

USER GUIDE | PUBLIC SAP PowerDesigner Document Version: 16.7.00 - 2020-04-03

New Features Summary SAP PowerDesigner Documentation Collection



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1 New Features v16.7

The following sections describe the new features available in SAP® PowerDesigner® v16.7.

PowerDesigner Web v16.7 requires Java 8 or higher. If you have previously installed PowerDesigner Web to your own application server, you must verify that it uses Java 8 or migrate to the Tomcat 8 server provided with the installer.

Core Features [Web Client]

Export from Web privilege.

A new privilege has been added to the list of existing privileges for repository users. This new **Export from Web** privilege can be used to allow or restrict exporting content from the repository for individuals users and groups. This privilege controls the *Export Diagram to PowerPoint*, *Generate Report* and *Export to Repository Zip File* features.

Creating Repository Users

Limit the choice of model types offered in New Model dialog

You can create a model template in the Library/Resources/Model Templates folder to override a standard model template and define its permission in order to remove the corresponding model type from the *New Model* dialog *Type* list for some specific users and groups.

Making Your Customizations Available in the New Model Dialog

New models added

PowerDesigner Web can now create and edit conceptual data models, physical data models, NoSQL models and data movement models.

Information Architecture

Customize link symbol labels

You can now customize the displayed labels (source, center and destination) for link symbols.

Customizing Link Symbols

Generate Models using the CSN notation

You can now generate some model objects using CSN notation (Core Schema Notation) in order to import your objects in Web IDE.

Generating Models using the CSN notation

OAuth 2.0 Client Credentials authentication

You can now use OAuth 2.0 Client Credentials authentication for your APIs.

Enabling the OAuth 2.0 Client Credentials Flow

Data Architecture [Desktop Client]

• New or Enhanced DBMS Support

The following DBMS versions are added or updated:

- Oracle 18
- Oracle 19
- Snowflake

Oracle Snowflake

The following sections describe the new features available in SAP® PowerDesigner® v16.6 SP10.

PowerDesigner Web v16.6 SP10 requires Java 8 or higher. If you have previously installed PowerDesigner Web to your own application server, you must verify that it uses Java 8 or migrate to the Tomcat 8 server provided with the installer.

Core Features [Web Client]

Import objects from CSV files as shortcuts.

You can now specify reference files when importing objects from CSV files in order to create shortcuts instead of standard objects.

Importing Objects from CSV Files

Export repository content using an API.

Programmers can use a dedicated API to export repository content.

Exporting Repository Content Using an API

Export Multiple Object Lists to CSV

When clicking the *Export to CSV* button in the object list toolbar, you can now select to export the current list only, two or more specific lists, or all object lists.

Viewing Lists

Concurrent Editing

Two or more users can now edit the same model in parallel. If another user has published a new version of the model since you began editing you will be prompted to review and apply their changes in your model before publishing your changes. Concurrent editing is supported for all model types except requirements models.

Publishing Models

Business Architecture [Web Client]

Updated EAM Symbols

The enterprise architecture model symbols have been updated to a more modern look.

i Note

These new symbols are not supported in the desktop client, and workflows which mix editing in the desktop client and PowerDesigner Web will invoke a symbol conversion, which may disorganize the diagram layout.

Enterprise Architecture

Delete enterprise architecture model sub-process diagram.

In the enterprise architecture model, you can now delete the sub-diagram associated with a process that contains subprocesses. All sub-processes and other child objects contained in this diagram will be deleted.

Creating Sub-Processes Inside Processes

Shortcut Symbol Enhancements

When reusing a BPMN sub-process object or any of the EAM objects whose symbols can display sub-symbols, the shortcut symbol will now show those sub-symbols. You can remove sub-symbols from the shortcut symbol to simplify it and restore any sub-object symbols that you have removed.

Reusing Objects

The following sections describe the new features available in SAP® PowerDesigner® v16.6 SP09.

PowerDesigner Web v16.6 SP09 requires Java 8 or higher. If you have previously installed PowerDesigner Web to your own application server, you must verify that it uses Java 8 or migrate to the Tomcat 8 server provided with the installer.

Core Features [Web Client]

Content Transfer Enhancements - Transfer Analysis Rule Sets

You can now export your analysis rule sets from one repository and import them to another.

Transferring Content Between Repositories

Business Architecture [Web Client]

Criteria Value Coloring in Heat Maps

You can now control the color that is used to indicate each value defined for an analysis criterion when it is used in a heat map.

Analysis Criteria (EAM)

Administration [Web Client]

Rename Standard Object Types

You can now change the name used to identify any standard object type in object lists, property sheets, and the diagram toolbox.

Renaming Standard Object Types

Customize Object Property Sheet Info Tabs

You can now customize object property sheet *Info* tabs by moving and hiding properties and creating new sections.

Customizing Object Property Sheets

The following sections describe the new features available in SAP® PowerDesigner® v16.6 SP08.

PowerDesigner Web v16.6 SP08 requires Java 8 or higher. If you have previously installed PowerDesigner Web to your own application server, you must verify that it uses Java 8 or migrate to the Tomcat 8 server provided with the installer.

Core Features [Web Client]

New Shell and Navigation Panel

The application shell has been refreshed and now offers a navigation panel on the left side, which allows rapid switching between the homepage, repository explorer, diagram viewer, impact analysis, and other screens.

Working with Models and Diagrams in PowerDesigner Web

Multi-Tab Diagram Editor

You can now open multiple diagrams and object lists in separate tabs within the diagram viewer screen. Similarly, the impact analysis viewer supports opening multiple analysis diagrams in separate tabs.

Navigating in the Model Structure

Impact and Lineage Analysis

Updated Terminology

Where appropriate, the user interface and documentation have been updated to refer to *models* rather than *diagrams* to better reflect the fact that every diagram is created in the context of a model. Certain of the diagram/model type names have been adjusted for the same reason. Also, when administering users and groups, we now refer to *repository privileges* instead of *repository rights* when speaking of giving access to general repository features.

