



Jedox 2020.4

## Release Notes



Jedox Release Notes 2020.4

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# Release Notes 2020.4

## Jedox 2020.4: the best Jedox version ever!

This document gives an overview of the new features, enhancements, and fixes in Jedox, which is currently available at <https://www.jedox.com/en/epm-software/free-trial/>. We are committed to keeping newer versions compatible with previous versions, especially solutions built with previous versions. Any changes in the software that would require a change in a solution built with the software will be announced during the ramp-up phase before the change goes into effect.

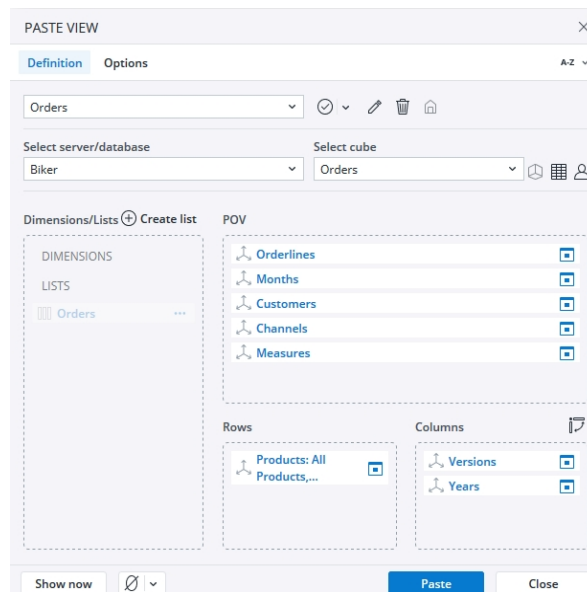
Some Jedox features are released **IN PREVIEW**. These features have undergone testing and passed quality thresholds, but they should not be used in production until they have reached “generally available” (GA) status. For features in preview, we are targeting a maximum of two releases for maturation, i.e., it will take a maximum of two releases until they become GA. Our intention is to get your feedback on these features before making them GA and production-ready. These in-preview features may undergo minor design changes while going through the maturation process. Most in-preview features can be enabled in Jedox Web Administration.

Jedox features with the heading **ATTN** include changes that may impact settings in your current installation. Always back up your databases and other customized content before upgrading.

## Jedox Web

### GA: redesign of Paste View dialog

In preview with Jedox 2020.3, the Paste View dialog redesign is now generally available. The dialog is split into four sections, with all available dimensions and lists shown in a new field. Stored Views appear at the top in a drop-down list and can be managed with the neighboring buttons.



Dimensions and lists can be multi-selected (using Shift / CTRL keys) and dragged. You can also move them via right-click context menu. The dimension fields will show a preview text for any user-selected element(s).

## Changes to stored subsets in Views

Together with the redesigned Paste View dialog, Jedox 2020.4 changes the way stored subsets are handled in Views. (46020)

- The checkbox "Enforce stored subset definition" has been removed from the Element selectors.
- When selecting a stored subset, it will now automatically show the Alias that was set in the stored subset (if any), with no need to select it in the element selector. You can, however, pick a different alias there, overriding the one in the subset.
- If the subset sets the "parents below children" option, then the dimension will also expand that way on rows / columns; no need to set the option in the View explicitly. This also means you could have a dimension on rows expand parents below children (via subset), while dimension on columns expand children "below" (to the right of) parents.
- You can now use a subset in a View that combines e.g. an Hfilter for one element and its children, plus a spacer and some more elements via picklist.
- When selecting a stored subset, it will now automatically use the order from the subset.

**Note:** not all of these changes are fully supported in Excel. They will work when using the [new Web dialog](#), or when pasting a stored View and expanding/collapsing in the worksheet.

## IN PREVIEW: subsets stored with View XML schema

When set, the Subset Editor will store subsets using the View XML schema rather than the legacy Subset XML schema. The View XML schema offers several advantages; for example, the stored subset remains stable when attributes are re-created while using Afilter.

An optional configuration for the In-Memory DB can automatically convert stored subsets in OLAP to the new XML schema on database load. See "New palo.ini option: use-new-subset-def" on page 11.

This feature is in preview and must be activated with the feature flag `features.rollout.subset_viewxml`. (43130)

## GA: Lists

Lists, in preview with Jedox 2020.3, are now generally available. They allow application designers to compose combinations, or "blocks", of specific elements from several dimensions that can then be used in Jedox Views. (46581)

Lists are not supported in the native Excel View dialog, but pasting a stored View with a list from the View ribbon drop-down menu in Excel works.

