ARIS Process Performance Manager
INSTALLATION

Version 10.2

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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 (for example, 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 **PPM Analysis GUI**. Additionally, you will receive information as to what to observe when installing PPM and how to proceed after installation.

Use the **ARIS Process Performance Manager** 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. See Install PPM Analysis GUI (Page 15).

You can install PPM under various approved operating systems:

- Installation on a Windows system (Page 7)
- Installation on a Linux system (Page 11)

Make sure that the hard and software requirements are met, see chapter Hardware and software requirements.

You can download current products, product updates and documentation on the ARIS Download Center (https://empower.softwareag.com/redirect2ARISdownloadcenter.asp).

We recommend reading the ARIS PPM Release Notes.pdf for important information which could not be included in this document at release date.

3 Hardware and software requirements

Installation of PPM has been tested and approved for various Windows and Linux 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 various 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
- Load balancer
- Cloud Agent
- Cloud Controller
- Central user management

4.1 Apache ZooKeeper

Product components and common infrastructure components 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, that is, 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 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(s) can be encrypted. To transmit commands to a Cloud Agent, 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, that is, 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, for example, 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 on a Windows system

Use the ARIS Process Performance Manager installation program to install PPM and the infrastructure on a Microsoft Windows system.

Download the ARIS Process Performance Manager installation program suitable for the operating system on which you want to install PPM.

You can download current products, product updates and documentation on the ARIS Download Center (https://empower.softwareag.com/redirect2ARISdownloadcenter.asp).

6.1 Start installation

You must run the installation program with administration privileges to run the installation completely.

Prerequisite

The prerequisites listed in the chapter on **Hardware and software requirements** are met.

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

Procedure

1. Open the downloaded directory that contains the PPM installation program.
2. Right click the **setup.exe** file and select **Run as administrator** to run the installation program with administration privileges.

   The installation wizard starts and the welcome page is displayed.
3. Click **Next**.

Your settings are applied.

6.2 Accept license terms

Accept the license terms displayed to continue with the installation.

Procedure

1. Enable the option **I accept the terms of the license agreements**.
2. Click **Next**.

Your settings are applied.

6.3 Select the installation scenario

You can install PPM on the local computer running a Windows operating system or on a remote computer running a Linux System.

Procedure

1. Enable the option **Install ARIS Process Performance Manager on this computer** to install PPM on your local computer. The option is enabled by default.

2. If you want to install PPM on a Linux system, you must perform a remote installation. See Installation on a Linux system (Page 11) for details.

    a. Enable the option **Install ARIS Process Performance Manager on a remote computer**.

    b. Enter the URL of the remote computer in the **Remote computer** input box.

3. Click **Next**.

Your settings are applied.

6.4   Select installation directory

You can specify the directory where PPM is to be installed.

The installation is performed with the access privileges of the **SYSTEM** user. You can only install PPM in a directory for which the **SYSTEM** user has access privileges. Thus you can not install PPM on mapped network drives, because they only exist for the currently logged in user.

Procedure

1. Select the installation directory.

    a. Click **Change** to install PPM in a directory different from the default installation directory.

        The default installation directory is **C:\SoftwareAG**.

    b. Enter the relevant path in the **Path** box or navigate to the relevant directory in the **Directories** box, and then click **OK**.

        Do not specify a directory under **C:\Program Files**. Enter the directory path without spaces.

2. Click **Next**.

Your settings are applied.

6.5   Specify external IP

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.

Procedure

1. Enable the **Use external IP** option.

2. Enter the host name or IP address of the computer on which you are installing PPM in the **Computer name or IP** input box.

3. Click **Next**.

Your settings are applied.

6.6   Specify port number

You can specify the port number of the load balancer for external access to PPM.

Procedure

1. Enter the port number of the load balancer in the **HTTP port** box. You must 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. This is generally the default port **80**.

2. Click **Next**.

Your settings are applied.

6.7 Select system configuration

Select the appropriate system settings option. You must take the RAM required and the number of users who will be accessing the PPM server into account. For a productive system, you are recommended to select the **Medium** or **Large** option. **Medium** is enabled by default. The **Small** scenario option is recommended for demonstration purposes (laptop) only.

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 Finish installation

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

If you want to change your settings, click **Back** and make your changes.

Procedure

1. Click **Install**.

    The installation is executed and the installation progress is displayed.

2. Click **Close**.

The installation is complete and the installation wizard closes.

