



Infor Cloud Printing Service Administration Guide

Copyright © 2017 Infor

Important Notices

The material contained in this publication (including any supplementary information) constitutes and contains confidential and proprietary information of Infor.

By gaining access to the attached, you acknowledge and agree that the material (including any modification, translation or adaptation of the material) and all copyright, trade secrets and all other right, title and interest therein, are the sole property of Infor and that you shall not gain right, title or interest in the material (including any modification, translation or adaptation of the material) by virtue of your review thereof other than the non-exclusive right to use the material solely in connection with and the furtherance of your license and use of software made available to your company from Infor pursuant to a separate agreement, the terms of which separate agreement shall govern your use of this material and all supplemental related materials ("Purpose").

In addition, by accessing the enclosed material, you acknowledge and agree that you are required to maintain such material in strict confidence and that your use of such material is limited to the Purpose described above. Although Infor has taken due care to ensure that the material included in this publication is accurate and complete, Infor cannot warrant that the information contained in this publication is complete, does not contain typographical or other errors, or will meet your specific requirements. As such, Infor does not assume and hereby disclaims all liability, consequential or otherwise, for any loss or damage to any person or entity which is caused by or relates to errors or omissions in this publication (including any supplementary information), whether such errors or omissions result from negligence, accident or any other cause.

Without limitation, U.S. export control laws and other applicable export and import laws govern your use of this material and you will neither export or re-export, directly or indirectly, this material nor any related materials or supplemental information in violation of such laws, or use such materials for any purpose prohibited by such laws.

Trademark Acknowledgements

The word and design marks set forth herein are trademarks and/or registered trademarks of Infor and/or related affiliates and subsidiaries. All rights reserved. All other company, product, trade or service names referenced may be registered trademarks or trademarks of their respective owners.

Publication Information

Release: Infor Cloud Printing Service 10.5.1.1

Publication Date: March 27, 2017

Document Code: rptcpsag

Contents

About this guide.....	5
Contacting Infor.....	5
Chapter 1: Introduction.....	7
System Requirements.....	7
Chapter 2: Installation.....	9
Architecture.....	9
Chapter 3: Uninstallation.....	11
Chapter 4: Configuring the Infor Cloud Printing Service.....	13
Adding a connection.....	13
Sending printers to LN.....	15
Testing a connection.....	15
Adding a printer to a connection.....	16
Viewing the status of a printer.....	17
Adding a file share to a connection.....	17
Specifying a command for a file share.....	18
Testing a file share.....	18
Enabling a printer or file share.....	18
Configuring logging.....	19
Log file rotation.....	19
Chapter 5: Configuring the LN UI server.....	21
Chapter 6: Configuration console UI.....	23
Main view.....	23
Using the main view.....	23
Connection view.....	24
Printer view.....	24
File Share view.....	25
Configure Logging dialog box.....	25
Chapter 7: Advanced Topics.....	27
Printing without direct PDF printing support.....	28

About this guide

This guide describes how to install and configure the Infor Cloud Printing Service.

Note: You can use the Cloud Printing Service in Cloud environments and on-premises environments.

Contacting Infor

If you have questions about Infor products, go to the Infor Xtreme Support portal.

If we update this document after the product release, we will post the new version on this website. We recommend that you check this website periodically for updated documentation.

If you have comments about Infor documentation, contact documentation@infor.com.

The Infor Cloud Printing Service is a Windows service that periodically makes contact to Infor LN software. The service retrieves print requests that are waiting to be printed on a local printer.

You can also use the service to transfer file output to a local file share.

You can configure the Infor Cloud Printing Service in a configuration console. The configuration console is a snap-in for Microsoft Management Console.

System Requirements

To run the Infor Cloud Printing Service, a Windows machine with .NET Framework 4.5 is required.

To print, you must connect to a printer that supports direct printing of PDF files. This printer must be able to handle a byte stream with PDF data that is retrieved from LN.

