software AG

webMethods Process Performance Manager
CUSTOMIZING TOOLKIT

Version 9.10

April 2016

Contents

1 Text conventions

Menu items, file names, etc. are indicated in texts as follows:

- Menu items, key combinations, dialogs, file names, entries, etc. are displayed in **bold**.
- User-defined entries are shown in **<bold and in angle brackets>**.
- Single-line example texts (e.g., a long directory path that covers several lines) are separated by ↵ at the end of the line.
- File extracts are shown in this font format:

  ```
  This paragraph contains a file extract.
  ```

2 General

This user guide uses a client's process analysis to describe basic PPM Customizing Toolkit (CTK) functions and provides an overview of the procedure for using PPM Customizing Toolkit to configure PPM.

Detailed information on configuring Data analytics and Cross analytics for a client is available in the **PPM Data analytics** manual.

The user guide is aimed at PPM Customizing Toolkit users who are application configuration experts.

As an **application configuration expert** you are responsible for customizing all ETL processes (**E**xtracting source system data, **T**ransforming the data, **L**oading the data into the target database), which includes process nesting, process typification, as well as measure and dimension calculation.

Overview

- The **Introduction to PPM Customizing Toolkit** (Page 3) chapter provides you with an overview of the user interface and the basic functionality.

- The chapter **Getting started** (Page 5) uses a scenario to describe how to create a client and specify the basic settings.

- The chapter **Configure the client** (Page 11) describes how to set the properties of your client and configure the data management.

- The **Appendix** (Page 17) contains more detailed information.

Prerequisite

Both PPM Customizing Toolkit and PPM are installed on your computer.

The description of using PPM Customizing Toolkit to configure a PPM client assumes general knowledge of handling PPM.

3 Introduction to PPM Customizing Toolkit

Before you can import data from your source system into PPM, you need to define criteria for your analyses, e.g., process types, measures, dimension, and calculation rules, and then set up a configuration for your PPM system. This process is referred to as customizing. Customizing a client is divided into two major analysis areas: process and organizational analysis or Data and Cross analytics. Process and organizational analyses enable you to evaluate process-specific analysis criteria of real business processes. Data analytics enables you to evaluate comprehensive table data (big data) and is extended by Cross analytics, which adds a process analysis component.

PPM Customizing Toolkit provides a standardized, wizard-based interface that enables you to easily and conveniently tailor your PPM system to your requirements without the need for programming skills or additional technical know-how. PPM Customizing Toolkit provides you with a user-friendly graphical editor that you can use to create and edit the XML-based configuration files for PPM. For example, you can use Point-n-Click to select measures, map processes, and define the source system data to be imported. PPM Customizing Toolkit provides you with all the necessary functions and applications to simplify customizing of your PPM system.

This makes continuous project work much more systematic and considerably expedites implementation. CTK is supplied with basic configurations of common application scenarios that enable you to leverage stored know-how for your own projects.

3.1 User interface

The toolbar contains the most important functions of each module. You find all other functions in the main menu (menu bar) or in an item's pop-up menu (right click). The PPM Customizing Toolkit user interface is divided into two main areas, the navigation structure and the **Editor window**. The navigation structure consists of various bars that you use to activate individual modules and call up the editor window to edit the individual items. In the editor window, you define and configure the various items in your client, such as creating measures or defining calculated attributes.

3.2 Functions

In PPM Customizing Toolkit, various modules comprise different, functionally related components that provide all the configuration options and applications you need.

CLIENT OVERVIEW

In the client overview, you can create new clients, edit them, and specify general properties of PPM Customizing Toolkit.

MANAGE CLIENTS

In the **Client** module, you can define the client-specific behavior, set and manage your source system's data sources, and call up applications that help you configure your client and source system data.

DEFINE ATTRIBUTES

Use the **Attributes** module to define and manage data types, attributes, attribute groups, and the interface language.

EXTRACT DATA AND GENERATING PROCESSES

Use the **Process merge** module to configure source system data extraction in detail and to specify fragment and attribute mapping. You can define various rules for merging the extracted source system data into consistent processes.

DEFINE MEASURES AND DIMENSIONS

Use the **Measures and dimensions** module to create calculation rules for attributes and define measures and dimensions based on directly imported and calculated attributes. You can also configure measure groups, dimension groups, and relations, and define process instance-independent measures.

DEFINE PROCESSES

Use the typification rules in the **Processes** module to assign individual process instances to particular process types and process type groups. You can assign measures and dimensions to the various process types and process type groups.

3.3   PPM client

Using clients, you can configure and manage your PPM projects. A client provides you with all the configuration files and applications required to extract data from your source system and configure it for further processing.

A client is made up of the following elements.

- Client-specific configuration files, e.g., interface language
- Configuration files for data management
- Data management applications
- Extracted and transformed source data

PPM repository

The prepared client-specific data is saved in a dedicated PPM repository, where it is available to PPM for analysis under the same client name. PPM Customizing Toolkit provides all of the required configuration files and a basic configuration of measures, dimensions and all the utilities for managing your new client.

4   Getting started

This chapter uses a simple scenario as an example of how to get started with PPM Customizing Toolkit.

Scenario

You want to create a new client without being able to use a similar, existing client configuration. The data to be extracted is available in a JDBC data source. Processes are to be merged by simple sorting of the process fragments.

Procedure

1. **Step 1** shows how to use a template to create a client and set the client properties.
2. **Step 2** shows how to configure the source system data by specifying the data sources and configuration files and setting the corresponding access parameters for your data source.
3. **Step 3** shows how to use additional applications to configure and manage your PPM client.
4. **Step 4** shows how to automatically create documentation for your PPM client.

You can then configure your new client for your PPM system in detail and extract the desired data from your source system for further analysis in PPM.

4.1   Step 1: Create client

Use the Installation Wizard to easily create and edit **clients** in PPM Customizing Toolkit. You can configure all required settings in the Client Installation Wizard.

For detailed information on how to create clients, please refer to the PPM Installation Guide.

The help in the wizard provides additional information on the setting options displayed. To view this information, click the **Help** button in the wizard or go to the **Help** tab.

Example

Your client **my_project** is to be created based on the template **base_en** with a predefined default configuration. .

Procedure

5. Start PPM Customizing Toolkit.
6. Click the **Create client** button in the **Client overview**.

    The Installation Wizard is launched and the **Basic settings** dialog is displayed.
7. Enter a **Name** for your new client, e.g., my_project.
8. Select the template called **base_en**.

    PPM Customizing Toolkit provides a basic configuration and all applications required for your new client.
9. Specify all other required settings.

    If necessary, contact your PPM system administrator.
10. Click **Next**.

The wizard guides you through all further steps.

There are several templates containing different configurations that you can use to create the configuration files for your new client. The wizard contains a detailed description of the available default templates.

