

# Jedox Release 2018.4

## What's New



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# 1 What's New in Jedox Release 2018.4

This document gives an overview of the new features, enhancements, and fixes in Jedox Release 2018.4, which is currently available at <https://www.jedox.com/en/software/free-software-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.

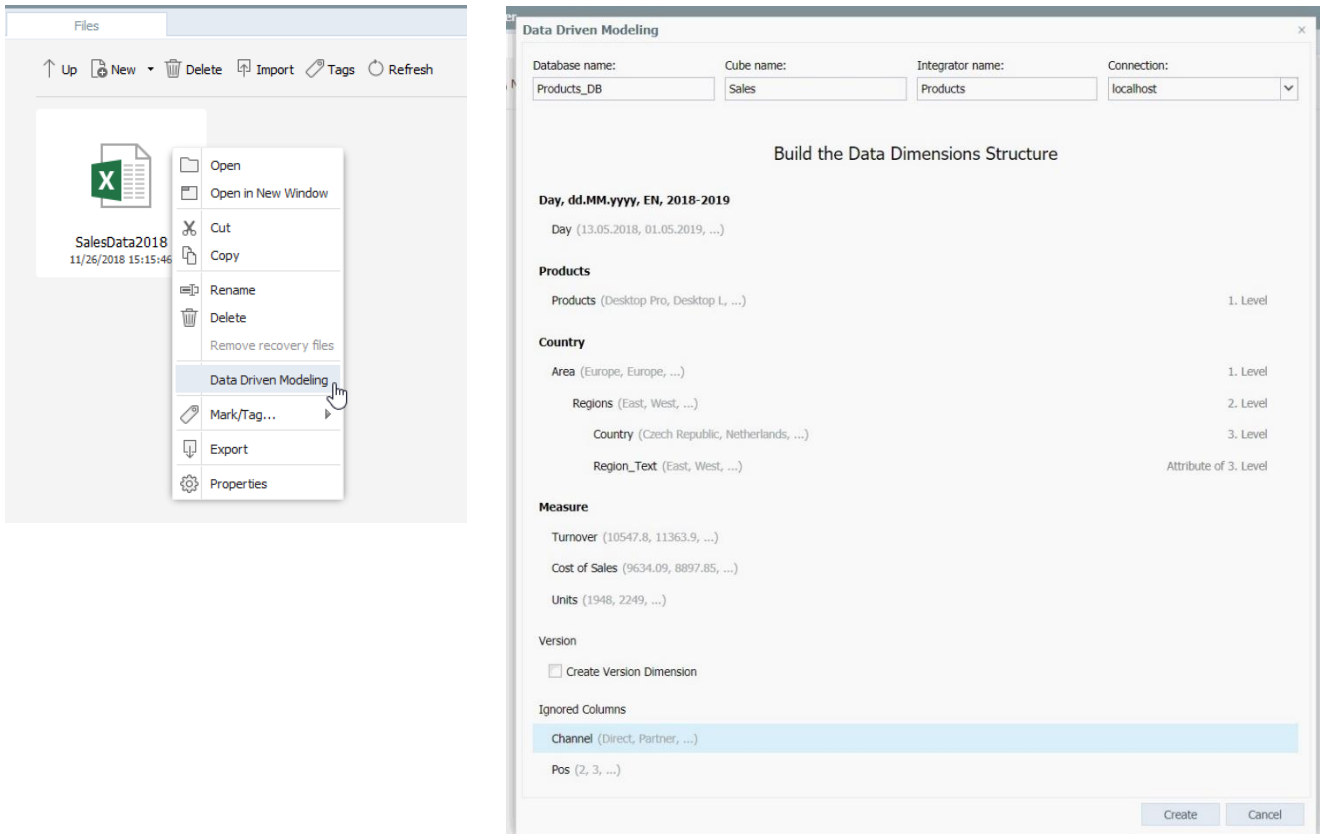
As more and more customers adopt Jedox as a service running in the cloud, reliability, performance, and above all security have become essential aspects of the offering. You want your data to be managed in a secure manner, accessible only to you and people you allow. You want to store your data in a service that is reliable and scales easily with your needs. You expect service that adds to and integrates seamlessly with additional services as they become available.

