IBM Planning Analytics
2.0

New Features

Note

Before you use this information and the product it supports, read the information in “Notices” on page 363.

Product Information

This document applies to IBM Planning Analytics Version 2.0 and might also apply to subsequent releases.

Last updated: 2023-09-29

Contents

Introduction

This documentation describes the features that are new in IBM® Planning Analytics.

Planning Analytics integrates business planning, performance measurement, and operational data to enable companies to optimize business effectiveness and customer interaction regardless of geography or structure. Planning Analytics provides immediate visibility into data, accountability within a collaborative process and a consistent view of information.

Finding information

To find documentation on the web, including all translated documentation, access IBM Documentation (http://www.ibm.com/support/knowledgecenter).

Software environments

To review an up-to-date list of environments supported by IBM Planning Analytics, create a detailed system requirements report using the Software Product Compatibility Reports tool (https://www.ibm.com/software/reports/compatibility/clarity/index.html).

Known issues

To view known issues and their workarounds, see the IBM Support portal (http://www.ibm.com/support).

For information about using the Support portal, see the IBM Support portal assistance (http://www.ibm.com/software/support/portal/sp-help.html).

Accessibility

Accessibility features help users who have a physical disability, such as restricted mobility or limited vision, to use information technology products.IBM Planning Analytics has some components that support accessibility features. IBM Cognos® TM1® Performance Modeler, IBM Cognos Insight, and Cognos TM1 Operations Console have accessibility features. For information about these features, see the accessibility section in the documentation for each component.

IBM HTML documentation has accessibility features. Because PDF documents are supplemental, they include no added accessibility features.

Deprecation

Documentation of functionality might differ from what is available in your environment because functionality is deprecated or removed in the current release of Planning Analytics. In the documentation, Deprecated indicates deprecated functionality that will be removed in a future release. If you use deprecated functionality, it is recommended that you take appropriate action before you upgrade. In the documentation, Not supported indicates functionality that is no longer available or supported in the current release.

Samples disclaimer

The Sample Outdoors Company, Great Outdoors Company, GO Sales, any variation of the Sample Outdoors or Great Outdoors names, and Planning Sample depict fictitious business operations with sample data used to develop sample applications for IBM and IBM customers. These fictitious records include sample data for sales transactions, product distribution, finance, and human resources. Any resemblance to actual names, addresses, contact numbers, or transaction values is coincidental. Other sample files may contain fictional data manually or machine generated, factual data compiled from academic or public sources, or data used with permission of the copyright holder, for use as sample data

to develop sample applications. Product names referenced may be the trademarks of their respective owners. Unauthorized duplication is prohibited.

Forward-looking statements

This documentation describes the current functionality of the product. References to items that are not currently available may be included. No implication of any future availability should be inferred. Any such references are not a commitment, promise, or legal obligation to deliver any material, code, or functionality. The development, release, and timing of features or functionality remain at the sole discretion of IBM.

Chapter 1. What's new in IBM Planning Analytics

Read about what's new or updated in IBM Planning Analytics Local local and components that are installed with Planning Analytics, such as TM1 Server, Planning Analytics Workspace, and TM1 Web.

For a full accounting of new and changed features by component, see the Planning Analytics New Features Guide.

Planning Analytics 2.0.9.18 - July 10, 2023

IBM Planning Analytics Local version 2.0.9.18 and the cloud release of IBM Planning Analytics version 2.0.9.18 includes updates for IBM TM1 Server version 11.8.22.

IBM Planning Analytics version 2.0.9.18 includes numerous improvements and defect fixes, but does not include new features.

Note: Updates to each version of IBM Planning Analytics are cumulative. If you are upgrading IBM Planning Analytics, review all updates since your installed version to plan your upgrade and application deployment.

Planning Analytics 2.0.9.17 - May 5, 2023

IBM Planning Analytics Local version 2.0.9.17 and the cloud release of IBM Planning Analytics version 2.0.9.17 include updates for IBM TM1 Server version 11.8.20.

Note: Updates to each version of IBM Planning Analytics are cumulative. If you are upgrading IBM Planning Analytics, review all updates since your installed version to plan your upgrade and application deployment.

New database configuration parameter to allow SSL certificates with non-critical constraints

If your custom SSL certificates contain non-critical constraints, stricter certificate acceptance criteria introduced in Planning Analytics 2.0.9.17 can result in certificate rejection.

A new database configuration parameter, **`GSK_ALLOW_NONCRITICALBASICCONSTRAINT`**, is now available to let you successfully use your custom SSL certificates containing non-critical constraints.

Add **`GSK_ALLOW_NONCRITICALBASICCONSTRAINT=T`** to your `Tm1s.cfg` file to allow certificates with non-critical constraints.

If **`GSK_ALLOW_NONCRITICALBASICCONSTRAINT`** is not explicitly set in the `Tm1s.cfg` file, the default value is F, which results in the rejection of SSL certificates containing non-critical constraints.

Planning Analytics 2.0.9.16 - February 28, 2023

IBM Planning Analytics Local version 2.0.9.16 and the cloud release of IBM Planning Analytics version 2.0.9.16 includes updates for IBM TM1 Server version 11.8.19.

IBM Planning Analytics version 2.0.9.16 includes numerous improvements and defect fixes, but does not include new features.

Among the defect fixes, a change in the way processes handle alias modifications could have an impact on your model. For more information, see "Impact of alias modifications on process execution in Planning Analytics Database 2.0.9.16 and later" on page 2.

Note: Updates to each version of IBM Planning Analytics are cumulative. If you are upgrading IBM Planning Analytics, review all updates since your installed version to plan your upgrade and application deployment.

Impact of alias modifications on process execution in Planning Analytics Database 2.0.9.16 and later

In specific circumstances, a recent improvement which ensures that alias and other attribute modifications are correctly applied in the Planning Analytics database can result in longer process execution times.

You might experience a process slowdown in this scenario:

- Your model includes aliases.
- A single TurboIntegrator process modifies an alias and later attempts to retrieve the same alias.

The process slowdown is the result of an IX (intent-to-write) lock that is applied to the dimension that is associated with the member alias for the duration of process execution.

To avoid process slowdown in this scenario, consider one of these alternatives:

- If possible, rewrite your process to use the member's principal name rather than an alias.
- Split the process so that the modification of the alias occurs in one process, and retrieval of the modified alias occurs in a later separate process.
- If an alias is changed in a process, any subsequent lookup of the element associated with the alias within the same process should use member's principal name instead of the alias.

Planning Analytics 2.0.9.15 - October 19, 2022

IBM Planning Analytics Local version 2.0.9.15 and the cloud release of IBM Planning Analytics version 2.0.9.15 includes updates for IBM TM1 Server version 11.8.17.

Note: Updates to each version of IBM Planning Analytics are cumulative. If you are upgrading IBM Planning Analytics, review all updates since your installed version to plan your upgrade and application deployment.

SubsetMDXSet function extended to apply to temporary subsets

The SubsetMDXSet TurboIntegrator function, which applies a specified MDX expression to a subset, has been extended to apply to temporary subsets.

Prior to Planning Analytics 9.0.15, the SubsetMDXSet function applied only to public subsets.

For more information, see SubsetMDXSet

Planning Analytics 2.0.9.14 - May 27, 2022

IBM Planning Analytics Local version 2.0.9.14 and the cloud release of IBM Planning Analytics version 2.0.9.14 includes updates for IBM TM1 Server version 11.8.13.

IBM Planning Analytics version 2.0.9.14 includes numerous improvements and defect fixes, but does not include new features.

Note: Updates to each version of IBM Planning Analytics are cumulative. If you are upgrading IBM Planning Analytics, review all updates since your installed version to plan your upgrade and application deployment.

Planning Analytics 2.0.9.13 - April 25, 2022

IBM Planning Analytics Local version 2.0.9.13 and the cloud release of IBM Planning Analytics version 2.0.9.13 includes updates for IBM TM1 Server version 11.8.12.

IBM Planning Analytics version 2.0.9.13 includes numerous improvements and defect fixes, but does not include new features.

Note: Updates to each version of IBM Planning Analytics are cumulative. If you are upgrading IBM Planning Analytics, review all updates since your installed version to plan your upgrade and application deployment.

Planning Analytics 2.0.9.12 - March 11, 2022

IBM Planning Analytics Local version 2.0.9.12 and the cloud release of IBM Planning Analytics version 2.0.9.12 includes updates for IBM TM1 Server version 11.8.11.

IBM Planning Analytics version 2.0.9.12 includes numerous improvements and defect fixes, but does not include new features.

Note: Updates to each version of IBM Planning Analytics are cumulative. If you are upgrading IBM Planning Analytics, review all updates since your installed version to plan your upgrade and application deployment.

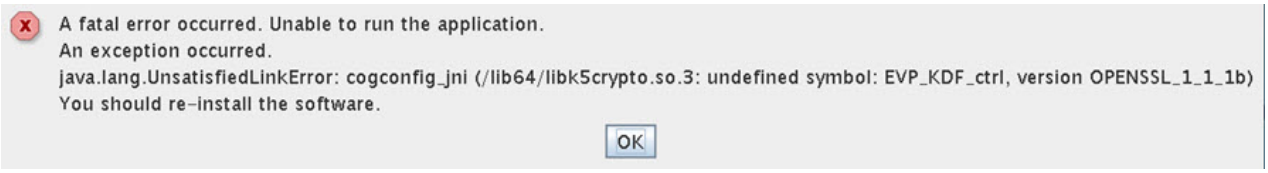
Known issues

The following are known issues in Planning Analytics 2.0.9.12. These issues will be resolved in a future release.

Cognos Configuration fails to open on RedHat Enterprise Linux 8.x with latest 11.8.x TM1 Server and OpenSSL 1.1.1b or later

Condition

Cognos Configuration fails to open and you receive an error similar to this:



Cause

The error is caused by a conflict with the system library `libcrypto.so.1.1` and the library installed by Planning Analytics in `<installdir>/bin64`.

Remedy

Procedure

1. Open `<installdir>/bin64/cogconfig.sh` for editing.
2. Add this line: `LD_PRELOAD=/usr/lib64/libcrypto.so.1.1`
3. Save and close `cogconfig.sh`.
4. Start Cognos Configuration.

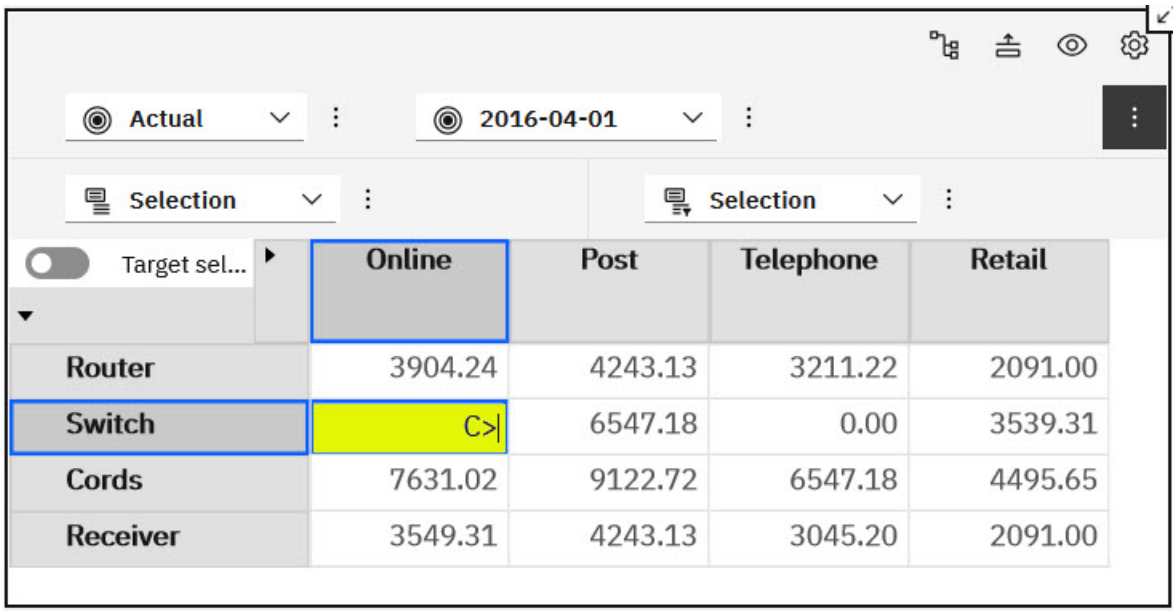
Error occurs when applying the Clear data spreading method when a zero is present in the direction of spreading

Condition

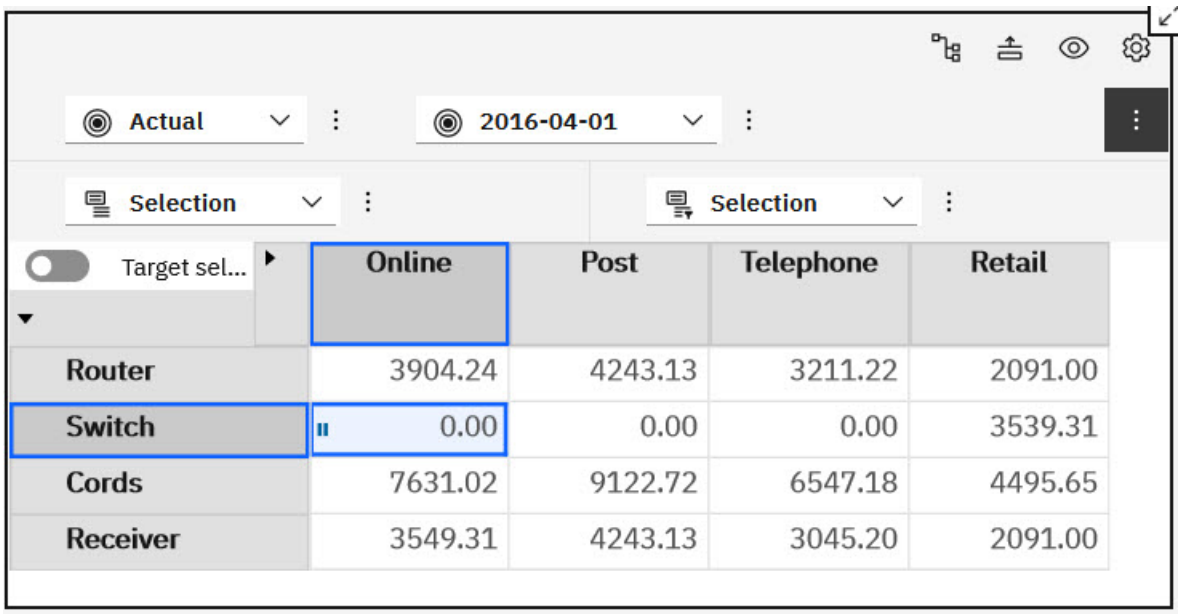
When you attempt to use the Clear data spreading method and a zero (0) is present in any cell that is subject to data spreading in the specified direction of spreading, values are cleared only until the zero

value is encountered, at which point further data spreading fails and you receive an error. The error indicates **`Unable to clear cells. Attempt to update a non-updateable cell.`**

For example, here you can see the Clear spreading method applied from the highlighted cell, with the right spreading direction indicated (C>).



The full data spreading operation fails because a zero value (Switch, Telephone) is present in the specified direction of spreading. Once the zero value is encountered, spreading ceases and you receive an error. As a result, the entire row is not cleared and a value remains in Switch, Retail.



The error occurs both when using the C data spreading syntax in conjunction with a direction indicator or when using the **Data spread** option and selecting the **Clear** method from the right-click menu on a cell.

Further, a hold is placed on the cell from which you initiate the Clear data spreading method. To clear the hold, right-click on the cell, then click **Release hold**.

Remedy

Procedure

1. Execute the Clear data spreading, which will clear values until the zero value is encountered.
2. Again execute the Clear data spreading in the cell after the zero value. Data will be cleared until another zero is encountered.

Planning Analytics 2.0.9.11 - December 21, 2021

IBM Planning Analytics Local version 2.0.9.11 and the cloud release of IBM Planning Analytics version 2.0.9.11 includes updates for IBM TM1 Server version 11.8.9.

IBM Planning Analytics version 2.0.9.11 includes numerous improvements and defect fixes, as well as the changes noted here.

Note: Updates to each version of IBM Planning Analytics are cumulative. If you are upgrading IBM Planning Analytics, review all updates since your installed version to plan your upgrade and application deployment.

Timeline of previous Planning Analytics releases

For a comprehensive listing of Planning Analytics component releases by month and year, see Timeline for IBM Planning Analytics Releases. You can view versions and release months for the following components:

- Planning Analytics Local TM1 Server
- Planning Analytics Workspace
- Planning Analytics for Microsoft Excel
- Planning Analytics Spreadsheet Services/TM1 Web

SkipLoadingAliases server configuration parameter no longer supported

As of Planning Analytics 2.0.9.11, the `SkipLoadingAliases` parameter to `Tm1s.cfg` is not supported. If this parameter is present and enabled in your `Tm1s.cfg` file, it is ignored.

Introduction of HTTPOriginAllowList server configuration parameter

This parameter sets a comma-delimited list of external origins (URLs) that are trusted and can access the TM1 server. For more information, see HTTPOriginAllowList.

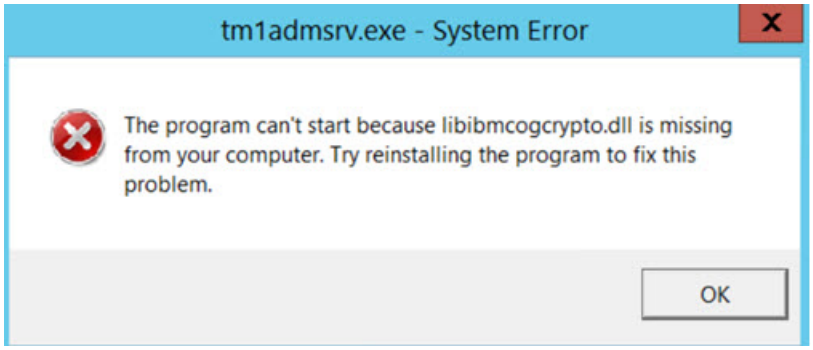
RedHat Enterprise Linux 8.x support

Planning Analytics 2.0.9.11 introduces support for RedHat Enterprise Linux® 8.x. Support for RedHat Enterprise Linux 7.x continues as well.

Error when attempting to start the TM1 server in console mode on Windows Server 2012

Due to a load order issue with an IBM-built wrapper library of `openssl: libibmcogcrypto.dll`, an attempt to start the TM1 Server in console mode (direct execution of `Tm1s.exe`) fails on Windows 12.

After attempting to start the server, you receive an error indicating that the Admin Server cannot start due to the missing `libibmcogcrypto.dll` file.



This issue occurs only on Window 12. The issue will be addressed in the next release of Planning Analytics after 2.0.9.11.

IBM Planning Analytics TM1 Web 2.0.69 no longer supports the Workspace Classic Experience

IBM Planning Analytics TM1 Web 2.0.69 and later releases no longer support embedded Websheets in Planning Analytics Workspace (PAW) books without the PAW New Experience.

Planning Analytics on Cloud environments can use either the PAW Classic or New Experience. Classic Experience for Planning Analytics Local refers to the user experience in PAW 2.0.55 and earlier releases.

The PAW New Experience was released in October 2020 as part of the 2.0.56 update for Planning Analytics on Cloud and 2.0.57 for Planning Analytics Local. This new experience showcases a new look and feel, improves navigation and content management, and introduced the Applications and Plans, and Predictive Forecasting capabilities.

Planning Analytics on Cloud customers that are using the PAW Classic Experience with Websheets that are embedded in books, should avoid updating to TM1 Web 2.0.69 or higher. If an upgrade to TM1 Server is required for a Planning Analytics on Cloud environment, contact IBM Support to discuss the version of TM1 Web packaged with the TM1 Server upgrade.

Planning Analytics 2.0.9.10 - September 14, 2021

IBM Planning Analytics Local version 2.0.9.10 and the cloud release of IBM Planning Analytics version 2.0.9.10 includes updates for IBM TM1 Server version 11.8.9.

IBM Planning Analytics version 2.0.9.10 includes numerous improvements and defect fixes, as well as several new TurboIntegrator functions that let you work with subsets.

Note: Updates to each version of IBM Planning Analytics are cumulative. If you are upgrading IBM Planning Analytics, review all updates since your installed version to plan your upgrade and application deployment.

New TurboIntegrator functions to help you manage subsets

These new TurboIntegrator functions are introduced in IBM Planning Analytics Local version 2.0.9.10 and the cloud release of IBM Planning Analytics version 2.0.9.10.

HierarchySubsetAliasGet

HierarchySubsetAliasGet returns the alias attribute for a subset within a hierarchy. This function was introduced in Planning Analytics 2.0.9.10/TM1 Server 11.8.9 and cannot be used in previous versions.

This function is valid in TM1 TurboIntegrator processes only.

Syntax

```
HierarchySubsetAliasGet(DimName, HierName, SubName);
```

Table 1. HierarchySubsetAliasGet syntax

Argument	Description
DimName	The parent dimension of the subset for which you want to retrieve the alias.
HierName	The name of a hierarchy within the dimension.
SubName	The subset within the specified hierarchy for which you want to retrieve the alias.

Example

```
HierarchySubsetAliasGet('Region', 'European', 'Northern Europe');
```

This example retrieves the alias for the Northern Europe subset of the European hierarchy in the Region dimension.

PublishSubset

PublishSubset publishes a named private subset on the server. This function was introduced in Planning Analytics 2.0.9.10/TM1 Server 11.8.9 and cannot be used in previous versions.

This function is valid in TM1 TurboIntegrator processes only.

Syntax

```
PublishSubset(DimName, SubName, OverwriteExistingSubset);
```

Table 2. PublishSubset arguments

Argument	Description
DimName	The parent dimension of the private subset you want to publish.
SubName	The name of the private subset to be published.
OverwriteExistingSubset	This Boolean argument (1 or 0) determines if any existing identically named public subset are overwritten when the private subset is published. If OverwriteExistingSubset is true (1) , any existing identically named public subset is overwritten when the private subset is published. If this argument is false (0), the public subset is not overwritten, the private subset is not published, and an error is written to the TurboIntegrator log file.

Example

```
PublishSubset('Region', 'Northern Europe', 1);
```

This example publishes the private Northern Europe subset of the Region dimension. If a public subset named Northern Europe already exists for the Region dimension, the public subset is overwritten then the private subset is published.

SubsetAliasGet

SubsetAliasGet returns the alias attribute for a subset. This function was introduced in Planning Analytics 2.0.9.10/TM1 Server 11.8.9 and cannot be used in previous versions.

This function is valid in TM1 TurboIntegrator processes only.

Syntax

```
SubsetAliasGet( DimName, SubName);
```

Table 3. SubsetAliasGet syntax

Argument	Description
DimName	The parent dimension of the subset for which you want to retrieve the alias.
SubName	The subset for which you want to retrieve the alias.

Example

```
SubsetAliasGet('Region', 'Central Europe');
```

This example retrieves the alias for the Central Europe subset of the Region dimension.

Planning Analytics 2.0.9.9 - July 14, 2021

IBM Planning Analytics Local version 2.0.9.9 and the cloud release of IBM Planning Analytics version 2.0.9.9 includes updates for IBM TM1 Server version 11.8.8.

IBM Planning Analytics version 2.0.9.9 includes numerous improvements and defect fixes, but does not include new features.

Note: Updates to each version of IBM Planning Analytics are cumulative. If you are upgrading IBM Planning Analytics, review all updates since your installed version to plan your upgrade and application deployment.

Planning Analytics 2.0.9.8 - May 26, 2021

IBM Planning Analytics Local version 2.0.9.8 and the cloud release of IBM Planning Analytics version 2.0.9.8 includes updates for IBM TM1 Server version 11.8.7.

IBM Planning Analytics version 2.0.9.8 includes numerous improvements and defect fixes, but does not include new features.

Note: Updates to each version of IBM Planning Analytics are cumulative. If you are upgrading IBM Planning Analytics, review all updates since your installed version to plan your upgrade and application deployment.

Planning Analytics 2.0.9.7 - April 15, 2021

IBM Planning Analytics Local version 2.0.9.7 and the cloud release of IBM Planning Analytics version 2.0.9.7 includes updates for IBM TM1 Server version 11.8.6.

IBM Planning Analytics version 2.0.9.7 includes numerous improvements and defect fixes, as well as the deprecation of two TM1 database parameters.

Note: Updates to each version of IBM Planning Analytics are cumulative. If you are upgrading IBM Planning Analytics, review all updates since your installed version to plan your upgrade and application deployment.

Deprecated TM1 database parameters

The following TM1 database parameters are deprecated as of IBM Planning Analytics version 2.0.9.7.

LockPagesInMemory

The LockPagesInMemory database parameter, which managed paging behavior and was applicable only to TM1 databases running on a Microsoft® Windows 64-bit operating system, is fully deprecated.

MTQ.CTreeRedundancyReducer

Due to a previously identified and communicated issue concerning database stability when `MTQ.CTreeRedundancyReducer=T`, this parameter is fully deprecated as of Planning Analytics version 2.0.9.7.

You can review the previous announcement of recommended usage of MTQ.CTreeRedundancyReducer in this tech note.

User modifications within CAM groups are now captured in the TM1 audit log

The TM1 database updates group membership in TM1 based on information from Cognos Authentication Manager when a user logs into TM1 using CAM. These events are now captured in the TM1 audit log.

The audit log now captures events such as:

- user creation in CAM
- user deletion in CAM
- user addition to a CAM group
- user removal from a CAM group

This sample audit log extract shows multiple events where user modifications in CAM are written to the TM1 audit log.

```
<Commit ts="20210318202610" client="Cognos Users/user1 user1">
"45","CAMID(""CognosEx:u:uid=tester2"")","Client 'CAMID(""CognosEx:u:uid=tester2"")' was
deleted."
</Commit>

<Commit ts="20210318202817" client="Cognos Users/tester1 tester1">
"31","CAMID(""::All Authenticated Users"")","Cognos Users/tester1 tester1","Client 'Cognos
Users/tester1 tester1' was assigned to group 'CAMID(""::All Authenticated Users"")'."
"31","CAMID(""::Everyone"")","Cognos Users/tester1 tester1","Client 'Cognos Users/tester1
tester1' was assigned to group 'CAMID(""::Everyone"")'."
"31","CAMID("":Analytics Administrators"")","Cognos Users/tester1 tester1","Client 'Cognos
Users/tester1 tester1' was assigned to group 'CAMID("":Analytics Administrators"")'."
"144","Cognos Users/tester1 tester1","9.30.77.16","User 'Cognos Users/tester1 tester1'
successfully logged in from address '9.30.77.16'."
</Commit>

<Commit ts="20210318203231" client="Cognos Users/tester7 tester7">
"31","CAMID("":Analytics Users"")","Cognos Users/tester7 tester7","Client 'Cognos Users/tester7
tester7' was assigned to group 'CAMID("":Analytics Users"")'."
"144","Cognos Users/tester7 tester7","9.30.77.16","User 'Cognos Users/tester7 tester7'
successfully logged in from address '9.30.77.16'."
</Commit>

<Commit ts="20210318204344" client="Cognos Users/tester5 tester5">
"32","CAMID("":TM1 Group 3"")","Cognos Users/tester5 tester5","Client 'Cognos Users/tester5
tester5' was removed from group 'CAMID("":TM1 Group 3"")'."
"32","CAMID("":Tm1 Role 1"")","Cognos Users/tester5 tester5","Client 'Cognos Users/tester5
tester5' was removed from group 'CAMID("":Tm1 Role 1"")'."
"144","Cognos Users/tester5 tester5","9.30.77.16","User 'Cognos Users/tester5 tester5'
successfully logged in from address '9.30.77.16'."
</Commit>
```

```
<Commit ts="20210318205451" client="Cognos Users/tester5 tester5">
"144","Cognos Users/tester5 tester5","9.30.77.16","User 'Cognos Users/tester5 tester5'
successfully logged in from address '9.30.77.16'."
</Commit>

<Commit ts="20210318205520" client="Cognos Users/tester7 tester7">
"32","10000","Cognos Users/tester7 tester7","Client 'Cognos Users/tester7 tester7' was removed
from group '10000'."
"32","10100","Cognos Users/tester7 tester7","Client 'Cognos Users/tester7 tester7' was removed
from group '10100'."
"144","Cognos Users/tester7 tester7","9.30.77.16","User 'Cognos Users/tester7 tester7'
successfully logged in from address '9.30.77.16'."
</Commit>

<Commit ts="20210318210127" client="Cognos Users/tester8 tester8">
"32","10000","Cognos Users/tester8 tester8","Client 'Cognos Users/tester8 tester8' was removed
from group '10000'."
"32","10100","Cognos Users/tester8 tester8","Client 'Cognos Users/tester8 tester8' was removed
from group '10100'."
"32","10110","Cognos Users/tester8 tester8","Client 'Cognos Users/tester8 tester8' was removed
from group '10110'."
"144","Cognos Users/tester8 tester8","9.30.77.16","User 'Cognos Users/tester8 tester8'
successfully logged in from address '9.30.77.16'."
</Commit>

<Commit ts="20210318210142" client="Cognos Users/user1 user1">
"144","Cognos Users/user1 user1","9.30.77.16","User 'Cognos Users/user1 user1' successfully
logged in from address '9.30.77.16'."
</Commit>
```

You can disable the capture of user modifications within CAM groups in the TM1 audit log. Set `CheckCAMClientAlias =F` in Tm1s.cfg if you do not want CAM user modification information to be written to the audit log.

For more details on using the audit log, see the Audit Log.

Planning Analytics 2.0.9.6 - March 16, 2021

IBM Planning Analytics Local version 2.0.9.6 and the cloud release of IBM Planning Analytics version 2.0.9.6 includes updates for IBM TM1 Server version 11.8.5.

IBM Planning Analytics version 2.0.9.6 includes numerous improvements and defect fixes, but does not include new features.

Note: Updates to each version of IBM Planning Analytics are cumulative. If you are upgrading IBM Planning Analytics, review all updates since your installed version to plan your upgrade and application deployment.

Planning Analytics 2.0.9.5 - February 8, 2021

IBM Planning Analytics Local version 2.0.9.5 and the cloud release of IBM Planning Analytics version 2.0.9.5 includes updates for IBM TM1 Server version 11.8.4.

IBM Planning Analytics version 2.0.9.5 includes numerous improvements and defect fixes, but does not include new features.

Note: Updates to each version of IBM Planning Analytics are cumulative. If you are upgrading IBM Planning Analytics, review all updates since your installed version to plan your upgrade and application deployment.

Change to default value of FIPSOperationMode in tm1s.cfg and cogstartup.xml

As of IBM Planning Analytics 2.0.9.5, the default value of the **FIPSOperationMode** configuration parameter in `tm1s.cfg` and `cogstartup.xml` is **FIPSOperationMode=2**.

The default value in previous versions of Planning Analytics was **FIPSOperationMode=1**.

The change to **FIPSOperationMode=2** is necessary to enable future security updates to third-party libraries in IBM Global Security Kit (GSKit).

Disable DES and 3DES Ciphers in IBM Planning Analytics to mitigate false-positive security scans

To address the vulnerabilities exploited by the SWEET32 Birthday attack (CVE-2016-2183), IBM Planning Analytics 2.0.9.5 has enabled the restriction of payload size to 32GB via GSKit. However, the DES and 3DES ciphers will continue to be available and will show up as false positives on security scans. To prevent these false positives, remove the DES and 3DES ciphers from your Planning Analytics configuration.

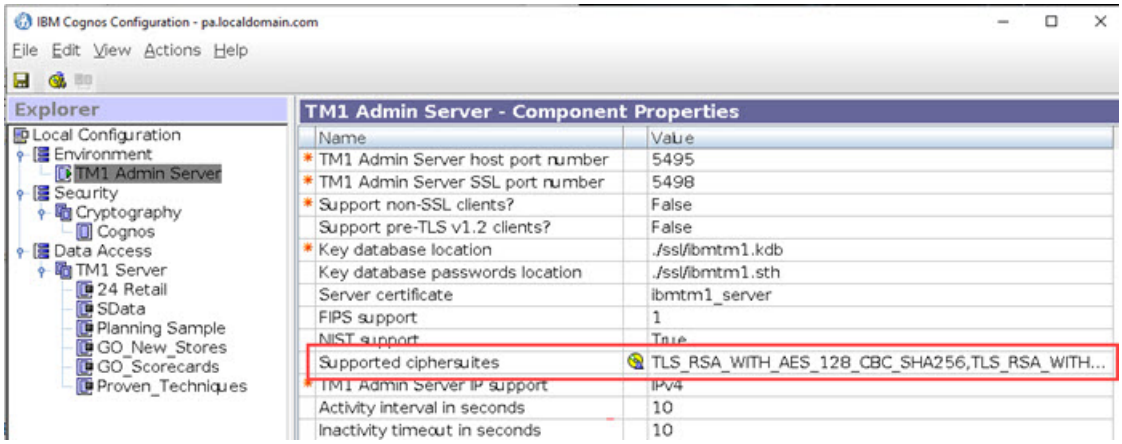
About this task

The configuration changes described here are applicable only to Planning Analytics Workspace Local. You do not have to make any modifications to Planning Analytics Workspace on Cloud.

Procedure

1. Stop all of the TM1 Server database services and the TM1 Admin Server service in your environment.
2. Open Cognos Configuration for the TM1 Admin Server service and set the following ciphers in the **Supported Cipher Suites** property:

```
TLS_RSA_WITH_AES_128_CBC_SHA256,TLS_RSA_WITH_AES_256_CBC_SHA256,
TLS_RSA_WITH_AES_128_GCM_SHA256,TLS_RSA_WITH_AES_256_GCM_SHA384,
TLS_ECDHE_ECDSA_WITH_AES_128_CBC_SHA256,TLS_ECDHE_ECDSA_WITH_AES_256_CBC_SHA384,
TLS_ECDHE_ECDSA_WITH_AES_128_GCM_SHA256,TLS_ECDHE_ECDSA_WITH_AES_256_GCM_SHA384,
TLS_ECDHE_RSA_WITH_AES_128_CBC_SHA256,TLS_ECDHE_RSA_WITH_AES_256_CBC_SHA384,
TLS_ECDHE_RSA_WITH_AES_128_GCM_SHA256,TLS_ECDHE_RSA_WITH_AES_256_GCM_SHA384
```



3. Add the following line to the `Tm1s.cfg` file for each TM1 Server database:

```
tlsCipherList=TLS_RSA_WITH_AES_128_CBC_SHA256,
TLS_RSA_WITH_AES_256_CBC_SHA256,TLS_RSA_WITH_AES_128_GCM_SHA256,
TLS_RSA_WITH_AES_256_GCM_SHA384,TLS_ECDHE_ECDSA_WITH_AES_128_CBC_SHA256,
TLS_ECDHE_ECDSA_WITH_AES_256_CBC_SHA384,TLS_ECDHE_ECDSA_WITH_AES_128_GCM_SHA256,
TLS_ECDHE_ECDSA_WITH_AES_256_GCM_SHA384,TLS_ECDHE_RSA_WITH_AES_128_CBC_SHA256,
TLS_ECDHE_RSA_WITH_AES_256_CBC_SHA384,TLS_ECDHE_RSA_WITH_AES_128_GCM_SHA256,
TLS_ECDHE_RSA_WITH_AES_256_GCM_SHA384
```

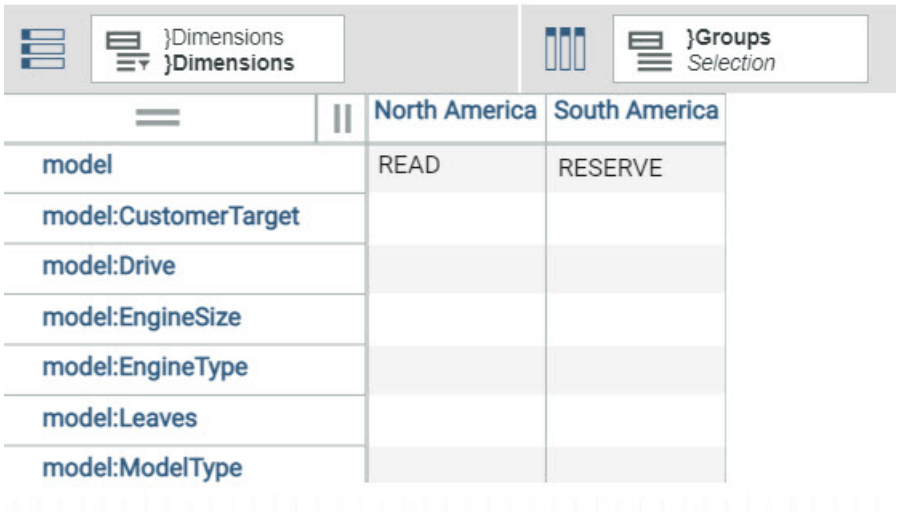
4. Start the TM1 Admin Server service and all of your TM1 Server database services.

Change in dimension hierarchy security

Planning Analytics 2.0.9.5 introduces an enhancement to hierarchy security.

You can now define security for dimension hierarchies independent of the parent dimension in the }DimensionSecurity control cube.

In previous version of Planning Analytics, dimension hierarchies inherited security from the parent dimension. There was no need to explicitly define security for an hierarchy in the }DimensionSecurity control cube. For example, here the North America user group inherited Read access for all hierarchies of the Model dimension, while the South America user group inherited Reserve access for all hierarchies of the dimension.



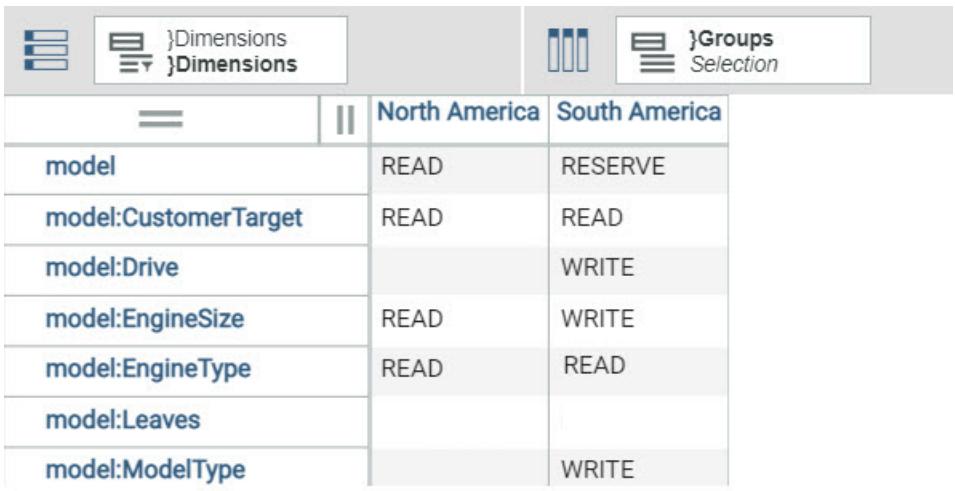
	North America	South America
model	READ	RESERVE
model:CustomerTarget		
model:Drive		
model:EngineSize		
model:EngineType		
model:Leaves		
model:ModelType		

As of Planning Analytics 2.0.9.5, hierarchies no longer inherit security from the parent dimension.

Important: If you want a user group to have access to a dimension hierarchy, you must explicitly define hierarchy security in the }DimensionSecurity control cube. If you do not define security for a user group to an hierarchy, members of the user group cannot see the hierarchy in Planning Analytics.

You can assign hierarchy security equivalent to or lower than the security defined for the parent dimension. A user group cannot have higher security access to a hierarchy than to the parent dimension.

Here's an example of how you define hierarchy security in Planning Analytics 2.0.9.5 and later:



	North America	South America
model	READ	RESERVE
model:CustomerTarget	READ	READ
model:Drive		WRITE
model:EngineSize	READ	WRITE
model:EngineType	READ	READ
model:Leaves		
model:ModelType		WRITE

Each hierarchy has security explicitly set for all user groups. Note that a blank cell is equivalent to None security.

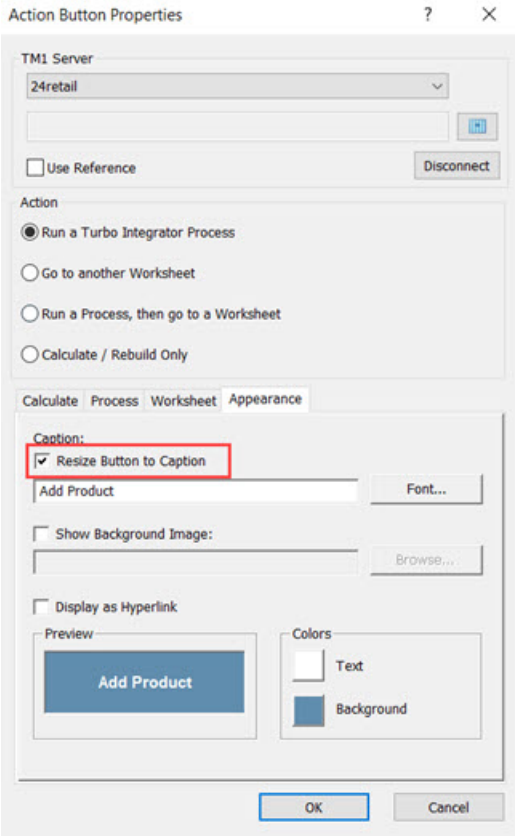
Action Button is misaligned in Perspectives using Office Excel 2016 - 2019

An Action Button created in Excel 2016 - 2019 can sometimes appear misaligned or the text may be improperly positioned on the button.

You can see this issue in the following image, where the **Set Security** text is improperly positioned on the button and the button is misaligned to the grid.

To correct this issue:

1. Open the Excel sheet that contains the Action Button.
2. Right-click the button, then click **Properties**.
3. Clear and re-select the **Resize Button to Caption** option.
4. Click **OK**.



Planning Analytics 2.0.9.4 - December 17, 2020

IBM Planning Analytics Local version 2.0.9.4 and the cloud release of IBM Planning Analytics version 2.0.9.4 includes updates for IBM TM1 Server version 11.8.3.

IBM Planning Analytics version 2.0.9.4 includes numerous improvements and defect fixes, as well as some new features.

Note: Updates to each version of IBM Planning Analytics are cumulative. If you are upgrading IBM Planning Analytics, review all updates since your installed version to plan your upgrade and application deployment.

Secure Shell URL support in Git integration

Secure Shell (SSH) URL is supported to access the Git repository.

The REST API actions `GitInit`, `GitStats`, `GitPull`, `GitPush`, and `GitDeploy` can take three additional parameters to pass the SSH credential. These additional parameters are `PublicKey`, `PrivateKey`, and `Passphrase`.

The content of the `PublicKey` and `PrivateKey` parameters should be identical to the content of the generated SSH key files. `Passphrase` is the same as was specified when generating the private key.

The `PrivateKey` and `Passphrase` will not be written to the server log.

The Git credential is cached in the HTTP session.

This example shows a GitInit with the supported SSH parameters:

```
POST /api/v1/GitInit
{
 "URL": "git@github.com:GithubAccountXXX/RepoXXX.git",
 "Deployment": "prod",
 "PublicKey": "ssh-rsa AAAAB3NzaC1yc2Exxx...",
 "PrivateKey": "----BEGIN RSA PRIVATE KEY----\nMIIJKAIBxxx...",
 "Passphrase": "xxx"
}
```

Assuming Git is initialized with SSH URL, a full GitPull looks like this:

```
POST /api/v1/GitPull
{
 "Branch": "DB_PlanSamp",
 "PublicKey": "ssh-rsa AAAAB3NzaC1yc2Exxx...",
 "PrivateKey": "-----BEGIN RSA PRIVATE KEY-----\nMIIJKAIBxxx..."
 "Passphrase": "xxx"
}
```

However, since the Git credential is cached, you can exclude the credentials in the GitPull request if you'd like:

```
POST /api/v1/GitPull {
  "Branch": "DB_PlanSamp"
}
```

Once Git is initialized with SSH URL, `GitStats`, `GitPush`, and `GitDeploy` can be used in the same manner as `GitPull`, as shown previously.

HTTP proxy support in Git integration

The Git repository that the TM1 server connects to for Git integration functionality is frequently isolated behind a firewall and only reachable via an HTTP proxy. Proxy access is supported on TM1 server.

Proxy support is provided via the Git `http.proxy` parameter, which is defined at https://git-scm.com/docs/git-config.

`http.proxy` specifies the URL of the HTTP proxy when invoking the actions `GitInit` and `GitDeploy`. The proxy routes traffic to the Git repository that is specified by the URL parameter, which uses HTTPS protocol.

For example, this `GitInit` routes traffic through the `http://localhost:8888` proxy to the repository at `https://github.com/GithubaccountXXX/RepoXXX.git`.

```
POST /api/v1/GitInit
{
 "URL": "https://github.com/GithubAccountXXX/RepoXXX.git",
 "Deployment": "prod",
 "Username": "GitUserXXX",
 "Password": "xxx",
 "Config":
 {
   "http.proxy": "http://localhost:8888"
```

```
  }
}
```

Improved member selection in query to TM1 Server when using multiple hierarchies

In previous releases of Planning Analytics, query member selection with multiple hierarchies could sometimes include unnecessary members, leading to inconsistent query performance.

As of Planning Analytics 2.0.9.4, members selection is now predictable and consistent, resulting in consistent query performance.

In some limited circumstances, you might encounter a query that exceeds the current **MaximumViewSize** server configuration setting. When this occurs, it is an effect of TM1 Server in 2.0.9.4 doing a better job of selecting the members for a multiple hierarchies query to guarantee consistent query performance. We are working to reduce the additional memory usage for these limited cases in an upcoming release.

If you encounter a query that exceeds the **MaximumViewSize**, the current work-around is to increase the **MaximumViewSize** value in `Tm1s.cfg` to accommodate the increased memory usage.

For details on the **MaximumViewSize** parameter, see https://www.ibm.com/support/knowledgecenter/SSD29G_2.0.0/com.ibm.swg.ba.cognos.tm1_cloud_mg.2.0.0.doc/c_maximumviewsize_1.html.

The chore StartTime property time is stored and represented as Coordinated Universal Time and does not vary for Daylight Saving Time

Documentation has been updated to reflect that the `StartTime` property for a chore is represented as Coordinated Universal Time (UTC).

UTC is a fixed time that does not vary for Daylight Saving Time. Accordingly, a chore start time remains concurrent with UTC, regardless of Daylight Saving Time status for any location.

When the TM1 server stores or returns a local time, or "time relative location," the server uses a DateTimeOffset that represents a date/time value, together with an offset that indicates how much that value differs from UTC in the physical location where the server resides. This offset does not vary for Daylight Saving Time.

Users of the TM1 OData Rest API need to verify compliance with the standard http://docs.oasis-open.org/odata/odata-csdl-json/v4.01/odata-csdl-json-v4.01.html#sec_DateTimeOffset. Failure to verify compliance will result in user-built applications failing when the TM1 Server responds with DateTimeOffset according to the standard

Enhanced SQL error logging in tm1server.log

As of Planning Analytics 2.0.9.4, the TM1 Server now processes more ODBC driver errors and reports them in the server message log (`tm1server.log`). As a result, you may see SQL errors in `tm1server.log` that were not previously reported.

These errors from the ODBC driver have always existed, but were not written to the server message log prior to Planning Analytics 2.0.9.4. The errors are discoverable using the tracing capability of your ODBC administrator tool.

Any SQL errors reported in `tm1server.log` originate from the ODBC driver. You can use these errors to review issues with your ODBC driver and to pursue support with your ODBC vendor.

Planning Analytics 2.0.9.3 - October 9, 2020

IBM Planning Analytics Local version 2.0.9.3 and the cloud release of IBM Planning Analytics version 2.0.9.3 includes updates for IBM TM1 Server version 11.8.2.

IBM Planning Analytics version 2.0.9.3 includes numerous improvements and defect fixes. This version does not include new features. However, PMHub is fully deprecated as of version 2.0.9.3, as previously announced in the IBM Planning Analytics 2.0 deprecation notices. For details about the impact of this deprecation, see PMHub deprecation.

Note: Updates to each version of IBM Planning Analytics are cumulative. If you are upgrading IBM Planning Analytics, review all updates since your installed version to plan your upgrade and application deployment.

PMHub deprecation

PMHub is fully deprecated as of IBM Planning Analytics version 2.0.9.3, as previously announced in the IBM Planning Analytics 2.0 deprecation notices.

IBM Planning Analytics for Microsoft Excel must use hubless mode when upgrading to 2.0.9.3. In hubless mode, Planning Analytics for Microsoft Excel connects to Planning Analytics sources via Planning Analytics Workspace.

Planning Analytics for Microsoft Excel version 2.0.41 and prior do not support hubless mode. If you have version 2.0.41 or prior, please upgrade to the most recent version of Planning Analytics for Microsoft Excel when you install IBM Planning Analytics version 2.0.9.3

Planning Analytics for Microsoft Excel version 2.0.52 and later forces all non-overridden connections to IBM Planning Analytics version 2.0.9 or later to use hubless mode.

If you currently use an overridden connection to IBM Planning Analytics, you must remove the override to connect to IBM Planning Analytics version 2.0.9.3.

An overridden connection looks like this: `http://<hostname>/?pmhub&rest`. For example, `http://planninganalytics.ibmcloud.com/?pmhub&rest`.

You must remove the override and use `http://<hostname>/`. For example, `http://planninganalytics.ibmcloud.com/`.

Note that Exploration Views and Quick Reports encode their host information internally. As long as the <hostname> remains the same when moving from an overridden to a non-overridden connection, you do not need to modify any views or reports. In any circumstance, it is preferable to update your connection before interacting with any reporting content.

TM1 Server on Linux requires the Java shared object libjsig.so to be in the LD_LIBRARY_PATH

As of TM1 Server version 11.8.2 (Planning Analytics 2.0.9.3), the TM1 Server executable (`tm1s.exe`) requires the Java shared object `libjsig.so` to be in the server's `LD_LIBRARY_PATH` to successfully start up or shut down a TM1 Server on Linux.

The TM1 Server requires Java to support the `ExecuteJavaN` or `ExecuteJavaS` TurboIntegrator functions. Additionally, with the later versions of Java 8, the TM1 Server needs to be able to shut down the JVM via the `libjsig.so` library. This library is required whether you use `ExecuteJavaN` or `ExecuteJavaS` functions or not. The link to the `libjsig.so`, which is necessitated to support the noted Turbointegrator functions, is also required to successfully start or stop the TM1 Server. If the library is missing, you cannot start or stop the server.

The `start_tm1.sh` script has been modified to find the required Java shared object `libjsig.so` by looking for the `JAVA_HOME` environment variable and loading the required library according to processor architecture.

Depending on your processor architecture, `libjsig.so` is located in one of these locations:

- `${JAVA_HOME}/lib/amd64/libjsig.so` for x86_64
- `${JAVA_HOME}/lib/s390x/libjsig.so` for s390x
- `${JAVA_HOME}/lib/ppc64le/libjsig.so` for ppc64le

It is important to have Java 8 installed and the `JAVA_HOME` environment variable set, otherwise the TM1 Server cannot start up or shut down.

Planning Analytics 2.0.9.2 - July 27, 2020

IBM Planning Analytics Local version 2.0.9.2 and the cloud release of IBM Planning Analytics version 2.0.9.2 includes updates for IBM TM1 Server version 11.8.1.

Note: Updates to each version of IBM Planning Analytics are cumulative. If you are upgrading IBM Planning Analytics, review all updates since your installed version to plan your upgrade and application deployment.

TM1 Web is no longer part of the Planning Analytics long cadence (LC) release

As of the 2.0.9.2 LC release of IBM Planning Analytics, TM1 Web is no longer included in the long cadence release.

Instead, new versions of TM1 Web will be available approximately once a month, similar to the release schedules of IBM Planning Analytics Workspace and IBM Planning Analytics for Microsoft Excel. The first version of TM1 Web to be available on this new schedule is 2.0.55 SC.

New installer for TM1 Web

As of the 2.0.9.2 LC/2.0.55 SC releases of IBM Planning Analytics, TM1 Web is installed with the IBM Planning Analytics Spreadsheet Services installer. TM1 Web is no longer part of the web tier within the Planning Analytics Local installer.

For details on installing TM1 Web with the IBM Planning Analytics Spreadsheet Services installer, see Installing and configuring Planning Analytics TM1 Web.

Planning Analytics 2.0.9.1 - May 21, 2020

IBM Planning Analytics Local version 2.0.9.1 and the cloud release of IBM Planning Analytics version 2.0.9.1 includes updates for IBM TM1 Server version 11.8.0.

IBM Planning Analytics version 2.0.9.1 includes numerous improvements and defect fixes, but does not include new features.

Note: Updates to each version of IBM Planning Analytics are cumulative. If you are upgrading IBM Planning Analytics, review all updates since your installed version to plan your upgrade and application deployment.

Planning Analytics 2.0.9 - December 16, 2019

IBM Planning Analytics Local version 2.0.9 and the cloud release of IBM Planning Analytics version 2.0.9 includes updates and new features for IBM TM1 Server version 11.7.0.

Note: Updates to each version of IBM Planning Analytics are cumulative. If you are upgrading IBM Planning Analytics, review all updates since your installed version to plan your upgrade and application deployment.

Manage a list of TM1 databases on the TM1 Admin Server

In TM1 Server version 11.7.0, you can set up one TM1 Admin Server that refers to the active TM1 databases for a model. All your users can point to the TM1 Admin Server and you can rapidly switch over

from one TM1 database to another TM1 database. The TM1 Admin Server doesn't need to be restarted, which means that you can completely automate the failover to the backup system if a crash occurs on a TM1 database.

GET the list of databases that are available

To see which databases are currently self-registered, you can retrieve the list of TM1 databases that are registered with the TM1 Admin Server. You can use GET against the ~/api/v1/Servers resource to find the list of all databases that are available.

```
GET http://<adminserver>:<adminserver_port>/api/v1/Servers
```

Example response body:


```
{
    "@odata.context": "$metadata#Servers",
    "value": [
        {
            "Name": "24retail",
            "SelfRegistered": true,
            "Host": "http://DESKTOP-RHJLSO4:8014",
            "IPAddress": "9.24.156.199",
            "IPv6Address": "",
            "PortNumber": 17414,
            "ClientMessagePortNumber": 0,
            "HTTPPortNumber": 8014,
            "IsLocal": false,
            "UsingSSL": false,
            "SSLCertificateID": null,
            "SSLCertificateAuthority": null,
            "SSLCertificateRevocationList": null,
            "ClientExportSSLSvrCert": false,
            "ClientExportSSLSvrKeyID": null,
            "AcceptingClients": true,
            "LastUpdated": "2020-01-09T13:44:04.566Z"
        },
        {
            "Name": "GO_New_Stores",
            "SelfRegistered": true,
            "Host": "https://DESKTOP-RHJLSO4:5010",
            "IPAddress": "9.24.156.199",
            "IPv6Address": "",
            "PortNumber": 45557,
            "ClientMessagePortNumber": 0,
            "HTTPPortNumber": 5010,
            "IsLocal": false,
            "UsingSSL": true,
            "SSLCertificateID": null,
            "SSLCertificateAuthority": null,
            "SSLCertificateRevocationList": null,
            "ClientExportSSLSvrCert": false,
            "ClientExportSSLSvrKeyID": null,
            "AcceptingClients": true,
            "LastUpdated": "2020-01-09T13:44:10.120Z"
        },
        {
            "Name": "GO_Scorecards",
            "SelfRegistered": true,
            "Host": "https://DESKTOP-RHJLSO4:44312",
            "IPAddress": "9.24.156.199",
            "IPv6Address": "",
            "PortNumber": 44321,
            "ClientMessagePortNumber": 0,
            "HTTPPortNumber": 44312,
            "IsLocal": false,
            "UsingSSL": true,
            "SSLCertificateID": null,
            "SSLCertificateAuthority": null,
            "SSLCertificateRevocationList": null,
            "ClientExportSSLSvrCert": false,
            "ClientExportSSLSvrKeyID": null,
            "AcceptingClients": true,
            "LastUpdated": "2020-01-09T13:44:09.360Z"
        },
        {
            "Name": "Planning Sample",
            "SelfRegistered": true,
```

```
            "Host": "https://DESKTOP-RHJLSO4:12354",
            "IPAddress": "9.24.156.199",
            "IPv6Address": "",
            "PortNumber": 12345,
            "ClientMessagePortNumber": 0,
            "HTTPPortNumber": 12354,
            "IsLocal": false,
            "UsingSSL": true,
            "SSLCertificateID": null,
            "SSLCertificateAuthority": null,
            "SSLCertificateRevocationList": null,
            "ClientExportSSLSvrCert": false,
            "ClientExportSSLSvrKeyID": null,
            "AcceptingClients": true,
            "LastUpdated": "2020-01-09T13:44:02.022Z"
        },
        {
            "Name": "proven_techniques",
            "SelfRegistered": true,
            "Host": "https://DESKTOP-RHJLSO4:5011",
            "IPAddress": "9.24.156.199",
            "IPv6Address": "",
            "PortNumber": 53333,
            "ClientMessagePortNumber": 0,
            "HTTPPortNumber": 5011,
            "IsLocal": false,
            "UsingSSL": true,
            "SSLCertificateID": null,
            "SSLCertificateAuthority": null,
            "SSLCertificateRevocationList": null,
            "ClientExportSSLSvrCert": false,
            "ClientExportSSLSvrKeyID": null,
            "AcceptingClients": true,
            "LastUpdated": "2020-01-09T13:44:10.173Z"
        },
        {
            "Name": "SData",
            "SelfRegistered": true,
            "Host": "https://DESKTOP-RHJLSO4:8010",
            "IPAddress": "9.24.156.199",
            "IPv6Address": "",
            "PortNumber": 12346,
            "ClientMessagePortNumber": 0,
            "HTTPPortNumber": 8010,
            "IsLocal": false,
            "UsingSSL": true,
            "SSLCertificateID": null,
            "SSLCertificateAuthority": null,
            "SSLCertificateRevocationList": null,
            "ClientExportSSLSvrCert": false,
            "ClientExportSSLSvrKeyID": null,
            "AcceptingClients": true,
            "LastUpdated": "2020-01-09T13:44:09.619Z"
        },
        {
            "Name": "MyDB",
            "SelfRegistered": true,
            "Host": "https://DESKTOP-RHJLSO4:5001",
            "IPAddress": "9.24.156.199",
            "IPv6Address": "",
            "PortNumber": 60042,
            "ClientMessagePortNumber": 0,
            "HTTPPortNumber": 5001,
            "IsLocal": false,
            "UsingSSL": true,
            "SSLCertificateID": null,
            "SSLCertificateAuthority": null,
            "SSLCertificateRevocationList": null,
            "ClientExportSSLSvrCert": false,
            "ClientExportSSLSvrKeyID": null,
            "AcceptingClients": true,
            "LastUpdated": "2020-01-09T13:44:09.475Z"
        }
    ]
}
```

GET details for a specific database

You can do a GET against a specific database, for example, ~/api/v1/Servers('*<database_name>*'), to retrieve details of that database.

```
GET http://<adminserver>:<adminserver_port>/api/v1/Servers('<database_name>')
```

Example response body for GET http://<adminserver>:5895/api/v1/Servers('Sdata')

```
{
    "@odata.context": "$metadata#Servers/$entity",
    "Name": "SData",
    "SelfRegistered": true,
    "Host": "https://DESKTOP-RHJLSO4:8010",
    "IPAddress": "9.24.156.199",
    "IPv6Address": "",
    "PortNumber": 12346,
    "ClientMessagePortNumber": 0,
    "HTTPPortNumber": 8010,
    "IsLocal": false,
    "UsingSSL": true,
    "SSLCertificateID": null,
    "SSLCertificateAuthority": null,
    "SSLCertificateRevocationList": null,
    "ClientExportSSLSvrCert": false,
    "ClientExportSSLSvrKeyID": null,
    "AcceptingClients": true,
    "LastUpdated": "2020-01-09T13:54:10.343Z"
}
```

POST a database to your list of available TM1 databases

You can add another TM1 database to your list of available databases. POST changes to the database list on the TM1 Admin Server as a collection of Server entities.

```
POST http://<adminserver>:<adminserver_port>/api/v1/Servers
```

Example body with a database to add:

```
{
    "Name":"MyModel1",
    "IPAddress":"172.20.10.10",
    "PortNumber":12345,
    "UsingSSL": true,
    "ClientMessagePortNumber":61098,
    "HTTPPortNumber":12999,
    "ClientExportSSLSvrCert":true,
    "ClientExportSSLSvrKeyID":"whateverExportSSLSvrKeyID",
    "AcceptingClients":true
}
```

Example response body for POST, which shows defaults applied

```
{
    "@odata.context": "$metadata#Servers/$entity",
    "Name": "MyModel1",
    "SelfRegistered": false,
    "Host": null,
    "IPAddress": "172.20.10.10",
    "IPv6Address": "",
    "PortNumber": 12345,
    "ClientMessagePortNumber": 61098,
    "HTTPPortNumber": 12999,
    "IsLocal": false,
    "UsingSSL": true,
    "SSLCertificateID": null,
    "SSLCertificateAuthority": null,
    "SSLCertificateRevocationList": null,
    "ClientExportSSLSvrCert": true,
    "ClientExportSSLSvrKeyID": "whateverExportSSLSvrKeyID",
    "AcceptingClients": true,
    "LastUpdated": "2020-01-09T22:09:19.838Z"
}
```

PATCH a database to your list of available TM1 databases

Use PATCH to upsert (insert or update) a database to your list of available databases. PATCH changes to the database list on the TM1 Admin Server as a collection of `Server` entities.

```
PATCH http://<adminserver>:<adminserver_port>/api/v1/Servers
```

Example body with a database to insert or update:

Some properties are not required in the body. The response body shows you the defaults that are applied.

```
{
    "Name": "MyModel2",
    "IPAddress":"172.20.10.10",
    "PortNumber":12345,
    "UsingSSL":false
}
```

Example response body for PATCH, which shows defaults applied

```
{
    "@odata.context": "$metadata#Servers/$entity",
    "Name": "MyModel2",
    "SelfRegistered": false,
    "Host": null,
    "IPAddress": "172.20.10.10",
    "IPv6Address": "",
    "PortNumber": 12345,
    "ClientMessagePortNumber": 0,
    "HTTPPortNumber": 0,
    "IsLocal": false,
    "UsingSSL": false,
    "SSLCertificateID": null,
    "SSLCertificateAuthority": null,
    "SSLCertificateRevocationList": null,
    "ClientExportSSLSvrCert": false,
    "ClientExportSSLSvrKeyID": null,
    "AcceptingClients": false,
    "LastUpdated": "2020-01-09T13:51:13.770Z"
}
```

PATCH or DELETE a specific TM1 database

You can PATCH updates to individual TM1 databases or DELETE individual TM1 databases only if they were added using the TM1 REST API. Both of these requests use the same format.

The request body for a PATCH to an individual database cannot have the `Name` property because this property is implied by the URL.

```
PATCH http://<adminserver>:<adminserver_port>/api/v1/Servers('<database_name>')
```

```
{
    "IPAddress":"172.20.10.10",
    "PortNumber":12345,
    "UsingSSL":false
}
```

You don't need a request body to DELETE an individual database.

```
DELETE http://<adminserver>:<adminserver_port>/api/v1/Servers('<database_name>')
```

Use the ViewZeroOut TurboIntegrator function on MDX views

The ViewZeroOut TurboIntegrator function now works on MDX-based views. You can zero out the data of views with intersections that are unique to elements that exist only in hierarchies. For all views, including

multi-hierarchy views, ViewZeroOut collects intersected leaf sets before it sets all data points in a view to zero.

Related topics:

ViewZeroOut

Use dynamic shapes and images in websheets

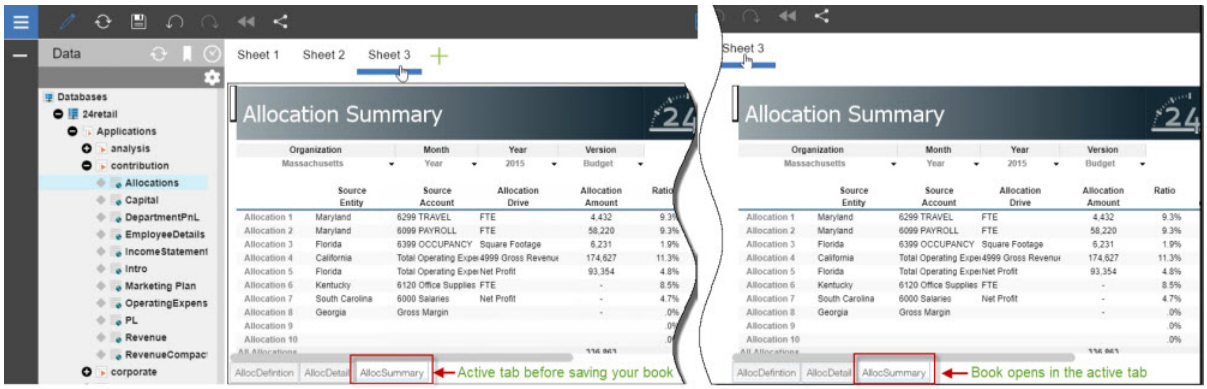
Customize your websheets! In TM1 Web, you can dynamically insert shapes and images anywhere in your websheet where you'd like the image to change when the value of a cell changes. You can dynamically insert logos, employee pictures, flags, product images, and more.

A dynamic image can be created by assigning a named range that contains an INDIRECT or INDEX-based formula to an image object. The formula resolves to a cell reference, and if an image is anchored to that cell, the dynamic shape reflects that image object's content.

To support this feature, TM1 Web persists the assigned formula, and when it recalculates, TM1 Web evaluates the named range formula to a cell reference. Using this cell reference, TM1 Web can then update the image object's file name to match the referenced image.

Open a websheet on the active tab when you save a multi-tab websheet

If you have a websheet with multiple tabs in a book, Planning Analytics Workspace keeps track of the active websheet tab when you save the book. Then, when you open the book in Planning Analytics Workspace later, you are where you left off in your work!



Using Planning Analytics version 2.0.9 and Planning Analytics Workspace version 2.0.46, when you open a book with a websheet in Planning Analytics Workspace, the tab that you saved the websheet with is active.

Note: You must be using Planning Analytics Workspace on IBM Planning Analytics version 2.0.9 to take advantage of this feature of websheets in IBM Planning Analytics TM1 Web.

If you don't have Planning Analytics version 2.0.9, the default tab that the websheet was published with (using TM1 Perspectives or Planning Analytics for Microsoft Excel) is active when you open the book in Planning Analytics Workspace.

Deprecation of TM1 Operations Console

Deprecated in v2.0.9 In Planning Analytics version 2.0.9, TM1 Operations Console is no longer supported. When you access the TM1 Operations Console URL, you see a general 500 error message that indicates that the URL is not available. You can use IBM Planning Analytics Administration to monitor databases in IBM Planning Analytics and IBM Planning Analytics Local.

Related topics:

Monitor and administer databases

Planning Analytics 2.0.8 - July 17, 2019

IBM Planning Analytics Local version 2.0.8 and the cloud release of IBM Planning Analytics version 2.0.8 includes updates and new features for IBM TM1 Server version 11.6.0.

Note: Updates to each version of IBM Planning Analytics are cumulative. If you are upgrading IBM Planning Analytics, review all updates since your installed version to plan your upgrade and application deployment.

View process rollback and restart messages in TM1 logs

This update makes it easier to detect lock exceptions for TurboIntegrator processes, and makes it easier to process the tm1server.log file with automation tools. When a TurboIntegrator process rolls back and restarts, the process is now represented in the `tm1server.log` file as three steps: starting, restarting because of lock contention or rollback, and then finishing. An entry was added to the `tm1server.log` file that shows the TurboIntegrator process as restarting due to lock contention or rollback instead of just starting. This logging is enabled by default without setting any specific debug options.

Example log

```
2364    [15]   INFO   2019-01-09 20:30:37.986   TM1.Process   Process
"Diag.LockTest.DimensionWrite1" executed by user "CJP/stuart"
17088   [15]   INFO   2019-01-09 20:30:37.987   TM1.Process   Process
"Diag.LockTest.DimensionWrite2" executed by user "CJP/stuart"
17088   [15]   INFO   2019-01-09 20:30:41.058   TM1.Process   Process
"Diag.LockTest.DimensionWrite2" rolled back due to lock exception (2364).  Process will restart
automatically"
2364    [15]   INFO   2019-01-09 20:30:41.054   TM1.Process   Process
"Diag.LockTest.DimensionWrite1":  finished executing normally, elapsed time 3.07 seconds
17088   [15]   INFO   2019-01-09 20:30:41.058   TM1.Process   Process
"Diag.LockTest.DimensionWrite2" executed by user "CJP/stuart"
17088   [15]   INFO   2019-01-09 20:30:44.064   TM1.Process   Process
"Diag.LockTest.DimensionWrite2":  finished executing normally, elapsed time 3.00 seconds
```

View and report on audit log data with the TM1 REST APIs

You can retrieve audit logs by using the TM1 REST APIs the same way that you retrieve other logging data such as transaction and message logs. You can also use ODATA filters such as top, skip, and select for querying the details of audit logs. The contents of the audit log is unchanged.

If you are authorized to get audit logs, you can use the following query to retrieve audit logs:

```
/api/v1/AuditLogEntries
```

Note: If you are not authorized to get audit logs, for example if you are not an administrator, the result of this query is empty.

If the audit log has details, you can expand the `AuditDetails` by using the following query:

```
/api/v1/AuditLogEntries?$expand=AuditDetails
```

You can use filter options, such as top, skip, and select, to create queries based on any data field, including the time stamp. For example:

```
$filter=TimeStamp gt 2019-04-23T11:13:45Z
$filter=contains(Description, 'New')
$filter=ObjectType eq ‘Dimension’
$select=UserName,Description,ObjectType,ObjectName
$count=true
$skip=2
$top=4
```

You can also use change tracking. When you set the `Prefer` header to `odata.track-changes`, a delta link is appended to each response body.

You can use `TailAuditLog()` to obtain the current `timeStamp` only. Then, you can use `/api/v1/AuditLogEntries/!delta('<timestamp>')` to retrieve any audit logs that occur after that `timeStamp`. For example:

```
/api/v1/AuditLogEntries
/api/v1/AuditLogEntries/!delta('<timestamp>')
```

Or:

```
/api/v1/AuditLogEntries?$select=User,ObjectType,ObjectName,Details&$expand=
AuditDetails($select=ID,User,Description,ObjectType,ObjectName)
```

Example of an auditLog entry

```
{
   "ID":"<id>",
   "TimeStamp":"2019-01-16T13:57:46Z",
   "User":"",
   "Description":"Server 'lemonade' was shutdown.",
   "ObjectType":"Server",
   "ObjectName":"SYSTEM"
}
```

Example auditLogEntry with AuditDetails

```
{
   "ID":"<id>",
   "TimeStamp":"2019-01-16T13:59:50Z",
   "User":"",
   "Description":"Server 'lemonade' was started.",
   "ObjectType":"Server",
   "ObjectName":"SYSTEM",
   "AuditDetails":[
      {
         "DetailID":"<id>",
         "TimeStamp":"2019-01-16T13:59:50Z",
         "User":"",
         "Description":"Property ChangedSinceLoaded was set to 'FALSE' for server 'lemonade'.",
         "ObjectType":"Server",
         "ObjectName":"SYSTEM"
      }
   ]
}
```

TM1 REST API updates

The following entity types were added to support audit logging:

- `AuditDetail`
- `AuditLogEntry`

The following function was added to support audit logging:

- `TailAuditLog`

What's next?

For more information about audit logging in general, see Using the audit log.

Iterate through SQL rowsets to speed up drill through queries

You can use TM1 REST API actions and entities to execute a relational drill through and retrieve results as a rowset entity. You can use the rowset to iteratively retrieve subsequent subset rows. This approach improves the performance of retrieving drill through results.

Actions

In Planning Analytics version 2.0.8, you can use the following actions to execute relational drillthroughs but return rowsets:

- Use ExecuteRelationalDrillthroughWithRowset to execute a relational drill through to get a rowset of a relational table.
- Use RelationalDrillthrough.ExecuteWithRowset to drill into a cell to get a rowset of a relational table.

Entity types

In Planning Analytics version 2.0.8, you can use the following entity types:

- A Rowset represents the result of an execution of a relational drill through. A rowset is session-scoped and must be deleted after you use it. Closing a session invalidates all of its rowsets.
- A RowsetRow represents a row in a rowset. The RowsetRow can be retrieved in subsequent requests. These subsequent requests do not cause the drillthrough process to be re-executed.

Example: Drill into a cell to get a rowset

```
POST /api/v1/Cubes('x')/Views('x')/tm1.Execute
POST /api/v1/Cellsets('x')/Cells(N)/DrillthroughScripts('x')/tm1.ExecuteWithRowset
GET /api/v1/Rowsets('x')?$expand=Rows($top=1000)
DELETE /api/v1/Rowsets('x')
```

Example: Use a transient process to open a CSV rowset

```
POST /api/v1/ExecuteRelationalDrillthroughWithRowset?$expand=Rows($select=A,B)
{
    "DrillthroughProcess":
    {
        "EpilogProcedure": "#****Begin: Generated
Statements***\r\nReturnCsvTableHandle;\r\n#****End: Generated Statements****",
        "DataSource": {
            "Type": "ASCII",
            "asciiDelimiterChar": ",",
            "asciiDelimiterType": "Character",
            "dataSourceNameForServer": "CSV_FILENAME.csv"
        }
    }
}
```

Review updates to the TM1 REST API metadata

IBM Planning Analytics Local version 2.0.8 and the cloud release of IBM Planning Analytics version 2.0.8 includes the following updates to the TM1 REST APIs for IBM TM1 Server version 11.6.0.

Metadata updates

The following entity types were changed in 11.6.0:

- **Added** `AuditDetail`
- **Added** `AuditLogEntry`
- **Added** `Rowset`
- **Added** `RowsetRow`

The following functions were changed in 11.6.0:

- **Added** `TailAuditLog`

The following actions were changed in 11.6.0:

- **Added** `ExecuteRelationalDrillthroughWithRowset`
- **Added** `RelationalDrillthrough.ExecuteWithRowset`
- **Added** `Cube.Load`
- **Added** `Cube.Unload`

To learn more, see What's new in 11.6.0 (https://www.ibm.com/support/knowledgecenter/SSD29G_2.0.0/com.ibm.swg.ba.cognos.tm1_rest_api.2.0.0.doc/r_restapi_v1_csdl_whats_new.html#restapi_v1_csdl_whats_new_11_6_0).

Include user names and memory usage in TM1 Web logs

User names and memory usage are included in TM1 Web logs. This update makes it easy to see when a user runs an active form, workbook, or cube that renders too many rows. To turn on this optional logging, the logging level of `log4j.logger.com.ibm.cognos.tm1` must be set to DEBUG in the `\tm1_64\webapps\tm1web\WEB-INF\configuration\log4j.properties` file. You can review the audit logs and reduce the number of rows in the rendering.

The following information is included in logs:

- Timestamp
- Application and Active Form name
- Number of rows that were generated
- User name
- Current heap memory after the websheet renders

Example log when you open an active form

```
"<TIMESTAMP>:CLASSNAME:Constructed view for <ActiveFormViewid> contains <#> rows, by user
'<username>'.
<TIMESTAMP>:CLASSNAME:Current heap memory usage: <MB>".
```

Example log when you open a workbook

```
"<TIMESTAMP>:CLASSNAME:Creating WorkbookMetaData for <sheet name>, by user '<username>'.
<TIMESTAMP>:CLASSNAME:Current heap memory usage: <MB>".
```

Example log when you open a cube view

```
"<TIMESTAMP>:CLASSNAME:Exit from getUpdatedCubeViewData, updatedData: class name, username:
<username>.
<TIMESTAMP>:CLASSNAME:Current heap memory usage: <MB>".
```

Changes saved automatically in TM1 Application Web

In Planning Analytics version 2.0.8, the **Save** confirmation dialog box in IBM TM1 Application Web has been removed. When you close a view, you are not prompted to save changes. All data changes are saved automatically when you close the application. Your changes are available when you reopen the application. This change applies to all web browsers.

Configure login using TM1 Web URL API with Cognos Analytics security

In Planning Analytics version 2.0.8, a new parameter `CSPHeaderFrameSource` is available in the `tm1web_config.xml` file. If you use the TM1 Web URL API configured with integrated security mode

5 (Cognos Analytics security authentication), you must set this parameter to allow users to log in. This parameter controls security of the context that is loaded in the <frame> element, which is used by TM1 Web URL API. The CSPHeaderFrameSource parameter defines allowed sources for Content-Security-Policy (CSP) frame-src policy.

Syntax

```
<add key="CSPHeaderFrameSource" value="" />
```

If the CSPHeaderFrameSource is specified, it sets the allowed sources for the frame-src policy. If the value is left blank or the parameter is not set, the default value is '*', which allows content from all sources to load.

Remember: In IBM Planning Analytics Local version 2.0.8, you install a new version of the tm1web_config.xml file that is called tm1web_config.xml.new and your existing tm1web_config.xml file is preserved. To take advantage of fixes that are applied to this release, you must rename the tm1web_config.xml.new file to tm1web_config.xml and you must reapply any changes that you made to your previous configuration settings.

Example

```
<add key="CSPHeaderFrameSource" value="'self'" />
```

Sets the frame-src policy to 'self'.

Allows contents from the site's origin to load.

Example

```
<add key="CSPHeaderFrameSource" value="http://CAM_HOST:CAM_PORT http://
TM1WEB_HOST:TM1WEB_PORT" />
```

Sets the frame-src policy to http://CAM_HOST:CAM_PORT http://TM1WEB_HOST:TM1WEB_PORT.

Allows contents from CAM_HOST:PORT and TM1WEB_HOST:PORT to load.

What to do next

For more information on how to define sources for frame-src, see Sources on the MDN web docs site.

Relational data sources in TM1 Web websheets removed

Removed in v2.0.8 The ability to use relational data sources in TM1 Web has been removed from IBM Planning Analytics Local version 2.0.8. The IBM Data Server Driver for JDBC and SQLJ 4.17 (10.5.0.2) have also been removed from the installation kit (db2cc4.jar, ojdbc6.jar, sqlj4.zip, sqljdbc4.jar).

Planning Analytics version 2.0.7 was the last release with support for relational data sources in TM1 Web websheets.

TM1 Package Connector removed from Planning Analytics Local

Removed in v2.0.8 With IBM Planning Analytics Local version 2.0.8, the IBM Cognos Package Connector is no longer included in the Planning Analytics Local installation kit. This change does not

affect Planning Analytics on cloud. Cognos Package Connector is not available or supported in Planning Analytics on cloud.

Planning Analytics 2.0.7 - April 29, 2019

IBM Planning Analytics Local version 2.0.7 and the cloud release of IBM Planning Analytics version 2.0.7 includes updates and new features for IBM TM1 Server version 11.5.0.

Note: Updates to each version of IBM Planning Analytics are cumulative. If you are upgrading IBM Planning Analytics, review all updates since your installed version to plan your upgrade and application deployment.

Install IBM Planning Analytics Local on Windows Server 2019

IBM Planning Analytics Local is now supported on Windows Server 2019.

To learn more, see Planning Analytics Local Installation and Configuration (https://www.ibm.com/support/knowledgecenter/SSD29G_2.0.0/com.ibm.swg.ba.cognos.tm1_inst.2.0.0.doc/pa_install.html)..

Upgrade to WebSphere Liberty Profile 18.0.0.4

The WebSphere Liberty Profile has been upgraded to 18.0.0.4. This upgrade requires a manual change to the `server.xml` file for existing IBM Planning Analytics Local installations that upgrade to Planning Analytics Local version 2.0.7.

In Planning Analytics Local version 2.0.7, the `server.xml` file has been updated to add the following property to disable sending server version information in response headers.

```
<webContainer disableXPoweredBy="true"/>
```

The response header is informational and not required for operations. It is now disabled by default to minimize thread surface.

Remember: In Planning Analytics Local version 2.0.7, you install a new version of the `server.xml` file that is called `server.xml.new` and your existing `server.xml` file is preserved. To take advantage of fixes that are applied to this release, you must rename the `server.xml.new` file to `server.xml` and you must reapply any changes that you made to your previous configuration settings.

For more information, see Upgrading Planning Analytics Local (https://www.ibm.com/support/knowledgecenter/SSD29G_2.0.0/com.ibm.swg.ba.cognos.tm1_inst.2.0.0.doc/c_tm1_inst_upgradingfromearlierversionsoftm1.html).

Optimize the login process with a new tms1.cfg parameter

A new parameter, **`OptimizeClient`**, has been added to the tms1.cfg file to prevent obtaining a lock when serializing objects when a user authenticates. This parameter determines whether private objects are loaded when the user authenticates during TM1 Server startup.

Note: A new user that was dynamically added, who logs in with CAM authentication, is still subject to lock contention because a new element must be added to the `}clients` dimension.

Organizations with many users, or users with many private objects, can set which users this parameter is applied to. This approach impacts the server load and potentially the amount of memory that is consumed at startup.

The **`OptimizeClient`** parameter can be set as follows:

- None = 0
- OperationsAdmin = 1
- Admin = 2
- All = 3

For more information, see **OptimizeClient** (https://www.ibm.com/support/knowledgecenter/SSD29G_2.0.0/com.ibm.swg.ba.cognos.tm1_inst.2.0.0.doc/c_optimizeclient.html).

Monitor threads with the Top logger

TM1 Server dynamically monitors the threads that are running and now outputs thread status to the `tm1top.log` file by using the Top logger. You can also log information about the sandboxes and job queue for a specific database.

You can use the new Top logger in IBM Planning Analytics on cloud and IBM Planning Analytics Local. You can download the logs from IBM Planning Analytics Administration. For more information, see Download database log files.

Note: The content of the `tm1top.log` file is the same as the TM1Top logs. The TM1Top utility is scheduled for deprecation on Planning Analytics Local.

Configure tm1s.cfg parameters

The Top logger is `Off` by default. To enable logging, you must add **TopLogging=T** to the `tm1s.cfg` file before you start your TM1 Server.

Note: This parameter cannot be configured in Planning Analytics Administration.

The following settings can be configured in the `tm1s.cfg` file:

TopLogging
Enables dynamic logging of the threads running in an instance of the TM1 Server. The Top logger can also display information about the sandboxes and job queue for a specific database.

Boolean, dynamic

Default=FALSE

TopScanFrequency
The logging frequency (interval) in seconds.

Integer, dynamic

Default is 5 seconds

0 disables the Top logger.

TopScanMode.Threads
Enables logging of the current processing state of each thread. This information includes the name of the user or process that started the thread, the API function that the thread is executing, the lock status of the last object that was locked, the number of objects that are used by the thread, and the total time, in seconds, that the current API function or chore process has been processing.

Default = T

TopScanMode.Sandboxes
Enables logging of the active sandboxes for the current server, the total memory that is consumed for all sandboxes by a user, and the number of sandboxes for this user.

Default = F

TopScanMode.SandboxQueueMetrics
Enables logging of sandbox queue metrics. The name of the node for the sandbox, the status of the sandbox in the queue, and the length of time the sandbox was in the queue before it was processed is logged for each sandbox in the queue.

Default = F

For more information, see Parameters in the tm1s.cfg file.

If TM1 Server starts with **TopLogging** turned on, the server adds the Top logger configuration to the `tm1s-log.properties` file if the configuration is not already there. The log level is `INFO`. The special log format is controlled by the format parameter of the definition, which must be set to `TM1Top`.

The following configuration information is added:

```
log4j.logger.Top=INFO, S_Top
log4j.appender.S_Top=org.apache.log4j.SharedMemoryAppender
log4j.appender.S_Top.MemorySize=5 MB
log4j.appender.S_Top.MaxFileSize=100 MB
log4j.appender.S_Top.MaxBackupIndex=20
log4j.appender.S_Top.File=tm1top.log
log4j.appender.S_Top.Format=TM1Top
```

After the Top logger is enabled and the configuration settings are added to the `tm1s-log.properties`, you can disable or enable the Top logger without restarting the TM1 Server.

TM1 REST API support

The Top logger and its settings can be read and modified by using the TMI REST API:

```
GET /api/v1/ActiveConfiguration/Administration/TopLog
PATCH /api/v1/StaticConfiguration/Administration/TopLog
{
    "ScanFrequency": "P0DT00H00M02S"
}
GET /api/v1/Loggers('Top')
PATCH /api/v1/Loggers('Top')
{
    "Level": "Off"
}
```

For more information, see TopLogSettings and TopScanMode.

Log example

```
=====  2019-01-09 22:20:54 GMT      2019-01-09 17:20:54 local  ===== Server:Planning Sample
===========
10744  Th:Pseudo          -              Idle        -              -
-              -   0
22584  Th:DynamicConfig   -              Idle        -              -
-              -   0
676    Admin               :1            Idle        -              -
-              -   0
4920   Sa         Architect              Idle        -              -
-              -   0
=====  2019-01-09 22:20:56 GMT      2019-01-09 17:20:56 local  ===== Server:Planning Sample
===========
8120   C:SleepEvery10s      -            Run:R    -              Process SyncSleep_10    Prolog
(6)   0
10744  Th:Pseudo          -              Idle        -              -
-              -   0
22584  Th:DynamicConfig     -            Idle        -              -
-              -   0
676    Admin    :1     Run:R  -  POST   /api/v1/Cubes('plan_BudgetPlan')/Views('def')/
tm1.Execute  -  1
22620  > Work unit for 676       -                              -             -
-       -    0
3284   > Work unit for 676       -                              -             -
-      -    0
22376  > Work unit for 676       -                              -             -
-      -    0
17568  > Work unit for 676       -                              -             -
-      -    0
2940   > Work unit for 676       -                              -             -
-      -    0
128    > Work unit for 676       -                              -             -
-      -    0
20552  > Work unit for 676       -                              -             -
-      -    0
4920     Sa           Architect         Idle        -          -             -
-          0
```

Run multiple processes on their own thread with a new TurboIntegrator function

You can now run TurboIntegrator processes in parallel, each on its own thread that is managed by TM1 Server, by using the new `RunProcess` function. This approach speeds up data load and other operations where TurboIntegrator processes are used to divide the work.

You can use the new `RunProcess(ProcessName, [ParamName1, ParamValue1,ParamName2, ParamValue2]);` function to run TurboIntegrator processes in parallel on a separate thread within the server. By using the `RunProcess` function, issues such as external encrypted credentials can be avoided.

For more information, see RunProcess.

Prepare for changes in behavior in TM1 Server

IBM Planning Analytics Local version 2.0.7 and the cloud release of IBM Planning Analytics version 2.0.7 includes updates that change behavior in IBM TM1 Server version 11.5.0. Review this list to prepare for your upgrade.

Default logging level of TM1.Mdx.Interface logger

In IBM Planning Analytics version 2.0.7 or later, the TM1.Mdx.Interface logger reports syntax errors only when set to DEBUG level.

Previously, in IBM Planning Analytics version 2.0.6 or earlier, the TM1.Mdx.Interface logger reported syntax errors when it was set to ERROR level. However, when Planning Analytics for Microsoft Excel or Planning Analytics Workspace generated invalid MDX internally, the tm1server log filled up quickly with a large number of entries in the form:

```
11276 [6b5] ERROR 2017-10-16 13:51:10.237 TM1.Mdx.Interface
    Syntax error at or near: 'hildren},{[Entity].[]})}', character position 21
```

These errors now appear only when the logging level is set to DEBUG. For more information, see System and performance monitoring (https://www.ibm.com/support/knowledgecenter/SSD29G_2.0.0/com.ibm.swg.ba.cognos.tm1_op.2.0.0.doc/c_systemandperformancemonitoring_n160007.html).

Default value of RulesOverwriteCellsOnLoad parameter

In IBM Planning Analytics version 2.0.7 or later, if the **RulesOverwriteCellsOnLoad** parameter is not present in the configuration file then it is assumed to be False by default. This is a change in behavior.

Previously, in IBM Planning Analytics version 2.0.6 or earlier, if this parameter was not present in the configuration file then it was assumed to be True by default.

For more information, see **RulesOverwriteCellsOnLoad** (https://www.ibm.com/support/knowledgecenter/SSD29G_2.0.0/com.ibm.swg.ba.cognos.tm1_inst.2.0.0.doc/c_rulesoverwritecellsonload.html).

Searching large transaction logs

In IBM Planning Analytics version 2.0.7 or later, if there are too many INVALID records, for example more than **500** invalid records in **one search** in the transaction logs, search stops and an error message is generated in the server log. User intervention is required to clean up the transaction logs. This change prevents the server from searching for long periods and blocking other activities.

For example, the error message contains the following text:

`Starts from <file name>, over 500 bad transaction records found, transaction log searching stopped.`

The error message indicates where the search was started. For example, if the user searched from December 1 to December 12, the server searches multiple log files. The "Starts from" indicates where in the transaction logs the cleanup must start.

This change in the behavior of searching large transaction logs prevents the TM1 Server from generating large logs. However, user intervention is required to clean up the invalid records if the logs become too large.

Learn more about updates to TM1 REST APIs

IBM Planning Analytics Local version 2.0.7 and the cloud release of IBM Planning Analytics version 2.0.7 includes the following updates to the TM1 REST APIs for IBM TM1 Server version 11.5.0.

Metadata updates

The following entity types were changed in 11.5.0:

- **Added** `GitPlan`
- **Added** `GitPullPlan`
- **Added** `GitPushPlan`

The following complex types were changed in 11.5.0:

- **Added** `Git`
- **Added** `GitCommit`
- **Added** `GitRemote`
- **Added** `TopLogSettings`

The following enumerated types were changed in 11.5.0:

- **Added** `GitPlanExecutionMode`
- **Added** `TopScanMode`

The following actions were changed in 11.5.0:

- **Added** `GitPullPlan.Execute`
- **Added** `GitPushPlan.Execute`
- **Added** `GitDeploy`
- **Added** `GitInit`
- **Added** `GitPull`
- **Added** `GitPush`
- **Added** `GitStatus`
- **Added** `GitUninit`

The following properties were changed in 11.5.0:

- **Deprecated** property `ID` in `Entry`
- **Added** property `Active` in `Session`

To learn more, see What's new in 11.5.0 (https://www.ibm.com/support/knowledgecenter/SSD29G_2.0.0/com.ibm.swg.ba.cognos.tm1_rest_api.2.0.0.doc/r_restapi_v1_csdl_whats_new.html#restapi_v1_csdl_whats_new_11_5_0).

Support for hiding hierarchies

The `Visible` property of a `Hierarchy` (https://www.ibm.com/support/knowledgecenter/SSD29G_2.0.0/com.ibm.swg.ba.cognos.tm1_rest_api.2.0.0.doc/r_restapi_v1_csdl_alltypes.html#restapi_v1_csdl_entitytype_Hierarchy) entity has been extended to allow a client to filter any collection of hierarchies.

For example:

```
GET /api/v1/Dimensions('dim')/Hierarchies?$filter=Visible eq true
```

By default, the `Visible` property is determined by the `Visible` dimension property (currently this is in the }DimensionProperties cube, which includes every individual hierarchy). This property defaults to True.

If a control cube exists with the name }HierarchyVisibility_{{DIMNAME}}, which has two dimensions: }Hierarchies_{{DIMNAME}} and }Groups, then more specific values here will overwrite the default dimension property (if TRUE or FALSE is written to the appropriate cell). Similar to security, if a user belongs to multiple groups, and any of those groups sets the hierarchy as visible, then the hierarchy will be visible.

Determining the value of the `Visible` property uses the following logic:

- Is there a value of TRUE anywhere in the }HierarchyVisibility_{{DIMNAME}} cube for this hierarchy or any group the current user belongs to? Then, `Visible` = true.
- Is there a value of FALSE anywhere in the }HierarchyVisibility_{{DIMNAME}} cube for this hierarchy or any group the current user belongs to? Then, `Visible` = false.
- Is the value of the VISIBILITY dimension property (note that this is per hierarchy) set to TRUE? Then, `Visible` = true.
- Is the value of the VISIBILITY dimension property set to FALSE? Then, `Visible` = false.
- Otherwise, `Visible` = true.

Use Git source control to deploy database assets between environments

As an administrator of a TM1 database, you can deploy database assets between environments (for example, from development to production) without stopping the database or manually copying and pasting assets. The source specifications of models and their database assets are created and managed with Git commands. You can see the structure of the database assets in Git and use Git commands to add and remove versions of your assets easily.

Why is this useful?

- You can see your database assets in an easy to read format. Assets can include chores, cubes, dimensions, processes, and more.
- You can build different versions of your database assets by using Git branches.
- You can control which versions of your database assets you use for your environments. Use one branch for your development environment and another for your production environment.
- You can see the differences between versions of your database assets easily. You can even revert to previous versions if you need to.
- You can deploy your database assets directly to your environment by using Git commands.

Note: This capability is available only in Planning Analytics Local.

To learn more, see Managing TM1 database assets with Git (https://www.ibm.com/support/knowledgecenter/SSD29G_2.0.0/com.ibm.swg.ba.cognos.tm1_rest_api.2.0.0.doc/c_tm1_restapi_model_deployment.html).

Load websheets faster in TM1 Web

To optimize loading of websheets in TM1 Web, you can set a new feature flag `OptimizeCssForHiddenContent`. The feature flag can be added in `tm1_64\webapps\tm1web\WEB-INF\configuration\features.json`.

When `OptimizeCssForHiddenContent` is set to `true`, CSS style information that comes from hidden content (sheets, rows, columns, cells, or controls) is excluded during websheet loading.

`OptimizeCssForHiddenContent` is set to `false` by default.

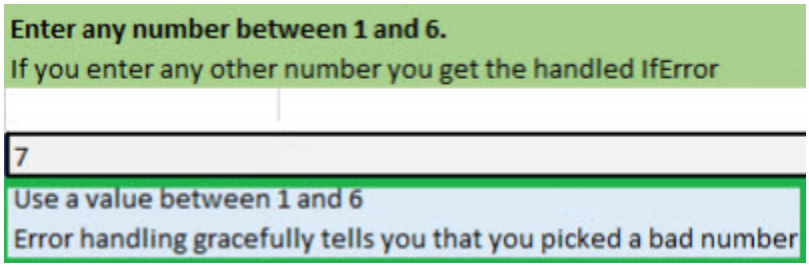
Example

```
{
    "NestedDbsEvaluation": false,
    "NewIrrAlgorithm": false ,
    "OptimizeCssForHiddenContent": true
}
```

Use the IFERROR Excel function in TM1 Web

IBM Planning Analytics TM1 Web now supports the use of the IFERROR function in websheets.

The IFERROR function traps errors in a formula and returns an alternative result, such as text, when an error is detected.



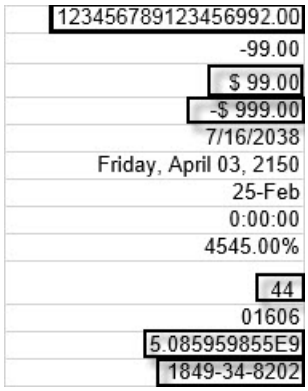
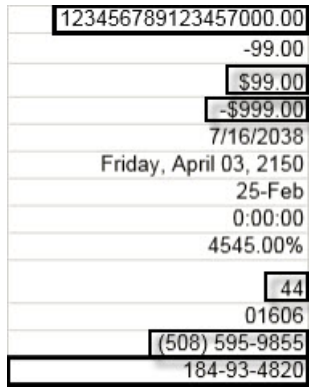
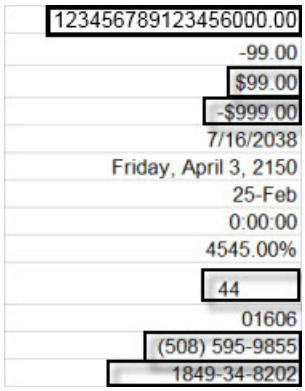
Take advantage of improved cell formatting in TM1 Web websheets

The cell formatting of currency, fractions, phone numbers, and social security numbers in TM1 Web websheets has improved.

The following changes have been made to formatting of cells in websheets:

- For numbers with more than 15 digits, cells in websheets round up the number to the first 15 digits. For example, "123456789123456992.00" appears as "123456789123457000.00". In Excel, only the first 15 digits are stored and remaining digits are replaced by zeros. For example, "123456789123456992.00" appears as "123456789123456000.00".
- Currency appears with no space after the $ sign. Negative currency also appears with no space after the dollar sign. For example, "$99.00" and "-$999.00".
- Fractions are formatted to appear in fraction format "# ??/??" with a space between the whole number and the fraction. When the number is a whole number, the cell is formatted without a space after the whole number.
- Phone numbers are formatted as "(nnn) nnn-nnnn" as in Excel.
- Social security numbers are formatted with the first 9 digits. Any digits that follow the first 9 digits are truncated. For example, "1849348202" appears as "184-93-4820" with the last digit "2" truncated. This formatting is different in Excel. For numbers with more than 9 digits, Excel adds the format to the last 9 digits while the additional digits at the beginning don't change. For example, in Excel, "1849348202" appears as "1849-34-8202".

Table 4. Cell formatting comparison

TM1 Web version 2.0.6 or earlier	TM1 Web version 2.0.7 or later	Cell formatting in Excel
		

This cell formatting is enabled by default in TM1 Web websheets with the feature flag `NewDataFormatter`. The feature flag can be set in `tm1_64\webapps\tm1web\WEB-INF\configuration\features.json`.

Example

```
{
    "NestedDbsEvaluation": false,
    "NewIrrAlgorithm": false ,
    "NewDataFormatter": true
}
```

Check out updated TM1 Web configuration defaults

The following TM1 Web configuration parameters have new default settings. These settings were previously recommendations. They are now default settings in the `tm1web_config.xml` file for new installations of TM1 Web.

Note: Some default configuration parameter values for Planning Analytics on cloud are different than in Planning Analytics Local.

ExportCellsThreshold
Specifies the maximum number of cells that an export of a websheet or a cube view can contain.

Default changed from blank to 1000000.

MaximumConcurrentExports
Specifies the maximum number of concurrent exports that can be executed from TM1 Web.

The default value in Planning Analytics on cloud is set to 3. This default value is unchanged.

The default value in Planning Analytics Local is changed from 5 to 4.

MaximumSheetsForExport
Specifies the maximum number of sheets that are allowed to export.

Default changed from 100 to 50.

WorkbookMaxCellCount
Specifies the maximum cell count of a workbook as a number with no thousands separators.

Default changed from -1 to 500000.

For more information, see TM1 Web configuration parameters.

Review deprecation notices

The following tools and components are deprecated or scheduled for deprecation in IBM Planning Analytics version 2.0.7. Review deprecation details for IBM Planning Analytics version 2.0.7 in Deprecation notices for IBM Planning Analytics.

- **Relational data sources in TM1 Web websheets (local only)**

  Planning Analytics version 2.0.7 is the last release with support for relational data sources in TM1 Web websheets.

- **IBM TM1 Package Connector (local only)**

  Planning Analytics version 2.0.7 is the last release of TM1 Package Connector.

- **Advanced Rules Editor (TM1 Architect and TM1 Perspectives only)**

  As of Planning Analytics version 2.0.7, the **AdvancedRulesEditor** parameter in the `tm1p.ini` file is ignored. The Advanced Rules Editor does not launch in TM1 Architect and TM1 Perspectives, only the basic rule editor launches.

- **IBM TM1 Operations Console**

  IBM TM1 Operations Console is scheduled for deprecation. You can use IBM Planning Analytics Administration to monitor databases in IBM Planning Analytics and IBM Planning Analytics Local.

  To learn more, see Monitor and administer databases (https://www.ibm.com/support/knowledgecenter/SSD29G_2.0.0/com.ibm.swg.ba.cognos.tm1_prism_gs.2.0.0.doc/c_paw_administer_servers.html)..

- **IBM Cognos Performance Management Hub**

  IBM Cognos Performance Management Hub (PMHub) is scheduled for deprecation.

  In Planning Analytics version 2.0.7, the following features have been disabled in PMHub because of security vulnerabilities:

  – Watchlists (com.ibm.ba.pm.service.watchlist)
  – Async job API (com.ibm.ba.pm.service.queue)
  – Pmpsvc passthrough support for PMHub (com.ibm.ba.pm.pmpsvc)
  – Support for old PMHub TM1 v1 requests (com.ibm.ba.pm.bridge)

  If you currently use these features, you have the option of maintaining a TM1 Server that is installed with Planning Analytics version 2.0.6 (ring-fenced by a firewall if necessary) and change any systems that use these features to reference this server.

- **IBM TM1 Top utility**

  The TM1 Top utility is scheduled for deprecation.

Planning Analytics 2.0.6 - October 11, 2018

IBM Planning Analytics Local version 2.0.6 and the cloud release of IBM Planning Analytics version 2.0.6 includes updates and new features for IBM TM1 Server version 11.4.0.

Note: Updates to each version of IBM Planning Analytics are cumulative. If you are upgrading IBM Planning Analytics, review all updates since your installed version to plan your upgrade and application deployment.

Upgrade to Java 8 and removal of Java 7

Planning Analytics Local has been upgraded to Java™ 8.0.5.20.

Important: You must stop all related IBM Cognos TM1 and IBM Planning Analytics services before you upgrade to Planning Analytics version 2.0.6.

On Windows, if the installation detects an existing JRE 7, a new JRE 8 is installed during the installation, and the JRE 7 `cacerts` file is copied to the `Java80\jre\lib\security` location. If you have an

existing Java80 folder, the `cacerts` file is not copied over. The existing Java70 folder is removed. On Linux, you must install Java 8.0.5.20.

Note: With the upgrade to Java 8 in Planning Analytics version 2.0.6, some tools such as the IBM Key Management tool (`ikeyman.exe`), are now located in the <*PA_install_directory*>`\jre\bin` directory of the Planning Analytics installation or in the IBM JRE installation if Linux used.

For more information, see Upgrading from Planning Analytics version 2.0.0 (https://www.ibm.com/support/knowledgecenter/SSD29G_2.0.0/com.ibm.swg.ba.cognos.tm1_inst.2.0.0.doc/t_tm1_inst_upgrade_200.html).

ThirdPartyCertificateTool no longer supported

Not supported in v2.0.6 + The ThirdPartyCertificateTool requires Java 7 and is not supported in Planning Analytics version 2.0.6 or later.

New TurboIntegrator functions to delete leaf elements from dimension or hierarchy

You can use TurboIntegrator functions to delete leaf elements from a dimension or hierarchy using a subset of elements for higher performance.

`DimensionDeleteElements( dimension, subset)`
The subset provides the list of elements to delete from the indicated dimension. The subset is usually temporary.

`HierarchyDeleteElements( dimension, hierarchy, subset)`
If you use `HierarchyDeleteElements` and the indicated hierarchy is the Leaves hierarchy, then the subset should list those leaves that should be deleted, and they are removed completely from the dimension.

New parameter to configure session timeout for TM1 Web

In IBM Planning Analytics Local version 2.0.6, there is a new parameter in the `tm1web_config.xml` file called `HttpSessionTimeout`. This parameter defines the session timeout (in minutes) of the HTTP session for TM1 Web.

If the `HttpSessionTimeout` parameter is not specified (missing or blank), the value is less than 1 or not a numerical value, the default `session-timeout` that is defined in the `web.xml` file is used.

Important: As of IBM Planning Analytics Local version 2.0.6, you must not change the `session-timeout` value in the `web.xml` file.

For more information, see Setting the TM1 Web session timeout (https://www.ibm.com/support/knowledgecenter/SSD29G_2.0.0/com.ibm.swg.ba.cognos.tm1_ug.2.0.0.doc/t_paw_troubleshooting_web_timeout.html).

Remember: In IBM Planning Analytics Local version 2.0.6, you install a new version of the `tm1web_config.xml` file that is called `tm1web_config.xml.new` and your existing `tm1web_config.xml` file is preserved. To take advantage of fixes that are applied to this release, you must rename the `tm1web_config.xml.new` file to `tm1web_config.xml` and you must reapply any changes that you made to your previous configuration settings.

TM1 REST API updates

IBM Planning Analytics Local version 2.0.6 and the cloud release of IBM Planning Analytics version 2.0.6 includes the following updates to the TM1 REST APIs for IBM TM1 Server version 11.4.0.

Metadata updates

The following functions were introduced in 11.4.0:

- Cube.DimensionsStorageOrder
- GetOIDCKeys

The following actions were introduced in 11.4.0:

- Cube.ReorderDimensions
- RemoveOIDCKeyFromCache

To learn more, see What's new in 11.4.0 (https://www.ibm.com/support/knowledgecenter/SSD29G_2.0.0/com.ibm.swg.ba.cognos.tm1_rest_api.2.0.0.doc/r_restapi_v1_csdl.html#restapi_v1_csdl_whats_new_11_4_0).

Planning Analytics 2.0.5 - June 25, 2018

IBM Planning Analytics Local version 2.0.5 and the cloud release of IBM Planning Analytics version 2.0.5 includes updates and new features for IBM TM1 Server version 11.3.0.

Note: Updates to each version of IBM Planning Analytics are cumulative. If you are upgrading IBM Planning Analytics, review all updates since your installed version to plan your upgrade and application deployment.

Local installation and configuration updates

IBM Planning Analytics Local version 2.0.5 includes the following updates to installation and configuration.

Planning Analytics Administration agent installation

The Planning Analytics Administration agent is required for the following features in Planning Analytics Workspace Local:

- Adding dimension members and attributes using drag and drop
- Importing data into a cube using drag and drop

For more information, see Planning Analytics Administration agent installation (https://www.ibm.com/support/knowledgecenter/SSD29G_2.0.0/com.ibm.swg.ba.cognos.tm1_inst.2.0.0.doc/c_tm1_install_paa.html).

Not supported 32-bit version of Planning Analytics no longer available

Planning Analytics Local version 2.0.5 does not include a 32-bit version of the installation program. For more information, see http://www-01.ibm.com/support/docview.wss?uid=swg22013654.

TM1 Server updates

IBM Planning Analytics Local version 2.0.5 and the cloud release of IBM Planning Analytics version 2.0.5 includes the following features for IBM TM1 Server version 11.3.0.

Change in the behavior of the STR function

The behavior of the STR function has been updated. This may cause a behavior change in usage depending on which version of IBM Planning Analytics you are upgrading from.

For more information, see STR (https://www.ibm.com/support/knowledgecenter/SSD29G_2.0.0/com.ibm.swg.ba.cognos.tm1_ref.2.0.0.doc/r_tm1_ref_str.html.

Change in the behavior of TI process rollback

A TurboIntegrator process that encounters a major error now rolls back instead of committing any changes.

This change in behavior impacts only major errors. The entire TurboIntegrator process is a single atomic transaction. Either the entire process succeeds and is committed, or the entire process fails and rolls back. For example, errors such as the data source failing to open or attempting to write to a cube that doesn't exist are major errors and now trigger a rollback.

The handling of minor errors is unchanged. For example, errors such as having a malformed input line in a data source logs a minor error and continues running the next data source record.

Multi-threaded loading of individual cubes

You can enable multi-threaded loading of individual cubes, which delivers better speeds than the approach that is enabled by the `MaximumCubeLoadThreads` setting. The following `tm1s.cfg` settings are available to enable and configure this feature:

- `MTCubeLoad`
- `MTCubeLoad.MinFileSize`
- `MTCubeLoad.UseBookmarkFiles`
- `MTCubeLoad.Weight`
- `IndexStoreDirectory`
- `PreallocatedMemory.BeforeLoad`
- `PreallocatedMemory.Size`
- `PreallocatedMemory.ThreadNumber`

Using `MTCubeLoad` also eliminates the risk of changing feeder generation sequences. When `MTCubeLoad` is enabled, the `MaximumCubeLoadThreads` configuration option is ignored.

TM1 Server administrators can use new `tm1s.cfg` settings (`PreallocatedMemory.Size`, `PreallocatedMemory.ThreadNumber`, and `PreallocatedMemory.BeforeLoad`) to configure preallocation memory and optimize scale-up and performance results.

The following loggers have been added:

log4j.logger.TM1.Server.Loading=DEBUG
: Allows you to capture individual timing of TM1 Server loading stages: DeSerializeDimensions, DeSerializeAttributeCubes, DeSerializeRegularCubes, GenerateServerSecurity.

log4j.logger.TM1.Cube.Loading=DEBUG
: Captures cube loading time, separately for `.cub` and `.feeder` files.

For more information, see `MTCubeLoad` (https://www.ibm.com/support/knowledgecenter/SSD29G_2.0.0/com.ibm.swg.ba.cognos.tm1_inst.2.0.0.doc/c_tm1_inst_mtcubeload.html).

New operational administrator

IBM Planning Analytics has a new system's user group, OperationsAdmin, whose sole purpose is to do maintenance and operational work. The members of this group do not see any of TM1 metadata, nor any cube or any other data. However, members of this group can perform tasks such as unlock users, disconnect users, and cancel threads.

For more information, see Administrative groups and authority (https://www.ibm.com/support/knowledgecenter/SSD29G_2.0.0/com.ibm.swg.ba.cognos.tm1_op.2.0.0.doc/c_understandingadministrativegroupsandauthority_n1701b8.html).

Reference a public subset by name in MDX

You can use the `TM1SubsetToSet` (https://www.ibm.com/support/knowledgecenter/SSD29G_2.0.0/com.ibm.swg.ba.cognos.tm1_ref.2.0.0.doc/r_tm1_ref_tm1subsettoset.html) function to return the members of a public TM1 subset. If a private and a public subset have identical names, enter the optional scope parameter as `public` to return the members of the public TM1 subset. If the scope parameter is not specified, the server searches first for a private subset.

TM1 REST API updates

IBM Planning Analytics Local version 2.0.5 and the cloud release of IBM Planning Analytics version 2.0.5 includes the following updates to the TM1 REST APIs for IBM TM1 Server version 11.3.0.

Batch request capability

To execute a set of cell updates as autonomous requests, each of which can individually succeed or fail, you can batch multiple requests in one request.

The 11.3.0 version of the OData v4.0 based REST APIs partially implements the JSON format based $batch implementation, as specified in Chapter 19 of the OData Committee Specification 1: Batch Requests and Responses (http://docs.oasis-open.org/odata/odata-json-format/v4.01/odata-json-format-v4.01.pdf).

To learn more, see Batch options (https://www.ibm.com/support/knowledgecenter/SSD29G_2.0.0/com.ibm.swg.ba.cognos.tm1_rest_api.2.0.0.doc/dg_tm1_odata_additional_ops.html#dg_tm1_odata_batch_query_update_options).

Metadata updates

The following types were introduced in 11.3.0:

- `ErrorLogFile`
- `ProcessExecuteResult`
- `ProcessExecuteStatusCode`

The following entity types were **deprecated** in 11.3.0:

- `ProcessErrorLog`

The following functions and actions were introduced in 11.3.0:

- `TailMessageLog`
- `TailTransactionLog`
- `ExecuteProcessWithReturn`
- `Process.ExecuteWithReturn`

The following actions were **deprecated** in 11.3.0:

- `Process.Execute`
- `ExecuteProcess`

To learn more, see What's new in 11.3.0 (https://www.ibm.com/support/knowledgecenter/SSD29G_2.0.0/com.ibm.swg.ba.cognos.tm1_rest_api.2.0.0.doc/r_restapi_v1_csdl.html#restapi_v1_csdl_whats_new_11_3_0).

Documentation updates

The TM1 REST API documentation has been updated to include information about data spreading. To learn more, see Data spreading with the TM1 REST API (https://www.ibm.com/support/knowledgecenter/SSD29G_2.0.0/com.ibm.swg.ba.cognos.tm1_rest_api.2.0.0.doc/c_spreading_rest_api.html).

TM1 Web updates

IBM Planning Analytics Local version 2.0.5 and the cloud-only release of IBM Planning Analytics version 2.0.5 includes the following features for TM1 Web.

Changes to `web.xml` file

If you are upgrading IBM Planning Analytics TM1 Web with this installation of IBM Planning Analytics Local version 2.0.5, you install a new version of the `web.xml` file called `web.xml.new` and your existing `web.xml` file is preserved.

To take advantage of fixes applied to this release, you must use the `web.xml.new` file and you must reapply any changes that you made to your previous configuration settings. In particular, restore your values for **`session-timeout`**.

1. Back up the existing `web.xml` file in `<PA_installation_location>/webapps/tm1web/WEB-INF`. For example, rename `web.xml` to `web.xml.old`. This step backs up your current settings.
2. Rename `web.xml.new` to `web.xml`. This step uses the new version of `web.xml` that is supplied with IBM Planning Analytics Local version 2.0.5.
3. Replace the entry for **`session-timeout`** in `web.xml` with the entry from `web.xml.old`. This step restores any changes that you made to this property previously.

   For example:

```
<session-config>
    <session-timeout>20</session-timeout>
</session-config>
```

Exporting to PDF

Exporting a websheet to PDF uses the print area information. If you define a print area in a worksheet, only the data in that area is exported to PDF. This behavior is the same as printing from Excel.

Cognos Insight updates

IBM Planning Analytics Local version 2.0.5 includes updates for Cognos Insight.

Deprecated Cognos Insight - Distributed mode

IBM Planning Analytics version 2.0.5 is the last release of Cognos Insight – Distributed mode when used with TM1 Applications. Cognos Insight in Connected mode and TM1 Application Web will continue to be supported.

This change does not affect the functionality of the client, with the exception of work offline. If the ability to work offline is an important capability, IBM recommends the use of IBM Planning Analytics for Microsoft Excel.

Planning Analytics 2.0.4 - February 16, 2018

IBM Planning Analytics Local version 2.0.4 and the cloud release of IBM Planning Analytics version 2.0.4 includes updates and new features for IBM TM1 Server version 11.2.0.

Note: Updates to each version of IBM Planning Analytics are cumulative. If you are upgrading IBM Planning Analytics, review all updates since your installed version to plan your upgrade and application deployment.

Local installation and configuration updates

IBM Planning Analytics Local version 2.0.4 includes the following updates to installation and configuration.

Deprecated 32-bit version of TM1 Server client installation

Planning Analytics Local version 2.0.4 is the last release of the 32-bit version of the TM1 Server client installation program.

For more information, see http://www-01.ibm.com/support/docview.wss?uid=swg22013654.

TM1 Server updates

IBM Planning Analytics Local version 2.0.4 and the cloud release of IBM Planning Analytics version 2.0.4 includes the following features for IBM TM1 Server version 11.2.0.

Encryption at rest

TM1 Server uses a two-tier key management system to encrypt and decrypt server data. TM1 APIs enable and disable data encryption. With the TM1 Server command line utility, you can perform primary key rotations for added security. And, if you need to, you can restore files by using the TM1Crypt utility. For more information, see the TM1 Server data encryption in the *Planning Analytics Installation and Configuration* documentation.

Note: Encryption is not supported for IBM Planning Analytics on cloud. Encryption is available for Planning Analytics Local customers only. Encryption is not supported on a TM1 Server that is using replication and sync. Blobs are excluded from server artifacts that are encrypted by encryption at rest.

Server stability and improved server shutdown

The TM1 Server performs the following tasks to safely shut down the server:

1. Terminates all spawned external processes.
2. Cancels all running threads (which is the same as an administrator logging in and canceling all running threads).
3. Collects and produces information and metrics for the shutdown process.
4. Sends data to the event log and the server log.

You can use IBM Planning Analytics Administration to start and stop databases.

Change to reporting of memory consumed by feeders in TM1 Server

TM1 Server now reports the memory that is consumed by feeders only once. If there are no changes to rules or cube data, the memory consumption represents a static value that is recorded after the server successfully starts. If there are changes to rules, feeders, or cube data during the running of the server, the Memory Used for Feeders value in the }StatsByCube control cube is updated the next time that the server starts.

Note: The memory accounting is accurate at start-up time. You cannot change your feeders and see what kind of memory profile is generated without restarting the server.

For more information, see Performance Monitoring Control Cubes(https://www.ibm.com/support/knowledgecenter/SSD29G_2.0.0/com.ibm.swg.ba.cognos.tm1_op.2.0.0.doc/c_performancemonitoringcontrolcubes_n608ec.html).

Selectively enable multi-threaded query processing

The MTQQuery parameter in the tm1s.cfg file is now set to True by default. You can use a new TI function, `EnableMTQQuery()`, to selectively enable or disable multi-threaded query processing when calculating a view to be used in a TI process.

TM1 support for localizable attributes for View, Subset, and TI Processes

TM1 Server supports localizable attributes. You can provide a localized value for the attributes of Dimension, Element, and Cube. TM1 Server automatically returns the correct value for an attribute based on the user-supplied language locale or preferred language locale setting. You don't need to create an alias attribute or text attribute for each language.

In this version of TM1 Server, the View, TI Process, and Subset objects can also have attributes that are localizable. For more information, see Attributes and localization.

Sandbox comparisons

To enable sandbox comparisons, you can set **`EnableSandboxDimension`** parameter in your tm1s.cfg file.

For more information, see EnableSandboxDimension.

REST API updates

The following changes were made to the TM1 REST APIs:

- You can use the REST API actions `ExecuteCubeDrillthrough` and `ExecuteRelationalDrillthrough` to preview a datasource. For more information, see Preview a datasource.
- You can rename or copy a folder in the TM1 Server by using the `Copy` and `Move` actions that are bound to the Entry entity. Copy creates an Entry with a different name in the target destination and leaves the source Entry the same. Move creates an Entry with a different name in the target destination and removes the source Entry. You can specify whether the Entry that is created should be public or private. If the target folder is unspecified, the parent folder of the source is used. If the target Name is unspecified, the name of the source is used.
- You can retrieve elements by supplying either alias or invariant name: The OData-compliant REST API requires an application to know the type of the key when asked for dimension element. The supplied key can either be invariant name or alias. However, when the type is not known, that is, can be either invariant name or alias, the application cannot determine which one to use. For more information, see Retrieve elements by supplying either alias or invariant name.
- You can now execute a PUT on the reference of the subset element collection to update the collection. You can execute a DELETE on the reference of the collection to empty the collection. The $filter query option can be used to specify which element to be removed. For more information, see Update all elements in a static set.

To learn more, see What's new in 11.2.0 (https://www.ibm.com/support/knowledgecenter/SSD29G_2.0.0/com.ibm.swg.ba.cognos.tm1_rest_api.2.0.0.doc/r_restapi_v1_csdl.html#restapi_v1_csdl_whats_new_11_2_0).

TM1 Performance Modeler updates

IBM Planning Analytics Local version 2.0.4 and the cloud release of IBM Planning Analytics version 2.0.4 includes updates to IBM Cognos TM1 Performance Modeler.

In IBM Planning Analytics version 2.0.4, TM1 Performance Modeler is started as a Java application without a console window.

If you are trying to locate the TM1 Performance Modeler process in Task Manager, you must look for `javaw.exe`. Previously, this process appeared in Task Manager as `PerformanceModeler.exe`.

When TM1 Performance Modeler is starting up, the icon in the taskbar might appear as  .

Cognos Insight updates

IBM Planning Analytics Local version 2.0.4 includes new features for Cognos Insight.

The following features were introduced in IBM Planning Analytics Local version 2.0.4. For more information, see the *Cognos Insight* documentation in IBM Knowledge Center.

Autosum

For any widget with numeric values in the grid, you can highlight cells and display their sum and average on the widget with a count of the number of cells selected.

1. To enable this feature for any widget, from the drop-down menu on the widget, select **Show Autosum**.
2. Click in the grid to close the menu.
3. Highlight any range of numeric cells. For disconnected cells, use Ctrl+click to multi-select cells.

If you select any cells that contain strings, these cells are not included in the count of selected cells.

If none of the cells you select contain numeric data, the average displays NaN (not a number).

Context-sensitive action buttons

You can add parameters that can be synchronized with your TM1 data to an action button that runs a TurboIntegrator (TI) process. When the TI process runs, the parameter is dynamically replaced by the name of the currently selected member of the specified dimension.

For more information, see Adding action buttons that run a script (https://www.ibm.com/support/knowledgecenter/SSD29G_2.0.0/com.ibm.swg.ba.cognos.dsk_ug.2.0.0.doc/t_dsk_work_script.html).

Changes to startup

In IBM Planning Analytics 2.0.4, Cognos Insight is started as a Java application without a console window.

If you are trying to locate the Cognos Insight process in Task Manager, you must look for `javaw.exe`. Previously, this process appeared in Task Manager as `CognosInsight.exe`.

When Cognos Insight is starting up, the icon in the taskbar might appear as  .

Deprecation of Cognos Insight - Distributed mode

As of IBM Planning Analytics version 2.0.4, IBM announces the intent to deprecate the use of Cognos Insight – Distributed mode when used with TM1 Applications. Cognos Insight in Connected mode and TM1 Application Web will continue to be supported.

This change does not affect the functionality of the client, with the exception of work offline. If the ability to work offline is an important capability, IBM recommends the use of IBM Planning Analytics for Microsoft Excel.

Chapter 2. What's new in Planning Analytics Workspace

Find out what's new or changed in the most recent release of IBM Planning Analytics Workspace.The new features described here always reflect the full capabilities of Planning Analytics Workspace on cloud.

You can also review all new features introduced since 2.0.58, in the the IBM Planning Analytics Workspace new feature summary table. You can use the table to search for new features across all releases by description. You can also sort new features by release, date, functional area, and description.

If you use Planning Analytics Workspace Local, some features might not be available. For more information, see Applicability of Planning Analytics Workspace documentation (https://www.ibm.com/support/knowledgecenter/SSD29G_2.0.0/com.ibm.swg.ba.cognos.tm1_prism_gs.2.0.0.doc/c_prism_applicability_documentation.html).

2.0.90 - What's new, September 19, 2023

Learn about new features and known issues in version 2.0.90 of IBM Planning Analytics Workspace in the following topics.

Updates to each version of Planning Analytics Workspace are cumulative. To see what was new in previous releases, see Chapter 2, “What's new in Planning Analytics Workspace,” on page 45.

You can also review all new features introduced since 2.0.58, in the the IBM Planning Analytics Workspace new feature summary table. You can use the table to search for new features across all releases by description. You can also sort new features by release, date, functional area, and description.

You can view the fix lists for this and previous versions of Planning Analytics Workspace at https://www.ibm.com/support/pages/ibm-planning-analytics-20-fix-lists#anchor2.

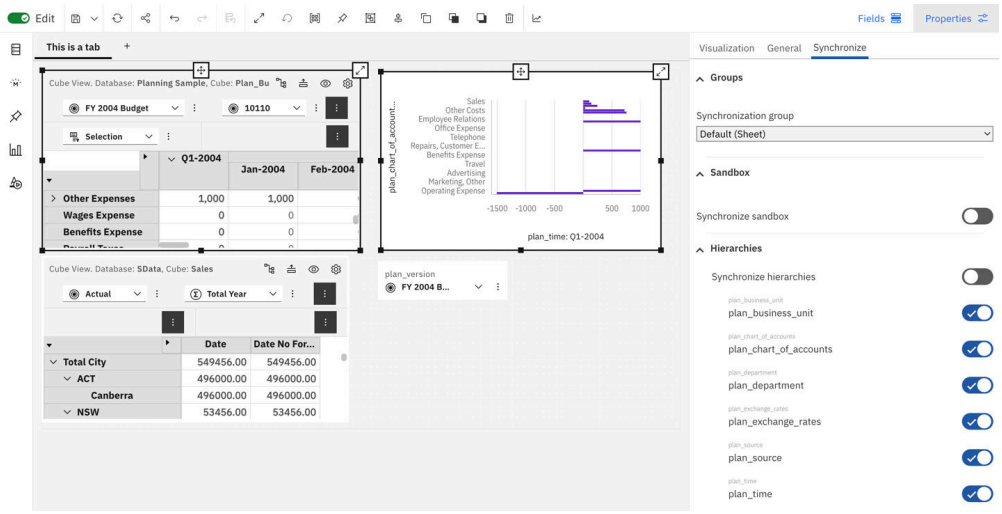
What's new in books and reporting - 2.0.90

The following new and changed features in books and reporting are available in Planning Analytics Workspace 2.0.90.

Set synchronization properties for multiple widgets simultaneously

You can now set synchronization properties for multiple widgets at the same time. Previously you could set synchronization properties for only one widget at a time.

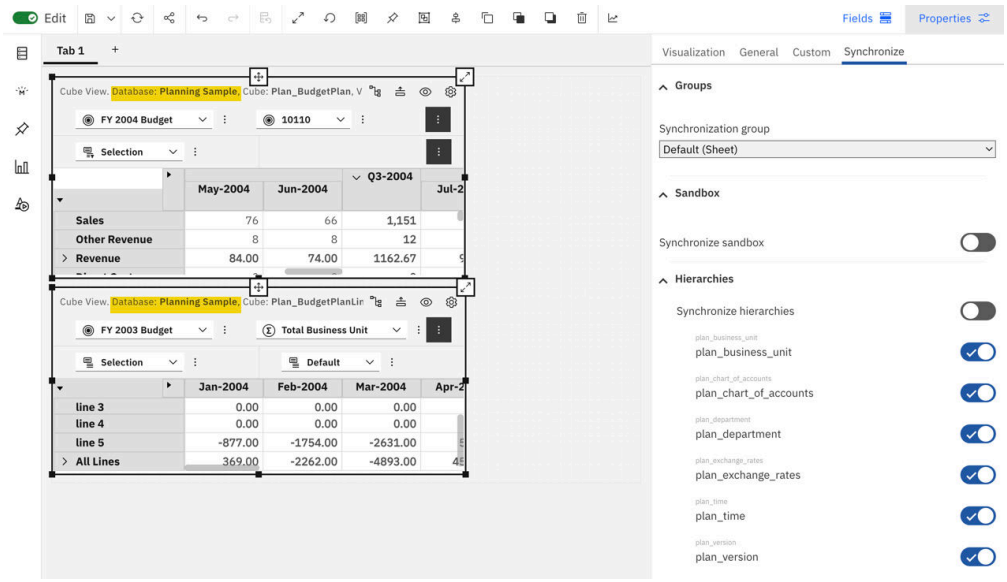
In edit mode, select multiple widgets with Ctrl + click or by using the mouse drag action. Then, under **Properties > Synchronization**, choose the synchronization properties that you want to apply to the selected widgets.



When you select multiple widgets, only the synchronization properties that apply to all selected widgets display. The following properties are available if you select:

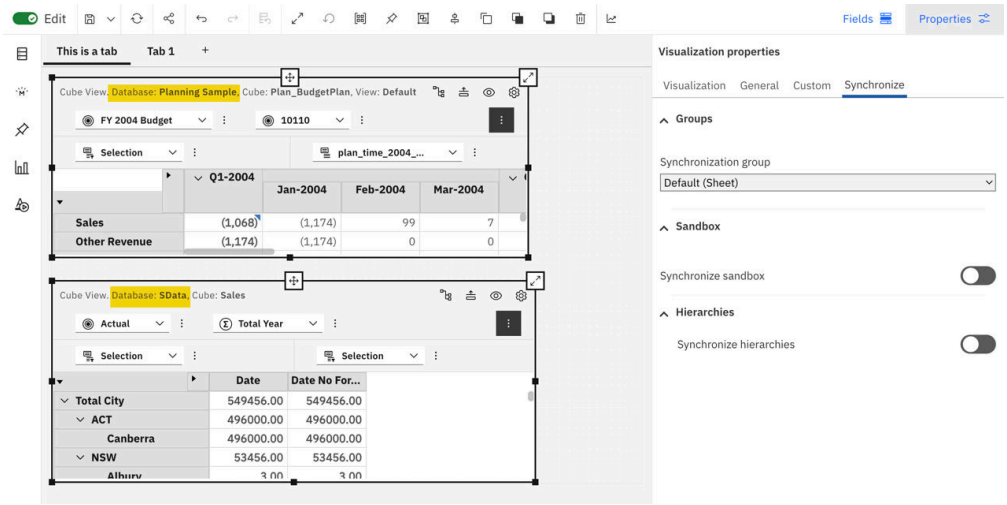
- Cube views from the same database

  The **Synchronization group**, **Synchronize sandbox**, and **Synchronize hierarchies** properties are available. You can synchronize only those hierarchies that are common to both cube views; other hierarchies do not display.



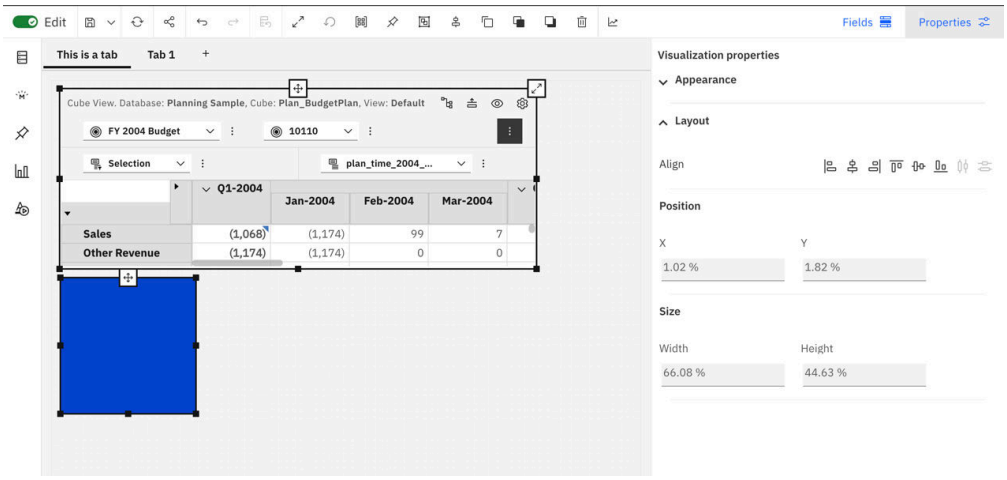
- Cube views from different databases

  The **Synchronization group** and **Synchronize sandbox** properties are available. You can also enable the **Synchronize hierarchies** property to turn on synchronization, but since there aren't any common hierarchies between the selected widgets, there are no hierarchies to select.



- Cube view and shape widget

  Since the shape widget does not have synchronization properties, no synchronization properties display.



The order in which the synchronization properties display in **Synchronization groups** and **Synchronize hierarchies** is determined by the widget that you select first. For example, if the first widget that you select is in the Book synchronization group, the Book option appears first in the **Synchronization groups** list.

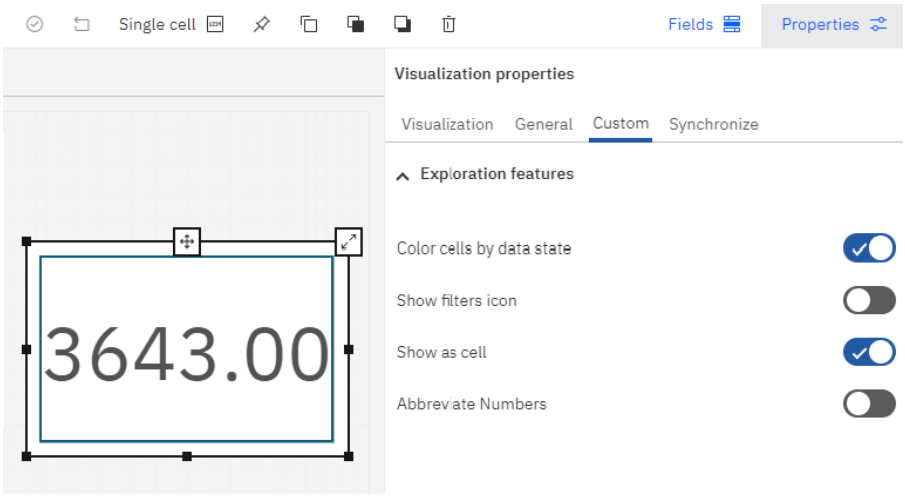
Ability to delete data from single cell widgets removed

You can no longer use the **Delete** key to delete data from single cell widgets. The **Delete** key function was disabled on the contents of a single cell widget to prevent accidental deletion of data. However, you can modify data in a single cell widget, including clearing the value to display **0**, or delete the single cell widget altogether.

To modify single cell widget values (in consumption and Edit mode), the **Show as cell** property must be enabled for the widget.

To turn on the **Show as cell** property:

1. Select the single cell widget in Edit mode.
2. Go to **Properties** and under the **Custom** tab, enable the **Show as cell** property.



A blue box outlines the value inside the single cell widget. Double-click the value to make changes.

When **Show as cell** property is on, you can also clear the value in a single cell widget with the **Clear** option in the right-click menu. The existing value clears and displays **0** instead.

When the **Show as cell** property is turned off, the single cell widget is in read-only mode. You cannot modify the widget's values or delete the widget.

You can delete a single cell widget in Edit mode only. Use the **Delete** icon in the toolbar to delete the widget.

Select a member or set by typing its name in an exploration view

The exploration view now offers a quick way to select a member or set. You can open an input box from a dimension tile in the **Context** or **Bench** area to enter a member name or Member ID and update the view with that member. Similarly, you can open the input box from a tile in the **Row** or **Column** area and type the set name to update the view with that set.

This feature is especially useful if you are familiar with the data in the cube and want to avoid using the **Search** feature to find and select a member or set.

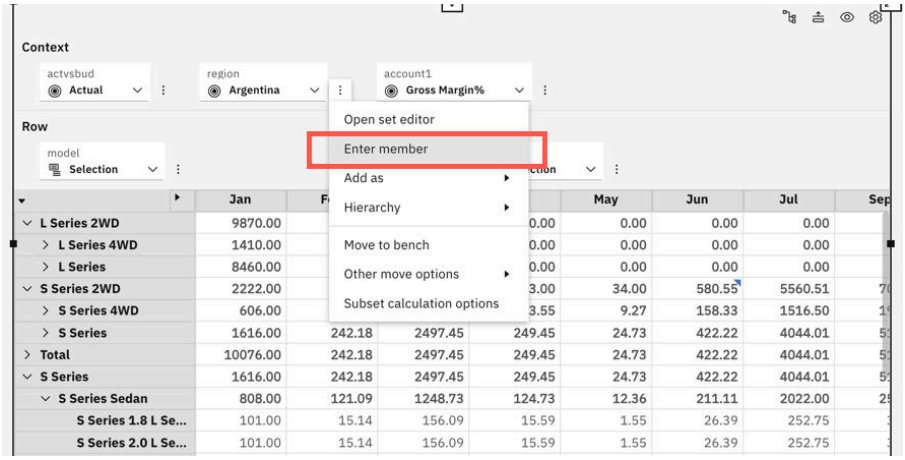
When you enter a member using the input box, the current set is bypassed and you can directly use any member. The set then changes to a single member set.

If you are selecting a set using the input box, the named set you enter must exist. If customized sets are defined, then the named set must be in the customized set list.

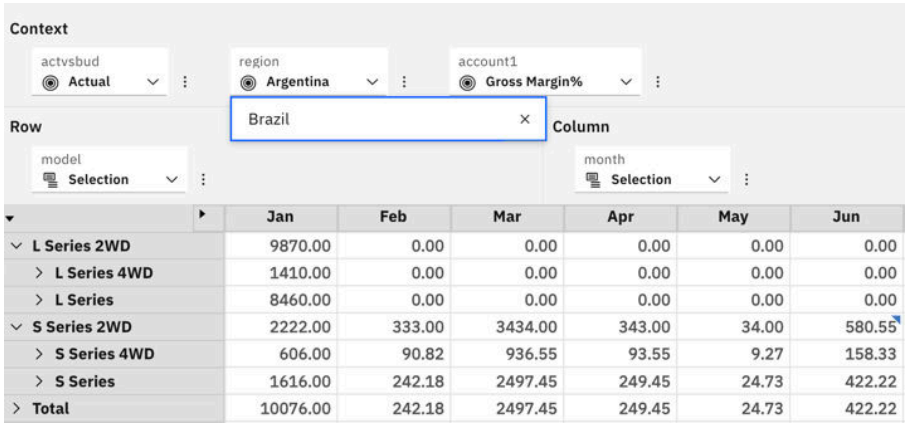
To use the input box to select a member:

1. Click the menu icon next to the dimension tile in the **Context** or **Bench** area and select **Enter member** to open the input box.

   Tip: If you're on Windows, simply press **Ctrl + click** the member name in a dimension tile to open the input box.

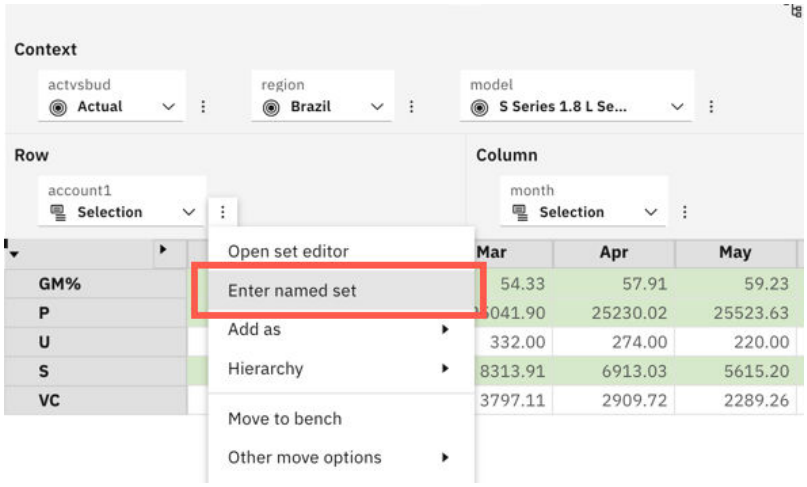


2. Type the member name or ID in the input box and press Enter.



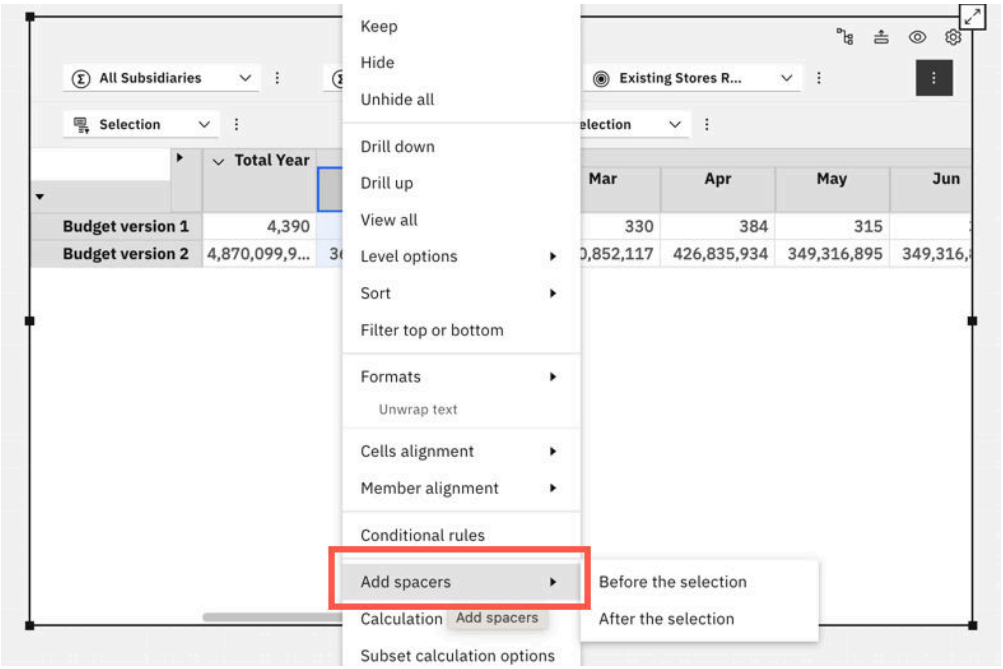
The view updates with the member you entered.

You can select a set by typing its name in the same way from the tiles in the **Row** or **Column** area. If you are using the menu option, select **Enter named set** instead to open the input box.



Insert spacer rows and columns in explorations

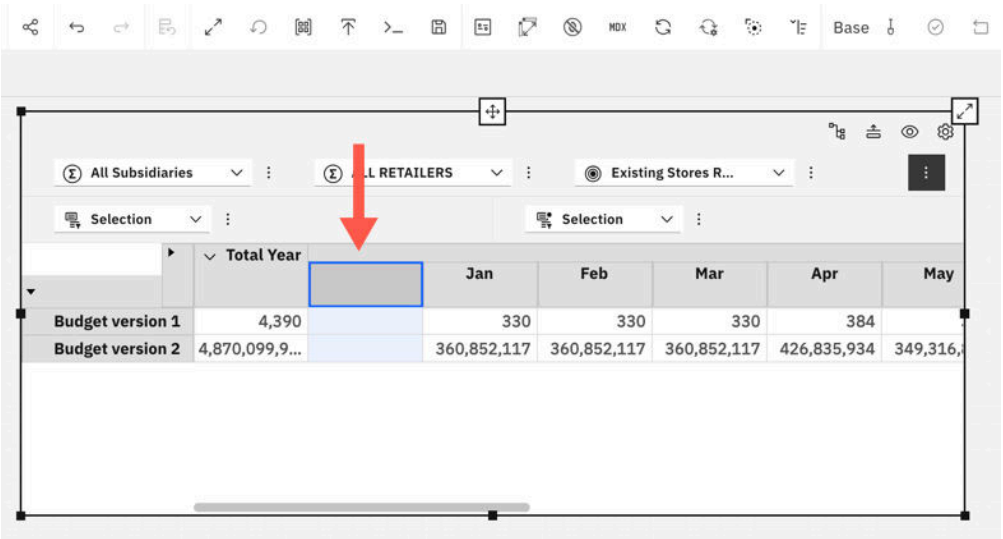
You can now insert spacer rows and columns in explorations through the right-click menu. This is a useful for building stylized views of data in books.



To insert a spacer:

1. Select a row or column and right-click a row or column header in an exploration.
2. Click **Add spacers** and select where you want to insert the spacer row or column.

A spacer row or column is inserted at the position you selected.

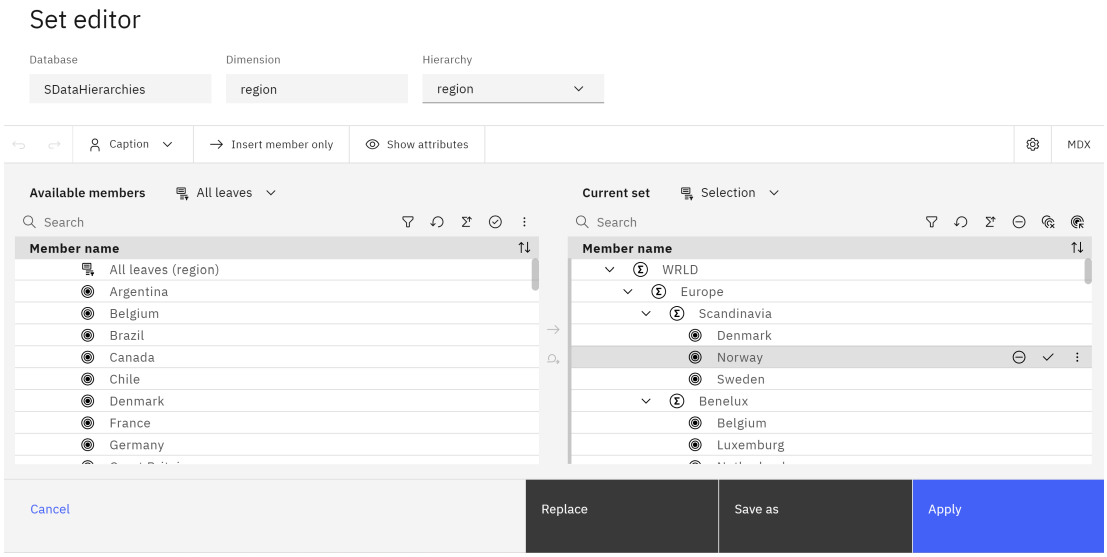


You can copy and paste a row or column with spacer cells. However, the spacer cells can break some spreads.

To remove a spacer row or column, right-click the spacer header cell and select **Remove**.

Replace button now works on selections in the Current set

The **Replace** button in the set editor now also works on the selections you make in the **Current set** pane. You can select members on both sides of the set editor, either the **Available members** or the **Current set**, and replace members in the view.



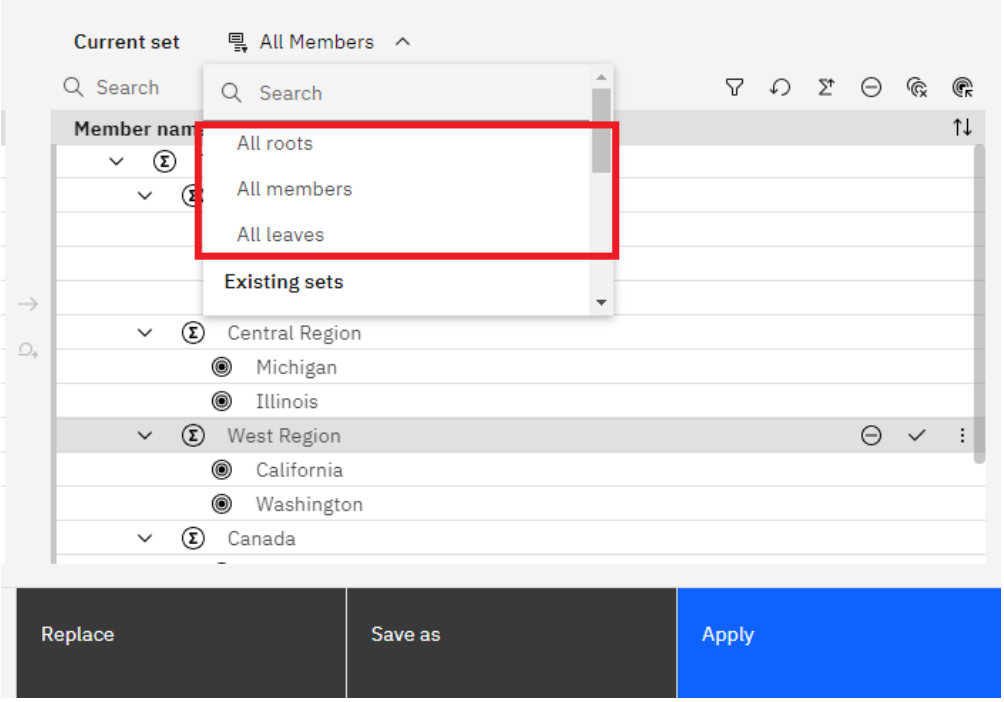
The **Replace** button is disabled when no members are selected in the set editor.

Previously, while you could select members on one or both sides of the set editor at the same time, the **Replace** button only worked on selections that were made in the **Available members** pane. To replace members in a view from the **Current set** in the set editor, you had to click **Apply** instead of **Replace**. Additionally, if there were no selections in the **Available members** pane, the **Replace** button was disabled.

Virtual set and reset features are now available for the current set in the set editor

All virtual sets (**All roots**, **All members**, and **All leaves**) in the **Available members** pane in the set editor are now also available in the **Current set** pane. Additionally, reset features are now available in the **Current set** pane.

The availability of virtual sets in the **Current set** pane lets you work with these sets without having to toggle **Available members** back on when you are in single-pane mode.



When you select a virtual set, the **Current set** label changes to display the virtual set's name.

The **Current set** changes when you:

- Select a named set or virtual set from **Current set** list
- Replace **Current set** with a named set from the **Available members** pane
- Switch hierarchies - when you switch hierarchies, the **Current set** changes to the default named set. If a default named set does not exist, the **Current set** switches to **All roots**.
- Delete the current named set

If your **Current set** is a named set, the **Current set** keeps the alias of the existing set and expands above with the virtual set, when you select **Show totals trailing** and choose a virtual set.

You can use **Undo** and **Redo** to move between a virtual and a named set.

You can now also **Reset the current set** to reset changes that you made to the currently selected set.

You can reset the current set only if you made edits to the set or if you inserted members from **Available members** to the **Current set**. You can verify that you made an edit by the state of the set icon: .

