



# Palo Suite Release 3.2

## What's new?

Commercial Open Source  
Business Intelligence for  
Performance Management

Palo Suite  
Release 3.2

What's new?

Jedox AG

Dated July 21, 2011

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# 1 What's new in Palo Suite 3.2 SR3

This document gives an overview of the new features, enhancements and fixes in Palo Suite 3.2 SR3 Premium Edition and Palo for Excel 3.2 SR3 Premium Edition. Palo 3.2 SR3 is available for download at <http://www.jedox.com>. Detailed information about previous Palo Suite 3.2 versions can be found in the next chapters of this document.

## 1.1 Fixed issues from Version 3.2 SR2

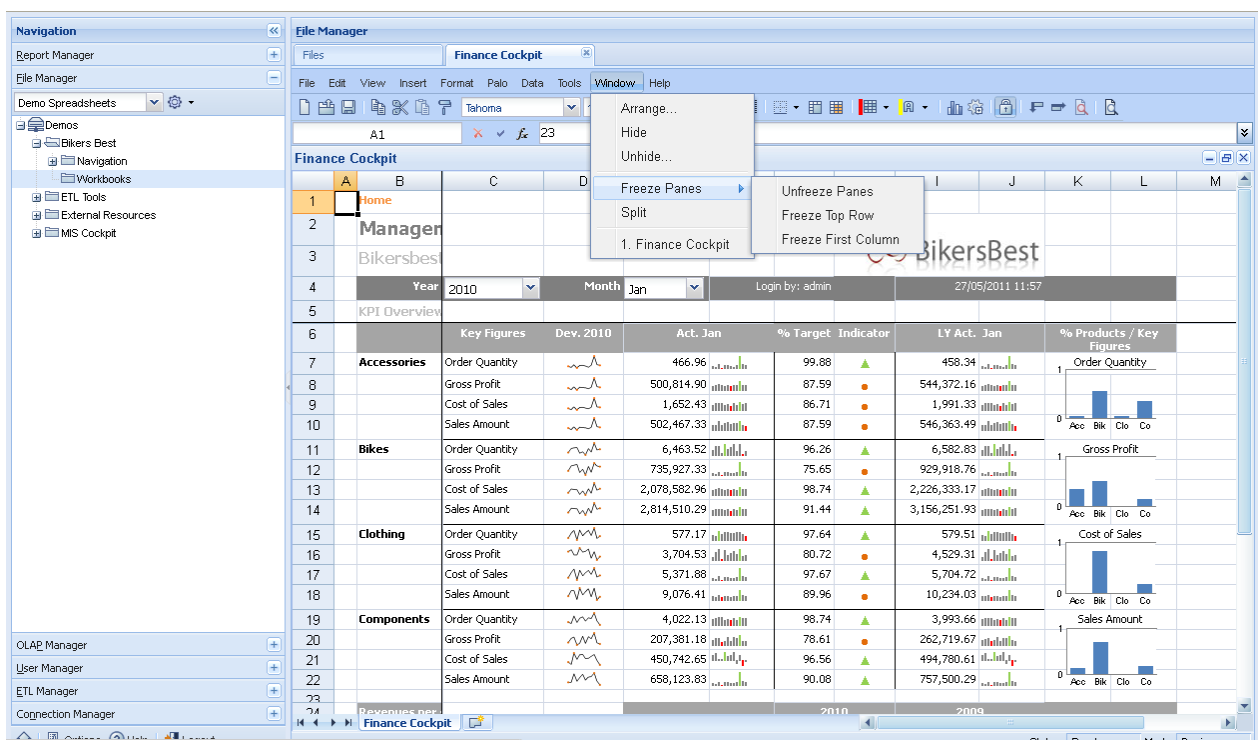
Issues found in version 3.2 SR2 have been fixed in version 3.2.SR3. The development team thanks those customers and partners who used <http://bugs.palo.net> to log issues and bugs.

| Product      | Issues | Resolved |
|--------------|--------|----------|
| OLAP Server  | 45     | 45       |
| Excel Add-in | 31     | 31       |
| Client Libs  | 24     | 24       |
| ETL Server   | 17     | 17       |
| ODBO/XMLA    | 11     | 11       |
| Palo Web     | 206    | 206      |
| Palo Setup   | 14     | 14       |

A detailed list of all issues can be found in the change log PDF document.

## 1.2 Freeze Panes in Palo Spreadsheet

Finally we made it! Palo Web Spreadsheet now offers Freeze Panes to freeze columns and rows in large reports. Just select a cell you want to use for the freeze point and open the appropriate commands from the Window menu.

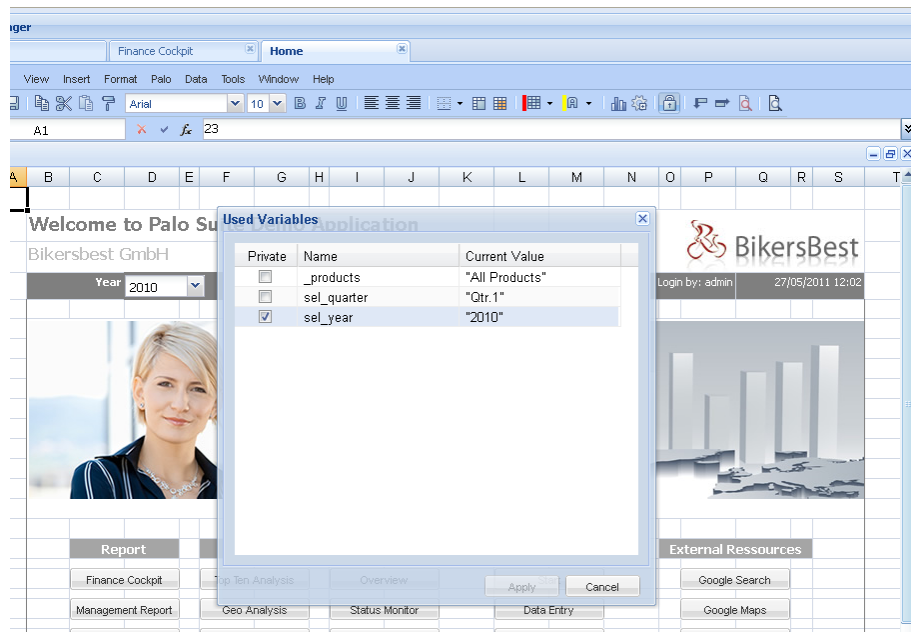


Palo Spreadsheet also allows to set a split point in the sheet. Use the command Split instead of Freeze Panes for that.

## 1.3 Private (User) Variable Management

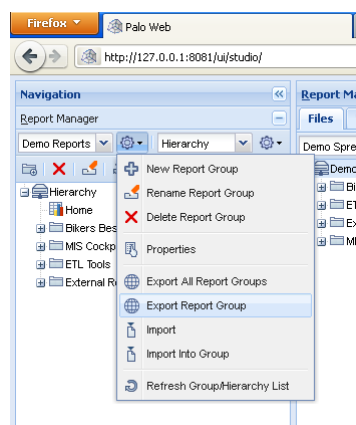
Private variables have been extended. The "private" flag is now set per workbook for all users (before, each user had to set the flag himself). This makes it very easy for Report developers to create reports where users can save and maintain their own set of variables.

In File Manager specify a variable as private. Each selection of the variable will be stored per User.

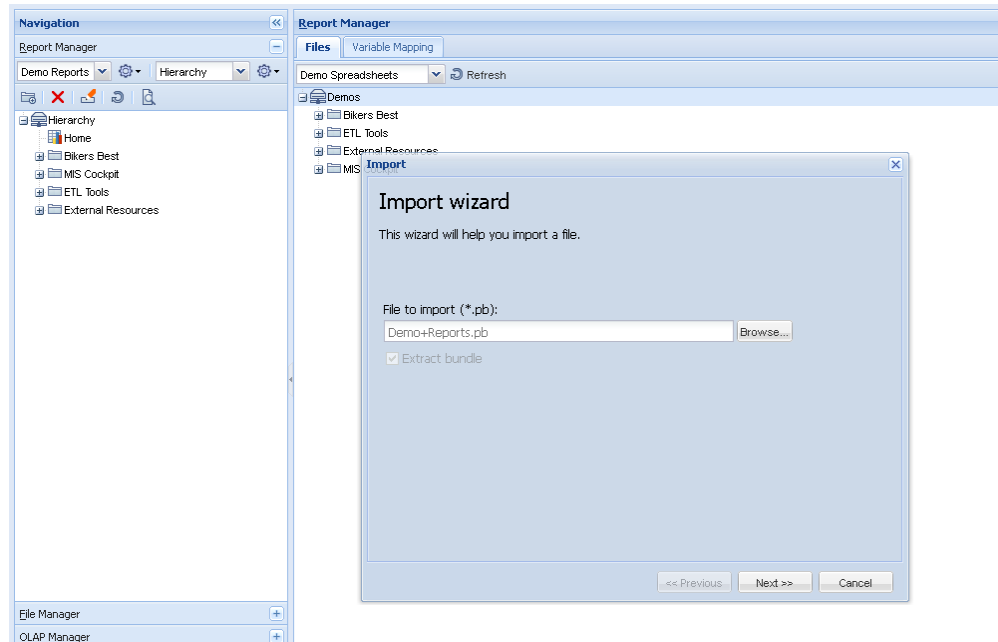


## 1.4 Application Bundles

With SR3 Palo Web introduce a new feature called Application Bundle. This makes it much easier to transfer a complete application, report structure or just a set of reports to other locations. Application Bundles allows an export and (later) import of files.



Use this features to transfer Palo Web Application from one server to another or just a different location in the same project. An exported Application Bundle can be imported using the import function in Report Manager or File Manager.



Use the import wizard to import an Application Bundle file.

## 1.5 DFilter Optimization for Palo OLAP Accelerator (GPU)

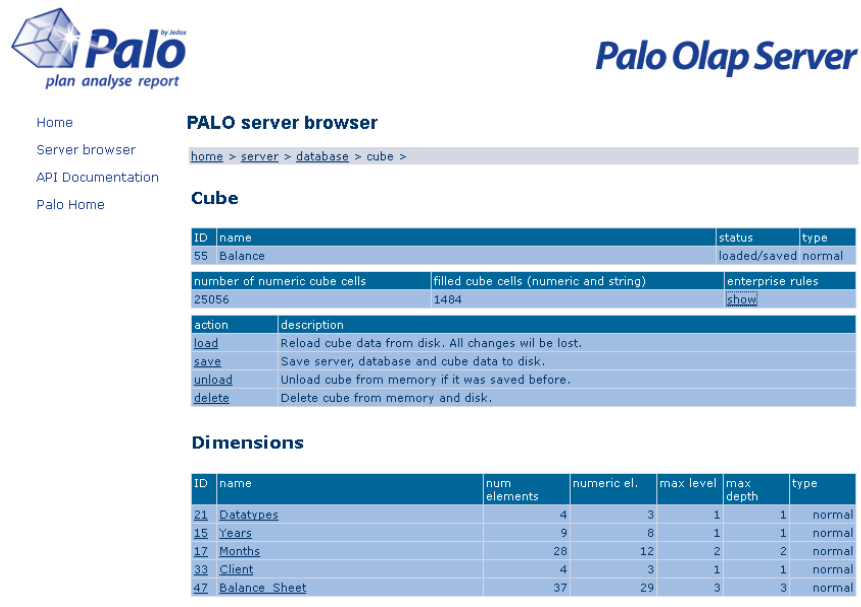
With SR3 the data filter functions are optimized again for the Palo OLAP Accelerator (GPU) version. DFilter subsets are used to create analysis like Top N reports.



## 1.6 Rule calculation statistics

Starting with Palo OLAP SR3, every rule displays additional information indicating how many cells were calculated using the rule and how many of these results in a zero value calculation. This information is very important for detection of slow performing rules.