## 1.1 General

### 1.1.1 Data –Driven Modeling in Jedox Web

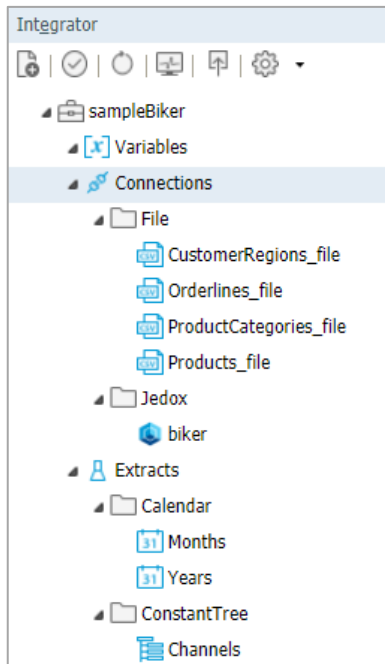
Data-Driven Modeling (DDM) is now available in Jedox Web. The new DDM engine lets you build a new app in just a few seconds and creates a multi-dimensional data model for you. Simply upload data from your ERP, CRM, or other source systems in an Excel file; dimensions and data types will be automatically recognized. You can modify the structure of your model using intuitive drag-and-drop functionality. When ready, the engine creates your data model in seconds.

The DDM procedure can be started by right-clicking on a data file. The resulting context menu contains the option for Data Driven Modeling, as shown below:

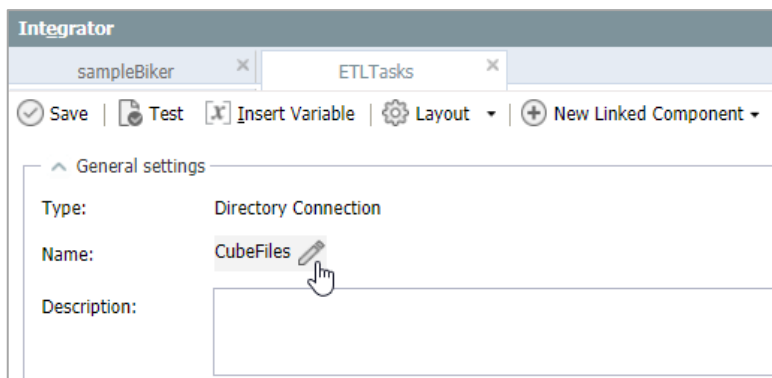


## 1.1.2 UI/UX enhancements

- The tree icons in Jedox Integrator have been redesigned.



- When you rename a project that uses Cube Load with Drillthrough, the Drillthrough links are also renamed.
- The name of Integrator components can now be edited in the General Settings field of the project tab.



When using the **New Linked Component** menu, the component selection dialog is now skipped, and the new component is immediately created.

- The icons on Jedox Web toolbars no longer have a hover effect.
- As announced in *What's New 2018.3*, all Jedox Web design themes except "White" have been removed. If a user has non-white theme selected in Options, it will be switched to "White" automatically.

## 1.1.3 SAML authentication now natively supported

Jedox 2018.4 natively supports the SAML standard for server-side and client-side authentication, using third-party identity providers, such as Azure Active Directory.

## 1.2 Jedox In-Memory DB

### 1.2.1 Optimization for database file storage

This feature was in preview for Jedox 2018.2 and is now generally available.

A configuration option for Jedox In-Memory DB Server allows cube data to be stored on the server's hard drive only in binary format, not in CSV format. Storing in binary format greatly speeds up the time needed for the file system storage, such as when the server is shut down. This feature is set in the palo.ini configuration file with the value **no-csv-save**.

### 1.2.2 New password policies

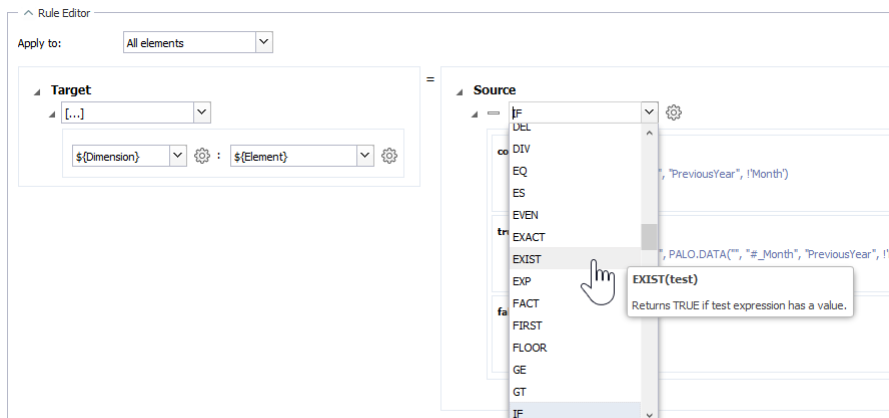
A new parameter in palo.ini allows you to change the password settings concerning the password length and the password pattern/complexity. Any password changing attempt that does not match the defined pattern will result in an error displayed in the **Change Password** dialog.

