



Planning Space 20.3 Update 12 Release Notes

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Planning Space 20.3 Update 12 Release Notes

RELEASE DATE: 19 January 2024

General Notes

Updates are based on full installations of Planning Space. All changes in previous Updates are included in the latest Update.

Support Ticket information: Ticket numbers refer to Cases in the Quorum Software Support service in Salesforce.

Note for installation: if the Planning Space installer fails to complete when installing "in place" (i.e., when a previous version of Planning Space is still installed), it is important to completely uninstall the previous version *and to reboot the server machine* before using the installer again. This is because the Windows OS may have pending installations (i.e., they are deferred to the next reboot) that are interfering with the Planning Space installation.

Database upgrades for this release

A mandatory database upgrade for Tenant databases is required for this update.

Upgrade path for Version 16.5

See the *Planning Space 20.3 Deployment Guide* ([Version 20 Upgrade Paths](#)) for the latest information about upgrade paths from version 16.5 to version 20.3.

Planning Space (IPS)

New Features

- SSL certificates for Secure HTTP: Certificates that are based on the CNG storage provider can now be installed in the IPS Server.

For more information about these changes, see the [Planning Space Deployment Guide](#) .

Planning Space Dataflow

New Features

- Bulk Utility: Grid columns can be grouped together; the group will be shifted in the grid as a single unit; a background color can be applied to all of the grid cells in the group.
- Single Document editor - Variable tooltip: The hover tooltip on variable labels now shows the variable's Prompt and Comments values; previously only the Prompt was shown.
- Bulk Utility: Background colors can be applied to variable values in grid cells based on a setting per each variable.
- Single Document editor - 'mention' email notifications for Comments: The email which is sent to mentioned users has been improved so that the specific variable is reported, and the URL link will open the document at the specific variable and comment.
- Document Type Templates: Calculation logging has been improved to detect cyclic variable references in templates.

For more information about these changes, see the [Planning Space User Manual](#) .

Fixed Defects

Description	Support Ticket
Document Type Template editor: Fixed an issue for 'TimeSeriesGrid' elements where variables could be duplicated in several rows, and values in the selector combo could be inserted into rows by mistake. Now only one instance of a variable will be allowed in the grid, and the variables already assigned to rows will not appear in the selector for new rows.	23-00923007
Data Propagator: Fixed a bug where an inactive tag was used in the preset editor and the tag was appearing as "Tag not found" in the Propagator blade.	—
Load from Economics tool: Fixed a bug in the aggregation logic which was causing loading errors "Project <X> is not calculated".	23-00908894, 23-00920209
Bulk Utility - Document calculation: Fixed a bug in the document calculation logic where, in the case of Boolean properties referencing each other within an expression, incorrect values for expressions were appearing in the Bulk Utility when a scenario variable was also being displayed.	23-00932378

Planning Space Economics and Financials

New Features and Fixed Defects apply to both applications, unless otherwise noted.

New Features

- Regime module function library: Added the function MIRR to calculate the modified internal rate of return for periodic cash flows.
- Regime module function library: The PARTNERVALUE function now accepts a Text variable as the input parameter for the partner name.

For more information about these changes, see the [Planning Space User Manual](#).

Fixed Defects

Description	Support Ticket
Regime Library: Improvements have been made in the logic for updating regimes; this addresses timeout errors which have occurred when the tenant data include a large number (thousands) of hierarchies.	—
Economics OData API: Fixed a bug in the resource '/data/v1/calculate' where a 500 server error was occurring after a modification had been made in a result set report's Currency & Discounting preset, due to incorrect caching of the report configuration.	—
Hierarchy folder delete operation: Fixed an issue that was causing a timeout error for large (over 50,000 projects) hierarchies.	—
Result Set Reports: Fixed a bug in the 'As Flat List' download process where a project name containing the ampersand character (&) was causing the export to fail with an "Entity Name" error.	23-00918948
Result Set Reports: Fixed a bug in the 'As Flat List' download process where the file path was too long for reports to be exported.	23-00918363
Regime Library: Fixed a bug in the IsLastPeriod function which was giving incorrect output in the case where FiscalYearEnd was not set to 'December'.	—

Planning Space 20.3 Update 11 Release Notes

RELEASE DATE: 24 November 2023

General Notes

Updates are based on full installations of Planning Space. All changes in previous Updates are included in the latest Update.

IMPORTANT - Digital Signature change: This release is using a new signing certificate (since 2023-10-08) with the digital signature 'Quorum Business Solutions, Inc.' (replacing 'Aucerna').

Note for installation: if the Planning Space installer fails to complete when installing "in place" (i.e., when a previous version of Planning Space is still installed), it is important to completely uninstall the previous version *and to reboot the server machine* before using the installer again. This is because the Windows OS may have pending installations (i.e., they are deferred to the next reboot) that are interfering with the Planning Space installation.

Database upgrades for this release

Upgrades are not required for this update.

Upgrade path for Version 16.5

See the *Planning Space 20.3 Deployment Guide* ([Version 20 Upgrade Paths](#)) for the latest information about upgrade paths from version 16.5 to version 20.3.

Planning Space Dataflow

Fixed Defects

Description	Support Ticket
Data Aggregator: Fixed an issue that was causing unreliable aggregation results in the case of ScalarString and ScalarDateTime variables. The aggregator logic will now always select the first non-null values for these variable types.	—

Planning Space Economics and Financials

New Features and Fixed Defects apply to both applications, unless otherwise noted.

Fixed Defects

Description	Support Ticket
Dataflow integration: Fixed a bug where the data sync operation was failing if the Dataflow link contained only property data (i.e., no scenario data to be updated).	—
Ringfencing: Fixed a bug that was causing incorrect calculations on monthly periodic data when the 'Fiscal Year-End' setting was not set to 'December'.	—

Planning Space 20.3 Update 10 Release Notes

RELEASE DATE: 18 October 2023

General Notes

Updates are based on full installations of Planning Space. All changes in previous Updates are included in the latest Update.