You can obtain additional templates in the form of **Content Packages** and add them to PPM Customizing Toolkit. Content Packages contain pre-defined configurations for PPM, PPM Customizing Toolkit and PPM Process Extractor SAP-2-PPM.

The following Content Packages are available:

- PPM Content Package for SAP MM

- PPM Content Package for SAP SD

Content Packages are only approved for use under Windows.

4.1.1   Set client properties

Once you created the client, you can tailor the properties of your client to your project requirements. Use the client properties to specify the configuration options that PPM Customizing Toolkit offers for your client.

You can retain the default settings for **Attribute editing**, **measure and dimension editing** and **Further properties**.

Procedure

1.   Select the client **my_project** in the client overview.

2.   Click the **Configure process analysis** button.

3.   The **Properties** component of the **Client** module is displayed.

4.   Click ✎ **Edit** in the toolbar.

    Edit mode is enabled.

5.   Click **Edit client properties** in the **Basic settings** box.

6.   Activate the **Process merge** page.

7.   For this example, enable the option **Use attribute copy rules**. The options **Use JDBC Extractor** and **Sort-based merge** have been preselected.

8.   You can leave **AT_** as the **Attribute prefix**.

9.   Click **OK**.

Your settings are applied.

Under **Help** you will find more information about the configuration options provided by PPM Customizing Toolkit when you select a particular option.

You can still change the properties of your client to suit your requirements even after you have exited the wizard.

4.2   Step 2: Configure data source

Before the data can be extracted from your source system, you have to specify the data sources and configuration files and set the appropriate access parameters for your data source.

Use the **Data source management** component of the **Client** module to configure the data sources of different data source types, such as system event, Graph, SAP, or JDBC. For these data sources you define the individual components for extracting data from your source system and importing data into PPM.

A data source comprises a fixed number of configuration files that depends on the data source type in question. Most of the configuration files are automatically created as empty files when a new data source is created. You configure them in the corresponding components, such as XML import and Data extraction. A data source combined in this way is saved as a separate file. It forms the basis for automated data extraction.

4.2.1   Create data source

You can create several data sources for a client.

Procedure

1.   Select the **Data source management** component of the **Client** module.

2.   Click *Edit* in the toolbar.

3.   Click **Create data source** in the toolbar.

4.   Specify your settings.

     Create a new data source of the same type as the source system data you want to extract.

     Enter a **Name**, e.g., JDBC_data_source, and where appropriate a **Description**, and then select JDBC as the **Type** for your data source.

     Every data source is uniquely identified by its name.

5.   Click **OK**.

PPM Customizing Toolkit now creates a data source with the name and type that you have specified.

Depending on the data source type, PPM Customizing Toolkit generates programs that help you to extract source system data and import data to PPM.

The applications are available in the **Programs** component of the **Client** module. In this example, PPM Customizing Toolkit generates the programs **Extract data from data source JDBC_data source** and **Import data from data source JDBC_data_source to PPM**.

4.2.2   Set database access parameters

By creating your data source you have specified the basic settings which can then be used to configure your source system data as required for further analysis in PPM.

Please consult your system administrator for the database access parameters.

Check whether you can establish a connection to your database system. If necessary, check your access parameters again. To do this, click **Test system access** in the toolbar.

Procedure

1. You can accept the preset **Process fragments** and **Mapping** components for your new JDBC data source.

2. Select a database type, e.g., Oracle.

3. Select a driver class in the selection box **Driver class for DB system**, or specify a driver class for your database system, e.g., oracle.jdbc.driver.OracleDriver.

4. Enter your **User name** and **Password** for logging on to your database.

5. Confirm your password.

6. Enter the database **URL**, e.g., jdbc:oracle:thin:@<host>:<port>:<dbname>.

7. Enter a date and time as the **Last extraction time**, up to when the data is extracted. The default value is 01 January 1970 00:00. Alternatively, you can also enter a **Last value extracted**.

8. Once you have entered all the required settings, click 💾 **Save** in the toolbar.

Your settings are applied.

The database type **ADABAS** is provided for use with Adabas Process Extractor. For a detailed description of Adabas Process Extractor, please refer to the documentation **Process Intelligence for Natural Applications How-To Guide**.

Detailed information on configuring an offset for data extraction is available in the technical documentation **PPM Process Extractors**.

4.3   Step 3: Configure and manage client using programs

PPM Customizing Toolkit provides you with a number of applications that make it easier to configure and manage your PPM client. You call up these applications in the **Programs** module of the **Client** module in PPM Customizing Toolkit.

You can use the available applications to perform various functions, e.g., **Initialize database**, **Import data** from your data source, **Run PPM server** or **Start PPM**.

Your client should be installed in your **PPM installation directory**. We recommend installing your client in the PPM installation directory by default; otherwise you will not be able to use the applications in the **Programs** module.

When executing some programs you are prompted for a password. This is the password that you use for logging in to your PPM client. The password is valid only for the currently open client and for the duration of the ongoing PPM Customizing Toolkit session. (See chapter on **Data management programs** (Page 25).)

You can obtain the required password from your system administrator.

Procedure

1. Select the **Programs** component of the **Client** module.

2. Activate the **Run program** tab.

3. Select a program from the list of **Program groups** and click ▶ **Run program**.

4. Enter your password.

This runs the program and displays a log of the execution process in the **Log output** window.

By default, the PPM Customizing Toolkit log language is English. To create the log in German, go to the **Configure parameters** tab and change the value of the **PPM_CONF_LANGUAGE** key from **en** to **de**.

You can also run the applications using the command prompt. The applications are available in the client directory **<PPM installation directory>\server\bin\work\data_ppm\custom\<client>\bat**.

4.4   Step 4: Automatically create documentation for your client

In PPM Customizing Toolkit, you can automatically create a documentation including the configurations of your PPM client. The **Create client documentation** program extracts the most important XML configuration files for PPM and creates HTML files that you can view in a browser.

The application is available in the **Programs** component of the **Client** module. The files of your documentation are saved under **<installation directory>\ppmmashzone\server\bin\work\data_ppm\custom\<client>\docu**.

You can document the configuration of the following elements of your client:

- Process tree
- Measures
- User-defined measures
- Dimensions
- Functions
- Attributes
- Calculated attributes (incl. calculation rule)
- Process instance-independent measures
- Relations

Procedure

1. Select the **Run program** tab in the **Programs** component of the **Client** module.

2. Select the **Create client documentation** program and click ▶ **Run program** in the toolbar.

The program creates the **<client>.html** documentation, e.g., My_Project.html in your client's **docu** directory.

You can open the html file and view it in a browser.

Apart from the documentation described above, you can also generate technical documentation for your client's configuration. The **Create technical client configuration** program generates documentation with technically relevant content, e.g., a list of all the attributes and calculated

attributes, process instance-independent measure series, relations, non-registered measures and dimensions. The documentation is stored as HTML pages in your client's **docu** directory under <client>_tech.html.

