



# ARIS Process Performance Manager INSTALLATION

Version 10.0

April 2017

This document applies to PPM Version 10.0 and to all subsequent releases.

Specifications contained herein are subject to change and these changes will be reported in subsequent release notes or new editions.

Copyright © 2000 - 2017 Software AG, Darmstadt, Germany and/or Software AG USA Inc., Reston, VA, USA, and/or its subsidiaries and/or its affiliates and/or their licensors.

The name Software AG and all Software AG product names are either trademarks or registered trademarks of Software AG and/or Software AG USA Inc. and/or its subsidiaries and/or its affiliates and/or their licensors. Other company and product names mentioned herein may be trademarks of their respective owners.

Detailed information on trademarks and patents owned by Software AG and/or its subsidiaries is located at <http://softwareag.com/licenses>.

Use of this software is subject to adherence to Software AG's licensing conditions and terms. These terms are part of the product documentation, located at <http://softwareag.com/licenses> and/or in the root installation directory of the licensed product(s).

This software may include portions of third-party products. For third-party copyright notices, license terms, additional rights or restrictions, please refer to "License Texts, Copyright Notices and Disclaimers of Third Party Products". For certain specific third-party license restrictions, please refer to section E of the Legal Notices available under "License Terms and Conditions for Use of Software AG Products / Copyright and Trademark Notices of Software AG Products". These documents are part of the product documentation, located at <http://softwareag.com/licenses> and/or in the root installation directory of the licensed product(s).

## Contents

1	Text conventions.....	1
2	General.....	2
3	Hardware and software requirements .....	3
4	Infrastructure components .....	4
4.1	Apache ZooKeeper.....	4
4.2	Load balancer .....	4
4.3	Cloud Agent .....	4
4.4	Cloud Controller .....	5
4.5	Central user management .....	5
5	Notes on installation.....	6
5.1	ARIS Process Performance Manager .....	6
5.2	PPM Customizing Toolkit.....	6
5.3	PPM Process Extractor SAP-2-PPM.....	6
6	Installation under Windows .....	7
6.1	Start installation.....	7
6.2	SSL and proxy settings.....	7
6.3	Authentication.....	7
6.4	Select installation directory and identify computer .....	8
6.5	Select products .....	8
6.6	Select language.....	8
6.7	Select system configuration .....	9
6.8	Accept license terms .....	9
6.9	Configure Platform Manager.....	9
6.10	Configure system .....	10
6.11	Configure PPM Analysis GUI .....	10
6.12	Finish installation.....	11
7	Installation under Linux .....	12
8	Procedure after installation.....	14
8.1	System update.....	14
8.2	PPM .....	14
8.2.1	Install database drivers.....	14
8.2.2	Import license .....	15
8.2.3	Create client.....	15
8.2.4	Create demo database .....	21
8.2.5	Transfer client .....	24
8.2.6	Start PPM.....	24
8.2.7	Use users in PPM.....	29
8.2.8	Use user groups in PPM.....	30
8.2.9	Adapt date format to British English language area .....	30
9	Uninstall applications.....	32

## 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

The installation guide describes the installation procedures for **ARIS Process Performance Manager** (PPM) and the infrastructure (Page 4) required. Additionally, you will receive information as to what to observe when installing PPM and how to proceed after installation.

You can install PPM and the infrastructure together or individually.

Use the **Software AG Installer** installation program to install PPM including CTK, the extractors **CSV-2-PPM**, **JDBC-2-PPM**, **SAP-2-PPM**, and **Universal Messaging-2-PPM**, as well as the Content Packages **SAP/SD** and **SAP/MM**.

You can also install the application **PPM Analysis GUI**. **PPM Analysis GUI** enables remote access to a PPM system without browser, similarly to the access via a browser applet. Local installation of the infrastructure is not required for **PPM Analysis GUI**.

Software AG Installer enables you to install PPM under various approved operating systems, see chapter Hardware and software requirements (Page 3). Detailed information on how to use Software AG Installer is available in the documentation **Using the Software AG Installer**. The PPM Installation Guide assumes that you are familiar with the documentation **Using the Software AG Installer**.

Detailed information on the installation of Software AG products is available in the document **Installing Software AG Products**.

You can download current products and documentation on the Software AG download page (<https://empower.softwareag.com/Products/default.asp>).

### 3 Hardware and software requirements

Installation of PPM has been tested and approved for various Windows operating systems.

Detailed information on the supported operating systems, Java VM versions, and databases is available in the document **Software AG System Requirements**.

## 4 Infrastructure components

Product installation comprises the individual PPM-specific product components and, as a common basis, various infrastructure components for user and license management. The infrastructure consists of different functional components for the administration of all components and services and installed, including user and license management and a central control unit. The product-specific and the infrastructure components must be installed and operated on the same computer. It is impossible and not supported to distribute the components to multiple systems. The infrastructure includes the following components that you can configure or use for installation purposes.

- Apache ZooKeeper (Page 4)
- Load balancer (Page 4)
- Cloud Agent (Page 4)
- Cloud Controller (Page 5)
- Central user management (Page 5)

### 4.1 Apache ZooKeeper

Product components and common infrastructure components (Page 4) use Apache ZooKeeper as a central registration service. Apache ZooKeeper is a service that centrally saves configuration information and names for the components registered. It also enables distributed synchronization and provides group services. Apache ZooKeeper enables the operation of distributed installations. Each installation has its own ZooKeeper instance. The individual ZooKeeper instances synchronize, i.e., they exchange data about the configuration of the respective installations. PPM does not support distributed installation scenarios.

### 4.2 Load balancer

The load balancer controls the server load distribution for distributed applications or servers. Multiple computers form an array that appears to behave like a single system. The load balancer is connected upstream of the Web application servers and distributes the incoming queries because a single host can only respond to only a limited number of HTTP queries. The upstream load balancer adds information to the HTTP query in order to send queries of the same user to the same server.

For PPM installation scenarios, load balancer does not provide load distribution, merely a distribution of context-related queries to various services.

### 4.3 Cloud Agent

Cloud Agent is a Windows service that enables you to install, configure, start, stop, and monitor product and infrastructure components on a single computer. Cloud Agent is set up as a service during installation and starts automatically. Each installation of product and infrastructure components has its own Cloud Agent.

## 4.4 Cloud Controller

Cloud Agent (Page 4) is controlled by Cloud Controller. Cloud Controller is a command line program used for sending commands to an active Cloud Agent. The Cloud Controller addressed can run on a local computer or any computer accessible in the network. Cloud Controller is able to control multiple Cloud Agents and thus to create and manage installations distributed on multiple computers.