IMPORTANT - Digital Signature change: This release is using a new signing certificate with the digital signature 'Quorum Business Solutions, Inc.' (replacing 'Aucerna').

Database upgrades for this release

Upgrades are not required for this update.

Upgrade path for Version 16.5

See the *Planning Space 20.3 Deployment Guide* ([Version 20 Upgrade Paths](#)) for the latest information about upgrade paths from version 16.5 to version 20.3.

Planning Space (IPS)

Fixed Defects

Description	Support Ticket
Product licensing: Fixed a bug that was causing a License Manager error "Unable to obtain the licenses... Value cannot be null" in the Desktop Application when the license mode was set to "Per tenant" without proxy.	—

Planning Space Dataflow

Fixed Defects

Description	Support Ticket
Dataflow OData API: Fixed a bug that could cause incorrect values for 'DocumentType' to be returned for wide table API requests (AllScalarVariablesWide, AllPeriodicVariablesWide). This bug affected tenant databases where the Dataflow document type names are not consistent with document template names. (Note: a manual fix based on database scripts is available for version 20.3 Update 9.)	—

Planning Space 20.3 Update 9 Release Notes

RELEASE DATE: 06 October 2023

General Notes

Updates are based on full installations of Planning Space. All changes in previous Updates are included in the latest Update.

Support Ticket information: Tickets can be accessed only in Salesforce; the ticket (case) numbers start with '22-' or '23-'. The Freshdesk ticket system was withdrawn from use on 2023-06-05; all open tickets have been migrated to Salesforce.

Advance Notice about digital signature change: All Planning Space versions released after 2023-10-08 will use a new signing certificate and the digital signature will be changed from 'Aucerna' to 'Quorum Business Solutions, Inc.'.

Note for installation: if the Planning Space installer fails to complete when installing "in place" (i.e., when a previous version of Planning Space is still installed), it is important to completely uninstall the previous version *and to reboot the server machine* before using the installer again. This is because the Windows OS may have pending installations (i.e., they are deferred to the next reboot) that are interfering with the Planning Space installation.

Known Issue

Dataflow OData API: An issue has been found which affects tenant databases where the Dataflow document type names are not consistent with document template names. In this case the data returned for OData wide tables (AllScalarVariablesWide, AllPeriodicVariablesWide) is incorrect: the value of 'DocumentType' returned contains the document template name, rather than the expected DocumentType name. You can test for the issue by comparing the outputs from the following API requests:

```
PlanningSpaceDataflow/api/v2/documenttypes?$select=id,name
```

```
PlanningSpaceDataflow/api/v2/documenttypetemplates?$select=documentType  
eId,name
```

The returned names should be identical, if not the issue is present.

A defect fix will be included in the 20.3 U10 release; or a manual fix can be applied using a database script in a 20.3 U09 deployment. Affected customers can contact Quorum Support for access to the database script and help on how to use it.

Database upgrades for this release

A mandatory database upgrade for Tenant databases is required for this update.

Upgrade path for Version 16.5

See the *Planning Space 20.3 Deployment Guide* ([Version 20 Upgrade Paths](#)) for the latest information about upgrade paths from version 16.5 to version 20.3.

Planning Space (IPS)

Fixed Defects

Description	Support Ticket
Dataflow API Swagger web interface: Removed incorrect preamble hyperlinks, and fixed the download link for the 'swagger.json' file.	—
Upgraded the CefSharp browser component in Planning Space to version v116.0.230 to address a critical vulnerability (CVE-2023-4863).	—

Planning Space Dataflow

New Features

- Bulk Utility - Presets: Security permissions have been added to presets; by default a new preset will be accessible only to the user who created it; permissions for 'read only' access and editor access can be granted to single users and workgroups, so that shared use and management of the presets can be flexibly configured.
- Single Document editor: A new search function for variables has been added; this enables rapid navigation to the variables in a document regardless of whether they are embedded in multiple levels of nested tabs.
- Expression Editor: An optional default parameter has been added to the GETSCENARIODATA expression function. If a scenario referenced by the expression doesn't exist in a document, then the default value will be returned.
- Dataflow API: Added permissions for presets ('/api/v2/permissions/instance/presets'); this is currently only effective for Bulk Utility presets; API requests to access or modify preset configurations ('/api/v2/preset') will require the user account to have the correct permissions.
- Single Document editor - Timeseries grid: Added a 'Summary' option for the row summary column (selected by default) which uses each variable's configured Timescale Consolidation Method for the summary calculation. This ensures that the summary values displayed are always meaningful for each variable. (Note the 'Max' and 'Min' summary options have been removed.)
- Single Document editor - Comments: Added a mention feature so that typing the '@' symbol followed by a user's name will cause an email notification to be sent to the user.
- Dataflow OData API Wide tables - critical functional changes and performance improvements: The API performance for OData 'Wide' requests has been significantly improved. *Paging now works in the same way as the v16.5 API, relying on the ODataWideAndTailTableMaxRowsPerRequest application setting; the 'pagesize' API parameter now denotes the number of documents being queried, and not as previously the number of variable data*

rows. **IMPORTANT:** Existing API queries that are part of integration workflows should be modified to delete all uses of the 'pagesize' parameter. If the default paging algorithm does not give satisfactory results, it is recommended to adjust the application setting rather using 'pagesize' as an override in API requests. Note additional functional changes: (1) documents without variable data will always be included in returned data if the OData request filters are satisfied; (2) if no filter is applied for the scenario in the request input, the API will now only return the default scenario(s) for each document type involved in the query.

- Document WI Tree: New 'All categories' option in the Add Category dialog so that all categories of all regimes are listed.
- Single Document editor menu: The top menu has been made responsive to window size, so that a compact (icons only) version of the menu will appear when the application window is not wide enough to display the full menu.

For more information about these changes, see the [Planning Space User Manual](#) .