5 Configure the client

5.1 Set client properties

You can tailor the properties of your PPM client to the requirements of your project. You can use the client properties to specify the configuration options that PPM Customizing Toolkit offers you for your client; this is also known as **tailoring**.

When creating your client, CTK provides you with all options required for a default configuration. You can customize the selection of options and components you want CTK to display for configuring your client. CTK applies a default configuration to options and components you do not want to display for configuration.

Depending on the selected client properties, certain configuration options are not required for subsequent configuration of your client. For the sake of clarity, these will not be displayed.

Example

If you select **Configure measure groups** on the **Measure and dimension editing** tab, CTK provides you with the **measure groups** component in the **Measures and dimensions** module and you can set all the options for configuring the measure groups. If this option is not enabled CTK uses a default configuration.

Further information about which configuration options PPM Customizing Toolkit provides you with when you select a particular option is available under **Help** in the corresponding client properties dialog box.

Procedure

1. Select a client in the **Client overview** and click the **Configure process analysis** button.

   The **Properties** component of the **Client** module is displayed.

2. Click ✎ **Edit**.

3. Click the **Edit client properties** button in the **Basic settings** box.

4. Specify your settings.

5. Click **OK**.

Your settings are applied.

Warning

After you have changed the client properties, items are displayed in **red** if they either already have values assigned to them, or if they are related to options you no longer want to display.

Change the corresponding values or options for these items to prevent a possible loss of data.

Move the mouse over the selected item to display more information in the form of a tooltip.

5.2   Set configurations

This chapter provides you with an overview of the most important steps in configuring your client's process analysis. CTK provides you with all the setting options you need in the individual modules.

Detailed information on configuring Data analytics and Cross analytics for a client is available in the **PPM Data analytics** manual.

To ensure your client configuration is consistent, you should proceed in a certain order. For example, you need to define measures and dimensions before you can then assign them to particular process types in the process tree.

Incorrect settings are displayed in color. Additional information is available in a tooltip, which you display by moving the mouse pointer over the corresponding field.

The schematic illustration below shows the interdependency of individual configuration items.

Example: Interdependency of configuration items
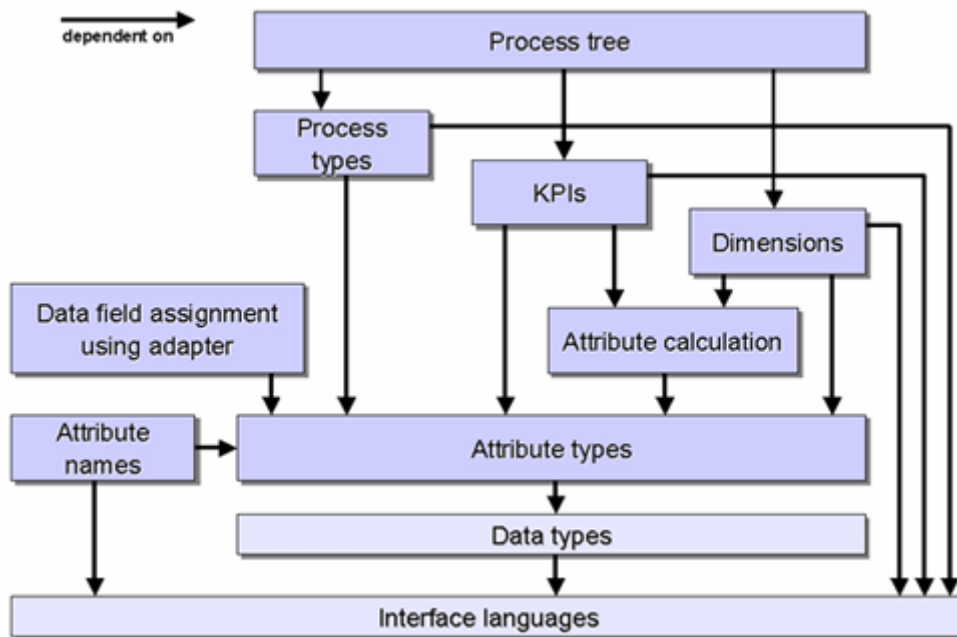
Because of the interdependency between the individual items, we recommend configuring your client in the following order.

1. Set interface language

    You can select the required interface languages in the **Interface language** component of the **Attributes** module.

2. Define data types

    You create and edit data types in the **Data types** component of the **Attributes** module.

3. Define attributes

You create attributes and attribute groups in the corresponding components of the **Attributes** module. If necessary, define new attribute groups first and you can then assign individual attributes to them.

4. Set process merge

   You can set the rules for the process merge in the **Process merge** module.

5. Define attribute calculation

   You define the attribute calculation in the **Calculated attributes** component of the **Measures and dimensions** module, based on calculation classes or calculation rules.

6. Define measures and dimensions

   You create measure and dimension groups in the corresponding components of the **Measures and dimensions** module and assign particular measures or dimensions to them.

7. Define process types

   In the **Processes** module, you assign new process types to the process tree based on typification rules.

8. Set process tree

   You edit the process tree in the **Processes** module, e.g., by assigning particular measures and dimensions to individual process types.

Your settings are saved in the configuration files of the respective clients under **<installation directory>\ppmmashzone\server\bin\work\data_ppm\custom\<client>\xml**.

You edit the configuration files of the client in the **Properties** components of the **Client** module.

5.3   Check client configuration

It is easy to gain an overview of the current state of your client's configuration. A list with messages displays warnings and errors pertaining to the client's configuration.

Procedure

1. Select the **Properties** component of the **Client** module.

2. Click ⊙ **Check client configuration** in the **Client configuration check** box.

If applicable, a list with messages concerning warnings or errors is displayed. If no errors or warnings were found, a corresponding message is displayed.

OPEN A COMPONENT

The messages are assigned to the individual components in which problems occur.

To open the relevant component, double-click a message.

Components hidden due to your settings in the client properties are checked, but you cannot jump to these components. You must first specify in the client properties that the component is to be shown again. For each message, a tooltip is displayed when you place your mouse pointer over a message.

SHOW/HIDE ALL WARNINGS

You can show and hide all messages pertaining to warnings by clicking ⚠ **Show/hide all warnings**.

SHOW/HIDE INDIVIDUAL MESSAGES

You can hide any message from the list by right-clicking the relevant message and selecting **Ignore message**. To show a message again, click ⚠ **Edit ignored messages** and delete the relevant message from the list of ignored messages.

6 Check calculation rules

You can use the **debugger** to check calculation rules for plausibility and thus find semantic mistakes.