Communication between Cloud Controller and Cloud Agent (Page 4)(s) can be encrypted. To transmit commands to a Cloud Agent (Page 4), authentication via user name and password is required.

You can start Cloud Controller in the Windows program group **Start > All Programs > Software AG > Administration**.

In the command line, enter the command **help** to display available Cloud Controller commands and related descriptions.

For detailed information on using Cloud Controller please refer to the documentation **PPM Operation Guide**.

## 4.5 Central user management

Central user management manages users, user groups, and product licenses for PPM. Central user management enables central single sign-on for registered products, i.e., users logged in to one product do no longer log in to another product. user management data is managed by administrators with the **Administrator** function privilege.



## 5 Notes on installation

Before you start with the installation, please observe the following.

### 5.1 ARIS Process Performance Manager

- When using a Windows operating system, the **Administrator** user account must always be used to run the setup. To do so, run the installation program as an administrator (pop-up menu item **Run as administrator**). Other user accounts do not work, even if they were assigned administrator privileges.
- Installations on integrated network drives and on substituted drives are not supported.
- In an installation of a distributed PPM environment (master-sub-server scenario), sub-server and master server can run on different database instances. For this to work, all instances must use the same database version.
- The **Windows** operating system offers only 5000 ports for TCP/RMI connections. This number may not be sufficient for error-free communication if the system is too busy. To change the parameter, the Windows registry must be adapted. Add the following entry: **HKEY\_LOCAL\_MACHINE\SYSTEM\CurrentControlSet\Services\Tcpip\Parameters**, **"MaxUserPort"=dword:00002000**. This example increases the number of available ports to 8192.

### 5.2 PPM Customizing Toolkit

- Regardless of your license key, PPM Customizing Toolkit is available with the PPM installation. PPM Customizing Toolkit supports you in configuring ARIS Process Performance Manager.
- If you are using PPM Customizing Toolkit under Windows to edit clients and configure system services, you need to run the installation program as an administrator (pop-up menu item **Run as administrator**).

### 5.3 PPM Process Extractor SAP-2-PPM

You can download SAP Java Connector from the SAP Service Marketplace (<http://service.sap.com/connectors>) under **SAP Java Connector**. Install it in line with the installation instructions supplied with SAP Java Connector. The version required for use with PPM is specified in the **Software AG System Requirements**.

The SAP JCO package usually consists of a Java part (jar file, e.g., sapjco3.jar) and an operating system specific part (operating system specific library). Proceed as described in the SAP instructions with the operating system specific part, and copy the library to the following directory of your installation:

<installation directory>\ppm\server\bin\work\data\_ppm\drivers

## 6 Installation under Windows

Use the **Software AG Installer** installation program to install PPM, PPM Analysis GUI, and the infrastructure under Windows.

Download the Software AG Installer suitable for the operating system on which you want to install PPM.

Detailed information on how to use Software AG Installer is available in the documentation **Using the Software AG Installer**.

You can download current products and documentation on the Software AG download page (<https://empower.softwareag.com/Products/default.asp>).

### 6.1 Start installation

To run the installation completely you need to run the installation program with administration privileges. With MS Windows, you can run a program as an administrator by means of the pop-up menu.

#### Prerequisite

The prerequisites listed in the chapter on **Hardware and software requirements** (Page 3) are met.

You have administration privileges on the computer on which you run the installation program.

#### Procedure

1. Start the installation program **Software AG Installer** as an administrator.  
The Installation Wizard is launched and the introduction page is displayed.
2. Click Advanced Options if you want to configure advanced **Software AG Installer** settings.
3. Click **Next**.

Your settings are applied.

### 6.2 SSL and proxy settings

You can select SSL for a secure connection between Software AG Installer and server and specify a proxy server.

#### Procedure

1. Specify your settings.
2. Click **Next**.

Your settings are applied.

### 6.3 Authentication

Log in to the Software AG Empower server with your user name and password. Depending on your user data, the server will provide all programs available to you for installation.

To obtain your user data please contact the system administrator.

#### Procedure

1. Enter your user name in the **User name** box your password in the **Password** box.
2. Click **Next**.

Your settings are applied.

## 6.4 Select installation directory and identify computer

Specify the directory path under which you want to install the products, and specify the host name or IP address of the computer. If you are installing PPM for use in a cloud environment, specify the external host name under which the installation can be accessed from the Internet here.

In addition, you can specify the name of the Start Menu group in which the program shortcuts are created (default: **Software AG**).

- Please do not specify folders under **C:\Program Files**.
- Enter the directory path without spaces.

#### Procedure

1. Specify your settings.
2. Click **Next**.

Your settings are applied.

## 6.5 Select products

In the product tree you can select individual products to be installed. If you select PPM the infrastructure required for PPM will be selected automatically. Installation of the infrastructure is not required for PPM Analysis GUI.

#### Procedure

1. Select the products to be installed.
2. If you want to install only the infrastructure, select **PPM infrastructure <version>** under the **Infrastructure** option.
3. Click **Next**.

Your settings are applied.

## 6.6 Select language

You can select an additional language pack to be installed. By default, the U.S. English language pack is always installed.

#### Procedure

1. Select a language pack.
2. Click **Next**.

Your settings are applied.

## 6.7 Select system configuration

Select a system configuration for PPM that can handle your expected usage needs. In each use case below, the values are valid only for the specified number of PPM clients. The database is not included in the estimate.

### Procedure

1. Select a system configuration.
2. Click **Next**.

Your settings are applied.

System configuration	PPM Clients	Users	System Hardware
Small	1	Up to 5	20 GB free hard drive space, 4 GB RAM, 2 CPUs
Medium	1	Up to 10	Depends on PPM customization
Large	Several	Up to 100	Depends on PPM customization

## 6.8 Accept license terms

To continue with the installation, you need to accept the license terms displayed.

### Procedure

1. Enable the option **I have read and I agree to the terms of the license agreements shown above**.
2. Click **Next**.

Your settings are applied.

## 6.9 Configure Platform Manager

Instead of using the default settings for Platform Manager, you can specify custom ones.

Platform Manager is an infrastructure component that is automatically installed when you select certain products in the product tree (Page 8).

PPM does not require an installation of Command Central. You can disable the **Use Command Central** option.

Detailed information is available in the documentation **Using the Software AG Installer**.

### Procedure

1. Specify your settings.
2. Click **Next**.

Your settings are applied.