Fixed Defects

Description	Support Ticket
Document Type Templates: Fixed a bug where removing an instance of a variable that contained expressions from a template was incorrectly removing expressions from other instances of the same variable.	23-00892364
Hierarchy toolbar - Reload button: The button was showing 'refresh' state (exclamation mark) after documents had been edited in the Bulk Utility, which was not useful. Now, the 'refresh' state will only be activated for adding, deleting, moving or renaming documents.	—
Document Permissions editor: Fixed a bug that was causing an exception error when trying to save permissions in cases where permissions had been changed for a workgroup, then a second change operation was applied for that workgroup which reverted the previous change.	—
Dataflow OData API: Fixed a bug that was causing datetime values in returned data to use the local server timezone and not UTC.	—

Planning Space Economics and Financials

New Features and Fixed Defects apply to both applications, unless otherwise noted.

Fixed Defects

Description	Support Ticket
Dataflow link - Pivot and Aggregate: Fixed an issue where the truncated data periods were not correctly set (the start/end dates of the first child source variable were always applied and not adjusted for subsequent variables).	23-00895114

Planning Space 20.3 Update 8 Release Notes

RELEASE DATE: 02 August 2023

General Notes

Updates are based on full installations of Planning Space. All changes in previous Updates are included in the latest Update.

Database upgrades for this release

A mandatory database upgrade for Tenant databases is required for this update.

Upgrade path for Version 16.5

See the *Planning Space 20.3 Deployment Guide* ([Version 20 Upgrade Paths](#)) for the latest information about upgrade paths from version 16.5 to version 20.3.

Planning Space Dataflow

New Features

- New 'Update Currency Settings' function to modify currency settings for variables in bulk, acting on a selected set of documents in the version hierarchy.

For more information about these changes, see the [Planning Space User Manual](#) .

Fixed Defects

Description	Support Ticket
Single Document editor - Working Interest: Fixed a bug where the Working Interest tree was incorrectly showing variable categories instead of working interest categories.	—

Planning Space 20.3 Update 7 Release Notes

RELEASE DATE: 14 July 2023

General Notes

Updates are based on full installations of Planning Space. All changes in previous Updates are included in the latest Update.

Support Ticket information: Tickets can be accessed only in Salesforce; the ticket (case) numbers start with '22-' or '23-'. The Freshdesk ticket system was withdrawn from use on 2023-06-05; all open tickets have been migrated to Salesforce.

Note for installation: if the Planning Space installer fails to complete when installing "in place" (i.e., when a previous version of Planning Space is still installed), it is important to completely uninstall the previous version *and to reboot the server machine* before using the installer again. This is because the Windows OS may have pending installations (i.e., they are deferred to the next reboot) that are interfering with the Planning Space installation.

Advance notice for the Planning Space 32-bit applications: The 32-bit versions of the Dataflow and Portfolio applications will be discontinued in a future release of Planning Space Version 20.

Database upgrades for this release

A mandatory database upgrade for Tenant databases is required for this update.

Upgrade path for Version 16.5

See the *Planning Space 20.3 Deployment Guide* ([Version 20 Upgrade Paths](#)) for the latest information about upgrade paths from version 16.5 to version 20.3.

Planning Space (IPS)

New Features

- Audit Log: Added detailed records for the editing of user accounts (changes to individual data fields, account status, API key).
- Audit log: New OData endpoint '/planningspace/data/v1/auditlogs' for access to log data.

For more information about these changes, see the [Planning Space Deployment Guide](#) .

Planning Space Dataflow

New Features

- **Hierarchy - Tree view:** This is now modified based on the current states of the Search function and the Hierarchy Filter (if document types are filtered, only those in the filter and their parent types in the hierarchy will be displayed; if a search is applied, only the parts of the hierarchy containing the matching documents will be displayed).
- **Bulk Utility:** Added the ability to change the order of the grid columns by drag and drop.
- **Bulk Utility - edit/save/publish workflow:** The need to manually switch documents to edit mode has been removed. Editable document rows are immediately editable when loaded into the BU, and modified documents go into edit mode when the user performs a save operation.
- **Bulk Utility - data export:** the export function will now save data in CSV output which has the same ordering of columns and filtered data as in the current state of the BU grid.
- **Document publish - 'Change Document' dialog:** The 'Shift' versus 'Truncate' button selection state will be stored and re-appear in the same state when the dialog is used in the user's current and future sessions.
- **Bulk Utility:** Users can now do copy-and-paste from Excel for numerical values which have accounting or currency formats applied.
- **Bulk Utility - Variables selector:** Variables with expressions now appear with a specific icon, so that they are easily differentiated from variables without expressions.
- **Single Document editor:** The state of the opened document is now persistent when the user re-opens the editor in the current session and the state will be restored when the user starts a new Planning Space session; also the hierarchy automatically expands at the location of the open document.

For more information about these changes, see the [Planning Space User Manual](#) .

Fixed Defects

Description	Support Ticket
Dataflow Configuration - Document Template manager: Fixed a bug that could cause the loss of newly-added variables when the template was published.	23-00905387
Dataflow Configuration - Document Template manager: When a variable is copied and pasted within the editor, the variable IDs are now checked to prevent the creation of duplicates (an error message is displayed to the user).	—
Hierarchy-Document editor: Fixed a bug that was causing an error when opening a document and the version name contained a quote character.	—
Load from Database tool: Fixed an issue that was causing the failure of some loader templates due to a high number of variable mappings.	23-00907597
Configuration - Currencies Management: Fixed a UI bug where using the mouse scroll action was causing an application error.	23-00892271

Planning Space Economics and Financials

New Features and Fixed Defects apply to both applications, unless otherwise noted.