Creating a Model

Granting Privileges to Users and Groups

Search Guide Text

A new guide text in the search dialog makes clear in which model or repository folder you are searching and the type or types of objects you are searching for.

Searching for Diagrams or Objects

Object Picker Enhancement

Your model is now saved automatically whenever you open an object picker.

Referencing an Object in an Info Tab Property Field

Referencing Objects in Lists on the Dependencies Tab

Export List of Changes to CSV

You can now export a list of changes to your model to a CSV file for external analysis.

Comparing Model Versions

Content Transfer Enhancements - Update Content

When importing models that are already present in the target folder, any changes present in the new version will be applied to the existing models, rather than simply overwriting them.

Transferring Content Between Repositories

Business Architecture

Visualize EAM Objects in Computed Diagrams

Computed diagrams now allow you to visualize any type of EAM object. In addition, you can now also filter your primary objects and overlays based on attribute or criteria values.

Visualizing EAM Objects in Computed Diagrams

Link Data Model Artifacts to EAM and BPM Artifacts

You can now select data artifacts from any enterprise architecture model, business process model, or conceptual or physical data model when associating data with EAM and BPM artifacts.

Data (EAM)

Administration

Float Data Type for Custom Properties

You can now create custom properties with a float data type to support number values with decimal places.

Creating Custom Properties

The following sections describe the new features available in SAP® PowerDesigner® v16.6 SP07.

PowerDesigner Web v16.6 SP07 requires Java 8 or higher. If you have previously installed PowerDesigner Web to your own application server, you must verify that it uses Java 8 or migrate to the Tomcat 8 server provided with the installer.

Data Architecture [Desktop Client]

• New or Enhanced DBMS Support

The following DBMS versions are added or updated:

- Microsoft SQL Azure Database
- Hadoop Hive 2 Microsoft SQL Azure

Hadoop Hive

- SAP HANA System Versioned Tables You can now model system-versioned tables in SAP HANA 2.0 Database models. System-Versioned Tables (HANA)
- Data Protection You can now document your organization's use of personal data across all your data models. Identifying and Documenting Personal Data

Core Features [Web Client]

- Copy and Paste Symbols You can now create a copy of an object by copying and pasting its symbol in a diagram. Creating Objects in a Diagram
- Symbol Content Customization All symbols show, by default, the name of the object in the symbol header area. You can now customize symbol header content to show up to five object properties. Customizing Symbol Content
- Symbol Display Mode EAM symbols that support both icon and box modes are now created by default as boxes. You can toggle between icon, box, and box with detail (show sub-symbols) modes using the display mode in the *Content Settings*.

Formatting Symbols

Symbol Alignment Tools

New tools in the format toolbar allow you to align, distribute, and resize symbols.

Formatting Symbols

• Content Transfer Enhancements

The following enhancements are available:

- Now, when transferring models between repositories, there are no longer restrictions around importing models containing shortcuts, and they and the source models containing the original objects can be imported in any order.
- You can now export folders (including any sub-folders and their contents) to repository zip files when transferring content between repositories.
- When exporting models from a repository, any extensions associated with the models are now also exported to the zip file. When importing content into a new repository, any extensions that are not already present are imported and reconnected to the models.
- You can now overwrite content when importing a repository zip file.
- You can now transfer external files via repository zip files.
- You can now import content from a repository zip file multiple times in different folders to create copies of your models.
- The *Export to Repository Zip File*, which allows you to download a zip file of the model for importing to another repository, is now available in the *Share* menu in the diagram editor.

Transferring Content Between Repositories

New Diagram from Selection

When you create a new diagram in your model, it is now initialized with the symbols selected in the current diagram. You can select symbols manually, with the *Lasso* tool, by pressing SHIFT and dragging over the diagram canvas or, to select all symbols, pressing CTRL + A. Creating Additional Diagrams in a Model

• Create a New Diagram from the Repository Explorer

You can now create a new diagram in an existing model from the model's property sheet in the repository explorer.

Browsing The Repository

• Stay in Diagram after Publication

The behavior of the diagram viewer has changed so that you now remain in the diagram after publication. Click *Edit* to continue editing the diagram or click *Home* to return to your homepage. Publishing Models

• Object List Enhancements

The following enhancements are available:

- You can now control whether to show shortcuts, objects in sub-packages, and sub-objects in your object lists.
- You can now export object lists to CSV files.

Viewing Lists

• Dependency List Enhancements

Many lists on the *Dependencies* tab of object property sheets now support both searching for existing objects to add to the list and creating new objects directly in the list. Referencing Objects in Lists on the Dependencies Tab

• Search Dialog Enhancements The behavior of and messages in the Search dialog have been refreshed to help simplify finding diagrams and objects.

Searching for Diagrams or Objects

• Updated Values in EA Landscape Combo Boxes

The default values available in various application and infrastructure architecure object properties (such as applications and hardware servers) have been updated. You can select a value from the list, enter a new value, or customize the available values.

Servers, Workstations, Mobile Devices, and Network Nodes (EAM)

- Note Tool in All Diagrams You can now create notes in any diagram and draw links to connect them to other symbols. Editing Diagrams
- Impact Analysis: Show Multiple Instances of Impacted or Lineage Objects

The impact and lineage analysis tree can now show the same object appearing multiple times in different places in the tree.