### 1.2.3 Enhanced security against Brute Force attacks

After a configurable number of failed logins, the response time for responding to the login increases incrementally. If no change is made to palo.ini, the login threshold is 10 failed logins.

### 1.2.4 New DDE-supported rule function EXIST(x)

The new rule function EXIST(x) can determine whether a cube cell holds a value or not. It returns null if x is empty, or 1 if x is numeric, string, or an error. Parameter can be numeric (including zero) or string (including empty). The rule is DDE-supported for CPU and GPU.



### 1.2.5 GPU Accelerator ships with CUDA 10 runtime

The Jedox GPU Accelerator is now based on CUDA 10, utilizing up-to-date CUDA compilers and runtimes. Please note that this change requires the use of an Nvidia graphics driver with version 400 or higher.

### 1.2.6 Flexible cube layout with Dynamic Cell Reference (DCR) now generally available

Rules can be written using dynamic cell reference, which shortens and simplifies the use of PALO.DATA and provides support for flexible cube layout. This feature, which was in preview for Jedox 2018.3, is now generally available.

Benefits of DCR are:

- the dimension can be found automatically. It does not have to be specified.
- the default read element is used if a dimension is added to the source cube.
- the order of parameters is not important

For example, the rule below shows the syntax before Jedox 2018.3:

```
PALO.DATA(("", "Sales", !'Month', !'Year', !'Product', !'Customer', !'Region', "Units"))
```

The same rule with 2018.4 syntax is much more efficient:

```
'Sales'['Measure': 'Units']
```

## 1.3 Jedox Web General

### 1.3.1 ATTN breaking change: private tasks feature no longer available

As announced in What's New 2018.1, you can no longer create new private tasks in Jedox Web. The existing private tasks are no longer accessible and will no longer be executed.

### 1.3.2 IN PREVIEW: OLAP Calculation Profiler

The new OLAP Calculation Profiler lets you inspect the details of specific value-calculation requests in the Jedox In-Memory DB. A history of requests per user session can be enabled in the new OLAP Visualization panel in the Performance area of Jedox Administration. Additionally, profiling can be enabled, in which case a visualization for long-running calculations in the request list can be generated, showing e.g. which rules were calculated and for how long.

Administration									
OLAP Visualization									
Last executed jobs: 100		Slowest jobs: 10		Profiling: <input checked="" type="checkbox"/>		Refresh			
Session ID	User	Jobs Executed	Active Jobs	Login Time	Time Spent	Idle Time	Client	Description	Profiling
18	_internal_suite	1207	0	2018-11-22 15:29:45	0.093s	00:00:27	Jedox Web ...	system login	Off
20	admin	718	0	2018-11-22 16:13:55	0.192s	00:00:00	Jedox Web ...	user login	Off
37	User	2030	0	2018-11-22 17:34:22	8.031s	00:00:27	Jedox Web ...	user login	On
Last executed jobs									
Clear History Refresh									
Job ID	Name	Duration	Parameters				Progress		
7574	/view/calculate	5.88s	/view/calculate?squash_list=1&database=14&view_subsets="3";Currency";5;688512;1;";0;1;0;1;4096;1;";75"5";Profit and Loss_me...				100%		
7573	/database/info	0s	/database/info?database=14&sid=aI...Rv				100%		
7572	/database/info	0s	/database/info?database=14&sid=aI...Rv				100%		
7571	/server/databas...	0s	/server/databases?show_normal=1&show_system=1&show_user_info=1&sid=aI...Rv				100%		
7563	/cell/area	0s	/cell/area?database=7&cube=10&area=0:27:4,0,&show_rule=0&show_lock_info=0&sid=aI...Rv				100%		
7561	/cell/area	0.001s	/cell/area?database=7&cube=10&area=6:2:5:3:0:27:4,0,&show_rule=0&show_lock_info=0&sid=aI...Rv				100%		
7560	/server/user_info	0.001s	/server/user_info?show_permission=1&show_info=1&show_gpuflag=1&sid=aI...Rv				100%		
Slowest jobs									
Clear History Refresh									
Job ID	Name	Duration	Parameters				Progress		
7574	/view/calculate	5.88s	/view/calculate?squash_list=1&database=14&view_subsets="3";Currency";5;688512;1;";0;1;0;1;4096;1;";75"5";Profit and Loss_me...				100%		
7573	/database/info	0s	/database/info?database=14&sid=aI...Rv				100%		
7572	/database/info	0s	/database/info?database=14&sid=aI...Rv				100%		
7571	/server/databas...	0s	/server/databases?show_normal=1&show_system=1&show_user_info=1&sid=aI...Rv				100%		
7563	/cell/area	0s	/cell/area?database=7&cube=10&area=0:27:4,0,&show_rule=0&show_lock_info=0&sid=aI...Rv				100%		
7561	/cell/area	0.001s	/cell/area?database=7&cube=10&area=6:2:5:3:0:27:4,0,&show_rule=0&show_lock_info=0&sid=aI...Rv				100%		