The **Reset the current set** feature is disabled when you perform the following gestures:

- View the attributes of any member in the **Current set** by clicking **Show attributes**
- Select a different set from **Current set** menu
- Switch the hierarchy in the set editor
- Delete a set on the **Available members** pane
- Save a new named set

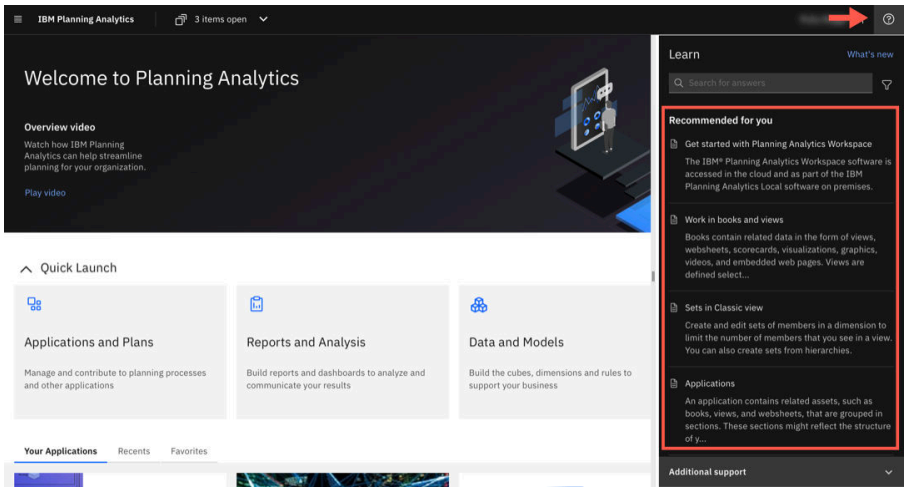
AI-generated recommendations available in the Learn Pane

The Learn Pane now provides dynamic AI-generated recommendations as well as static recommendations.

When you interact with the content inside the Learn Pane, the recommendation engine makes daily updates based on what you and other users are viewing. If no content was viewed inside the Learn Pane,

the recommendations remain unchanged. For example, if you and other users use books and views more often, more content about books and views is generated in the Learn Pane.

Previously, the Learn Pane provided suggestions only based on where you are in the product. The new update makes it convenient to find helpful topics that are more tailored to your current needs.



What's new in plans and applications - 2.0.90

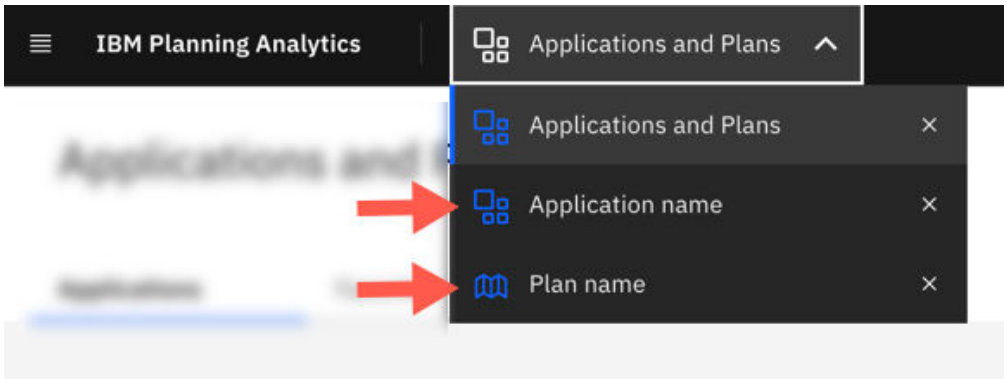
The following new and changed features in plans and applications are available in Planning Analytics Workspace 2.0.90.

Usability improvements to the contribution page in Applications and Plans

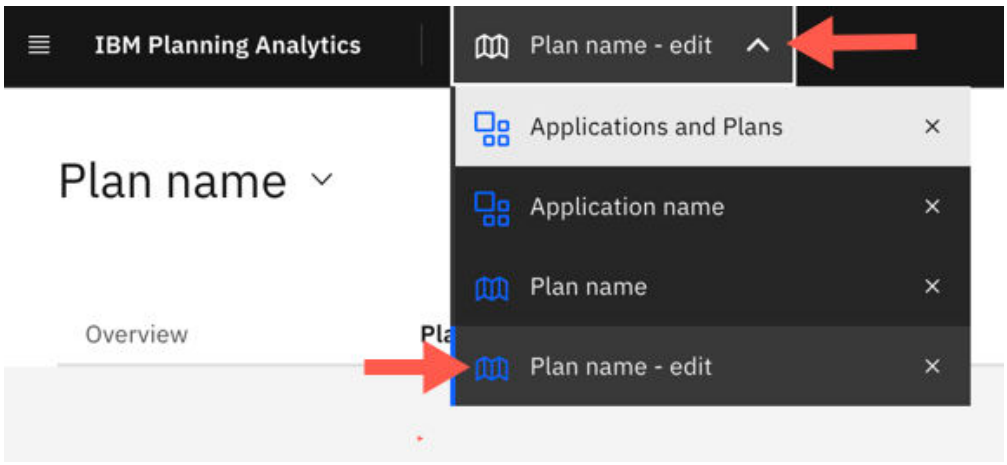
The contribution page in Applications and Plans include several usability enhancements that make it easier to navigate between applications and plans or to work with assets.

Easy to identify contribution mode in the content menu

When you open an application or a plan to the contribution page, the application or plan name displays in the content menu.



You can now easily differentiate between an application or plan that is in contribution and edit mode. An application or plan that is in edit mode displays in the content menu with an "- edit" appended to its name.



Assets open in the same page

Assets now open in the same page as the application or plan when you access them on the contribution page. Previously, when you opened an asset in an application or plan, the asset opened on a new page and displayed as a separate page in the content menu.

Editing of assets restricted in contribution mode

You can no longer edit assets in applications or plans when you are in contribution mode. You can enter values in a cube viewer or change the visualization type in contribution mode but you cannot add a new widget to the asset or change the asset's properties.

You can edit an asset in **Reports and Analysis**.

What's new in modeling - 2.0.90

The following new and changed modeling features are available in Planning Analytics Workspace 2.0.90.

Work with database logs on the modeling workbench

You can now access the server log, transaction log, and audit log for a database directly from the modeling workbench in Planning Analytics Workspace.

About this task

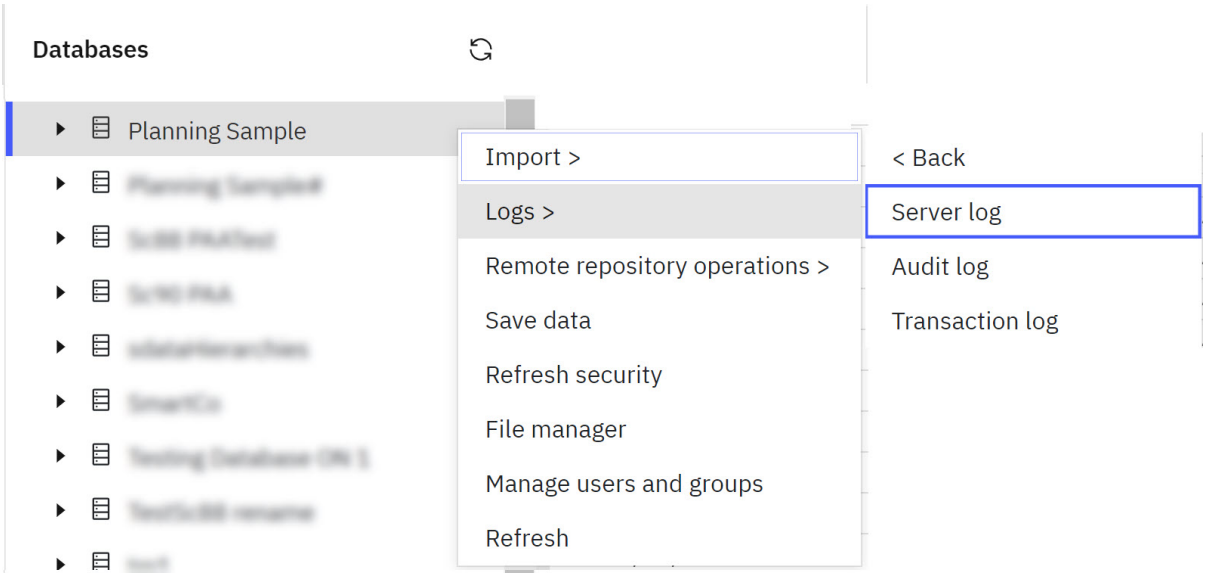
Access to server logs is available only on the modeling workbench. You cannot open logs from a book.

The option to open the server log and the transaction log is available for all databases. To access the audit log, the **Audit log** configuration parameter must be enabled for the database.

You can still download database logs from the Databases page in Planning Analytics Administration.

Procedure

1. To open any of the available database logs, open a modeling workbench.
2. Right-click the database on the **Data** tree.
3. Click **Logs**.
4. Click the log that you want to open.



Results

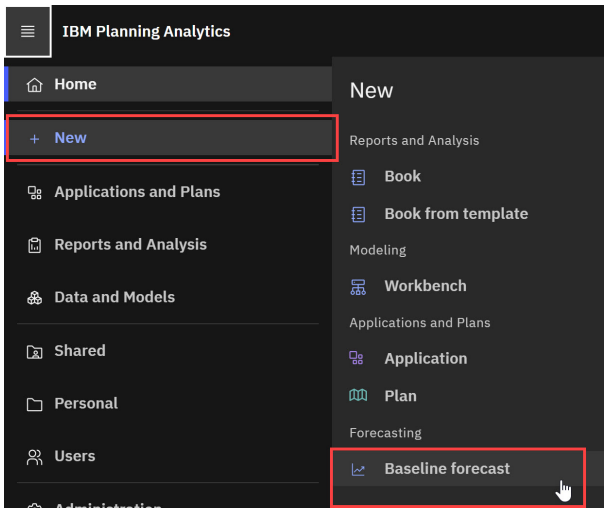
The log you click opens in a new tab on the modeling workbench. All logs include a filter to specify the period to display records. The audit log and transaction log also include additional filters that you can apply to the records shown in the log viewer.

Use baseline forecasting to create and share forecasts

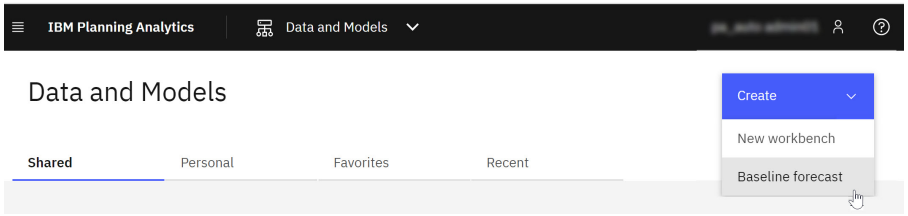
A baseline forecast is a new Planning Analytics Workspace asset that administrators and modelers can create and share with other users in your organization. Administrators, modelers, and analysts with the appropriate permissions can run the baseline forecast at any time and use the forecast to improve the planning process. Consumers cannot run baseline forecasts.

Baseline forecasts enhance the existing forecasting capabilities in Planning Analytics Workspace. You can still create and run ad-hoc forecasts on explorations in a book.

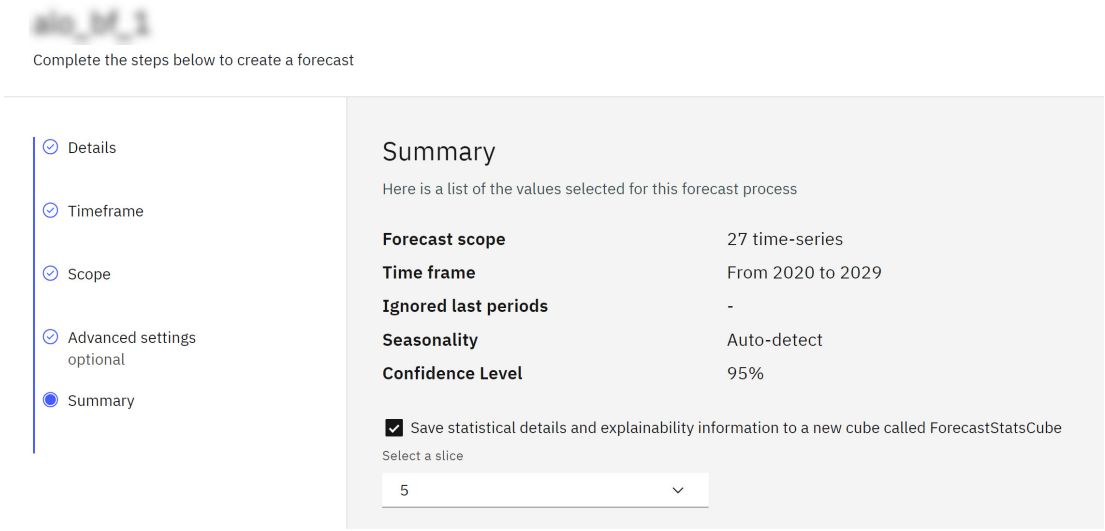
You can create a baseline forecast from the Planning Analytics Workspace home menu.



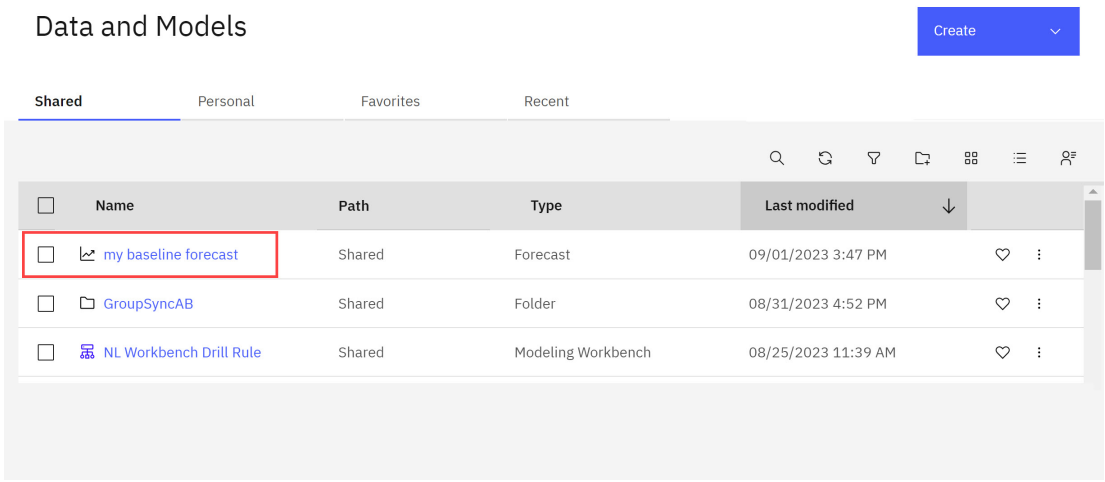
You can also create a baseline forecast from the Data and Models page.



Baseline forecasts are created using the same settings and parameters you are familiar with from creating ad-hoc forecasts on explorations. You set the timeframe, scope, and optional advanced settings for the forecast.



After the baseline forecast is defined, saved, and activated, it's available as an asset on both the Data and Models page and the Reports and Analysis page, where other users can open and run the forecast.



What's new in administration - 2.0.90

The following new and changed administration features are available in Planning Analytics Workspace 2.0.90.

Simplified process to rename databases, snapshots, and user groups

A new **Edit** option on the **Databases**, **Lifecycle Management**, and **Users and groups** pages simplifies the renaming process.

In Planning Analytics Administration, select a database, snapshot, or user group on the relevant administration page, then click Edit to modify the item name. You can also modify the description for snapshots and user groups.

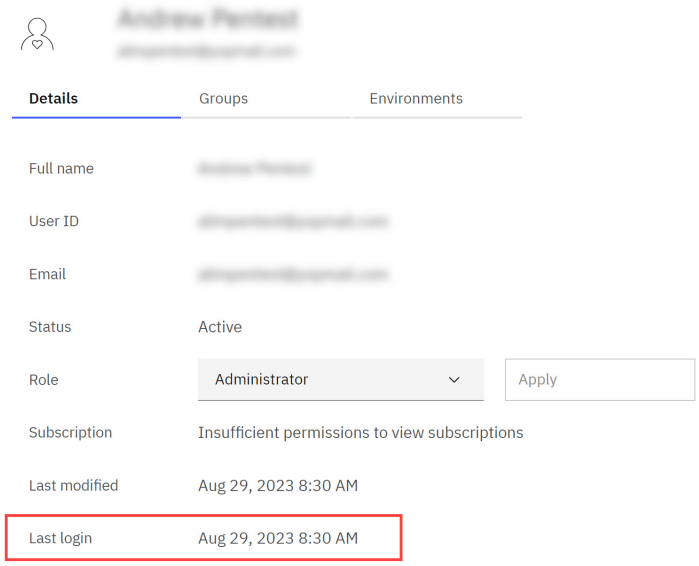
Note that a database must be stopped before you can rename it.

View a user's last login in Planning Analytics Administration

An enhancement in Planning Analytics Workspace 2.0.87 added the ability to view the last login for a user when you downloaded a user report from the **Users and groups** page. You can now view the last login for a user directly in Planning Analytics Administration without downloading a report.

Procedure

1. Open Planning Analytics Administration.
2. Click the **Users and groups** tile.
3. Click the **Users** tab.
4. Click a user.
5. Click the **Details** tab for the user to review the last login.



Deprecation notices - 2.0.90

The following deprecation notices are applicable to Planning Analytics Workspace 2.0.90.

Classic cube viewer removed from Planning Analytics Workspace 2.0.90

As of Planning Analytics Workspace 2.0.90, the classic cube viewer is no longer available in Planning Analytics Workspace.

Any existing classic cube viewer will be converted to a new experience cube viewer when first opened in Planning Analytics Workspace 2.0.90.

2.0.89 - What's new, July 24, 2023

Learn about new features and known issues in version 2.0.89 of IBM Planning Analytics Workspace in the following topics.

Updates to each version of Planning Analytics Workspace are cumulative. To see what was new in previous releases, see Chapter 2, “What's new in Planning Analytics Workspace,” on page 45.

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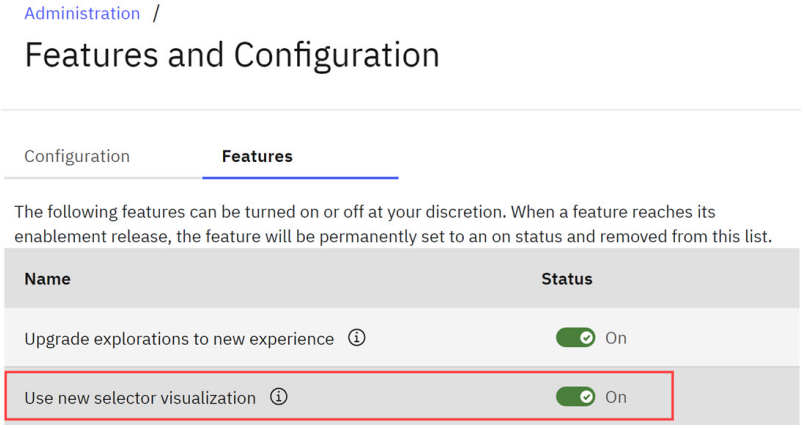
What's new in books and reporting - 2.0.89

The following new and changed features in books and reporting are available in Planning Analytics Workspace 2.0.89.

Use the new Selector visualization in place of selector widgets in your books

In Planning Analytics Workspace 2.0.89, a new **Selector** visualization is available to replace selector list and selector tile widgets in books.

Important: The new **Selector** visualization is partially subject to enablement by a Planning Analytics Workspace administrator.

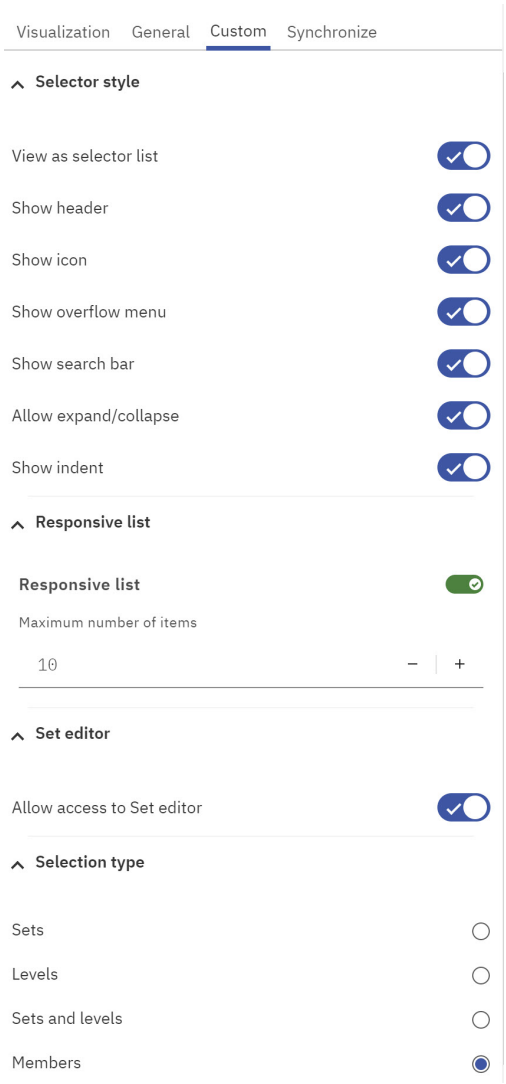


If an administrator does not explicitly enable the new **Selector** visualization feature, existing selector list and selector tile widgets in books remain unchanged until the enablement release for this feature, which is scheduled for Planning Analytics Workspace 2.0.92.

When the new Selector visualization feature is enabled, any existing selector list or selector tile widget in a book is converted to a Selector visualization when you open the book. The visualization is styled to most closely replicate the widget it replaces.

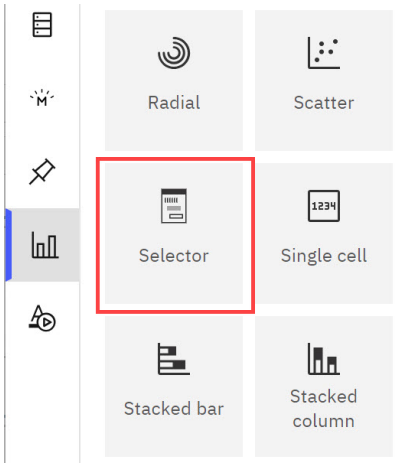
Regardless of the enablement status of the new Selector visualization feature, Selector visualizations can be created from the Visualization pane in Planning Analytics Workspace 2.0.89.

The Selector visualization behaves much as selector list and selector tile widgets did, but there are multiple **Custom** visualization properties that you can apply to tailor the visualization for your purposes.



There are several ways to insert a Selector visualization into a book. In all cases, the book must be in Edit mode.

- From the **Data** tree:
  1. On the **Data** tree, fully expand the **Dimensions** node beneath the cube for which you want to create a Selector visualization. You can create a Selector only from the Dimensions node beneath a cube. You can't create a Selector from the main Dimensions node.
  2. Right-click the dimension, hierarchy, or subset that you want to use as a Selector.
  3. Click **Add as selector**.
- From the **Visualizations** pane:
  1. Click the **Visualizations** icon to open the pane.
  2. Click the **Selector** icon.



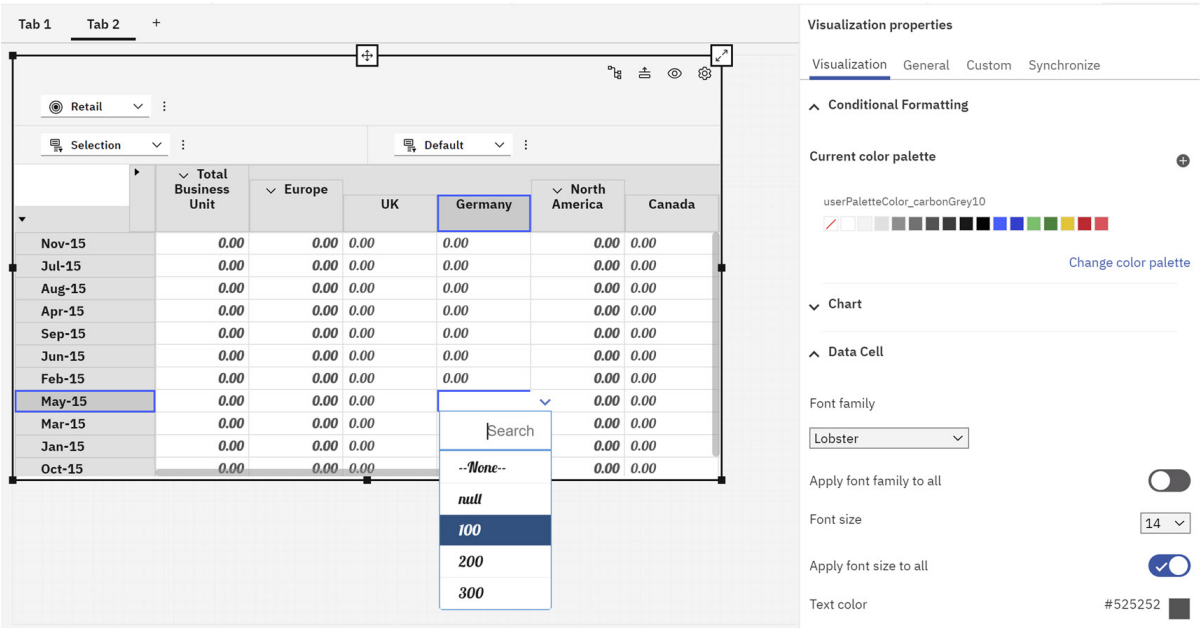
3. From the **Data** tree, drag and drop a dimension, hierarchy, set, or level onto the visualization placeholder.

- From an exploration, click the dimension tile that you want to use as a selector, then drag the dimension to an empty space on the book.

Pick lists now use the font defined for data cells in an exploration

In previous versions of Planning Analytics Workspace, pick list cell values and list members were displayed using the default IBM Plex font.

As of Planning Analytics Workspace 2.0.89, pick lists cells and pick list members use the font defined for the exploration by the **Data cell** font family property.



This example shows the exploration, including pick list cells and the pick list members, using the Lobster font.

Resize books to fill space in a tab

You can now resize a book in a tab that contains the full width and height within different window sizes with the new **Fill space** feature.

Previously, the aspect ratio of the book and its contents was maintained. Now, all the contents in a book fit perfectly within the browser window and the aspect ratio setting is ignored. You can apply the **Fill**

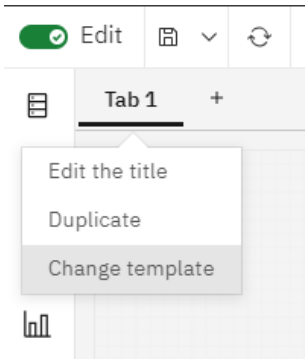
space feature in several places: when creating a new book with tabs, a new book from a **Fill space** template, and in **Properties**.

Note: When you save **Views** or **Websheets**, they are saved as a **Fill space** layout by default.

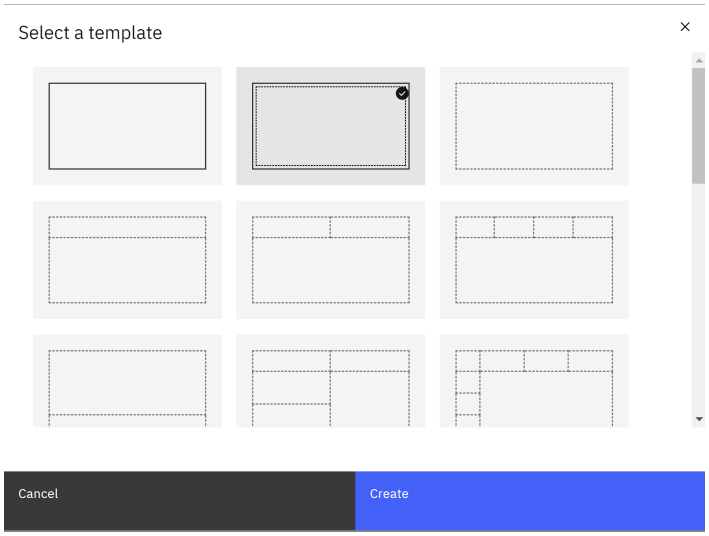
Fill space in book tabs

You can apply the **Fill space** feature when creating a new book.

1. From the **Home** menu, click **+ New** > **Book**.
2. In **Edit** mode, click **Tab 1** then click **Change template**.



   a. Click the second template in the first row, then click **Create** to change the layout to **Fill space**.



3. Alternatively, you can click the **Add new tab** icon **+**.
   a. Click the second template in the first row, then click **Create** to change the layout to **Fill space**

Fill space in book from template layout

You can use the **Fill space** feature when creating a **Book from template**.

1. From the **Home** menu, click **+ New** > **Book from template**.
2. Click **Fill space** and select the template, then click **Create**.

Fill space in properties

You can set the **Fill space** feature in the **Properties** panel on widgets in the current tab of a book.

1. Click **Properties**.
2. Under **General**, click **Canvas** and go to the **Page size** section.

3. Set the **Fill space** toggle to enable the feature.

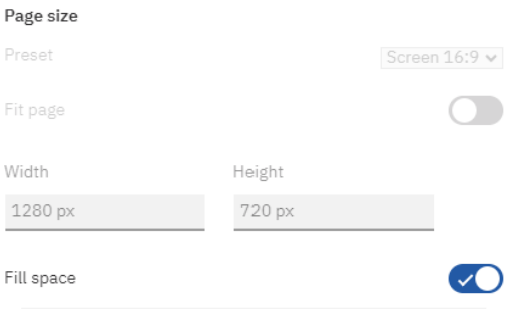


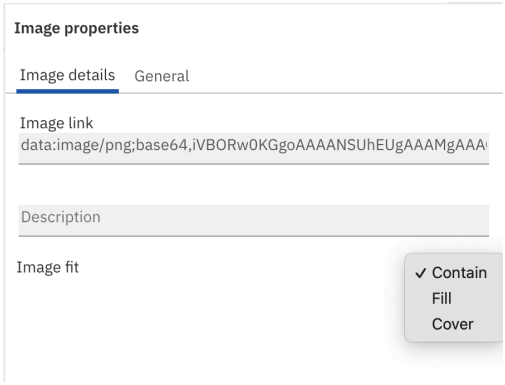
Image fit

For image widgets, you can also apply the **Image fit** property that's found in the **Properties** panel by choosing any of the following options:

- **Contain** – the default option for an image widget that locks the image's width and height when you resize the image.
- **Fill** – fills up the image in the entire widget container but stretches the image when you resize it.
- **Cover** – maintains the height of the image and crops the width when you adjust the size.

To add images to a book see Add pictures, media, and web pages.

You can resize your image widgets by clicking the image, then under **Image details** click the **Image fit** drop-down menu to view all the options.



What's new in plans and applications - 2.0.89

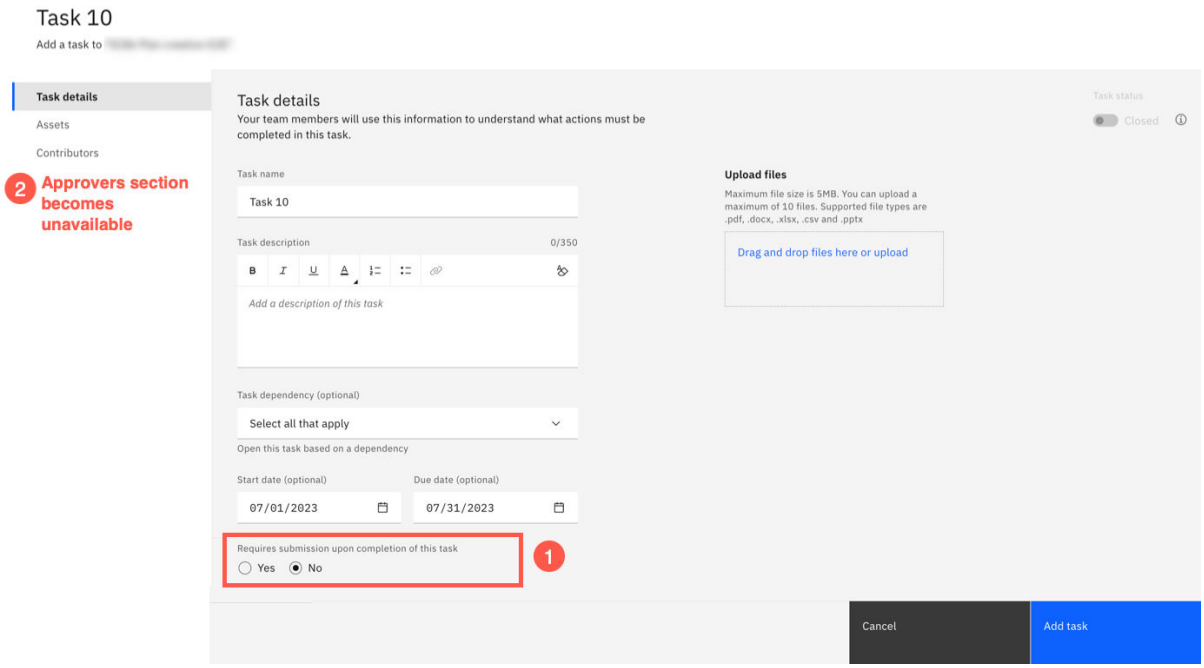
The following new and changed features in plans and applications are available in Planning Analytics Workspace 2.0.89.

Complete button for tasks that do not require submission

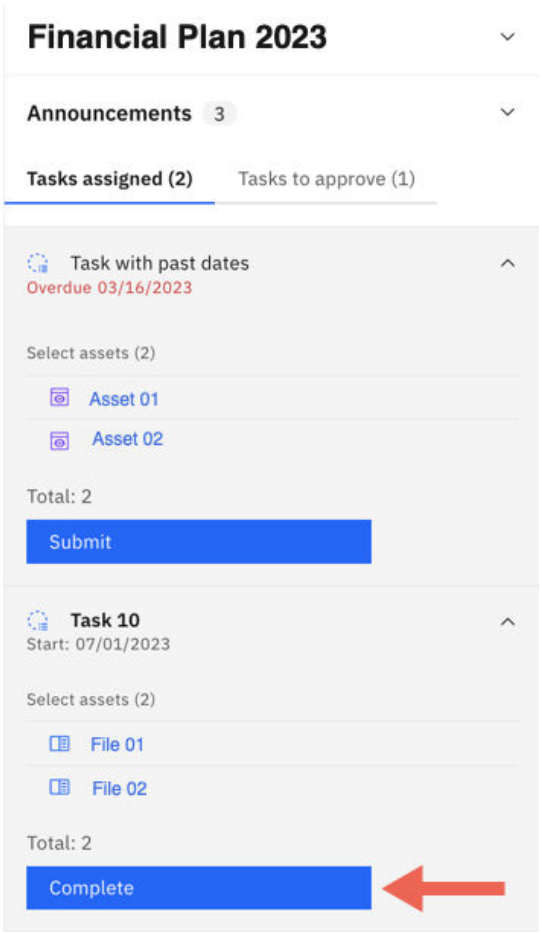
A **Complete** button is now available on the contribution page in tasks that do not require submission. Previously, if a task in a plan did not require submission, there was no way to indicate that the task was complete.

Plan owners and administrators can configure a task to not require a submission. When a submission is not required:

- the **Approvers** section becomes unavailable in the task creation page



- the **Complete** button displays on the plan contribution page for the task



What's new in modeling - 2.0.89

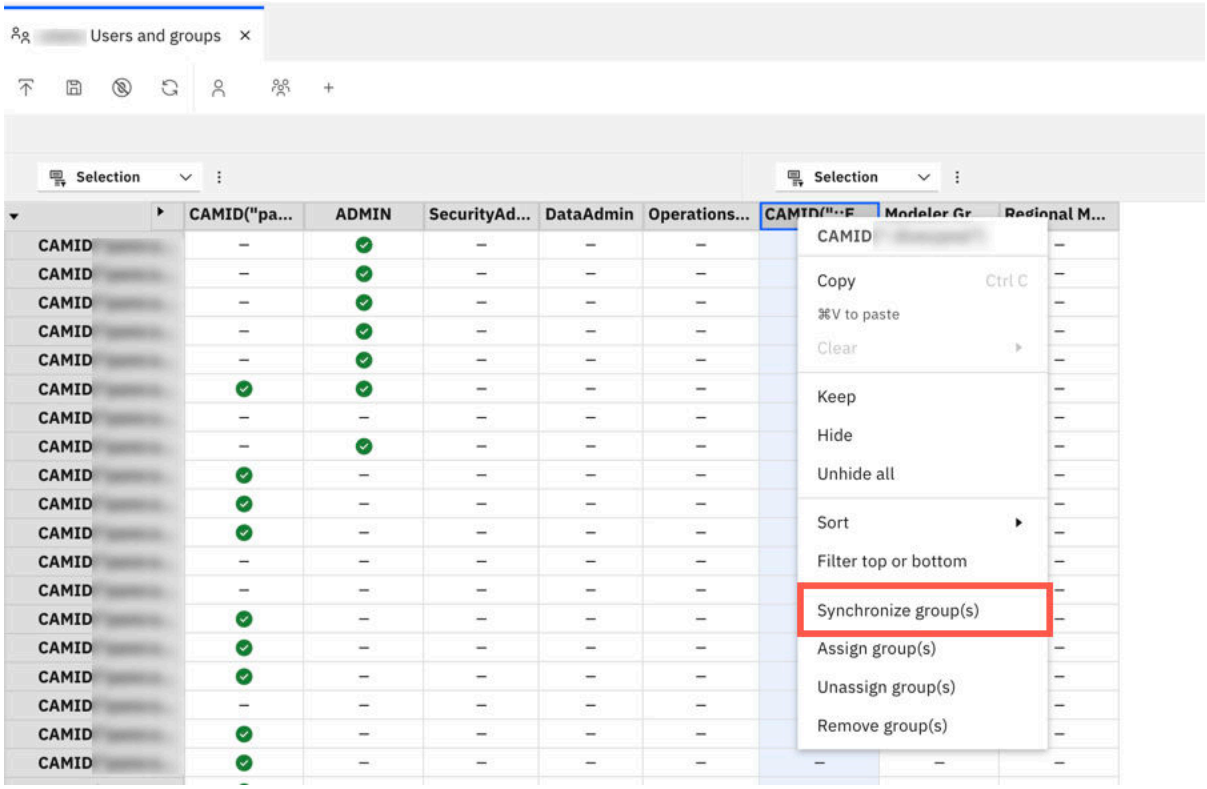
The following new and changed modeling features are available in Planning Analytics Workspace 2.0.89.

Synchronize user groups in Planning Analytics databases with Planning Analytics Workspace

Administrators and modelers can now synchronize user groups that are in a Planning Analytics database with the groups in Planning Analytics Workspace from the modeling workbench.

Important: You cannot synchronize the predefined groups ADMIN, DataAdmin, SecurityAdmin, and OperationsAdmin.

1. In a modeling workbench, right-click a database on the **Databases** tree and select **Manage users and groups**.
2. In the **Users and groups** editor, right-click a group and select **Synchronize group(s)**.



Memberships of the group in the database now match those of the same group that exists in Planning Analytics Workspace. Additionally, when you synchronize a group, existing users in the Planning Analytics Workspace group that are not in the database are also added to the database.

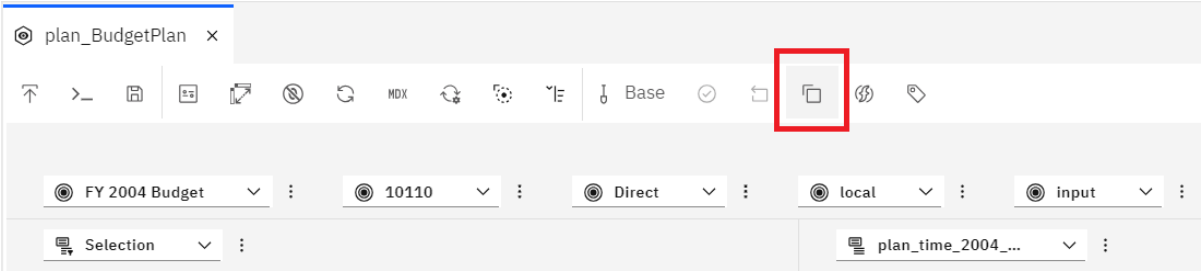
Note: Synchronization does not remove any new users that were added to the group in the database.

For more information, see Manage users and groups on a Planning Analytics database (Cloud only).

Duplicate cubes in the cube viewer

The **Duplicate** button is now available on the cube viewer toolbar on the workbench.

Click on the **Duplicate** button allows to create a duplicate of the current cube view. This button is located between the **Sandbox discard** button and the **Cube rules** button.



The newly duplicated cube view opens in a new tab, and the information in the duplicate includes the latest changes made in the cube.

This feature is also available when working in a pop out window. When duplicating a cube in a pop out window, the duplicated cube opens in a new pop out window.

Deprecation notices - 2.0.89

The following deprecation notices are applicable to Planning Analytics Workspace 2.0.89.

Classic cube viewer removed from Planning Analytics Workspace 2.0.90

As of Planning Analytics Workspace 2.0.90, the classic cube viewer is no longer available in Planning Analytics Workspace.

Any existing classic cube viewer will be converted to a new experience cube viewer when first opened in Planning Analytics Workspace 2.0.90.

2.0.88 - What's new, June 21, 2023

Learn about new features and known issues in version 2.0.88 of IBM Planning Analytics Workspace in the following topics.

Updates to each version of Planning Analytics Workspace are cumulative. To see what was new in previous releases, see Chapter 2, “What's new in Planning Analytics Workspace,” on page 45.

You can also review all new features introduced since 2.0.58, in the the IBM Planning Analytics Workspace new feature summary table. You can use the table to search for new features across all releases by description. You can also sort new features by release, date, functional area, and description.

You can view the fix lists for this and previous versions of Planning Analytics Workspace at https://www.ibm.com/support/pages/ibm-planning-analytics-20-fix-lists#anchor2.

What's new in books and reporting - 2.0.88

The following new and changed features in books and reporting are available in Planning Analytics Workspace 2.0.88.

Synchronize widgets at a group level

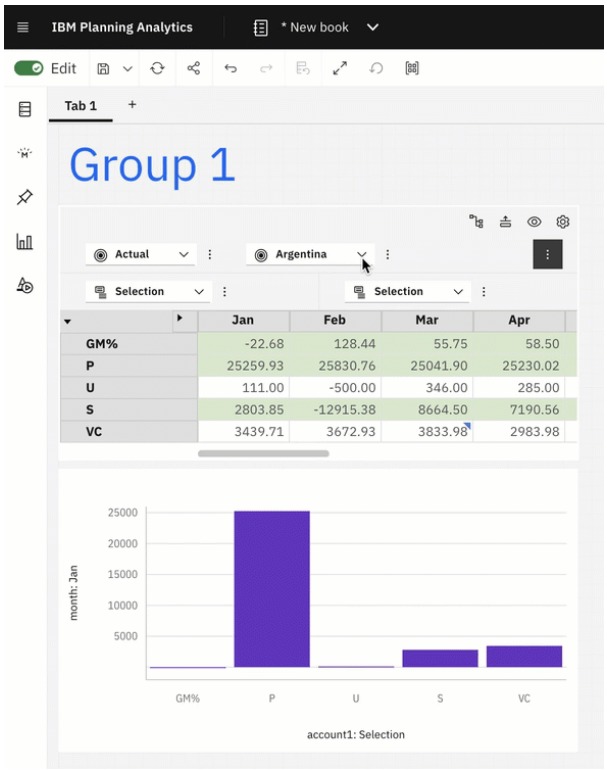
You can now synchronize widgets (explorations, visualizations, synchronization tiles, selector widgets, and websheets) at the group level with group synchronization. Previously, you could set the scope of synchronization at the book or sheet level only.

You can start by creating a synchronization group in book properties.

1. In edit mode, click **Properties**.
2. Under **Synchronization**, click **Create and manage custom groups**.
3. Click **Create** to create a group.
4. Enter a name and description for the group, and click **Create**.

5. Click **Apply changes** to finish creating the group.

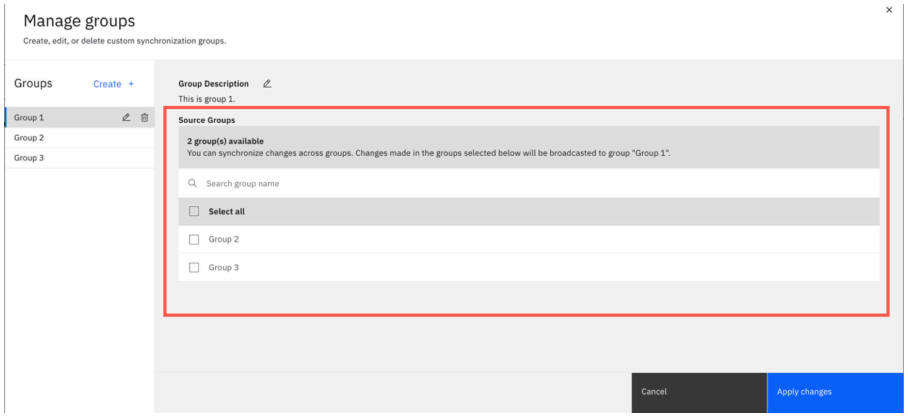
You can now add widgets to your group. Select a widget in your book and under **Properties > Synchronize > Synchronization group**, select the group you just created. Repeat this process for all the widgets that you want to assign to the group. Widgets in the group are now synchronized together.



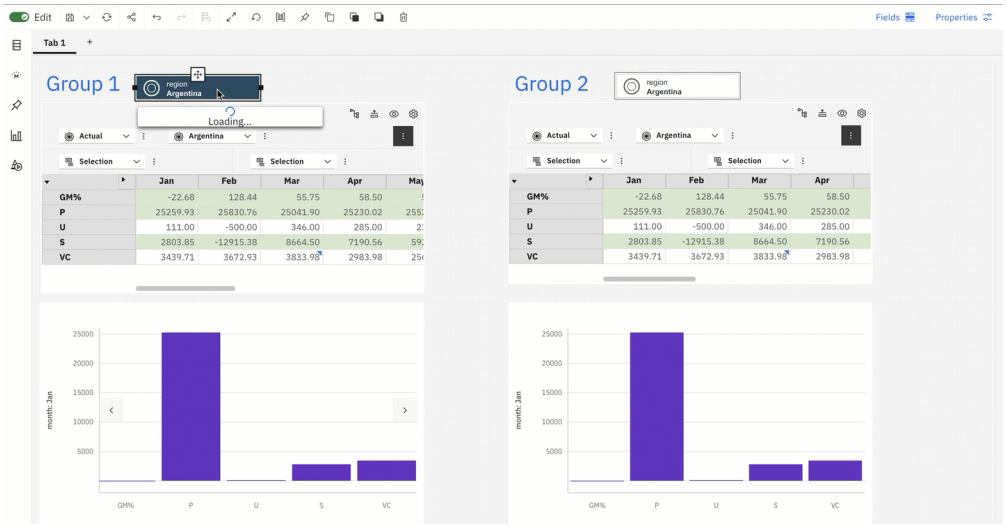
Changes to the currently displayed members of a hierarchy in a widget are shared with other widgets. As members of a hierarchy that are displayed in one widget change, the same members display in synchronized widgets that use the same hierarchy.

Synchronization groups can span to the entire book.

When you have two or more synchronization groups, you can have one group impact another group to achieve an cascading effect. To do this, you can assign more than one source group to a target group in the **Manage groups** dialog.



In the following example, the hierarchy change in Group 1 cascades to all the widgets in Group 1 and Group 2.



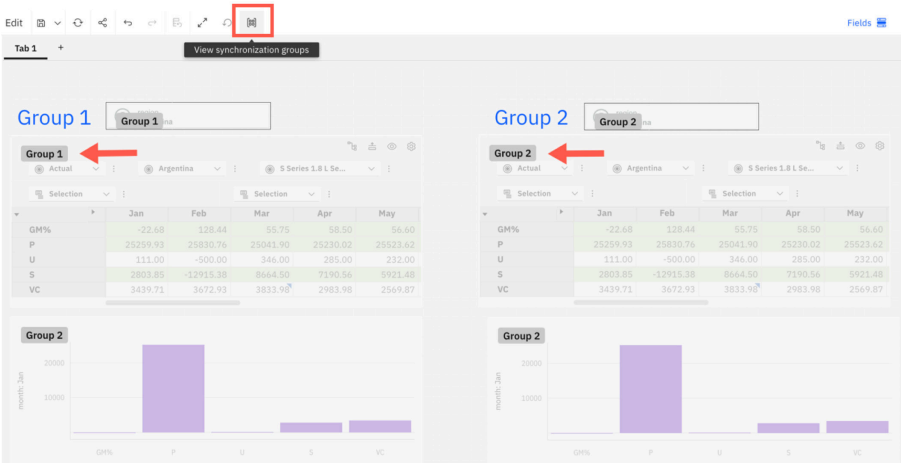
Note: Synchronization changes cascade only once. For example, if Group 1 is a source group for Group 2 and Group 2 is a source group for Group 3, changes in Group 1 impact only Group 2.

Additionally, you can now select default synchronization to be at the book, sheet, or group level.

- Book level synchronization - widgets in all the sheets in a book synchronize
- Sheet level synchronization - widgets in the selected sheet synchronize
- Custom group level synchronization - widgets in the book synchronize with changes in the custom group

Note: By default, synchronization is set to sheet level.

Click the new **View synchronization groups** icon in the toolbar to view an overlay for all widgets that are part of synchronization. The overlay displays the name of the group the widgets belong to. Click the icon again to interact with the widget.



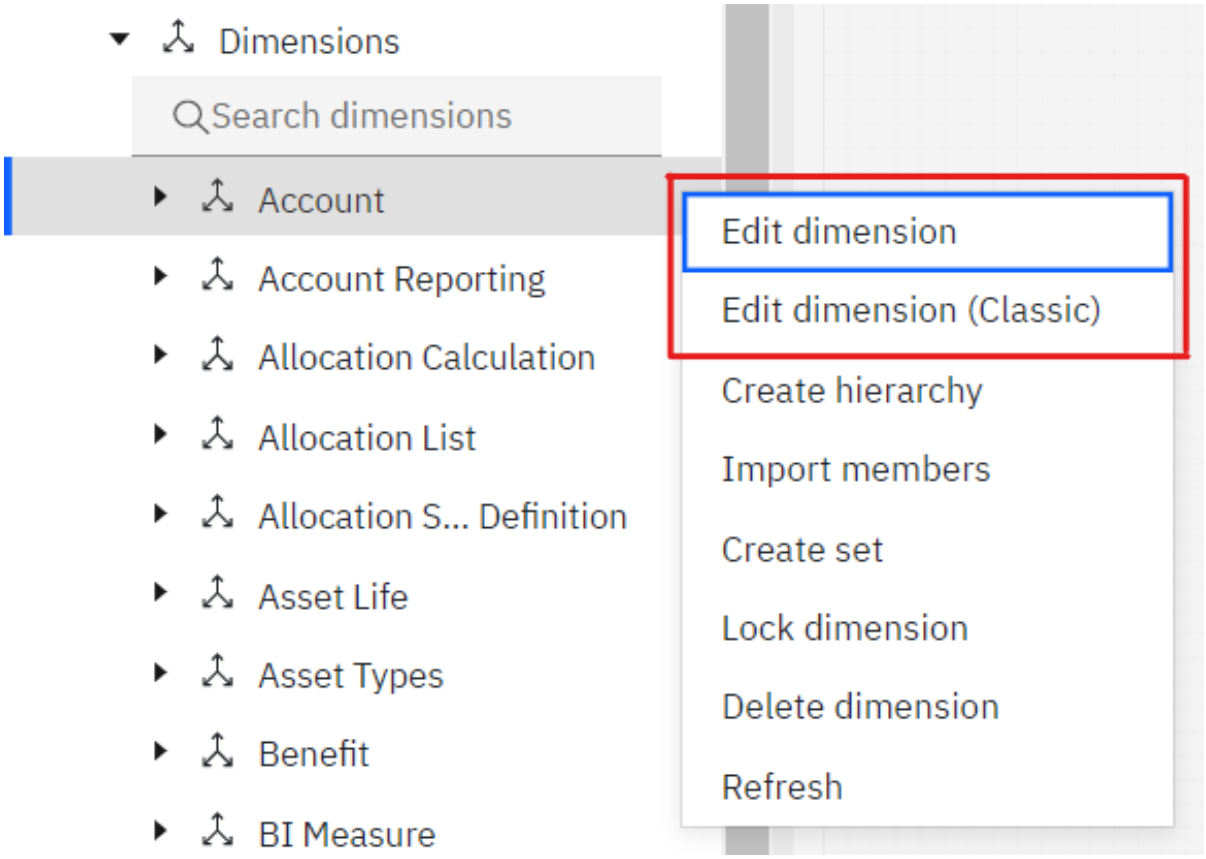
For more information, see Group synchronization.

Use the new experience dimension editor in books

The new experience dimension editor, which was previously available only on the modelling workbench, is now available in books.

To edit a dimension in the new experience editor, right-click a dimension on the **Databases** tree, then click **Edit dimension**

The classic dimension editor remains available in books. Right-click a dimension, then click **Edit dimension (Classic)** to edit a dimension in the classic editor.



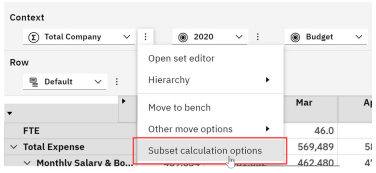
When you save a book with the new editor, you can reopen the book and retain your editor preferences in the same state as in the classic editor.

For more information on the new experience dimension editor, see Welcome to the new experience dimension editor.

Use subset calculations on the context section of a view

The subset calculation feature in the cube viewer has been added to dimensions on the context section of a view.

To create a subset calculation, click the **Options** menu ⋮ on a context dimension, then click **Subset calculation options**.

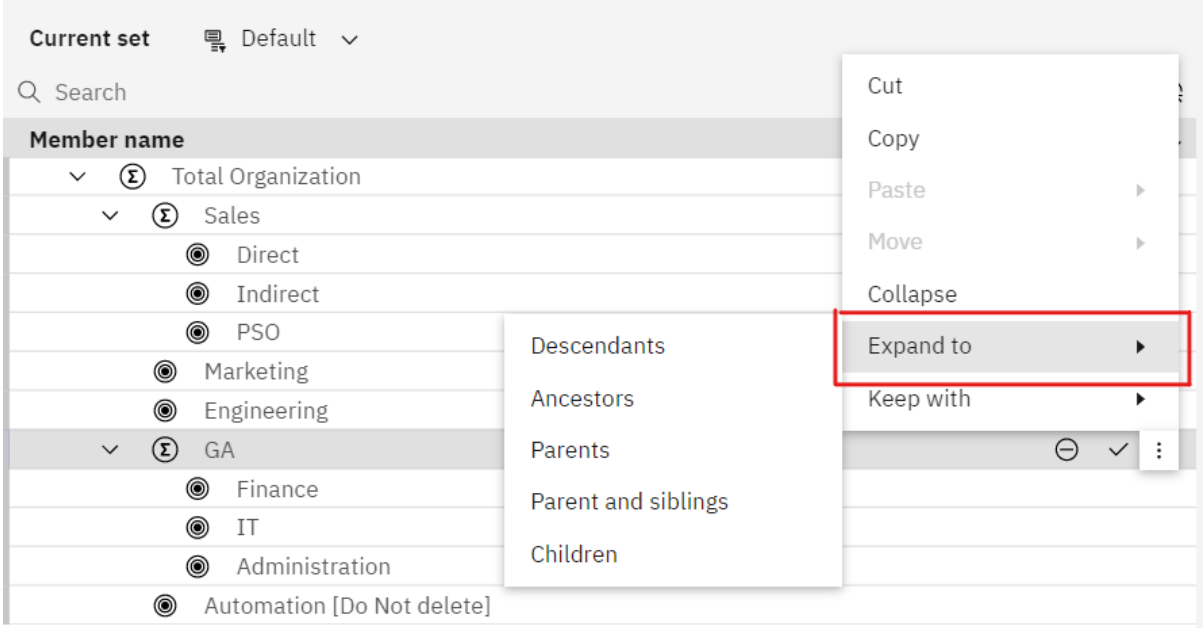


To learn more about subset calculations, see Add a subset calculation to a view.

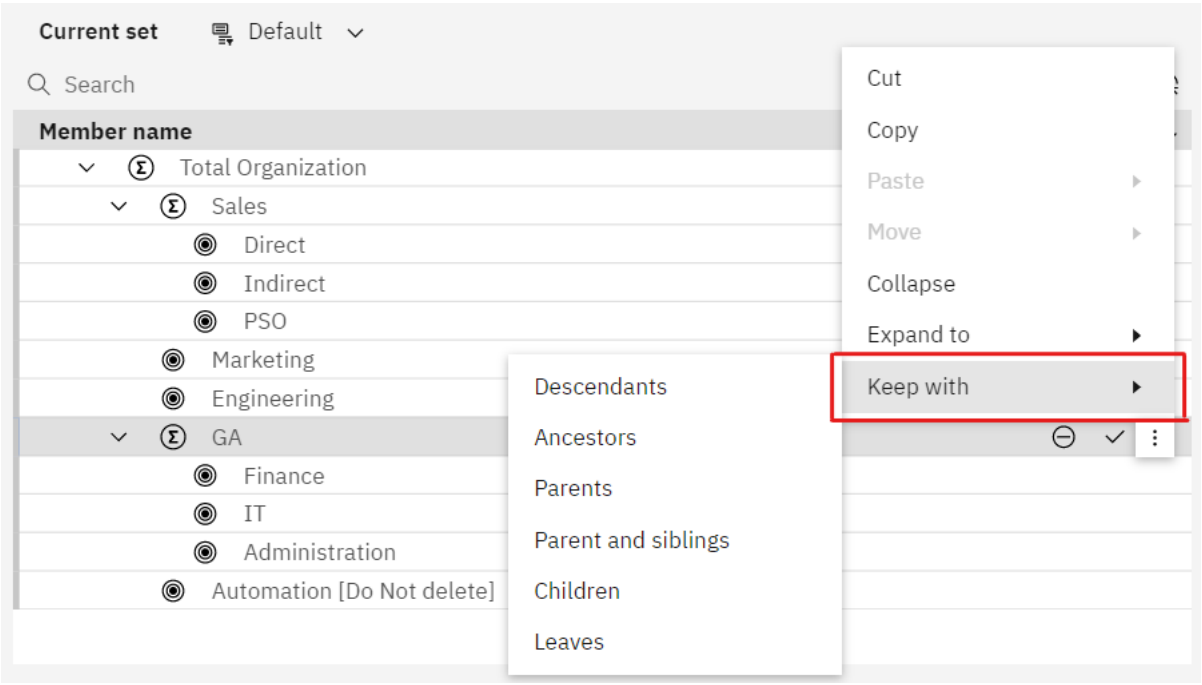
Use the new 'Expand to' and 'Keep with' options to organize members in a set

Expand to and **Keep with** have been added to the set editor. These new features display a set of members, based on hierarchy.

Expand to adds members to the set, allowing you to display members of one level higher or one level lower, based on the selected hierarchy. To access this feature, right-click on a member, select **Expand to**, and select the hierarchy you want to display from the menu.



Keep with, previously named **Show**, replaces members in the set, based on the selected hierarchy. To access this feature, right-click on a member, select **Keep with**, and select the hierarchy you want to display from the menu.



The **Expand to** and **Keep with** features both have a new menu item, named **Parent and siblings**. In **Expand to**, this allows you to expand a set member to its parents and siblings, and in **Keep with**, this allows you to replace a set member with its parents and siblings.

What's new in plans and applications - 2.0.88

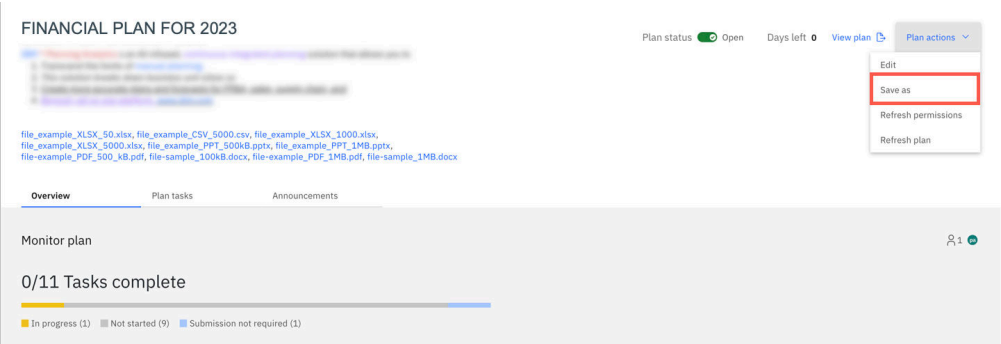
The following new and changed features in plans and applications are available in Planning Analytics Workspace 2.0.88.

Duplicate applications and plans with attachments

The duplication feature in Applications and Plans has been enhanced to support attachments. When you duplicate an application or plan, any attachments in the original now automatically copy over to the duplicate. This is also true when you duplicate a section in Applications or task in Plans.

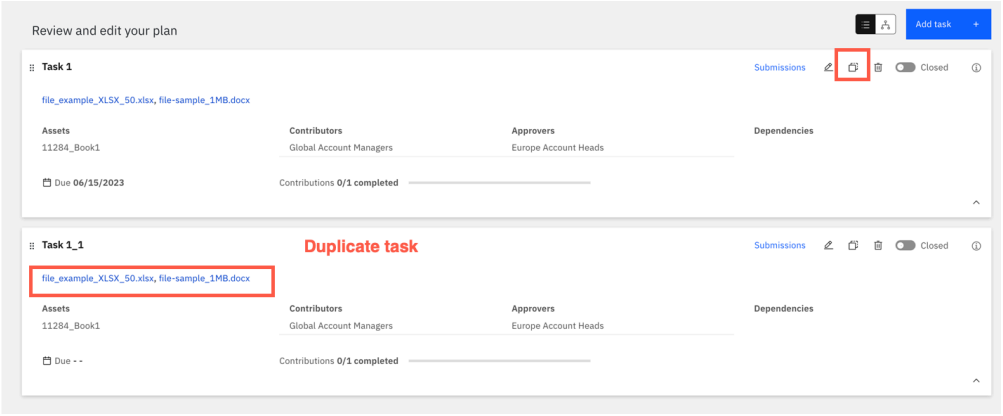
To duplicate an application or plan:

1. From the Home page, click **Applications and Plans**.
2. On the **Applications and Plans** page, click the menu icon next to the plan or application you want to duplicate.
3. Click **Edit**.
4. Under **Application actions** or **Plan actions**, select **Save as**.



5. Rename the duplicate and click **OK**.

To duplicate sections in Applications or tasks in Plans , click the duplicate option in the section or task that you want to duplicate. All attachments in the original task or section now copy over to the duplicate automatically.



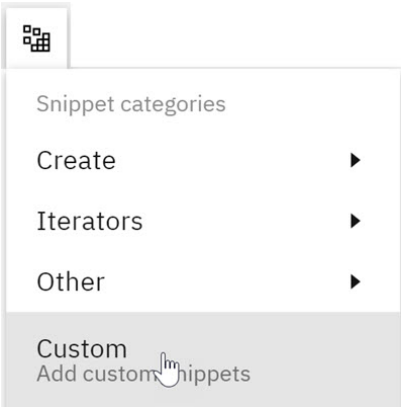
What's new in modeling - 2.0.88

The following new and changed modeling features are available in Planning Analytics Workspace 2.0.88.

Create and insert custom snippets for processes

If you have TurboIntegrator process code that you use frequently, you can now save the code as a custom snippet. You can insert a custom snippet into the **Script** tab of a process

When you click the **Snippet** icon on the process editor, a new **Custom** category is available. Select any of the snippets you've created to insert your custom code into a process.



For more information, see Create and upload a custom snippet.

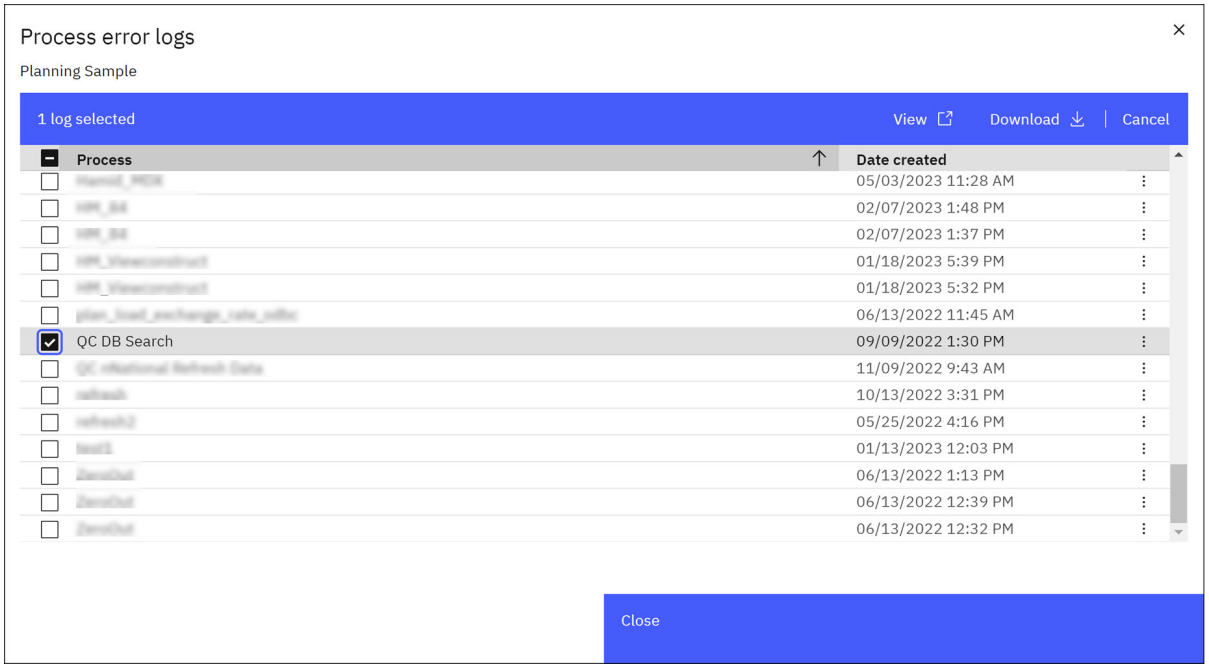
Access process error logs from the Databases tree

You can view or download process error logs from the **Processes** node on the **Databases** tree in a modeling workbench.

Procedure

1. On a modeling workbench, expand the database where you want to examine process log files.
2. Right-click the **Processes** node, then click **Error logs**.

   The **Process error logs** page displays all available logs, identified by **Process** name and **Date created**. You can click a column heading to sort the list of logs.



3. Select the individual log that you want to examine.
4. Click **View** to view the log in a temporary viewer or click **Download** to download the error log as a text file.

What's new in administration - 2.0.88

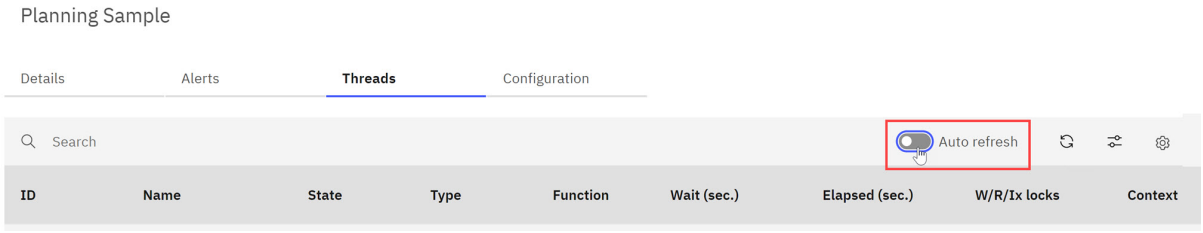
The following new and changed administration features are available in Planning Analytics Workspace 2.0.88.

Temporarily pause thread or activity refresh

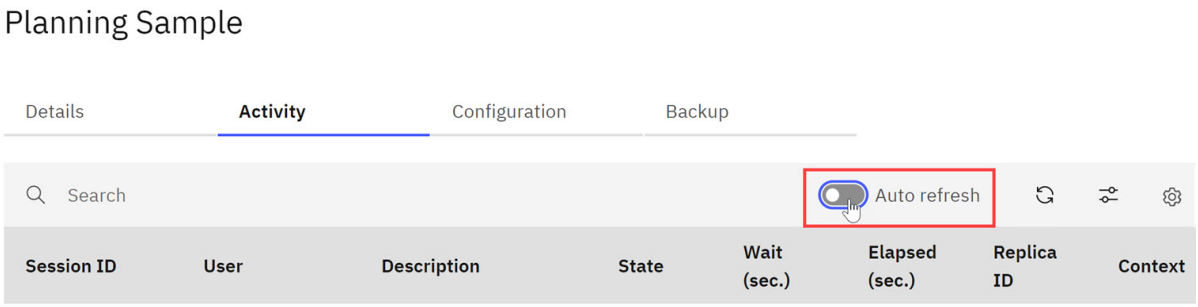
A new **Auto refresh** option on the database page lets you control automatic thread or activity refresh. You can use this option to pause refresh when you want to examine database activity without being interrupted by updates.

The option is available in Planning Analytics Workspace on all platforms, but is located slightly differently according to platform.

- In Planning Analytics Workspace Local and Planning Analytics Workspace on Cloud, the option is available on the database **Threads** tab.



- In Planning Analytics Workspace on Cloud Pak for Data and Planning Analytics Workspace on Planning Analytics as a Service, the option is available on the database **Activity** tab.



To temporarily pause automatic refresh, toggle the **Auto refresh** option to the off position.

Thread or activity collection continues while automatic refresh is paused. You can click **Refresh** to manually refresh the thread or activity list while automatic refresh is paused.

When you toggle the **Auto refresh** option to the off position, the setting does not persist when you leave the **Thread** or **Activity** tab. If you click a different tab or a different database, the **Auto refresh** option is reset to the on position.

Deprecation notices - 2.0.88

The following deprecation notices are applicable to Planning Analytics Workspace 2.0.88.

Classic cube viewer removed from Planning Analytics Workspace 2.0.90

As of Planning Analytics Workspace 2.0.90, the classic cube viewer is no longer available in Planning Analytics Workspace.

Any existing classic cube viewer will be converted to a new experience cube viewer when first opened in Planning Analytics Workspace 2.0.90.

Known issues - 2.0.88

The following are known issues in Planning Analytics Workspace. These issues will be resolved in a future release.

Imported data is not immediately visible in a reserved dimension

In a specific scenario, imported data is not immediately visible in a reserved dimension.

1. Open a dimension on your database.
2. Reserve the dimension.
3. Browse for any import file and import it into the dimension.

The imported data is not visible in the reserved dimension. The members are correctly imported, but not visible while the dimension is reserved.

Release the dimension to view the imported members.

2.0.87 - What's new, May 17, 2023

Learn about new features and known issues in version 2.0.87 of IBM Planning Analytics Workspace in the following topics.

Updates to each version of Planning Analytics Workspace are cumulative. To see what was new in previous releases, see Chapter 2, “What's new in Planning Analytics Workspace,” on page 45.

You can view the fix lists for this and previous versions of Planning Analytics Workspace at https://www.ibm.com/support/pages/ibm-planning-analytics-20-fix-lists#anchor2.

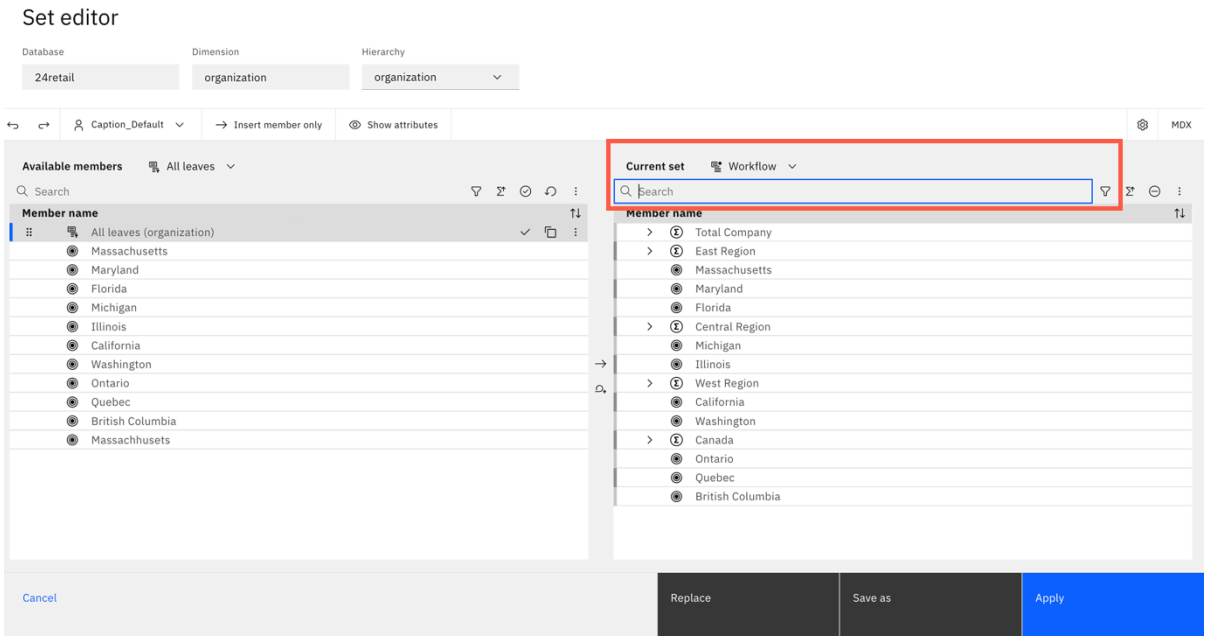
You can also review all new features introduced since 2.0.58, in the the IBM Planning Analytics Workspace new feature summary table. You can use the table to search for new features across all releases by description. You can also sort new features by release, date, functional area, and description.

What's new in books and reporting - 2.0.87

The following new and changed features in books and reporting are available in Planning Analytics Workspace 2.0.87.

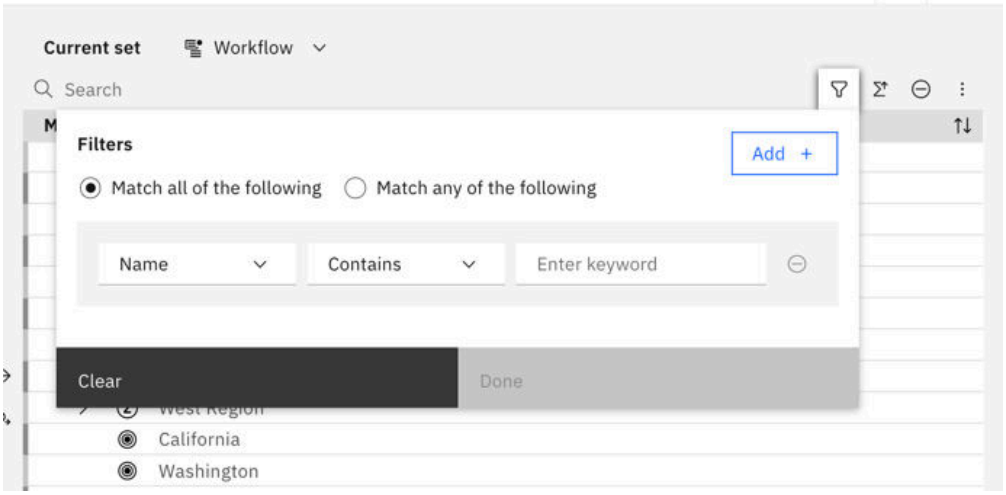
Search and filter capability available for current set in the set editor

The **Current set** pane in the new experience set editor now has search and filter capabilities. Previously, these features applied only to the **Available members** pane in the set editor.



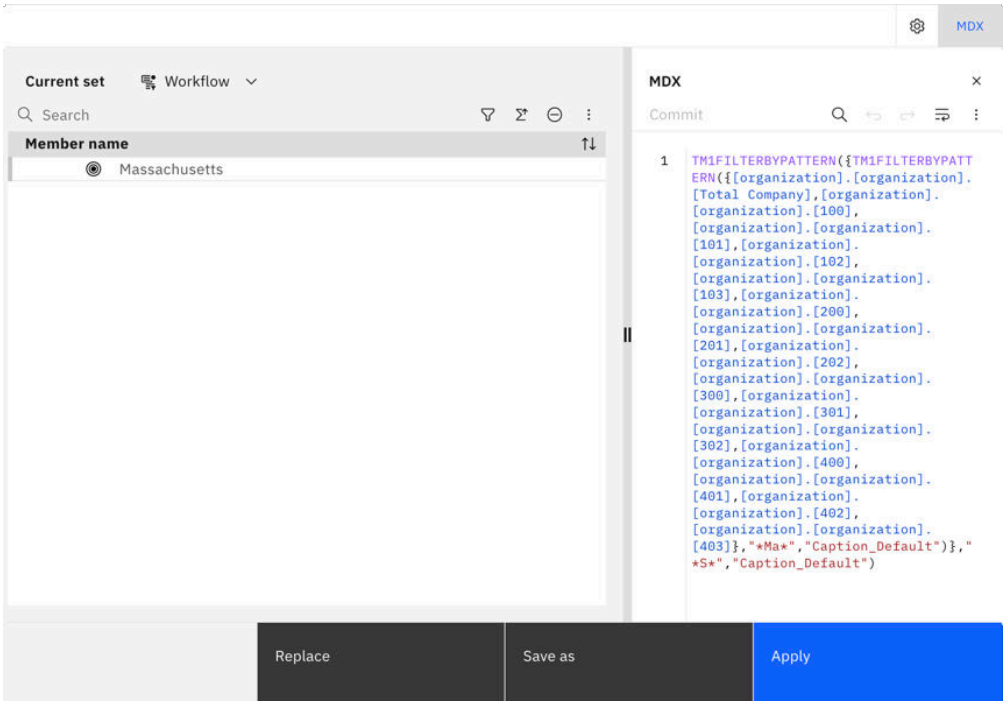
Use **Search** to look for members in the current MDX state for the **Current set**.

To filter the **Current set**, click **Filter** and add your parameters. You can filter a set by up to three parameters at a time.



After you apply a filter, the filter parameter clears from the **Filter** menu, allowing you to add more filters to further narrow your member selections. In an already filtered set, any new filter that you add, applies to the MDX state around the first filter.

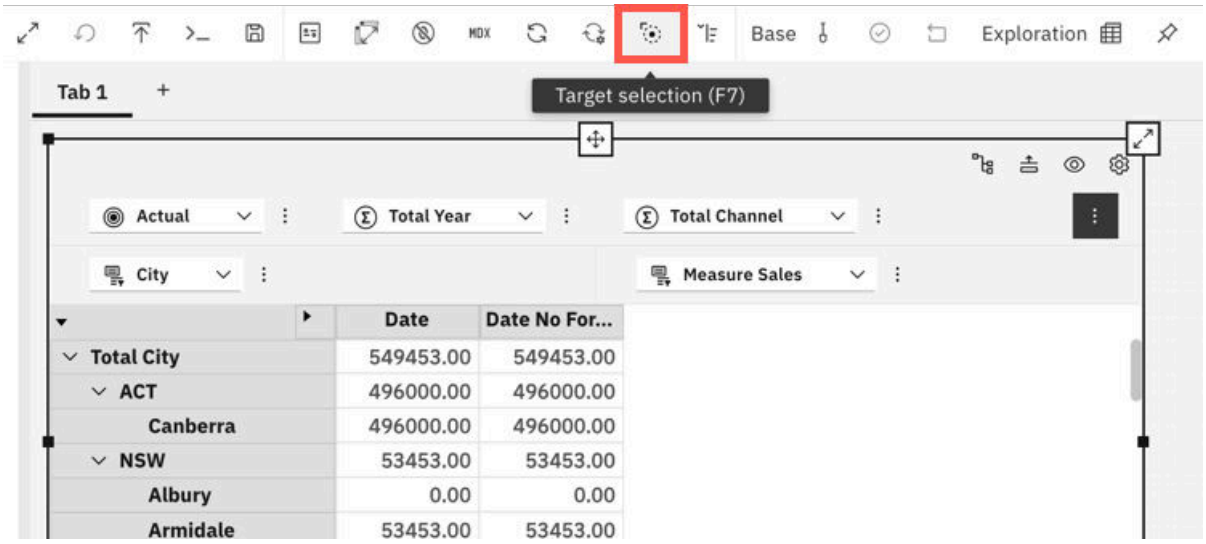
In the following example, the current set was first filtered to only include members with names that contain the letters `ma`. A second filter was applied to narrow down the selections to only include members with names that contain the letter `s`.



At any time, you can click **Undo** to clear your search or applied filters and return to the original set.

Target selection design and usability improvements

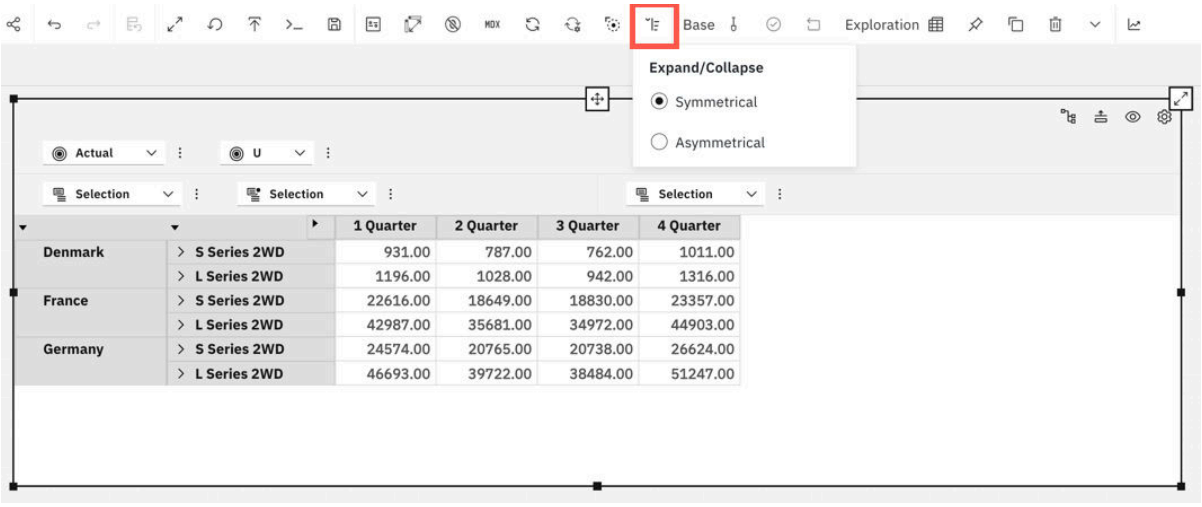
The target selection option is now available on the toolbar. Previously, the **Target selecting** toggle was available on the view grid. You can now also enable target selection mode with the keyboard shortcut **F7**.



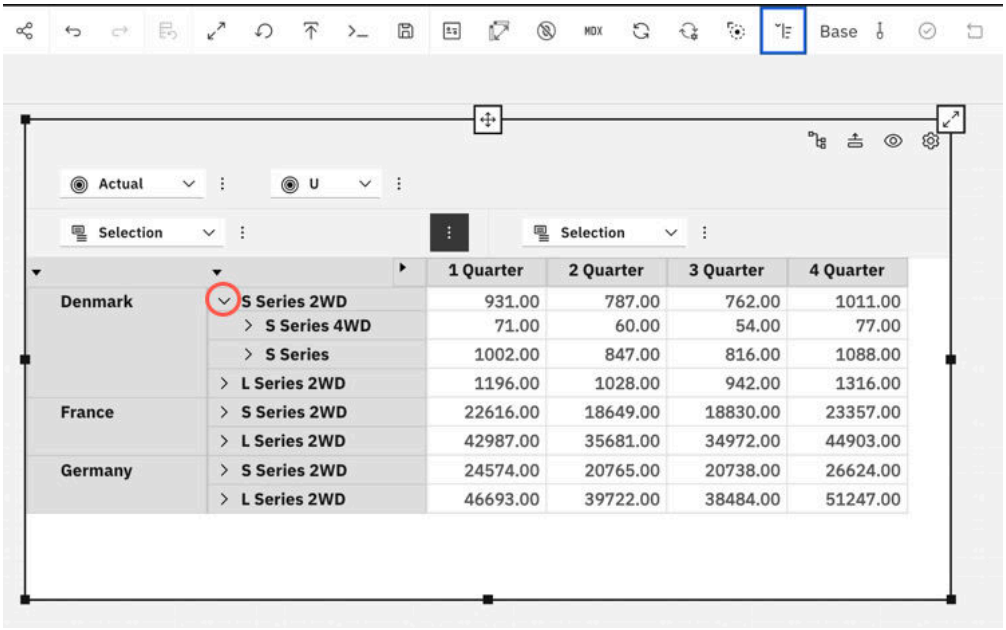
While there is no change to how the target selection feature works, the availability of the target selection option on the toolbar and the new keyboard shortcut makes it easy to use the feature. Simply, click the **Target selection** icon in the toolbar (or press **F7**) to quickly go into target selection mode and make asymmetric selections or calculations.

Expand and collapse rows and columns asymmetrically or symmetrically

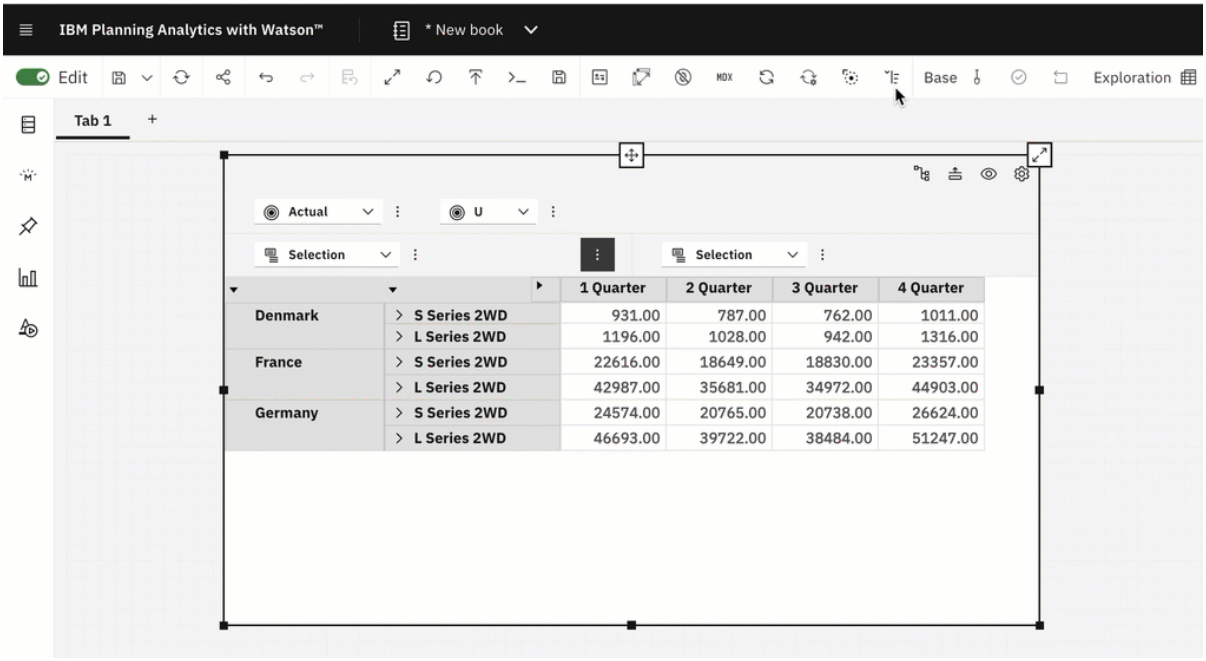
You can now expand and collapse rows and columns in a view either asymmetrically or symmetrically. Click the new **Expand/Collapse** icon in the toolbar and select how you want to expand and collapse rows and columns.



By default, expansion and collapse of rows and columns in views is asymmetrical. This means you can expand or collapse nested members individually.



In symmetrical expansion, expanding a nested member automatically expands that member across all hierarchies. In the following example, notice how expanding `S Series 2WD` for `Denmark` expands `S Series 2WD` for all countries.



Tip: If you set **Expand/Collapse** to be symmetrical but need to make an asymmetric gesture, you can do so with **Target selection**. Click **Target selection** or press **F7**, and expand or collapse an individual nested member.

Zoom bar available in additional visualizations

The zoom bar is now available in several additional visualizations. The zoom bar allows you to scroll and focus on a smaller area of a visualization.

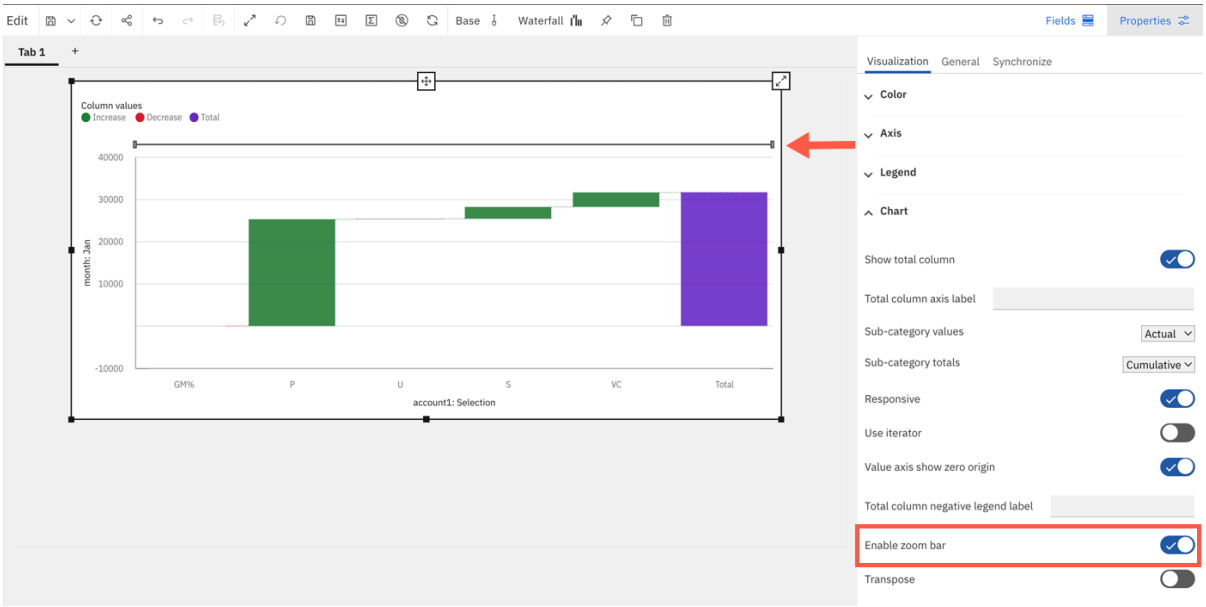
These visualizations now include the **Enable zoom bar** property.

- Box plot
- Marimekko

- Heat map
- Waterfall
- Bullet

The zoom bar was previously available only in the Area, Line, Line and column, Bar, Bubble, Point, Scatter, Stacked bar, Stacked column, and Tree map visualizations.

Use the **Enable zoom bar** property to add the zoom bar to your visualization. Drag a handle on the bar to zoom and focus on an area in the visualization. The area of focus changes as you drag the handle.



Note: When you enable the zoom bar, mouse scrolling is disabled in the visualization.

New properties in the Map visualization

Several new visualization properties were added to the Map visualization in this release.

World View

The **World View** property displays disputed country borders from the perspective of different countries.

In the **World View** property under **Chart**, select a country and notice how the visualization changes the way disputed country borders display based on the selected country's perspective.

By default, the **World View** property is set to United States (US). Other countries you can choose from are:

- IN - India
- CN - China
- JP - Japan
- AR - Argentina
- MA - Morocco
- RU - Russia
- TR - Turkey

Icons

You now have the option to select a pre-defined icon for points on a Map. Under **Points layer** in visualization properties, select an icon from the **Icon** property menu. You can also select a custom icon.

Note: To use a custom icon, you need to create a custom style and add an icon in Mapbox. You can then import the custom style in Planning Analytics Workspace. For more information, refer to Map.

Use the **Allow overlap** if you want the icons to display on each point even if another element (such as point labels) is conflicting with the icons.

You can hide the default circle icon for points in the Map by setting the **Transparency** property to **100%**.

Show map labels

Turn on the **Show map labels** under **Chart** to see background map labels.

New properties and other changes for the Bullet visualization

The Bullet visualization is updated in this release to include several new properties and changes.

New categories slot

A new **Categories** slot under **Fields** lets you draw multiple bullets without the use of **Repeat** slots. The **Categories** slot allows additional sorting capabilities such as sorting by Target and Bar values.

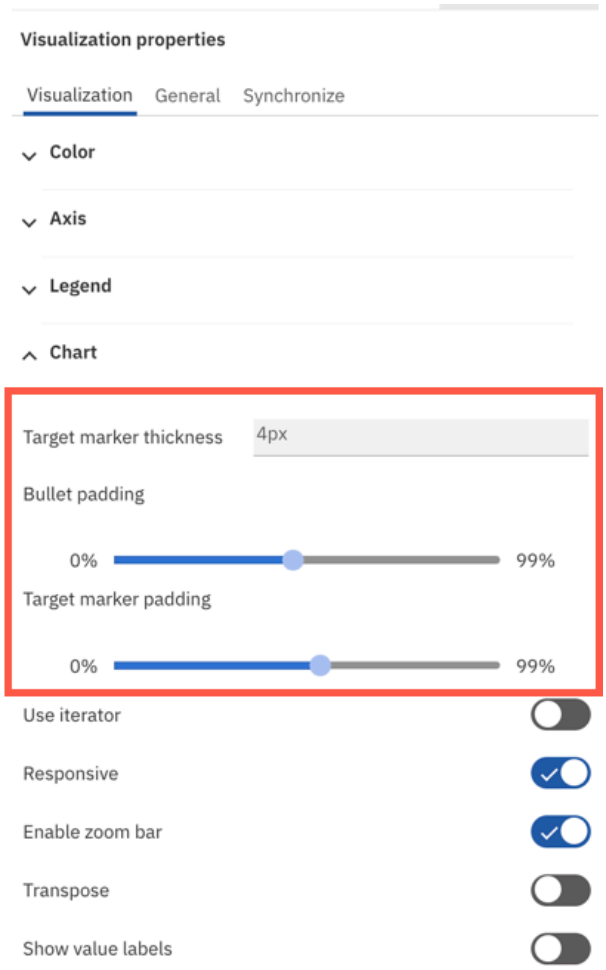
Style gridlines, axes lines, and axes labels

Item axis properties and additional value axis properties are now available under **Axis** in **Properties**. You can style gridlines, axes lines, and axes titles and labels. You can also set value axis minimum and maximum values.

Padding properties

You can now set bullet and target marker padding under **Chart** in **Properties**.

You can also specify the thickness of the target marker. Target marker thickness is set to 4 px by default.

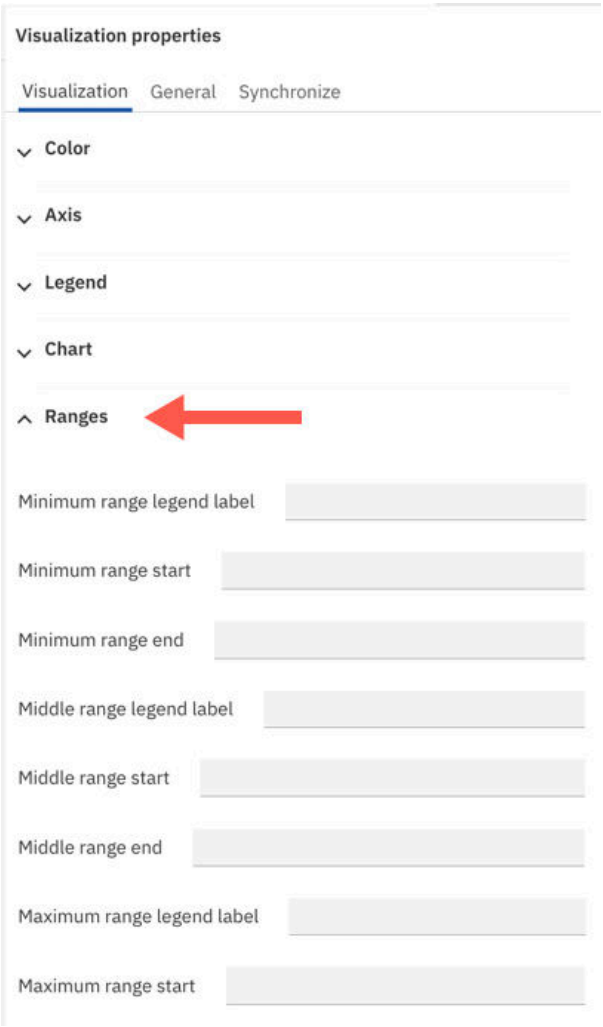


Zoom bar

Click **Enable zoom bar** under **Chart** to display a zoom bar in the visualization which allows you to scroll and focus on a smaller area of the visualization.

Manual range values

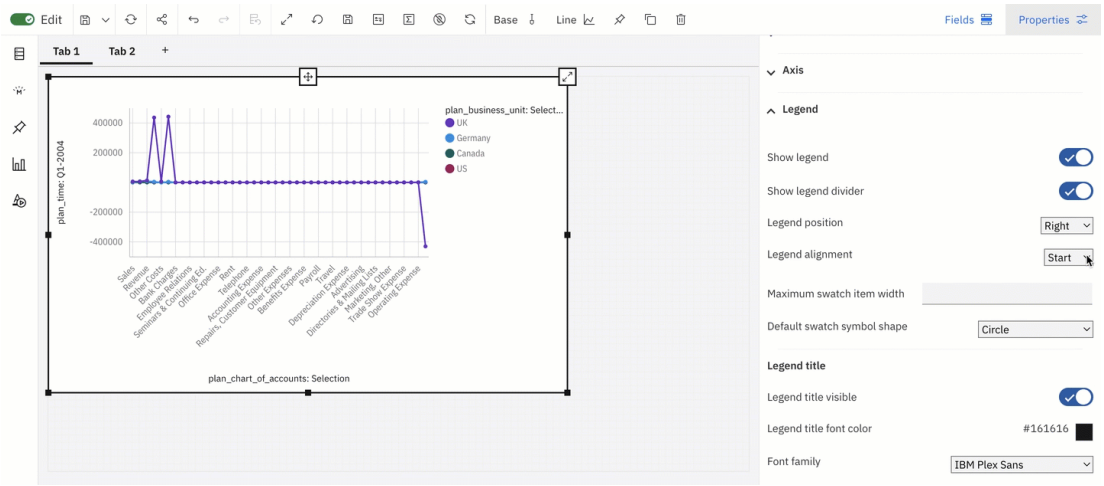
You can now specify minimum, mid, and maximum range values manually under the new **Ranges** section in **Properties**.



Legend alignment in visualizations

A new **Legend alignment** property in visualizations allows you to position a legend in the desired area of your visualization.

You can now align a legend vertically to display at the start, center, or end of the plot area in visualizations. In combination with the **Legend position**, this new property allows you to position the legend in twelve different areas in the visualization.



To change the alignment of the legend in a visualization:

1. In **Edit** mode, click the visualization.
2. Go to **Properties > Visualization properties > Legend**.
3. Select the desired **Legend alignment**.

Configuration modification for Learn Pane in Planning Analytics Workspace Local and Cloud Pak for Data

The cognitive Learn Pane in Planning Analytics Workspace Local is now hosted on a new domain. This change requires the following configuration modifications to Planning Analytics Workspace Local and Planning Analytics on Cloud Pak for Data to ensure continued access to documentation and other information through the Learn Pane.

Important: The change in hosting domain does not interrupt access to content through the Learn Pane for Planning Analytics Workspace on Cloud or Planning Analytics as a Service.

Planning Analytics Workspace Local Linux and Windows

1. Edit the `<paw_install>/services/glass/docker-compose.yml` to include the environment variable `CCH_URL=https://cchhelp.pac.cloud.ibm.com/docs/cch`.

```
version: '2.1'

services:
  glass:
    image: ${GLASS_IMAGE}
    container_name: glass
    restart: always
    volumes:
    - ${GLASS_LOG_DIR}:/glass-log:z
    environment:
    - CCH_URL=https://cchhelp.pac.cloud.ibm.com/docs/cch
```

   Important: The indentation of these new lines must match the indentation of the existing container properties.

2. To apply the change, run `scripts/paw.sh` if you are on Linux or `scripts\paw.ps1` on Windows.

Planning Analytics Workspace Local Distributed Swarm

1. Edit `<paw_install>/paw_2.0.XX/swarm/deployments/paw.yml` to find the `glass:` service definition.

2. Under the `glass` service properties, add the environment variable `CCH_URL=https://cchhelp.pac.cloud.ibm.com/docs/cch`.

```
140    glass:
141      image: ${GLASS_IMAGE}
142      networks:
143      - app
144      deploy:
145        mode: replicated
146        replicas: ${REPLICAS_GLASS}
147      logging:
148        driver: "json-file"
149        options:
150          max-size: ${JSON_FILE_MAX_SIZE:-1m}
151          max-file: ${JSON_FILE_MAX_FILE:-10}
152      environment:
153      - CCH_URL=https://cchhelp.pac.cloud.ibm.com/docs/cch
154
```

Important: The indentation of these new lines must match the indentation of the existing service properties.

3. Run `<paw_install>/start.sh` to apply the change.

Planning Analytics Workspace Local Distributed Kubernetes

1. Edit `<paw_install>/paw_2.0.XX/kubernetes/templates/any-node/pa-glass-deployment.yaml` to find the `glass` container definition under "`containers:`.
2. Add an additional environment variable under the `env:` section and set the variable `CCH_URL=https://cchhelp.pac.cloud.ibm.com/docs/cch` as follows:

```
131        containers:
132          - name: glass
133            image: %REGISTRY_PREFIX%/pa-glass:%GLASS_VERSION%
134            ports:
135              - containerPort: 9080
136                protocol: TCP
137            env:
138              - name: CCH_URL
139                value: "https://cchhelp.pac.cloud.ibm.com/docs/cch"
140              - name: ISTIO_ENABLED
141                value: "%PA_KUBE_ISTIO_CONFIGURED%"
```

Important: The indentation of these new lines must match the indentation of the existing container environment properties.

3. Run `<paw_install>/start.sh` to apply the change.

Planning Analytics on Cloud Pak for Data

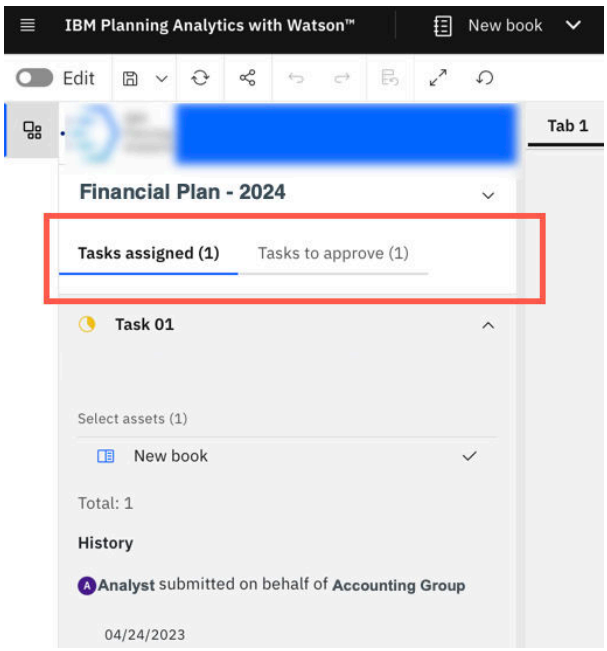
Run the following command: `oc set env deployment glass CCH_URL=https://cchhelp.pac.cloud.ibm.com/docs/cch -n <cpd-instance-ns>`

What's new in plans and applications - 2.0.87

The following new and changed features in plans and applications are available in Planning Analytics Workspace 2.0.87.

New tabs on the contribution panel show submission and approval tasks

New tabs on the **Plans contribution panel** display open tasks that are assigned to you for contribution and approval. These new tabs let you quickly submit tasks and approve or reject submissions from one place in the Plan.



You will see these tabs only if you have open tasks that need contribution and approval.

Note: After you submit a task or approve or reject a task, the task no longer displays on its respective tab in the contribution panel.

What's new in modeling - 2.0.87

The following new and changed modeling features are available in Planning Analytics Workspace 2.0.87.

Use the new "View related cubes" option to identify which cubes include a specific dimension

You can now quickly identify which cubes on a Planning Analyticsdatabase include a specific dimension. This is helpful when you are thinking about deleting a dimension, but want to see the impact of the deletion on the cubes on your database.

About this task

The new **View related cubes** option is available only on a modeling workbench. The option is available on the right-click menu anywhere you can see an individual dimension name on the **Databases** tree:

- *DatabaseName* > Dimensions > *DimensionName*
- *DatabaseName* > Cubes > *CubeName* > Dimensions > *DimensionName*
- *DatabaseName* > Control Objects > Control Dimensions > *DimensionName*
- *DatabaseName* > Control Objects > Control Cubes> *CubeName* > Dimensions > *DimensionName*

Procedure

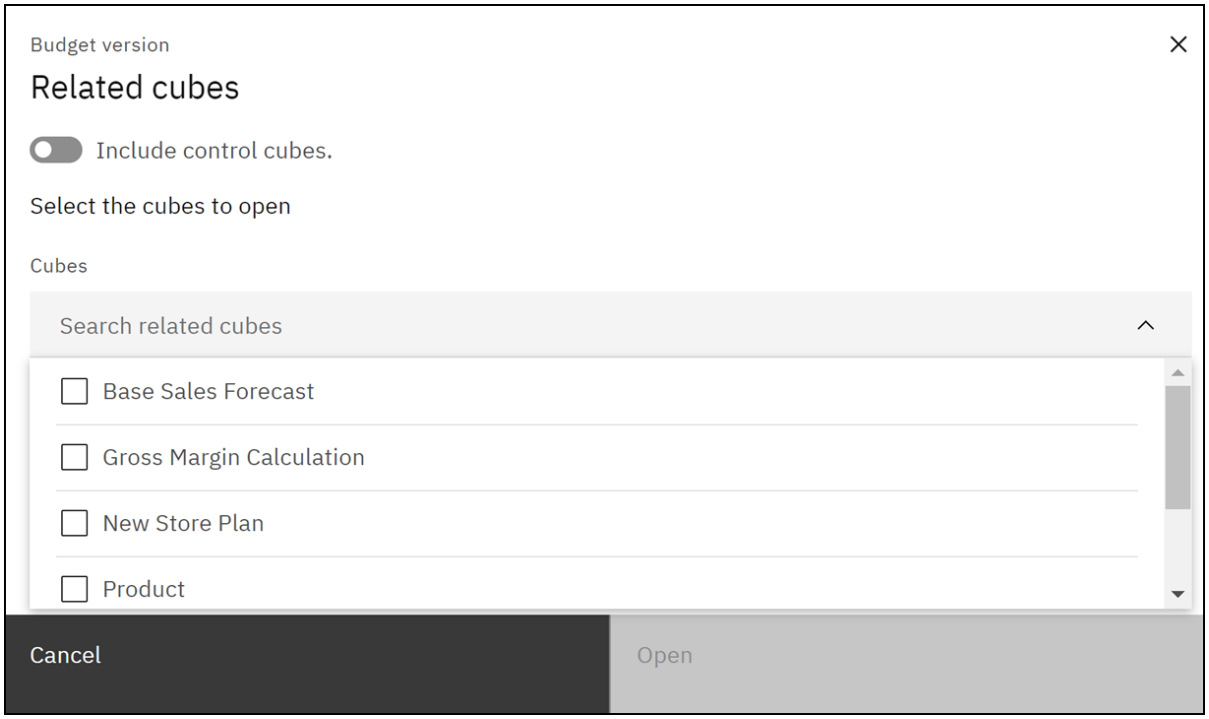
1. Right-click a dimension on the **Databases** tree on a modeling workbench.
2. Click **View related cubes**.

If the dimension is not included in any cubes, you receive notification and can cancel the procedure.

3. On the **Related cubes** window, toggle the **Include control cubes** option to show or hide control cubes in the list of cubes.
4. In the **Cubes** list, select the cubes you want to open for review.

   If the dimension is included in five or fewer cubes, the cubes are shown in a simple list.

   If the dimension is included in more than five cubes, the cubes are shown in a searchable menu list.



5. Click **Open**.

   Each of the cubes you selected opens for review on a separate tab on the modeling workbench.

Import a data source with multiple data value columns to an existing cube

If a data source includes multiple data value columns, you can now create mappings to import all data columns simultaneously into an existing cube. This is useful when importing data that has multiple value columns for days, weeks, or months.

You cannot import multiple data columns when creating a new cube.

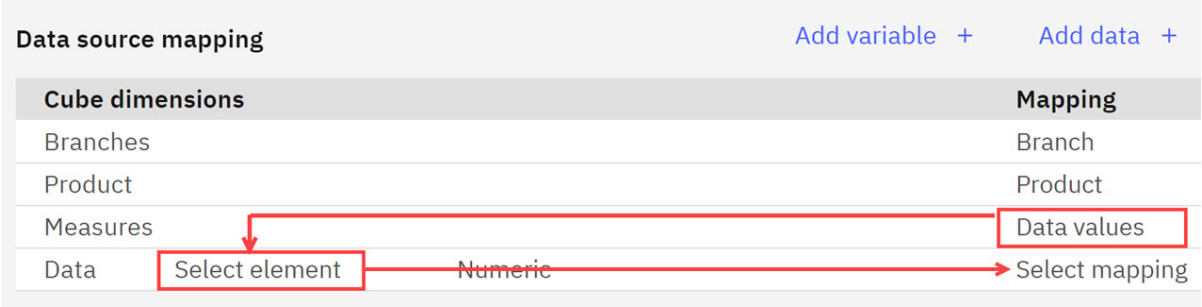
For example, this data source includes value columns for both Quantity and Sales dollars.

Preview

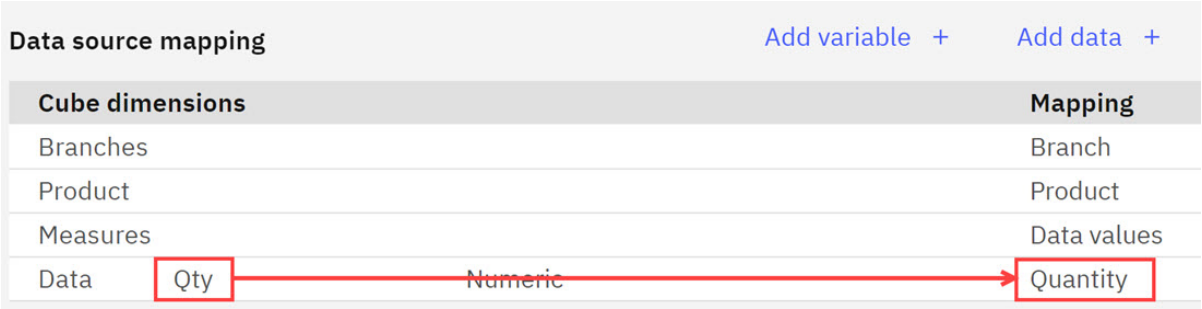
Refresh

Product	Month	Branch	Quantity	Sales dollars
Capri Orange Women's	15-Nov	Boston	3976	3976
Inferno Blue Men's	15-Jul	Bury St Edmunds	2719	122355
TX Green Men's	15-Aug	Leiston	3078	49248
Canyon Mule Climber Backpack Red 32000 cc	15-Apr	Ipswich	4801	388881
Capri Orange Women's	15-Sep	Bridgeport	46	46
Glacier Deluxe Black Unspecified	15-Sep	London	3839	122848
Cat Eye Orange Women's	15-Jun	Dundee	3221	235133
Pocket Gizmo Red 8.4 cm	15-Feb	Hamilton	1215	53460

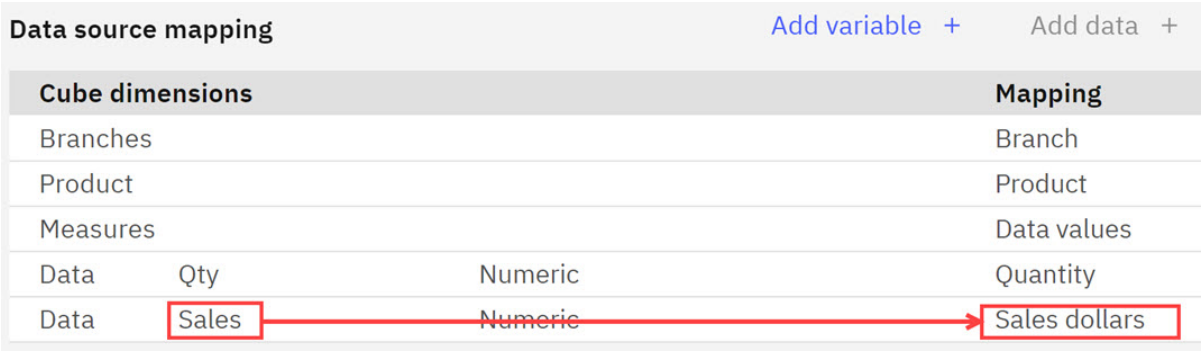
In this case, **Quantity** and **Sales dollars** correspond to elements of the Measures dimension in an existing cube. When you map an existing cube dimension to **Data values** in the data source mapping, a new **Select element** mapping option becomes available, which you can use to map individual elements to value columns in the source.



You can click **Select element** to pick a Measures dimension element in the existing cube, and then click **Select mapping** to map the Measures element to a value column in the data source. In this example, the **Qty** member in the Measures dimension maps to the **Quantity** value column in the data source.



Because the data source has multiple data value columns, you can click **Add data +** to create additional data mappings. Again, using our example, we know there is a **Sales** member in the Measures dimension, you we can map it to the appropriate value column in the data source.



When all the data value columns in the data source are mapped, the **Add data +** option is disabled.

Use the new editors to manage attributes and security for database objects

New settings editors are available from the **Databases** tree on a modeling workbench, which simplify the task of managing attributes or security for your database objects.

About this task

Previously, a single settings editor contained multiple interfaces to manage attributes and security for database objects. In Planning Analytics Workspace 2.0.87, a dedicated attributes editor and a dedicated security editor is available for each of these object groups:

- Cubes
- Dimensions
- Processes
- Chores

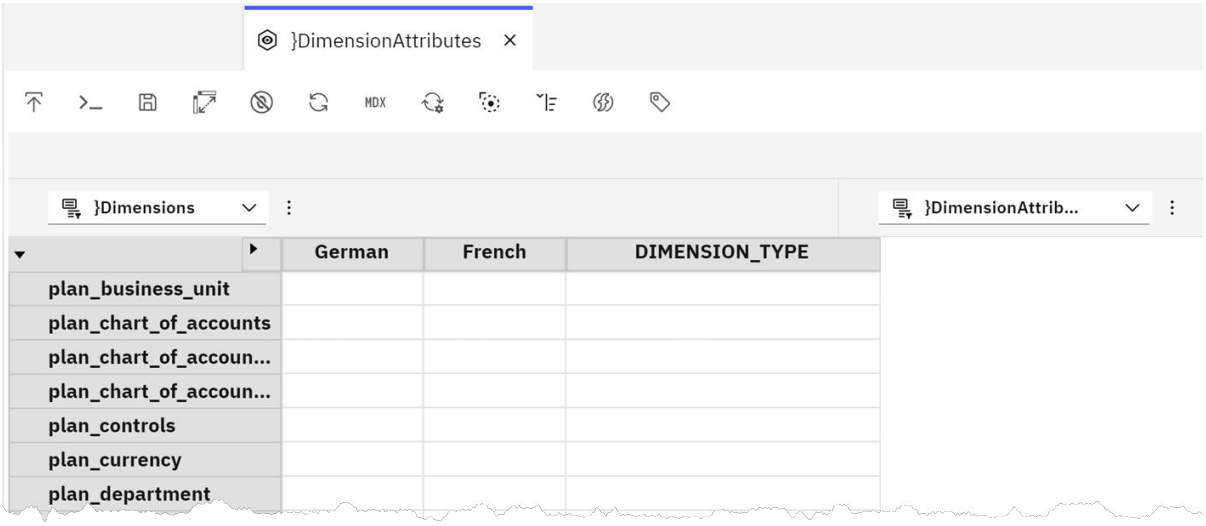
Manage attributes for a database object group

Procedure

1. On the **Database** tree on a modeling workbench, right-click the object group for which you want to manage attributes: **Cubes**, **Dimensions**, **Processes**, or **Chores**.
2. Click **ObjectName Attributes**. For example, **Cube Attributes** or **Chore Attributes**.

   A modified view of the applicable control cube opens, with individual database objects on the row axis and attributes on the column axis.

   For example, here's the view of the `}DimensionAttributes` cube you see when you click **Dimensions** > **Dimension Attributes**.



3. Click a cell at the intersection of an object and an attribute and enter or modify the attribute value.

   You can use Cut, Copy, and Paste to manage attribute values. You can also use the standard view options to manage sets and to select multiple cells, rows, or columns in the editor.

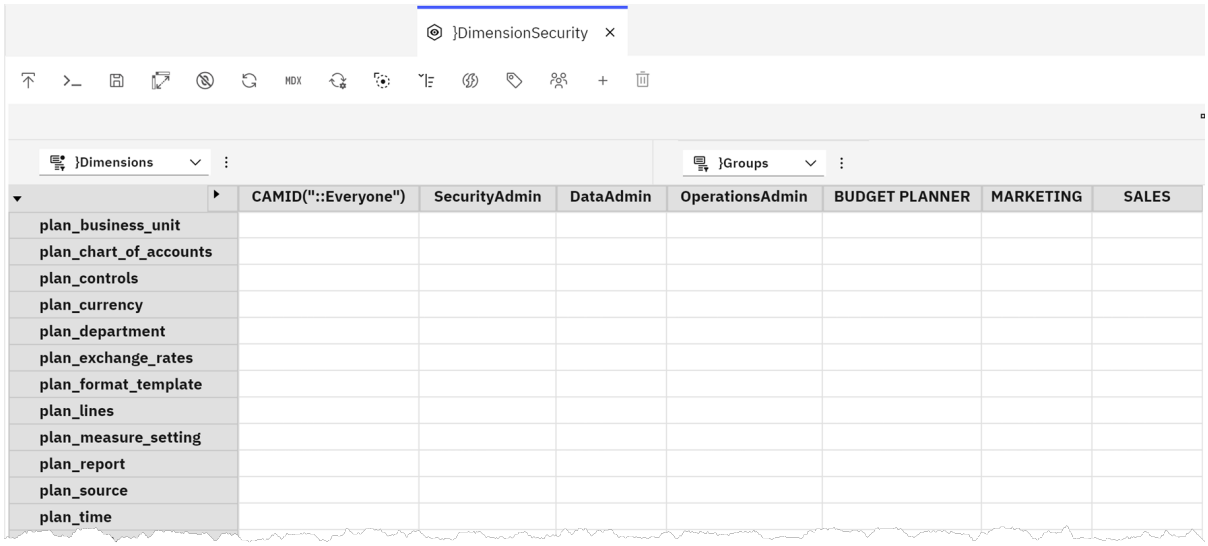
Manage security for a database object group

Procedure

1. On the **Database** tree on a modeling workbench, right-click the object group for which you want to manage security: **Cubes**, **Dimensions**, **Processes**, or **Chores**.
2. Click **ObjectName Security**. For example, **Cube Security** or **Chore Security**.

   A modified view of the applicable control cube opens, with individual database objects on the row axis and user groups on the column axis.

   For example, here's the view of the `}DimensionSecurity` control cube you see when you click **Dimensions** > **Dimension Security**.



You can use these options to manage security for objects on the Planning Analytics database:

- To assign security for a single user group to a single object, double-click the cell at the intersection of the user group and object, then click the desired security level.
- To assign security to multiple adjacent cells, click the first cell and SHIFT+click the last cell, then right-click the last cell and click **Cell security**.
- To assign security to multiple non-adjacent cells, CTRL+click each cell, then right-click the last cell and click **Cell security**.
- To assign security for an entire row, right-click the element name on the row header, then click **Cell security**. You can also use CTRL+click or SHIFT+click to select multiple rows.
- To assign security for an entire column, right-click the element name on the column header, then click **Cell security**. You can also use CTRL+click or SHIFT+click to select multiple columns.

3. Click + on the security editor to create a new group on the Planning Analytics database. You can then immediately apply object security to the new group.
4. (Cloud only) Click to import groups that exist in Planning Analytics Workspace to the Planning Analytics database.

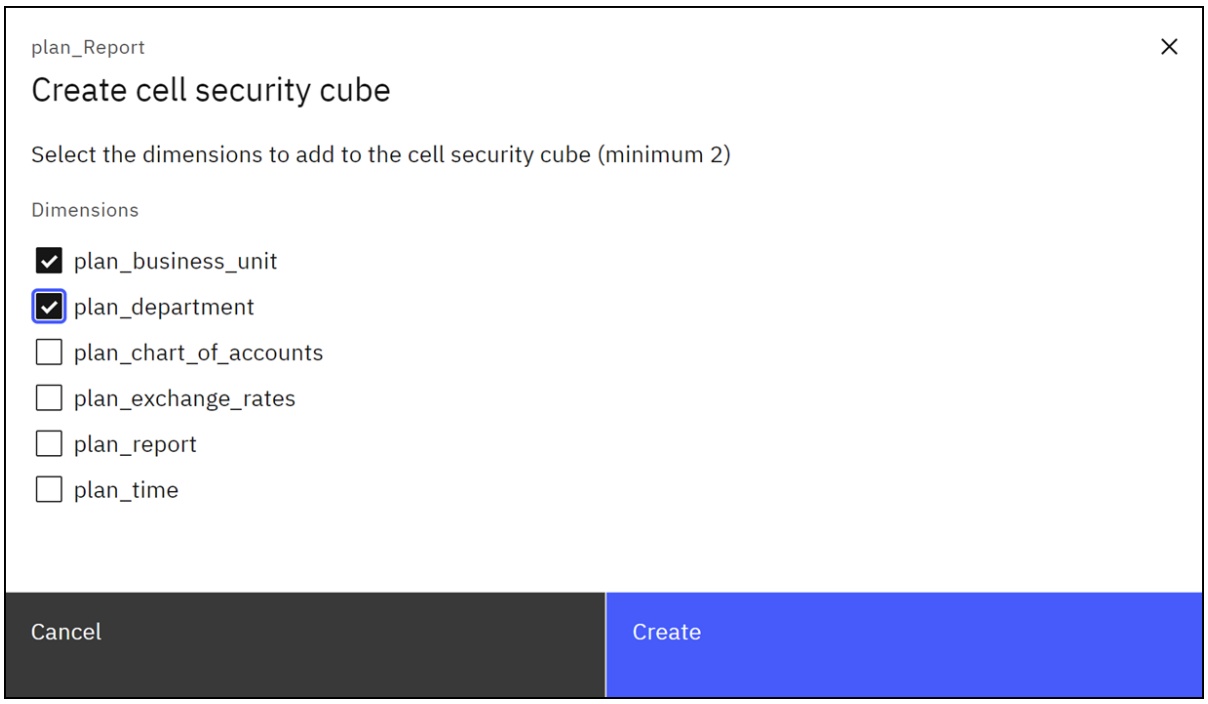
   The groups you select are added to the database. In addition, any users within the groups are also added to the database and assigned to the appropriate groups. You can then immediately apply object security to the new groups.

   You cannot import groups that exist in Planning Analytics Workspace to the Planning Analytics database on Planning Analytics Workspace Local.

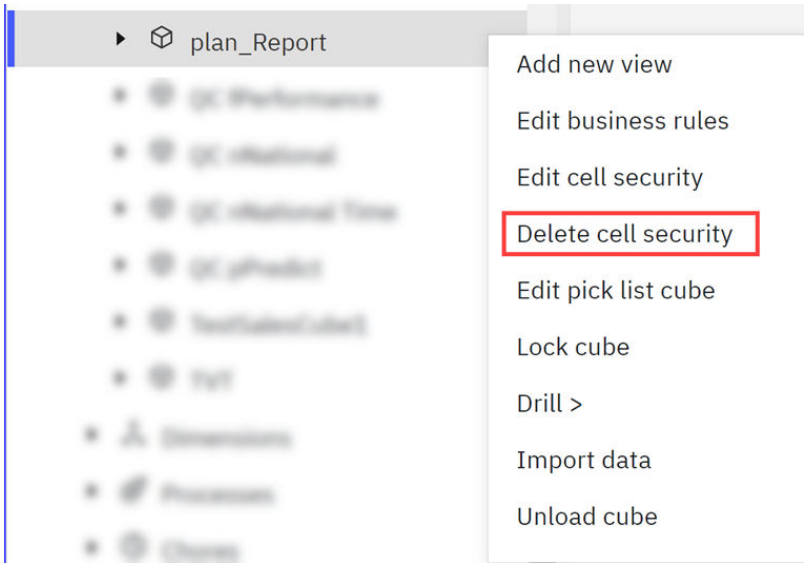
Manage cell security with a more flexible control cube structure

Previously, a cell security control cube contained all dimension from the data cube, plus the }Groups dimension. In Planning Analytics Workspace 2.0.87, you can select which dimensions to include in a cell security control cube, which can make it easier to manage security.

1. To create cell security, right-click a cube on the **Databases** tree on a modeling workbench, then click **Create cell security**.
2. Select the dimensions you want to include in the cell security cube.
3. Click **Create**.



In addition to the more flexible cell security cube structure, Planning Analytics Workspace 2.0.87 also introduces the ability to delete cell security for a cube.



For more information on defining cell security, see Secure cells.

What's new in administration - 2.0.87

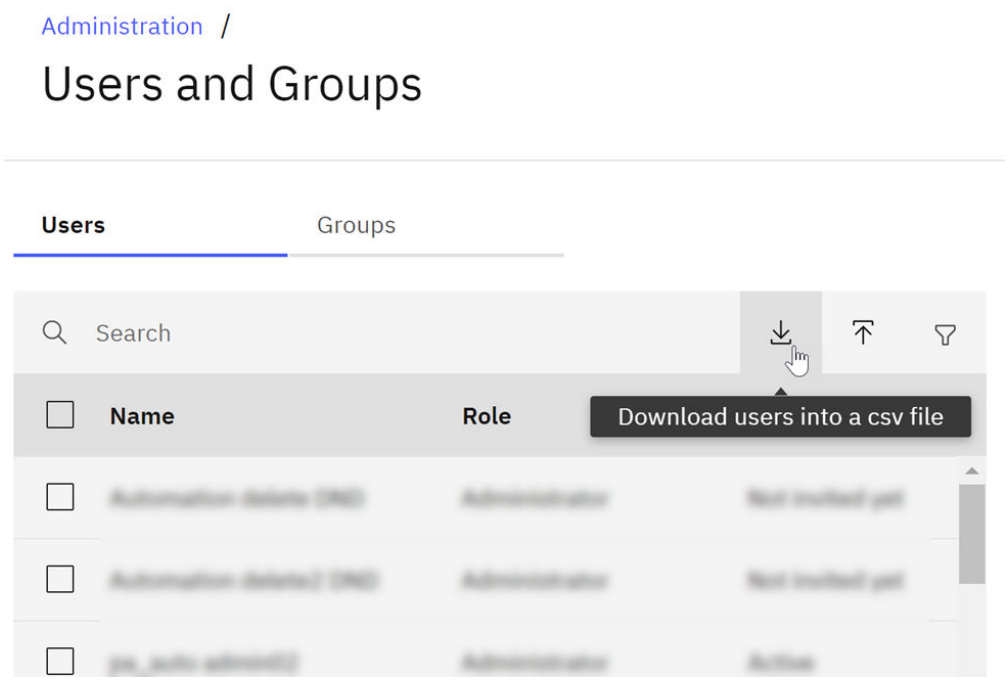
The following new and changed administration features are available in Planning Analytics Workspace 2.0.87.

View the last login date for Planning Analytics Workspace users

Administrators can now view the last login date for users on their Planning Analytics Workspace environment.

The last login date is not exposed in the Planning Analytics Administration interface, but is included when you download a user report to a .csv file.

1. Open Planning Analytics Administration.
2. Click the **Users and groups** tile.
3. Click **Download users**.



4. Open the downloaded `all-users.csv` file.

The **Last Login** column shows the date and time of the most recent login for the users on your database.

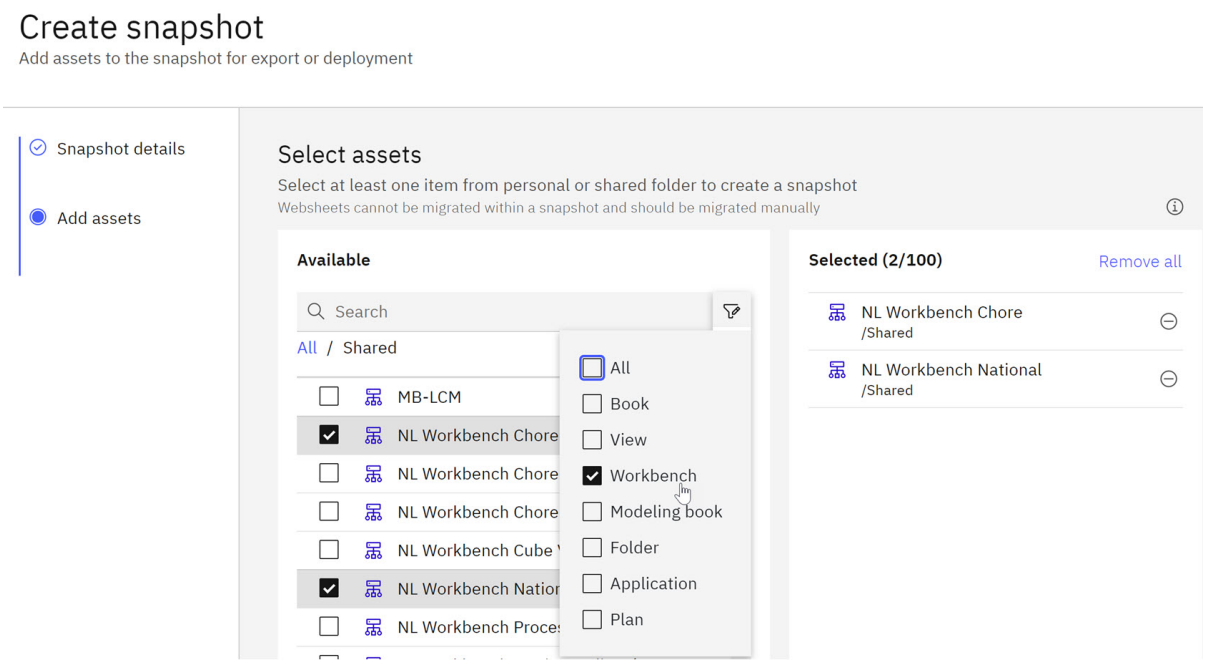
	A	B	C	D	E	F	G
1	Login Id	First Name	Last Name	Role	Environment	Directive	Last Login
2							2022-06-16T13:15:41Z
3							2022-06-22T22:36:26Z
4							2022-06-23T13:44:17Z
5							2022-06-23T15:33:16Z
6							2022-06-23T18:35:09Z
7							2022-06-23T19:06:10Z
8							2022-06-24T13:23:02Z
9							2022-09-21T16:02:35Z
10							2022-09-22T12:33:14Z
11							2023-01-03T19:36:17Z
12							2023-02-06T18:36:23Z
13							2023-02-06T18:36:29Z
14							2023-02-09T16:42:18Z
15							2023-02-17T20:25:18Z
16							2023-04-21T12:15:59Z
17							2023-04-25T18:27:53Z
18							2023-04-26T15:42:16Z
19							2023-04-26T15:42:16Z
20							2023-04-26T15:45:05Z
21							2023-04-26T15:45:05Z
22							2023-04-27T17:32:59Z
23							2023-04-27T17:33:33Z

The **Last Login** column is ignored if you use the `all-users.csv` file to upload users to a database.

Include modeling workbenches in Lifecycle Management snapshots

You can now include modeling workbenches when you use Lifecycle Management to copy and deploy Planning Analytics assets.

When you create a snapshot, the **Workbench** asset type is available when you filter or choose assets for inclusion in the snapshot.



For more information on using Lifecycle Management, see Copy and deploy assets with Lifecycle Management in Planning Analytics Workspace.

2.0.86 - What's new, April 18, 2023

Learn about new features and known issues in version 2.0.86 of IBM Planning Analytics Workspace in the following topics.

Updates to each version of Planning Analytics Workspace are cumulative. To see what was new in previous releases, see Chapter 2, “What's new in Planning Analytics Workspace,” on page 45.

You can view the fix lists for this and previous versions of Planning Analytics Workspace at https://www.ibm.com/support/pages/ibm-planning-analytics-20-fix-lists#anchor2.

You can also review all new features introduced since 2.0.58, in the the IBM Planning Analytics Workspace new feature summary table. You can use the table to search for new features across all releases by description. You can also sort new features by release, date, functional area, and description.

What's new in books and reporting - 2.0.86

The following new and changed features in books and reporting are available in Planning Analytics Workspace 2.0.86.

Synchronize same hierarchies across different databases

You can now synchronize same hierarchies that are in different Planning Analytics databases.

For example, when you enable synchronization for the same hierarchy that is in two different databases, changes you make to the data in one widget is reflected in the synchronized widget.

Important: Sandbox hierarchies do not synchronize across different databases.

To enable same hierarchy synchronization across different databases:

1. In edit mode, create a book with two views from cubes that are in two different databases.
2. Select a view and go to **Properties > Synchronize**.
3. Under **Hierarchies**, enable **Synchronize hierarchies** to synchronize all hierarchies.

All hierarchies are selected by default. You can turn off synchronization for a hierarchy if you want to exclude it from the synchronization.

4. Repeat steps 2 and 3 for the second view.
5. Click **Properties** again to close the panel.
6. Click in the book and go to **Properties > Synchronize**.
7. Under **Mappings**, turn on **Synchronization across servers**.

Make a change in one of the views to see the data update in the other view.

Disable select data spreading methods on Planning Analytics Workspace Local

You can configure your Planning Analytics Workspace Local environment to disable any combination of the **Repeat**, **Repeat leaves**, **Equal leaves**, and **Straight line** data spreading methods.

About this task

When you disable a data spreading method, the method cannot be applied in a cube view or in a single cell widget. The method is grayed-out and cannot be selected in the **Data spread options** window and the spreading method cannot be applied using data spread keyboard shortcuts.

Procedure

1. Open the Planning Analytics Workspace Local configuration file.

   The configuration file is located in the `<planning_analytics_install_dir>\config` directory and is named `paw.ps1` (Windows) or `paw.env` (Linux).
2. Add the **`DISABLED_SPREAD_OPTIONS`** parameter to the configuration file and specify the data spreading methods you want to disable.

   The methods you can specify for this parameter are:

   - Repeat
   - RepeatLeaves
   - EqualLeaves
   - StraightLine

   If you specify multiple data spreading methods, separate each method with a comma and enclose the entire parameter value string in quotation marks as shown in the example.
3. Save the configuration file.
4. Run `./scripts/paw.ps1` (Windows) or `./scripts/paw.env` to apply the configuration changes.

Example

To disable the Repeat, Repeat leaves, Equal leaves, and Straight line data spreading methods on Windows, add this line to the `paw.ps1` configuration file.

```
$env:DISABLED_SPREAD_OPTIONS="Repeat,RepeatLeaves,EqualLeaves,StraightLine"
```

To disable the Repeat, Repeat leaves, Equal leaves, and Straight line data spreading methods on Linux, add this line to the `paw.env` configuration file.

```
export DISABLED_SPREAD_OPTIONS="Repeat,RepeatLeaves,EqualLeaves,StraightLine"
```

What's new in plans and applications - 2.0.86

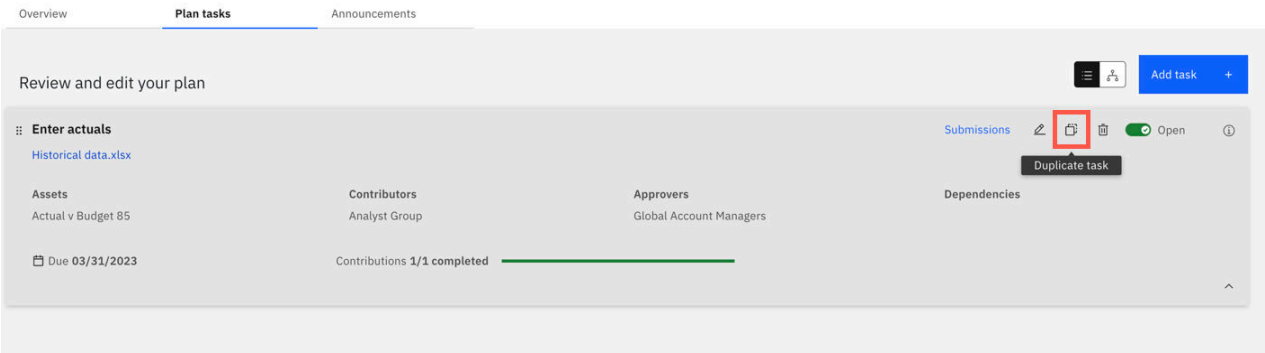
The following new and changed features in plans and applications are available in Planning Analytics Workspace 2.0.86.

Duplicate tasks and sections in Plans and Applications

You can now duplicate tasks in Plans and sections in Applications to quickly create similar tasks and sections, saving you time.

Duplicating tasks in Plans

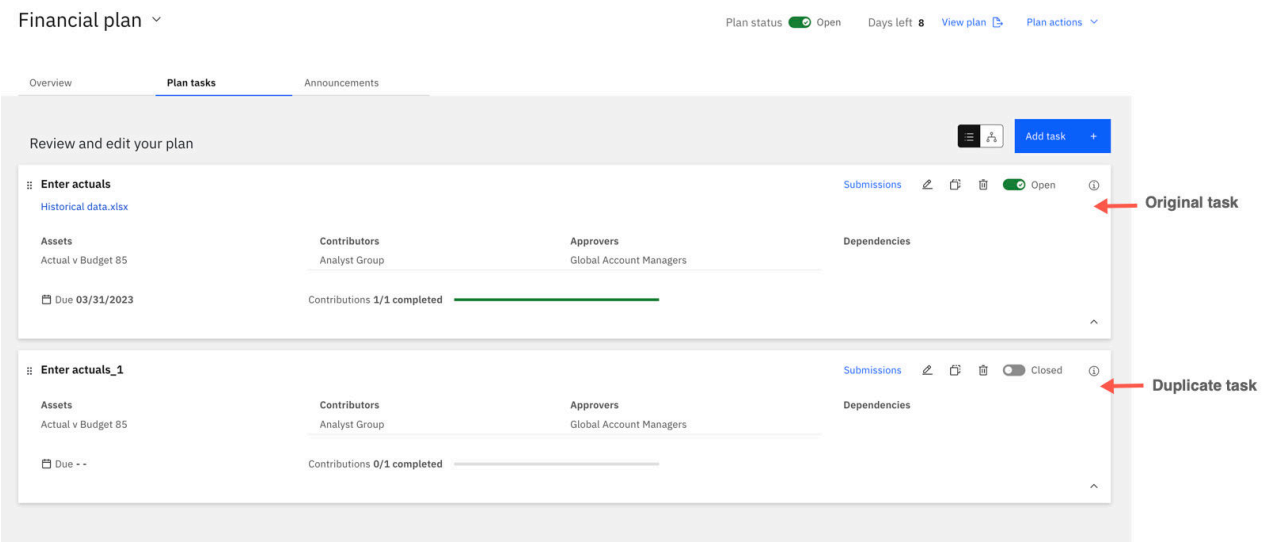
In list view on the **Plan tasks** tab, click **Duplicate task** for the task you want to duplicate.



You can also duplicate tasks in the flow view by selecting the task and clicking **Duplicate**.

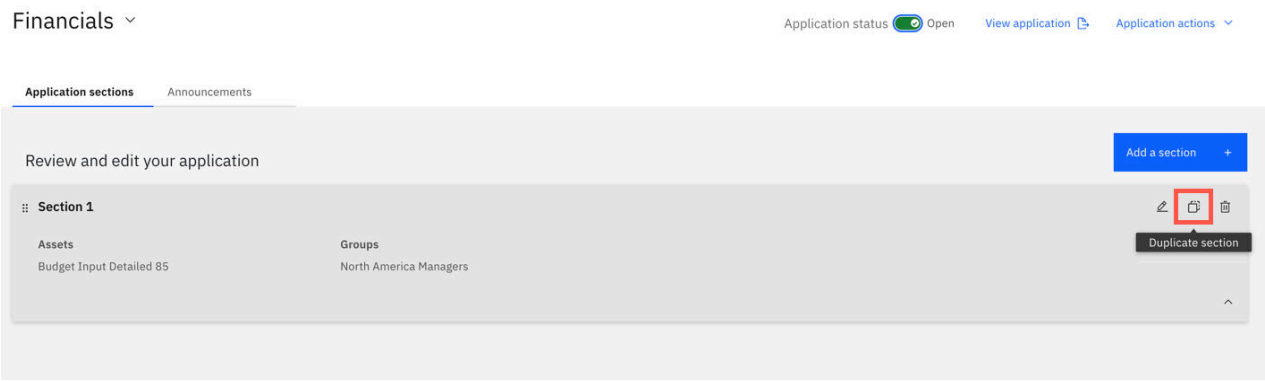
When you duplicate a task, most of the details such as the dependencies, contributors, and approvers are copied from the original task to the duplicated task. The following information in the duplicate task differs from the original task:

- Task name - The duplicated task name includes the original name and appends an underscore and number at the end of the task name.
- Start and due dates - Dates that occur in the past are reset. For the start and due dates to be copied over to the duplicated task, the start date must occur in the future.
- Attachments - Attachments are not copied to the duplicated task.
- Submission logs - Contributions and approvals are not copied over and submission logs are reset in the duplicated task.
- Task status - The task status for duplicated tasks is set to **Closed**.



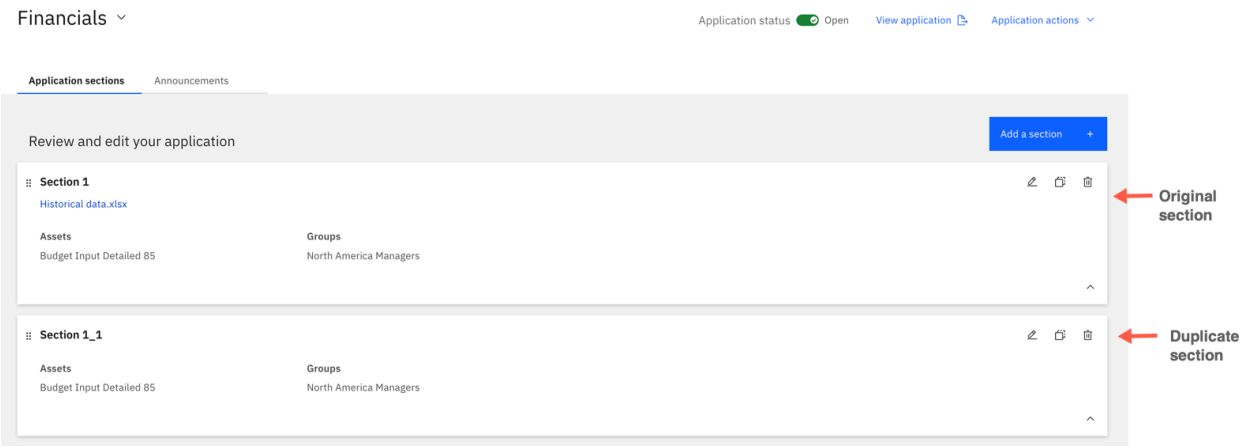
Duplicating sections in Applications

Under **Application sections**, click **Duplicate section** to duplicate a section that you have already created in your application.



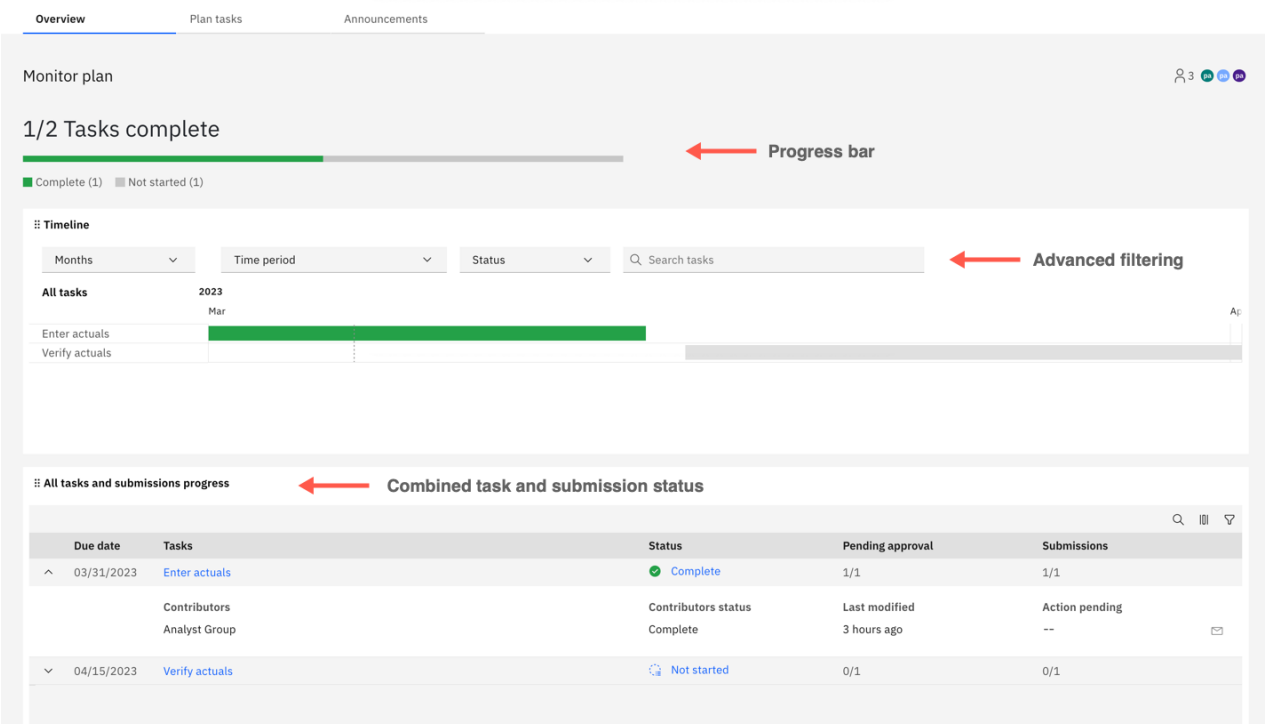
When you duplicate a section, details such as the **Assets** and **Contributor** groups are copied over to the duplicated item. The following information in the duplicate section is different from the original:

- Section name - The duplicated section name includes the original name and appends an underscore and number at the end of the section name.
- Attachments - Attachments are not copied from the original section to the duplicated section.



New look and usability improvements for Plans Overview

In Planning Analytics Workspace 2.0.86, the **Overview** tab in Plans features a new design and several usability improvements that help you quickly see your plan's progress.



New progress bar

A progress bar now features on the **Overview** tab that displays the progress of your plan.

Advanced filtering in the Timeline panel

The **Timeline** panel now includes advanced filtering. You can filter tasks by name, task status, and time period.