Impact and Lineage Analysis

• Portuguese User Interface The user interface is now available in Portuguese. Working with Models and Diagrams in PowerDesigner Web

Requirements Management [Web Client]

- ReqIF Import Enhancements
 You can now merge requirements and associated data from a ReqIF file into an existing requirements
 model or create a new model.
 Importing Requirements from a ReqIF File
- Importing Requirement from Word
 You can now import a requirements hierarchy from a Microsoft Word . docx file into a new or existing requirements model.
 Importing Requirements from a Word Document

Business Architecture [Web Client]

- **Computed Capability Maps** You can now create computed capability maps, which display all the business capabilities in your model grouped by parent. Creating a computed diagram in this way allows you to quickly visualize and share your capabilities in a standard layout without having to manually draw them. Visualizing EAM Objects in Computed Diagrams
- Value Flows in Value Flows Value flows can now be broken down into sub-flows. Value Streams and Value Flows (EAM)

Administration [Web Client]

Customization Enhancements

This version offers new kinds of customizations and more control over how your customizations are used. You can now:

- Create new types of objects for use in your diagrams. Creating Custom Object Types
- Create custom extension files to package your customizations and attach them to individual models. Creating Custom Extension Files and Attaching a Custom Extension File to a Model
- Add custom diagram types based on extensions to the *New Diagram* dialog. Making Your Customizations Available in the New Model Dialog
- Custom Property and Dependency Enhancements
 You can now select object types from other types of models to appear as custom properties and custom
 dependencies.
 Creating Custom Properties
 Creating Custom Dependencies

 Specifying a Log Data Retention Period
- The repository administrator can now set a retention period for log data. Defining a Retention Policy for Log Data

• Refresh Tool in Log Pages The log pages now provide a manu

The log pages now provide a manual *Refresh* tool above the lists to ensure that the information is up-todate.

Monitoring Repository Activities

Anonymization of Deactivated User Information

The repository administrator can now permanently anonymize personally-identifying information of deactivated users.

Deactivating Users

The following sections describe the new features available in SAP® PowerDesigner® v16.6 SP06.

PowerDesigner Web v16.6 SP06 requires Java 8 or higher. If you have previously installed PowerDesigner Web to your own application server, you must verify that it uses Java 8 or migrate to the Tomcat 8 server provided with the installer.

Symbol Format [Web Client]

A new format toolbar allows you to change the fill, outline, and font color of symbols.

PowerDesigner Web > Working with Models and Diagrams in PowerDesigner Web > Editing Diagrams > Symbol Format

Open Diagram [Web Client]

A new *Open Diagram* tool in object property sheets lets you open any of the diagrams in which the object appears.

PowerDesigner Web > Working with Models and Diagrams in PowerDesigner Web > Viewing Diagrams > Object Properties

Analysis Criteria and Heat Map Enhancements [Web Client]

You can now search for and apply analysis criteria to multiple objects at once and change the analysis values applied to objects on the fly when heat map coloring is active.

PowerDesigner Web > Working with Models and Diagrams in PowerDesigner Web > Viewing Diagrams > Applying Heat Map Coloring to a Diagram

Capability Coverage [Desktop/Web Client]

A new *Capability Coverage* list on the *Dependencies* tab of application property sheets allows you to add business capabilities to the list and specify the maturity of the application's coverage of them.

PowerDesigner Web > Enterprise Architecture > Business Architecture Modeling > Business Capabilities > Specifying Application Coverage of Business Capabilities

Requirements Diagram [Web Client]

New requirement diagrams allow you to visualize the hierarchy and other relationships between all or some of the requirements from your requirements list.

PowerDesigner Web > Requirements > Requirement Diagrams

CDS Extensions [Desktop Client]

We now provide support for HANA CDS extensions for entities.

Data Architecture > DBMS Definition Reference > SAP HANA > Modeling for Core Data Services (CDS) > Extensions (CDS)

Web Extension Enhancements [Web Client]

Custom properties now support **URL** and **Date** data types. You can also now modify the values appearing in drop-down lists for certain properties and add new types of dependencies.

PowerDesigner Web > Installing and Administering PowerDesigner Web > Customizing Object Properties

Change List Reassignment [Web Client]

If the creator of a draft change list is unavailable, an administrator can now re-assign the draft changes to another user.

PowerDesigner Web > Installing and Administering PowerDesigner Web > Monitoring Repository Activities

Custom Tool Placement [Web Client]

You can now control the positioning of custom tools in the Web client toolbox when editing EAM diagrams checked in from the desktop.

Customizing and Extending PowerDesigner > Extension Files > Stereotypes (Profile) > Positioning Custom EAM Tools in the Web Client Toolbox

Custom Symbol Changes [Desktop Client]

A new command, Symbol Restore Format for All Diagrams, restores the default formats to all symbols in your model.

Core Features Guide > Modeling with PowerDesigner > Diagrams, Matrices, and Symbols > Symbols > Formatting, Aligning, Ordering, Grouping, Hiding, and Protecting Symbols

The following sections describe the new features available in SAP® PowerDesigner® v16.6 SP05.

PowerDesigner Web v16.6 SP05 requires Java 8 or higher. If you have previously installed PowerDesigner Web to your own application server, you must verify that it uses Java 8 or migrate to the Tomcat 8 server provided with the installer.

7.1 New PowerDesigner Web Features v16.6 SP05

PowerDesigner v16.6 SP05 includes new features for the PowerDesigner Web repository client.

Impact Analysis

Administrators with the **Manage All Documents** right can now edit the analysis rules that control the inclusion of object collections in the analysis and their positioning on the lineage or impact sides of the analysis tree directly in the Web client Impact Analysis window.

Documented in:

• PowerDesigner Web > Modeling with PowerDesigner Web > Impact and Lineage Analysis

Requirements Modeling

See New Requirements Model Features v16.6 SP05 [page 19].

Enterprise Architecture Modeling

See New Enterprise Architecture Model Features v16.6 SP05 [page 19].

Business Process Modeling

See New Business Process Model Features v16.6 SP05 [page 21].

7.2 New Requirements Model Features v16.6 SP05

PowerDesigner v16.6 SP05 includes new features for the Enterprise Architecture Model (EAM), which are available in the Web client.

ReqIF Template Support

You can now create mapping templates to configure and reuse mappings between ReqIF properties and PowerDesigner Web requirements properties. Administrators can create and share templates to support ReqIF standards, such as **IBM Rational DOORS**.

Documented in:

• PowerDesigner Web > Requirements > Importing Requirements from a ReqIF File

7.3 New Enterprise Architecture Model Features v16.6 SP05

PowerDesigner v16.6 SP05 includes new features for the Enterprise Architecture Model (EAM), which are available in the desktop and Web clients.