New Features

- Result Set calculations: New option to disable folder incrementals for the entire Result Set (Standard or Sensitivity), replacing the need to do manual settings for individual hierarchy nodes.
- Regimes - Function Library: Added new functions so that Working Interest partner settings can be modified by the regime logic.
- Regimes - Excel Economics spreadsheet models: Added functionality so that multiple linked spreadsheets can be executed using a single call of the 'ExecuteSpreadsheet' function.
- Dataflow integration - Pivot & Aggregate link: Added an optional Inflation Date setting to the link configuration.
- Dataflow integration - Pivot & Aggregate link: the Unit System and Unit Size settings have been removed from the link configuration; they are no longer required because the unit transformations between Dataflow and Economics/Financials are handled automatically.
- Regimes - Excel Economics spreadsheet models: The 'ProjectIndex' cell in OUT rows can now contain a calculated value based on inputs and internal calculations, rather than a static value. This improvement makes it possible to have simpler models with fewer placeholder sections.
- Regimes - Excel Economics spreadsheet models: Groups of linked spreadsheets can be inspected and have breakpoints set in the debugger; and the complete group of spreadsheet files can be exported in a runnable linked state.

For more information about these changes, see the [Planning Space User Manual](#).

Fixed Defects

Description	Support Ticket
Result Set calculations: Fixed a bug that was causing the error "Unexpected Error when building ringfenced calculator" which was occurring in the case where a module weighting variable no longer existed or was invalid; the calculation logic now checks for variable validity and in case of failure it substitutes 'Default' for the weighting variable.	23-00902211
Result Set calculations - unweighted ringfencing: Fixed a bug that was causing the error "Unexpected Error when building ringfenced calculator" when the 'Align scenarios (unweighted)' option was enabled and a project scenario had been selected which did not exist in one of the projects.	23-00884265
Result Set calculations: Fixed an issue that was causing errors due to a missing setting when 'Inherit economic limit from parent node' was enabled. The option 'Use economic limit set in project' is now enforced as a default.	23-00884747
Result Set - Project Sensitivities configuration: Fixed a UI slow performance issue that occurred when the 'Inherit project sensitivities from	23-00888052

Description	Support Ticket
parent node' checkbox was un-checked in cases where a large number of regimes needed to be scanned to load the variable information for the selection dialog; this load operation has now been optimized.	
Result Set calculations: Fixed an issue that was causing the calculation error "There was an error in calculating the working interest shares" for ringfenced projects.	23-00885469
OData API: Fixed a bug that was causing a '500' error response to result set data requests due to incorrect handling of empty data tables in the tenant database.	—
Result Sets - Term Variables Sensitivities: Fixed a bug that was causing incorrect handling of sensitivities when more than one regime was added to the configuration (only the first regime's term overrides were being processed, the other regimes' overrides were being ignored).	23-00888643
OData API requests for Result Set data: Fixed a bug that was breaking paged downloads when the result set name contained accented characters.	23-00888997
Regime import: Fixed issues that were causing very slow importing for regime files containing large numbers of variables; the function logic has been improved for efficiency, error checking, and more linear dependence on the number of variables.	23-00894088
Hierarchy clone operation: Fixed an issue that was causing a timeout error for large (over 50,000 projects) hierarchies.	—

Planning Space 20.3 Update 6 Release Notes

RELEASE DATE: 05 May 2023

General Notes

Updates are based on full installations of Planning Space. All changes in previous Updates are included in the latest Update.

Support Ticket information: Tickets with numbers starting '22-' or '23-' can be accessed in Salesforce; other tickets can be accessed in Freshdesk. When a ticket for the same issue exists in both systems, both numbers are included. (The Freshdesk system was deprecated on 2022-11-07 and it is not updated with new information.)

Note for installation: if the Planning Space installer fails to complete when installing "in place" (i.e., when a previous version of Planning Space is still installed), it is important to completely uninstall the previous version *and to reboot the server machine* before using the installer again. This is because the Windows OS may have pending installations (i.e., they are deferred to the next reboot) that are interfering with the Planning Space installation.

Advance notice for the Planning Space 32-bit applications: The 32-bit versions of the Dataflow and Portfolio applications will be discontinued in a future release of Planning Space Version 20.

Database upgrades for this release

A mandatory database upgrade for IPS Common and Tenant databases is required for this update.

Upgrade path for Version 16.5

See the *Planning Space 20.3 Deployment Guide* ([Version 20 Upgrade Paths](#)) for the latest information about upgrade paths from version 16.5 to version 20.3.

Planning Space (IPS)

New Features

- Upgraded the CefSharp browser component in Planning Space to version v112.

For more information about these changes, see the [Planning Space Deployment Guide](#) .

Fixed Defects

Description	Support Ticket
Authentication using an Identity Provider: Fixed an issue that was causing failure to launch the tenant web page for IDP-initiated logins.	—

Planning Space Dataflow

New Features

- Hierarchy viewer: The toolbar at the top of the viewer now has an overflow menu which appears automatically when the width of the viewer is not sufficient to display all of the tool buttons; the overflow button is used to access the tools that are not being displayed.

For more information about these changes, see the [Planning Space User Manual](#).

Fixed Defects

Description	Support Ticket
Single Document editor - Document rename: The usability has been improved by displaying the Publish dialog immediately after a document rename; this ensures that documents will be calculated and all expressions will be up to date, and also that pending edits will be published.	—
Document Template editor: Fixed a bug where internal system variables (i.e. names starting with "System") were incorrectly appearing in variable selection lists and could be configured for use in templates. Also, the Dataflow API has new validation checks so that system variables with the protected prefix "System" cannot be created or modified through the API.	—
DEFERREDRATE expression function: Fixed a bug that was causing the function error "Index was out of range" in the case where a deferred rate was set for a time period before the production starts.	—
Single Document editor - Timeseries data: Fixed a bug where adding a value to an empty cell was causing all of the other empty cells to be filled with zero values.	—
Reporting: Improved the function logic to deal with slow performance for reports involving large numbers of variables.	23-00897668

Planning Space Economics and Financials

New Features and Fixed Defects apply to both applications, unless otherwise noted.