## 6.10 Configure system

You specify the port number of the load balancer (Page 4) and select from various, predefined system settings. System settings depend on computer power and usage of products installed.

Small (demo installation)

- Medium (standard installation)
- Large (productive server installation)

### Procedure

1. Enter the port number of the load balancer in the **Load Balancer port** box. You need to enter a port number between 1 and 65535.

The default port number is **4080**.

If you are installing PPM for use in a cloud environment, specify the http port under which the installation can be accessed from the Internet here. This is generally the default port **80**.

2. Enter the port number of the load balancer for an SSL (https) connection in the **Load Balancer SSL port** box. You need to enter a port number between 1 and 65535.

The default port for https (SSL) is **4443**.

If you are installing PPM for use in a cloud environment, specify the https port under which the installation can be accessed from the Internet here. This is generally the default port **443**.

3. Click **Next**.

Your settings are applied.

## 6.11 Configure PPM Analysis GUI

You can install PPM Analysis GUI independently of PPM Server. PPM Analysis GUI enables you to call the PPM interface instead of the applet from a client computer.

If you want to install PPM Analysis GUI you need to specify the URL of a PPM Web server that the PPM Analysis GUI is to access. The PPM Web server is part of the PPM infrastructure.

PPM GUI is automatically installed during the PPM Server installation. So if you install PPM Server, you do not need to install PPM Analysis GUI on top of it. In this case you can disable the **PPM Analysis GUI** option in the Product selection (Page 8).

If you install PPM Analysis GUI, you need to specify the URL of a PPM Web server. If now PPM Web server is found at the URL specified, a corresponding message is displayed. This happens, for example, if you install PPM Analysis GUI and PPM Server together. You can confirm the message and continue with installation or change the URL.

### Procedure

1. In the **ARIS Process Performance Manager URL** box, enter the required URL of your PPM Web server in the following form.

http(s)://<computer name>:<port>/ppm

2. Click **Next**.

Your settings are applied.

## 6.12 Finish installation

Once you have specified all required settings, you can finalize the installation.

If you want to change your settings, click **Back** until you get to the relevant dialog and make your changes. By repeatedly clicking **Next** you get back to the summary.

### Procedure

1. Click **Next**.

The installation is carried out and you are shown a note on installation progress.

2. Click **Close**.

The installation is complete and the Installation Wizard exits.

You can now launch the programs installed.

## 7 Installation under Linux

Use the **Software AG Installer** installation program to install PPM PPM Analysis GUI, and the infrastructure under Linux Red Hat Enterprise Linux Server 6.4, 6.5, and 7 (64-bit), as well as Suse Linux Enterprise Server 11 SPx.

Download the Software AG Installer suitable for the operating system on which you want to install PPM.

Detailed information on how to use Software AG Installer is available in the documentation **Using the Software AG Installer**.

You can download current products and documentation on the Software AG download page (<https://empower.softwareag.com/Products/default.asp>).

The installation under Linux is basically the same as the installation under Windows (Page 7). Please observe the following for Linux.

Before you can install PPM on a Linux system you need to check the following system settings and change them, if required.

Check the shared memory settings (kernel parameter **shmmax**) with the command **sysctl -a | fgrep kernel.shmmax**. The value is output in bytes. If the value is below 629145600 bytes it must be increased before installation. To do so, execute the command **sysctl -w kernel.shmmax=629145600** as a root user. Alternatively, you can execute the command **echo "kernel.shmmax=629145600" >> /etc/sysctl.conf**. Activation is then executed by the command **sysctl -p**.

Check the settings for the system-wide, maximum number of file descriptors (kernel parameter **fs.file-max**) with the command **sysctl -a | fgrep fs.file-max**. The value of the parameter must be at least 200000. If it is lower or not specified you need to increase it before installation. To do so, execute the command **sysctl -w fs.file-max=200000** as a root user. Alternatively, you can execute the command **echo "fs.file-max=200000" >> /etc/sysctl.conf**. Activation is then executed by the command **sysctl -p**.

Check the user, group, and process settings for the maximum number of open file descriptors using the **ulimit -Hn** (Hard Limit) and **ulimit -Sn** (Soft Limit) commands, and the maximum number of processes per user using the **ulimit -Hu** and **ulimit -Su** commands. The value for the maximum number of open file descriptors should be at least **200000** and the value for the maximum number of processes per user should be at least **65535**. If they are lower, they must be increased before installation.

On Redhat systems, you do this by executing the following commands as the root user:

```
echo "<user name> soft nofile 200000" >> /etc/security/limits.d/40-<user name>.conf
echo "<user name> hard nofile 200000" >> /etc/security/limits.d/40-<user name>.conf
echo "<user name> soft nproc 65535" >> /etc/security/limits.d/40-<user name>.conf
echo "<user name> hard nproc 65535" >> /etc/security/limits.d/40-<user name>.conf
```

On SUSE systems, you do this by executing the following commands as the root user:

```
echo "<user name> soft nofile 200000" >> /etc/security/limits.conf
echo "<user name> hard nofile 200000" >> /etc/security/limits.conf
```

```
echo "<user name> soft nproc 65535" >> /etc/security/limits.conf  
echo "<user name> hard nproc 65535" >> /etc/security/limits.conf
```

The host name of the system must be entered in the DNS of the available network. If this is not the case the name can also be entered in the file **/etc/hosts**.

By default, the load balancer is assigned ports 4080 for http and 4443 for https during installation. If you change the default ports during installation you need to observe the following. The installation under Linux is run with a normal user. For normal users, only ports from 1024 are available on the operating system. If you still want to provide the services of the above system on ports 80 and 443, you as a root user must set up the following port forwarding:

```
iptables -t nat -A PREROUTING -i eth0 -p tcp --dport 80 -j REDIRECT --to-ports 4080  
iptables -t nat -A PREROUTING -i eth0 -p tcp --dport 443 -j REDIRECT --to-ports 4443
```

The following is also to be observed when working under Linux:

Shortcuts as described in chapter Select installation folder and computer (Page 8) are not created.

Do not perform the installation under Linux as a root user or using sudo.

By default, Cloud Agent is not installed as a daemon or service (see step **2** below).

### Procedure

1. Perform the installation as described in chapter Installation under Windows (Page 7).
2. To install Cloud Agent under Linux as a service, run the call **<./CloudAgentApp.sh install** with sudo or root privileges in the directory **<installation directory>/ppm/server/bin/** after the installation.
3. Start the infrastructure and the components of the products installed. To do so, run the corresponding scripts **start\_ppm.sh**. The scripts are located in the directory **<installation directory>/ppm/server/**.
4. You can now check if all required components are running.
  - a. Start Cloud Controller (acc.sh) by executing the following command in the command line in the directory **<installation directory>/ppm/server/acc/**.  

```
./acc.sh -h localhost -u Clous -pwd g3h31m -p 17005
```
  - b. Enter the command **list** to display the components' status. Use the commands **stopall** and **startall** to stop and restart all components, if necessary.