Business Capabilities, Process Groups, and Business Processes

The new process group object can contain sub-groups and business processes. Business processes, are at the lowest level of the process group structure, and can be further analyzed in BPMN business process diagrams. They can realize capabilities, be associated with data as inputs and outputs, and contribute to value flows:



Documented in:

 PowerDesigner Web > Enterprise Architecture > Business Architecture Modeling > Processes Groups and Business Processes

Value Streams and Value Flows

These new objects help you identify and visualize how your enterprise generates value. Value streams can contain sub-streams and value flows, and business processes can be grouped in value flows. Value flows can realize capabilities and be associated with data as inputs and outputs:

[≡]	VS Retail Loans				
	WF Loan Account Origination				
	Evaluate Needs and OpportunityDevelop and Present ProposalCustomer Acceptance of ProposalValidation and Enrichment of ApplicationBank Acceptance of ApplicationSignature of Application				
	>>> VF Loan Account Maintenance				
	Execution of Order Management of Due Items Execution of Payments Handling Exceptions Termination fo Contract Management of Collateral				

Documented in:

• PowerDesigner Web > Enterprise Architecture > Business Architecture Modeling > Value Streams and Value Flows

Deprecation of Process Map

With business capabilities, process groups, and value streams all supporting box-in-box display in enterprise architecture diagrams, the specialized process map diagram is deprecated and may be removed in a future release.

Other Changes

The following other changes are also available:

- Business capabilities, as well as the new process group and value stream objects have a new calculated *Level* property to identify where they are in the relevant hierarchy.
- Many objects have a new *Owner* property that can be set directly or is calculated from the first item in the list of role associations.
- Analysis criteria have new *Category* and *Type* properties to classify them.
- When applying heat map coloring driven by impact analysis to diagrams, you can now specify the number of levels of impacts to take into account.
- The architecture area object is renamed to area

Documented in:

• PowerDesigner Web > Enterprise Architecture

7.4 New Business Process Model Features v16.6 SP05

PowerDesigner v16.6 SP05 includes new features for the Business Process Model (BPM), which are available in the Web client.

Export Changes to SAP Solution Manager v7.2 Process Diagrams

You can edit process diagrams imported from Solution Manager, create new diagrams inside the processes you have imported, and export your changes back to Solution Manager.

Documented in:

 PowerDesigner Web > Business Processes > Importing SAP Solution Manager 7.2 Process Diagrams > Exporting Diagram Changes to Solution Manager

Update Diagram Changes from Solution Manager

Once you have imported Solution Manager processes into PowerDesigner Web, you can import updates from the Solution Manager server to keep your diagrams up to date.

Documented in:

 PowerDesigner Web > Business Processes > Importing SAP Solution Manager 7.2 Process Diagrams > Updating Diagram Changes from Solution Manager

7.5 New Data Model Features v16.6 SP05

PowerDesigner v16.6 SP05 includes new features for the Physical Data Model (PDM), which are available in the desktop client.

New or Enhanced DBMS Support

The following DBMS versions are added or updated:

• Amazon Redshift

Documented in:

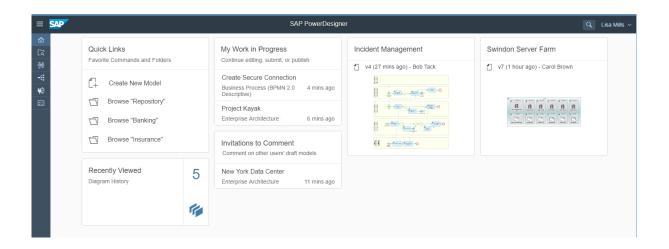
• Data Architecture

PowerDesigner v16.6 SP04 includes new features for the Web and desktop clients.

8.1 New Web Client Features

PowerDesigner v16.6 SP04 includes new features for the Web client.

Homepage



The new homepage combines the old homepage and workspace screens. It provides access to all your draft diagrams and those awaiting your review and comment. You can add your favorite diagrams and repository folders to your homepage and also access your recently viewed diagrams.

Documented in:

• PowerDesigner Web > Working with Models and Diagrams in PowerDesigner Web

Toolbox and Reuse of Local Model Objects

The behavior of the toolbox has changed. You now create objects in your diagrams from a toolbox docked to the left side of the diagram by drag and drop. A new local search tool allows you to reuse objects created in the current model in your diagram.

Documented in:

• PowerDesigner Web > Working with Models and Diagrams in PowerDesigner Web > Editing Diagrams > Creating Objects and Symbols in the Diagram

Navigation in Model Structure and Creation of New Diagrams in Models

A new toolbar above the diagram contains a new breadcrumbs control, which allows you to navigate through the structure of models subdivided into packages, and a view selector, which lets you navigate between diagrams in the current package, create new diagrams in the package, and open the new list viewer to list the diagrams in the package.

Documented in:

 PowerDesigner Web > Working with Models and Diagrams in PowerDesigner Web > Viewing Diagrams > Navigating in the Model Structure

List Viewer

SAP			SAP PowerDesigner		Q, Lisa	Mills 丶
Object Lists ×						
Application Landscape ~	· 🔳 👻				à 🗹 🗐 Edi	t 🔳
Applications \sim	Search	Q			Show Filter Bar Clear Filters	Go
(15) Include: Sub-P	ackages 🗌 Shortcuts 🗌 Sut	o-Objects		(d ·
Name	Code	Туре	Version	Vendor	Indigo	
Aurora	AURORA	Development Tool	15.4	Acme	Application	
Banzai	BANZAI	Development Tool	1.9	Acme	0 0 0	0
Business Warehouse	BW	Development Tool	7.4	SAP	Info Children Dependencies Diagra	ims
BusinessObjects	в	Development Tool	4.1	SAP	✓ General	
CandyCone	CANDYCONE	Development Tool	2.2	SoftCorp	Name: Indigo	
CRM	CRM	Package Application	7.0	SAP	Code: INDIGO	
DeepRed	DEEPRED	Development Tool	5.3	SecureCorp	Type: Development Tool	
EngineBox	ENGINEBOX	Development Tool	4.8	Gentrify	> Detail	4-3
ERP	ERP	Package Application	6.0	SAP	Version Info	
FlatZone	FLATZONE	Development Tool	10.5	BoxinBox	Version mo	
Gamma	GAMMA	Development Tool	6.5	DimeStore		
HiTone	HITONE	Development Tool	5.9	ExGen		

The new list viewer provides an alternative tabular view of the objects in the current package, and is accessed through the view selector in the toolbar above the diagram. You can filter the list by name or other properties and choose the columns to display.