The debugger applies a calculation rule to any one or multiple EPCs, calculates their attributes and analyzes the calculation performed. Setting break points at any calculation element of the calculation rule enables you to pause the attribute calculator's calculation process and track data changes at the EPC step by step.

The following explains how to check a calculation rule.

Details on how the individual debugger elements work are provided in the Debugger view dialog of the help.

Procedure

1. Open a calculation rule in the form of a calculation tree.

2. Activate the **Debugger view** tab.

3. Open one or multiple EPCs that you want to use for analyzing the calculation rule.

    You can open an EPC via the main menu, by drag and drop from Windows Explorer, or directly from PPM.

    The open EPCs are displayed in the **EPC files** panel.

4. If required, set breaks for individual nodes of the calculation rule by clicking a (hidden) break after the line number.

    The icon for a set break is displayed.

5. In the main menu, click ▶ **Run calculation**.

    The calculation runs all the way to the end or to the next break, if you set any.

6. If you set breaks, you can also perform the calculation step by step by clicking the **Continue calculation step by step**.

The calculation rule is calculated (step by step). Nodes with calculation errors are highlighted in red.

6.1 Check dependent calculation rule

A calculation rule to be analyzed in the debugger can be dependent on various other calculation rules. If an error occurs when calculating a calculating rule, this error may originate in a dependent calculation rule.

You can open and analyze the dependent calculation rule in addition to the calculation rule to be analyzed.

Prerequisite

Your calculation rule contains a dependent calculation rule.

Procedure

1. In the calculation tree, right-click a dependent calculation rule.

2.   Select **Open calculation rule**.

The selected calculation rule opens on a separate tab and can now be checked for plausibility.

6.2   How a calculation works

The end results of a calculation are saved as attribute values in the EPC graph. The calculated function attributes are saved at the function nodes of the EPC and the calculated process attributes are saved at the EPC. To track the incremental calculation of attributes, all intermediate results of a calculation for the calculation elements are displayed in the calculation tree. If the result of a calculation element consists of multiple values, these values are displayed in curly brackets and separated by a semicolon.

The result at the root node represents the end result of the attribute calculation, which is saved as a new attribute in one of the **attribute containers** of the EPC graph or which modifies an existing attribute.

ATTRIBUTE CONTAINER

The **Attribute container** panel includes all attribute containers of the selected EPC. Attribute containers comprise the process represented by the EPC including process attributes and all nodes of the EPC with the respective node attributes. The list of attribute containers includes the **attribute source** and the **attribute target** on individual tabs that display read or write access during calculation.

Both access types are displayed in real time, i.e., only during calculation. By placing breaks and using incremental calculation, you can track which attributes are currently being obtained from the EPC and where calculated attributes are saved in the EPC. For this purpose, you can switch between the two tabs **Source** and **Target** during the calculation.

READ ACCESS

Read access takes place only if a calculation element of the **Attribute** or **Filtered attribute** type is being processed. In this case, the name of the relevant attribute container is written in bold and an additional icon is displayed.

Attribute containers whose attributes have been changed by a calculation are graphically emphasized. The color and the icon of an attribute container reveal information about its state. In the normal state, i.e., directly after the EPC is loaded, each attribute container has its original icon and its name is written in black. After the modification of attributes of an attribute container the icon and the text are marked.

ATTRIBUTE VALUES

Depending on the type of modification, attribute calculation results are saved on the individual tabs of the **Attributes** panel.

All attributes being read are displayed in a table on the Access tab of the Attributes panel. This table is displayed only during the calculation of a calculation rule and always references the active (currently calculated) calculation element. Since the calculation tree can be run through multiple times, the displayed data always refers to the current run.

7   Appendix

7.1   Transfer client

You can transfer existing clients from previous PPM versions to the current PPM **9.9** version.

Detailed information on how to transfer clients to the current PPM version is available in the manuals **PPM Migration 5.x to 9.9** and **PPM Migration 9.x to 9.9**.

7.2   Job automation

Job automation enables you to automatically run selected programs at specific points in time.

In a job automation, you specify the programs and the execution rules based on which the programs are to be executed regularly. Available are the programs of the **Programs** component of the relevant client.

After the job automation is completed, a message is automatically created and sent to specific recipients.

You can create job automations (Page 17) in the **Job automation** component of a client.

7.2.1   Create a job automation

In CTK, a wizard supports you in creating custom job automations for individual clients. Select the programs to be run, and define the required time interval for the executions in an execution rule.

When creating a job automation you need to specify a user name and password. This login information is required for running the automation. Each job automation requires its own login information. You can also specify the same login information for all existing job automations of a client (change login information for all automations ()).

For details on creating and editing job automations, as well as changing the password, please refer to the integrated help of the respective wizard or dialog.

Procedure

1.   Start PPM Customizing Toolkit.

2.   Select a client in the client overview.

3.   Click the **Configure process analysis** button.

4.   Open the **Automation** component of the client.

     An overview of job automations is displayed.

5.   Click **Edit** in the toolbar.

     Edit mode is enabled.

6.   Click **Create job automation**.

7.   Specify your settings.

The job automation is created and displayed in the overview. The job automation is executed in line with the execution rule defined. Only activated job automations are executed.

You can display the result of the job automation in your Web browser. To do so, select a job automation from the overview and click **Show result**.

Use transport containers (Page 18) to export and import job automations.

- To import, click **Import data from a transport container** in the automation overview.

- To export, first click **Add job automation to transport container** and then **Export transport container**.

7.3   Transport container

Use a transport container to simultaneously exchange multiple system configuration elements between various PPM installations.

You can add the following content to a transport container in the respective modules.

- **Client** module: Automations

- **Attributes** module: Attributes

- **Measures and dimensions** module: Calculated attributes, measures, dimensions, relations, process instance-independent measures

Open the relevant module or component, select the required element, and click **Add selected <element> to transport container**.

When you have added all required elements to the transport container, you can export it. To do so, click **Export transport container**.

To transfer elements from a transport container to the current PPM system, click **Import data from a transport container**. With the help of a wizard, select the elements to be imported and specify whether the existing configuration is to be overwritten or supplemented. You also have the option to check the changed configuration for any errors and inconsistencies. The new or changed configuration is saved only after the import has been completed.

Details on the import process are available in the integrated help of the corresponding wizard.

7.4   Client directory structure

By default, PPM Customizing Toolkit stores the configuration files and applications for your PPM Customizing Toolkit client in the **custom** directory of your PPM installation.

This structure has been developed from many years of project experience and has proved its suitability on many occasions. We advise you not to change this directory structure.

ADVANTAGES OF THE STANDARD PPM CUSTOMIZING TOOLKIT DIRECTORY STRUCTURE

CLARITY

The data is stored in different folders so that you can find the information you are looking for faster.

STANDARDIZATION

A standard structure helps you handle different projects and shortens familiarization time. A wide range of applications can access this common standard.