### 1.3.3 In Preview: optional timeout for In-Memory DB Server requests in client components

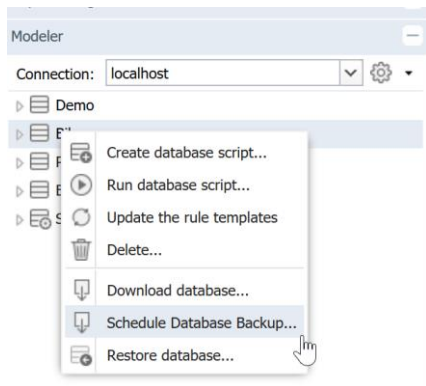
A timeout period can now be set for In-Memory DB Server requests in client components. If the defined timeout is reached while the client is waiting for In-Memory DB Server to finish a running request, the client will close the connection. By default, the timeout is not configured in any component.

### 1.3.4 New directive for controlling cookie secure flags

A new directive for controlling cookie secure flags, `CFG_COOKIE_SECURE`, is available in `config.php`. This prevents the browser from inadvertently sending the cookie back to a non-HTTPS request on the same server. Note that, if you only use HTTP, the cookie is visible the first time the server sends it to the client. Additionally, to use secure cookies, you must also set the `"session.cookie_secure"` in the `php.ini` configuration file of the `httpd` component.

### 1.3.5 Schedule Database Backup in Modeler

This new feature is available by right-clicking on a database in Modeler. The resulting dialog allows you to create a backup task in Scheduler.



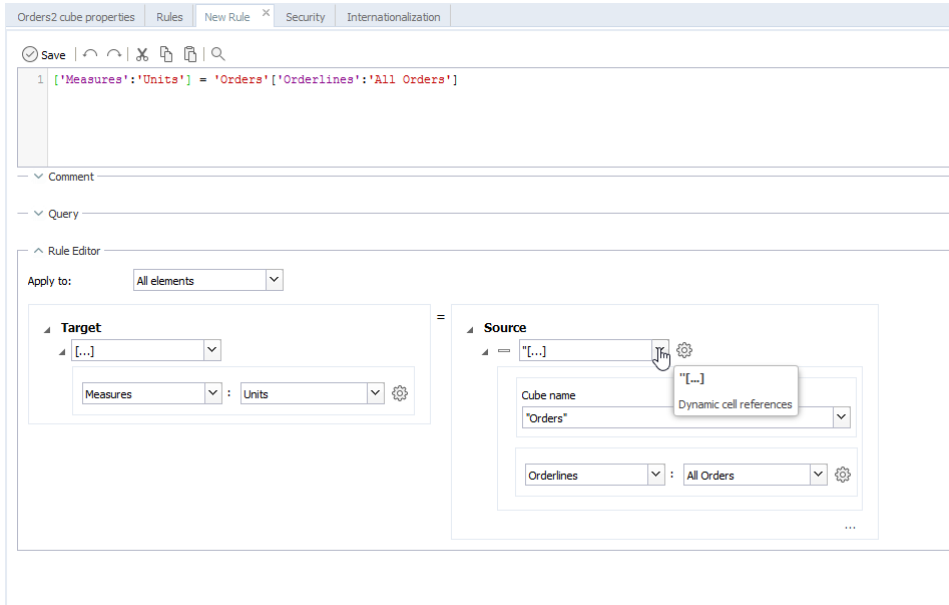
### 1.3.6 Redesigned Active column in Scheduler

The **Active** column in scheduler has been redesigned to feature a clickable check box. This changes the active state of the task, which is reloaded after selecting the **Active** option.

