ARIS PROCESS PERFORMANCE MANAGER

INSTALLATION

VERSION 10.5.10 AND HIGHER

OCTOBER 2024

This document applies to ARIS Process Performance Manager Version 10.5.10 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.

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1 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 PPM CTK, the extractors **CSV-2-PPM**, **JDBC-2-PPM**, and **SAP-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. See Install PPM Analysis GUI (page 18).

You can install PPM under various approved operating systems:

- Installation on a Windows system (page 7)
- Installation on a Linux system (page 12)

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.

2 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 **ARIS System Requirements**.

3 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
- ARIS PPM Cloud Agent
- ARIS Cloud Controller
- Central user management

3.1 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.

3.2 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.

3.3 ARIS PPM Cloud Agent

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

3.4 ARIS Cloud Controller

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

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

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

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

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

3.5 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.

4 Notes on installation

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

4.1 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.
- PPM currently supports side-by-side installation only. If you have an older PPM version installed on your host on which you want to install the new PPM version, you must first stop all running PPM infrastructure components and PPM instances.

4.2 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**).

4.3 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 GmbH 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

5 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).

5.1 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. For a side-by-side installation, make sure that all running PPM infrastructure components and PPM instances of the currently installed PPM version are stopped. For more details, see ARIS Process Performance Manager (page 5).
2. Open the downloaded directory that contains the PPM installation program.
3. 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.
4. Click **Next**.

Your settings are applied.

5.2 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.

5.3 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 12) 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. If you perform a remote installation and you have changed the ARIS PPM Cloud Agent credentials on the remote computer, a dialog opens where you can enter the required credentials. Enter the user name in the **User** input box, the corresponding user password in the **Password** input box, and click **Next**.

   On how to change the ARIS PPM Cloud Agent credentials, see the chapter Change the ARIS PPM Cloud Agent user credentials in the documentation **PPM Operation Guide**.
4. Click **Next**.

Your settings are applied.

5.4 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.

5.5 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.

5.6 Change ARIS PPM Cloud Agent user credentials

For security reason, we recommend to change the default ARIS PPM Cloud Agent user credentials.

A ARIS PPM Cloud Agent user has also access to ARIS Cloud Controller. To prevent unauthorized access, you can change the relevant user credentials.

Procedure

1. Enable the **Specify credentials** option.
2. Enter a user name in the **User** input box.
3. Enter a corresponding password in the **Password** input box.
4. Confirm your password in the corresponding input box.
5. Click **Next**.

Your settings are applied.

5.7 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.

5.8 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

5.9 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 23) for details.

6 Installation on a Linux system

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

There is no GUI setup available to install PPM on a Linux system. You can only install PPM remotely on a Linux system. To perform a remote installation, ARIS PPM Cloud Agent must first be installed on the remote computer. The ARIS PPM Cloud Agent is automatically installed on Windows systems. On Linux systems, you must install ARIS PPM Cloud Agent manually as a daemon, see chapter Install ARIS PPM Cloud Agent (page 14). For a remote installation, you must open the port of the ARIS PPM Cloud Agent in your fire wall and close it after the installation is completed.

Use the PPM installation program to install PPM and the infrastructure under a Linux-based operating system. Supported platforms are listed in the **ARIS System Requirements** document. The ARIS PPM Analysis GUI is not supported on a Linux-based operating system.

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

Before you start your installation on a Linux system, please follow the preparation steps thoroughly to avoid problems during installation. Please also note the following restrictions when installing on Linux:

- Use a dedicated Unix user to install and operate PPM. Do not use the root user.
- This dedicated Unix user needs sudo privileges. Other Unix users are not supported.
- By default, ARIS PPM Cloud Agent is not installed as a daemon. The daemon under Linux can be set up after installation using the above-mentioned Unix user with sudo privileges.

  For details on installing the ARIS PPM Cloud Agent on a Linux system as a service, see the chapter Install ARIS PPM Cloud Agent as a service (page 15). Note that the ARIS PPM Cloud Agent must be installed first (page 14).

6.1 Preparing to install PPM on a Linux system

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

- Create a dedicated PPM user on the Linux system and grant this user sudo privileges.

- 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, port 4080 is assigned to the load balancer 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 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.

6.2 Install ARIS PPM Cloud Agent

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

Procedure

1. Copy the file **ppm105-cloud-agent-<version>.x86_64.rpm** to the hard drive of your Linux system. For example the version 10.5.5 of the file is named as follows: ppm105-cloud-agent-10.5.5.0.2697574-1.x86_64.rpm.