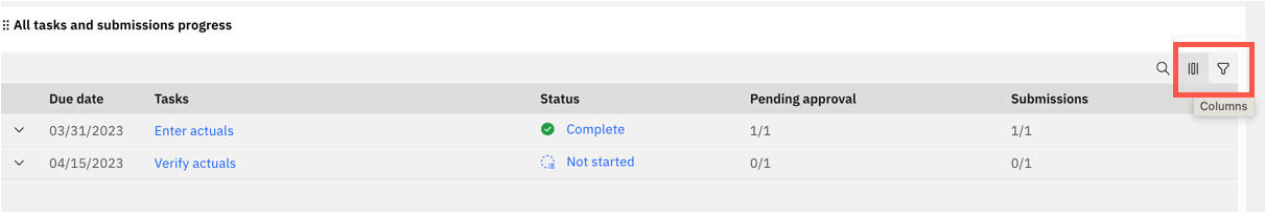
New All tasks and submissions progress panel

Previously, plan details were split into three panels on the **Overview** tab: **Plan progress**, **Contributions**, and **Timeline**.

The **Plan progress** and **Contributions** panels are now combined into the **All tasks and submissions progress** panel, which allows you to see the progress of your plans' tasks and its submissions in one place.

Expand each task to see status details for the submissions in that task.

You can customize the **All tasks and submissions progress** panel by choosing the columns you want to see and filtering by task status.



What's new in modeling - 2.0.86

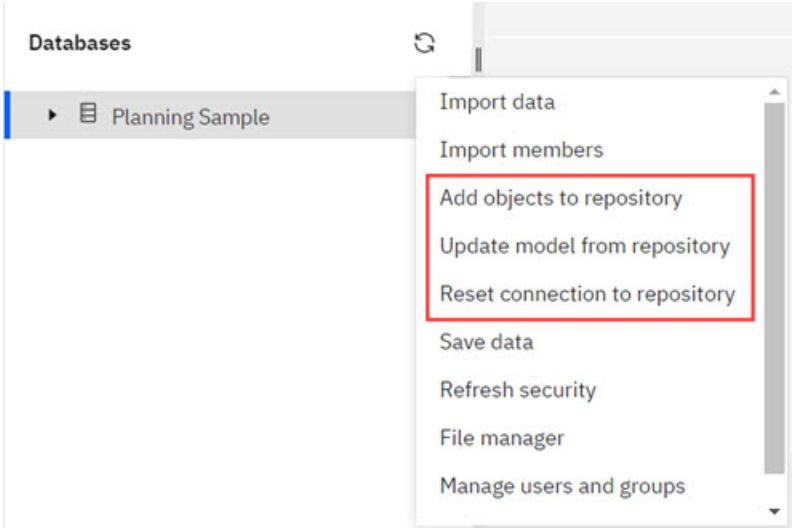
The following new and changed modeling features are available in Planning Analytics Workspace 2.0.86.

Git repository integration for Planning Analytics database objects

Modelers can now access a Git repository (GitHub, Microsoft Azure, or AWS CodeCommit) directly from Planning Analytics Workspace. You can use the Git repository to store Planning Analytics database objects such as cubes, dimensions, rules, and processes that are common across multiple models. You can also use the repository to move database objects from one environment to another. For example, you might want to copy database objects from a development environment to a production environment.

The repository can also serve as a version control facility for your Planning Analytics database objects.

New options to interact with a Git repository are available when you right-click a database on the **Databases Tree** of a modeling workbench.



You can access a Git repository in Planning Analytics Workspace using an SSH connection and a public key/private key pair. An optional passphrase is also supported.

The following limitations apply when pushing database objects to a repository:

- Data is not included when you push cubes or views to a repository.
- Attributes are not included when you push dimensions to a repository.

For more information, see Use Git repository integration to manage Planning Analytics database objects.

Dimension editor search and locate in hierarchy

You can now determine a member's location using the dimension editor search function.

The dimension editor search function now includes a menu item called **Locate**. Searching in the dimension editor acts as a filter to generate a list of members that match the search term. After searching, right-click a member from the generated list and select **Locate** to remove the filters and locate the member in the hierarchy.

Note: If the user picks a set (filter), the element is located within the set.

To learn more about the dimension editor, see Dimensions in Planning Analytics Workspace.

Hide databases in Preferences

You can now use a Preferences option on a modeling workbench to hide databases from the Databases tree. When you hide a database, it is hidden in the Databases tree on both the modeling workbench and

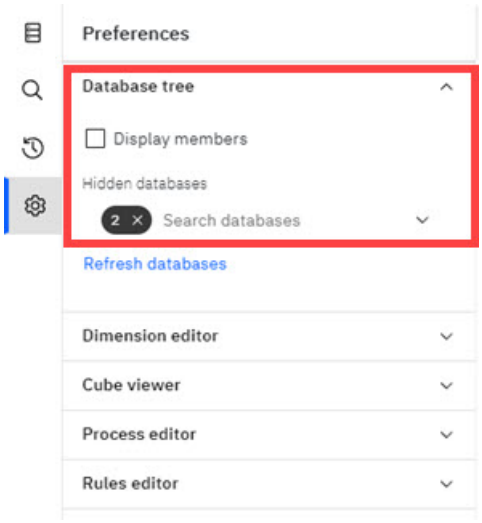
in books (Reports and Analysis). Though hidden, an active database remains running and available to processes, chores, action buttons, and any other components or features that reference the database.

1. Open a modeling workbench.
2. Click to open **Preferences.**
3. Click the **Database tree** preference section.
4. On the **Hidden databases** preference, search for the database that you want to hide or click the **Open** icon to reveal all running databases.

   If there are fewer than five databases running in your environment, you don't need to click the **Open** icon; all running databases are shown

   The list of running databases is static, so it's possible that a database could start after you open the **Preferences** and not be visible in the list. You can click **Refresh databases** to update the list.
5. Toggle the visibility of a database by clicking the box next to its name.

   The **Hidden databases** preference indicates how many databases are hidden.



6. To see your changes, refresh the **Databases** tree on the workbench.

This new preference also applies to the display of databases on the search panel. There is no impact on open editors or saved workbenches, however, **Find in tree** will not find hidden databases.

Note: While this preference can be set only on modeling workbenches, the setting also applies for the same modeler user in books. If a modeler hides a database on the tree in a modeling workbench, the database is also hidden for the same modeler on the tree in a book.

For more information on preferences, see Workbench preferences.

Upcoming change notifications - 2.0.86

The following changes are planned for an upcoming Planning Analytics Workspace release. These notifications are made available so you can plan upgrades and maintain your Planning Analytics Workspace environment.

Upcoming configuration modification required for Learn Pane in Planning Analytics Workspace Local

The cognitive Learn Pane in Planning Analytics Workspace Local will be hosted on a new domain in the near future. This will require configuration changes to Planning Analytics Workspace Local installations to ensure continued access to documentation and other information through the Learn Pane.

Important: This notification applies **only** to Planning Analytics Workspace Local. The change in hosting domain will not interrupt access to content through the Learn Pane for Planning Analytics Workspace on Cloud, Planning Analytics on Cloud Pak for Data, or Planning Analytics as a Service.

Full details on the configuration modifications required for Planning Analytics Workspace Local will be provided in the Planning Analytics Workspace 2.0.87 new features documentation.

2.0.85 - What's new, March 22, 2023

Learn about new features and known issues in version 2.0.85 of IBM Planning Analytics Workspace in the following topics.

Updates to each version of Planning Analytics Workspace are cumulative. To see what was new in previous releases, see Chapter 2, “What's new in Planning Analytics Workspace,” on page 45.

You can view the fix lists for this and previous versions of Planning Analytics Workspace at https://www.ibm.com/support/pages/ibm-planning-analytics-20-fix-lists#anchor2.

You can also review all new features introduced since 2.0.58, in the the IBM Planning Analytics Workspace new feature summary table. You can use the table to search for new features across all releases by description. You can also sort new features by release, date, functional area, and description.

What's new in books and reporting - 2.0.85

The following new and changed features in books and reporting are available in Planning Analytics Workspace 2.0.85.

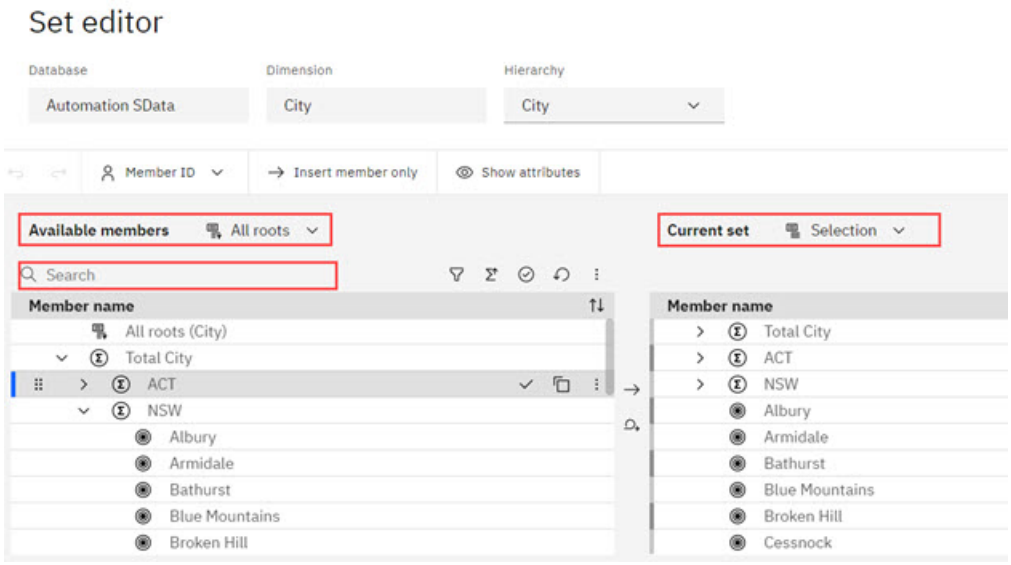
Set editor usability improvements

Usability improvements in the set editor make it easier to work with sets.

These changes do not introduce new functionality. Rather, some options on the set editor have been moved or made more intuitive.

- The **Available members** menu now appears immediately adjacent to the **Available members** label, rather than beneath the label.
- The **Current set** menu now appears above the current set, rather than on the header.
- The search bar for the **Available members** pane is always visible, you no longer need to click a **Search** icon to reveal the search bar.

This image shows the new location of all the improvements.



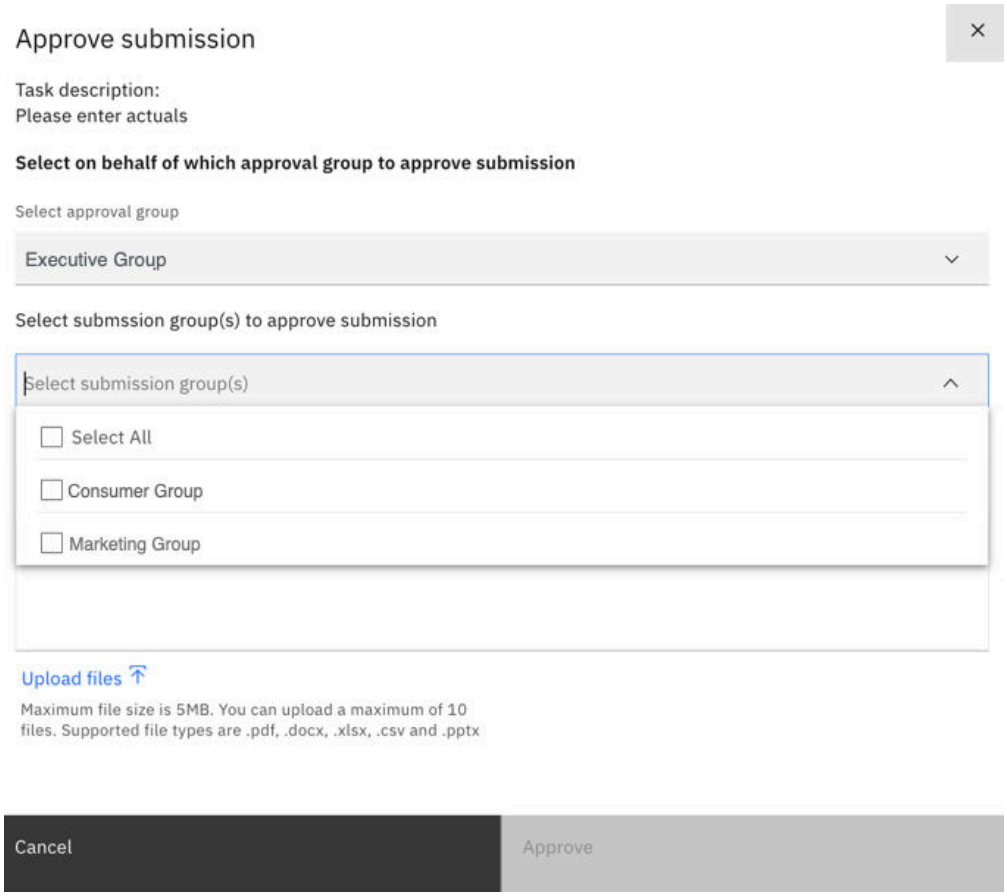
What's new in plans and applications - 2.0.85

The following new and changed features in plans and applications are available in Planning Analytics Workspace 2.0.85.

Improved approval process for plan submissions

Plan owners and approvers can now approve or reject a submission from multiple contributors in one go.

When approving or rejecting a submission, you can select the contributor(s) whose submission you want to approve or reject, or click **Select All** to apply your action to all the contributors for that submission.



To take action on a submission:

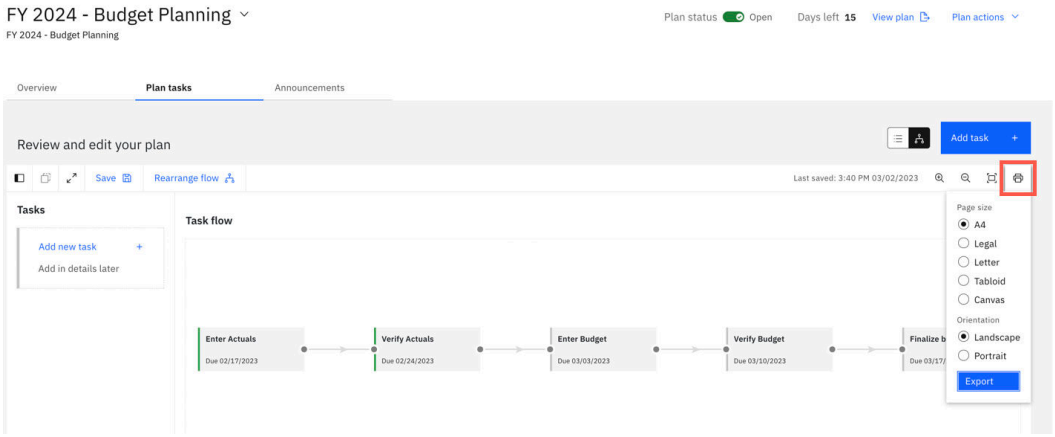
1. Click the link in the email that you receive or open the task in contribution mode.

   When a task has been submitted, approvers can see the **Reject** and **Approve** options at the end of the task, along with a history of submissions for the task.
2. Enter comments that describe your disposition on the submission, then click **Reject** or **Approve**.
3. Select the approval group that you are a part of and then select all the contributors for whom you want to approve or reject the submission. Click **Select All** to approve or reject the submission from all of the contributors for that task.
4. Click **Approve** or **Reject**.

Save task flows in plans as PDF files

You can now save your plan's task flow as a PDF file.

In the task flow view on the **Plan tasks** tab, click the **Export** icon to save the task flow as a PDF.



What's new in modeling - 2.0.85

The following new and changed modeling features are available in Planning Analytics Workspace 2.0.85.

Reopen recently opened objects from any database

You can now reopen recently opened objects from any database.

The **Recents** list contains the last twenty objects that were opened, with the most recent at the top. To remove an object from the **Recents** list, click on the **x** next to the object name.

The file path to the object includes the database name. For example, `Planning sample > Dimensions > Account`. Since search is restricted to one database, objects in search that have no path will only have their database name displayed in **Recents**.

Workbench preferences

Enhancements to user **Preferences** are available across multiple components.

Design update

A few design changes have been made to **Preferences**.

The **Preferences** icon is now ⚙. This button is always visible, even when the workbench is empty..

The order of sections and their sub-sections in **Preferences** is as follows:

- **Database tree**
  - **Display members**
  - **Hide Databases**
- **Dimension editor**
  - **Compact header**
  - **Show value bar**
  - **Show dimension editing warning**
  - **Page size**
- **Cube viewer**
  - **Show hierarchy name**
  - **Show context information**
  - **Show icons**
  - **Show section header**

- **Process editor**
  - **Font**
  - **Font size**
  - **Enable line wrapping**
  - **Lock generated statements**
- **Rules editor**
  - **Font**
  - **Font size**
  - **Enable line wrapping**

By default, all sections are collapsed, but retain their previous state when the user opens or closes the **Preferences** panel. Opening and closing **Preferences** also refreshes the selected values.

Note: The selected preferences apply only to the workbench, not the dashboard.

Process editor preferences

A new user preference is available to lock or unlock generated statements in the process editor.

To use this feature, click **Preferences** on a workbench, then click **Process editor**. Click the **Lock generated statements** option to toggle the lock on generated statements.

When the **Lock generated statements** option is enabled, users cannot edit the process script between the `#****Begin generated statements` and `#****End generated statements` lines.

Lock dimensions in Planning Analytics Workspace

You can now lock dimensions in Planning Analytics Workspace.

A user must have either Admin or Lock privilege for a dimension to lock the dimension.

When a user locks a dimension, only those users who have Admin rights for that dimension can modify the dimension. Even the user who locks the dimension cannot modify it, unless they have Admin rights for that dimension.

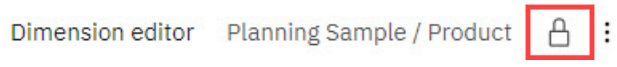
When a dimension is locked, options are disabled for these actions:

- Add members to any of the hierarchies in the dimension
- Remove members from any of the hierarchies in the dimension
- Create a hierarchy in the dimension
- Delete a hierarchy in the dimension

Users can create, delete, or update subsets under any locked dimension.

To lock a dimension, right-click the dimension on the **Databases** tree in either a book or a modeling workbench, then click **Lock dimension**. A lock icon on the dimension name indicates that the dimension is locked.

A lock icon on the header of the new experience dimension editor also indicates that the dimension is locked.



If a dimension is locked while it is open in the new experience dimension editor, you must refresh the dimension editor to see the lock icon.

To unlock a dimension, right-click the dimension on the **Databases** tree in either a book or a modeling workbench, then click **Unlock dimension**.

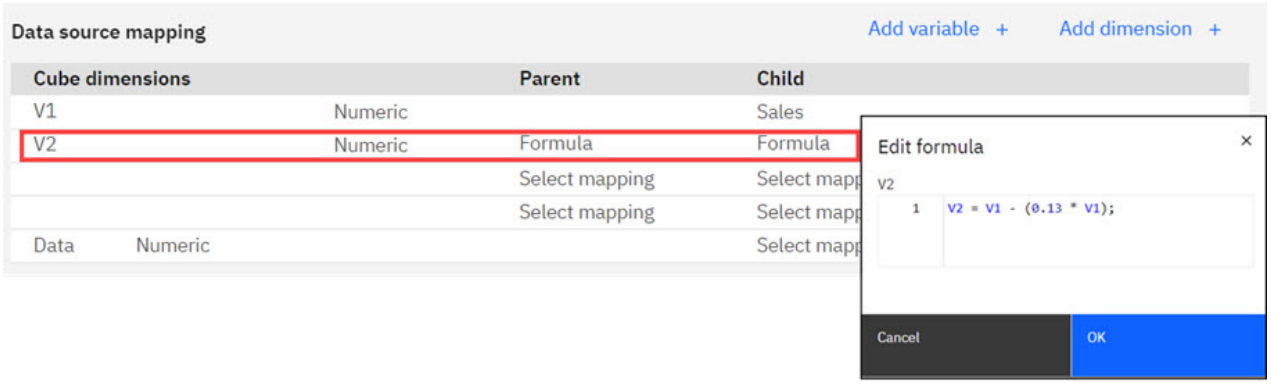
Use formulas to manipulate a data source during a .csv import

When you use the **Import data** or **Import members** options to import from a .csv file into a workbench, you can define formulas to manipulate the source data.

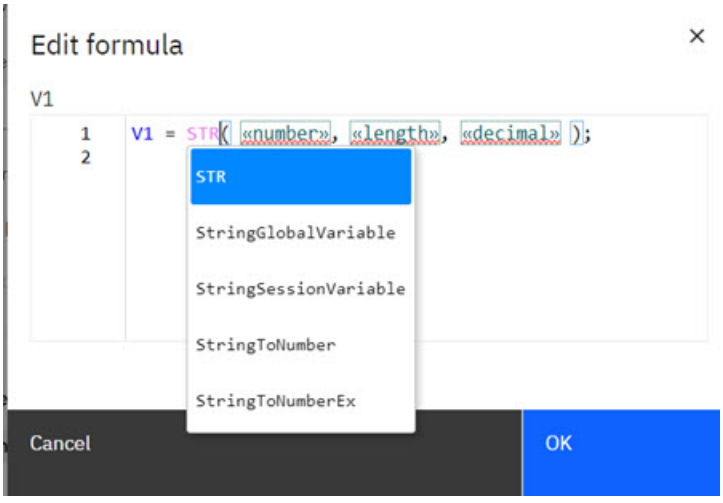
You can use any of these options on the **Databases** tree to import a .csv data source into a modeling workbench:

- Database > Import data
- Database > Import members
- Cubes node > Import data
- Cube name > Import data
- Dimensions node > Import members
- Dimension name > Import members

When mapping your data source for any of these import methods, a **Formula** mapping option is now available when you create a variable. When you select the **Formula** option, a formula editor opens and you can enter a formula to manipulate the data in the source column corresponding to the variable.

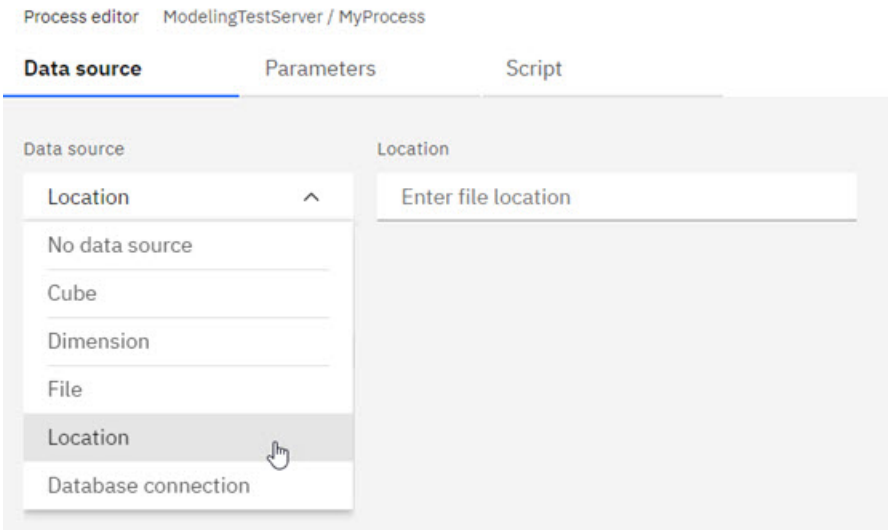


You can create a formula to perform an arithmetic calculation, manipulate strings, or apply any available Planning Analytics function to your data source. The formula editor includes an auto-complete feature to help you select and complete applicable functions.



New 'Location' data source option for processes

You can now specify a local or network location for a TurboIntegrator process data source.



When you select the **Location** data source option, the **Location** box accepts a local or network location for your data source. For example, `s:/abc/datasource.txt`.

For more information, see Define a location data source.

Known issues - 2.0.85

The following are known issues in Planning Analytics Workspace. These issues will be resolved in a future release.

Attachments in applications or plans are permanently deleted when you delete a snapshot in Lifecycle Management

If you delete a snapshot that contains an application or plan, any attachments are permanently deleted from the application or plan.

After you delete the snapshot in Lifecycle Management, the attachments can no longer be opened from the application or plan.

This issue is resolved in Planning Analytics Workspace 2.0.86.

2.0.84 - What's new, February 16, 2023

Learn about new features and known issues in version 2.0.84 of IBM Planning Analytics Workspace in the following topics.

Updates to each version of Planning Analytics Workspace are cumulative. To see what was new in previous releases, see Chapter 2, “What's new in Planning Analytics Workspace,” on page 45.

You can view the fix lists for this and previous versions of Planning Analytics Workspace at https://www.ibm.com/support/pages/ibm-planning-analytics-20-fix-lists#anchor2.

You can also review all new features introduced since 2.0.58, in the the IBM Planning Analytics Workspace new feature summary table. You can use the table to search for new features across all releases by description. You can also sort new features by release, date, functional area, and description.

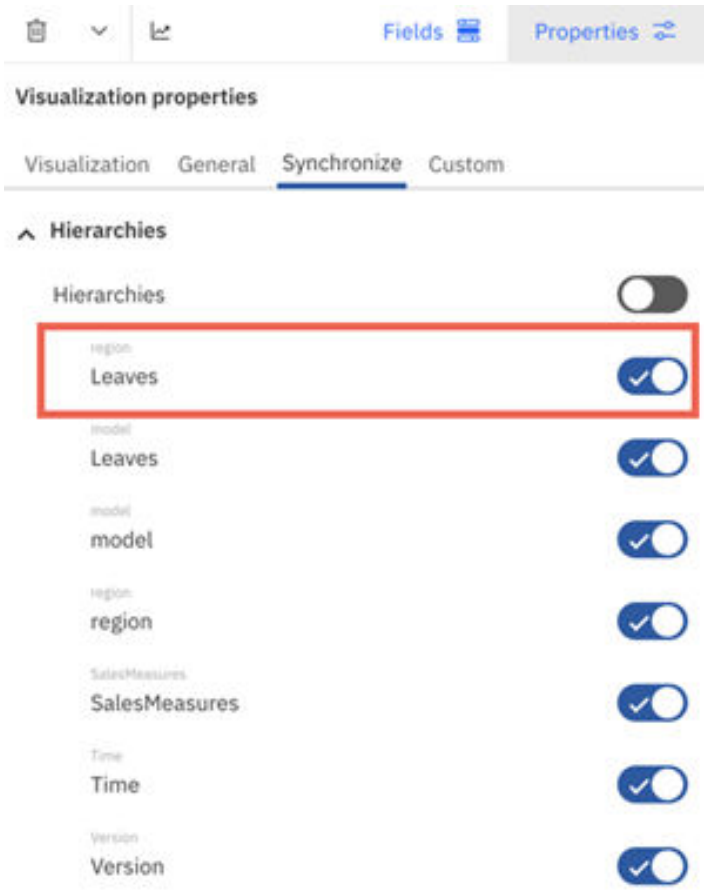
What's new in books and reporting - 2.0.84

The following new and changed features in books and reporting are available in Planning Analytics Workspace 2.0.84.

Usability improvement in synchronization for visualizations

The **Synchronize** feature for visualizations was improved for usability in Planning Analytics Workspace 2.0.84. Previously, the user interface displayed dimension synchronization labels instead of hierarchy synchronization.

You now see the hierarchy synchronization option in the **Synchronize** feature under **Visualization properties**. Dimension names also display above the hierarchy names now for easy identification.

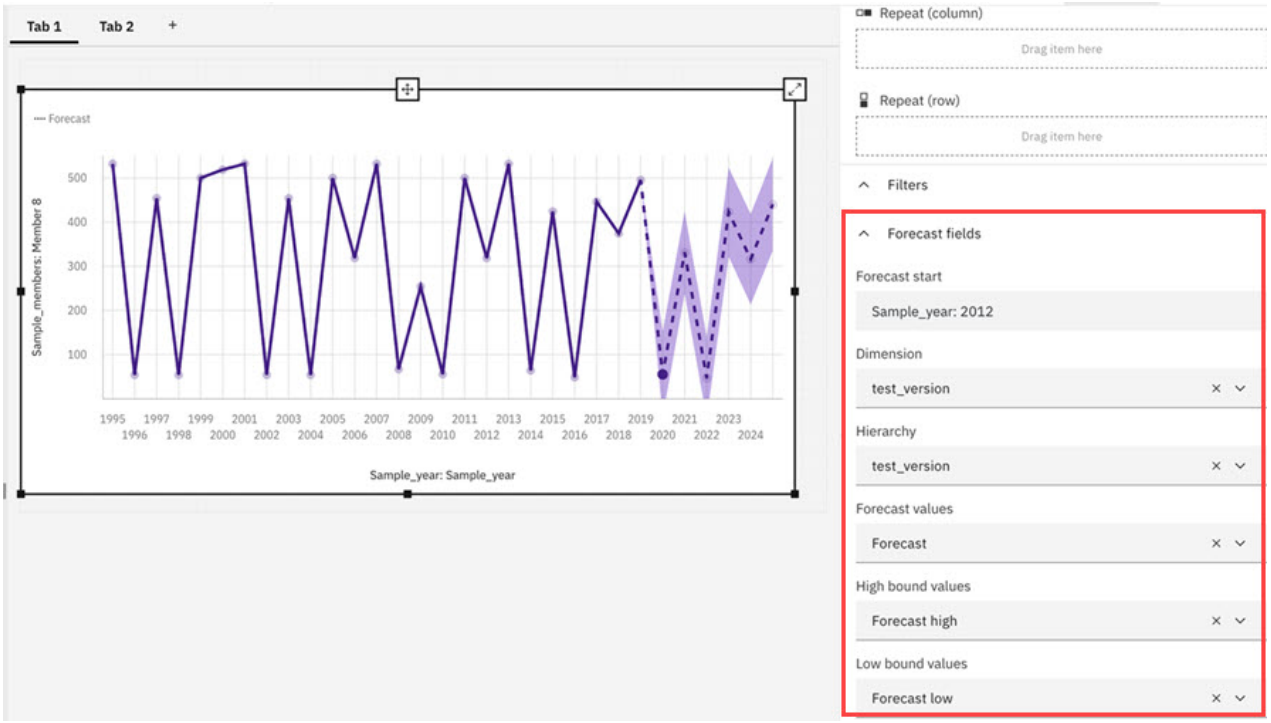


There is no other change to the **Synchronize** feature and it continues to work as before. For more information, see Synchronize objects in a book or sheet.

New forecast capabilities for Line visualization

The Line visualization now includes three slots to specify **High bound**, **Low bound**, and **Forecast** values. You can use this new visualization to view existing forecast data independent of the forecasting interface in Planning Analytics Workspace.

As with current forecasting capabilities, **High bound** and **Low bound** are used to draw the envelope and **Forecast** indicates the forecasted values. Additionally, you must specify a **Forecast start** to indicate when the forecast data starts.

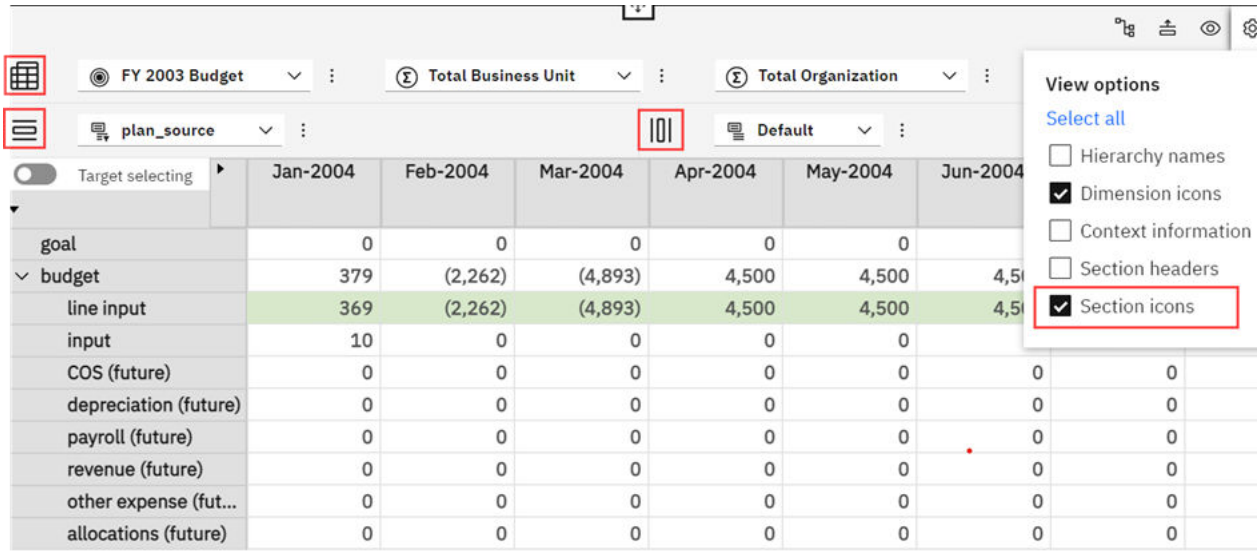


View section icons

Section icons can now be enabled in a view independent of section header strings.

To enable or disable section icons in the cube viewer, click **View options**, and then toggle section icons by clicking the check box next to **Section icons**.

When section icons are enabled, they are displayed on the context, row, and column sections.

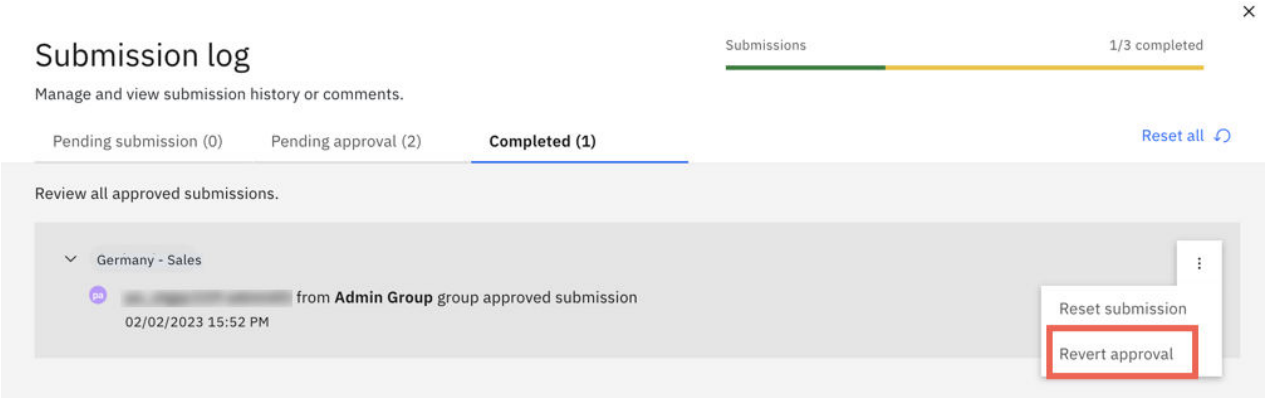


What's new in plans and applications - 2.0.84

The following new and changed features in plans and applications are available in Planning Analytics Workspace 2.0.84.

Revert approvals in plans

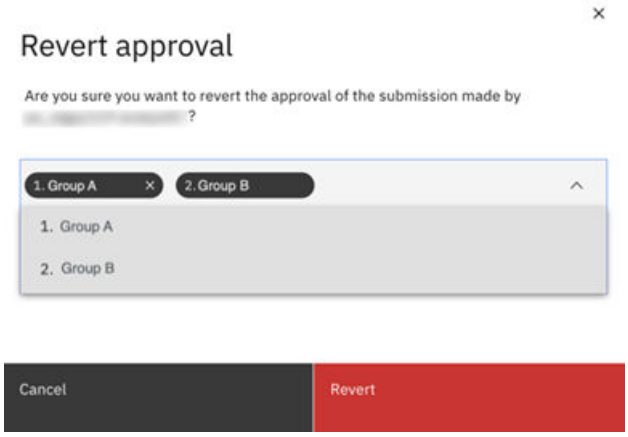
Plan owners and co-owners can now cancel previously approved tasks.



To revert a task approval:

1. Open the plan in edit mode.
2. Under **Plan tasks**, click the **Submissions** link on a task to open the **Submissions log**.
3. Click **Pending approval** or **Completed** to find the approved submission. Submissions that require multiple approvals and were only partially approved are under **Pending approval**. Submissions that were fully approved are under **Completed**.
4. Click the menu next to the task for which you want to cancel an approval and select **Revert approval**.
5. Select the approver group(s) from whom you want to remove approval(s) and click **Revert**.

   Where there are multiple approvers for a task, when you revert an approval, approval is also removed from any next-in-line approvers. In the following example, if you remove Group A's approval, Group B's is also removed. Both Group A and Group B will need to approve the submission again.



For more information, see Manage plan submissions.

Improvements to the 'Task flow' pane for plans

Several usability improvements are introduced to the **Task flow** pane for plans in Planning Analytics Workspace 2.0.84.

The **Task flow** pane is available on the **Plan tasks** tab of a plan.

You can now edit a task directly from the **Task flow** pane. Hover the cursor on a task, then click the **Edit** icon to open the task editor.

You can also use full screen mode to maximize the canvas when working in the **Task flow** pane. Click the Full screen icon to enter full screen mode, where the **Task flow** pane and the **Tasks** list occupy the entire screen.

What's new in modeling - 2.0.84

The following new and changed modeling features are available in Planning Analytics Workspace 2.0.84.

Copy object names from the Databases tree

You can now copy name objects from the **Databases** tree.

You can copy the object name into your clipboard by hovering your cursor over the item that you want to copy and then pressing CTRL+C (Windows) or CMD+C (Mac).

When copying the object name for a member, the value copied is the MUN (Member Unique Name).

For more information, see Find data with the tree.

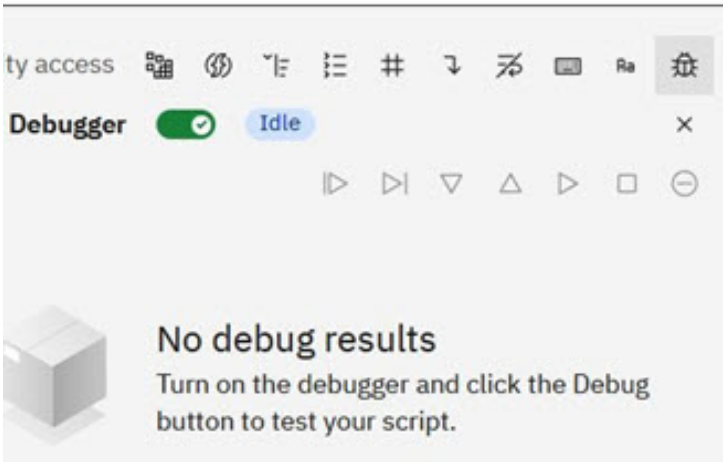
TurboIntegrator process debugger

The process editor in Planning Analytics Workspace includes a debugger user interface that allows you to set line breakpoints, continue to the next breakpoint, and step over to the next line. Conditional breakpoints are also supported.

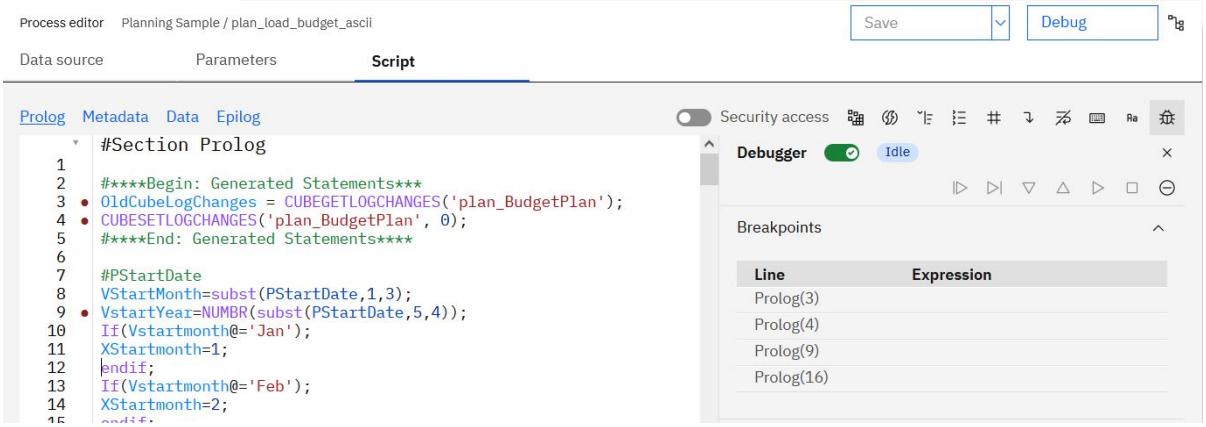
You can enable the debug mode only on one process at a time.

On the **Script** tab in the process editor, click the debugger icon to open the debugger pane.

In this pane, use the **Debugger** toggle switch to enable the debug mode.



Using breakpoints, you can stop the execution of code at a particular line. To set a breakpoint, click the line number in the code editor.

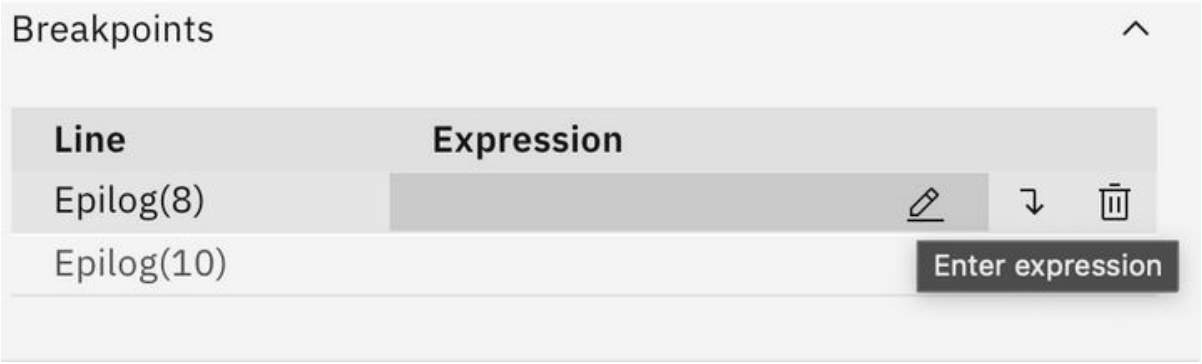


With the debugger running, navigate through the code using the following buttons:

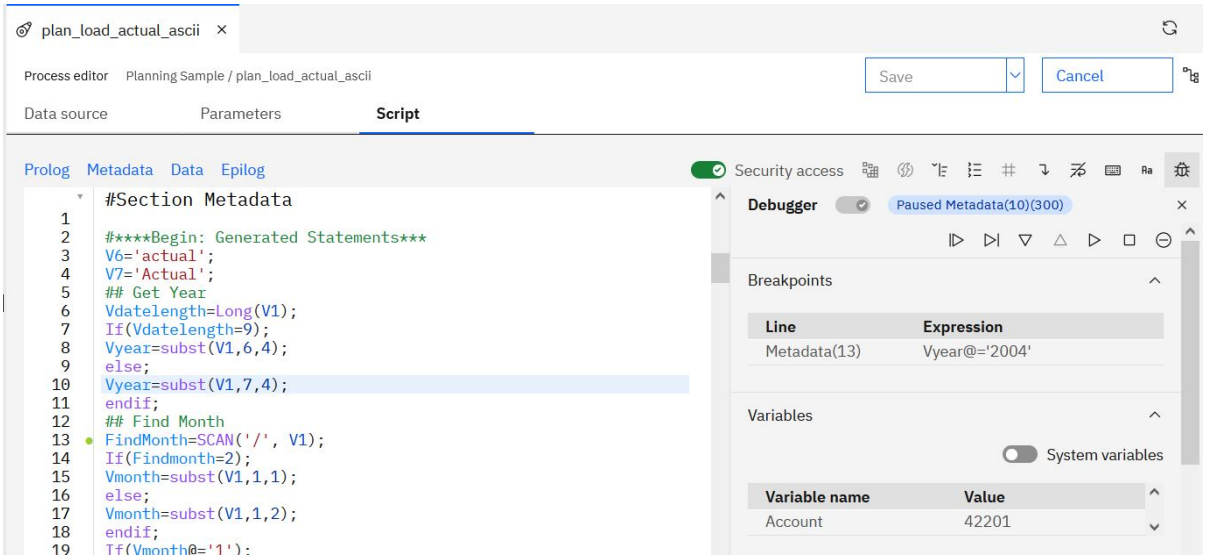
- **Continue**
- **Step over**
- **Step in**
- **Step out**
- **Continue to end**
- **Stop execution**
- **Remove all breakpoints**

You can set conditional breakpoints by entering expressions. The expression must evaluate to true or false and can contain references to any variables and parameters, and use TM1 TurboIntegrator process functions. Potential expression errors can be corrected at run time.

To enter the expression, click the **Expression** field for the selected breakpoint, and type the expression.



In the following example, the expression `Vyear@='2004'` is entered for the line 13 breakpoint to stop debugging when the input data is for year 2004.



The debugger includes a panel with the current variables, parameters, and their respective values. These values are read only.

For more information, see Debug a process.

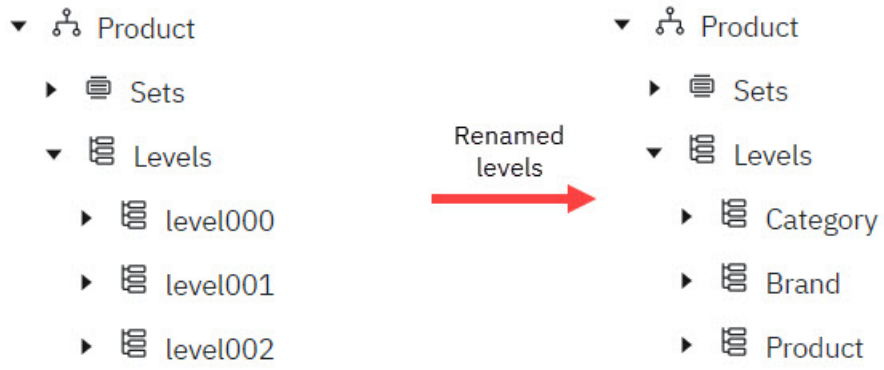
Rename hierarchy levels in the dimension editor

You can now rename hierarchy levels directly in the new experience dimension editor.

About this task

By default, levels within a hierarchy are named `level000` (highest level of consolidation), `level001`, `level002`, and so on.

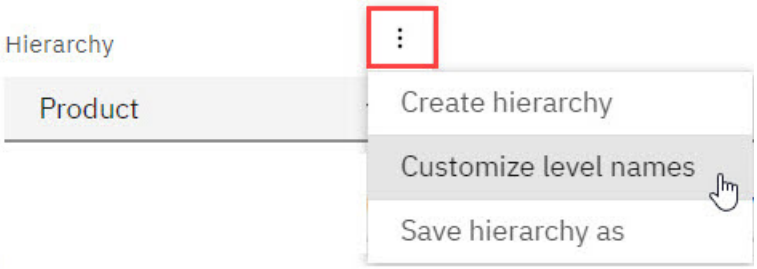
You can assign custom level names in the dimension editor to make hierarchy levels more easily identifiable. For example, the Product hierarchy has three levels corresponding to Category, Brand, and Product. Customizing the levels with the relevant names makes it easier to work in the hierarchy.



Procedure

1. Open the hierarchy in the dimension editor.

2. Click the **Action** button next to the Hierarchy label, then click **Customize level names**.

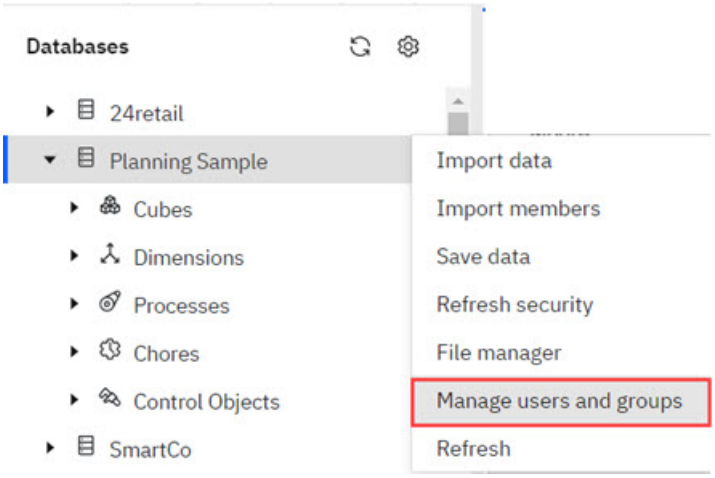


3. Enter a custom name for each hierarchy level.
4. Click **Done**.

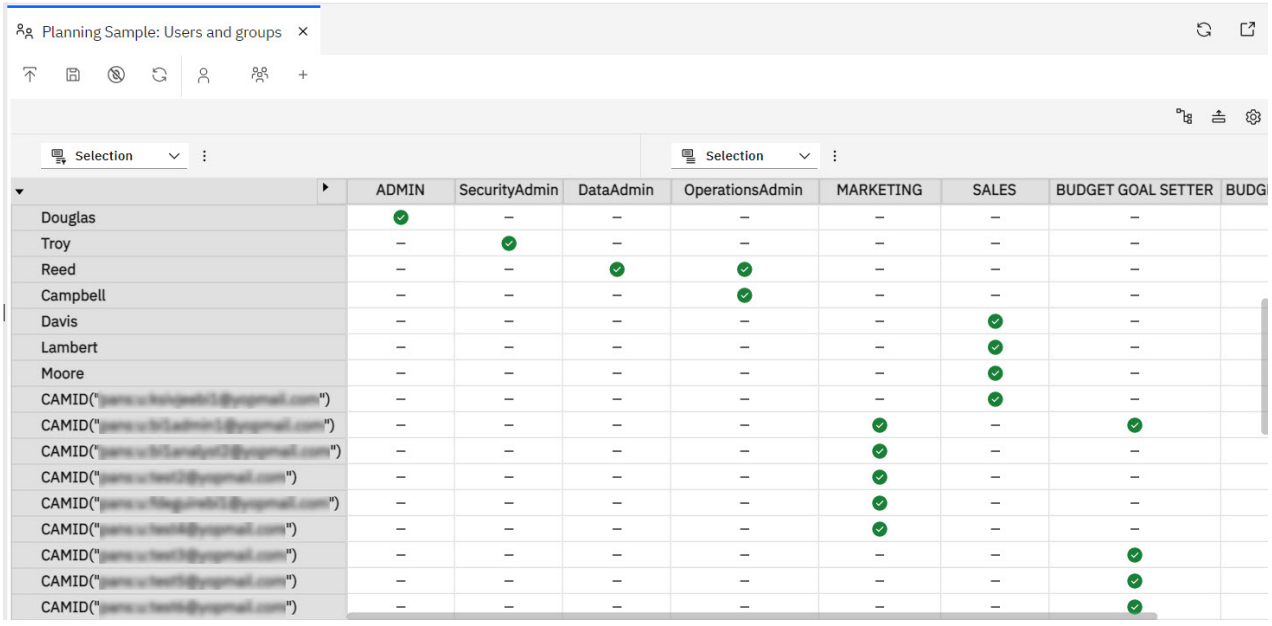
Manage users and groups on a Planning Analytics database (Cloud only)

A new editor provides an intuitive interface to manage users and groups on a Planning Analytics database. You can also use the editor to import users and groups from Planning Analytics Workspace into a Planning Analytics database.

To open the new **Users and groups** editor on a modeling workbench, right-click a database on the **Databases** tree and then click **Manage users and groups**.



The **Users and groups** editor displays your current database users and groups in an enhanced cube view.



Use the standard view options to manage sets and to select multiple row or column headers in the **Users and groups** editor.

You can use these options to manage existing users and groups on your Planning Analytics database:

- To assign or remove a user to a group, right-click at the intersection of a user and group name, then click **Assign user to group** or **Remove user from group**.
- To assign all users to a group, right-click the group name, then click **Assign group**.
- To remove all users from a group, right-click the group name, then click **Remove group**.
- To assign a user to all groups, right-click the user name, then click **Assign user**.
- To remove a user from all groups, right-click the user name, then click **Assign user**.
- To remove a group from the database, right-click the group name, then click **Remove group**.
- To remove a user from the database, right-click the user name, then click **Remove user**.

You can also use the **Users and groups** editor to import users and groups from Planning Analytics Workspace into a Planning Analytics database or to create a new group on the Planning Analytics database.

- To create a new group on the database, click + .
- To add users that exist in Planning Analytics Workspace to the Planning Analytics database, click . Select the users, then click **Add**.

  The users are added to the database, but not assigned to any groups.
- To add groups that exist in Planning Analytics Workspace to the Planning Analytics database, click . Select the groups, then click **Add**.

  The groups are added to the database. In addition, any users within the groups are also added to the database and assigned to the appropriate groups.

Known issues

The following are known issues in Planning Analytics Workspace. These issues will be resolved in a future release.

Attachments in applications or plans are permanently deleted when you delete a snapshot in Lifecycle Management

If you delete a snapshot that contains an application or plan, any attachments are permanently deleted from the application or plan.

After you delete the snapshot in Lifecycle Management, the attachments can no longer be opened from the application or plan.

This issue is resolved in Planning Analytics Workspace 2.0.86.

Deprecation notices - 2.0.84

The following deprecation notices are applicable to Planning Analytics Workspace 2.0.84.

Classic dimension editor removed from the modeling workbench in Planning Analytics Workspace 2.0.84

In Planning Analytics Workspace 2.0.84, the classic dimension editor is no longer available from the modeling workbench. The classic dimension editor remains available on books.

All dimension creation and maintenance in the modeling workbench must now be performed in the new experience dimension editor. The new experience dimension editor was introduced on the modeling workbench in Planning Analytics Workspace 2.0.82.

2.0.83 - What's new, January 19, 2023

Learn about new features and known issues in version 2.0.83 of IBM Planning Analytics Workspace in the following topics.

Updates to each version of Planning Analytics Workspace are cumulative. To see what was new in previous releases, see Chapter 2, “What's new in Planning Analytics Workspace,” on page 45.

You can view the fix lists for this and previous versions of Planning Analytics Workspace at https://www.ibm.com/support/pages/ibm-planning-analytics-20-fix-lists#anchor2.

You can also review all new features introduced since 2.0.58, in the the IBM Planning Analytics Workspace new feature summary table. You can use the table to search for new features across all releases by description. You can also sort new features by release, date, functional area, and description.

What's new in books and reporting - 2.0.83

The following new and changed features in books and reporting are available in Planning Analytics Workspace 2.0.83.

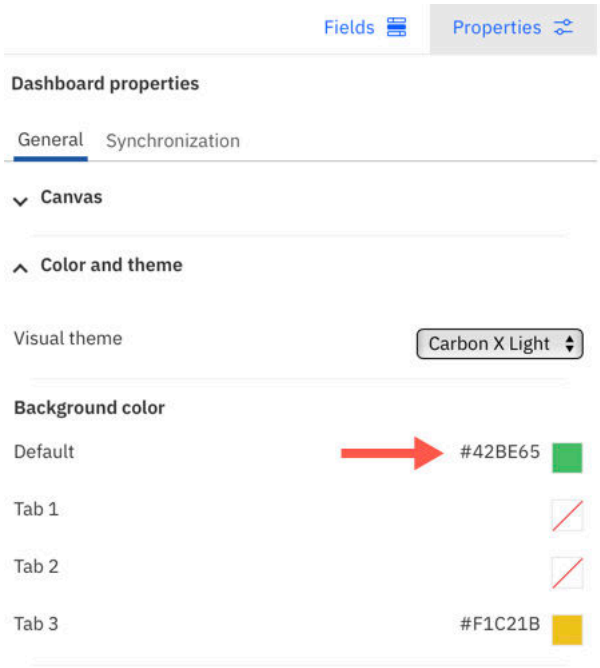
Set default background color for tabs

You can now set a default background color for all tabs in a book. When you set a default background color, the same background color is used for any new tab that you add to the book. All existing tabs also use the default background color provided that they do not have their own color settings.

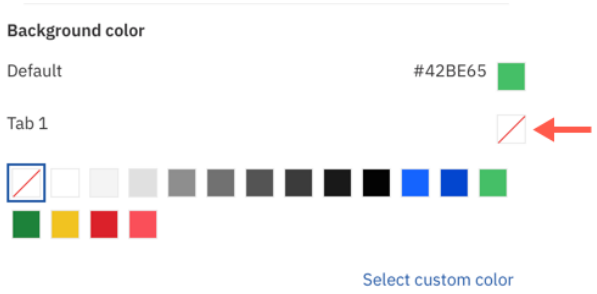
To set a default background color for tabs:

1. Click **Properties**.
2. For the entire book, ensure that nothing else has focus by clicking the background, away from any visualization or object.
3. Click **Color and theme**, and under **Background color** select a default color.

   Tip: You can also click **Select custom color** to open the color picker instead of choosing from the default color options.



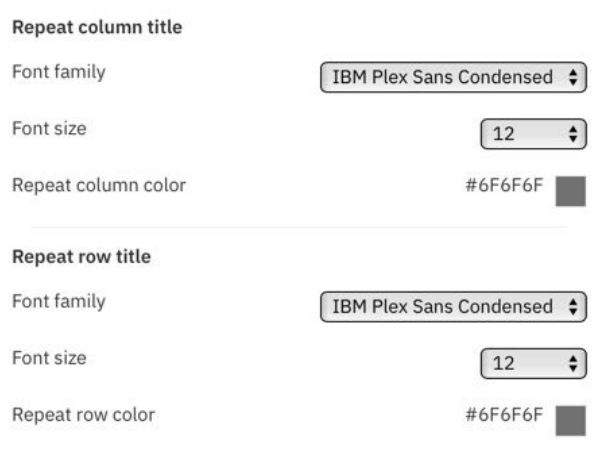
You can override the default background color for an individual tab by selecting a new color for the tab.



Customize styling for repeat column and row titles in visualizations

You can now customize repeat column and repeat row titles in visualizations that use **Repeat (column)** or **Repeat (row)** filters.

Formatting properties for repeat column and repeat row titles appear in their own sections under **Axis** in **Properties**.



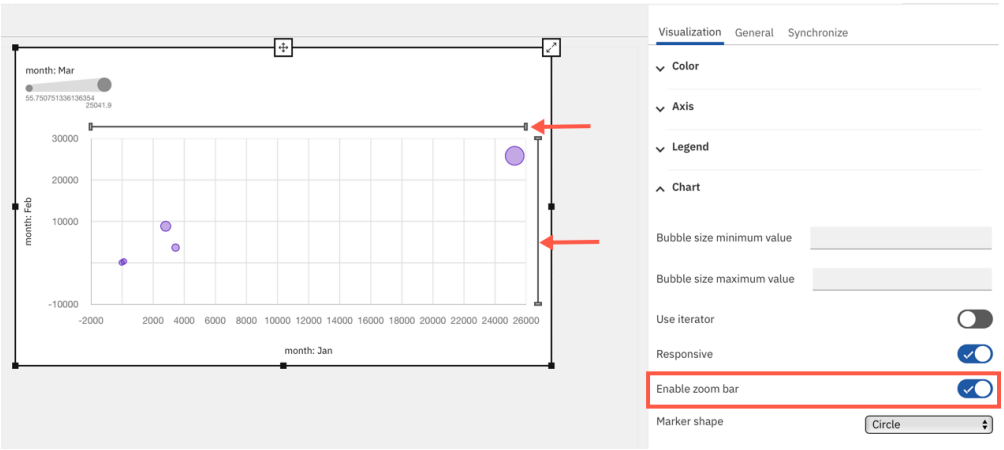
New properties in bubble and scatter visualizations

Several new properties were introduced for bubble and scatter visualizations in IBM Planning Analytics Workspace 2.0.83:

Enable zoom bar

The zoom bar allows for horizontal and vertical scrolling in bubble and scatter visualizations. You can now enable the zoom bar in bubble and scatter visualizations to scroll and focus on a smaller area of the visualization.

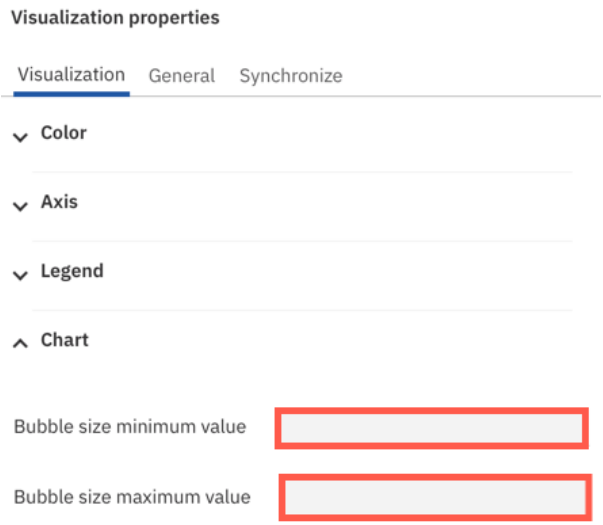
Use the **Enable zoom bar** property to add the zoom bar to your visualization. Drag a handle on the bar to zoom and focus on an area in the visualization. The area of focus changes as you drag the handle.



Bubble size limits

You can specify bubble size limits in bubble and scatter visualizations in the **Chart** section under **Properties**.

In bubble visualizations, you can specify the minimum and maximum values for the bubble size. Bubbles for values that are below the minimum size appear as the minimum size, while bubbles for values that are above the maximum size appear as the maximum size.

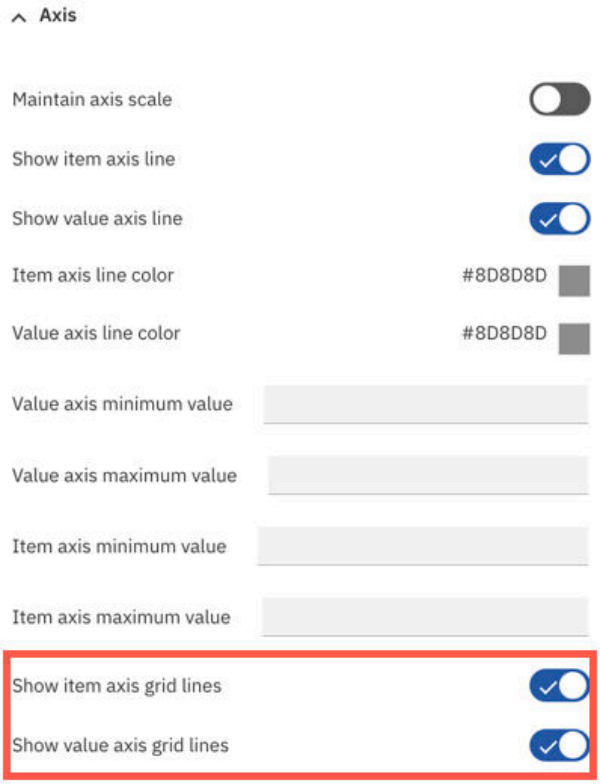


When you specify a bubble size in a scatter visualization, all points in the visualization display at this specified size. The default bubble size in scatter visualizations is **3px**.

Show item value and axis value grid lines

Two new properties, **Show item value grid lines** and **Show item value grid lines**, have replaced the **Show grid lines** property in bubble and scatter visualizations. These new properties now let you show or hide item value and axis value grid lines independently of each other.

You can find **Show item value grid lines** and **Show item value grid lines** in the **Axis** section under **Properties**.



New properties in line and column visualization

In IBM Planning Analytics Workspace 2.0.83, the following new properties were added in the line and column visualization:

Enable zoom bar

The zoom bar allows for horizontal scrolling in a line and column visualization. You can now enable the zoom bar to scroll and focus on a smaller area of the visualization.

Use the **Enable zoom bar** property in the **Chart** section under **Properties** to add the zoom bar to your visualization. Drag a handle on the bar to zoom and focus on an area in the visualization. The area of focus changes as you drag the handle.

Formatting options for column value and point value labels

You can format column value labels and point value labels in line and column visualizations. Value labels can now display as values or percentages of a category or color.

To change the format of value labels, enable **Show column value labels** or **Show point value labels** in the **Chart** section under visualization properties.

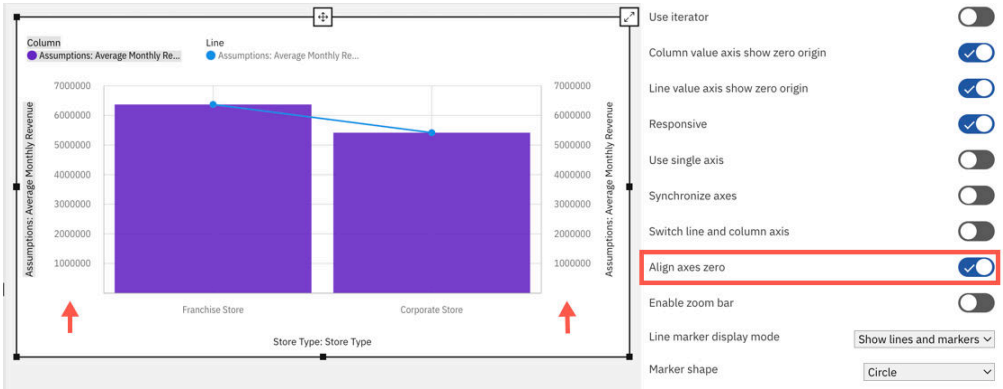
New properties were also introduced for point value labels. You can add a shadow to the labels, change their color, or set a contrast label color.

Alignment position for zero

In line and column visualizations, you can control whether the line and column sections have zero in the same position with the new **Align axes zero** property.

Found under the **Chart** section in visualization properties, the **Align axes zero** toggle is enabled by default. If the toggle is enabled, the zero values for the lines and columns are on the same axes in the visualization. If the toggle is disabled, the zero value might be on different axes in the visualization.

Disabling the zero alignment position (that is, specifying that the line and column sections do not have zero in the same position) makes the line and column values independent and can make the relevant values more visible in certain scenarios.



Change line width

You can now change the line width in line and column visualizations by specifying the thickness of the line. By default, the line width is set to **2 px**.

Known issues - 2.0.83

The following are known issues in Planning Analytics Workspace. These issues will be resolved in a future release.

Attachments in applications or plans are permanently deleted when you delete a snapshot in Lifecycle Management

If you delete a snapshot that contains an application or plan, any attachments are permanently deleted from the application or plan.

After you delete the snapshot in Lifecycle Management, the attachments can no longer be opened from the application or plan.

This issue is resolved in Planning Analytics Workspace 2.0.86.

Deprecation notices - 2.0.83

The following deprecation notices are applicable to Planning Analytics Workspace 2.0.83.

Classic dimension editor to be removed from the modeling workbench in Planning Analytics Workspace 2.0.84

As of Planning Analytics Workspace 2.0.84, the classic dimension editor will be removed from the modeling workbench. The classic dimension editor remains available on books.

All dimension creation and maintenance in the modeling workbench must be performed in the new experience dimension editor. The new experience dimension editor was introduced on the modeling workbench in Planning Analytics Workspace 2.0.82.

2.0.82 - What's new, November 17, 2022

Learn about new features and known issues in version 2.0.82 of IBM Planning Analytics Workspace in the following topics.

Updates to each version of Planning Analytics Workspace are cumulative. To see what was new in previous releases, see Chapter 2, “What's new in Planning Analytics Workspace,” on page 45.

You can view the fix lists for this and previous versions of Planning Analytics Workspace at https://www.ibm.com/support/pages/ibm-planning-analytics-20-fix-lists#anchor2.

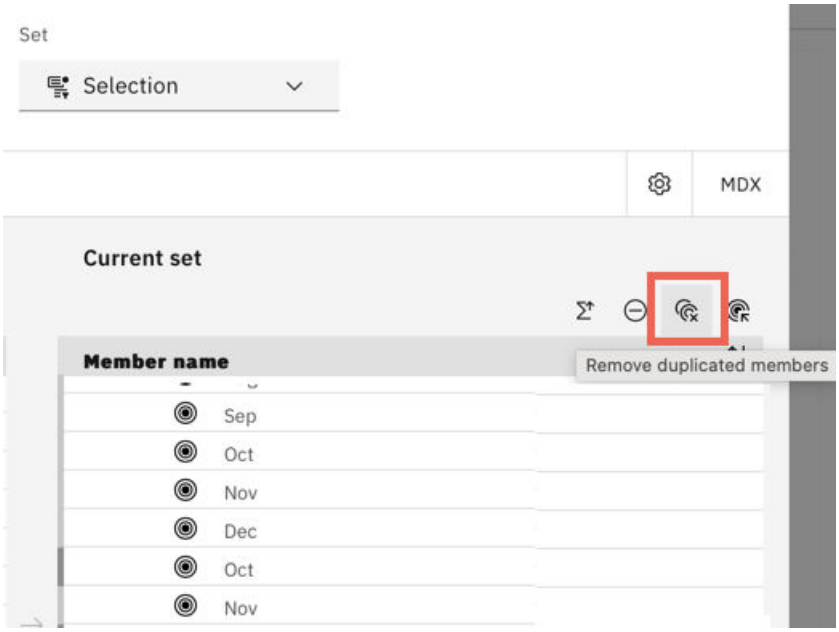
You can also review all new features introduced since 2.0.58, in the the IBM Planning Analytics Workspace new feature summary table. You can use the table to search for new features across all releases by description. You can also sort new features by release, date, functional area, and description.

What's new in books and reporting - 2.0.82

The following new and changed features in books and reporting are available in Planning Analytics Workspace 2.0.82.

Automatically remove duplicate members from current set in the set editor

You can now automatically remove duplicate members from the **Current set** in the set editor by clicking **Remove duplicated members**. This is a quick way to remove any duplicates when you are creating a dynamic or static set, especially if the set includes a large number of members.



Previously, you had to remove duplicate members by either editing the MDX expression or by selecting each duplicate member in the **Current set** and manually removing it.

Improved error handling when visualization has a missing mapped member

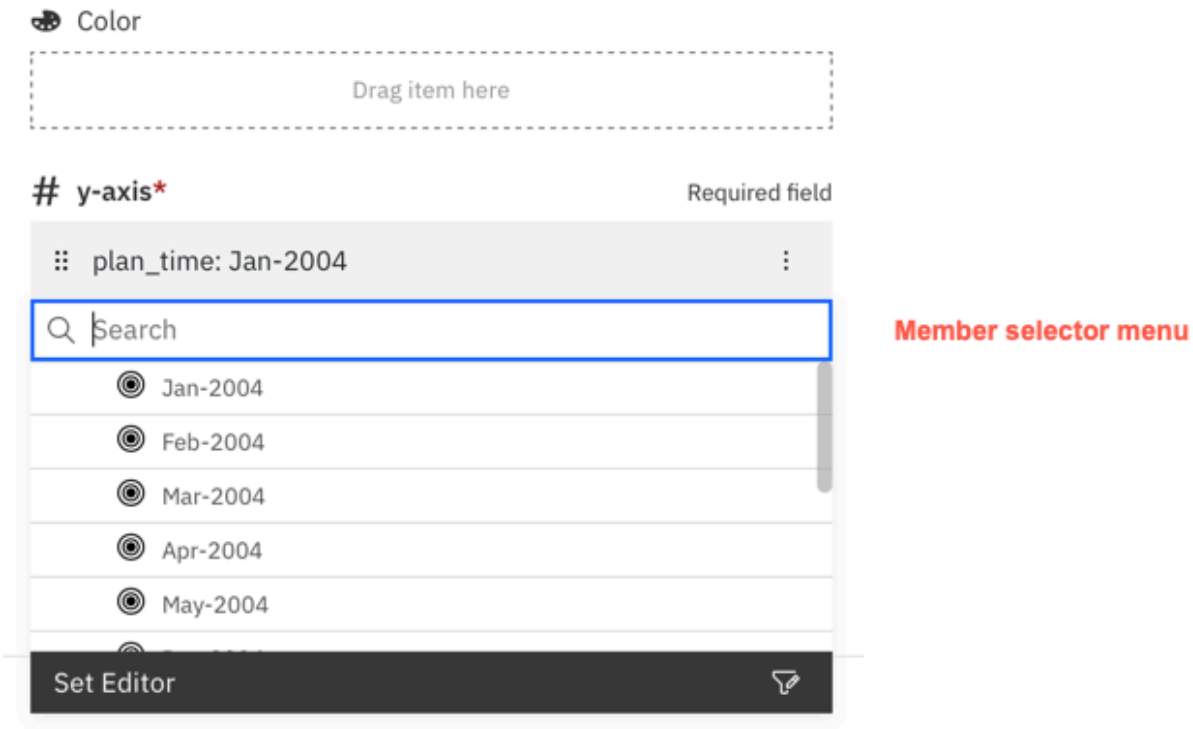
Prior to IBM Planning Analytics Workspace 2.0.82, when a visualization did not find a mapped member, an error displayed and the application showed a blank visualization. This error could occur if a mapped member was removed from the data as a result of a change in the set, zero suppression, or calculation removal, or even if the user had insufficient TM1 permissions.

In Planning Analytics Workspace 2.0.82, when a visualization cannot find a mapped member, the first member in the current set is now automatically reassigned to the field slot and the visualization displays.

You can select the visualization and go to the **Fields** tab to see the substitute member that was assigned to the missing member's field slot.

You will still see a blank visualization if:

- a substitute member is not available
- synchronization forces the visualization to use the missing mapped member
- the field slot is reassigned to a substitute member but you force the visualization to use the missing mapped member by selecting it from the member selector menu

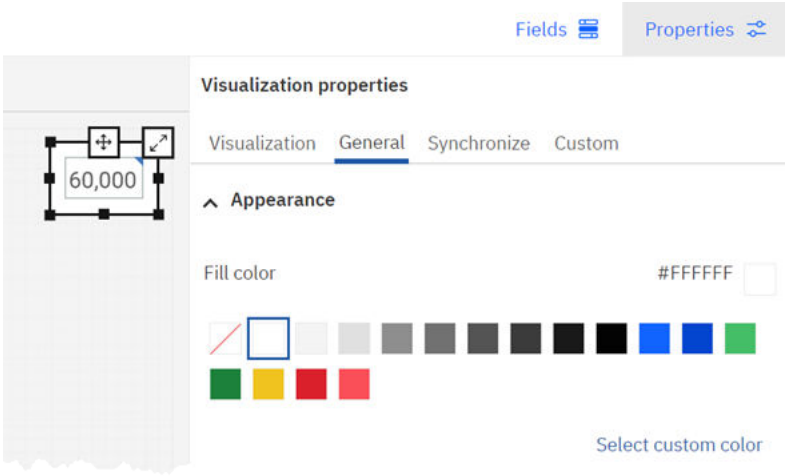


Text fill color property added to single cell widgets

You can now change the **Fill color** of **Single Cell** widgets.

Fill color is now available under a **Single Cell**'s text property.

To access this feature, select the single cell visualization and go to the **Properties** tab. Under the **General** tab, click **Appearance** to see the **Fill color** options.



What's new in plans and applications - 2.0.82

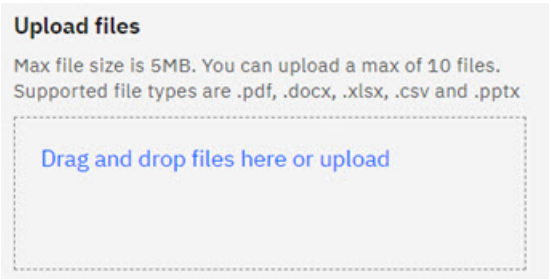
The following new and changed features in plans and applications are available in Planning Analytics Workspace 2.0.82.

Add attachments to applications and plans

You can now add attachments to applications and plans. Attachments can be added to the application or plan overview, as well as to individual tasks or sections and to announcements.

Supported file types for attachments are .pdf, .docx, .xlsx, .csv, and .pptx.

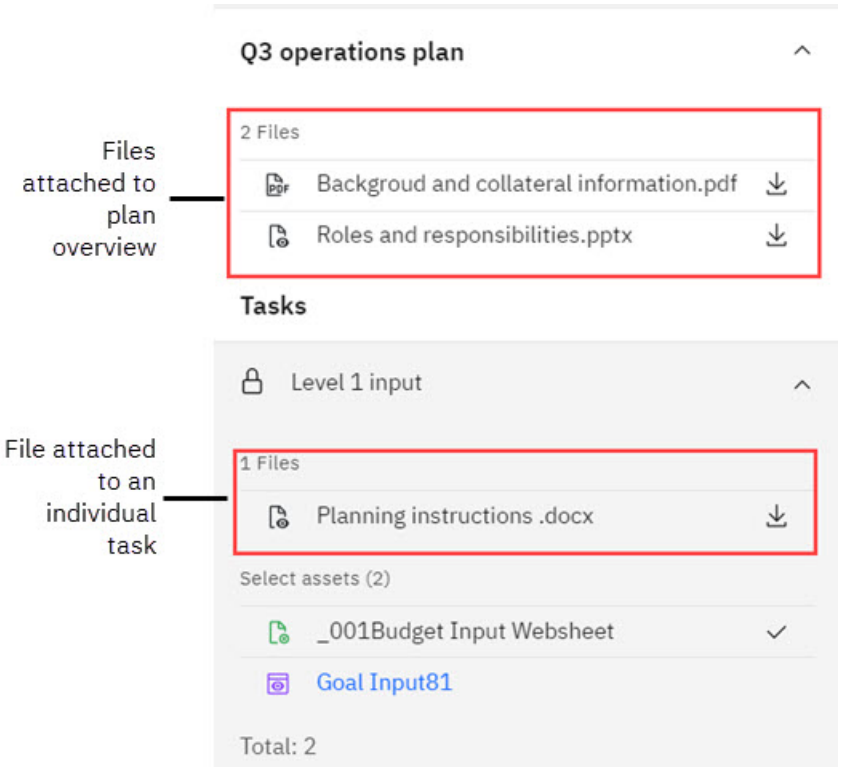
To add attachments that are accessible from the application or plan overview, use the **Upload files** option on the application or plan Details page.



To add attachments that are accessible from an individual task or section, use the **Upload files** option on the task or section Details page.

To add attachments that are accessible from an announcement, use the **Upload files** option on the Announcements page.

When a user opens a plan or application, the attached documents can be downloaded from the relevant area of the plan or application.



What's new in modeling - 2.0.82

The following new and changed modeling features are available in Planning Analytics Workspace 2.0.82.

New dimension editor available on the modeling workbench

As part of IBM's continued investment in the Carbon Design methodology and in the interest of providing a consistent user experience across all components, the dimension editor in Planning Analytics Workspace has been updated to use Carbon Design principles. The new dimension editor also includes several usability and performance enhancements.

In Planning Analytics Workspace 2.0.82, the new dimension editor is available only on a modeling workbench. A future release will include the ability to use the new dimension editor on a book as well.

To use the new dimension editor to create a dimension, right-click the **Dimensions** node on the **Databases** tree, then click **Create dimension**.

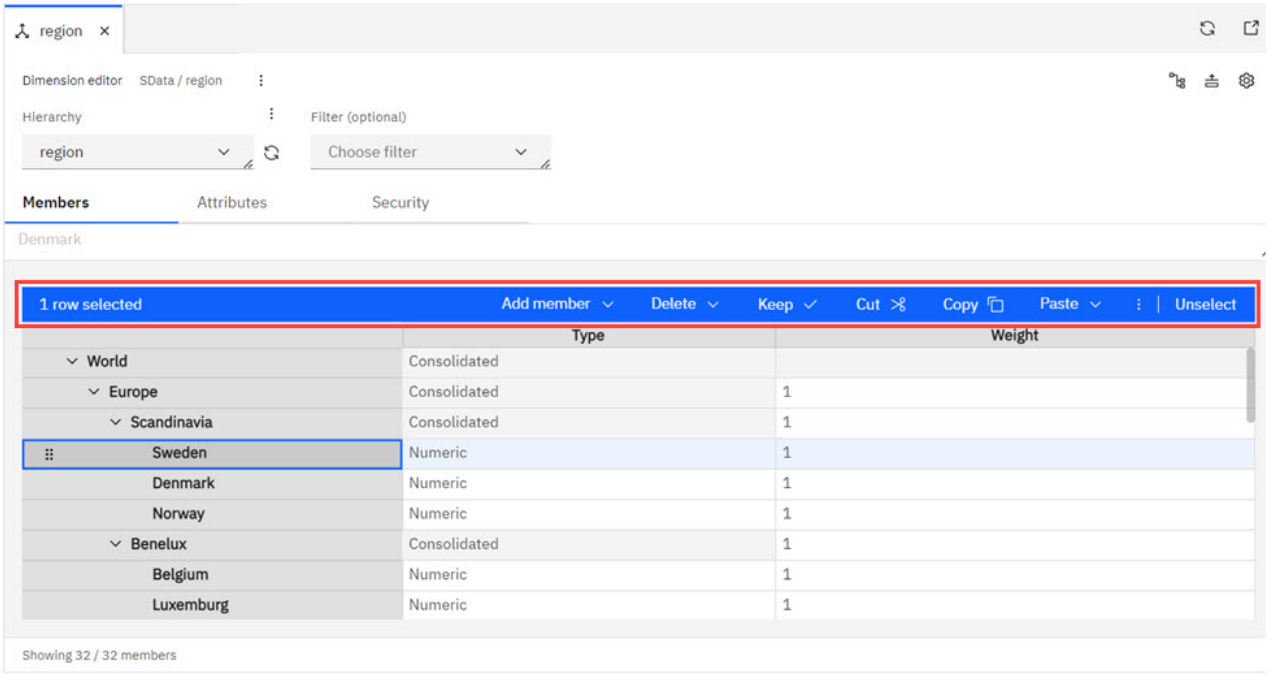
To use the new dimension editor to edit an existing dimension, right-click the dimension name on the **Databases** tree, then click **Edit dimension**.

You can also use the new dimension editor to create a new hierarchy for a dimension. Right-click the dimension name on the **Databases** tree, then click **Create hierarchy**.

The new dimension editor includes all the capabilities of the classic dimension editor, but the capabilities are provided in slightly different ways.

Members

When you select one or more members in the dimension editor, an action toolbar becomes available.



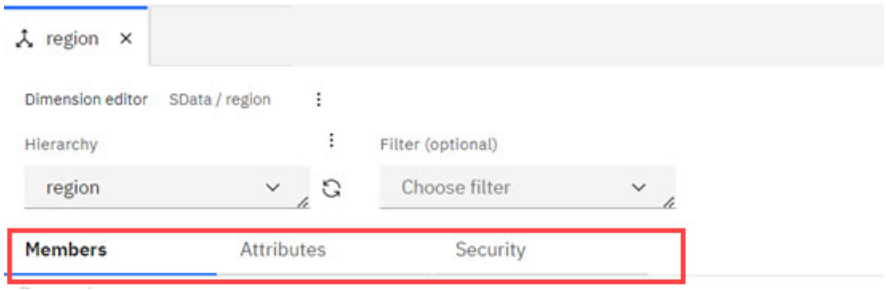
The action toolbar provides all the capabilities of the right-click (context) menu and the vertical toolbar from the classic dimension editor.

Use this toolbar to complete any of these tasks:

- Add or delete members.
- Change the order of members.
- Cut, copy, and paste members.
- Hide or reveal members.
- Set display formats.

Attributes and security

You can create and modify member attributes and security in the new dimension editor. Click the appropriate tab to work with either **Attributes** or **Security**. These tabs take the place of the **Attributes** and **Security** icons on the classic dimension editor.

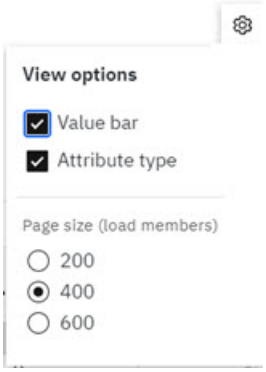


Enhancements on the new dimension editor

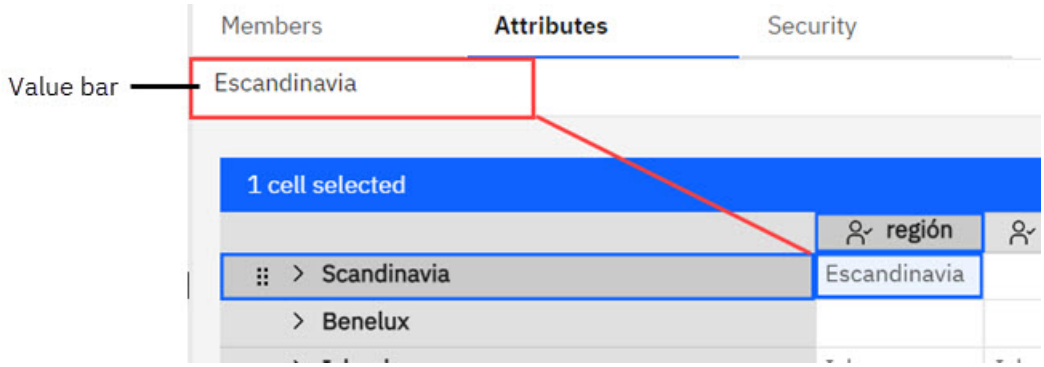
The new dimension editor includes the following enhancements.

Settings to manage Value bar, Attribute type, and Page size

Click the **Settings** icon to enable or disable the display of the value bar and attribute icons or to set the page size.

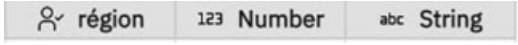


- **Value bar** - Use the value bar to edit member names or cell values outside of the dimension editor grid. This editing option is helpful, for instance, when a cell is narrow but an alias name is long.



  Enable the **Value bar** option to display the value bar. Disable the **Value bar** option to maximize the number of members that are displayed in the dimension editor without scrolling.

- **Attribute type** - Enable the **Attribute type** option to display an attribute type icon for each attribute on the Attributes tab. Disable the **Attribute type** option to display only attribute names on the **Attributes** tab. When the option is enabled, you can see these icons for Alias, Number, and String icons.



- **Page size** - Select the number of members to initially load when the dimension editor is opened and each time a new page is fetched.

  You can now load and display up to 600 members per page, which is a significant performance improvement over the 70 members per page that were displayed in the classic dimension editor.

Filter members

Use the **Filter** option to narrow the focus of members displayed in the editor. You can select any saved set or member level.

Expand or collapse header

Click **Expand header** or **Collapse header** to control the display of the header.

The header displays the **Hierarchy** selector and **Filter** option. Expand the header to display both the Hierarchy selector and Filter option. Collapse the header to maximize the number of members that are displayed in the dimension editor without scrolling.

Known issues - 2.0.82

The following are known issues in Planning Analytics Workspace. These issues will be resolved in a future release.

Attachments in applications or plans are permanently deleted when you delete a snapshot in Lifecycle Management

If you delete a snapshot that contains an application or plan, any attachments are permanently deleted from the application or plan.

After you delete the snapshot in Lifecycle Management, the attachments can no longer be opened from the application or plan.

This issue is resolved in Planning Analytics Workspace 2.0.86.

Deprecation notices - 2.0.82

The following deprecation notices are applicable to Planning Analytics Workspace 2.0.82.

Classic dimension editor to be removed from the modeling workbench in Planning Analytics Workspace 2.0.84

As of Planning Analytics Workspace 2.0.84, the classic dimension editor will be removed from the modeling workbench. The classic dimension editor remains available on books.

All dimension creation and maintenance in the modeling workbench must be performed in the new experience dimension editor. The new experience dimension editor was introduced on the modeling workbench in Planning Analytics Workspace 2.0.82.

2.0.81 - What's new, October 20, 2022

Learn about new features and known issues in version 2.0.81 of IBM Planning Analytics Workspace in the following topics.

Updates to each version of Planning Analytics Workspace are cumulative. To see what was new in previous releases, see Chapter 2, “What's new in Planning Analytics Workspace,” on page 45.

You can view the fix lists for this and previous versions of Planning Analytics Workspace at https://www.ibm.com/support/pages/ibm-planning-analytics-20-fix-lists#anchor2.

You can also review all new features introduced since 2.0.58, in the the IBM Planning Analytics Workspace new feature summary table. You can use the table to search for new features across all releases by description. You can also sort new features by release, date, functional area, and description.

What's new in Planning Analytics Workspace Local - 2.0.81

The following new and changed features are available in Planning Analytics Workspace Local 2.0.81 as of November 1, 2022.

Configuration support available for Red Hat OpenShift Service Mesh in Planning Analytics Workspace Distributed

You can now enable Service Mesh support in IBM Planning Analytics Workspace Distributed. You can configure Planning Analytics Workspace Distributed to use Service Mesh if OpenShift Service Mesh was enabled for your cluster.

Note: You need to first install and configure OpenShift Service Mesh before you can enable Service Mesh in Planning Analytics Workspace Distributed.

For more information, see Configure OpenShift Service Mesh in Planning Analytics Workspace Distributed.

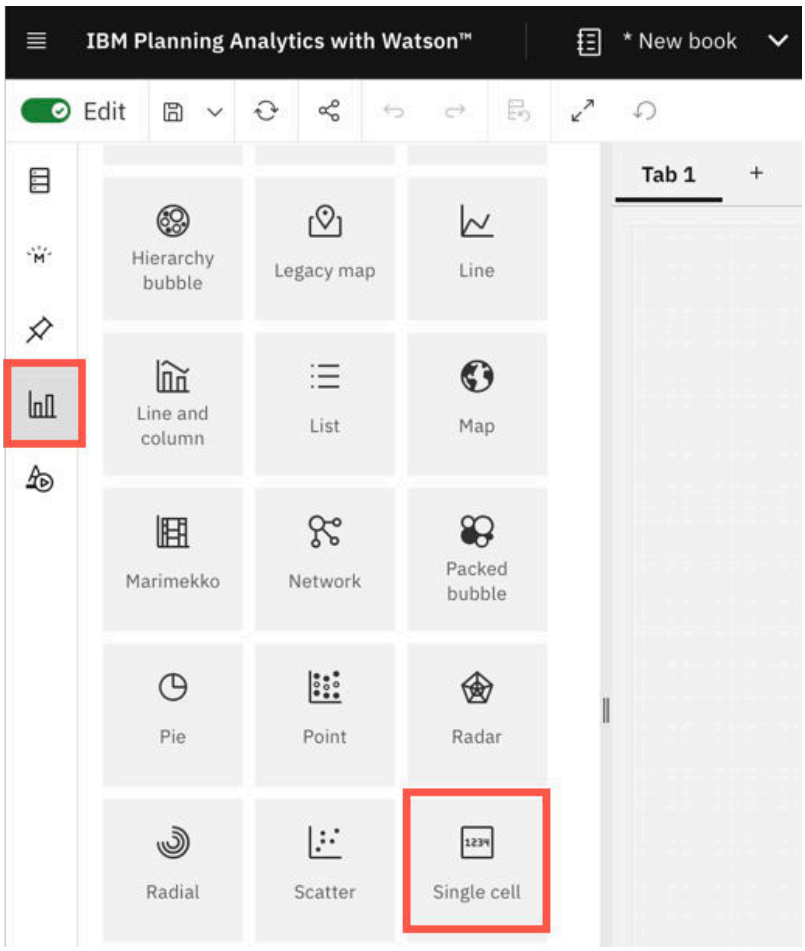
What's new in books and reporting - 2.0.81

The following new and changed features in books and reporting are available in Planning Analytics Workspace 2.0.81.

Single cell widget is now a visualization type

The single cell widget is now a visualization type and has several new capabilities. You can create a single cell visualization and convert it to a view (exploration) or another visualization and vice versa.

Like any other visualization, you can add a **Single cell** visualization to your book from **Visualizations** and drag a cube or view on to the template.



You can also create a **Single cell** visualization by right-clicking a view and selecting **Add to sheet**.

Note: Unless you select a specific cell in the view, when you add a **Single cell** visualization with this method, the visualization displays data from the first cell in the view.

When you select the **Single cell** visualization and go to the **Fields** tab, you can see dimensions and filters in their appropriate fields. You can also change the color palette for any conditional rules applied to the visualization and enable automatic refresh under the **Visualization** tab under **Properties**. Previously, fields and visualization properties were not available for the single cell widget.

Note: Any existing cell widgets in books from before Planning Analytics Workspace 2.0.81, will convert to the new single cell visualization with Field dimensions and visualization properties.

You can convert **Single cell** to another visualization or an exploration and vice versa. When you convert another visualization or view to a Single cell visualization, Single cell displays data from the first cell.

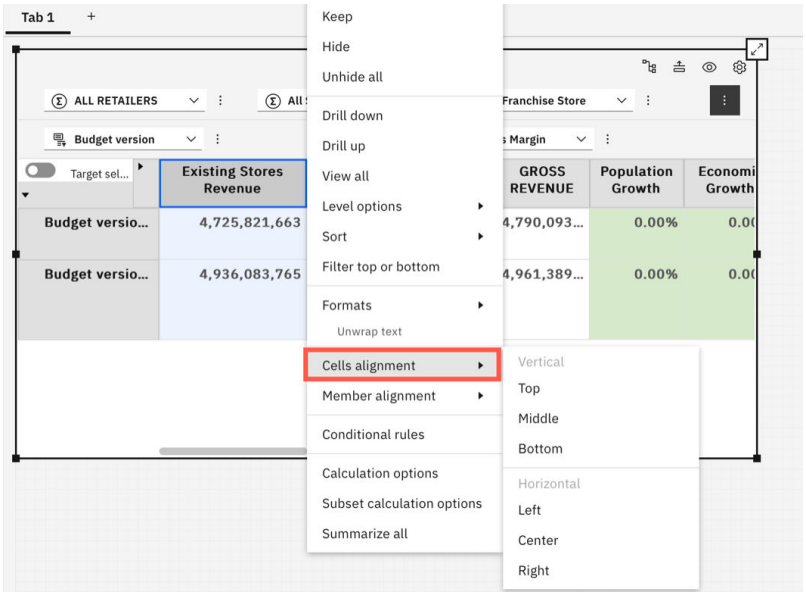
The new cell alignment option is also available for **Single cell** visualizations. Right-click a **Single cell** visualization to see cell alignment and other formatting options for the visualization.

Align cells and headers

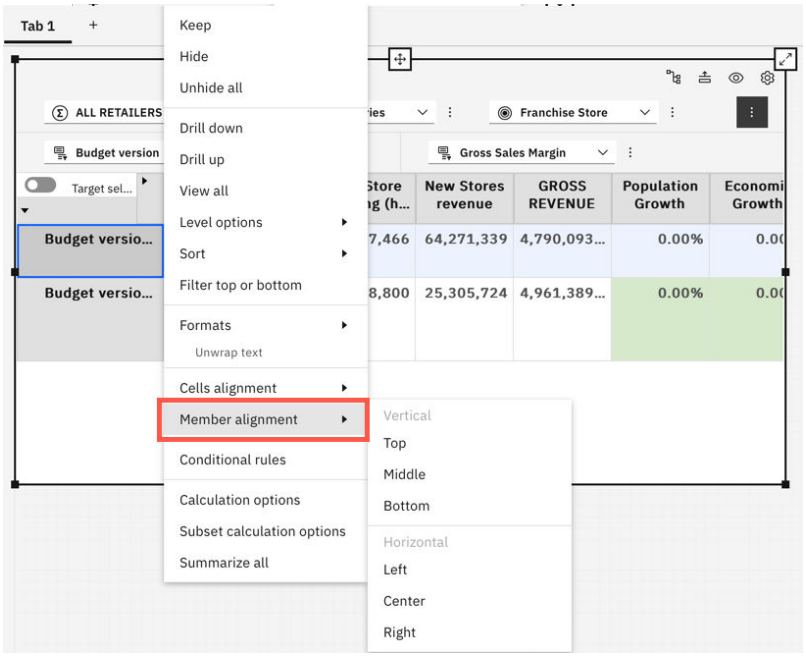
You can now align the text in data cells and headers in an exploration (view) and a single cell visualization.

In explorations, you can align text in data cells and headers either vertically or horizontally. You can align a row or column of data cells, align a member in row and column headers, and align based on hierarchy.

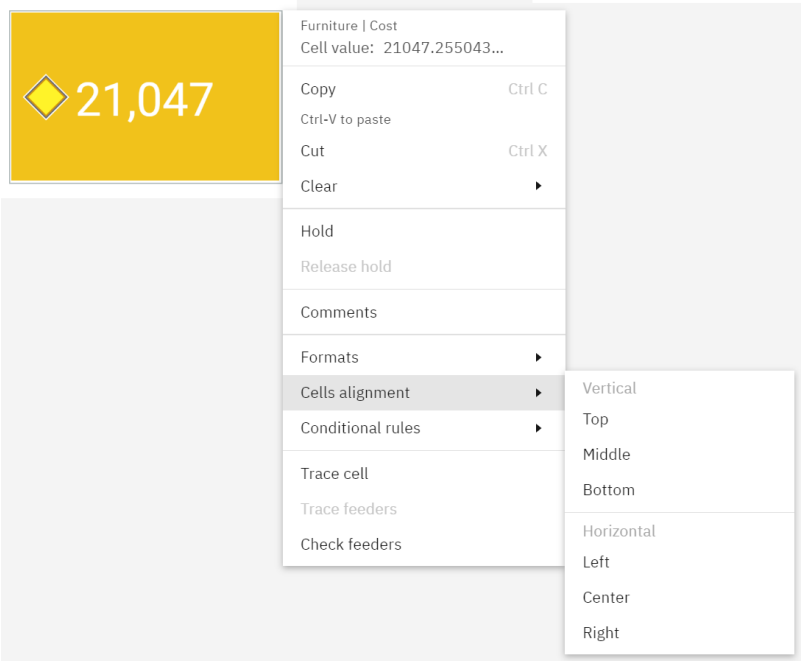
Right-click a data cell and select **Cells alignment** to see text alignment options.



To align members in row or column headers, right-click a row or column header and under **Member alignment**, select an alignment option.



You can also align text in the new single cell visualization vertically or horizontally. Simply, right-click the visualization to see alignment options.



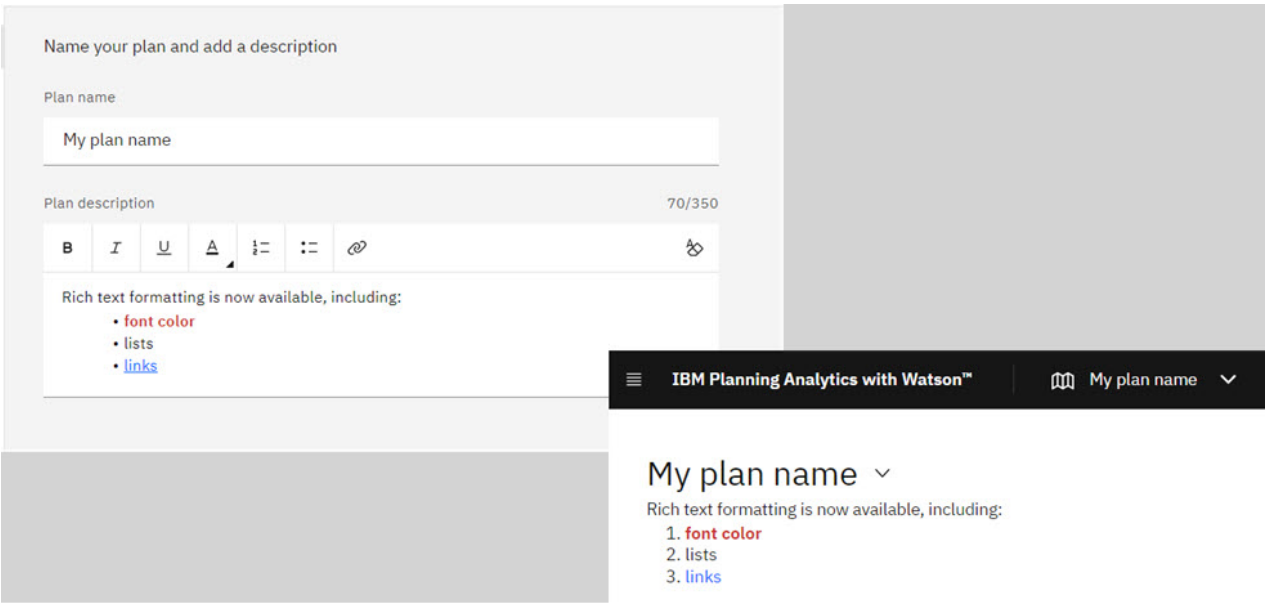
You can clear text alignment in the exploration or single cell visualization by right clicking the cell and selecting the alignment option under **Clear**.

What's new in plans and applications - 2.0.81

The following new and changed features in plans and applications are available in Planning Analytics Workspace 2.0.81.

Use rich text formatting in plan and application descriptions

You can now apply rich text formatting to enhance your plan and application descriptions.



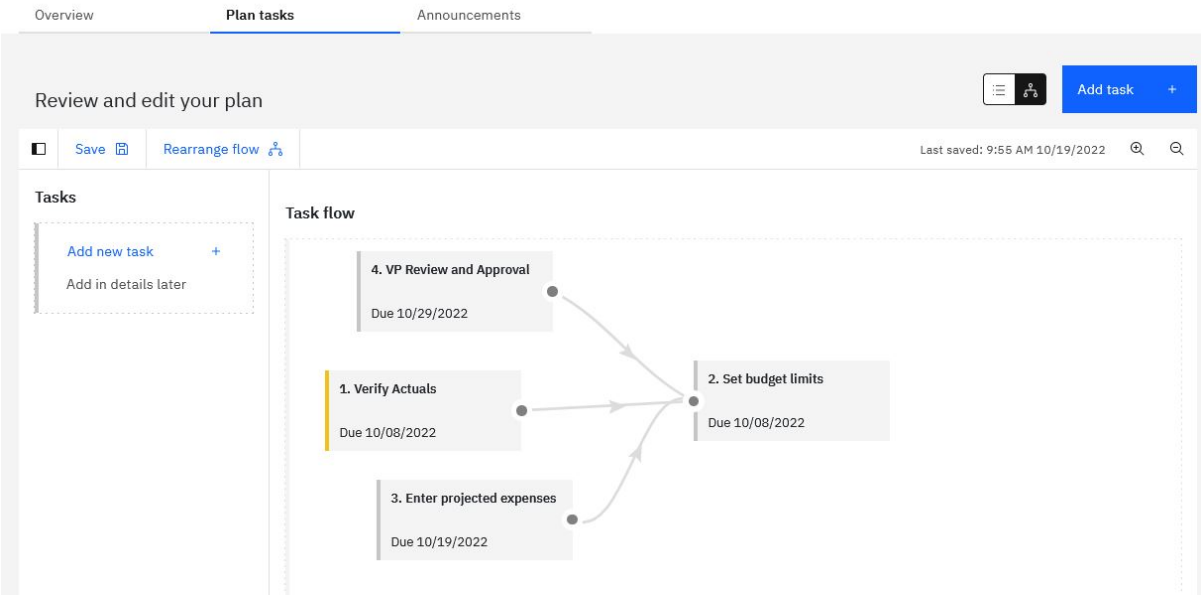
The new text formatting toolbar on the plan or application description box lets you quickly apply text formatting, create numbered and bulleted lists, and create links.

Task flow view in plans

You can now manage plan tasks by using the task flow view.

On the **Plan tasks** tab, you can switch between the task list view and the task flow view.

In the task flow view, you can create tasks and define task dependencies. When you create a task in this view, the task is shown in the **Tasks** pane. To define the task dependencies in this view, drag the tasks from the **Tasks** pane to the **Task flow** pane. Then, hover the cursor over the task rectangle until you see a dot in the rectangle sides. Starting from the dot, draw a line toward the dependent task, linking the two tasks. A visual task flow diagram is created. You can rearrange the position of the tasks in the diagram. The diagram is saved when you save the plan.



The changes in the task flow view are reflected in the task list view, and the opposite.

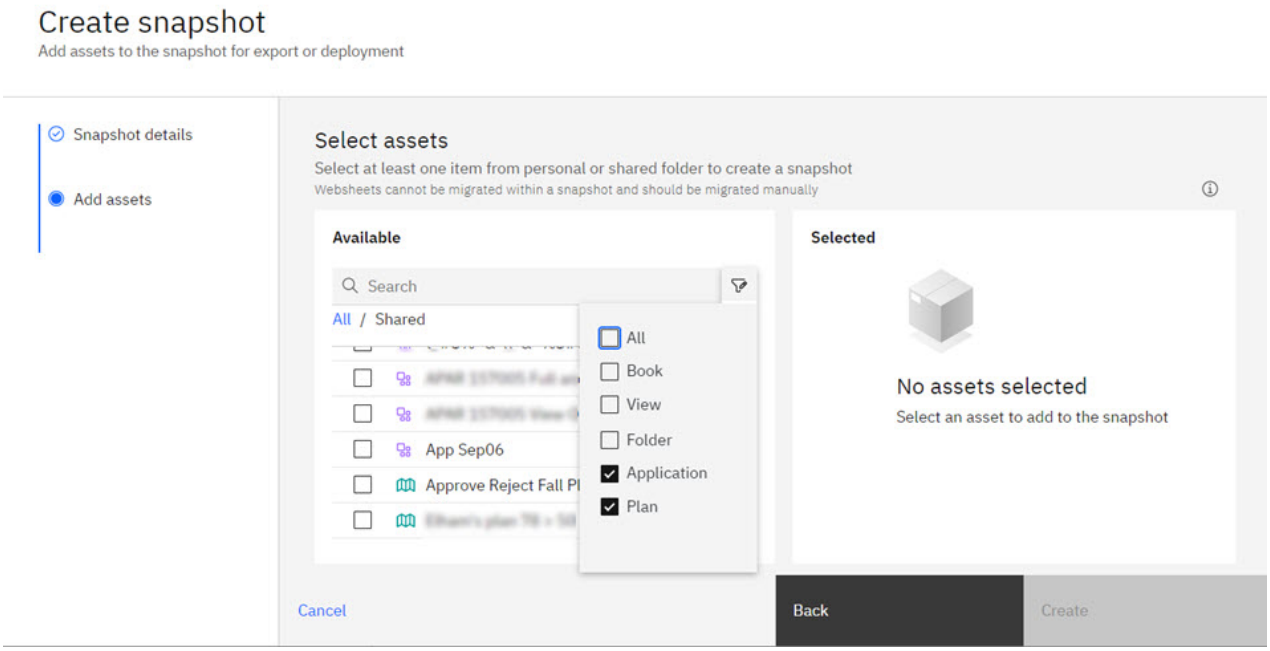
For more information, see Using the task list and task flow views.

What's new in administration - 2.0.81

The following new and changed administration features are available in Planning Analytics Workspace 2.0.81.

Include plans and applications when you copy and deploy assets with Lifecycle Management

You can now include plans and applications when you create and deploy a snapshot in Lifecycle Management.



When you add a plan or application to a snapshot, all books and views within the plan or application are also included in the snapshot. However, as Lifecycle Management does not support websheet migration, any websheets present in a plan or application are not included in the snapshot.

If a step in a plan includes a contributor or approver group that is not available on the target database, the group is removed from the step when the snapshot is deployed. You must manually update the step to use a valid group on the target database.

For more information about Lifecycle Management, see Copy and deploy assets with Lifecycle Management in Planning Analytics Workspace.

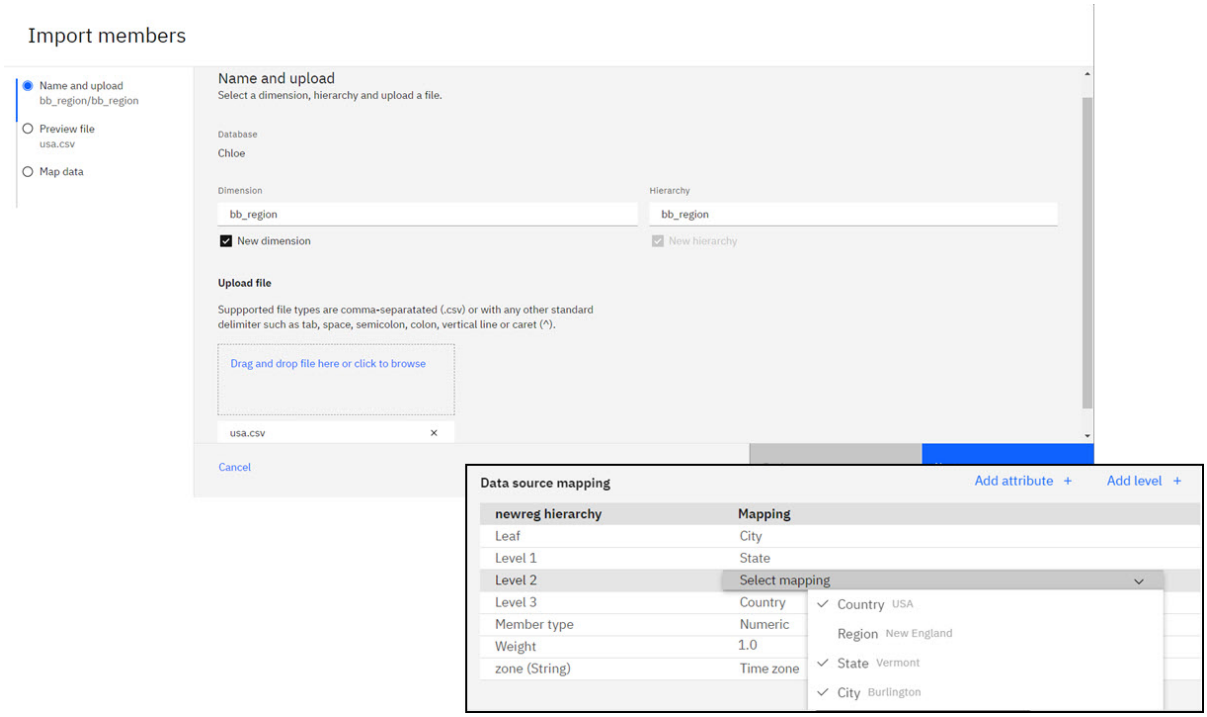
What's new in modeling - 2.0.81

The following new and changed modeling features are available in Planning Analytics Workspace 2.0.81.

Updated 'Import members' procedure

As part of our continued investment in the IBM Carbon Design methodology and in the interest of providing a consistent user experience across all components, the **Import members** procedure for a dimension has been updated to use Carbon Design principles.

The new procedure uses more intuitive controls to define a data source and set mappings.



Additionally, you can import members into a dimension from multiple locations on the **Databases** tree. Depending on the launch point, your ability to create or modify metadata might be limited.

If you click **Dimensions**, **Import members** on the Databases tree, there are no limitations on metadata updates. You can:

- update an existing dimension and an existing hierarchy
- update an existing dimension and create a new hierarchy
- create a new dimension and a new hierarchy

If you click **<dimension name>**, **Import members** on the Databases tree, updates apply to the dimension you clicked, but you can pick the hierarchy to update or choose to create a new hierarchy.

If you click **<hierarchy name>**, **Import members** on the Databases tree, updates apply only to the hierarchy you clicked.

For more information, see Import members and attributes into a dimension.

Snippets in the process editor

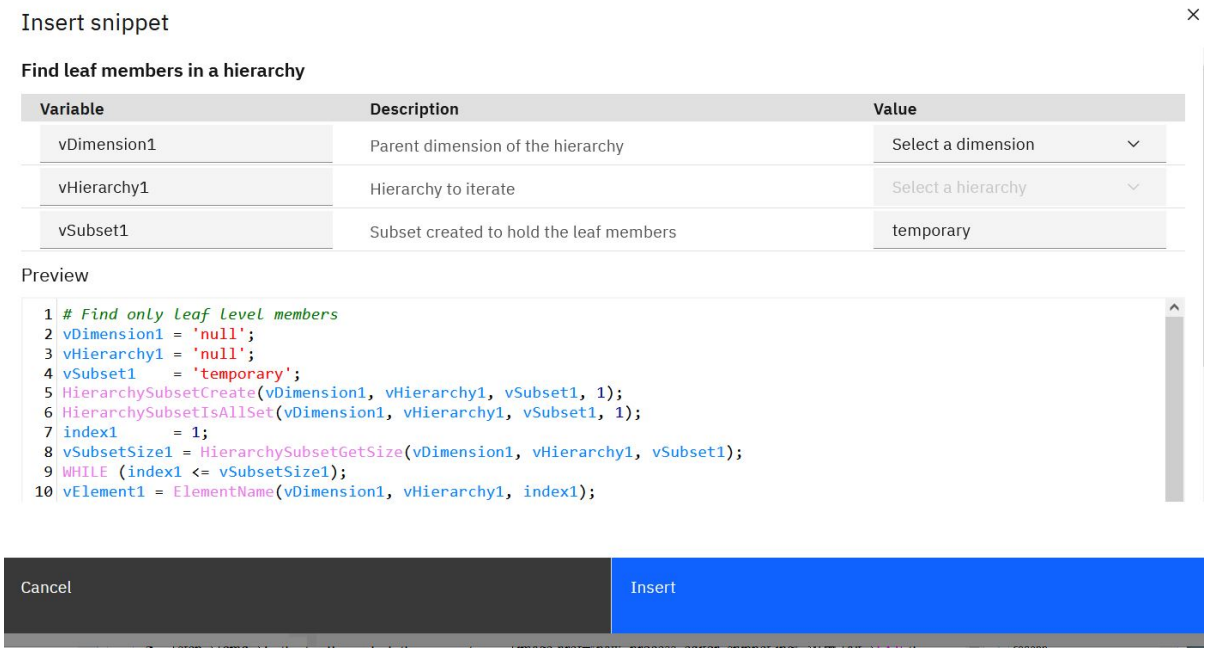
The process editor in Planning Analytics Workspace provides predefined code snippets that users can insert in the TurboIntegrator process.

The TurboIntegrator process code can be repetitive. Users often repeat the same tasks, changing only the variable or object names. The code snippets simplify the repetitive tasks, making the process less error-prone.

To use the snippets, on the **Script** tab in the process editor, click the snippet icon in the toolbar, as highlighted in the following image:

The following categories of snippets are currently available: **Create**, **Iterators**, and **Other**. Expand the category to view the list of snippets, and select one of them.

The following image shows one of the available iterator snippets:



The **Variable** and **Value** columns are editable. As you specify values in these columns, the **Preview** is updated with your input. When you click **Insert**, the snippet is inserted in the line under the current position of the cursor.

For more information, see Insert a code snippet into a process.

Known issues - 2.0.81

The following are known issues in Planning Analytics Workspace. These issues will be resolved in a future release.

Attachments in applications or plans are permanently deleted when you delete a snapshot in Lifecycle Management

If you delete a snapshot that contains an application or plan, any attachments are permanently deleted from the application or plan.

After you delete the snapshot in Lifecycle Management, the attachments can no longer be opened from the application or plan.

This issue is resolved in Planning Analytics Workspace 2.0.86.

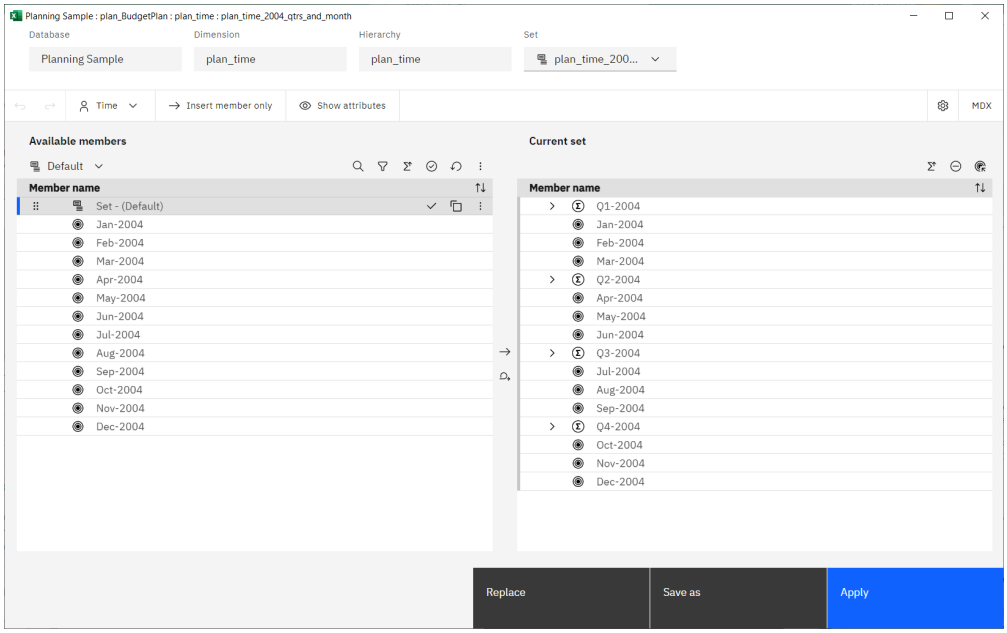
Deprecation notices - 2.0.81

The following deprecation notices are applicable to Planning Analytics Workspace 2.0.81.

Deprecation notice - the set editor in a widget is removed from books as of Planning Analytics Workspace 2.0.81

You cannot add a set editor in a widget from the Data tree in books as of Planning Analytics Workspace 2.0.81.

Instead, when you edit a set from the Data tree, the new experience set editor opens. The new set editor opens as a dialog and is not inserted as a widget in the book.



Note: You can still add the set editor to a modeling workbench. When you open or create a set from the Databases tree in a workbench, the set editor appears on a new tab on the active tabset.

The new experience set editor was introduced in Planning Analytics Workspace 2.0.71. For more information, see New experience view and set editor.

2.0.80 - What's new, September 22, 2022

Learn about new features and known issues in version 2.0.80 of IBM Planning Analytics Workspace in the following topics.

Updates to each version of Planning Analytics Workspace are cumulative. To see what was new in previous releases, see Chapter 2, “What's new in Planning Analytics Workspace,” on page 45.

You can view the fix lists for this and previous versions of Planning Analytics Workspace at https://www.ibm.com/support/pages/ibm-planning-analytics-20-fix-lists#anchor2.

You can also review all new features introduced since 2.0.58, in the the IBM Planning Analytics Workspace new feature summary table. You can use the table to search for new features across all releases by description. You can also sort new features by release, date, functional area, and description.

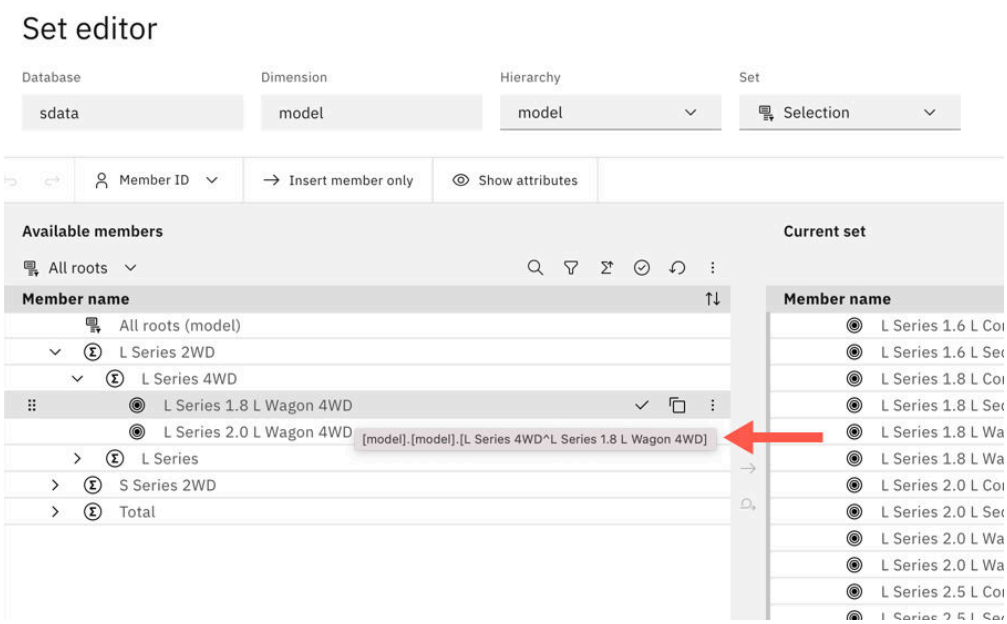
What's new in books and reporting - 2.0.80

The following new and changed features in books and reporting are available in Planning Analytics Workspace 2.0.80.

Member unique names in set editor

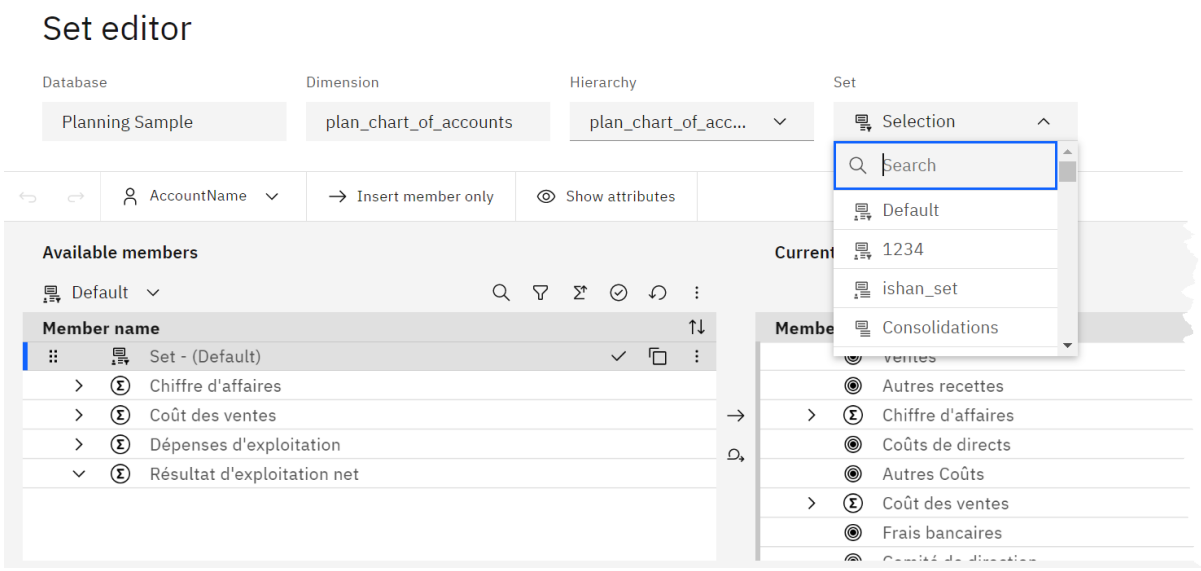
Starting in Planning Analytics Workspace 2.0.80, you can see the Member Unique Name (MUN) for a member when you hover over the member in the **Available members** panel in the set editor.

An MUN is the unique identifier that is used to locate a member in the data source and includes the member name and its ancestry. In the following example, the MUN for **`L Series 1.8 L Wagon 4WD`** displays its dimension (**`model`**), hierarchy (**`model`**), and parent name (**`L Series 4WD`**).



Search in the Set list on the Set editor

A new search bar in the **Set** list lets you search for a set by name.

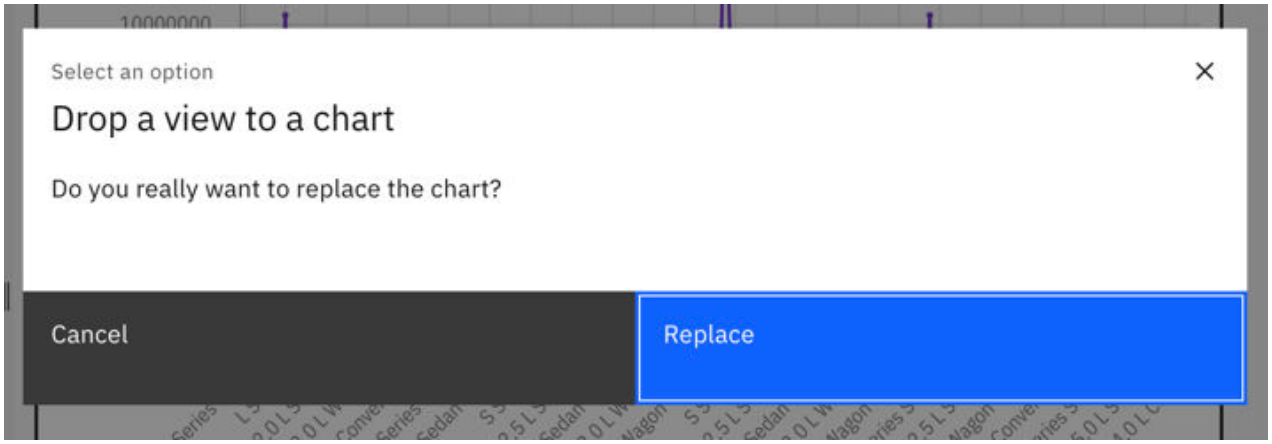


Drag a view to replace a visualization

You can now drag a cube or a cube view from the data tree onto an existing visualization to replace the visualization. The visualization updates based on the view you drop.

When you drag a view onto an existing visualization, you are asked to confirm if you want to replace the visualization.

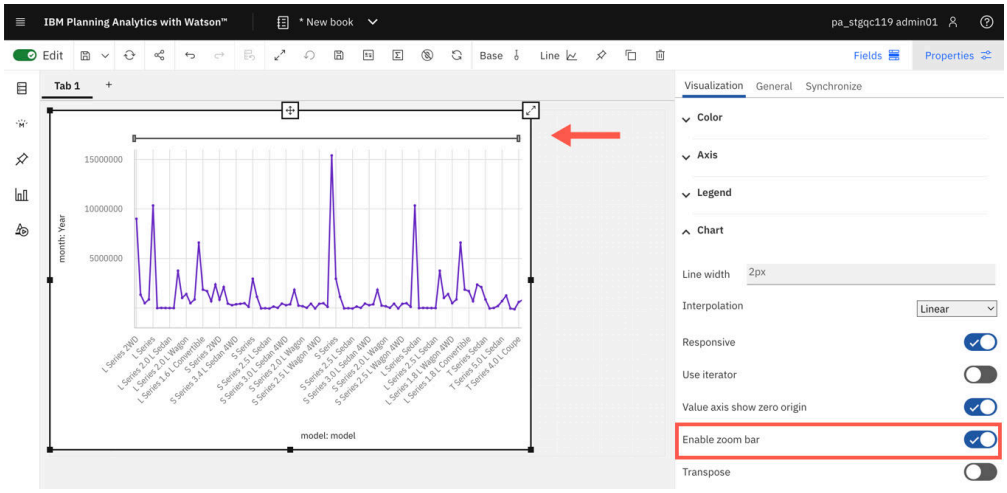
Note: Replacing the visualization resets any previous visualization properties and fields that you manually selected or added.



Zoom bar in Area, Line, and Bar visualizations

A new zoom bar in the **Area**, **Line**, and **Bar** visualization allows you to scroll and focus on a smaller area of the visualization.

Use the **Enable zoom bar** property to add the zoom bar to your visualization. Drag a handle on the bar to zoom and focus on an area in the visualization. The area of focus changes as you drag the handle.



Note: When you enable zoom bar, mouse scrolling gets disabled.

New look for "Save to server" option when saving a view

As part of our continued investment in the IBM Carbon Design methodology, the **Save to server** feature in IBM Planning Analytics Workspace has been updated to use Carbon Design principles.

There is no change to how this feature functions. Views saved to server continue to be available for use in Planning Analytics Workspace, Planning Analytics for Microsoft Excel, and as a process data source.

For more information about Carbon Design principles, see https://www.carbondesignsystem.com.

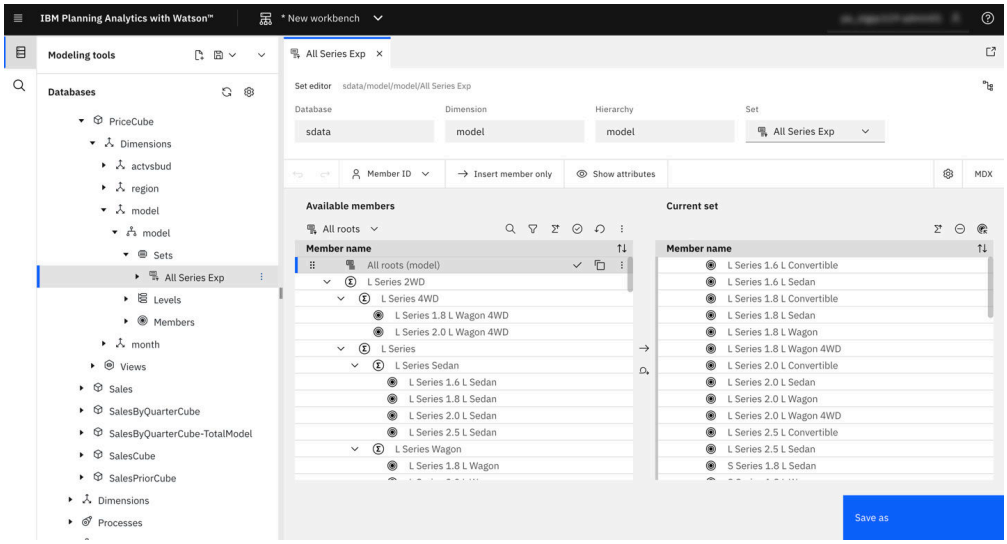
What's new in modeling - 2.0.80

The following new and changed modeling features are available in Planning Analytics Workspace 2.0.80.

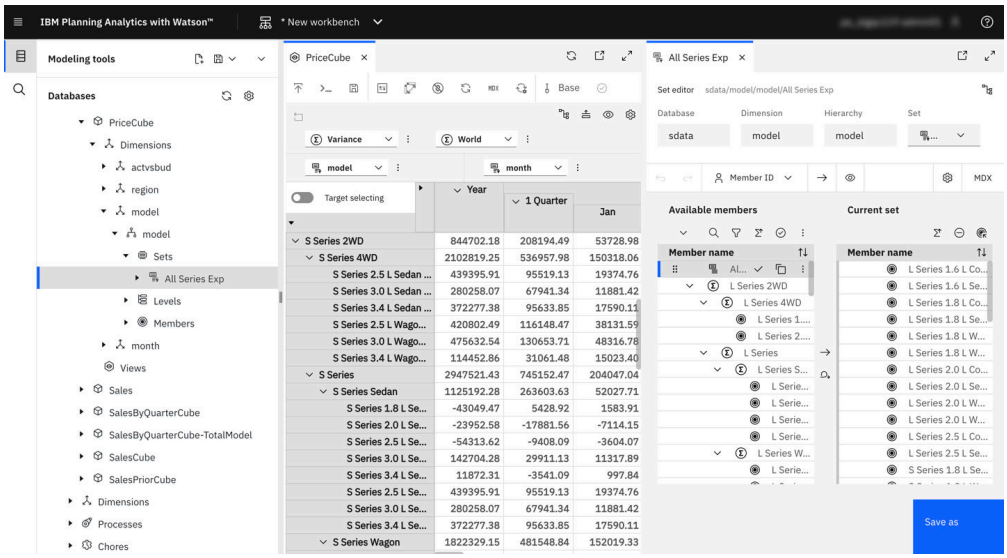
Support for new experience set editor on the modeling workbench

Set editors that are opened or created from the Databases tree on the modeling workbench now use the new experience interface. Previously, the new set editor was available only through the new experience view. Sets that were opened or created from the Databases tree used the classic interface.

When you open or create a set from the Databases tree, the new experience set editor appears on a new tab on the active tabset, making it easy to compare the set with other assets.



You can open the new set editor in a new window or move the set editor to another region on the workbench to create an editing environment that suits your needs.



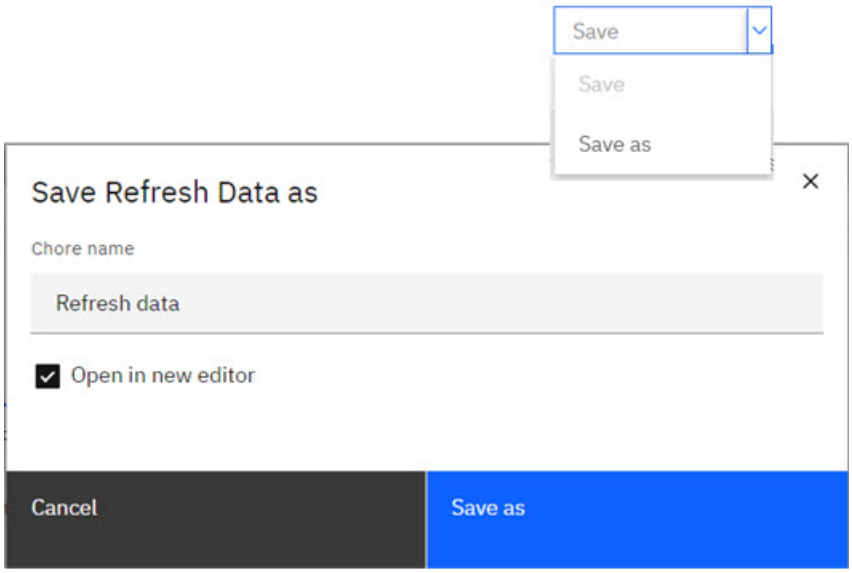
Note: When you open a set editor from the new experience view, the set editor opens as a separate dialog and isn't inserted on a new tab in the workbench.

The new experience view and set editor were first made available on the modeling workbench in Planning Analytics Workspace 2.0.78. For more information, see New experience view on modeling workbench.

Updated chore editor

As part of our continued investment in the IBM Carbon Design methodology and in the interest of providing a consistent user experience across all components, the chore editor in IBM Planning Analytics Workspace has been updated to use Carbon Design principles.

Additionally, the chore editor now includes a **Save as** option that lets you use an existing chore as the basis of a new chore.



Updated 'Reorder dimensions' option

As part of our continued investment in the IBM Carbon Design methodology and in the interest of providing a consistent user experience across all components, the **Reorder dimensions** page in IBM Planning Analytics Workspace has been updated to use Carbon Design principles.

The **Reorder dimensions** page lets you change the stored order of dimensions in a cube, which can reduce memory consumption and improve performance.

Check feeders in an exploration on a modeling workbench

If a cube contains a rule with SKIPCHECK and FEEDERS statements, you can use the **Check feeders** option to check that Planning Analytics properly feeds the components of a consolidation.

Right-click a consolidated cell on an exploration, then click **Check feeders** to view a report that indicates if the cell is fed or unfed.

Deprecation notices - 2.0.80

The following deprecation notices are applicable to Planning Analytics Workspace 2.0.80.

Deprecation notice - chore editor removed from books, available only on workbenches as of Planning Analytics Workspace 2.0.80

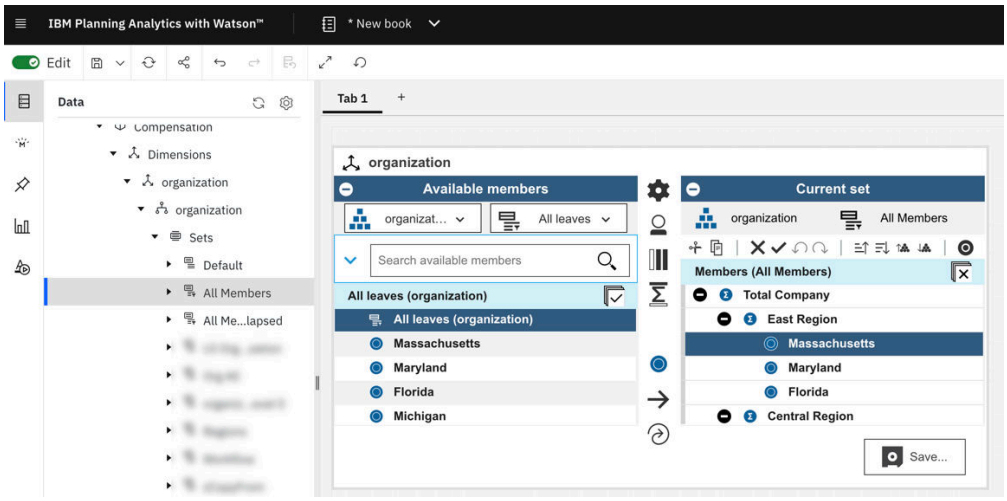
Starting with Planning Analytics Workspace 2.0.80, chores must be created and edited on a modeling workbench.

If you are an administrator or modeler and you attempt to open a book containing a chore in 2.0.80, you receive a notification that chore editing must be performed on a workbench. You can click **Open in workbench** to immediately open the chore on a new workbench.

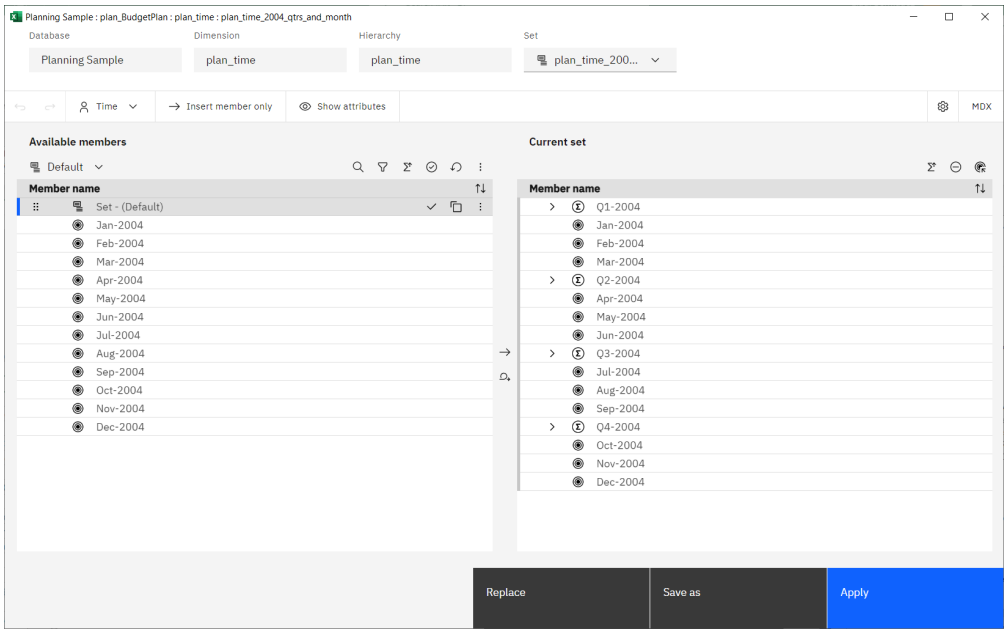
Deprecation notice - set editor in a widget to be removed from books as of Planning Analytics Workspace 2.0.81

The ability to add a set editor in a widget from the data tree in Books will be deprecated in Planning Analytics Workspace 2.0.81. Currently, when you select **Edit set** from the data tree, the classic experience set editor opens in a widget.

Classic set editor in a widget:



Starting in Planning Analytics Workspace 2.0.81, when you edit a set from the data tree, the new experience set editor will display. The new set editor opens as a dialog and is not inserted as a widget in the Book.



The new experience set editor was introduced in Planning Analytics Workspace 2.0.71. For more information, see New experience view and set editor.

2.0.79 - What's new, August 25, 2022

Learn about new features and known issues in version 2.0.79 of IBM Planning Analytics Workspace in the following topics.

Updates to each version of Planning Analytics Workspace are cumulative. To see what was new in previous releases, see Chapter 2, “What's new in Planning Analytics Workspace,” on page 45.

You can view the fix lists for this and previous versions of Planning Analytics Workspace at https://www.ibm.com/support/pages/ibm-planning-analytics-20-fix-lists#anchor2.

You can also review all new features introduced since 2.0.58, in the the IBM Planning Analytics Workspace new feature summary table. You can use the table to search for new features across all releases by description. You can also sort new features by release, date, functional area, and description.

Planning Analytics Workspace Classic on Cloud no longer available as of 2.0.79

The 'new experience' is a major update to the Planning Analytics Workspace user experience that was originally released as part of the 2.0.56 update in October 2020.

ThePlanning Analytics Workspace new experience provides an updated look and feel, improved navigation, and better content management. It also introduces Applications and Plans, a dedicated modeling environment, and predictive forecasting capabilities.

The user experience in 2.0.55 and earlier releases is referred to as Planning Analytics Workspace Classic. Cloud environments provisioned before the 2.0.56 update could remain on Planning Analytics Workspace Classic, preview the new experience, or permanently switch to the new experience.

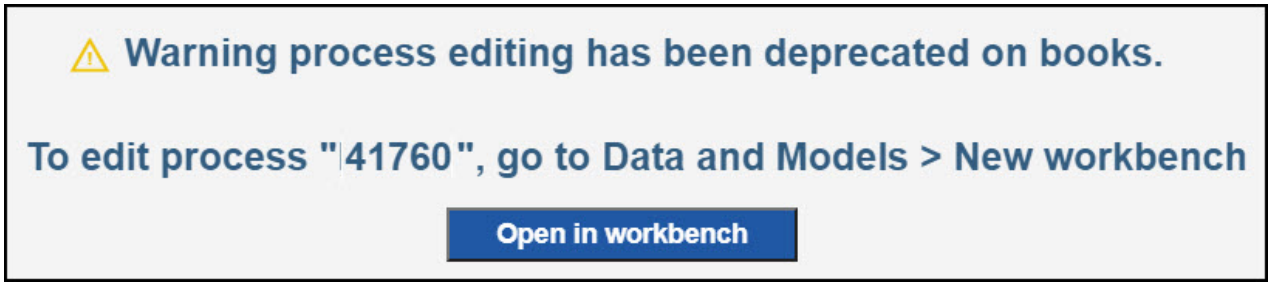
As previously and repeatedly announced in the monthly Planning Analytics Workspace Early Notification and in the monthly What's New topic on IBM Documentation, Planning Analytics Workspace on Cloud environments that use the Classic interface will automatically be updated to the new experience as part of the 2.0.79 update.

This announcement does not impact Planning Analytics on-premises deployments.

Process editor available only on modeling workbenches

As previously announced, processes must be created and edited on a modeling workbench as of Planning Analytics Workspace 2.0.79.

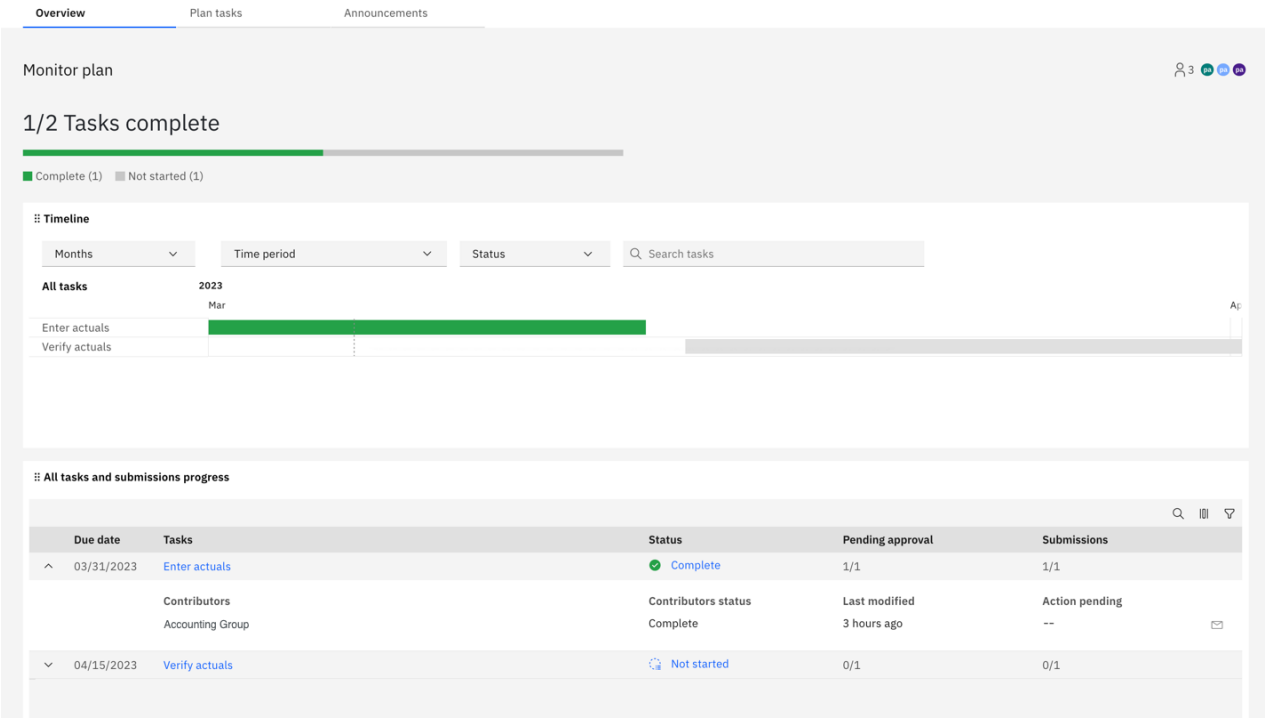
If you are an administrator or modeler and you attempt to open a process editor that was saved in a book prior to 2.0.79, you receive a notification that process editing must be performed on a workbench. You can click **Open in workbench** to immediately open the process on a new workbench.



Track and report on plan progress with the plan Overview report

You can view a plan-level overview report to help you assess the progress of your plan.

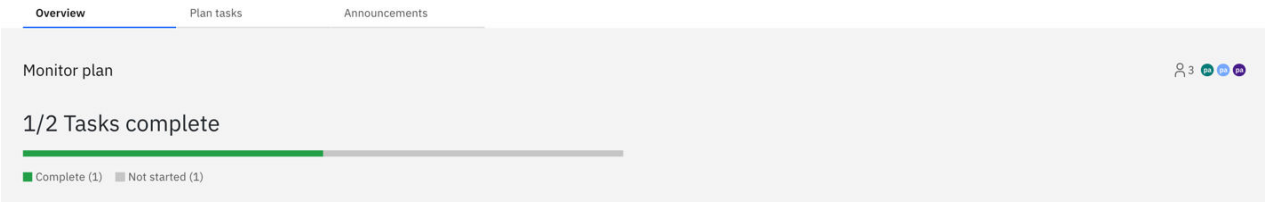
The report appears on the **Overview** tab when you are viewing plan details.



The overview report consists of a progress bar and two panels: **Timeline** and **All tasks and submissions progress**. You can click the handle next to the panel name to drag a panel to a different location on the Overview report.

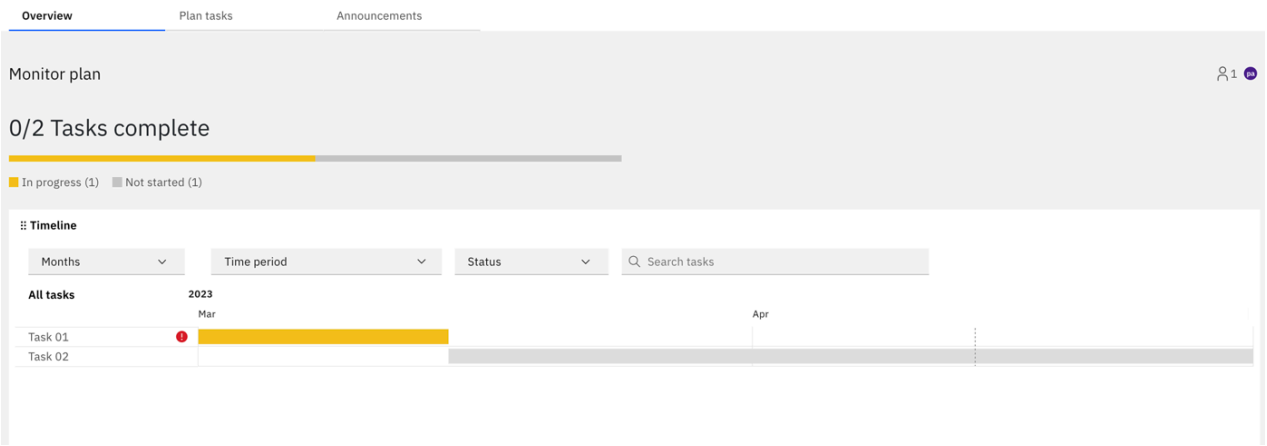
Progress bar

The progress bar displays the progress of plan. You can see the number of tasks that were completed and the number of tasks that have not yet started.



Timeline panel

The **Timeline** panel shows the status of tasks within a plan against a timeline, which can be configured to show either months or weeks.