Please enable the Palo OLAP admin port, so users can browse databases, cubes and rules like shown on next picture:



**PALO server browser**

home > server > database > cube >

### Cube

| ID | name    | status       | type   |
|----|---------|--------------|--------|
| 55 | Balance | loaded/saved | normal |

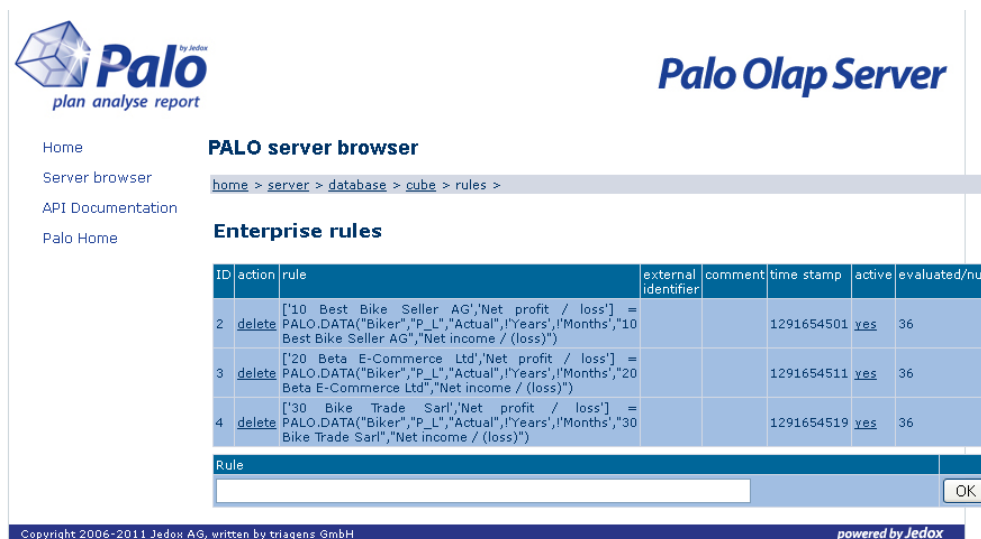
| number of numeric cube cells | filled cube cells (numeric and string) | enterprise rules     |
|------------------------------|--|----------------------|
| 25056                        | 1484                                   | <a href="#">show</a> |

| action                 | description   |
|------------------------|---|
| <a href="#">load</a>   | Reload cube data from disk. All changes will be lost. |
| <a href="#">save</a>   | Save server, database and cube data to disk.          |
| <a href="#">unload</a> | Unload cube from memory if it was saved before.       |
| <a href="#">delete</a> | Delete cube from memory and disk.                     |

### Dimensions

| ID | name          | num elements | numeric el. | max level | max depth | type   |
|----|---------------|--------------|-------------|-----------|-----------|--------|
| 21 | Datatypes     | 4            | 3           | 1         | 1         | normal |
| 15 | Years         | 9            | 8           | 1         | 1         | normal |
| 17 | Months        | 28           | 12          | 2         | 2         | normal |
| 33 | Client        | 4            | 3           | 1         | 1         | normal |
| 47 | Balance Sheet | 37           | 29          | 3         | 3         | normal |

Counters of the rule execution are set to 0 when rule text changes. You can also reset the counter of all rules in cube clicking on text “evaluated” or “null results” in header of the column.



**PALO server browser**

home > server > database > cube > rules >

### Enterprise rules

| ID | action                 | rule   | external identifier | comment | time stamp | active              | evaluated/null |
|----|------------------------|--|---------------------|---------|------------|---------------------|----------------|
| 2  | <a href="#">delete</a> | ['10 Best Bike Seller AG','Net profit / loss'] = PALO.DATA("Biker","P_L","Actual",!Years,!Months,"10 Best Bike Seller AG","Net income / (loss)") |                     |         | 1291654501 | <a href="#">yes</a> | 36             |
| 3  | <a href="#">delete</a> | ['20 Beta E-Commerce Ltd','Net profit / loss'] = PALO.DATA("Biker","P_L","Actual",!Years,!Months,"20 Beta E-Commerce Ltd","Net income / (loss)") |                     |         | 1291654511 | <a href="#">yes</a> | 36             |
| 4  | <a href="#">delete</a> | ['30 Bike Trade Sari','Net profit / loss'] = PALO.DATA("Biker","P_L","Actual",!Years,!Months,"30 Bike Trade Sari","Net income / (loss)")         |                     |         | 1291654519 | <a href="#">yes</a> | 36             |

Rule

OK

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A high amount of null results indicates that markers should be used for that rule.

## 1.7 New Java Library for Palo ETL

Palo Suite SR3 introduces a new Java library for all Palo OLAP components like connections, extracts and loads. The new components are delivered in 3.2 SR3 as a Ramp-up-Version. After Standard Installation the 3.2 SR2 components are still used.

To switch to the new library the following steps have to be done:

- Stop PaloSuiteTomcatService
- In folder .\tomcat\webapps\etlserver\config\standard
  - Rename File component.xml to component\_3.2.xml
  - Rename File component\_3.3\_Beta.xml to component.xml
- Start PaloSuiteTomcatService

No changes are required in existing ETL projects **but** it is **not** possible to use old and new components at the same time.

The new components have a lot of great advantages like higher stability, less memory consumption, parallel processing (in ETL 3.3) and SSL connections.

In most cases an increase of performance can be measured too.

## 1.8 New Splash Parameter ##

Palo Suite 3.2 SR3 offers a new splash parameter. The ## parameter is used to add or subtract absolute values. The new parameter works in Palo for Excel as well as in Palo Spreadsheet.

##1000 adds 1000 to the actual value (also possible ##+1000).

##-1000 subtracts 1000 of the current value.

## 1.9 Palo Web Demo resources

The European 2011 Palo roadshow is over. After a lot of request from customers and partners we have been published our Palo Web demo resources.

The new Bikers Best demo can be downloaded from the Jedox Homepage -> download -> other downloads. Please follow the install instructions to setup the Roadshow Demo. A guided tour thru the demo can be found on Jedox's YouTube channel:

<http://www.youtube.com/user/JedoxPalo#p/a/u/2/JJDKd5Gp6Y4>

## 2 What's new in Palo Suite 3.2 SR2

This document gives an overview of the new features, enhancements and fixes in Palo Suite 3.2 SR2 Premium Edition and Palo for Excel 3.2 SR2 Premium Edition. Palo 3.2 SR2 is available for download at <http://www.jedox.com>. Detailed information about previous Palo Suite 3.2 versions can be found in the next chapters of this document.

### 2.1 Fixed issues from Version 3.2 SR1

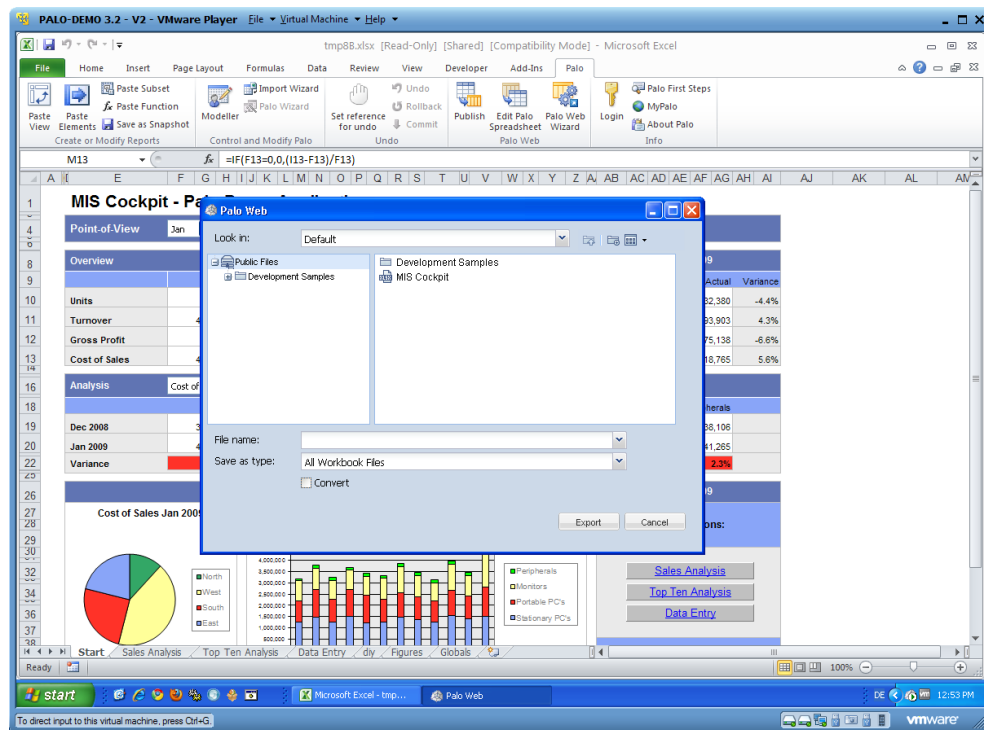
Issues found in version 3.2 SR1 have been fixed in version 3.2.SR2. The development team thanks those customers and partners who used <http://bugs.palo.net> to log issues and bugs.

| Product      | Issues | Resolved |
|--------------|--------|----------|
| OLAP Server  | 19     | 19       |
| Excel Add-in | 16     | 16       |
| Client Libs  | 6      | 6        |
| ETL Server   | 14     | 14       |
| ODBO/XMLA    | 4      | 4        |
| Palo Web     | 189    | 189      |
| Palo Setup   | 36     | 36       |

### 2.2 Palo File Manager as central storage for Microsoft Excel sheets

With 3.2 SR2 Palo Web – File Manager can be used to save pure Excel Spreadsheets in a central location. Instead of using a network share or distribute the file, all Palo Excel based reports or any other Excel file can be stored in File Manager.

Just use the Publish functionality and uncheck 'convert'. Published files can be secured later in the File Manager environment in Palo Web.



## 2.3 Status bar in Palo Web

A status bar will be shown during long running operations in Palo Web.

## 2.4 Updated Palo OLAP Accelerator (GPU) version

The Palo OLAP Accelerator (GPU) is now supporting the new 3.2 DFilters. These filters allow the creation of data driver queries.

## 2.5 ETL Server and Palo Web ETL Manager for 64bit

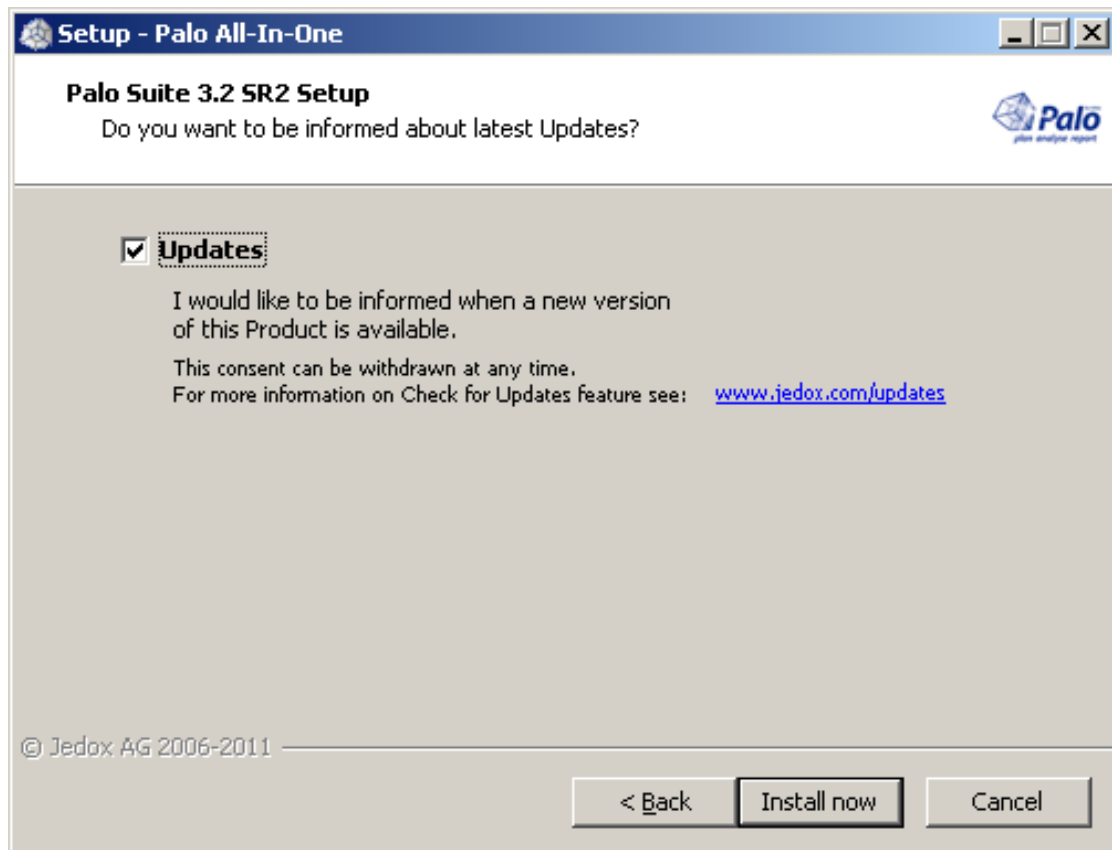
3.2 SR2 of Palo ETL supports 64bit for all components. Since version 3.2 SR1 Palo ETL Server is completely available as community version. (Open Source)

## 2.6 New Languages

Estonian and Israeli is available as a new UI language for Palo for Excel.

## 2.7 Check for Updates

The new version allows disabling the 'check for updates' functionality during install. Jedox highly recommend to keep the check for update mechanism always on to stay currently informed about new versions.