PORTABILITY

All the information required to create a PPM client is stored in one coherent directory structure. This structure can be copied to any computer, allowing you to completely reproduce a PPM client.

DATA ARCHIVING

The only archiving needed is backing up the client directory, which contains all the necessary information for your client.

LAYOUT OF THE STANDARD PPM CUSTOMIZING TOOLKIT DIRECTORY STRUCTURE

The client data directory is stored under **<PPM installation directory>\server\bin\work\data_ppm\custom** and has the same name as the relevant PPM client. Below is a folder structure with the configuration contents.

Example: Directory structure for umg_en **client in the custom directory**
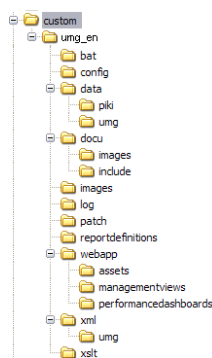
The following list describes the contents of the standard PPM Customizing Toolkit directory structure.

BAT DIRECTORY

This directory contains all the utilities for managing and configuring your client. The utilities are in the form of batch scripts that you can call up from PPM Customizing Toolkit. The directory is mandatory.

COCKPITS DIRECTORY

This directory contains the Performance Cockpit definition and configuration files. The directory is optional and only required if you use performance cockpits.

CONFIG DIRECTORY

This directory contains the ***_settings.properties** files for your PPM client's properties. All the files in this directory are copied from the **bat** directory to the corresponding **config** directory for

the PPM installation when you run **runinitdb.bat**. This applies in particular to **InitDb_settings.properties** and **InitSystem_settings.properties**, which are used to initiate the database.

If you specify settings in the settings files of your PPM client (**<PPM installation directory>\server\bin\work\data_ppm\config\<client>**), e.g., Keyindicator_settings.properties, we recommend that you copy the modified files to the **config** directory of your corresponding PPM Customizing Toolkit client (**<PPM installation directory>\server\bin\work\data_ppm\custom\<client>\config**) to ensure complete archiving.

DATA DIRECTORY

This directory contains the extracted source data of the PPM client. We recommend a separate subdirectory for each data source with the same name as the data source in question, e.g., **CustomerServices** or **Sales** in the PPM demo database. A corresponding directory is created automatically when you extract data.

In addition to the process data, we recommend separate subdirectories for the process instance-independent measures (**piki** folder) and dimension data (**dimdata** folder). The default batch applications supplied use this structure to import data.

DOCU DIRECTORY

This directory contains any documentation for a client. By default, the expert and technical documentation that PPM Customizing Toolkit generates for a client is written to this directory. The directory is optional and is created automatically when documentation is generated.

DUMP DIRECTORY

This directory contains any database dumps that may have been produced. The directory is optional.

LOG DIRECTORY

This directory contains the **log** files produced by the CTK applications. The **log** files for the default batch applications have a name with the form **<batname>_<Date>_<Time>.log**. <batname> represents the name of the batch application, <Date> is the date and <Time> is the time at which the application was run. The directory is deleted when **runinitdb.bat** is called up. Server log output is not written to this file, but to **<PPM installation directory>\server\bin\work\data_ppm\log\<client>.log**. This directory is mandatory and is created automatically during installation.

MANAGEMENTVIEWS DIRECTORY

The directory is optional and only required if you want to use Management views.

THE PERFORMANCEDASHBOARDS DIRECTORY

This directory contains the Performance Dashboard definition and configuration files. The directory is optional and only required if you use Performance Dashboards.

PATCH DIRECTORY

This directory contains the client-specific JAR files. These are always needed when specific Java classes are used, e.g., to calculate a measure or define a merge rule. When **create_demo.bat** is called up, all JAR files in the directory are automatically copied to the PPM **patch** directory and the PPM Customizing Toolkit **patch** directory. The directory is optional and only required if you use patches.

REPORTDEFINITIONS DIRECTORY

This directory is optional and only required if you want to use reports.

XML DIRECTORY

This directory contains the PPM client configuration files in XML format. All files in this directory should observe the convention **<client>_<configmodule>.xml**. We recommend storing all the configuration files for PPM in this directory.

Each data source defined has its own **<client>_<data source>.xml** files and other files it requires, such as the fragment definition or mapping definition. The files are stored in a mandatory subdirectory with the same name as the data source.

7.5 Client templates

Client templates provide you with predefined configurations for your client.

When creating a client, CTK provides various client templates.

7.5.1 base

This template contains a basic configuration made up of measures, dimensions and all the utilities required to manage the configurations. The template covers most PPM use cases.

7.5.2 sortmerge

This PPM configuration can be used as a template for the order-based merge of processes in PPM.

SCENARIO

A source system generates a system event for each process step executed. The names and types of the system events are not known in advance and can be anything. In each system event, the process step is described by the **EVENTTYPE** attribute. In addition, each system event knows its own process relation (**ID**) and its execution time (see example data in **data/Events/SortmergeEvents.xml**). The process steps are to be merged to form a process in PPM, sorted by their execution time.

SOLUTION

- System event import with order-based merge (no merge key required)

- A single process fragment definition is used and the names of the steps are copied from the system event data.

- Fixed process type definition with predefined process type group/process type in the attribute copy rules

Installation

1. In the **Client** module group, open the **Programs** module and run the **All.bat** program.

2. Then start PPM in the list of programs.

You will see three process instances.

No specific measures or dimensions are defined (default "base" configuration).

7.5.3   predecessormerge

This configuration can be used as a template for a key-based merge of processes in PPM using a predecessor relation.

SCENARIO

A source system generates a system event for each process step executed. The names and types of the system events are not known in advance and can be anything. In each system event, the process step is described by the **EVENTTYPE** attribute. In addition, each system event knows its own process relation (**ID**), its execution time and its preceding process step (see example data in **data/Events/predecessormerge_Events.xml**). The process steps are to be merged to form a process in PPM based on the predecessor relation.

SOLUTION

- System event import with key-based merge, with the ID of a process steps being used as the merge key for the end event of the process fragments and the ID of the predecessor process step being used as the merge key for the start event of the process fragment.

- A single process fragment definition is used and the names of the steps are copied from the system event data.

- Fixed process type definition with predefined process type group/process type in the attribute copy rules

Installation

1. In the **Client** module, open the **Programs** component and run the **Initialize client completely** program.

2. Then start PPM in the list of programs.

You will see five process instances.

No specific measures or dimensions are defined (see default **base** configuration).

Attributes that do not yet exist in PPM are automatically created when importing and copied to the functions.

Process instances 4 and 5 illustrate how process steps that refer to two preceding steps can be imported and represented.

7.5.4 jdbc

This configuration is an example of a process merge based on sort order in PPM.