The selected products are now installed and can be used.

Now you can configure your system as described in chapter Procedure after installation (Page 14).

To stop the infrastructure of the installed products, run the scripts **stop\_ppm.sh**. The scripts are located in the directory **<installation directory>/ppm/server/**.



## 8 Procedure after installation

You must perform the following steps after the installation in order to be able to use PPM (Page 14).

### 8.1 System update

After installation of the initial release version of PPM and associated products by means of the Software AG Installer, you can update the products only using the Software AG Update Manager. A product update is usually called **Official Fix** and contains important error fixes for the product. We urgently recommend that you apply official fixes using the Software AG Update Manager after you installed the release version.

Software AG Update Manager offers the latest official fixes for all products you installed. The current official fixes contain all official fixes previously released.

#### INSTALL SOFTWARE AG UPDATE MANAGER

If you have not installed the Software AG Update Manager yet, you can do this using the Software AG Installer at a later time. Make sure that the Update Manager is installed into a separate directory in parallel to the installation directory of the other Software AG products.

To install, follow the instructions provided in the chapter Installation under Windows (Page 7) up to the selection of product groups. Select Update Manager as a product. More information on installation and use of Software AG Update Manager is available in the document **Using SAG Update Manager** (<https://empower.softwareag.com/Products/default.asp>).

You can now use the Software AG Update Manager for system updates.

### 8.2 PPM

#### 8.2.1 Install database drivers

To set up a database connection (Page 23) you need to install the required database driver in PPM first.

For license reasons, PPM does not come with database drivers. Please contact your system administrator for more information.

By default, the database drivers are located in the **drivers** directory of your PPM installation.

<installation directory>\ppm\server\bin\work\data\_ppm\drivers

##### Procedure under Windows

1. If required, stop all PPM system components. Click **Stop PPM Core 10.0** in the Windows program group **Software AG > Stop Servers**.
2. Copy the database drivers to the **driver** directory.
3. Start all PPM components. Click **Start PPM Core 10.0** in the Windows program group **Software AG > Start Servers**.

The database drivers are available in PPM.

### Procedure under Linux

1. If required, stop all PPM system components. Run the script **stop\_ppm.sh**. The script is located in the directory **<installation directory>/ppm/server/**.
2. Copy the database drivers to the **drivers** directory.
3. Start all PPM components. Run the script **start\_ppm.sh**. The script is located in the directory **<installation directory>/ppm/server/**.

The database drivers are available in PPM.

## 8.2.2 Import license

After the installation, you need to import your PPM license into central user administration in order to be able to use PPM and PPM components.

You can open central user management as a Web application in your Web browser using the following URL:

`http(s)://<server>:<port>/umc`

Example: **http://localhost:4080/umc** for a local PPM installation with reference to the default port. The default port number is **4080**.

Detailed information on using central user management is available in the user management online help.

### Prerequisite

You have started the PPM system components.

### Procedure

1. Open a Web browser.
2. Enter the URL of central user management in the Web browser's address bar, e.g., `http://localhost:4080/umc`.

Central user management opens in your Web browser.

3. Import your PPM license on the **Licenses** page.

Your PPM license has been imported and you can use PPM.

## 8.2.3 Create client

To be able to work with PPM you must create at least one client after the installation by means of PPM Customizing Toolkit (CTK).

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. 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.

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

### Procedure under Windows

1. Start the PPM and infrastructure components by clicking **Start PPM Core 10.0** in the Windows program group **Software AG > Start Servers**.
2. Start CTK by clicking **PPM Customizing Toolkit 10.0** in the Windows program group **Software AG > Administration**.

The CTK start page with the client overview is displayed.

3. Click the **Create client** button in the **Client overview**.

The wizard guides you through the individual steps.

After creating a client (Page 15), an individual link for each client is available in the program folders **Software AG > Start Servers > Start PPM instances** and **Software AG > Stop Servers > Stop PPM instances**. Use the links **Start <client>** and **Stop <client>** to start or stop client and analysis servers independently of CTK. <client> indicates the client name.

### Procedure under Linux

1. Run the script **start\_ppm.sh**. The script is located in the directory **<installation directory>/ppm/server/**.

The infrastructure components and PPM components start.

2. Run the script **runppmctk**. The script is located in the directory **<installation directory>/ppm/server/bin/agentLocalRepo/.unpacked/<installation\_time>\_ppm-client-run-prod-<version>-runnable.zip/ppm/ctk/bin/**.

The CTK start page with the client overview is displayed.

3. Click the **Create client** button in the **Client overview**.

The wizard guides you through the individual steps.

## 8.2.3.1 Basic settings

In the first step of the wizard, you can select basic settings for your new client.

If you do not wish to use the client feature offered by PPM, create a default client.

You may also create a default client in addition to the other clients. The default client is automatically selected when a user does not specify a client name at login.

The system monitor client supplies you with a configuration that you can use to analyze the performance of your PPM system.

### Procedure

1. Specify a **client name**.

The name can contain exclusively the characters A-Z, a-z, 0-9, underscores, and no special characters. However, it may not begin with a number or an underscore.

- a. If you want to create a default client, select the option **default**.
- b. If you want to create a **system monitor client**, select the option **sysmon**.

- c. If you do not wish to create a default client or system monitor client, specify a name for your client.
2. Enable the **Create client on PPM server** option.  
Creates the settings files required for running the client in PPM.  
The settings files are stored in the client directory **<installation directory>\ppm\server\bin\work\data\_ppm\config\<client name>**.
3. Enable the **Create customizing files** option.  
Creates the configuration files required for customizing the client in PPM Customizing Toolkit.  
The customizing files are stored in the client directory **<installation directory>\ppm\server\bin\work\data\_ppm\custom\<client name>**.
4. If you want to create the client based on a template, enable the **Select client template** option.
5. Select a client template in the **Template** selection box.  
Client templates provide you with preset client configurations. By default, the **base\_de** template is preset, containing a default configuration.
6. Enable the **Copy client** option if you want to transfer the contents of any client directory to the new client.
7. If required, specify a client directory in the input box, the contents of which you want to transfer.
8. Click **Next**.