New Features

- Regimes - Function Library: Added new functions so that Working Interest partner settings can be modified by the regime logic.

For more information about these changes, see the [Planning Space User Manual](#) .

Fixed Defects

Description	Support Ticket
Regime import: Fixed issues that were causing very slow importing for regime files containing large numbers of variables; the function logic has been improved for efficiency, error checking, and closer to linear dependence on the number of variables.	23-00894088
Dataflow integration - Pivot & Aggregate link: Fixed a bug that was causing duplication of the 'Gross' category in project Working Interest Share settings in the UI, in cases where a WI variable was mapped by the Dataflow link.	—

Planning Space 20.3 Update 5 Release Notes

RELEASE DATE: 24 March 2023

General Notes

Updates are based on full installations of Planning Space. All changes in previous Updates are included in the latest Update.

Support Ticket information: Tickets with numbers starting '22-' or '23-' can be accessed in Salesforce; other tickets can be accessed in Freshdesk. When a ticket for the same issue exists in both systems, both numbers are included. (The Freshdesk system was deprecated on 2022-11-07 and it is not updated with new information.)

Note for installation: if the Planning Space installer fails to complete when installing "in place" (i.e., when a previous version of Planning Space is still installed), it is important to completely uninstall the previous version *and to reboot the server machine* before using the installer again. This is because the Windows OS may have pending installations (i.e., they are deferred to the next reboot) that are interfering with the Planning Space installation.

Advance notice for the Planning Space 32-bit applications: The 32-bit versions of the Dataflow and Portfolio applications will be discontinued in a future release of Planning Space Version 20.

Database upgrades for this release

A mandatory database upgrade for IPS Common and Tenant databases is required for this update.

Upgrade path for Version 16.5

See the *Planning Space 20.3 Deployment Guide* ([Version 20 Upgrade Paths](#)) for the latest information about upgrade paths from version 16.5 to 20.3.

Planning Space (IPS)

Fixed Defects

Description	Support Ticket
SAML-based authentication: Fixed a bug that was causing login failure due to the IPS Server interpreting SAML URLs with case-sensitivity.	23-00883234

Planning Space Dataflow

New Features

- Single Document editor: Improved the spreadsheet-style functionality of timeseries grids.
- Single Document editor: Added a feature that allows discussion-format text comments to be applied to individual data values in a document.
- A new API endpoint has been implemented to create variables in bulk.
- Financials and Economics Mapping: Improved the usability of the mapping configuration page. Outdated variable mappings will now be highlighted allowing for a review and manual fix.
- Load from Economics tool - UI change: The result set run selection is now persistent between the batch setup tabs.

For more information about these changes, see the [Planning Space User Manual](#) .

Fixed Defects

Description	Support Ticket
Revision History: Fixed a UI bug where economics settings which had been migrated were not being correctly displayed in the UI.	—
Single Document and Bulk Utility editors: The Expression popup window now resizes properly to display long expressions.	—
Bulk Utility - Export and Import: Fixed an issue with inconsistent date formats in exported CSV data; the 'local short date' format (i.e., as configured in the local machine Regional settings) will now be applied to exported data, and the Bulk Utility Import function will only accept data that is using the same format.	—
Single Document editor: Fixed a UI bug that was causing timeseries grids to appear contracted, after a 'Cancel Edit' operation.	—
Load from Database tool: Fixed a bug that was causing Economics calculation errors when a document was loaded that had an Economics link defined.	23-00885786
Single Document editor: Improved the UI performance when switching between tabs.	—

Planning Space Economics and Financials

New Features and Fixed Defects apply to both applications, unless otherwise noted.

New Features

- Reporting: Added Real/Nominal settings for individual linked variables in report templates; report runs can use the setting 'From Template' to apply these individual values, or

override them.

- Hierarchy 'Copy From': Added options to include the source hierarchy price deck and currency deck in the copy.
- Result Sets 'Copy': The Copy function has been extended to apply to folders in the explorer. This means that entire nested structures of folders and Result Sets can be copied in one step.
- Sensitivity Result sets: Added the ability to change the decimal precision for variables in report tables and charts.
- Excel Spreadsheets in Regimes: Added the ability to use Excel User Defined Functions (UDF) in spreadsheets.

For more information about these changes, see the [Planning Space User Manual](#) .

Planning Space 20.3 Update 4 Release Notes

RELEASE DATE: 03 March 2023

General Notes

Updates are based on full installations of Planning Space. All changes in previous Updates are included in the latest Update.

Support Ticket information: Tickets with numbers starting '22-' can be accessed in Salesforce; other tickets can be accessed in Freshdesk. When a ticket for the same issue exists in both systems, both numbers are included. (The Freshdesk system was deprecated on 2022-11-07 and it is not updated with new information.)

Note for installation: if the Planning Space installer fails to complete when installing "in place" (i.e., when a previous version of Planning Space is still installed), it is important to completely uninstall the previous version *and to reboot the server machine* before using the installer again. This is because the Windows OS may have pending installations (i.e., they are deferred to the next reboot) that are interfering with the Planning Space installation.

Advance notice for the Planning Space 32-bit applications: The 32-bit versions of the Dataflow and Portfolio applications will be discontinued in a future release of Planning Space Version 20.

Database upgrades for this release

A mandatory database upgrade for Tenant databases is required for this update.

Upgrade path for Version 16.5

See the *Planning Space 20.3 Deployment Guide* ([Version 20 Upgrade Paths](#)) for the latest information about upgrade paths from version 16.5 to 20.3.

Planning Space Dataflow

New Features

- Added security permissions for revision tags, which determine access to tags and to tagged document data (compatible functionality with Planning Space version 16.5).
- Modified the DEFERREDRATE expression function so that it uses cumulative volume planned to identify the production rate, after factoring in deferred days; the previous version only considered the cumulative deferred days to calculate a percentage.