Scheduler				
Tasks				
Name	Type	Trigger	Descripti...	Active
Bikers Report	Batch PDF	Interval		<input checked="" type="checkbox"/>

### 1.3.7 Support for flexible rule syntax in Rule Editor

The Rule Editor in Jedox Web now supports rules using the new flexible rule syntax (see section 1.2.6).



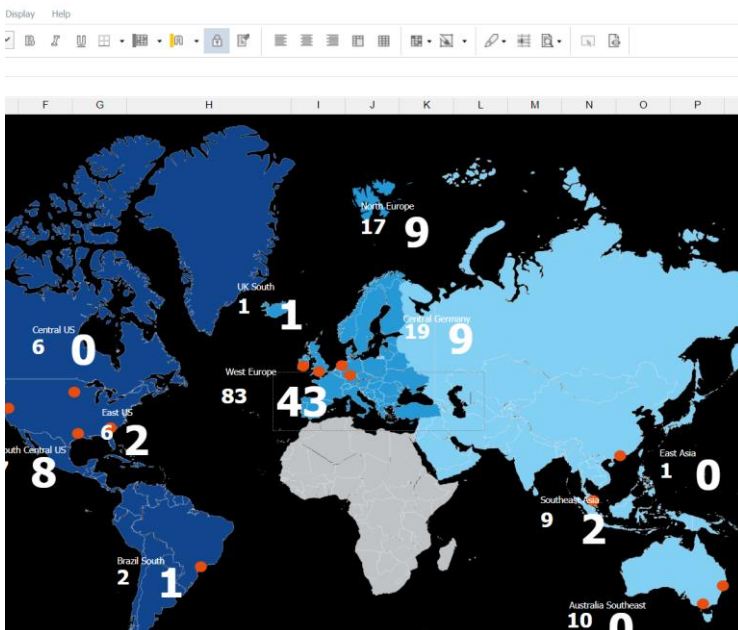
### 1.3.8 Extended log out for load of Web reports

When a Web report is opened, the Spreadsheet Server now prints an additional log message (file core.log) after the load of the report is completely finished.

## 1.4 Jedox Web Spreadsheets

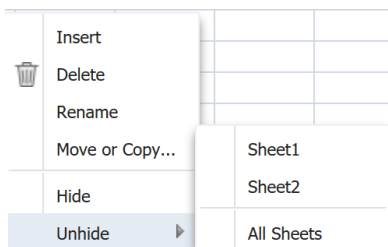
### 1.4.1 New form element: label

You can now make free-form annotations on a report by using labels. They can display either text or the result of a formula. Label can use a specific background color or transparent background.



## 1.4.2 Hiding and unhiding sheets

You can now hide specific sheets in a workbook. For example, this feature allows you to add meta content that is not meant for a resource workbook. Hiding sheets simplifies the workbook design process.



## 1.4.3 Same value can be entered in multiple data cells in Reports mode

Users can now add a value to multiple cells with special key combinations. To add a value to a continuous range of cells, select one cell, then hold the SHIFT key and select the last cell. To add a value to various, noncontinuous cells, select one cell, then hold the CONTROL key and select additional cells. Once the cells have been selected, enter the value and press the ENTER key. The value will then be applied to all of the selected cells. You can also use input via a data validation list or the copy command. **Note:** it is not necessary to press CONTROL + ENTER, as with Microsoft Excel.

## 1.4.4 Preselection in Subset Editor implemented

When the Subset Editor is opened while a cell containing a PALO.SUBSET() cell is selected, the editor now parses the subset formula and preselects the formula parameters in the dialog.

# 1.5 Jedox Integrator

## 1.5.1 ATTN breaking change: SVS event handler disabled by default in cube loads

The SVS event handler is disabled by default when creating a Cube Load. Disabling the event handler means that cube workers in Supervision Server will not be triggered when the load is executed.

## 1.5.2 Parallel Jobs can be included in a Groovy job

Parallel jobs can now be executed in a Groovy job.