Your settings are applied.

The wizard contains a detailed description of the available default templates.

### 8.2.3.2 Server settings

You can apply the default settings of the wizard for the various servers or customize them in line with your system requirements.

#### CLIENT SERVER

Each client server access the network via a particular computer address (network adapter) and individual port. You can assign each port number only once with one computer address. If necessary, you must unlock the port in the firewall.

If the computer has several network adapters you can assign each client a different address and use the same port for all client servers.

If no particular network adapter address is specified all network adapters are handled the same way. In this case, each client must be assigned an individual port.

#### Procedure

1. Specify the qualified computer name (e.g., localhost) or the IP address (e.g., 172.16.0.15) of a network adapter.
2. Click **Check availability** to test the availability of the specified port.

3. If required, change the preset **Client server port** in the input box.
4. Set the **Memory configuration** for the client server.

You can select between various default settings or specify your own values for minimum and maximum reserved memory.

We recommend the **Default** setting for average systems. You can specify any value from at least 64 MB as user-defined memory. You must specify one value each for minimum and maximum memory.

## ANALYSIS SERVER

### Procedure

1. Click **Check availability** to test the availability of the specified port.
2. If required, change the preset **Analysis server port** in the input box.
3. In the **Maximum memory (MB)** input box, specify the maximum RAM requirements to be reserved for the analysis server.

Maximum memory depends on your system configuration, i.e., on your operating system (64-bit only), the JVM used, and the size of the available physical RAM. Also, the size of reserved memory depends on the client's data volume to be analyzed, e.g., number of process instances, dimensions, and measures.

For further information please contact your PPM system administrator.

4. In the **Minimum memory (MB)** input box, specify the minimum RAM requirements to be reserved for the analysis server.

By default, the value of the maximum memory is assigned to the minimum memory. The minimum memory requirement is at least 64 MB.

5. Click **Additional settings** to set the temporary memory for Java Garbage Collection and other parameters.

## CORBA SERVER

You can enter the port number of the Corba server here. CTK automatically sets an available port. If no client has been installed yet, the default port for the Corba server is **17591**.

### Procedure

1. Click **Check availability** to test the availability of the specified port.
2. If required, change the preset **CORBA server port** in the input box.

## WEB SERVICE

Here, you can specify the port number of the web service that the PPM analysis client uses to communicate with the PPM server. CTK automatically sets an available port. If no client has been installed yet, the default port for the web service is **17651**.

### Procedure

1. Click **Check availability** to test the availability of the specified port.
2. If necessary, change the preset **Web service port** in the input field.

### JVM PARAMETERS OF SERVER PROGRAMS

You can change the default JVM parameters for memory configuration and customize them in line with your requirements. Set the minimum and maximum memory requirement and specify optional JVM parameters.

#### Procedure

1. If you want to change the default values of the JVM parameters, enable the option **Apply special JVM parameters** and click **Configure JVM parameters**.
2. Select a predefined memory configuration for each server program, or select the **User-defined** option to set the minimum and maximum memory requirements yourself.
3. If required, specify additional memory configuration parameters in the **More JVM parameters** box.
4. Click **OK**.

Your changes will be saved in the corresponding server program files.

### OPERATION MODE

You can operate the client server in **Default**, **Master**, or **Sub-server** mode.

A combination of master and one or more sub-servers enables you to distribute data in a scaled system. Data analytics is not supported in this scenario.

If you are installing a sub-server, make sure that the port for the RMI registry and the port for the client server are enabled in the firewall on the sub-server computer. The default port for the RMI registry is **17500**. For the set port for the client server, see the **Client server** section above.

#### Procedure

1. Click **Change**.
2. Specify your settings.
3. Click **Next**.

Your settings are applied.

### 8.2.3.3 Language and e-mail settings

You can set the language, encoding, the address of your mail server, and the sender address for e-mails for automatic notification. The e-mail address is required if, for example, planned values for specific measures are exceeded during data import.

#### Procedure

1. Select a language for displaying configuration-irrelevant items in the process tree.  
If you have installed an international PPM version, you can choose among various languages.
2. Specify the encoding of the client. The default encoding is ISO 8859-1. To create a client with multi-byte capability, select the transformed character set **UTF-8** as encoding.
3. Enter the TCP/IP address of your mail server and the sender address for e-mails.  
Click **Send test mail** to test if your input is correct.
4. Click **Next**.

Your settings are applied.

#### Tip

A detailed description of the use of multi-byte character sets is available in the documentation **PPM Customizing**.

### 8.2.3.4 Database settings

Select a database that you want to use for your client and set the relevant parameters. For detailed information on the required database settings, please contact your system administrator.

#### Procedure

1. Select a **database** from the selection box.  
Depending on the selected database, different input options are displayed.
2. In the **Database server** box, specify the computer in the network on which the database server with the client-specific PPM database is running.  
For an MS SQL Server database, you can specify a **Named instance** in the form of **<computer>\<named instance>**, e.g., "mypc\testinstance".
3. Specify the port number of the database service in the **Database port** box.
4. Specify the name of the PPM database in the **Database name** box.
5. In the **Database user** box, enter the user name that you use to log in to the PPM database.
6. In the **Database password** box, enter the user password that you use to log in to the PPM database.
7. Reenter your **Database password** in the **Password confirmation**.
8. Click **Test database connection** to verify if your settings are correct.  
You can test the database connection only if you have previously installed the required database drivers (Page 14).
9. Click **Next**.

Your settings are applied.

### 8.2.3.5 Program integrations

You can provide a shortcut in the PPM user interface to start webMethods Optimize.

If you enable the option **Allow jump from PPM to webMethods Optimize**, creating an alert in webMethods Optimize is supported for specific measures. This function is then available to you in the pop-up menus of diagrams and in table rows.

Detailed information on this topic is available in the online help under **PPM help topics**.

#### Procedure

1. Enable the option **Allow jump from PPM to webMethods Optimize**.

2. Enter the URL of the webMethods Optimize start page in the **webMethods Optimize URL** box, for example, `http://localhost:8585/webm.apps.optimizeforprozess`.

If you are installing PPM for use in the cloud, make sure that webMethods Optimize is also accessible from the cloud. In this case, enter the address that can be accessed from the Internet. Note that the port for the webMethods Optimize installation must also be accessible from the Internet.

3. If required, enable the option **Use single sign-on (SSO)**.

Single sign-on can be used only if you configure SAML usage in central user management.

4. Click **Next**.

Your settings are applied.

### 8.2.3.6 Query interface settings

You can activate the PPM query interface for your client and specify the required settings.