Documented in:

PowerDesigner Web > Working with Models and Diagrams in PowerDesigner Web > Viewing Diagrams > Viewing Lists

CSV Import

You can import lists of objects defined in CSV files into your diagram. For example, if you have lists of sites, servers, people, and applications, you can import them rather than creating them manually.

Documented in:

• PowerDesigner Web > Working with Models and Diagrams in PowerDesigner Web > Editing Diagrams > Importing Objects from CSV Files

Heat Map Coloring of Diagrams

You can apply heat map coloring to any diagram. The coloring can be used to highlight objects impacted by the selected object or, for enterprise architecture diagrams, to display their level of compliance with analysis criteria:



Documented in:

• PowerDesigner Web > Working with Models and Diagrams in PowerDesigner Web > Viewing Diagrams > Applying Heat Map Coloring to a Diagram

Analysis Criteria

Criteria allow you to define a benchmark, standard, or scale, and then rank your enterprise artifacts against it. Criteria can be used to drive heat map coloring of your enterprise architecture diagrams:



Documented in:

• PowerDesigner Web > Enterprise Architecture > Goal and EA Project Modeling > Analysis Criteria (EAM)

AutoLayout for Diagrams and Composite Symbols

New autolayout options help you organize symbols and links in your diagrams and sub-symbols inside composite symbols.

Documented in:

• PowerDesigner Web > Working with Models and Diagrams in PowerDesigner Web > Editing Diagrams > AutoLayout for Diagrams and Composite Symbols

Impact Analysis

The impact and lineage analysis will now provide, by default, up to three expanded levels of impacts (comprising up to 100 objects) and lineages. To pursue the analysis further, click on a plus sign on the edge of the tree. Link objects are no longer displayed in order to simplify the analysis diagram, and you can open any object displayed in the tree in its original diagram.

Documented in:

 PowerDesigner Web > Working with Models and Diagrams in PowerDesigner Web > Viewing Diagrams > Impact and Lineage Analysis

Share Links to Repository Folders, Documents, and Objects

You can now share links to these repository objects.

Documented in:

• PowerDesigner Web > Working with Models and Diagrams in PowerDesigner Web > Browsing The Repository

Business Function Renamed to Business Capability

This change aligns the object more closely with common industry terminology.

Documented in:

• PowerDesigner Web > Enterprise Architecture > Process and Function Architecture Modeling > Business Capabilities

Import and Export ReqIF Files

Requirements Interchange Format (ReqIF) files are XML files used to exchange requirements between different requirement management tools. You can import a .reqif file or a .reqifz ZIP archive containing a .reqif

file and associated images to a requirement list and export all or parts of a requirements list (including any images contained in your requirements) to a .reqifz ZIP archive.

Documented in:

• PowerDesigner Web > Requirements > Importing Requirements from a ReqIF File

Compare Requirements Document Versions

You can now compare two versions of a requirements document to obtain a color-coded visualization of differences between them.

Documented in:

 PowerDesigner Web > Working with Models and Diagrams in PowerDesigner Web > Viewing Diagrams > Comparing Diagram Versions

Import SAP Solution Manager v7.2 Process Diagrams

You can now import SAP Solution Manager 7.2 process diagrams. You can share and comment on Solution Manager business process diagrams, link their objects to objects in other models, and include them in impact analysis.

Documented in:

• PowerDesigner Web > Business Processes > Importing SAP Solution Manager 7.2 Process Diagrams

Push Folders and Diagrams to Users' Homepages

The repository administrator can push diagrams and folders to users' homepages to give them personalized entry points to the repository. Diagrams appear as cards in the user's homepage, and folders as entries in the *Quick Links* card. You can push diagrams and folders to individual users or to groups.

Documented in:

 PowerDesigner Web > Installing and Administering PowerDesigner Web > Controlling Repository Access > Pushing Diagrams and Folders to Users' Homepages

8.2 New Desktop Client Features

PowerDesigner v16.6 SP04 includes new features for the desktop client.

Analysis Criteria

Criteria allow you to define a benchmark, standard, or scale, and then rank your enterprise artifacts against it. Criteria can be used to drive heat map coloring of your enterprise architecture diagrams in the Web client:



Documented in:

• Enterprise Architecture > Goal and EA Project Modeling > Analysis Criteria (EAM)

Architecture Areas

Architecture areas, which allow a loose grouping of objects, are now available in the following types of diagrams:

- EAM All diagrams except organization chart
- FEM
- CDM, LDM, PDM
- DMM Top-level diagrams
- OOM All diagrams except sequence and interaction overview diagrams

Documented in:

• Core Features Guide > Modeling with PowerDesigner > Objects > Architecture Areas

Business Function Renamed to Business Capability

This change aligns the object more closely with common industry terminology.

Documented in:

• Enterprise Architecture > Process and Function Architecture Modeling > Business Capabilities (EAM)

New or Enhanced DBMS Support

The following DBMS versions are added or updated:

- SAP HANA 2.0 CDS HDI
- Teradata v16
- IBM DB2 v12 for z/OS
- JSON

Documented in:

• Data Architecture

The following sections describe the new features available in SAP® PowerDesigner® v16.6 SP03.

New PowerDesigner Web Features

i Note

The architecture of the PowerDesigner Web server changed with v16.6 SP02. If you have enabled SSL/SSO before this version, you will need to re-enable them for the new architecture.