### 3 What's new in Palo Suite 3.2 SR1

This document gives an overview of the new features, enhancements and fixes in Palo Suite 3.2 SR1 Premium Edition and Palo for Excel 3.2 SR1 Premium Edition. Palo 3.2 SR1 is available for download at <http://www.jedox.com>. Detailed information about Palo Suite 3.2 can be found in the next chapter of this document.

#### 3.1 Fixed issues from Version 3.2

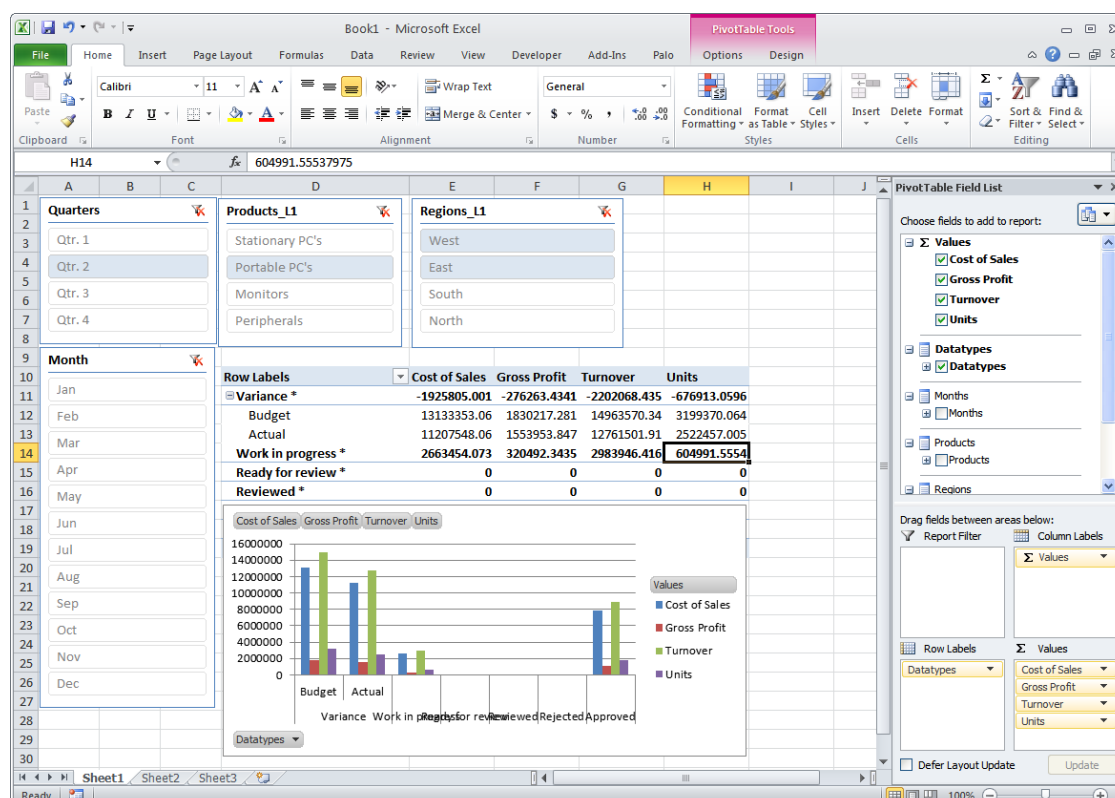
Issues found in version 3.2 have been fixed in version 3.2.SR1. The development team thanks those customers and partners who used <http://bugs.palo.net> to log issues and bugs.

| Product      | Issues | Resolved |
|--------------|--------|----------|
| OLAP Server  | 23     | 23       |
| Excel Add-in | 12     | 12       |
| Client Libs  | 2      | 2        |
| ETL Server   | 9      | 9        |
| ODBO/XMLA    | 7      | 7        |
| Palo Web     | 170    | 170      |
| Palo Setup   | 15     | 15       |

Please also refer to [http://www.jedox.com/known\\_issues.txt](http://www.jedox.com/known_issues.txt) for known issues with Palo Suite 3.2. SR1

#### 3.2 Palo 3<sup>rd</sup> Party Access (ODBO)

The new version of Palo 3<sup>rd</sup> Party Access supports now the new Microsoft Excel Slicer Controls. Use this controls to create an easy navigation through dimension and levels.



## 3.3 Palo Web

### 3.3.1 - Save as Snapshot

Palo Web Spreadsheets can now be saved as static Snapshots in Microsoft Excel 2007/2010 format. Palo formulas and all other Spreadsheet formulas will be converted into static numbers. The snapshot feature is also available during "Export to Web" from Microsoft Excel.

### 3.3.2 - Snap to Grid for floating objects

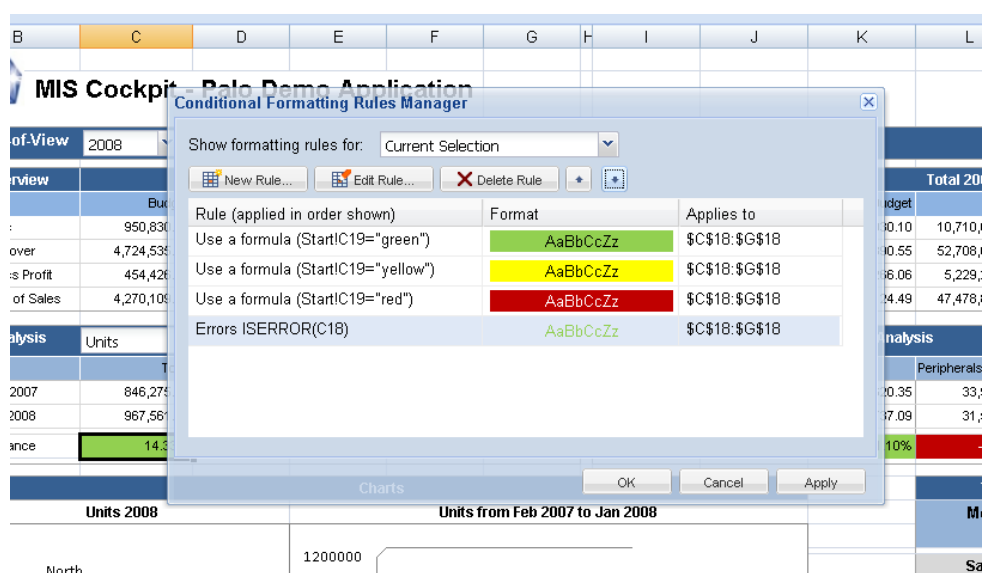
All floating objects can now be aligned to the grid. Floating objects are Charts, Buttons and Comboboxes. Hold the ALT key during movement with the mouse and release the object to align the object to the grid.

### 3.3.3 Optional conversion when importing XLSX files in File Manager

Microsoft Excel 2007/2010 documents can be automatically converted into native Palo Web Spreadsheets during import. A conversion button will be visible if an appropriate document was chosen.

### 3.3.4 Reordering of Conditional Formatting rules

Conditional formatting rules can now be reordered.



### 3.3.5 Chart Library enhancements

#### 3.3.5.1 Named range as Chart Source

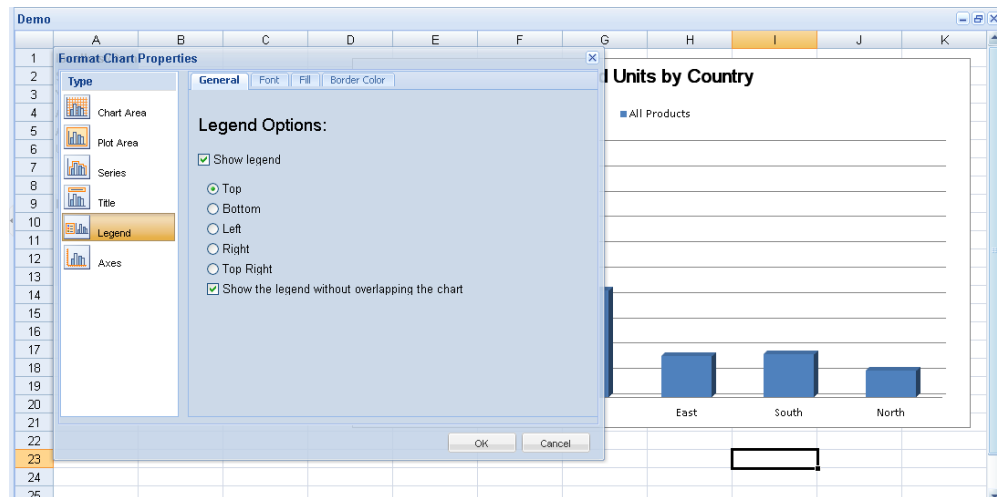
Named ranges can now be used for Charts.

#### 3.3.5.2 Reference cells inside DynaRanges

Cells inside DynaRanges can now be used for Charts

#### 3.3.5.3 Choosing legend position

The chart legend can now be placed on different areas of the chart.



### 3.3.6 Test connections in Connection Manager

New and existing connection in Connection Manager can now be tested. This makes it easier to check existing connections before set them to active.

### 3.3.7 Dynamically determine File Manager Document icon

If autosave documents of a document are available File Manager will display a different icon for these documents. To access the autosave files open the document and choose the autosave or current file and save it once.

### 3.3.8 Enhanced Options for Palo Web Reporting Links

If a Palo Report is embedded into an external Website (Intranet, Extranets or Portals) the new options allows to hide the toolbar, the status bar and to run the report in standalone mode. To change the options run Report Manager and choose properties from the context menu of a report.

### 3.3.9 Mixed borders

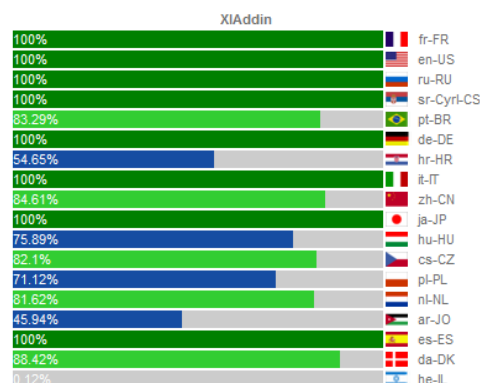
Cell formatting now supports mixed borders.

## 3.4 Documentation Updates

The new Palo Web Advanced documentation is now available in German, English and French.

## 3.5 Languages Updates

Japanese was added as new User interface language for Palo Excel Add-In 3.2.



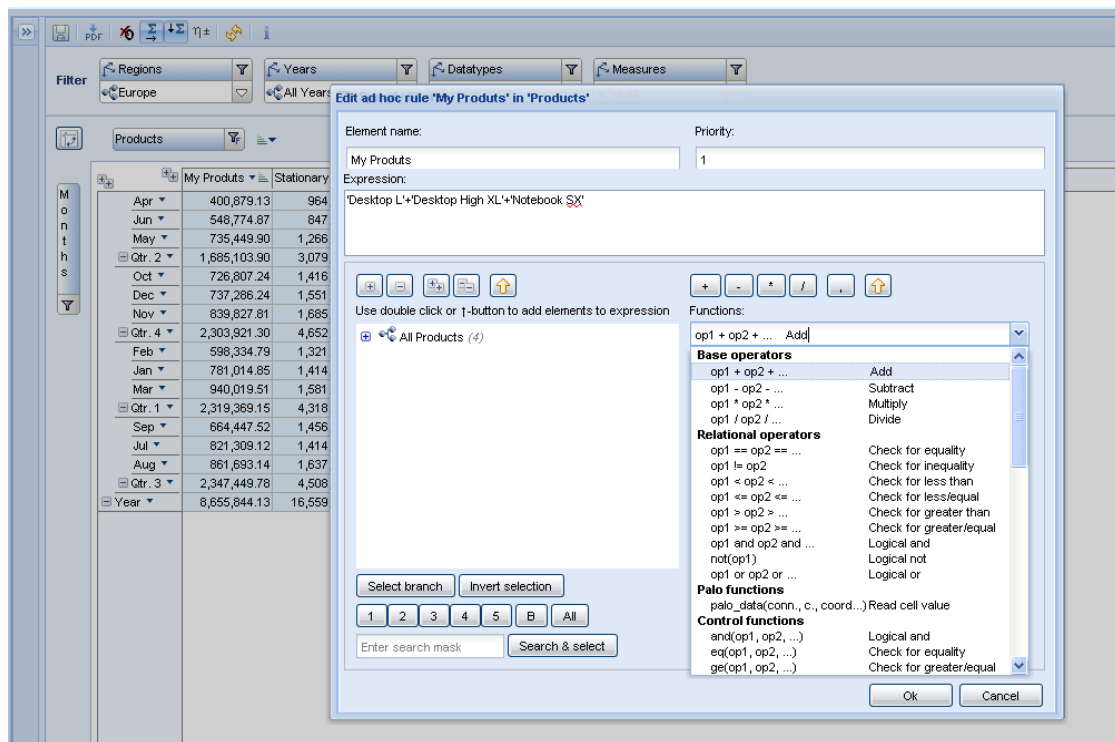


## 3.6 Palo Analyzer

Palo Suite 3.2 SR1 now includes the Palo Analyzer (the premium component of Palo Pivot). Palo Analyzer is available as a 30 day trial version and will be installed with the All in One Setup of Palo. Palo Analyzer has some really cool add on functions.