#### Procedure

#### CONTEXT

The Installation Wizard creates an individual context for each client on the Web application server. For this, an XML file containing the configuration of the context is created under **conf\catalina\localhost** in the **<installation directory>\ppm\server\bin\work\work\_ppm\_web\base** directory.

1. Enable the option **Activate PPM query interface** if you want to use this interface.
2. If required, change the name of the contexts.

#### TECHNICAL USER

PPM query interface uses the access data of the technical user to log into the PPM server.

1. Specify a **user name** for the user account for the client.
2. Specify a user account **password** for the client and confirm it.
3. Click **Finish**.

Your settings are transferred for the client and displayed in the **Client overview**.

The client is available in CTK for further configuration.

## 8.2.4 Create demo database

With CTK, you can configure the **umg\_en** demo client. Once PPM is installed, the **umg\_en** demo client including the corresponding demo database is available, which you can use to familiarize yourself with the program.

The demo database contains all process types, measures, and dimensions necessary to follow the examples in the PPM online help. The demo database also includes numerous favorites as illustrative examples of various types of analysis.



The demo client **umg\_de** does not contain any Data analytics data. To use Data analytics, install the **umg\_en** demo client.

When installing the demo database, the customizing files are created and become available with the **umg\_en** client in the **Client overview**. To be able to use the client in PPM you need to set up the **umg\_en** client completely by adding the required settings files and specifying further settings.

#### Procedure

1. Start CTK. (Page 15)
2. Select the client **umg\_en** in the client overview.
3. Click the **Edit client** button.  
The wizard for editing the **umg\_en** client is launched.
4. The wizard guides you through the individual steps.  
The demo database is available for your **umg\_en** client.

### 8.2.4.1 Create settings files

To be able to use the **umg\_en** client in PPM you must create the required client settings files. The settings files are automatically saved in the corresponding config directory and are available for the PPM server.

#### Procedure

1. Enable the option **Create client on PPM server (config directory)** in the **Basic settings** dialog of the Installation Wizard.
2. Click **Next**.  
The **Server settings** (Page 22) dialog is displayed.

### 8.2.4.2 Set server

You can apply the default settings of the various servers or customize them in line with your system requirements.

Use the **Check availability** button to check if the specified port number is already in use. If necessary, change a port number that is already in use.

#### Procedure

1. In the **Maximum memory (MB)** input box, specify the maximum RAM requirements to be reserved for the analysis server.  
The maximum reservable RAM depends on your operating system and the size of the physical memory used.
2. In the **Minimum memory (MB)** input box, specify the minimum RAM requirements to be reserved for the analysis server.  
The minimum memory requirement is 64 MB.
3. Click **Next**.

The **Language and report settings** dialog box is displayed.

4. You can apply the default settings.
5. Click **Next**.

The **Database settings** (Page 23) dialog is displayed.

### 8.2.4.3 Set database connection

Specify your settings for the PPM database.

For detailed information on the required database settings, please contact your system administrator.

#### Prerequisites

The database drivers are installed. (Page 14)

#### Procedure

1. Select a **database** from the selection box.  
Depending on the selected database, different input options are displayed.
2. In the **Database server** box, specify the computer in the network on which the database server with the client-specific PPM database is running.  
For an SQL database, you can specify a **Named instance** in the form of **<computer>\<named instance>**, e.g. "myipc\testinstance".
3. Specify the port number of the database service in the **Database port** box.
4. Specify the name of the PPM database in the **Database name** box.
5. In the **Database user** box, enter the user name that you use to log in to the PPM database.
6. In the **Database password** box, enter the user password that you use to log in to the PPM database.
7. Reenter your **Database password** in the **Password confirmation**.
8. Click **Test database connection** to verify if your settings are correct.
9. Click **Next**.

Your settings are applied.

### 8.2.4.4 Initialize demo database and import data

To be able to use the demo database in PPM you must initialize the demo database and import the required data into the database.

#### Prerequisite

You have started the PPM system components.

#### Procedure

1. Select the client **umg\_en** in the **Client overview**.
2. Click **Configure process analysis**.

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

3. Click **Programs** in the **Client** bar.
4. Display the **Run programs** tab.
5. In the **Program groups** box, double-click **Create UMG database** under **Import**.

The demo database is initialized and the data is imported into the database.

You can now use the client **umg\_en** with the corresponding database in PPM.

#### 8.2.4.5 Import Data analytics demo data

A demo scenario is available for Data analytics. The English version of the demo database contains the Data analytics analysis realm **Sakila movie database** with all relevant data and configurations. You can import the demo scenario into PPM in addition to the **umg\_en** demo database.

##### Prerequisite

You have started the PPM system components.

You have created the English **umg\_en** demo database. (Page 21)

Your PPM license includes the Data analytics license **PPM Server Data Instances Package**.

##### Procedure

1. If you have not installed the English demo database **umg\_en**, please install it as described in the previous steps.
2. Select the client **umg\_en** in the **Client overview**.
3. Click **Configure process analysis**.  
The **Properties** component of the **Client** module is displayed.
4. Click **Programs** in the **Client** bar.
5. Display the **Run programs** tab.
6. In the **Program groups** box, double-click **Add Data analytics data to UMG database** under **Import**.

The demo scenario has been imported into PPM. After the next start of the **umg\_en** client, the analysis realm **Sakila movie database** is available in PPM.

#### 8.2.5 Transfer client

You can transfer existing clients from previous PPM versions to the current PPM **10.0** version.

Detailed information on how to transfer clients to the current PPM version is available in the manuals **PPM Migration 5.x to 10.0** and **PPM Migration 9.x to 10.0**.

#### 8.2.6 Start PPM

This chapter describes how to start the PPM components, the required infrastructure, and the PPM user interface.

Three different methods are available for starting PPM.

- You can start PPM as a standard application in the Start menu under Windows or using the **runppmgui** program under Linux (Page 26). The PPM user interface is displayed as an independent application.
- You can start PPM as an applet in a Web browser. (Page 27) The PPM user interface is displayed as a Web application in a separate browser window.
- You can call PPM as a standard application in a Web browser via Web Start using a URL. (Page 27) The PPM user interface is displayed as an independent application.

When you start PPM as a standard application or as an applet, all PPM functions are available to you. Differences only occur as a result of the security restrictions for the Web browsers (opening of local HTML or PDF files).

By default, the login data (**User name**, **Password**, **Language**, and **Client** to be opened), is always requested when you start PPM, which you must enter manually. You can also add this data to the start command or the URL as parameters so that it is applied automatically. Depending on the method you select for starting PPM, different parameters (Page 28) are supported, which you can use to determine how PPM starts.