The following new features are available for PowerDesigner Web:

- Export to PowerPoint Select Share Export to PowerPoint to download the diagram as a *.pptx file for opening in Microsoft PowerPoint 2013 or higher.
- Diagram Overview Panel This new panel allows you to navigate in a diagram that is larger than the viewer by dragging the view box over a thumbnail of the full diagram image. The panel is collapsed by default and can be opened by clicking the *Show Overview* arrow in the bottom-right corner of the diagram viewer.
- Dependencies Tab This new object property tab combines and replaces the former Impacts and Depends On tabs.
- Share Menu A new Share menu regroups the various features for sharing and exporting diagrams, and a new option in the Share Link dialog allows you to choose between generating a link that points to the specific version of the diagram you are viewing, or one that will always point to the latest published version of a diagram.
- User Administration Enhancements:
 - A new log at Administration/Activities/Security Log allows administrators to review events relating to user accounts including successful and unsuccessful logins, password changes, user updates, and blocked and deactivated users.
 - Each user can now review the information associated with their account by clicking their name in the homescreen and selecting *User Account*.

Documented in:

PowerDesigner Web

The following sections describe the new features available in SAP® PowerDesigner® v16.6 SP02.

New PowerDesigner Web Features

i Note

The architecture of the PowerDesigner Web server has changed. If you have previously enabled SSL/SSO, you will need to re-enable them for the new architecture.

The following new features are available for PowerDesigner Web:

- Notifications Navigate to a folder or model in the repository, click the menu and select *Subscribe to Change Notifications* to receive an email each time the item is modified.
- Requirements model support in PowerDesigner Web has been enhanced:
 - View filter status and enable, disable, and modify filters in read-only mode.
 - Distinct fonts for each level of requirements.
 - Press Ctrl + Shift + I to create a child requirement of the selected requirement.
 - Press \boxed{Ctrl} + \boxed{M} to open the description of the selected requirement.
 - To select multiple requirements <a>[Ctrl]-click them in the left-most column. When multiple requirements are selected, any edits you make to properties in a column are applied to all the selected items.
 - Link to document view property sheet in title bar.
 - Priority O is now displayed as <undefined>.
- Multi-selection in selection dialogs You can now select multiple objects (where this is appropriate) in selection dialogs.
- Compare enhancements The list of changes now allows you to filter by type of change (creations, changes, and deletions), groups changes by the object affected, and allows you to drill down to see the details of each individual change.

Documented in:

PowerDesigner Web

New Core Features

The following new features are available for all models:

- URL extended attributes Specify extended attributes of type URL to allow users to enter Web addresses or folder paths.
- Resource multiple paths The lists of report templates and conversion tables now allow you to specify multiple paths to these types of resources and combine the results in order to populate the lists.

Documented in:

• Customizing and Extending PowerDesigner > Extension Files

New or Enhanced DBMS Support

The following DBMS versions are added or updated:

• SAP HANA 2.0 Database - Catalog objects.

Documented in:

• Data Architecture

The following sections describe the new features available in SAP® PowerDesigner® v16.6 SP01.

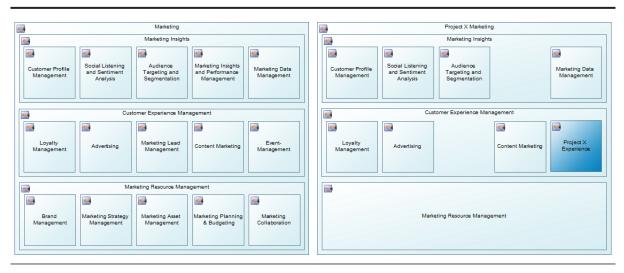
Improvements to Replica Symbols for Composite Objects

Support for replica symbols for composite objects has been enhanced as follows:

- When replicating a composite object (such as an EAM business capability) to another model, the replica symbol will now display all levels of sub-objects by default.
- When replicating by dragging and dropping a symbol from one diagram to another as a replica, the replica symbol will respect the formatting and content of the source symbol, including displaying only those sub-objects that are displayed on the source-symbol. You can change the format of the replica symbol as if it were a local object, including controlling whether the composite view is shown at each level, and hiding individual sub-objects.
- When you desynchronize collections of sub-objects to make them editable, you can delete sub-objects from and create new sub-objects in the replica using the Toolbox or property sheet.
- You can review and obtain any changes to desynchronized collections on the source object in your replica by right-clicking the replica in the Browser or diagram and selecting *Update Replica from Source Object*. Changes to any synchronized (non-editable) properties and collections continue to be pushed automatically to the replica.

Source Object Symbol

Replica Symbol (with Modifications)



Documented in:

• Core Features Guide > Linking and Synchronizing Models > Shortcuts and Replicas

New PowerDesigner Web Features

The Repository Explorer now allows you to navigate into and examine the contents of packages (including diagrams and subpackages).

Documented in:

• PowerDesigner Web > Modeling with PowerDesigner Web > The Repository

New or Enhanced DBMS Support

The following DBMS versions are added or updated:

- SAP HANA[®] v1 (cached views)
- SAP[®] SQL Anywhere[®] v17
- Teradata v15
- Microsoft SQL Server 2016

Documented in:

• Data Architecture

12 New Features v16.6

The following sections describe the new features available in SAP® PowerDesigner® v16.6.

12.1 PowerAMC Becomes PowerDesigner

Previous versions of PowerDesigner were provided as an English language installer and a separate French language installer, and the French version was called PowerAMC. From v16.6 onwards, both the English and French versions are called PowerDesigner and a single installer is delivered, which allows you to choose the installation language.

i Note

When upgrading from a version of PowerAMC, the installer will uninstall PowerAMC and install PowerDesigner, while preserving all your options and preferences. If both PowerDesigner and PowerAMC are present, the installer will only update PowerDesigner.

i Note

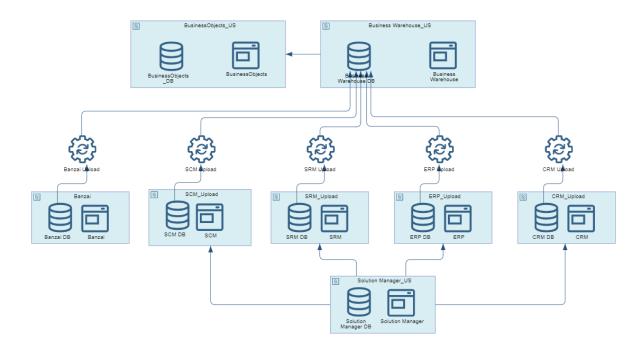
Upgrading directly from pre-v16.6 32-bit PowerAMC to v16.6 64-bit PowerDesigner is not supported. You must first upgrade to 32-bit PowerDesigner and then upgrade to 64-bit.