If a task has only a start date or only an end date defined, the date is represented by a diamond on the timeline. Hover the pointer over the diamond to view the exact start or end date.

If a task has both a start date and an end date defined, a bar represents the date range on the timeline. Hover the pointer over the bar to view the start and end date of the task.

Any task that is not complete and overdue is identified by an urgent notice icon .

The **Timeline** panel includes advanced filtering. You can filter tasks by name, task status, and time period.

All tasks and submissions progress panel

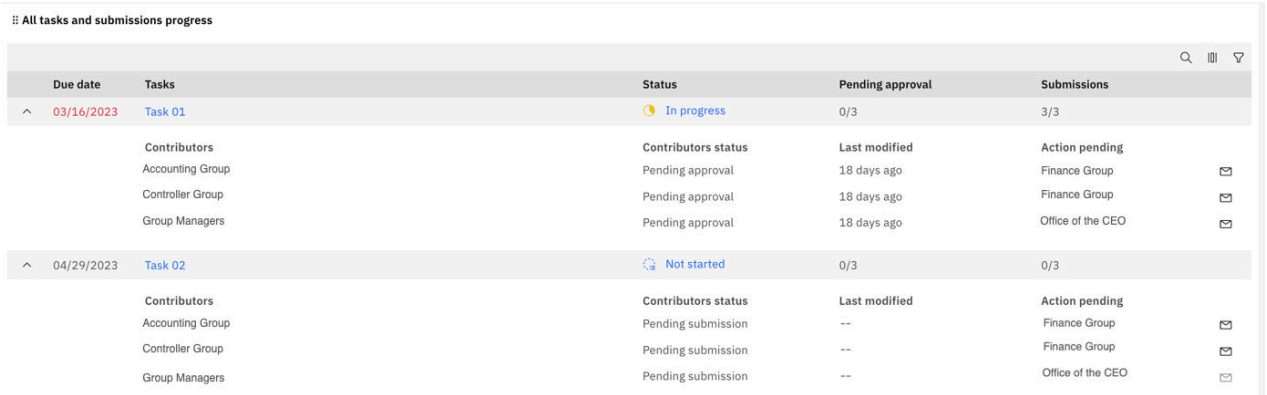
The **All tasks and submissions progress** panel displays progress for all submissions and individual tasks in a plan.

Expand each task to see status details for the individual submissions in that task.

Hover the pointer over a task name in the **Tasks** column to view the task description.

You can sort on any table heading and also search for tasks by name. You can customize the **All tasks and submissions progress** panel by choosing the columns that you want to see and filtering by task status.

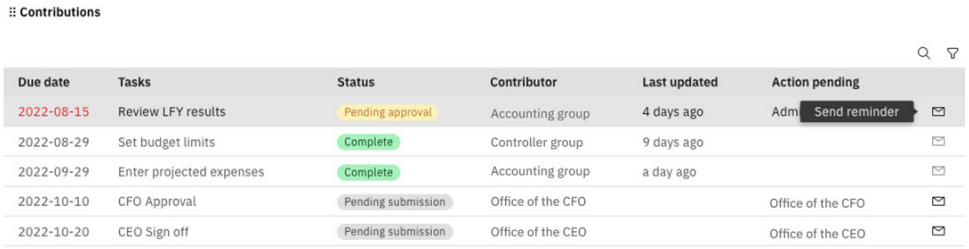
When an individual submission is in the **Pending submission** or **Pending approval** state, an email icon is active at the end of the submission record. Click the email icon to send a reminder that action is required to members of the group that is identified in the **Action pending** column.



Send email reminders to contributors of open tasks

You can now send an email reminder to plan contributors from the **Contributions** panel of the **Overview report**.

When an individual contribution on the **Contributions** panel is in the **Pending submission** or **Pending approval** state, an email icon is active at the end of the contribution record. Click the email icon to send a reminder that action is required to members of the group identified in the **Action pending** column.

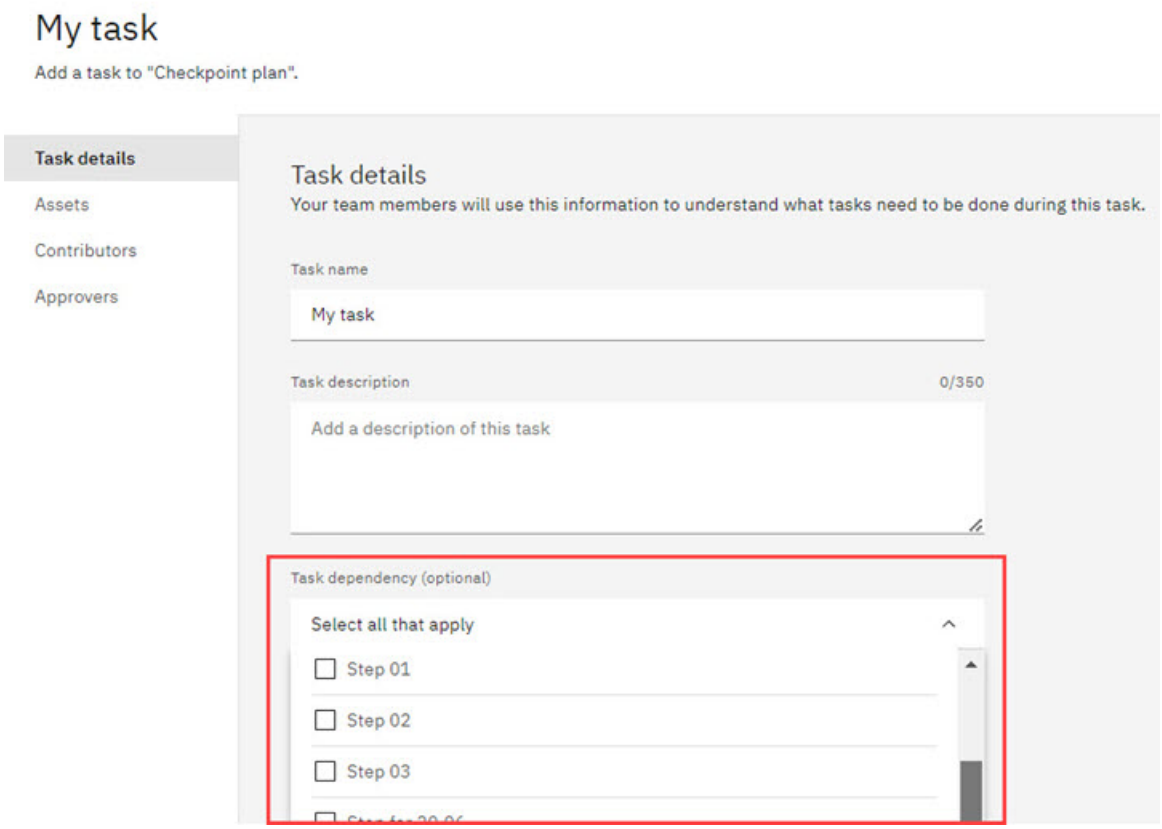


Set task dependencies for plan automation

You can now automatically open a task upon completion of one or more dependent tasks.

When you create or edit a task, use the **Task dependency** option on the **Task details** tab to set the dependencies.

You can select one or multiple tasks as dependencies. If you select a single dependency, the task is automatically opened when the single dependent task is complete. If you select multiple dependencies, the task is automatically opened only when all dependent tasks are complete.

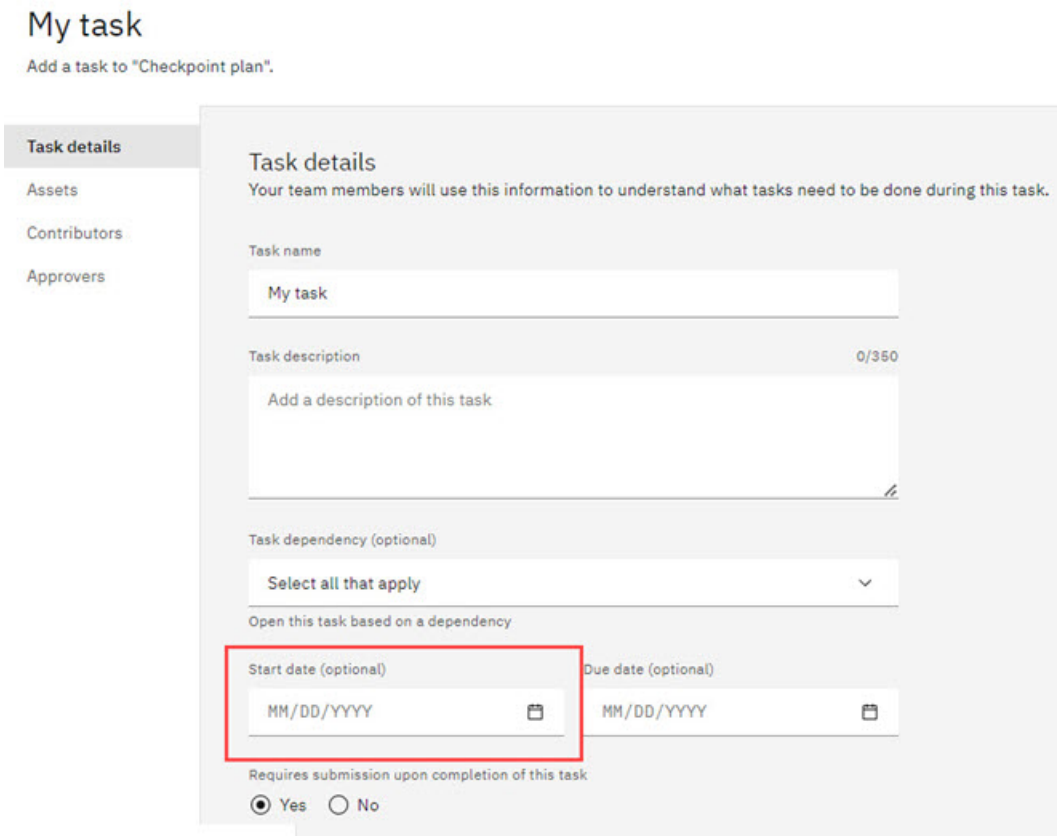


When a task is configured to use dependencies, the dependencies are identified on the task details view

Set a start date for your tasks

You can now set a start date as well as an end date for a task.

Previously, only an end date could be set. Set the start date on the **Task details** tab when creating or editing a task.



Use the new Features and Configuration tile to administer your Planning Analytics Workspace on Cloud environment

The **Features** tile in Planning Analytics Administration on Cloud is renamed as **Features and Configuration**. When you click the **Features and Configuration** tile, you see two tabs: **Features** and **Configuration**.

Use the **Features** tab to manage how your users are exposed to new features that are subject to enablement by a Planning Analytics Workspace administrator, as described in Manage features.

Use the **Configuration** tab to configure various aspects of the Planning Analytics on Cloud environment. For example, you can use the **Configuration** tab to set an inactivity timeout for Planning Analytics for Excel and Planning Analytics Workspace users in your environment.

Note: The **Features** tile name and capabilities remain unchanged in Planning Analytics Administration Local, but the interface has been updated to provide a user experience that is consistent with the rest of Planning Analytics Workspace.

Configure an inactivity timeout for Planning Analytics on Cloud

Planning Analytics Workspace on Cloud enforces an inactivity timeout. Previously, this inactivity period was set to 60 minutes for all users and could not be configured by a Planning Analytics administrator.

About this task

As of Planning Analytics Workspace 2.0.79, the inactivity timeout is configurable. When a user is inactive for the period of time specified by the Planning Analytics Workspace administrator, the user is disconnected from the Planning Analytics database. This inactivity timeout is mandatory and is applicable to all Planning Analytics Workspace on Cloud users, as well as Planning Analytics for Excel users.

For details on configuring timeouts in Planning Analytics Workspace Local, see Configuring parameters for Planning Analytics Workspace Local.

To set an inactivity timeout:

Procedure

1. Click the **Administration** tile on the Planning Analytics Workspace home page.
2. Click the **Features and Configuration** tile.
3. Click the **Configuration** tab.
4. Click the **Inactivity timeout** configuration parameter.
5. Use the **Hours** and **Minutes** controls to set an inactivity timeout period. The minimum timeout period is 30 minutes and the maximum period is 24 hours.

Use the new interface to manage chores involved with a specific process

Previously, when you opened the context (right-click) menu for a process in the Databases tree, you could click the Display chores involved option to open the **Modify chores** window. This window listed all of the chores that included the process. You could then use the **Modify chores** window to edit selected chores that included the process or delete the process from selected chores.

About this task

Planning Analytics Workspace 2.0.79 simplifies chore management by presenting two distinct options when you open the context menu for a process in the Databases tree: **Edit related chores** and **Remove from chores**.

Edit related chores that involve a specific process

Procedure

1. Right-click the process on the **Databases** tree in a modeling workbench.
2. Click **Edit related chores**. If the process is not included in any chores, you receive notification and can cancel the procedure. Otherwise, continue to the next step.
3. On the **Edit chores** window, select the chores you want to edit.
4. Click **Edit**.

   Each of the chores you selected opens for editing on a separate tab on the modeling workbench.

Remove a specific process from selected chores

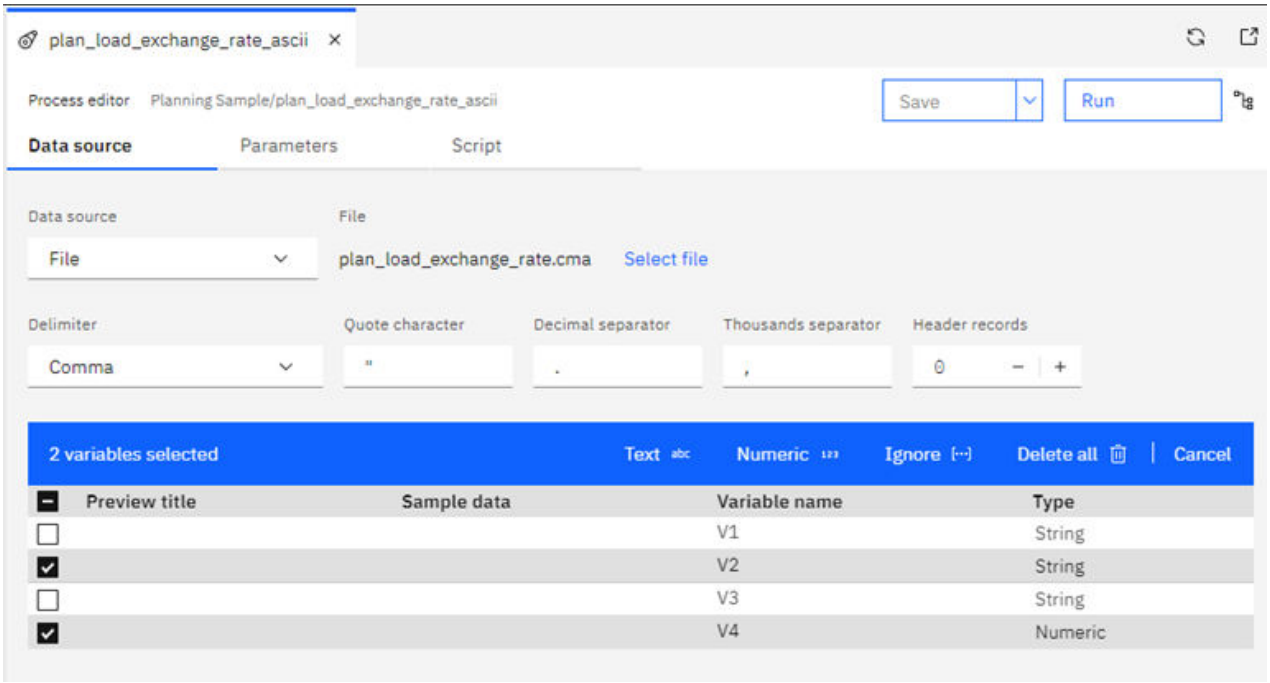
Procedure

1. Right-click the process on the **Databases** tree in a modeling workbench.

2. Click **Remove from chores**. If the process is not included in any chores, you receive notification and can cancel the procedure. Otherwise, continue to the next step.
3. On the **Remove chores** window, select the chores from which you want to remove the process.
4. Click **Remove**.
5. Click **Delete** when prompted for confirmation of removal.

Select multiple variables in the process editor

You can now select multiple variables in the process editor. When multiple variables are selected, you can apply any option on the selected variables bar to multiple variables simultaneously.

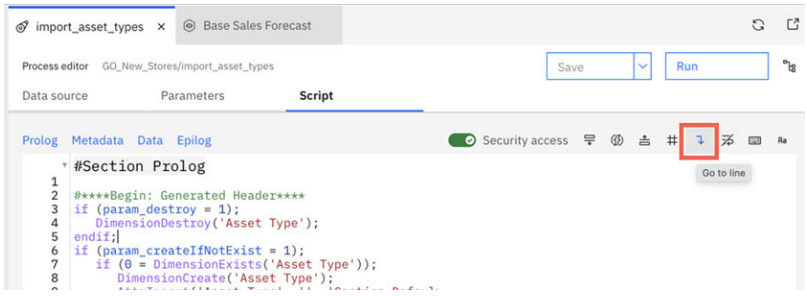


Go to a specific line in the process editor

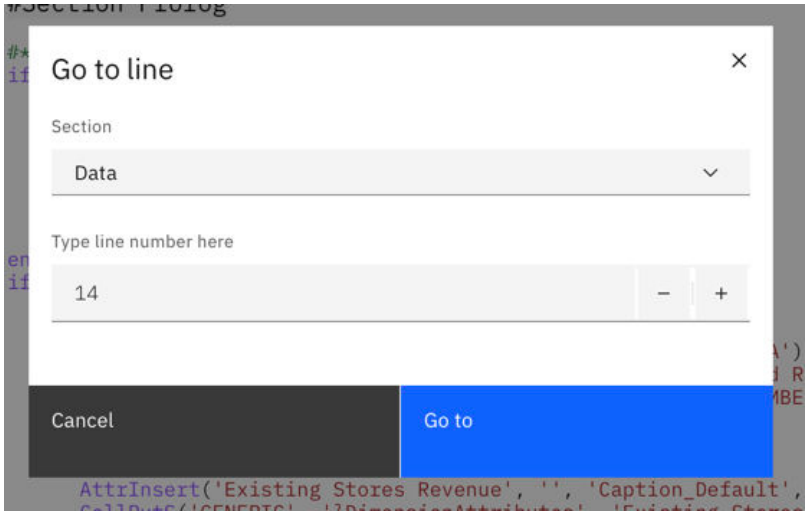
You can now jump to a specific line in the process editor with **Go to line**. This capability was previously available only in the rules editor through shortcut keys (Ctrl + L or Cmd + L). Now, you can click the **Go to line** icon in both the rules and process editors to quickly move up and down the script. This feature is especially useful if you encounter a process error that requires you to go to a specific section and line number.

To use the **Go to line** feature in the process editor:

1. On the **Script** tab, click the **Go to line** icon.



2. Select the section and enter the line number that you want to go to.



Note: If you enter a line number that does not exist in the section, an error displays which shows you how many lines are in that section.

3. Click **Go to**. The cursor moves to the start of that line.

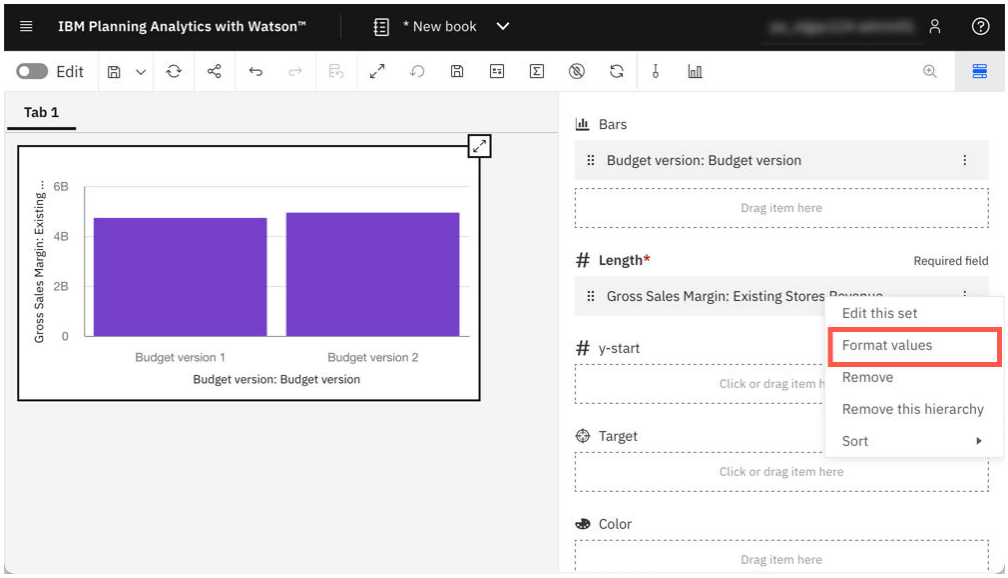
Note, the **Go to line** dialog in the process editor is slightly different from the one in the rules editor. Since the script in the process editor has sections, you need to specify both the section and the line number you want to go to. Whereas in the rules editor, you need to enter only the line number you want to go to.

Apply formatting to visualization axis

When you apply formatting to a visualization axis now, the axis retains the format when you change the member on the axis or when synchronization automatically changes the member. The formats are also retained when you switch from one visualization to another or convert the visualization to an exploration and vice versa.

To apply formatting to a visualization axis:

1. Select the visualization and click **Fields**.
2. Click the menu icon for the axis that you want to format and select **Format values**.



3. Choose the format that you want to apply to the axis.

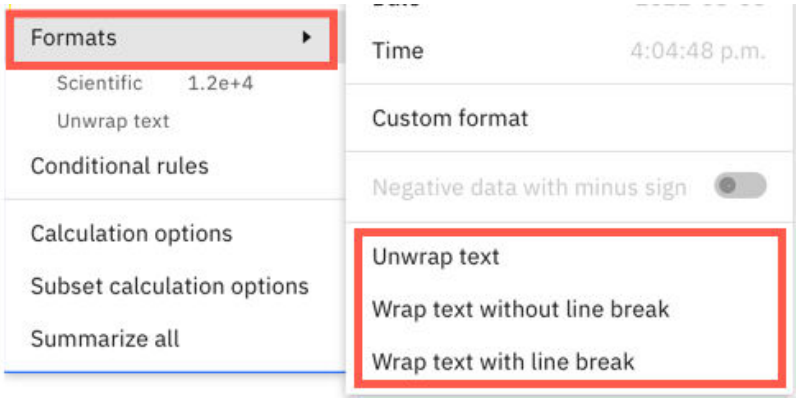
You can also right-click the axis title in a visualization and click **Format values** to select and apply a format to the axis.

Wrap text in data cells

You can now format string cells in explorations (or views) to wrap text. You can wrap multi-line text in data cells with or without line breaks. Previously, you could only wrap text in headers.

Note: The wrap text feature is only supported for text that is entered in a cell using the text editor (press F2 or click the pencil icon in the cell).

To wrap text, right-click a row or column. Go to **Formats** and select how you want to wrap text for that row or column.



To unwrap text, right-click the row or column and select **Unwrap text** under **Formats** or go to **Clear** and click **Formats**.

Deprecation notice - chore editor to be removed from books, available only on workbenches as of Planning Analytics Workspace 2.0.80

Starting with Planning Analytics Workspace 2.0.80, chores must be created and edited on a modeling workbench.

If you are an administrator or modeler and you attempt to open a book containing a chore in 2.0.80, you'll receive a notification that chore editing must be performed on a workbench. You can click **Open in workbench** to immediately open the chore on a new workbench.

2.0.78 - What's new, July 13, 2022

Learn about new features and known issues in version 2.0.78 of IBM Planning Analytics Workspace in the following topics.

Important: The July 13, 2022 update includes only Planning Analytics Workspace Local 2.0.78. The Planning Analytics Workspace Cloud 2.0.78 update is targeted for July 19, 2022.

Updates to each version of Planning Analytics Workspace are cumulative. To see what was new in previous releases, see Chapter 2, “What's new in Planning Analytics Workspace,” on page 45.

You can view the fix lists for this and previous versions of Planning Analytics Workspace at https://www.ibm.com/support/pages/ibm-planning-analytics-20-fix-lists#anchor2.

You can also review all new features introduced since 2.0.58, in the the IBM Planning Analytics Workspace new feature summary table. You can use the table to search for new features across all releases by description. You can also sort new features by release, date, functional area, and description.

Timeline of previous Planning Analytics releases

For a comprehensive listing of Planning Analytics component releases by month and year, see Timeline for IBM Planning Analytics Releases. You can view versions and release months for the following components:

- Planning Analytics Local TM1 Server

- Planning Analytics Workspace
- Planning Analytics for Microsoft Excel
- Planning Analytics Spreadsheet Services/TM1 Web

Rules must now be created and maintained on a modeling workbench

As of Planning Analytics Workspace 2.0.78, rules must be created and edited on a modeling workbench.

If you are an administrator or modeler and you attempt to open an existing rule in a book in 2.0.78 or later, you receive a notification that rule editing must be performed on a workbench. You can click **Open in workbench** to immediately open the rule on a new workbench.

All options to open or edit rules have been removed from the Databases tree in books.

New experience view now on modeling workbench

The new experience view (or exploration) and new set editor are now available on the modeling workbench. Along with an improved look and feel, this new experience interface has several usability improvements and enhancements. Until now, the new experience interface was only available in Planning Analytics Workspace books.

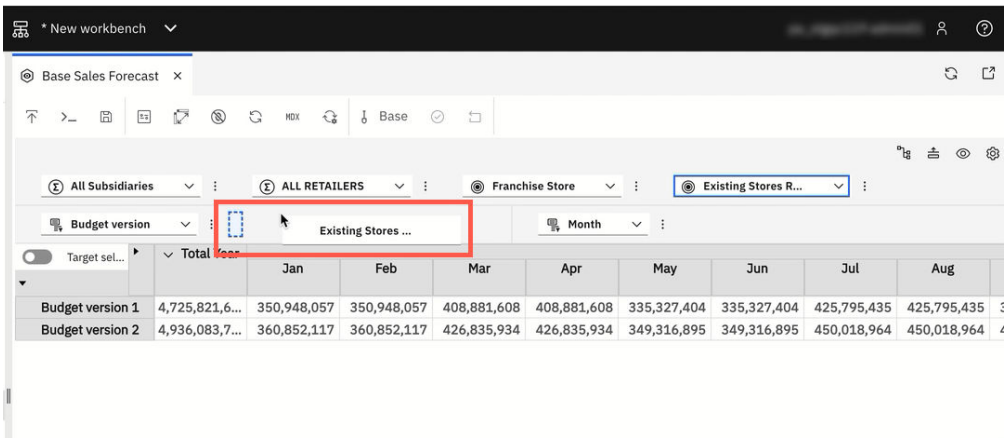
Important: All existing and new views on the workbench now use the new experience interface.

Using the new experience view

The new experience view offers flexible options to view, analyze, and organize data. Features in the new experience view are also now more accessible.

- **A more guided and intuitive experience**

  The new view's improved design offers a more guided experience without compromising its capabilities. For example, the new view now guides you to the drop zone when you drag a dimension to a different location in the grid.



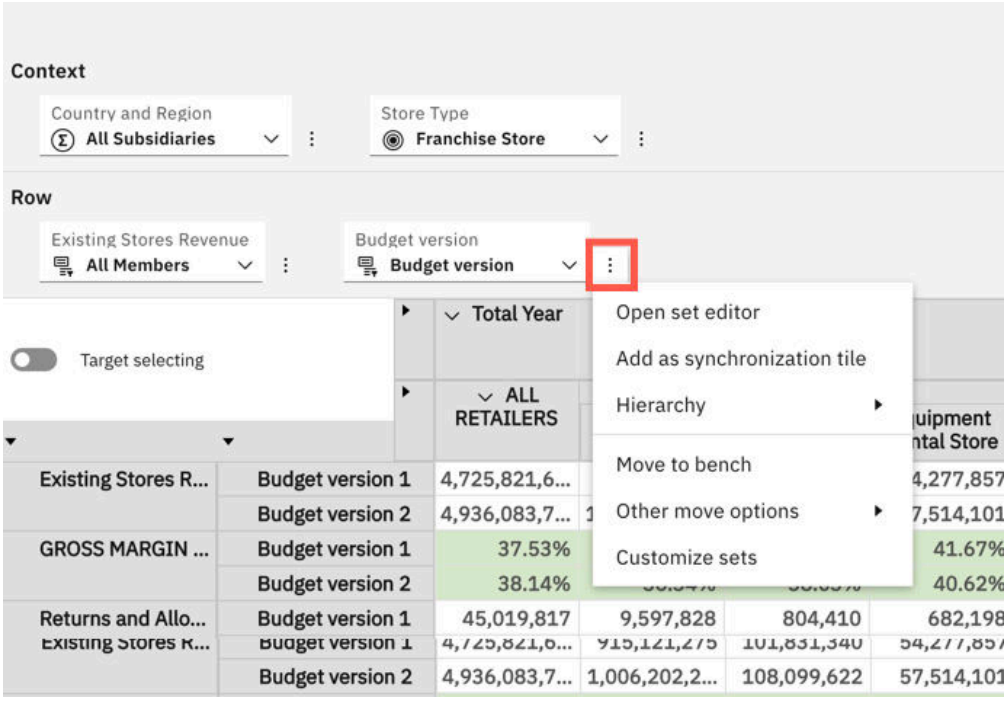
You can use the icons in the grid  to:

  - See the cube in the data tree.
  - Expand or collapse the overview.
  - See benched dimensions.
  - Select hierarchy, iconography, context information, and section headers to customize your view.

  Each dimension tile in the grid now has a menu icon next to it from which you can:

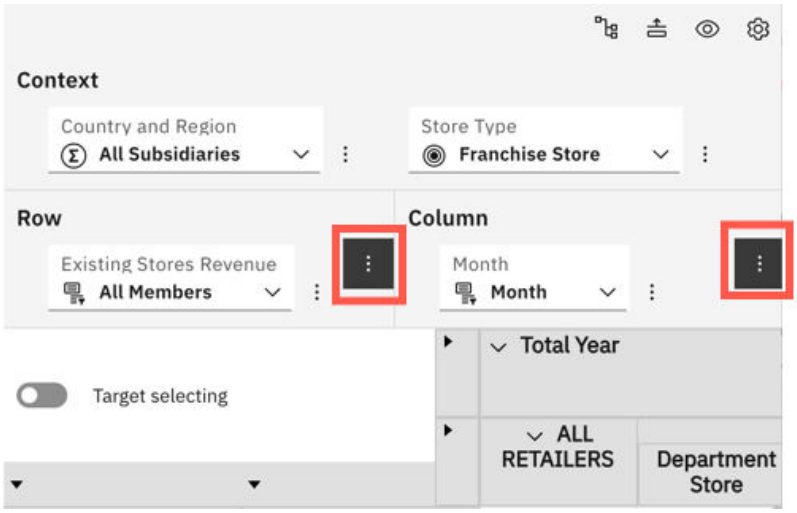
  - Open the set editor.

- Remove, replace, or add related hierarchy.
- Move the dimension to the bench.
- Manually move the dimension right or left, or to a row, column, or context.
- Limit the number of sets for a dimension (**Customize sets**)



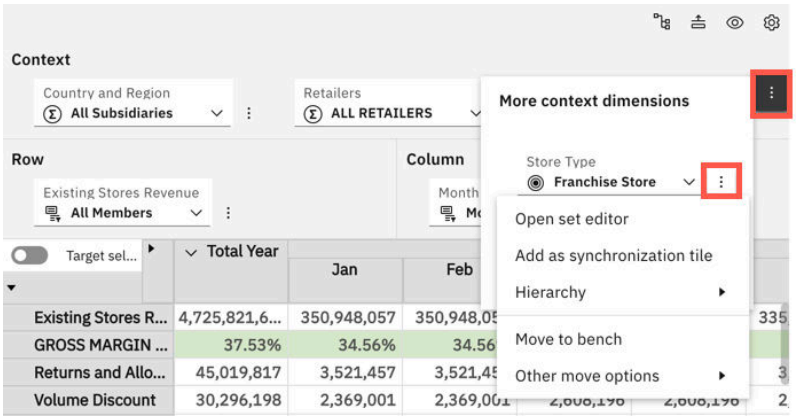
Depending on the number of dimensions or the size of the view, all dimensions might not display.

To see dimensions that are hidden from the view, click the **More dimensions** menu in the **Context**, **Row**, or **Column** area.



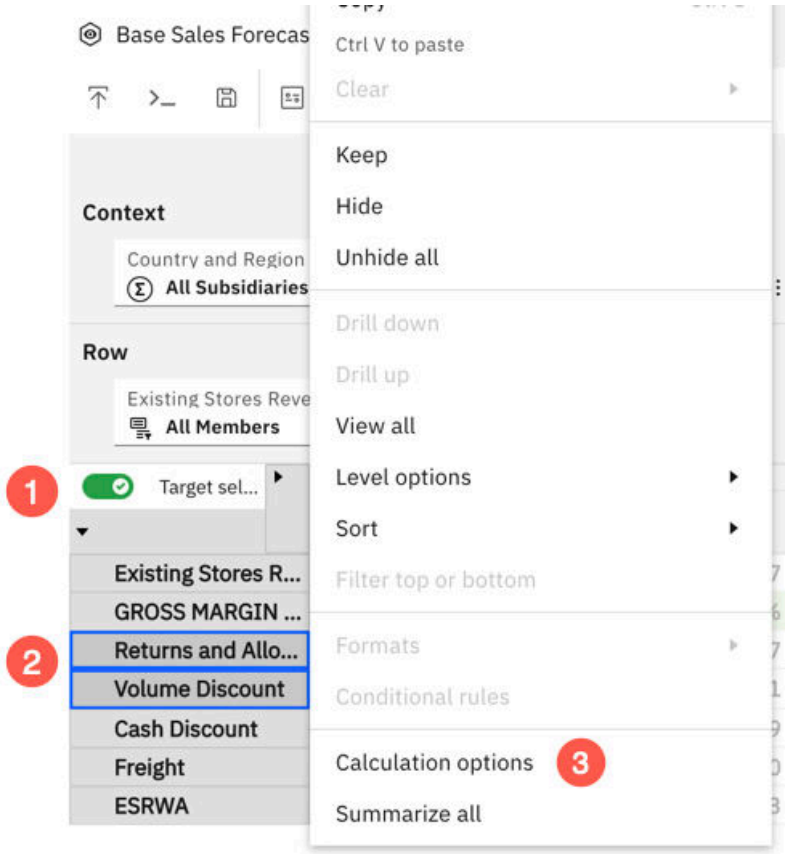
From the **More dimensions** menu, you can drag dimensions to the **Context**, **Row**, or **Column** area and vice versa. You can also move dimensions that appear within the **More dimensions** menu.

You can click the menu next to the member's name to open the set editor, move the dimension to the bench, see move options, and more.



- **Target selecting toggle for asymmetric calculation**

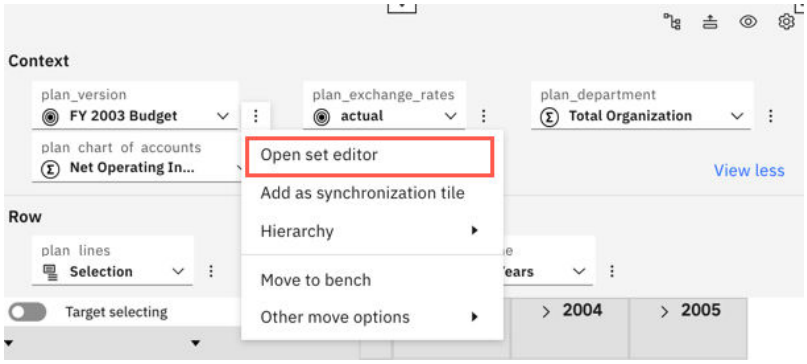
  The new **Target selecting** toggle is used to create an asymmetric calculation. You no longer need to select the individual button on the row or column headers to create an asymmetric calculation. Instead, enable **Target selecting** and select the members that you want to use in the asymmetric calculation. Right-click a selected member and click **Calculation options**.



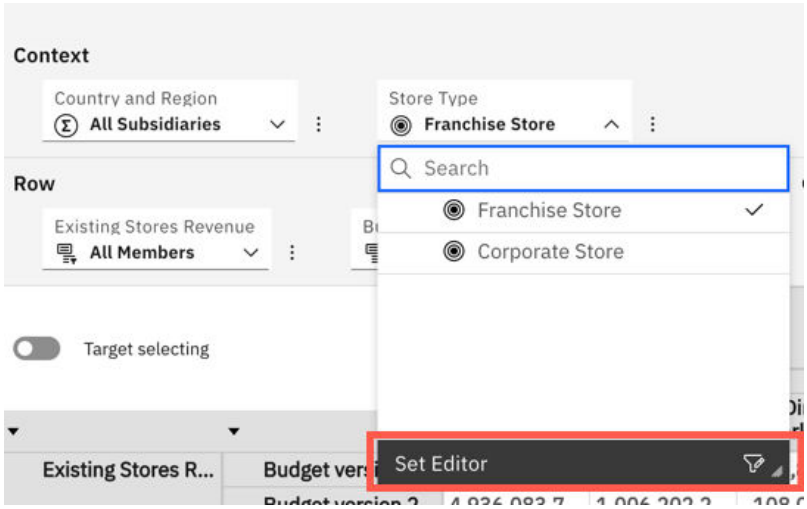
Using the new set editor

The new set editor can be accessed only through the new view. If you open a set as a separate tab from the data tree, it still uses the classic interface.

To open the set editor, click the menu icon next to a dimension in the view and select **Open set editor**.



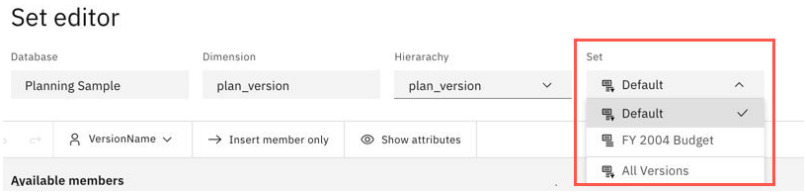
You can also double click the dimension tiles or click the **Set Editor** icon in the dimension menu to open the set editor.



As with the new view, the new set editor offers an improved flow, a more intuitive experience, and flexible options to edit your set.

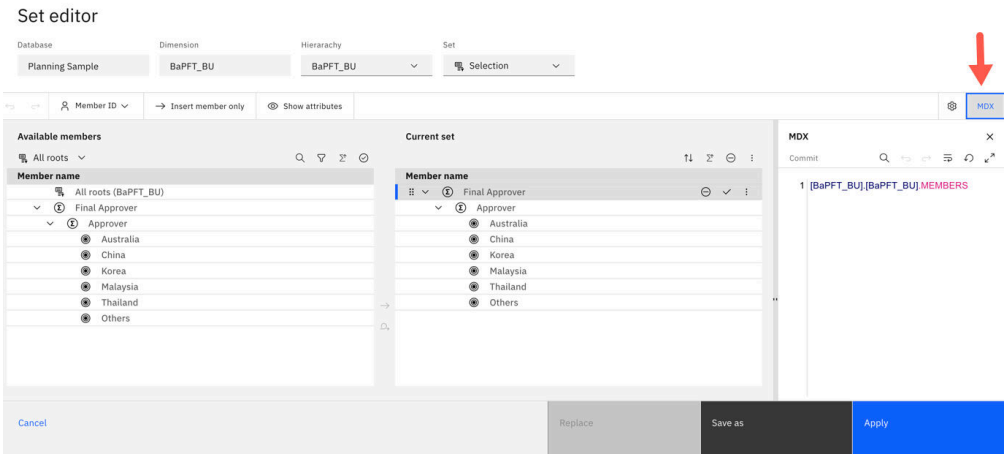
- **Set menu**

  With the **Set** menu, you can now change the set from within the set editor.



- **Improved MDX panel**

  Click **MDX** to see the **MDX** panel and script. You can edit the script in the panel and click **Commit** to apply your changes to the current set.

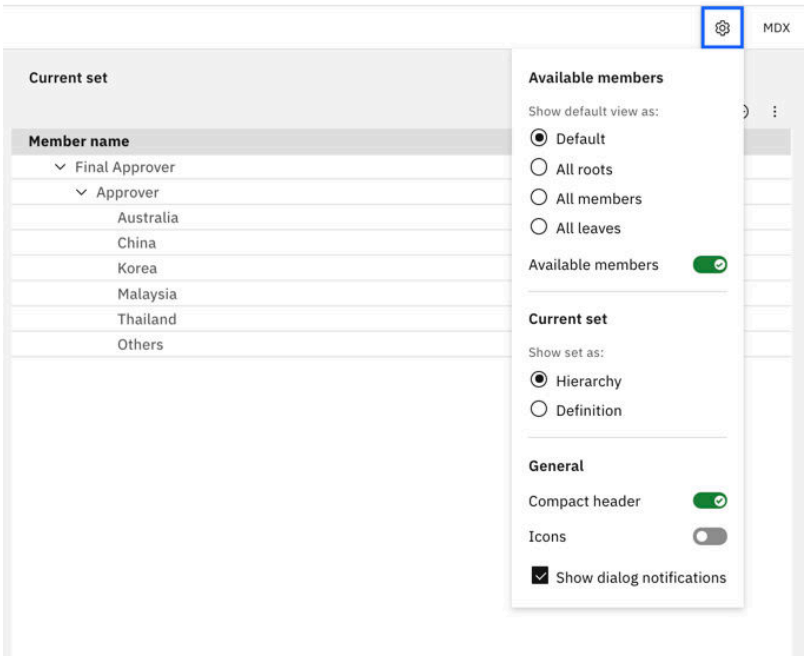


- **Settings menu**

  The **Settings** menu offers options to customize the display for your set.

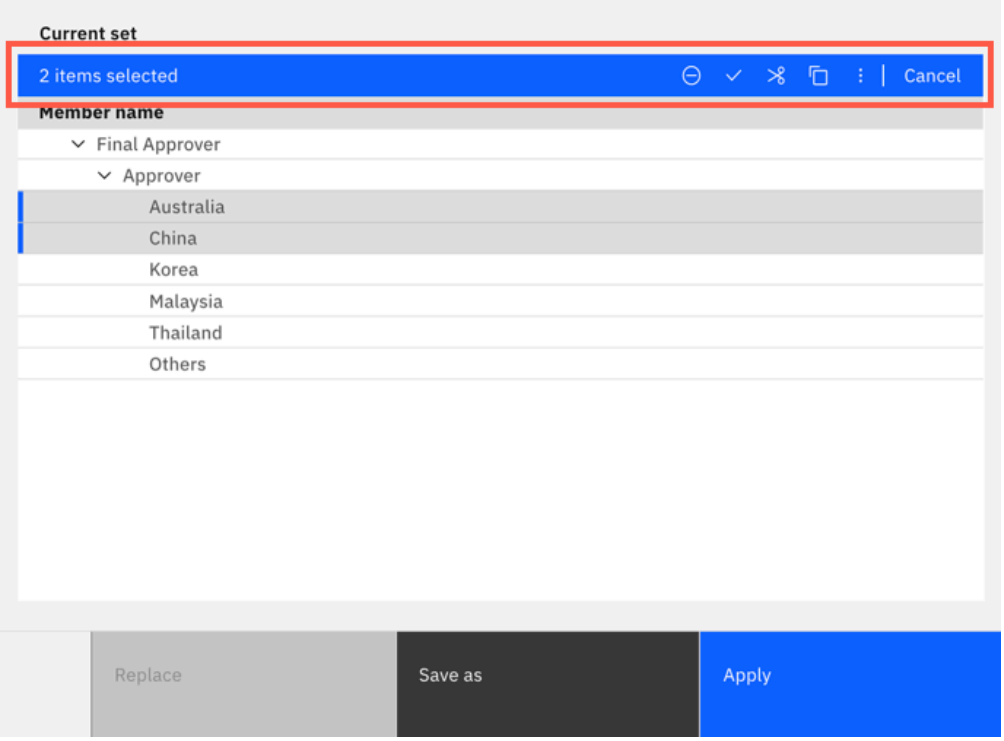
  Enable **Compact header** under the **General** section to reduce the size of the set editor header and see more members.

  You can also remove icons from all members for a simplified display with the **Icons** property under **General**.



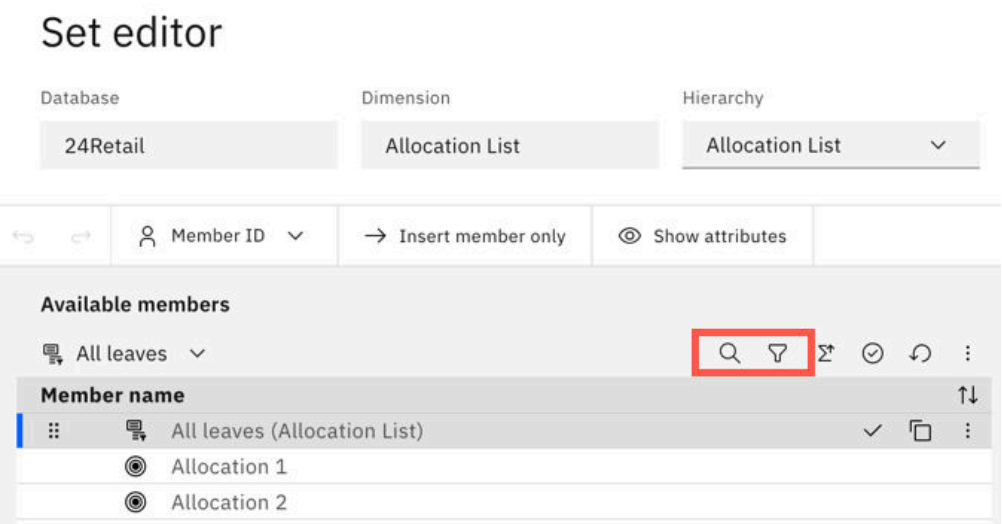
- **Multi-select activity display**

  When you select multiple members in **Available members** or **Current set**, an activity bar now displays with your selection information and available options.



- **Improved features**

  The Search and Filter features in the new set editor are now more intuitive and improved for usability. The filter feature allows you to filter a set by one or more attributes to choose the available members that appear in the set. The search feature lets you search for members in the set editor. You can use both features to include members in a set that match specific criteria.



The new experience set editor also offers the ability to delete sets from within the set editor.

Approvals and Rejections in Plans

Approvals and rejections are now available in the plans submission process. In addition, improvements to email notifications and the overall submission process make it easier to work with plans.

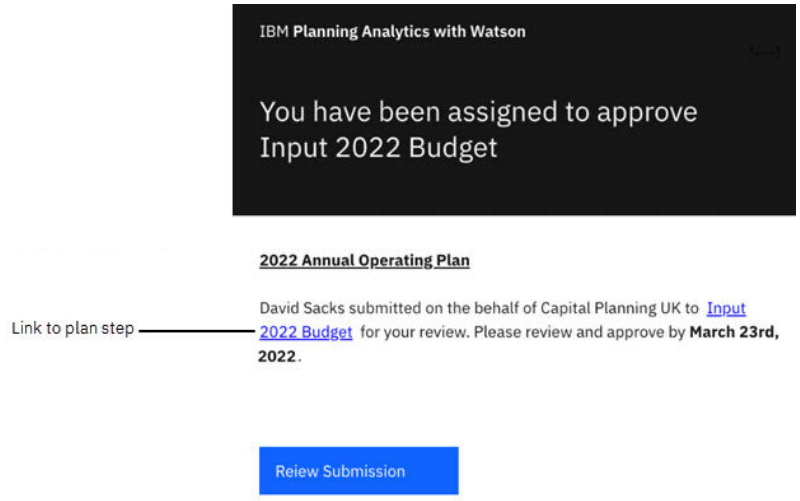
When you create a plan, you can now add approvers for each contribution group. The assigned approvers have the authority to accept or reject submissions. This is an improvement over previous versions of Planning Analytics Workspace, where an owner or co-owner could only reset an unsatisfactory submission.

Event-triggered email is now sent to relevant plan users when any of the following events occur in a plan. The email includes details on the event and, when applicable, a link to the location in the plan where you can take further action or review more information.

Table 5. Event-triggered email recipients

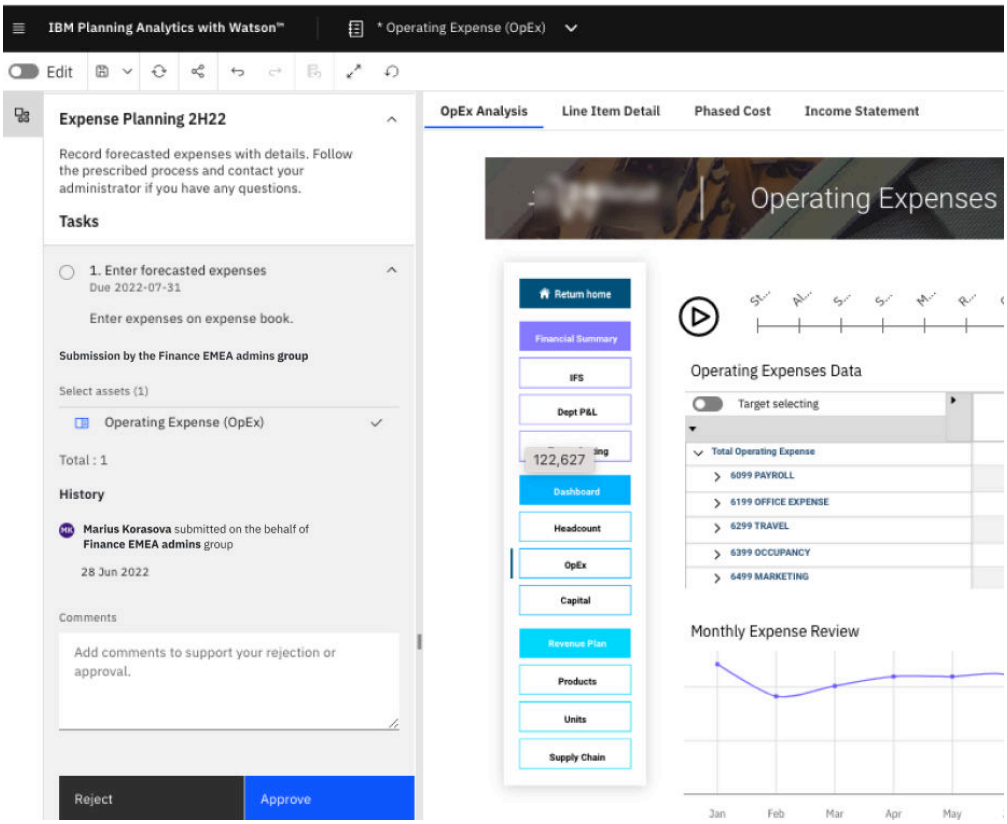
Event	**Email recipients**
A plan step is opened	Members of all groups that are assigned to the step
A plan step is submitted	Approvers that are assigned to the group that has submitted the step The plan owner and co-owners
A submitted step is rejected	The submitter of the rejected step
A submitted step is approved	The next in line approver, if any The plan owner and co-owners

For example, when a plan step is submitted, approvers who have been assigned to the group that submitted the step receive an email similar to this. The email would indicate the actual *step name*, *step contributor name*, and *group name* for the submission. The approver can click the **Review submission** button in the email to open the submission and either approve or reject it.



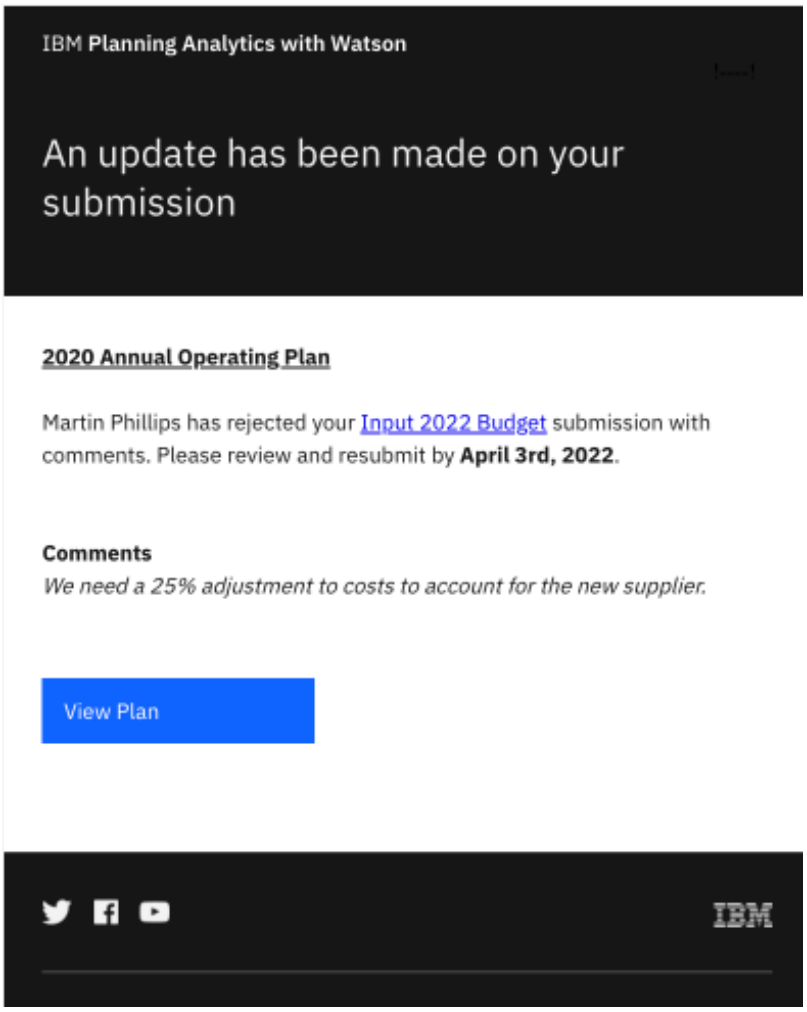
In addition, the submission process has been enhanced to provide more insight and options for owners, contributors, and approvers.

- You can now assign one or more approvers to a plan step. Approvers review step submissions and determine the disposition of the submissions.

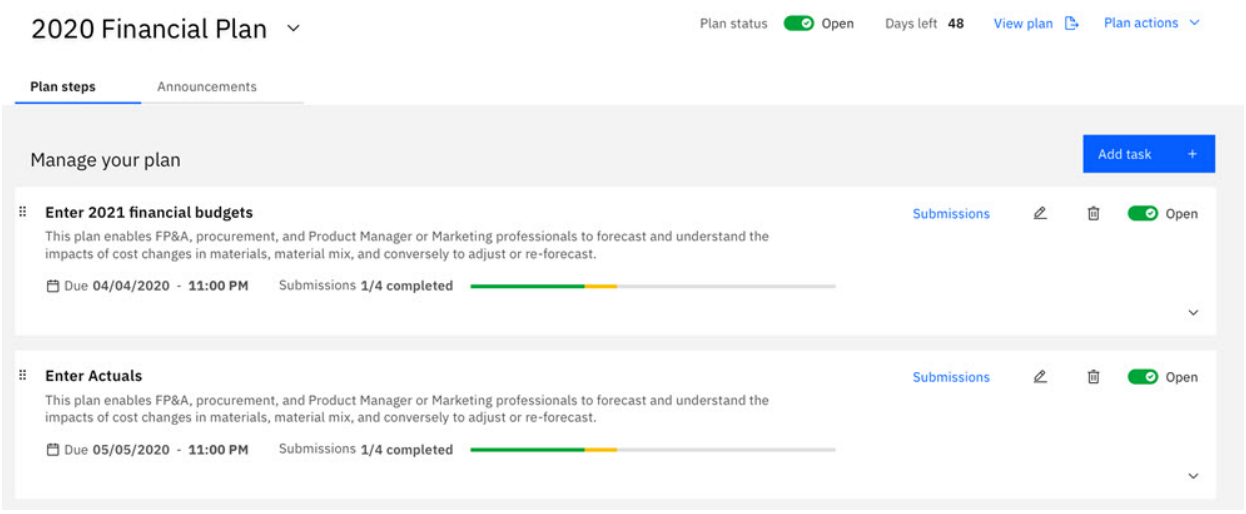


- When you add an approver to a step, the approver name is prefixed with a number in the **Approver** list. These numbers represent an approval hierarchy. When approver 1 approves a submission, it is routed to approver 2, and so on until the last approver approves the submission.
- If a submission is approved, the step remains closed for submissions to the group who submitted it.

  If a submission is rejected, the step is re-opened for the group who initially committed the submission. However, the assets included in the step are not reset; contributors can resume working on the assets in the same state they were in when the initial submission was made.



- The plan page shows the state of submissions for each step. A submission is not identified as completed until it has been approved.

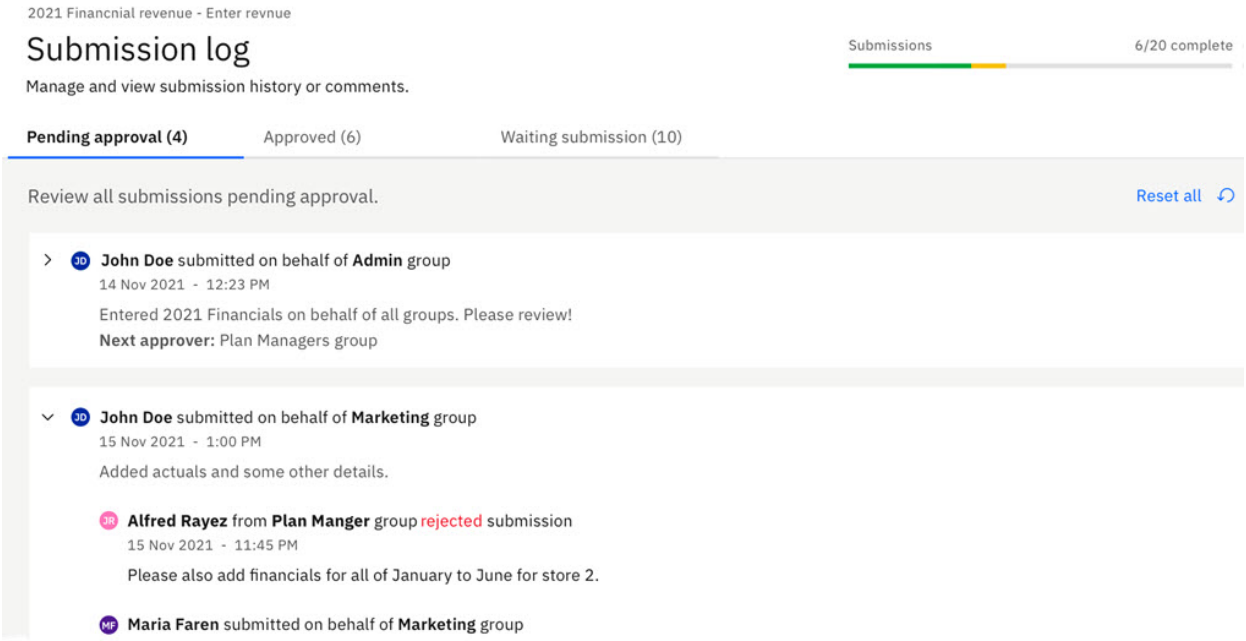


When no submission has been made for a step, the **Submissions** line does not include a status bar.

The yellow indicator in the status bar represents the percentage of submissions that are pending approval. When all submissions for a step are approved, the status bar appears dark green.

- Each step includes a link to the **Submissions** page. You can click the link to view the submission log for the step. The log captures the history and comments for all submissions. You can use the **Pending**

approval, **Completed**, and **Waiting submission** tabs to focus on submissions in any of those labeled states.



Plan owners can view all log entries while approvers can see only log entries for contributor groups they have been assigned to. Contributors can see only the log entries that apply to the group to which they belong.

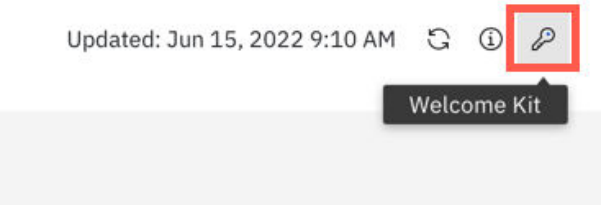
Reset password for Remote Desktop user accounts (Cloud only)

Subscription administrators can now reset passwords for Remote Desktop user accounts from the new **Welcome Kit settings** page under **Administration**. Password reset can be done for a specific or all Remote Desktop users in an environment.

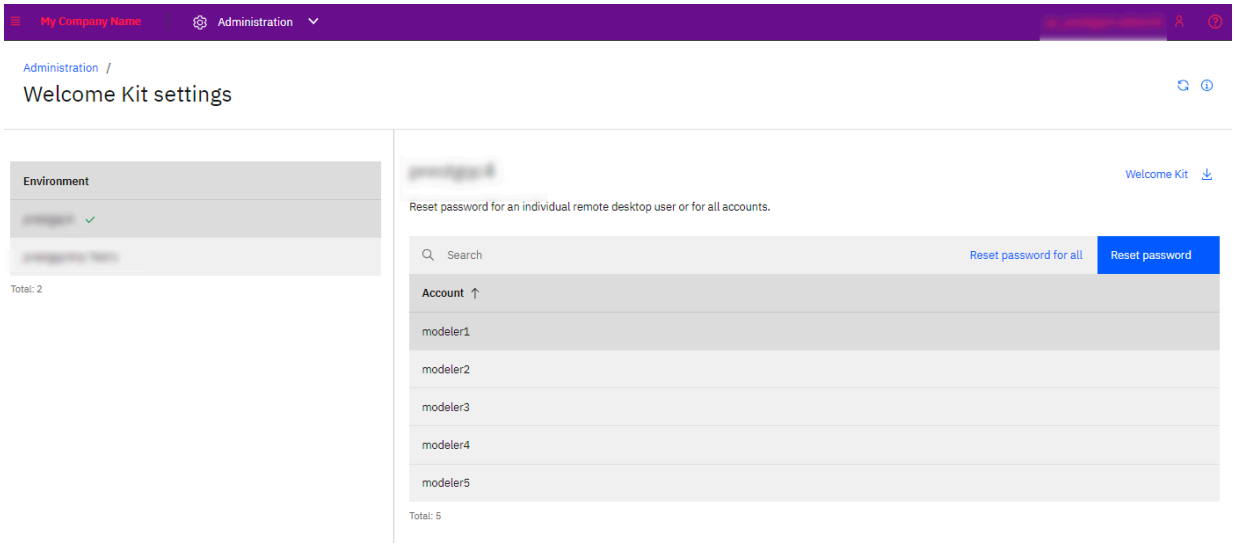
Important: This password reset feature applies only to Remote Desktop user accounts that use rich tier components to access TM1 and does not apply to Planning Analytics Workspace users.

To reset password for a Remote Desktop user:

1. On the **Home** page, click **Administration**.
2. Click the **Welcome Kit** icon in the toolbar.



3. On the **Welcome Kit settings** page, select an environment.
4. From the list of modelers, select the user for whom you want to reset the password and click **Reset password**.

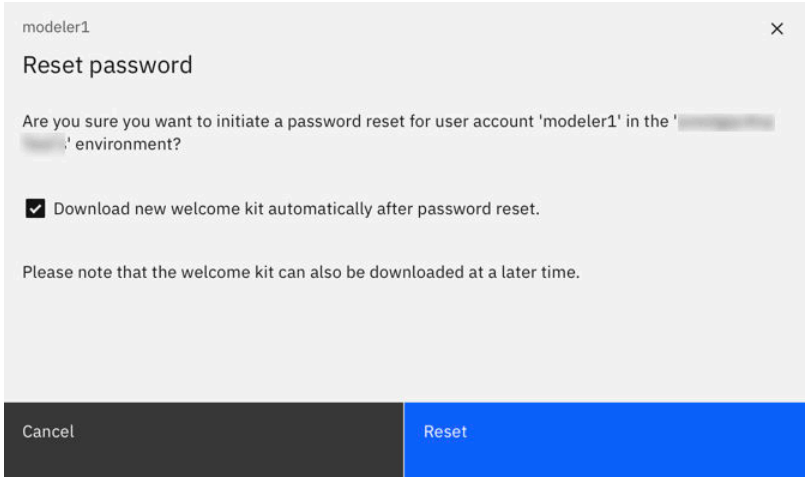


If you want to reset the password for all users in that environment, select **Reset password for all** instead.

5. A **Reset password** window opens.

   When you reset a password, a new welcome kit automatically downloads with the new password.

   If you are resetting passwords for more than one user (but not for all users) and do not want the welcome kit to download automatically upon each password reset, deselect the download option.



   You can download the welcome kit after the password is reset for all your selections.

6. Click **Reset** to reset the password.

Note: You cannot reset the password for a user for whom a password reset is in process. However, you can reset password for other users in the same or a different environment.

Updated menus for rows, columns, and data cells in views

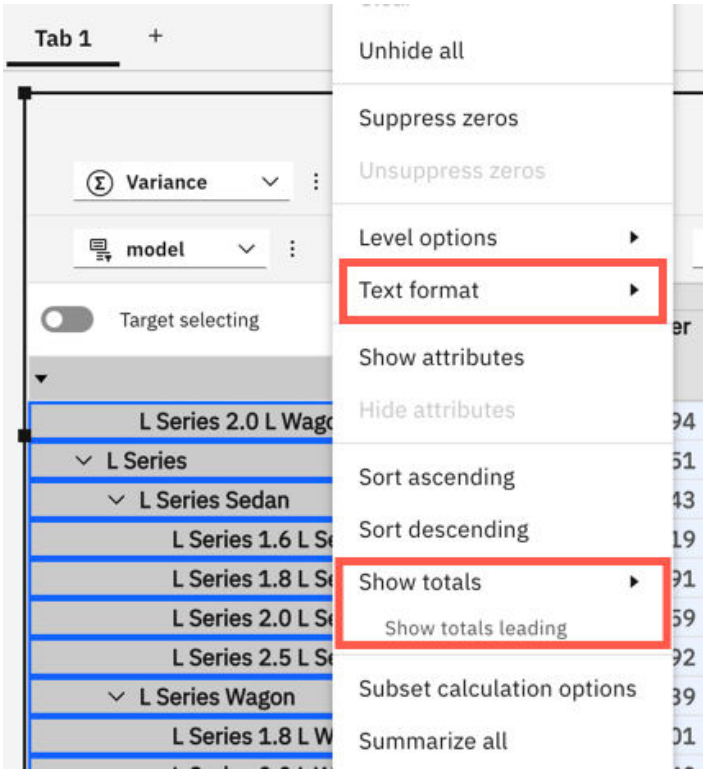
As part of the ongoing effort to standardize the Planning Analytics Workspace user experience, the menus for rows, columns, and data cells in the new experience view are now updated.

There is no change in how the menu options function but the new design includes usability improvements. A number of menu options were renamed:

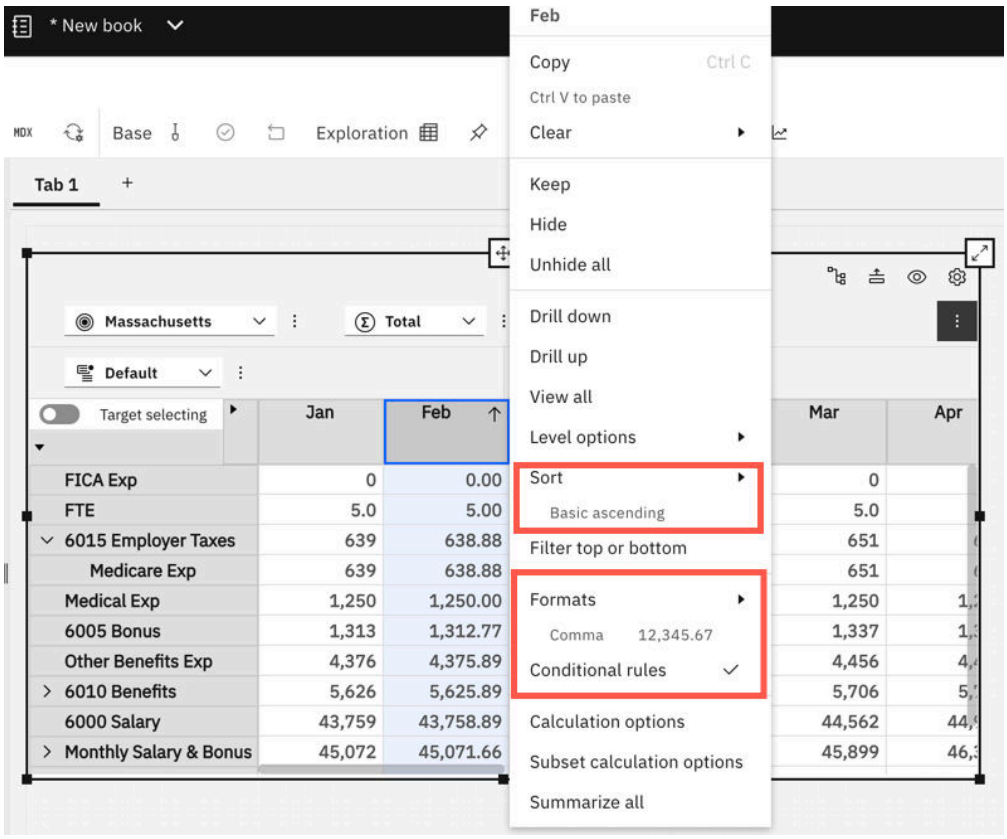
- **Create calculations** is now **Calculation options**
- **Format values** is now **Format**
- **Conditional format** is now **Conditional rules**

Several menu options are now grouped so you can easily see all related options together. For example:

- All sorting options are now under **Sort**
- Word wrapping options (for Headers only) are under **Text format**
- Show totals options are under **Show totals**



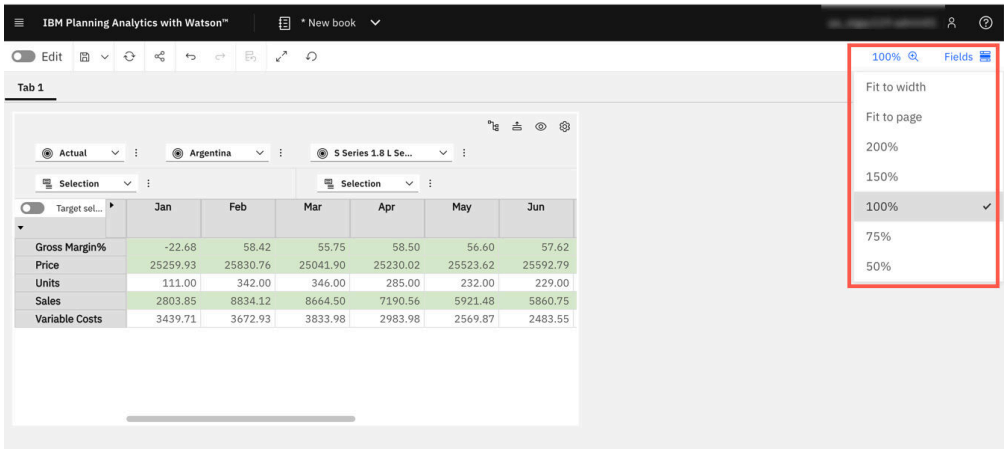
Some grouped options also include hints within the menu allowing you to quickly see the selections that apply to the row, column, or data cell.



Adjust page size in books

You can now adjust page size in books with the new zoom feature. Select a preset size to see your content at that magnification level. You can also resize the page view to fit the page or fit to width of your window. In both cases, the page size is responsive and automatically adjusts to fit the page or window when you resize your window.

Note: The zoom feature works only in consumption mode.

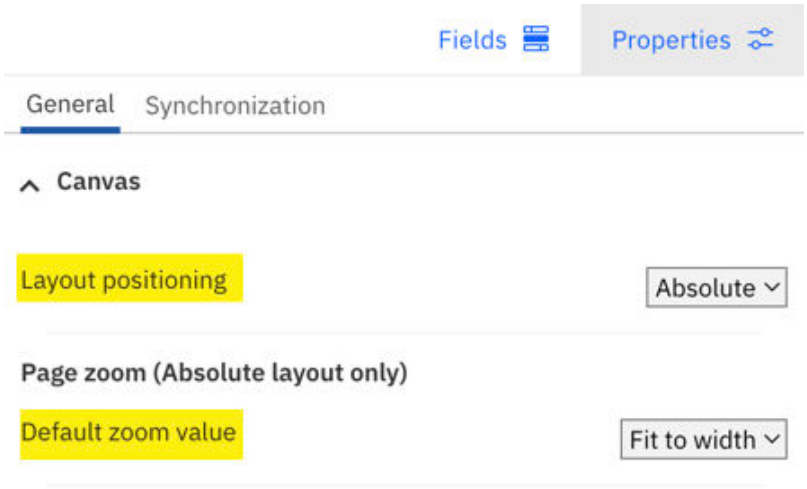


To use the zoom feature, make sure that the book is in **Absolute** layout. The zoom feature is not supported in books that use **Relative** layout position.

Note: When you upgrade from classic experience to new experience, depending on how you added tabs in books, the zoom feature might not work correctly. For more information, see known issue Zoom does not work correctly in upgraded books with templates.

You can change the layout position of a book in **Edit** mode on the **General** tab under **Properties**.

You can also set a default zoom value for your book under **Properties** so that it always opens in the selected size.

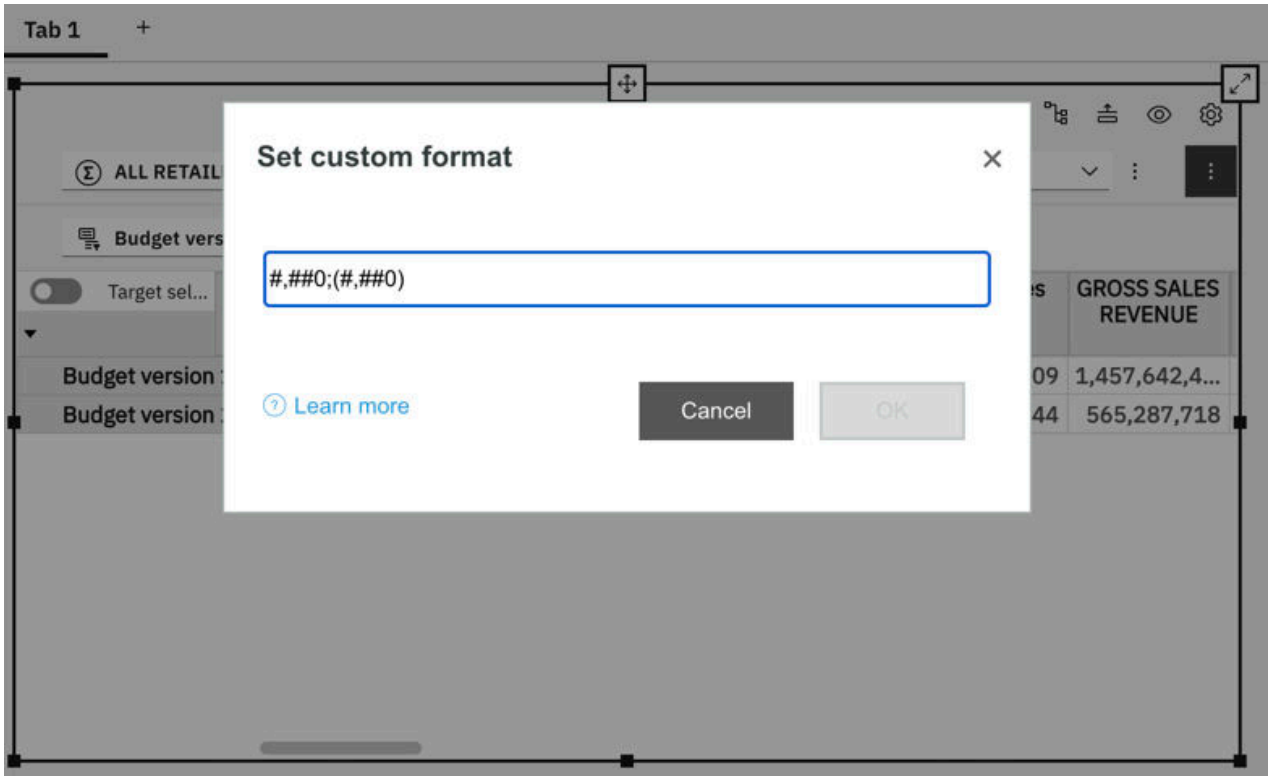


When you enter full screen mode, your zoom value is overridden and the page size changes to **Fit to page** to allow you to see the full contents of your page. However, you can still change your zoom value in full screen mode. When you exit full screen mode, you automatically go back to the previously selected zoom value.

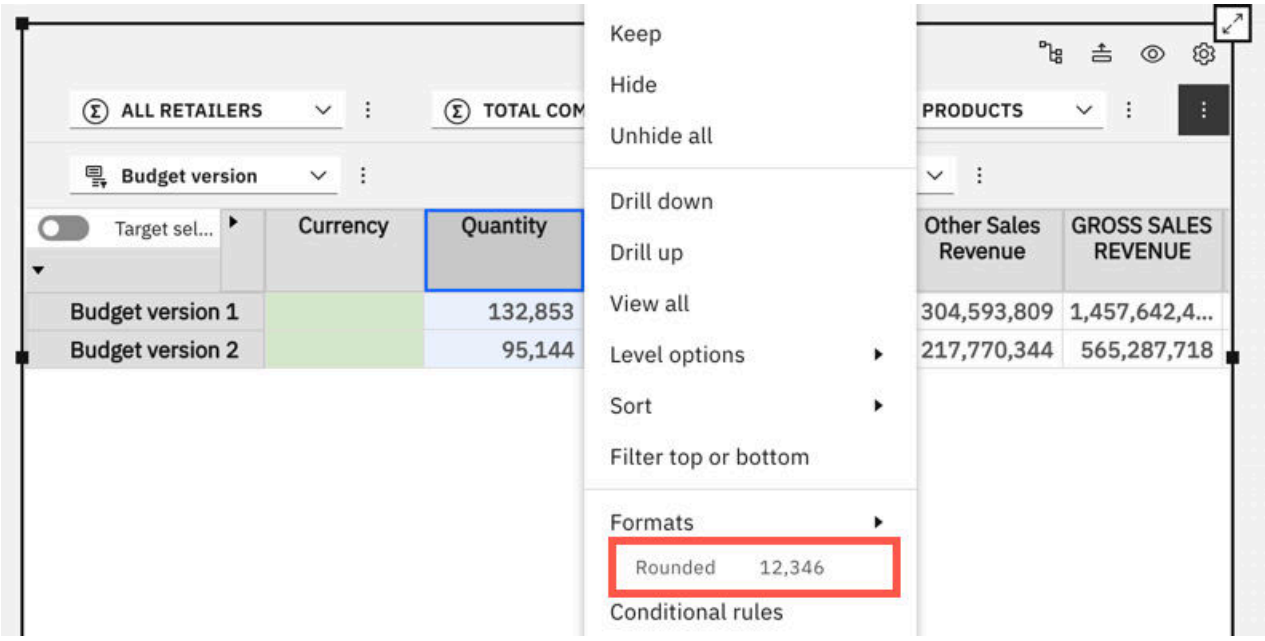
Enhanced data format feature

An enhancement to the data format feature in views now lets you quickly see the data format that was applied on a row, column, or an entire view.

When you apply a built-in data format or custom format to a row, column, or the entire view, the pattern for that format is now retained in the **Set custom format** field under **Custom format**.



For built-in data formats, you can also see the applied format under **Formats** when you right-click the relevant row or column.

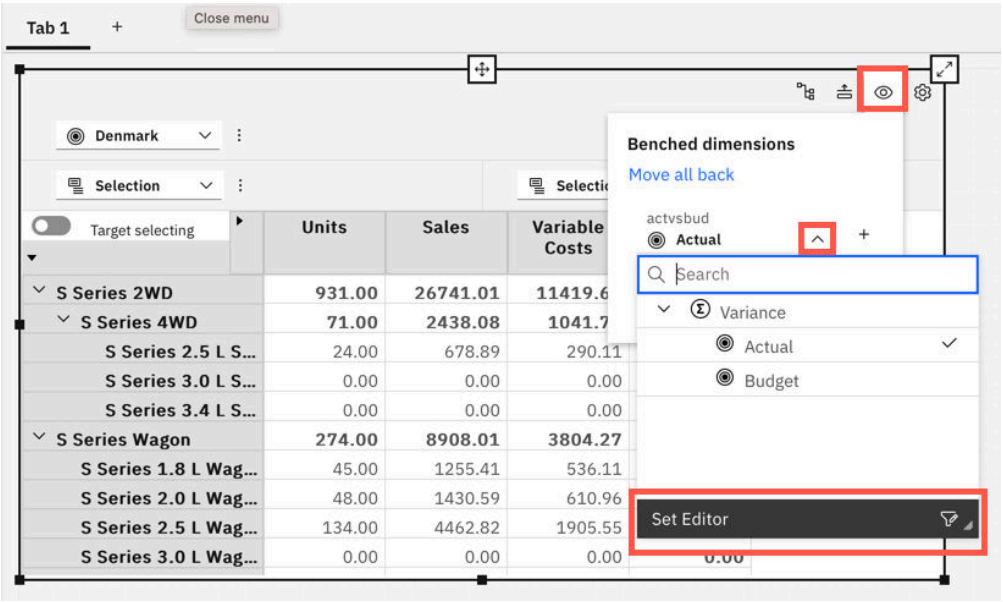


For more information, see Setting the data format in a view.

Open set editor for a benched dimension

In new experience views (or explorations), you can now open the set editor for dimensions that are on the bench.

To open the set editor for a benched dimension, click the **Bench** icon in a view and double-click the dimension. You can also click the drop-down menu icon for the benched dimension and open the set editor from the menu.



Provide a direct path to a Planning Analytics Workspace folder

You can now share a URL to your tabs that are labeled: **Shared**, **Personal**, **Favorites**, and **Recents**. You can also share a URL to provide a direct path to a folder within your tabs.

When you select tabs or select folders, the URL changes in your browser. The URL also changes in your browser when you select the breadcrumb links that are displayed under the tabs.

Copy and paste the updated URL to share a direct path to a tab, folder, or breadcrumb link.

Update to Planning Analytics Workspace Local installation on Windows Server 2016

In Planning Analytics Workspace Local version 2.0.78 and later, the Docker service file is no longer bundled with the installation kit. In previous versions, Docker is a prerequisite for installing Planning Analytics Workspace Local on Windows Server 2016.

When you now install Planning Analytics Workspace Local on Windows Server 2016, the installation script looks for Docker and if an existing version is not found, displays an error. To resolve the error and continue the installation process, you need to download Mirantis Container Runtime.

Before Planning Analytics Workspace Local 2.0.78, the installation script used the Docker file that was bundled with Planning Analytics Workspace to continue installation if Docker was not found on your system.

For more information, see Install Planning Analytics Workspace Local on Windows Server 2016.

Enable email notifications in Planning Analytics Workspace Local

Planning Analytics Workspace Local now supports both SMTP and SendGrid email services.

To enable the email service, specify the following parameters in the Planning Analytics Workspace Local configuration file. The configuration file is `paw.ps1` for Windows and `paw.env` for Linux. For more information, see Configure parameters.

ENABLE_EMAIL
Set this property to true to enable the email service in Planning Analytics Workspace Local. Either **EMAIL_SMTP_URL** or **SENDGRID_API_KEY** parameter must also be specified. If both parameters are specified, **EMAIL_SMTP_URL** is used.

Default: false

EMAIL_SMTP_URL
Use this parameter to enable the SMTP email service. The parameter specifies the SMTP server URL. The following are examples of such URLs:

```
smtp://username:password@smtp.example.com:587
```

```
smtp://username:password@smtp.example.com:587?secure=false
```

```
smtps://username:password@smtp.example.com:465
```

If you specify this parameter, the **SENDGRID_API_KEY** is not used, even if it's specified.

Default: empty (no URL is specified)

SENDGRID_API_KEY
Use this parameter to enable the SendGrid email service. The parameter specifies the API key for the SendGrid email account.

Note: You might need to contact the email administrator for your organization to obtain the API key that is specific to your email service.

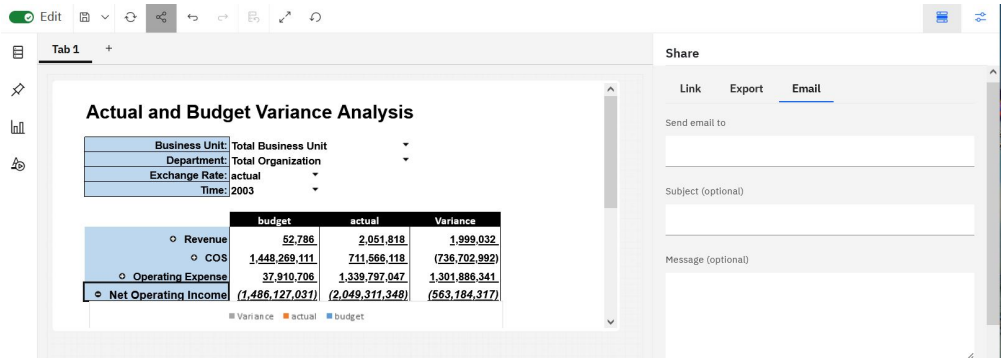
If you specify this parameter, specify also **EMAIL_FROM**, but don't specify **EMAIL_SMTP_URL**.

Default: empty (no API key is specified)

EMAIL_FROM
Specifies the sender address if it is required by the email server. This parameter is mandatory when **SENDGRID_API_KEY** is specified.

Note: When you change a paw configuration file, you must run `./scripts/paw` for your operating system or click **Start** in the Planning Analytics Workspace administration tool for your changes to take effect. Only services that are affected by the configuration change will restart.

The **Email** tab is now available in the user interface when you share a book or view.

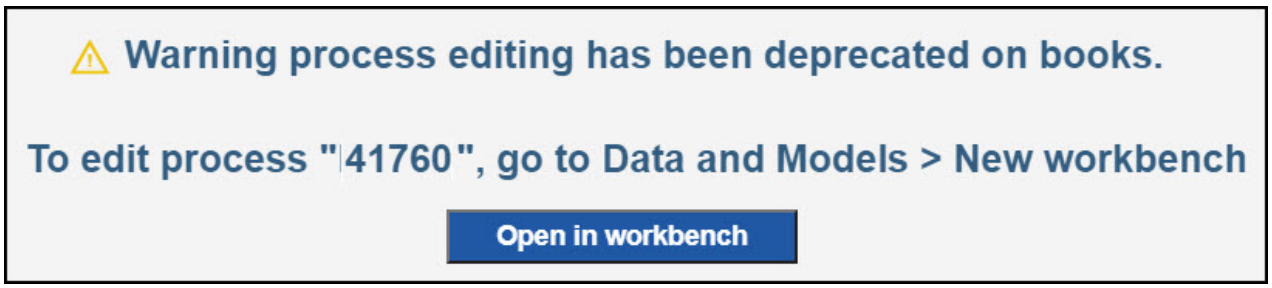


For more information, see Enable email notifications.

Deprecation notice - process editor to be removed from books, available only on workbenches as of Planning Analytics Workspace 2.0.79

Starting with Planning Analytics Workspace 2.0.79, processes must be created and edited on a modeling workbench.

If you are an administrator or modeler and you attempt to open a process in a book in 2.0.79, you'll receive a notification that process editing must be performed on a workbench. You can click **Open in workbench** to immediately open the process on a new workbench.



Deprecation notice for IBM Planning Analytics Workspace Classic experience

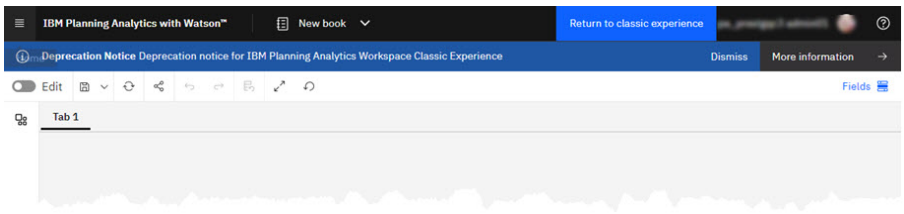
The IBM Planning Analytics team intends to remove the capability to remain on Planning Analytics Workspace Classic and preview the Planning Analytics Workspace new experience as part of the Planning Analytics Workspace 2.0.79 update in August 2022.

The 'new experience' is a major update to the Planning Analytics Workspace user experience released as part of the 2.0.56 update in October 2020. The Planning Analytics Workspace new experience provides an updated look and feel, improved navigation and content management. It also introduces Applications and Plans, a dedicated modeling environment, and Predictive Forecasting capabilities.

The user experience in 2.0.55 and earlier releases is referred to as Planning Analytics Workspace Classic. Cloud environments provisioned before the 2.0.56 update could remain on Planning Analytics Workspace Classic, preview the new experience, or permanently switch to the new experience.

Planning Analytics Workspace environments that use the Classic experience will automatically be updated to the new experience as part of the 2.0.79 update in August 2022. Planning Analytics cloud customers that use the Classic experience are encouraged to preview and switch to the new experience before August 2022.

If you are still using Planning Analytics Workspace Classic prior to the August 2022 update, administrators will see a deprecation notice banner on the home page when using Planning Analytics Workspace Classic or previewing the new experience. An administrator can click the **More information** link to view further details on the deprecation of Planning Analytics Workspace Classic.



The deprecation notice is presented to each administrator upon login. One administrator dismissing the banner dismisses the banner only for that administrator; other administrators can still see the banner.

The banner will reappear with each new Planning Analytics Workspace release until an administrator completes the switch to the new experience.

Note: This announcement does not impact Planning Analytics on-premise deployments.

Known issues

The following are known issues in Planning Analytics Workspace. These issues will be resolved in a future release.

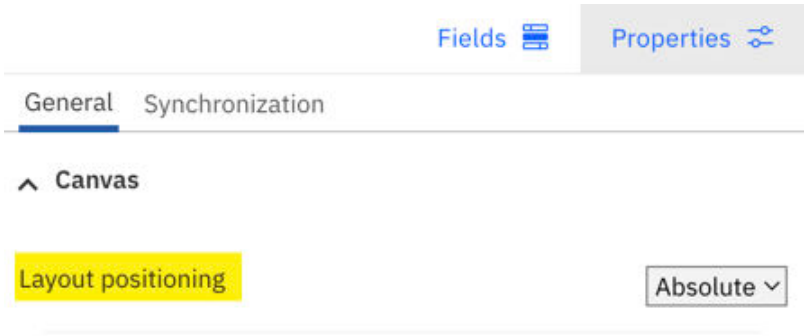
Zoom does not work correctly in upgraded books with templates

When you upgrade from the classic experience to new experience, depending on how you added the tabs in books with templates, the zoom feature might not work correctly.

In classic experience, different tabs in a book can have different layouts (relative or absolute). However, in new experience books, you can have only one layout.

When you upgrade from classic to new experience, the layout of each tab is retained. Even though the book's layout might display as **Absolute**, tabs that are created with templates are relative layout. When zoom feature's **Fit to page** is applied to the relative tabs, a white margin appears around the book. If you select a zoom value that is greater than 100%, a scroll bar appears on the relative tabs.

To fix this issue, change the layout position of the book from **Absolute** to **Relative** under **Properties** and save the book. Then, change the layout back to **Absolute**. The zoom feature will now work correctly.



2.0.77 - What's new, June 2, 2022

Learn about new features and known issues in version 2.0.77 of IBM Planning Analytics Workspace in the following topics.

Updates to each version of Planning Analytics Workspace are cumulative. To see what was new in previous releases, see Chapter 2, “What's new in Planning Analytics Workspace,” on page 45.

You can view the fix lists for this and previous versions of Planning Analytics Workspace at https://www.ibm.com/support/pages/ibm-planning-analytics-20-fix-lists#anchor2.

You can also review all new features introduced since 2.0.58, in the the IBM Planning Analytics Workspace new feature summary table. You can use the table to search for new features across all releases by description. You can also sort new features by release, date, functional area, and description.

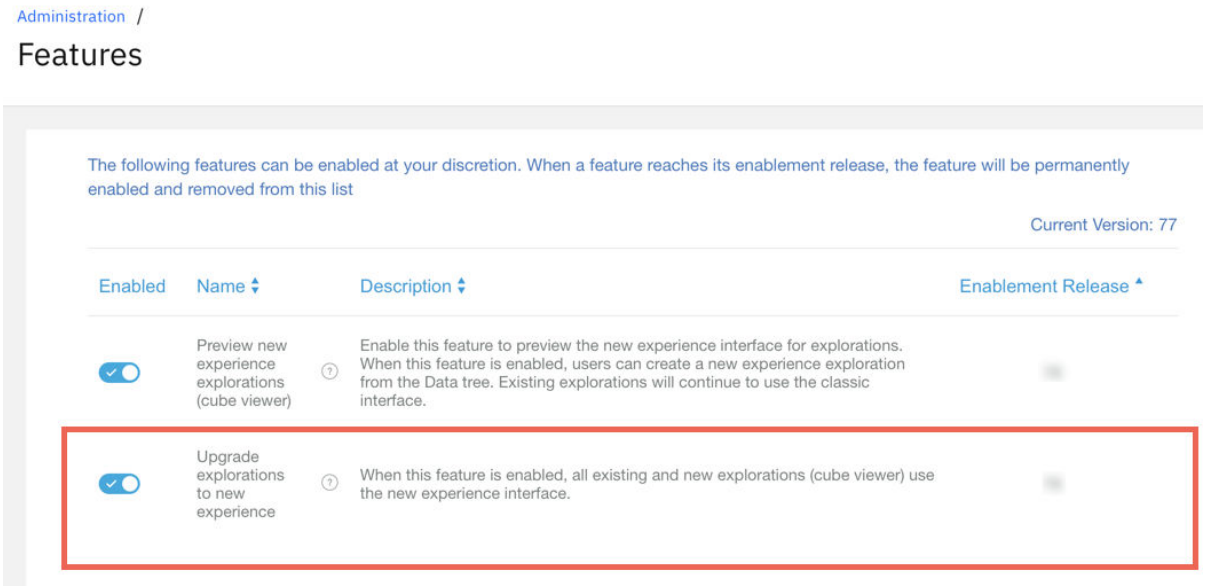
Timeline of previous Planning Analytics releases

For a comprehensive listing of Planning Analytics component releases by month and year, see Timeline for IBM Planning Analytics Releases. You can view versions and release months for the following components:

- Planning Analytics Local TM1 Server
- Planning Analytics Workspace
- Planning Analytics for Microsoft Excel
- Planning Analytics Spreadsheet Services/TM1 Web

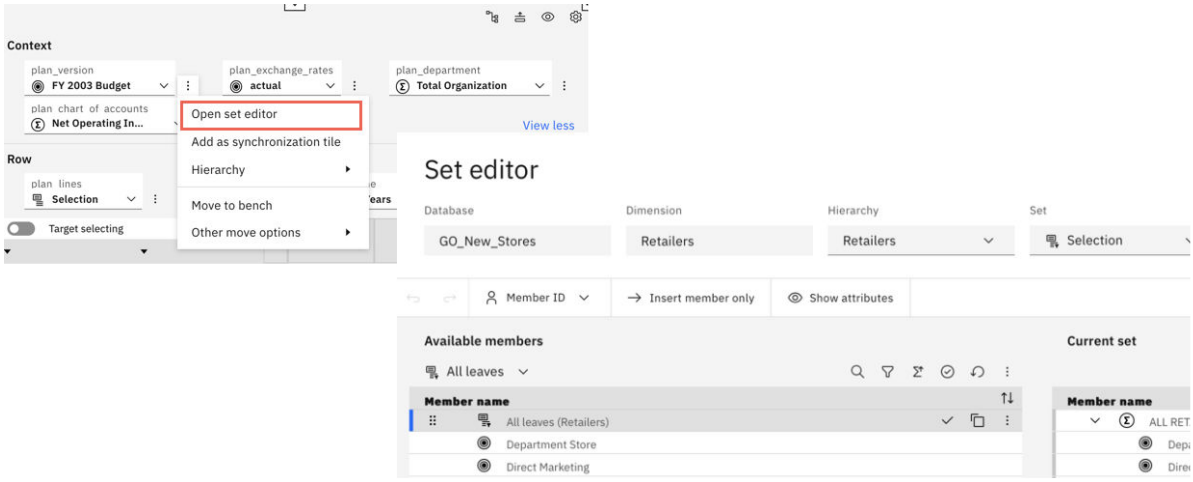
Upgrade explorations to the new experience

An option to upgrade explorations (cube viewer) to the new experience is now available on the **Features** administration tab. The new experience interface offers numerous enhancements and improvements.

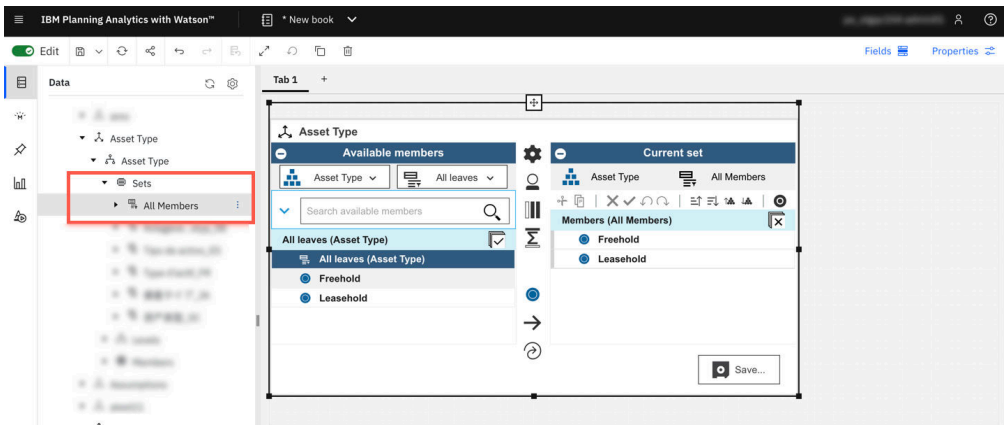


When you enable this feature, all existing and new explorations in books use the new experience interface. Explorations that previously used the classic interface are converted to new experience but retain the look (colors and font) of the classic interface.

Upgrading explorations to the new interface also upgrades set editors but only those that are opened from the new experience exploration.



If you add a set editor as a widget to a book from the data tree, the set editor continues to use the classic interface.



Note: Enabling the upgrade feature, upgrades only the explorations in Planning Analytics Workspace books. Explorations and set editors in the modeling workbench and IBM Planning Analytics for Microsoft Excel are not changed.

A preview of the new experience exploration and set editor was released in Planning Analytics Workspace 2.0.71 and is also available on the **Features** administration tab. You can enable preview to explore the new experience interface and compare the new explorations with the classic ones before you upgrade.

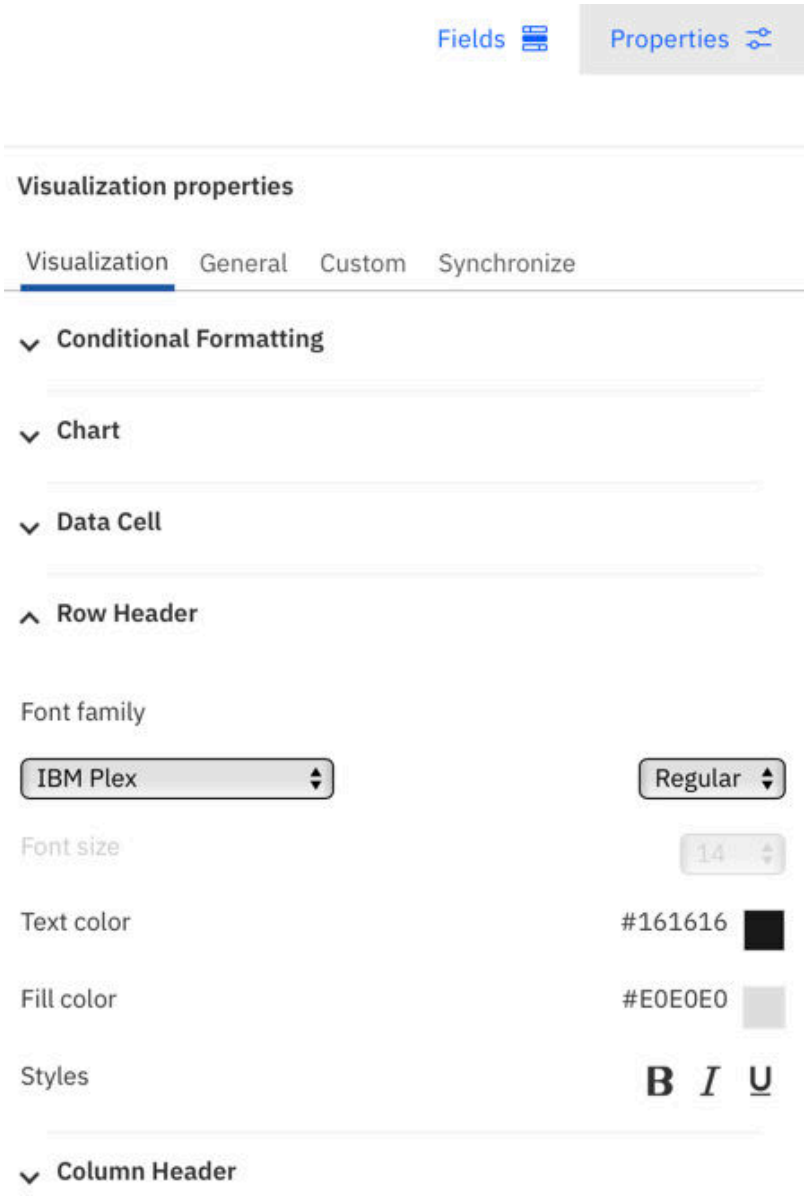
For more information, see New experience view and set editor.

Changes to text properties for explorations

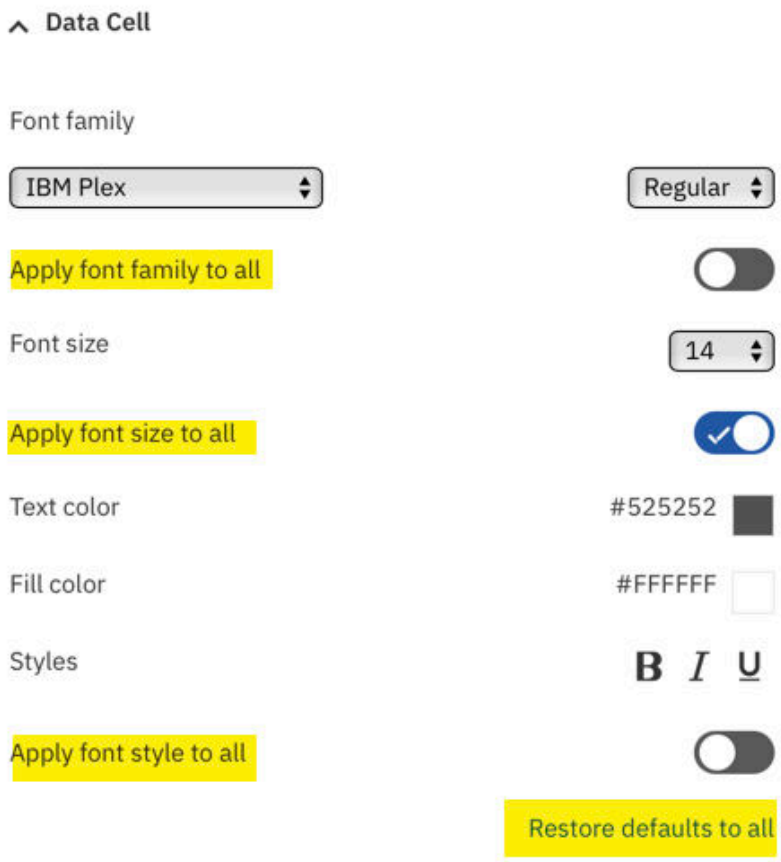
The text properties for explorations are now under the **Visualization** tab instead of the **Custom** tab in **Properties**.

Note: Text properties for single cell widgets continue to be under **Custom** tab.

The **Data Cell**, **Row Header**, and **Column Header** sections under the **Visualization** tab each have their own text properties. The following example shows the text properties for the **Row Header** in an exploration.



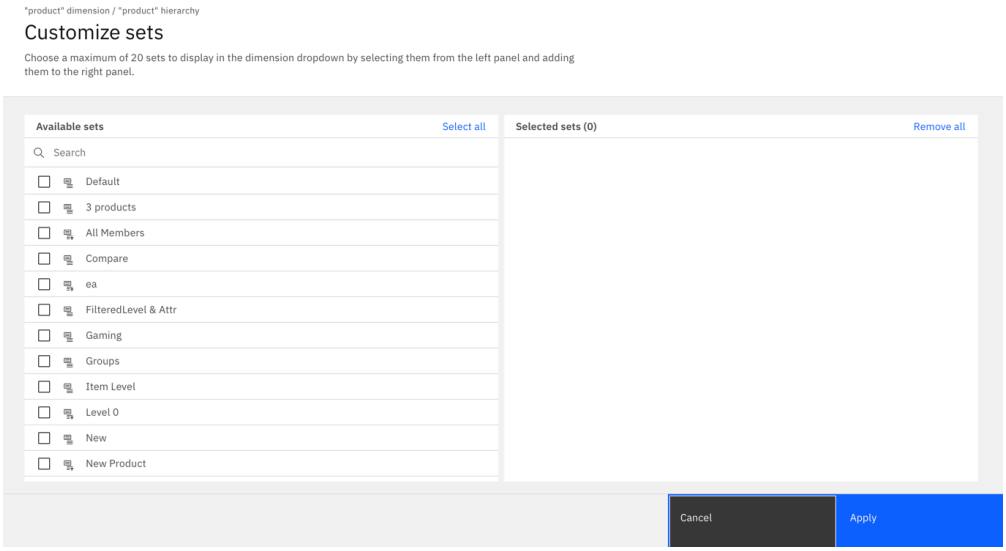
You can quickly apply the font family, font size, and font style to all sections or restore defaults for all sections under **Data Cell**.



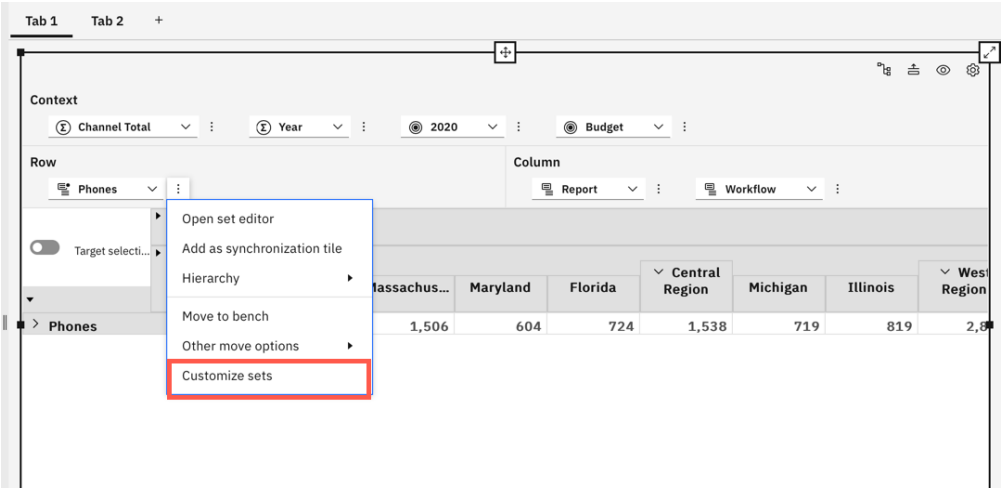
Select the sets that display in a dimension drop-down

Use the new **Customize sets** option in the new experience exploration (cube view) and visualizations to limit the number of sets that appear in a dimension drop-down. You can select up to 20 sets for a dimension.

Note: The **Customize sets** option does not limit the sets that you see in the set editor. You can still see the full list of sets in the set editor.



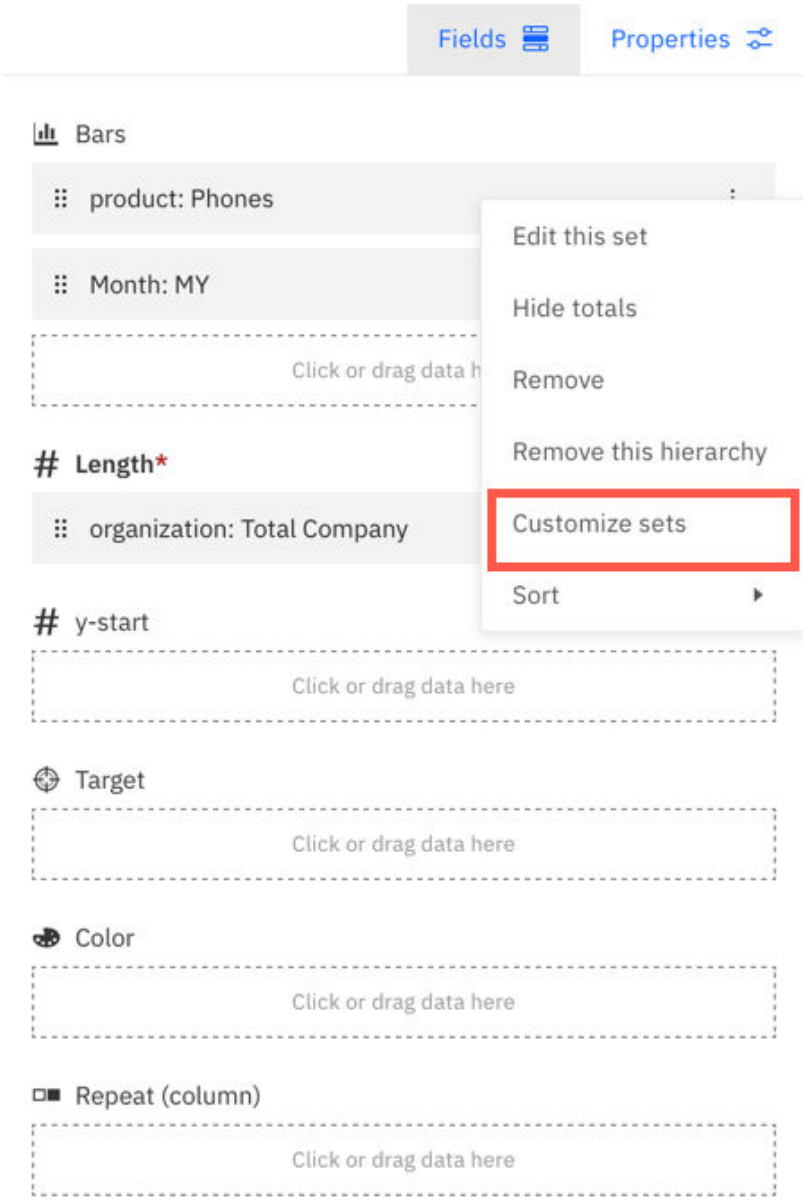
To **Customize sets** in an exploration, click the context menu of a dimension in the **Row** or **Column** area. You cannot customize sets for dimensions in the **Context** area.



You can move dimensions with customized sets between the **Row**, **Column**, and **Context** areas without losing the limited sets.

However, if you move a dimension with customized sets off the exploration and add it to the book as a widget, the limited list of sets is lost. You will see all the sets for that dimension in its drop-down.

You can also customize sets for dimensions in visualizations. Select the visualization in **Edit** mode and click **Fields**. Click the menu for the dimension you want to customize, and select **Customize sets**.

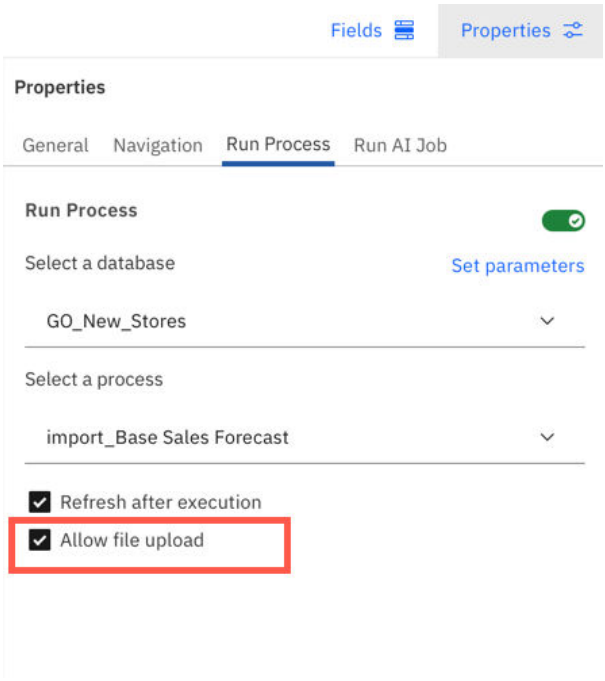


You can switch between a visualization and an exploration (or vice versa) without losing any customized sets that you applied.

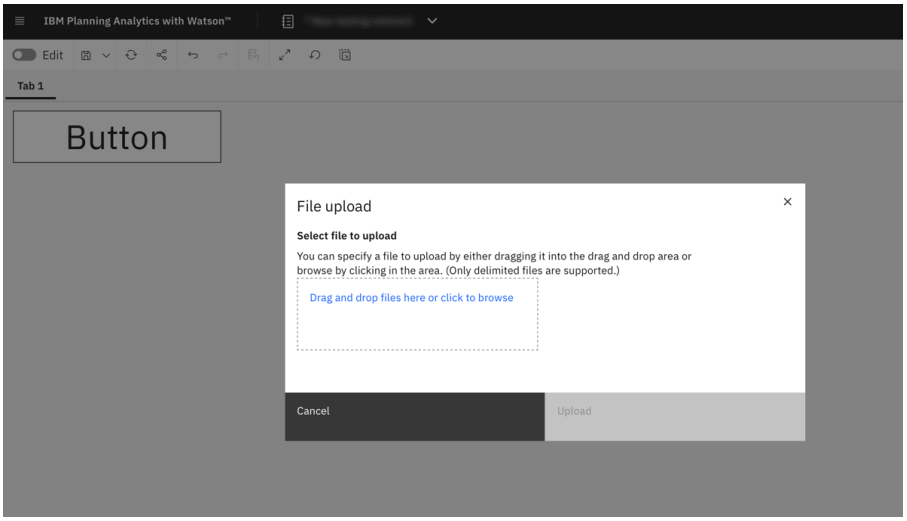
For more information, see Customize sets in dimension lists.

Upload files to a Planning Analytics database with the action button

In Planning Analytics Workspace books, the Action Button has a new property, **Allow file upload**, that lets you upload a file to a Planning Analytics database and run a process to use that file. This can be helpful if you want to, for example, import data from a specific file into a view you are using.

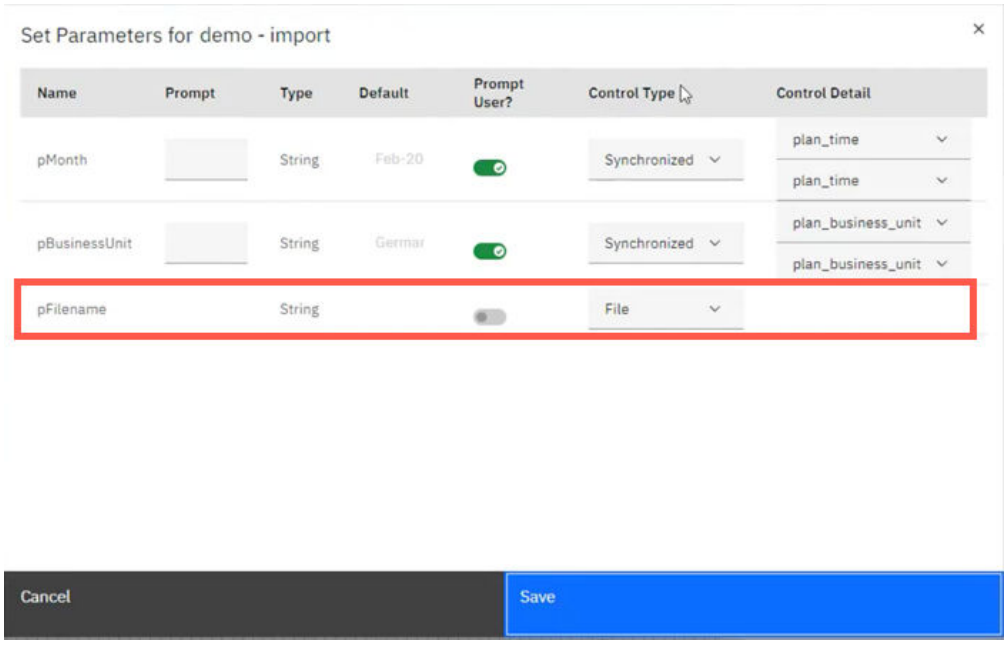


When you configure an action button to run a process (under **Properties > Run Process**), selecting **Allow file upload** prompts you to upload a file when you click the Action Button.



Note: The process runs only if the file is uploaded successfully.

A new **Control Type** parameter, **File**, is now also available under Set parameters. This new parameter displays only when the **Allow file upload** property is selected.



The **File** control type passes the file name of the uploaded file to the process parameter.

For more information, see Upload files to a database with the action button.

Manage files with File manager

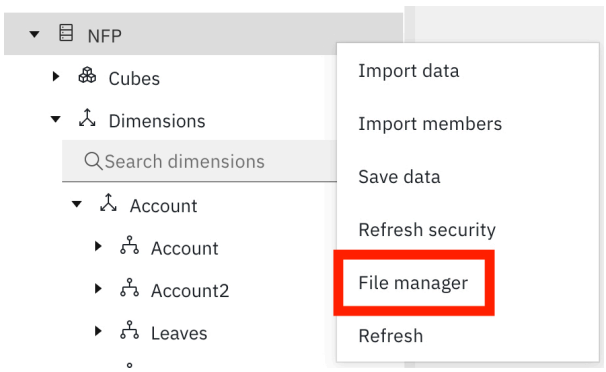
A new tool, **File manager**, shows a list of all the files and folders that have been uploaded to the Planning Analytics database and allows you to manage those items.

File manager is available only on the modeling workbench; you cannot open **File manager** from a book. You must be an Administrator or Modeler to work with **File manager**.

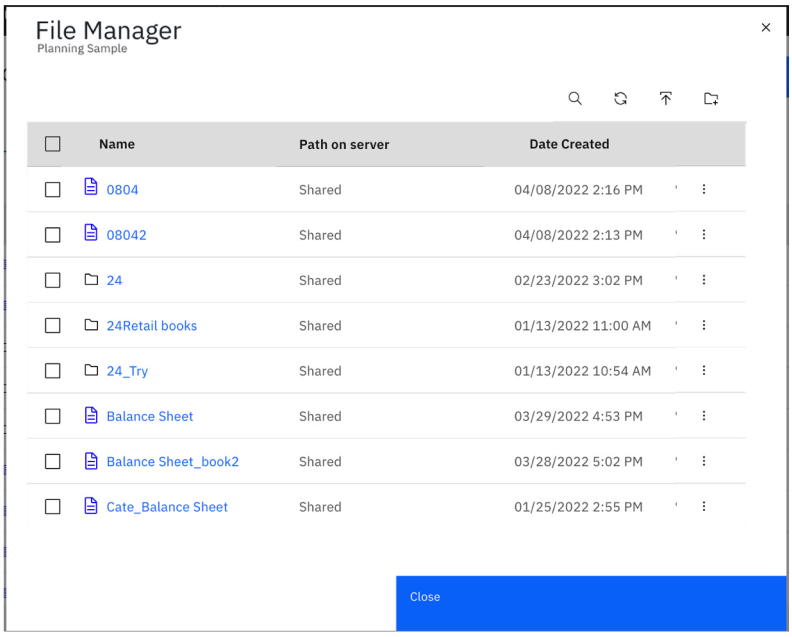
With **File manager**, you can complete the following tasks:

- Upload a file, or multiple files at once
- Delete a file, or multiple files at once
- Create folders
- Organize uploaded files into folders
- Delete folders
- Download files
- Refresh files

To launch **File manager** for a database, right-click the database in the Databases tree on a modeling workbench, then click **File manager**.



File manager displays a list of all the files and folders that have been uploaded to the server.

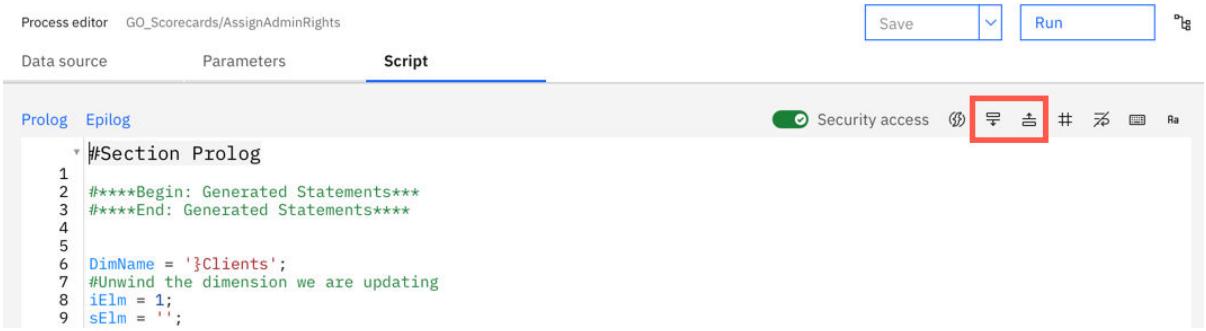


You can use the toolbar and the **Actions** button ⋮ to work with files and folders.

Expand and collapse regions in the process and rules editor

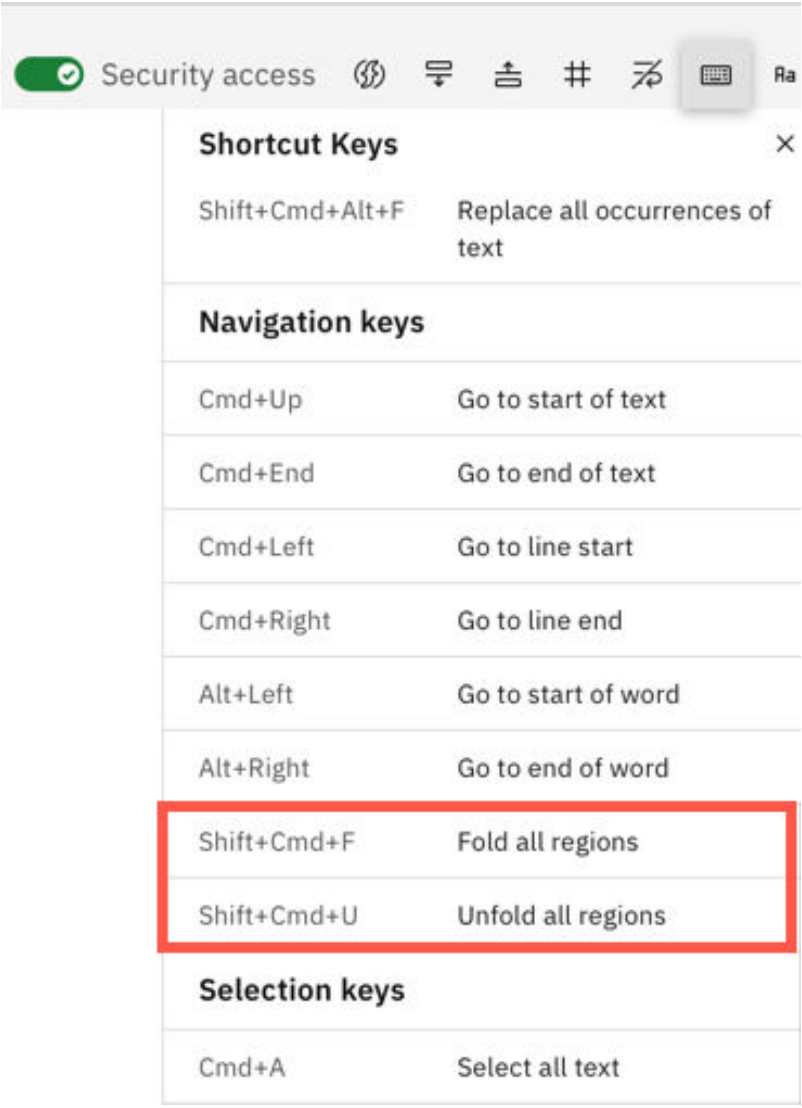
You can now expand and collapse regions in the process and rules editor on the modeling workbench. Before Planning Analytics Workspace 2.0.77, you could only expand and collapse regions one at a time.

Click **Unfold all regions** to expand all regions and **Fold all regions** to collapse regions in both the process and rules editor.



In the process editor, folding and unfolding regions starts at the **Section** level.

Two new shortcut keys for the expand and collapse features are now also available in the process and rules editor.

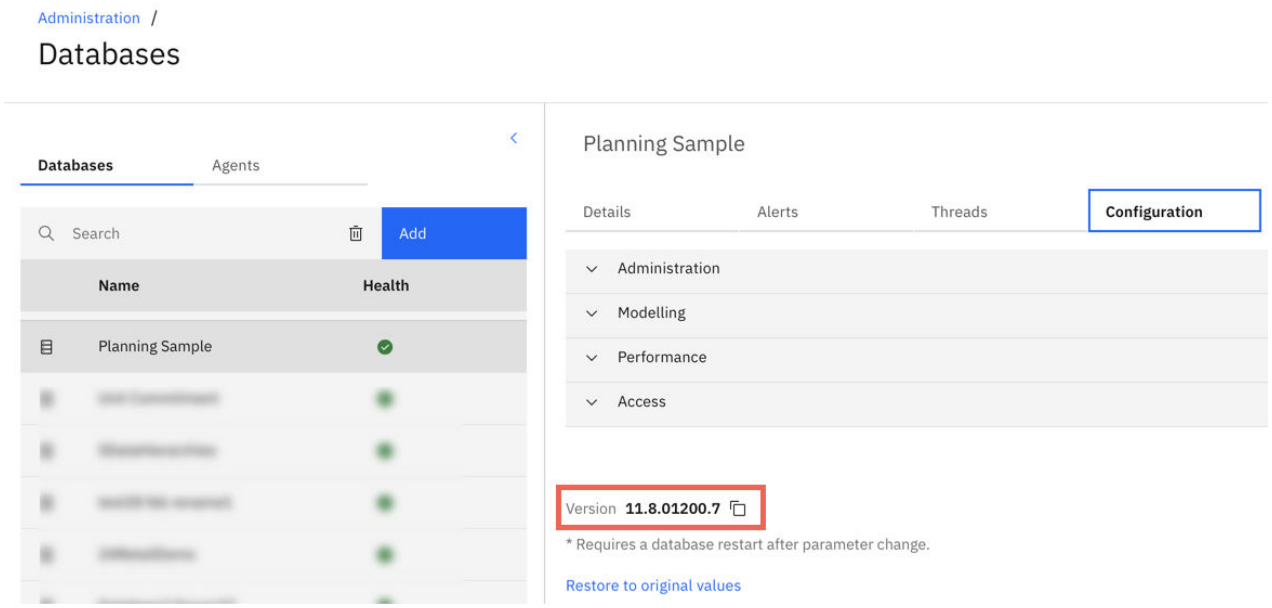


Viewing the TM1 database version (admins only)

You can now see the version of a TM1 database in **Administration** under the **Home** page in Planning Analytics Workspace.

To see the TM1 database version:

1. On the **Administration** page, click the **Databases** tile.
2. On the **Databases** page, select a database and click **Configuration**.

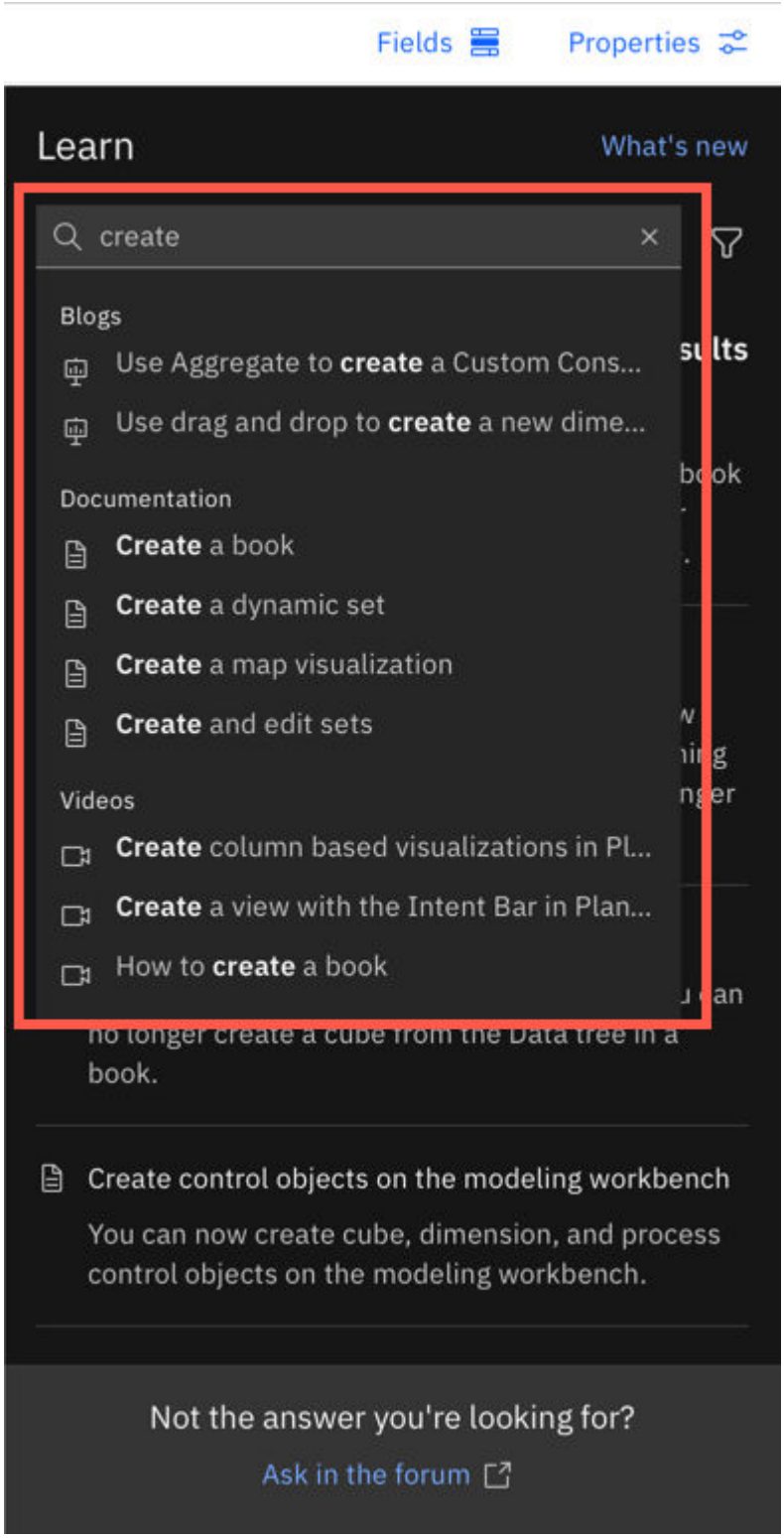


If you need to copy the version number, click the **Copy** icon next to the version number.

Auto-complete and popular search suggestions in the cognitive Learn pane

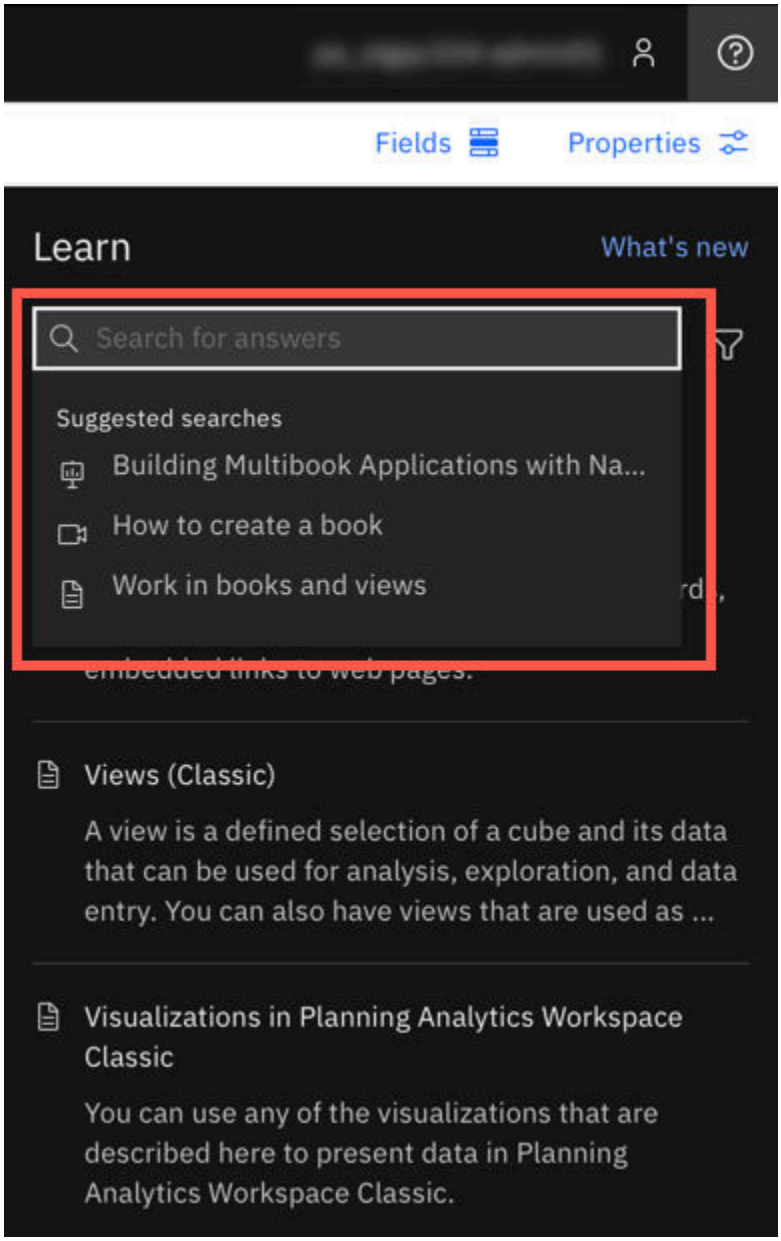
Find answers to your Planning Analytics Workspace questions faster! The Learn pane now predicts your search query as you type keywords in the **Search** field and displays a list of search suggestions from all content types.

This auto-complete feature makes it easy to complete your search quickly. Simply select a search suggestion to see related help content.



When you search in any supported language other than English, the auto-complete feature returns translated documentation in your search suggestions. You also see blogs and videos that match your search query, however, blogs and videos aren't translated.

Not sure what to search for in the Learn pane? Click the **Search** field to see a list of popular search suggestions.



For more information, see Find information.

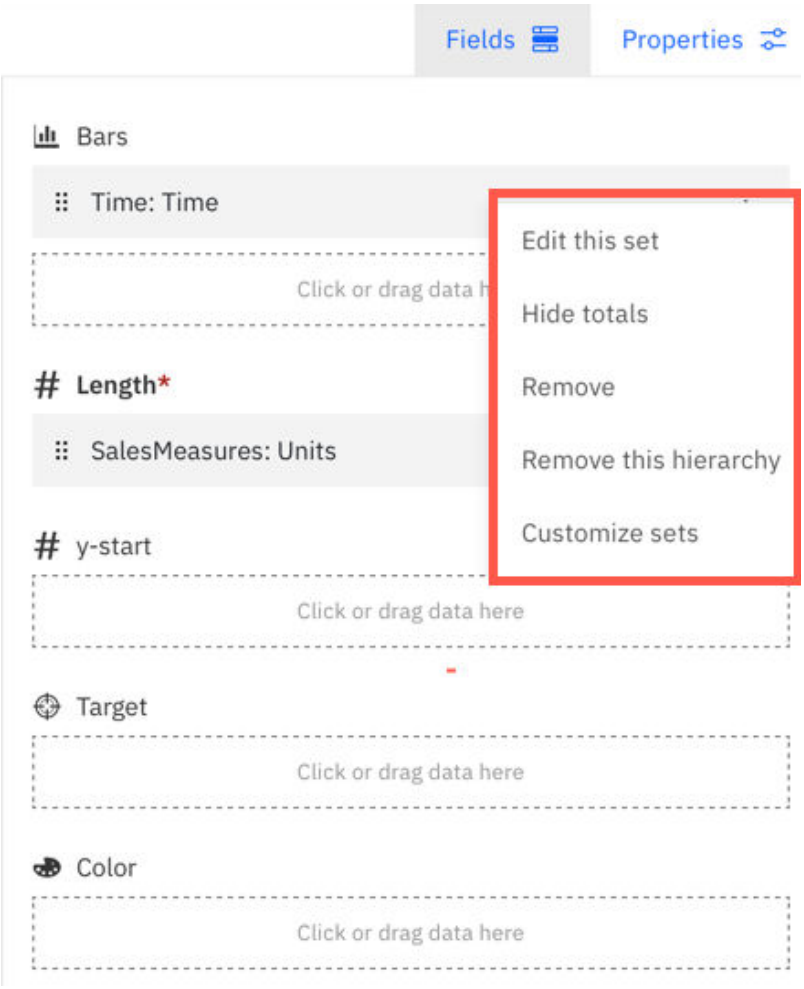
Updated menu options for visualization field slots

The options in the menu for field slots under the **Fields** tab have been updated in Planning Analytics Workspace 2.0.77.

The following changes were made to the menu options:

- The **Hide from view** option was replaced with **Remove**.

  The **Remove** option lets you remove a dimension from the field it was assigned to and move it to the **Filters** section.
- **Remove this hierarchy** now moves the dimension from the field slot to the **Filters** section and reverts the set to the dimension's default set.
- The **Remove field** option is no longer available.



To see the menu for a field slot:

1. While in **Edit** mode, select the visualization in your book.
2. Click **Fields**.
3. Click the menu icon in a field slot to see the options for that field.

For more information, see Create a visualization directly in a book.

Hide hierarchy name to shorten visualization titles

You can now hide the hierarchy name in an axis or legend title to shorten the labels in a visualization. The axis and legend title labels show both the hierarchy name and the name of the set or member that was selected. When the hierarchy name is hidden, you see the name of only the set or the selected member.

To hide the hierarchy name in a title:

1. Select a visualization in **Edit** mode.
2. Click **Properties**.
3. To hide the hierarchy name in an axis title, expand the **Axis** section under **Visualization**.

   To hide the hierarchy name in a legend title, expand the **Legend** section.
4. Enable **Hide hierarchy name**.

   For visualizations with axes, you can hide the hierarchy name in the **Item axis title**, **Value axis title**, or both.

Note: The **Hide hierarchy name** toggle works only on automatically generated titles and does not work on custom titles.

You can still see the full labels for axes or legend titles in the respective field slots on the **Fields** tab.

If multiple dimensions are assigned to a field in a visualization with axes, hiding the hierarchy name shortens the title for each dimension.

Similarly, for visualizations that have multiple legends, enabling **Hide hierarchy name** shortens the title for all legends in the visualization.

Restore a book to the currently open tab

When you reset a book from a saved tab to reverse changes you made, the book now restores to that currently open tab. Before Planning Analytics Workspace 2.0.77, **Reset book** restored the book to the first tab.

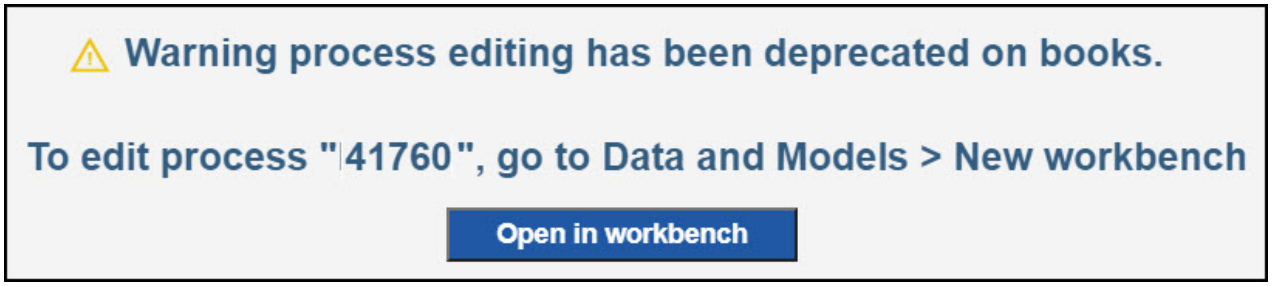
If you reset a book from a tab that has not been saved, the book returns to the first tab.

For more information, see Resetting a book.

Deprecation notice - process editor to be removed from books, available only on workbenches as of Planning Analytics Workspace 2.0.79

Starting with Planning Analytics Workspace 2.0.79, processes must be created and edited on a modeling workbench.

If you are an administrator or modeler and you attempt to open a process in a book in 2.0.79, you'll receive a notification that process editing must be performed on a workbench. You can click **Open in workbench** to immediately open the process on a new workbench.



Deprecation notice for IBM Planning Analytics Workspace Classic experience

The IBM Planning Analytics team intends to remove the capability to remain on Planning Analytics Workspace Classic and preview the Planning Analytics Workspace new experience as part of the Planning Analytics Workspace 2.0.79 update in August 2022.

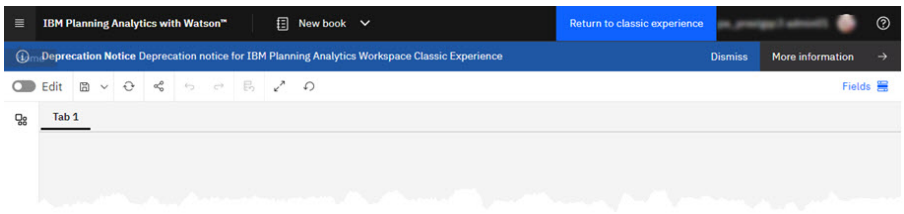
The 'new experience' is a major update to the Planning Analytics Workspace user experience released as part of the 2.0.56 update in October 2020. The Planning Analytics Workspace new experience provides an updated look and feel, improved navigation and content management. It also introduces Applications and Plans, a dedicated modeling environment, and Predictive Forecasting capabilities.

The user experience in 2.0.55 and earlier releases is referred to as Planning Analytics Workspace Classic. Cloud environments provisioned before the 2.0.56 update could remain on Planning Analytics Workspace Classic, preview the new experience, or permanently switch to the new experience.

Planning Analytics Workspace environments that use the Classic experience will automatically be updated to the new experience as part of the 2.0.79 update in August 2022. Planning Analytics cloud customers that use the Classic experience are encouraged to preview and switch to the new experience before August 2022.

If you are still using Planning Analytics Workspace Classic prior to the August 2022 update, administrators will see a deprecation notice banner on the home page when using Planning Analytics

Workspace Classic or previewing the new experience. An administrator can click the **More information** link to view further details on the deprecation of Planning Analytics Workspace Classic.



The deprecation notice is presented to each administrator upon login. One administrator dismissing the banner dismisses the banner only for that administrator; other administrators can still see the banner.

The banner will reappear with each new Planning Analytics Workspace release until an administrator completes the switch to the new experience.

Note: This announcement does not impact Planning Analytics on-premise deployments.

2.0.76 - What's new, May 5, 2022

Learn about new features and known issues in version 2.0.76 of IBM Planning Analytics Workspace in the following topics.

Updates to each version of Planning Analytics Workspace are cumulative. To see what was new in previous releases, see Chapter 2, “What's new in Planning Analytics Workspace,” on page 45.

You can view the fix lists for this and previous versions of Planning Analytics Workspace at https://www.ibm.com/support/pages/ibm-planning-analytics-20-fix-lists#anchor2.

You can also review all new features introduced since 2.0.58, in the the IBM Planning Analytics Workspace new feature summary table. You can use the table to search for new features across all releases by description. You can also sort new features by release, date, functional area, and description.

Timeline of previous Planning Analytics releases

For a comprehensive listing of Planning Analytics component releases by month and year, see Timeline for IBM Planning Analytics Releases. You can view versions and release months for the following components:

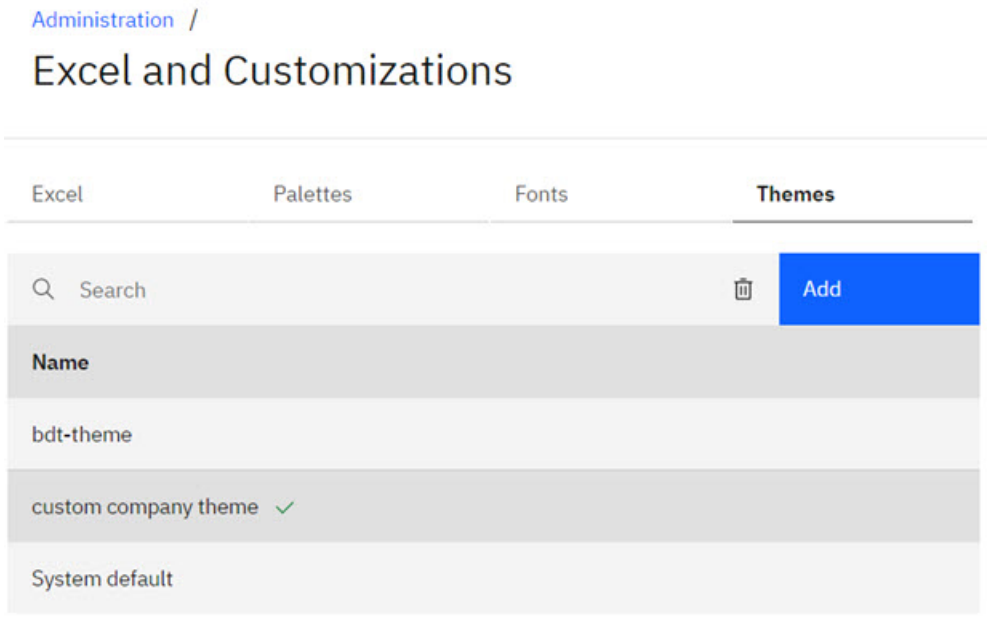
- Planning Analytics Local TM1 Server
- Planning Analytics Workspace
- Planning Analytics for Microsoft Excel
- Planning Analytics Spreadsheet Services/TM1 Web

Create and apply a custom theme for Planning Analytics Workspace

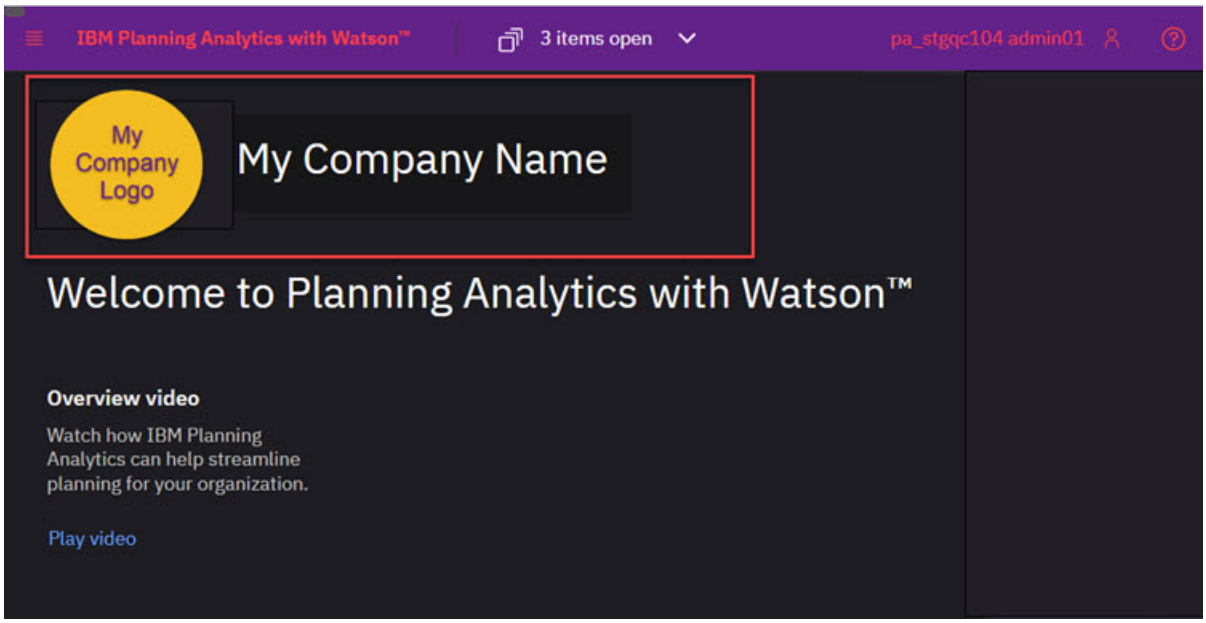
You can now create and upload a custom theme to reflect your corporate branding in Planning Analytics Workspace.