### 8.2.6.1 Start infrastructure and PPM components

Before you can start the user interface you need to start the required infrastructure components and PPM components. You also need to start the **client servers** and **analysis server**.

#### Procedure under Windows

1. Open the Windows Start menu and click **Start PPM Core 10.0** in the **Software AG > Start Servers** program group.

The infrastructure components and PPM components start.

2. Start CTK. (Page 15)
3. In the **client overview**, select the client you want to start.
4. Click **Configure process analysis**.

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

5. Click **Programs** in the **Client** bar.
6. Display the **Run programs** tab.
7. In the **Program groups** box, double-click **Start server and analysis server** under **System**.

As soon as the start process is completed, you can start the PPM user interface.

You start the PPM user interface in CTK by clicking **Start PPM client** or using the entry **PPM GUI (Page 26) 10.0** in the **Software AG > Tools** program group (Page 26).

After creating a client (Page 15), an individual link for each client is available in the program folders **Software AG > Start Servers > Start PPM instances** and **Software AG > Stop Servers > Stop PPM instances**. Use the links **Start <client>** and **Stop <client>** to start or stop client and analysis servers independently of CTK. <client> indicates the client name.

### Procedure under Linux

1. Run the script **start\_ppm**. The script is located in the directory **<installation directory>/ppm/server/**.

The infrastructure components and PPM components start.

2. Continue as described in **Procedure under Windows** from step 2.

As soon as the start process is completed, you can start the PPM user interface.

You can start the PPM user interface in CTK by clicking **Start PPM client** or using the **runppmgui** (Page 26) program.

## 8.2.6.2 Start PPM as a standard application

You can now launch the standard PPM user interface or PPM Analysis GUI.

### Prerequisite

The infrastructure components and the PPM components are started. (Page 25)

You have installed PPM or PPM Analysis GUI.

### Procedure under Windows

1. To start the standard PPM user interface, click **PPM GUI 10.0** in the **Software AG > Tools** program group.

The login dialog is displayed.

2. To start the PPM Analysis GUI, click **PPM Analysis GUI 10.0** in the **Software AG > Tools** program group.

The login dialog is displayed.

3. Enter your PPM user name in the **User** box.
4. In the **Password** box, enter the password associated with the user name.
5. In the **Client** box, enter the name of the client to be used.
6. Click **Next**.
7. In the **Language** box, select the language that PPM is to be displayed in.
8. Enable the option **Save login data** if you want to save the login data entered for the next login. The password will not be saved.
9. Click **Log in**.

The PPM user interface is started and the start page is displayed.

### Procedure under Linux

1. To start the standard PPM user interface, run the **runppmgui** program in the directory **<installation directory>/ppm/server/bin/agentLocalRepo/.unpacked/<installation\_time>\_ppm-client-run-prod-<version>-runnable.zip/ppm/bin/**.
2. To start PPM Analysis GUI, run the **runppmanalysisgui** program in the directory **<installation directory>/ppmgui/bin/**.
3. Continue as described in **Procedure under Windows** under step 3.

The PPM user interface is started as a standard application and the start page is displayed.

### 8.2.6.3 Start PPM as a Web application

You can start PPM as an applet in a Web browser.

#### Prerequisite

The infrastructure components and the PPM components are started. (Page 25)

You have installed PPM or PPM Analysis GUI.

#### Procedure

1. Launch a Web browser.
2. Enter the URL for the PPM Web server in the address bar in the following format:

`https://<hostname>:<port>/ppm/html/index.html`

For example, `https://localhost:4443/ppm/html/index.html`

The PPM user interface is displayed as a Web application in a separate browser window.

You can use parameters (Page 28) to extend the URL, thereby influencing the launch behavior of PPM. Specify the parameters as follows:

`https://<hostname>:<port>/ppm/html/index.html?user=<User name>&password=<Password> &client=<Client name>&language=<Language> ...`

#### Example

`https://localhost.eur.ad.sag:4443/ppm/html/index.html?user=system&password=manager&client=umg_en&language=en`

### 8.2.6.4 Start PPM as a standard application via Web Start

You can call PPM as a standard application in a Web browser via Web Start using a URL.

You must configure your Web browser so that it can call JNLP files. To do so, the Java plug-in must be installed and enabled in the Web browser. The JNLP file must also be linked to the Java Web Start Launcher. Google Chrome does not start the JNLP file automatically. Google Chrome downloads the file during the connection attempt, and you must start the file manually after it has been downloaded.

#### Prerequisite

The infrastructure components and the PPM components are started. (Page 25)

You have installed PPM or PPM Analysis GUI.

#### Procedure

1. Launch a Web browser.
2. Enter the URL for the PPM Web server in the address bar in the following format:

`https://<hostname>:<port>/ppm/html/ppm.jnlp`

For example, `https://localhost:4443/ppm/html/ppm.jnlp`

The PPM user interface is displayed as an independent application.

You can use parameters (Page 28) to extend the URL, thereby influencing the launch behavior of PPM. Specify the parameters as follows:

```
https://<hostname>:<port>/ppm/html/ppm.jnlp?user=<User name>&password=<Password>
&client=<Client name>&language=<Language> ...
```

#### Example

```
https://localhost.eur.ad.sag:4443/ppm/html/ppm.jnlp?user=system&password=manager&client=umg_en&language=en
```

You can run PPM as an application more than once in parallel by calling the URL again.

### 8.2.6.4.1 Jump scenarios

You can jump to PPM from other applications, e.g., webMethods Optimize.

In these types of jump scenarios, the behavior of PPM via Web Start differs fundamentally from that of PPM as a Web application (Applet). As a Web application, PPM generally always restarts in a separate browser window every time it is called from another application. In the case of the Web Start, the PPM user interface opens for each client. Calling the same client repeatedly from another Web application always uses the same user interface of the respective client that is already open. The user interface of a client is not restarted for each call.

To reuse a jump scenario for a Web Start, the name of the JNLP file must be changed in **ppm\_<client>.jnlp** accordingly and the jump target must be adapted in the file **Templates\_settings.properties** with the parameter **QueryApi.PPMUIMode=WEBSTART**. If the parameter does not exist or has a value other than **WEBSTART**, PPM opens as an applet in a Web browser. In the case of a SAML connection between webMethods Optimize and PPM, the file name **ppm.jnlp** must be used in the jump URL.

### 8.2.6.5 Start parameters

You can add specific parameters to the start command or URL that you use to call PPM.