12.2 New PowerDesigner Web Features v16.6

PowerDesigner v16.6 includes new features for the PowerDesigner Web repository client.

Enterprise Architecture Modeling

You can now create and edit enterprise architecture diagrams in PowerDesigner Web:



Existing business communication, city planning, application architecture, service-oriented, and technology infrastructure diagrams created in the PowerDesigner desktop version are all unified as enterprise architecture diagrams on the Web and any object can be created in them. Organization charts and timeline diagrams can presently only be created and edited in the PowerDesigner desktop version, but can be displayed on the Web.

Documented in:

• PowerDesigner Web > Enterprise Architecture

Requirements Modeling

You can now create and edit requirements documents in PowerDesigner Web:

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Inform	national Site 🗸 🔮				کې 🗗 Edit
Sea	rch	এ ४ ጵ			ア
	Title ID	Name	Code	Priority	Registration
	1.	Overview	REQ_0001	1	Requirement
	× 2.	Use Cases	REQ_0002	2	A customer must create an account before consulting publications. The registration process involves choosing a login name, password, and email address.
	× 2.1	Identified Users	REQ_0003	2	0 0 0
	2.1.1	Customer	REQ_0004	1.5	Info Children Dependencies Diagrams
	2.1.2	Administrator	REQ_0005	2	✓ General
	× 2.2	Identified Use Cases	REQ_0006	1.5	Title: Registration
v	2.2.1	Registration	REQ_0007	1	Code: REQ_0007
	2.2.2	Log On	REQ_0008	2	Description:
	2.2.3	Consultation	REQ_0009	1	A customer must create an account before consulting publications.
	2.2.4	Administration	REQ_0010	3	The registration process involves choosing a login name, password, and email address.
	> 3.	Technical Requirements	REQ_0012	1	anu cinan auuress.

You can create requirements and link them to design objects in other models, external files, and other requirements. You can also create users and groups and associate them with requirements.

Documented in:

• PowerDesigner Web > Requirements Documents

Search and Reuse

A new search dialog lets you filter by location, object type, and other criteria and can export results to Excel and PDF. A single dialog now supports searching the repository and locating objects to reuse in diagrams and to reference in other objects' property sheets:

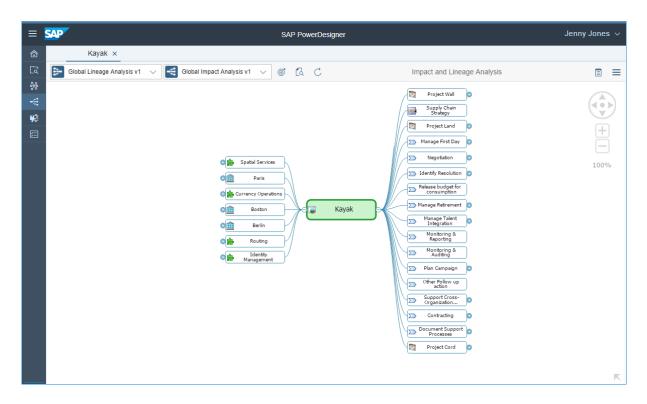
3 Repository Root > ⊃ Sales >	 Add missing data records (e.g. for service types) Add or use existing attributes to complete data with values from external data bases 	/Sales/Marketing/Identify Resolution
Sales >	Add or use existing attributes to complete data with values from external data bases	
Sales >		/Sales/Marketing/Data Enrichme
- Ouros	Analyze frequency distribution of different values using data profiling tool	/Sales/Marketing/Data Profili
Marketing	Approve complete master data quality concept	/Sales/Marketing/Quality Metri
Warkeung	Check data structure of attributes and their relationships of extracted master data.	/Sales/Marketing/Data Profili
Order and Contract Management	Consider data quality improvements to alleviate procurement process impacts	/Sales/Marketing/Data Quality Assesme
	Correct wrong data (e.g. addresses / description)	/Sales/Marketing/Data Cleansi
	Data imputation ('filling in' missing data with plausible values)	/Sales/Marketing/Data Cleansi
	Define formal data quality rules	/Sales/Marketing/Quality Metri
	Define master data quality policies, guidelines, and measurements	/Sales/Marketing/Quality Metri
	Define metrics to measure data quality	/Sales/Marketing/Quality Metri
	Define standard pattern and format for relevant data attributes	/Sales/Marketing/Data Standardizati
	Describe expectations by using data quality rules defined by SMEs	/Sales/Marketing/Quality Metri
	Describe end-user data quality expectations	/Sales/Marketing/Quality Metri
	Describe pattern and correct multiple variations of data contents	/Sales/Marketing/Data Standardizati
	Describe the component and format patterns used to represent a data object	/Sales/Marketing/Data Standardizati
	Evaluate the types of errors and data flaws that can occur	/Sales/Marketing/Data Quality Assesme
	Extract master data from systems to temporary master data repository	/Sales/Marketing/Extraction
	Identify business processes that are affected by data quality issues	/Sales/Marketing/Data Quality Assesme
	 Identify the critical data elements 	/Sales/Marketing/Data Quality Assesme
	Select suitable external databases for enriching master data	/Sales/Marketing/Data Enrichme

Documented in:

• PowerDesigner Web > Modeling with PowerDesigner Web > Search and Reuse

Impact Analysis

A new Web analysis engine allows you to launch a graphical impact and lineage analysis on any object:



You can launch the analysis from the diagram viewer, repository, or search dialog, expand and follow connections through multiple levels, and control the display of collections and individual objects.

Documented in:

• PowerDesigner Web > Modeling with PowerDesigner Web > Impact and Lineage Analysis

Customizable Diagram Reports

You can now generate a report on objects present in any diagram (whether or not it is editable in PowerDesigner Web), and control which kinds of objects are included.