In Modeler, the UI for defining "calculation" blocks has been enhanced with 2020.4: using the CTRL + Space shortcut, users can now select from the other available list blocks to use in the calculation.

## Drillthrough for Lists now supported

When using Lists in a View, Drillthrough is now supported, but only for the "Standard" blocks in the list, not for Calculation blocks. (46914)

## Improvements to Color Picker

The Color Picker has been enhanced to include the following features:

- Color values that have been applied on elements in the spreadsheet are now indicated in the Color Picker. (44203)
- Color Picker in the Format Cells dialog in the Fill tab and the toolbar are now synchronized. (44481)

## ATTN: change in password-length-validation handling

Password-length validation has been removed from the User Settings and Account Change dialogs. OLAP validation is used for password validation. (47534)

## ATTN: value type detection in Drillthrough result changed

In Drillthrough results, values consisting of digits, the character "e", and additional digits are now treated as strings. This behavior implies that if the first and last value in a specific column of the result are numbers in scientific format notation (e.g. 5+e20), then the column will be treated as a string. While the values will still be displayed as numbers, sorting the column by value will sort by the leading digit, not by the size of the value. (46812)

## Changes to SVS Script Editor UI

The Supervision Server (SVS) script window has been enhanced to enable a maximized window mode, making it easier for users to view and edit their scripts. (45359)

Further enhancements include:

- Max width of the panel has been increased by 200px to make long file names readable without needing to scroll horizontally.
- The panel can be entirely collapsed with a new button; an "expand" button reverses this action.

(45358)

## ATTN: deprecation of mobile interface for Jedox Web

As of Jedox 2020.4, viewing Jedox Web reports on mobile devices is only supported with the Jedox Plan & Forecast mobile app. Login on a mobile device with a browser (e.g. Safari, Chrome) is no longer supported. (45924)

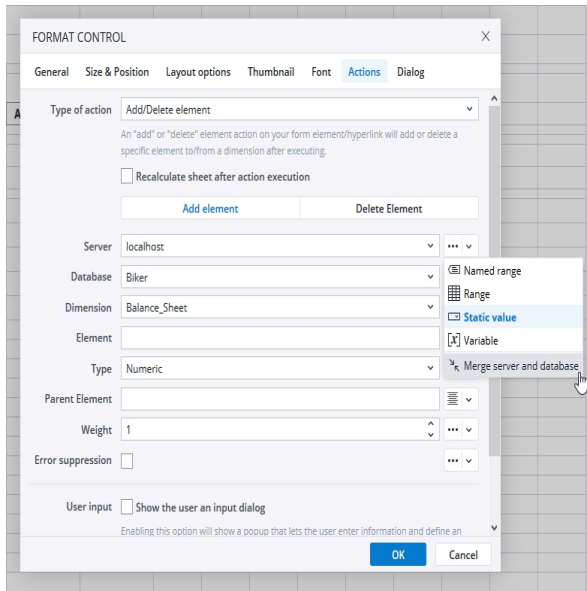
## New Action: "Scheduler task"

This action allows a designer to execute any type of scheduled job, whether it is active or not. For example, a report designer can include a Scheduler Action on a button control to execute a specific report batch job, such as batch PDFs.

Note that this action only works for tasks that are within the same scope (i.e. specific model, global, etc.) as the workbook containing the Action button/control. (46718)

### Option to merge input field for combined server/database in some Actions

For the *Add/delete element* and *Read/Write value* actions, users can opt to enter the In-Memory DB connection and the database in a single, merged field, rather than entering them separately (see screenshot below). This feature is helpful when a single named range (or @variable) is used, such as "rngServer" containing a value such as "localhost/Demo". (46657)