You must perform further steps after the installation in order to work with PPM. See Procedure after installation (Page 17) for details.

7 Installation on a Linux system

The installation on a Linux system is basically the same as the installation on a Windows system.

PPM can only be installed remotely on a Linux system. To perform a remote installation, Cloud Agent must first be installed on the remote computer. The Cloud Agent is automatically installed on Windows systems. On Linux systems, you must install Cloud Agent manually as a daemon, see chapter Install Cloud Agent (Page 13). For a remote installation, you must open the port of the Cloud Agent in your fire wall and close it after the installation is completed.

Use the ARIS Process Performance Manager 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.

You can download current products, product updates and documentation on the ARIS Download Center (https://empower.softwareag.com/redirect2ARISdownloadcenter.asp).

Observe the notes on the system settings in chapter Prepare to install PPM on a Linux system (Page 11).

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

- 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 on a Windows system (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 17009

    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.

You can configure your system as described in chapter Procedure after installation (Page 17).

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/**.

7.1 Prepare to install PPM on a Linux system

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 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

- Check the setting for shared memory (kernel parameter shmmax) by executing the command **sysctl -a | fgrep kernel.shmmax**. If the value is less than 629145600, log on as the root user and increase the value by executing **sysctl -w kernel.shmmax=629145600**

or echo **"kernel.shmmax=629145600" >> /etc/sysctl.conf**, then activate the new value by executing **sysctl -p**.

▪ Check the settings for the system-wide maximum number of file descriptors (kernel parameter fs.file-max) by executing the command **sysctl -a | fgrep fs.file-max**. If the value is less than 200000, log on as the root user and increase the value by executing **sysctl -w fs.file-max=200000** or **echo "fs.file-max=200000" >> /etc/sysctl.conf**, then activate the new value by executing **sysctl -p**.

▪ Check the user, group, and process settings for the maximum number of open file descriptors by executing the command **ulimit -Hn and ulimit -Sn**, where - Hn is the hard limit and -Sn is the soft limit. If the value is less than 200000, log on as a non-root user and increase the value by executing ulimit **-n 200000**. To permanently save this setting for the user, execute:

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

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

▪ Enter the host name of the machine on which you are installing products in the DNS of the network or in the file /etc/hosts.

▪ Check the virtual memory for the elasticsearch. The elasticsearch uses a **mmapfs** directory by default to store its indices. To avoid out of memory exceptions by operating system limits on mmap counts, you can increase the limits by running the following command as root:

sysctl -w vm.max_map_count=262144

To set this value permanently, update the **vm.max_map_count** setting in **/etc/sysctl.conf**. To verify after rebooting, run **sysctl vm.max_map_count**.

The RPM and Debian packages will configure this setting automatically. No further configuration is required.

7.2   Install Cloud Agent

You must install Cloud Agent on the remote Linux system on which you want to install PPM.

Procedure

1. Copy the file **aris10-cloud-agent-<number>-1.x86_64.rpm** or **aris10-cloud-agent-SLES-<number>-1.x86_64.rpm** to the hard drive of your Linux system.

   This file provides Cloud Agent. Cloud Agent is needed to perform a remote server installation.

2. Copy the file **aris10-acc_<number>-1.x86_64.rpm** to the hard drive of your Linux system.

   This file provides Cloud Controller (ACC).

3. Enter the relevant command to install the files depending on the files you have copied and the type of the Linux system. By default, these installations create an unprivileged and locked user ARIS which uses /home/ARIS10 to install ARIS itself. If you would like to use different settings, make sure to change them before installing the first rpm file.

   rpm –i aris10-cloud-agent-<number>-1.x86_64.rpm

This command installs Cloud Agent on your Red Hat system.

rpm –i aris10-cloud-agent-SLES-<number>-1.x86_64.rpm

This command installs Cloud Agent on your SUSE system.

rpm –i aris10-acc-<number>-1.x86_64.rpm

This command installs Cloud Controller (/bin/acc10.sh) on your Red Hat and SUSE system.

Cloud Agent is installed on your remote Linux system.

Now you can install PPM from a machine that runs a Microsoft Windows operating system (Page 7).

For a remote installation on a Linux system (Page 11), you must open the port of the Cloud Agent and close it after the installation is completed.