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

2. Install the ARIS PPM Cloud Agent service.

   a. Switch to sudo user shell:

      sudo -s.

   b. The default installation directory is **/opt/softwareag**. Set the environment variable **TARGETDIR** to change the installation directory:

      export TARGETDIR=<new_install_location>

   c. Ensure that the new value is correct:

      echo $TARGETDIR

   d. Install ARIS PPM Cloud Agent using rpm.

      rpm -i ppm105-cloud-agent-<version>.x86_64.rpm

      The execution ends with the following message:

      Starting Cloud Agent using "<TARGETDIR>/ppm/server/bin/CloudAgentApp.sh" ...

e. Ensure that ARIS PPM Cloud Agent is running:

   cd /<TARGETDIR>/ppm/server/bin

   ./CloudAgentApp.sh status

f. Exit sudo mode:

   exit

After the successful installation of the ARIS PPM Cloud Agent on your Linux system you can continue with the PPM installation on a remote Windows based system using the Windows setup program. For details, see the chapter Installation on a Windows system (page 7).

For a remote installation on a Linux system (page 12), you must open the port of the ARIS PPM Cloud Agent and close it after the installation is completed.

If you need to install ARIS PPM Cloud Agent as a service (page 15) (Linux daemon), proceed to the following chapter.

6.3 Install ARIS PPM Cloud Agent as a service

You can also install ARIS PPM Cloud Agent as a Windows service or Linux daemon.

Prerequisites

- The Linux system is prepared to install PPM. (page 12)
- ARIS PPM Cloud Agent is installed on the Linux system. (page 14)

Procedure

1. Adjust the existing **CloudAgentApp.sh** script before you install the service. The script is located in **<PPM installation>/ppm/server/bin** directory and can be edited using an appropriate Linux code editor.
2. Search the **RUN_AS_USER** setting in the **CloudAgentApp.sh** script, uncomment the setting, and add the PPM user that is used to install PPM on the Linux system. For example, if the user is called **ppmuser**, adjust the settings to RUN_AS_USER=ppmuser.
3. Save your changes. The PPM Service runs using the specified user.
4. For any further command, use the script **CloudAgentApp.sh** in the **<PPM installation>/ppm/server/bin** directory.
5. Check the status of ARIS PPM Cloud Agent: ./CloudAgentApp.sh status
6. If ARIS PPM Cloud Agent is running, stop ARIS PPM Cloud Agent using: ./CloudAgentApp.sh stop
7. Check if ARIS PPM Cloud Agent is stopped: ./CloudAgentApp.sh status
8. Install the service: sudo ./CloudAgentApp.sh install
9. Start ARIS PPM Cloud Agent again: ./CloudAgentApp.sh start

10. After restarting the computer, ARIS PPM Cloud Agent is started automatically.

Warning

Do not install the service as root user directly or even with the PPM user using sudo permission without adapting the script **CloudAgentApp.sh**. This damages the installation and may lead to problems starting ARIS PPM and services.

You can also perform the service installation after ARIS PPM is installed completely on your Linux Server.

6.4 Install PPM

For a remote installation on a Linux system you must consider the following prerequisites.

Prerequisites

- The Linux system is prepared to install PPM. (page 12)
- ARIS PPM Cloud Agent is installed on the Linux system. (page 14)
- The firewall settings must be checked in order to connect to your remote Linux system. You must open the port of the ARIS PPM Cloud Agent for the PPM installation. It can be closed again afterwards. The port number of your ARIS PPM Cloud Agent can be found on the remote Linux system in the following configuration file:

  <installation directory>/ppm/server/bin/agent.cfg

Procedure

1. Perform the remote installation as described in chapter Installation on a Windows system (page 7).
2. Select the option **Install ARIS Process Performance Manager on a remote computer** and specify the **Remote Computer** parameter.
3. To install ARIS PPM Cloud Agent under Linux as a service, run the call **<./CloudAgentApp.sh install** with sudo (= root privileges) in the directory **<installation directory>/ppm/server/bin/** after the installation.
4. 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/**.
5. You can now check if all required components are running.
   a. Start ARIS 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 17011

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 23). Note that if you are installing and customizing a PPM client using PPM CTK, an X-Server or an appropriate GUI environment must be available on the Linux system.

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 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.

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 PPM Analysis GUI Setup program.

The PPM Analysis GUI Setup program is located in the **Setups\Windows\ARIS PPM Analysis GUI** folder on the PPM installation media.