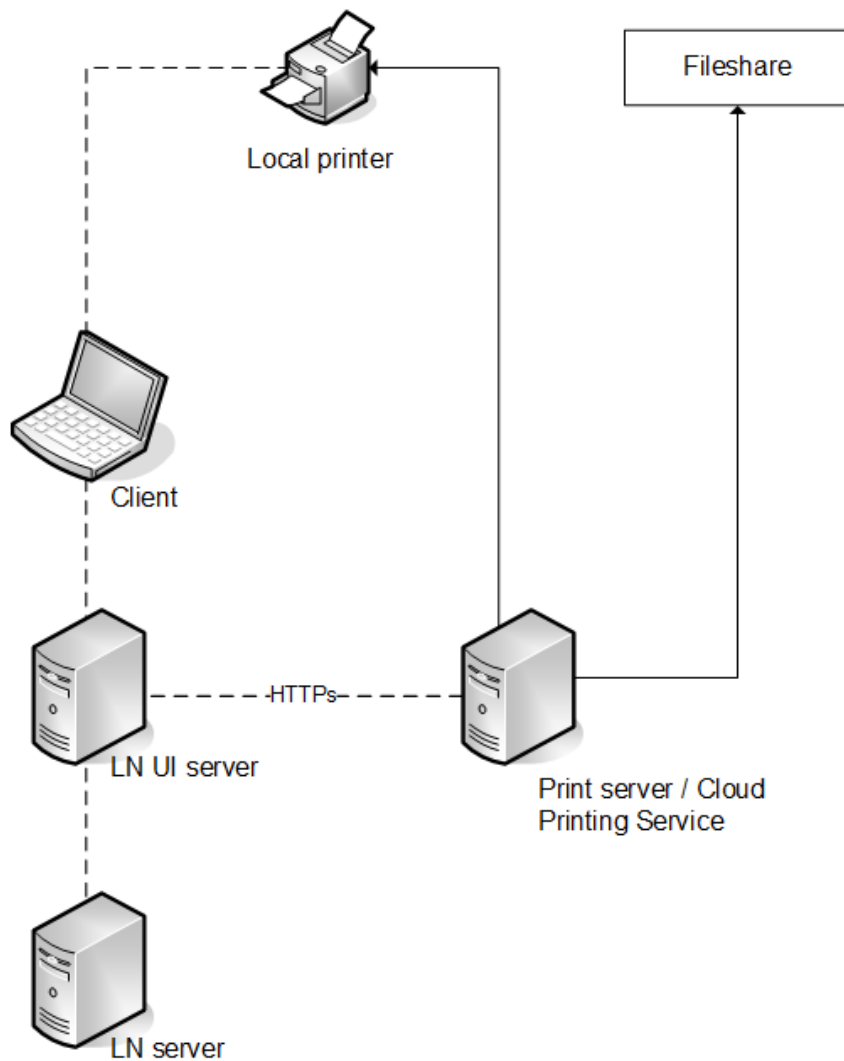
If your printer does not support direct PDF printing, see "Printing without direct PDF printing support" on page 28.

To install the Infor Cloud Printing Service and the configuration console:

- 1 Download the Infor Cloud Printing Service solution. See Infor Xtreme KB [1629931](#).
- 2 Run `setup.exe`.
- 3 Accept the license terms.
- 4 Accept or specify customer information.
- 5 Select **Complete**. Alternatively, to change the destination folder, select **Custom**.
- 6 If you selected **Custom**, specify the destination folder. The default folder is `C:\Program Files\Infor\Cloud Printing`.
- 7 Click **Install**.

Architecture

This diagram shows the architecture:



The diagram shows the typical architecture, where the Cloud Printing Service is installed on a separate print server. This print server is connected, through HTTPS, to the LN UI server. The Cloud Printing Service can print to a local printer or to a file share.

Alternatively, the Cloud Printing Service can be installed on the client.

Uninstallation

3

To uninstall the Infor Cloud Printing Service and the configuration console:

- 1 Open the Windows Control Panel.
- 2 Select **Programs and Features**.
- 3 Select **Infor Cloud Printing** from the list and click **Uninstall**. A question window is displayed. Click **Yes** to start the uninstallation.