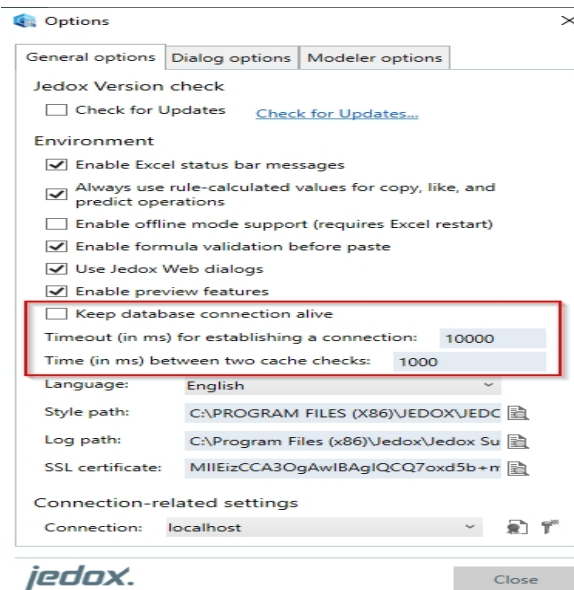
## Excel Add-in

### IN PREVIEW: Web dialog for Paste View in Excel

The Paste View dialog is now available as a Web dialog, with the full set of features available in Jedox Web. To use this feature, "Enable Preview Features" AND "Use Web dialogs" must be set in the Excel Add-in [Options dialog](#). (37787)



## New Options settings in Excel Add-in



**Keep database connection alive:** when ticked, the session is held permanently open and will not time out. With this option enabled, SAML will not try to reconnect the session, which means less disruption for the end user. (46726)

**Timeout (in ms) for establishing a connection:** this setting establishes a connection timeout in Excel Add-in, with a default of 1000 ms. Connection attempts will be aborted when the timeout limit is reached. (46489)

**Time (in ms) between two cache checks:** for optimum performance, the internal cache should only be checked when a minimal amount of time has elapsed since the last check. This option setting sets the minimum time, by default 1000 ms. If the connection has a higher latency, then increasing the minimum time may be helpful.

Changes take effect after the dialog is closed. (46828)

## Faster performance when opening Paste View dialog

Connections to the Jedox In-Memory DB in Excel Add-in have been optimized, resulting in faster launching of the Paste View dialog, especially when connecting to remote servers. (46656)

## In-Memory DB (OLAP)

### System DB now encrypted when generated by a backup procedure

When backing up the System DB from Modeler, the System DB script is now encrypted, so that password cells are no longer readable. Backups can be restored normally. (39716)

## GA: support for subsets in rule sources and aggregations

This enhancement to OLAP rules, in preview with Jedox 2020.3, is now generally available. It enables custom aggregations over dynamic cell areas directly within the OLAP engine. For example, you can now calculate an average over existing children of a specific product group, or sum up sales of a product with specific colors over a defined time range.

Note that this functionality is currently supported in plain text only. (45146)

## Prevention of duplicate naming of lists and dimensions

When creating a new list or dimension, the Jedox In-Memory DB (OLAP) now checks whether a list or dimension of the same name already exists and returns an error if it does. (46205)

## #\_Rights cell property now supported in Views for calculated List blocks

When #\_Rights cell property is checked in a View, the spreadsheet cells in a View with a List for List blocks pointing to cube cells to which the current user has at least Write (W) access will be unlocked. Cells pointing to calculated list blocks will be locked for non-admin users. (46258)

## Enhanced performance in rule calculation with constant values

Performance of calculation in rules with constant values in specific scenarios has been optimized. (46552)

## Improved performance of OFFSET function in rules with static cell reference

The OFFSET function performance has been improved to be in line with that of the PALO.OFFSET() function. It is accessible from the Rule Editor. (47250)

## Changed error messages for some writeback scenarios

The error messages from OLAP during cell writeback now provide more detailed information for the following scenarios:

1. When a normal string (letters) is written to a numeric cell.
2. When input contains special characters in scenarios where they are not supported (i.e., #20% is fine, but not !20%).
3. When using commands such as LIKE or AS with an incorrect path to the source.

(47159)

## Updates to required OLAP rights for List usage

A new rights object "lists" has been introduced. (46646) Rights can be assigned as follows:

**D:** user can delete Lists

**W:** user can create, and edit Lists

**R:** user can access Lists

**N:** no access to Lists

## Jedox custom keys are now auto-generated and displayed in Settings Manager

The following Jedox-specific keys now appear automatically in the Settings Manager:

- **features.rollout.preview** (default state: disabled)
- **spreadsheet.olap.undo** (default state: enabled)
- **spreadsheet.static\_window\_mode** (default state: disabled)

(46643)

## New rights object *ste\_storage* in System database

This object controls the user role's ability to access files in Designer *indirectly*, via other Jedox functionalities (such as Integrator projects that load files to Designer or Upload Actions). The existing rights object *ste\_files* continues to control the visibility of Designer. An Upload Action now works in end-user mode.

