SAP CLOUD PRINT MANAGER FOR PULL INTEGRATION QUICK GUIDE

Contents

1   INTRODUCTION

SAP Cloud Print Manager for Pull Integration is used to establish a connection between an SAP cloud-based solution and printers available in your network. SAP Cloud Print Manager for Pull Integration is required to enable automatic transmission and printing of documents from the cloud-based system to local printers.

You should install the SAP Cloud Print Manager for Pull Integration once in your network. As a Windows service, SAP Cloud Print Manager for Pull Integration is available for print queue output from the cloud-based system as long the Windows computer is up and running and the SAP Cloud Print Manager for Pull Integration Windows service has not been stopped manually. Thus, we recommend SAP Cloud Print Manager for Pull Integration to be installed on a central print server that is up and running all the time or at least during the time in which printing is needed.

You only need to install SAP Cloud Print Manager for Pull Integration more than once if you have multiple separate networks with printers that you want to use for process-integrated printing.

2   PREREQUISITES

2.1   Prerequisites on the Print Server

You have administration authorization for the computer on which SAP Cloud Print Manager for Pull Integration is to be installed.

Note that when SAP Cloud Print Manager for Pull Integration collects documents from a print queue and sends them to a printer, the documents are stored temporarily on the server SAP Cloud Print Manager for Pull Integration is installed on. If you are using SAP Cloud Print Manager for Pull Integration to print sensitive documents, it is recommended that you ensure that only authorized users can access this folder. The folder, called the working directory, can be found in the following path on the Windows computer running SAP Cloud Print Manager for Pull Integration:

C:\Users\<User Name>\AppData\Roaming\SAP\Cloud Print Manager for SCP

<User Name> is the logon user the SAP Cloud Print Manager for Pull Integration Windows service uses for starting.

2.2   Prerequisites in the SAP Cloud Systems

In S/4HANA Cloud the integration with SAP Cloud Print Manager for Pull Integration is done with an appropriate communication scenario. Please follow the instructions in Integrating SAP S/4HANA Cloud and Local Printers.

For SAP Business Technology Platform please get more information from the SAP Print Service documentation on how to integrate your system with SAP Cloud Print Manager for Pull Integration.

3   TASKS

3.1   Set Up the SAP Cloud Print Manager for Pull Integration
In the following subsections, you find a description of the different steps necessary to set up the SAP Cloud Print Manager for Pull Integration.

3.1.1   Define Connection Settings

1. Start the SAP Cloud Print Manager for Pull Integration application from the Microsoft Windows® start menu.
2. From the *Settings* menu, select *Service User*. Enter a service user to run the Microsoft Windows ® service. This user should have administration rights on the local computer as well as authorization to access your network printers.

3. Optional: From the *Settings* menu, select *Proxy* to set up a connection to the internet. It is recommended to use the same configuration required by your company to access the internet. Mostly the default setting should be fine and there is no need to change anything.

After applying these settings, the print service is started and runs as the Windows service *SAP Cloud Print Service for Pull Integration*. In addition, as a second Windows service, you can start the *SAP Cloud Print Watcher for Pull Integration* to check if the print service is running. If it's not running, for example, due to a crash, the *SAP Cloud Print Watcher for Pull Integration* restarts the print service to ensure permanent availability of the service. If necessary, you can restart the print service if it has stopped for any reason. You can start both services in the top right corner of the screen.

3.1.2   Add a Connection to an S/4HANA Cloud System

1. From the *Runtime System* menu, select *New* to add an SAP S/4HANA system to the SAP Cloud Print Manager for Pull Integration.
2. Select 'Basic Authentication' (S/4HANA Cloud) and confirm the dialog.
3. Enter the following information:
   - *Name*: Enter a unique name for the system.
   - *SAP Web Service URL*: Enter the URL to your system provided by SAP.
   - *User*: Enter the communication user you created while setting up the communication scenario for SAP Cloud Print Manager for Pull Integration.
   - *Password*: Enter the communication user's password.
4. Click *Test* to test the connection to the system and the user credentials.
5. Click *OK* to save the new configuration.

3.1.3   Add a Connection to SAP Business Technology Platform

1. From the *Runtime System* menu, select *New* to add an SAP Business Technology Platform connection to the SAP Cloud Print Manager for Pull Integration.
2. Select 'OAuth' (SAP Business Technology Platform) and confirm the dialog.
3. Enter the following information:
   - *Name*: Enter a unique name for the system.
   - *SAP Web Service URL*: Enter the URL to your system provided by SAP.
   - *Client ID*: Enter the client ID you received during the registration.
   - *Client Secret*: Enter the client secret you received during the registration.
   - *Token URL*: Enter the token URL you received during the registration.

4. Click *Test* to test the connection to the system and the user credentials.
5. Click *OK* to save the new configuration.