Configuring the Infor Cloud Printing Service

4

To configure the Infor Cloud Printing Service:

- 1 To start the configuration console, select **Start > All Programs > Infor > Cloud Printing > Infor Cloud Printing Configuration Console**.
- 2 Add a connection.
- 3 Test the connection.
- 4 Add a printer or file share to the connection.
- 5 Enable the printer or file share.
- 6 Configure logging.

For details, see the following sections.

Adding a connection

- 1 In the configuration console, select the top-level node, **Infor Cloud Printing**, in the tree to open the console's main view.
- 2 Click **Add Connection**.
- 3 Specify the name for the connection and click **OK**.
The connection is displayed in the tree.
- 4 Select the connection node in the tree to open the Connection view.
- 5 Specify the connection settings.
 - a Specify this information:

Enabled

If this check box is selected, the connection is processed by the service.

Authentication Type

Authentication type to be used when connecting to the LN UI server.

Select **Basic** for on-premises installations of LN, or **OAuth2** for multi-tenant cloud environments. Depending on this choice, some of the next parameters are not available.

- b If you selected the **Basic** authentication type, specify this information:

Base URL

The base URL for the LN UI server that connects to the LN server.

For example:

`http://server.example.com:8312/webui`

`https://server.example.com:8443/webui`

Environment

The environment name that identifies the LN server, as defined on the LN UI server.

Command

Optional command line arguments for starting the BShell on the LN server.

Username

Username used for logon to the LN server.

Password

Password used for logon to the LN server.

- c If you selected the **OAuth2** authentication type, specify this information:

ION-API File

The `.ionapi` file containing the OAuth2-related settings.

You can download such a file when you add "Infor Cloud Printing" as a client application in the ION-API application in Infor Ming.le™. See "Registering the client application" in the *Infor ION API Administration Guide*.

Click **Browse** to select the `.ionapi` file. You can use the following **Tenant ID** and **URL** fields to verify that the correct file was chosen.

Tenant ID

(Read-only) value of the "tenant ID" that is specified in the selected ION-API file.

URL

(Read-only) value of the "ION-API URL" that is specified in the selected ION-API file.

- d Specify this information:

Polling Interval

If no more print items are available, the LN server is contacted again after waiting for the specified number of seconds.

Handle all Printers

If this check box is selected, these printers are handled by the Cloud Printing Service: all available printers defined on the LN server, except those that have been configured in the Cloud Printing Service and are not enabled.

If this check box is cleared, the Cloud Printing Service does not handle printers for the connection. Even printers, for which the **Enabled** check box in the Printer view is selected, are not handled.

See "Enabling a printer or file share" on page 18.

- 6 Click **Save**.

After saving the connection, a new child node is present in the tree. When you select the node, a "Connection view" is displayed.

Sending printers to LN

To add all printers from the active directory to LN:

- 1 In the configuration console, select the connection node in the tree.
- 2 In the Connection view, click **Send Printers to LN**.

All printers from the active directory are added to the Client Printers (ttaad3109m000) session in LN.

In the User Settings (ttaad2105m000) session, you can register one of these client printers as the default printer for a specific user.

When printing to the default printer in the Select Device (ttstpsplopen) session, the placeholder in the device queue is expanded to the user's default printer.

Testing a connection

To test the connection parameters you specified:

- 1 Ensure that the service is running. You can start the service in several ways:
 - In the main view of the configuration console, click **Start**.
 - In the Services Control Panel applet, locate the "Infor Cloud Printing Service" service, and start the service in the usual way.
 - On a command line prompt, type `net start InforCloudPrinting`
- 2 In the configuration console, select the connection node in the tree.
- 3 In the Connection view, click **Test**.

If you perform a test while the service is not running, an error message, stating that the InforCloudPrinting service could not be reached, is displayed.

If all parameters are correct, a success message is displayed.