The rights object *ste\_storage* is automatically created when OLAP 2020.4 starts. (46335, 46369)

## New palo.ini option: *use-new-subset-def*

This optional palo.ini key converts existing stored subsets to the [View XML schema](#) upon database load. (47024)

# Integrator

## New feature for detailed analysis of Integrator processes: *Tracepoints*

Tracepoints trace values in an extract or transform based on predefined criteria. When Tracepoints have been enabled for a particular value, the developer can then review the TraceLog to see interactively how the traced value has changed during the process.

The screenshot displays the Integrator Trace Monitor interface. The top section shows a table of tracepoints with columns: ProductID, Name, ProductNumber, Color, StandardCost, ListPrice, Size, ProductCategoryID, ABC, ColorUpper, PriceBand, and rowcount. The table contains four rows of data for 'HC Tooling Frame - Blue 40' through 'Blue 50'. Below the table, the 'Log' section shows a detailed execution log with columns: Date, Level, Message, Name, Value, and Initial value. The log entries show the execution of various steps, including 'Starting execution of transform Products\_FT in project TraceETL (ID: 13) (User: admin)', 'Active Integration: ETL\_02', 'Variables: Evaluation="Endogenous" ToolRef="...", 'Starting source execution Products\_FT', 'Data retrieval from transform Products\_FT', 'Data retrieval from extract Products\_Extract', 'Processing data from transform Products\_FT', 'Processing data from view Products\_Extract', and 'Tracepoint 02 for source Products\_FT in row 5' through 'row 9'. The bottom right section shows a flow diagram of the process, including steps like 'Starting Transformation Products\_FT', 'Transform: Transform Products\_FT', 'Global File: Products\_Subset', and 'Commit File: Products\_Subset'.

The following constraints should be noted:

- LOOKUP functions will not appear in the TraceLog.
- Tracepoints are not copied along with dependencies.
- If the column name of an input changes, the Tracepoint must be updated.

Tracepoints are a powerful tool for debugging Integrator processes, and should be used outside of the production environment. Tracepoints can be established in pre-production and then be deactivated or deleted once the project enters production. The Tracepoints can be reactivated at a later time if necessary. (41953)

### In preview: Integrator Server now offers REST-based web service API

Jedox Integrator server now offers a REST-based API as an alternative to a SOAP-based API. Both APIs cover all back-end functionality of Jedox Integrator, such as project creation, data preview, job execution, and retrieval of execution monitor information. (46213)

### New consolidation mode for Dimension load: `insertParallelRetain`

This new consolidation mode compliments `InsertParallel` mode in Dimension loads. (47543)

The difference between the two modes is:

- for **`insertParallel`**, the *new* consolidations of the source have precedence (i.e., they will be in the resulting dimension after the load)
- for **`insertParallelRetain`**, the *already existing* consolidations of the dimensions have precedence.

### New parameter for Switch job: *Job status scope*

In previous versions, Switch jobs used a single execution status for all sub-executions. For example, in a Loop job, any error/warning status was accumulated for the rest of the Loop job execution. The option *Job status scope* is for scenarios where the execution status should not be accumulated. (45517)

The new parameter only applies when the Switch job is integrated as a subjob; it has no effect on a directly executed Switch job. There are two parameters:

**Global (default):** if a job is executed with an error, all subsequent jobs end with an error, even if the job is successful.

**Local:** if a previous job has an error, the subsequent jobs will continue to be executed correctly without ending in an error.

### New mode in Time Editor: *Extend and Preserve*

This new mode enables a user to extend a time-based dimension (e.g. add more years into the dimension) without losing existing custom consolidations, such as half years. Extend and Preserve behaves similarly to the consolidation load mode `ADD`, in that it adds new consolidations while keeping existing consolidations as they are. This mode is for the creation of parallel hierarchies, not for the customization of existing Time Editor hierarchies. (46782)

## New attributes in Time Editor: *DayValue*, *MonthValue*, *QuarterValue*, *YearValue*

The Time Editor has 4 new attributes that can be used to traverse a time dimension to a different day, month, quarter, or year element. When a Time dimension is modified, these attributes are automatically created and populated. The DayValue attribute also has the added advantage of being an integer in Excel date format. All attributes are unique within the dimension, which allows easy lookup of elements from the attribute value by using the PALO.EALIAS() function. (39504)