## 1.5.3 Loop Transform and Job: assignment of columns to variables

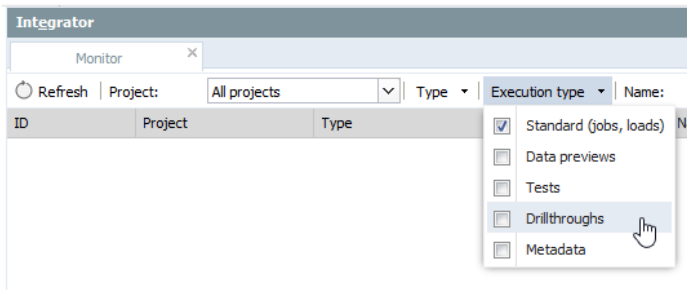
As of Jedox 2018.4, one variable from the Integrator project can be assigned for each column in the loop source. During a loop iteration, the variables get the corresponding value of the current row in the loop source. If no variables are assigned in the loop source, then the names of the columns in the source must match the names of the variables used in the execution (as in Jedox 2018.3).

## 1.5.4 New SOAP API for Drillthrough

A new SOAP API *drillthrough2* has replaced the previous API *drillthrough*. Both APIs retrieve identical results, but *drillthrough2* has the cell path as parameter and performs all authorization checks. The authorization check is done in the Supervision Server script onDrillThroughExt. The API is used in the new SVS sample script sep.inc.drill\_through\_etl2.php and in the command-line client.

## 1.5.5 Integrator Monitor enhanced to display Data Preview and Test in the UI

New options are available in the Integrator Monitor that allow you to display the types of executions and logs, as well as Data Preview and Tests. These features allow running executions and logs to be viewed and stopped.



## 1.5.6 Drillthrough requests handled as executions

Reading Drillthrough data (API drillthrough) is now handled as an execution, like Data Preview or Component Test.

## 1.5.7 MaxDB connection to become deprecated

Starting with the next Jedox release (2019.1), MaxDB connections will be set to deprecated. Existing MaxDB connections will no longer work as of Jedox 2019.2.

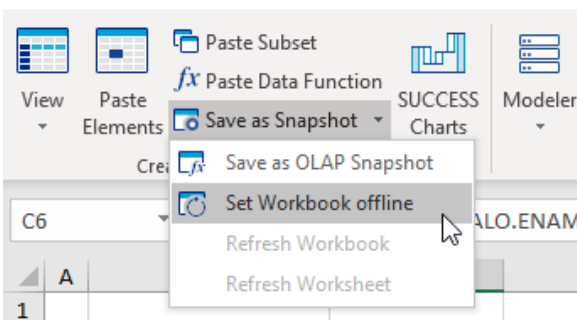
## 1.5.8 Default annotation in DDM on empty file changed from B to 1

The default column annotation in Data-Driven Modeling on an "empty" file (i.e. a file without any existing column annotations) has been changed from [B] to [1].

# 1.6 Jedox Excel Add-in

## 1.6.1 Offline mode for Excel workbooks

There is now an option to enable setting Excel workbooks in offline mode. Data cells will not be automatically retrieved from the In-Memory DB server while in offline mode; they will instead return static cell values that are stored in the workbook. You can refresh the values once, or permanently set the Workbook online again.



## 1.7 Setup

### 1.7.1 ATTN breaking change: default access rights on Password rights object

For the roles etl and designer, which are included in a standard installation, the default access rights on the **password** object has been changed to N (no access).

### 1.7.2 OpenJDK 11 ships with Windows setup

As of 2018.4, Jedox Setup for Windows includes OpenJDK 11, an open-source implementation of the Java Platform, Standard Edition. This version of Jedox only supports Java 11.

### 1.7.3 SSS core shutdown default value change

In Jedox 2018.3 and earlier, the variable `WEB_CORE_STOP_TIMEOUT` was set to zero (meaning no timeout). As of Jedox 2018.4, the default value is 300, which means that the shutdown script will wait five minutes before it kills the SSS process.

### 1.7.4 ODBO/MDX component has been deprecated

The ODBO/MDX component is no longer available in the standard setup and has been marked as obsolete in the advanced setup.

## 1.8 Technical health

In Jedox Version 2018.4, the following components were updated:

Component	Version
Apache	2.4.37
PHP (Apache)	7.2.11
PHP (SVS/SSS)	5.6.37
Tomcat	8.5.34
OpenJDK	11.0.1

## 1.9 Tasks implemented since release 2018.3

The following issues (features, tweaks, and bugs) reported in Jedox 2018.3 have been fixed/implemented in Jedox 2018.4. The development team thanks those customers and partners who have reported issues.

Component	Tickets
OLAP Server	88
SVS	0
Excel Add-in	50
Office Add-in	3
Client Libs	16
Integrator Server	120
Jedox Web	316
Jedox Mobile	41
Jedox Cloud	81
Demo content	5
Documentation	119
Setup/CI/CD	83
Models	112