Remark: The checkbox '*Single Item Transfer*' activates the initial version of the print API if selected. Then one request to the SAP cloud system is done per print queue item. This is much slower than the new default behavior. It might be useful in some scenarios, but usually it is better to leave the checkbox unselected. The new version of the print API transfers multiple print queue items with one request to the SAP cloud system. Currently this is only available for SAP S/4HANA cloud.
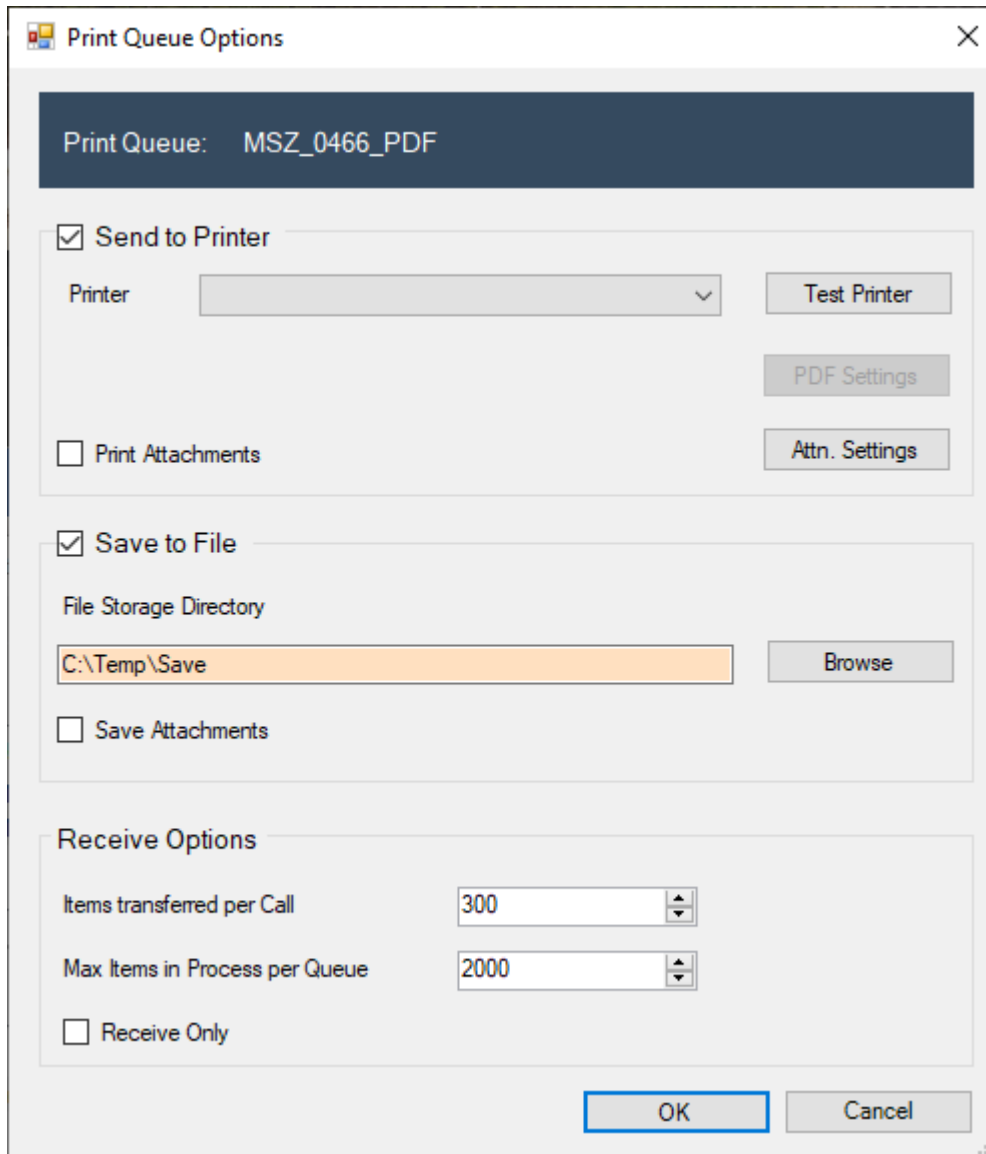
Remark: It is not supported to connect to the same Runtime System with the same communication user multiple times.

As soon as you have added the runtime system, SAP Cloud Print Manager for Pull Integration starts to collect print queues from the SAP cloud system. All print queues that have been assigned to the communication scenario or user are displayed in SAP Cloud Print Manager for Pull Integration. You now need to assign Windows printers to the print queues to start printing. If you do not immediately see any print queues, select *Check Now* from the *Runtime System* menu to start the connection.

3.1.4   Assign a Printer to a Print Queue

1. Under *Runtime Systems*, select a system from the list.

All print queues that have been assigned to the technical user are displayed in this list.

2. Under *Print Queues*, select a print queue and choose *Queue Options* from the *Print Queue* menu or use the context menu or a double click on the queue. The *Print Queue Options* dialog box opens. Mark the checkbox *Send to Printer* and/or *Save to File*.

3. Select a Windows printer and/or browse or enter a path and click *OK* to save the configuration.

Note that the printer that you assign to the queue should support the printer language defined in the queue. You can view this information in the *Format* column of the *Print Queues* list. Do not select a printer that requires user interaction for each print job. For example, you should not select a printer that prints to a file with a file selection popup. There is no user interface to the service, so the job wouldn't print.