## New DateFormat patterns

The DateFormat function in Field transforms now includes the following patterns:

**cd:** Day counter starting from 1900, like in MS Excel serial numbers

**cM:** Month counter starting from 1900

**cQ:** Quarter counter starting from 1900

For example, 31.12.2014 converted with pattern **cd** would be 42004.46791)

## ATTN: update to Hive connection driver

The Hive connection driver has been updated to the JDBC driver version, Apache Hive 2.3.7. Hortonworks Data Platform (HDP) distributions using earlier Hive JDBC drivers (2.6.4 or earlier) no longer work. (46874)

## ATTN: DateFormat function does not work with NULL in source

When using the DateFormat function on source data containing a default value of NULL or empty, a warning message is delivered and the function will not be carried out. (46331)

# Setup & Configuration

## Excel Setup uninstaller now has *silent* and *verysilent* parameters

These two parameters enable unattended/automatic uninstalling. (45505)

**silent:** shows only the uninstallation progress. When the uninstall is finished, the Setup closes.

**verysilent:** no window is shown during uninstall. When the uninstall is finished, the Setup closes.

## Excel Setup uninstaller now has */wipe* parameter

This command-line parameter uninstalls Excel Add-in and all associated directories and their contents. The parameter is entered like this: UninstallExcelAddin.exe /wipe

When this parameter is given, the uninstaller will also remove the following directories:

- Jedox Clients\install
- Jedox Clients\excel-addin\cert

- %APPDATA%\Jedox\xlAddin

... and delete the following registry trees:

- HKEY\_USERS\DEFAULT\Software\Jedox
- HKEY\_CURRENT\_USER\SOFTWARE\Jedox

When wiping, there is also no fallback to the Jedox setup's Excel Add-in installation. (45507)

## Linux setup no longer ships with OpenJDK

The Jedox setup for Linux no longer includes the OpenJDK binaries required for Integrator. The setup will request whether the user wants to download OpenJDK during the installation procedure. Note that the setup will abort if the download is cancelled. (47620)

## ATTN: obsolete config.php entries removed from Linux setup

The following configuration parameters have become obsolete and have been removed from config.php:

- CFG\_ETL\_LEGACY
- CFG\_CURL\_REUSE and its comment "// enable curl conn reuse"
- CFG\_IE8\_COMPAT\_MODE and its comment "// enable IE8 compatibility mode"
- CFG\_AHVIEWER\_PATH and its comment "// ad hoc viewer"

(46377)

## New config.php parameter for shared temp directory

There is a new config item that defines a folder path for temporary files to which both Jedox Web and Jedox Spreadsheet server must have (write) access.

Example: `define('CFG_SHTMP_DIR', '/tmp');`

(46364)

## New settings key for custom SMTP protocols: *tasks.smtp.ssl\_protocols*

The `tasks.smtp.ssl_protocols` key enables custom protocols for sending out mailings via Integrator or Scheduler. (46430)

## ATTN: Multi-core rule calculation deprecated

In favor of reduced resource usage, improved average performance, and general reliability, the current implementation of multi-core rule processing within the DDE rules engine has been deprecated.

As of Jedox 2020.4, new installations (setups and managed/Cloud) will ship with the "engine-configuration 1" setting in `palo.ini`. The internal default configuration will be changed in a future version.

Note that multi-core aggregations are not affected by this change. (47680)

## Technical Health

In Jedox Version 2020.4, the following components were updated:

Component	Version
Apache HTTPD	2.4.46
Apache Tomcat	9.0.39
PHP (Apache)	7.3.24
PHP (SVS/SSS)	7.3.19

### Tasks implemented since release 2020.3

The following issues (features, tweaks, and bugs) reported in Jedox 2020.3 have been fixed/implemented in Jedox 2020.4. The development team thanks those customers and partners who have reported issues.

Component	Tickets
OLAP Server	115
SVS	3
Excel Add-in	47
Office Add-in	1
Client Libs	12
Integrator Server	82
Jedox Web	292
Demo content	3
Documentation	138
Setup/CI/CD	93
Jedox Mobile	31

Jedox Cloud	68
Models	135
<b>TOTAL</b>	1020