If the connection parameters contain errors, an error message is displayed. The message usually indicates which parameter is wrong:

- An error in the Username or Password results in this message: `Wrong username/password`
- An error in the Environment results in this message: `Environment 'xxxx' not found`
- An error in the Command may result in this message: `createManagedConnection failed`
- An error in the last part of the URL may result in this message: `Response status code does not indicate success: 404 (Not Found)`
- An error in the first part of the URL (hostname or port number) may result in this message: `An error occurred while sending the request`

If the error message is unclear, as in the last example, select the top-level node in the tree. The main view is displayed. Click **View** to open the log file. Inspect the end of the file for more clues:

- In case of a wrong port number, you may find further information: No connection could be made because the target machine actively refused it <IP address>:<port>.
- In case of a wrong hostname, you may find this information: The remote name could not be resolved: <hostname>.

Adding a printer to a connection

1 Define a **Windows Server Printer** device on the LN server.

- a In LN, start the Device Data (ttaad3500m000) session.
- b Add a device.

Points of attention:

Device Type

Select **Windows Server Printer**.

Argument for Conversion Program

In an on-premises LN installation on a Unix or Windows platform, specify **-cloudPrinting**

In a cloud installation, leave blank.

Device Queue

Specify the appropriate printer queue. Specify the UNC path in this format: `\\servername\printername`.

See the online help of the Device Data (ttaad3100s000) session.

2 Add the printer in the Cloud Printing Service.

- a In the configuration console, select the connection node in the tree and click **Add Printer**.
- b Specify this information:

UNC Path

Specify the UNC path in this format: `\\servername\printername`. If the path does not have this format, the **OK** button is unavailable.

The UNC path must exactly match the value of the **Device Queue** field of the corresponding **Windows Server Printer** device in the Device Data (ttaad3100s000) session on the LN server.

If the service is running, select the UNC path from the drop-down list. The running service contacts the LN server and retrieves a list of printers that have been configured there. The drop-down list is not filled immediately when opening the Add Printer dialog box. It may take a few seconds to start a Bshell on the LN server and perform a query to obtain the requested data.

If the service is not running, type the required printer path.

For details about Windows Server Printer devices, see the *Infor Enterprise Server - Administration Guide* and the Enterprise Server online help.

- c click **OK**.

After a printer is added, it is displayed in the tree as a child node of the connection. Select this printer node to open the Printer view.

The printer node in the tree does not have any actions, except the standard MMC actions.

Viewing the status of a printer

- 1 In the configuration console, select the printer in the tree. The Printer view is displayed.
The status of the printer is displayed in the **Status** field.
If the printer is ready to receive print jobs, the status is **Available**. All other status values, such as **PaperOut**, **Offline**, and **TonerLow**, indicate a problem. If an invalid printer path was specified in the printer definition, the status is **NotAvailable**.
- 2 Click **Refresh** to refresh the printer status.

Adding a file share to a connection

- 1 In the configuration console, select the connection node in the tree and click **Add File Share**.
- 2 Specify this information:

UNC path

Specify the UNC path in this format: `\\servername\...\folder`. If the path does not have this format, the **OK** button is unavailable.

The service is logged on using a specific account. It should be able to write and delete files to the designated folder from this account. Therefore, the owner of the designated folder must set the write and delete permissions accordingly.

For files to be processed, the UNC path must exactly match the value of the **Designated Printer** field in the Queued Items (ttrpi4110m000) session on the LN server.

Overwrite existing files

If this check box is selected, if a file is published to a file share and a file with the same name already exists, the existing file is overwritten.

If this check box is cleared, a sequence number to make the file name unique is appended to the new file name when the new file is written.

- 3 Click **OK**.

After a file share is added, it is displayed in the tree as a child node of the connection. Select this file share node to open the File Share view.

The file share node in the tree does not have any actions, except the standard MMC actions.

Specifying a command for a file share

- 1 In the configuration console, open the connection node and select the file share.
- 2 In the File Share view, specify this information:

Command

Specify actions that must be performed after the file has been published to the share.

The contents of this property are passed as argument to the command line. The passed contents are preceded with `"/c"` to terminate the command line after executing the specified argument.

You can use the `"$file"` placeholder for the file name of the copied file.