SCENARIO

A list of events is extracted from a source system using JDBC Extractor. The appearance of the events depends on the system event specification of the extractor. In each event, the process step is described by the **STEPTBL-CHANGEDESC** attribute. In addition, each system event knows its own order relation (**ORDERTBL-ORDERNO**), its execution time, its processor and the customer who placed the order (see example data in **data/jdbc/JDBC_ORACLE_Data.xml**).

The process steps are to be merged to form a process in PPM, sorted by the order number and execution time.

SOLUTION

- Configuration of the data source in terms of system access and data extraction (definition of system events).
- Extraction of data from the system specified in the data source.
- Event import of extracted data with order-based merge.
- A single process fragment definition is used and the names of the steps are copied from the system event data.
- Fixed process type definition with predefined process type group/process type in the attribute copy rules.

Installation:

1. Prerequisite: JDBC Extractor must be installed.
2. Use this configuration to create a new PPM client.
3. For details on how to install the JDBC example data source system, refer to the instructions in the **readme.txt** file stored under **<installation directory>\ppmmashzone\server\bin\agentLocalRepo\.unpacked\ppm-client-run-prod-<version>-runnable.zip\ppm\ctk\ctk\examples\custom\jdbc\dump**.

7.5.5 organalysis

You can use this configuration as a template for an organizational analysis.

The template is based on the sortmerge template. Two additional relations are defined:

EXECUTES

The **executes** relation is defined from an organizational unit to a function. It describes the fact that an organizational unit executes a particular function. In the activity analysis, the relation can

answer questions such as: "Who does what?", "How much time is spent on which process step?", "How busy is a department?", etc.

This relation measures the communication between two organizational units. Each time one process step follows another, this relation is set up between the two organizational units involved. This enables you to create a communication graph, e.g., representing the actual cooperation between departments.

Installation

1. In the **Client** module, open the **Programs** component and run the **Initialize client completely** program.

2. Then start PPM in the list of programs.

You will see three process instances.

No other specific measures or dimensions are defined (see default **base** configuration).

7.5.6 wm_bpms

Use the template to extract data from **webMethods BPMS**.

The template contains the base configuration for **Process Intelligence for webMethods BPMS** version 9. It provides the configurations for data extraction and import, measures and dimensions, as well as all utilities required.

For detailed information, please refer to the document **PI_for_webMethods_BPMS.pdf** under **<installation directory>\ppmmashzone\server\bin\agentLocalRepo\.unpacked\ppm-client-run-p rod-<version>-runnable.zip\ppm\ctk\ctk\examples\custom\wm_bpms\doc**.

The client template is only approved for use under Windows.

7.5.7 natural_applications

Use the template to extract data from **Natural applications**.

The template contains the base configuration for **Process Intelligence for Natural Applications**. It provides the configurations for data import, measures and dimensions, as well as all utilities required.

For detailed information, please refer to the document **Natural Applications.pdf** under **<installation directory>\ppmmashzone\server\bin\agentLocalRepo\.unpacked\ppm-client-run-p rod-<version>-runnable.zip\ppm\ctk\ctk\examples\custom\natural_applications\d oc** of your PPM installation.

The client template is only approved for use under Windows.

7.5.8   wm_process

Use the template to extract **webMethods Process Engine** and **webMethods Optimize** data from **Universal Messaging**.

The template contains the base configuration for **Process Intelligence for webMethods Processes Version 9**. It provides the configurations for data extraction, data import, measures and dimensions, as well as all utilities required.

For detailed information, please refer to the document **PI_for_wM_Processes.pdf** under **<installation directory>\ppmmashzone\server\bin\agentLocalRepo\.unpacked\ppm-client-run-prod-<version>-runnable.zip\ppm\ctk\ctk\examples\custom\wm_process\doc**.

The client template is only approved for use under Windows.

7.5.9   ppm4sd

Use the template to extract data from an SAP SD system.

It provides the configurations for data extraction, data import, measures and dimensions, as well as all utilities required.

For detailed information, please refer to the document **PPM Content Package for SAP SD.pdf** under **<installation directory>\ppmmashzone\server\bin\agentLocalRepo\.unpacked\ppm-client-run-prod-<version>-runnable.zip\ppm\ctk\ctk\examples\custom\ppm4sd_en\doc**.

The client template is only approved for use under Windows.

7.5.10   ppm4mm

Use the template to extract data from an SAP MM system.

It provides the configurations for data extraction, data import, measures and dimensions, as well as all utilities required.

For detailed information, please refer to the document **PPM Content Package for SAP MM.pdf** under **<installation directory>\ppmmashzone\server\bin\agentLocalRepo\.unpacked\ppm-client-run-prod-<version>-runnable.zip\ppm\ctk\ctk\examples\custom\ppm4mm_en\doc**.

The client template is only approved for use under Windows.

7.6   Data management and configuration programs

By default, PPM Customizing Toolkit provides you with a number of applications that make it easier to configure and manage your PPM client data.

These programs are stored as batch scripts in your PPM client's **bat** directory. The applications available depend on your client's configuration. The default scripts available have a client-independent configuration and so can be used for any client.

Depending on the configuration of PPM Customizing Toolkit, the corresponding applications are available in the **Programs** component of the **Client** module.

All programs first run the script file **_param.bat**. This file sets environment variables that are used as arguments in the program files. To improve clarity, the names of all environment variables begin with the string **PPM_CONF_**.

The file **_param.bat** is automatically managed by PPM Customizing Toolkit. Manual changes to the file **_param.bat** are not evaluated by PPM Customizing Toolkit but overwritten with the information from the **Programs** component.

PASSWORD REQUEST

To run some programs, you need access privileges for the corresponding PPM client server. Before the program is started for the first time, a password is requested. The password is valid only for the current client and for the duration of the ongoing PPM Customizing Toolkit session. This is the password that you use for logging in to your PPM client.

On the **Configure programs** tab in the **Password required** column, you can specify whether a password will be required for running individual programs or not.

You can change a wrong password at a later time. To do this, click the **Change password** button on the **Run program** tab and enter the correct password.

For client configurations that were created with a version older than CTK 4.1.2, the **Password required** column is not displayed. To display the column, go to the **Configure parameters** tab, delete the entry **PPM_CONF_PASSWD**, and save the configuration.

LIST OF DEFAULT PARAMETERS AVAILABLE

The following parameters are available for configuring scripts if you have selected the **base** template for your client.