8 Install PPM Analysis GUI

You can install the application **PPM Analysis GUI** independently of PPM Server. **PPM Analysis GUI** enables remote access to a PPM system without browser, similarly to the access via a browser applet. You can call the PPM interface instead of the applet from a client computer.

PPM must be installed if you want to use PPM Analysis GUI. By default, PPM Analysis GUI uses the URL of the PPM Web system installed on the local host. If you want to use another PPM installation, you must specify the corresponding server URL of a PPM Web server to be accessed by PPM Analysis GUI. The PPM Web server is part of the PPM infrastructure.

PPM Analysis GUI is available for Windows operation systems and can be installed using the **ARIS Client Setup** program.

For details on how to use the **ARIS Client Setup** program, refer to the ARIS Client Installation Guide.

Procedure

1. Start the **ARIS Client Setup** program.

2. In the product selection dialog, select **ARIS PPM Analysis GUI** as the product to be installed.

3. Click **Next**.

4. In the **ARIS Process Performance Manager Analysis GUI** dialog, you can specify a Web server URL. By default, the Web server URL of the local host is used.

   a. Enable the **Use ARIS Process Performance Manager URL** to change the server URL to be used.

   b. Enter the required PPM Web server URL in the **Server URL** box in the following form.

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

5. Click **Next**.

Your settings are applied.

9   System update

After installation of the initial release version of PPM and associated products, you can update the products only using the PPM Patch Setup. A product update is usually called **Official Fix** and contains important error fixes for the product. You are strongly advised to apply official fixes using the PPM Patch Setup after you installed the release version.

The PPM Patch Setup offers the latest official fixes for all products you have installed. The current official fixes contain all official fixes previously released. The PPM Patch Setup updates only the user management and PPM related components. The PPM Patch reads the PPM installation path from the registry. To update the Cloud Controller and Cloud Agent, you must perform a separate setup.

You can download current products, product updates and documentation on the ARIS Download Center (https://empower.softwareag.com/redirect2ARISdownloadcenter.asp).

Conditions

Your Cloud Agent is running as a service on the operating system on which your PPM system is installed.

The PPM infrastructure components are not running.

Procedure

1. Copy the PPM Patch Setup into a directory on your Windows or Linux operating system on which your PPM system is running. Use the **PPM_Patch_Setup_<version>.exe** file for a Windows system and the **PPM_Patch_Setup_<version>.bin** file for a Linux system.

2. Run the PPM Patch Setup.

3. Click **Start** to run the update process, or click **Exit** to close the PPM Patch Setup. The update is performed automatically.

4. If the installation process leads to an error, an error message appears. Click **OK** to display the complete error message in your Web browser.

5. If the installation process runs successfully, an success message appears. Click **OK** to finish the PPM Patch Setup.

Your PPM system is updated.

The **patch.log** file of the setup procedure is located in the **<PPM installation>\server\bin\log** directory.

10 Procedure after installation

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

10.1 Install database drivers

To set up a database connection (Page 25) 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 10.2** 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 10.2** 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.

10.2 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, for example, 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.

10.3   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, for example, 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 10.2** in the Windows program group **Software AG > Start Servers**.

2. Start CTK by clicking **PPM Customizing Toolkit 10.2**   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 18), 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.

10.3.1 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.

10.3.2 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 (for example, localhost) or the IP address (for example, 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, for example, 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, for example, 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

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 box.

PARAMETERS OF IMPORT PROGRAMS

You can select a predefined import scenario. The scenario **Small**, **Medium**, and **Large** are available. If you do not select a scenario, the **Small** scenario is set by default. The import scenarios are used by the import programs **runxmlimport**, **runppmimport**, **runpikidata**, and **runppmcompress**.

▪ **Small** - Optimized configuration for server systems with at least 1 GB available main memory for import programs.

▪ **Medium** - Optimized configuration for server systems with at least 4 GB available main memory for import programs.

▪ **Large** - Optimized configuration for server systems with at least 8 GB available main memory for import programs.

Procedure

Select an import scenario in the **Import configuration** drop-down menu.

Details can be found in the documentation **PPM Data Import**.

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 scaled system, we recommend not to set up a firewall between sub- and master-server.

Procedure

1. Click **Change**.

2. Specify your settings.

3. Click **Next**.

Your settings are applied.

10.3.3 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**.

10.3.4 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>**, for example, "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 17).

9. Click **Next**.

Your settings are applied.