### 3.6.1 Ad hoc Rules / Calculated members

Palo Analyzer allows the creation of ad Rules / Calculated dimension members. These ad hoc rules can be created using the filter dialog of a dimension. Use complex formulas to calculate the values. The new (calculated) elements can be used everywhere in the dimension and Palo Analyzer Views.



### 3.6.2 Generate PDF Files from View

Palo Analyzer allows generating PDFs from the current views. Just use the PDF button in the toolbar to render the PDF.

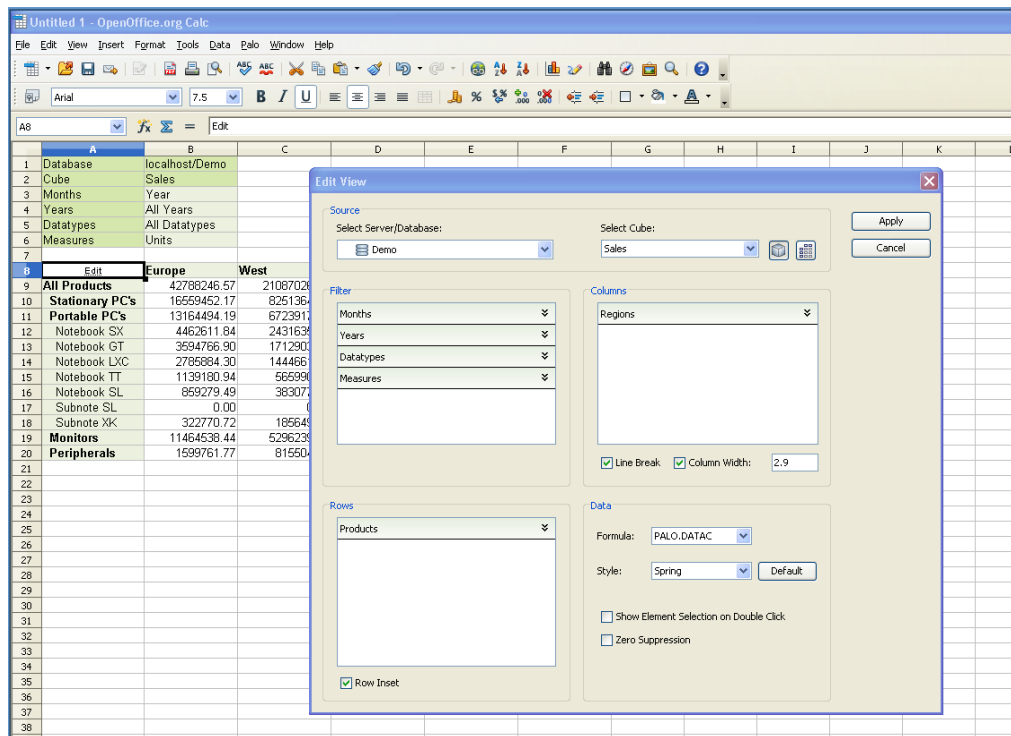
### 3.6.3 Sorting of Columns and Rows

Based on cell data Palo Analyzer allows to sort column and rows. Just right click to open the context menu of a cell to start sorting.

## 3.7 Palo for Open office Add in

### 3.7.1 Style selector for Paste View

A set of new refreshed stylesheets are provided to show data in paste view.



### 3.7.2 Import Data with Setdata loops

Palo for Open Office now supports data and structure imports via Import Files and Setdata. Each row in a text file will be looped into the first row of an Open Office Spreadsheet.

## 3.8 New Palo Web Demo reports added

With SR1 of Palo Suite we added a set of new reports to demo the possibilities of Palo Web. The new Biker Demo consists of a new Biker OLAP database, an ETL process to load one of the sample cubes and a set of Palo Web reports.

The new demo can be found in the Demo repository in File Manager and Report Manager. The new demo shows features like Frameset Navigation, Widgets, Drill Through, Relational Reporting and Dashboards with Sparklines.

This demo will be continuously enhanced with reports to show the possibilities of Palo Web and the Palo Suite.

**Navigation**

Report Manager

Demo Report: Hierarchy

Hierarchy

- Bikers Best Navigation
  - Bikers Best
    - Planning
      - Budget Data Entry
    - Analyse
      - Top10 Analysis
      - Geo Analysis (Widget)
      - Order Analysis (Drill Through)
      - Time Analysis (relational)
    - Reporting
      - Finance Cockpit
      - Management Reporting
      - Balance Sheet
      - Profit & Loss (DynaRange)
      - Profit & Loss (Chart)
  - MIS Cockpit
  - ETL Tools
  - External Resources

File Manager OLAP Manager User Manager ETL Manager Connection Manager Options Help Logout

**Report Manager**

Bikers Best Navigation

File Edit View Data Window Help

Refresh Print Preview PDF

Bikers Best Navigation

Home Plan Analyse Report

**Management-/ Finance and Analysis Cockpit**

Bikersbest GmbH

Year: 2008 Month: Jan Login by: admin 13/12/2010 15:16

KPI Overview Actual Jan 2008

|                    | Key Figures    | Dev. 2008 | Act. Jan     | % Target | Indicator |
|--------------------|----------------|-----------|--------------|----------|-----------|
| <b>Accessories</b> | Order Quantity |           | 5,850.31     | 109.10   |           |
|                    | Gross Profit   |           | 303,044.51   | 126.82   |           |
|                    | Cost of Sales  |           | 237,186.33   | 84.29    |           |
|                    | Sales Amount   |           | 540,230.84   | 103.82   |           |
| <b>Bikes</b>       | Order Quantity |           | 6,815.83     | 104.08   |           |
|                    | Gross Profit   |           | 992,071.94   | 107.48   |           |
|                    | Cost of Sales  |           | 2,191,748.88 | 100.74   |           |
|                    | Sales Amount   |           | 3,183,820.82 | 102.75   |           |
| <b>Clothing</b>    | Order Quantity |           | 610.60       | 104.87   |           |
|                    | Gross Profit   |           | 3,957.23     | 89.89    |           |
|                    | Cost of Sales  |           | 4,844.57     | 85.18    |           |
|                    | Sales Amount   |           | 8,801.80     | 87.23    |           |
| <b>Components</b>  | Order Quantity |           | 3,452.86     | 85.53    |           |
|                    | Gross Profit   |           | 237,484.41   | 93.77    |           |
|                    | Cost of Sales  |           | 490,391.15   | 102.33   |           |
|                    | Sales Amount   |           | 727,875.56   | 99.37    |           |

**Revenues per sales channel 2008**

Dev. 2008

All Channels Fax/Phone/Mail Online Shop Walk-In Indicator

102.24

102.24

102.22

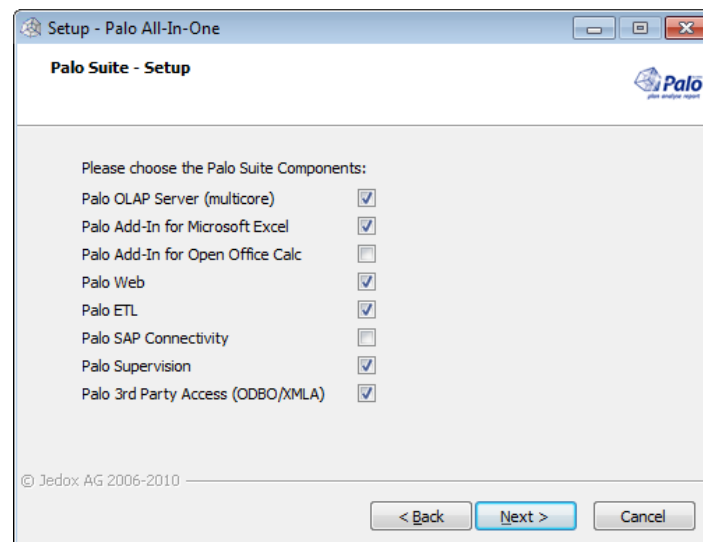
102.31

## 4 What's new in Palo Suite Version 3.2

This document gives an overview of the new features, enhancements and fixes in Palo Suite 3.2 Premium Edition and Palo for Excel 3.2 Premium Edition. Palo 3.2 is available for download at <http://www.jedox.com>

### 4.1 All-In-One Setup to simplify deployment

The new Palo All-in-One Setup will allow you to install all available Palo Suite components from within one single setup, therefore greatly simplifying the deployment process. Palo Setup will use all necessary settings in Standard installation mode. The Advance setup will allow the adjusting of settings manually.



Advanced Options in Palo "All-In-One Setup"

For detailed Information on Setup please review the new Palo Setup and Installation Guide.

## 4.2 Fixed issues from Version 3.1 SR1

Many issues found in version 3.1 have been fixed in version 3.2. The development team thanks those customers and partners who used <http://bugs.palo.net> to log issues and bugs.

| Product      | Issues | Resolved |
|--------------|--------|----------|
| OLAP Server  | 128    | 128      |
| Excel Add-in | 72     | 72       |
| Client Libs  | 31     | 31       |
| ETL Server   | 107    | 107      |
| ODBO/XMLA    | 7      | 7        |
| Palo Web     | 830    | 830      |

Please also refer to [http://www.jedox.com/known\\_issues.txt](http://www.jedox.com/known_issues.txt) for known issues with Palo Suite 3.2.

## 5 Palo OLAP

Palo OLAP 3.2 has many performance optimizations in every area including memory consumption, rules performance, new data filter algorithms and cube export (changed to support faster calculation and larger models). 3.2 deliver the best performance of Palo OLAP to date. Testing of existing models showed good improvements in all areas.

In addition, Palo OLAP Accelerator (GPU) is now generally available, another step forward in performance for In-Memory databases.

### 5.1 Palo OLAP Accelerator (GPU version)

With version 3.2 we introduce the Palo OLAP Accelerator (GPU version). This extension allows for loading of Palo OLAP cubes into the memory of graphical processing units (GPUs). These units are optimized for parallel processing and are extremely well suited for OLAP processing. The performance improvements when processing OLAP queries is very high.

Palo OLAP GPU is available as an extension component of the Palo Premium Editions with version 3.2. The Palo OLAP Accelerator is optimized for read operations. General write back operations (and splashing) will be available with a next service release.

### Changes from the Palo OLAP Accelerator version 3.1 (ramp up version)

#### 5.1.1 Optimized GPU Cube storage and structure

The storage of Palo Cubes on GPU cards has been optimized to get more performance and use the more effective the memory of the GPU cards.

#### 5.1.2 Synchronization

Modelling changes will be synchronized without requiring re-loading of the GPU cube. This simplifies ETL processes and eliminates further conversion processes. An ETL process now automatically covers all necessary cube conversions.

#### 5.1.3 Linux Support

Palo OLAP Accelerator is also available on Linux.

### 5.1.4 Palo ETL Rules aggregation script (ETL Tasks)

Cube rules in Palo OLAP Accelerator are not supported yet. To easily convert a Palo Rules model into a value-based Cube, use the new Palo ETL Task (Pre-calculate Rules).

For further information please refer to the Palo GPU Whitepaper.

## 5.2 New Multi-User Synchronization

Palo 3.2 OLAP now has new and optimized multi user synchronization. The new implementation of the synchronization subsystem increases Palo's user scalability significantly. Multiple users can now browse reports while others (including ETL tasks) can modify the database at the same time with minimal performance impact.