Please refer to the following notes:

If PPM Analysis GUI is already installed, it will be updated automatically.

The installed PPM Analysis GUI version 10.5.4 or older cannot be updated with this setup.

You must run the latest PPM Client setup version (Service release 20 or newer) first and then run the PPM Analysis GUI setup again. You can download the latest PPM Client Setup from the ARIS Download Center.

Procedure

1. Start the **PPM Analysis GUI Setup** program.
2. Click **Next**.
3. Read and accept the terms of the license agreement.
4. Click **Next**.
5. Specify the folder where PPM Analysis GUI should be installed.
6. Click **Next**.
7. 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.
8. Enable **Use ARIS Process Performance Manager URL** to change the server URL to be used.
9. Enter the PPM Web server URL in the **Server URL** box in the following form.

   http(s)://<computer name>:<port>/ppm
10. Click **Next**.

Your settings are applied.

8 Install a PPM Service Release

You can install a PPM Service Release as a new full featured PPM version or as an update of an already installed PPM 10.5 version.

Currently, the service release installer does not support side-by-side installation if a PPM 10.5 version is already installed.

For PPM version 10.4 or older, the service release installer only supports side-by-side installation.

If you install the service release as an update, the PPM Setup automatically updates the installed PPM system including the client settings if required. You only must convert the database manually after installation, if required. Please refer to the Release Notes if a conversion of the database is required.

INSTALLATION ON A WINDOWS SYSTEM

On a Windows system, you must run the PPM Service Release installation program (setup.exe). The installation program updates the installed ARIS PPM Cloud Agent and runnables to the Service Release version.

For details on installing PPM on a Windows system, refer to the chapter Installation on a Windows system (page 7).

INSTALLATION ON A LINUX SYSTEM

On a Linux system, you must first update the ARIS PPM Cloud Agent (page 14) by running the rpm installer as sudo:

rpm -Uvh ./ppm105-cloud-agent-<version>.rpm.

After you have updated the ARIS PPM Cloud Agent, you can install the Service Release using a remote installation.

For details on installing PPM on a Linux system, refer to the chapter Installation on a Linux system (page 12).

Warning

When updating the ARIS PPM Cloud Agent, the **CloudAgentApp.sh** script is overwritten with the default script from the installation package. Any changes previously made to the **CloudAgentApp.sh** script are lost and must be recreated. If you have configured the **RUN_AS_USER** parameter in the script and specified a custom user, you must re-enter these changes before the service is restarted. In this case we recommend removing the service first, before running the update. To do so, call **sudo ./CloudAgentApp.sh remove** from the directory **<PPM installation>/ppm/server/bin**. After the update is completed, you can adjust the **CloudAgentApp.sh** script again and reinstall the service as described in chapter Install ARIS PPM Cloud Agent as a service (page 15).

UPDATING VERSION PPM 10.5.0 TO PPM 10.5.6 AND HIGHER

When updating from PPM 10.5.0 to PPM 10.5.6 and higher, a direct update by using an over-installation is not possible.

Procedure

- First update PPM 10.5.0 to PPM 10.5.5.

  This can be done using the standard over-installation procedure.
- Start the PPM infrastructure.

  Windows: Click **Start ARIS PPM Core 10.5** in the Windows program group **ARIS PPM 10.5**.

  Linux: Run the script **start_ppm.sh**. The script is located in the directory **<PPM installation>/ppm/server/**.
- When the PPM infrastructure is fully started, stop it.

  Windows: Click **Stop ARIS PPM Core 10.5** in the Windows program group **ARIS PPM 10.5**.

  Linux: Run the **script stop_ppm.sh**. The script is located in the directory **<PPM installation>/ppm/server/**.
- Update PPM 10.5.5 to PPM 10.5.6 or higher.

  This can be done using the standard over-installation procedure.

9 Install a PPM Fix

You can update a PPM release version and related products with a PPM fix version by using the PPM Patch Setup. An official fix 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 ARIS Cloud Controller and ARIS PPM 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 ARIS PPM 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 under Windows

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.

Procedure under Linux

1. Copy the PPM Patch Setup into a directory on your Linux operating system on which your PPM system is running. Use the **PPM_Patch_Setup_<version>.bin** file for a Linux system.
2. Switch to a sudo shell: sudo -s

3. Make sure that you have execution rights on the patch setup file:
   chmod 775 PPM_Patch_Setup_<version>.bin
4. Run the PPM Patch Setup: ./PPM_Patch_Setup_<version>.bin
5. Click **Start** to run the update process or click **Exit** to close the PPM Patch Setup. The update is performed automatically.
6. If the installation process leads to an error, an error message appears. Click **OK** to display the complete error message in your Web browser.
7. If the installation process runs successfully, a 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.