10.3.5   Program integrations

You can provide links in the PPM user interface to start the external programs **webMethods Optimize** and **MashZone NextGen**.

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

Procedure

1. Enable the option **Provide link in PPM Analysis UI** for the relevant program.

   If you enable the option for 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.

   If you enable the option for MashZone NextGen, a link is provided on the **Start page** tab of PPM.

2. Enter the URL of the start page of the program required.

   For example, http://localhost:8585/webm.apps.optimizeforprozess for webMethods Optimize or http://localhost:8080/mashzone for MashZone NextGen

   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)** for the jump to webMethods Optimize or MashZone NextGen. Single sign-on can be used only if you configure SAML usage in central user management.

   For detailed information on how to integrate MashZone NextGen in a SSO scenario   (SAML configuration) see the relevant chapter **Integrate MashZone in a SSO scenario** in the PPM Operation guide.

4. Click **Next**.

Your settings are applied.

10.3.6   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.

10.4   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 18)

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.

10.4.1 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 25) dialog is displayed.

10.4.2 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 25) dialog is displayed.

10.4.3 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 17)

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>**, for example, "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.

9. Click **Next**.

Your settings are applied.

10.4.4   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.

10.4.5   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 24)

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.

10.5   Transfer client

You can transfer existing clients from previous PPM versions to the current PPM **10.2** version.

Detailed information on how to transfer clients to the current PPM version is available in the manuals **PPM Migration 5.x to 10.2** and **PPM Migration 9.x to 10.2**.

10.6   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 29). The PPM user interface is displayed as an independent application.

- You can start PPM as an applet in a Web browser. (Page 29) 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 30) 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 31) are supported, which you can use to determine how PPM starts.

10.6.1   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 10.2** in the **Software AG > Start Servers** program group.

    The infrastructure components and PPM components start.

2. Start CTK. (Page 18)

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** 29**)10.2** in the **Software AG > Tools** program group (Page 29).

After creating a client (Page 18), 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 29) program.

10.6.2   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 28)

You have installed PPM or PPM Analysis GUI.

Procedure under Windows

1. To start the standard PPM user interface, click **PPM GUI 10.2** in the **Software AG > Tools** program group.

    The login dialog is displayed.

2. To start the PPM Analysis GUI, click **PPM Analysis GUI 10.2** 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.

10.6.3   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 28)

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:

   http://<hostname>:<port>/ppm/html/index.html

   For example, http://localhost:4080/ppm/html/index.html

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

You can use parameters (Page 31) to extend the URL, thereby influencing the launch behavior of PPM. Specify the parameters as follows:

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

Example

http://localhost.eur.ad.sag:4080/ppm/html/index.html?user=system&password=manager&client=umg_en&language=en

10.6.4   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 28)

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:

   http://<hostname>:<port>/ppm/html/ppm.jnlp

   For example, http://localhost:4080/ppm/html/ppm.jnlp

The PPM user interface is displayed as an independent application.

You can use parameters (Page 31) to extend the URL, thereby influencing the launch behavior of PPM. Specify the parameters as follows:

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

Example

http://localhost.eur.ad.sag:4080/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.

10.6.4.1   Jump scenarios

You can jump to PPM from other applications, for example, 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 an SAML connection between webMethods Optimize and PPM, the file name **ppm.jnlp** must be used in the jump URL.

10.6.5   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
show	Direct access to the PPM **User management** component. Navigation to another component is not possible.	yes	yes

Parameter	Description	Call as an applet or application via Web Start	Call as an application via Start menu
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 **FAVORITES_PRIVATE** or **FAVORITES_SHARED** 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, that is, 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.

10.7   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 29) 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.

10.8   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 29) 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.

10.9   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 (for example, 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 10.2**.

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 10.2.**

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.

11   Uninstall PPM

You can uninstall PPM from your local or remote computer.

Procedure under Windows

1. In the **Control Panel** of Windows, open the **Uninstall a program** component.
2. Double click **ARIS PPM <_version>**.

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, product updates and documentation on the ARIS Download Center (https://empower.softwareag.com/redirect2ARISdownloadcenter.asp).

12   Uninstall PPM Analysis GUI

You can uninstall PPM Analysis GUI from your local computer.

Procedure

1.   In the **Control Panel** of Windows, open the **Uninstall a program** component.
2.   Double click **ARIS 10.0**.

The wizard launches and guides you through the uninstall procedure.

12   Uninstall PPM Analysis GUI