## 5.3 Cell based rights management

Cell based rights management compatible with IBM TM1 has been implemented in version 3.2. Palo OLAP now allows administrators to specify user rights at a cell level. For example, different access right may be given to Budget, 2011, Germany [read and write] and Budget, 2010, Germany [read only]. This cell based security can easily be defined using the new Security Cube which now contains an extra dimension (for User Groups).

|    | A                       | B            | C               | D             | E        | F           | G | H |
|----|-------------------------|--------------|-----------------|---------------|----------|-------------|---|---|
| 1  | localhost/Demo          |              |                 |               |          |             |   |   |
| 2  | #_GROUP_CELL_DATA_Sales |              |                 |               |          |             |   |   |
| 3  | admin                   |              |                 |               |          |             |   |   |
| 4  | Year                    |              |                 |               |          |             |   |   |
| 5  | 2008                    |              |                 |               |          |             |   |   |
| 6  | All Datatypes           |              |                 |               |          |             |   |   |
| 7  | Units                   |              |                 |               |          |             |   |   |
| 8  |                         |              |                 |               |          |             |   |   |
| 9  |                         | All Products | Stationary PC's | Portable PC's | Monitors | Peripherals |   |   |
| 10 | Europe                  |              |                 |               |          |             |   |   |
| 11 | West                    |              | R               | R             |          |             |   |   |
| 12 | East                    |              | R               | D             |          |             |   |   |
| 13 | South                   |              | R               | W             |          |             |   |   |
| 14 | North                   |              | W               |               |          |             |   |   |
| 15 |                         |              |                 |               |          |             |   |   |
| 16 |                         |              |                 |               |          |             |   |   |
| 17 |                         |              |                 |               |          |             |   |   |
| 18 |                         |              |                 |               |          |             |   |   |
| 19 |                         |              |                 |               |          |             |   |   |
| 20 |                         |              |                 |               |          |             |   |   |
| 21 |                         |              |                 |               |          |             |   |   |
| 22 |                         |              |                 |               |          |             |   |   |
| 23 |                         |              |                 |               |          |             |   |   |

To inherit cell based right use the Palo Rules functionality.

## 5.4 Evolved security

### 5.4.1 On the fly User Account creation

When using in conjunction with Palo Supervision, it is now possible to create users "on the fly" in Palo OLAP provided by third party system.



## 5.4.2 User/Groups/Roles inactive switch

3.2 offers the possibility to switch specific Users, Groups or Roles of Palo OLAP to inactive. This is very helpful to disable a login during maintenance activity like ETL jobs.

## 5.5 Optimized DFilters / Subsets

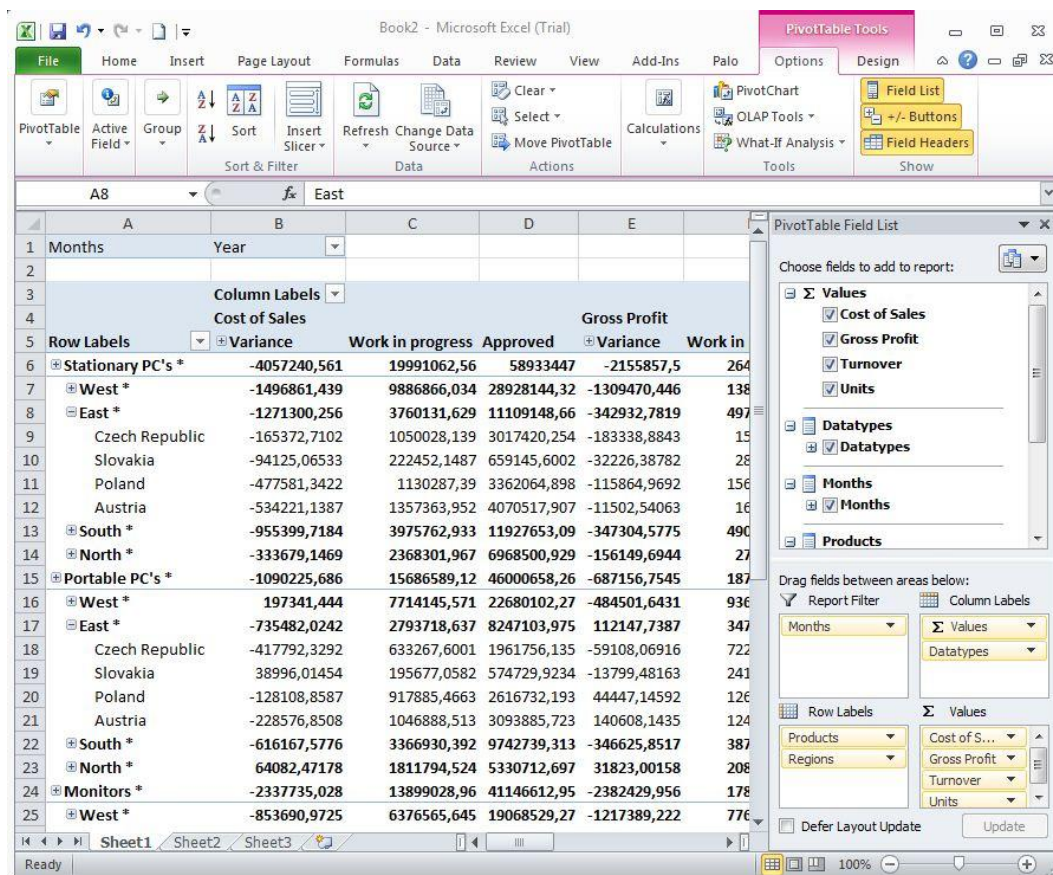
The DFilter handling has been implemented in the core Server, and removed from the client. Filter/Export operations are now done completely on the server, improving performance.

DFilters can be used to create dynamic subsets of a dimension. For example they could be used to show the top 10 regions in 2010 by product, by measure, sorted by organization.

Cube export functions have been largely re-written.

## 5.6 Enhanced ODBO support

The Palo ODBO provider now supports write back and modeling. In addition, these new areas have been optimized and are done internally, to support Microsoft Excel 2010, and other front ends like Bissantz DeltaMaster and Cubeware Cockpit.



## 5.7 New Rules functions

The rules functions AND, OR, NOT are now available.

## 5.8 Rules optimized for better calculation performance

Rules calculation has been optimized for faster PALO.DATA and PALO.MARKER calculation. This increases data scalability.

## **5.9 Rules deactivation when dimension changes**

Rules related to elements that are deleted are now deactivated, and stay in the server for possible manual correction.

## **5.10 Calculation engine unified**

Different Palo data formulas (PALO.DATA/DATAC/DATAV) now have their calculation engine unified on the server. Instead of using a different calculation engine, the new Palo 3.2 engine now handles all data function request, streamlining internal development and quality processes.

## **5.11 Larger dimension support**

The new Palo GPU Accelerator Palo now supports very large dimensions. In addition, a new API has been implemented to retrieve these large dimensions in small blocks. Instead of loading the complete dimension, only the visible part of the dimension is retrieved.

This speeds up the handling of large dimensions on the client. Palo front ends will use this API calls in a next service release.

## **5.12 Memory management improved**

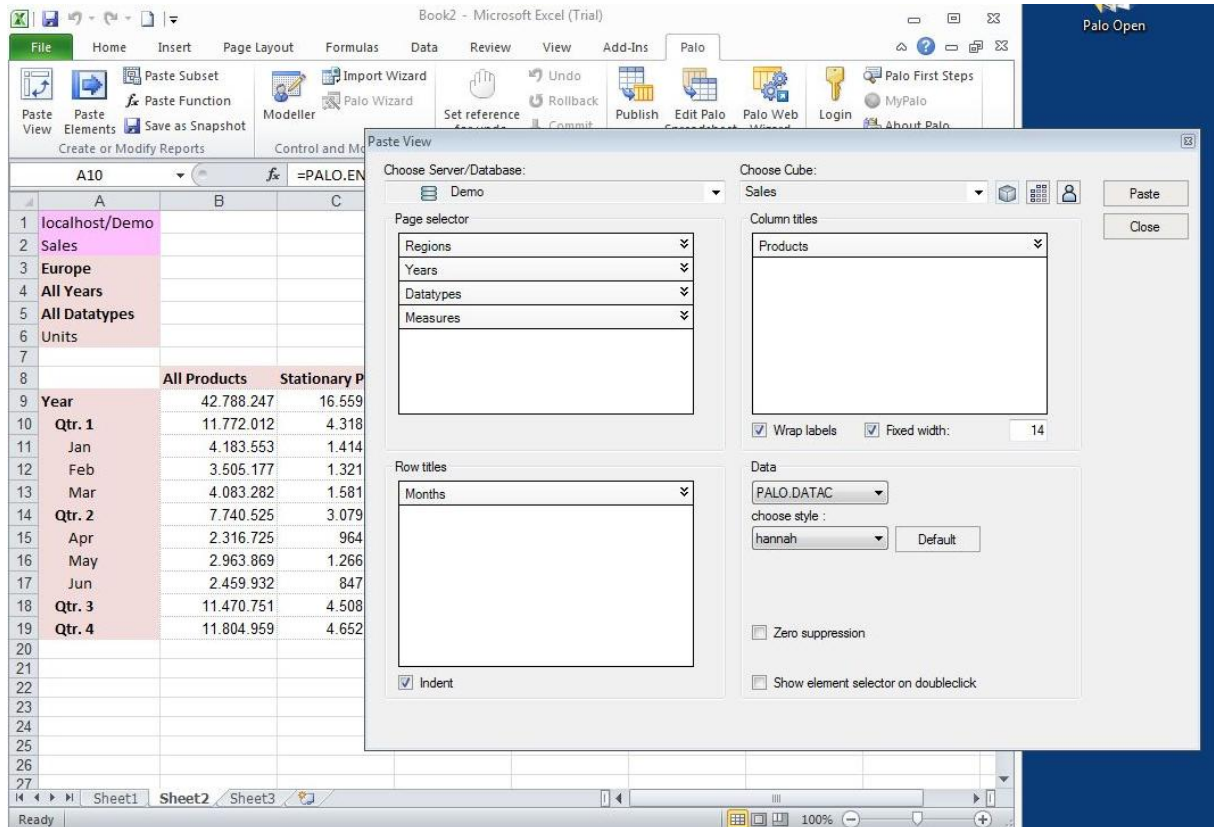
The internal Palo OLAP Memory management has been changed for better availability (mainly on 32 bit systems).



## 6 Palo for Excel

### 6.1 Stylesheets selector for Paste View

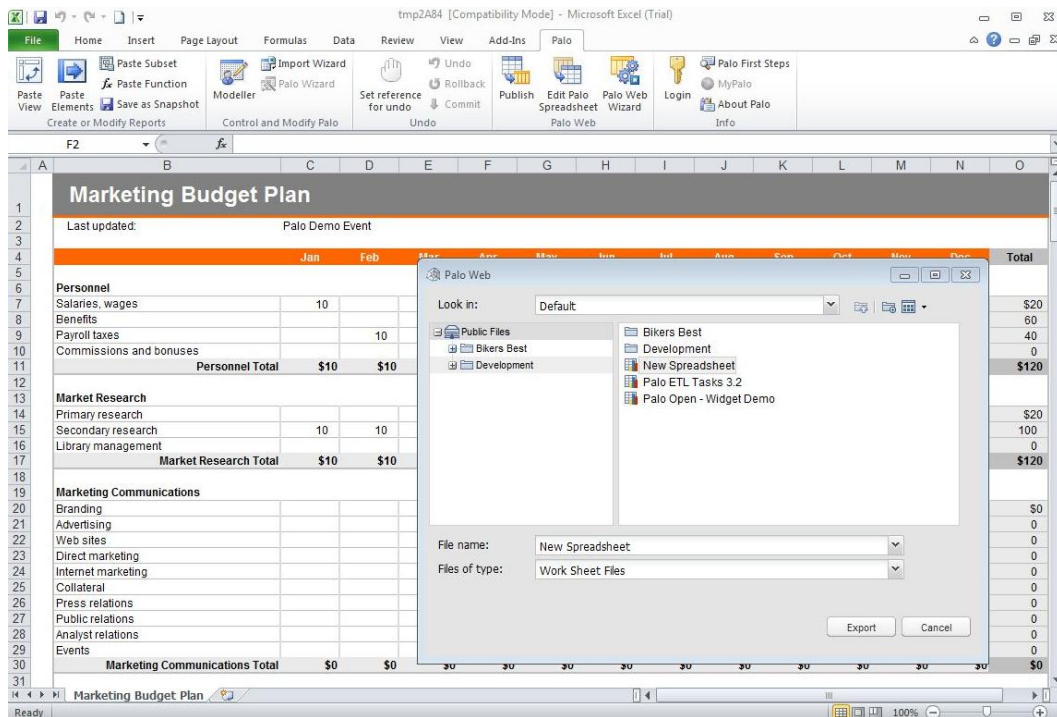
A set of new refreshed stylesheets are provided to show data in paste view