Please note that a X-Server must be available to run the patch setup program, If no X-Server is present on the system, you can also use the silent mode:

./PPM_Patch_Setup_yversion>.bin -console -silent

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 32) 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 ARIS PPM Core 10.5** in the Windows program group **ARIS PPM 10.5**.
2. Copy the database drivers to the **driver** directory.
3. Start all PPM components. Click **Start ARIS PPM Core 10.5** in the Windows program group **ARIS PPM 10.5**.

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 (PPM 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 ARIS PPM Core 10.5** in the Windows program group **ARIS PPM 10.5**.
2. Start PPM CTK by clicking **PPM Customizing Toolkit 10.5** in the Windows program group **ARIS PPM 10.5**.

   The PPM 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 24), an individual link for each client is available in the program folders **ARIS > PPM 10.5.10 > Start Servers > Start PPM instances** and **ARIS > PPM 10.5.10 > Stop Servers > Stop PPM instances**. Use the links **Start <client>** and **Stop <client>** to start or stop client and analysis servers independently of PPM 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 PPM 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.

WEB SERVICE

You can specify the port number of the web service that the PPM analysis client uses to communicate with the PPM server. PPM 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 23).

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 program **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 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:8080/mashzone

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

10.4 Create demo database

With PPM 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 PPM CTK. (page 24)
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 31) 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 32) 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 23)

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 30)

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 **10.5.10** version.

Detailed information on how to transfer clients to the current PPM version is available in the manual **PPM Migration 9.x and 10.x to 10.5.10**.

10.6 Start PPM

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

Two 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. The PPM user interface is displayed as an independent application.
- You can call PPM as a standard application in a Web browser via PPM download client using a URL. (page 36) The PPM user interface is displayed as an independent application.

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 37) 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 ARIS PPM Core 10.5.10** in the **ARIS > PPM 10.5.10 > Start Servers** program group.

   The infrastructure components and PPM components start.
2. Start PPM CTK. (page 24)
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 PPM CTK by clicking **Start PPM client** or using the entry **PPM GUI 10.5.10** in the **ARIS > PPM 10.5.10 > Tools** program group.

After creating a client (page 24), an individual link for each client is available in the program folders **ARIS > PPM 10.5.10 > Start Servers > Start PPM instances** and **ARIS > PPM 10.5.10 > Stop Servers > Stop PPM instances**. Use the links **Start <client>** and **Stop <client>** to start or stop client and analysis servers independently of PPM 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 PPM CTK by clicking **Start PPM client** or using the **runppmgui** program.

10.6.2 Start PPM user interface

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

Prerequisite

The infrastructure components and the PPM components are started. (page 34)

You have installed PPM or PPM Analysis GUI.

Procedure under Windows

1. To start the standard PPM user interface, click **ARIS PPM GUI 10.5.10** in the **ARIS > PPM 10.5.10 > Tools** program group.

   The login dialog is displayed.
2. To start the PPM Analysis GUI, click **ARIS PPM Analysis GUI 10.5.10** in the **ARIS > PPM 10.5.10 > 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 user interface via download client

You can call PPM as a standard application in a Web browser using the ARIS PPM download client.

The ARIS PPM download client provides two components:

- ARIS PPM client downloader installs the ARIS PPM client launcher and the bundled JRE.
- ARIS PPM client launcher starts the ARIS PPM client.

Prerequisite

The infrastructure components and the PPM components are started. (page 34)

A Java run time environment of version 1.7 or newer must be installed.

Procedure

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

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

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

   The PPM download page opens.
3. Click **Start**. The browser download dialog opens.
4. Click **Save file**.
5. Open the folder containing the saved file.
6. Double-click the saved **ARISPPMClientDownloader<version>.jar** file.

The PPM user interface opens.

You can run parallel PPM applications by calling the ARIS PPM client downloader again.

10.6.4 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 application via download client	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

Parameter	Description	Call as an application via download client	Call as an application via start menu
language	Login language	yes	yes
show	Direct access to the PPM **User management** component. Navigation to another component is not possible.	yes	yes
umcsession	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 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 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 **ARIS > PPM 10.5.10 > Stop Servers**, and click **Stop ARIS PPM Core 10.5.10**.