Delete file after executing command

If this check box is selected, the file is removed from the file share if the command line exits successfully. Files are only removed if a command is performed on them.

Testing a file share

To test whether a file share is available for the service:

- 1 In the configuration console, open the connection node and select the file share.
- 2 In the File Share view, click **Test**.

Enabling a printer or file share

- 1 In the configuration console, select the printer or file share in the tree. Printers and file shares are child nodes of the connection.
The Printer or File Share view is displayed.
- 2 Select the **Enabled** check box.
- 3 Select the root node in the tree.
The main view is displayed.
- 4 Select **Action > Save**.
- 5 In the main view, click **Reload** so that the service picks up the changes in the configuration.

The printer or file share is now handled by the service.

Note:

- If the **Enabled** check box is cleared, the printer or file share is not handled by the service.
- For printers, this behavior is not influenced by the value of **Handle all Printers** in the parent Connection view. The **Handle all Printers** option only influences the "other" printers that are known on the LN server, but have not been added as printer nodes in the tree.
See "Adding a connection" on page 13.

Configuring logging

- 1 In the configuration console, select the top-level node, **Infor Cloud Printing**, in the tree to open the console's main view.
- 2 Under **Logging**, click **Configure** to open the Configure Logging dialog box.
- 3 Specify this information:

Log Level

Indicates which types of messages are logged:

- Off: No messages are logged.
- Fatal: Only fatal errors are logged.
- Error: All errors are logged.
- Warning: Warning messages and errors are logged.
- Info: Info messages and warnings and errors are logged.
- Debug: All messages are logged.

Max File Size

The maximum size of the log file. If the log file exceeds this limit, log file rotation takes place.

KB / MB

The unit, kilobyte or megabyte, for the specified log file size.

Max Nr of Files

The maximum number of backup log files that are kept during log file rotation.

See "Log file rotation" on page 19.

Log File

The path of the log file. You can specify either an absolute path, or a path relative to the installation folder.

Click **Browse** to navigate to a different location or specify a different file name.

- 4 Click **OK**.

Log file rotation

Log file rotation takes place when a log file is growing too large: a new log file is opened and the old log file is backed-up by appending ".1" to its name. Existing backup log files get a higher number; if the maximum number is reached, the corresponding log file is deleted during rotation.

Example

The log file name is "CloudPrinting.log". The maximum file size is 1MB and the maximum number of log files is 10. 10 backup files are already present: CloudPrinting.log.1 - CloudPrinting.log.10.

If the log file reaches its maximum size of 1 MB, CloudPrinting.log is renamed to CloudPrinting.log.1. The existing CloudPrinting.log.1 is renamed to CloudPrinting.log.2, and so on.

Configuring the Infor Cloud Printing Service

`CloudPrinting.log.9` is renamed to `CloudPrinting.log.10`, and the existing `CloudPrinting.log.10` is deleted.

Configuring the LN UI server

5

To expose the web services for "LN Client Service", you must configure the LN UI server. Otherwise the connection cannot be established.

To configure the LN UI server:

- 1 Start the LN UI Administration Webapp.
- 2 Select **Infor LN > LN Client Service**.
- 3 Select the **Enable Service** check box, and save the changes.

For details about the configuration of LN UI, see the *Infor LN UI Administration Guide* and the online help for the LN UI Administration Webapp.

This section describes the user interface of the configuration console.

Main view

Use this view to perform various actions.

See "Using the main view" on page 23.

Using the main view

- 1 To open the main view, select the top-level node, **Infor Cloud Printing**, in the tree. The current status of the service is displayed.
- 2 Perform the desired actions.
 - a In the **Service Status** section, you can run these commands:
 - Start**
Starts the service.
 - Stop**
Stops the service.
 - Reload**
Reloads the service with new configuration settings that were made in the console, and have been saved to the configuration file.
 - b In the **Logging** section, you can run these commands:
 - View**
Opens the log file in the standard program that is associated with ".log" files. By default this is Notepad.
 - Configure**
Opens a dialog box, where you can configure the logging settings.

See "Configuring logging" on page 19.