You can use a theme to modify the colors of the application bar and the navigation bar, set the corporate name shown on the home page, and specify an image to display on the home page.

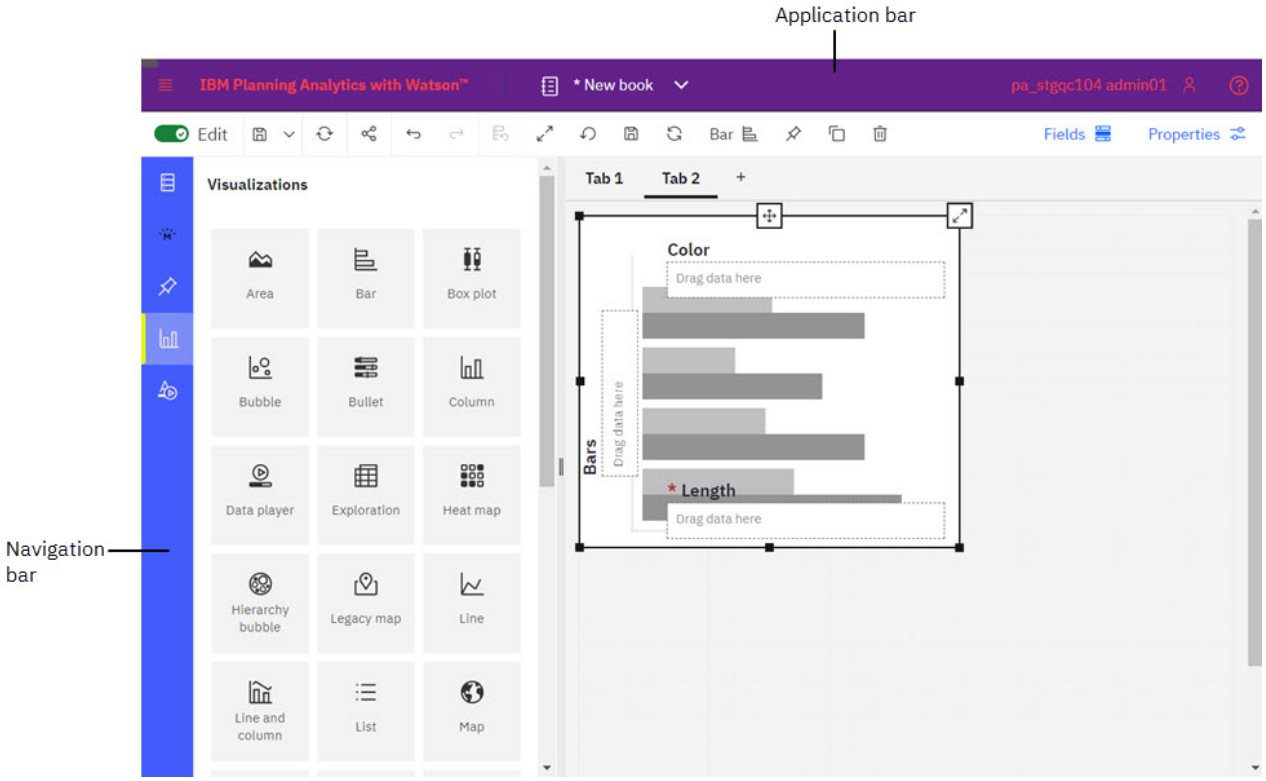
The **Excel and Customizations** page in Planning Analytics Administration on cloud and the **Customizations** page in Planning Analytics Administration local include a new **Themes** tab. You can use the **Themes** tab to upload, manage, and apply themes.



A theme is defined in a `.zip` archive that contains a `.json` file and an `image` directory. The keys in the `.json` specify the colors and images in you interface. For example, you can specify an image and company name on the home page.



Similarly, you can set colors for the application bar and navigation bar.



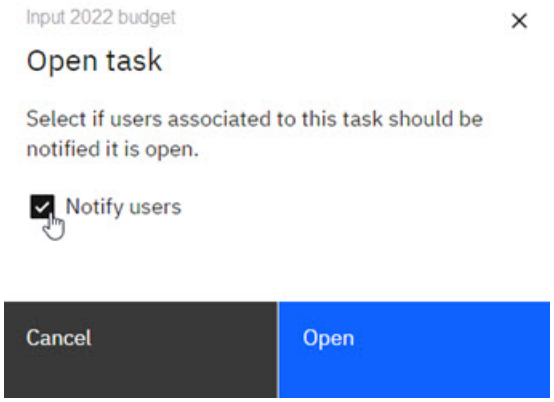
For full details on creating and managing themes, see Customize the interface for your company when Planning Analytics Workspace 2.0.76 is released.

For more information, see Creating a custom theme.

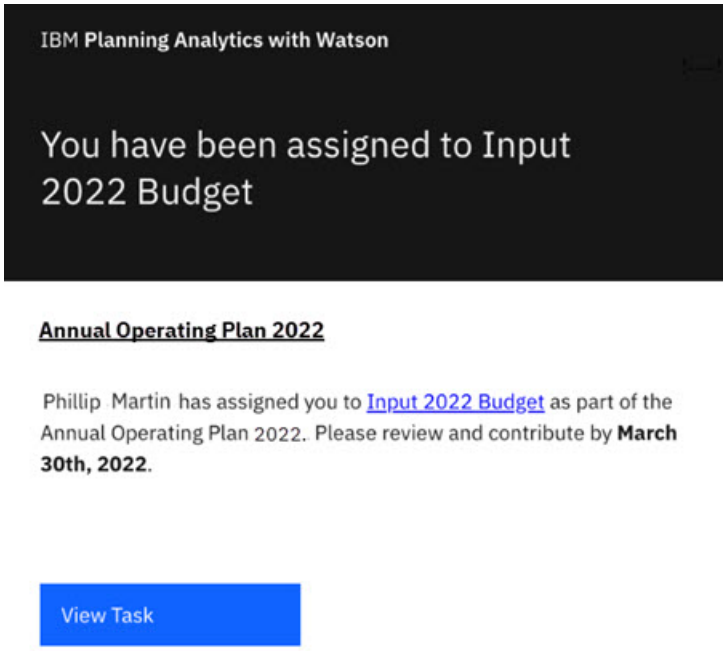
Send email notification when you open a plan step

You can now send an email notification to contributors when you open a step in a plan.

When a step include at least one asset and has at least one user group assigned to it, you'll receive the option to **Notify users** when you open the step in edit mode.



If you select the **Notify users** option and then click **Open** to open the step, all users in the groups assigned to the step receive an email notification similar to this, including a direct link to the plan step.



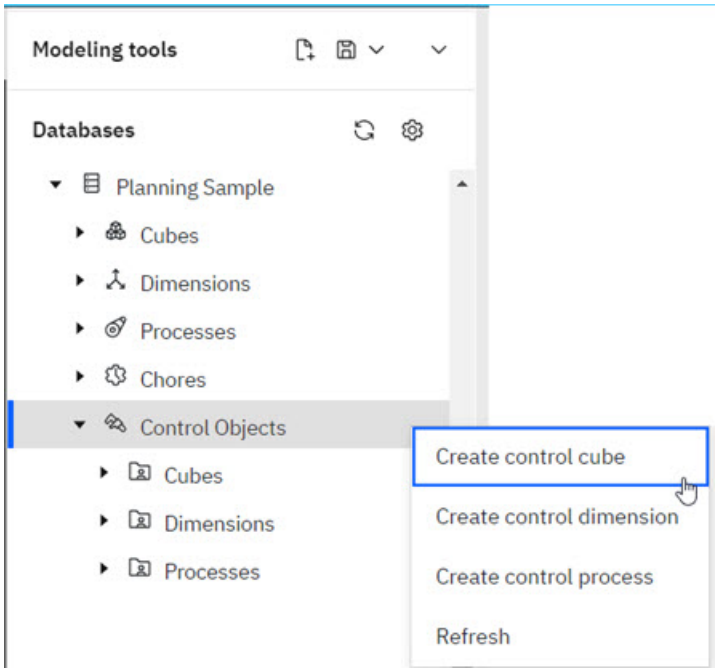
If the Everyone group is assigned to the step, email is **not** sent to members of the Everyone group when the step is opened.

Note: The **Notify users** option appears only when you open a step in a plan that is open. If you open a step in a closed plan, there is no option to send email notification to users.

For more information, see Manage a plan.

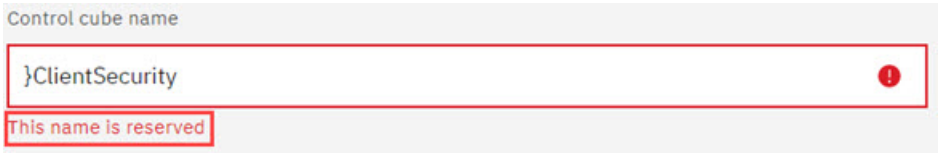
Create control objects on the modeling workbench

You can now create cube, dimension, and process control objects on the modeling workbench.



To create a control object, click ⋮ next to the **Control Objects** node, then click the appropriate option for the type of control object you want to create.

When you make a selection, you must first enter an object name before you proceed to the appropriate editor. All system control object names are reserved and validated when you create a new control object. If you attempt to create a new control object with a reserved name, you receive a notification.

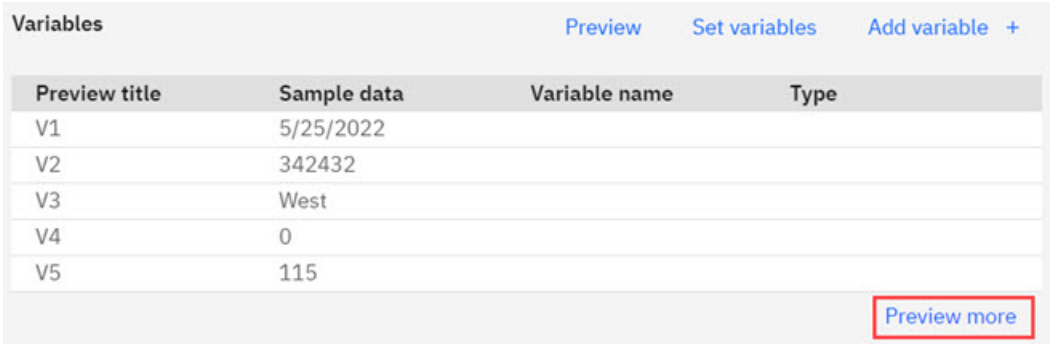


For more information, see Control objects.

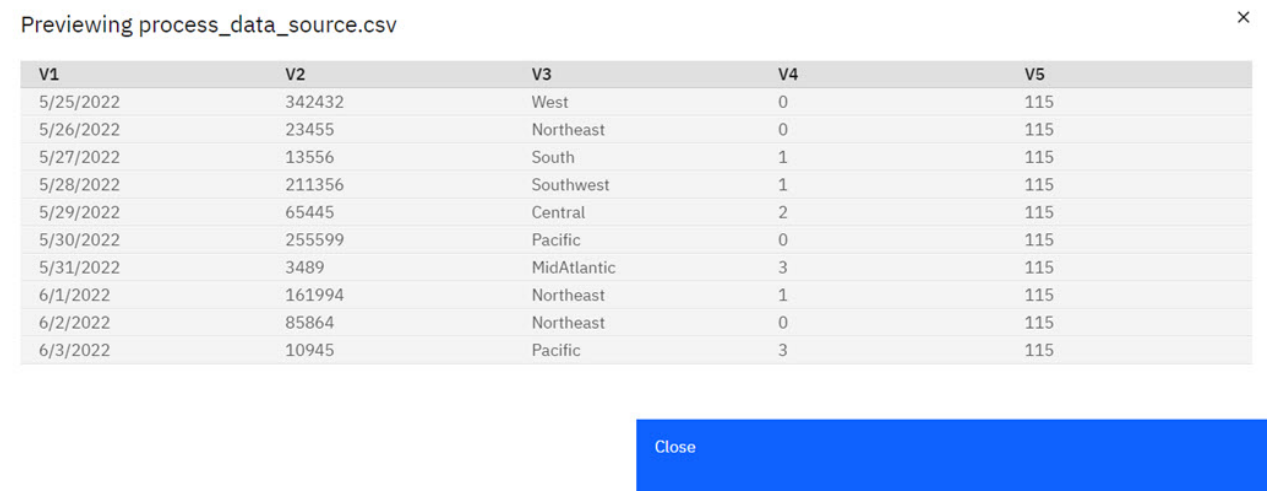
Preview additional data source rows in the process editor

When you are creating or editing a process with a database connection or file data source, you can now preview additional rows to assist you in managing your process.

After you click **Preview** to initially preview your data source, you'll see a new **Preview more** option.



Click **Preview more** to view the first ten rows in your data source. These additional rows can help you better understand your data source and structure. The additional rows can also help you to confirm that you have loaded the intended data source.

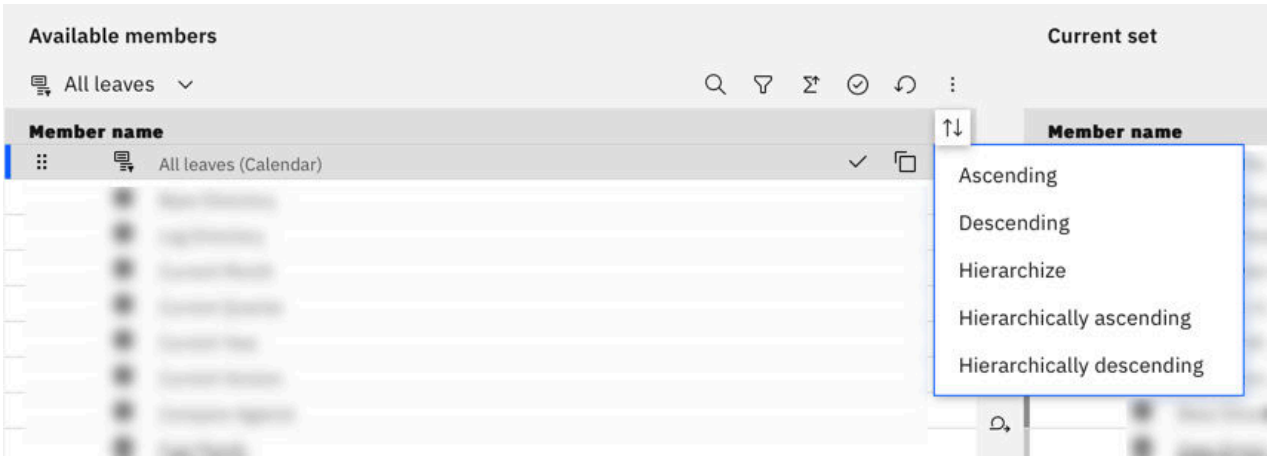


Sorting available members in the new experience set editor

You can now sort members, attributes, and properties under **Available members** in the new experience set editor. Previously, you could sort only the **Current set**.

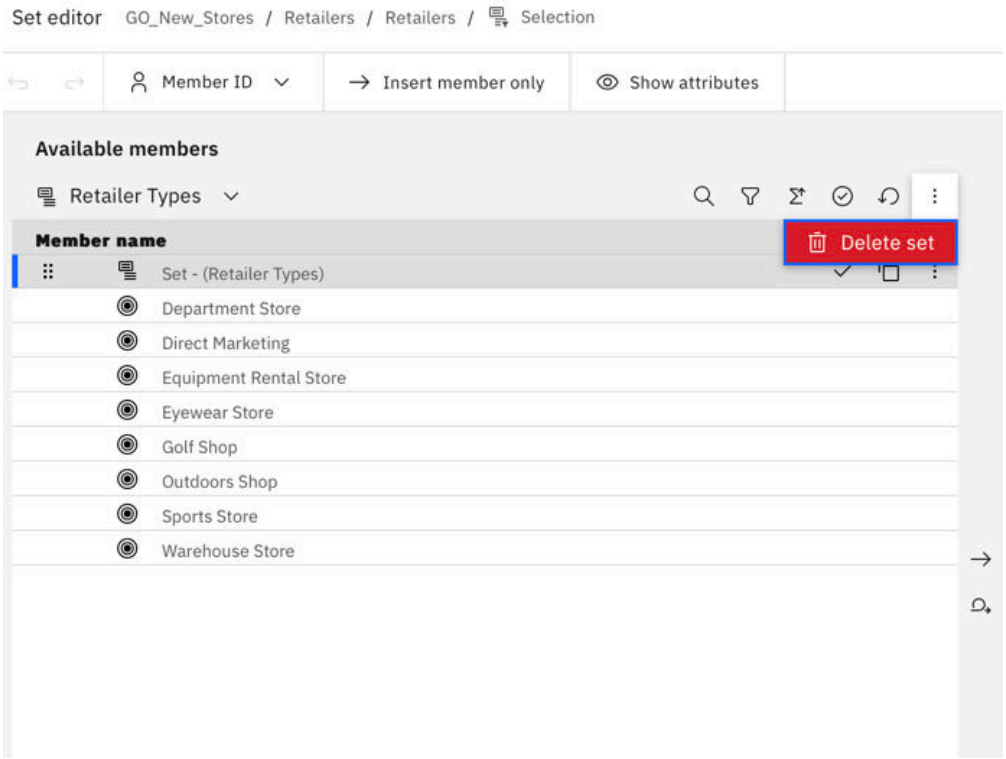
Note: To use the new experience view and set editor, you need to enable the feature under **Features** in **Administration**. For more information, see Manage features.

Click **Sort** next to the member, attribute, or property name under **Available members** and select how you want to sort the column. The **Hierarchize** option reverts any sorting you applied to the member's column.



Delete sets from the new experience set editor

An additional way to delete sets is now available. Previously, you could delete sets only from the navigation tree but now you can also delete sets from the new experience set editor.



Note: You cannot restore a set after deleting it.

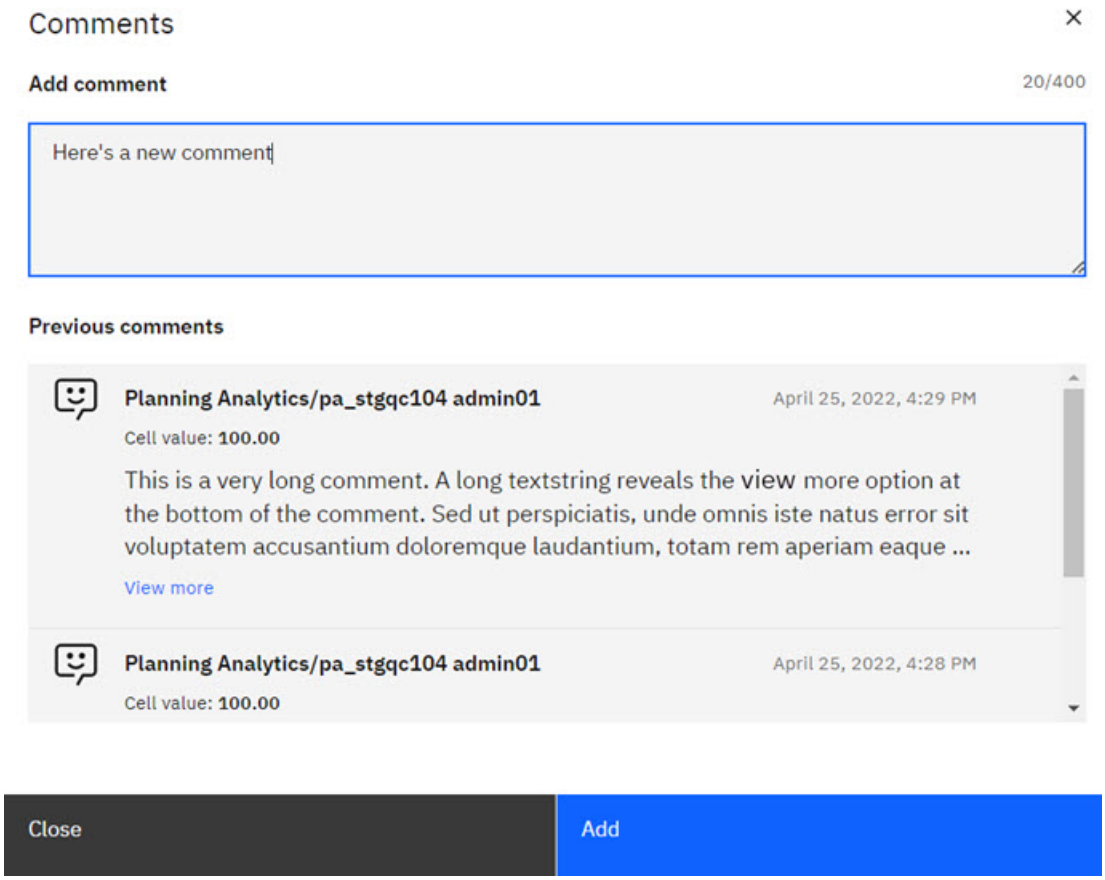
Unnamed sets such as **All roots**, **All members**, and **All leaves** cannot be deleted.

As an administrator, you can delete any public or private set that you own. If you are not an administrator, you can delete only the private sets that you own.

For more information, see Deleting sets.

Use the updated cell comment feature in the new experience cube viewer

The cell comments feature in the new experience cube viewer has a new look and feel, making it easier to read and enter comments.



Comments are listed in descending order by date/time, with the most recent comment first in the list.

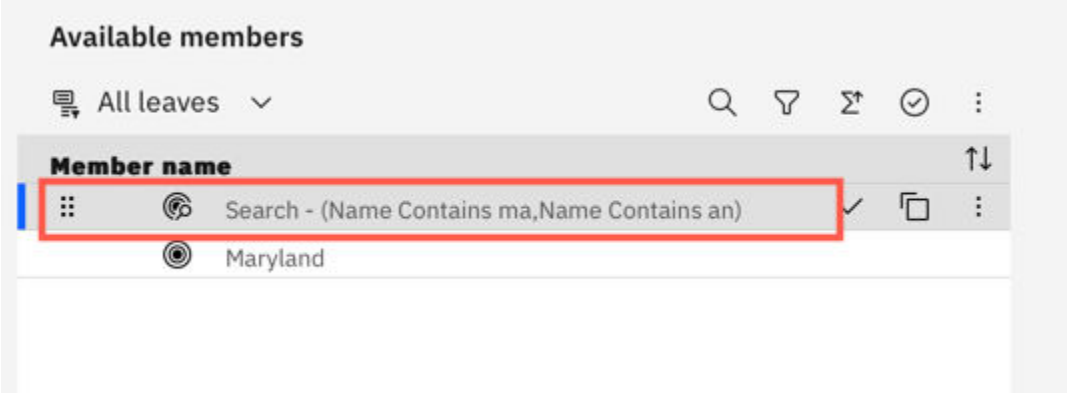
For more information, see Comments.

Enhanced search and filter features

The search and filter features for the **Available members** pane in the new experience set editor have been enhanced. Before Planning Analytics Workspace 2.0.76, you could use **Search** to search for members in a set and use **Filter** for advanced search options. Now, both these features are more intuitive and improved for usability.

Two new options are now available when you filter a set, **Match all of the following** and **Match any of the following**. These options apply to the filter statements when you filter a set by more than one attribute. The default selection is **Match all of the following**.

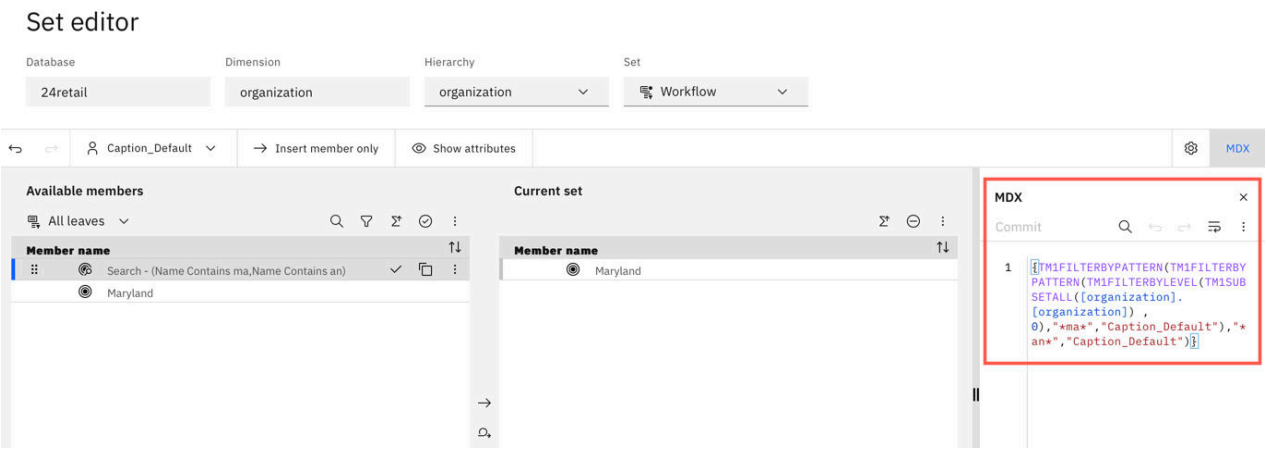
In the following example, the set was filtered to include only members that contain `ma` and `an` in their name.



Once you apply a filter, the filter parameter clears from the **Filter** menu. This allows you to add more filters to further narrow your member selections.

However, you can still see the applied filters in the **Member name** list under **Available members** or in the **MDX**.

Note: Replace the **Current set** with the filtered set and click **MDX** to see the applied filters.



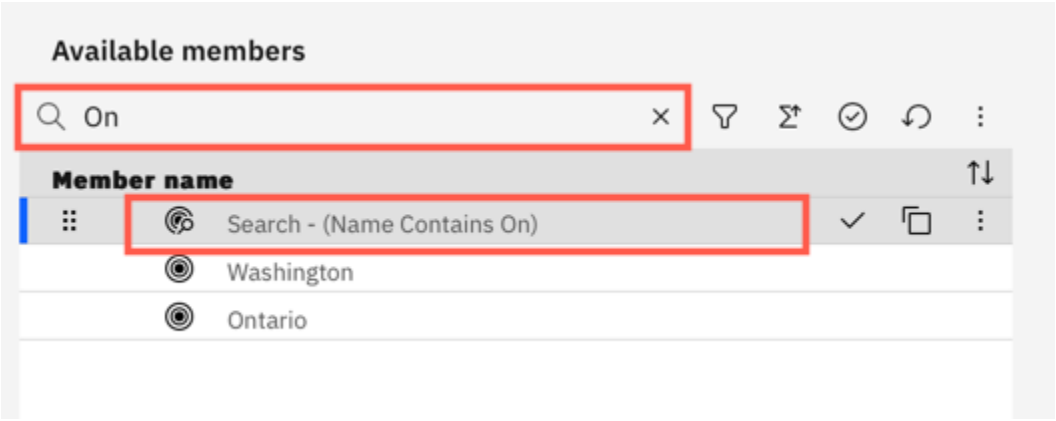
If you apply a filter to an already filtered set, the new filter applies to the MDX state around the first filter. For example, in the following MDX, a new filter was applied to an already filtered set to include only members with names that contain the letter `r`.

You can click **Reset** to clear all the filters you applied and restore the set to its original state.

For more information on filtering, see Filtering sets.

With **Search**, you can look for members that match specific criteria but only in the current MDX state. This means if a set is filtered, search looks for members that match the given criteria in the filtered set and not the full list of members.

To search for members, click **Search** and type your criteria in the search box. Press Enter to search.



Note: Unlike filters, searches do not accumulate. Your search results replace any previous searches that you conducted.

You can clear your search by deleting or replacing the input in the search box and pressing Enter. Or, click **Reset**.

For more information, see Searching in sets.

New properties for tree map visualizations

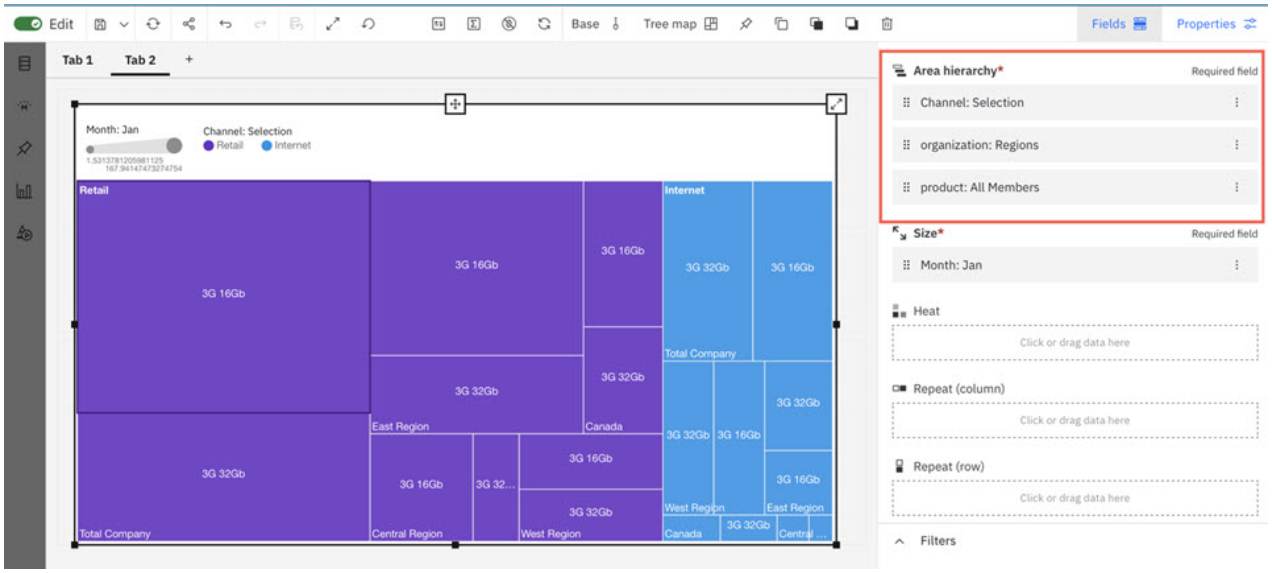
Three new properties, **Show leaf labels**, **Leaf label format**, and **Show intermediate labels** are now available for **Tree map** visualizations. Use these properties to customize the appearance of the visualization.

Enable **Show leaf labels** to display labels in the **Tree map**.

When the **Show leaf labels** property is enabled, you can select the **Leaf label format** to display the item, value of the item, or both in the **Tree map**.

If there are three row dimensions in the row axis of a **Tree map** (in the **Area hierarchy** slot under **Fields**), the labels for intermediate dimension members display by default. An intermediate dimension is the second dimension in a stack of three row dimensions.

In this example, the intermediate dimension is **organization** since it is listed between **channel** and **product**.



Turn off the **Show intermediate labels** property to prevent the labels for intermediate dimension members from displaying in the **Tree map**.

To use these properties:

1. Select the **Tree map** in **Edit** mode.
2. Click **Properties**.
3. Under the **Visualization** tab, expand **Chart** to see **Show leaf labels** and, if applicable, **Show intermediate labels**. The **Leaf label format** property displays only if **Show leaf labels** is enabled.

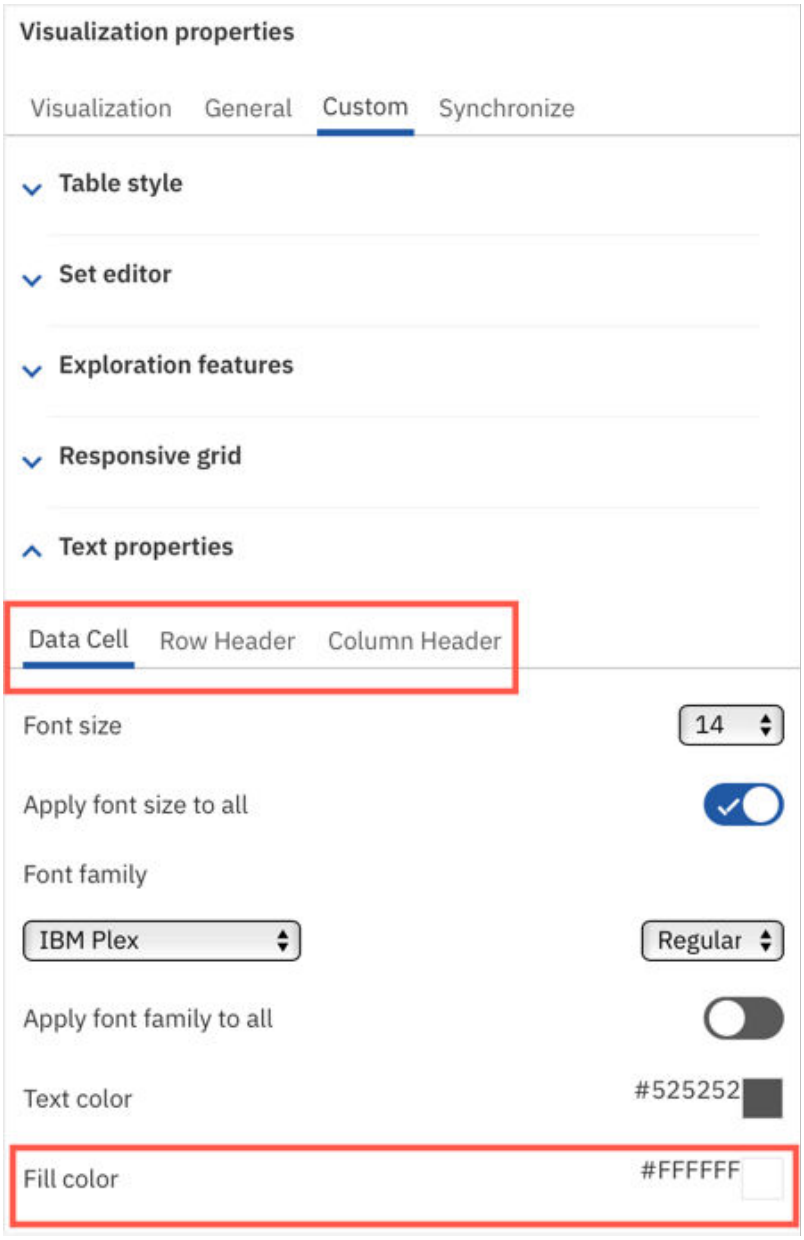
Customize the background color for data and header cells

In the new experience view, you can now customize the background color of data cells and row and column header cells to any color from the palette or custom color selector.

To customize the background color of cells in the new experience view:

1. In **Edit** mode, go to **Properties**.

2. Click **Custom** and expand **Text properties**.
3. Select the cell type for which you want to change the color.
4. Click **Fill color** and select a new color. Optionally, use **Select custom color** to create your own color with the **Color picker**.



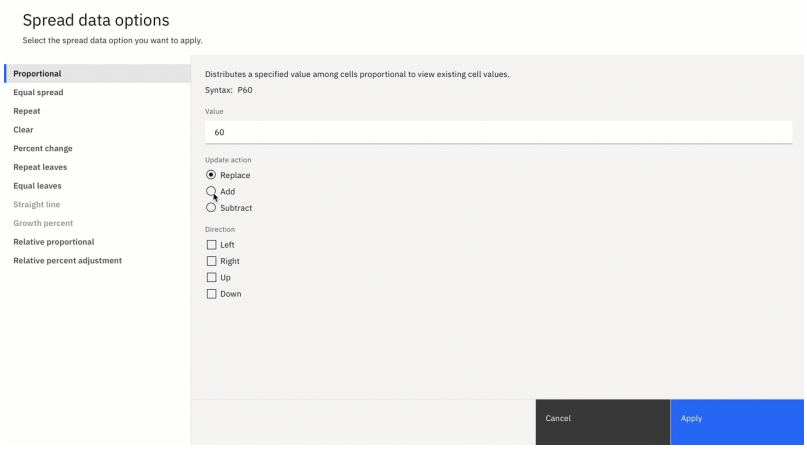
Updated design for data spread options

As part of the ongoing effort to standardize the Planning Analytics Workspace user experience, the **Spread data options** dialog box in the new experience view has been updated.

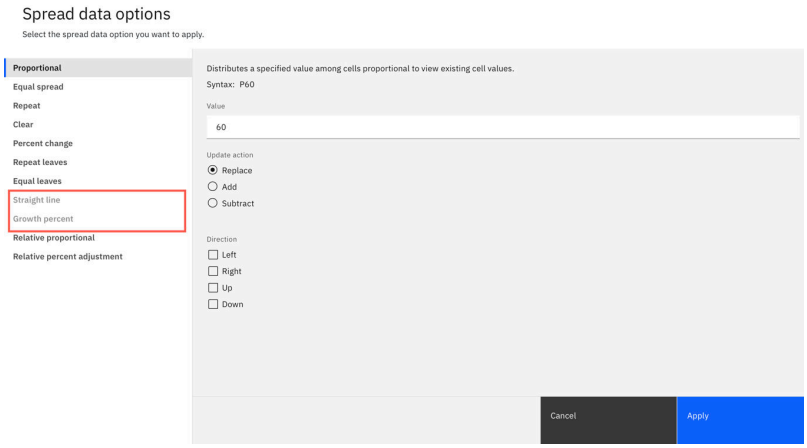
There is no change to the data spreading options or how they function but the new design includes usability improvements.

Each data spread option now includes the **Syntax** value for reference. This is the data spreading syntax that you can enter directly in a cell to accomplish the same spreading that you are specifying in the Spread data options dialog box.

As you select an action or direction, the **Syntax** changes .



Data spreading options and fields that are not valid for the cell or range, display in a dimmed color and are not available for use.

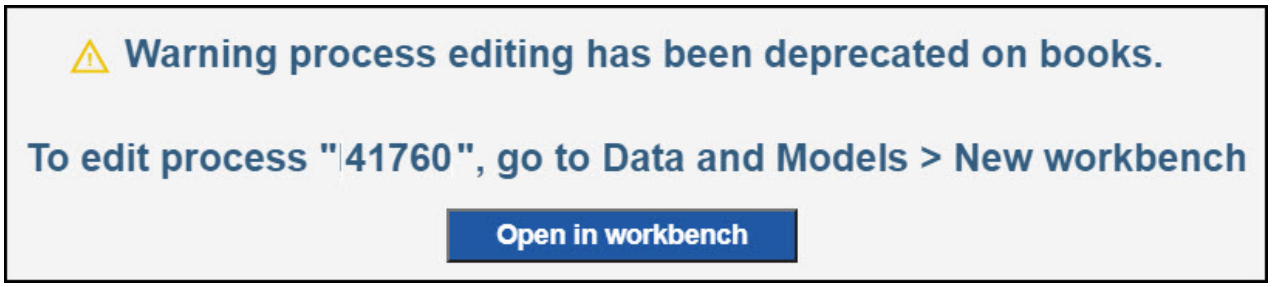


For more information, see Data spreading.

Deprecation notice - process editor to be removed from books, available only on workbenches as of Planning Analytics Workspace 2.0.79

Starting with Planning Analytics Workspace 2.0.79, processes must be created and edited on a modeling workbench.

If you are an administrator or modeler and you attempt to open a process in a book in 2.0.79, you'll receive a notification that process editing must be performed on a workbench. You can click **Open in workbench** to immediately open the process on a new workbench.



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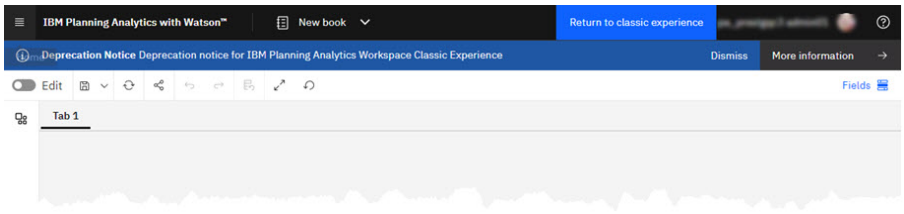
If you are still using Planning Analytics Workspace Classic prior to the August 2022 update, administrators will see a deprecation notice banner on the home page when using Planning Analytics Workspace Classic or previewing the new experience. An administrator can click the **More information** link to view further details on the deprecation of Planning Analytics Workspace Classic.



The deprecation notice is presented to each administrator upon login. One administrator dismissing the banner dismisses the banner only for that administrator; other administrators can still see the banner.

The banner will reappear with each new Planning Analytics Workspace release until an administrator completes the switch to the new experience.

Note: This announcement does not impact Planning Analytics on-premise deployments.

2.0.75 - What's new, April 7, 2022

Learn about new features and known issues in version 2.0.75 of IBM Planning Analytics Workspace in the following topics.

Updates to each version of Planning Analytics Workspace are cumulative. To see what was new in previous releases, see Chapter 2, “What's new in Planning Analytics Workspace,” on page 45.

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Timeline of previous Planning Analytics releases

For a comprehensive listing of Planning Analytics component releases by month and year, see Timeline for IBM Planning Analytics Releases. You can view versions and release months for the following components:

- Planning Analytics Local TM1 Server
- Planning Analytics Workspace
- Planning Analytics for Microsoft Excel

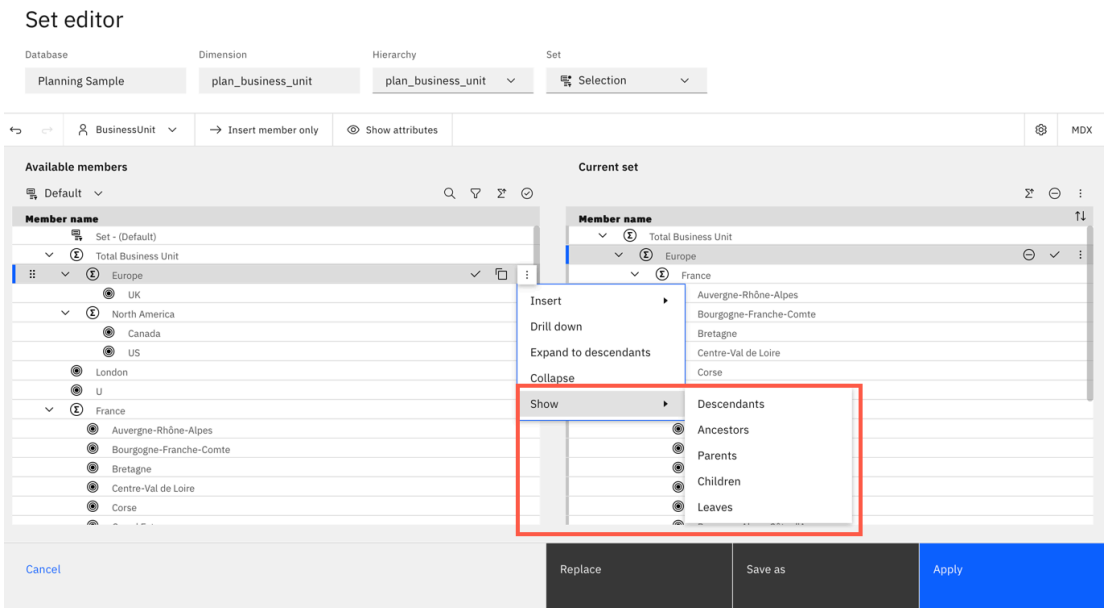
- Planning Analytics Spreadsheet Services/TM1 Web

Displaying parents, children, or leaves for selected members

The new experience set editor now has three new options in the **Show** menu that allow you to further refine the number of members that you see in a view.

You can now set your view to include only the immediate parents, children, or leaves of selected members.

Select one or more members in the **Available members** or the **Current set** panel. Go to the **Show** menu and choose the related members you want to include in the view. All other members are hidden from the view.



For more information, see Narrowing down selections in the set editor.

Update to predictive forecasting service

Predictive forecast capabilities in Planning Analytics Workspace use a common library of capabilities based on IBM Watson. In this Planning Analytics Workspace release, this library has been updated to support additional capabilities such as outlier detection and correction.

This library update should not significantly affect the accuracy of previous forecast results. However, you may notice changes in the forecasted values themselves. The new library creates a more rigorous distinction between training and testing in the historical data, so in some cases, your forecast accuracy may benefit from more historical data.

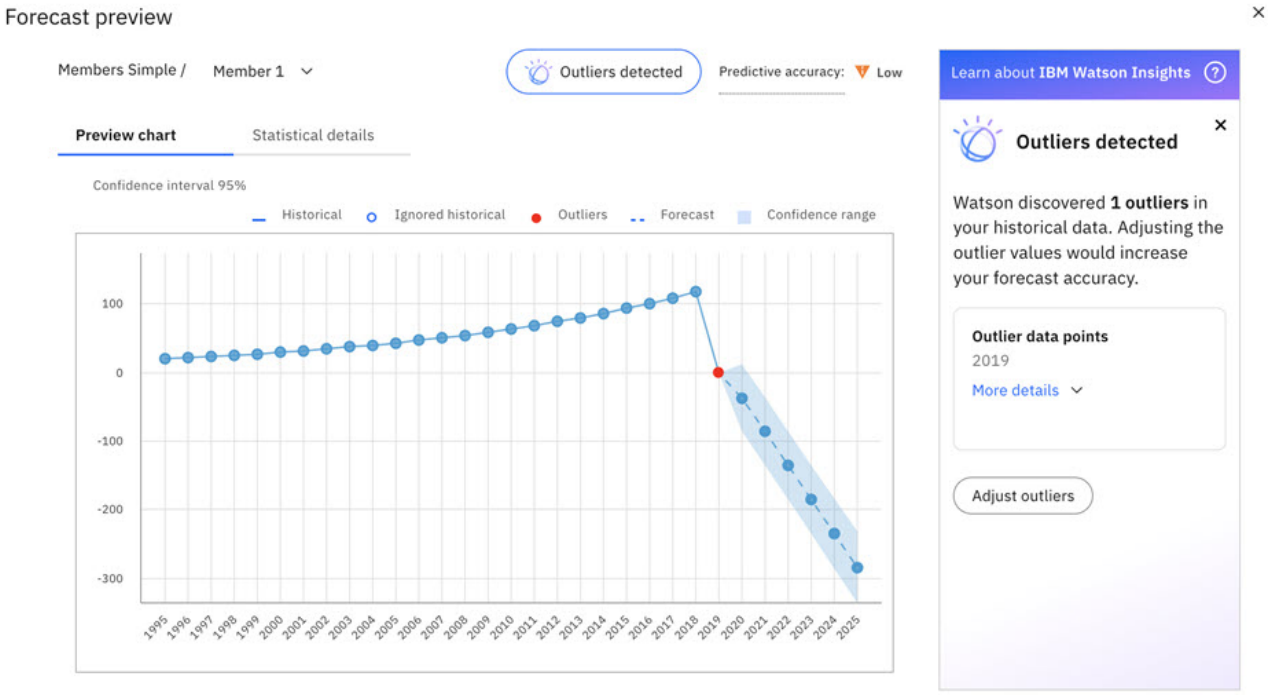
Note: In extreme cases, a high number of multiple users simultaneously requesting forecast results might result in a small decrease in performance. This scenario is unlikely, but if performance decreases the 'spinning waiting' icon is displayed until the forecast process is complete.

Adjust for outliers in your forecast

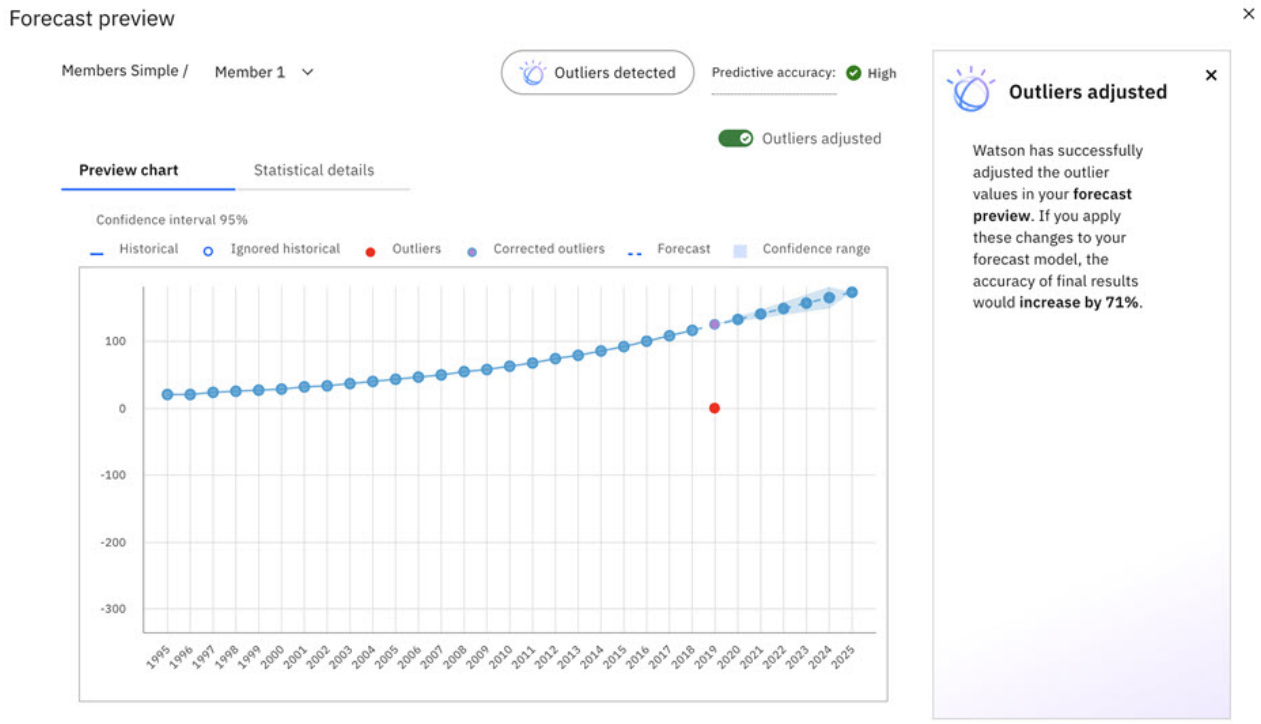
If outliers are detected in your forecast, you can now use an option to adjust a forecast preview to compensate for the outliers and improve the accuracy of your forecast.

Note that you can adjust outliers only after you create a preview.

If outliers are detected in your preview, you receive notification.



Click **Adjust outliers** to update the forecast and see the impact of the adjustment.



An informational message shows the impact of the adjustment. In this example, the adjustment results in a 71% increase in the accuracy of the forecast. You can toggle the **Outliers adjusted** option  to see the forecast with or without the adjustment. If you choose not to accept the adjustment, you can turn off the **Outliers adjusted** option and your forecast will not include the automatic outlier adjustment.

When multiple outliers are detected, they are adjusted sequentially from the beginning of the data set. This means that each adjusted outlier value is applied to the calculation of the adjustment for the subsequent outlier, resulting in a more accurate forecast.

Changes to cube creation

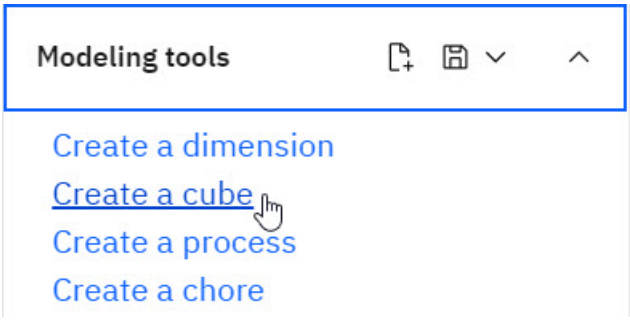
As of Planning Analytics Workspace 2.0.75, you can no longer create a cube from the Data tree in a book.

Cubes can be created only in a Modeling workbench. Additionally, the cube creation process has been modified and an option to create a new cube based on the structure of an existing cube is now available.

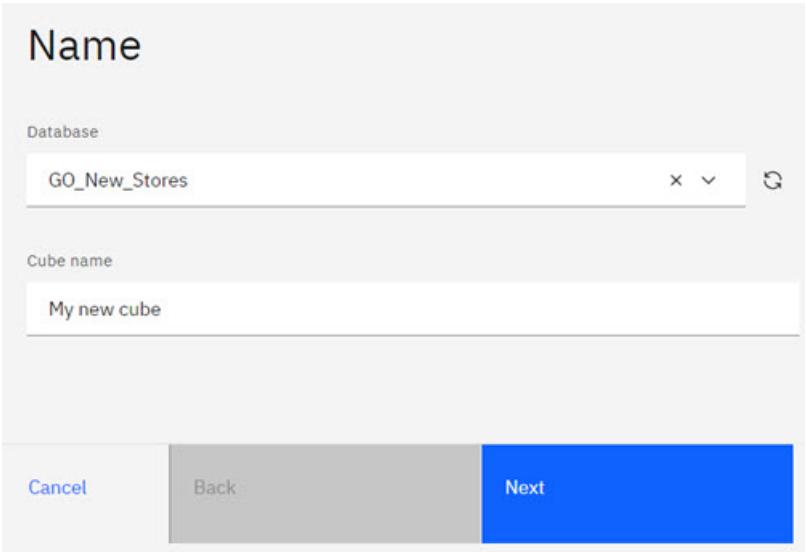
Create a new cube on the Modeling workbench

To create a cube:

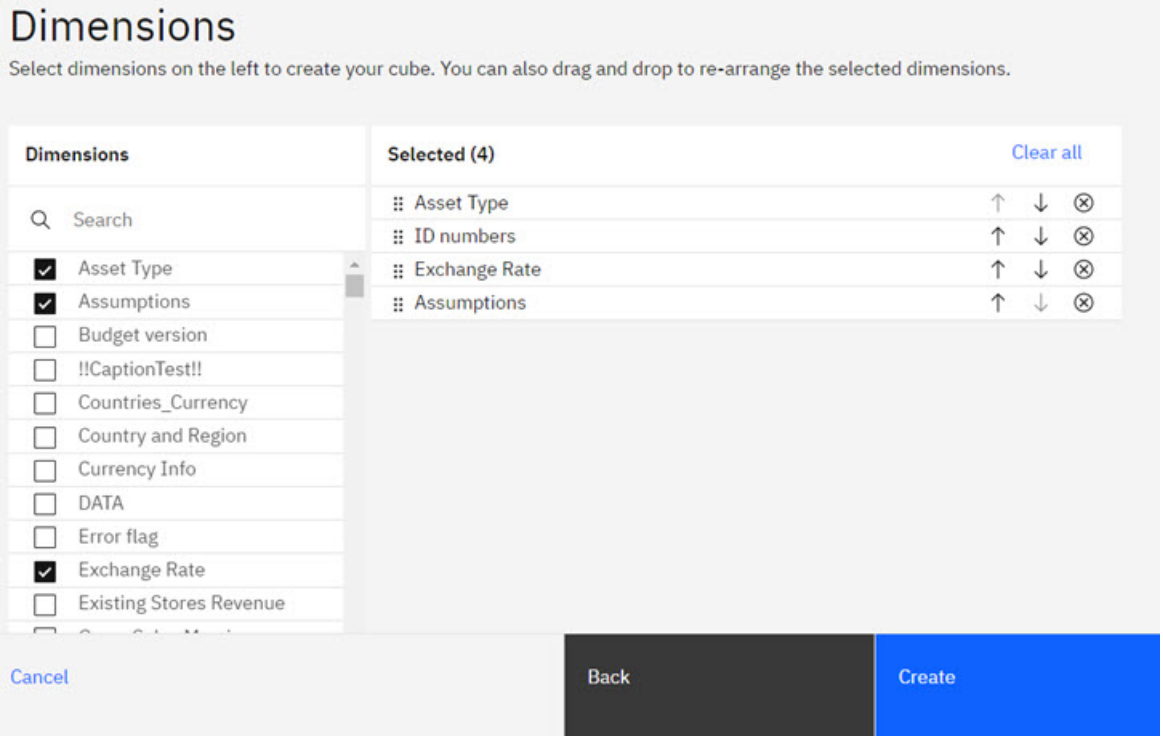
1. Open a Modeling workbench.
2. Expand the **Modeling tools** menu, then click **Create cube**.



3. Select the database on which you want to create the cube.
4. Enter a name for the cube.



5. Click **Next**.
6. Select the dimensions you want to include in the cube from the **Dimensions** list. When you select a dimension, it is added to the **Selected** list.



7. Optionally, you can change the order of dimensions in the cube by clicking a dimension handle and dragging it to a new position or by clicking the **Up** or **Down** arrow next to a dimension.
8. Click **Create** to create the new cube.

Create a new cube based on the structure of an existing cube

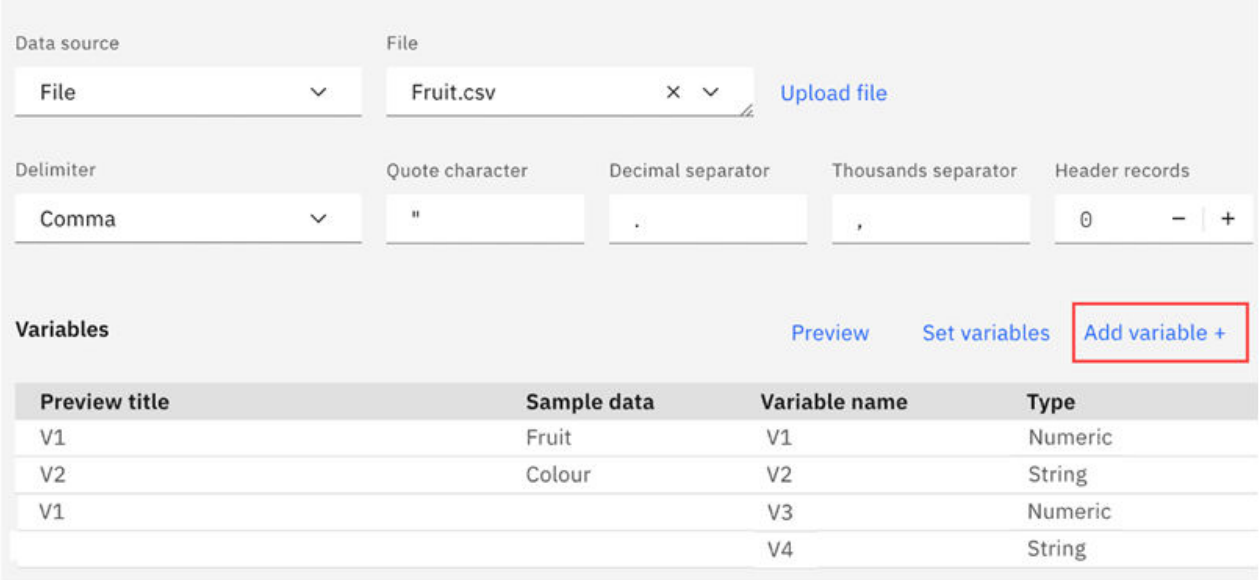
If a cube exists with the structure and dimensionality that you want you use in a new cube, the **Create from cube** option provides a handy shortcut for cube creation.

1. Open a Modeling workbench.
2. In the **Databases** tree, locate the existing cube that you want to use as the basis for a new cube.
3. Right-click the existing cube, then click **Create from cube**.
4. Enter a new **Cube name**, then click **Next**. The dimensions from the existing cube are preselected and ordered as specified in the existing cube.
5. Optionally, you can select additional dimension to include in the new cube, remove preselected dimension, or change the order of dimensions for the new cube.
6. Click **Create**.

Add variables in the Process editor

Up until now, the number of variables in a Planning Analytics Workspace TurboIntegrator process was limited to the number of columns in the data source. The variable for the process were created automatically, one for each column in the source.

As of Planning Analytics Workspace 2.0.75, you can use the new **Add variable** option on the process editor to add variables to a process.



A variable name cannot be empty and must adhere to the Planning Analytics naming conventions.

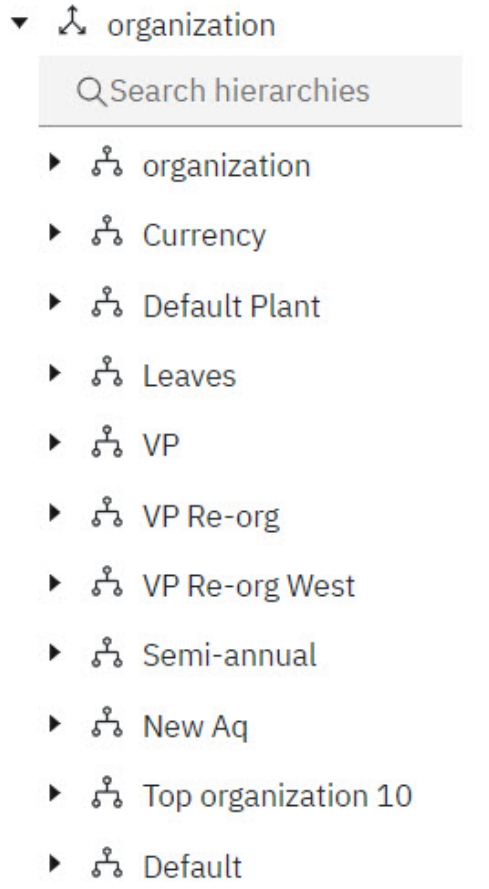
You can also delete any variable in a process. Hover the cursor on any variable name to reveal, and then click, the icon.

The ability to add variables to a process is useful when you are creating a process, but the data source is not available. It's also useful when the number of columns in the data source changes, as can occur when the data source of a process is modified at run time.

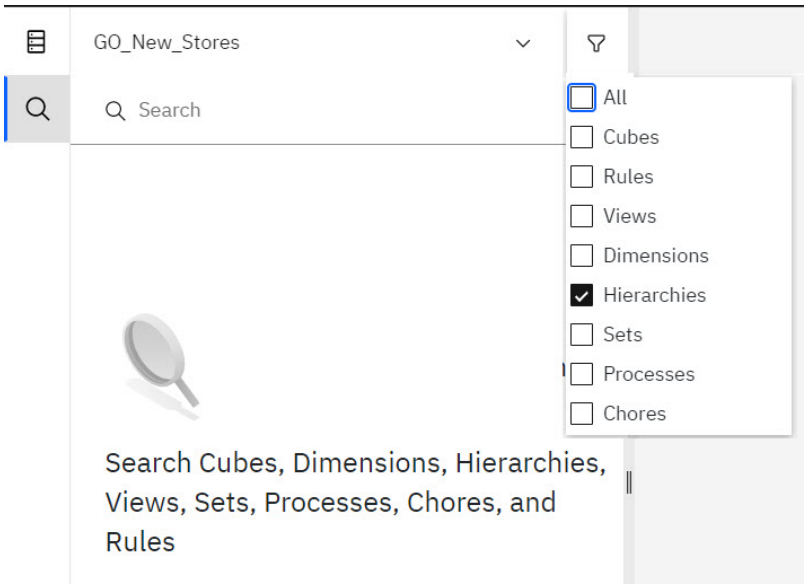
If you have more variables in a process than columns in the data source, the process still works. The extra variables will simply be empty.

Search and filter on hierarchies

The **Data** tree for books and the **Databases tree** for workbenches now displays a search box under a dimension when the dimension contains 11 or more hierarchies.



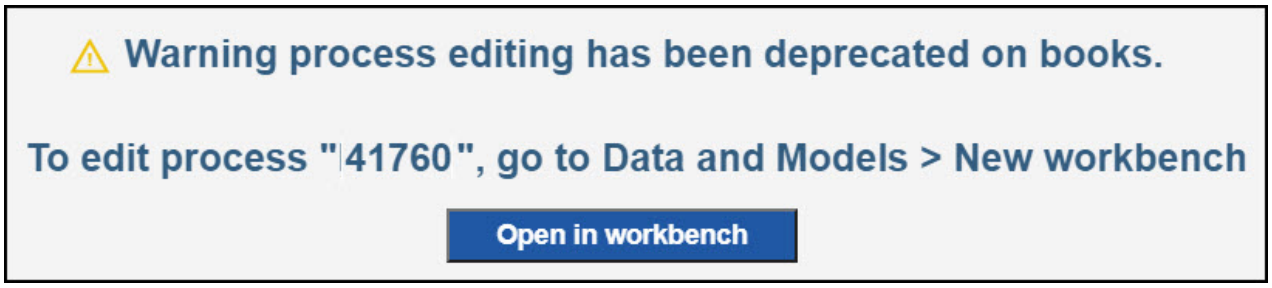
Additionally, the database **Search** on the modeling workbench now encompasses hierarchies, and you can filter search results to include or exclude hierarchies.



Deprecation notice - process editor to be removed from books, available only on workbenches as of Planning Analytics Workspace 2.0.79

Starting with Planning Analytics Workspace 2.0.79, processes must be created and edited on a modeling workbench.

If you are an administrator or modeler and you attempt to open a process in a book in 2.0.79, you'll receive a notification that process editing must be performed on a workbench. You can click **Open in workbench** to immediately open the process on a new workbench.



Deprecation notice for IBM Planning Analytics Workspace Classic experience

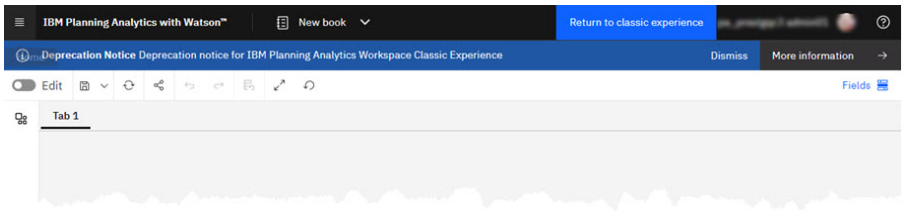
The IBM Planning Analytics team intends to remove the capability to remain on Planning Analytics Workspace Classic and preview the Planning Analytics Workspace new experience as part of the Planning Analytics Workspace 2.0.79 update in August 2022.

The 'new experience' is a major update to the Planning Analytics Workspace user experience released as part of the 2.0.56 update in October 2020. The Planning Analytics Workspace new experience provides an updated look and feel, improved navigation and content management. It also introduces Applications and Plans, a dedicated modeling environment, and Predictive Forecasting capabilities.

The user experience in 2.0.55 and earlier releases is referred to as Planning Analytics Workspace Classic. Cloud environments provisioned before the 2.0.56 update could remain on Planning Analytics Workspace Classic, preview the new experience, or permanently switch to the new experience.

Planning Analytics Workspace environments that use the Classic experience will automatically be updated to the new experience as part of the 2.0.79 update in August 2022. Planning Analytics cloud customers that use the Classic experience are encouraged to preview and switch to the new experience before August 2022.

If you are still using Planning Analytics Workspace Classic prior to the August 2022 update, administrators will see a deprecation notice banner on the home page when using Planning Analytics Workspace Classic or previewing the new experience. An administrator can click the **More information** link to view further details on the deprecation of Planning Analytics Workspace Classic.



The deprecation notice is presented to each administrator upon login. One administrator dismissing the banner dismisses the banner only for that administrator; other administrators can still see the banner.

The banner will reappear with each new Planning Analytics Workspace release until an administrator completes the switch to the new experience.

Note: This announcement does not impact Planning Analytics on-premise deployments.

Known issues

The following are known issues in Planning Analytics Workspace. These issues will be resolved in a future release.

Planning Analytics Workspace local/distributed fails to start when IPv6 is disabled on Linux using kernel boot parameter

Condition

Planning Analytics Workspace local/distributed version 2.0.75 and later fails to start when IPv6 is disabled using Linux kernel boot parameter `ipv6.disable=1`. This problem only applies to Docker Swarm deployments of Planning Analytics Workspace.

Cause

Planning Analytics Workspace distributed version 2.0.75 and later includes a version of MySQL database that requires the kernel IPv6 support to be enabled to start up. See https://bugs.mysql.com/bug.php?id=106485 for a description of this issue.

On Linux systems where the kernel IPv6 support is disabled, some of the PAW mysql-cluster containers enter a restart loop. Inspecting the logs for the mysql-mgmt pod/container reveals an error as follows:

```
MySQL Cluster Management Server mysql-8.0.28 ndb-8.0.28
2022-04-12 09:42:01 [MgmtSrvr] ERROR -- At least one hostname in the configuration does not
match a local interface. Failed to bind on mysql-mgmt
2022-04-12 09:42:01 [MgmtSrvr] ERROR -- The hostname this node should have according to the
configuration does not match a local interface.
Attempt to bind 'mysql-mgmt' failed with error: 97 'Address family not supported by protocol'
```

You can check the host boot parameters to confirm that kernel IPv6 support is disabled:

```
$ cat /proc/cmdline
...
BOOT_IMAGE=(hd0,msdos1)/vmlinuz-4.18.0-305.19.1.el8_4.x86_64 root=/dev/mapper/rhel-root ro
            resume=/dev/mapper/rhel-swap rd.lvm.lv=rhel/root rd.lvm.lv=rhel/swap rhgb quiet
--->>>>     ipv6.disable=1         <<<<---
            noibrs noibpb nopti nospectre_v2 nospectre_v1 l1tf=off nospec_store_bypass_disable
no_stf_barrier mds=off mitigations=off
```

Remedy

To work around this problem, kernel IPv6 support must be enabled on all the cluster nodes.

These general steps describe one possible solution to enable IPv6 in the kernel. Specific steps for resolution may vary in your environment.

1. Edit `/etc/default/grub` and remove **`ipv6.disable=1`** in line `GRUB_CMDLINE_LINUX`. For example:

   ```
   GRUB_TIMEOUT=5
   GRUB_DISTRIBUTOR="$(sed 's, release .*$,,g' /etc/system-release)"
   GRUB_DEFAULT=saved
   GRUB_DISABLE_SUBMENU=true
   GRUB_TERMINAL_OUTPUT="console"
   GRUB_CMDLINE_LINUX="resume=/dev/mapper/rhel-swap rd.lvm.lv=rhel/root rd.lvm.lv=rhel/swap
   rhgb quiet ipv6.disable=1 noibrs noibpb nopti nospectre_v2 nospectre_v1 l1tf=off
   nospec_store_bypass_disable no_stf_barrier mds=off mitigations=off"
   GRUB_DISABLE_RECOVERY="true"
   GRUB_ENABLE_BLSCFG=true
   ```

2. Regenerate the GRUB configuration file.

   ```
   $ sudo grub2-mkconfig -o /boot/grub2/grub.cfg
   ```

3. Reboot.

```
$ sudo shutdown -r now
```

4. (Optional) If you still want to disable IPv6, use `sysctl` settings instead of disabling IPv6 with the kernel settings.

```
$ sudo sysctl -w net.ipv6.conf.all.disable_ipv6=1
$ sudo sysctl -w net.ipv6.conf.default.disable_ipv6=1
```

5. Restart Docker.

```
$ sudo systemctl restart docker
```

2.0.74 - What's new, March 10, 2022

Learn about new features and known issues in version 2.0.74 of IBM Planning Analytics Workspace in the following topics.

Updates to each version of Planning Analytics Workspace are cumulative. To see what was new in previous releases, see Chapter 2, “What's new in Planning Analytics Workspace,” on page 45.

You can view the fix lists for this and previous versions of Planning Analytics Workspace at https://www.ibm.com/support/pages/ibm-planning-analytics-20-fix-lists#anchor2.

Timeline of previous Planning Analytics releases

For a comprehensive listing of Planning Analytics component releases by month and year, see Timeline for IBM Planning Analytics Releases. You can view versions and release months for the following components:

- Planning Analytics Local TM1 Server
- Planning Analytics Workspace
- Planning Analytics for Microsoft Excel
- Planning Analytics Spreadsheet Services/TM1 Web

Windows Server 2019 support (local only)

IBM Planning Analytics Workspace Local versions 2.0.74 and later now support Windows Server 2019. You can install Planning Analytics Workspace Local on Windows Server 2019.

For more information, see Install Planning Analytics Workspace Local on Windows Server 2019.

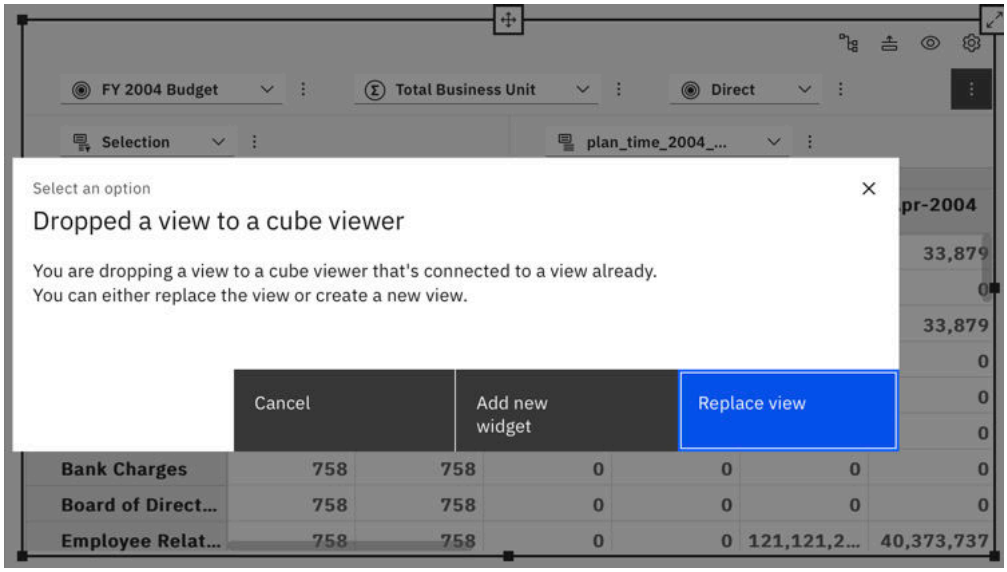
Support for Windows Server 2016 continues as well.

Add a view by dragging it from the data tree

You can now add a view to a book by dragging the view from the data tree and dropping it on to a cube viewer.

In the data tree, expand the cube that contains the data you want to use. Select the view that you want to add and drag it on to a cube viewer (new or classic).

If you drag a view on a cube viewer that is not empty, you can either replace the existing view with the new one, or add the view as a new widget.

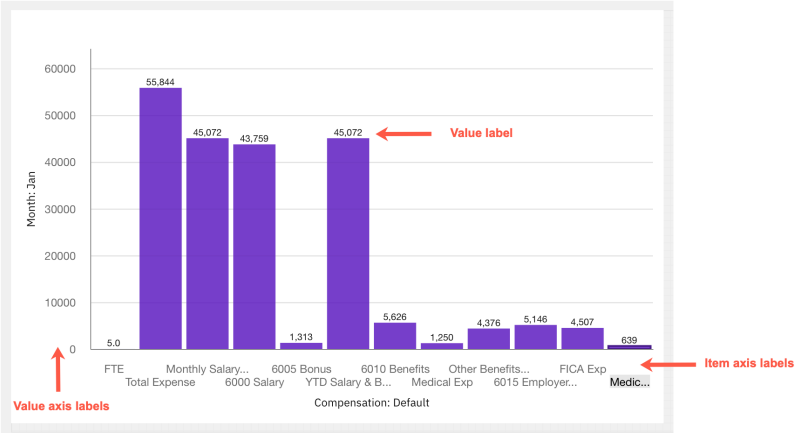


Note: When you replace an existing view with a new view, the new view inherits the existing view's properties (such as background color).

Apply text styles to axis values in visualizations

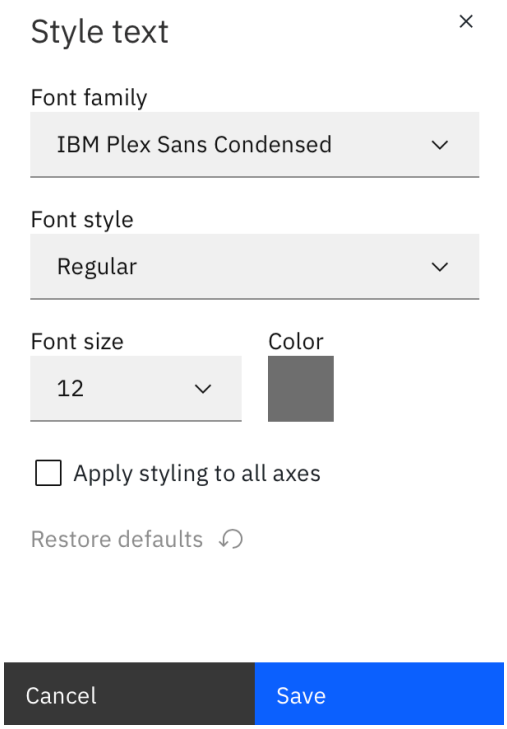
In visualizations, you can now apply text styles to the value axis labels and value labels. Previously, you could apply styling to only item axis labels.

Right-click any axis label or value label and click **Style text** to select and apply text styles.

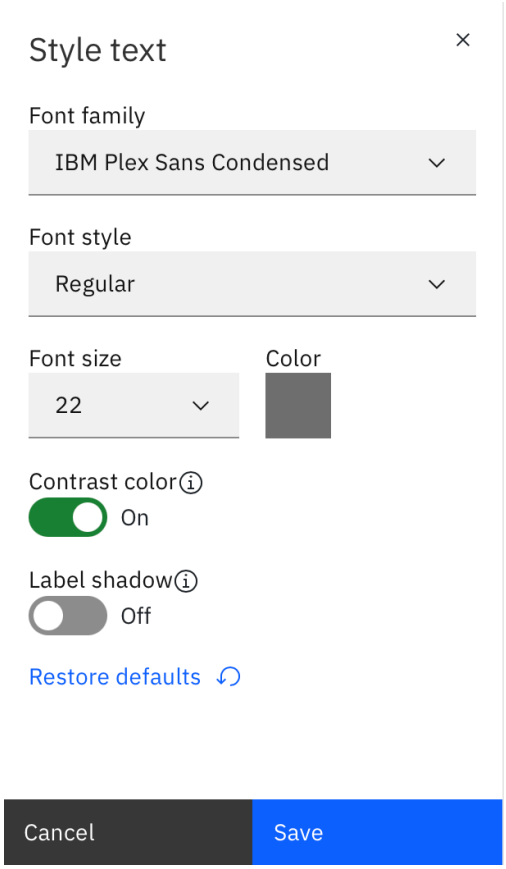


The **Style text** menu includes a new **Font style** option.

For axes, the **Style text** menu includes an option to apply styling to all axes in the visualization.

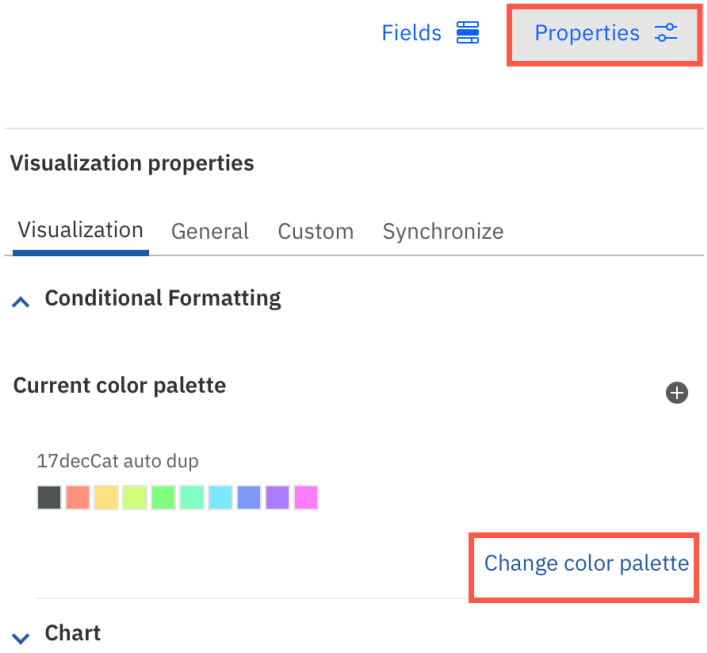


For value labels, the **Style text** menu is slightly different and includes **Contrast color** and **Label shadow** options for accessibility. When **Contrast color** is on, it auto adjusts the font color and overrides the selected color. Turning on **Label shadow** adds a shadow to value labels.



Availability of color palettes for conditional formatting in Properties

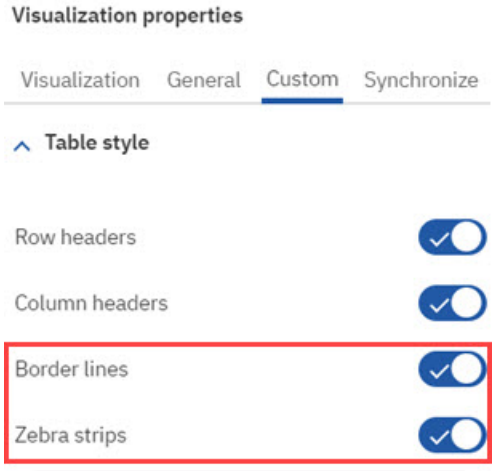
Global and custom color palettes are now available for views with conditional formatting and can be applied from **Properties**.



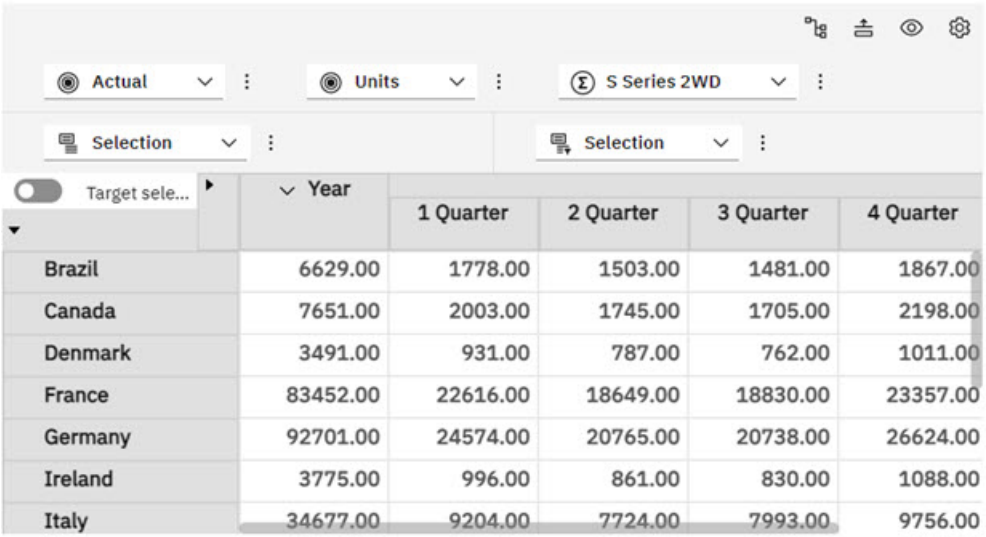
Previously, you could only use default colors when applying conditional formatting to views. You can change these default colors now by clicking **Change color palette** under **Visualization** in **Properties**. For more information, see Conditional formats.

Customize your explorations with new properties

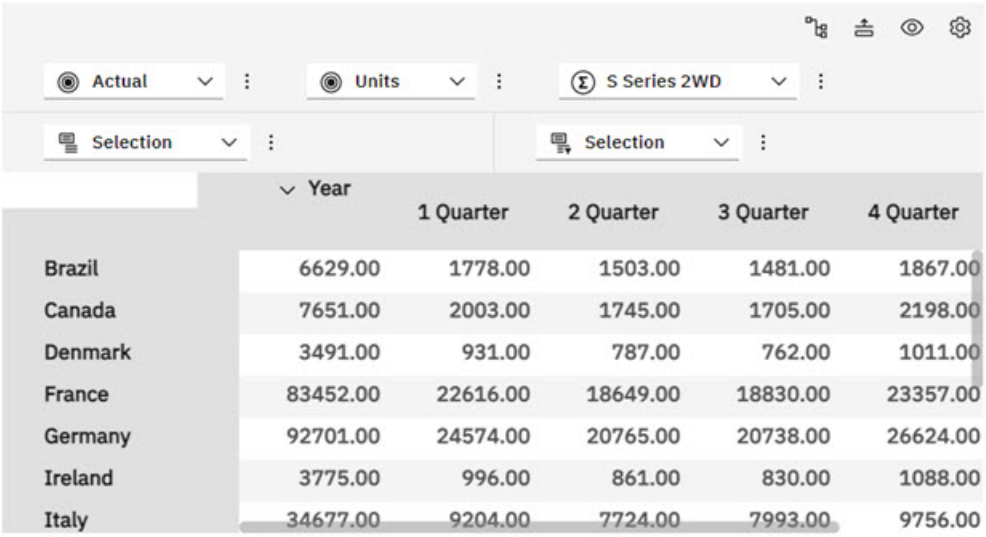
Two new properties, **Border lines** and **Zebra strips**, are now available to let you customize the appearance of new experience explorations (views). Both of these properties were previously applied with themes in classic explorations.



The **Border lines** property controls the display of border lines around cells and header members in an exploration. Enable the property to display border lines, disable it to hide border lines. This example shows an exploration with the **Border lines** property enabled.



The **Zebra strips** property controls row shading. Enable the property to apply a shaded background to alternating rows in an exploration, disable it to display all rows with a uniform background. This example shows an exploration with the **Zebra strips** property enabled.



To use these properties:

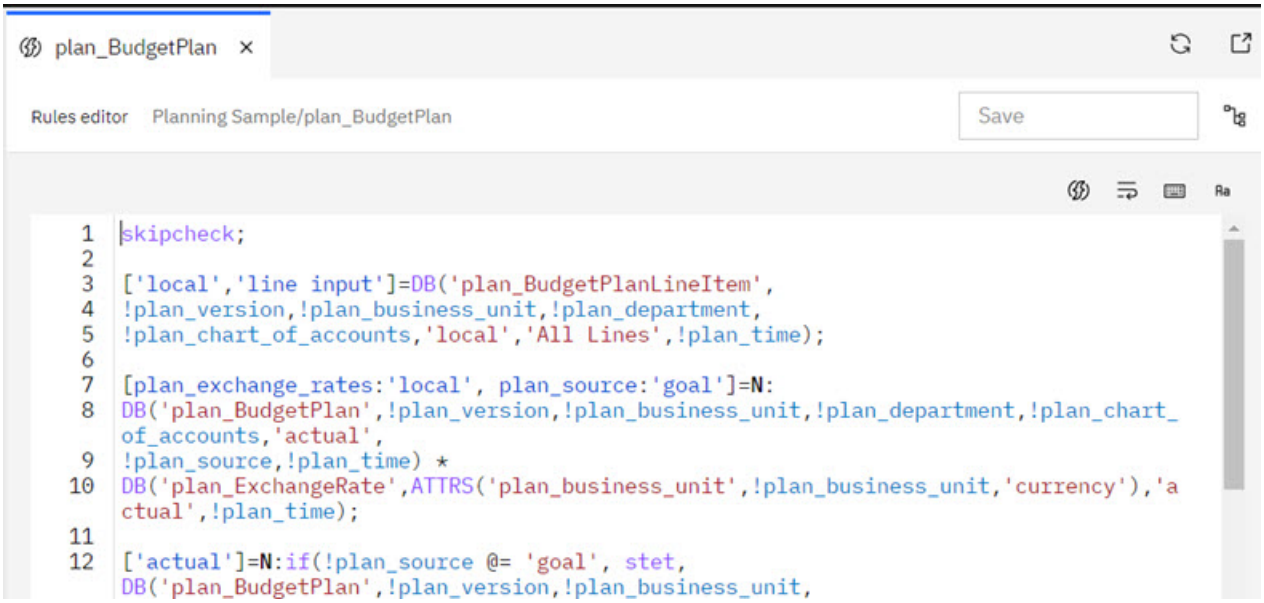
1. Select an exploration while in Edit mode.
2. Click **Properties**.
3. Click the **Custom** tab.
4. Expand the **Table style** group to reveal the **Border lines** and **Zebra strips** properties.

The new experience exploration was introduced in Planning Analytics Workspace 2.0.71. You can review the features and capabilities of the new experience exploration here.

Updated rules editor

As part of the ongoing effort to standardize the Planning Analytics Workspace user experience, the rules editor has been updated.

Note that any existing rules editors that were previously saved in a modeling book or workbench remain available using the previous interface in the modeling book or workbench.



For more information, see Use the rules editor in Planning Analytics Workspace.

Deprecation notice for IBM Planning Analytics Workspace Classic experience

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The 'new experience' is a major update to the Planning Analytics Workspace user experience released as part of the 2.0.56 update in October 2020. The Planning Analytics Workspace new experience provides an updated look and feel, improved navigation and content management. It also introduces Applications and Plans, a dedicated modeling environment, and Predictive Forecasting capabilities.

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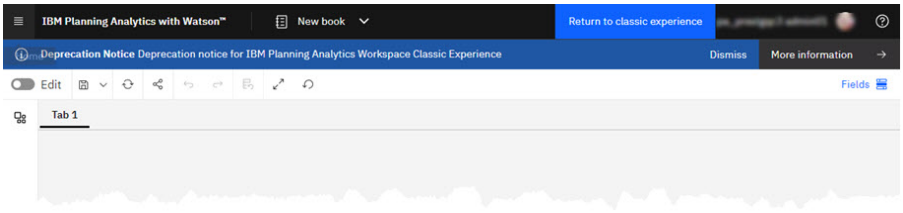

The deprecation notice is presented to each administrator upon login. One administrator dismissing the banner dismisses the banner only for that administrator; other administrators can still see the banner.

The banner will reappear with each new Planning Analytics Workspace release until an administrator completes the switch to the new experience.

Note: This announcement does not impact Planning Analytics on-premise deployments.

2.0.73 - What's new, February 10, 2022

Learn about new features and known issues in version 2.0.73 of IBM Planning Analytics Workspace in the following topics.

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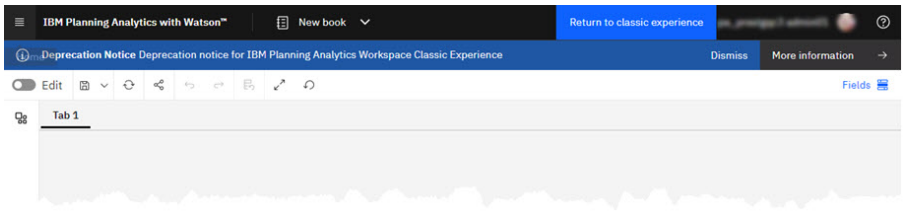

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Creation of modeling books no longer supported

As previously announced in a deprecation notice, the ability to create modeling books is no longer available in Planning Analytics Workspace as of 2.0.73. Existing modeling books continue to be usable, but all modeling activities are now supported in the Modeling Workbench.

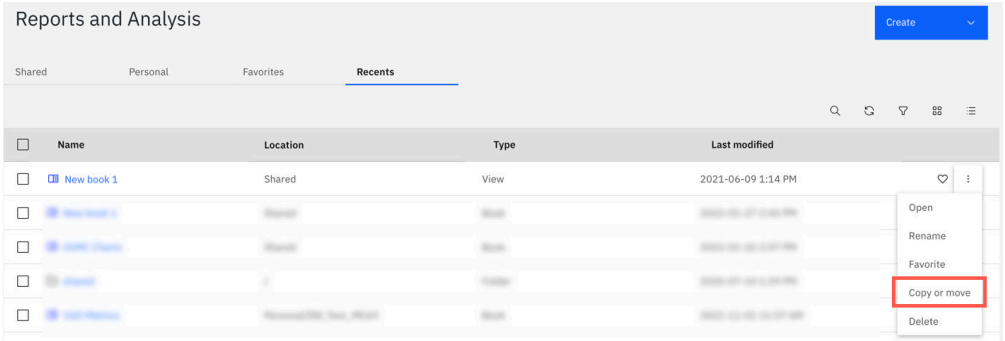
You can review the deprecation notice here.

For more information on the Modeling Workbench, see Use the Modeling Workbench to create and manage your model.

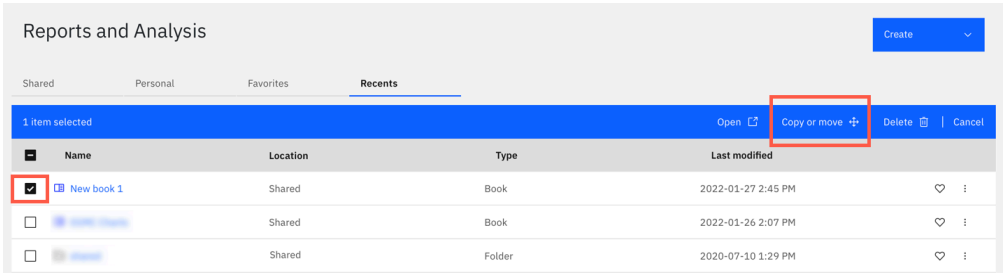
Copy assets or folders to a shared or personal folder

All assets and folders in your **Shared** and **Personal** folders can now be copied to a new location. A new **Copy or move** option lets you copy (or move) an asset or folder to a new location, either to or within the **Shared** or **Personal** folder.

Click the menu icon next to any asset or folder to see the **Copy or move** option.



You can also select the asset or folder to see a new **Copy or move** option in the toolbar.



Click either of the two **Copy or move** options and select a destination folder for the asset. To copy the asset to the destination folder, click **Copy**. Click **Move** to move the asset to the new destination.

Note: If you copy or move an asset to the **Shared** folder, you are prompted to set user group permissions to the asset or folder.

Copy and paste images, pictures, web pages, and text

You can now copy content (such as an image, media, web page, or text) and paste it directly into an IBM Planning Analytics Workspace book. The software automatically identifies the type of content you pasted and converts it to the appropriate widget, simplifying the process to add content.

To copy paste content directly into a book, copy the content and open a book in **Edit** mode. Click anywhere in the book and use **CTRL+V** (Windows) or **CMD+V** (Apple Mac) to paste the copied content.

You can copy paste:

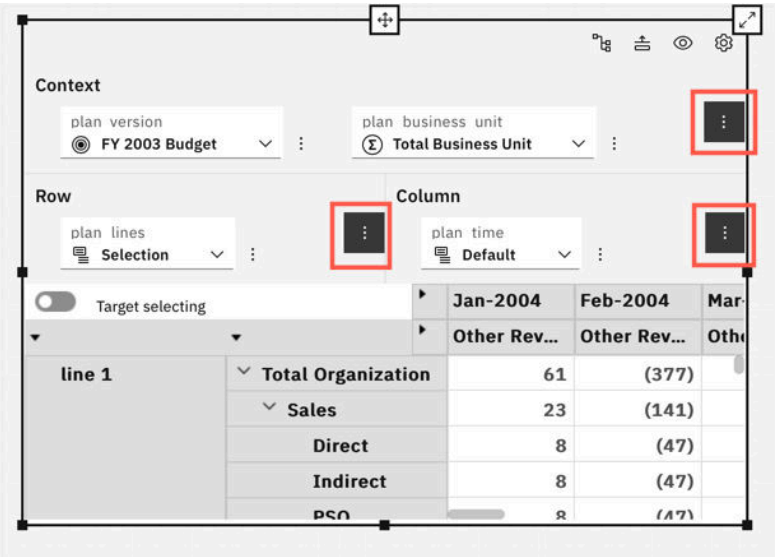
- Images from your computer, online images from your browser, or links to image files
- URLs to media format (such as online videos)
- URLs to web pages
- Text

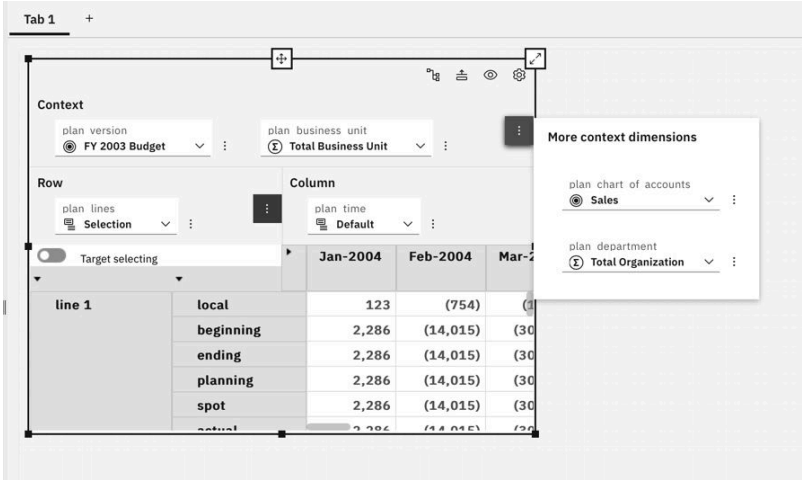
You can also continue to add content to your book by using the **Widgets** icon in the side bar. For more information, see Add pictures, media, and web pages.

View all and View less links replaced by a menu in new experience view

The **View all** and **View less** links, which were used to see and hide dimensions from the view, have been replaced by a new menu.

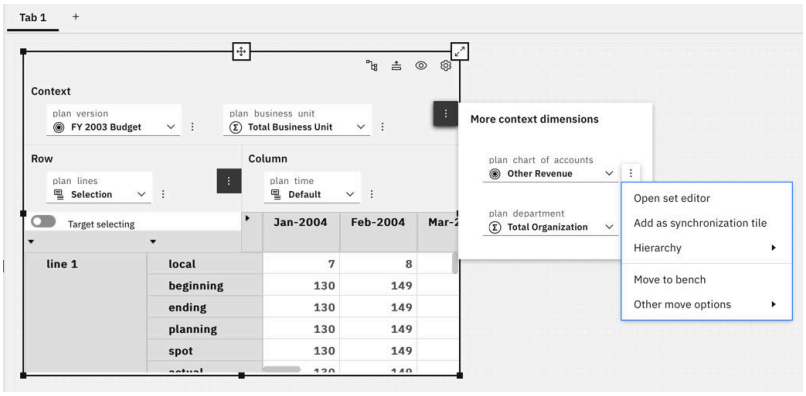
Depending on the number of dimensions in a view or the view's size, you might not be able to see all the dimensions supported by the view. Click the menu icon in the **Context**, **Row**, or **Column** areas, to see dimensions that are hidden from display.





You can move dimensions from this menu to the **Context**, **Row**, or **Column** areas and vice versa. You can also move dimensions within the menu.

Click the dimension's menu to see options such as **Open set editor**, **Move to bench**, **Other move options** and more.



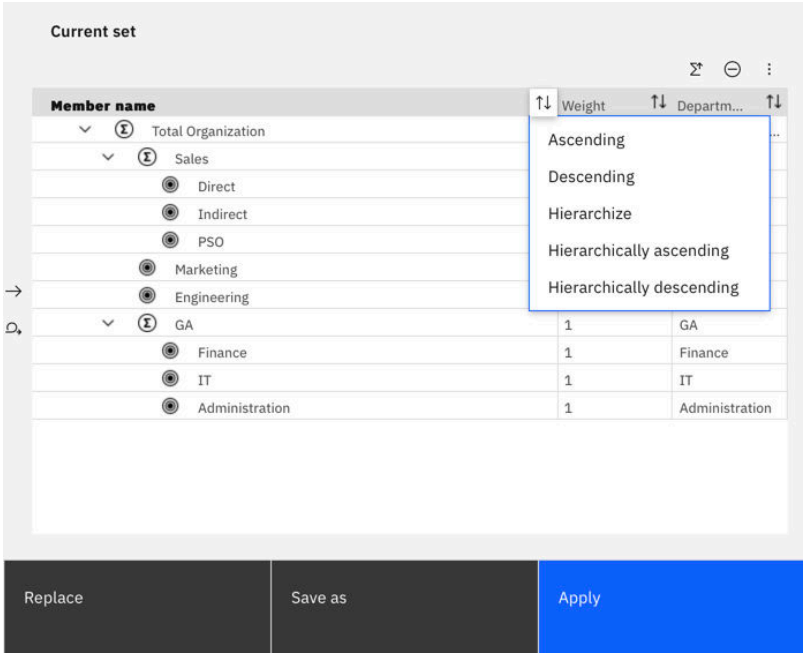
For more information, see New experience view and set editor.

Sort members, attributes, and properties in the new set editor

The new experience set editor now supports sorting of members, attributes, and properties.

Note: To use the new experience view and set editor, you need to enable the feature under **Features** in **Administration**. For more information, see Manage features.

Click **Sort** next to the member, attribute, or property name under **Current set** and select how you want to sort the column (in ascending, descending, hierarchically ascending, or hierarchically descending order).

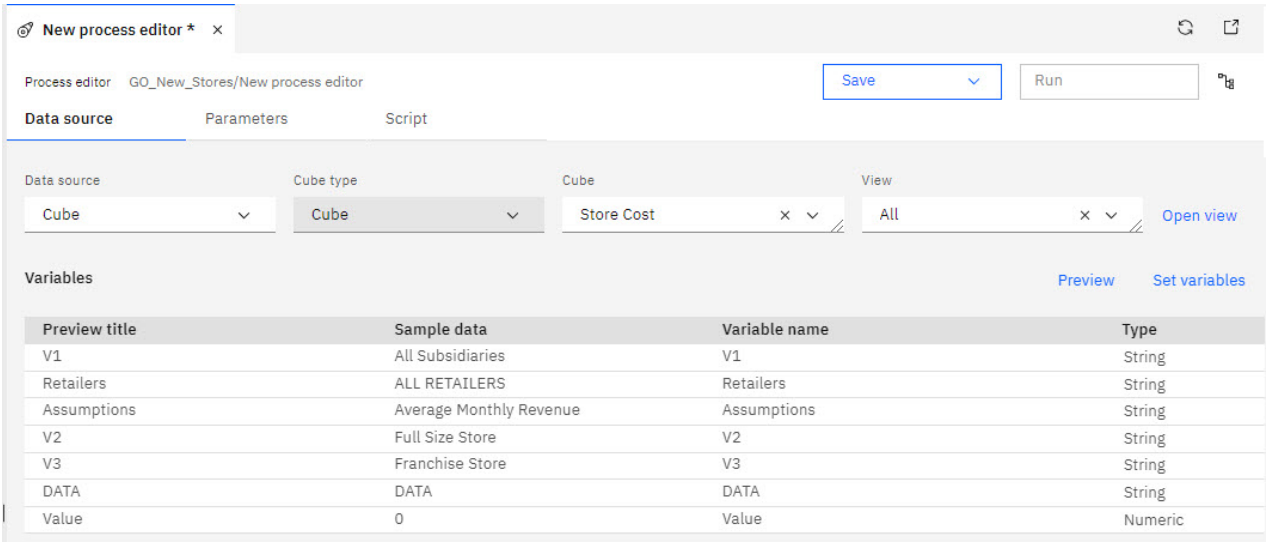


Click **Hierarchize** to revert any sorting you applied to the member's column.

New process editor

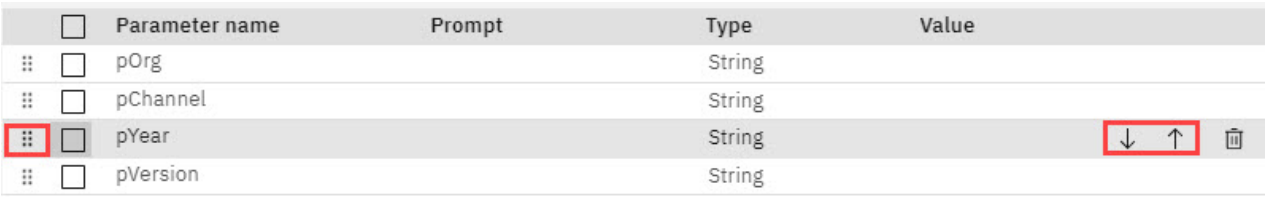
As part of the ongoing effort to standardize the Planning Analytics Workspace user experience, the process editor has been updated. Note that any existing process editors that were previously saved in

a modeling book or workbench remain available using the previous interface in the modeling book or workbench.

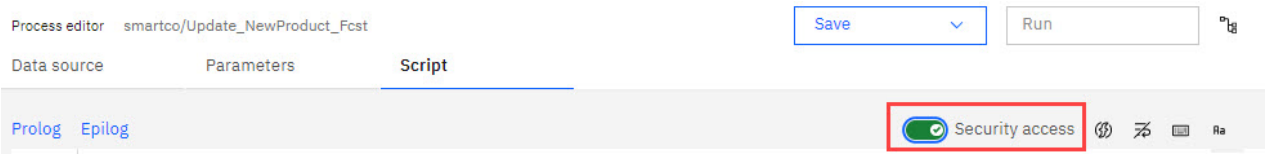


The new editor also includes several usability improvements.

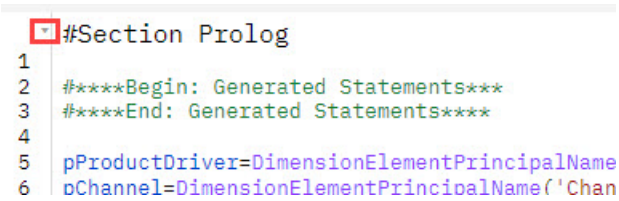
You can change the order of parameters on the **Parameters** tab. Click a parameter handle and drag to a new location or select a parameter and use the **Up** and **Down** arrows to move the parameter.



You can enable or disable the permission for a process to modify security data with the **Security** access switch directly on the **Scripts** tab.



You can click the **Expand/Collapse** arrow next to any section on the **Scripts** tab to expand or collapse a section.

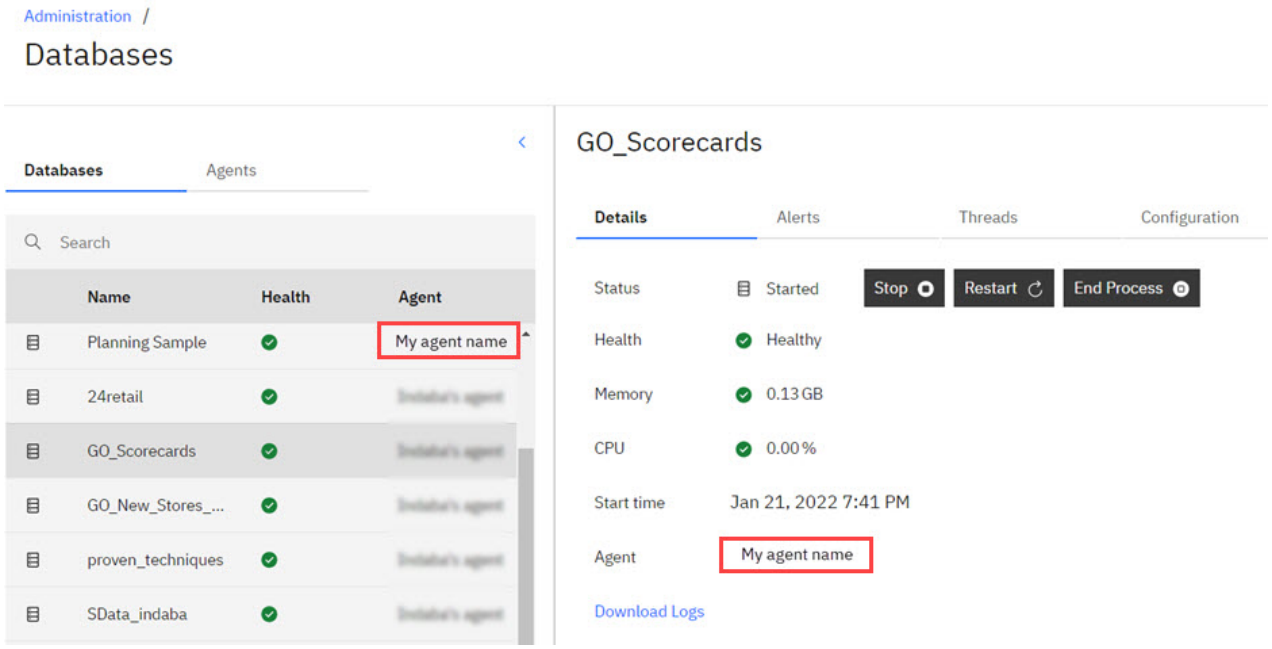


You can click the **Find in tree button** to immediately locate the process in the Databases tree.

Show agent label instead of IP address in Planning Analytics Administration (Local only)

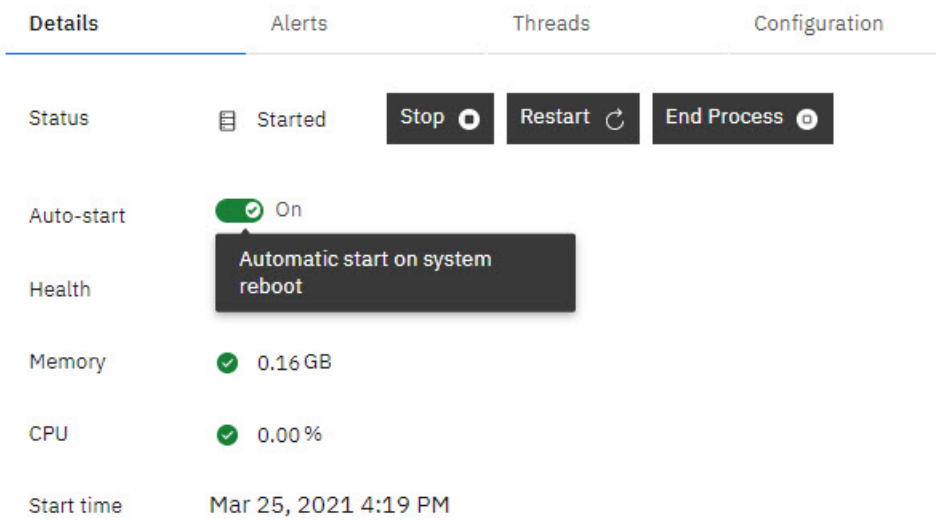
A new property to the `bootstrap.properties` file lets you specify an agent label, which is displayed in place of the agent IP address in Planning Analytics Administration.

To use this new capability, add the property AGENT_LABEL="*agent_name*" to the `bootstrap.properties` file for your agent. When this property is set, you'll see the agent name rather than the IP address in Planning Analytics Administration.



Auto-start option for databases (Cloud only)

The **Details** tab on the database administration page now includes an **Auto-start** option to automatically start a database when the data tier is restarted during regular monthly maintenance.



It's possible that you don't want some of your databases to start when the data tier is restarted, while other databases are essential and must be started along with the data tier. Use the **Auto-start** option to control the behavior of individual databases. By automatically starting only essential databases upon data tier restart, you can conserve system resources and reduce database startup time.

You can always manually start a database from the Databases administration page.

Note: If a database has a space in its name and the **Auto-start** option is **disabled**, there is a known issue that prevents the database from being manually started after the data tier is restarted. To work around this issue, enable the **Auto-start** option then start the database. This issue will be fixed in an upcoming release.

2.0.72 - What's new, December 20, 2021

IBM Planning Analytics Workspace 2.0.72 contains no new features. This version is provided solely to address vulnerabilities in Apache Log4j, which is used by Planning Analytics Workspace as part of its logging infrastructure.

For full details on Log4j vulnerability, see Security Bulletin: IBM Planning Analytics 2.0: Apache log4j Vulnerability (CVE-2021-44228).

Updates to each version of Planning Analytics Workspace are cumulative. To see what was new in previous releases, see Chapter 2, “What's new in Planning Analytics Workspace,” on page 45.

You can view the fix lists for this and previous versions of Planning Analytics Workspace at https://www.ibm.com/support/pages/ibm-planning-analytics-20-fix-lists#anchor2.

2.0.71 - What's new, December 14, 2021

Learn about new features and known issues in version 2.0.71 of IBM Planning Analytics Workspace in the following topics.

Updates to each version of Planning Analytics Workspace are cumulative. To see what was new in previous releases, see Chapter 2, “What's new in Planning Analytics Workspace,” on page 45.

You can view the fix lists for this and previous versions of Planning Analytics Workspace at https://www.ibm.com/support/pages/ibm-planning-analytics-20-fix-lists#anchor2.

Recommended cohorts

For reference purposes, here are the most recent and recommended cohorts for Planning Analytics Workspace 2.0.71:

- **Planning Analytics for Microsoft Excel 2.0.69**. For more information, see Download Planning Analytics v2.0 - IBM Planning Analytics for MS Excel Release 69 from Fix Central.
- **IBM Planning Analytics Local 2.0.9.10**. For more information, see IBM Planning Analytics Local 2.0.9.10 is now available on Fix Central.

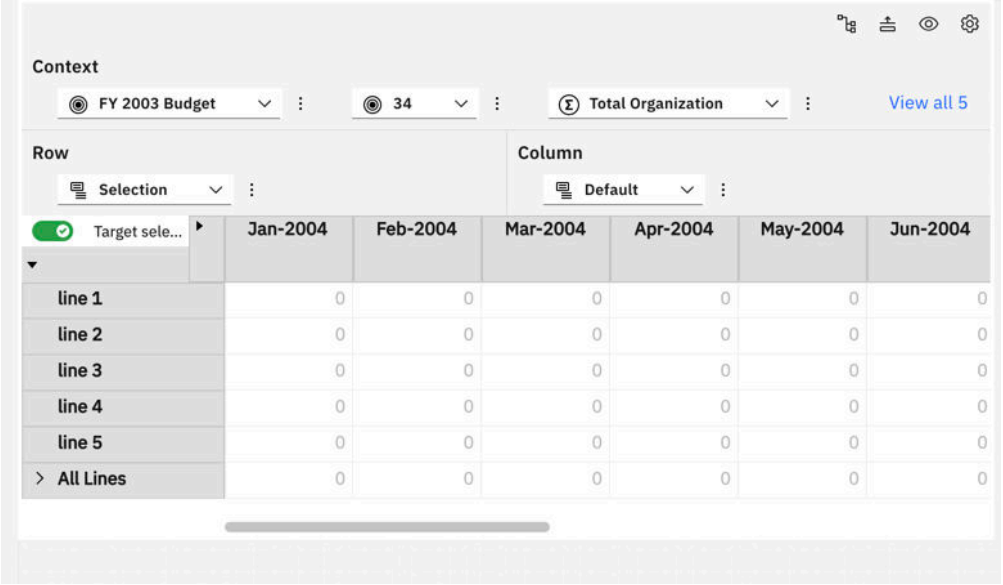
Timeline of previous Planning Analytics releases

For a comprehensive listing of Planning Analytics component releases by month and year, see Timeline for IBM Planning Analytics Releases. You can view versions and release months for the following components:

- Planning Analytics Local TM1 Server
- Planning Analytics Workspace
- Planning Analytics for Microsoft Excel
- Planning Analytics Spreadsheet Services/TM1 Web

New experience view and set editor

A new experience view (or exploration) and set editor are now available in **Books**. With several improvements and enhancements, the new view and set editor offer flexible options to view, analyze, and organize data.



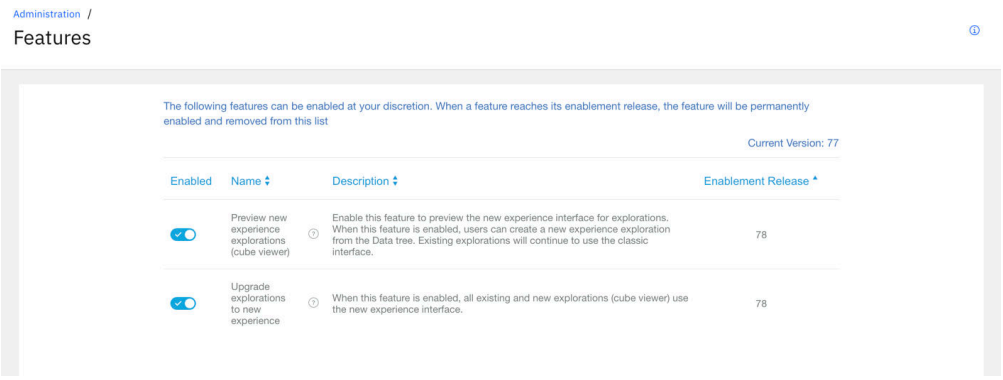
A video walk-through of the new experience view and set editor is available on the IBM Business Analytics Community.

Use the following links to navigate to the relevant section in this topic:

- Enabling the new experience view (preview and upgrade)
- Using the new experience view
- Using the new set editor

Enabling the new experience view

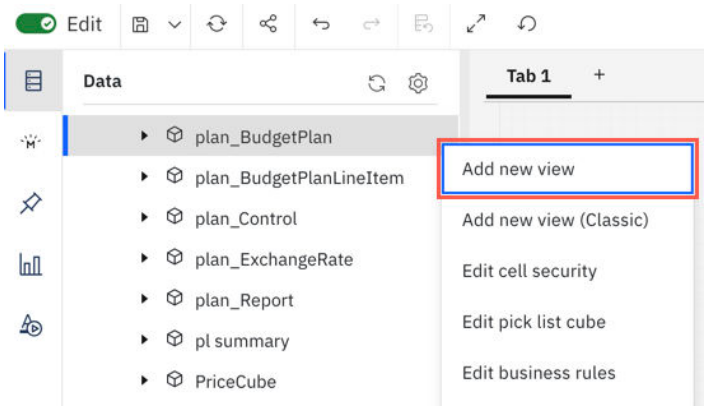
You can preview or upgrade to the new experience view under **Features** in **Administration**. For more information, see Manage features.



Previewing the new experience view:

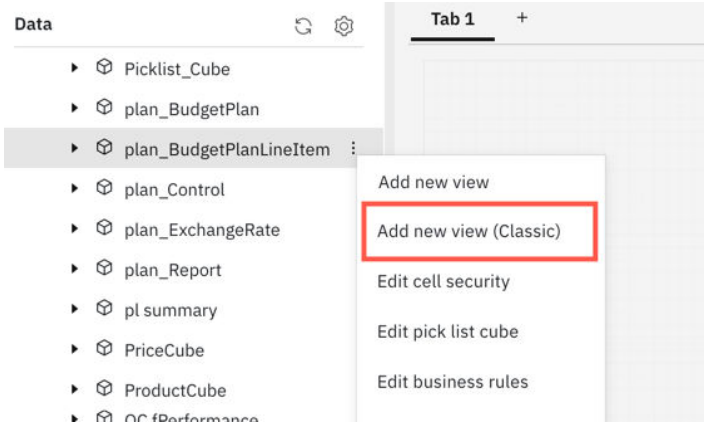
In preview, you can explore and compare the features of both the new experience and classic view interfaces.

After the feature is enabled, open a book in **Edit** mode and right-click the cube in the data tree that contains the data you want to use. Select **Add new view** to use the new view and set editor.



Note: You can access the new set editor only through the new view.

To use the classic view, click **Add new view (Classic).**



Upgrading to the new experience view:

When you upgrade to the new experience view, all existing and new views in **Books** use the new experience interface. Any existing views that use the classic interface are converted to the new experience but retain the look (colors and font) of the classic interface.

Note: Views and set editors in the modeling workbench and IBM® Planning Analytics for Microsoft™ Excel are not changed.

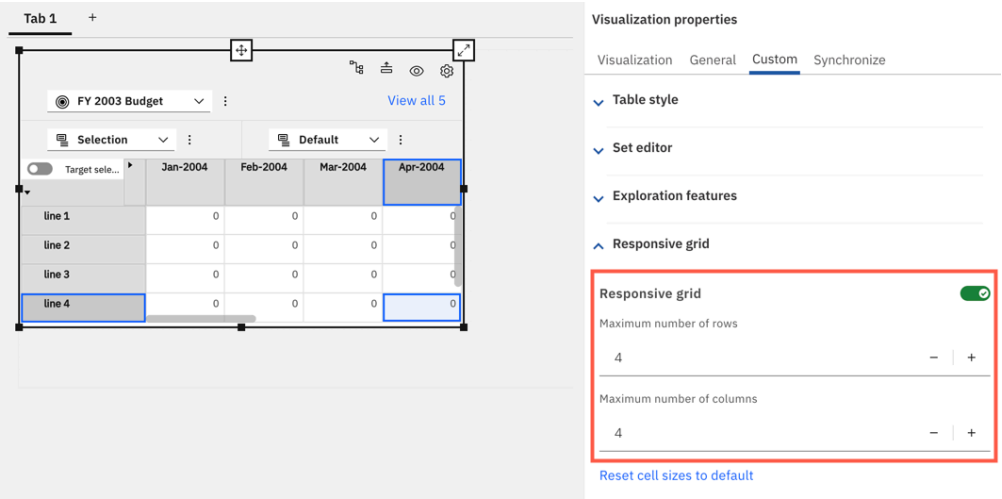
Upgrading views to the new interface also upgrades set editors but only those that are opened from the new experience view. If you add a set editor as a widget to a book from the data tree, the set editor continues to use the classic interface.

Using the new experience view

The new view has several improvements and enhancements that make features more accessible.

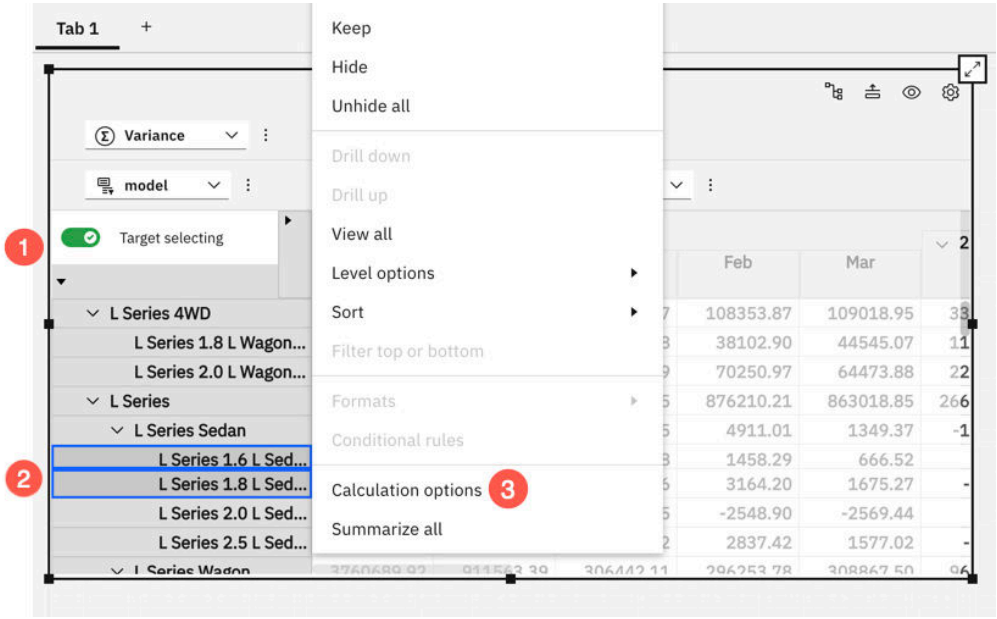
- **Responsive grid property**

  A new **Responsive grid property** property makes the view responsive to size changes. Enable the property to set a fixed number of columns and rows. The view displays the fixed number of columns and rows when you resize the grid.



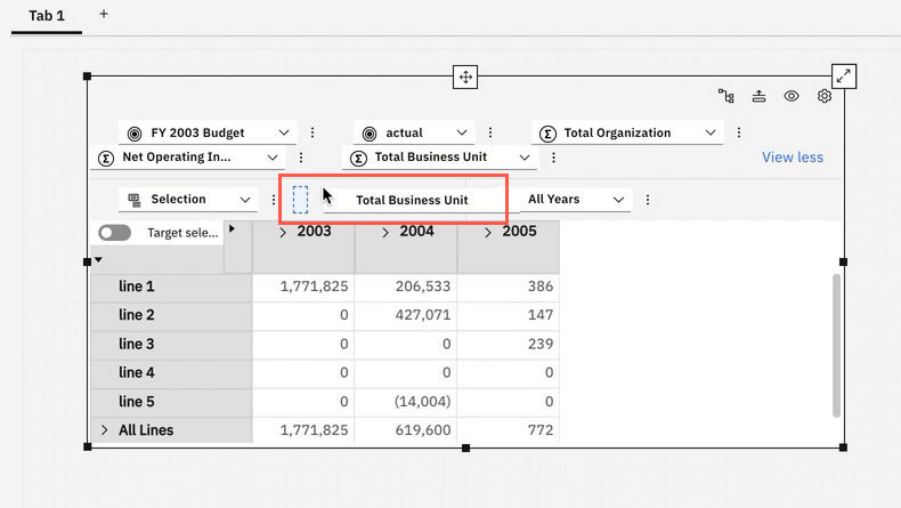
- **Target selecting toggle for asymmetric calculation**

  The new **Target selecting** toggle is used to create an asymmetric calculation. You no longer need to select the individual button on the row or column headers to create an asymmetric calculation. Instead, enable **Target selecting** and select the members that you want to use in the asymmetric calculation. Right-click a selected member and click **Calculation options**.



- **A more guided and intuitive experience**

  The new view's improved design offers a more guided experience without compromising its capabilities. For example, the new view now guides you to the drop zone when you drag a dimension to a different location in the grid.

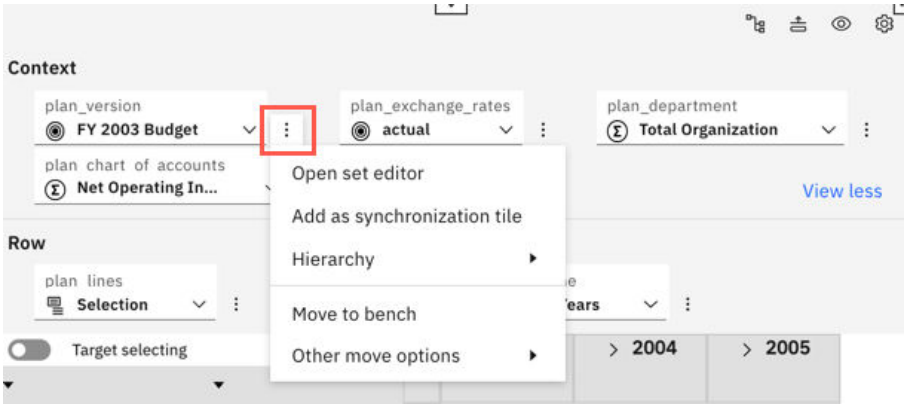


Use the icons in the grid  to:

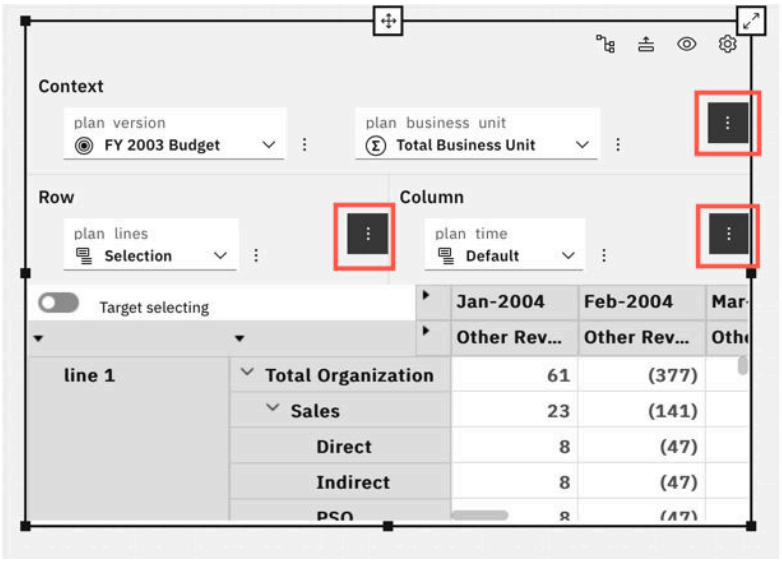
- See the cube in the data tree.
- Expand or collapse the overview.
- See benched dimensions.
- Select hierarchy, iconography, context information, and section headers to customize your view.

Each dimension tile in the grid now has a menu icon next to it from which you can:

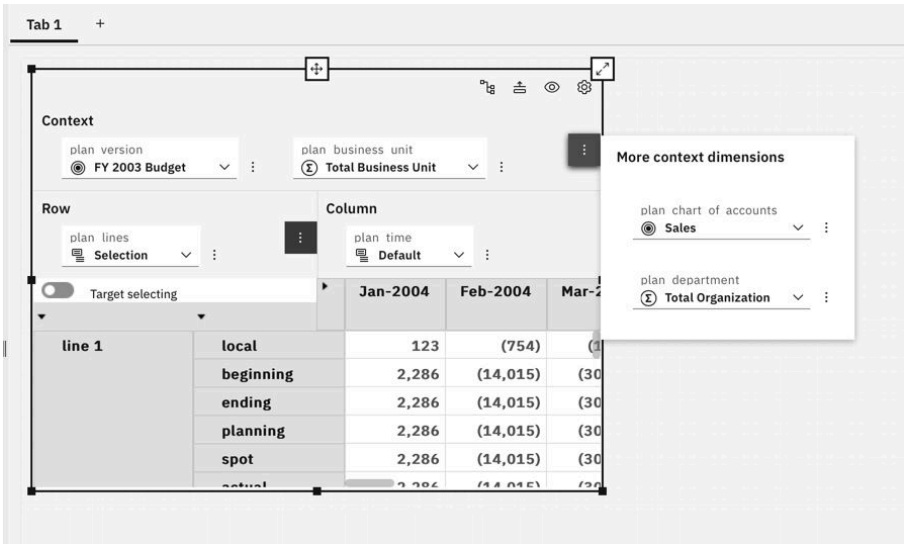
- Open the set editor.
- Add the dimension as a synchronization tile.
- Remove, replace, or add related hierarchy.
- Move the dimension to the bench.
- Manually move the dimension right or left, or to a row, column, or context.



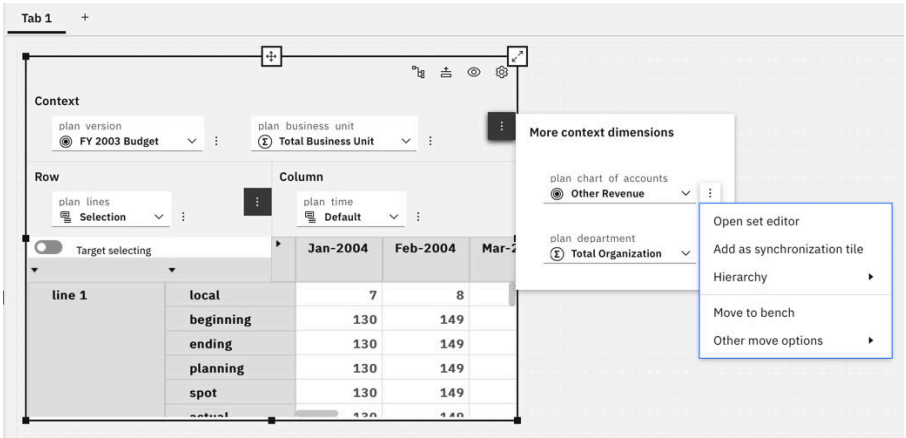
Depending on the number of dimensions or the size of the view, all dimensions might not display. To see dimensions that are hidden from the view, click the **More dimensions** menu in the **Context**, **Row**, or **Column** area.



From the **More dimensions** menu, you can drag dimensions to the **Context**, **Row**, or **Column** area and vice versa. You can also move dimensions that appear within the **More dimensions** menu.



You can click the menu next to the member's name to open the set editor, move the dimension to the bench, see move options, and more.



- **Setting properties in the new view**

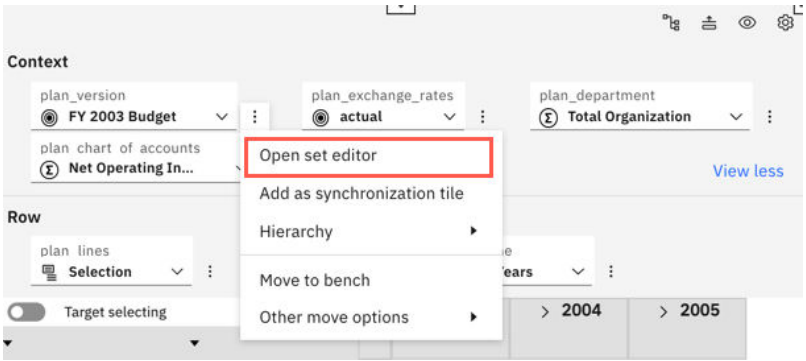
Like in the classic view, you can set properties for the new view by clicking **Properties**.

To offer more formatting flexibility in the new view, the **Themes** property is no longer available.

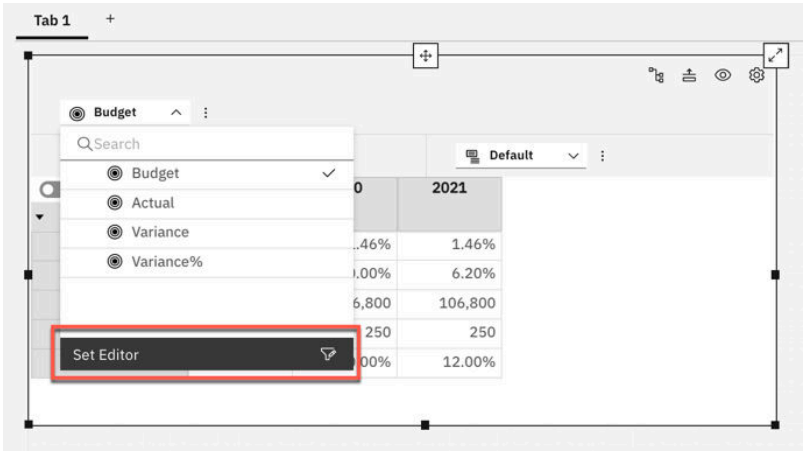
Note: If you save a **Book** with a new view and reopen it, the **Book** displays the new view. However, if you disable the new view feature and reopen the **Book**, you see the classic view.

Using the new set editor

The new set editor can be accessed only through the new view. To open the set editor, click the menu icon next to a dimension in the view and select **Open set editor**.



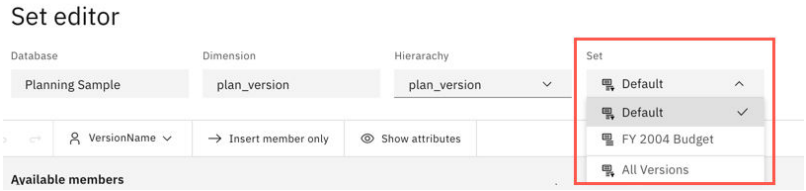
You can also double click the dimension tiles or click the **Set Editor** icon in the dimension menu to open the set editor.



As with the new view, the new set editor offers an improved flow, a more intuitive experience, and flexible options to edit your set.

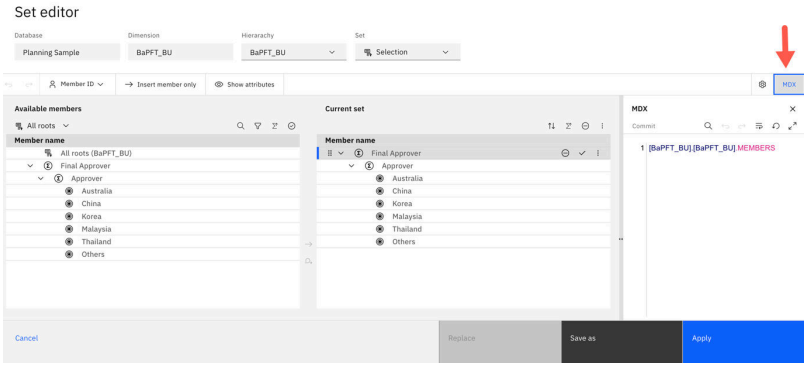
- **Set menu**

  With the **Set** menu, you can now change the set from within the set editor.



- **Improved MDX panel**

  Click **MDX** to see the **MDX** panel and script. You can edit the script in the panel and click **Commit** to apply your changes to the current set.

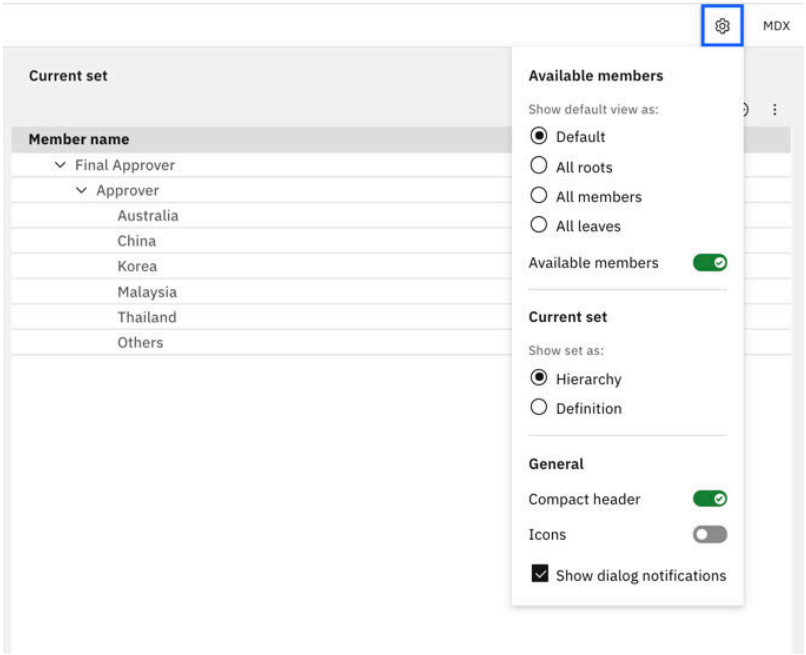


- **Settings menu**

  The **Settings** menu offers options to customize the display for your set.

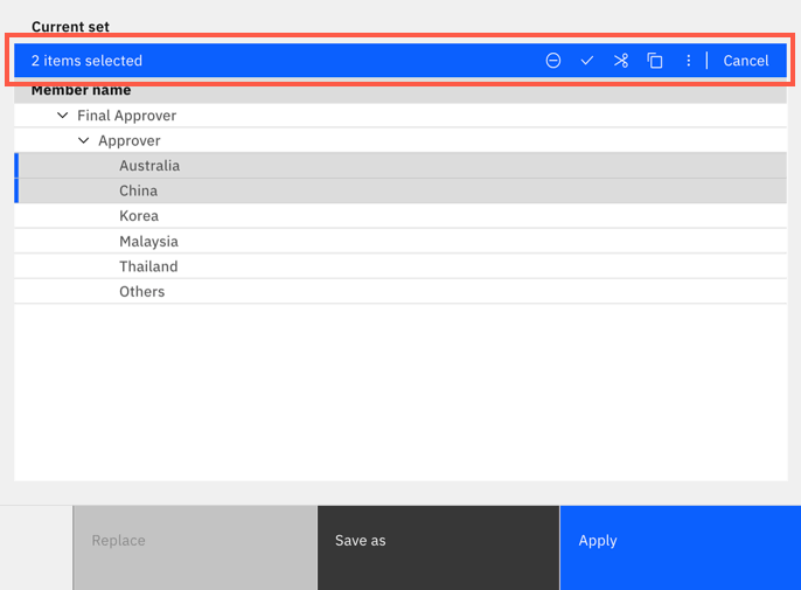
  Enable **Compact header** under the **General** section to reduce the size of the set editor header and see more members.

  You can also remove icons from all members for a simplified display with the **Icons** property under **General**.



- **Multi-select activity display**

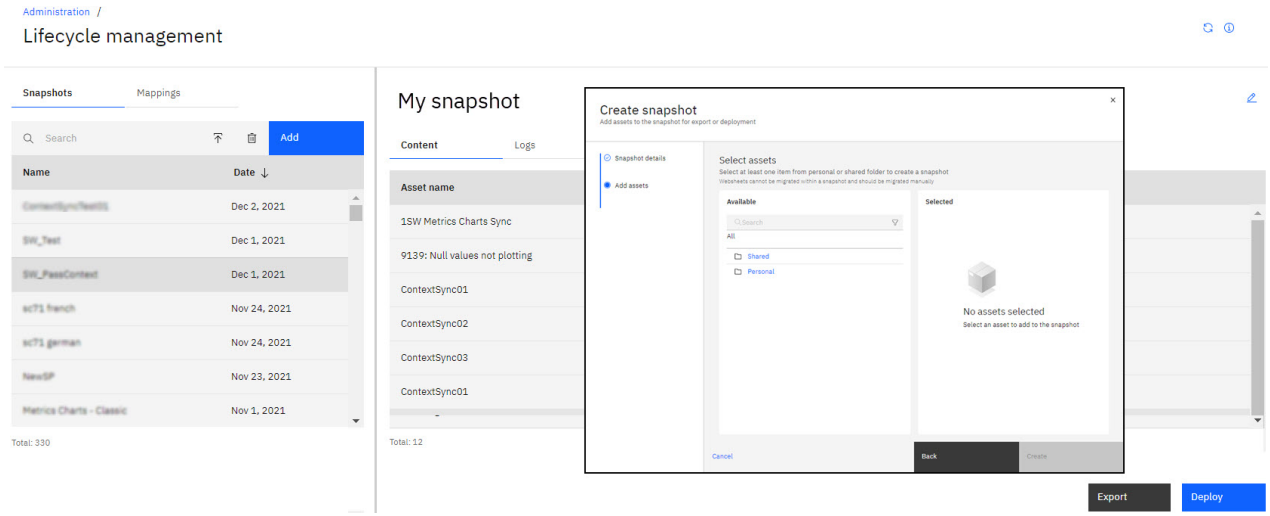
  When you select multiple members in **Available members** or **Current set**, an activity bar now displays with your selection information and available options.



New UI and functional improvements for Lifecycle Management

A simplified user interface makes it easier to create and manage snapshots.

The new interface also provides a look and feel that is consistent with other Planning Analytics Workspace components.



Here are some of the changes you'll notice in the new Lifecycle Management:

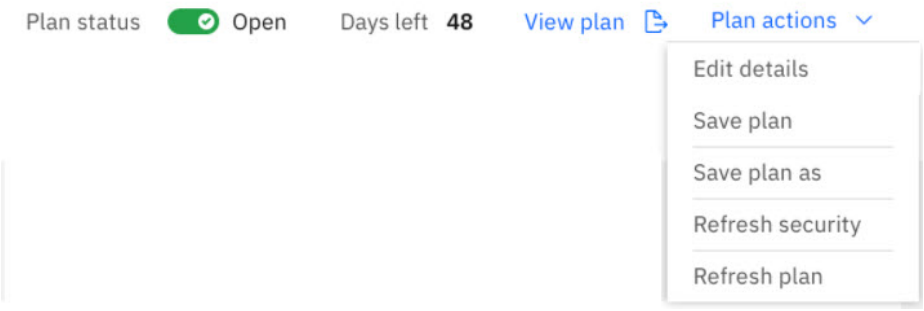
- You no longer have to manage a cart for your assets. Selecting an asset automatically adds the asset to your snapshot.
- You can now select a folder and all its contents to include in a snapshot. This is an improvement over the previous Lifecycle Management, where every asset in a snapshot had to be selected individually.
- You can now include content from both the Shared and Personal folder in a single snapshot.
- Moving a snapshot to a target environment is now called **Deploy** rather than **Migrate** in the user interface.

New header for plans and applications administration page

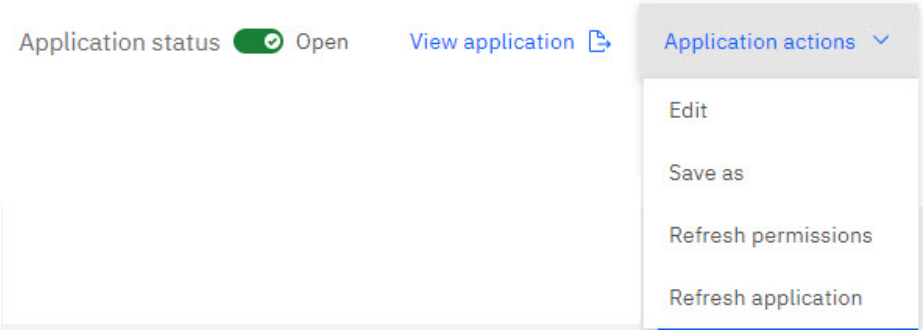
The header section of the administration page for plans and application now includes the ability to quickly open a different plan or application. The header also provides direct access to common administration tasks.

Click ^ next to the plan or application name to open a different plan or application.

Use the options on the plan header to open or close the application, view the plan in contribution mode, or apply any of the plan actions. The **Days left** indicates the number of days left until the last due day for any step in the plan.



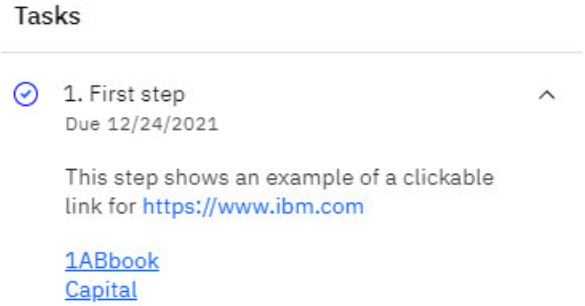
Use the options on the application header to open or close the application, view the application in contribution mode, or apply any of the application actions.



URLS in plan steps or application sections are now active links

If the description for a step in a plan or a section in an application contains a properly formed URL, the URL is now presented as a clickable link.

Clicking the link opens the destination in a new browser tab.

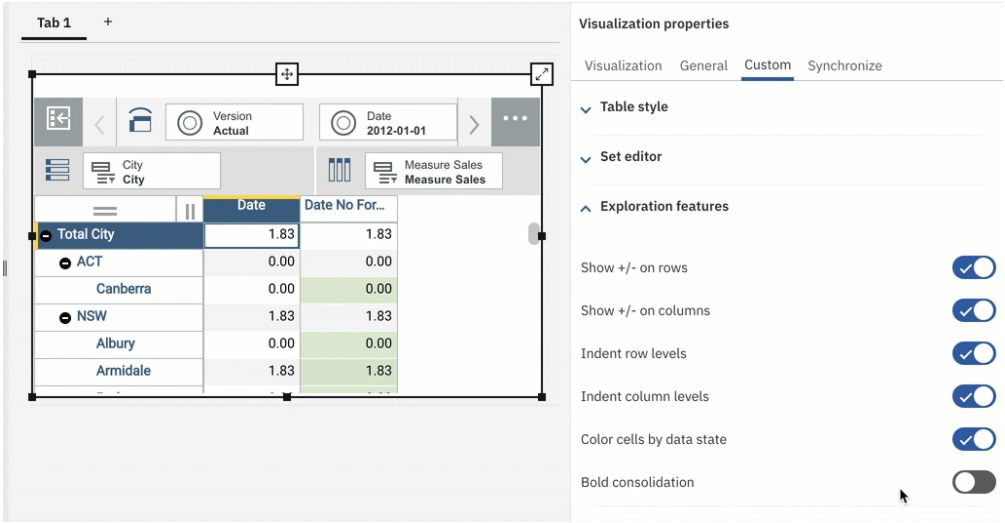


Enable or disable consolidation formatting

You can now enable or disable the bold formatting for consolidated values in an Exploration.

Consolidation formatting can be enabled or disabled only in **Edit** mode.