For more information about these changes, see the [Planning Space User Manual](#).

Fixed Defects

Description	Support Ticket
Load from Database tool: Fixed a bug that was allowing users to modify a destination document's revision tags when the user was not granted the 'Revisions Apply and Remove Tags' role.	119337, 22-00841603
Version Management - Price Deck validation: When changing the price deck for a version in the Version Management screen, there was a validation issue because the price decks for all revisions were being validated. Now only the price deck of the latest revision will be validated.	—
Document Type Templates: Fixed a bug where where setting or modifying the order of variables in a Time Series Grid was not being saved correctly for publication of the template.	22-00867075
Load from Database tool: Fixed an issue which was causing slow performance of the UI when expanding nodes in the import hierarchy explorer.	22-00867057
Single Document user interface: Improved the UI so that edit states in a tab are persistent when the user switches between tabs; the expander open/closed states that have been set by the user will be remembered, as well as the settings of unit dropdowns.	—
Document Type Template editor: Fixed an issue that was causing a fatal application error when the user attempted to copy/paste time series variables which had currency settings overwritten at the variable level.	22-00867735
Price Decks: Fixed a bug where metric-valued variables were not being converted when the price deck had an imperial setting for the variable.	—
Single Document editor: Fixed a bug which was causing the real/nominal information in the Units column to be shown incorrectly, and not respecting the setting in the template.	—
Single Document editor: Fixed a bug for new documents (only) which was happening if the document's unit system and scale size were set differently from default; after the first 'Publish' the displayed values of variables were not correct as had been entered.	—
Bulk Utility: Fixed a bug where the Units column was not showing the full information for variables with price units (Oil Price, Gas Price etc.)	—

Planning Space 20.3 Update 3 Release Notes

RELEASE DATE: 13 January 2023

General Notes

Updates are based on full installations of Planning Space. All changes in previous Updates are included in the latest Update.

Note for installation: if the Planning Space installer fails to complete when installing "in place" (i.e., when a previous version of Planning Space is still installed), it is important to completely uninstall the previous version *and to reboot the server machine* before using the installer again. This is because the Windows OS may have pending installations (i.e., they are deferred to the next reboot) that are interfering with the Planning Space installation.

Advance notice for the Planning Space 32-bit applications: The 32-bit versions of the Dataflow and Portfolio applications will be discontinued in a future release of Planning Space Version 20.

Database upgrades for this release

A mandatory database upgrade for Tenant databases is required for this update.

Upgrade path for Version 16.5

IPS and Planning Space databases running in Version 16.5 can be upgraded for use in Version 20.3 Update 3 for all 16.5 Update releases up to and including 16.5 Update 22.

Planning Space Dataflow

Fixed Defects

Description	Support Ticket
Single Document user interface: The default width of the dropdown UI element for unit labels was not sufficient to fully display the majority of labels; the width has been increased from 75 to 100 pixels.	—
Reporting - 'Document report settings' blade: The width of the Revision Tag dropdown selector causes long tag names to be obscured; a tooltip has been added so that the full name is displayed when the mouse is hovered over the name.	—

Description	Support Ticket
Single Document and Bulk Utility viewers: Zero and null values in time series data were not being handled correctly (null values were displayed in the UI as "0.00", zero values were exported as null); the UI and export functions now behave correctly.	—
Data Aggregator and Data Propagator: Fixed an issue where variable mappings migrated from version 16 databases were causing the error "Cannot save mapping containing variables of different types, aggregation methods or deleted variable" if the variable properties 'IsValidDataType' and 'IsValidUnit' were missing. Database migration scripts have been modified so that variables with the missing properties will be excluded.	—
Revision History: Fixed a bug that was causing variables to be displayed twice in the Variables list in the filter blade.	—
Bulk Utility document calculations: Fixed a bug when multiple documents with different price settings were being calculated in parallel; the results were incorrect because all documents were wrongly using the price deck assigned to the first document in the calculation.	—

Planning Space 20.3 Update 2 Release Notes

RELEASE DATE: 02 December 2022

General Notes

Updates are based on full installations of Planning Space. All changes in previous Updates are included in the latest Update.

Note for installation: if the Planning Space installer fails to complete when installing "in place" (i.e., when a previous version of Planning Space is still installed), it is important to completely uninstall the previous version *and to reboot the server machine* before using the installer again. This is because the Windows OS may have pending installations (i.e., they are deferred to the next reboot) that are interfering with the Planning Space installation.

Advance notice for the Planning Space 32-bit applications: The 32-bit versions of the Dataflow and Portfolio applications will be discontinued in a future release of Planning Space Version 20.

Database upgrades for this release

A mandatory database upgrade for Tenant databases is required for this update.

Upgrade path for Version 16.5

IPS and Planning Space databases running in Version 16.5 can be upgraded for use in Version 20.3 Update 2 for all 16.5 Update releases up to and including 16.5 Update 22.

Planning Space Dataflow

New Features

- Added the ability to cut, copy and paste documents in version hierarchies.
- Added automatic unique ID generation for documents. The ID is assigned when a document is created and it is maintained when the document is copied between versions. The ID can be stored in a variable for use in document templates and reports.
- The Planning Space application (Dataflow and Administration) and web UI have been re-branded to use the Quorum Software company name and product logos. The 'Planning Space' product name has been changed and now includes a space character.

For more information about these changes, see the [Planning Space User Manual](#) .