- c If the top-level node, **Infor Cloud Printing**, is selected in the tree, you can perform these actions:

Add Connection

Opens a dialog box where you must specify a name for the new connection.

See "Adding a connection" on page 13.

Save

Saves all changes that were made in the console screens to the configuration file of the Infor Cloud Printing Service.

- If the service is currently running, click **Reload** to make the service use the new settings.
- If the service is not running, click **Start** to start the service with the new settings.

Revert

Reverts all changes that were made since the last **Save** action. The console is reloaded with the settings from the configuration file.

The actions are available in these locations:

- The **Action** menu.
- The shortcut menu of the top-level node.
- The Action pane. You can hide or show this pane by pressing a toolbar button.

Connection view

Use this view to perform these actions:

- Configure the connection to Infor LN.
See "Adding a connection" on page 13.
- Test the connection.
See "Testing a connection" on page 15.
- Add all printers from the active directory to LN.
See "Sending printers to LN" on page 15.

Printer view

Use this view to perform these actions:

- View the status of a printer.

See "Viewing the status of a printer" on page 17.

- Enable or disable a printer.

See "Enabling a printer or file share" on page 18.

File Share view

Use this view to perform these actions:

- Specify a command for a file share.

See "Specifying a command for a file share" on page 18.

- Test a file share.

See "Testing a file share" on page 18.

- Enable or disable a printer.

See "Enabling a printer or file share" on page 18.

Configure Logging dialog box

Use this view to specify logging settings.

See "Configuring logging" on page 19.

The default name for the configuration file for the Infor Cloud Printing Service, which is edited in the Configuration console, is `CloudPrintingConfig.xml`. This file is located in the installation folder.

You can change the location where the configuration file is stored. This is useful to keep your configuration files in a location that is backed-up regularly. To change the location, manually edit the application configuration file for the service, `CloudPrintingService.exe.config`, in the installation folder. This XML file contains a `configFilePath` property containing the path to the configuration file of the service.

```
<?xml version="1.0" encoding="utf-8"?>
<configuration>
  <startup>
    <supportedRuntime version="v4.0" sku=".NETFramework,Version=v4.5"
  />
  </startup>
  <appSettings>
    <add key="configFilePath" value="CloudPrintingConfig.xml" />
  </appSettings>
  <system.serviceModel>
  ...
```

The default value is `CloudPrintingConfig.xml`, which is interpreted as a path relative to the installation folder. To change it, replace the value by the new value. The path must either be absolute, or relative to the installation folder. For example:

```
<appSettings>
  <add key="configFilePath"
    value="C:\settings\CloudPrinting\CloudPrintingConfig.xml" />
</appSettings>
```

Printing without direct PDF printing support

If your printer does not support direct PDF printing, you can print PDFs through a file share and a PDF reader.

1 Define a **Windows Server Printer device on the LN server.**

- a In LN, start the Device Data (ttaad3500m000) session.
- b Add a device.

Points of attention:

Device Type

Select **Windows Server Printer**.

Argument for Conversion Program

In an on-premises LN installation on a Unix or Windows platform, specify **-cloudPrinting**

In a cloud installation, leave blank.

Device Queue

Specify the UNC path of a file share that is defined within the Cloud Printing Service. Specify the UNC path in this format: `\\servername\...\folder`.

See the online help of the Device Data (ttaad3100s000) session.

2 On the client, install a PDF reader that can open the pdf and send it from a command line to the printer.

For example, install Sumatra PDF.

3 Specify the command line for the file share.

- a In the Cloud Printing Service configuration console, open the connection node and select the file share.
- b In the File Share view, specify this information:

Command

Specify the appropriate command line. For details, see the documentation of the PDF reader.

For example, if you installed Sumatra PDF on the client, specify a command line in this format in the **Command** field in the file share properties.

`"path to sumatraPDF.exe" -print-to UNC path for the printer -exit-when-done $file"`

For example: `"\Program Files\SumatraPDF\SumatraPDF.exe" -print-to \\SRV_DEV2\PNL0133 -exit-when-done $file"`

You can now print with the options specified on the command line.