%PPM_CUSTOM_DIR% => <PPM installation directory>\ppmmashzone\server\bin\work\data_ppm\custom

PPM_CONF_COCKPIT_CONF	File containing the cockpit's technical specifications. Valid value: **-cockpitconfiguration <file name>**
PPM_CONF_COCKPIT_DEF	File containing the cockpit hierarchy model. Valid value: **-cockpitdefinition <file name>**
PPM_CONF_COCKPIT_PROCTYPE	Process type group and, if required, process type at which the user-defined aggregated measures are to be registered. Valid value: **-processtype <ptg[\pt]>**
PPM_CONF_DIMDATACSV_FILE	Files to be imported when the **Import dimension values as CSV** program is called up. Default value: **%PPM_CUSTOM_DIR%\data\dimdata*.csv**
PPM_CONF_DIMDATAXML_FILE	Files to be imported when the **Import dimension values as XML** program is called up. Default value: **%PPM_CUSTOM_DIR%\data\dimdata*.xml**
PPM_CONF_EXPORTPATH	Directory to which a configuration is saved using the programs **Export PPM configurations** or **Import PPM configurations**.
PPM_CONF_IMPORT_MODE	Option in the **Import PPMconfigurations** program. Valid values: **-overwrite** or **-replace** to overwrite or replace existing configurations.
PPM_CONF_INITDB_OVERWRITE	Defines whether any existing content is to be overwritten (= **-overwrite**) or not (no value) when **Initialize database** is called up.
PPM_CONF_JDBC_PARAMS	Options applied when JDBC2PPM Extractor is run
PPM_CONF_LANGUAGE	Language parameter for PPM commands
PPM_CONF_SAP_PARAMS	Options applied when SAP2PPM Extractor is run
PPM_CONF_PASSWD	Password of the PPM user

PPM_CONF_PIKICSV_FILE	Files to be imported when the **Import process instance-independent measures as CSV** program is called up. Default value: **%PPM_CUSTOM_DIR%\data\piki*.csv**
PPM_CONF_PIKIXLS_FILE	Files to be imported when the **Import process instance-independent measures from Excel** program is called up. Default value: **%PPM_CUSTOM_DIR%\data\piki*.xls**
PPM_CONF_PIKIXML_FILE	Files to be imported when the **Import process instance-independent measures as XML** program is called up. Default value: **%PPM_CUSTOM_DIR%\data\piki*.xml**
PPM_CONF_PROTOCOL_ERROR	Flags whether PPM tool errors are to be logged or not. Valid values: **yes**: Errors are logged **no**: Errors are not logged
PPM_CONF_PROTOCOL_INFO	Flags whether PPM tool information output is to be logged or not. Valid values: **yes**: Information is logged **no**: Information is not logged
PPM_CONF_PROTOCOL_WARNING	Flags whether PPM tool warnings are to be logged or not. Valid values: **yes**: Warnings are logged **no**: Warnings are not logged
PPM_CONF_USER	PPM user used for executing PPM commands
PPM_CONF_UPDATE_RECOVERY_FILE	Analysis server recovery file for data import operations Valid values: **yes**: always update **no**: never update
PPM_CONF_MAKEZIP_DIR	Target directory for client archiving Default value: **<PPM installation directory>\server\bin\work\data_ppm\custom**

	archive
PPM_CONF_PIKIEXPORT_FILE	File to be used for the export when the **Import process instance-independent measures as XML** program is called. Default value: **%PPM_CUSTOM_DIR%\data\piki\piki_export.xml**
PPM_CONF_AS_STARTEMPTY	Specifies if a dump is used when calling **Start analysis server**. Valid values: **startempty**: Dump is not used **No value**: Dump is used
PPM_CONF_CONVERTER_CHECK	Specifies if only the database version is checked when calling **Convert PPM database**. Valid values: **check**: Is checked **No value**: Is converted
PPM_CONF_CONVERTER_IGNOREPIKIDATA	Specifies if existing PIKI cubes are considered when calling **Convert PPM database**. Valid values: **No value**: The converter does not start if PIKI cubes still exist in the database **ignorepikidata**: Existing PIKI cubes will be deleted.

In the development phase of your project, assign the **PPM_CONF_INITDB_OVERWRITE** parameter the value **-overwrite** to allow the database to be initialized again using the **runinitdb** command. When the development phase has been completed, reset the value to prevent the database from accidentally being overwritten.

LIST OF DEFAULT PROGRAMS AVAILABLE

The following list contains a selection of default programs available in PPM Customizing Toolkit, if you selected **base** as the template for your client.

CUSTOMIZING

Recalculate measures	keyindicatornew.bat	Recalculates all the client's measures and dimensions.

Activate configuration of the **Attributes** module	activate_attributes. bat	Imports all the configurations edited in the **Attributes** module into the client.
Activate configuration of the **Measures and dimensions** module	activate_ki.bat	Imports all the configurations edited in the **Measures and dimensions** module into the client. Since new attributes may also be imported, all the configurations in the **Attributes** module are imported so as to ensure that the configuration is imported correctly.
Activate configuration of the **Merge** module	activate_merger.bat	Imports all the configurations edited in the **Process merge** module into the client. Since new attributes may also be imported, all the configurations in the **Attributes** module are imported so as to ensure that the configuration is imported correctly.
Activate configuration of the **Processes** module	activate_ptree.bat	Imports all the configurations edited in the **Processes** module into the client. Since new attributes, measures and dimensions may also be imported, all the configurations from the **Attributes** and **Measures and dimensions** modules are imported so as to ensure that the configuration is imported correctly.

IMPORT

Initialize database	runinitdb.bat	Re-initializes the client's database if the database is empty. If the variable **PPM_CONF_INITDB_OVERWRITE**=**-o verwrite** has been set, the existing database is overwritten.
		Warning
		All data will be lost.
		In addition, all the log files in the **log** directory are deleted prior to initialization.

SYSTEM

Reinitialize PPM analysis server	initanalysisserver.ba t	Reinitializes the client's PPM analysis server
Start PPM client	rungui.bat	Starts PPM without a browser

Create new user passwords	renew_userpasswords.bat	Creates new, random passwords for all users in central user management and e-mails them to the respective users.
Run report automation	startreportautomation.bat	This program starts report automation. To call it, you must specify user name and password of a user with the **Report management** user privilege. Nevertheless, the report automations are run under the account of the user with which they are associated.
Start PPM servers and analysis server	startup.bat	Starts the PPM server of the client and the associated analysis server
Stop PPM servers and analysis server	shutdown.bat	Stops the PPM server of the client and the associated analysis server
Stop PPM server	stopserver.bat	Stops the client's PPM server
Run PPM server	runserver.bat	Starts the client's PPM server
Update the recovery file of the PPM analysis server	update_recoveryfile.bat	Updates the recovery files of the PPM analysis server

OTHER

Stop PPM analysis server	stopanalysisserver.bat	Stops the client's PPM analysis server
Start PPM analysis server	runanalysisserver.bat	Starts the client's PPM analysis server
Start suspected deviation analysis	ppmanalytics.bat	This programs runs a suspected deviation analysis for the current client data. The analysis result is sent to the users with the corresponding privileges.
Create client documentation	createdocu.bat	Creates documentation for the measures and dimensions in HTML format from the current client configuration (the configuration files in the **xml** directory). The result is stored in the **docu** directory under **<client>.html** and can be copied to the >PPM> Web server using the **<Publish** program.
Anonymize organizational units	anonymize_orgunits.bat	Anonymizes organizational units