Fixed Defects

Description	Support Ticket
Fixed an issue where 'Joblog' filenames were being generated differently in browsers or the client application (Chrome/Edge inserted a timestamp, the client app did not). Joblog filenames are now consistent and use an ISO format timestamp.	—
Fixed a responsive UI issue where the Hierarchy view became stuck in minimized state if the application window width was below a threshold.	—
Dataflow presets: Fixed an issue where illegal characters could be used in a preset name so that the preset did not function correctly; names are now validated in the UI during saving and importing.	—
Document templates: Fixed a bug where a new variable was added to a document template but the template change was not registered in the Manage Data workspace for document creation.	128582
Bulk Utility: Improved the UI progress and status messages for data loading into the grid.	—
Hierarchy - filter presets: Fixed a bug that was causing a 'Something went wrong' error when a hierarchy filter had been applied based on one preset, then a document was opened, then the preset was changed and the Apply button was pressed.	—

Planning Space 20.3 Update 1 Release Notes

RELEASE DATE: 07 October 2022

General Notes

Updates are based on full installations of Planning Space. All changes in previous Updates are included in the latest Update.

Note for installation: if the Planning Space installer fails to complete when installing "in place" (i.e., when a previous version of Planning Space is still installed), it is important to completely uninstall the previous version *and to reboot the server machine* before using the installer again. This is because the Windows OS may have pending installations (i.e., they are deferred to the next reboot) that are interfering with the Planning Space installation.

Licensing change with particular impact on Named User product licenses: This Update contains a fix for an issue where duplicate licenses could be consumed due to different UPN identities (Windows ID, Planning Space ID) being used for the license request by the Planning Space client application. To prevent multiple identities, there is a new default behavior that the client will always use the Planning Space ID. This will impact on deployments which are using Named User product licenses, because those licenses will typically be based on users' Windows UPNs; however there will be no conflicts if the Planning Space username is identical to the user's Windows UPN, which for SAML2 user accounts is most likely be the case. Administrators can override the default behavior by changing the application setting 'License.UseWindowsIdentity' to True (this is individually set for Dataflow, Economics, and Financials). Alternatively, the Named User license must be modified to use the Planning Space ID for each user; Administrators can make this change on a self-service basis using the Client Center (see the Deployment Guide for Named User license management). Please contact Quorum Support for further advice and help.

Advance notice for the Planning Space 32-bit applications: The 32-bit versions of the Dataflow and Portfolio applications will be discontinued in a future release of Planning Space Version 20.

Database upgrades for this release

A mandatory database upgrade for IPS Common and Tenant databases is required for this update.

Upgrade path for Version 16.5

IPS and Planning Space databases running in Version 16.5 can be upgraded for use in Version 20.3 Update 1 for all 16.5 Update releases up to and including 16.5 Update 22.

Planning Space (IPS)

New Features

- New IPS service configuration setting 'ContentSecurityPolicy' which sets the Content-Security-Policy HTTP response header when the IPS server responds to static content requests.

For more information about these changes, see the [Planning Space Deployment Guide](#).

Fixed Defects

Description	Support Ticket
Licensing: Fixed an issue where duplicate licenses could be consumed due to different UPN identities (Windows ID, Planning Space ID) being used for the license request by the client application. To prevent multiple identities, there is a new default behavior that the client will always use the Planning Space ID; the application setting 'License.UseWindowsIdentity' has been added which can be used to switch the client to use Windows IDs.	—
Fixed an issue that was causing '/data' resources to be missing from the Swagger-based API reference web pages for the Dataflow, Economics and Financials Web APIs. The live OData API endpoints are once again available.	—

Planning Space Dataflow

New Features

- Single Document editor: Added a function to restore a document revision, i.e., the current (Latest) content of the document will be replaced by the content in a stored revision.
- Added the ability to define lookup lists for variables in template definitions which may be used in the Bulk Utility and Single Document editors.
- Load from Database tool: 'Update document using identifier' option now uses case-insensitive matching for the identifier.
- Hierarchy filter: Added the ability to filter based on Properties that are empty (null-valued) or not empty.
- Load from Database tool: Added 'Load All Items' option in the loader batch settings (if enabled then all documents in the source will be loaded regardless of the selection of documents in the explorer panel; this matches the loader functionality in version 16.5).
- Single Document view: Hovering over the document name in the top bar now shows a tooltip with the hierarchy path of the document (this is helpful when the List View is active so that the document's hierarchy location is not visible).
- Version hierarchy: In List View mode each document now has a context menu (when mouse hovers over the document), the same as in the Tree View mode.
- Bulk Utility and Single Document editor: Added a popup viewer for expressions; clicking the "fx" expression icon opens a popup that shows the expression and allows it to be

copied to the clipboard.

- Single Document editor: The user's previous focus, selection and scroll position are now restored when reloading a Document.
- The Hierarchy search filter has been extended with the functionality to search for documents that are being edited.
- Data Aggregator and Data Propagator: Each preset now contains 'Comment' and 'Revision Tags' fields. These set default content which can be edited in the Revision Details dialog when the preset is used for an aggregate/propagate operation.
- Data Aggregator and Data Propagator - Source Document Property Filter: Added the ability to filter based on Properties that are blank (null-valued) or not blank.
- Single Document editor: Added functionality to open the Revision History window from inside the editor, and to load the content of any revision into the editor's data fields (the data is read-only because data in revisions cannot be changed).
- Bulk Utility: Added functionality to filter and sort on the columns in the data grid.
- Bulk Utility: Added function to Import data into the grid from an external CSV file; this makes it possible to export grid data to CSV for external processing and then import the processed data back to Dataflow.
- Bulk Utility usability improvements: Added functionality to manipulate data in the table - selection, copy-and-paste, fill down, cell drag down, and the use of keyboard shortcuts for selection and editing.
- Bulk Utility: Improved performance of the Save and Publish operations so that changes on very large (up to hundreds of thousands) document sets can be performed.

For more information about these changes, see the [Planning Space User Manual](#).