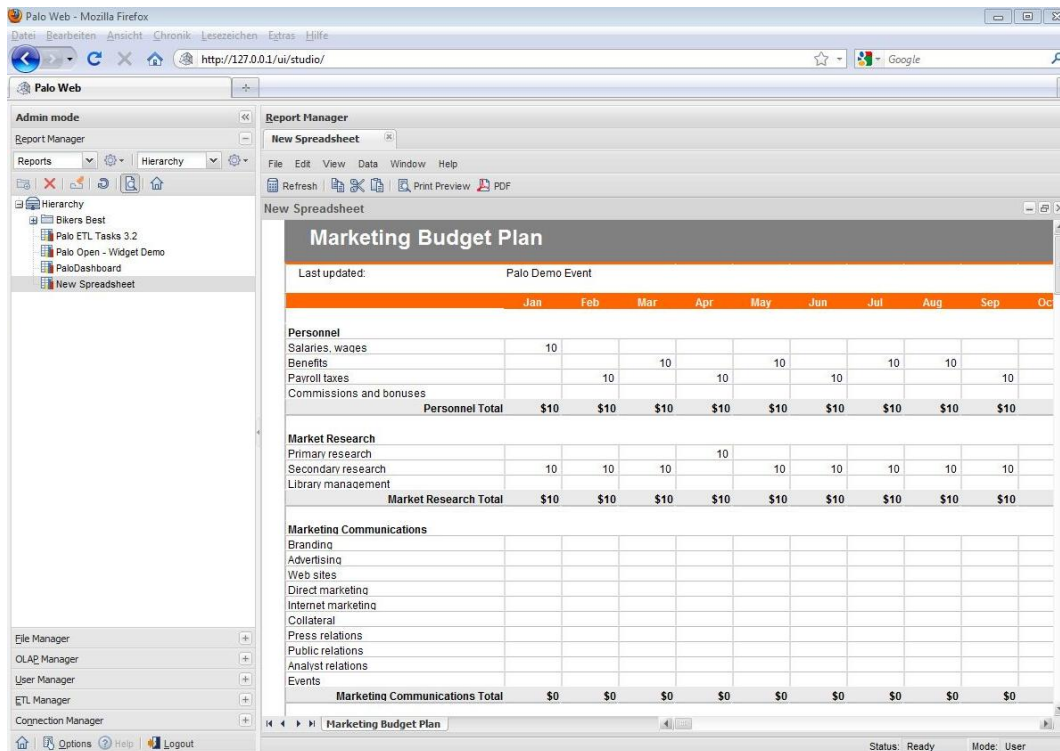
If you want to change the Palo View data style, open the palostyles.xls or copy a template over the existing one.

## 6.2 Palo Web integration and publishing

With Palo for Excel it is now possible to publish a spreadsheet as a Palo Web Spreadsheet. The new tool bar can be used to define a Palo Web connection. As this is done, an Excel Spreadsheet can be easily published as a Palo Web Spreadsheet.



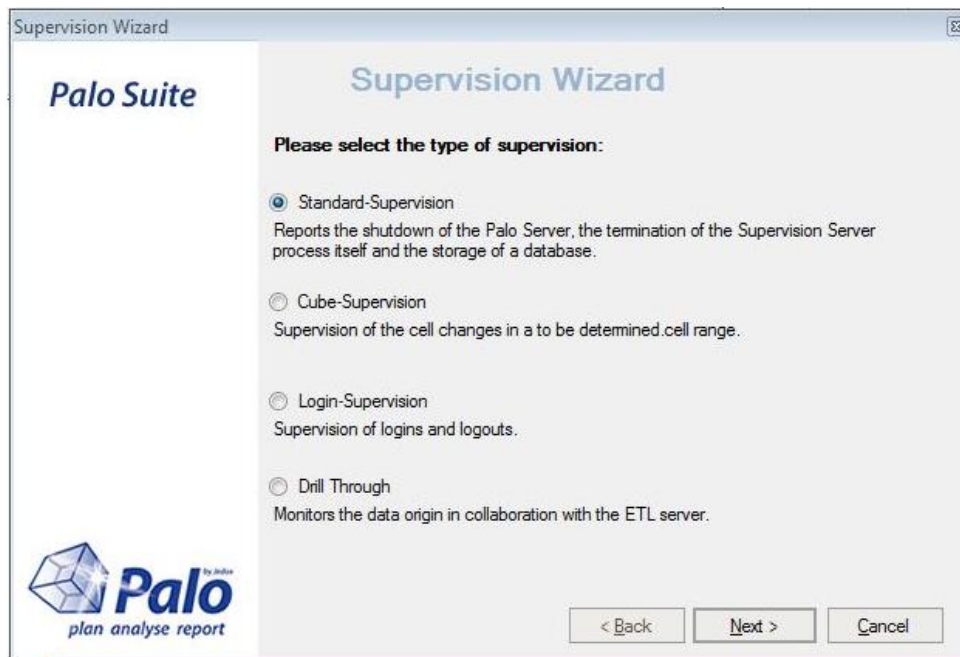
In addition, it is also possible to open any Palo Web Spreadsheet in Microsoft Excel, to view or modify it.



The current version still has some limitations on which features / functions can be imported/exported. The main formats and Palo functions are supported.

## 6.3 Supervision Server Event Wizard

The new Supervision Server Event wizard allows an easy way to pre-create Supervision Server Events like Login, Cube Area or Drill Through. Based on the selected event, further information will be requested. Upon completion, a PHP script is generated which can be saved into the Supervision Server directory.



The individual code for the events can then be implemented.

## 7 Palo Web

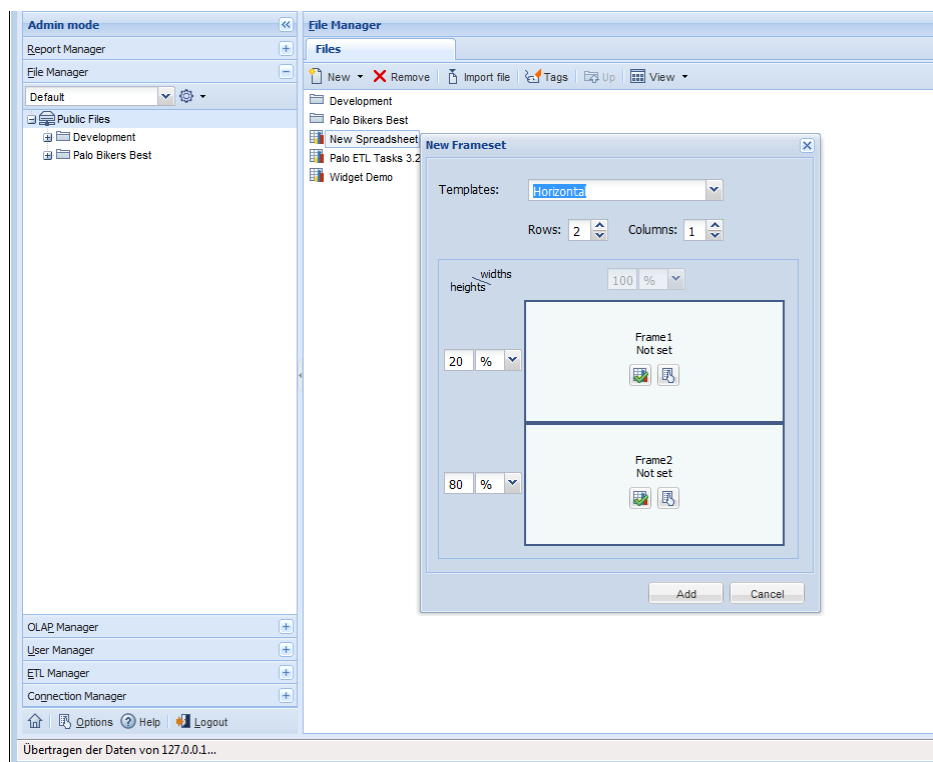
Palo Web combines all components (managers) required to access Palo OLAP using a standard web browser. Below is an overview of the new features in version 3.2

Palo ETL Manager is covered in the ETL section. A generic feature overview is found in the manual "First\_steps\_with\_Palo\_Web".

### 7.1 Extended Report Manager Navigation (Framesets)

Palo Web 3.2 introduces a new document type called Frameset. With Framesets it is possible to arrange several Palo Spreadsheets into one single application; split screen in different areas and use those areas to load and display different workbooks. This functionality can be used, for example to extend application navigation. Hyperlinks have been improved to support this function. See 7.3.3 section below for more details.

A frameset can be defined in one of the standard layouts Palo Web offers or can be freely customized.



### 7.2 Copy data from Microsoft Excel to Web reports


Planning data is commonly collected using Palo Web Spreadsheet input sheets. These sheets receive specific budget values as inputs. Some users still do "side planning" with standard Excel spreadsheets, which they calculate (with) more detailed values. With version 3.2, it is possible to copy Excel cells directly into a Palo Spreadsheet area via the copy & paste (clipboard) function.

The source and target area need to be the same size and the target area must consist of base level elements.

## 7.3 Enhance Palo Spreadsheet Usability

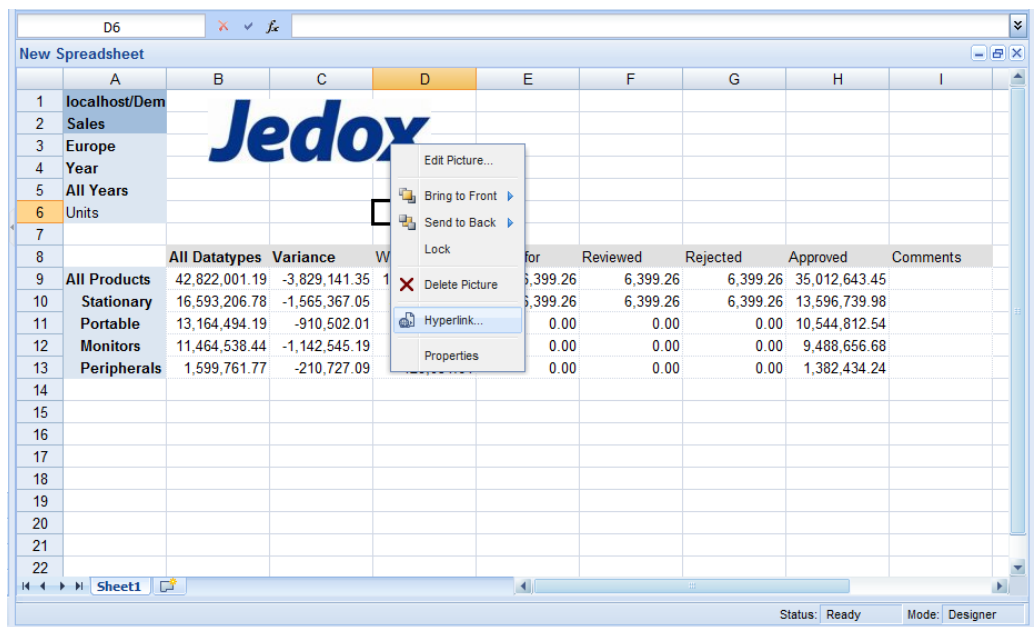
Palo Spreadsheet 3.2 has a few new features to make report creation easier.

### 7.3.1 Format Painter Tool

 **Format Painter** Format painter is now available to easily copy a format of a selected cell to other cells using mouse drags.

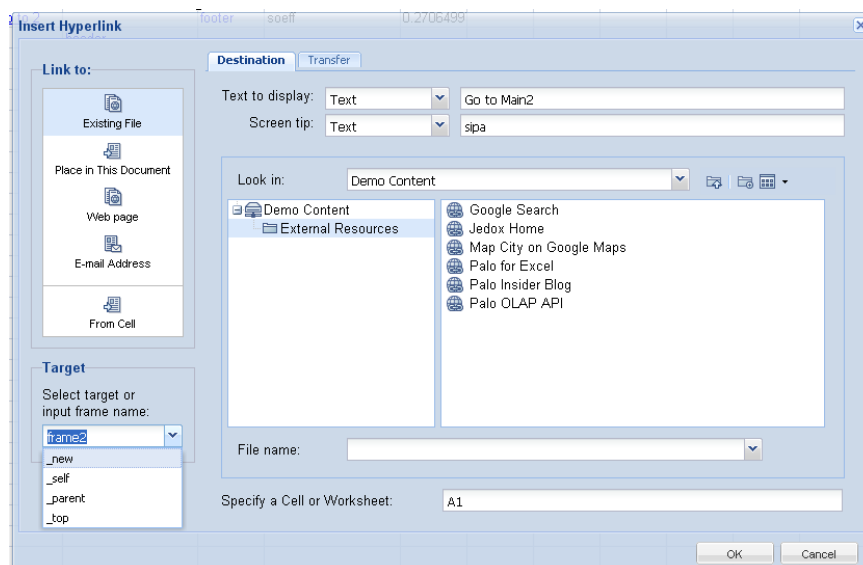
### 7.3.2 Hyperlinks on images

Embedded images in a Palo Spreadsheet can now contain addition hyperlinks to other sources or reports. Use right-click and specify the hyperlink for a selected image.