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 **ARIS > PPM 10.5.10 > Start Servers**, and click **Start ARIS PPM Core 10.5.10.**

4. Start the relevant PPM client.

To do so, go to the Windows Start menu, open the program group **ARIS > PPM 10.5.10 > Start Servers > Start ARIS 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 10.5**.

The wizard launches and guides you through the uninstall procedure.

Procedure under Linux

Use the given package manager on your Linux system to uninstall PPM. For supported operating systems, this is the RedHat Package Manager (rpm). Just follow these steps on your Linux system:

1. Stop ARIS PPM and ARIS PPM Cloud Agent.
2. If ARIS PPM Cloud Agent is installed as a service, remove the service first before uninstalling PPM. To do so, run **sudo ./CloudAgentApp.sh remove** in the **<PPM installation>/ppm/server/bin** directory.
3. Switch to a sudo shell: sudo -s
4. Find the installed ARIS Cloud Agent rpm package: rpm -qa | grep ppm
   The output might look like this: ppm105-cloud-agent-10.5.5.0.2697574-1.x86_64
5. Run the following command:
   rpm -e ppm105-cloud-agent-10.5.5.0.2697574-1.x86_64
6. Exit the sudo shell.

PPM is removed from your system.

Note that the original installation directory still contains some backup files from your previous installation. To install a new version in the same directory, you must first remove the backup files.

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 PPM Client <version>**.

The wizard launches and guides you through the uninstall procedure.

13 Uninstall PPM download client

You can uninstall the PPM download client from your local computer.

Procedure

1. Under Windows, delete the following directory.

   %USERPROFILE%\ARISPPM<MajorVersion.MinorVersion>

2. Under Linux, delete the following directory.

   $HOME/ARISPPM<MajorVersion.MinorVersion>

The PPM download client is uninstalled from your local computer.

14 Legal information

14.1 Documentation scope

The information provided describes the settings and features as they were at the time of publishing. Since documentation and software are subject to different production cycles, the description of settings and features may differ from actual settings and features. Information about discrepancies is provided in the Release Notes that accompany the product. Please read the Release Notes and take the information into account when installing, setting up, and using the product.

If you want to install technical and/or business system functions without using the consulting services provided by Software GmbH, you require extensive knowledge of the system to be installed, its intended purpose, the target systems, and their various dependencies. Due to the number of platforms and interdependent hardware and software configurations, we can describe only specific installations. It is not possible to document all settings and dependencies.

When you combine various technologies, please observe the manufacturers' instructions, particularly announcements concerning releases on their Internet pages. We cannot guarantee proper functioning and installation of approved third-party systems and do not support them. Always follow the instructions provided in the installation manuals of the relevant manufacturers. If you experience difficulties, please contact the relevant manufacturer.

If you need help installing third-party systems, contact your local Software GmbH sales organization. Please note that this type of manufacturer-specific or customer-specific customization is not covered by the standard Software GmbH software maintenance agreement and can be performed only on special request and agreement.

14.2 Support

If you have any questions on specific installations that you cannot perform yourself, contact your local Software GmbH sales organization (https://www.softwareag.com/corporate/company/global/offices/default.html). To get detailed information and support, use our Web sites.

If you have a valid support contract, you can contact **Global Support ARIS** at: **+800 ARISHELP**. If this number is not supported by your telephone provider, please refer to our Global Support Contact Directory.

For issues regarding the product documentation, you can also send an e-mail to documentation@softwareag.com (mailto:documentation@softwareag.com).

ARIS COMMUNITY

- Download products, updates and fixes
- Find information, expert articles, issue resolution, videos, and communication with other ARIS users

If you do not yet have an account, register at ARIS Community.

PRODUCT TRAINING

You can find helpful product training material on our Learning Portal.

TECH COMMUNITY

You can collaborate with Software GmbH experts on our Tech Community Web site. From here you can, for example:

- Browse through our vast knowledge base.
- Ask questions and find answers in our discussion forums.
- Get the latest Software GmbH news and announcements.
- Explore our communities.
- Go to our public GitHub and Docker repositories and discover additional Software GmbH resources.

PRODUCT SUPPORT

Support for Software GmbH products is provided to licensed customers via our Empower Portal (https://empower.softwareag.com/). Many services on this portal require that you have an account. If you do not yet have one, you can request it. Once you have an account, you can, for example:

- Add product feature requests
- Search the Knowledge Center for technical information and tips
- Subscribe to early warnings and critical alerts
- Open and update support incidents.