Fixed Defects

Description	Support Ticket
Hierarchy filtering: Fixed a slow performance issue that was occurring when a 'Does not contain' condition for scalar variables was applied.	—
Manage Data workspace: Fixed an issue where the last-used Version did not persist between sessions. The last-opened Version is now stored (in the local user account browser data) and it will be re-opened in a new Planning Space session.	—
Versions: Fixed a bug that was causing an exception error when switching to a version where the price deck was not set.	—
Document calculation: Fixed an issue that was causing exception errors due to the expression function 'VALUEBYOFFSET' returning 'Null' when the 'default' argument was not specified. The function now returns the value 'double.nan' for this situation.	—
Document calculation: The expression function 'GETPRICESCENARIODATA' was generating an obscure error message ('Object reference not set to an instance of an object') when the version did not have a linked price deck. An informative error message has been added.	—

Planning Space Economics and Financials

New Features and Fixed Defects apply to both applications, unless otherwise noted.

New Features

- Global price decks: Security permissions have been added to folders in the Price Management interface; these will be automatically-inherited by new decks or folders created within a parent folder.
- Regime Library: Security permissions have been added to folders; these will be automatically-inherited by new regimes created within folders.
- Regime Library: A Read-Only mode has been added so that a user can view the content of a regime when the regime has been opened and locked by another user.
- Security permissions for report templates: Permissions can be applied to report templates and folders in the Report Designer in the Configuration workspace. The permissions control a user's access to modify a template and to use it for generating reports. Folder permissions are inherited; you can use this feature to set default permission settings which new report templates will automatically inherit.
- Hierarchy 'Copy Settings From' function: Added an option to include the projects' Scenario Consolidation Settings in the copy operation.
- Result Set calculations - Price sensitivities: Added the ability to sensitize on Price Deck prices (this can be used for Standard and Sensitivity Result Sets).
- Regime module function library: Added the functions `GetPriceScenarioName()` and `GetProjectScenarioName()`.
- Result Set calculations: A new calculation mode has been added which implements a type of unweighted ringfencing. If the application tenant setting 'EnableUnweightedRingFenceMode' is set to True then all users of the tenant will be able to use an extra option 'Align scenarios (unweighted)' when a ringfenced calculation is selected (available for Standard Result Sets and Sensitivity Result Sets); in this mode the inputs to the ringfences are not risked before entering the ringfence calculation.
- Lock Management: The list of locked entities (project, regime, etc.) is now filtered according to the access permissions of the current user for each locked item; the user will not be able to view entities for which they are not granted 'Read' access. (This means that the 'Locks' role can safely be granted to users with restricted access to Economics/Financials data).
- Clone Hierarchy function copies hierarchy permissions: the function has been modified to copy all of the user/workgroup permissions settings from the source hierarchy.
- Incremental groups: Added the ability to include projects with different project scenario weightings within the same incremental group (the 'Back Allocation' option must be enabled in the Incremental Settings).
- Sensitivity Result Set calculations- Project Variable Sensitivities setting: The 'Select Sensitivity Types' dialog now includes a 'Search' field for variable names, and a 'Regime' field to filter for variables that are used that are used in one specific regime in the hierarchy.
- Audit Log: Added entries for operations on folders in Result Sets, Regime Library, Report Designer, Global Price Decks, Global Currency Decks.
- Result Set calculations: The naming scheme for exported calculation spreadsheets has been changed to deal with issues that users were experiencing with filenames that were exceeding the length limit allowed in Windows.

For more information about these changes, see the [Planning Space User Manual](#) .

Fixed Defects

Description	Support Ticket
Price Management - Price Decks export: Fixed a bug that was causing duplication of decks in the export list (for decks that had been newly created or copied).	—

Planning Space 20.3 RTM Release Notes

RELEASE DATE: 02 August 2022

New features in version 20.3

Planning Space Version 20.3 is the first commercial release of the next generation of Planning Space. This version contains the applications Dataflow, Economics, and Financials.

Dataflow Version 20 is a new application with improved data model, modernized user interface, and highly-improved calculation performance. A summary feature comparison for Dataflow 20.3 and Dataflow 16.5 can be found in the User Manual documentation: [Version 16.5 Features Comparison](#).

The Economics and Financials applications have been migrated from version 16.5, with the same functionality. (Economics Version 20 is a new application that is currently under development and will be released initially in 2023.)

Planning Space Version 20.3 supports integration with the Quorum Software (Aucerna) applications Portfolio, Reserves, and PetroVR. Further product integrations will be developed as Planning Space Version 20 evolves.

Deprecated applications

The Planning Space Portfolio application is removed from the standard configuration in Version 20.3. Replacement functionality is provided by Quorum Software (Aucerna) Portfolio.

The Planning Space Reserves application (Reconciliation and Decline workspaces) is not implemented in Version 20.3. Replacement functionality is provided by Quorum Software (Aucerna) Reserves.

Upgrading from version 16.5 to 20.3

Quorum Software's consultants will work closely with customers who decide to move from Version 16.5 to Version 20.3, to ensure that all workflows and data can be migrated and accommodated in the new version.

Version 20.3 has a completely new data model for Dataflow, and this means that migration of data from 16.5 requires additional steps *before* using the Database Upgrade tools.

The **Config Analyzer** tool must be used to scan your existing version 16.5 databases. The tool will generate reports that highlight issues for preparing your Planning Space deployment before upgrading to Version 20, in some cases they will alert about changes that must be made before running the 20.3 DBUpgrade program on the tenant database, and in other cases they provide warnings about changes that the DBUpgrade will make automatically. The tool uses obfuscation

of data (this is enabled by default) so that output reports do not reveal any sensitive content information. This means that the tool can be run in situ on production databases, and the results can be safely shared with Quorum Software support and consultant teams.

Hardware and software requirements

There are no major changes in hardware and software requirements to deploy Version 20.3. There is one additional permissions setting required in SQL Server for running the 'DBUpgrade' programs; see the link below for details.

The improved processor and memory performance of Dataflow Version 20 means that your hardware currently deployed for Version 16.5 can be expected to deliver significantly better performance when running 20.3, in terms of concurrent users and server processes, and therefore you should plan to review your current and future hardware needs for a Planning Space Version 20 deployment.

For the detailed requirements information, see [Planning Space 20.3 Deployment Guide: Hardware and software requirements](#).