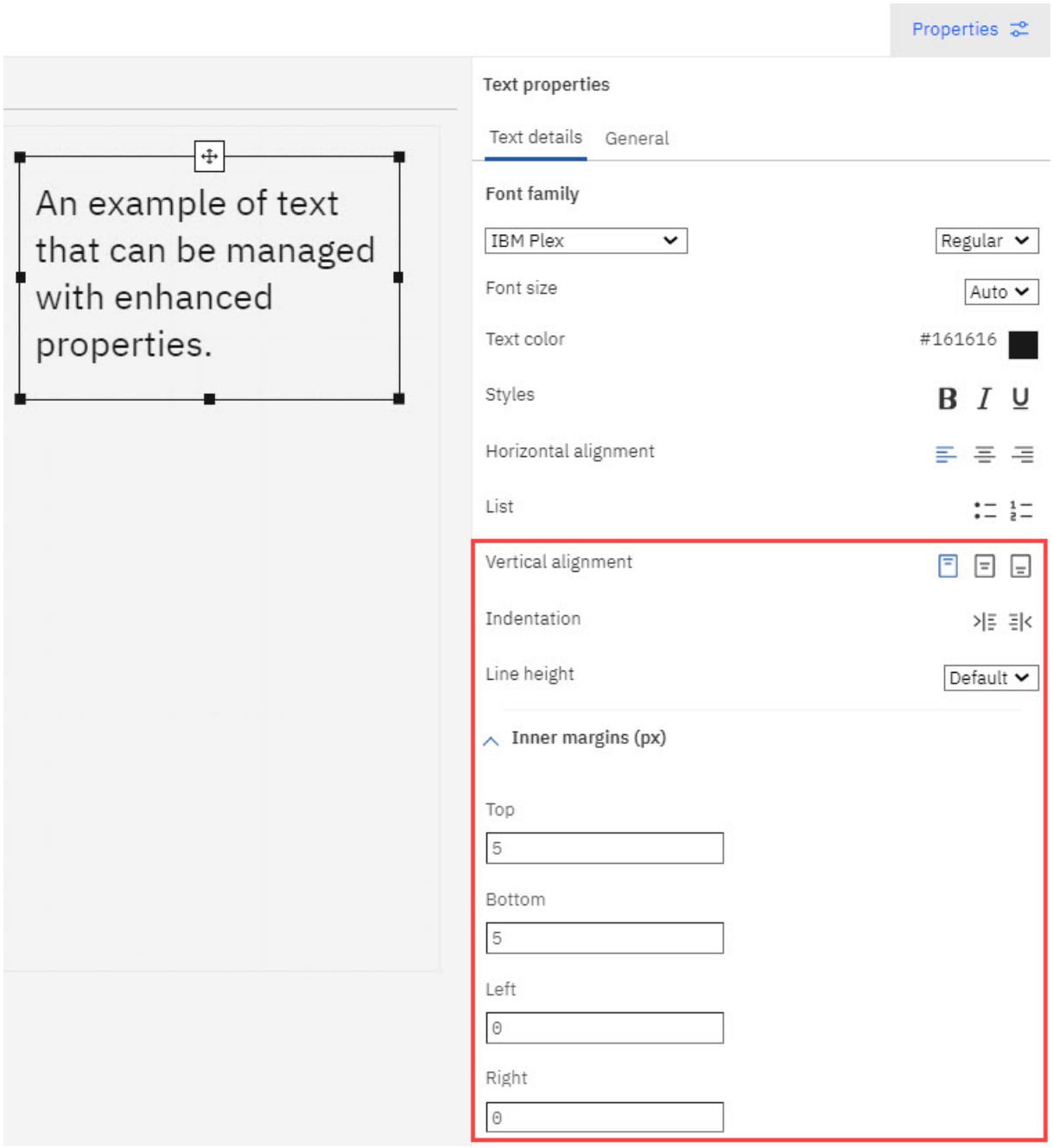
Under **Properties**, go to **Custom** and expand **Exploration features**. To see consolidated values in bold, enable the **Bold consolidation** property. If you disable the property, all values in the Exploration are displayed in regular text.



Enhanced text formatting

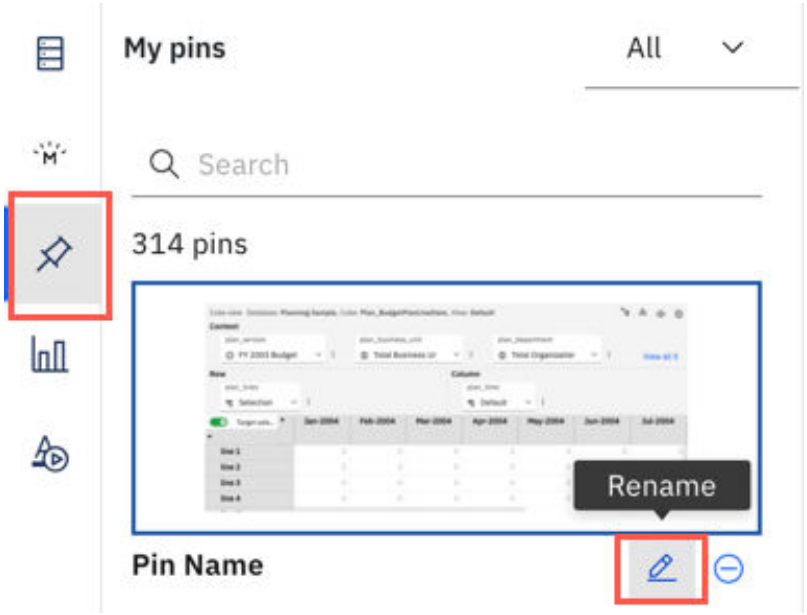
You can now apply properties that manage the vertical alignment, indentations, line height, and inner margins for text within a text widget.

To use the new properties, click the text inside a text widget while in **Edit** mode, then click **Properties**. Click the **Text details** tab to see and use the new text properties.


Properties
An example of text that can be managed with enhanced properties.
Text properties
Text details
General
Font family
IBM Plex
Regular
Font size
Auto
Text color
#161616
Styles
Horizontal alignment
List
Vertical alignment
Indentation
Line height
Default
Inner margins (px)
Top
5
Bottom
5
Left
0
Right
0

Rename pins

You can now rename a pin when you are in **Edit** mode by clicking the **Rename** icon next to the name of the pinned item.



For more information, see Pin items.

2.0.70 - What's new, November 16, 2021

Learn about new features and known issues in version 2.0.70 of IBM Planning Analytics Workspace in the following topics.

Updates to each version of Planning Analytics Workspace are cumulative. To see what was new in previous releases, see Chapter 2, “What's new in Planning Analytics Workspace,” on page 45.

Recommended cohorts

For reference purposes, here are the most recent and recommended cohorts for Planning Analytics Workspace 2.0.70:

- **Planning Analytics for Microsoft Excel 2.0.69**. For more information, see Download Planning Analytics v2.0 - IBM Planning Analytics for MS Excel Release 69 from Fix Central.
- **IBM Planning Analytics Local 2.0.9.10**. For more information, see IBM Planning Analytics Local 2.0.9.10 is now available on Fix Central.

Timeline of previous Planning Analytics releases

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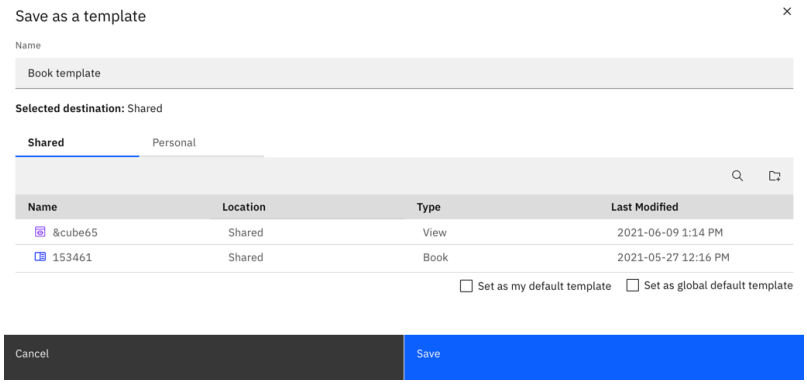
- Planning Analytics Local TM1 Server
- Planning Analytics Workspace
- Planning Analytics for Microsoft Excel
- Planning Analytics Spreadsheet Services/TM1 Web

Fix list

You can view the fix lists for this and previous versions of Planning Analytics Workspace at https://www.ibm.com/support/pages/ibm-planning-analytics-20-fix-lists#anchor2.

Save a book as a template and set it as a default

You can now save a book as a template and set it to be your default. Administrators can also set a book template to be a global default, making it a default template for other users.

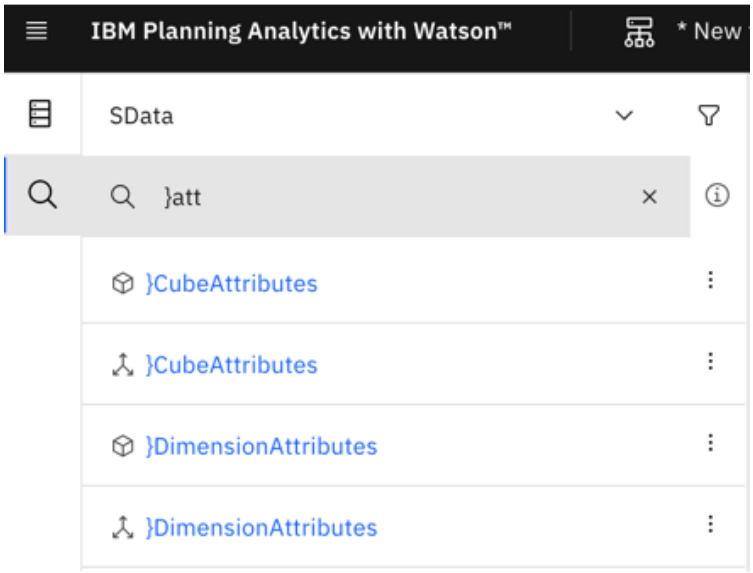


For more information, see Saving a book as a template and setting it as default.

Modeling workbench search improved to support control objects

In the modeling workbench, you can now search for control objects.

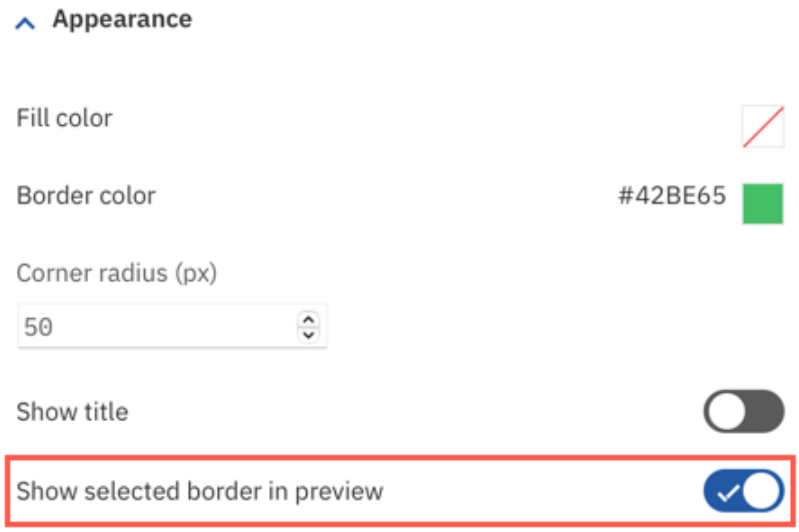
In the **Search** field, prefix the search term with } to search for a control object. For example, `}Capabilities`. The search looks for items that contain the string that follows }.



For more information, see Using database-level search in a modeling workbench.

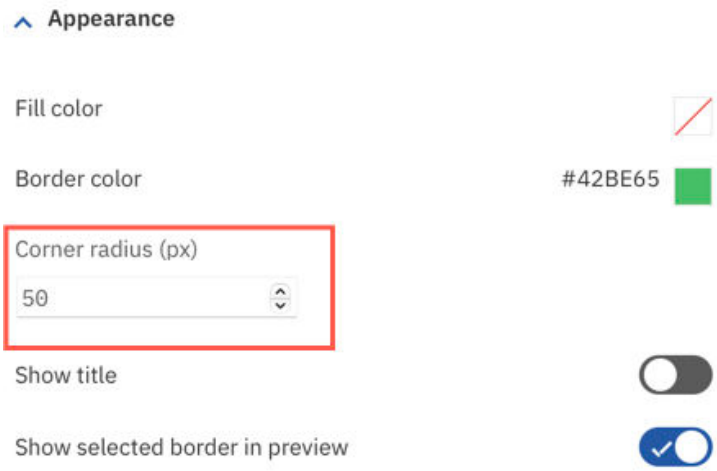
New property added for item borders

A new property, **Show selected border in preview**, is now available for items (widgets, visualizations, and explorations). With this property, you can enable or disable borders around items when they are in consumption mode.



For dynamic items like visualizations and explorations, the property is enabled by default. For all other items (widgets such as Text, Image, and Shapes), this property is disabled.

You can now also set a corner radius for borders around items.

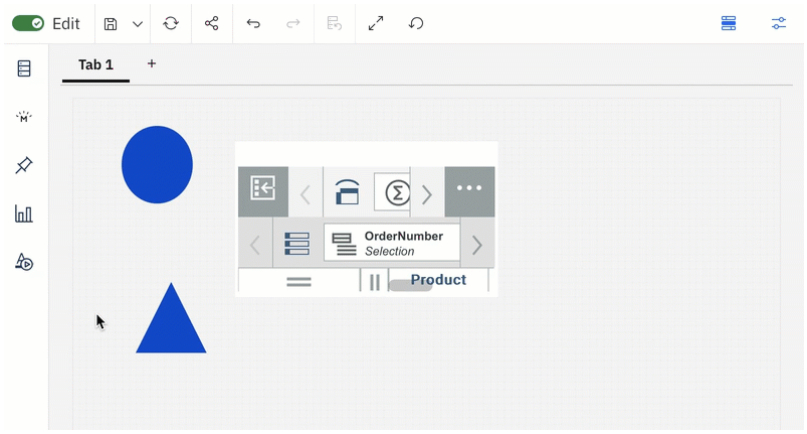


For more information, see Enable or disable borders for items in consumption mode.

Select multiple items by using mouse drag

You can now select multiple items (widgets, visualization, and explorations) that are on a book tab by using your mouse. Previously, you had to select each item separately.

Click anywhere on the canvas and drag your mouse around the items you want to select. All items within the lasso you created are now selected. With this improvement, you can easily group or move multiple items at the same time.



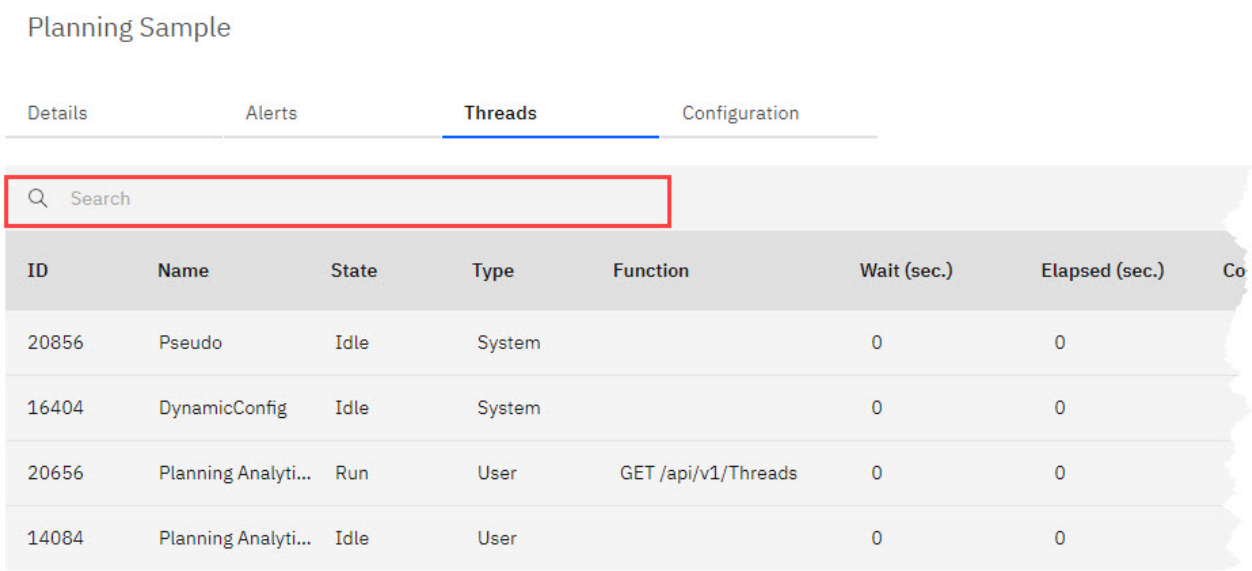
You can select multiple items with a mouse drag in both Edit and consumption mode.

When you are in consumption mode, before you make your selection, enable the Show selected border in preview property for the items you want to select. This makes it easy to see the selected items when you lasso around them.

Search on multiple words when monitoring thread activity in Planning Analytics Administration

You can now search for multiple words on the database **Threads** tab in Planning Analytics Administration. Separate each word with a comma. For example, **`run,admin,Architect`**.

Search is not case-sensitive.



For more information on monitoring thread activity, see Monitor and manage database thread activity.

Use custom compact numeric format to display values

You can now append one or more commas to the end of a custom number format pattern to display values in compact format in explorations and visualizations. Each comma present at the end of a format pattern scales the value display by 1,000.

A single comma results in the value being displayed as thousands. Two commas display the value as millions. Three commas display the value as billions.

For example, the format pattern `#,##0.0,` results in the value 1234567.89 being displayed as 1,234.6. The format pattern `#,##0.0,,` displays the same value as 1.2.

To improve the usability of compact format, you can include literals in the format pattern to display specified characters. You can use these characters to indicate that the value is displayed as thousands, millions, or billions. Literals must be enclosed in single quotation marks.

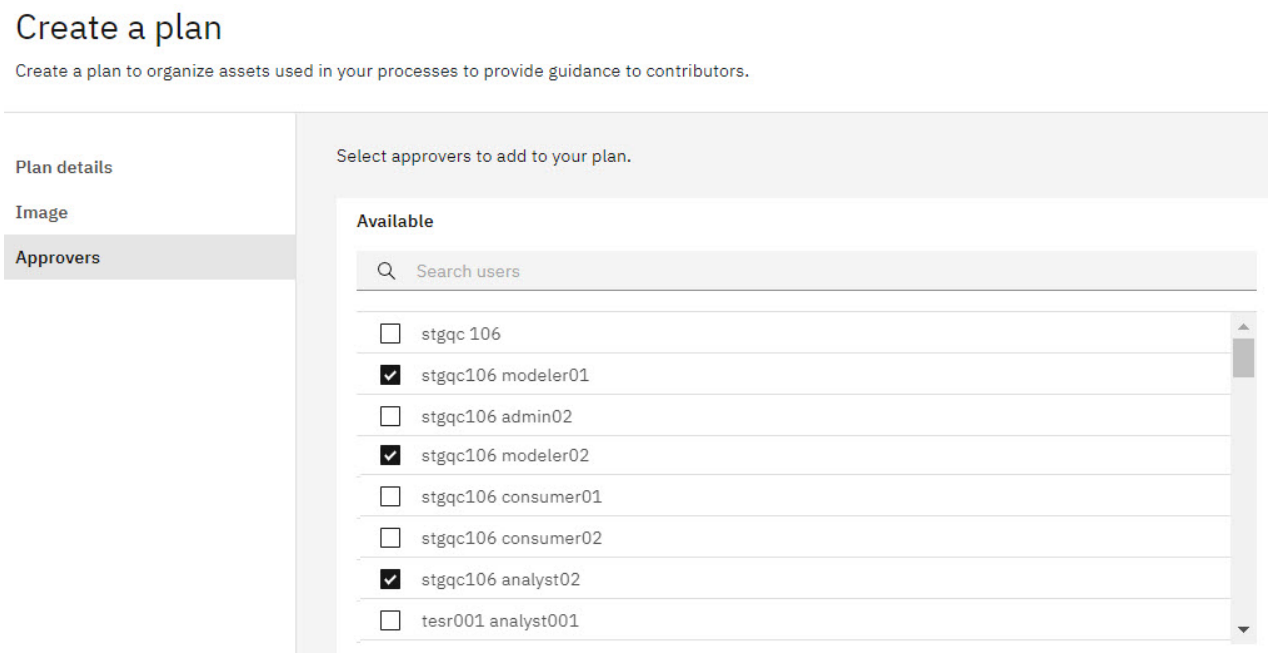
To improve upon the previous example, use the format pattern `#,##0.0,'K'` to display the value 1234567.89 as 1,234.6K. The format pattern `#,##0.0,,'M'` displays the same value as 1.2M.

For more information on setting custom formats, see Setting the data format in a view.

Use enhanced workflow and capabilities when you create plans and applications

The workflow for creating plans and applications is modified to simplify the creation process.

When you initially create a plan or application, you set the name, description, and image on a page separate from the plan or application template.



You can still modify these details directly on the plan or application at any time.

Additionally, you can now set approvers for a plan or application. Approvers are users who can fully edit a plan or application after its initial creation. An approver has all the capabilities of an administrator for a plan or application, including the ability to submit a plan step on behalf of any group.

For more information on creating plans and applications, see Use plans and applications to organize work.

Submit a plan step for all groups to which you belong

When you belong to more than one group that is assigned to a plan step, you'll see a new option to **Submit all groups** when submitting a step. Select this option to submit the plan on behalf of all groups to which you belong.

For more information, see Open and contribute to a plan.

Planning Analytics Workspace Local support for Red Hat Enterprise Linux 8 (Local only)

You can now install Planning Analytics Workspace Local version 2.0.70 or later on Red Hat Enterprise Linux 8.

For details, see Installing Planning Analytics Workspace Local.

Deprecation notice - modeling books in Planning Analytics Workspace

Planning Analytics Workspace 2.0.70 is the last release that allows modelers to create new Modeling Books.

The ability to create modeling books will be removed in the next Planning Analytics Workspace release. Existing modeling books will continue to be usable. IBM recommends the use of the Modeling Workbench as a replacement for modeling books.

2.0.69 - What's new, October 12, 2021

Learn about new features and known issues in version 2.0.69 of IBM Planning Analytics Workspace in the following topics.

Updates to each version of Planning Analytics Workspace are cumulative. To see what was new in previous releases, see Chapter 2, “What's new in Planning Analytics Workspace,” on page 45.

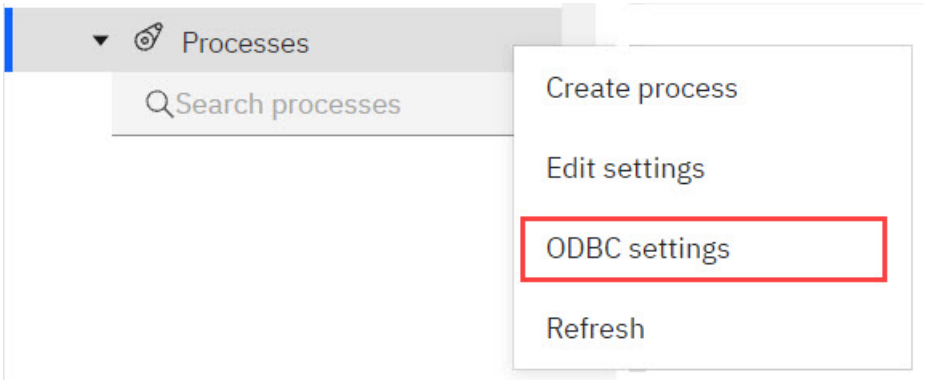
You can view the fix lists for this and previous versions of Planning Analytics Workspace at https://www.ibm.com/support/pages/ibm-planning-analytics-20-fix-lists#anchor2.

Manage ODBC connections for multiple processes on the modeling workbench

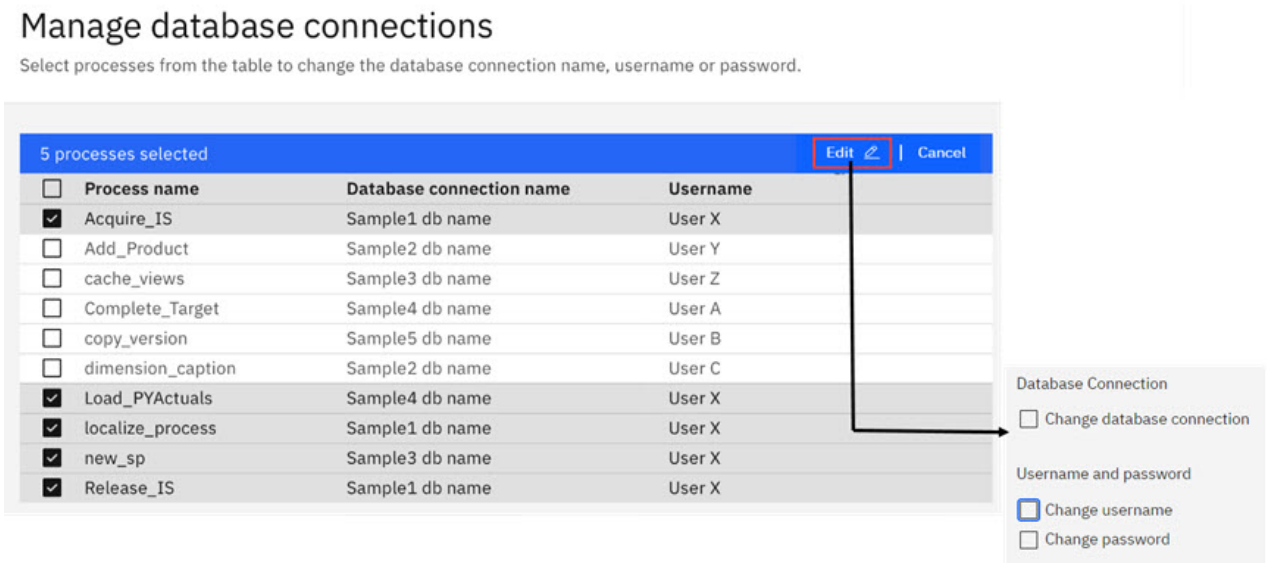
Each process with an ODBC data source includes the declaration of the ODBC connection, username and password as part of the data source connection configuration. When your database contains multiple processes that use the same data source connection configuration, it can be laborious to update each process individually when the connection configuration changes.Use the new connection manager to modify the ODBC connections for multiple processes simultaneously.

Note: The connection manager is available only on the modeling workbench. You can't use the connection manager in a modeling book.

To open the connection manager, click the **Actions** icon ⋮ on the Process node in the Databases tree, then click **ODBC settings**.



In the connection manager, you can select which processes you want to modify, then click **Edit** to modify the database connection type, user, or password.

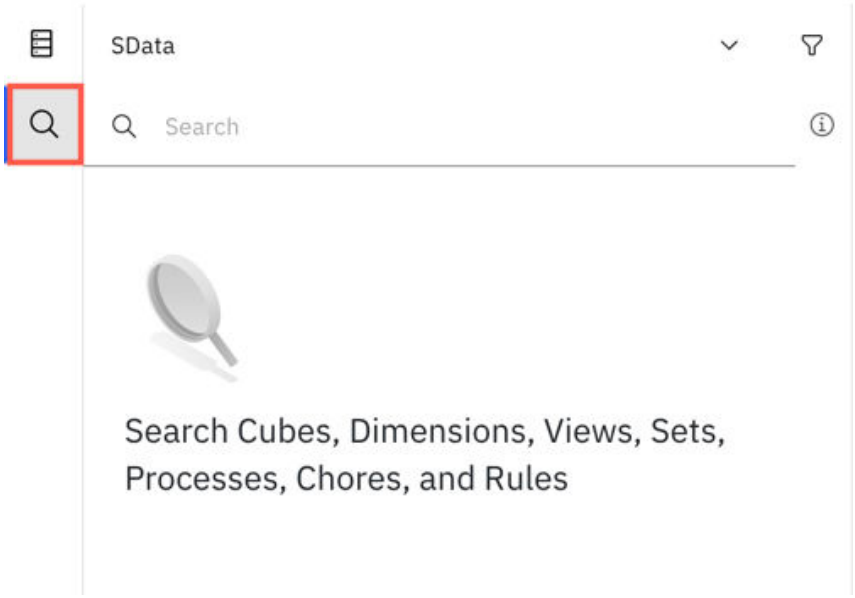


After you save the connection changes, the modified connection configuration is applied and saved to each of the processes you selected.

For more details, see Modify connection configuration for multiple processes that use ODBC data sources.

New database-level search in the modeling workbench

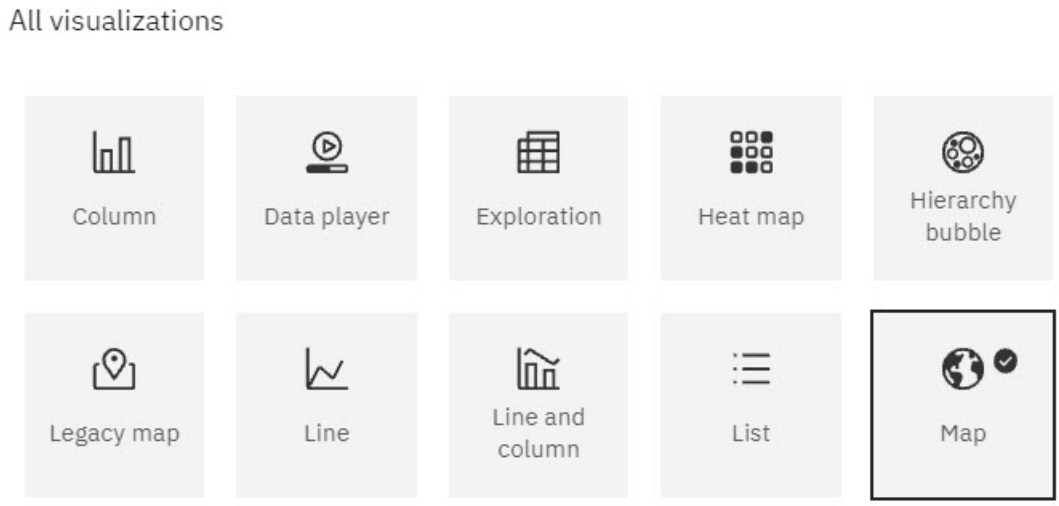
In the modeling workbench, you can now search for data items (cubes, dimensions, views, sets, processes, chores, and rules) in any database. This lets you quickly find a data object and open it in a tab. You can also edit or delete a data item from the within the search panel.



For more information, see Using database-level search in a modeling workbench.

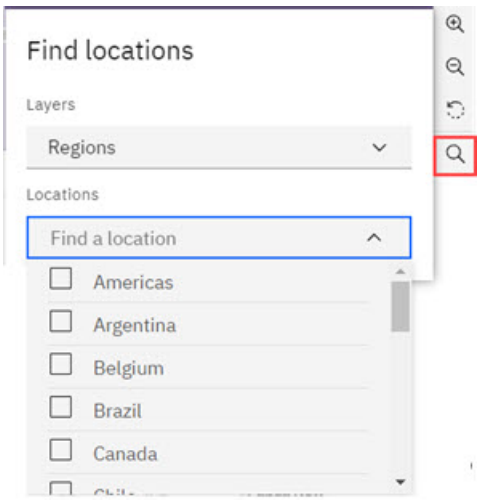
Use the new Map visualization to view geographic data

A new Map option is now available to create visualizations for data with a geographic component.

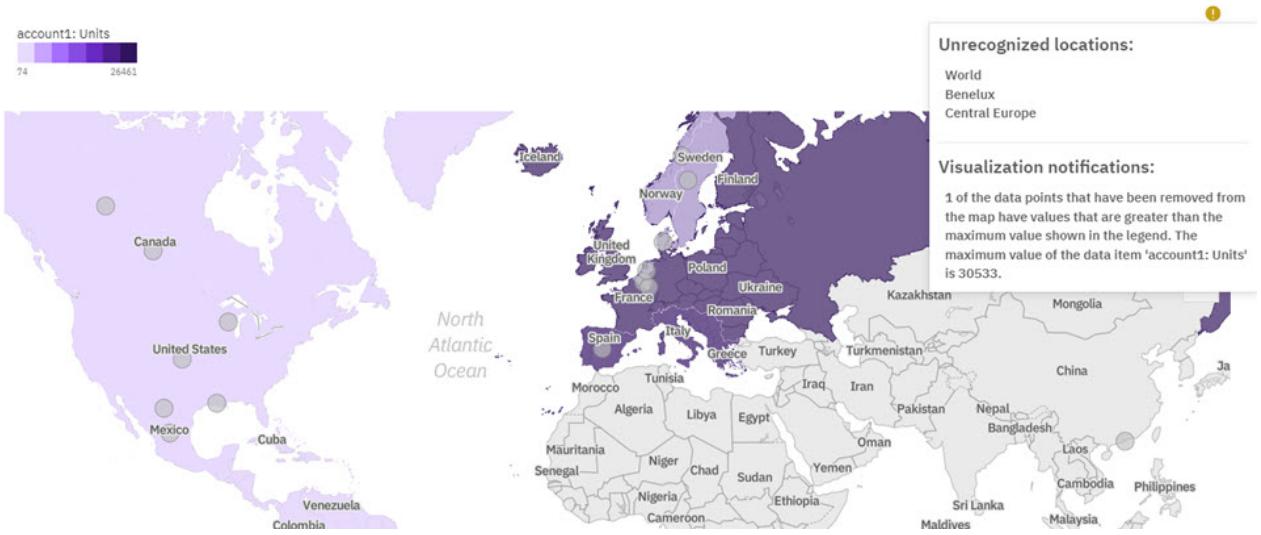


Both the new **Map** and the existing **Legacy map** visualizations are available for use. Any books that contain a Legacy map remain unchanged; Legacy maps are not automatically converted to the new Map visualization.

The new Map visualization provides improvements in geographic dimension identification, general usability, and error warnings. For example, you can easily search for locations directly from the map.



Additionally, if your data contains unrecognizable locations or data outliers, you can view that information while you create or use a Map.



Another advantage of the new Map visualization is that you can use integration with Mapbox to display custom polygons or layers in your maps.

Reset a book

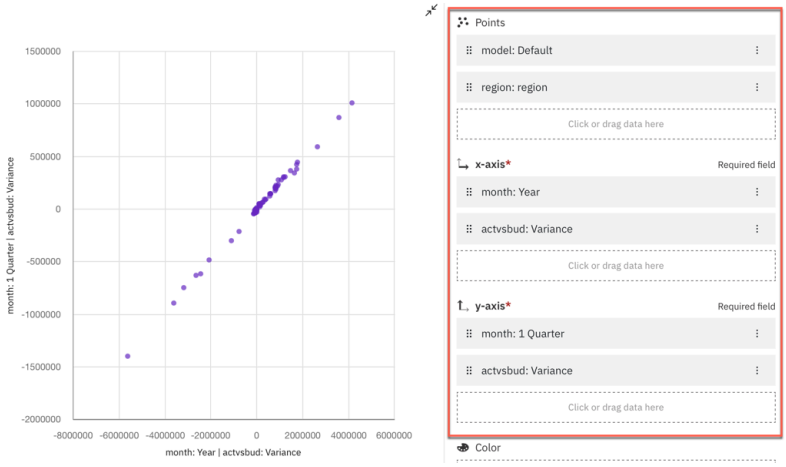
You can now reset your book to reverse changes you made and go back to the last saved version of the book. Resetting a book is useful if you want to reset all the filters of a book to their initial selections.

Click the **Reset book** button in the IBM Planning Analytics toolbar to reset book changes.

For more information, see Resetting a book.

Enhanced Scatter visualization

You can now assign multiple data items to all the fields in **Scatter** visualizations. For example, in this screen capture, there are two data items mapped to each field.



For more information, see Scatter visualization.

Rollback data entry button updated

Use  to now rollback your data entries. There is no change to the rollback data entry feature and it continues to function as before.

For more information, see Rollback data entry.

2.0.68 - What's new, September 14, 2021

Learn about new features and known issues in version 2.0.68 of IBM Planning Analytics Workspace in the following topics.

Updates to each version of Planning Analytics Workspace are cumulative. To see what was new in previous releases, see Chapter 2, “What's new in Planning Analytics Workspace,” on page 45.

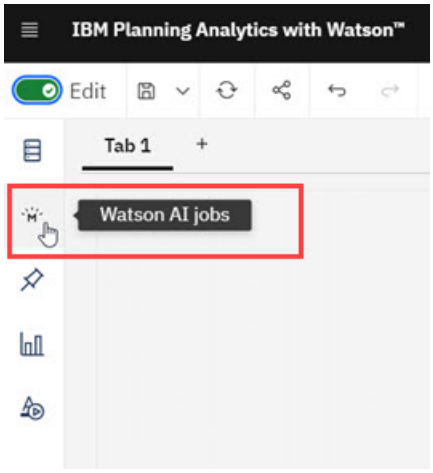
You can view the fix lists for this and previous versions of Planning Analytics Workspace at https://www.ibm.com/support/pages/ibm-planning-analytics-20-fix-lists#anchor2.

Use Decision Optimization with Planning Analytics Workspace (Cloud only)

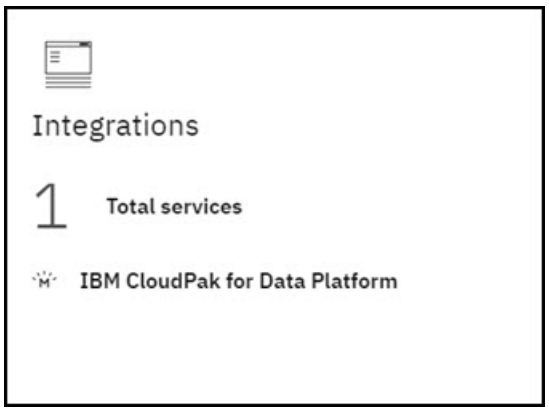
You can now use Decision Optimization (IBM ILOG® CPLEX®) with IBM Planning Analytics Workspace on Cloud to deliver prescriptive analytics capabilities to help you make better decisions and deliver improved business outcomes.

With the Cloud Pak for Data Platform integration configured, and the required services IDs and views in place, analysts can easily view and run optimization jobs within the configured deployment space directly from Planning Analytics Workspace. Additionally, they can configure action buttons to run any of the jobs of a deployment space, allowing any Planning Analytics Workspace user to run optimization jobs.

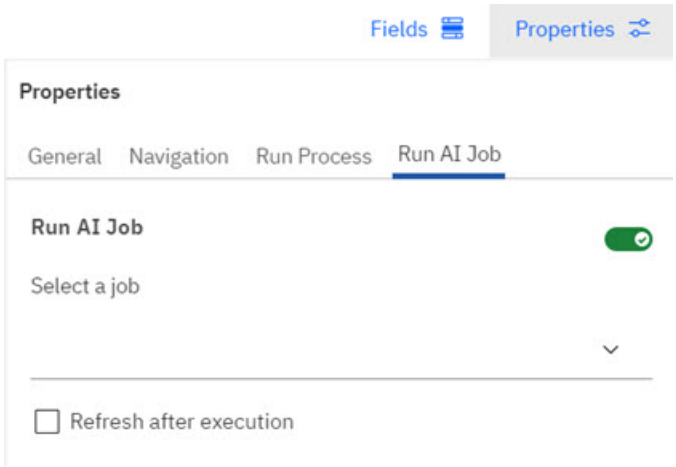
Administrators, analysts, and modelers can access optimization jobs from the new **Watson AI jobs** tab on a book.



You'll notice a couple of other changes in support of Decision Optimization. The Administration perspective now includes an **Integrations** tile, where you can configure the required integration with the IBM Cloud Pak® for Data Platform.



Additionally, the properties for an Action button now include a **Run AI Job** tab, where you can specify an existing Watson AI job to run from the button.



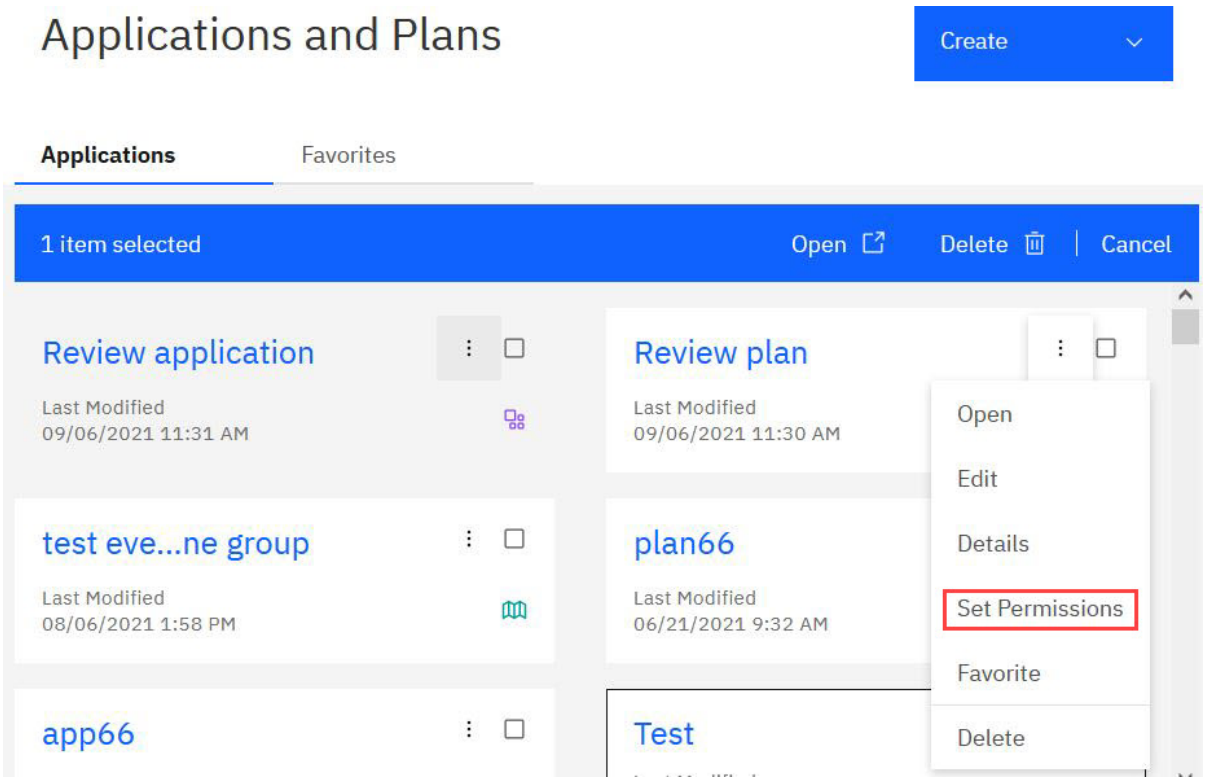
Analysts and modelers can create applications and plans

Analysts and modelers, not only administrators, can now create and manage applications and plans. The plan or application creator is automatically given full control over the asset.

Any user with the **Full control** permission is considered an owner of the application or plan. Users with **Edit only** or **View only** permissions can contribute to the plan or application when they belong to a group that is added to a step (plan) or section (application).

Users with the **Full control** permission can submit the steps or sections on behalf of any user. They can also give permissions to other users for the assets they own. Users without full control can submit only the steps or sections that they are added to.

To facilitate the process of assigning permissions to other users, users with the **Full control** permission have now the **Set Permissions** option available to them from the plan or application context menu ⋮ in the **Applications and Plans** page.



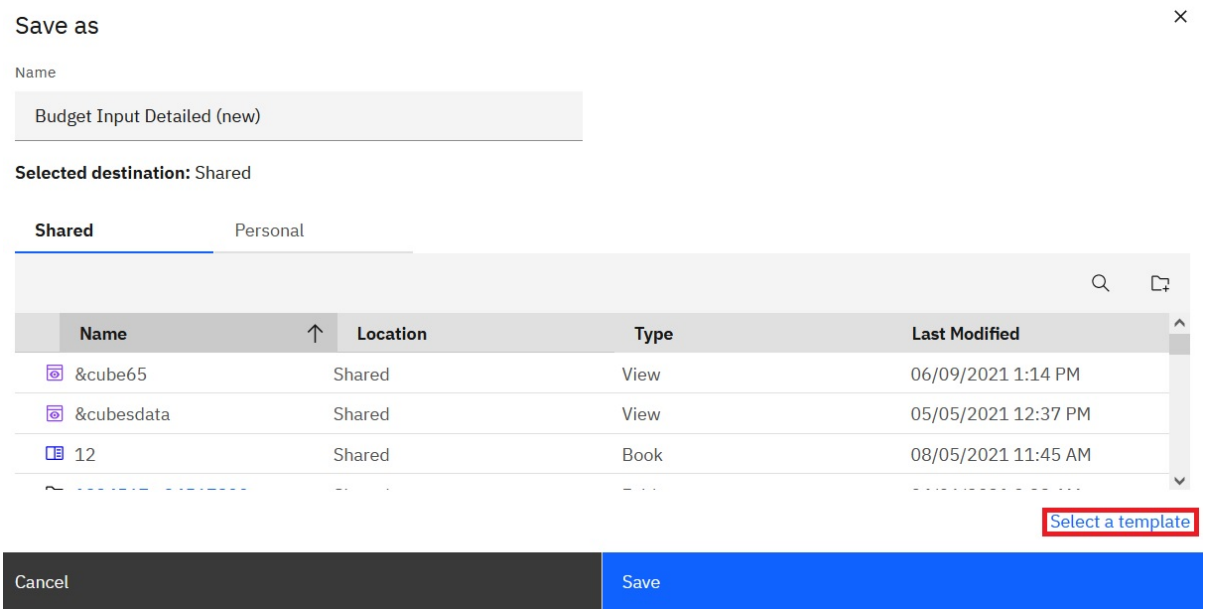
For more information, see Use applications and plans to organize work.

Dashboard grid size enhancements

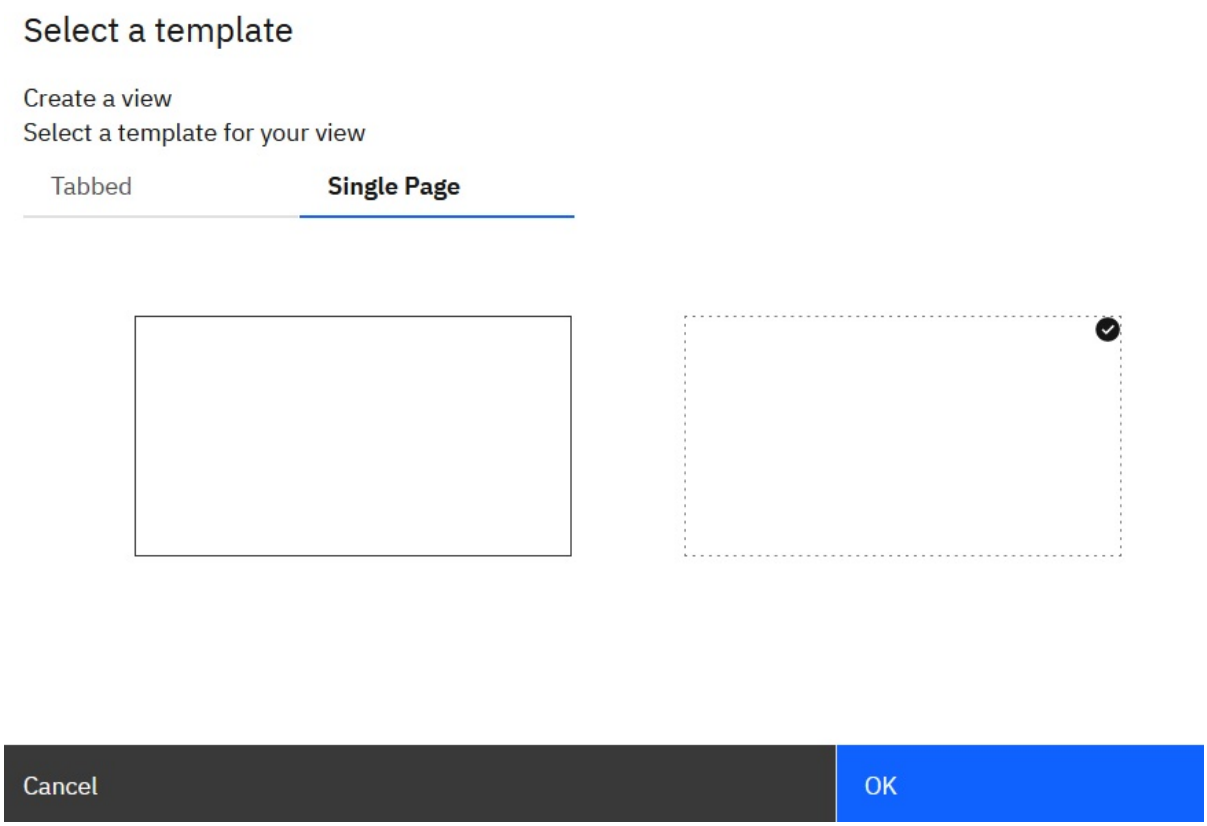
You can now use a template to display widgets in books and websheets in a tabbed page or single page.

In previous versions of IBM Planning Analytics Workspace, a hardcoded template with a single widget was used.

When you save a view by using the **Save view as** option, you can select a template.



When you click **Select a template**, the following dialog box is displayed:



You can save the view as a **Tabbed** or **Single page** page. When the **Tabbed** template is selected, the view is displayed on one tab, and you can add more tabs to the book. When the **Single page** is selected, you cannot add more tabs to the book. With the dotted-line template, the view is maximized to use all space within the tab or sheet. With the solid-line template, the view is displayed with the default widget sizing.

For more information, see Save a view.

Download a Welcome Kit directly from Planning Analytics Administration

When you receive initial notification that a Planning Analytics Welcome Kit is available, you must download the kit from IBM@Box. However, any subsequent Welcome Kits can now be downloaded directly from Planning Analytics Administration.

For full details, see Download a Welcome Kit from Planning Analytics Administration.

2.0.67 - What's new, August 24, 2021

Learn about new features and known issues in version 2.0.67 of IBM Planning Analytics Workspace in the following topics.

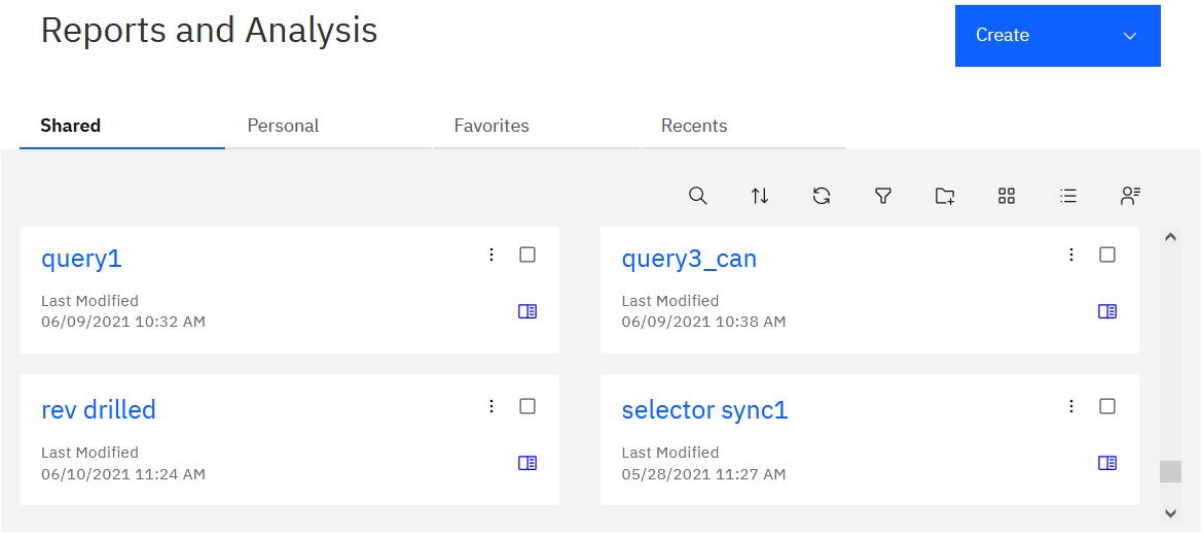
Updates to each version of Planning Analytics Workspace are cumulative. To see what was new in previous releases, see Chapter 2, “What's new in Planning Analytics Workspace,” on page 45.

You can view the fix lists for this and previous versions of Planning Analytics Workspace at https://www.ibm.com/support/pages/ibm-planning-analytics-20-fix-lists#anchor2.

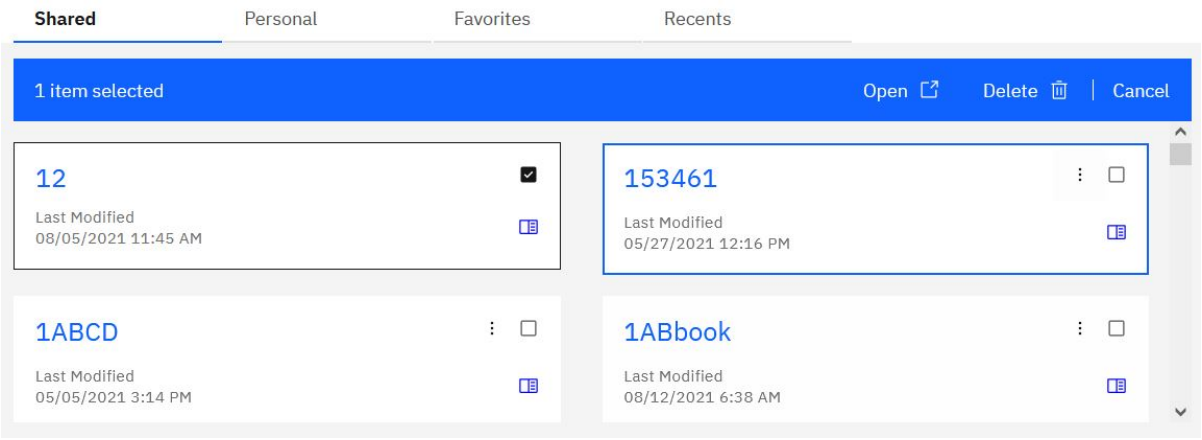
Checkboxes available in the grid view

The tiles in the grid view in the **Applications and Plans**, **Reports and Analysis**, and **Data and Models** pages now include a checkbox.

The following image shows the **Reports and Analysis** page in the **Grid view** . On each tile, the checkbox is in line with the item name.



When you select the checkbox, the page actions toolbar changes to show options that are available for the selected item or items, as shown in the following image.

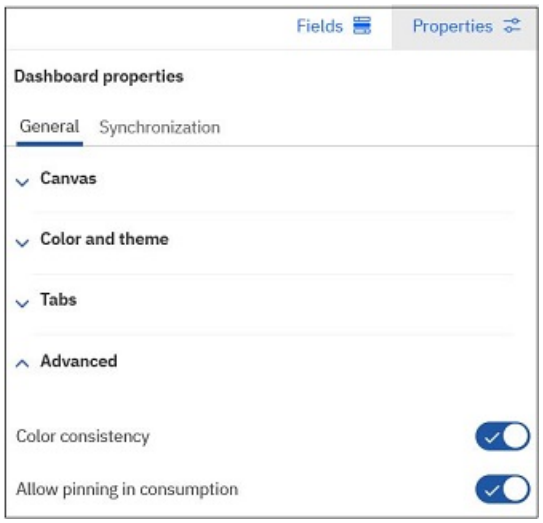


The checkboxes in the **Grid view** and the **List view** are used in the same way.

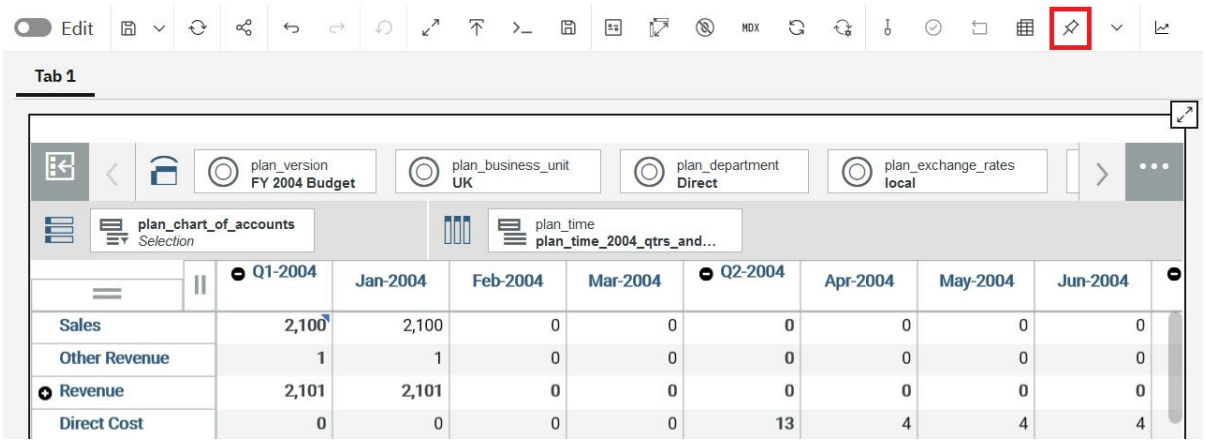
Pin widgets while in consumption mode

You can pin widgets, such as views and websheets, while in consumption mode.

Until now, the ability to pin a widget in a book was available only in the edit mode. Starting with this release, you can turn on the book property **Allow pinning in consumption** to enable pinning in consumption mode.



The pin button then becomes available in the toolbar when the widget is selected in consumption mode.



Clicking the pin button adds the widget to the **Pins** tab.

For more information, see Enable pinning in consumption mode and Pin items.

Assign a step or a section to everyone in plans/applications

Until now, you had to assign individual user groups to a step in a plan or to a section in an application. You can now assign a step or a section to Everyone, allowing all users in your environment access to a step or section.

2.0.66 - What's new, July 14, 2021

Learn about new features and known issues in version 2.0.66 of IBM Planning Analytics Workspace in the following topics.

Updates to each version of Planning Analytics Workspace are cumulative. To see what was new in previous releases, see Chapter 2, “What's new in Planning Analytics Workspace,” on page 45.

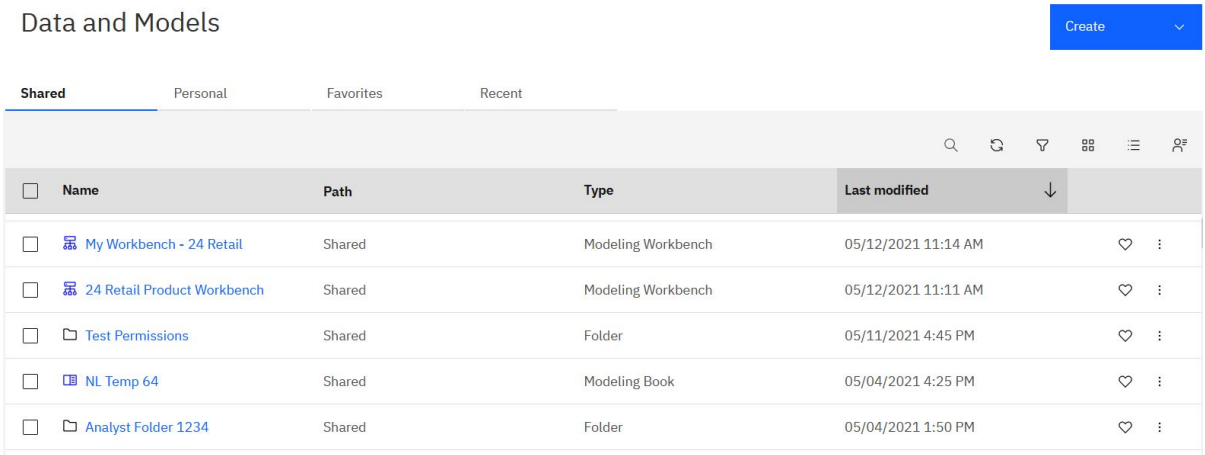
You can view the fix lists for this and previous versions of Planning Analytics Workspace at https://www.ibm.com/support/pages/ibm-planning-analytics-20-fix-lists#anchor2.

The modeling workbench is fully integrated with the product

The modeling workbench that was introduced as a beta feature in IBM Planning Analytics Workspace 2.0.64 and 2.0.65 is now available as a standard product feature.

The modeling workbench is used to create and maintain your model. All the workbench functionality is identical as in the beta version. However, with the introduction of the **Data and Models** view in this release, you can access existing workbenches and create new ones in a slightly different way. For example, in previous releases, if you clicked the **Data and Models** tile in the **Quick Launch** section of the Welcome page, the workbench view was opened directly. In this release, this action opens the **Data and Models** view from which you can access existing workbenches and create new ones.

The following screen capture shows the **Data and Models** page where you can access and manage existing workbenches in the **Shared**, **Personal**, or other folders, and use the **Create** button to start creating new workbenches.

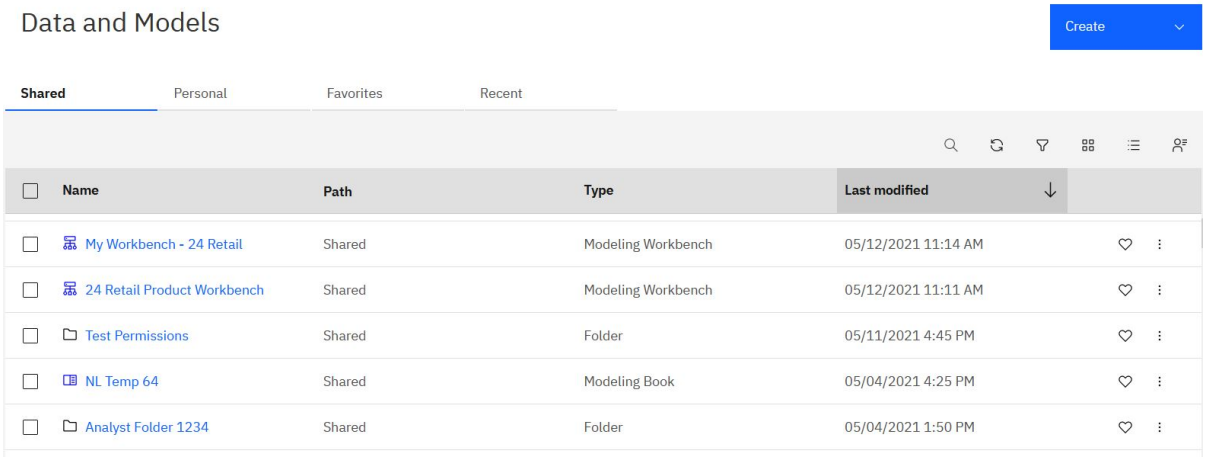


For mu information, see Use the modeling workbench to create and manage your model.

Full-page view of the modeling content

The **Data and Models** page provides access to the modeling content in IBM Planning Analytics Workspace.

To access the **Data and Models** page, click the **Home** menu ☰, and then click **Data and Models**. You can also access this page from the welcome page, the **Quick Launch** section, the **Data and Models** tile.



From this page, you can create new, and access and manage existing modeling workbenches and modeling books. The modeling content of the **Shared**, **Personal**, **Favorites**, and **Recent** folders is displayed on separate tabs.

The items in each folder can be displayed in the **List view** (default) or **Grid view** .

To open an item, click it. The item is opened in the related user interface. To manage an item, use the options in the actions toolbar or the item context menu .

Apply proportional or relative proportional data spreading to a forecast

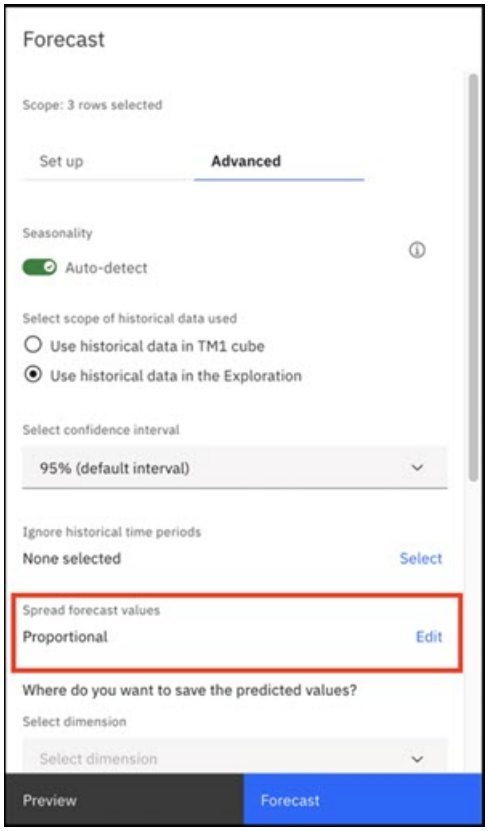
You can now use data spreading methods to write values to consolidated cells when you create a forecast.

Note: Data spreading in a forecast requires TM1 server 11.8.7 (PA 2.0.9.8) or later.

Proportional data spreading distributes a specified value among cells proportional to existing cell values.

Relative proportional data spreading distributes values to the leaves (children) of a consolidation proportional to the leaves of a reference cell or cells. This is useful when you want to create a forecast based on a known previous time period.

Both of these spreading methods can be applied to a forecast.



For more information on using data spreading in a forecast, see Forecasting options.

Hide zero/null data points in select visualizations

You can suppress zeroes in an exploration or visualization, but this only suppresses entire rows or columns that contain zero/null values. Individual zero/null data points cannot be suppressed. Planning Analytics Workspace 2.0.65 introduces a **Hide empty data points** property that lets you hide individual zero/null values in visualizations.

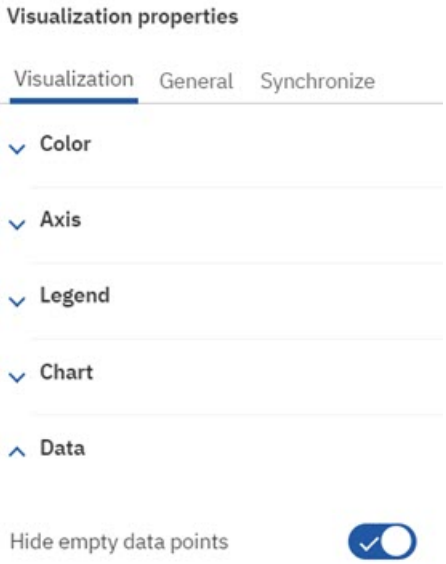
This property is available for the following visualization types:

- Box plot
- Line

- Line & column
- Radar
- Word cloud

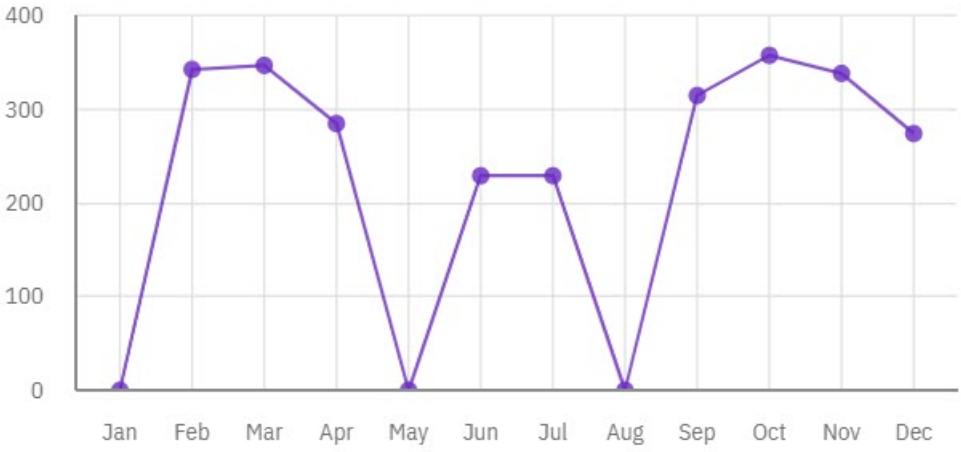
To enable the property:

1. Enable Edit mode on the dashboard.
2. Select a visualization on the dashboard.
3. Click **Properties**.
4. Click the **Visualization** tab.
5. Click the **Data** category.
6. Enable the **Hide empty data points** property.

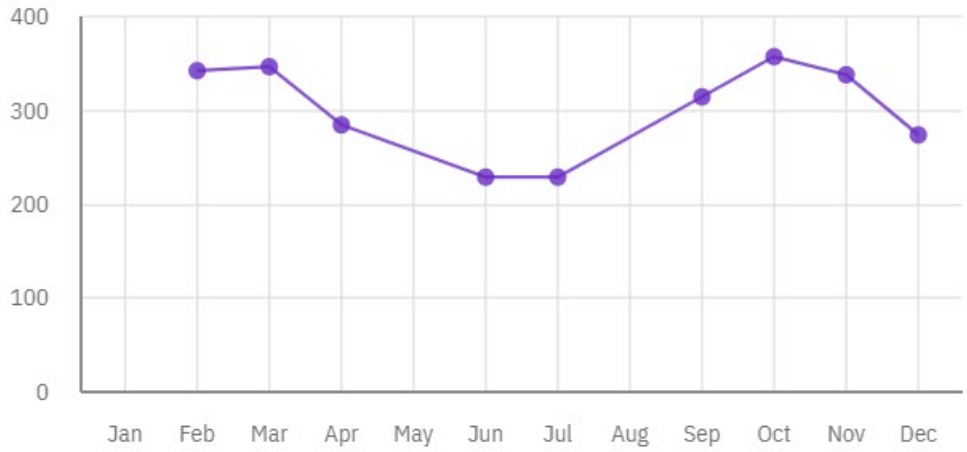


When the property is enabled, empty data points are excluded from your visualization.

For example, here's a simple line visualization for a view that includes several zero values (Jan, May, and Aug). In this image, the **Hide empty data points** property is not enabled. You can see that the zero values are included in the visualization.



When the **Hide empty data points** property *is* enabled, as in the following image of the same visualization, data points for zero values are hidden in the visualization.



Confirm the Clear spreading shortcut command in the cube viewer

When you type 'c' or 'C' in a cube viewer cell, you are now prompted to confirm that you want to clear values. This ensures that cell values are not inadvertently cleared.

You will be prompted for confirmation when 'c' or 'C' alone is entered in a cell, as well as when entered with trailing or leading spaces or with any of the directional spreading indicators (| ^ < >).

Include attribute headers when exporting a cube view

The cube viewer supports the display of attribute values on both rows and columns. In previous version of Planning Analytics Workspace, attribute values were included when exporting a view to Excel, but attribute names were not exported as a header.

As of Planning Analytics Workspace 2.0.66, attribute names are exported as headers when you export to Excel.

Attributes can exist on rows and columns. When a view contains attributes on **both** rows and columns, there can be a conflict as to which attribute name should show up in the header cell. In this case, the attributes on the rows take priority.

For details on exporting a view, see Export to Excel.

Use * and ? wildcards to search in the Set editor

You can now use the * and ? wildcard characters when searching in the Set editor. The * wildcard character matches zero or more characters. The ? wildcard character matches any single character.

For further details on searching in the Set editor, see Search in sets.

2.0.65 - What's new, June 16, 2021

Learn about new features and known issues in version 2.0.65 of IBM Planning Analytics Workspace in the following topics.

Updates to each version of Planning Analytics Workspace are cumulative. To see what was new in previous releases, see Chapter 2, “What's new in Planning Analytics Workspace,” on page 45.

You can view the fix lists for this and previous versions of Planning Analytics Workspace at https://www.ibm.com/support/pages/ibm-planning-analytics-20-fix-lists#anchor2.

Use the modeling workbench to create and maintain your model (beta)

The modeling workbench introduced in IBM Planning Analytics 2.0.64 remains available as a beta feature in 2.0.65.

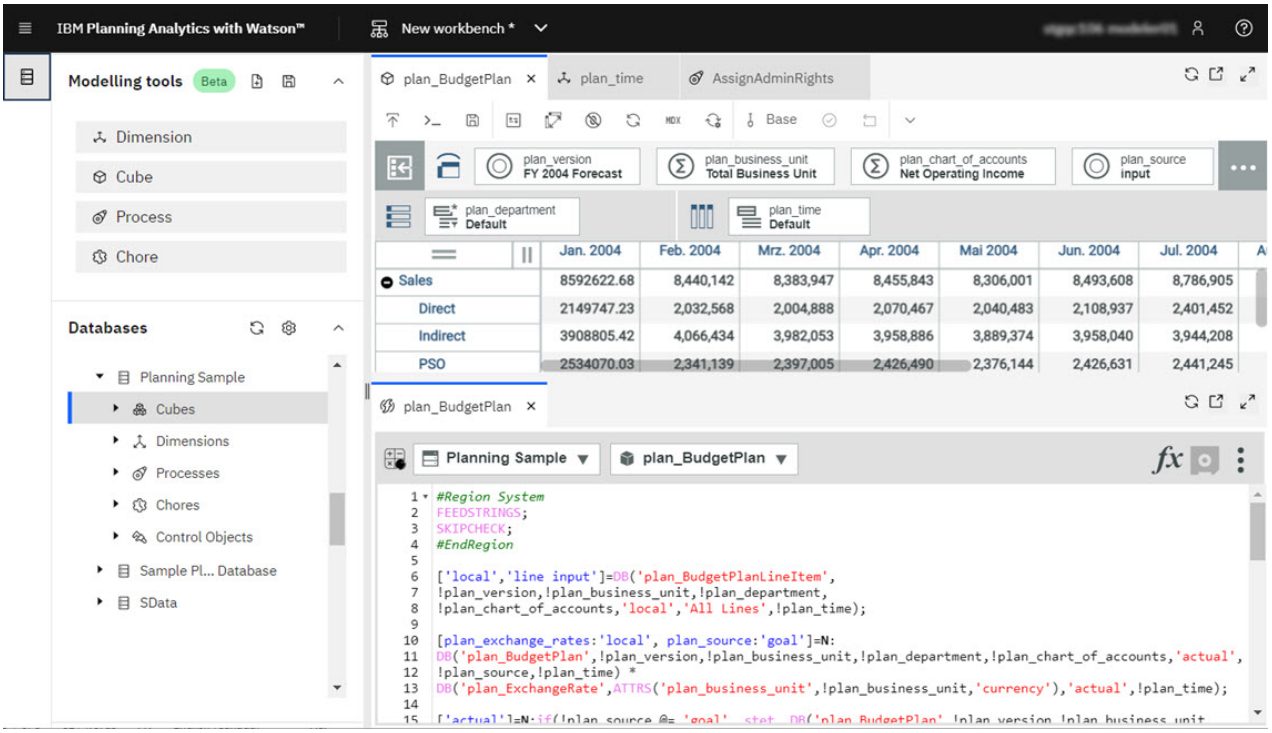
You can now open the modeling workbench from the user interface; you no longer need to enter a URL to the `modeling` perspective in your Planning Analytics Workspace environment.

To create a new workbench, click the **Home** menu ☰, then click **New** > **Workbench**.

To open an existing workbench:

1. Click the **Home** menu ☰, then click either **Shared** or **Personal**, depending upon where the workbench is saved.
2. Click the workbench you want to open. To make it easier to find your workbench, click the **Filter** icon ▽ and select **Workbench**. You can also search for a workbench.

Only users with the modeler or administrator role can create or edit workbenches.



As you can see, the workbench efficiently presents all your modeling assets in a tabbed and sectioned layout.

You can use the modeling workbench to:

- Create, edit, and delete any of these objects: dimensions, hierarchies, sets, processes, chores, and rules
- Run processes and chores
- Create and save cube views
- Edit settings for cubes, dimensions, processes, and chores
- Create drill processes, import data, import dimensions, reload/unload cubes
- Reorder dimensions
- Refresh security, set cell security

For details on using the modeling workbench, see Use the modeling workbench to create and manage your model.

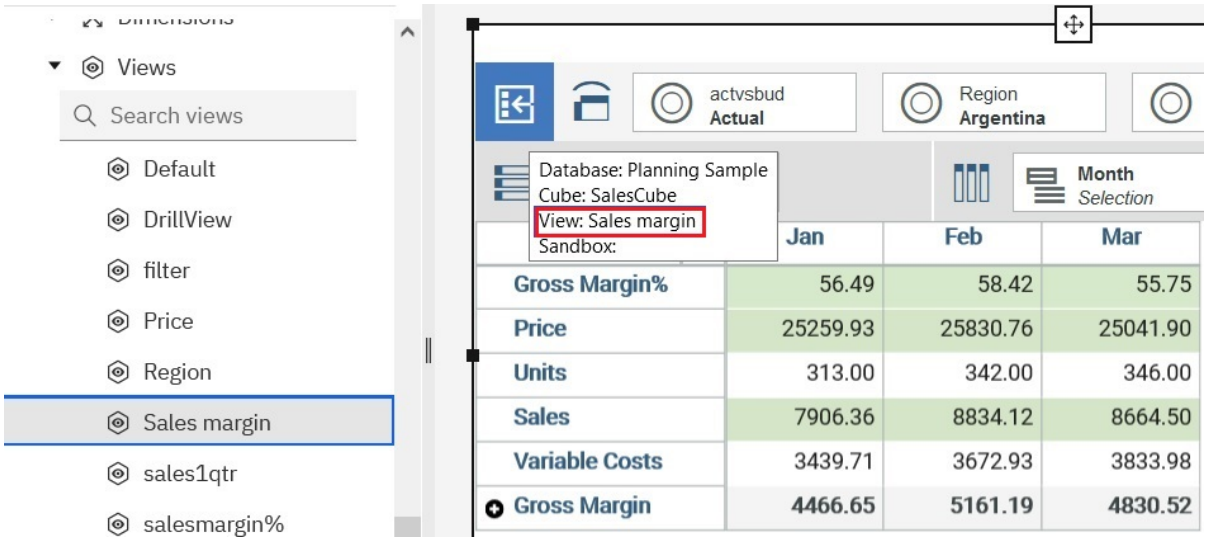
We encourage you to provide feedback on your experience with the modeling workbench during the beta period. Please visit https://community.ibm.com/community/user/businessanalytics/blogs/stuart-king1/2021/05/17/modeling-workbench-beta to share your thoughts.

See the updated view name when you save a view to the server

When you save a view by using the **Save to server** option, the new view name is displayed in the view details box.

In previous versions of the product, the old view name was displayed here when the view was saved to the server under a different name.

In an exploration, hover the cursor over the view details icon  to reveal information about the view, including the view name.

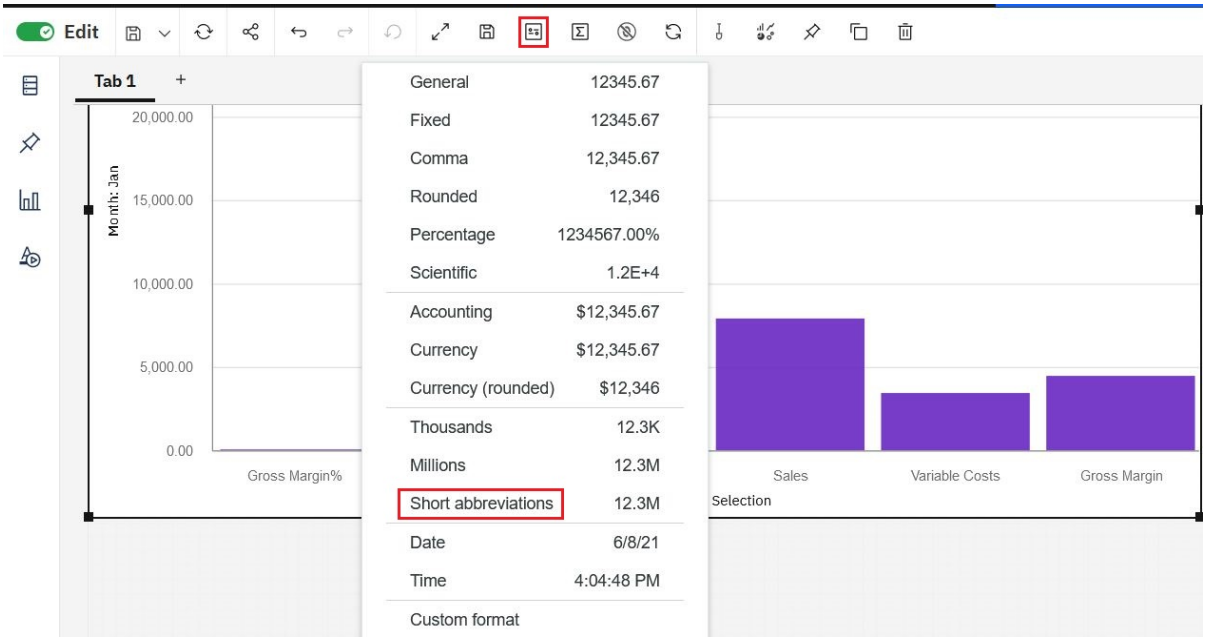


This functionality is available in the Planning Analytics Workspace new experience, and in Planning Analytics for Microsoft Excel.

For more information, see Save a view.

Abbreviated format to display large numbers

The **Short abbreviations** data format is now available to format large numbers in a view.



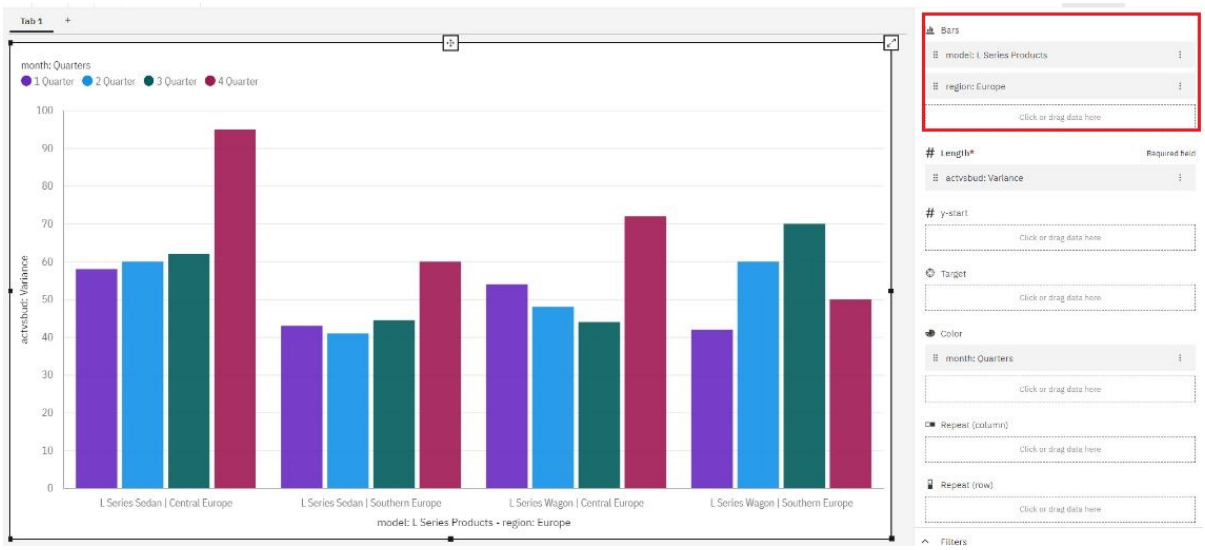
Depending on how large the number is, it's shortened by using a locale-specific abbreviation. In English, it's K for thousands, M for millions, B for billions, and T for trillions. For example, the value of 1500 is shown as 1.5K, and the value of 1500000000 is shown as 1.5B.

For more information, see Change the format of data in a view.

Assign multiple data items per slot in a visualization

You can assign multiple data items to a single slot in a visualization.

For example, in the following screen capture, the Model and Region dimensions are mapped to the **Bars** field.



In previous versions, only one data item could be assigned to a slot.

Create calculations for named sets

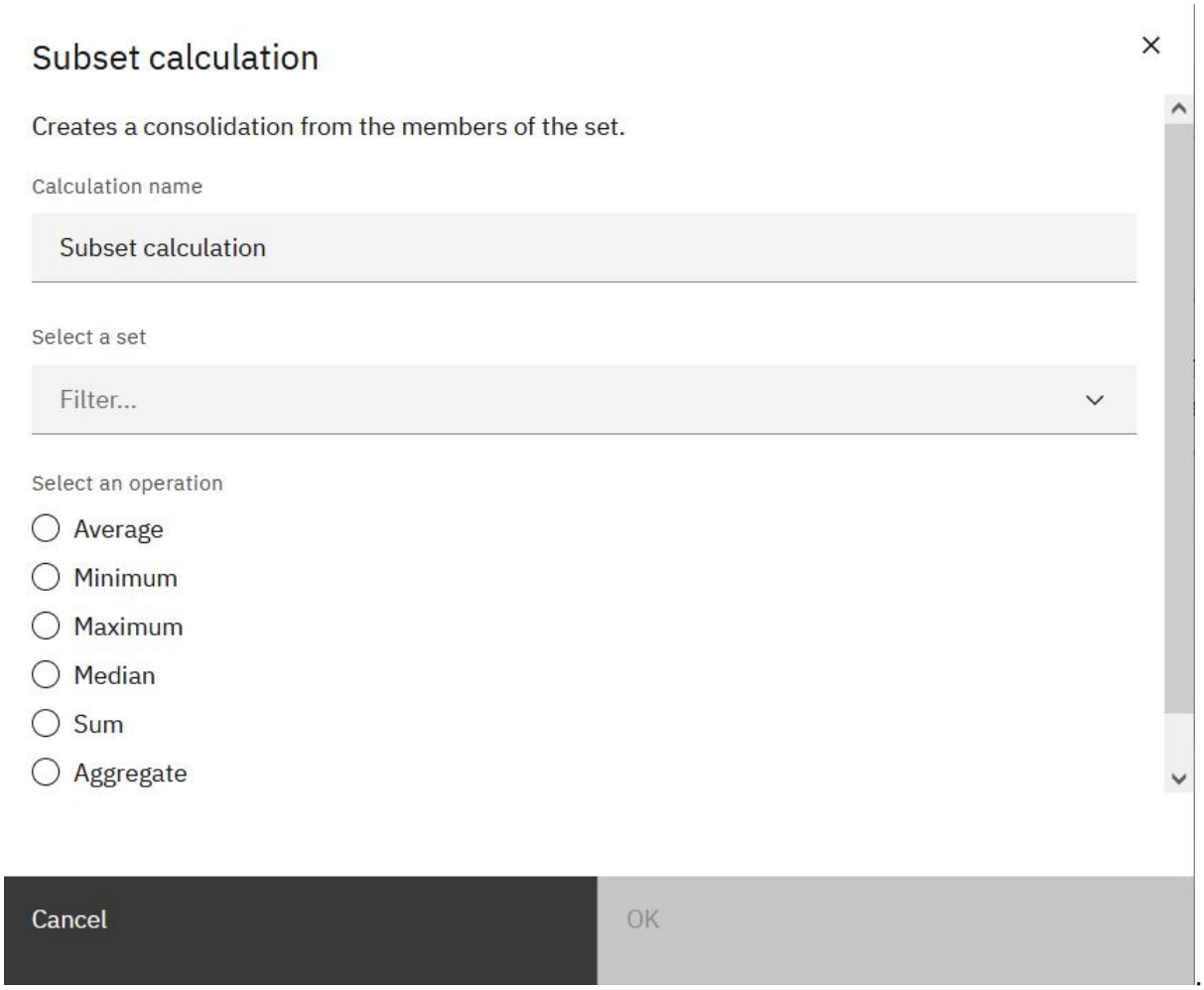
If a dimension includes named sets, you can create a calculation that is based on the set members.

To launch the calculation editor in a view, do the following steps:

1. Right-click a row or column label, or the rows or columns handle.
2. Click **Subset calculation**.

   The calculation options are the same as in the **Summarize all** calculation. The **Aggregate** option is available only on a server that supports aggregates.

   If you created the subset calculation for specific rows or columns, the calculation is added in the grid after the related row or column. If you created the subset calculation from the rows or columns handle, the calculation is added as the last row or column.



For more information, see Add a subset calculation to a view.

Minor changes to the procedures for creating plans and applications

The user interface and procedures for creating plans and applications have been updated to simplify the creation and editing process.

The capabilities of plans and applications remain unchanged. The information on IBM Documentation describes the new interface and procedures.

2.0.64 - What's new, May 18, 2021

Learn about new features and known issues in version 2.0.64 of IBM Planning Analytics Workspace in the following topics.

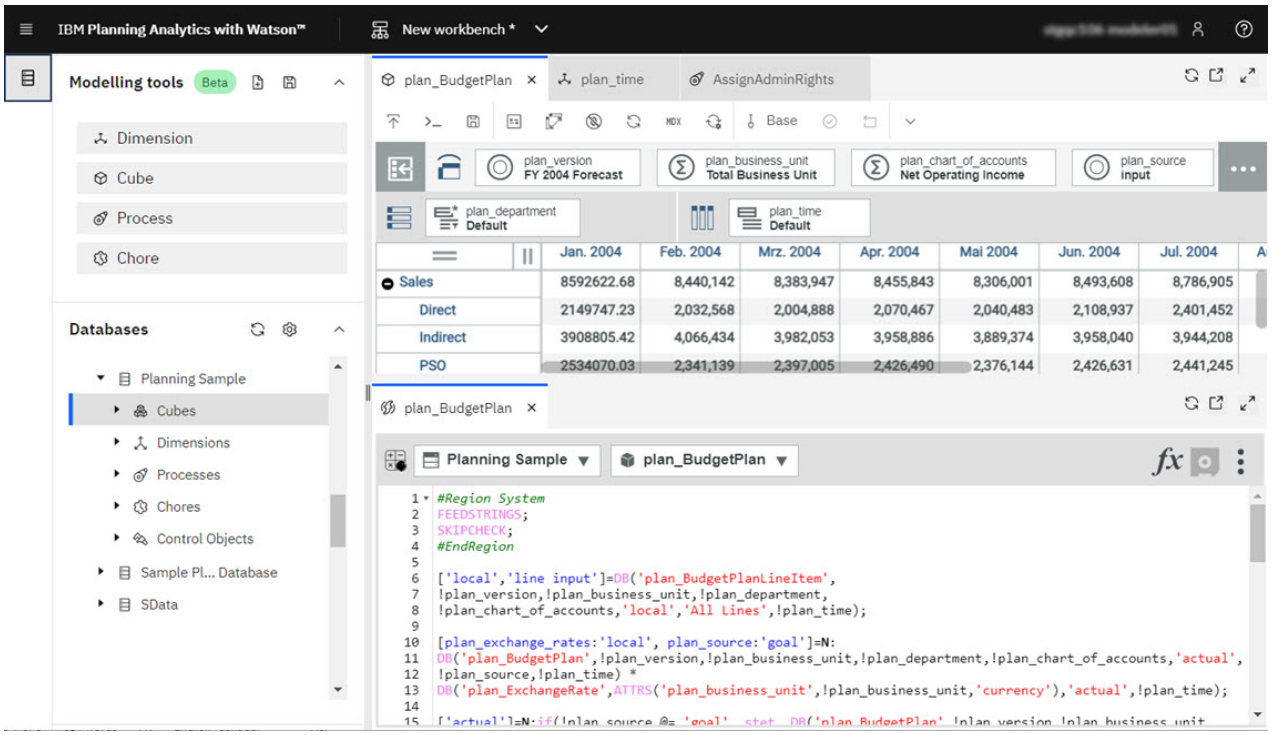
Updates to each version of Planning Analytics Workspace are cumulative. To see what was new in previous releases, see Chapter 2, “What's new in Planning Analytics Workspace,” on page 45.

You can view the fix lists for this and previous versions of Planning Analytics Workspace at https://www.ibm.com/support/pages/ibm-planning-analytics-20-fix-lists#anchor2.

Use the Modeling workbench to create and maintain your model (beta)

IBM Planning Analytics 2.0.64 introduces the modeling workbench as a beta feature. The modeling workbench is a dedicated modeling space optimized for all modeling activities.

To use the modeling workbench during the beta period, open the `modeling` perspective in your Planning Analytics Workspace environment. For example, `https://<my_planning_analytics_url>/?perspective=modeling`. Only users with the modeler or administrator role can create or edit workbenches.



As you can see, the workbench efficiently presents all your modeling assets in a tabbed and sectioned layout.

You can use the modeling workbench to:

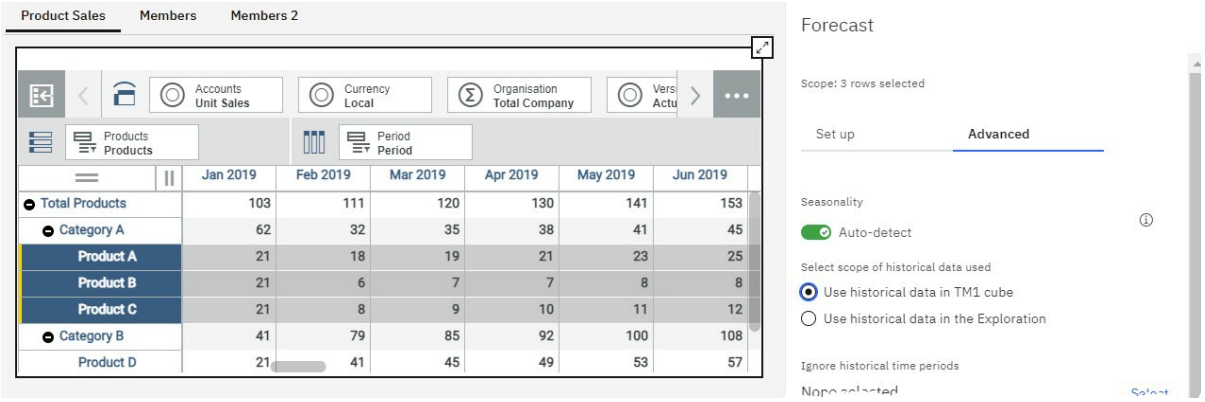
- Create, edit, and delete any of these objects: dimensions, hierarchies, sets, processes, chores, and rules
- Run processes and chores
- Create and save cube views
- Edit settings for cubes, dimensions, processes, and chores
- Create drill processes, import data, import dimensions, reload/unload cubes
- Reorder dimensions
- Refresh security, set cell security

For details on using the modeling workbench, see Use the modeling workbench to create and manage your model.

We encourage you to provide feedback on your experience with the modeling workbench during the beta period. Please visit https://community.ibm.com/community/user/businessanalytics/blogs/stuart-king1/2021/05/17/modeling-workbench-beta to share your thoughts.

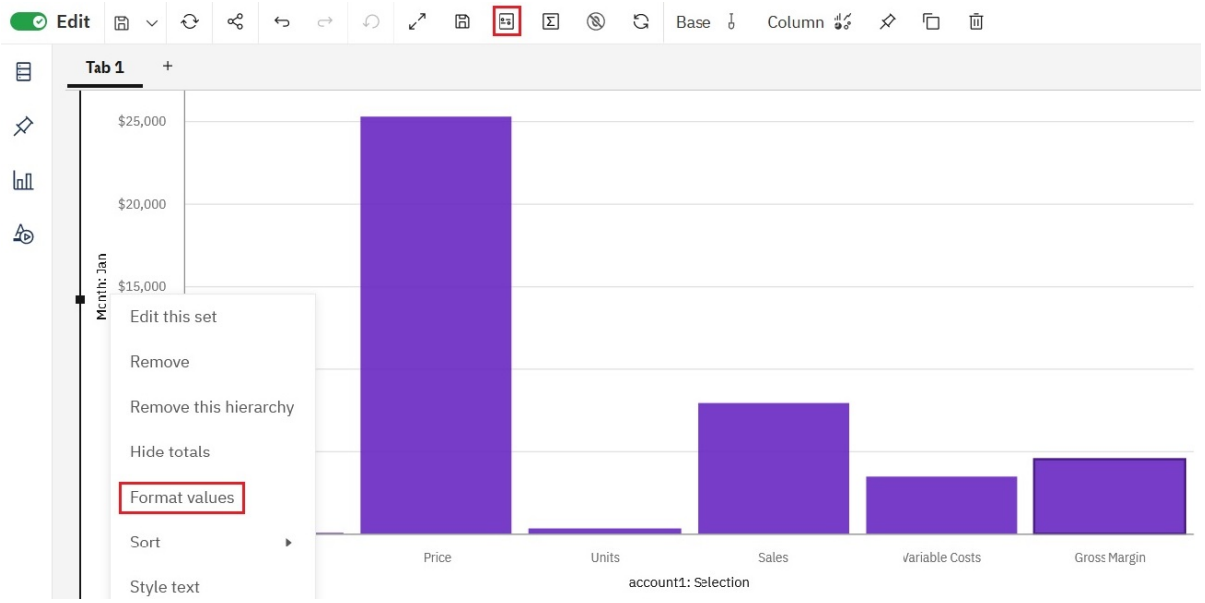
Forecasting improvements

As of Planning Analytics Workspace 2.0.64 you can define historical multiple time periods to be ignored by the forecasting engine.



Apply value formats in visualizations

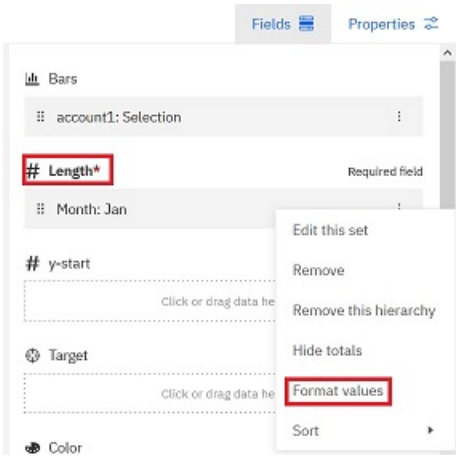
You can now format data values in visualizations. The formats are retained when the view is switched back to exploration or other type of visualization.



The **Format values** icon in the application toolbar is now available for visualizations. Use this icon to set data format for all values in the view.

To set data format for rows or columns, right-click the column in the visualization, and click **Format values**.

You can also set the format in the **Fields** tab.

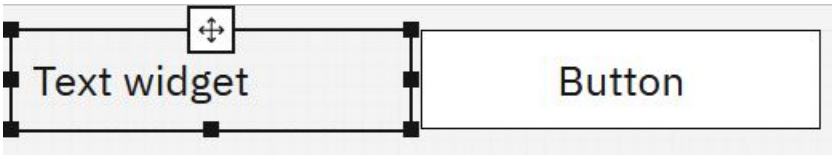


This functionality is available only in the Planning Analytics Workspace new experience.

For more information, see Change the format of data in a view.

Identical font size in equally sized widgets

When equally sized text, cell, or button widgets are placed in a book, the font size of the text in each widget is identical.



This was not the case in previous releases, where the text font size in a cell widget was much smaller than the content in an equally sized text widget.

For more information, see Add cell values to the sheet as a cell view.

2.0.63 - What's new, April 21, 2021

Learn about new features and known issues in version 2.0.63 of IBM Planning Analytics Workspace in the following topics.

Updates to each version of Planning Analytics Workspace are cumulative. To see what was new in previous releases, see Chapter 2, “What's new in Planning Analytics Workspace,” on page 45.

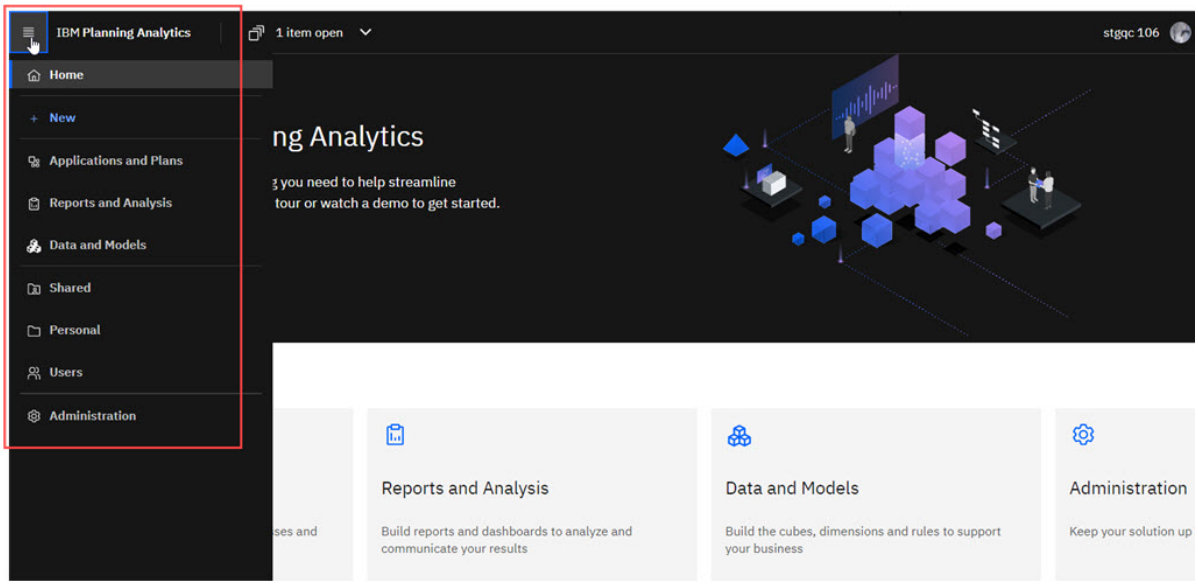
You can view the fix lists for this and previous versions of Planning Analytics Workspace at https://www.ibm.com/support/pages/ibm-planning-analytics-20-fix-lists#anchor2.

Design and usability improvements

Several design and user interface enhancements are included in the Planning Analytics Workspace 2.0.63 release, signifying our continued investment in usability. Here are a few of the areas we have improved in Planning Analytics Workspace 2.0.63.

Collapsible navigation panel

The navigation panel is now available from the Home menu.

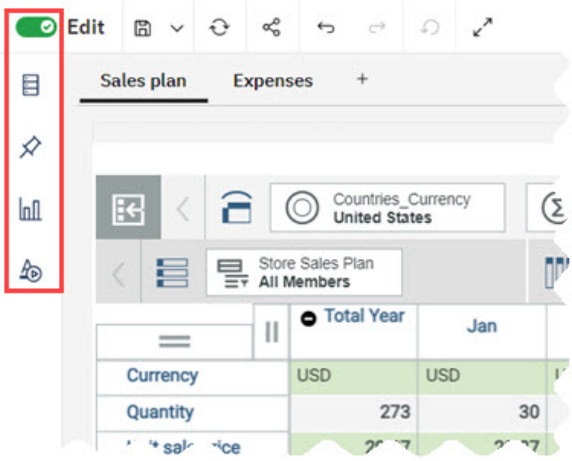


You no longer need to return to the Workspace home page to navigate or access Workspace content. For example, if you're working on the Administration page, you can navigate directly to a book by opening the navigation panel, opening the Shared folder, and searching for the book.

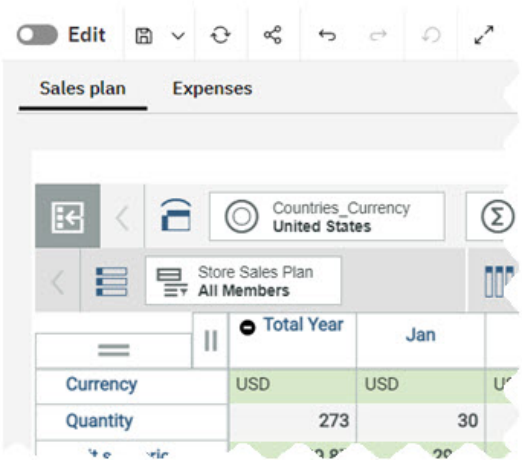
Database Tree hidden when not in edit mode

The database tree is hidden when a book is not in edit mode. To reveal the database tree, the book must be set to edit mode.

Edit mode enabled



Edit mode disabled

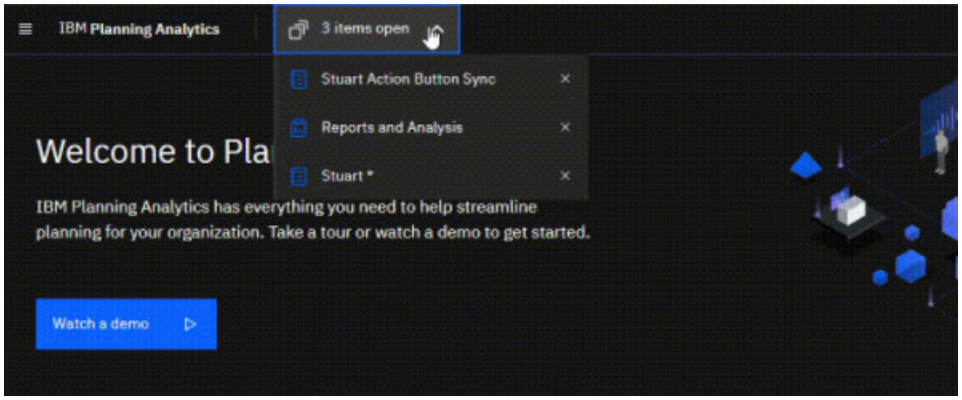


This change provides more horizontal space for users consuming the book. This change also makes it clear that you must enable edit mode to incorporate content from the database tree into the book.

Note that the Edit pencil icon has been replaced with a labeled Edit switch. This change makes it easier to discern when a book is in edit mode.

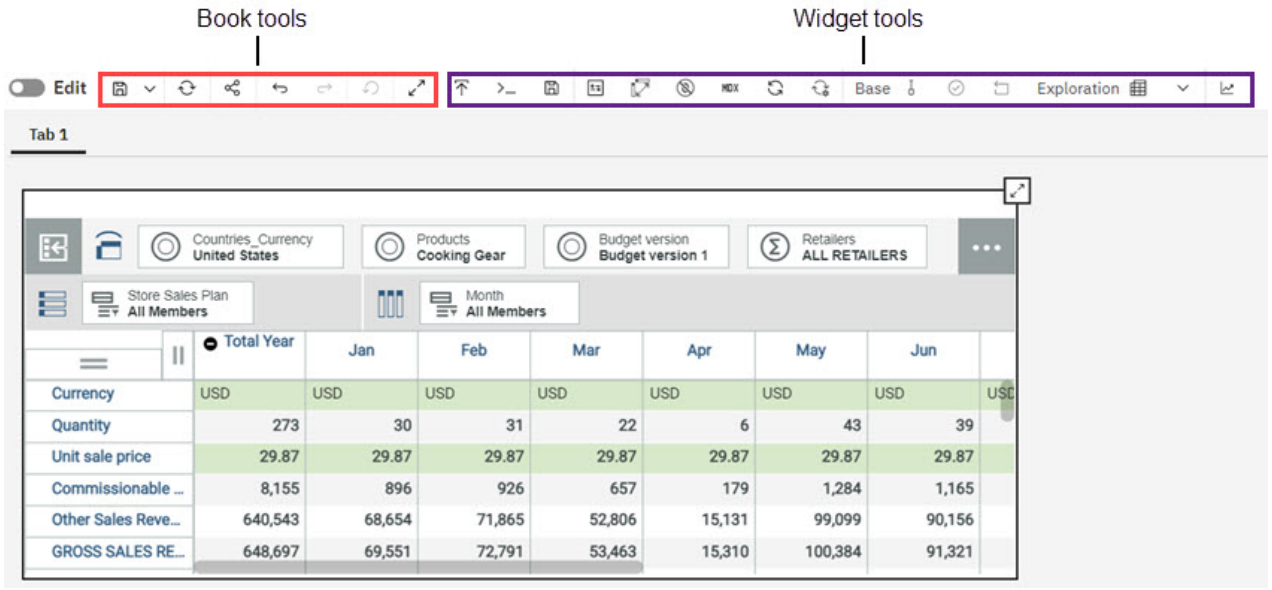
Left-aligned switcher

The content switcher is now left-aligned for a consistent look and feel with Cognos Analytics. The content switcher no longer includes a Home option. To return to the home page, click **IBM Planning Analytics**.



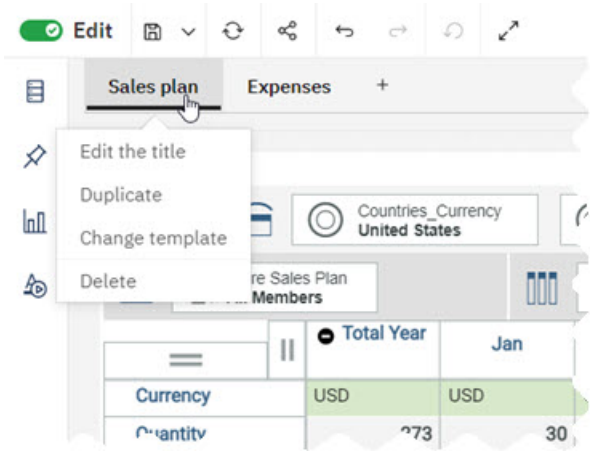
Combined toolbar

Book and widget toolbars are now integrated into a single toolbar. This change improves the vertical space available to book creators and consumers. Buttons for each widget are displayed alongside the book buttons after selecting the widget.



Tab controls

Clicking on a tab while in edit mode now presents a menu of available actions.



Save and Move dialogs

The Save and Move dialogs have been updated to support searching, sorting, creating folders, and replacing books. You can search for folders, books, and views in either the shared or personal folder.

Rename a TM1 database

Planning Analytics on Cloud customers can now rename TM1 databases by using Planning Analytics Workspace **Administration**.

The self-service updates the database directory in the `prod` folder, and the database name in the `tm1s.cfg` file to match the new name.

You must use the Planning Analytics Workspace new interface, which is also referred to as New Experience, to rename the database. This functionality is not available in the Planning Analytics Workspace Classic Experience.

For more information, see Rename a database.

Remove users in Planning Analytics Workspace

Planning Analytics on Cloud administrators can remove multiple users at once in Planning Analytics Workspace **Administration**.

Administrators remove users only from the primary tenant (environment), and the system then removes the users from all secondary tenants (environments). The users are automatically removed from IBM Subscriptions Management, from groups that they were members of, and from all environments that they were associated with. Each user's personal folder is renamed to **Unknown**, and the user's personal assets are moved to this folder. User's shared assets remain in the shared folder.

For more information, see Remove users in Planning Analytics Workspace.

Use the new Box Plot visualization

Use a box plot visualizations to identify outliers and compare distributions in your data.

You can create a box plot to show the median, quartiles, and outlier and extreme values for a variable. The inter-quartile range is the difference between the 75th and 25th percentiles and corresponds to the length of the box. The middle line is the 50th percentile.

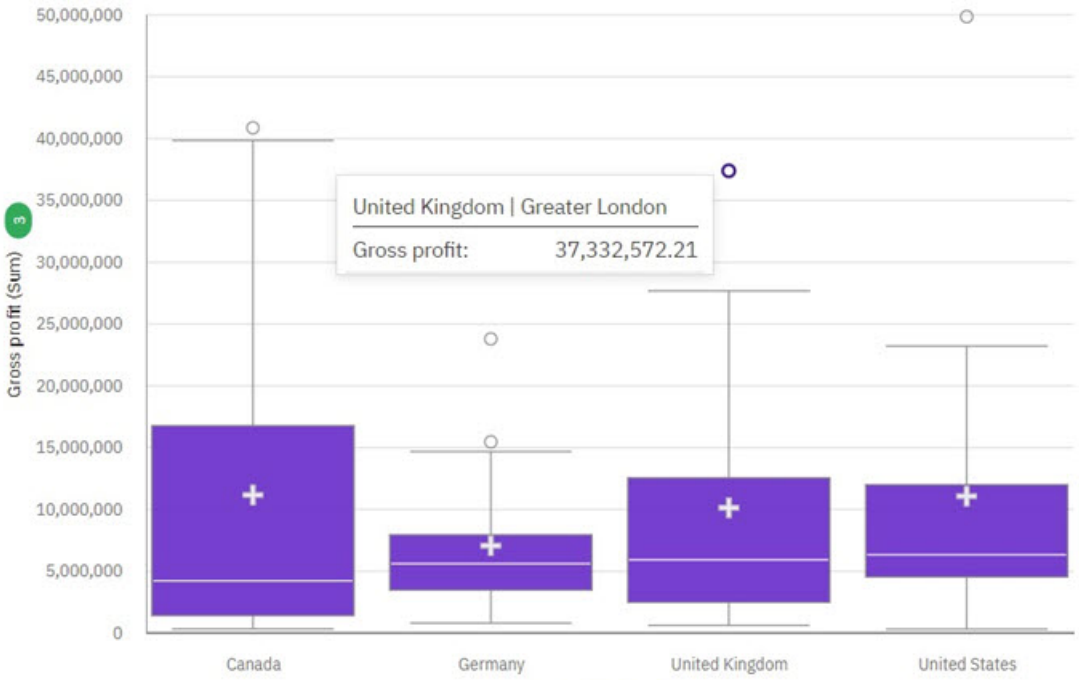
Above and under each box, 'whiskers' give additional information about the spread of the data.

Outliers are represented by "o" signs beyond the whiskers.

The mean score in a box plot is presented by a "+" sign.

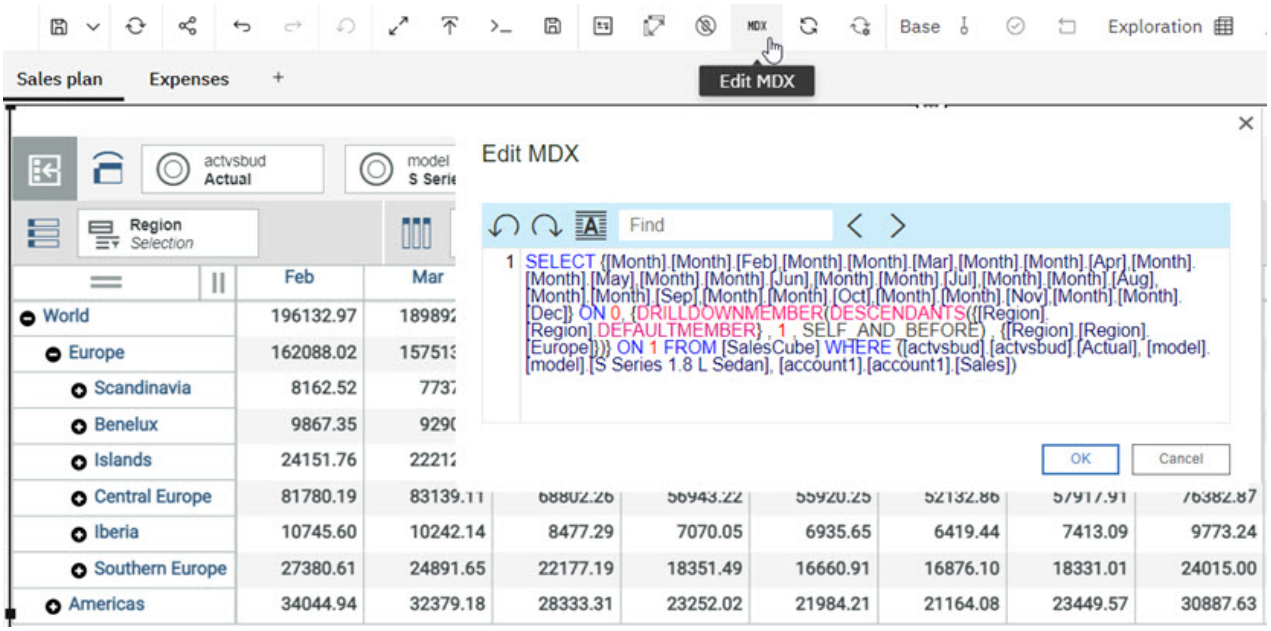
Use the **Key** field in a box plot visualization to determine the items for which you want to identify outliers and compare distributions.

This box plot example shows the gross profit statistics for various markets.



Edit MDX source for a cube view

You can use the new **MDX** button on the toolbar to view and edit the MDX source for a cube view.



2.0.62 - What's new, March 17, 2021

Learn about new features and known issues in version 2.0.62 of IBM Planning Analytics Workspace in the following topics.

Updates to each version of Planning Analytics Workspace are cumulative. To see what was new in previous releases, see Chapter 2, “What's new in Planning Analytics Workspace,” on page 45.

You can view the fix lists for this and previous versions of Planning Analytics Workspace at https://www.ibm.com/support/pages/ibm-planning-analytics-20-fix-lists#anchor2.

Delete a TM1 database

Planning Analytics on Cloud customers can now delete TM1 databases by using Planning Analytics Workspace **Administration**. You no longer need to submit a support ticket to have a TM1 database deleted for you.

The self-service delete action removes the database from the user interface. However, the database directory and its contents are retained on the data tier. You can later decide whether they should be deleted, moved, copied, or kept on the data tier.

You must use the Planning Analytics Workspace new interface, which is also referred to as New Experience, to delete the database. This functionality is not available in the Planning Analytics Workspace Classic Experience.

Note: To rename a TM1 database, you still need to open a support ticket.

For more information, see Delete a database.

Seamlessly scroll through all objects in the data tree

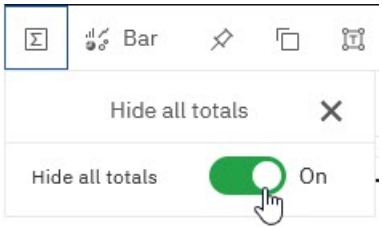
The **Load more** setting has been removed from the data tree in Planning Analytics Workspace. You can now scroll infinitely through all items in a node in the data tree.

The **Load more** setting for the data tree was introduced in Planning Analytics Workspace 2.0.61. This setting determined the number of items within a node that could be viewed before you had to click **Load more** to retrieve and display additional items. With the introduction of infinite scrolling, this setting is no longer necessary and it has been removed from the Settings options.

Hide totals in a visualization with a new toolbar button

You can now hide totals in visualizations with a couple of clicks on a new toolbar button.

To hide totals in a visualization, click the new **Hide all totals** button on the toolbar, then turn on the **Hide all totals** option.



To restore totals in the visualization, turn off the **Hide all totals** option.

Retrieve data from multiple TM1 databases in a websheet (Planning Analytics Workspace local only)

You can now retrieve data from more than one TM1 database in a websheet.

All databases referenced in a websheet must be registered on the same Admin host. You can retrieve data from multiple databases only in Custom Reports and Dynamic Reports, which use the VIEW function to retrieve data.

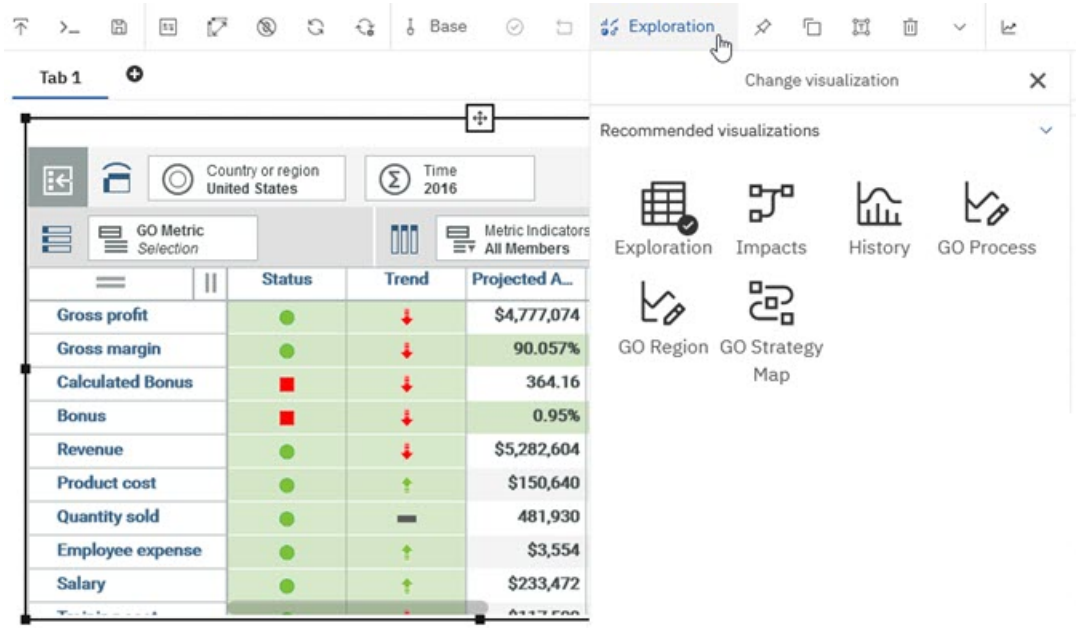
To successfully reference multiple databases in a websheet:

- Database names must be static; computed database names are not supported.
- All databases must be configured to use the same authentication mode.
- Users must have common credentials across databases.

You can learn more about websheets in the Websheets overview.

Use scorecards to track objectives

If a view is configured to support scorecarding, you can now select from five scorecards to view data and track the progress of your organization.



To display a scorecard, click the **Change visualization** button and pick one of the following scorecards types:

Impacts
Illustrates the positive and negative relationships between the metrics in your metrics cube. This type of diagram shows how the business works by displaying how one metric influences another.

History
Shows a column chart of data for a metric. By default, it compares the actual value against the target value for each time period, and indicates whether the result is within an accepted tolerance.

Process
Shows metrics in the context of a process flow.

Region
Shows performance across geographies on a map overlay.

Strategy Map
Tracks business performance by perspectives, objectives, and metrics.

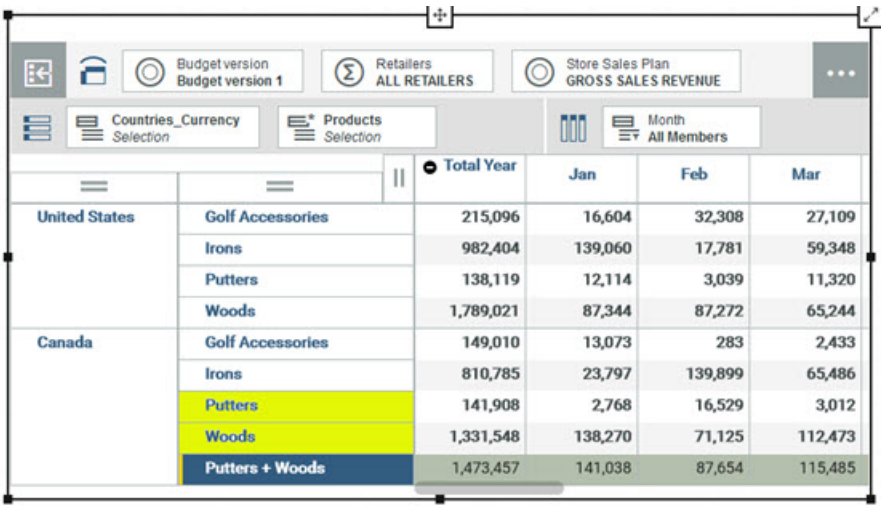
To learn more about scorecards, see Explore scorecards.

Create asymmetric calculations on stacked rows or columns in an exploration

You can now create calculations that apply to a single nested dimension set on rows or columns in a view. Because these calculations are applied to a single nested set for a given dimension and are *not* common to all nested sets for the dimension, they are called *asymmetric calculations*.

Asymmetric calculations can be confined within a single nested set or span multiple nested sets of the same dimension.

In this example, which is confined within a single nested set, you can see the **Putters+Woods** asymmetric calculation in the Products set. It calculates the total of Putters and Woods in Canada. Note that the calculation appears just once; it is not duplicated in both nested Products sets.



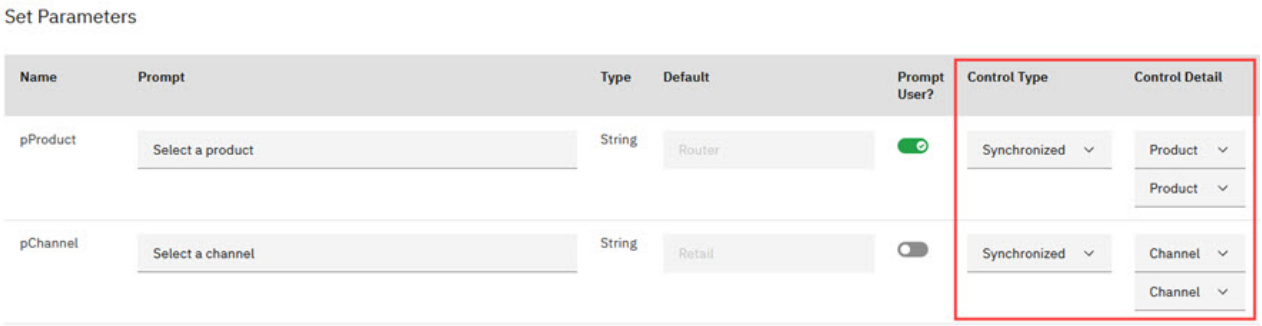
This example shows the **Golf Accessories + Putters** asymmetric calculation, which spans multiple nested sets of the Product dimension. It calculates the total of Golf Accessories in the United States plus Putters in Canada. Though the calculation spans the nested Products set for both United States and Canada, it appears only in the nested Products sets for Canada.

For full details, see Add an asymmetric calculation to a view.

Synchronize parameters for an Action button that runs a TurboIntegrator process

You can now synchronize string parameters for a TuroIntegrator process that is executed from an Action button, so the process picks up parameter values from other synchronized objects in a book.

When setting a parameter for a process that is executed from an Action button, select the **Synchronized** Control Type and select the dimension and hierarchy to be synchronized under the Control Details column.



When a parameter is set to **Synchronized** and the **Prompt User?** option is enabled, the user is presented with an informational screen indicating the parameter values being used, but cannot change the parameter values.

A process can receive synchronized parameter values from any of the following items:

- cube view (exploration or visualization)
- websheet
- dimension selector
- synchronization tile

Work with values formatted as Percentage in the Cube Viewer

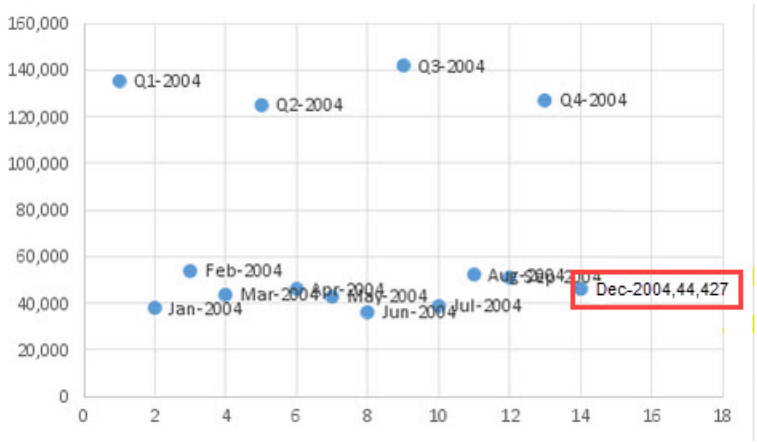
When you double-click a cell formatted as Percentage in the Cube Viewer, you now continue to see the value expressed as a percentage. In previous versions of Planning Analytics Workspace, double-clicking on a cell formatted as Percentage would display the underlying decimal value as stored in the Planning Analytics database.

Additionally, when you modify a value in a cell formatted as Percentage, you now always see the value you entered expressed as a percentage. In previous versions of Planning Analytics Workspace, when you entered a value in a cell formatted as Percentage while the **Defer on leaf data change** option was enabled, the value was displayed as decimal, and would be updated to percentage only after refreshing the view.

Known issue - Unexpected label in websheet Scatter Chart

This issue occurs when label text in a Scatter Chart is edited to use customized/hardcoded text.

Instead of displaying the customized label text, the label displays "[x-value], [y-value]". X value and y value are the values for the data point as set in the range of the chart.The highlighted label in this image illustrates the issue.



This issue will be corrected in an upcoming release.

2.0.61 - What's new, February 10, 2021

Learn about new features and known issues in version 2.0.61 of IBM Planning Analytics Workspace in the following topics.

Updates to each version of Planning Analytics Workspace are cumulative. To see what was new in previous releases, see Chapter 2, “What's new in Planning Analytics Workspace,” on page 45.

You can view the fix lists for this and previous versions of Planning Analytics Workspace at https://www.ibm.com/support/pages/ibm-planning-analytics-20-fix-lists#anchor2.

Create a TM1 database

Planning Analytics on Cloud customers can now create their own TM1 databases by using Planning Analytics Workspace **Administration**. You no longer need to submit a support ticket to have a TM1 database created for you.

You must use the Planning Analytics Workspace new interface, which is also referred to as New Experience, to create the database. You can even create a database while using the New Experience in Preview mode; there's no need to commit to a permanent upgrade! You can learn more about enabling the New Experience in Preview mode in this Knowledge Center topic: Manage the new experience for your users.

You cannot create a database in Planning Analytics on Cloud using the Planning Analytics Workspace Classic interface.

The database is created in the standard location. You can configure and manage the database just like any existing TM1 database. All users with the Planning Analytics Workspace Administrator role are given ADMIN access to the new database.

To rename or delete the TM1 database that you created, you still need to open a support ticket.

For more information, see Create a database.

Welcome Kit change for Planning Analytics on Cloud

The security mode 1 "admin" user name and password for each TM1 database are no longer included in the Welcome Kit for Planning Analytics on Cloud.

This change reduces the size of the Welcome Kit and eliminates the need to regenerate and distribute the kit after each request to create, rename, or delete a TM1 database.

When a database is created, a randomly generated password is set for the security mode 1 "admin" user name. If you need to use the admin user, administrators can set a new password by using the AssignClientPassword TM1 function.

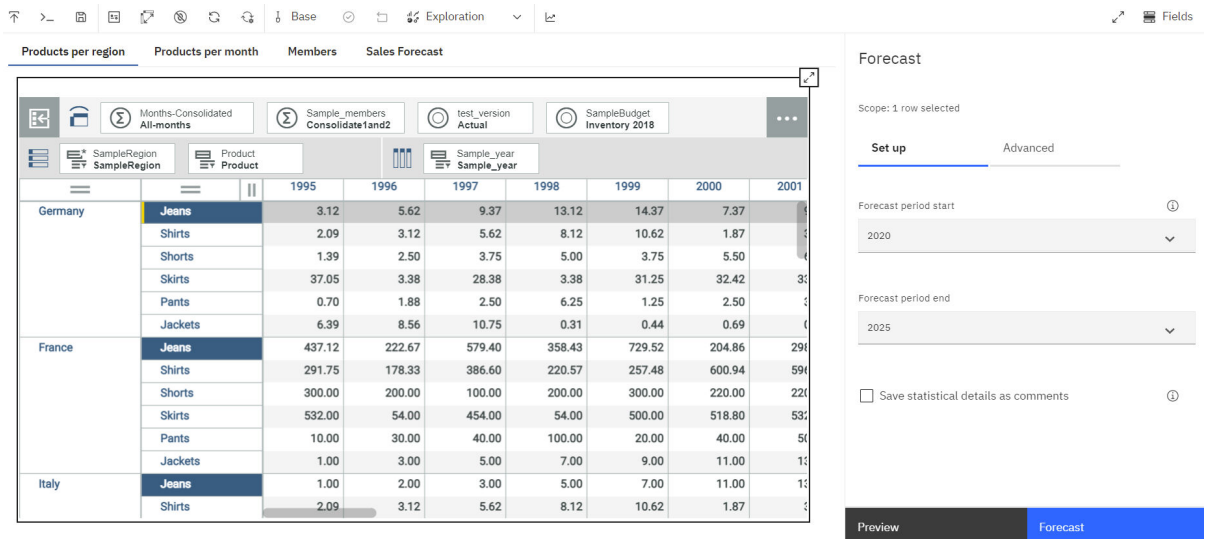
For more information, see The Welcome Kit.

Forecasting: preview nested dimension

Forecasting in IBM Planning Analytics Workspace allows previewing of nested members. And you can forecast by using cube view data.

Preview nested dimensions

As of SC61 Planning Analytics Workspace supports the preview of nested dimensions. Planning Analytics Workspace can now render a preview with nested dimensions. In the following case, jeans is selected for preview and **Preview** is enabled.



For complete details on using forecasting in Planning Analytics Workspace, including a complete tutorial, see Forecasting.

Sixty minute inactivity timeout for Planning Analytics Workspace on Cloud

A new inactivity timeout enhances security in Planning Analytics Workspace 2.0.61.

Currently, Planning Analytics Workspace on Cloud enforces a 24 hour session timeout. This session timeout disconnects a user 24 hours after their most recent login and requires the user to log back in to Planning Analytics Workspace. The session timeout is enforced regardless of user activity. If a user is active continuously, the session timeout is still triggered 24 hours after the most recent login.

In addition to this session timeout, Planning Analytics Workspace 2.0.61 introduces an inactivity timeout. When a user is inactive for 60 minutes, the user is logged out of Planning Analytics Workspace. This inactivity timeout is mandatory and applicable to all Planning Analytics Workspace on Cloud customers. The 60 minute inactivity interval is static and cannot be modified.

Planning Analytics Workspace will warn a user about an imminent timeout due to inactivity. If the user does not intervene, the inactivity timeout occurs 60 minutes after the most recent activity.

When an inactivity timeout does occur, what is the impact on the user?

- Workspace end user state will be lost.
- Authoring of Books and Plans/Applications that are not saved will be lost.

This new inactivity timeout is applicable only to Planning Analytics Workspace on Cloud, but also impacts Planning Analytics for Microsoft Excel.

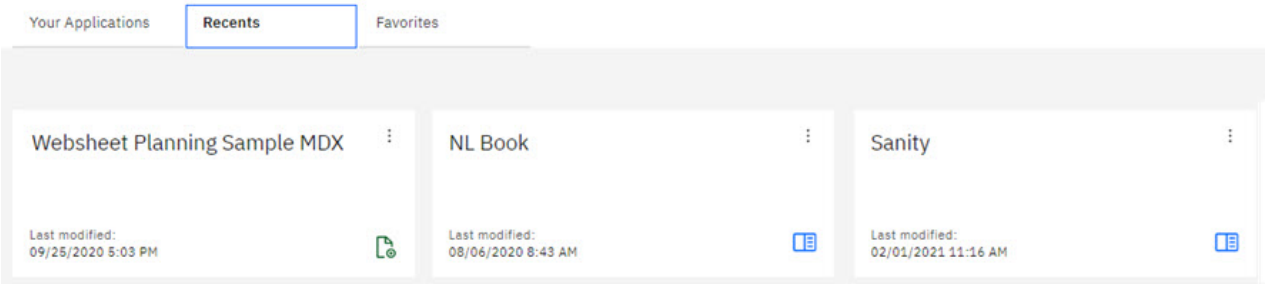
For more information on the inactivity timeout, see Connection timeouts in Planning Analytics Workspace on Cloud.

For details on configuring timeouts in Planning Analytics Workspace Local, see Configuring parameters for Planning Analytics Workspace Local.

For more information on how the inactivity timeout impacts Planning Analytics for Microsoft Excel, see Timeouts in IBM Planning Analytics for Microsoft Excel

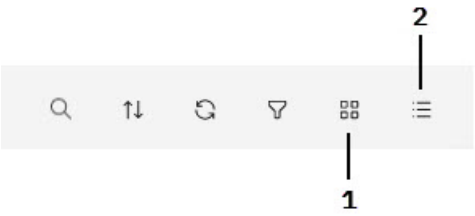
View assets as tiles

Recents and **Favorites** on the Home page are now displayed as tiles.



You also now have the option to view assets on the **Applications and Plans** page and the **Reports and Analysis** page as tiles or as a list.

Click the appropriate button to change how assets are displayed:



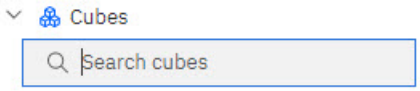
1
Tile view

2
List view

Search at the node level in the data tree

To make it easier to locate an object within a long list of items in the data tree, you can now search at the node level in the tree.

When you expand the Cubes, Dimensions, Sets, Processes, Chores, or Control Objects:Cubes nodes in the data tree, you'll see a search box. For example, here's what the search box looks like under the Cubes node.

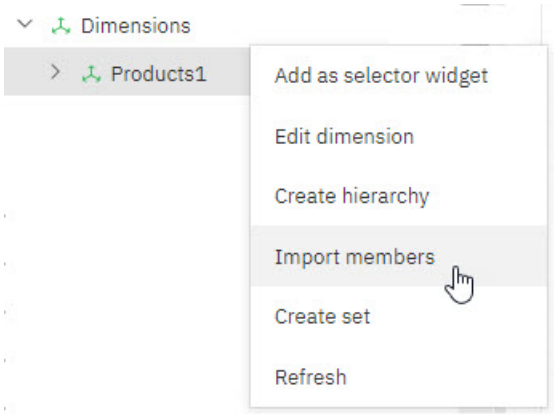


Start typing in the box to see the objects that contain your search string. The results are updated continuously as you enter characters.

Import dimension members from the data tree

You can now right-click a dimension in the data tree and click **Import members** to initiate an import.

You no longer need to have the dimension open in a book to start importing members.



Reset a sandbox

You can now reset data in a sandbox with a single click.

Click the **Sandbox discard** button to discard all data changes since your last commit action.

2.0.60 - What's new, January 12, 2021

Learn about new features and known issues in version 2.0.60 of IBM Planning Analytics Workspace in the following topics.

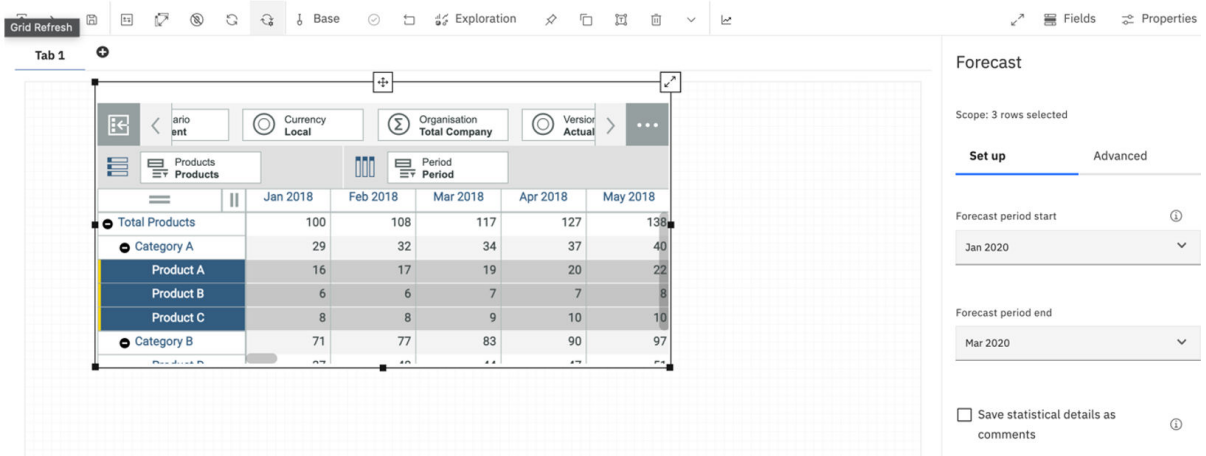
Updates to each version of Planning Analytics Workspace are cumulative. To see what was new in previous releases, see Chapter 2, “What's new in Planning Analytics Workspace,” on page 45.

Forecasting: preview more than one row and forecast by using cube view data

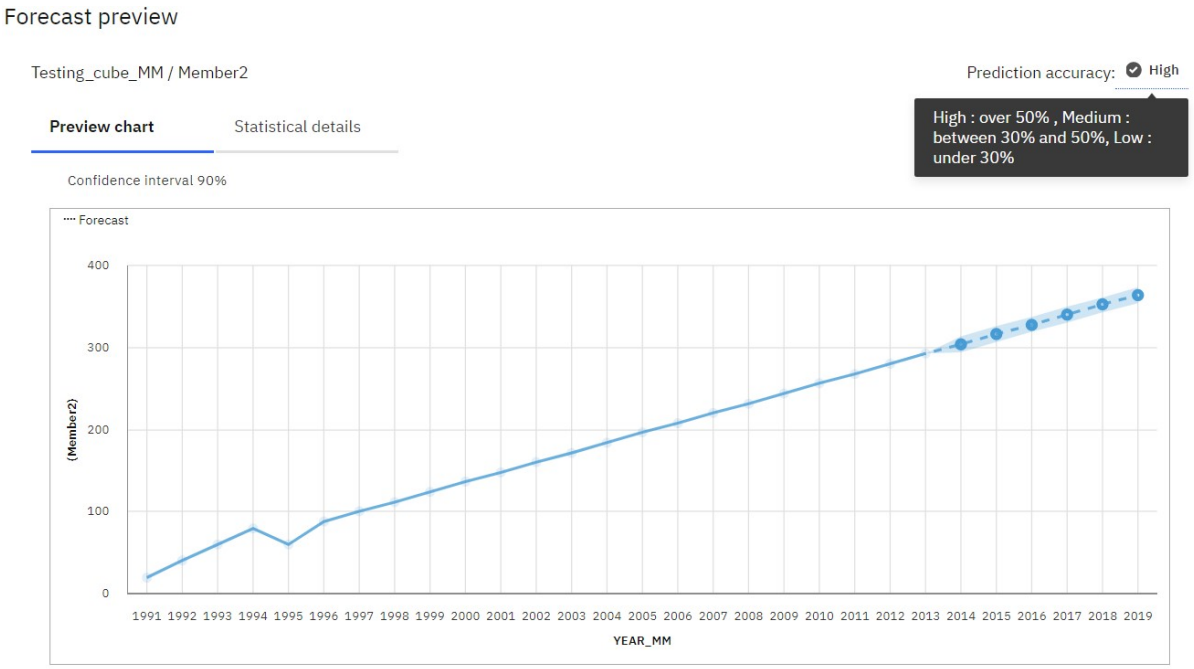
Forecasting in IBM Planning Analytics Workspace allows previewing based on up to 25 rows. And you can forecast by using cube view data.

Preview more than one row

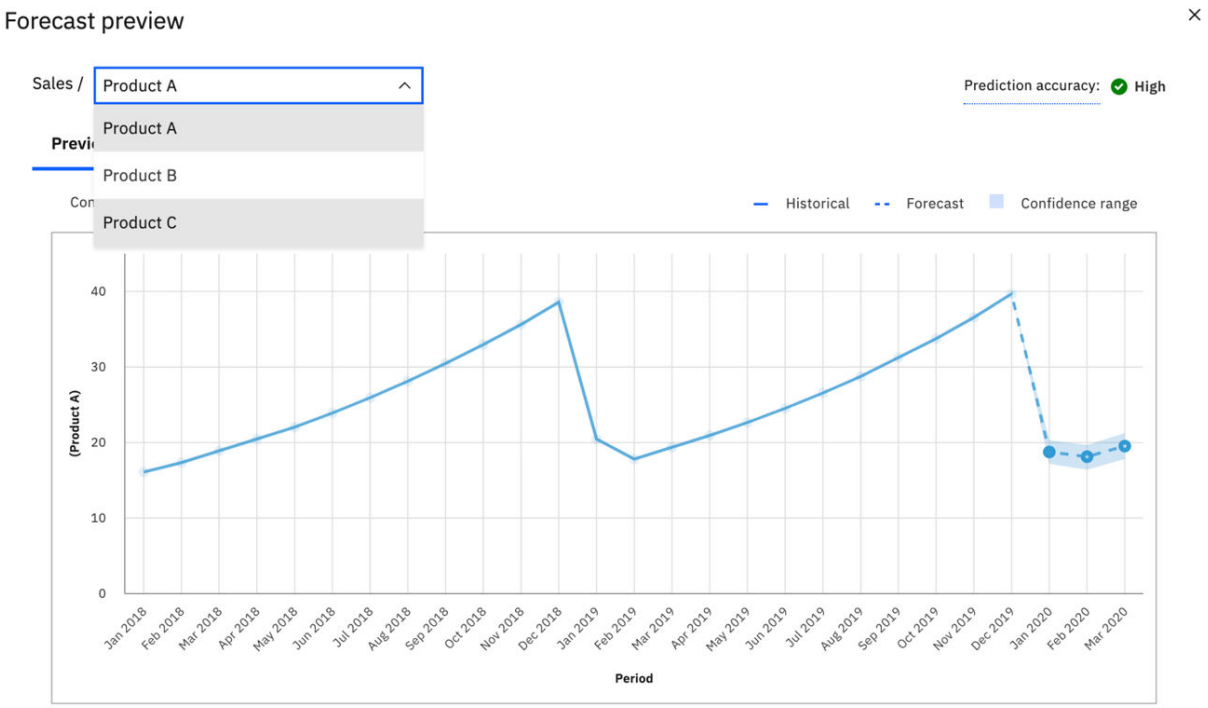
We now support the preview of up to 25 rows. In the following case, three rows are selected for preview and **Preview** is enabled.



Before SC60



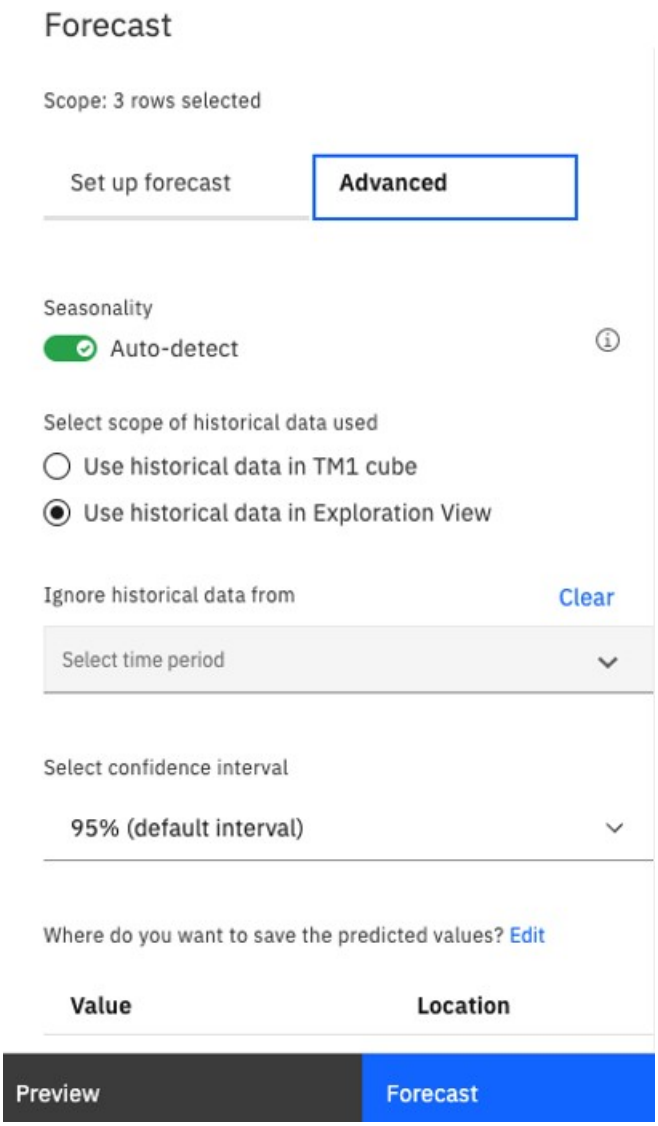
As of SC60



For more information, see Previewing more than one row.

Forecast by using cube view data

Initially, when the forecast preview is run, the data in TM1 is used as the historical data regardless of what is presented in the cube view. The reason for that was to include more history in the prediction, which results in higher accuracy. In SC60, a new option is added that allows you to choose whether to use the data in TM1 or the current cube view as the history.



In the **Advanced** tab in the **Forecast** window, you can select two options **Use historical data in TM1 cube** and **Use historical data in Exploration View**. The default is **Use historical data in Exploration View**.

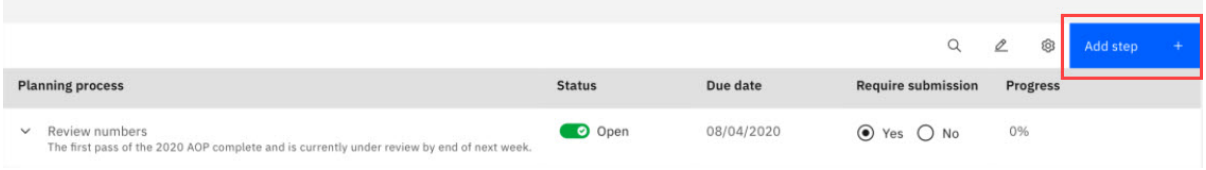
For more information, see Forecasting options.

For complete details on using forecasting in Planning Analytics Workspace, including a complete tutorial, see Forecasting.

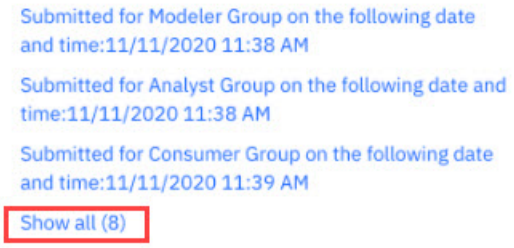
Applications and Plans UI enhancements

The user interface for Applications and Plans has been updated to simplify administration.