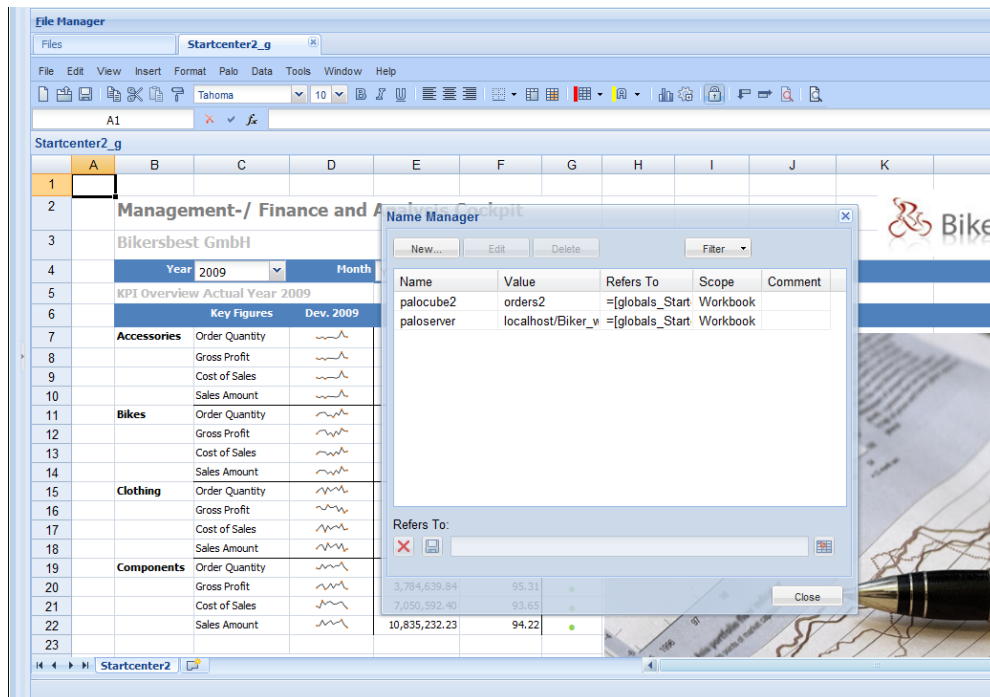
### 7.3.3 Hyperlinks support for Framesets

Both, Hyperlink dialog and Spreadsheet function were enhanced with target argument in Palo Web 3.2 to support frameset documents.



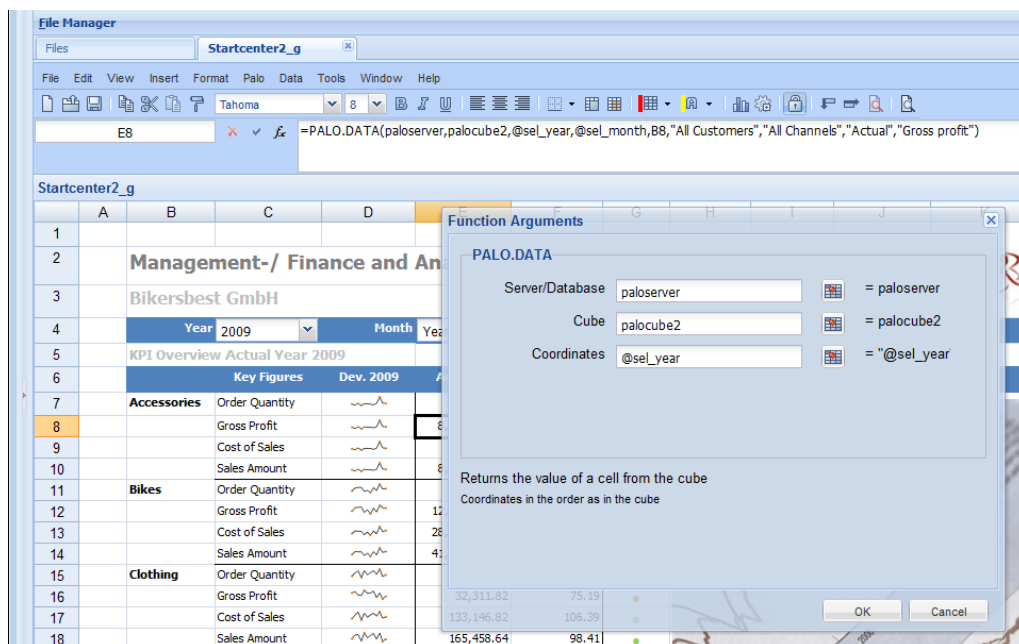
### 7.3.4 Name Manager for Cells / Tag-Manager

Cells can now be named using the standard text field in the formula bar in the new Tag/Name manager of the Palo Spreadsheet. A named cell can be used in formulas. If the name of the cell is written in the formula bar field, this cell gets active and selected.



### 7.3.5 Formula bar improvements

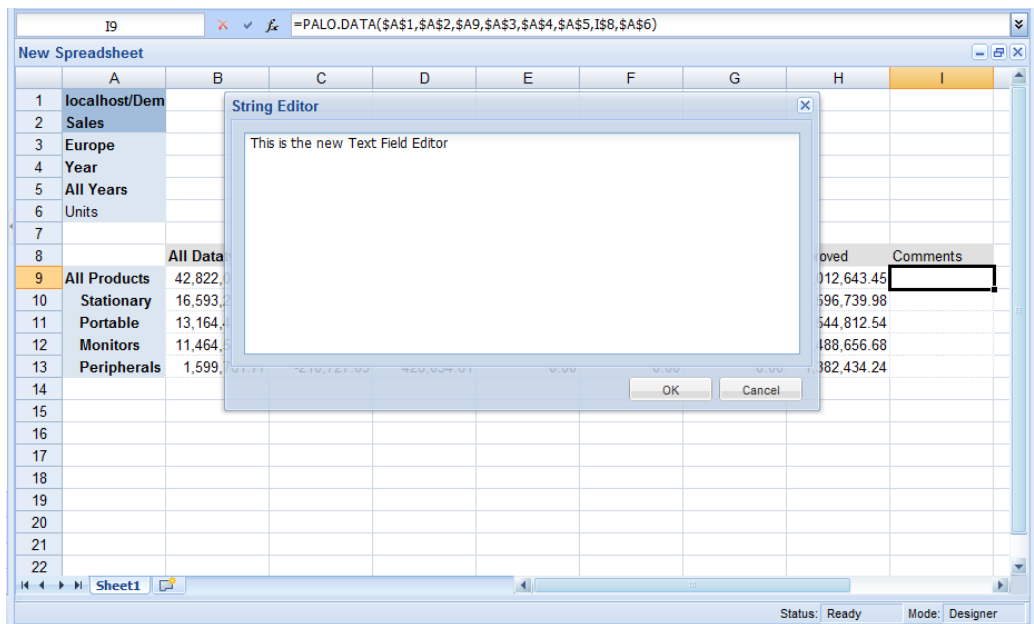
The new formula bar can be resized to view even complex formulas. The 'fx' function buttons has been added to jump directly into the formula editor. This also works for Palo formulas.





### 7.3.6 Text-Editor for Palo String Elements

For Palo string elements, version 3.2 offers a new Text Editor box to write and maintain longer text strings. A double-click on a Palo string element with the option 'unlock' opens the Text editor.



### 7.3.7 New format options for Charts

Palo Spreadsheet charts now supporting new options like transparency, data label orientation and custom angles.

## 7.4 PDF export improvements

The pdf export options are now an integrated part of Palo Web. The All-in-One setup process will install all necessary files to use PDF export of a report / spreadsheet. Internal improvements were done to create a one-to-one representation of a report/spreadsheet. Thru the Page Setup dialog, additional parameters for PDF exports can be defined. (Page orientation, scaling, etc.)

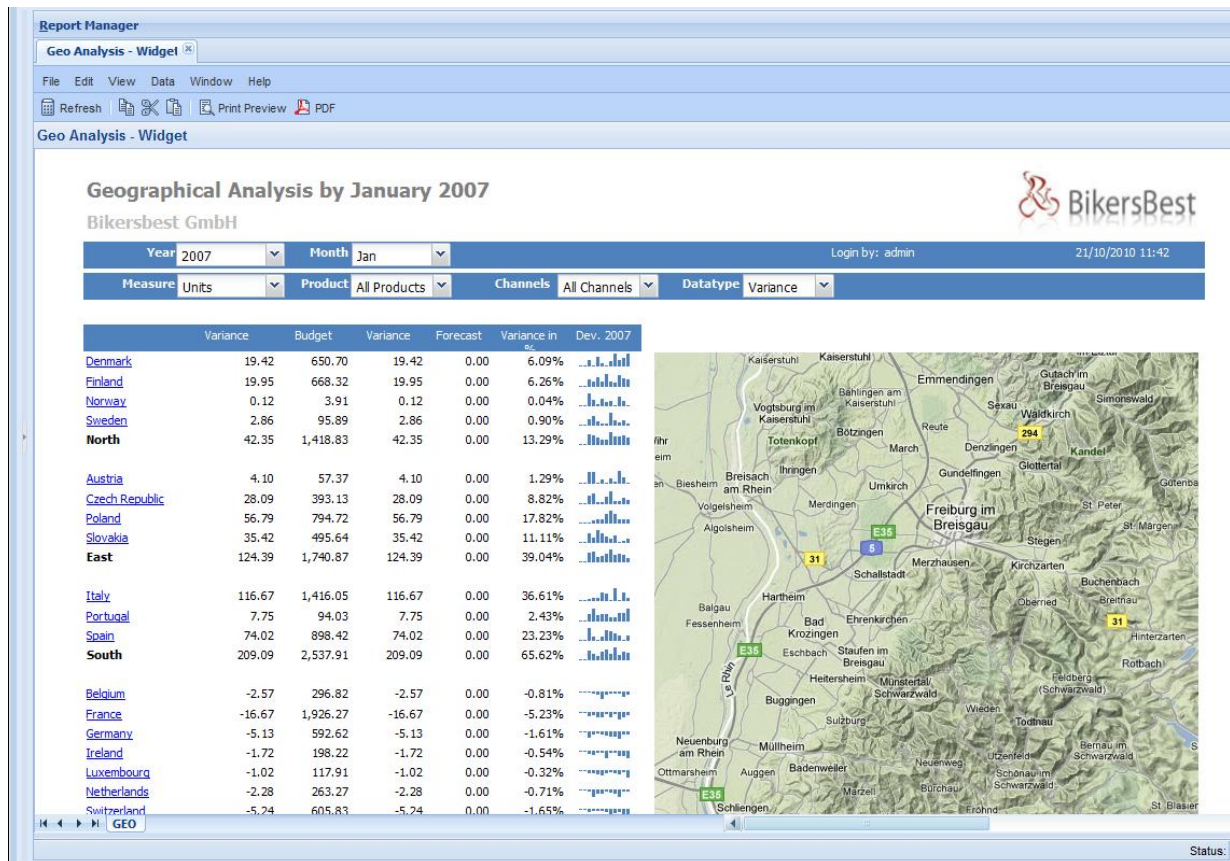
Attention: Fonts are not installed due to license restrictions. All necessary fonts for the PDF export module can be downloaded at <http://corefonts.sourceforge.net/>

## 7.5 Private / Global mode for Spreadsheet variables

By default, every variable in Palo Spreadsheet is used globally for every user. With 3.2, the concept of private variables has been added. The variable manager dialog offers the possibility to specify a variable as private. The content of a private variable will be stored for each user.

## 7.6 Spreadsheet Widgets

Spreadsheets Widgets extend Palo Spreadsheet for web-based components. A widget is a placeholder for external content (or even another Palo Spreadsheet). Widgets allow the creation of dashboards, interactive and animated charts or external applications like Google maps, all in one Palo Spreadsheet report. Furthermore, Widgets can interact with each other, or get and send parameters to/from a Palo Spreadsheet.



Example of Google Map integration via Widget

## 7.7 Floating Objects enhancements

With 3.2, floating objects like combo boxes, charts, widgets have been improved with more properties. A floating object can be locked to a position, or placed into the background/foreground, main working with and handling of these floating objects much easier.