Depending on the method you select for starting PPM, different parameters are supported, which you can use to determine how PPM starts.

Parameter	Description	Call as an applet or application via Web Start	Call as an application via Start menu
user	User name or user identifier	yes	yes
password	Password that matches the user name	yes	yes; the user's password is passed on in plain text and therefore poses a security problem.
client	Client	yes	yes
language	Login language	yes	yes

Parameter	Description	Call as an applet or application via Web Start	Call as an application via Start menu
show	Direct access to the PPM <b>User management</b> component. Navigation to another component is not possible.	yes	yes
pwtoken	A password token generated by the server with limited validity and for one-time use. Used for login if the password cannot be transferred via Java mechanisms.	yes	no
favoriteid	ID of a favorite to be called directly after starting PPM.	yes	no
favoriteserver	The <b>FAVORITES_PRIVATE</b> or <b>FAVORITES_SHARED</b> server to which the favorite ID is related.	yes	no

If not all required parameters for login are provided, the login dialog is displayed. When login to PPM is successful, the **User name**, **Client**, and **Language** are saved in the user settings. As a general rule, however, the parameters have a higher priority than the data in the user settings, i.e., the most recent login data is ignored if other values are transferred via the parameters.

If no specific start behavior has been specified using parameters, the **Home** start page is displayed.

If a default query has been specified in PPM (Favorite **Autostart** under the private favorites root), this favorite is displayed in the analysis. The name of the favorite is identical in all languages and is not localized.

If a view has been parameterized using the **show** parameter, the corresponding view is displayed.

## 8.2.7 Use users in PPM

You can set up more users from central user management as PPM users.

Information on how to use central user management is available in the user management online help.

Information on how to use PPM is available in the PPM online help.



### Procedure

1. In central user management, create additional users or import users into central user management.
2. In user management, assign the relevant user the **PPM user** privilege. You can also assign the user to a group that has the **PPM user** privilege.
3. Activate the relevant user in PPM. To do so, start the PPM user interface (Page 26) and activate the user in the component **Administration > User privileges**.
4. In PPM, assign the user at least the **PPM login** privilege if the user is supposed to be able to use the PPM user interface. Without this function privilege, the user can access PPM data only via a query interface.

You can now work with the user in PPM.

## 8.2.8 Use user groups in PPM

You can set up user groups from central user management as PPM user groups.

Information on how to use central user management is available in the user management online help.

Information on how to use PPM is available in the PPM online help.

### Procedure

1. In central user management, create user groups or import user groups into central user management.
2. In user management, assign the relevant users to a user group.
3. Activate the user group in PPM. To do so, start the PPM user interface (Page 26) and activate the user group in the component **Administration > User privileges**.

All users activated in this client now have the privileges that were assigned to the group.

## 8.2.9 Adapt date format to British English language area

You can display the date in the British English format **day/month/year**. By default, the date is displayed in the American English format **month/day/year**.

The required files are available from version **9.9** after installation. After installation, the directory **<installation**

**directory>\ppm\server\bin\agentLocalRepo\unpacked\<installation\_time>\_ppm-client-run-prod-<version>-runnable.zip\ppm\i18n** contains (for Unix, accordingly) subdirectories with locale (e.g., en or us), each of which contains a file named **ppmdate.jar**. This file contains the localization of the respective language version.

### Procedure

1. If required, stop all infrastructure and PPM components.  
To do so, go to the Windows Start menu, open the program group **Software AG > Stop Servers**, and click **Stop PPM Core 10.0**.

2. Replace the file **ppmdate.jar** with the file with the same name from the directory **<installation directory>\ppm\server\bin\agentLocalRepo\unpacked\<installation\_time>\_ppm-client-run-prod-<Version>-runnable.zip\ppm\i18n\en** in these directories:
  - a. **<installation directory>\ppm\server\bin\agentLocalRepo\unpacked\<installation\_time>\_ppm-client-run-prod-<Version>-runnable.zip\ppm\lib\**
  - b. **<installation directory>\ppm\server\bin\agentLocalRepo\unpacked\<installation\_time>\_ppm-web-run-prod-<Version>-runnable.zip\ppm\web\clientjars\**
  - c. **<installation directory>\ppm\server\bin\agentLocalRepo\unpacked\<installation\_time>\_ppm-web-run-prod-<Version>-runnable.zip\ppm\webservices\automation\WEB-INF\lib**

To restore the American English date format, copy the file **ppmdate.jar** located in the directory **<installation directory>\ppm\server\bin\agentLocalRepo\unpacked\<installation\_time>\_ppm-client-run-prod-<Version>-runnable.zip\ppm\i18n\us** to the directories listed above.
3. Start all infrastructure and PPM components again.  
To do so, go to the Windows Start menu, open the program group **Software AG > Start Servers**, and click **Start PPM Core 10.0**.
4. Start the relevant PPM client.  
To do so, go to the Windows Start menu, open the program group **Software AG > Start Servers > Start PPM instances**, and click **Start <client>**.

The date is displayed in British English format.

### Extractors

The same procedure is applied for extractors. The directory with the localized files is

**<installation**

**directory>\ppm\server\bin\agentLocalRepo\unpacked\<installation\_time>\_ppm-client-run-prod-<version>-runnable.zip\ppm\<extraktor>i18n** with the

subdirectories **\en** and **\us**. Copy the required file **ppmdate\*.jar** to **<installation**

**directory>\ppm\server\bin\agentLocalRepo\unpacked\<installation\_time>\_ppm-client-run-prod-<version>-runnable.zip\ppm\lib\ext** and replace the existing file.

## 9 Uninstall applications

You can uninstall products separately.

### Procedure under Windows

1. In the Windows Control Panel, open the **Uninstall a program** component.
2. Uninstall **Software AG Products: <installation path>**. The variable specifies the path to the installation path under which the products have been installed.

The wizard launches and guides you through the uninstall procedure.

### Procedure under Linux

1. Before uninstalling, run the following scripts to remove Cloud Agent as a service.
  - a. **<installation directory>/ppm/server/bin/CloudAgentApp.sh remove** with sudo or root privileges
  - b. **<installation directory>/ppm/server/bin/CloudAgentApp.sh start**
2. Run Software AG Installer to uninstall the relevant products.

The wizard launches and guides you through the uninstall procedure.

Detailed information on how to use Software AG Installer is available in the documentation **Using the Software AG Installer**.

You can download current products and documentation on the Software AG download page (<https://empower.softwareag.com/Products/default.asp>).