The text link to Add a step (for plans) and Add a section (for applications) has been moved from the bottom of the plan/application grid and converted to a button at the top of the grid. This example shows the change in a plan, but you'll see the same change (with a different button label) for applications.



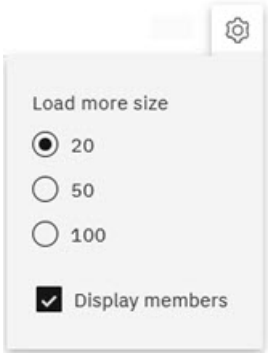
Additionally, the plan contribution panel has been modified to show only the first three submissions for a step. You can click **Show all** to reveal all the submissions.



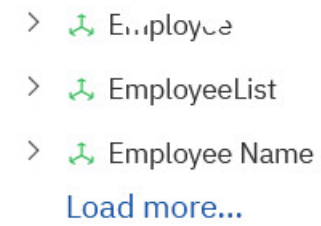
After reviewing the submissions, you can click **Show less** to collapse the list and show just the first three submissions.

New data tree Settings menu

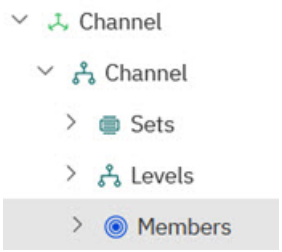
A new Settings menu lets you manage the behavior of the data tree.



You can specify a **Load more size** value to determine how many items of any object type are displayed in the data tree before you have to click **Load more** to retrieve and display more items. For example, here you can see a list of dimensions where the **Load more** option is enabled because the number or dimensions exceeds the specified **Load more size** value.



You can also use the **Display members** option to determine if the Members node appears in the data tree under dimension hierarchies. When the option is enabled, the Members node is available, as in this example.



When the option is disabled, the Members node is not available in the data tree.

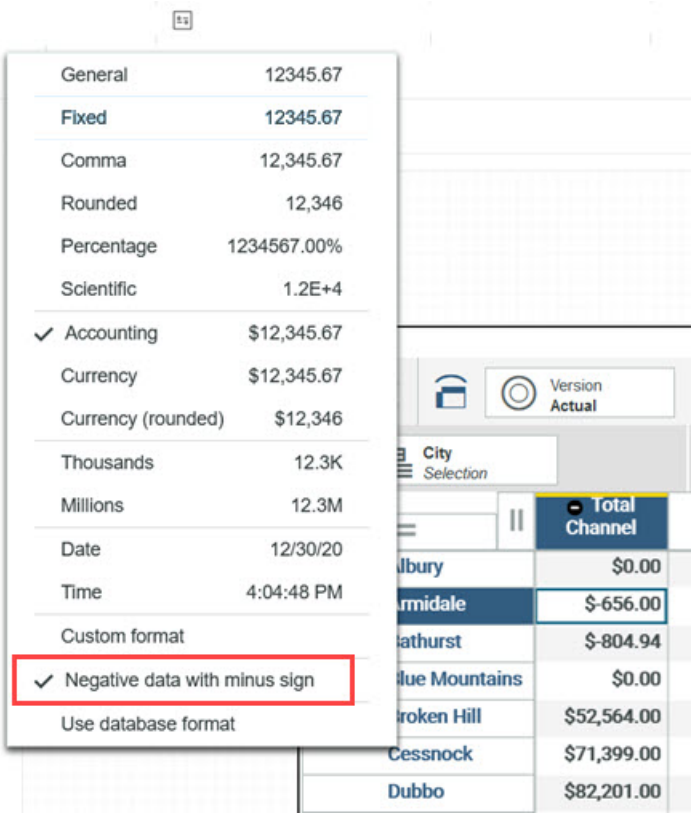
Prefix negative values with a minus sign

When defining a display format for an entire view, a single row, a single column, or a cell widget, you can set the format to display negative values with a minus sign, rather than enclosed in parentheses.

The **Negative data with minus sign** option is available when you select any of the following formats:

- Comma
- Rounded
- Accounting
- Currency
- Currency (Rounded)
- Thousands
- Millions

This example shows the **Negative data with minus sign** option applied to the Accounting format and visible in a cube view.



Delete a folder for a removed user

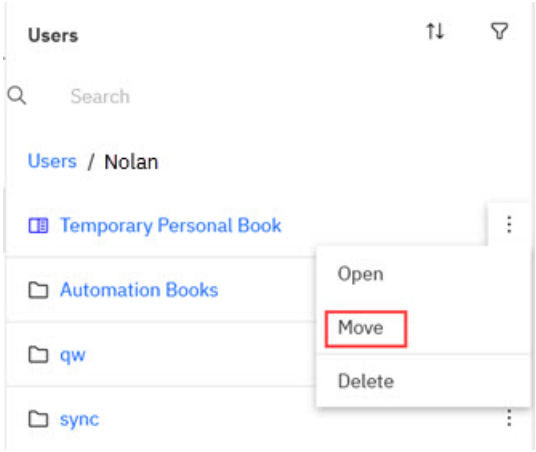
Previously, when a user was removed from Planning Analytics Workspace, the user's personal folder was renamed to Unknown and the folder could not be deleted by an administrator.

Administrators can now delete the Unknown folder associated with any deleted user.

Move assets or folders in a user's personal folder

A **Move** option is now available for all assets and folders within a user's personal folder. A user or administrator can use this option to move an asset or folder to a new location, either in the Shared folder or a different place in the user's personal folder.

When you click the **Options** menu next to any asset or folder within a user's personal folder, you'll see the new **Move** option.



When you click the **Move** option, you can select a destination folder for the asset or folder. The destination can be in the Shared folder or in the user's personal folder. If you move to the Shared folder, you are prompted to set user/group permissions to the asset or folder.

2.0.59 - What's new, November 17, 2020

Learn about new features and known issues in version 2.0.59 of IBM Planning Analytics Workspace in the following topics.

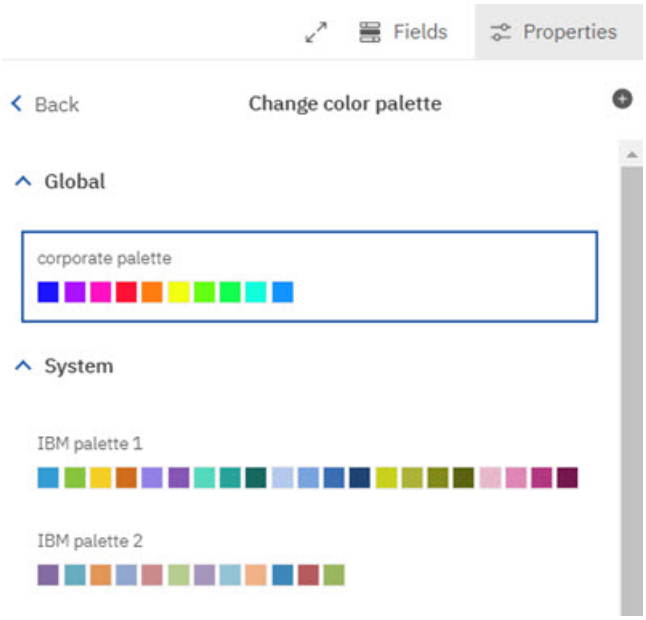
Updates to each version of Planning Analytics Workspace are cumulative. To see what was new in previous releases, see Chapter 2, “What's new in Planning Analytics Workspace,” on page 45.

Create a global color palette

Administrators can create global color palettes that can be applied to books and visualizations in Planning Analytics Workspace.

Procedure

1. Click the **Administration** tile on the Planning Analytics Workspace Home page.
2. Click the **Excel and Customizations** tile.
3. Click the **Palettes** tab.
4. Click **Add global palette** +.

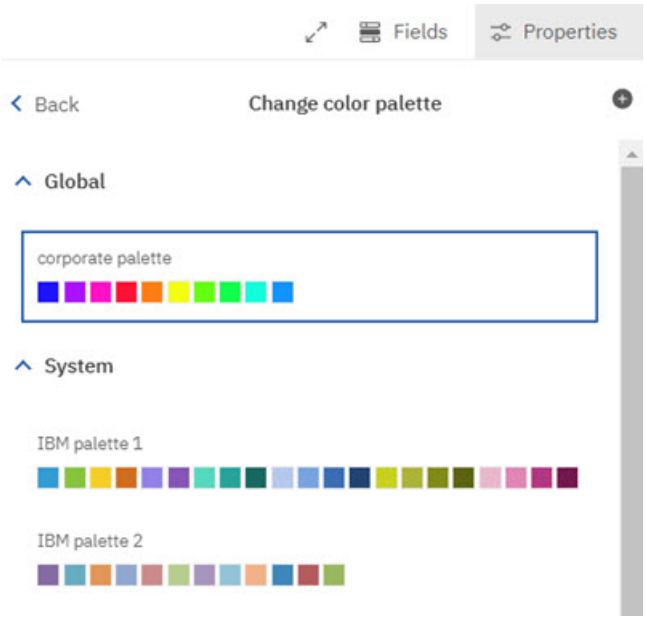


You can create the following types of color palettes:

Categorical
Used for visualizations that support discrete colors, like a bar or pie visualization.

Continuous
Used for visualizations that support color transitions, like a map or a heat map visualization.

After the global color palette is saved, users can apply the palette from the Global color palette properties.



For complete details on creating a global palette in Planning Analytics Workspace, see Create a global color palette.

Support for iPad

The Planning Analytics Workspace new experience is now supported on iPad.

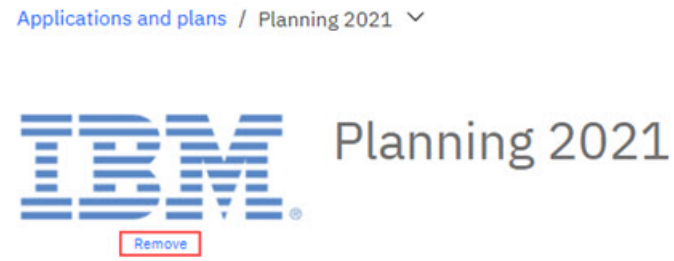
For details on mobile device capabilities and performance considerations, see Accessing Planning Analytics Workspace from Apple iPad.

Usability enhancements

This release includes several usability enhancements.

Remove a logo from an application or plan

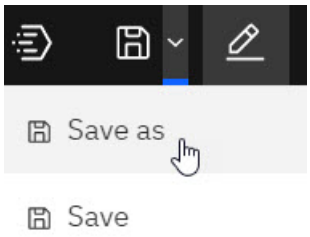
You can now delete a logo from an application or plan by clicking the **Remove** option directly beneath the logo.



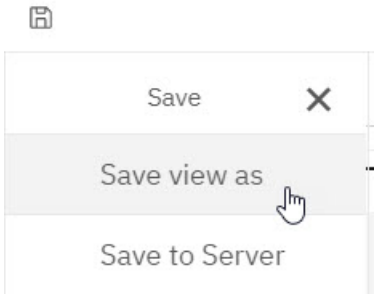
Delete option for logo

'Save as' defaults to current folder for books and views

If a book has previously been saved, then the folder where the book exists is the default folder when you choose **Save** > **Save as**.

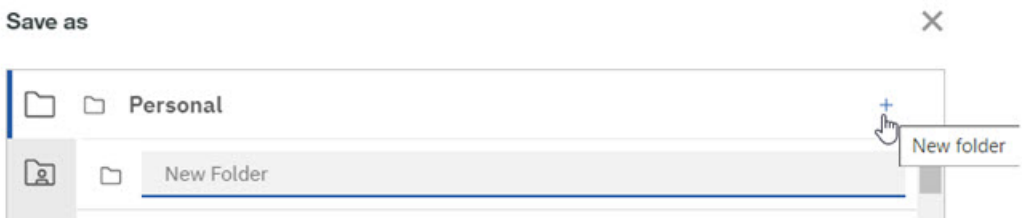


Similarly, if a view has previously been saved, then the folder where the view exists is the default folder when you choose **Save** > **Save view as**.



Create a new folder when saving a book or view

When saving a book or view, you can now create a new folder to accept the book or view. You can create a new folder in the Shared folder, in your personal folder, or in any sub-folder of your personal folder. To create a new folder, click the New folder icon on the parent folder where you want to insert the new folder, then assign a name for the folder and click Save.



Planning Analytics for Microsoft Excel: login or server access may fail in new experience

This issue may occur only when authenticating against a local TM1 database in the Planning Analytics new experience. You will not encounter this issue when authenticating against a local database in Planning Analytics classic or any Planning Analytics on Cloud database.

When attempting to log in to a TM1 database from Planning Analytics for Microsoft Excel, you may receive the following error under certain configurations or conditions: `Cannot load the requested view`.

To work around this issue, you can dismiss the error and again select the desired TM1 database and continue to log in with a valid user name.

This issue will be corrected in an upcoming release.

2.0.58 - What's new, October 21, 2020

Planning Analytics Workspace 2.0.58 SC is a cloud release that includes significant changes in the look and feel of Planning Analytics Workspace, as well as important new functionality.

Updates to each version of Planning Analytics Workspace are cumulative. To see what was new in previous releases, see Chapter 2, “What's new in Planning Analytics Workspace,” on page 45.

Learn from the experts

There are a lot of big changes in the Planning Analytics Workspace new experience, introduced in 2.0.57 local and 2.0.58 cloud. From a completely revised interface to significant new features like forecasting, the best place to learn about these changes is from the detailed blogs created by our subject matter experts.

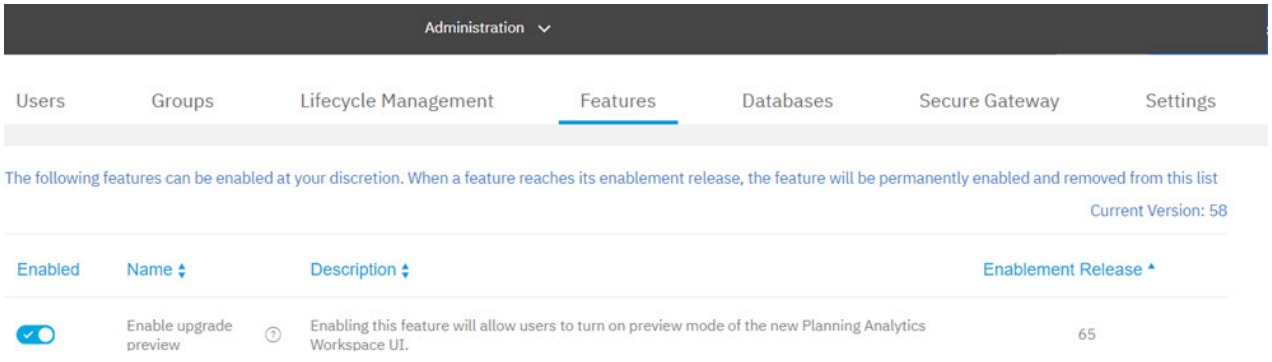
Click here to visit the central blog about Planning Analytics Workspace enhancements and new capabilities. From this central blog, you'll find links to other blog posts and additional information from a range of Planning Analytics Workspace pros.

Manage the new experience for your users

To make the move to the new interface more manageable, Planning Analytics Workspace administrators can manage when a new experience preview is exposed to their users and when a permanent upgrade to the new experience is executed.

Enable the preview

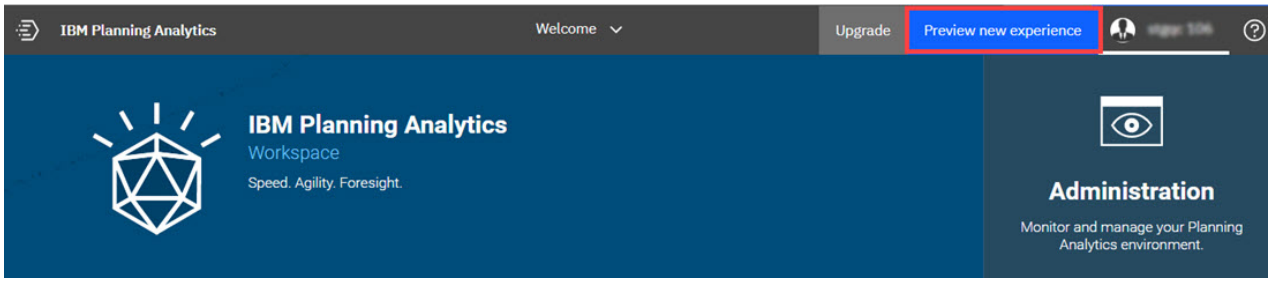
To make a new experience preview available for your users, enable the **Enable upgrade preview** feature on the Features administration tab.



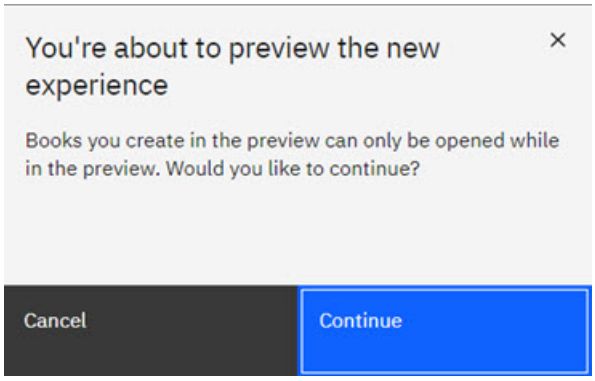
As with all features that are subject to administrator enablement, the feature is enabled by default. If you don't want the new experience preview to be available to your users, disable the feature. Note that disabling the feature also removes the Upgrade option for administrators.

See Manage features on IBM Knowledge Center for full details on using the Features administration tab.

When the feature is enabled, all users see a **Preview new experience** button on the Planning Analytics Workspace banner. (Note that the adjacent **Upgrade** button is visible only to administrators. We'll discuss that further in a moment.)



You can click the button to experiment with the new experience. When you click the button, you'll be asked for confirmation. Click **Continue** to proceed to the new experience preview.



While using the new experience preview, all users should be aware of these considerations:

- You can return to the classic Planning Analytics Workspace interface at any time by clicking the **Return to Classic Experience** button on the banner.
- Books created in the classic experience can be opened in the new experience. When you open a book that was created in Planning Analytics Workspace Classic, a message appears saying: "Your Dashboard has been upgraded. Save now to maintain optimum performance."
- When you open a book that was created in Planning Analytics Workspace Classic, you should use Save As and save the book to a new name or location in order to create a copy of the classic book and take advantage of the features in the new experience. In this scenario, the original book is still visible in the classic experience and the copy is available in the new experience, making it easy to compare and validate your assets.
- Any books saved in the new experience cannot be viewed in the classic experience. If you attempt to open such a book, you'll receive an error message. Views saved to the content store in the new experience cannot be opened in Planning Analytics for Microsoft Excel.

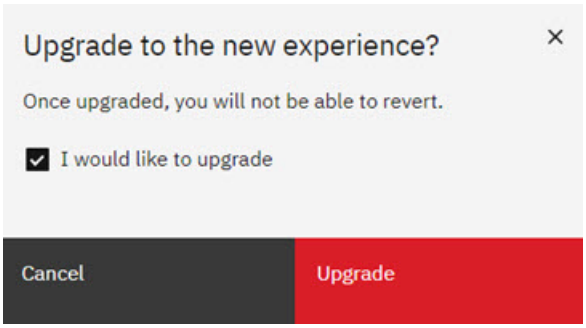
Perform a permanent upgrade to the new experience

Once all your users are comfortable with the new interface, have validated their current assets, and are ready to adopt the change, an Administrator can perform a permanent upgrade to the new experience.

Note: Remember there is no way to undo an upgrade, so please be sure to complete all of your testing before proceeding with a permanent upgrade to the new Planning Analytics Workspace experience. To ensure consistency and a smooth upgrade, we recommend that you preview and upgrade first in a non-production environment, then in a test environment (if applicable), and finally in your production environment.

To perform the upgrade, click the **Upgrade** button on the Planning Analytics Workspace Classic banner.

To avoid an accidental upgrade, you'll be prompted for confirmation. Select the **I would like to upgrade** option, then click **Upgrade**.



After the upgrade is complete, the **Preview** and **Upgrade** buttons will no longer be visible and all future logins take all users directly to the new experience.

After upgrading, users must open and save any existing books before they can take advantage of the enhancements available in the new experience.

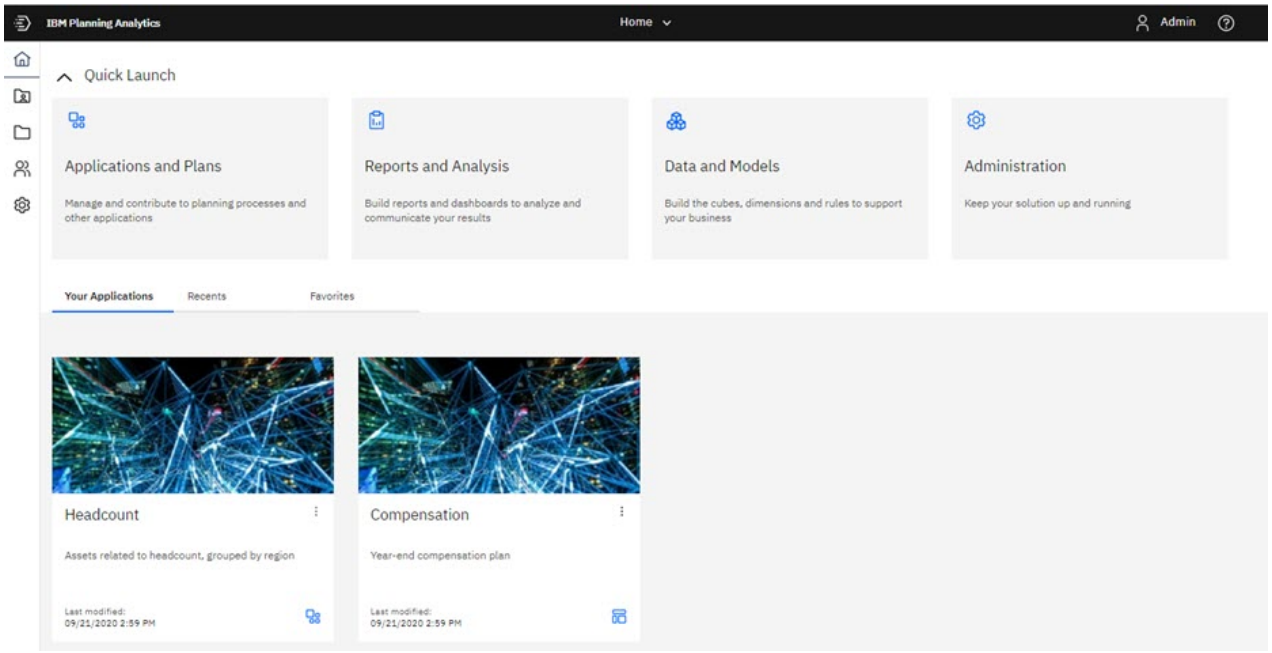
Improved look and feel

The Planning Analytics Workspace user interface has been updated to make it easier to accomplish tasks, provide a more consistent experience with other IBM products, and to simplify the transition between Planning Analytics Workspace and Cognos Analytics.

As part of the interface update, new icons adhering to the Carbon Design principles have been introduced throughout Planning Analytics Workspace. For more information about Carbon Design principles, see https://www.carbondesignsystem.com.

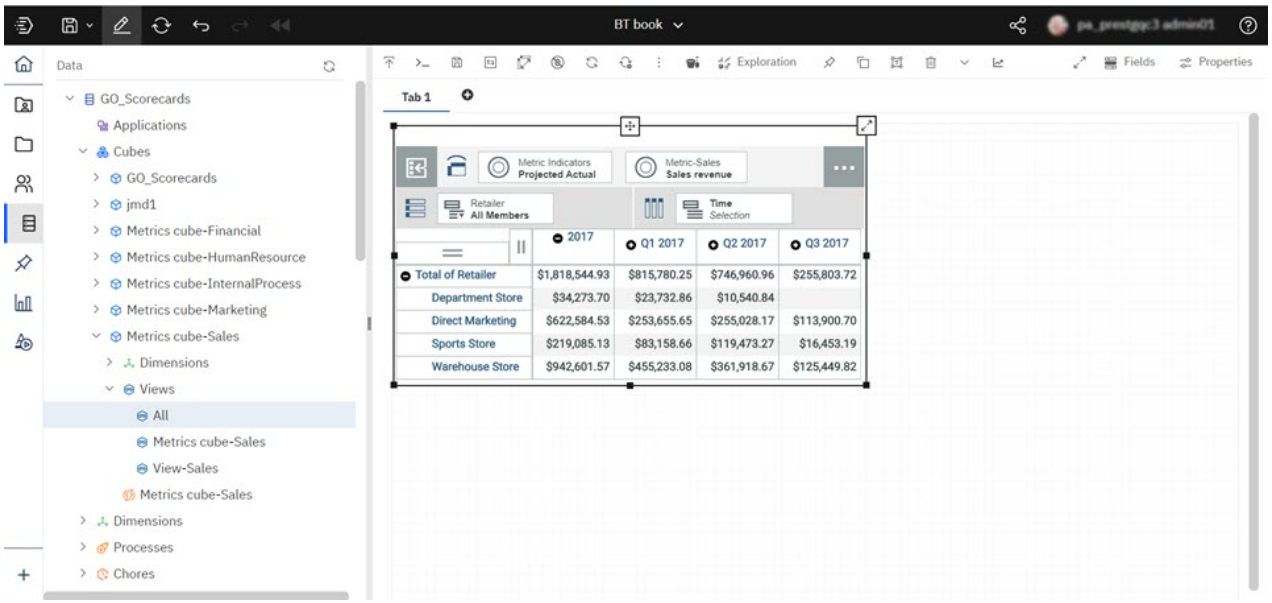
Note: Because the interface that exists in versions of Planning Analytics Workspace prior to 2.0.57 SC is still supported, it is necessary to differentiate between the new interface and the 'old' interface in the documentation. When there is a divergence of procedures or capabilities between the current (new) interface and the old, the documentation describes the current interface as Planning Analytics Workspace and describes the interface in 2.0.55 SC and prior versions as Planning Analytics Workspace Classic.

A new **Home** page for Planning Analytics Workspace is the first significant changes you'll notice. On the new **Home** page, you can quickly access the area you want to work in, customized for your role within Planning Analytics Workspace. You can also quickly open your applications and plans, as well as your recent and favorite items.



The prominent Quick Launch tiles that provide immediate access to **Applications and Plans**, **Reports and Analysis**, **Data and Models**, and **Administration** are dynamically displayed depending upon your role when you log in to Planning Analytics Workspace. Only the tiles that you can use based on your role appear. For example, an administrator sees all of the Quick Launch tiles, while an analyst sees only **Applications and Plans** and **Reports and Analysis**. You can click the Quick Launch show/hide button Quick Launch to show or hide the Quick Launch tiles. When you hide the tiles, you can see more of your applications, recent items, or favorite items.

You'll also notice improvements in other familiar places. For example, in books the user interface is simplified, new icons are present, and the toolbar has been decoupled from the view.

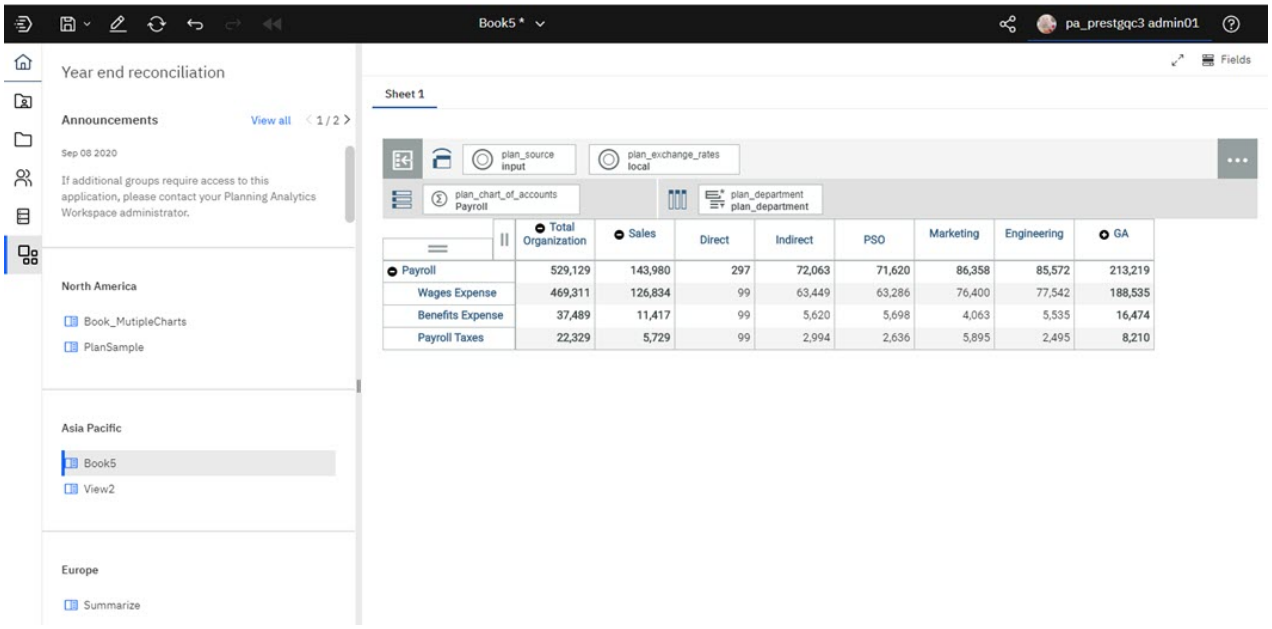


Use of the new interface is described in the relevant topics throughout the Planning Analytics Workspace help and documentation.

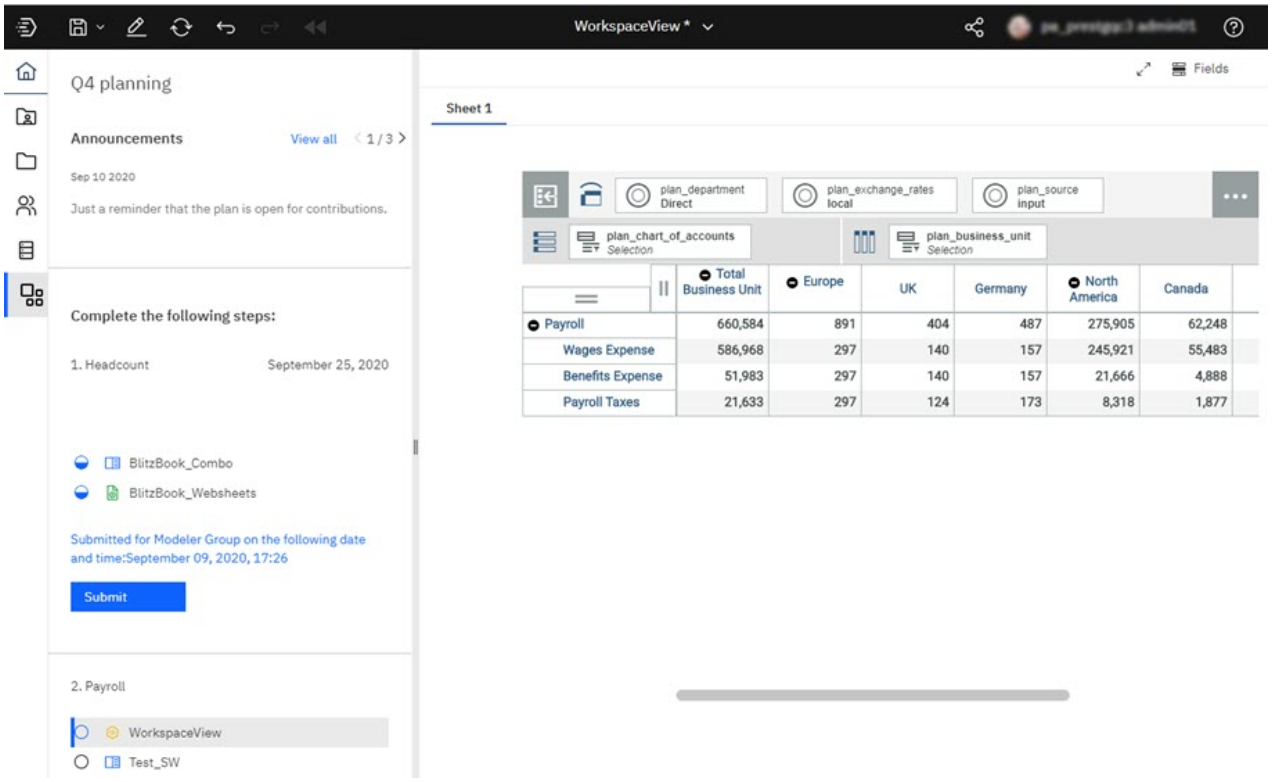
Applications and Plans

Applications and plans let you organize logically related Planning Analytics Workspace assets such as books, view, and websheets in containers.

An application contains related assets that are grouped in sections. These sections might reflect the structure of your organization, planning and budgeting requirements, or any other relevant grouping of assets. While an application contains logically related assets, there are no implied or required actions associated with the assets or sections in an application. An individual asset can belong to more than one application.



A plan contains assets that are grouped in steps. These steps can represent discrete tasks or contributions that must be completed in a planning or budgeting process. While steps can be ordered in a plan, there is no requirement for contributors to complete the steps sequentially; they can be completed in any order. Steps can also be assigned a due date for contributions. An administrator can require that steps be explicitly submitted for approval, and an administrator can reject and reset a submission.

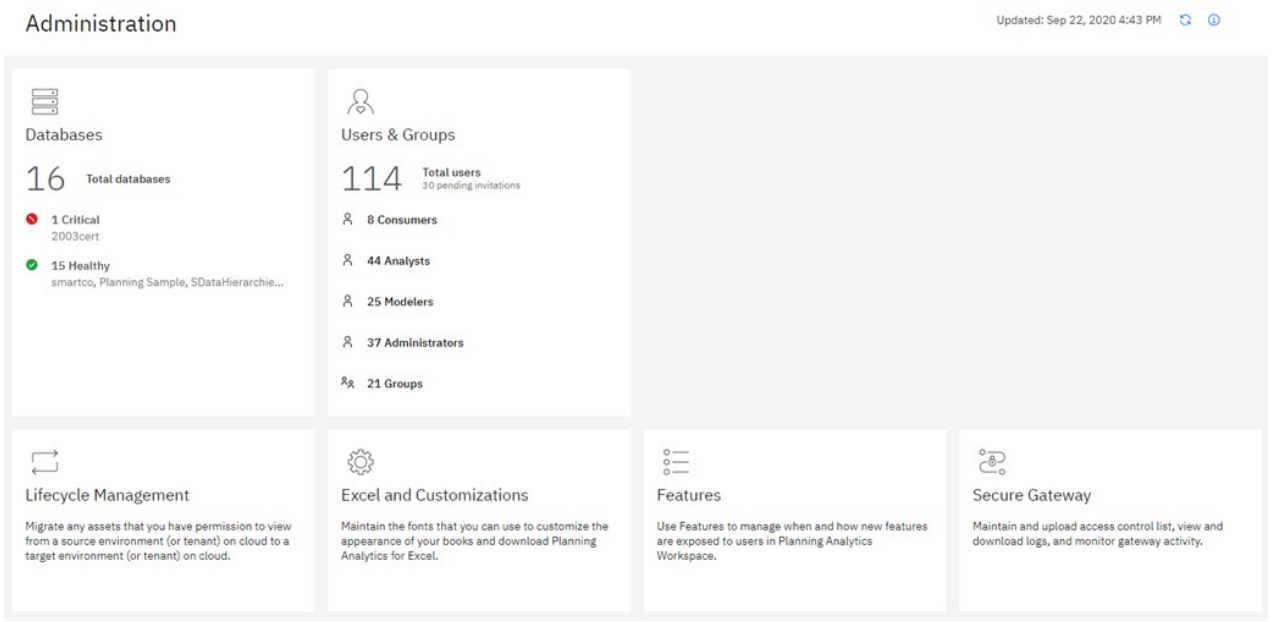


For complete details on creating, managing, and using applications and plans, see Applications and plans.

Administration page changes

The Planning Analytics Workspace **Administration** page has been reorganized to provide greater insight into your environment and to simplify access to administrative tasks.

The Administration page now includes several task-specific tiles. The Databases tile provide quick insight into the health of your databases. The Users and Groups tile lets you know how many users are assigned to each role and the number of groups that are defined.



You can click any tile to perform the administrative tasks associated with the tile.

The tiles available on the **Administration** page vary depending on whether you are running Planning Analytics Workspace Local or on Cloud. The Agents tile is available only on Local, while the Secure Gateway tile is available only on Cloud.

For complete details on using the new Administration page, see Administer Planning Analytics Workspace.

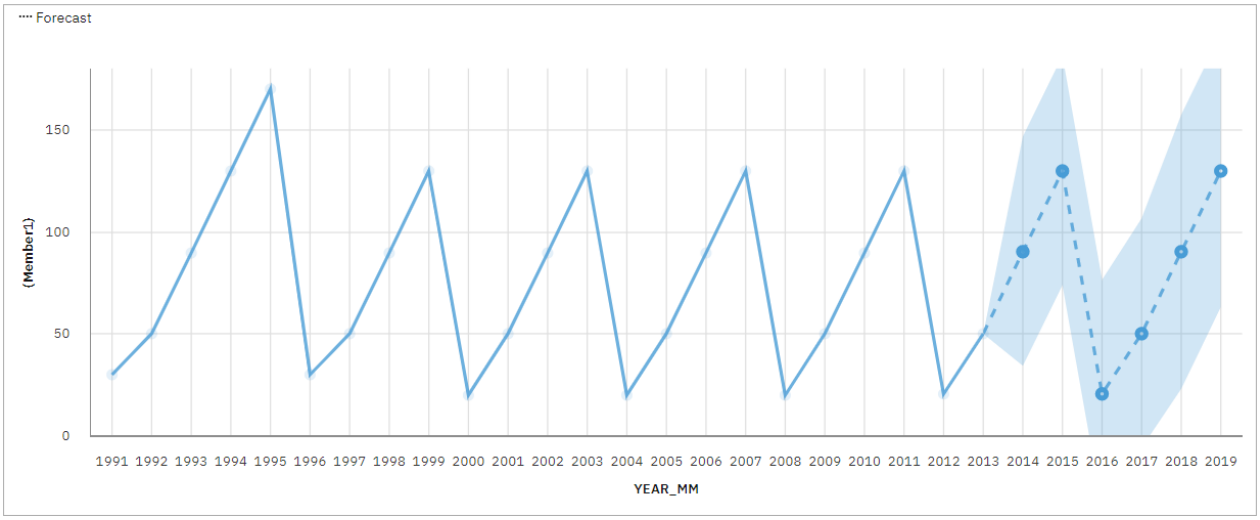
Forecasting

You can now use forecasting in IBM Planning Analytics Workspace to discover and model trend, seasonality, and time dependence in data.

You can forecast in Planning Analytics Workspace by using automated tools that model time-dependent data. Automated model selection and tuning makes forecasting easy to use, even if you are not familiar with time series modeling.

Forecasts and their confidence bounds are displayed in visualizations as a continuation of historic data. You can also view the statistical details for generated models if you want to see the technical background.

The following example shows forecasting values and confidence bounds in a line visualization.



Specifying time series in forecasts often requires data manipulation. Planning Analytics Workspace supports a wide range of time series without the need for manipulation, ranging from standard date and time types, to nested periodic and cyclical time fields. When data is recognized as a time series, data preparation is automated. Appropriate trend and seasonal periods are detected, and models are selected from a set of nine different model types.

You can forecast in line visualizations. Forecasting allows analysis of hundreds of time series per visualization. Forecasts and confidence bounds are computed for each time series, and displayed in the visualization as extensions of the current data. You can inspect each time series separately, and tailor the forecast and results to your own data and requirements.

If you are familiar with forecasting models, you can view the selected model type, estimated model parameters, standard accuracy measures, and processing summary information.

For complete details on using forecasting in Planning Analytics Workspace, including a complete tutorial, see Forecasting.

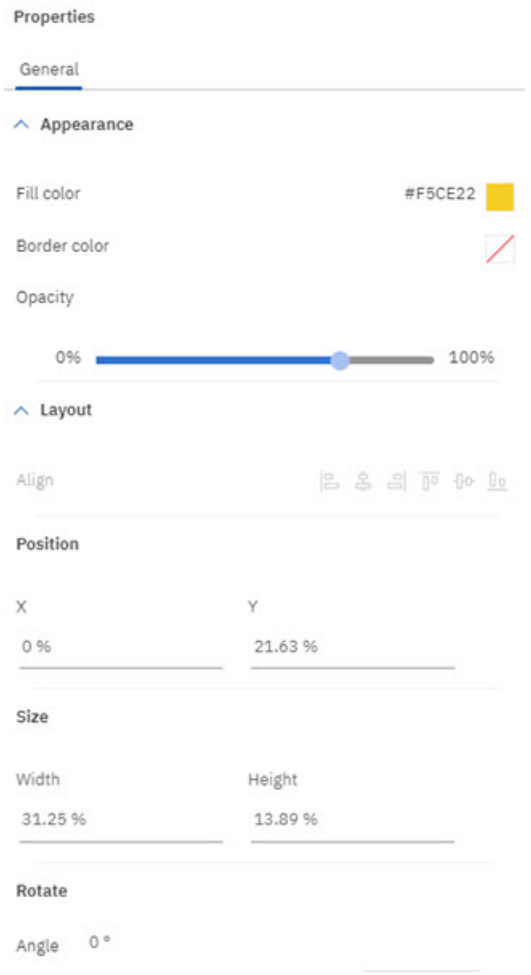
Book and visualization improvements

The properties available to manage all aspects of your books have been significantly expanded. The visualization types available to use in Planning Analytics Workspace have been updated to provide more and improved visualizations.

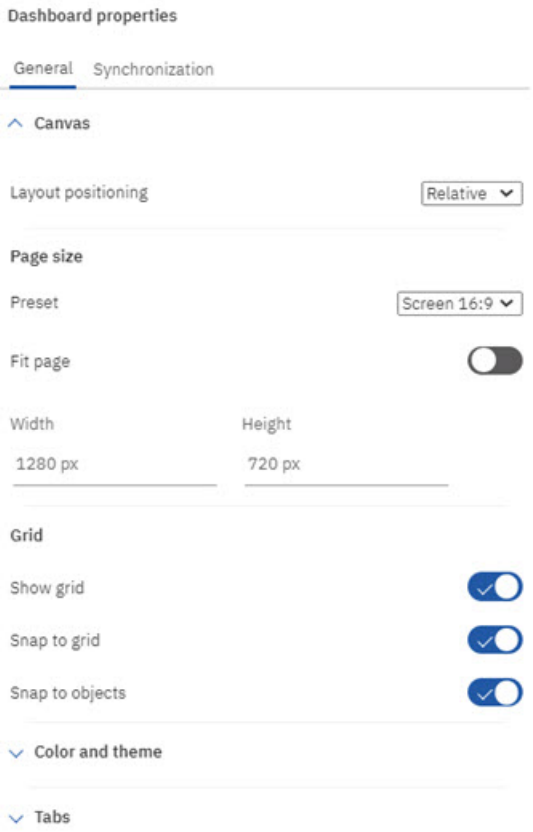
Books

All objects in a book, such as explorations, visualizations, buttons, images, and text, can now be precisely managed using an expanded selection of properties.

When you select an object in a book and then click the **Properties** tab, you'll see an expanded list of properties that you can set to manage the object in your book. The properties available vary by object type, and the properties you're familiar with are still available, but new properties allow you to precisely manage the size, position, alignment, and appearance of all objects in a book.



You can also set Dashboard properties to manage the general appearance of your book.



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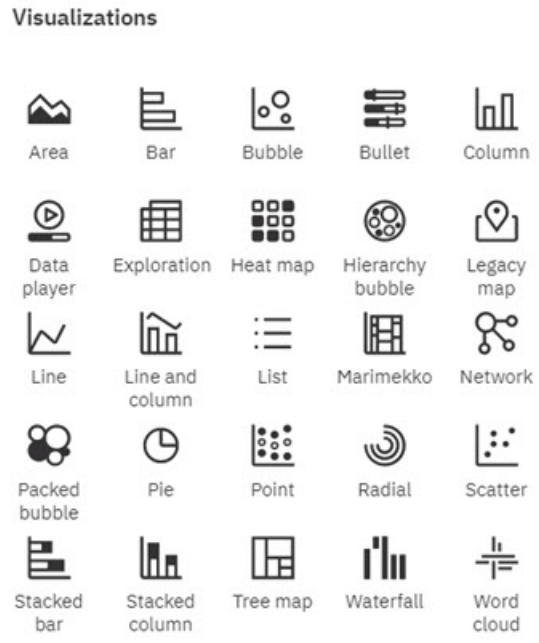

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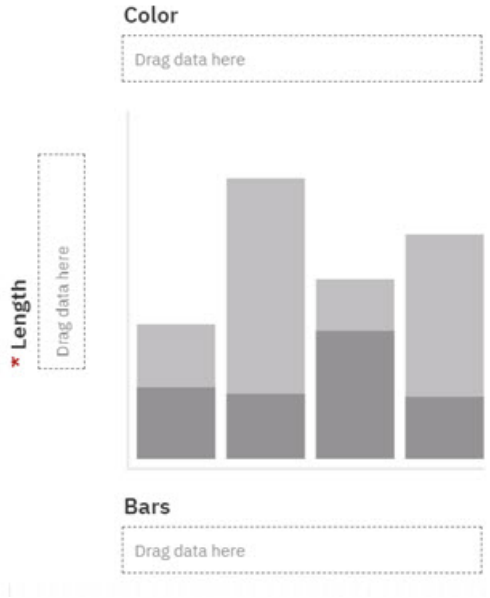
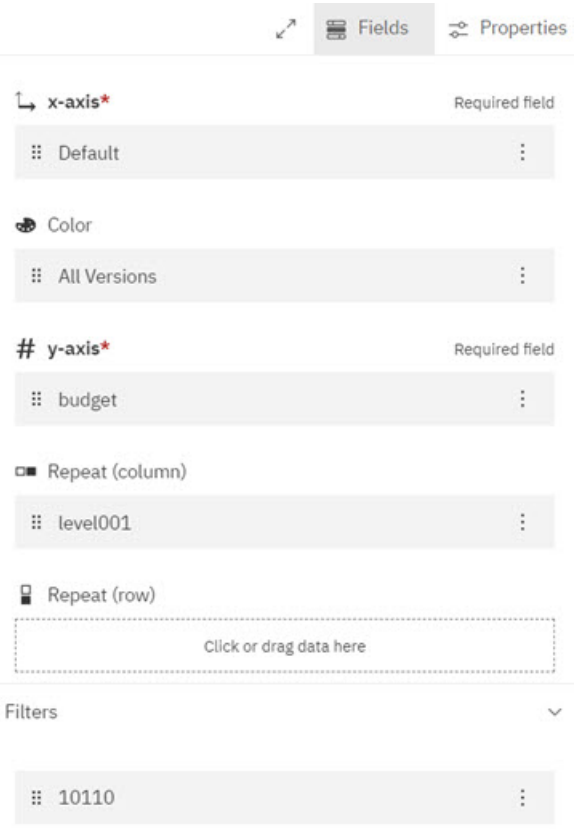


You can drag and drop dimensions from the Data tree onto the **Drag data here** drop zones to build a visualization from scratch. Once the visualization is complete, you can manage the visualization using the Fields tab on a book. You can drag and drop dimensions to different fields to change the structure of your visualization or you can click a field to select a new member to use in your visualization.

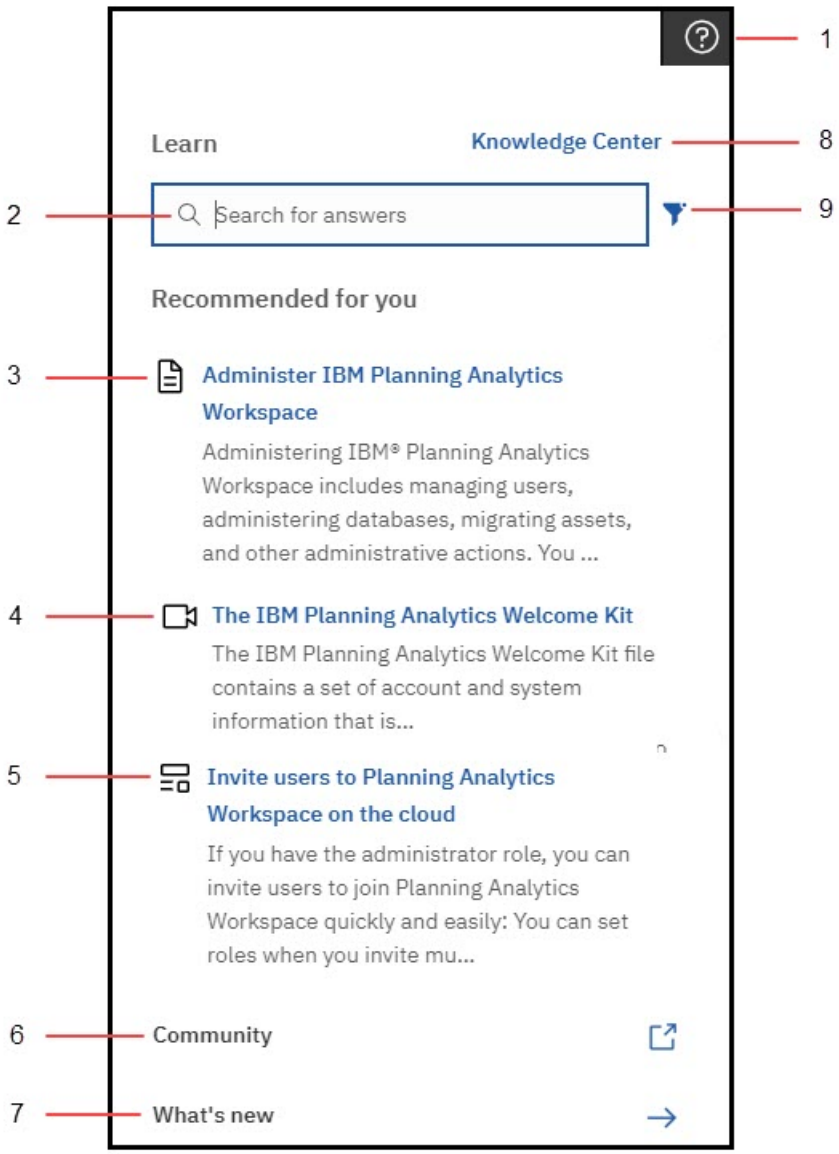


For further details, see Visualizations.

Ask for help in the cognitive Learn pane

If you want to learn more about how to use Planning Analytics Workspace, click the Help icon and ask a question. The cognitive help tailors your help experience based on where you are working in the product and finds only the answers that are relevant to your user role. You can find the latest videos, blogs, and documentation.

Use these features on the Learn pane to find answers and be more productive!



1

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2

Type a question in the Search box. You can search in any supported language in the Learn pane and you see translated documentation in your search results. You also see blogs and videos that match your search, however, blogs and videos aren't translated.

3

Read the formal product documentation, sourced from IBM Knowledge Center.

4. Watch a video! Sometimes the best way to learn is to see it in action.
5. Read a post in the Planning Analytics Community Blog The community blog posts are written by experts who use Planning Analytics Workspace and share their tips and tricks.
6. Go to the Planning Analytics Community. In the community, you can find the latest articles, blog posts, and events. You can also start and contribute to discussions about Planning Analytics.
7. Click **What's New** to find out what is new in the latest release of Planning Analytics Workspace.
8. Visit the IBM Knowledge Center for all IBM Planning Analytics documentation In the IBM Knowledge Center, you can read all documentation, including related products.
9. Filter your search results to show only your preferred content type: videos, blogs, or documentation.

Considerations for upgrading to Planning Analytics Workspace new experience

Users should be aware of the following considerations before upgrading to the new experience in Planning Analytics Workspace 2.0.57 SC local and 2.0.58 cloud.

The upgrade to Planning Analytics Workspace 2.0.57 SC local is a permanent upgrade. There is no way to revert to a prior version of Planning Analytics Workspace Classic.

likewise, when an administrator commits to an upgrade in 2.0.58 cloud, there is no way to revert to the 'classic' user experience.

Features not supported in initial 2.0.57 local/2.0.58 cloud releases

These features are not supported in the initial new experience Planning Analytics Workspace release. Support for these features may be reintroduced in subsequent releases.

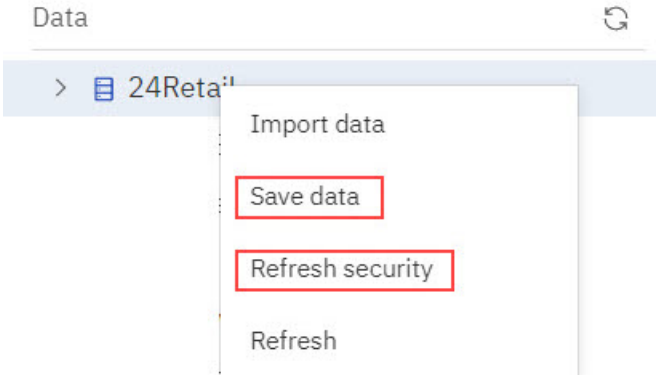
- Tree map visualizations upgrade successfully *except* when more than one dimension is present on an axis, in which case the tree map is converted to an Exploration during book upgrade.
- The Reports and Analysis landing page does not display individual tiles for books, views, or websheets. Rather, the Reports and Analysis landing page displays a searchable and sortable list of all assets.
- Mobile devices are not fully supported in the initial new experience release, as some gestures are not yet implemented.
- An Administrator cannot set up a global color palette. (This capability is supported as of Planning Analytics Workspace 2.0.59.)
- When you click **Share** > **Export**, you cannot share a book or view as an image or PowerPoint document. You can, however, export as PDF with enhanced print options.
- The Intent bar (sometimes called the NLP bar) is not available in this release.

Differences in behavior between Planning Analytics Workspace 2.0.57 local/2.0.58 cloud and Planning Analytics Workspace Classic

- Chats are deprecated, as previously announced in this deprecation notice.
- Bookmarks and history are no longer available on the Data tree. Instead, you can use the Recents or Favorites tabs on the Planning Analytics Workspace Home page to open assets that you have recently viewed or favorited.
- Collections has been changed to Pins. You can pin a view or websheet from a book. You can access pinned items from the Pin button while in Edit mode.

Database administration enhancements

You can now save data and refresh security for a selected database directly from the Data tree.



Save data

To save all data for a database from memory to disc, right-click the database in the Data tree, then click **Save data**. This action also restarts the `tm1s.log` file for the database.

Refresh security

To update all security structures and assignments for a database, right-click the database in the Data tree, then click **Refresh security**.

Planning Analytics for Microsoft Excel: login or server access may fail in new experience

This issue may occur only when authenticating against a local TM1 database in the Planning Analytics new experience. You will not encounter this issue when authenticating against a local database in Planning Analytics classic or any Planning Analytics on Cloud database.

When attempting to log in to a TM1 database from Planning Analytics for Microsoft Excel, you may receive the following error under certain configurations or conditions: `Cannot load the requested view`.

To work around this issue, you can dismiss the error and again select the desired TM1 database and continue to log in with a valid user name.

This issue will be corrected in an upcoming release.

2.0.57 - What's new, October 2, 2020

Planning Analytics Workspace 2.0.57 SC is a local-only release that includes significant changes in the look and feel of Planning Analytics Workspace, as well as important new functionality.

Updates to each version of Planning Analytics Workspace are cumulative. To see what was new in previous releases, see Chapter 2, “What's new in Planning Analytics Workspace,” on page 45.

Learn from the experts

There are a lot of big changes in the Planning Analytics Workspace new experience, introduced in 2.0.57 local and 2.0.58 cloud. From a completely revised interface to significant new features like forecasting, the best place to learn about these changes is from the detailed blogs created by our subject matter experts.

Click here to visit the central blog about Planning Analytics Workspace enhancements and new capabilities. From this central blog, you'll find links to other blog posts and additional information from a range of Planning Analytics Workspace pros.

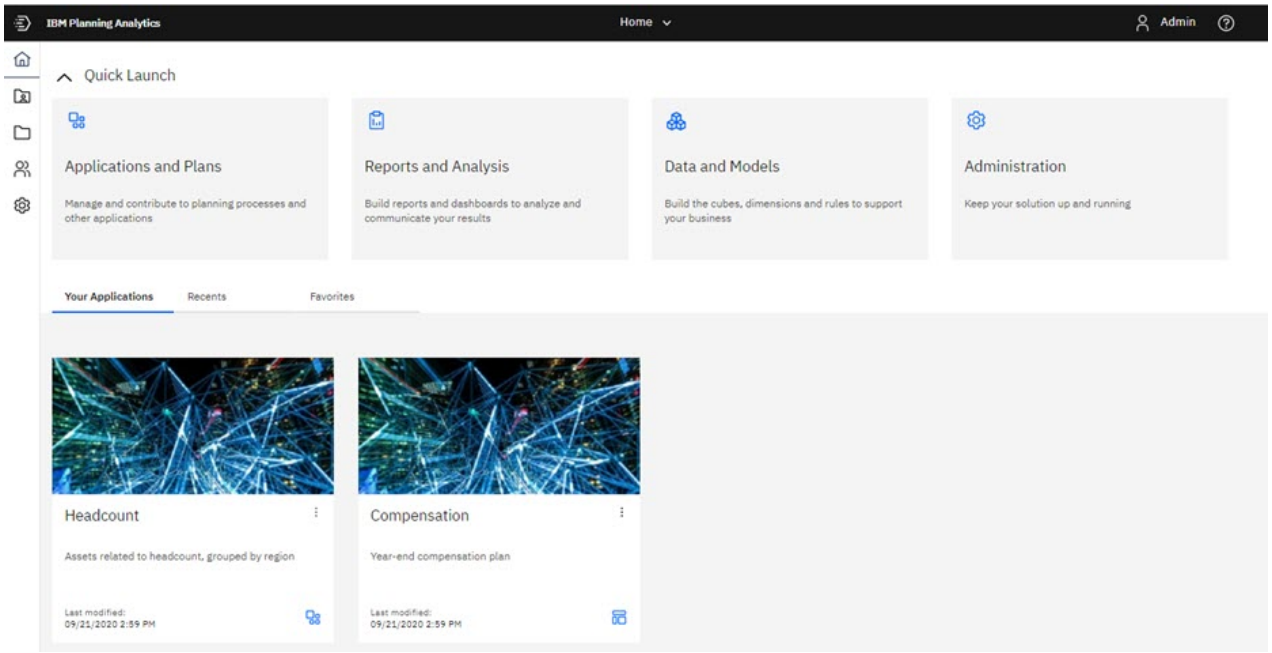
Improved look and feel

The Planning Analytics Workspace user interface has been updated to make it easier to accomplish tasks, provide a more consistent experience with other IBM products, and to simplify the transition between Planning Analytics Workspace and Cognos Analytics.

As part of the interface update, new icons adhering to the Carbon Design principles have been introduced throughout Planning Analytics Workspace. For more information about Carbon Design principles, see https://www.carbondesignsystem.com.

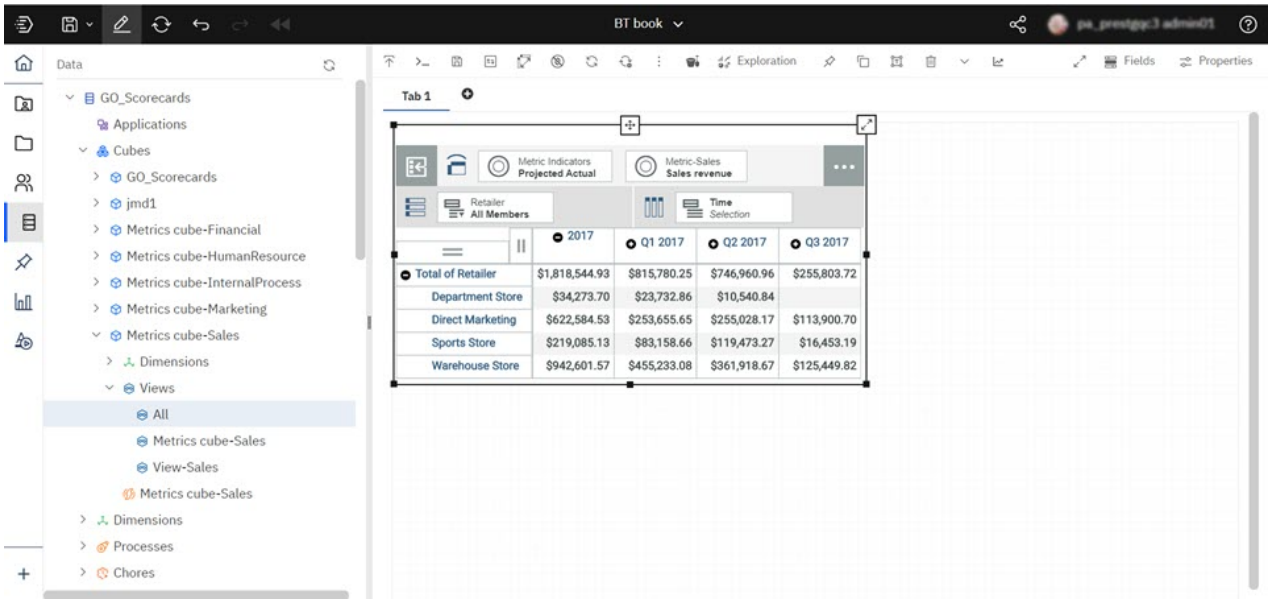
Note: Because the interface that exists in versions of Planning Analytics Workspace prior to 2.0.57 SC is still supported, it is necessary to differentiate between the new interface and the 'old' interface in the documentation. When there is a divergence of procedures or capabilities between the current (new) interface and the old, the documentation describes the current interface as Planning Analytics Workspace and describes the interface in 2.0.55 SC and prior versions as Planning Analytics Workspace Classic.

A new **Home** page for Planning Analytics Workspace is the first significant changes you'll notice. On the new **Home** page, you can quickly access the area you want to work in, customized for your role within Planning Analytics Workspace. You can also quickly open your applications and plans, as well as your recent and favorite items.



The prominent Quick Launch tiles that provide immediate access to **Applications and Plans**, **Reports and Analysis**, **Data and Models**, and **Administration** are dynamically displayed depending upon your role when you log in to Planning Analytics Workspace. Only the tiles that you can use based on your role appear. For example, an administrator sees all of the Quick Launch tiles, while an analyst sees only **Applications and Plans** and **Reports and Analysis**. You can click the Quick Launch show/hide button Quick Launch to show or hide the Quick Launch tiles. When you hide the tiles, you can see more of your applications, recent items, or favorite items.

You'll also notice improvements in other familiar places. For example, in books the user interface is simplified, new icons are present, and the toolbar has been decoupled from the view.

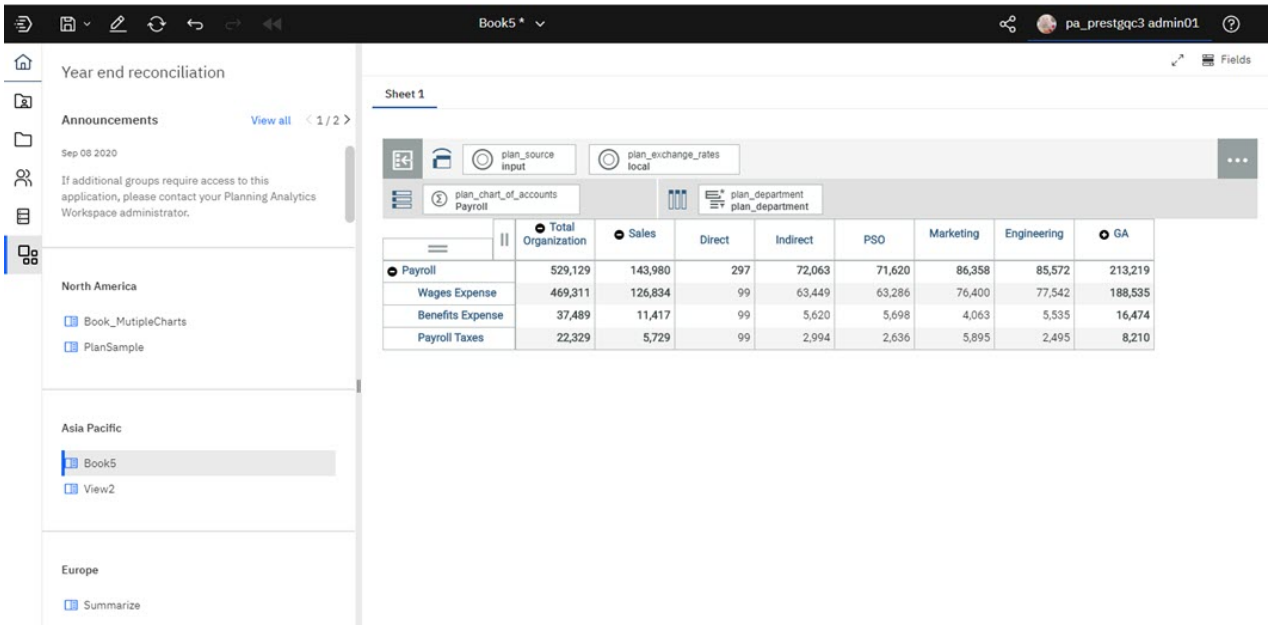


Use of the new interface is described in the relevant topics throughout the Planning Analytics Workspace help and documentation.

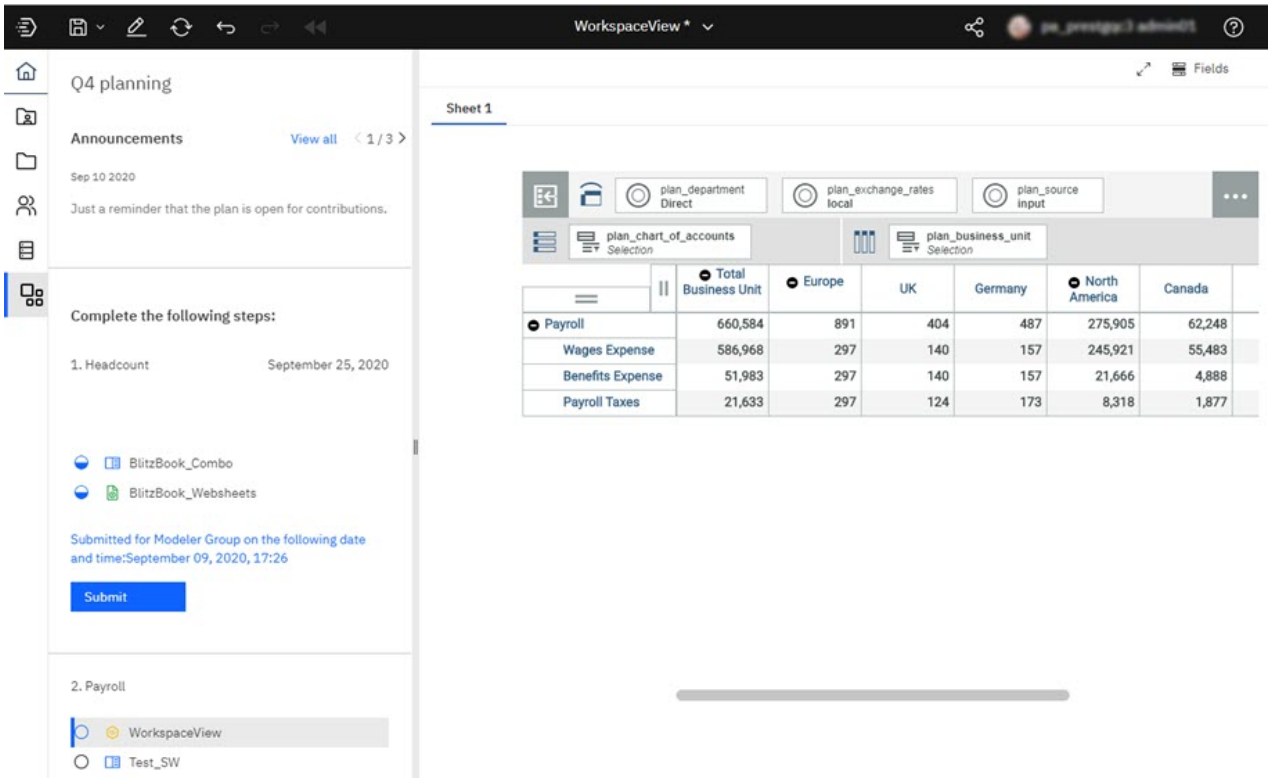
Applications and Plans

Applications and plans let you organize logically related Planning Analytics Workspace assets such as books, view, and websheets in containers.

An application contains related assets that are grouped in sections. These sections might reflect the structure of your organization, planning and budgeting requirements, or any other relevant grouping of assets. While an application contains logically related assets, there are no implied or required actions associated with the assets or sections in an application. An individual asset can belong to more than one application.



A plan contains assets that are grouped in steps. These steps can represent discrete tasks or contributions that must be completed in a planning or budgeting process. While steps can be ordered in a plan, there is no requirement for contributors to complete the steps sequentially; they can be completed in any order. Steps can also be assigned a due date for contributions. An administrator can require that steps be explicitly submitted for approval, and an administrator can reject and reset a submission.

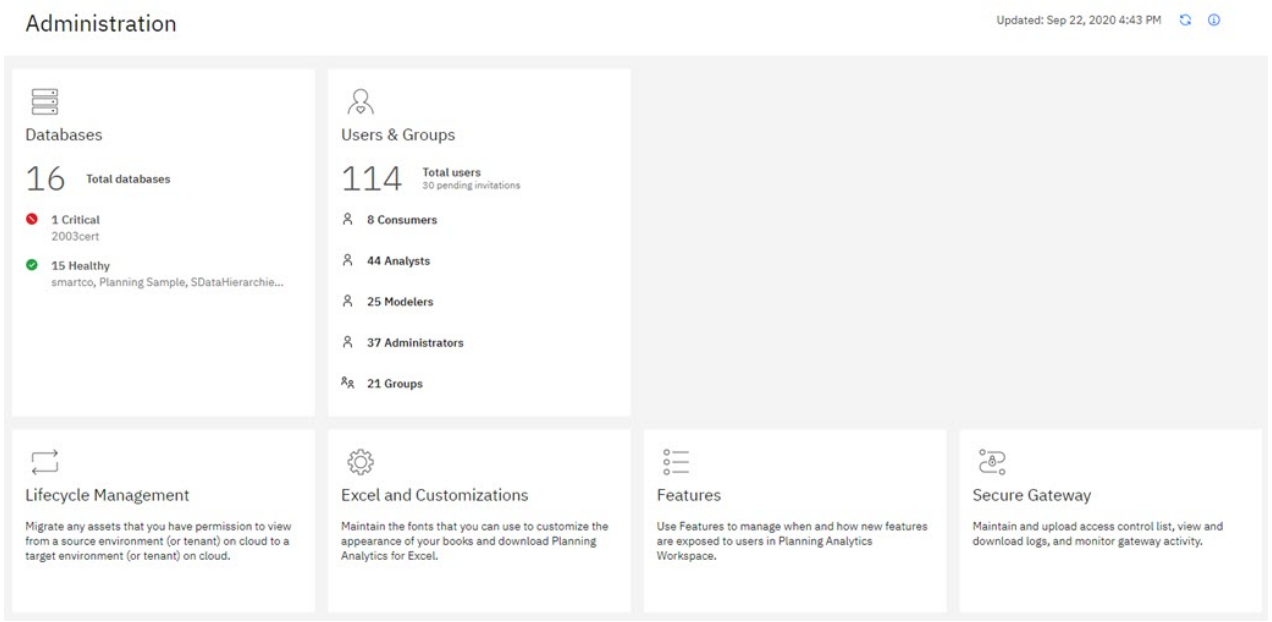


For complete details on creating, managing, and using applications and plans, see Applications and plans.

Administration page changes

The Planning Analytics Workspace **Administration** page has been reorganized to provide greater insight into your environment and to simplify access to administrative tasks.

The Administration page now includes several task-specific tiles. The Databases tile provide quick insight into the health of your databases. The Users and Groups tile lets you know how many users are assigned to each role and the number of groups that are defined.



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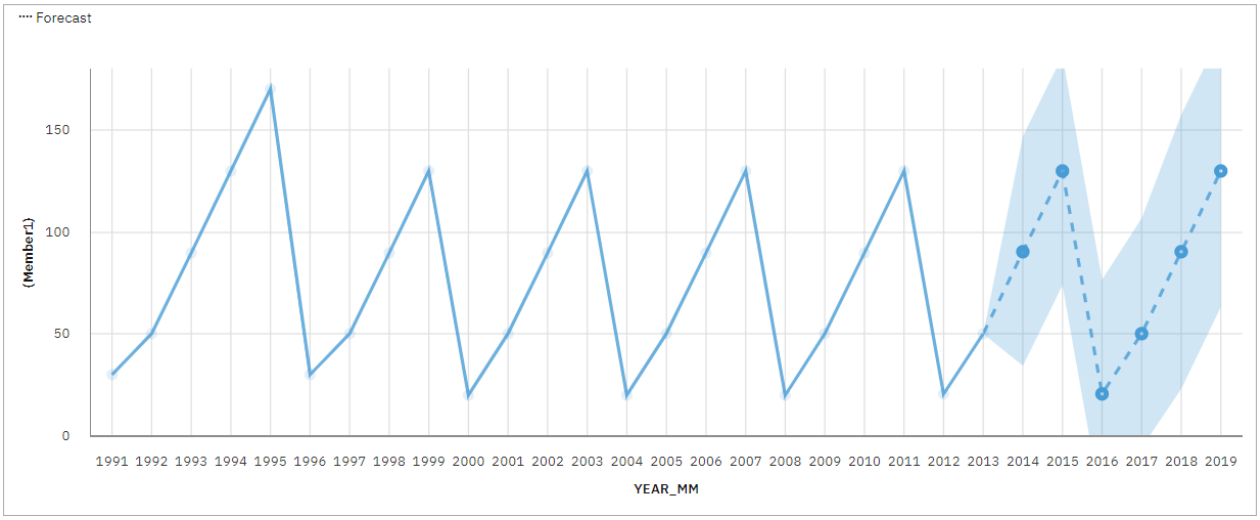

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Book and visualization improvements

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All objects in a book, such as explorations, visualizations, buttons, images, and text, can now be precisely managed using an expanded selection of properties.

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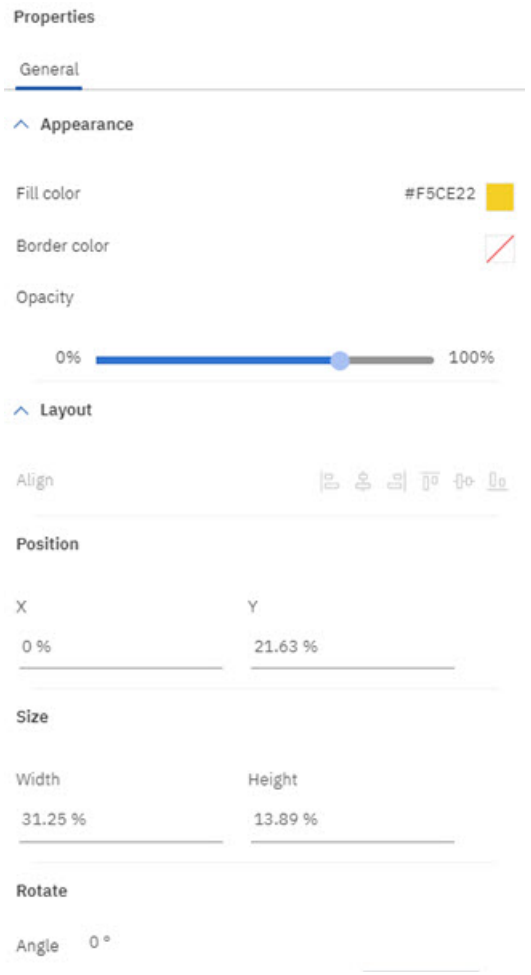
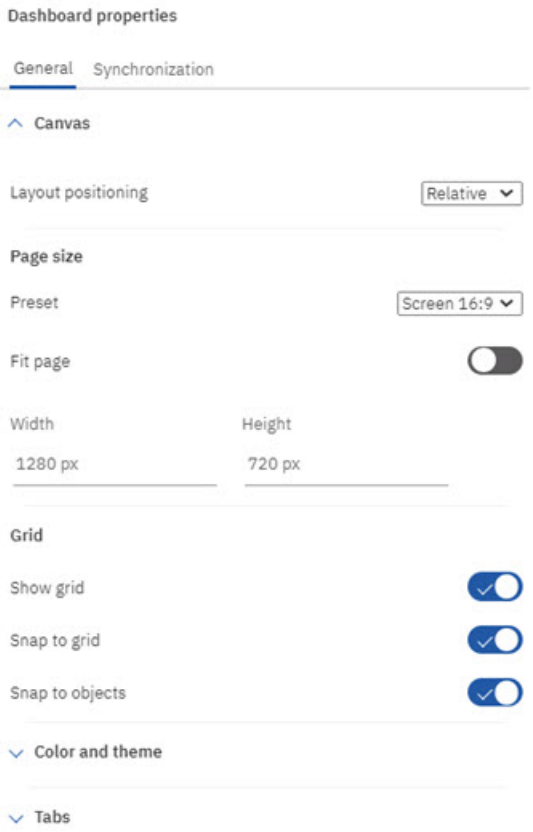


You can also set Dashboard properties to manage the general appearance of your book.



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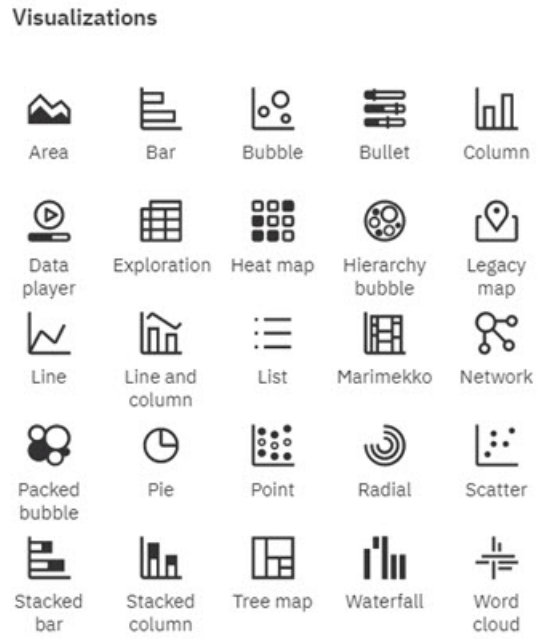
The list of visualizations available in Planning Analytics Workspace has been expanded to include twenty five options.



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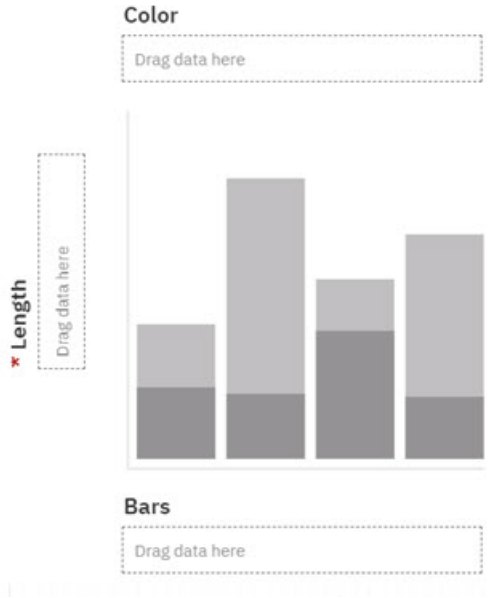
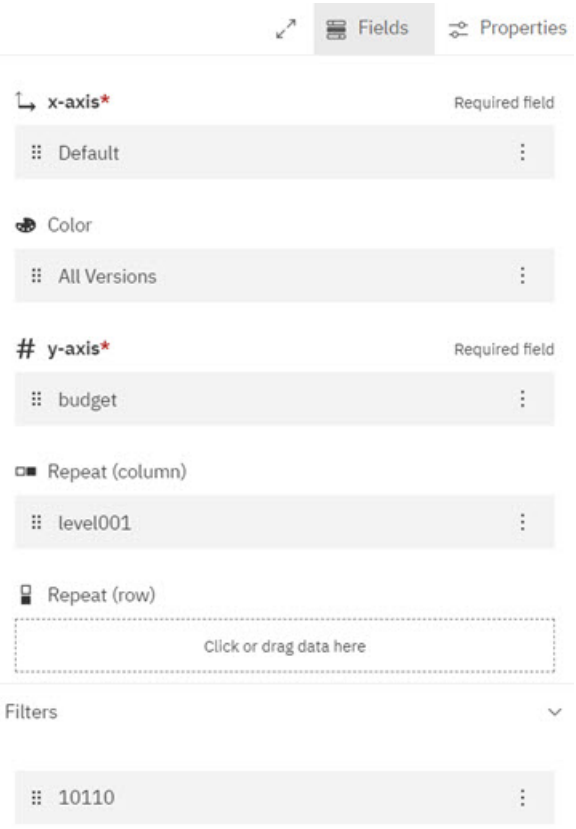


You can drag and drop dimensions from the Data tree onto the **Drag data here** drop zones to build a visualization from scratch. Once the visualization is complete, you can manage the visualization using the Fields tab on a book. You can drag and drop dimensions to different fields to change the structure of your visualization or you can click a field to select a new member to use in your visualization.



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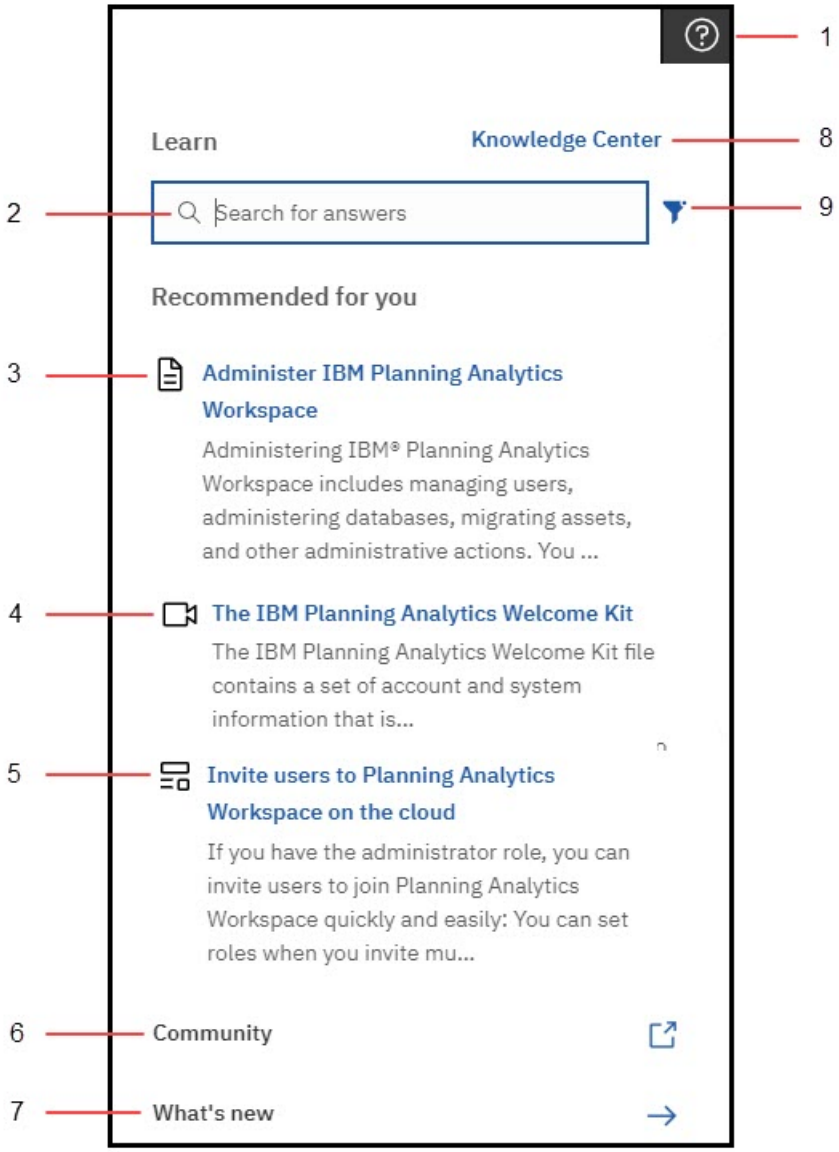

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Read the formal product documentation, sourced from IBM Knowledge Center.

4. Watch a video! Sometimes the best way to learn is to see it in action.
5. Read a post in the Planning Analytics Community Blog The community blog posts are written by experts who use Planning Analytics Workspace and share their tips and tricks.
6. Go to the Planning Analytics Community. In the community, you can find the latest articles, blog posts, and events. You can also start and contribute to discussions about Planning Analytics.
7. Click **What's New** to find out what is new in the latest release of Planning Analytics Workspace.
8. Visit the IBM Knowledge Center for all IBM Planning Analytics documentation In the IBM Knowledge Center, you can read all documentation, including related products.
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Considerations for upgrading to Planning Analytics Workspace new experience

Users should be aware of the following considerations before upgrading to the new experience in Planning Analytics Workspace 2.0.57 SC local and 2.0.58 cloud.

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Differences in behavior between Planning Analytics Workspace 2.0.57 local/2.0.58 cloud and Planning Analytics Workspace Classic

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- Bookmarks and history are no longer available on the Data tree. Instead, you can use the Recents or Favorites tabs on the Planning Analytics Workspace Home page to open assets that you have recently viewed or favorited.
- Collections has been changed to Pins. You can pin a view or websheet from a book. You can access pinned items from the Pin button while in Edit mode.

2.0.55 - What's new, August 11, 2020

This version of Planning Analytics Workspace on cloud includes fixes only.

Updates to each version of Planning Analytics Workspace are cumulative. To see what was new in the previous release, see “2.0.54 - What's new, July 15, 2020” on page 291.

2.0.54 - What's new, July 15, 2020

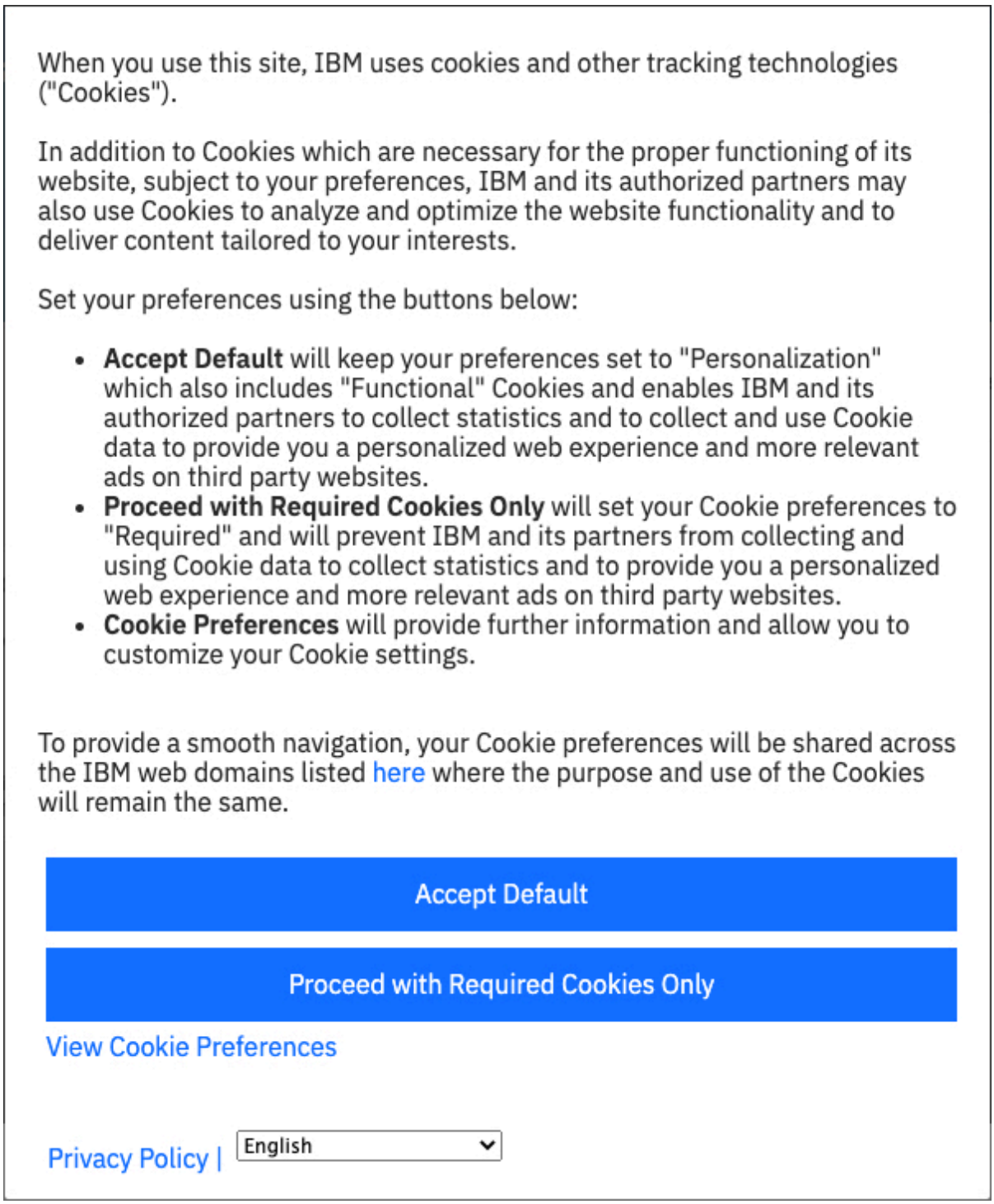
See what's new in version 2.0.54 of IBM Planning Analytics Workspace in the following topics.

Note: Planning Analytics Workspace on cloud is available from July 15, 2020. Planning Analytics Workspace local is available starting from July 12, 2020.

Set your cookie preferences

IBM begins to capture metrics of your usage of IBM Planning Analytics Workspace on cloud to improve the product, and its capabilities, with the release of 2.0.54.

If you are based in the European Union, you will see a prompt the first time that you log on after Planning Analytics Workspace on cloud is upgraded. Users are determined to be in the European Union based on their IP address by using geolocation services. Your acceptance of cookie preferences is stored as a cookie in your browser, so if you clear your cookies or change browser, you see the prompt again. This is standard behavior, and enables you to control the level of cookies that you allow to be stored.



If you are not based in the European Union, you are not prompted for cookies but you can select the level of cookies by clicking and then selecting **Cookie Preferences**. You can see more information about the levels of cookies by clicking **View Cookie Preferences** in the **Cookies** window.

To learn more, see:

Cookie preferences for Planning Analytics on cloud (https://www.ibm.com/support/knowledgecenter/SSD29G_2.0.0/com.ibm.swg.ba.cognos.tm1_prism_gs.2.0.0.doc/c_paw_cookies.html)

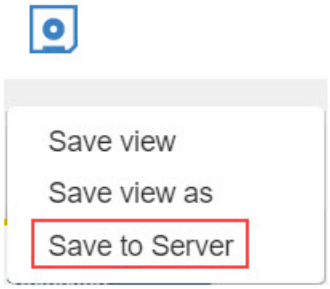
Save a view to the TM1 database

You can save a view from Planning Analytics Workspace to the TM1 database.

When a view is saved to the database, it can be used by TM1 processes as a data source from which you can extract data and create or update objects or data.

A view saved to the TM1 database is also available to any Planning Analytics client that connects to the database.

To save a view to the TM1 database, select **Save to Server** from the shortcut bar.



To learn more, see:

Save a view (https://www.ibm.com/support/knowledgecenter/SSD29G_2.0.0/com.ibm.swg.ba.cognos.tm1_prism_gs.2.0.0.doc/t_paw_save_view.html).

Format numbers for an entire view

You can apply number formatting for an entire view from the shortcut bar.

To apply formatting, click the **Format** icon on the shortcut bar and select the desired format.

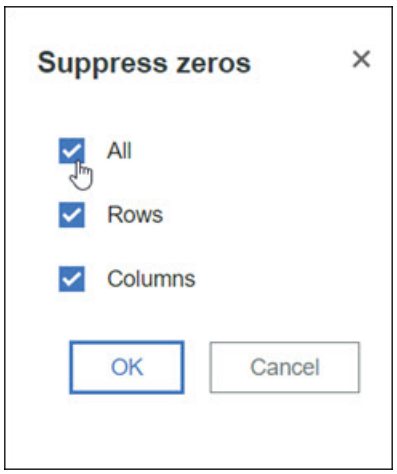
To learn more, see:

Change the format of data in a view (https://www.ibm.com/support/knowledgecenter/SSD29G_2.0.0/com.ibm.swg.ba.cognos.tm1_prism_gs.2.0.0.doc/t_paw_format_data.html).

Suppress zeros for an entire view

You can suppress zeros for an entire view from the shortcut bar.

To suppress all rows and columns that contain only zeros, click on the shortcut bar, then select **All**.



To learn more, see:

Suppress zeros (https://www.ibm.com/support/knowledgecenter/SSD29G_2.0.0/com.ibm.swg.ba.cognos.tm1_prism_gs.2.0.0.doc/t_prism_suppress.html).

Remove a user from all environments simultaneously (cloud only)

As of Planning Analytics 2.0.54, removing a user from the primary environment automatically removes the user from all environments within the organization. You no longer need to remove a user from secondary environments before removing the user from the primary environment.

Chapter 3. What's new in Planning Analytics for Microsoft Excel

Read about what's new or updated in IBM Planning Analytics for Microsoft Excel.

2.0.90 - Feature updates, September 12, 2023

IBM Planning Analytics for Microsoft Excel was refreshed on September 12, 2023 to include the following features and notices.

Updates to each version of Planning Analytics for Microsoft Excel are cumulative.
To see what was new in previous releases, see What's new in Planning Analytics for Microsoft Excel (https://www.ibm.com/support/knowledgecenter/SSD29G_2.0.0/com.ibm.swg.ba.cognos.ug_cxr.2.0.0.doc/c_nfg_pax_test.html).

Hierarchy aware Universal Reports are now available in IBM Planning Analytics for Microsoft Excel

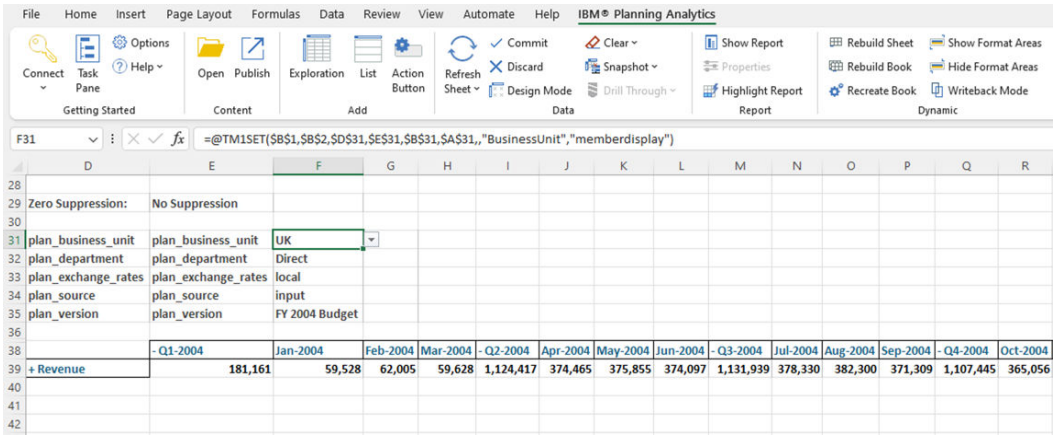
Universal Reports, a new hierarchy aware and parameterized report type, is now available in IBM Planning Analytics for Microsoft Excel, IBM Planning Analytics TM1 Web, and IBM Planning Analytics Workspace websheets. Universal Reports were previously referred to as Dynamic Quick Reports on Planning Analytics for Microsoft Excel's roadmap.

About Universal Reports

Prerequisites

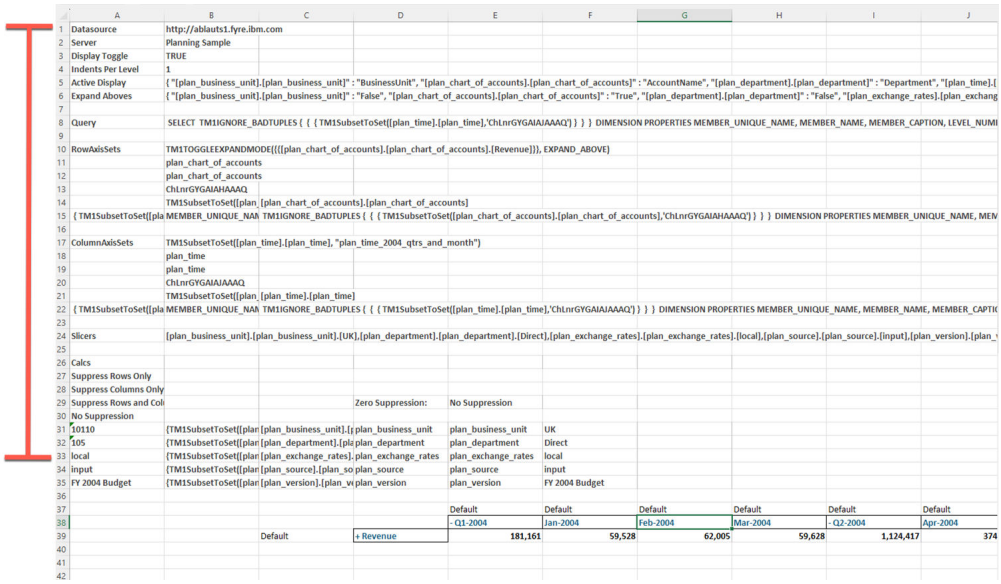
About Universal Reports

Driven by TM1SET formulas, a Universal Report is a hierarchy aware and parameterized report that achieves its parameterization by using named ranges.



	D	E	F	G	H	I	J	K	L	M	N	O	P	Q	R
28															
29	Zero Suppression:	No Suppression													
30															
31	plan_business_unit	plan_business_unit	UK												
32	plan_department	plan_department	Direct												
33	plan_exchange_rates	plan_exchange_rates	local												
34	plan_source	plan_source	input												
35	plan_version	plan_version	FY 2004 Budget												
36															
38		- Q1-2004	Jan-2004	Feb-2004	Mar-2004	- Q2-2004	Apr-2004	May-2004	Jun-2004	- Q3-2004	Jul-2004	Aug-2004	Sep-2004	- Q4-2004	Oct-2004
39	+ Revenue	181,161	59,528	62,005	59,628	1,124,417	374,465	375,855	374,097	1,131,939	378,330	382,300	371,309	1,107,445	365,056
40															
41															
42															

The query parameterization area of a Universal Report is hidden by default. You can unhide this area to see the formulas that drive a Universal Report.



	A	B	C	D	E	F	G	H	I	J
1	Datasource	http://ablauts1.fyre.ibm.com								
2	Server	Planning Sample								
3	Display Toggle	TRUE								
4	Indents Per Level	1								
5	Active Display	{ "[plan_business_unit].[plan_business_unit]" : "BusinessUnit", "[plan_chart_of_accounts].[plan_chart_of_accounts]" : "AccountName", "[plan_department].[plan_department]" : "Department", "[plan_time].[								
6	Expand Aboves	{ "[plan_business_unit].[plan_business_unit]" : "False", "[plan_chart_of_accounts].[plan_chart_of_accounts]" : "True", "[plan_department].[plan_department]" : "False", "[plan_exchange_rates].[plan_exchang								
7										
8	Query	SELECT TM1IGNORE_BADTUPLES { { { TM1SubsetToSet([plan_time].[plan_time],'ChLnrGYGAIAJAAAQ') } } } DIMENSION PROPERTIES MEMBER_UNIQUE_NAME, MEMBER_NAME, MEMBER_CAPTION, LEVEL_NUMI								
9										
10	RowAxisSets	TM1TOGGLEEXPANDMODE({{[plan_chart_of_accounts].[plan_chart_of_accounts].[Revenue]}}, EXPAND_ABOVE)								
11		plan_chart_of_accounts								
12		plan_chart_of_accounts								
13		ChLnrGYGAIAHAAAQ								
14		TM1SubsetToSet([plan_[plan_chart_of_accounts].[plan_chart_of_accounts]								
15	{ TM1SubsetToSet([pla	MEMBER_UNIQUE_NAM	TM1IGNORE_BADTUPLES { { { TM1SubsetToSet([plan_chart_of_accounts].[plan_chart_of_accounts],'ChLnrGYGAIAHAAAQ') } } } DIMENSION PROPERTIES MEMBER_UNIQUE_NAME, MEM								
16										
17	ColumnAxisSets	TM1SubsetToSet([plan_time].[plan_time], "plan_time_2004_qtrs_and_month")								
18		plan_time								
19		plan_time								
20		ChLnrGYGAIAJAAAQ								
21		TM1SubsetToSet([plan_[plan_time].[plan_time]								
22	{ TM1SubsetToSet([pla	MEMBER_UNIQUE_NAM	TM1IGNORE_BADTUPLES { { { TM1SubsetToSet([plan_time].[plan_time],'ChLnrGYGAIAJAAAQ') } } } DIMENSION PROPERTIES MEMBER_UNIQUE_NAME, MEMBER_NAME, MEMBER_CAPTI								
23										
24	Slicers	[plan_business_unit].[plan_business_unit].[UK],[plan_department].[plan_department].[Direct],[plan_exchange_rates].[plan_exchange_rates].[local],[plan_source].[plan_source].[input],[plan_version].[plan_								
25										
26	Calcs									
27	Suppress Rows Only									
28	Suppress Columns Only									
29	Suppress Rows and Col			Zero Suppression:	No Suppression					
30	No Suppression									
31	10110	{TM1SubsetToSet([plar	[plan_business_unit].[	plan_business_unit	plan_business_unit	UK				
32	105	{TM1SubsetToSet([plar	[plan_department].[pla	plan_department	plan_department	Direct				
33	local	{TM1SubsetToSet([plar	[plan_exchange_rates].	plan_exchange_rates	plan_exchange_rates	local				
34	input	{TM1SubsetToSet([plar	[plan_source].[plan_so	plan_source	plan_source	input				
35	FY 2004 Budget	{TM1SubsetToSet([plar	[plan_version].[plan_v	plan_version	plan_version	FY 2004 Budget				
36										
37					Default	Default	Default	Default	Default	Default
38					- Q1-2004	Jan-2004	Feb-2004	Mar-2004	- Q2-2004	Apr-2004
39			Default	+ Revenue	181,161	59,528	62,005	59,628	1,124,417	374
40										
41										
42										

A Universal Report combines features from all report types in Planning Analytics for Excel and allows you to build a complex and sophisticated report. Here are some Universal Report features in Planning Analytics for Excel that you can use to build powerful reports:

- Convert an existing view or Exploration View to a Universal Report
- Add multiple Universal Reports to a single sheet, vertically aligned or side by side
- Toggle rows and columns to expand and collapse consolidated cells
- Launch the set editor from slicers or row and column headers to modify the view
- Apply Excel's conditional formatting rules
- Suppress zeros on rows, columns, or both
- Use spreading shortcuts

For greater customization, you can even modify a Universal Report by directly editing the query parameterization cells.

A Universal Report can be run against the TM1 Server or Planning Analytics Engine to retrieve updated data.

After you create a Universal Report, you can publish the report to the TM1 Server Application folder and open it as a live websheet in TM1 Web or Planning Analytics Workspace websheets.

For more information, see Universal Reports.

Prerequisites

To align with the launch of Universal Report's expanded features, including TM1SET usage, IBM Planning Analytics for Microsoft Excel 2.0.90 requires IBM Planning Analytics TM1 Web 2.0.90 or a newer version. You can use any version of Planning Analytics Workspace.

Planning Analytics on Cloud

Planning Analytics on Cloud customers must request their TM1 Server be upgraded to 2.0.9.18 IF2 or higher for TM1 Web 2.0.90 to be deployed on cloud.

Planning Analytics Local

On-premise customers do not require an upgrade to 2.0.9.18 IF2 to use Universal Reports on TM1 Web 2.0.90 and Planning Analytics for Excel 2.0.90.

Deployments using distributed TM1 environment

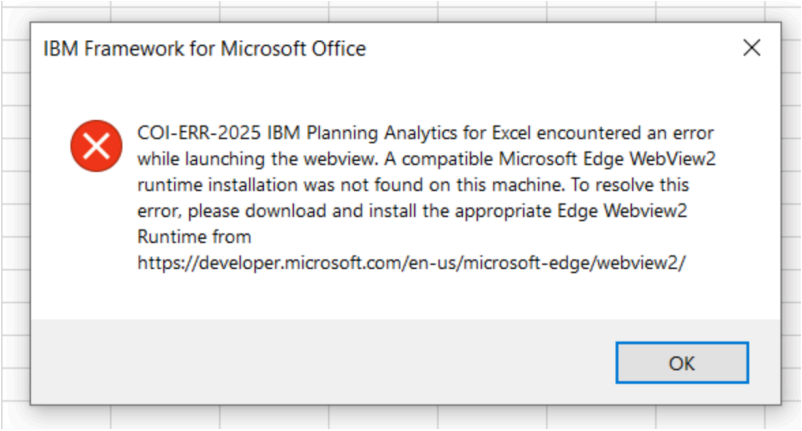
Planning Analytics for Microsoft Excel and TM1 Web use TM1 Web's EvaluationService component to support features such as Universal Reports and TM1SET. For deployments that use a distributed TM1 environment, you will need to configure the EvaluationService before you can use these features.

Planning Analytics for Microsoft Excel now defaults to WebView2

IBM Planning Analytics for Microsoft Excel's authentication flow and shared components now use Microsoft Edge WebView2 by default. WebView2 allows Planning Analytics for Excel to be compatible with newer web standards and technologies. Planning Analytics for Excel has supported WebView2 since version 2.0.74 through feature flags.

With the move to WebView2, shared components in Planning Analytics for Excel such as the cube viewer, set editor, drill through, and content store also default to using Carbon Design principles.

The upgrade to WebView2 requires installation of Microsoft Edge WebView2 runtime. Planning Analytics for Excel looks for WebView2 when launching webview. If you do not have WebView2 installed on your computer, you will see the following error prompting you to install the WebView2 runtime component.



Note: WebView2 runtime might already be installed on your computer. To check if you have WebView2 runtime installed, go to **Apps & features (Start > Settings > Apps)** and search for `WebView2`.

2.0.89 - Feature updates, July 17, 2023

IBM Planning Analytics for Microsoft Excel was refreshed on July 17, 2023 to include fixes and the following notices.

Updates to each version of Planning Analytics for Microsoft Excel are cumulative.
To see what was new in previous releases, see What's new in Planning Analytics for Microsoft Excel (https://www.ibm.com/support/knowledgecenter/SSD29G_2.0.0/com.ibm.swg.ba.cognos.ug_cxr.2.0.0.doc/c_nfg_pax_test.html).

Resolved - potential report integrity issue in IBM Planning Analytics for Microsoft Excel

As previously stated, IBM Planning Analytics for Microsoft Excel 2.0.89 includes a refined fix for the potential report integrity issue in Custom Reports and Dynamic Reports that was announced in 2.0.88.

IBM recommends that all users upgrade to Planning Analytics for Microsoft Excel 2.0.89.

For more information, see Potential report integrity issue in IBM Planning Analytics for Microsoft Excel.

Formula failure behavior improved to simplify error identification

Formula failure behaviour was improved in Planning Analytics for Microsoft Excel 2.0.89 to make error identification easier.

Some #VALUE errors now display as #NUM errors to represent a numeric error in a formula. #NUM can also mean that the input(s) are not in the range of valid metadata. Other errors continue to display as #VALUE to denote incorrect formula construction, including bad input type.

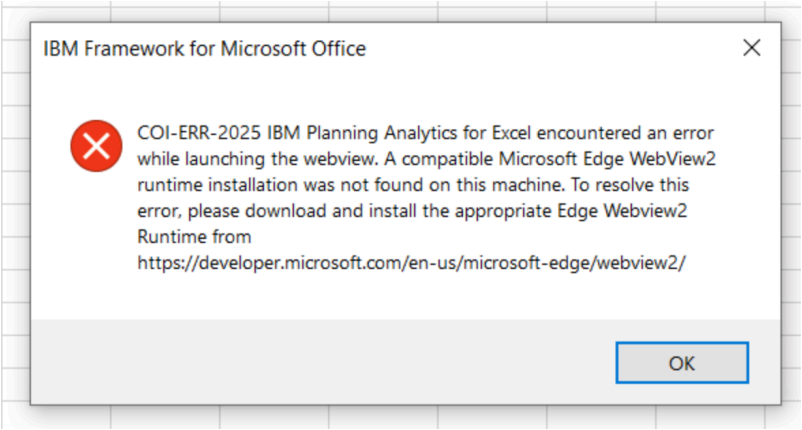
Previously, all formula failures in Planning Analytics for Microsoft Excel showed #VALUE, making it difficult to identify the error.

Upcoming change notification - Planning Analytics for Microsoft Excel to default to WebView2

IBM® Planning Analytics for Microsoft Excel will default to using Microsoft Edge WebView2 in an upcoming release. WebView2 allows Planning Analytics for Excel to be compatible with newer web standards and technologies.

With the move to WebView2, components in Planning Analytics for Excel such as the cube viewer, set editor, drill through, and content store will also default to using Carbon Design principles.

The upgrade to WebView2 requires installation of Microsoft Edge WebView2 runtime. Planning Analytics for Excel will look for WebView2 when launching webview. If you do not have WebView2 installed on your computer, you will see the following error prompting you to install the WebView2 runtime component.



Note: WebView2 runtime might already be installed on your computer. To check if you have WebView2 runtime installed, go to **Apps & features (Start > Settings > Apps)** and search for `WebView2`.

Support for WebView2 runtime was first introduced in Planning Analytics for Excel 2.0.74 with the authentication flow and was later extended to other components.

2.0.88 - Feature updates, June 8, 2023

IBM Planning Analytics for Microsoft Excel was refreshed on June 8, 2023 to include fixes and the following notices.

Updates to each version of Planning Analytics for Microsoft Excel are cumulative.
To see what was new in previous releases, see What's new in Planning Analytics for Microsoft Excel (https://www.ibm.com/support/knowledgecenter/SSD29G_2.0.0/com.ibm.swg.ba.cognos.ug_cxr.2.0.0.doc/c_nfg_pax_test.html).

Potential report integrity issue in IBM Planning Analytics for Microsoft Excel

IBM has become aware of a potential report integrity issue in Custom Reports and Dynamic Reports in IBM Planning Analytics for Microsoft Excel. Quick Reports and Explorations are not affected by this issue.

In Custom Reports and Dynamic Reports, incorrect values might be inserted into a small number of cells under complex report conditions when multiple TM1 formulas are referenced and/or TM1 formula nesting is defined in the report.

This issue impacts Planning Analytics for Excel versions 2.0.73 to 2.0.87. As a result, these versions are no longer available for download. However, users who do not use Custom Reports and Dynamic Reports can continue to use these versions.

IBM recommends that users who use Custom Reports and Dynamic Reports upgrade to Planning Analytics for Excel 2.0.88 immediately. Modifications present in the Planning Analytics for Excel 2.0.88 ensure that the recognized error patterns don't occur.

A comprehensive resolution to this issue will be available in Planning Analytics for Excel 2.0.89.

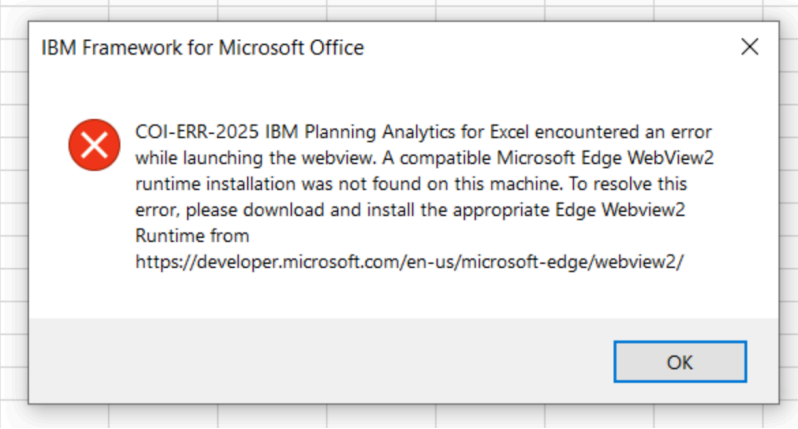
IBM recommends that all users upgrade to 2.0.89 once it is released. Planning Analytics for Excel 2.0.89 is targeted to release in July 2023.

Upcoming change notification - Planning Analytics for Microsoft Excel to default to WebView2

IBM® Planning Analytics for Microsoft Excel will default to using Microsoft Edge WebView2 in an upcoming release. WebView2 allows Planning Analytics for Excel to be compatible with newer web standards and technologies.

With the move to WebView2, components in Planning Analytics for Excel such as the cube viewer, set editor, drill through, and content store will also default to using Carbon Design principles.

The upgrade to WebView2 requires installation of Microsoft Edge WebView2 runtime. Planning Analytics for Excel will look for WebView2 when launching webview. If you do not have WebView2 installed on your computer, you will see the following error prompting you to install the WebView2 runtime component.



Note: WebView2 runtime might already be installed on your computer. To check if you have WebView2 runtime installed, go to **Apps & features (Start > Settings > Apps)** and search for `WebView2`.

Support for WebView2 runtime was first introduced in Planning Analytics for Excel 2.0.74 with the authentication flow and was later extended to other components.

2.0.87 - Feature updates, May 5, 2023

IBM Planning Analytics for Microsoft Excel was refreshed on May 5, 2023 to include fixes and the following notices.

Updates to each version of Planning Analytics for Microsoft Excel are cumulative.
To see what was new in previous releases, see What's new in Planning Analytics for Microsoft Excel (https://www.ibm.com/support/knowledgecenter/SSD29G_2.0.0/com.ibm.swg.ba.cognos.ug_cxr.2.0.0.doc/c_nfg_pax_test.html).

Timeline of previous Planning Analytics releases

For a comprehensive listing of Planning Analytics component releases by month and year, see Timeline for IBM Planning Analytics Releases. You can view versions and release months for the following components:

- Planning Analytics Local TM1 Server
- Planning Analytics Workspace
- Planning Analytics for Microsoft Excel
- Planning Analytics Spreadsheet Services/TM1 Web

Aligning releases for IBM Planning Analytics components

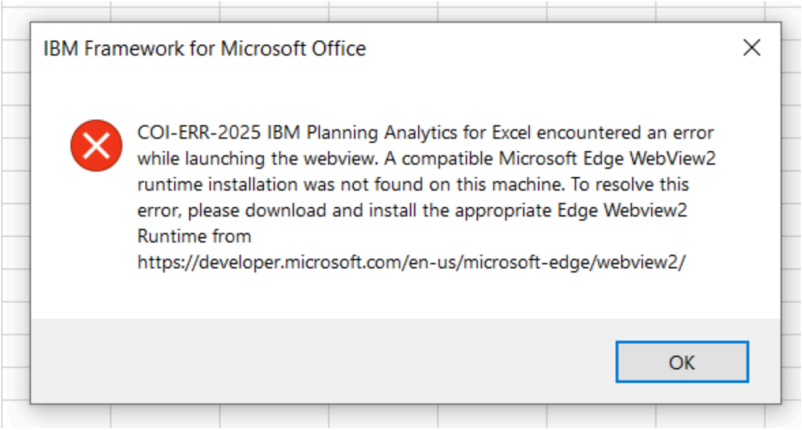
To simplify and align IBM Planning Analytics for Microsoft Excel releases with those across IBM Planning Analytics Workspace, IBM is labeling its next Planning Analytics for Excel release as IBM Planning Analytics for Microsoft Excel 2.0.87.

Upcoming change notification - Planning Analytics for Microsoft Excel to default to WebView2

IBM® Planning Analytics for Microsoft Excel will default to using Microsoft Edge WebView2 in an upcoming release. WebView2 allows Planning Analytics for Excel to be compatible with newer web standards and technologies.

With the move to WebView2, components in Planning Analytics for Excel such as the cube viewer, set editor, drill through, and content store will also default to using Carbon Design principles.

The upgrade to WebView2 requires installation of Microsoft Edge WebView2 runtime. Planning Analytics for Excel will look for WebView2 when launching webview. If you do not have WebView2 installed on your computer, you will see the following error prompting you to install the WebView2 runtime component.



Note: WebView2 runtime might already be installed on your computer. To check if you have WebView2 runtime installed, go to **Apps & features (Start > Settings > Apps)** and search for `WebView2`.

Support for WebView2 runtime was first introduced in Planning Analytics for Excel 2.0.74 with the authentication flow and was later extended to other components.

2.0.85 - Feature updates, April 10, 2023

IBM Planning Analytics for Microsoft Excel was refreshed on April 10, 2023 to include the following features and notices.

Updates to each version of Planning Analytics for Microsoft Excel are cumulative.
To see what was new in previous releases, see What's new in Planning Analytics for Microsoft Excel (https://www.ibm.com/support/knowledgecenter/SSD29G_2.0.0/com.ibm.swg.ba.cognos.ug_cxr.2.0.0.doc/c_nfg_pax_test.html).

Timeline of previous Planning Analytics releases

For a comprehensive listing of Planning Analytics component releases by month and year, see Timeline for IBM Planning Analytics Releases. You can view versions and release months for the following components:

- Planning Analytics Local TM1 Server
- Planning Analytics Workspace
- Planning Analytics for Microsoft Excel
- Planning Analytics Spreadsheet Services/TM1 Web

New TM1ACTIVESERVERS function returns active connections

A new worksheet function, TM1ACTIVESERVERS, is available in IBM Planning Analytics for Microsoft Excel 2.0.85. TM1ACTIVESERVERS returns the host URI, server name, and username information for active session connections in a 2-dimensional array

For more information, see TM1ACTIVESERVERS.

DefineCalc function promoted from Technology Preview Code to production status

The worksheet function `DefineCalc` is now available for production with core Custom Reports. `DefineCalc` was introduced in IBM Planning Analytics for Microsoft Excel 2.0.80 as Technology Preview Code.

For more information, see DefineCalc.

2.0.84 - Feature updates, March 3, 2023

IBM Planning Analytics for Microsoft Excel was refreshed on March 3, 2023 to include fixes only.

Updates to each version of Planning Analytics for Microsoft Excel are cumulative.
To see what was new in previous releases, see What's new in Planning Analytics for Microsoft Excel (https://www.ibm.com/support/knowledgecenter/SSD29G_2.0.0/com.ibm.swg.ba.cognos.ug_cxr.2.0.0.doc/c_nfg_pax_test.html).

Timeline of previous Planning Analytics releases

For a comprehensive listing of Planning Analytics component releases by month and year, see Timeline for IBM Planning Analytics Releases. You can view versions and release months for the following components:

- Planning Analytics Local TM1 Server
- Planning Analytics Workspace
- Planning Analytics for Microsoft Excel

- Planning Analytics Spreadsheet Services/TM1 Web

2.0.83 - Feature updates, February 10, 2023

IBM Planning Analytics for Microsoft Excel was refreshed on February 10, 2023 to include fixes only.

Updates to each version of Planning Analytics for Microsoft Excel are cumulative.
To see what was new in previous releases, see What's new in Planning Analytics for Microsoft Excel (https://www.ibm.com/support/knowledgecenter/SSD29G_2.0.0/com.ibm.swg.ba.cognos.ug_cxr.2.0.0.doc/c_nfg_pax_test.html).

Timeline of previous Planning Analytics releases

For a comprehensive listing of Planning Analytics component releases by month and year, see Timeline for IBM Planning Analytics Releases. You can view versions and release months for the following components:

- Planning Analytics Local TM1 Server
- Planning Analytics Workspace
- Planning Analytics for Microsoft Excel
- Planning Analytics Spreadsheet Services/TM1 Web

2.0.82 - Feature updates, November 3, 2022

IBM Planning Analytics for Microsoft Excel was refreshed on November 3, 2022 to include fixes only.

Updates to each version of Planning Analytics for Microsoft Excel are cumulative.
To see what was new in previous releases, see What's new in Planning Analytics for Microsoft Excel (https://www.ibm.com/support/knowledgecenter/SSD29G_2.0.0/com.ibm.swg.ba.cognos.ug_cxr.2.0.0.doc/c_nfg_pax_test.html).

Timeline of previous Planning Analytics releases

For a comprehensive listing of Planning Analytics component releases by month and year, see Timeline for IBM Planning Analytics Releases. You can view versions and release months for the following components:

- Planning Analytics Local TM1 Server
- Planning Analytics Workspace
- Planning Analytics for Microsoft Excel
- Planning Analytics Spreadsheet Services/TM1 Web

2.0.81 - Feature updates, October 6, 2022

IBM Planning Analytics for Microsoft Excel was refreshed on October 6, 2022 to include the following features and notices.

Updates to each version of Planning Analytics for Microsoft Excel are cumulative.
To see what was new in previous releases, see What's new in Planning Analytics for Microsoft Excel (https://www.ibm.com/support/knowledgecenter/SSD29G_2.0.0/com.ibm.swg.ba.cognos.ug_cxr.2.0.0.doc/c_nfg_pax_test.html).

In a future release of Planning Analytics for Microsoft Excel, we will expand the formula failure behavior to simplify error identification. #VALUE errors will denote incorrect formula construction, including bad input type. #NUM errors will specifically represent a numeric error in a formula. A #NUM error could mean that the input(s) are not in the range of valid metadata. Currently, all formula failures show #VALUE, which can be an ambiguous Excel error indicator.

Timeline of previous Planning Analytics releases

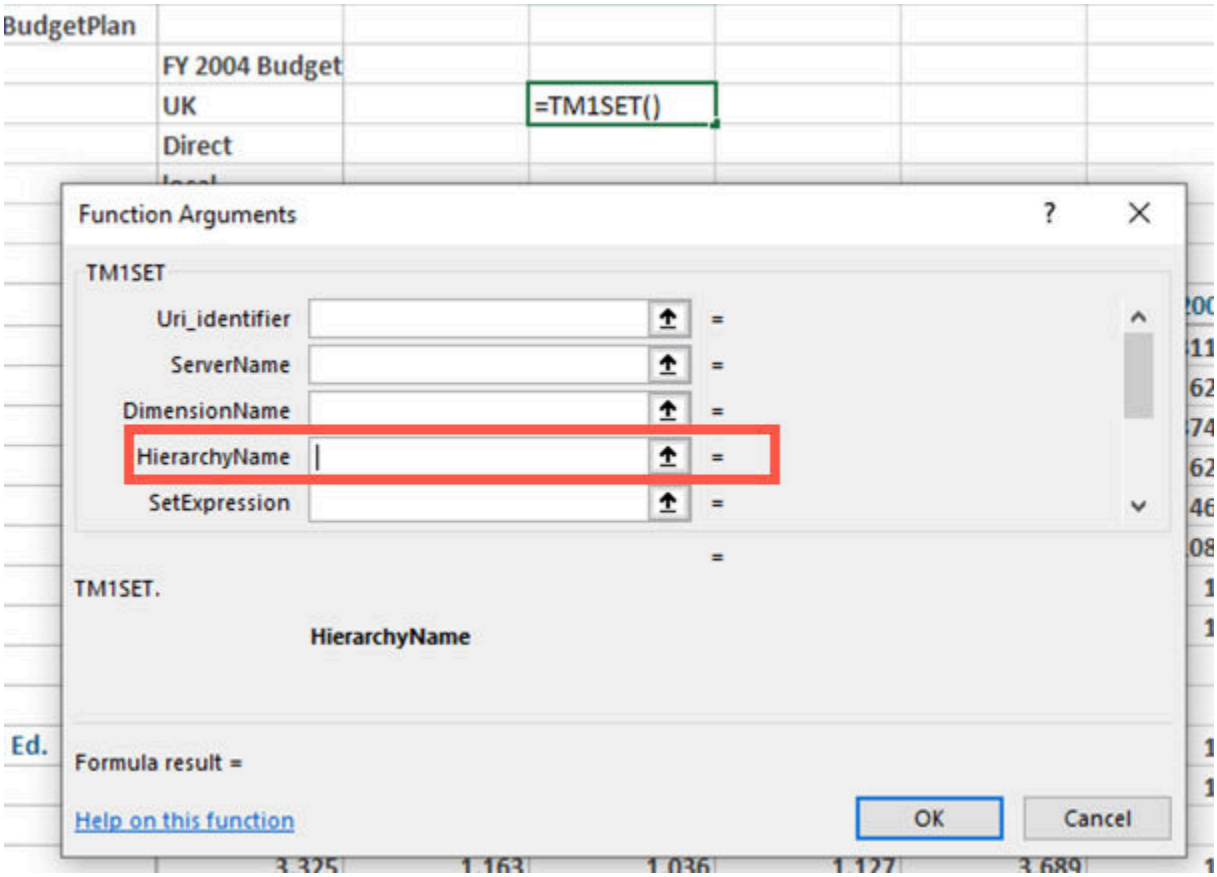
For a comprehensive listing of Planning Analytics component releases by month and year, see Timeline for IBM Planning Analytics Releases. You can view versions and release months for the following components:

- Planning Analytics Local TM1 Server
- Planning Analytics Workspace
- Planning Analytics for Microsoft Excel
- Planning Analytics Spreadsheet Services/TM1 Web

New TM1SET function supports alternate hierarchies

TM1SET, a new worksheet function that supports alternate hierarchies, is now available in IBM Planning Analytics for Microsoft Excel and IBM Planning Analytics TM1 Web. Until now, functions in both Planning Analytics for Excel and TM1 Web only supported default hierarchies.

Important: To use the TM1SET function, you must be on at least Planning Analytics for Microsoft Excel 2.0.81, TM1 Web 2.0.81, and IBM Planning Analytics Workspace 2.0.80.



You can add TM1SET to new and existing reports for greater customization. For example, you can add TM1SETs into the slicer area of Quick Reports or Dynamic Reports. You can even replace existing SUBNMs in Custom Reports with TM1SET functions.

A dynamic and versatile function, the TM1SET takes nine arguments, and you can configure the function's output.

```
=@TM1SET(Host, Server, Dimension, Hierarchy, Set Expression, Selected Member, Session Set Id,
Active Alias, Output type)
```

TM1SET also supports set editor integration. Double-click a TM1SET cell to open the set editor and modify the TM1SET function. You can also edit the TM1SET formula manually.

Note: To open the set editor with a double-click from a TM1SET cell, that cell must be in a tracked area named range (apply `tm2\\_tracked`). For more information, see TM1SET.

Another powerful feature of the TM1SET is its reference traversal capability in both Planning Analytics for Excel and TM1 Web. TM1SET's arguments can be written inline, or they can be written in other cells and referenced in the TM1SET function. When you change the TM1SET in the set editor (for example, when you select a different hierarchy) that change applies to the output values **and** to any cells that might be referenced in the TM1SET formula.

For more information, see TM1SET.

2.0.80 - Feature updates, September 1, 2022

IBM Planning Analytics for Microsoft Excel was refreshed on September 1, 2022 to include the following features and notices.

Updates to each version of Planning Analytics for Microsoft Excel are cumulative.
To see what was new in previous releases, see What's new in Planning Analytics for Microsoft Excel (https://www.ibm.com/support/knowledgecenter/SSD29G_2.0.0/com.ibm.swg.ba.cognos.ug_cxr.2.0.0.doc/c_nfg_pax_test.html).

In a future release of Planning Analytics for Microsoft Excel, we will expand the formula failure behavior to simplify error identification. #VALUE errors will denote incorrect formula construction, including bad input type. #NUM errors will specifically represent a numeric error in a formula. A #NUM error could mean that the input(s) are not in the range of valid metadata. Currently, all formula failures show #VALUE, which can be an ambiguous Excel error indicator.

Timeline of previous Planning Analytics releases

For a comprehensive listing of Planning Analytics component releases by month and year, see Timeline for IBM Planning Analytics Releases. You can view versions and release months for the following components:

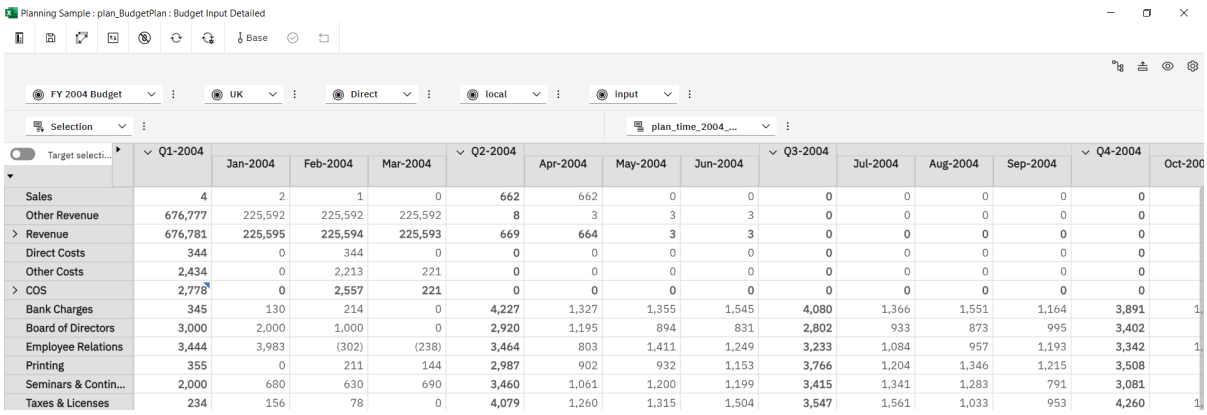
- Planning Analytics Local TM1 Server
- Planning Analytics Workspace
- Planning Analytics for Microsoft Excel
- Planning Analytics Spreadsheet Services/TM1 Web

New look for components in IBM Planning Analytics for Microsoft Excel

To provide a consistent user experience across IBM products, certain components in Planning Analytics for Microsoft Excel that are shared with IBM Planning Analytics Workspace, have been updated to use Carbon Design principles.

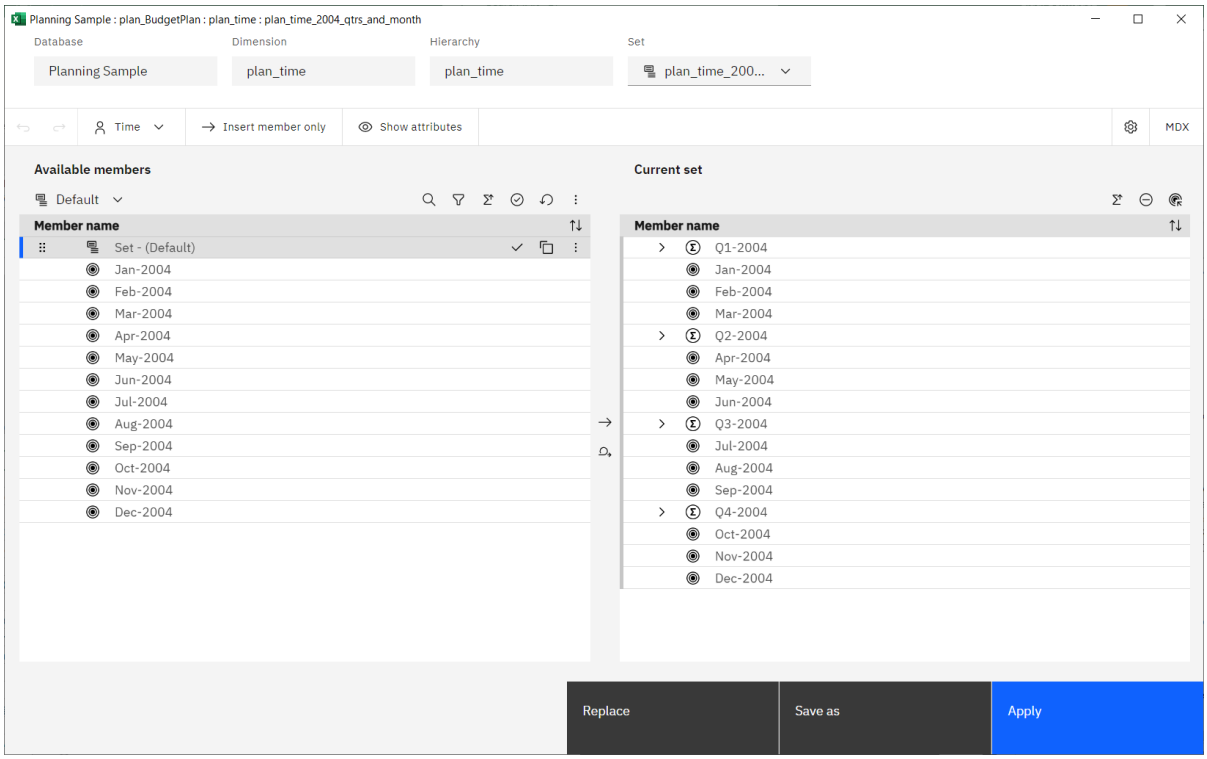
The updated user interface of the components (cube viewer, set editor, drill through, and content store) make it easier to accomplish tasks. The improved and simplified user interface also offers flexible options to view, analyze, and organize data.

For example, the updated cube viewer has a responsive grid and a more guided and intuitive experience that makes it more accessible.



Note: The **Zoom In** and **Zoom Out** buttons are not available in the new experience view. Instead, use **`Ctrl +`** to zoom in and **`Ctrl -`** to zoom out.

The set editor also has an improved flow and flexible options to edit sets.



These changes to the user interface were first introduced in Planning Analytics Workspace 2.0.71. For more information, see New experience view and set editor.

Enabling carbon components

To use the carbon components, set `EnableWebView2ForCarbon` to `true` in the `tm1features.json` file.

```
{"EnableWebView2ForCarbon" : true}
```

For more information, see Manually enabling features in the tm1features.json file.

User-Defined Calculations now supported

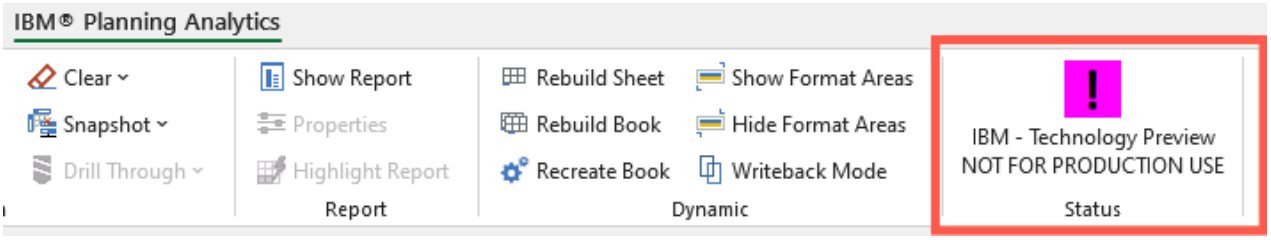
User-defined calculations (UDCs) are now supported through a new worksheet function called `DefineCalc`. You can use this function to register or unregister a server-side calculation definition into the IBM Planning Analytics for Microsoft Excel add-on.

Note: The UDC integration is included as Technology Preview Code and is offered only with Custom Reports. We encourage you to provide feedback on your experience using this function in the IBM Planning Analytics Community (https://community.ibm.com/community/user/businessanalytics/communities/community-home?CommunityKey=8fde0600-e22b-4178-acf5-bf4eda43146b).

For more information, see DefineCalc.

Known issue - Technology preview status displays for carbon components

Carbon components in Planning Analytics for Microsoft Excel 2.0.80 are available for production use. However, the Technology Preview icon still displays in the IBM ribbon when this feature is enabled. This is a known issue and will be fixed in Planning Analytics for Excel 2.0.81.



2.0.79 - Feature updates, August 5, 2022

IBM Planning Analytics for Microsoft Excel was refreshed on August 5, 2022 to include the following features and notices.

Updates to each version of Planning Analytics for Microsoft Excel are cumulative. To see what was new in previous releases, see What's new in Planning Analytics for Microsoft Excel (https://www.ibm.com/support/knowledgecenter/SSD29G_2.0.0/com.ibm.swg.ba.cognos.ug_cxr.2.0.0.doc/c_nfg_pax_test.html).

In a future release of Planning Analytics for Microsoft Excel, we will expand the formula failure behavior to simplify error identification. #VALUE errors will denote incorrect formula construction, including bad input type. #NUM errors will specifically represent a numeric error in a formula. A #NUM error could mean that the input(s) are not in the range of valid metadata. Currently, all formula failures show #VALUE, which can be an ambiguous Excel error indicator.

Timeline of previous Planning Analytics releases

For a comprehensive listing of Planning Analytics component releases by month and year, see Timeline for IBM Planning Analytics Releases. You can view versions and release months for the following components:

- Planning Analytics Local TM1 Server
- Planning Analytics Workspace
- Planning Analytics for Microsoft Excel
- Planning Analytics Spreadsheet Services/TM1 Web

Aligning releases for IBM Planning Analytics components

To simplify and align IBM Planning Analytics for Microsoft Excel releases with those across IBM Planning Analytics Workspace, IBM is labeling its next Planning Analytics for Excel release as IBM Planning Analytics for Microsoft Excel 2.0.79.

Alternate web technology support for components in Planning Analytics for Microsoft Excel

IBM Planning Analytics for Microsoft Excel now supports the use of Microsoft Edge WebView2 for all components (cube viewer, drill through, set editor, and content store) through a new feature flag. Enabling this feature flag allows these components in Planning Analytics for Excel to be compatible with newer web standards.

To enable WebView2 for all components in Planning Analytics for Excel version 2.0.79, follow these steps:

1. Download and install Microsoft Edge WebView2 Runtime (https://developer.microsoft.com/en-us/microsoft-edge/webview2/).

   Note: WebView2 might already be installed on your computer. To check if you have WebView2 Runtime installed, go to **Apps & features** (`Start > Settings > Apps`) and search for `WebView2`.

2. Enable WebView2 in the `tm1features.json` file by setting the **`EnableWebView2ForClassic`** flag to **`true`**. For more information, see Manually enabling features in the tm1features.json file.

WebView2 support was first introduced in Planning Analytics for Excel 2.0.74 with the authentication flow. For more information, see Alternate web technology support for Planning Analytics authentication (Microsoft Edge WebView2).

2.0.77 - Feature updates, June 24, 2022

IBM Planning Analytics for Microsoft Excel was refreshed on June 24, 2022 to include the following features and notices.

Updates to each version of Planning Analytics for Microsoft Excel are cumulative.
To see what was new in previous releases, see What's new in Planning Analytics for Microsoft Excel (https://www.ibm.com/support/knowledgecenter/SSD29G_2.0.0/com.ibm.swg.ba.cognos.ug_cxr.2.0.0.doc/c_nfg_pax_test.html).

In a future release of Planning Analytics for Microsoft Excel, we will expand the formula failure behavior to simplify error identification. #VALUE errors will denote incorrect formula construction, including bad input type. #NUM errors will specifically represent a numeric error in a formula. A #NUM error could mean that the input(s) are not in the range of valid metadata. Currently, all formula failures show #VALUE, which can be an ambiguous Excel error indicator.

Timeline of previous Planning Analytics releases

For a comprehensive listing of Planning Analytics component releases by month and year, see Timeline for IBM Planning Analytics Releases. You can view versions and release months for the following components:

- Planning Analytics Local TM1 Server
- Planning Analytics Workspace
- Planning Analytics for Microsoft Excel
- Planning Analytics Spreadsheet Services/TM1 Web

Deprecation notice - r41_EnableConstrainedCalcScope feature flag to be removed

The IBM Planning Analytics team plans to deprecate the **`r41_EnableConstrainedCalcScope`** feature flag (used to turn on Constrained Calculations) in a future release of Planning Analytics for Microsoft Excel. Customers that use Constrained Calculations are encouraged to enable the **`r56_EnableManualConstrainedCalc`** feature flag instead.

The **`r56_EnableManualConstrainedCalc`** flag offers Constrained Calculations but with a better range scope control and additional refresh gestures. With **`r56_EnableManualConstrainedCalc`**, you can

now narrow the scope of recalculation to a selected range of cells in a worksheet instead of an entire worksheet or workbook.

Note: The **r56_EnableManualConstrainedCalc** flag performs Constrained Calculations only when your calculation options in Microsoft Excel are set to the **Manual** mode.

You can manually enable **r56_EnableManualConstrainedCalc** in the `tm1features.json` file.

For more information, see Constrained Calculations.

2.0.76 - Feature updates, May 6, 2022

IBM Planning Analytics for Microsoft Excel was refreshed on May 6, 2022 to include the following features and notices.

Updates to each version of Planning Analytics for Microsoft Excel are cumulative.
To see what was new in previous releases, see What's new in Planning Analytics for Microsoft Excel (https://www.ibm.com/support/knowledgecenter/SSD29G_2.0.0/com.ibm.swg.ba.cognos.ug_cxr.2.0.0.doc/c_nfg_pax_test.html).

In a future release of Planning Analytics for Microsoft Excel, we will expand the formula failure behavior to simplify error identification. #VALUE errors will denote incorrect formula construction, including bad input type. #NUM errors will specifically represent a numeric error in a formula. A #NUM error could mean that the input(s) are not in the range of valid metadata. Currently, all formula failures show #VALUE, which can be an ambiguous Excel error indicator.

Timeline of previous Planning Analytics releases

For a comprehensive listing of Planning Analytics component releases by month and year, see Timeline for IBM Planning Analytics Releases. You can view versions and release months for the following components:

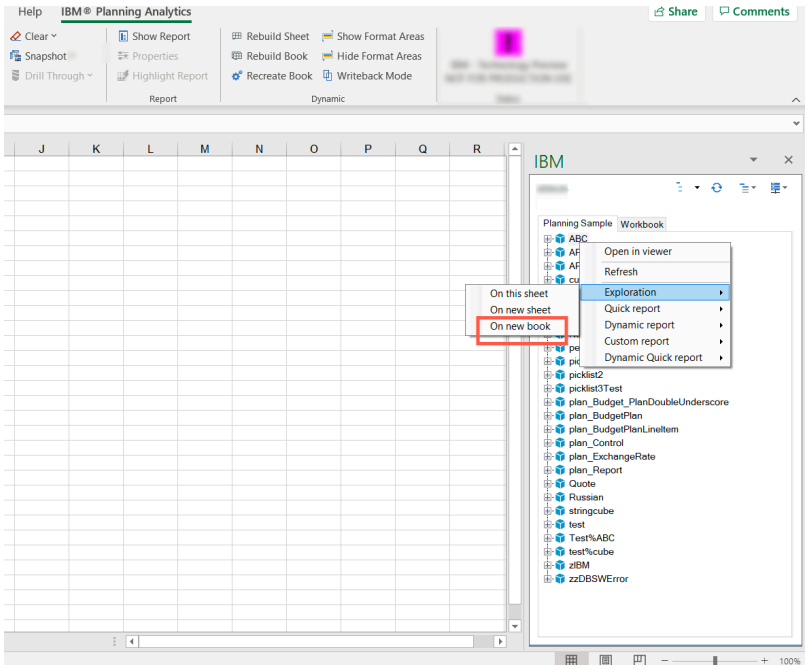
- Planning Analytics Local TM1 Server
- Planning Analytics Workspace
- Planning Analytics for Microsoft Excel
- Planning Analytics Spreadsheet Services/TM1 Web

Create a report in a new workbook from the IBM task pane

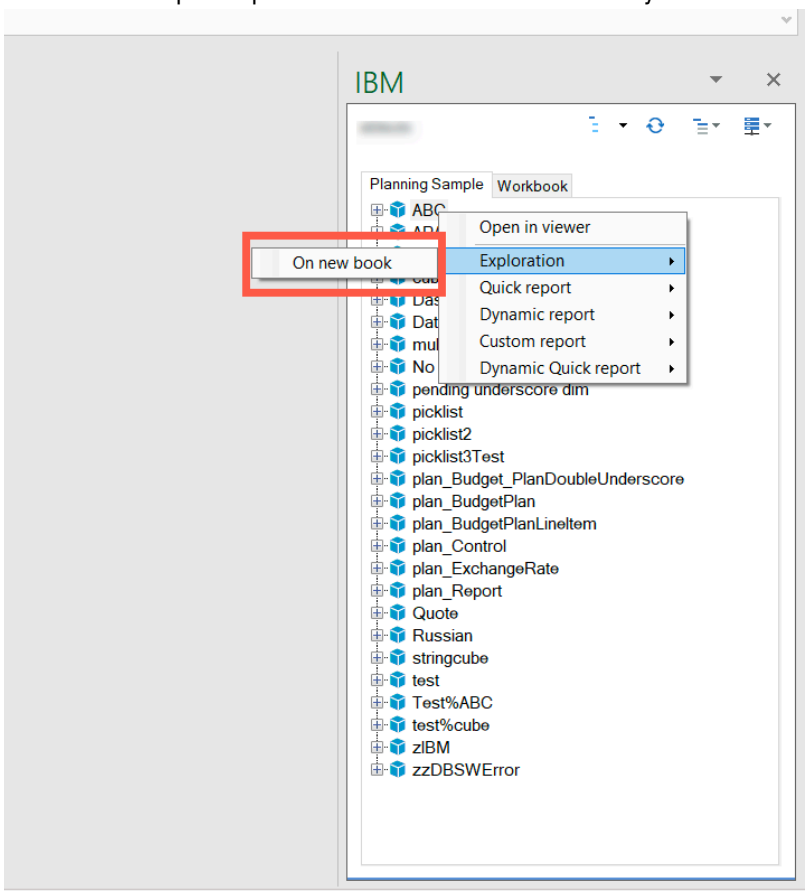
You now have the option to open a report in a new workbook when you create a report from the task pane in IBM Planning Analytics for Microsoft Excel.

Procedure

1. In the IBM task pane, right-click the cube that you want to create a report from.
2. Select the report type and click **on new book** to place the report on a new workbook.



You can also open reports on a new workbook even if you do not already have a workbook open.



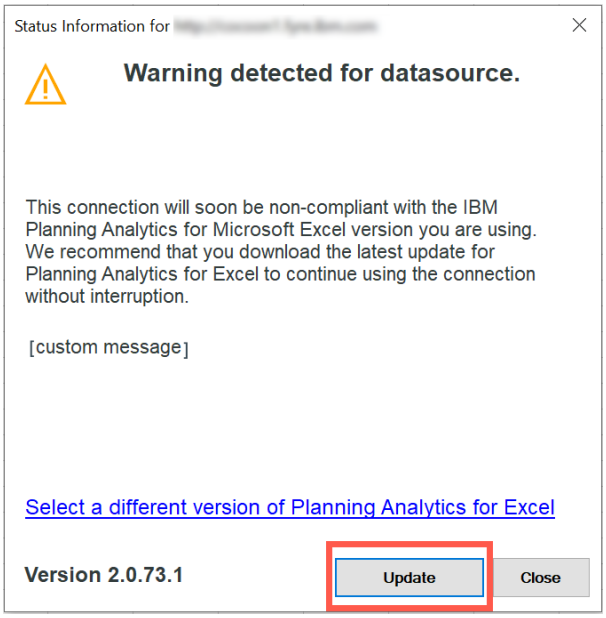
Related concepts

"Create reports from the viewer without opening a workbook" on page 311

You can now create reports from the viewer in Planning Analytics for Excel without opening a workbook. Previously, if you didn't have a workbook open and tried to create a report from the viewer, an error displayed.

Configure version control to download an update

Administrators can now configure version control in IBM Planning Analytics for Microsoft Excel to download a specific version of the software when users click **Update** in any compatibility status message.



Before Planning Analytics for Excel 2.0.76, the ability to update the software with **Update** was not supported.