Documented in:

 PowerDesigner Web > Modeling with PowerDesigner Web > The Diagram Viewer > Generating a Report on a Diagram

Translatable Diagrams

PowerDesigner Web supports translating your diagram content for viewing in over 30 languages. Each repository has a default language for creating diagrams and objects, and users can choose the language in which they want to view model data.

Documented in:

 PowerDesigner Web > Modeling with PowerDesigner Web > Translating Diagrams and Viewing Translated Diagrams

Simplified Diagram Creation

You can now create a diagram right from your workspace screen by clicking the + tile in the *My Draft Diagrams* section. You can also create a new process diagram by importing a BPMN 2 file exported from SAP BPM directly in the repository explorer.

Documented in:

- PowerDesigner Web > Modeling with PowerDesigner Web > The Workspace
- PowerDesigner Web > BPMN 2.0 Executable > Importing and Exporting BPMN 2.0 Files > Importing from SAP BPM

Repository Explorer Enhancements

You can now upload external files to the repository for sharing. You can also move, rename, and delete documents and folders in the repository explorer.

Documented in:

• PowerDesigner Web > Modeling with PowerDesigner Web > The Repository

Administration Enhancements

New lists of locks, activities, and change lists are now available for administrators. You can also test connections to the database, license, and LDAP servers.

Documented in:

• PowerDesigner Web > Administering PowerDesigner Web

12.3 New Core Features v16.6

PowerDesigner v16.6 includes new core features available for all models.

Object Name/Code Enhancements

The options surrounding the synchronization and display of object names and codes have been reorganized to simplify standard workflows:

• A new Synchronize code option in the Naming Conventions dialog allows you to control name-to-code synchronization on a model-by-model basis. This option replaces the old Name to Code Mirroring general option.

Synchronize code is enabled by default until you reverse-engineer or import a database, business process, XML or OO code, when it will be automatically disabled to allow the free editing of object names without affecting the underlying code. You can re-enable the option at any time.

• The *Display* option, which allows you to choose between the display of object names or codes in the Browser and diagram symbols is moved from *Naming Conventions* to the Display Preferences General Settings tab. You can toggle between the values of this setting with the *Display Name/Code* tool in the *Standard* toolbar.

Documented in:

• Core Features Guide > Modeling with PowerDesigner > Comparing and Merging Models

Property Sheet Notes Tab becomes Definition

The Notes tab is renamed to *Definition* to give it more visibility, and gains a *Timestamp* tool for its *Description* and *Annotation* sub-tabs.

Documented in:

• Core Features Guide > Modeling with PowerDesigner > Objects > Object Properties > Definition Tab

Manage Users becomes Manage Users & Permissions

The Manage Users repository right is renamed to Manage Users & Permissions and now allows users to whom it is granted to list and set permissions on all repository documents without needing explicit Full permission.

Documented in:

• Core Features Guide > Administering PowerDesigner > Controlling Repository Access

Improved Object Sorting

A new general option, *Sort object categories alphabetically*, allows you to list object categories in the browser and *Model* menu in alphabetical order. By default, object categories are ordered by importance with core objects (such as PDM tables, CDM entities, and OOM classes) listed first.

Extended collections and compositions now allow you to specify whether users can manually order them or not.

Documented in:

- Core Features Guide > Modeling with PowerDesigner > Customizing Your Modeling Environment > General Options
- Customizing and Extending PowerDesigner > Extension Files > Extended Collections and Compositions (Profile)

12.4 New Data Model Features v16.6

PowerDesigner v16.6 includes new features for the Physical Data Model (PDM).

SAP HANA Calculation Views

PowerDesigner now supports modeling SAP HANA calculation views, including import from and export to the HANA repository. Full round-trip support is provided for simple calculation views (referencing one or two tables or views), while more complex views are imported with mappings to their sources to allow their inclusion in impact analyses.

Documented in:

• Data Architecture for SAP HANA > PowerDesigner and HANA

SAP HANA Core Data Services (CDS)

PowerDesigner now supports modeling and exporting CDS artifacts to:

- SAP HANA CDS Repository (up to HANA v1 SP11)
- SAP HANA CDS HDI (HANA v1 SP11 and higher)

Documented in:

• Data Architecture for SAP HANA > PowerDesigner and HANA

Other Features

- The procedure signature is now taken into account when assessing name uniqueness to allow the definition of procedures with the same name and different parameters.
- New model-to-model generation options give you full control over PDM object codes to be created when generating from a CDM, LDM, PDM, or OOM.
- New tools in the CDM and LDM toolboxes allow you to create one-many dependent relationships and many-many relationships in one step.

Documented in:

- Data Architecture > Building Data Models > Physical Diagrams > Stored Procedures and Functions (PDM)
- Core Features Guide > Linking and Synchronizing Models > Generating Models and Model Objects
- Data Architecture > Building Data Models > Conceptual and Logical Diagrams > Relationships (CDM/LDM)

New or Enhanced DBMS Support

The following DBMS versions are added or updated:

- SAP HANA[®] v1.0 now includes support for SP10 and SP11, with limited support for import/export of calculation views.
- SAP HANA CDS Repository (up to HANA v1 SP11)
- SAP HANA CDS HDI (HANA v1 SP11 and higher)

Documented in:

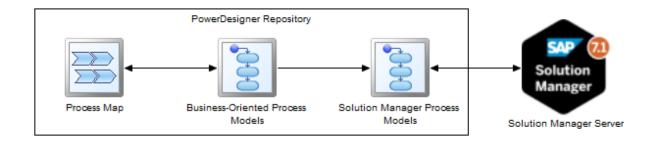
• Data Architecture

12.5 New Business Process Model Features v16.6

PowerDesigner v16.6 includes new features for the Business Process Model (BPM).

BPMN 2.0 Descriptive to Solution Manager Generation

PowerDesigner now supports generating BPMN 2.0 Descriptive process models to Solution Manager models to help you align the business and technical views of your processes and allow for the cascading of changes in the business-oriented processes to your Solution Manager server:



Documented in:

• Business Process Architecture > SAP Solution Manager

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