Export PPM attributes	exportattributes.bat	Exports PPM attributes into the directory **PPM_CONF_EXPORTPATH**. Attribute names are not exported. the client's XML directory is the default directory, i.e., the existing configuration files are overwritten.
Convert PPM database	runppmconverter.bat	Converts an existing PPM database. If the variable **PPM_CONF_CONVERTER_CHECK=-check** is set, the system checks if the database must be converted or if it is up to date.
Export PPM process tree	exportprocesstree.bat	Exports the process tree from the PPM database into a file.
Merge processes and calculate measures	ppmimport.bat	Merges the imported process data and calculates the measures and dimensions.
ZIP archiving of a client	make_zip.bat	Archives the contents of a client directory in ZIP file.
Export PPM configuration	exportconfig.bat	Exports a user-defined selection of configurations to the **PPM_CONF_EXPORTPATH** directory. This is done by commenting the corresponding lines in the file in and out. By default, all configurations are exported to the client's **XML** directory. All existing configuration files are overwritten.
Activate cockpit data	activatecockpit.bat	Generates the favorites structure and user-defined measure for aggregation from a cockpit definition file in the **cockpits** subdirectory and imports this information to the PPM client.
Import dimension data in CSV format	dimdataimport_csv.bat	Imports all the dimension data from the **PPM_CONF_DIMDATACSV_FILE** directory (under **<client>/data/dimdata** by default) in CSV format (*.cvs) with **<;** as the separator.

Import dimension data in XML format	dimdataimport_xml. bat	Imports all the dimension data from the **PPM_CONF_DIMDATAXML_FILE** directory (under **<client>/data/dimdata** by default) in XML format (*.xml).
Create client documentation with function overview	createfuncdocu.bat	Creates technical documentation for the client's measures, dimensions, processes and functions. The result is stored in the **docu** directory under **<client>.html** and can be copied to the PPM Web server using the **Publish** program. The data is extracted from the client, i.e., the client server must be running.
Create technical client documentation	createtechdocu.bat	Creates technical documentation for the measures and dimensions in HTML format from the current client configuration (the configuration files in the **xml** directory). The result is stored in the **docu** directory under **<client>_tech.html**.
Import process instance-independent measures as CSV	pikiimport_csv.bat	Imports all process instance-independent measure series from the **PPM_CONF_PIKICSV_FILE** directory (under **<client>/data/piki** by default) in CSV format (*.csv).
Import process instance-independent measures as XML	pikiimport_xml.bat	Imports all process instance-independent measure series from the **PPM_CONF_PIKIXML_FILE** directory (under **<client>/data/piki** by default) in XML format (*.xml).
Import process instance-independent measures from Excel	pikiimport_xml.bat	Imports all process instance-independent measure series from the **PPM_CONF_PIKIXLS_FILE** directory (under **<client>/data/piki** by default) in XLS format (*.xls).

Publish cockpits, Management views, and documentation	publish.bat	Copies data from the **custom** directory to the corresponding PPM installation directories:
		Performance cockpits from the **cockpits** directory
		Management views from the **managementviews** directory
		Reports from the **reports** directory
		Client documentation from the **docu** directory
Import specific PPM configurations	importconfig.bat	Imports a user-defined selection of configurations. This is done by commenting the corresponding lines in the file in and out.
Export process instance-independent measures as XML	piki_export.bat	This program exports all process instance-independent measure series in XML format (*.xml) into the file **PPM_CONF_PIKIEXPORT_FILE**.

You can add further available programs s to the list. To do so, select the relevant programs on the **Configure programs** tab. When you open the **Programs** component again, the selected programs are displayed in the **Program groups** list.

You can transfer any of the programs from the list to the quick launch bar. This enables you to run frequently used programs just by clicking them. Click ⭐ **Edit program favorites** to run the corresponding administration component.

If you want to modify certain scripts for a client, you can configure the programs appropriately and define your own parameters. All batch script parameters are set in the **_param.bat** file in your client's **bat** directory that every batch script calls up when it is run.

You can find a list of the parameters used by a script in the description of the program in question.

You can set the script parameters on the **Configure parameters** tab.

ADD CUSTOM PROGRAMS

You can also write your own applications and make them available in your client. The file name of your application must not begin with an underscore, e.g., _myprogram.bat.

Save the custom script in the **bat** directory of your client (<PPM installation directory>\server\bin\work\data_ppm\custom\<client>\bat). When you open the **Programs** component again, your application will be displayed in the **Program groups** list.

GUIDELINES FOR CREATING CUSTOM SCRIPTS

Then use the command prompt **pushd** to switch to the **bin** directory of your PPM installation, where you can run any command line programs from your PPM system. Before exiting your script, use the **popd** command to reset the original working directory.

When you run a PPM command line program, the echo output is activated. Deactivate this immediately after calling up the command line program using the **@echo off** command (the leading **@** character also suppresses output of the **echo** command itself).

Example

The example below shows the script file **rungui.bat**, in which the guidelines described can easily be identified.

```
@echo off
REM ******************************************************
REM ...
REM ******************************************************

REM global variables
call _init.bat

REM backup the current directory and change to PPM_HOME
pushd C:\SoftwareAG\ppmmashzone\server\bin\work\data_ppm\bin

REM start PPM GUI for client
@echo on
call runppmgui -language %PPM_CONF_LANGUAGE% -user %PPM_CONF_USER% -password
%PPM_CONF_PASSWD% -client %PPM_CLIENT%
@echo off

REM restore directory
popd
```

7.7 Data archiving

All imported source system data, as well as configurations imported using the **runppmconfig** configuration program, are saved in the database schema of the PPM client and are automatically saved when the database schema is backed up.

To prevent data losses, you should back up the database schema regularly.

You can automatically archive imported source system files after a successful import by appropriate configuration of the data source (**datasource.xml**). For detailed information, refer to the **Data import** documentation in the PPM Technical Reference.

The configuration files of a PPM client are saved by client in the **config** and **custom** directories in the PPM installation directory. Save these directories each time you change the configuration.

You must manually save the PPM directory of the Web server and all user-specific report definitions. To identify the storage location of the Web server directory that you specified at installation, refer to the **ManagementViews.BaseDirectory** key in the client-specific **Templates_settings.properties** configuration file. In this file, discard the last part **html/umg_en/managementviews/**.

Back up the log files of your PPM server at regular intervals. To do this, stop the server in a maintenance window and move the log files to your archive. The default path for the log files of the PPM servers is **<PPMinstallation directory>\server\bin\work\data_ppm\log\<client name>**.