For more information, see Configuring the update button.

2.0.75 - Feature updates, April 8, 2022

IBM Planning Analytics for Microsoft Excel was refreshed on April 8, 2022 to include the following features and notices.

Updates to each version of Planning Analytics for Microsoft Excel are cumulative.
To see what was new in previous releases, see What's new in Planning Analytics for Microsoft Excel (https://www.ibm.com/support/knowledgecenter/SSD29G_2.0.0/com.ibm.swg.ba.cognos.ug_cxr.2.0.0.doc/c_nfg_pax_test.html).

In a future release of Planning Analytics for Microsoft Excel, we will expand the formula failure behavior to simplify error identification. #VALUE errors will denote incorrect formula construction, including bad input type. #NUM errors will specifically represent a numeric error in a formula. A #NUM error could mean that the input(s) are not in the range of valid metadata. Currently, all formula failures show #VALUE, which can be an ambiguous Excel error indicator.

Timeline of previous Planning Analytics releases

For a comprehensive listing of Planning Analytics component releases by month and year, see Timeline for IBM Planning Analytics Releases. You can view versions and release months for the following components:

- Planning Analytics Local TM1 Server
- Planning Analytics Workspace
- Planning Analytics for Microsoft Excel

- Planning Analytics Spreadsheet Services/TM1 Web

Create reports from the viewer without opening a workbook

You can now create reports from the viewer in Planning Analytics for Excel without opening a workbook. Previously, if you didn't have a workbook open and tried to create a report from the viewer, an error displayed.

To create a report from the viewer without opening a workbook:

1. In the IBM Planning Analytics ribbon, click **Connect**.
2. Select the datasource that contains the model or package you want to use.
3. In the IBM task pane, right-click the view that you want and click **Open in viewer**.
4. In the viewer toolbar, click **Reports** and select the report that you want to create.

The report opens in a new workbook.

If you already have a workbook open and you create a report from the viewer, the report opens in a new sheet in the same workbook.

Related tasks

"Create a report in a new workbook from the IBM task pane" on page 308
You now have the option to open a report in a new workbook when you create a report from the task pane in IBM Planning Analytics for Microsoft Excel.

2.0.74 - Feature updates, March 4, 2022

IBM Planning Analytics for Microsoft Excel was refreshed on March 4, 2022 to include the following features and notices.

Updates to each version of Planning Analytics for Microsoft Excel are cumulative.
To see what was new in previous releases, see What's new in Planning Analytics for Microsoft Excel (https://www.ibm.com/support/knowledgecenter/SSD29G_2.0.0/com.ibm.swg.ba.cognos.ug_cxr.2.0.0.doc/c_nfg_pax_test.html).

In a future release of Planning Analytics for Microsoft Excel, we will expand the formula failure behavior to simplify error identification. #VALUE errors will denote incorrect formula construction, including bad input type. #NUM errors will specifically represent a numeric error in a formula. A #NUM error could mean that the input(s) are not in the range of valid metadata. Currently, all formula failures show #VALUE, which can be an ambiguous Excel error indicator.

Timeline of previous Planning Analytics releases

For a comprehensive listing of Planning Analytics component releases by month and year, see Timeline for IBM Planning Analytics Releases. You can view versions and release months for the following components:

- Planning Analytics Local TM1 Server
- Planning Analytics Workspace
- Planning Analytics for Microsoft Excel
- Planning Analytics Spreadsheet Services/TM1 Web

Converting a truncated Exploration to a Quick or Custom Report

In IBM Planning Analytics for Microsoft Excel, when you convert a Quick Report or Custom Report from a truncated Exploration View (where data exceeds the row limits), the hidden rows are not automatically included in the conversion.

A new message now displays when you convert a truncated Exploration View to a Quick or Custom Report, warning you that the data display row limit is on and hidden rows are lost in the conversion. If you choose to proceed with the conversion, you lose access to the data in the hidden rows.

To include hidden rows in a converted report, you need to first change the data display row limit for the Exploration View, and then convert the report.

To change the data display row limit:

1. Click **Options** in the IBM Planning Analytics ribbon.
2. Locate **Data display row limit** under **Exploration or list settings**, and enter `0`.
3. Click **OK**.

You can also double-click the **More** or **All** link under the last row of your Exploration View to see the remaining rows of data. Then, convert the report to a Quick or Custom Report.

For more information, see Converting a report.

Alternate web technology support for Planning Analytics authentication (Microsoft Edge WebView2)

IBM Planning Analytics for Microsoft Excel now supports using Microsoft Edge WebView2 for authentication through a new feature flag. Enabling this feature flag allows Planning Analytics for Excel to be compatible with newer web standards that can be configured as part of your authentication flow for Planning Analytics sources.

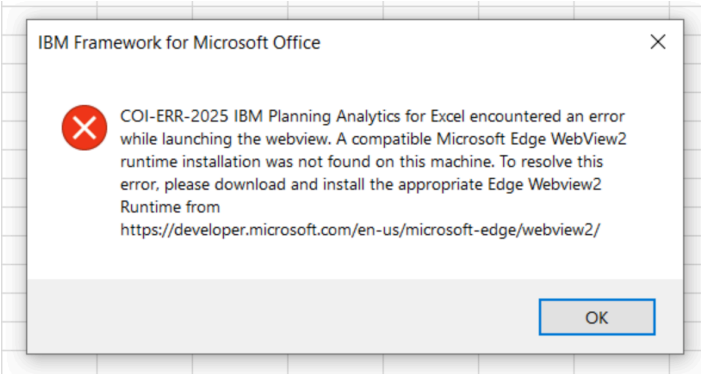
To use WebView2 for authentication in Planning Analytics for Excel version 2.0.74, follow these steps:

1. Download and install Microsoft Edge WebView2 Runtime (https://developer.microsoft.com/en-us/microsoft-edge/webview2/).

   Note: WebView2 might already be installed on your computer. To check if you have WebView2 Runtime installed, go to **Apps & features** (`Start > Settings > Apps`) and search for `WebView2`.

2. Enable WebView2 in the `tm1features.json` file by setting the **r74_EnableWebView2ForAuth** flag to **true**. For more information, see Manually enabling features in the tm1features.json file.

If you do not have WebView2 Runtime installed on your computer and you enable WebView2 in Planning Analytics for Excel, the following message displays:



Click **OK** and install the appropriate Microsoft Edge WebView2 Runtime to use WebView2.

2.0.73 - Feature updates, February 4, 2022

IBM Planning Analytics for Microsoft Excel was refreshed on February 4, 2022 to include the following features and notices.

Updates to each version of Planning Analytics for Microsoft Excel are cumulative.
To see what was new in previous releases, see What's new in Planning Analytics for Microsoft Excel (https://www.ibm.com/support/knowledgecenter/SSD29G_2.0.0/com.ibm.swg.ba.cognos.ug_cxr.2.0.0.doc/c_nfg_pax_test.html).

In a future release of Planning Analytics for Microsoft Excel, we will expand the formula failure behavior to simplify error identification. #VALUE errors will denote incorrect formula construction, including bad input type. #NUM errors will specifically represent a numeric error in a formula. A #NUM error could mean that the input(s) are not in the range of valid metadata. Currently, all formula failures show #VALUE, which can be an ambiguous Excel error indicator.

Timeline of previous Planning Analytics releases

For a comprehensive listing of Planning Analytics component releases by month and year, see Timeline for IBM Planning Analytics Releases. You can view versions and release months for the following components:

- Planning Analytics Local TM1 Server
- Planning Analytics Workspace
- Planning Analytics for Microsoft Excel
- Planning Analytics Spreadsheet Services/TM1 Web

Aligning releases for IBM Planning Analytics components

To simplify and align IBM Planning Analytics for Microsoft Excel and IBM Planning Analytics TM1 Web (IBM Planning Analytics Spreadsheet Services) releases with those of IBM Planning Analytics Workspace, IBM is labeling its next Planning Analytics for Excel and TM1 Web release as IBM Planning Analytics for Microsoft Excel 2.0.73 and IBM Planning Analytics TM1 Web 2.0.73.

New functions for removing nested parentheses

Nested parentheses for compounded arguments can now be removed from workbooks with the following new functions:

- TM1RESOLVEBOOK( ) - removes nested parentheses from each cell within a workbook
- TM1RESOLVESHEET( ) - removes nested parentheses from each cell in the active worksheet
- TM1RESOLVEFORMULAS( ) - removes nested parentheses within a cell range
- TM1RESOLVENESTEDPARENS( ) - removes the nested parentheses and returns a string

New version control mechanism checks datasource compatibility

A new version control mechanism in IBM Planning Analytics for Microsoft Excel displays whether the datasource you are connecting to is compatible with your version of IBM Planning Analytics for Microsoft Excel.

By default, version control is turned on in Planning Analytics for Excel 2.0.73 and higher versions.

Note: Version control is supported only in the Planning Analytics Local environment.

Administrators can specify which versions of Planning Analytics for Excel can work with a particular TM1 datasource by configuring the Evaluation Server.

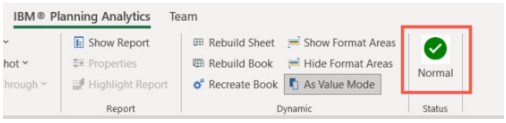
When you connect to a datasource, the version control mechanism checks for compatibility with your version of Planning Analytics for Excel. If the datasource and Planning Analytics for Excel are not

compatible, you cannot use Planning Analytics for Excel until you update the software to a latest or another supported version.

There are three compatibility status types:

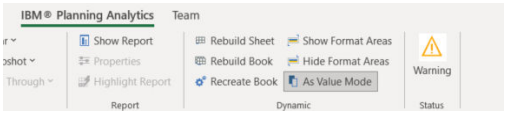
- **Normal**

  A **Normal** status in the IBM Planning Analytics ribbon means that the datasource you connected to is compatible with your version of Planning Analytics for Excel, and an update is not needed.



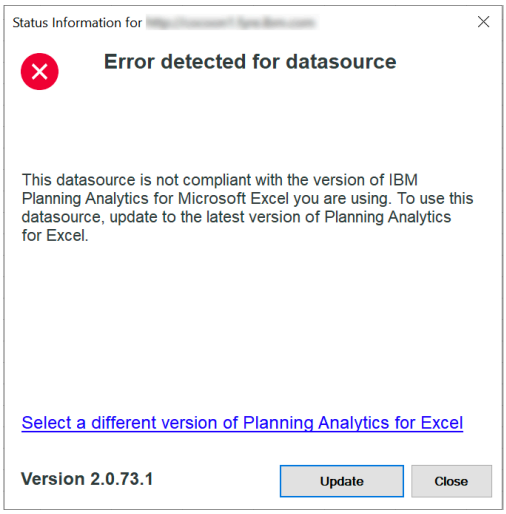
- **Warning**

  A **Warning** status in the IBM Planning Analytics ribbon indicates that the datasource you connected to will soon be incompatible with your version of Planning Analytics for Excel. An update to the software is recommended but not needed.



- **Blocked**

  When the datasource is not compatible with your version of Planning Analytics for Excel, you cannot use the datasource until you update Planning Analytics for Excel.



For more information, refer to Version control and datasource compatibility.

2.0.70 - Feature updates, December 20, 2021

IBM Planning Analytics for Microsoft Excel was refreshed on December 20, 2021 to include the following features and notices.

Updates to each version of Planning Analytics for Microsoft Excel are cumulative.
To see what was new in previous releases, see What's new in Planning Analytics for Microsoft Excel (https://www.ibm.com/support/knowledgecenter/SSD29G_2.0.0/com.ibm.swg.ba.cognos.ug_cxr.2.0.0.doc/c_nfg_pax_test.html).

In a future release of Planning Analytics for Microsoft Excel, we will expand the formula failure behavior to simplify error identification. #VALUE errors will denote incorrect formula construction, including bad input type. #NUM errors will specifically represent a numeric error in a formula. A #NUM error could mean that the input(s) are not in the range of valid metadata. Currently, all formula failures show #VALUE, which can be an ambiguous Excel error indicator.

New API functions to run evaluations

The Evaluate functionality can now be used in a VBA macro in Planning Analytics for Microsoft Excel. Previously, Planning Analytics for Excel did not support the Evaluate command.

Two new methods are now available with which the Evaluate functionality can be used in Planning Analytics for Excel:

1. You can use the **`EvaluateSynchronous`** function, which behaves like Excel's Evaluate formula.
2. You can turn on Planning Analytics for Excel's single pass mode with the **`SinglePassMode`** Boolean flag and run evaluations with Excel's Evaluate formula.

For more information, see EvaluateSynchronous (https://ibm.github.io/paxapi/#evaluatesynchronous).

2.0.69 - Feature updates, November 5, 2021

IBM Planning Analytics for Microsoft Excel was refreshed on November 5, 2021 to include fixes only.

Updates to each version of Planning Analytics for Microsoft Excel are cumulative.
To see what was new in previous releases, see What's new in Planning Analytics for Microsoft Excel (https://www.ibm.com/support/knowledgecenter/SSD29G_2.0.0/com.ibm.swg.ba.cognos.ug_cxr.2.0.0.doc/c_nfg_pax_test.html).

In a future release of Planning Analytics for Microsoft Excel, we will expand the formula failure behavior to simplify error identification. #VALUE errors will denote incorrect formula construction, including bad input type. #NUM errors will specifically represent a numeric error in a formula. A #NUM error could mean that the input(s) are not in the range of valid metadata. Currently, all formula failures show #VALUE, which can be an ambiguous Excel error indicator.

2.0.68 - Feature updates, October 8, 2021

IBM Planning Analytics for Microsoft Excel was refreshed on October 8, 2021 to include the following features and notices.

Updates to each version of Planning Analytics for Microsoft Excel are cumulative.
To see what was new in previous releases, see What's new in Planning Analytics for Microsoft Excel (https://www.ibm.com/support/knowledgecenter/SSD29G_2.0.0/com.ibm.swg.ba.cognos.ug_cxr.2.0.0.doc/c_nfg_pax_test.html).

In a future release of Planning Analytics for Microsoft Excel, we will expand the formula failure behavior to simplify error identification. #VALUE errors will denote incorrect formula construction, including bad input type. #NUM errors will specifically represent a numeric error in a formula. A #NUM error could mean that the input(s) are not in the range of valid metadata. Currently, all formula failures show #VALUE, which can be an ambiguous Excel error indicator.

Formula-based design functionality separated from Design Mode

The **Design Mode** is a handy tool that you can use to manage how an Exploration View behaves when you change the structure or data in the view. Previously, you could also preserve or overwrite DBRW formulas when copy pasting values into cells using **Design Mode**.

As of Planning Analytics for Excel 2.0.68, you can no longer preserve or overwrite DBRW formulas with **Design Mode**. Instead, use the new formula mode button in the IBM Planning Analytics ribbon, to choose how values are entered into DBRW formula cells.

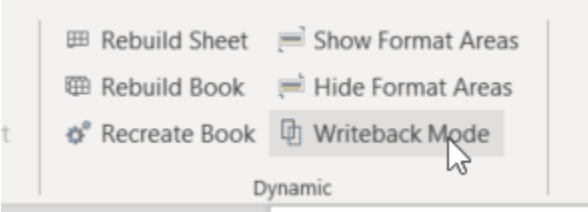
Note that you can still use **Design Mode** to enable refresh preview, but it can be applied to only Exploration Reports now.

For more information, see Design Mode.

New formula mode button in Custom and Dynamic Reports

A new formula mode button is now available in Custom and Dynamic Reports. Located in the IBM Planning Analytics ribbon, the formula mode button has two options – **Writeback Mode** and **As Value Mode**.

You can toggle between these two options to choose how values are entered into DBRW formula cells.



The **Writeback Mode** lets you preserve DBRW formulas when entering values into cells. Any values you enter are committed to the TM1 server. With **As Value Mode**, you can enter values into cells and overwrite any DBRW formulas in those cells. This makes it easier to restructure reports.

For more information, see Preserve or overwrite DBRW formulas with formula mode.

2.0.67 - Feature updates, August 9, 2021

IBM Planning Analytics for Microsoft Excel was refreshed on August 9, 2021 to include the following features and notices.

Updates to each version of Planning Analytics for Microsoft Excel are cumulative.
To see what was new in previous releases, see What's new in Planning Analytics for Microsoft Excel (https://www.ibm.com/support/knowledgecenter/SSD29G_2.0.0/com.ibm.swg.ba.cognos.ug_cxr.2.0.0.doc/c_nfg_pax_test.html).

In a future release of Planning Analytics for Microsoft Excel, we will expand the formula failure behavior to simplify error identification. #VALUE errors will denote incorrect formula construction, including bad input type. #NUM errors will specifically represent a numeric error in a formula. A #NUM error could mean that the input(s) are not in the range of valid metadata. Currently, all formula failures show #VALUE, which can be an ambiguous Excel error indicator.

Sort nested rows in Cognos Analytics explorations

You can now sort on the innermost nested row of a Cognos Analytics exploration in Planning Analytics for Microsoft Excel. In previous versions, the **Sort** option was unavailable when an exploration was configured with nested rows.

Note that sorting on a Cognos Analytics exploration in Planning Analytics for Microsoft Excel corresponds to the sorting behavior in Cognos Analytics, where sorting is supported only on the innermost row of a nested Crosstab and is not supported in relational Crosstabs.

For more information on sorting in a Cognos Analytics exploration, see Sort rows by values or names.

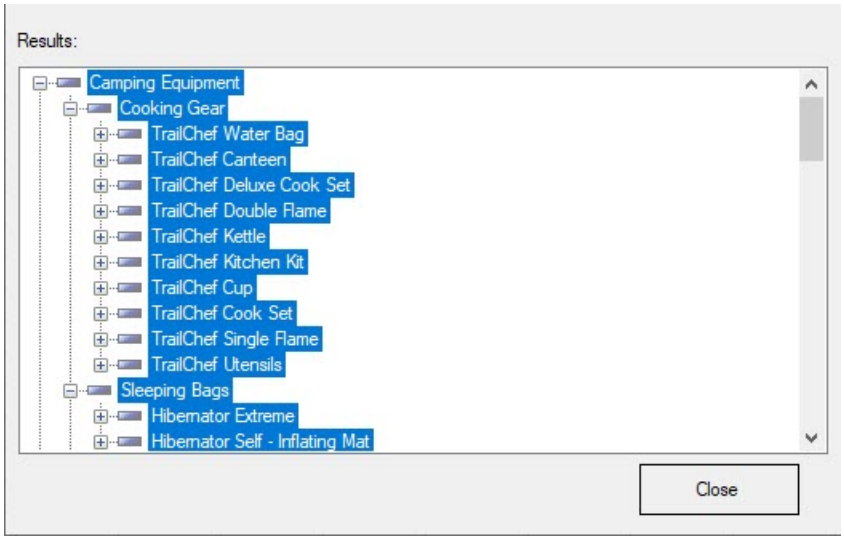
2.0.66 - Feature updates, July 12, 2021

IBM Planning Analytics for Microsoft Excel was refreshed on July 12, 2021 to include the following features and notices.

Updates to each version of Planning Analytics for Microsoft Excel are cumulative.
To see what was new in previous releases, see What's new in Planning Analytics for Microsoft Excel (https://www.ibm.com/support/knowledgecenter/SSD29G_2.0.0/com.ibm.swg.ba.cognos.ug_cxr.2.0.0.doc/c_nfg_pax_test.html).

Select members across hierarchies when searching the source tree

You can now select members across multiple hierarchies in the search results and drag them into your report or exploration, as in this example.



In previous versions of Planning Analytics for Microsoft Excel, you could select members only from within a single hierarchy in the search results.

For details on searching in the source tree, see Find items in the source tree.

2.0.65 - Feature updates, June 18, 2021

IBM Planning Analytics for Microsoft Excel was refreshed on June 18, 2021 to include the following features and notices.

Updates to each version of Planning Analytics for Microsoft Excel are cumulative.
To see what was new in previous releases, see What's new in Planning Analytics for Microsoft Excel (https://www.ibm.com/support/knowledgecenter/SSD29G_2.0.0/com.ibm.swg.ba.cognos.ug_cxr.2.0.0.doc/c_nfg_pax_test.html).

New installation method

You can now install and launch Planning Analytics for Microsoft Excel using the Planning Analytics for Microsoft Excel add-in.

In previous versions of Planning Analytics for Microsoft Excel, the installation was performed using a bundled installer. Starting in Planning Analytics for Microsoft Excel version 2.0.65, users can install and launch Planning Analytics for Microsoft Excel with the Planning Analytics for Microsoft Excel add-in.

The new add-in installation method allows users to quickly upgrade multiple instances of Planning Analytics for Microsoft Excel without the having to run an installer for each instance or uninstall the previous version of Planning Analytics for Microsoft Excel.

For more information, see Single .xll add-in install (https://www.ibm.com/support/knowledgecenter/SSD29G_2.0.0/com.ibm.swg.ba.cognos.tm1_inst.2.0.0.doc/c_pax_install_xll.html).

Reinstated compatibility between Cognos for Microsoft Office and Planning Analytics for Excel

With the release of IBM Cognos for Microsoft Office 11.0.1 Fix Pack 1 IF4, compatibility with Planning Analytics for Microsoft Excel is reinstated for all releases moving forward, starting with release 2.0.65.

Earlier releases of Planning Analytics for Microsoft Excel are not compatible with IBM Cognos for Microsoft Office 11.0.1 Fix Pack 1 IF4.

For more information about downloading and installing Cognos for Microsoft Office 11.0.1 Fix Pack 1 IF4, see this document (www.ibm.com/support/pages/node/6465507).

2.0.64 - Feature updates, May 10, 2021

IBM Planning Analytics for Microsoft Excel was refreshed on May 10, 2021 to include the following features and notices.

Updates to each version of Planning Analytics for Microsoft Excel are cumulative.
To see what was new in previous releases, see What's new in Planning Analytics for Microsoft Excel (https://www.ibm.com/support/knowledgecenter/SSD29G_2.0.0/com.ibm.swg.ba.cognos.ug_cxr.2.0.0.doc/c_nfg_pax_test.html).

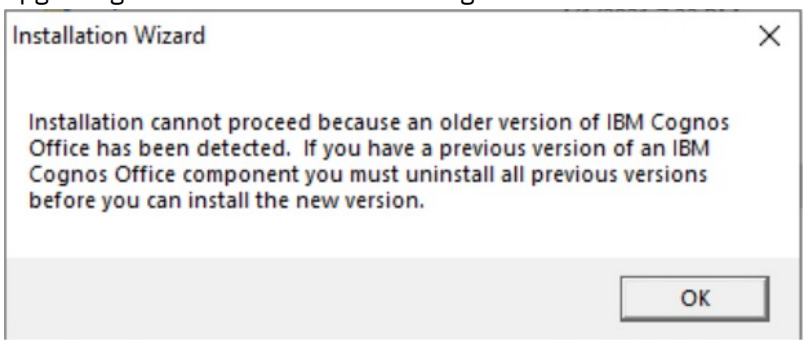
Planning Analytics for Microsoft Excel 2.0.64 compatibility with Cognos for Microsoft Office

Users that use both Planning Analytics for Microsoft Excel as well as Cognos for Microsoft Office are affected in their ability to upgrade to the latest release of Planning Analytics for Microsoft Excel.

Planning Analytics for Microsoft Excel 2.0.64 is not compatible with the latest release of Cognos for Microsoft Office. This is due to conformance updates implemented in Planning Analytics for Microsoft Excel 2.0.63. These updates are fundamental to future development and improving the overall product experience, including the installation and post-installation experience.

Users that use both Planning Analytics for Microsoft Excel as well as Cognos for Microsoft Office are affected in their ability to upgrade to the latest release of Planning Analytics for Microsoft Excel. Users who utilize either Cognos for Microsoft Office or Planning Analytics for Microsoft Excel on their own may continue using the latest releases of each. For those who utilize both Planning Analytics for Microsoft Excel as well as Cognos for Microsoft Office for their reporting needs may continue using Planning Analytics for Microsoft Excel 2.0.62 alongside the latest release of Cognos for Microsoft Office.

If you are upgrading from Planning Analytics for Microsoft Excel version 2.0.62 to Planning Analytics for Microsoft Excel version 2.0.63 or 2.0.64, you must uninstall Planning Analytics for Microsoft Excel version 2.0.62 before upgrading. Failing to uninstall Planning Analytics for Microsoft Excel version 2.0.62 before upgrading will result in an error message.



In an upcoming release, the Planning Analytics add-in will be converted from an installer-based delivery to a single file a fraction of the size. This will also enable easier self service in enabling and disabling the add-in. Following this, a new release of Cognos for Microsoft Office will enable the link with the installer-less Planning Analytics for Microsoft Excel.

View formula in a Custom Report is displayed by default

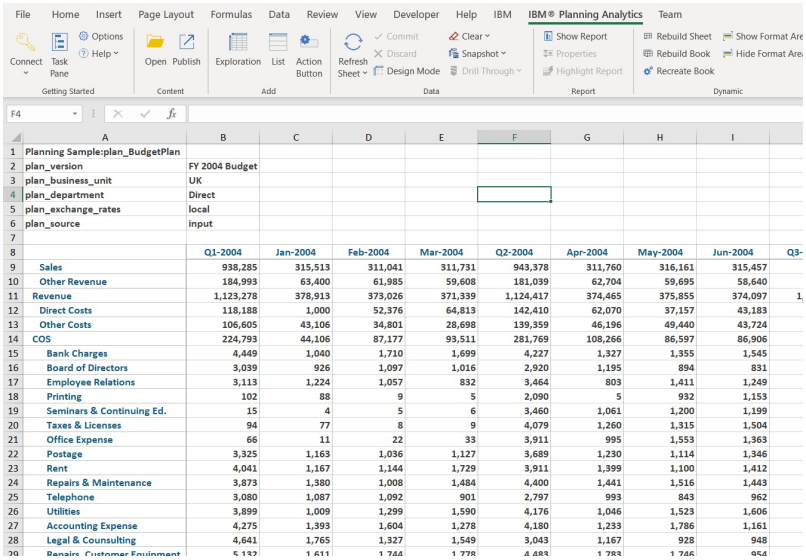
The view formula in a Custom Report is now displayed by default.

The first row of a Custom Report contains the view's formula. In previous version of Planning Analytics for Microsoft Excel, the first row of a Custom Report was hidden by default. As of Planning Analytics for Microsoft Excel 2.0.64, the first row of a Custom Report is displayed by default.

Custom Reports indented based on hierarchy level

Custom Reports are now indented based on the hierarchy level of each row.

In previous versions of Planning Analytics for Microsoft Excel, the rows in a Custom Report were not indented. As of Planning Analytics for Microsoft Excel 2.0.64, the rows of a Custom Report are indented based on the hierarchy level of the row.



	A	B	C	D	E	F	G	H	I
1	Planning Sample:plan_BudgetPlan								
2	plan_version	FY 2004 Budget							
3	plan_business_unit	UK							
4	plan_department	Direct							
5	plan_exchange_rates	local							
6	plan_source	input							
7									
8		Q1-2004	Jan-2004	Feb-2004	Mar-2004	Q2-2004	Apr-2004	May-2004	Jun-2004
9	Sales	938,285	315,513	311,041	311,731	943,378	311,760	316,161	315,457
10	Other Revenue	184,993	63,400	61,985	59,608	181,039	62,704	59,695	58,640
11	Revenue	1,123,278	378,913	373,026	371,339	1,124,417	374,465	375,855	374,097
12	Direct Costs	118,188	1,000	52,376	64,813	142,410	62,070	37,157	43,183
13	Other Costs	106,605	43,106	34,801	28,698	139,359	46,196	49,440	43,724
14	COS	224,793	44,106	87,177	93,511	281,769	108,266	86,597	86,906
15	Bank Charges	4,449	1,040	1,710	1,699	4,227	1,327	1,355	1,545
16	Board of Directors	3,039	926	1,097	1,016	2,920	1,195	894	831
17	Employee Relations	3,113	1,224	1,057	832	3,464	803	1,411	1,249
18	Printing	102	88	9	5	2,090	5	932	1,153
19	Seminars & Continuing Ed.	15	4	5	6	3,460	1,061	1,200	1,199
20	Taxes & Licenses	94	77	8	9	4,079	1,260	1,315	1,504
21	Office Expense	66	11	22	33	3,911	995	1,553	1,363
22	Postage	3,325	1,163	1,036	1,127	3,689	1,230	1,114	1,346
23	Rent	4,041	1,167	1,144	1,729	3,911	1,399	1,100	1,412
24	Repairs & Maintenance	3,873	1,380	1,008	1,484	4,400	1,441	1,516	1,443
25	Telephone	3,080	1,087	1,092	901	2,797	993	843	962
26	Utilities	3,899	1,009	1,299	1,590	4,176	1,046	1,523	1,606
27	Accounting Expense	4,275	1,393	1,604	1,278	4,180	1,233	1,786	1,161
28	Legal & Counsulting	4,641	1,765	1,327	1,549	3,043	1,167	928	948

New API methods for the Task Pane

You can now use new API methods to interact with the Task Pane.

Four new API methods have been added as of Planning Analytics for Microsoft Excel 2.0.64. You can use the new Task Pane API methods to Show, Hide, Refresh, and return the visibility state of the Task Pane.

To learn more about the new Task Pane API methods, see the following topics:

- Hide (Task Pane)
- IsVisible (Task Pane)
- Refresh (Task Pane)
- Show (Task Pane)

2.0.63 - Feature updates, April 12, 2021

IBM Planning Analytics for Microsoft Excel was refreshed on April 12, 2021 to include the following features and notices.

Updates to each version of Planning Analytics for Microsoft Excel are cumulative.
To see what was new in previous releases, see What's new in Planning Analytics for Microsoft Excel (https://www.ibm.com/support/knowledgecenter/SSD29G_2.0.0/com.ibm.swg.ba.cognos.ug_cxr.2.0.0.doc/c_nfg_pax_test.html).

Note: If you are upgrading from Planning Analytics for Microsoft Excel version 2.0.62 to Planning Analytics for Microsoft Excel version 2.0.63, you must uninstall Planning Analytics for Microsoft Excel version 2.0.62 before upgrading.

New CreateFromCVS API method

You can now use the `CreateFromCVS` API method to generate a new Exploration View or Quick Report using a common view specification (CVS).

A common view specification (CVS) is JSON that is composed of two major parts; the MDX query and a sidecar for additional state information. Data driven mechanisms, such as TurboIntegrator

are only concerned with the MDX query, however user interfaces will also consume the sidecar to ensure presentation consistency. As of Planning Analytics for Microsoft Excel 2.0.63, you can use the `CreateFromCVS` API method to generate a new Exploration View or Quick Report using a CVS.

For more information, see CreateFromCVS (Exploration View) and CreateFromCVS (Quick Report).

To learn more about Common View Specifications, see Common View Specification(https://www.ibm.com/support/knowledgecenter/SSD29G_2.0.0/com.ibm.swg.ba.cognos.ug_cxr.2.0.0.doc/c_pax_cvs.html).

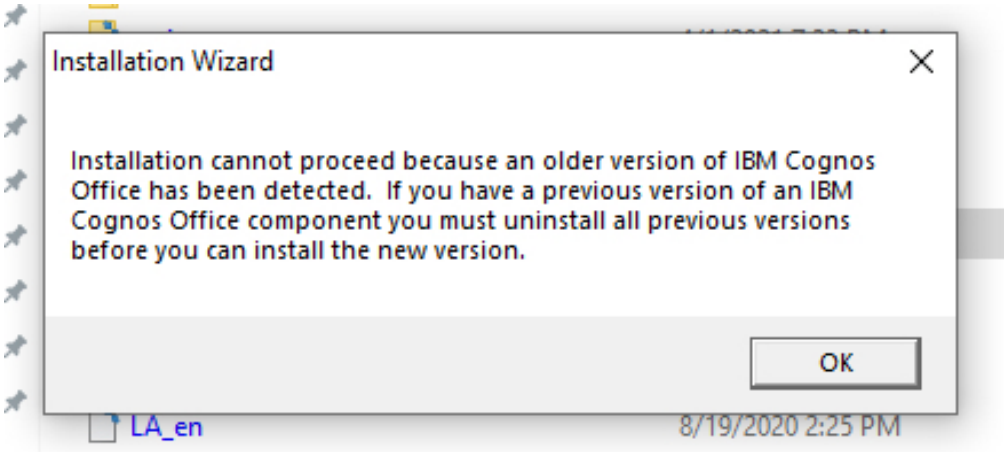
Conformance compatibility update

Planning Analytics for Microsoft Excel 2.0.63 contains conformance updates fundamental to improving the overall product experience including the installation and post-installation experience.

The 2.0.63 update of Planning Analytics for Microsoft Excel is not compatible with the current release of Cognos Office Connection. Users that use both Planning Analytics for Microsoft Excel as well as Cognos Office Connection are affected in their ability to upgrade to the latest release of Planning Analytics for Microsoft Excel.

Users who utilize either Cognos Office Connection or Planning Analytics for Microsoft Excel on their own may continue using the latest releases of each. For those who utilize both Planning Analytics for Microsoft Excel as well as Cognos Office Connection for their reporting needs may continue using Planning Analytics for Microsoft Excel 2.0.62 alongside the latest release of Cognos Office Connection.

If you are upgrading from Planning Analytics for Microsoft Excel version 2.0.62 to Planning Analytics for Microsoft Excel version 2.0.63, you must uninstall Planning Analytics for Microsoft Excel version 2.0.62 before upgrading. Failing to uninstall Planning Analytics for Microsoft Excel version 2.0.62 before upgrading will result in an error message.



In an upcoming release, the Planning Analytics add-in will be converted from an installer-based delivery to a single file a fraction of the size. This will also enable easier self service in enabling and disabling the add-in. Following this release shortly, Cognos Office Connection will enable the link between the two products once again.

2.0.62 - Feature updates, March 08, 2021

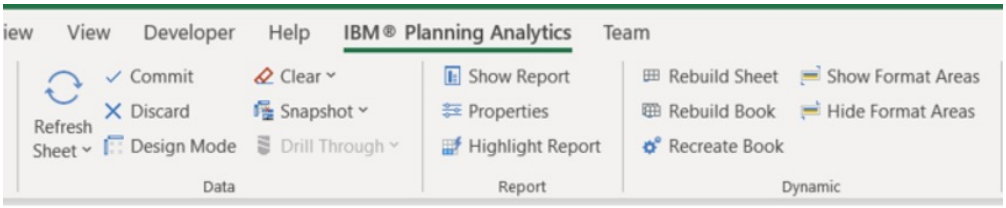
IBM Planning Analytics for Microsoft Excel was refreshed on March 08, 2021 to include the following features and notices.

Updates to each version of Planning Analytics for Microsoft Excel are cumulative.
To see what was new in previous releases, see What's new in Planning Analytics for Microsoft Excel (https://www.ibm.com/support/knowledgecenter/SSD29G_2.0.0/com.ibm.swg.ba.cognos.ug_cxr.2.0.0.doc/c_nfg_pax_test.html).

New Report ribbon group

You can show reports, highlight report areas, and view report properties with the new **Report** ribbon group in Planning Analytics for Microsoft Excel.

Planning Analytics for Microsoft Excel now features a new group in the ribbon area, called **Report**. The **Report** ribbon group contains buttons which you can use to quickly show the report of a highlighted cell, highlight the report area of a highlighted cell, and view the report properties of a highlighted cell.



For more information on this feature, see User interface overview(https://www.ibm.com/support/knowledgecenter/SSD29G_2.0.0/com.ibm.swg.ba.cognos.ug_cxr.2.0.0.doc/c_pax_userinterface.html)

2.0.61 - Feature updates, February 9, 2021

IBM Planning Analytics for Microsoft Excel was refreshed on February 9, 2021 to include fixes only.

Updates to each version of Planning Analytics for Microsoft Excel are cumulative.
To see what was new in previous releases, see What's new in Planning Analytics for Microsoft Excel (https://www.ibm.com/support/knowledgecenter/SSD29G_2.0.0/com.ibm.swg.ba.cognos.ug_cxr.2.0.0.doc/c_nfg_pax_test.html).

Timeouts in IBM Planning Analytics for Microsoft Excel

Planning Analytics for Microsoft Excel is now enforcing an inactivity timeout if the user does not interact with a TM1 Server component for 60 minutes.

There is a new inactivity timeout for Planning Analytics for Microsoft Excel users when configured with Planning Analytics Workspace on Cloud version 2.0.61 or newer. The new inactivity timeout is designed to enhance security.

If the user does not interact with any TM1 Server components in Planning Analytics for Microsoft Excel for 60 minutes, they will be disconnected and will be required to log in again. Examples of TM1 Server components in Planning Analytics for Microsoft Excel include the set editor, the task pane, and sending and retrieving data in general.

Note: When a user is disconnected due to an inactivity timeout, they do not experience a loss of state. Upon logging back in, the user does not lose any changes or data due to the timeout.

For more information on the inactivity timeout, see Connection timeouts in Planning Analytics Workspace on Cloud.

2.0.60 - Feature updates and known issues, December 17, 2020

IBM Planning Analytics for Microsoft Excel was refreshed on December 17, 2020 to include the following features and notices.

Updates to each version of Planning Analytics for Microsoft Excel are cumulative.
To see what was new in previous releases, see What's new in Planning Analytics for Microsoft Excel (https://www.ibm.com/support/knowledgecenter/SSD29G_2.0.0/com.ibm.swg.ba.cognos.ug_cxr.2.0.0.doc/c_nfg_pax_test.html).

Show and hide your TM1 servers

You can now select specific TM1 servers to hide in Planning Analytics for Microsoft Excel.

In previous versions of Planning Analytics for Microsoft Excel, you were shown a full list of all of the TM1 servers in your TM1 datasources when connecting to a TM1 datasource from the ribbon or from the task pane. As of Planning Analytics for Microsoft Excel version 2.0.60, you can now select specific TM1 servers to hide from these menus. For more information on this feature, see Show and hide servers in a TM1 datasource(https://www.ibm.com/support/knowledgecenter/SSD29G_2.0.0/com.ibm.swg.ba.cognos.ug_cxr.2.0.0.doc/c_pax_hide_tm1_server.html)

Saving or renaming a view in the set editor

When you save or rename a view in the set editor, the title bar in the set editor now updates to display the name of the view. A view saved from the set editor now also automatically appears in the task pane.

In previous versions of Planning Analytics for Microsoft Excel, the title bar of the set editor did not update to show the name of the view. As of Planning Analytics for Microsoft Excel version 2.0.60, when you save or rename a view, the title bar of the set editor shows the updated view name. The task pane now also shows new views that are saved from the set editor without the need to manually refresh the task pane.

Quick Report sheet names in the task pane

Quick Report sheet names are updated in the **Workbook** tab of the task pane.

In previous versions of Planning Analytics for Microsoft Excel, the **Workbook** tab only displayed the sheet number of a sheet. As of Planning Analytics for Microsoft Excel version 2.0.60, Quick Report sheets in the **Workbook** tab now display a sheet name in the following format: `Sheet[sheet number] [cube name]: [report name] [Report ID number]`.

Planning Analytics for Microsoft Excel: login or server access may fail in new experience

This issue may occur only when authenticating against a local TM1 database in the Planning Analytics new experience. You will not encounter this issue when authenticating against a local database in Planning Analytics classic or any Planning Analytics on Cloud database.

When attempting to log in to a TM1 database from Planning Analytics for Microsoft Excel, you may receive the following error under certain configurations or conditions: `Cannot load the requested view`.

To work around this issue, you can dismiss the error and again select the desired TM1 database and continue to log in with a valid user name.

This issue will be corrected in an upcoming release.

2.0.59 - Feature updates and known issues, November 13, 2020

IBM Planning Analytics for Microsoft Excel was refreshed on November 13, 2020 to include the following features and notices.

Updates to each version of Planning Analytics for Microsoft Excel are cumulative.
To see what was new in previous releases, see What's new in Planning Analytics for Microsoft Excel (https://www.ibm.com/support/knowledgecenter/SSD29G_2.0.0/com.ibm.swg.ba.cognos.ug_cxr.2.0.0.doc/c_nfg_pax_test.html).

MDX and TM1 Server views are listed together in the source tree

The source tree now presents MDX views and TM1 Server views combined in a single group, sorted alphabetically.

In previous versions of Planning Analytics for Microsoft Excel, MDX views were listed in one group, while TM1 Server views were listed a separate group,

Planning Analytics for Microsoft Excel: login or server access may fail in new experience

This issue may occur only when authenticating against a local TM1 database in the Planning Analytics new experience. You will not encounter this issue when authenticating against a local database in Planning Analytics classic or any Planning Analytics on Cloud database.

When attempting to log in to a TM1 database from Planning Analytics for Microsoft Excel, you may receive the following error under certain configurations or conditions: `Cannot load the requested view`.

To work around this issue, you can dismiss the error and again select the desired TM1 database and continue to log in with a valid user name.

This issue will be corrected in an upcoming release.

2.0.58 - Feature updates and known issues, October 20, 2020

IBM Planning Analytics for Microsoft Excel was refreshed on October 20, 2020.

Updates to each version of Planning Analytics for Microsoft Excel are cumulative.
To see what was new in the previous release, see 2.0.57 - Feature updates, September 14, 2020 (https://www.ibm.com/support/knowledgecenter/SSD29G_2.0.0/com.ibm.swg.ba.cognos.ug_cxr.2.0.0.doc/c_pax_new_features_2_0_57.html).

Updates to the IBM Planning Analytics ribbon

The IBM Planning Analytics ribbon has been updated in Planning Analytics for Microsoft Excel.

As of Planning Analytics for Microsoft Excel version 2.0.58, the IBM Planning Analytics ribbon has been updated to improve usability and to maximize space.

Quick Reports

The ribbon group for Quick Reports has been removed, however all functionality is still accessible either from the **Data** ribbon group or from the task pane. For more information, see:

- Clearing all data from a Quick Report
- Refresh
- Commit data in a Quick Report

Dynamic Reports

The Dynamic Reports ribbon group has now been renamed to **Dynamic**. All functionality remains the same.

Planning Analytics for Microsoft Excel: login or server access may fail in new experience

This issue may occur only when authenticating against a local TM1 database in the Planning Analytics new experience. You will not encounter this issue when authenticating against a local database in Planning Analytics classic or any Planning Analytics on Cloud database.

When attempting to log in to a TM1 database from Planning Analytics for Microsoft Excel, you may receive the following error under certain configurations or conditions: `Cannot load the requested view`.

To work around this issue, you can dismiss the error and again select the desired TM1 database and continue to log in with a valid user name.

This issue will be corrected in an upcoming release.

2.0.57 - Feature updates, September 14, 2020

IBM Planning Analytics for Microsoft Excel was refreshed on September 14, 2020 to include fixes only.

Updates to each version of Planning Analytics for Microsoft Excel are cumulative. To see what was new in the previous release, see 2.0.56 - Feature updates, August 12, 2020 (https://www.ibm.com/support/knowledgecenter/SSD29G_2.0.0/com.ibm.swg.ba.cognos.ug_cxr.2.0.0.doc/c_pax_new_features_2_0_56.html).

2.0.56 - Feature updates, August 12, 2020

IBM Planning Analytics for Microsoft Excel was refreshed on August 12, 2020 to include the following features and notices.

Updates to each version of Planning Analytics for Microsoft Excel are cumulative. To see what was new in the previous release, see 2.0.55 - Feature updates, July 16, 2020 (https://www.ibm.com/support/knowledgecenter/SSD29G_2.0.0/com.ibm.swg.ba.cognos.ug_cxr.2.0.0.doc/c_pax_new_features_2_0_55.html).

Cube Viewer

Starting in IBM Planning Analytics for Microsoft Excel version 2.0.56, you can change the font size and save views in the Cube Viewer.

Changing the font size

If you're working with large dimensions or sets, you can change the font size of the Cube Viewer to display more data.

For more information about changing the font size in the Cube Viewer, see Change the font size(https://www.ibm.com/support/knowledgecenter/SSD29G_2.0.0/com.ibm.swg.ba.cognos.ug_cxr.2.0.0.doc/c_pax_cube_viewer_zoom.html).

Save views as part of the cube

After you are finished working in the Cube Viewer, you can save your views as part of the cube. To use this feature, ensure that you also have IBM Planning Analytics Workspace version 2.0.56 or later installed.

For more information about saving views from the Cube Viewer, see Save a view from the Cube Viewer(https://www.ibm.com/support/knowledgecenter/SSD29G_2.0.0/com.ibm.swg.ba.cognos.ug_cxr.2.0.0.doc/t_pax_save_cube_viewer.html).

Changing hierarchies

If your dimension contains multiple hierarchies, you can use the set editor or Cube Viewer to change the hierarchy that's being used in your report.

For more information about changing the hierarchy of a report, see Change the hierarchy(https://www.ibm.com/support/knowledgecenter/SSD29G_2.0.0/com.ibm.swg.ba.cognos.ug_cxr.2.0.0.doc/c_pax_change_hierarchy.html).

2.0.55 - Feature updates, July 16, 2020

IBM Planning Analytics for Microsoft Excel was refreshed on July 16, 2020 to include the following features and notices.

Updates to each version of Planning Analytics for Microsoft Excel are cumulative. To see what was new in the previous release, see 2.0.54 - Feature updates, June 12, 2020 (https://www.ibm.com/support/knowledgecenter/SSD29G_2.0.0/com.ibm.swg.ba.cognos.ug_cxr.2.0.0.doc/c_pax_new_features_2_0_54.html).

Converting reports

As of 2.0.55, if you are converting reports in IBM Planning Analytics for Microsoft Excel, you can define whether or not the converted report uses Microsoft Excel's stylesheet formatting.

You can decide whether or not your converted reports use stylesheet formatting. When you convert a report directly from an Exploration View, the converted report uses stylesheet formatting if you have **Use Excel Formats** enabled. If you are creating or converting a report from the source tree, the cube viewer, or another path, the converted report defaults to using stylesheet formatting.

For more information about converting reports, see Converting a report from an Exploration View(https://www.ibm.com/support/knowledgecenter/SSD29G_2.0.0/com.ibm.swg.ba.cognos.ug_cxr.2.0.0.doc/c_pax_convert_reports.html).

2.0.54 - Feature updates, June 12, 2020

IBM Planning Analytics for Microsoft Excel was refreshed on June 12, 2020 to include fixes only.

Updates to each version of Planning Analytics for Microsoft Excel are cumulative. To see what was new in the previous release, see 2.0.53 - Feature updates, May 15, 2020 (https://www.ibm.com/support/knowledgecenter/SSD29G_2.0.0/com.ibm.swg.ba.cognos.ug_cxr.2.0.0.doc/c_pax_new_features_2_0_53.html).

2.0.53 - Feature updates, May 15, 2020

IBM Planning Analytics for Microsoft Excel was refreshed on May 15, 2020 to include fixes only.

Updates to each version of Planning Analytics for Microsoft Excel are cumulative. To see what was new in the previous release, see 2.0.52 - Feature updates, April 16, 2020 (https://www.ibm.com/support/knowledgecenter/SSD29G_2.0.0/com.ibm.swg.ba.cognos.ug_cxr.2.0.0.doc/c_pax_new_features_2_0_52.html).

2.0.52 - Feature updates, April 16, 2020

IBM Planning Analytics for Microsoft Excel was refreshed on April 16, 2020 to include the following features and notices.

Updates to each version of Planning Analytics for Microsoft Excel are cumulative. To see what was new in the previous release, see “2.0.51 - Feature updates, March 06, 2020” on page 327 (https://www.ibm.com/support/knowledgecenter/SSD29G_2.0.0/com.ibm.swg.ba.cognos.ug_cxr.2.0.0.doc/c_pax_new_features_2_0_51.html).

All connections are switching to IBM Planning Analytics Workspace

As of 2.0.52, if you are using TM1 Server 2.0.9 or newer and have any connections through PMHub in IBM Planning Analytics for Microsoft Excel, your connections will be switched to solely go through Planning Analytics Workspace.

All new connections in Planning Analytics for Microsoft Excel currently go through Planning Analytics Workspace. Existing PMHub connections will be switched to Planning Analytics Workspace connections if you are using Planning Analytics for Microsoft Excel 2.0.52 or newer with TM1 Server 2.0.9 or newer.

Improvements to the set editor

As of 2.0.52, the set editor has a number of improvements to make it easier to work with large dimensions.

To use the updated set editor, ensure that you have IBM Planning Analytics Workspace version 2.0.52 or later installed. Refer to the Planning Analytics for Microsoft Excel conformance requirements.

Note: If you are using IBM Planning Analytics for Microsoft Excel versions 2.0.51 and older with Planning Analytics Workspace versions 2.0.52 and newer, you will see all of the new set editor features, however

any changes made in the default view settings for the Available Members and Current Set panes will not be saved.

Focus on one area at a time

You can hide the pane that you are not currently working in to enable you to focus on one area at a time.

Maximize the set editor

Quickly maximize the set editor by clicking the **Max** icon .

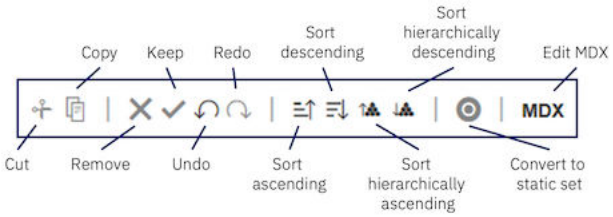
Note: If you added the set editor from the tree, you can resize the set editor by dragging the grab handles.

Drag and drop

Drag members into the **Current Set** from **Available Members**. Dragging uses the default insert settings . If there are a lot of members in the **Current Set**, you can scroll down the pane while dragging the selection into the correct position.

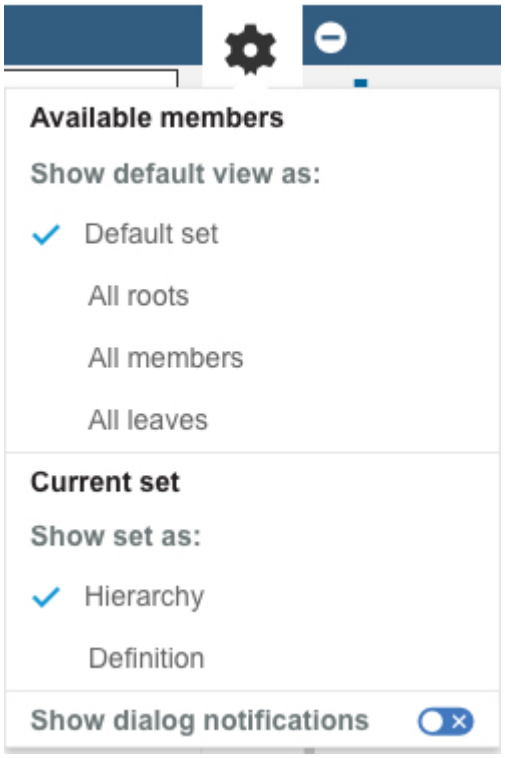
Easy access to functions

The new toolbar makes it easy to edit the members in the current set, with the most frequently used functions available.



Configure default view settings for the Available Members and Current Set panes

For the **Available Members** pane, you can choose to display **Default set**, **All roots**, **All members**, or **All leaves** by default. For the **Current Set** pane, you can choose whether to display the members as a **Hierarchy**, or as a **Definition** (MDX).



Click ⚙ to access the **Settings** menu.

For more information about the set editor, see Sets(https://www.ibm.com/support/knowledgecenter/SSD29G_2.0.0/com.ibm.swg.ba.cognos.ug_cxr.2.0.0.doc/c_paw_set.html).

Version requirements for using IBM Planning Analytics for Microsoft Excel 2.0.52 with TM1 Server.

Improvements in IBM Planning Analytics for Microsoft Excel 2.0.52 are tested on the current supported TM1 Server versions (For more information on supported TM1 Server versions, see IBM Planning Analytics for Microsoft Excel conformance requirements. Please note that some functionality will not work as expected in TM1 Server versions 2.0.5 and older.

2.0.51 - Feature updates, March 06, 2020

IBM Planning Analytics for Microsoft Excel was refreshed on March 06, 2020 to include the following features and notices.

Updates to each version of Planning Analytics for Microsoft Excel are cumulative.
To see what was new in the previous release, see “2.0.50 - Feature updates, February 7, 2020” on page 328 (https://www.ibm.com/support/knowledgecenter/SSD29G_2.0.0/com.ibm.swg.ba.cognos.ug_cxr.2.0.0.doc/c_pax_new_features_2_0_50.html).

Update the datasource or package for Exploration Views in bulk

As of version 2.0.51, you can now bulk update the datasource or package for multiple Exploration Views at the same time.

To bulk update the datasource or package for your Exploration Views, you need to use the `BulkSerializeUtil` command. For more information, see Bulk update the datasource or package for Exploration Views(https://www.ibm.com/support/knowledgecenter/SSD29G_2.0.0/com.ibm.swg.ba.cognos.ug_cxr.2.0.0.doc/t_pax_exploration_bulk_update_server.html)

2.0.50 - Feature updates, February 7, 2020

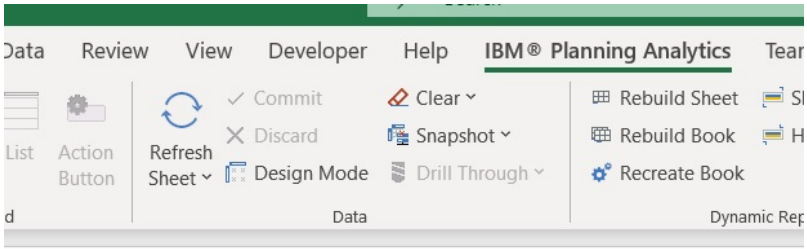
IBM Planning Analytics for Microsoft Excel was refreshed on February 7, 2020 to include the following features and notices.

Updates to each version of Planning Analytics for Microsoft Excel are cumulative.
To see what was new in the previous release, see "2.0.49 - Feature updates, December 19, 2019" on page 328 (https://www.ibm.com/support/knowledgecenter/SSD29G_2.0.0/com.ibm.swg.ba.cognos.ug_cxr.2.0.0.doc/c_pax_new_features_2_0_49.html).

Improvements to Design Mode

As of 2.0.50, use **Design Mode** to preserve or clear DBRW formulas when you are copying and pasting values into cells.

Design Mode is a handy tool that can be used to enable or disable the refreshing of an Exploration View upon every change. You can now also use **Design Mode** to preserve or clear DBRW formulas when you are copying and pasting values into cells. Simply enable or disable **Design Mode** from the **Data** group in the IBM Planning Analytics ribbon.



For more information about **Design Mode**, see Design Mode(https://www.ibm.com/support/knowledgecenter/SSD29G_2.0.0/com.ibm.swg.ba.cognos.ug_cxr.2.0.0.doc/c_pax_design_mode.html).

2.0.49 - Feature updates, December 19, 2019

IBM Planning Analytics for Microsoft Excel was refreshed on December 19, 2019 to include the following features and notices.

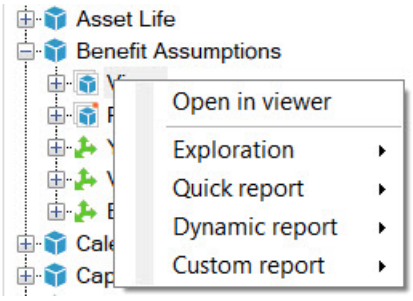
Updates to each version of Planning Analytics for Microsoft Excel are cumulative.
To see what was new in the previous release, see "2.0.48 - Feature updates, November 20, 2019" on page 329 (https://www.ibm.com/support/knowledgecenter/SSD29G_2.0.0/com.ibm.swg.ba.cognos.ug_cxr.2.0.0.doc/c_pax_new_features_2_0_48.html).

Quickly access views from the IBM task pane

As of 2.0.49, you can open views from the IBM task pane.

You can now quickly access views from the IBM task pane by double-clicking a cube or Views node. You can also open a view by right-clicking a cube or Views node and selecting **Open in viewer** from the right-click menu.

Additionally, when you right-click a cube or Views node on the task pane, you can choose to run as one of the available report types.



For more information about the IBM task pane and how you can open views from the task pane, see IBM task pane(https://www.ibm.com/support/knowledgecenter/SSD29G_2.0.0/com.ibm.swg.ba.cognos.ug_cxr.2.0.0.doc/c_pax_taskpane.html).

2.0.48 - Feature updates, November 20, 2019

IBM Planning Analytics for Microsoft Excel was refreshed on November 20, 2019 to include the following features and notices.

Updates to each version of Planning Analytics for Microsoft Excel are cumulative. To see what was new in the previous release, see 2.0.47 - Feature updates, October 15, 2019 (https://www.ibm.com/support/knowledgecenter/SSD29G_2.0.0/com.ibm.swg.ba.cognos.ug_cxr.2.0.0.doc/c_pax_new_features_2_0_47.html).

Show the information header in a Quick Report

Starting in 2.0.48, you can show or hide header information in a Quick Report. The header information includes the host URL, server name, and the cube name for the Quick Report.

For more information about the information header, see Show the information header in a Quick Report(https://www.ibm.com/support/knowledgecenter/SSD29G_2.0.0/com.ibm.swg.ba.cognos.ug_cxr.2.0.0.doc/t_pax_qr_header_informtion.html).

For more information on enabling the information header, see Manually enabling features in the tm1features.json file(https://www.ibm.com/support/knowledgecenter/SSD29G_2.0.0/com.ibm.swg.ba.cognos.ug_cxr.2.0.0.doc/r_pax_tm1features.html).

Dimension names are automatically displayed in a Quick Report

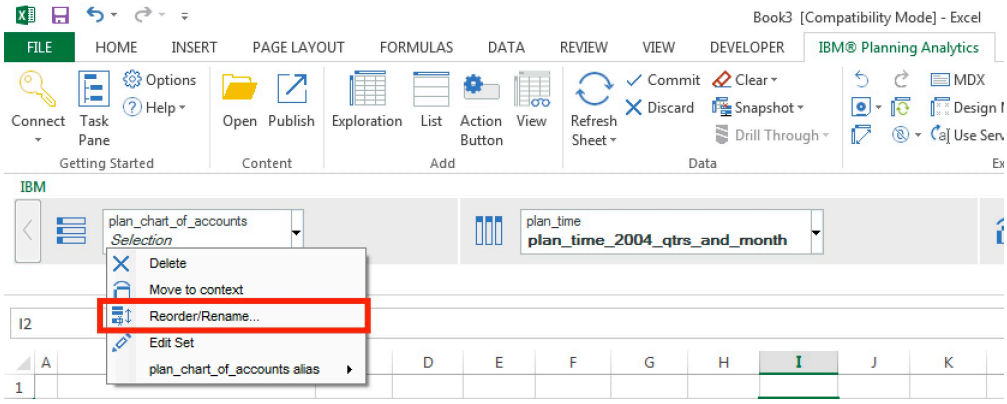
When you create or open a Quick Report, the names of the dimensions used in the Quick Report are automatically displayed at the top of the report.

For more information about Quick Reports, see Quick Reports(https://www.ibm.com/support/knowledgecenter/SSD29G_2.0.0/com.ibm.swg.ba.cognos.ug_cxr.2.0.0.doc/c_ug_cxr_powersheets.html).

Deprecation notice for the Reorder/Rename feature in Exploration Views and lists

In IBM Planning Analytics for Microsoft Excel version 2.0.49, the Reorder/Rename feature in Exploration Views and lists will be deprecated.

The Reorder/Rename feature:



- You can use the set editor to reorder your members. For more information, see Reorder members in a set(https://www.ibm.com/support/knowledgecenter/SSD29G_2.0.0/com.ibm.swg.ba.cognos.ug_cxr.2.0.0.doc/t_set_editor_reorder_members.html).
- You can still use aliases to rename a member.
- To rename a calculated column or row, edit the column or row header. For more information, see Rename a calculated column or row(https://www.ibm.com/support/knowledgecenter/SSD29G_2.0.0/com.ibm.swg.ba.cognos.ug_cxr.2.0.0.doc/t_pax_exploration_rename_calculation.html).

2.0.47 - Feature updates, October 15, 2019

IBM Planning Analytics for Microsoft Excel was refreshed on October 15, 2019 to include fixes only.

Updates to each version of Planning Analytics for Microsoft Excel are cumulative. To see what was new in the previous release, see 2.0.46 - Feature updates, September 13, 2019 (https://www.ibm.com/support/knowledgecenter/SSD29G_2.0.0/com.ibm.swg.ba.cognos.ug_cxr.2.0.0.doc/c_pax_new_features_2_0_46.html).

2.0.46 - Feature updates, September 13, 2019

IBM Planning Analytics for Microsoft Excel was refreshed on September 13, 2019 to include fixes only.

Updates to each version of Planning Analytics for Microsoft Excel are cumulative. To see what was new in the previous release, see 2.0.45 - Feature updates, August 16, 2019 (https://www.ibm.com/support/knowledgecenter/SSD29G_2.0.0/com.ibm.swg.ba.cognos.ug_cxr.2.0.0.doc/c_pax_new_features_2_0_45.html).

2.0.45 - Feature updates, August 16, 2019

IBM Planning Analytics for Microsoft Excel was refreshed on August 16, 2019 to include fixes only.

Updates to each version of Planning Analytics for Microsoft Excel are cumulative. To see what was new in the previous release, see 2.0.44 - Feature updates, July 30, 2019 (https://www.ibm.com/support/knowledgecenter/SSD29G_2.0.0/com.ibm.swg.ba.cognos.ug_cxr.2.0.0.doc/c_pax_new_features_2_0_44.html).

2.0.44 - Feature updates, July 30, 2019

IBM Planning Analytics for Microsoft Excel was refreshed on July 30, 2019 to include the following features.

Updates to each version of Planning Analytics for Microsoft Excel are cumulative. To see what was new in the previous release, see 2.0.43 - Feature updates, June 19, 2019 (https://www.ibm.com/support/knowledgecenter/SSD29G_2.0.0/com.ibm.swg.ba.cognos.ug_cxr.2.0.0.doc/c_pax_new_features_2_0_43.html).

Save your Exploration Views to the Planning Analytics Workspace Content Store!

As of 2.0.44, you can save your Exploration Views to the Planning Analytics Workspace Content Store.

Save your Exploration View to the Planning Analytics Workspace Content Store
Saving your Exploration Views to the Planning Analytics Workspace Content Store allows you to save enhanced views, and share your views between IBM Planning Analytics Workspace and IBM Planning Analytics for Microsoft Excel.

Share views between Planning Analytics Workspace and Planning Analytics for Microsoft Excel
Saving your Exploration View to the Planning Analytics Workspace Content Store allows you to share your views toPlanning Analytics Workspace and Planning Analytics for Microsoft Excel. Simply access the Planning Analytics Workspace from either product and open the view for quick and flexible collaboration.

The versatility of MDX Views
MDX expressions can be a powerful tool for storing and generating views. When you save your Exploration View to the Planning Analytics Workspace Content Store, the view is stored as an MDX expression. Just like in an MDX View, you can store calculations or headers, and define asymmetric axes when you save your Exploration Views to the Planning Analytics Workspace Content Store.

Compatibility
Planning Analytics for Microsoft Excel version 2.0.44 used with Planning Analytics Workspace version 2.0.44 will receive full support for saving to the Planning Analytics Workspace Content Store.

You also need IBM Planning Analytics version 2.0.7 IF 3 or newer installed. It is recommended that you install IBM Planning Analytics version 2.0.8 or newer.

For more information about saving your Exploration Views to the Planning Analytics Workspace Content Store, see Methods for saving an Exploration View(https://www.ibm.com/support/knowledgecenter/SSD29G_2.0.0/com.ibm.swg.ba.cognos.ug_cxr.2.0.0.doc/c_pax_exploration_save.html).

Enhanced clear functionality for Exploration Views

The clear functionality when applied to an Exploration View has been improved as of 2.0.44.

Using **Clear workbook**, **Clear worksheet**, or **Clear data** on an Exploration View or list view will now also clear any items in the context area drop zone.

For more information about clearing Exploration Views, see Clearing all data from an Exploration View or list view(https://www.ibm.com/support/knowledgecenter/SSD29G_2.0.0/com.ibm.swg.ba.cognos.ug_cxr.2.0.0.doc/t_pax_clear_data_exploration.html).

MDX button disabled after clearing an Exploration View or list view

As of 2.0.44, the MDX button will be temporarily disabled after a user clears an Exploration View or list view.

When you clear data in an Exploration View or list view, the cleared cells remain as blank cells on the report. Clearing the content does not break the link to the datasource. As of version 2.0.44, when you clear data in an Exploration View or list view, the button to open the MDX editor is temporarily disabled. This feature prevents other users from viewing the worksheet's MDX expression, which may contain information about the datasource.

The button to open the MDX editor is enabled again if the Exploration View or list view is refreshed by the user that initially cleared the data. When the view is refreshed, the context dimensions will query for the first available member for each subset and update the selections and the MDX expression is updated.

For more information about clearing Exploration Views, see Clearing all data from an Exploration View or list view(https://www.ibm.com/support/knowledgecenter/SSD29G_2.0.0/com.ibm.swg.ba.cognos.ug_cxr.2.0.0.doc/t_pax_clear_data_exploration.html).

Actions to prompt a Constrained Calculation

As of 2.0.44, you can use a number of actions to prompt a Constrained Calculation in IBM Planning Analytics for Microsoft Excel.

Constrained Calculations can be used in Planning Analytics for Microsoft Excel to limit recalculations strictly to a specified worksheet. Because Planning Analytics for Microsoft Excel is only recalculating the single worksheet, you may notice improved performance when refreshing a single worksheet. The 2.0.44 release of Planning Analytics for Microsoft Excel has enabled new actions that will prompt a recalculation when Constrained Calculations are enabled.

To learn more about the actions you can use to prompt a recalculation, see Actions that prompt a Constrained Calculation(https://www.ibm.com/support/knowledgecenter/SSD29G_2.0.0/com.ibm.swg.ba.cognos.ug_cxr.2.0.0.doc/r_pax_constrainedcalculationgestures.html).

To learn more about Constrained Calculations, see Constrained Calculations(https://www.ibm.com/support/knowledgecenter/SSD29G_2.0.0/com.ibm.swg.ba.cognos.ug_cxr.2.0.0.doc/c_pax_constrainedcalculations.html).

2.0.43 - Feature updates, June 19, 2019

IBM Planning Analytics for Microsoft Excel was refreshed on June 19, 2019 to include the following features.

Updates to each version of Planning Analytics for Microsoft Excel are cumulative. To see what was new in the previous release, see 2.0.42 - Feature updates, May 13, 2019 (https://www.ibm.com/support/knowledgecenter/SSD29G_2.0.0/com.ibm.swg.ba.cognos.ug_cxr.2.0.0.doc/c_pax_new_features_2_0_42.html).

Support for Microsoft Excel 2019

Starting in version 2.0.43, IBM Planning Analytics for Microsoft Excel will now be compatible with Microsoft Excel 2019.

You can now use Planning Analytics for Microsoft Excel with Microsoft Excel 2019. For more information on supported software environment, see the IBM Software Product Compatibility Reports (https://www.ibm.com/software/reports/compatibility/clarity/index.html).

2.0.42 - Feature updates, May 13, 2019

IBM Planning Analytics for Microsoft Excel was refreshed on May 13, 2019 to include the following features.

Updates to each version of Planning Analytics for Microsoft Excel are cumulative. To see what was new in the previous release, see 2.0.41 - Feature updates, April 12, 2019 (https://www.ibm.com/support/knowledgecenter/SSD29G_2.0.0/com.ibm.swg.ba.cognos.ug_cxr.2.0.0.doc/c_pax_new_features_2_0_41.html).

Quickly access the set editor from the IBM task pane

As of 2.0.42, you can open the set editor from the IBM task pane.

You can now quickly access the set editor from the IBM task pane by double-clicking a dimension or named set, or by right-clicking a dimension or named set and opening the set editor from the right-click menu.

For more information about the IBM task pane and how you can open the set editor from the IBM task pane, see IBM task pane(https://www.ibm.com/support/knowledgecenter/SSD29G_2.0.0/com.ibm.swg.ba.cognos.ug_cxr.2.0.0.doc/c_pax_taskpane.html).

Set data refresh options for your views

As of 2.0.42, you can set a data refresh option for your views from the cube viewer.

Using the Cube Viewer, you can define how data refreshes are triggered in your view.

For more information about how you can set data refresh options for your views, see Set data refresh options for a view(https://www.ibm.com/support/knowledgecenter/SSD29G_2.0.0/com.ibm.swg.ba.cognos.ug_cxr.2.0.0.doc/t_pax_cubeviewer_autorecalc.html).

Use Planning Analytics for Microsoft Excel without Performance Manager Hub

Planning Analytics for Microsoft Excel no longer requires IBM Cognos Performance Management Hub (PMHub) to access the TM1 Server or TM1 Admin Server.

For more information about how you can use Planning Analytics for Microsoft Excel without Performance Manager Hub, see Using Planning Analytics for Microsoft Excel without Performance Manager Hub (https://www-01.ibm.com/support/docview.wss?uid=ibm10883120).

2.0.41 - Feature updates, April 12, 2019

IBM Planning Analytics for Microsoft Excel was refreshed on April 12, 2019 to include the following features.Updates to each version of Planning Analytics for Microsoft Excel are cumulative. To see what was new in the previous release, see 2.0.40 - Feature updates, February 22, 2019 (https://www.ibm.com/support/knowledgecenter/SSD29G_2.0.0/com.ibm.swg.ba.cognos.ug_cxr.2.0.0.doc/c_pax_new_features_2_0_40.html).

Speed up your worksheet refreshes with Constrained Calculations

As of 2.0.41, you can improve the performance and speed of your single worksheet refreshes using Constrained Calculations.

When you refresh your worksheet, IBM Planning Analytics for Microsoft Excel will recalculate every worksheet in your workbook. Using Constrained Calculations is an easy way to narrow the scope of the recalculates to just your active worksheet.

For more information about Constrained Calculations, see Constrained Calculations(https://www.ibm.com/support/knowledgecenter/SSD29G_2.0.0/com.ibm.swg.ba.cognos.ug_cxr.2.0.0.doc/c_pax_constrainedcalculations.html).

2.0.40 - Feature updates, February 22, 2019

IBM Planning Analytics for Microsoft Excel was refreshed on February 22, 2019 to include fixes.Updates to each version of Planning Analytics for Microsoft Excel are cumulative. To see what was new in the previous release, see 2.0.39 - Feature updates, December 21, 2018 (https://www.ibm.com/support/knowledgecenter/SSD29G_2.0.0/com.ibm.swg.ba.cognos.ug_cxr.2.0.0.doc/c_pax_new_features_2_0_39.html).

2.0.39 - Feature updates, December 21, 2018

IBM Planning Analytics for Microsoft Excel was refreshed on December 21, 2018 to include fixes.Updates to each version of Planning Analytics for Microsoft Excel are cumulative. To see what was new in the previous release, see 2.0.38 - Feature updates, November 27th, 2018 (https://www.ibm.com/support/knowledgecenter/SSD29G_2.0.0/com.ibm.swg.ba.cognos.ug_cxr.2.0.0.doc/c_pax_new_features_2_0_38.html).

New API function for Quick Reports

As of 2.0.39, you can use the `ReplaceWithFormats` function to replace the MDX statement in a Quick Report with another MDX statement. `ReplaceWithFormats` also has an option to preserve or destroy the existing sheet formatting in the Quick Report.

To find out more, see ReplaceWithFormats (https://ibm.github.io/paxapi/#replacewithformats).

2.0.38 - Feature updates, November 27, 2018

IBM Planning Analytics for Microsoft Excel was refreshed on November 27, 2018 to include fixes.Updates to each version of Planning Analytics for Microsoft Excel are cumulative.

Chapter 4. What's new in TM1 Web

There are new features in IBM TM1 Web. For more information, see the *TM1 Web* documentation in IBM Knowledge Center.

2.0.90 - Feature updates, September 12, 2023

IBM® Planning Analytics TM1 Web was refreshed on 12 September 2023 to include the following changes.

Updates to each version of TM1 Web are cumulative. To see what was new in the previous release, see Chapter 4, “What's new in TM1 Web,” on page 335.

Timeline of previous Planning Analytics releases

For a comprehensive listing of Planning Analytics component releases by month and year, see Timeline for IBM Planning Analytics Releases. You can view versions and release months for the following components:

- Planning Analytics Local TM1 Server
- Planning Analytics Workspace
- Planning Analytics for Microsoft Excel
- Planning Analytics Spreadsheet Services/TM1 Web

Aligning releases for IBM Planning Analytics components

To simplify and align IBM Planning Analytics TM1 Web (Spreadsheet Services) releases with those across IBM Planning Analytics Workspace, IBM is labeling its next TM1 Web release as IBM Planning Analytics TM1 Web 2.0.90.

Related concepts

“Aligning releases for IBM Planning Analytics components” on page 339
To simplify and align IBM Planning Analytics TM1 Web (Spreadsheet Services) releases with those across IBM Planning Analytics Workspace, IBM is labeling its next TM1 Web release as IBM Planning Analytics TM1 Web 2.0.85.

Universal Reports available in TM1 Web and Planning Analytics Workspace websheets

Universal Reports, a new hierarchy aware and parameterized report type, is now available in IBM Planning Analytics for Microsoft Excel, IBM Planning Analytics TM1 Web, and Planning Analytics Workspace websheets.

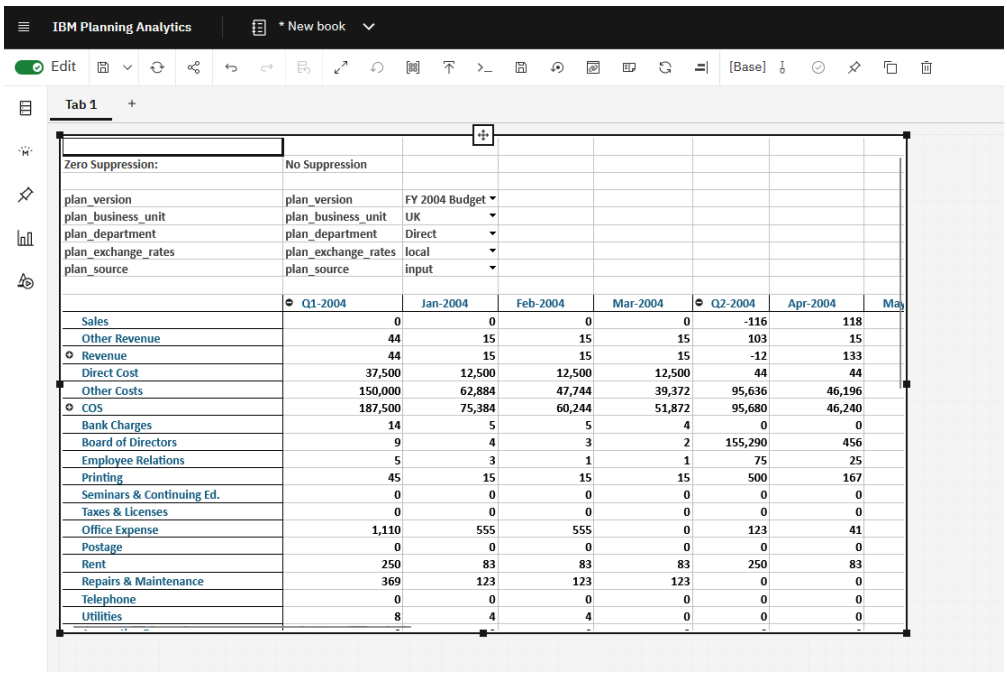
About Universal Reports

Prerequisites

About Universal Reports

Driven by TM1SET formulas, a Universal Report is a hierarchy aware and parameterized report that achieves its parameterization by using named ranges. The query parameterization area of a Universal Report is hidden by default. Unhide this area in Planning Analytics for Excel to see the powerful formulas that drive the report.

You can open a Universal Report that was created in Planning Analytics for Excel as a live websheet in TM1 Web or Planning Analytics Workspace.



Zero Suppression:	No Suppression						
plan_version	plan_version	FY 2004 Budget					
plan_business_unit	plan_business_unit	UK					
plan_department	plan_department	Direct					
plan_exchange_rates	plan_exchange_rates	local					
plan_source	plan_source	input					
	Q1-2004	Jan-2004	Feb-2004	Mar-2004	Q2-2004	Apr-2004	Ma
Sales	0	0	0	0	-116	118	
Other Revenue	44	15	15	15	103	15	
Revenue	44	15	15	15	-12	133	
Direct Cost	37,500	12,500	12,500	12,500	44	44	
Other Costs	150,000	62,884	47,744	39,372	95,636	46,196	
COS	187,500	75,384	60,244	51,872	95,680	46,240	
Bank Charges	14	5	5	4	0	0	
Board of Directors	9	4	3	2	155,290	456	
Employee Relations	5	3	1	1	75	25	
Printing	45	15	15	15	500	167	
Seminars & Continuing Ed.	0	0	0	0	0	0	
Taxes & Licenses	0	0	0	0	0	0	
Office Expense	1,110	555	555	0	123	41	
Postage	0	0	0	0	0	0	
Rent	250	83	83	83	250	83	
Repairs & Maintenance	369	123	123	123	0	0	
Telephone	0	0	0	0	0	0	
Utilities	8	4	4	0	0	0	

Universal Reports in TM1 Web and Planning Analytics Workspace supports write back to the server, which means you can make certain changes to the report without having to go back to Planning Analytics for Excel.

You can make powerful changes to a Universal Report by modifying its query parameterization cells in TM1 Web and Planning Analytics Workspace. You can also manipulate data in a Universal Report to change the scope of the data that is being viewed or to modify the appearance of the report. For example, you can update hierarchy from the slicer cells in a Universal Report, or open the set editor from hierarchy cells to edit the report. You can also open the set editor from the row and column headers.

The following Universal Report features in TM1 Web and Planning Analytics Workspace websheets allow you to further customize your reports:

- Toggle rows and column headers to expand and collapse members
- Apply zero suppression on rows and columns
- Use spreading shortcuts
- Use spread dialog
- Apply Microsoft Excel's conditional formatting
- Use member selector on TM1SET slicers
- Set Editor integration (in Planning Analytics Workspace websheets only)
- Synchronization (in Planning Analytics Workspace websheets only)

The following features are not supported in TM1 Web and Planning Analytics Workspace websheets:

- Drill through
- Cell indicators
- Cell Annotations
- Sandboxes
- Export
- Undo and Redo feature

For more information, see Universal Reports.

Prerequisites

To align with the launch of Universal Report's expanded features, including TM1SET usage, IBM Planning Analytics for Microsoft Excel 2.0.90 requires IBM Planning Analytics TM1 Web 2.0.90 or a newer version. You can use any version of Planning Analytics Workspace.

Planning Analytics on Cloud
Planning Analytics on Cloud customers must request their TM1 Server be upgraded to 2.0.9.18 IF2 or higher for TM1 Web 2.0.90 to be deployed on cloud.

Planning Analytics Local
On-premise customers do not require an upgrade to 2.0.9.18 IF2 to use Universal Reports on TM1 Web 2.0.90 and Planning Analytics for Excel 2.0.90.

Deployments using distributed TM1 environment

Planning Analytics for Microsoft Excel and TM1 Web use TM1 Web's EvaluationService component to support features such as Universal Reports and TM1SET. For deployments that use a distributed TM1 environment, you will need to configure the EvaluationService before you can use these features.

2.0.88 - Feature updates, June 16, 2023

IBM® Planning Analytics TM1 Web was refreshed on 16 June 2023 to include the following changes.

Updates to each version of TM1 Web are cumulative. To see what was new in the previous release, see Chapter 4, “What's new in TM1 Web,” on page 335.

Timeline of previous Planning Analytics releases

For a comprehensive listing of Planning Analytics component releases by month and year, see Timeline for IBM Planning Analytics Releases. You can view versions and release months for the following components:

- Planning Analytics Local TM1 Server
- Planning Analytics Workspace
- Planning Analytics for Microsoft Excel
- Planning Analytics Spreadsheet Services/TM1 Web

Plugins no longer required to copy and paste in TM1 Web and Planning Analytics Workspace websheets

Browser extensions and additional clipboard access are no longer required to copy and paste in TM1 Web 2.0.88 and in Planning Analytics Workspace websheets. You can copy and paste values in Google Chrome, Microsoft Edge, and Firefox with keyboard shortcuts without installing any browser extensions or removing any that were previously installed.

Important: If you are using a version before 2.0.88, you will still need an IBM Cognos TM1 Web Clipboard Extension to copy and paste. Note, an upcoming change in Chrome later this year will impact the copy and paste clipboard extension, making it unavailable for use. Users on Chrome will then need to upgrade to TM1 Web 2.0.88 or a later version to continue copying and pasting in TM1 Web and Planning Analytics Workspace websheets.

Use the following keyboard shortcuts to copy and paste in TM1 Web and Planning Analytics Workspace websheets:

Table 6. Copy and paste keyboard shortcuts

Action	Windows	Apple Mac
Copy	CTRL+C	CMD+C
Paste	CTRL+V	CMD+V

You can also copy values through the right-click menu or toolbar in websheets. The **Cut** and **Copy** buttons in the set editor still function as before. Keep in mind, when you copy an element name from the set editor, you cannot paste it to an external application. You can, however, paste an element name that was copied from the set editor into the set editor.

You can only paste by using the keyboard shortcut. The **Paste** button is no longer available in the websheet toolbar, right-click menu, or the set editor.

New feature flag recalculates chart data when publishing

A new feature flag, `CalculateChartsAtPublishTime`, recalculates chart data an additional time when you open a websheet that contains charts to avoid some chart rendering problems.

You can find information on one such chart rendering issue here.

To run the recalculation, enable `CalculateChartsAtPublishTime` in the `features.json` file. By default, this feature flag is disabled and set to `false`.

Note: When you enable `CalculateChartsAtPublishTime`, because an additional calculation of the chart data takes place, there might be performance impact at publish time for a websheet that contains charts.

2.0.87 - Feature updates, May 12, 2023

IBM® Planning Analytics TM1 Web was refreshed on 12 May 2023 to include to include fixes only.

Updates to each version of TM1 Web are cumulative. To see what was new in the previous release, see Chapter 4, “What's new in TM1 Web,” on page 335.

Timeline of previous Planning Analytics releases

For a comprehensive listing of Planning Analytics component releases by month and year, see Timeline for IBM Planning Analytics Releases. You can view versions and release months for the following components:

- Planning Analytics Local TM1 Server
- Planning Analytics Workspace
- Planning Analytics for Microsoft Excel
- Planning Analytics Spreadsheet Services/TM1 Web

2.0.86 - Feature updates, April 11, 2023

IBM® Planning Analytics TM1 Web was refreshed on 11 April 2023 to include to include fixes only.

Updates to each version of TM1 Web are cumulative. To see what was new in the previous release, see Chapter 4, “What's new in TM1 Web,” on page 335.

Timeline of previous Planning Analytics releases

For a comprehensive listing of Planning Analytics component releases by month and year, see Timeline for IBM Planning Analytics Releases. You can view versions and release months for the following components:

- Planning Analytics Local TM1 Server
- Planning Analytics Workspace
- Planning Analytics for Microsoft Excel
- Planning Analytics Spreadsheet Services/TM1 Web

2.0.85 - Feature updates, March 23, 2023

IBM® Planning Analytics TM1 Web was refreshed on 23 March 2023 to include the following changes.

Updates to each version of TM1 Web are cumulative. To see what was new in the previous release, see Chapter 4, “What's new in TM1 Web,” on page 335.

Timeline of previous Planning Analytics releases

For a comprehensive listing of Planning Analytics component releases by month and year, see Timeline for IBM Planning Analytics Releases. You can view versions and release months for the following components:

- Planning Analytics Local TM1 Server
- Planning Analytics Workspace
- Planning Analytics for Microsoft Excel
- Planning Analytics Spreadsheet Services/TM1 Web

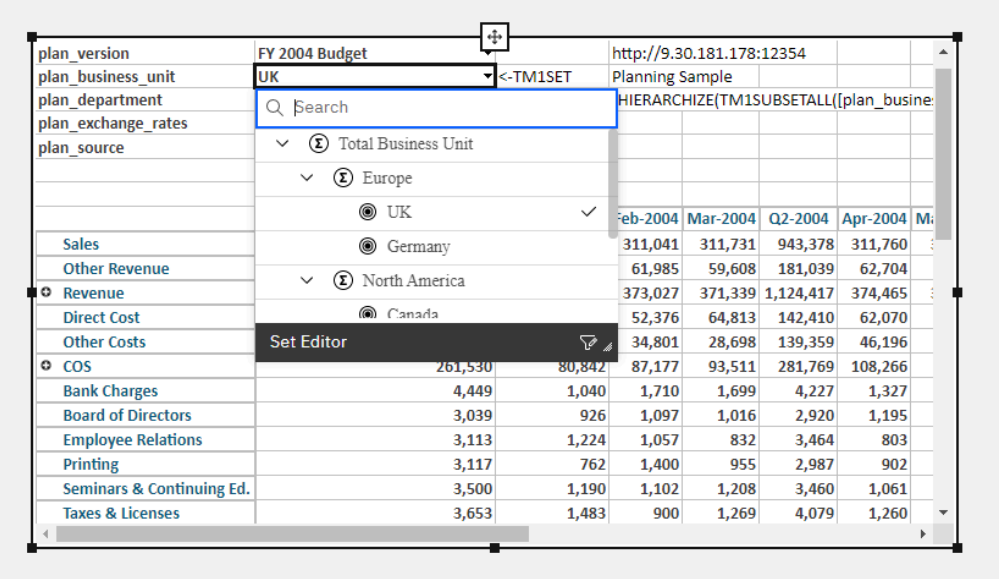
Aligning releases for IBM Planning Analytics components

To simplify and align IBM Planning Analytics TM1 Web (Spreadsheet Services) releases with those across IBM Planning Analytics Workspace, IBM is labeling its next TM1 Web release as IBM Planning Analytics TM1 Web 2.0.85.

Member set menu available for TM1SET cells in websheets

A new member set menu is now available in Planning Analytics Workspace websheets that lets you quickly search and select members from the current set in TM1SET cells. You can even open the set editor from this menu.

Note: To use the member set menu feature, you must be on at least IBM Planning Analytics TM1 Web 2.0.85 and IBM Planning Analytics Workspace 2.0.85.



The new member set menu is available through a feature flag. Enable the member set menu by setting the feature flag `EnableCarbonMemberSelector` to `true` in the `features.json` file.

Note: To open the set editor or use the member set menu in TM1SET cells, the cells must be in a tracked area named range. Tracked area named range implementation takes place in Planning Analytics for Excel. For more information, see TM1SET.

2.0.83 - Feature updates, February 17, 2023

IBM® Planning Analytics TM1 Web was refreshed on February 17, 2023 to include fixes only.

Updates to each version of TM1 Web are cumulative. To see what was new in the previous release, see Chapter 4, “What's new in TM1 Web,” on page 335.

Timeline of previous Planning Analytics releases

For a comprehensive listing of Planning Analytics component releases by month and year, see Timeline for IBM Planning Analytics Releases. You can view versions and release months for the following components:

- Planning Analytics Local TM1 Server
- Planning Analytics Workspace
- Planning Analytics for Microsoft Excel
- Planning Analytics Spreadsheet Services/TM1 Web

2.0.82 - Feature updates, November 10, 2022

IBM® Planning Analytics TM1 Web was refreshed on November 10, 2022 to include the following changes.

Updates to each version of TM1 Web are cumulative. To see what was new in the previous release, see Chapter 4, “What's new in TM1 Web,” on page 335.

Timeline of previous Planning Analytics releases

For a comprehensive listing of Planning Analytics component releases by month and year, see Timeline for IBM Planning Analytics Releases. You can view versions and release months for the following components:

- Planning Analytics Local TM1 Server
- Planning Analytics Workspace
- Planning Analytics for Microsoft Excel
- Planning Analytics Spreadsheet Services/TM1 Web

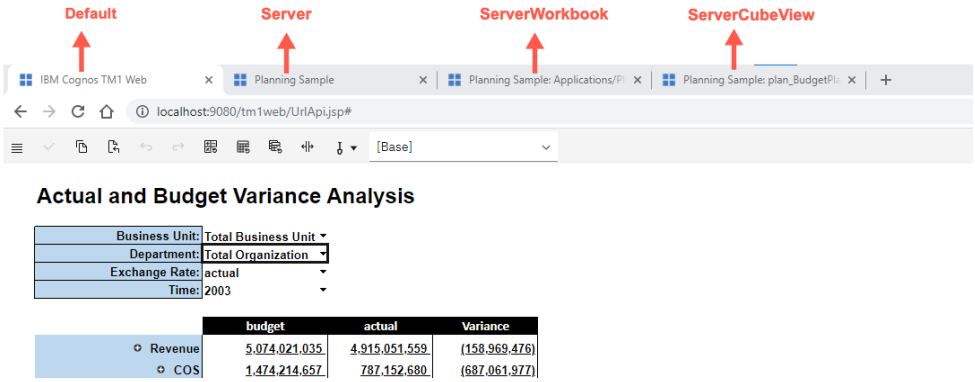
Rename websheet tabs with the URL API CustomTitle parameter

You can now rename websheet tabs in TM1 Web by using the new URL API parameter, `CustomTitle`.

You can configure the websheet tabs to display the:

- TM1 server name
- TM1 server name and workbook path (server:path)
- TM1 server, cube, and view names (server:cube:view)

If you do not use the `CustomTitle` parameter, you see the default **IBM Cognos TM1 Web** title in the websheet tab.



For more information, see URL API CustomTitle parameter.

Websheets now scalable in Planning Analytics Workspace

As of IBM Planning Analytics TM1 Web 2.0.82 and IBM Planning Analytics Workspace 2.0.81, websheets are scalable and compatible with the zoom feature in Planning Analytics Workspace.

2.0.81 - Feature updates, October 7, 2022

IBM® Planning Analytics TM1 Web was refreshed on October 7, 2022 to include the following changes.

Updates to each version of TM1 Web are cumulative. To see what was new in the previous release, see Chapter 4, “What's new in TM1 Web,” on page 335.

Timeline of previous Planning Analytics releases

For a comprehensive listing of Planning Analytics component releases by month and year, see Timeline for IBM Planning Analytics Releases. You can view versions and release months for the following components:

- Planning Analytics Local TM1 Server
- Planning Analytics Workspace
- Planning Analytics for Microsoft Excel
- Planning Analytics Spreadsheet Services/TM1 Web

Aligning releases for IBM Planning Analytics components

To simplify and align IBM Planning Analytics TM1 Web (Spreadsheet Services) releases with those across IBM Planning Analytics Workspace, IBM is labeling its next TM1 Web release as IBM Planning Analytics TM1 Web 2.0.81.

New TM1SET function supports alternate hierarchies

TM1SET, a new worksheet function that supports alternate hierarchies, is now available in IBM Planning Analytics for Microsoft Excel and IBM Planning Analytics TM1 Web. Until now, worksheet functions in both Planning Analytics for Excel and TM1 Web only supported default hierarchies.

Important: To use the TM1SET function, you must be on at least Planning Analytics for Microsoft Excel 2.0.81, TM1 Web 2.0.81, and IBM Planning Analytics Workspace 2.0.80.

Syntax

A dynamic and versatile function, the TM1SET takes nine arguments, and you can configure the function's output.

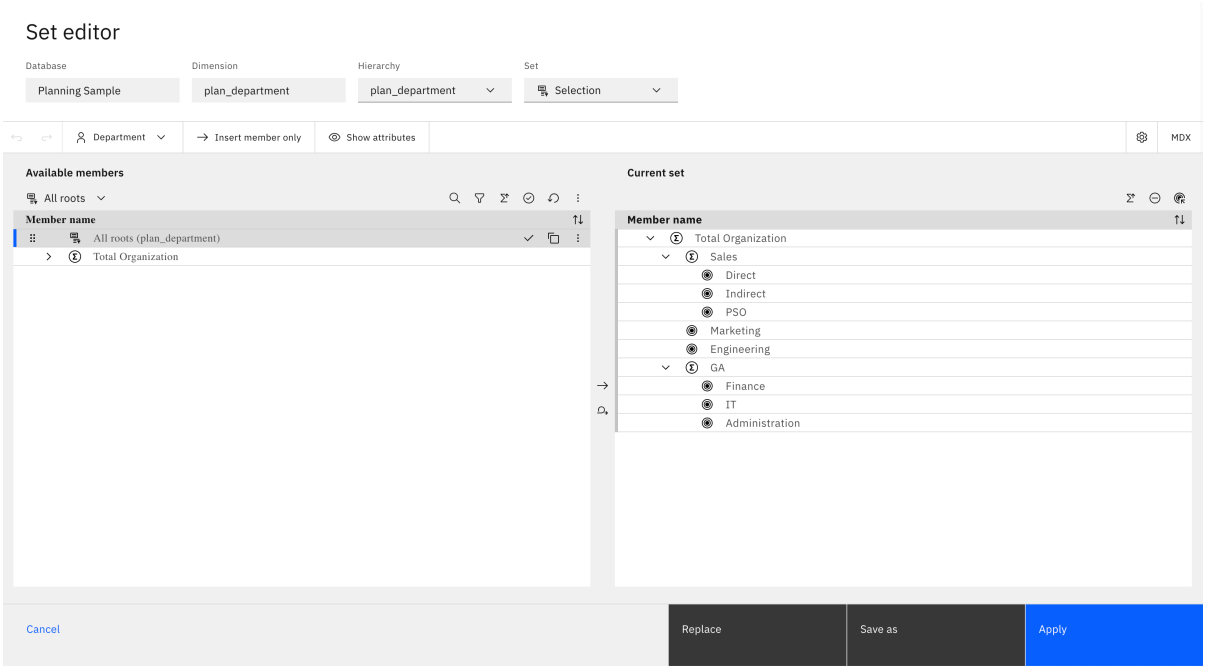
```
=@TM1SET(Host, Server, Dimension, Hierarchy, Set Expression, Selected Member, Session Set Id,
Active Alias, Output type)
```

Features

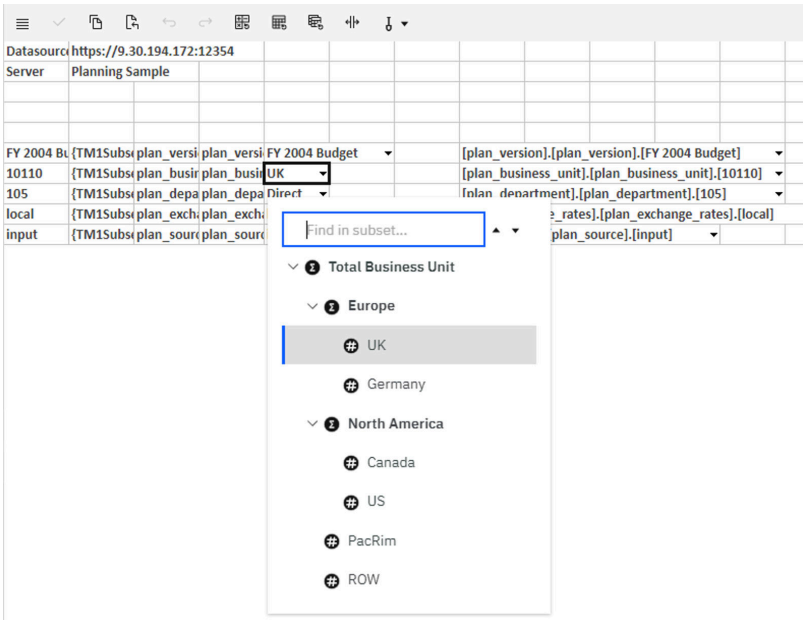
Much like the SUBNM formulas in TM1 Web, cells that contain the TM1SET function display a drop-down.

TM1SET supports set editor integration in Planning Analytics Workspace websheets. You can click a TM1SET cell to open the set editor and change the set definition such as selecting a different hierarchy.

Note: TM1SET in Planning Analytics Workspace on Cloud supports the new experience set editor. If you are using Planning Analytics Workspace Local, TM1SET uses the default set editor based on your settings.



In stand-alone TM1 Web, you cannot open the set editor from a TM1SET cell. Instead, click the cell and change your set selections by using TM1 Web's subset editor (member drop-down selector).



Note: To open the set editor or use the member drop-down in TM1SET cells, the cells must be in a tracked area named range. Tracked area named range implementation takes place in Planning Analytics for Excel. For more information, see TM1SET.

A powerful feature of TM1SET is its true reference traversal capability. TM1SET's arguments can be written inline, or they can be written in other cells and referenced in the TM1SET function. When you change a TM1SET function (for example, when you select a different hierarchy) that change applies to TM1SET's output **and** to any cells that might be referenced in the formula.

Synchronization is also supported in Planning Analytics Workspace websheets. When you enable synchronization in a websheet, any change to the set definition of the TM1SET is synchronized across the Planning Analytics Workspace websheet or book.

Note: Synchronization dimensions are currently not controlled by the tracked area named range. You might see untracked TM1SETs in the synchronization side panel.

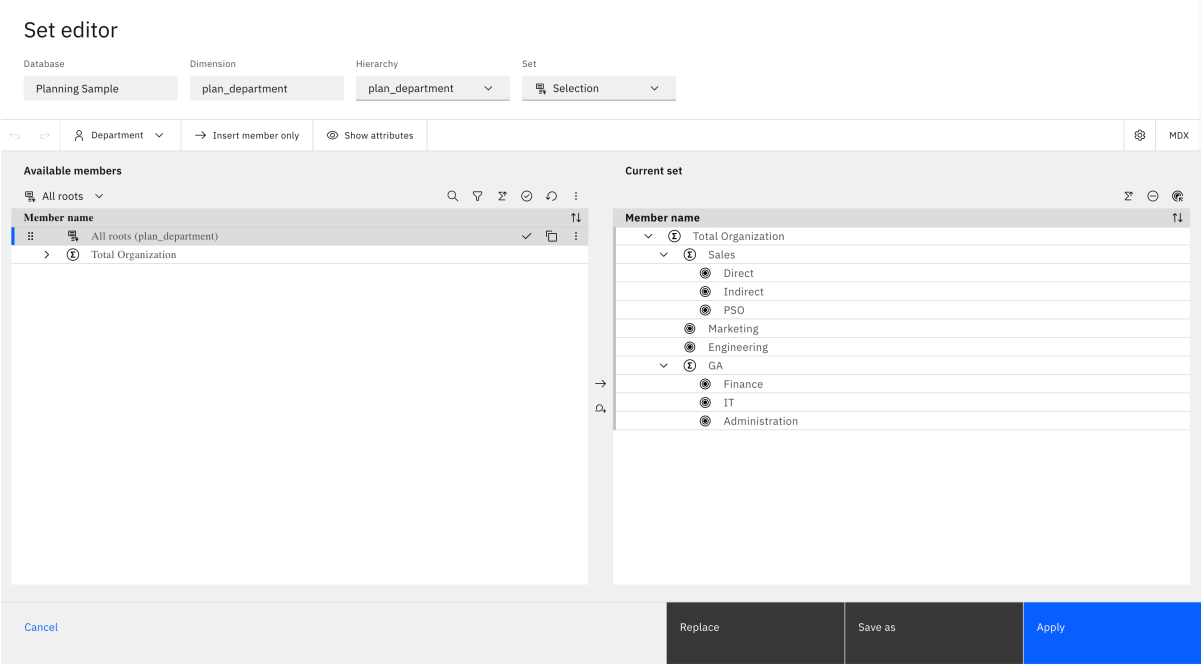
For more information, see TM1SET.

Set editor available for TM1SET function in websheets

The new TM1SET function in TM1 Web websheets supports the IBM Planning Analytics Workspace set editor. Previously, set editor integration was not supported in websheets.

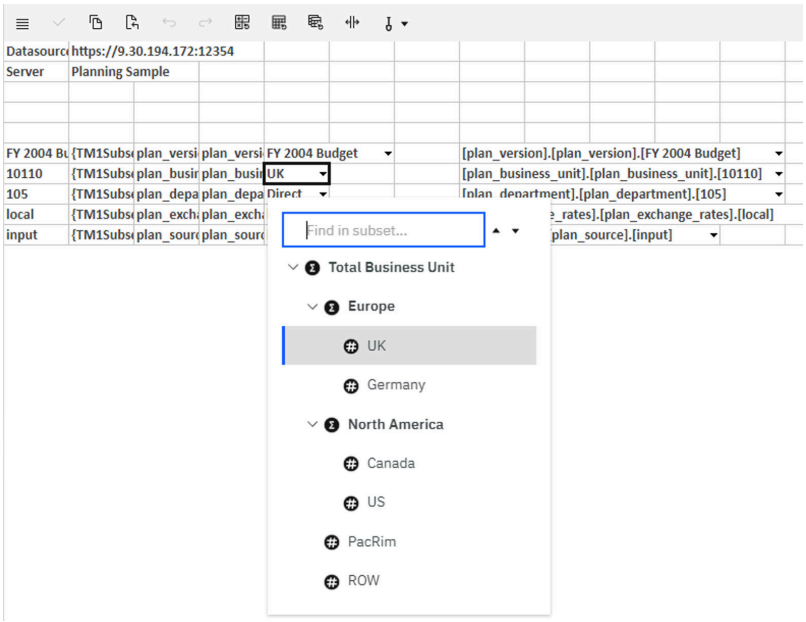
When you use websheets in Planning Analytics Workspace, you can open the set editor by double-clicking a cell that contains the TM1SET function.

Note: TM1SET in Planning Analytics Workspace Cloud supports the new experience set editor. If you are using Planning Analytics Workspace Local, TM1SET uses the default set editor based on your settings.



Any changes you make to the set definition, updates the output of the formula as well as any cells that the TM1SET references.

The TM1SET function in standalone TM1 Web uses TM1 Web's subset editor (member drop-down selector) instead of the Planning Analytics Workspace set editor.



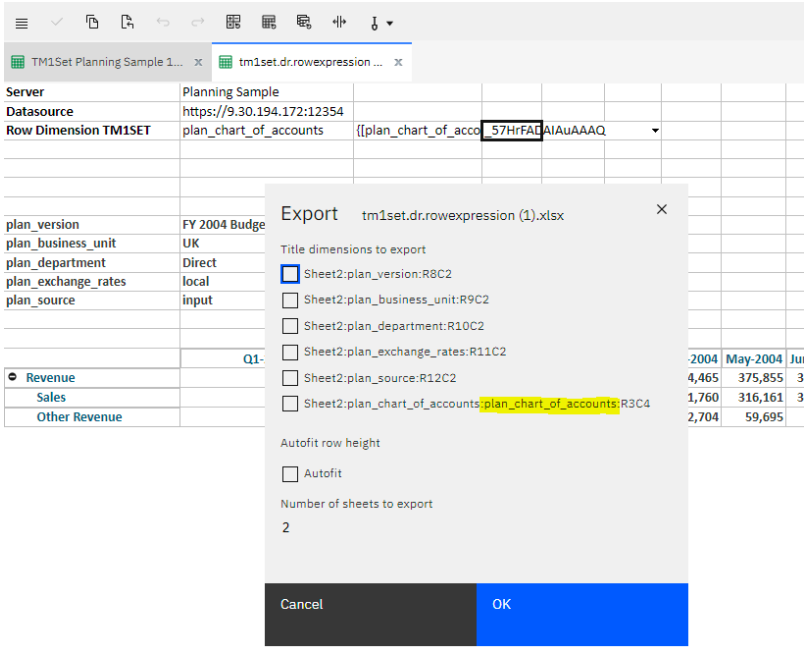
Note: To launch the set editor in Planning Analytics Workspace integrated websheets or use the member drop-down selector in standalone TM1 Web, cell(s) containing the TM1SET function must be in a tracked area named range (apply `tm2\\_tracked`). You can apply the tracked area name range to TM1SET cells in IBM Planning Analytics for Microsoft Excel.

Export dialog includes hierarchy name for TM1SET functions

When you export a websheet in TM1 Web (slice to Excel), the Export dialog displays the hierarchy name in the title dimension for TM1SET functions.

The hierarchy name makes it easy to identify the TM1SET you want to export and also lets you differentiate between a TM1SET and SUBNM formula. SUBNM title dimensions include only the dimension name.

Note: The TM1SET function must be in a tracked area named range for the hierarchy to display in the title dimension. You can apply tracked area to TM1SET cells in Planning Analytics for Microsoft Excel.



2.0.79 - Feature updates, August 9, 2022

IBM® Planning Analytics TM1 Web was refreshed on August 9, 2022 to include the following changes.

Updates to each version of TM1 Web are cumulative. To see what was new in the previous release, see Chapter 4, “What's new in TM1 Web,” on page 335.

Timeline of previous Planning Analytics releases

For a comprehensive listing of Planning Analytics component releases by month and year, see Timeline for IBM Planning Analytics Releases. You can view versions and release months for the following components:

- Planning Analytics Local TM1 Server
- Planning Analytics Workspace
- Planning Analytics for Microsoft Excel
- Planning Analytics Spreadsheet Services/TM1 Web

Aligning releases for IBM Planning Analytics components

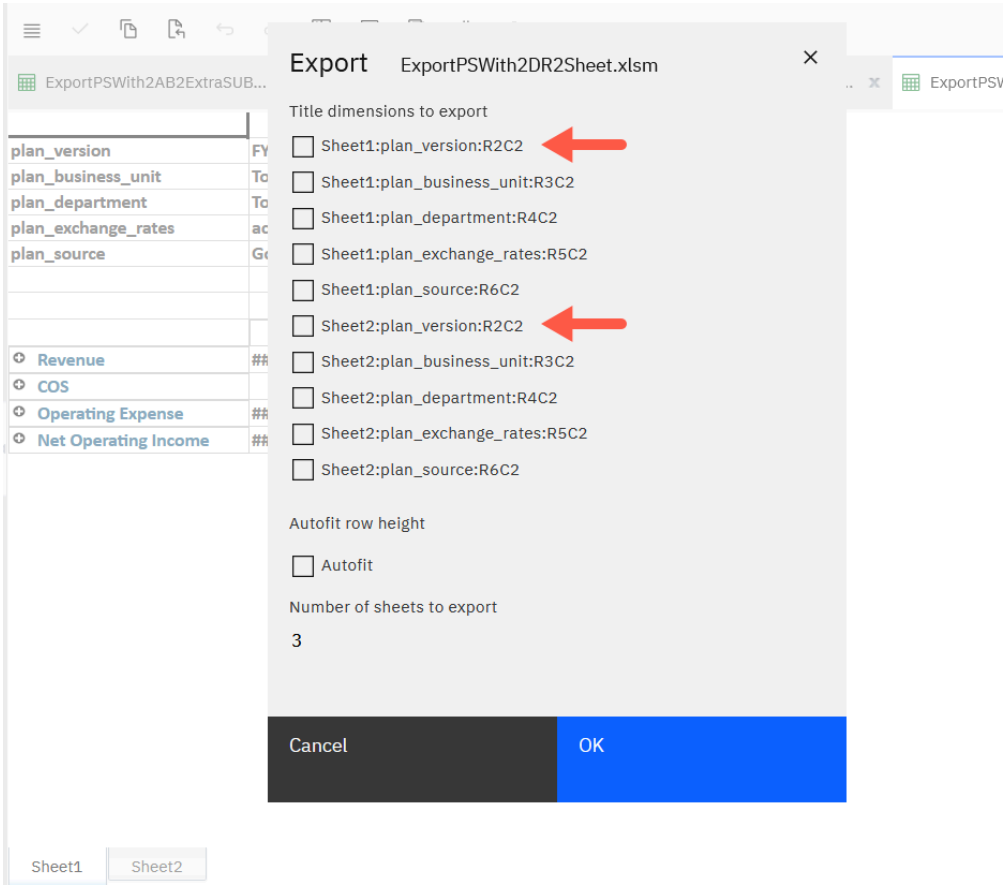
To simplify and align IBM Planning Analytics TM1 Web (Spreadsheet Services) releases with those across IBM Planning Analytics Workspace, IBM is labeling its next TM1 Web release as IBM Planning Analytics TM1 Web 2.0.79.

Location detail for SUBNMs included in the TM1 Web Export dialog

In TM1 Web, when you export a websheet (slice) to Excel, you can now see the location details for any cell that contains SUBNMs in the websheet. The location details appear in the **Export** dialog and along with the sheet name, includes the row and column number of the SUBNM. This makes it easier to identify SUBNMs and determine which SUBNM is driving the report based on its position. Previously, if there were multiple SUBNMs in a websheet with the same dimension name, it was difficult to identify the SUBNM when exporting.

Whether you have a websheet with multiple dynamic reports or multiple sheets, with the location details of all SUBNMs in each sheet, you can quickly select the dimensions you want to export.

The following example shows that SUBNM `plan_version` is located in the cell that is on Row 2 and Column 2 on Sheet 1 and Sheet 2.



Authentication enhancement for websheets in IBM Planning Analytics Workspace

You no longer see an authentication error when you open a TM1 websheet with data from multiple databases in Planning Analytics Workspace. Instead, an authentication page now displays for each database that is referenced in the websheet. Simply enter your credentials to open the websheet. This enhancement eliminates the need to manually resolve the authentication error, saving you time and effort.

In previous TM1 Web versions, you had to resolve the authentication error by going to the data tree, clicking each database referenced in the websheet, and entering your credentials. After you were authenticated against each database, you could open the websheet.

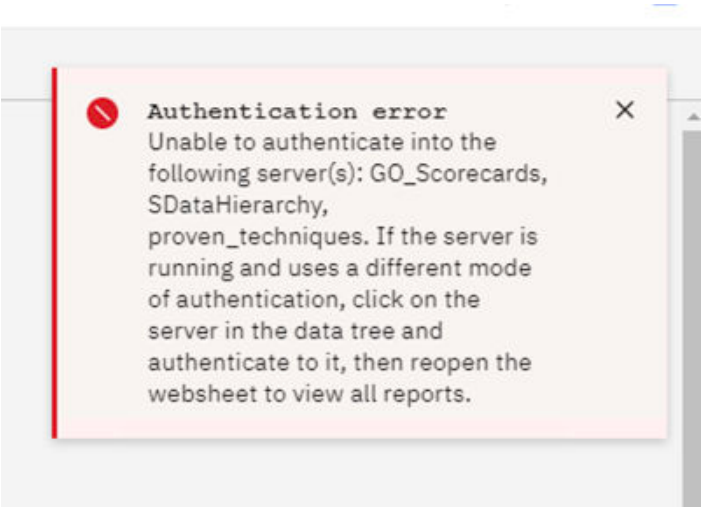
Known issues

The following are known issues in IBM Planning Analytics TM1 Web. These issues will be resolved in a future release.

Unable to log in to TM1 websheets with data from more than three databases

You might not be able to successfully open a TM1 websheet with data from more than three databases in IBM Planning Analytics Workspace.

When you try to open a websheet that has data from more than three databases, you can successfully authenticate against the first three databases but authentication against any additional database displays an error.



This limitation only applies to databases that were configured to use security mode 2.

For more information, see Authentication enhancement for websheets in IBM Planning Analytics Workspace.

2.0.77 - Feature updates, June 27, 2022

IBM® Planning Analytics TM1 Web was refreshed on June 27, 2022 to include the following changes.

Updates to each version of TM1 Web are cumulative. To see what was new in the previous release, see Chapter 4, “What's new in TM1 Web,” on page 335.

Timeline of previous Planning Analytics releases

For a comprehensive listing of Planning Analytics component releases by month and year, see Timeline for IBM Planning Analytics Releases. You can view versions and release months for the following components:

- Planning Analytics Local TM1 Server
- Planning Analytics Workspace
- Planning Analytics for Microsoft Excel
- Planning Analytics Spreadsheet Services/TM1 Web

Usability fixes for TM1 Web on Apple iPad

IBM® Planning Analytics TM1 Web 2.0.77 includes the following usability fixes for TM1 Web on Apple iPad:

- You can now scroll in the subset editor by using touch gestures.
- You can now pinch to zoom in or out in Websheets on an iPad.

For more information, see Accessing TM1 Web from Apple iPad.

2.0.76 - Feature updates, May 6, 2022

IBM® Planning Analytics TM1 Web was refreshed on May 6, 2022 to include fixes only.

Updates to each version of TM1 Web are cumulative. To see what was new in the previous release, see Chapter 4, “What's new in TM1 Web,” on page 335.

Timeline of previous Planning Analytics releases

For a comprehensive listing of Planning Analytics component releases by month and year, see Timeline for IBM Planning Analytics Releases. You can view versions and release months for the following components:

- Planning Analytics Local TM1 Server
- Planning Analytics Workspace
- Planning Analytics for Microsoft Excel
- Planning Analytics Spreadsheet Services/TM1 Web

2.0.75 - Feature updates, April 8, 2022

IBM® Planning Analytics TM1 Web was refreshed on April 8, 2022 and includes the following changes.

Updates to each version of TM1 Web are cumulative. To see what was new in the previous release, see Chapter 4, “What's new in TM1 Web,” on page 335.

Timeline of previous Planning Analytics releases

For a comprehensive listing of Planning Analytics component releases by month and year, see Timeline for IBM Planning Analytics Releases. You can view versions and release months for the following components:

- Planning Analytics Local TM1 Server
- Planning Analytics Workspace
- Planning Analytics for Microsoft Excel
- Planning Analytics Spreadsheet Services/TM1 Web

Custom fonts supported in websheets

Websheets can display custom fonts that have been uploaded in Planning Analytics Workspace.

When an administrator uploads a custom font in Planning Analytics Workspace, the font can be applied and displayed in websheets.

For details on how to make custom fonts available in websheets, see Upload custom fonts.

2.0.74 - Feature updates, March 4, 2022

IBM® Planning Analytics TM1 Web was refreshed on March 4, 2022 to include fixes only.

Updates to each version of TM1 Web are cumulative. To see what was new in the previous release, see Chapter 4, “What's new in TM1 Web,” on page 335.

Timeline of previous Planning Analytics releases

For a comprehensive listing of Planning Analytics component releases by month and year, see Timeline for IBM Planning Analytics Releases. You can view versions and release months for the following components:

- Planning Analytics Local TM1 Server
- Planning Analytics Workspace
- Planning Analytics for Microsoft Excel
- Planning Analytics Spreadsheet Services/TM1 Web

2.0.73 - Feature updates, February 10, 2022

IBM® Planning Analytics TM1 Web was refreshed on February 10, 2022 and includes the following changes.

Updates to each version of TM1 Web are cumulative. To see what was new in the previous release, see Chapter 4, “What's new in TM1 Web,” on page 335.

Timeline of previous Planning Analytics releases

For a comprehensive listing of Planning Analytics component releases by month and year, see Timeline for IBM Planning Analytics Releases. You can view versions and release months for the following components:

- Planning Analytics Local TM1 Server
- Planning Analytics Workspace
- Planning Analytics for Microsoft Excel
- Planning Analytics Spreadsheet Services/TM1 Web

Aligning releases for IBM Planning Analytics components

To simplify and align IBM Planning Analytics for Microsoft Excel and IBM Planning Analytics TM1 Web (IBM Planning Analytics Spreadsheet Services) releases with those of IBM Planning Analytics Workspace, IBM is labeling its next Planning Analytics for Excel and TM1 Web release as IBM Planning Analytics for Microsoft Excel 2.0.73 and IBM Planning Analytics TM1 Web 2.0.73.

Design improvements

As part of our continued investment in IBM Carbon Design methodology, IBM® Planning Analytics TM1 Web 2.0.73 includes the following changes:

- a stylesheet update that replaces bold font in IBM Plex Sans with IBM Plex Sans-SemiBold
- removal of the ability to sort comments in the **Browse comments** dialog box

2.0.70 - Feature updates, January 5, 2022

IBM® Planning Analytics TM1 Web was refreshed on January 5, 2022 and includes the following changes.

Updates to each version of TM1 Web are cumulative. To see what was new in the previous release, see Chapter 4, “What's new in TM1 Web,” on page 335.

IBM Planning Analytics TM1 Web no longer supports the Planning Analytics Workspace Classic interface

IBM Planning Analytics TM1 Web 2.0.69 and later releases no longer support embedded Websheets in Planning Analytics Workspace books without the Planning Analytics Workspace "New Experience" interface.

Planning Analytics on Cloud environments can use either the Classic or New Experience interface. Classic for Planning Analytics Local refers to the interface in PAW 2.0.55 and earlier releases.

The Planning Analytics Workspace New Experience was released in October 2020 as part of the 2.0.56 update for Planning Analytics on Cloud and 2.0.57 for Planning Analytics Local. This new experience showcases a new look and feel, improves navigation and content management, and introduces the Applications and Plans, and Predictive Forecasting capabilities.

Planning Analytics on Cloud customers that are using the Planning Analytics Workspace Classic interface with Websheets that are embedded in books should avoid updating to TM1 Web 2.0.69 or higher. If an upgrade to TM1 Server is needed for a Planning Analytics on Cloud environment, contact IBM Support to discuss the version of TM1 Web packaged with the TM1 Server upgrade.

2.0.69 - Feature updates, November 9, 2021

The IBM® Planning Analytics TM1 Web refresh on November 9, 2021 includes the following changes.

Updates to each version of TM1 Web are cumulative. To see what was new in previous releases, see Chapter 4, “What's new in TM1 Web,” on page 335.

Required update for Web pages that use the TM1 JavaScript library

The HTML <head> section in each custom web page that uses the TM1 JavaScript library now requires the inclusion of a `<script> dojoConfig` reference to enable access to TM1 Web.

Update the <head> section of your HTML pages, using the following tags and references as a template.

```
<!DOCTYPE html>
<html>
<head>
<meta charset="UTF-8">
<meta http-equiv="X-UA-Compatible" content="IE=edge">
<script> dojoConfig =
 {paths:
  {"react": "../react/react.production.min",
   "react-dom": "../react/react-dom.production.min",
   "prop-types": "../carbon/prop-types.min",
   "carbon-icons": "../carbon/carbon-icons",
   "carbon-components-react": "../carbon/carbon-components-react"}
 };
</script>
</head>
<body class="exp tm1web"></body>
</html>
```

New look for messaging in TM1 Web

Messages in TM1 Web have been updated to use Carbon Design principles. This provides a consistent user experience across IBM products.

You'll notice that the color and style of messages have changed.

Warning, Success, and Info messages no longer require explicit acknowledgment or dismissal. Messages quickly fade after their initial display.

Error messages continue to require acknowledgment.

For more information about Carbon Design principles, see https://www.carbondesignsystem.com.

2.0.68 - Feature updates, October 8, 2021

The IBM® Planning Analytics TM1 Web refresh on October 8, 2021 includes the following changes.

Updates to each version of TM1 Web are cumulative. To see what was new in the previous release, see Chapter 4, “What's new in TM1 Web,” on page 335.

Claro theme deprecation

The Claro theme is deprecated and no longer available in Planning Analytics Spreadsheet Services/TM1 Web as of Planning Analytics 2.0.68.

Any references to the Claro theme will fail and any widgets that use the Claro theme will appear unstyled.

2.0.67 - Feature updates, August 9, 2021

IBM® Planning Analytics TM1 Web was refreshed on August 9, 2021 to include fixes only.

Updates to each version of TM1 Web are cumulative. To see what was new in the previous release, see Chapter 4, “What's new in TM1 Web,” on page 335.

2.0.66 - Feature updates, July 12, 2021

IBM® Planning Analytics TM1 Web was refreshed on July 12, 2021 to include fixes only.

Updates to each version of TM1 Web are cumulative. To see what was new in the previous release, see Chapter 4, “What's new in TM1 Web,” on page 335.

2.0.65 - Feature updates, June 11, 2021

IBM® Planning Analytics TM1 Web was refreshed on June 11, 2021 to include fixes only.

Updates to each version of TM1 Web are cumulative. To see what was new in the previous release, see Chapter 4, “What's new in TM1 Web,” on page 335.

2.0.64 - Feature updates, May 13, 2021

IBM® Planning Analytics TM1 Web was refreshed on May 13, 2021 to include fixes only.

Updates to each version of TM1 Web are cumulative. To see what was new in the previous release, see Chapter 4, “What's new in TM1 Web,” on page 335.

2.0.63 - Feature updates, April 12, 2021

IBM® Planning Analytics TM1 Web was refreshed on April 12, 2021 to include the following updates.

Updates to each version of TM1 Web are cumulative. To see what was new in the previous release, see Chapter 4, “What's new in TM1 Web,” on page 335.

Retrieve data from multiple TM1 databases in a websheet

You can now retrieve data from more than one TM1 database in a websheet. Limitations to this ability that were present in previous releases have been removed.

Planning Analytics SC 2.0.62 introduced the ability to retrieve data from multiple TM1 databases in a websheet, but imposed two limitations:

- all databases referenced in a websheet had to be registered on the same Admin host
- you could use multiple TM1 databases in a websheet only on Planning Analytics Local

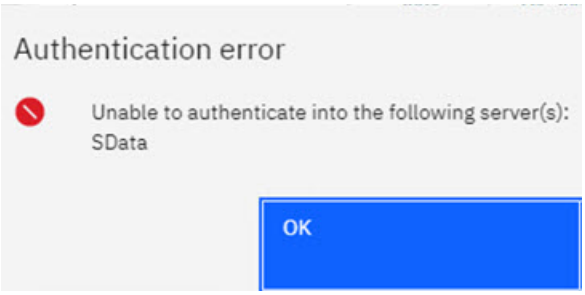
These limitations have been removed. A websheet can now reference databases that are registered on different Admin hosts. You can also retrieve data from multiple TM1 databases in a websheet on both Planning Analytics Workspace Local and Planning Analytics on Cloud.

You can retrieve data from multiple databases only in Custom Reports and Dynamic Reports, which use the VIEW function to retrieve data.

To successfully reference multiple databases in a websheet:

- Database names must be static; computed database names are not supported.
- All databases must be configured to use the same authentication mode.
- Users must have common credentials across databases.

If one of the referenced databases is not running or a connection cannot be established, you will see an error in the websheet.



You can learn more about websheets in the Websheets overview.

2.0.62 - Feature updates and known issues, March 8, 2021

IBM® Planning Analytics TM1 Web was refreshed on March 8, 2021. This release includes a known issue regarding unexpected labels in websheet Scatter Charts.

The Scatter Charts issue is described here

Updates to each version of TM1 Web are cumulative. To see what was new in the previous release, see Chapter 4, “What's new in TM1 Web,” on page 335.

Retrieve data from multiple TM1 databases in a websheet (Planning Analytics Workspace local only)

You can now retrieve data from more than one TM1 database in a websheet.

All databases referenced in a websheet must be registered on the same Admin host.

You can retrieve data from multiple databases only in Custom Reports and Dynamic Reports, which use the VIEW function to retrieve data.

To successfully reference multiple databases in a websheet:

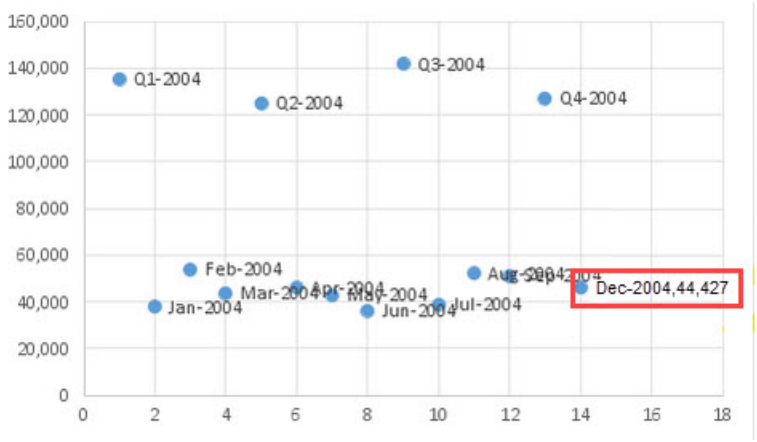
- Database names must be static; computed database names are not supported
- All databases must be configured to use the same authentication mode
- Users must have common credentials across databases

Unexpected label in websheet Scatter Chart

This issue occurs when label text in a Scatter Chart is edited to use customized/hardcoded text.

Instead of displaying the customized label text, the label displays [x-value], [y-value]. X value and y value are the values for the data point as set in the range of the chart.

The highlighted label in this image illustrates the issue.



This issue will be corrected in an upcoming release.

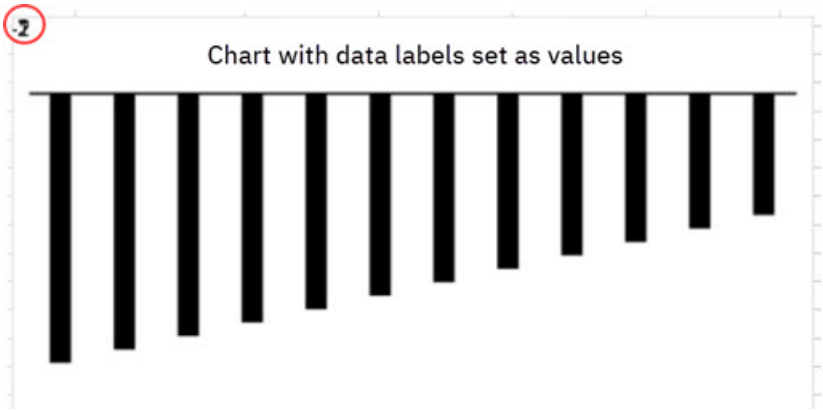
2.0.61 - Feature updates and known issues, February 9, 2021

IBM® Planning Analytics TM1 Web was refreshed on February 9, 2021 to include fixes only. There are no new features, but a known issue regarding label misalignment in charts is described here.

Updates to each version of TM1 Web are cumulative. To see what was new in the previous release, see Chapter 4, “What's new in TM1 Web,” on page 335.

Chart labels are misaligned in websheets

In the uncommon chart configuration where chart data labels are set as values in Excel, the labels are mispositioned in the corresponding TM1 Web websheet. The labels appear at the upper left of the chart, with all labels superimposed, as in the following image.



This issue will be corrected in an upcoming release.

2.0.60 - Feature updates and known issues, December 17, 2020

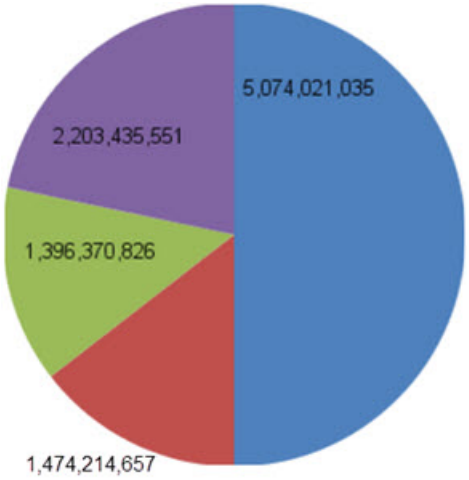
IBM® Planning Analytics TM1 Web was refreshed on December 17, 2020 to include fixes only. There are no new features, but a known issue regarding label misalignment in pie charts is described here.

Updates to each version of TM1 Web are cumulative. To see what was new in the previous release, see Chapter 4, “What's new in TM1 Web,” on page 335.

Pie chart labels are misaligned in websheets

Pie chart labels in TM1 Web websheets are sometimes misaligned in comparison to the chart labels in the source Excel spreadsheet.

In some cases, a segment label can appear outside of the segment to which it applies, as in the following example.



This issue will be corrected in an upcoming release.

2.0.59 - Feature updates, November 13, 2020

IBM® Planning Analytics TM1 Web was refreshed on November 13, 2020 to include fixes only.

Updates to each version of TM1 Web are cumulative. To see what was new in the previous release, see Chapter 4, “What's new in TM1 Web,” on page 335.

2.0.58 - Feature updates, October 20, 2020

IBM® Planning Analytics TM1 Web was refreshed on October 20, 2020 to include fixes only.

Updates to each version of TM1 Web are cumulative. To see what was new in the previous release, see Chapter 4, “What's new in TM1 Web,” on page 335.

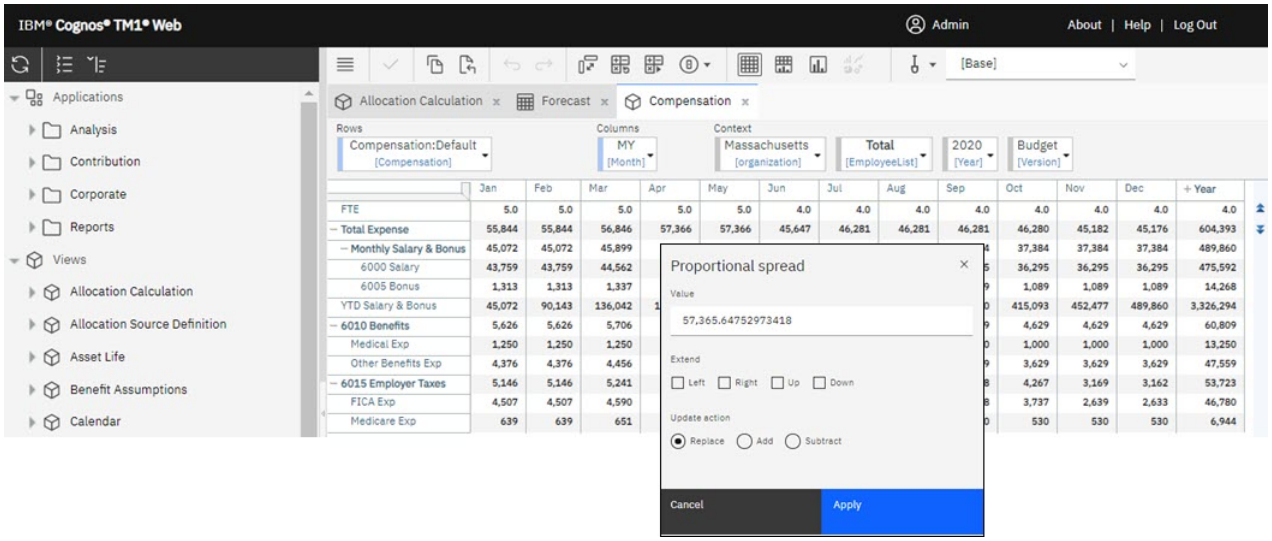
2.0.57 - Feature updates, September 21, 2020

IBM Planning Analytics TM1 Web was refreshed on September 21, 2020 to include the following updates.

New user experience

The TM1 Web user interface has been updated to provide a more consistent experience with other IBM products. A new login page and simplified icons throughout TM1 Web are the most prominent changes you'll notice.

Gestures, menu selections, and functionality remain unchanged. All existing websheets, views, and reports continue to work just as you'd expect.



Updates to each version of TM1 Web are cumulative. To see what was new in the previous release, see Chapter 4, “What's new in TM1 Web,” on page 335.

2.0.56 - Feature updates, August 12, 2020

IBM® Planning Analytics TM1 Web was refreshed on August 12, 2020 to include fixes only.

Updates to each version of TM1 Web are cumulative. To see what was new in the previous release, see Chapter 4, “What's new in TM1 Web,” on page 335.

2.0.55 - Feature updates, July 16, 2020

IBM Planning Analytics TM1 Web was refreshed on July 16, 2020 to include the following features and notices.

Updates to each version of TM1 Web are cumulative. To see what was new in the previous release, see Chapter 4, “What's new in TM1 Web,” on page 335.

New release schedule for TM1 Web

As of the 2.0.55 SC release of IBM Planning Analytics, new versions of TM1 Web will be released on a more frequent schedule. New versions will be available approximately once a month, similar to the release schedules of IBM Planning Analytics Workspace and IBM Planning Analytics for Microsoft Excel.

TM1 Web is no longer included in the 2.0.x LC releases of Planning Analytics.

New installer for TM1 Web

As of the 2.0.9.2 LC/2.0.55 SC releases of IBM Planning Analytics, TM1 Web is installed with the IBM Planning Analytics Spreadsheet Services installer. TM1 Web is no longer part of the web tier within the Planning Analytics Local installer.

For details on installing TM1 Web with the IBM Planning Analytics Spreadsheet Services installer, see Installing and configuring Planning Analytics TM1 Web.

2.0.9 - Feature updates, December 16, 2019

IBM Planning Analytics Local version 2.0.9 and the cloud-only release of IBM Planning Analytics version 2.0.9 includes the following updates for TM1 Web.

Use dynamic shapes and images in websheets

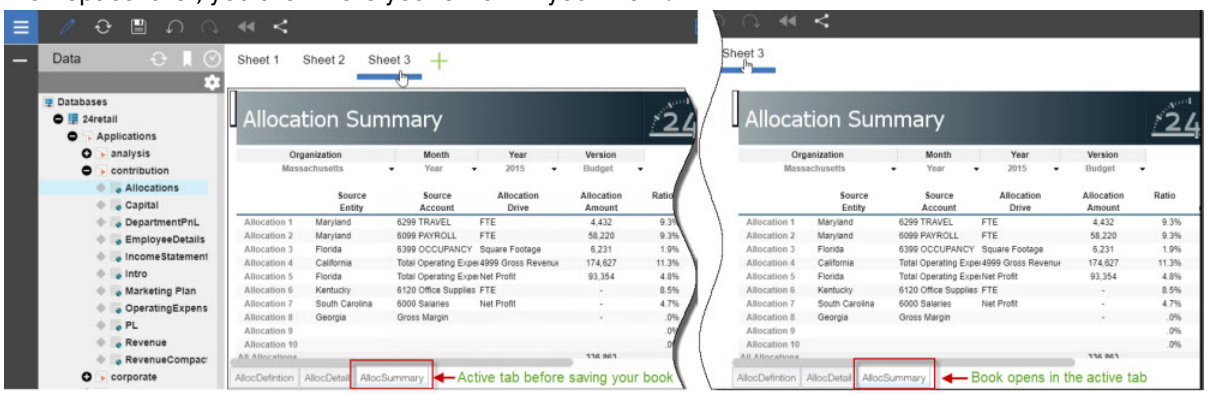
Customize your websheets! In TM1 Web, you can dynamically insert shapes and images anywhere in your websheet where you'd like the image to change when the value of a cell changes. You can dynamically insert logos, employee pictures, flags, product images, and more.

A dynamic image can be created by assigning a named range that contains an INDIRECT or INDEX-based formula to an image object. The formula resolves to a cell reference, and if an image is anchored to that cell, the dynamic shape reflects that image object's content.

To support this feature, TM1 Web persists the assigned formula, and when it recalculates, TM1 Web evaluates the named range formula to a cell reference. Using this cell reference, TM1 Web can then update the image object's file name to match the referenced image.

Open a websheet on the active tab when you save a multi-tab websheet

If you have a websheet with multiple tabs in a book, Planning Analytics Workspace keeps track of the active websheet tab when you save the book. Then, when you open the book in Planning Analytics Workspace later, you are where you left off in your work!



Using Planning Analytics version 2.0.9 and Planning Analytics Workspace version 2.0.46, when you open a book with a websheet in Planning Analytics Workspace, the tab that you saved the websheet with is active.

Note: You must be using Planning Analytics Workspace on IBM Planning Analytics version 2.0.9 to take advantage of this feature of websheets in IBM Planning Analytics TM1 Web.

If you don't have Planning Analytics version 2.0.9, the default tab that the websheet was published with (using TM1 Perspectives or Planning Analytics for Microsoft Excel) is active when you open the book in Planning Analytics Workspace.

2.0.8 - Feature updates, June 21, 2019

IBM Planning Analytics Local version 2.0.8 and the cloud-only release of IBM Planning Analytics version 2.0.8 includes the following updates for TM1 Web.

Include user names and memory usage in TM1 Web logs

User names and memory usage are included in TM1 Web logs. This update makes it easy to see when a user runs an active form, workbook, or cube that renders too many rows. To turn on this optional logging, the logging level of `log4j.logger.com.ibm.cognos.tm1` must be set to DEBUG in the `\tm1_64\webapps\tm1web\WEB-INF\configuration\log4j.properties` file. You can review the audit logs and reduce the number of rows in the rendering.

The following information is included in logs:

- Timestamp
- Application and Active Form name

- Number of rows that were generated
- User name
- Current heap memory after the websheet renders

Example log when you open an active form

```
"<TIMESTAMP>:CLASSNAME:Constructed view for <ActiveFormViewid> contains <#> rows, by user
'<username>'.
<TIMESTAMP>:CLASSNAME:Current heap memory usage: <MB>".
```

Example log when you open a workbook

```
"<TIMESTAMP>:CLASSNAME:Creating WorkbookMetaData for <sheet name>, by user '<username>'.
<TIMESTAMP>:CLASSNAME:Current heap memory usage: <MB>".
```

Example log when you open a cube view

```
"<TIMESTAMP>:CLASSNAME:Exit from getUpdatedCubeViewData, updatedData: class name, username:
<username>.
<TIMESTAMP>:CLASSNAME:Current heap memory usage: <MB>".
```

Changes saved automatically in TM1 Application Web

In Planning Analytics version 2.0.8, the **Save** confirmation dialog box in IBM TM1 Application Web has been removed. When you close a view, you are not prompted to save changes. All data changes are saved automatically when you close the application. Your changes are available when you reopen the application. This change applies to all web browsers.

Configure login using TM1 Web URL API with Cognos Analytics security

In Planning Analytics version 2.0.8, a new parameter `CSPHeaderFrameSource` is available in the `tm1web_config.xml` file. If you use the TM1 Web URL API configured with integrated security mode 5 (Cognos Analytics security authentication), you must set this parameter to allow users to log in. This parameter controls security of the context that is loaded in the `<frame>` element, which is used by TM1 Web URL API. The `CSPHeaderFrameSource` parameter defines allowed sources for Content-Security-Policy (CSP) `frame-src` policy.

Syntax

```
<add key="CSPHeaderFrameSource" value="" />
```

If the `CSPHeaderFrameSource` is specified, it sets the allowed sources for the `frame-src` policy. If the value is left blank or the parameter is not set, the default value is '*', which allows content from all sources to load.

Remember: In IBM Planning Analytics Local version 2.0.8, you install a new version of the `tm1web_config.xml` file that is called `tm1web_config.xml.new` and your existing `tm1web_config.xml` file is preserved. To take advantage of fixes that are applied to this release, you must rename the `tm1web_config.xml.new` file to `tm1web_config.xml` and you must reapply any changes that you made to your previous configuration settings.

Example

```
<add key="CSPHeaderFrameSource" value="'self'" />
```

Sets the `frame-src` policy to 'self'.

Allows contents from the site's origin to load.

Example

```
<add key="CSPHeaderFrameSource" value="http://CAM_HOST:CAM_PORT http://
TM1WEB_HOST:TM1WEB_PORT" />
```

Sets the `frame-src` policy to http://CAM_HOST:CAM_PORT http://TM1WEB_HOST:TM1WEB_PORT.

Allows contents from CAM_HOST:PORT and TM1WEB_HOST:PORT to load.

What to do next

For more information on how to define sources for `frame-src`, see Sources on the MDN web docs site.

Relational data sources in TM1 Web websheets removed

Removed in v2.0.8 The ability to use relational data sources in TM1 Web has been removed from IBM Planning Analytics Local version 2.0.8. The IBM Data Server Driver for JDBC and SQLJ 4.17 (10.5.0.2) have also been removed from the installation kit (db2cc4.jar, ojdbc6.jar, sqlj4.zip, sqljdbc4.jar).

Planning Analytics version 2.0.7 was the last release with support for relational data sources in TM1 Web websheets.

2.0.7 - Feature updates, April 29, 2019

IBM Planning Analytics Local version 2.0.7 and the cloud-only release of IBM Planning Analytics version 2.0.7 includes the following updates for TM1 Web.

Load websheets faster in TM1 Web

To optimize loading of websheets in TM1 Web, you can set a new feature flag `OptimizeCssForHiddenContent`. The feature flag can be added in `tm1_64\webapps\tm1web\WEB-INF\configuration\features.json`.

When `OptimizeCssForHiddenContent` is set to `true`, CSS style information that comes from hidden content (sheets, rows, columns, cells, or controls) is excluded during websheet loading.

`OptimizeCssForHiddenContent` is set to `false` by default.

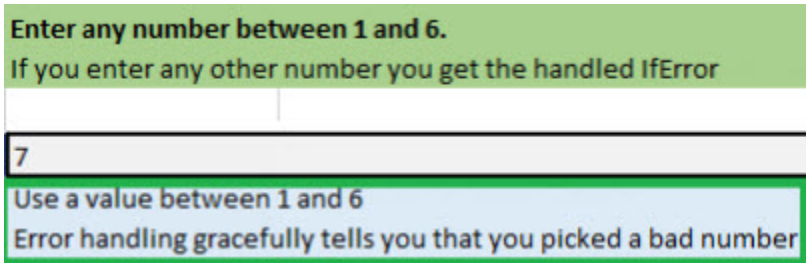
Example

```
{
    "NestedDbsEvaluation": false,
    "NewIrrAlgorithm": false ,
    "OptimizeCssForHiddenContent": true
}
```

Use the IFERROR Excel function in TM1 Web

IBM Planning Analytics TM1 Web now supports the use of the IFERROR function in websheets.

The IFERROR function traps errors in a formula and returns an alternative result, such as text, when an error is detected.



Take advantage of improved cell formatting in TM1 Web websheets

The cell formatting of currency, fractions, phone numbers, and social security numbers in TM1 Web websheets has improved.

The following changes have been made to formatting of cells in websheets:

- For numbers with more than 15 digits, cells in websheets round up the number to the first 15 digits. For example, "123456789123456992.00" appears as "123456789123457000.00". In Excel, only the first 15 digits are stored and remaining digits are replaced by zeros. For example, "123456789123456992.00" appears as "123456789123456000.00".
- Currency appears with no space after the $ sign. Negative currency also appears with no space after the dollar sign. For example, "$99.00" and "-$999.00".
- Fractions are formatted to appear in fraction format "# ??/??" with a space between the whole number and the fraction. When the number is a whole number, the cell is formatted without a space after the whole number.
- Phone numbers are formatted as "(nnn) nnn-nnnn" as in Excel.
- Social security numbers are formatted with the first 9 digits. Any digits that follow the first 9 digits are truncated. For example, "1849348202" appears as "184-93-4820" with the last digit "2" truncated. This formatting is different in Excel. For numbers with more than 9 digits, Excel adds the format to the last 9 digits while the additional digits at the beginning don't change. For example, in Excel, "1849348202" appears as "1849-34-8202".

Table 7. Cell formatting comparison

TM1 Web version 2.0.6 or earlier	TM1 Web version 2.0.7 or later	Cell formatting in Excel
123456789123456992.00	123456789123457000.00	123456789123456000.00
-99.00	-99.00	-99.00
$ 99.00	$99.00	$99.00
-$ 999.00	-$999.00	-$999.00
7/16/2038	7/16/2038	7/16/2038
Friday, April 03, 2150	Friday, April 03, 2150	Friday, April 3, 2150
25-Feb	25-Feb	25-Feb
0:00:00	0:00:00	0:00:00
4545.00%	4545.00%	4545.00%
44	44	44
01606	01606	01606
5.085959855E9	(508) 595-9855	(508) 595-9855
1849-34-8202	184-93-4820	1849-34-8202

This cell formatting is enabled by default in TM1 Web websheets with the feature flag `NewDataFormatter`. The feature flag can be set in `tm1_64\webapps\tm1web\WEB-INF\configuration\features.json`.

Example

```
{
    "NestedDbsEvaluation": false,
    "NewIrrAlgorithm": false ,
    "NewDataFormatter": true
}
```

Check out updated TM1 Web configuration defaults

The following TM1 Web configuration parameters have new default settings. These settings were previously recommendations. They are now default settings in the `tm1web_config.xml` file for new installations of TM1 Web.

Note: Some default configuration parameter values for Planning Analytics on cloud are different than in Planning Analytics Local.

ExportCellsThreshold
Specifies the maximum number of cells that an export of a websheet or a cube view can contain.

Default changed from blank to 1000000.

MaximumConcurrentExports
Specifies the maximum number of concurrent exports that can be executed from TM1 Web.

The default value in Planning Analytics on cloud is set to 3. This default value is unchanged.

The default value in Planning Analytics Local is changed from 5 to 4.

MaximumSheetsForExport
Specifies the maximum number of sheets that are allowed to export.

Default changed from 100 to 50.

WorkbookMaxCellCount
Specifies the maximum cell count of a workbook as a number with no thousands separators.

Default changed from -1 to 500000.

For more information, see TM1 Web configuration parameters.

Deprecation of relational datasources in TM1 Web websheets

Deprecated Planning Analytics version 2.0.7 is the last release with support for relational datasources in TM1 Web websheets.

2.0.6 - Feature updates, October 11, 2018

IBM Planning Analytics Local version 2.0.6 and the cloud-only release of IBM Planning Analytics version 2.0.6 includes the following features for TM1 Web.

New parameter to configure session timeout for TM1 Web

In IBM Planning Analytics Local version 2.0.6, there is a new parameter in the `tm1web_config.xml` file called `HttpSessionTimeout`. This parameter defines the session timeout (in minutes) of the HTTP session for TM1 Web.

If the `HttpSessionTimeout` parameter is not specified (missing or blank), the value is less than 1 or not a numerical value, the default `session-timeout` that is defined in the `web.xml` file is used.

Important: As of IBM Planning Analytics Local version 2.0.6, you must not change the `session-timeout` value in the `web.xml` file.

Remember: In IBM Planning Analytics Local version 2.0.6, you install a new version of the `tm1web_config.xml` file that is called `tm1web_config.xml.new` and your existing `tm1web_config.xml` file is preserved. To take advantage of fixes that are applied to this release, you must rename the tm1web_config.xml.new file to tm1web_config.xml and you must reapply any changes that you made to your previous configuration settings.

2.0.5 - Feature updates, June 25, 2018

IBM Planning Analytics Local version 2.0.5 and the cloud-only release of IBM Planning Analytics version 2.0.5 includes the following features for TM1 Web.

Changes to `web.xml` file

If you are upgrading IBM Planning Analytics TM1 Web with this installation of IBM Planning Analytics Local version 2.0.5, you install a new version of the `web.xml` file called `web.xml.new` and your existing `web.xml` file is preserved.

To take advantage of fixes applied in this release, you must use the `web.xml.new` file and you must reapply any changes that you made to your previous configuration settings. In particular, restore your values for **`session-timeout`**.

1. Back up the existing `web.xml` file in `<PA_installation_location>/webapps/tm1web/WEB-INF`. For example, rename `web.xml` to `web.xml.old`. This step backs up your current settings.
2. Rename `web.xml.new` to `web.xml`. This step uses the new version of `web.xml` that is supplied with IBM Planning Analytics Local version 2.0.5.
3. Replace the entry for **`session-timeout`** in `web.xml` with the entry from `web.xml.old`. This step restores any changes that you made to this property previously.

   For example:

```
<session-config>
    <session-timeout>20</session-timeout>
</session-config>
```

Exporting to PDF

Exporting a websheet to PDF uses the print area information. If you define a print area in a worksheet, only the data in that area will be exported to PDF. This behavior is the same as printing from Excel.

2.0.3 - Feature updates, September 19, 2017

IBM Planning Analytics Local version 2.0.3 and the cloud-only release of IBM Planning Analytics version 2.0.3 includes the following features for TM1 Web.

Display the current TM1 database label in TM1 Web

The TM1DatabaseLabel parameter displays the TM1 database label in the banner along with the user name. For more information, see TM1DatabaseLabel Parameter and TM1 Web Configuration Parameters.

Specify the maximum cell count of a workbook

The WorkbookMaxCellCount parameter specifies the maximum cell count of a workbook as a number with no thousands separators. You can use WorkbookMaxCellCount to avoid issues opening workbooks with many cells.

For more information, see TM1 Web Configuration Parameters.

Limit the number of cells that can be exported from websheets

The ExportCellsThreshold parameter specifies the maximum number of cells that an export of a websheet or a cube view can contain. If the number of selected cells exceeds the threshold, a warning message is displayed and the export does not start.

For more information, see TM1 Web Configuration Parameters.

Hide dimensions in the cube viewer

The CubeViewerHiddenDimensionsEnabled parameter allows you to hide dimensions in the TM1 Web cube viewer.

For more information, see TM1 Web Configuration Parameters.

Waterfall chart support

TM1 Web supports excel-based Waterfall charts in websheets. These charts were released in Microsoft Excel 2016.

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