As soon you have assigned a printer to the print queue, collecting and printing documents that have been sent to this print queue starts.

SAP Cloud Print Manager for Pull Integration can print and/or save attachments which were added to the document. Attachments can be saved in any format, but you can only print PDF, DOCx, XLSx and PPTx attachments. To save attachments to the specified path, you should select the checkbox '*Save Attachments*'.

Mapped network drives might not work correctly if chosen from the 'Browse' dialog. In this case enter the UNC path name (\\<server_name>\<directory_name>) manually in the entry field for the file storage directory on the left side.

3.1.5 Test Printer

1. Under *Print Queues*, select a print queue and choose *Output Options* from the *Print Queue* menu.
2. Ensure that *Send to Printer* is checked and a valid printer is selected.
3. Press the *Test Printer* button.
   A test page is sent to the defined printer. The test page contains a test sentence in English, Chinese, French, and German.

3.1.6 PDF Settings

1. Click on PDF Settings to define print settings for your PDF document. This button is only available for queues with format PDF.
2. Choose between the following options:
   * *Auto-Rotate*: The print settings are adapted in accordance with the orientation of the document to print.
   * *Fit paper size*: The print settings are scaled in accordance with the paper size in the paper tray while preserving the aspect ratio of your original document.
   * *Ignore print profile*: SAP Cloud Print Manager for Pull Integration sends printer specific properties of the attached printer to the print queue in the SAP cloud system. If supported from the application, these can be used to define print profiles for a print queue item. Print profiles can consist of settings like duplex mode, color mode, tray selection and others. To use the global default settings of SAP Cloud Print Manager for Pull Integration, select this option.
   * *Ignore paper size*: Sending a document with invalid paper size (for instance, a letter to an A4 tray) usually causes the printer to ask for a manual confirmation to print. To prevent this, select this option.
   * *Duplex Mode*: Global print property (see '*Ignore print profile*')
   * *Add empty page*: When selecting this option, an empty page is added after a document with odd pages is printed in duplex mode.
   * *Use font substitution*: See SAP note 2959085 for details.
3. Confirm with *OK.*

3.1.7 Attachment Settings

1. Click on *Attn. Settings* to define print settings for your attachments.
2. Choose between the following options from the print mode:
   * *Print as separate file*: All attachments are printed separately keeping their original document format.
   * *Print as merged PDF*: All attachments are merged into one PDF and are printed in accordance with the selected PDF settings (see section 3.1.5).
3. Additionally, you can select *Add Page Numbers* for Merged PDFs to add page numbering.
4. Confirm with *OK.*

3.1.8 Receive Options

Usually there is no need to change the given values of those options. The defaults are determined by SAP as best practices. Changing it might have negative impacts on the overall performance of the print process.

* '*Items transferred per Call*' specifies the number of print queue items which are transferred in one request using the new print API.
* '*Max. Items in Process per Queue*' specifies the maximum number of print queue items that can exist in the internal queue of SAP Cloud Print Manger for Pull Integration. If the limit is reached, no new items will be received until some of them were processed. This behavior should prevent memory overflow in case of problems with a printer.

- '*Receive only*' is a test option to measure the performance of the item transfer from the SAP cloud system to SAP Cloud Print Manager for Pull Integration. Do not select this option in a productive environment. Nothing is printed or saved. Create many items in a test queue, set the *Log Level* to *Info* (see section 3.2.1) and select '*Receive only*'. After all print queue items were received, you can find a time stamp for each block of items in the *Error Log*. The block size is the number specified in '*Items transferred per Call*'.

3.2 Other Functions

3.2.1 View Log Information

1. From the *Help* menu, select *About….*
2. Using the links provided in the *About SAP Cloud Print Manager for Pull Integration* dialog box, you can access the following information:
   - *Document Log*: All documents retrieved from the configured runtime system.
   - *Error Log*: General errors.
   - *Printing Log*: Errors during print job processing.
3. If you need to provide more detailed log information select *Options…* from the *Settings* menu, set the *Log Level* to *Info* or *Debug* and mark the checkbox named *Keep Job-Specific Log Files*. Then reproduce the error. This will add more detailed error information to the log files.
4. If required, click *Save Support Information* to create an archive file containing all log information, which can be attached to a support incident on the application component BC-CCM-PRN-OM-PM.

Remark: Accessing those files via the dialog only works if the service user of SAP Cloud Print Manager for Pull Integration (see section 2.1) is the same user you are logged in with on the print server. If this is not the case, you can access the files manually from the working directory with a user with appropriate access authorizations.

3.2.2 Cleanup Directories

1. From the *Settings* menu, select *Cleanup directories*.
2. All documents and log files stored in SAP Cloud Print Manager for Pull Integration's working directories will be deleted.

3.2.3 Reset to Factory Defaults

1. From the *Settings* menu, select *Reset to factory defaults*.
2. All documents and log files, including the configuration, will be deleted. After performing this action, all the system information, including user and password, must be entered again.