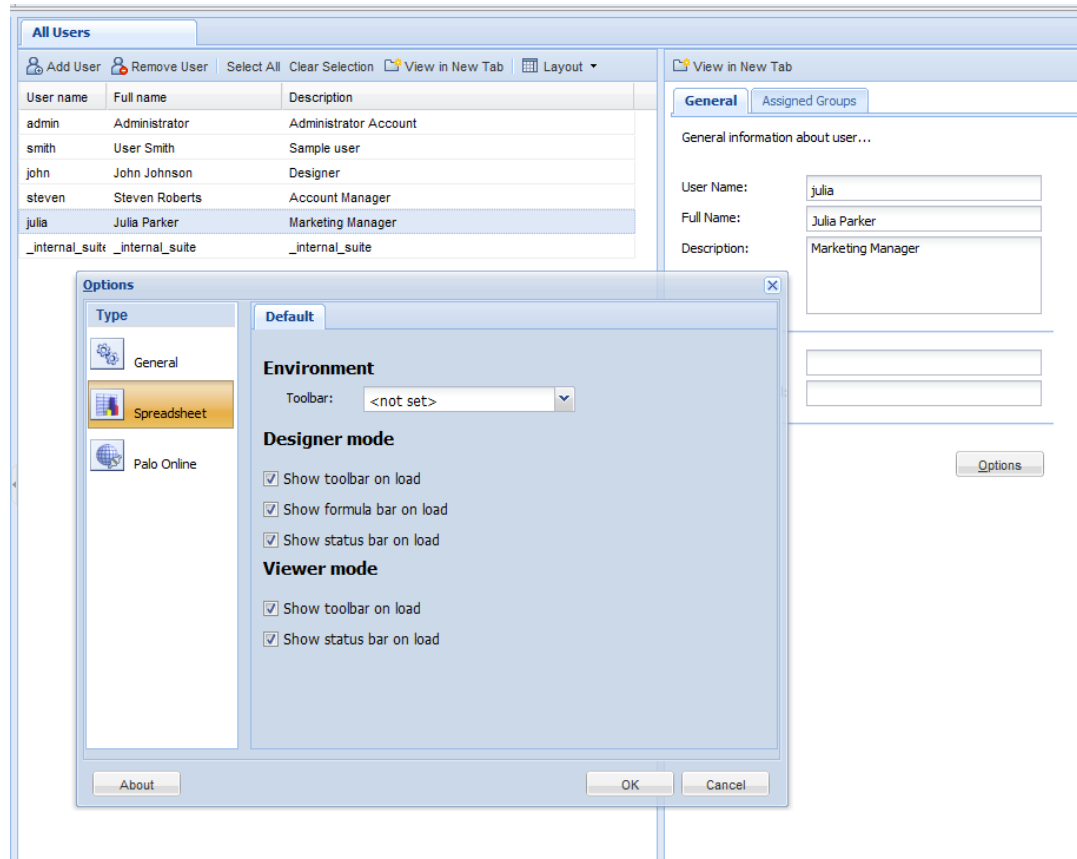


## 7.8 User Manager / User Options

All User Options including language, design of Palo Web, default folders and reports can be specified per user and group in Palo User Manager. This allows an administrator to setup Palo Web individually, for an application, or per user and group.

Palo 3.2 adds options for the appearance of Palo Spreadsheet in design and viewer mode. New options to hide the Status and Toolbar have been added.

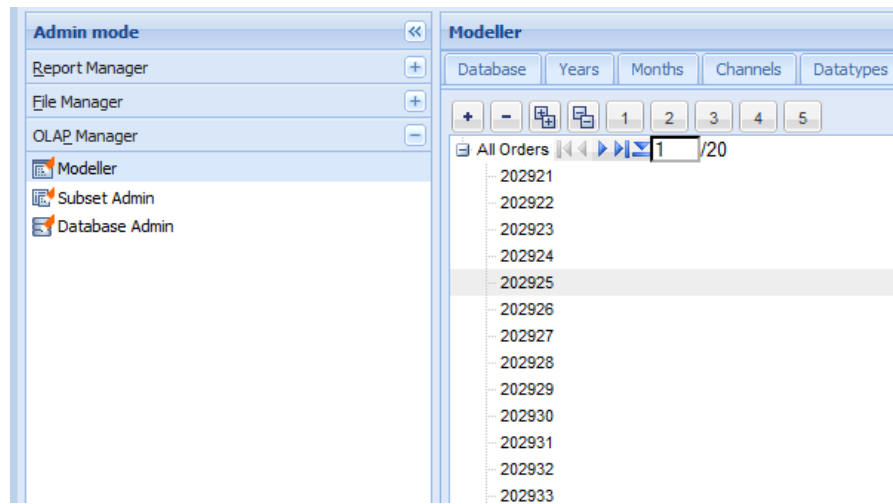
The Layout of the Palo User Manager is now stored consistently.



## 7.9 Palo OLAP Manager

3.2 adds missing functionality to get Palo OLAP Manager 100% consistent with the Palo for Excel Modeller. Functions like sorting dimensions or elements are now available in the web-based modeler as well.

For large dimensions, Palo Olap Manager adds paging functionality. Children of a parent element can now be received in pages. This significantly speeds up the handling of large dimensions. The paging control can also be switch off if required.



## 8 Palo ETL

### 8.1 Icon refreshment

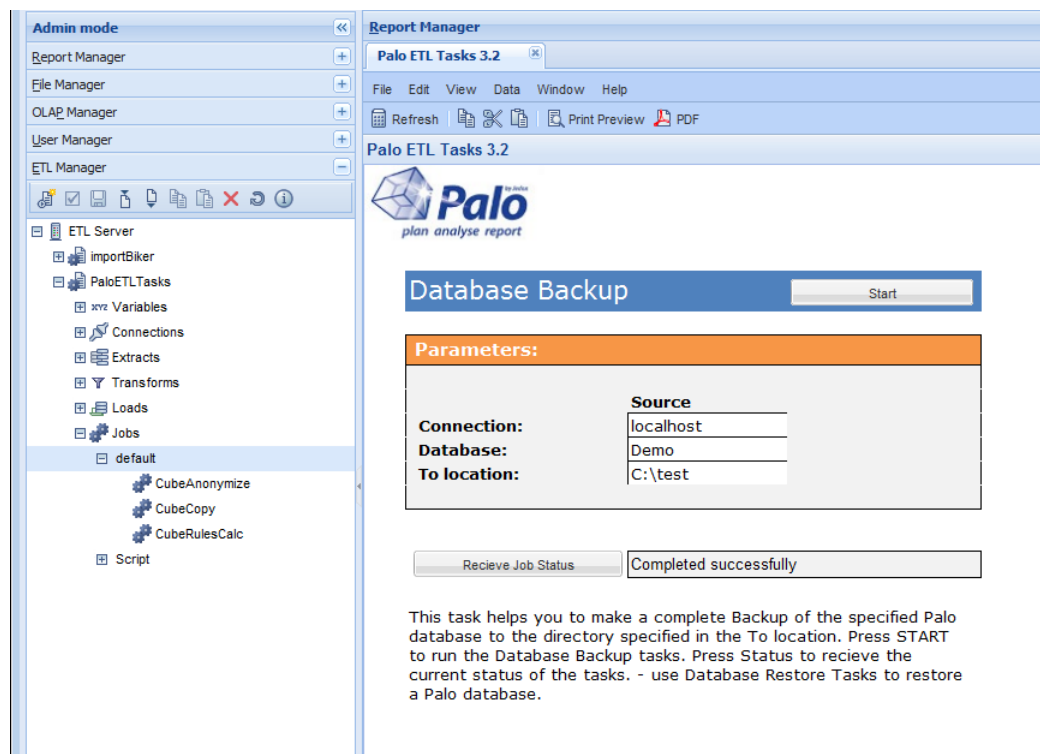
The Palo ETL icon set has been refreshed in version 3.2. The new Icons now have the same look and feel as other Palo Managers icons. This documentation may still contain screenshots with the 3.1 icon set.

### 8.2 Palo ETL Tasks

Palo ETL Tasks are pre-defined ETL processes. These processes can be started using a Palo Spreadsheet. We have added these tasks to maintain typical processes in an application such as database backup and restore, or to create a copy of a database / cube.

Copy tasks can also be used to transfer a Cube or Database between a development and production environment. The ETL Tasks can be easily modified and adjusted, or used as a template for other required processes in a project.

Further ETL tasks include Cube Rules pre-calculation to create a Palo Cube without rules. This is necessary to run a Cube with Palo OLAP Accelerator (GPU), or to speed up the query performance of a Cube. The ETL Task Cube restore can also load an Infor PM10 Olap or TM Cube into Palo.



### 8.3 New Connection types

#### 8.3.1 Directory

The new connection type 'Directory connection' has been added, and is helpful if multiple files of the same type are used in an ETL process. This connection can use file patterns to mask specific files. Only one extract is needed to access multiple files. This can dramatically simplify an ETL process.

### 8.3.2 Ingres DB

Palo ETL 3.2 supports Ingres databases as sources. Ingres is a high-end open source relational database and fits into the open source stack. More information on Ingres can be found at <http://www.ingres.com>

### 8.3.3 Access database files

Microsoft Access can now be a source or a target for Palo ETL. Many organizations still store data in Microsoft Access database, so this has been added as a source in Palo ETL 3.2.

## 8.4 Deactivation of Rules during Load

A new property for Cube loads now allows for the deactivation of Palo OLAP rules calculation during data loads. This speeds up the load process. Attention: While deactivated, rules are not calculated for other users connected to Palo OLAP at the same time.

## 8.5 New Job Type "Script"

The new job type script allows for the execution of Groovy-Scripts. This allows full control over the flow and options of a job execution via script. Examples of a script job can be found in pre-defined ETL tasks such as Palo database backup.

## 8.6 New options for Command Line Client

New parameters are available for the command line client for Palo ETL. All missing parameters which are known from the SOAP or Web client interface of Palo ETL are available, including Job Monitoring, Logs and Drill-through.

# 9 Palo SAP Connectivity

The Palo SAP Connectivity is an additional component of Palo ETL, which offers additional types of connections and extractions to access SAP Systems directly. Version 3.2 adds new extraction functions.

## 9.1 Extracts for specific ERP Hierarchies

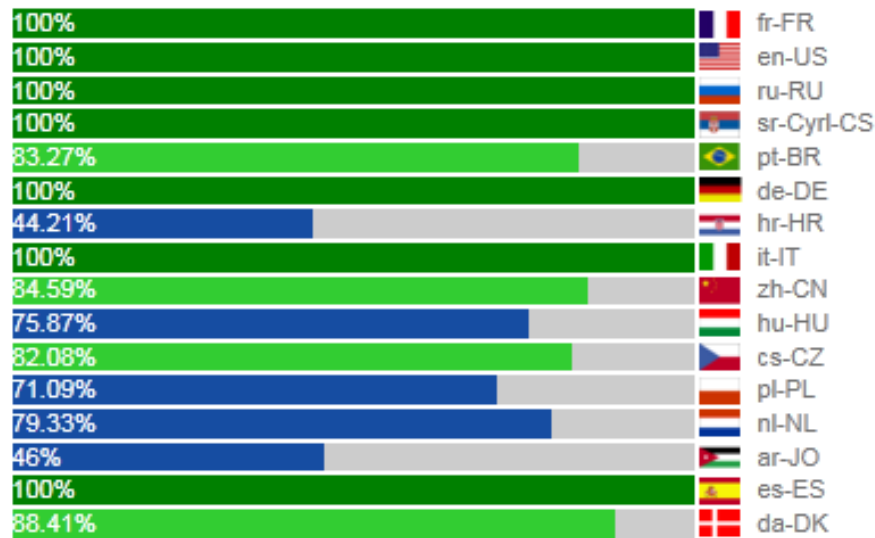
SAP Connectivity 3.2 adds extracts for SAP Orders like Internal Order, Production Order or Maintenance Order, Projects, Financial Statement Versions and Statistical Key Figures.

## 10 Internationalization

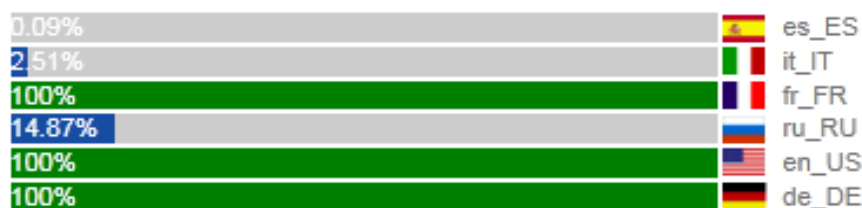
Palo Suite 3.2 is available in German, English and French. For these languages the User Interface, Setup and most of the documentation is maintained by Jedox.

Other languages are translated by Jedox partners and the Palo community. If you wish to participate in our translation process (can be done completely online), please send an email to [sales@jedox.com](mailto:sales@jedox.com).

### 10.1 Palo for Excel Client UI:



### 10.2 Palo Web UI:



## 11 Documentation

Palo Suite 3.2 has the following updated documentation which can be downloaded from <http://www.jedox.com>

### 11.1 Palo Suite requirements guide

This document describes the Hardware and the Software requirements for the Palo Suite Version 3.2.

### 11.2 Palo Setup Guide

This document guides you through the various setup steps of Palo Suite Version 3.2

### 11.3 Palo ODBO / XMLA Guide

Installation, configuration and a reference for the Palo ODBO provider 3.2