Infor LN Transfer Service Administration Guide

Release 10.7.x

Contents

About this guide

This guide describes how to install and configure the Infor LN Transfer Service.

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

Contacting Infor

If you have questions about Infor products, go to Infor Concierge at https://concierge.infor.com/ and create a support incident.

The latest documentation is available from docs.infor.com or from the Infor Support Portal. To access documentation on the Infor Support Portal, select **Search > Browse Documentation**. We recommend that you check this portal periodically for updated documentation.

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Chapter 1: Introduction

The Infor LN Transfer Service is a Windows service that periodically makes contact to Infor LN software.

You can use the service to perform these tasks:

- Retrieve print requests that are waiting to be printed on a local printer.
- Transfer file output to a local file share.
- Transfer files from a given folder structure in a cloud storage system to a similar folder structure on a local system. This is the so-called "Download Folder" functionality. The cloud storage system can be the `${BSE}/appdata` folder on the LN server or it can be located in an Amazon S3 bucket.
- Transfer files from a given folder structure on a local system to a similar structure in a cloud storage system. This is the so-called "Upload Folder" functionality.

Note: The Upload/Download Folder functionality for transferring files to/from the `${BSE}/appdata` area on the LN server was originally meant for transferring relatively small EDI messages. Files larger than 10 MB are not supported.

The Upload/Download Folder functionality for transferring files to/from an Amazon S3 bucket was designed for handling large files. The 10 MB file size limit does not apply here.

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

System Requirements

To run the Infor LN Transfer 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

SLM license

The LN Transfer Service communicates with a BShell in LN. Therefore, it requires its own SLM server license, using product ID 10996 - Enterprise Server.

This license is not shared with other active users or service users from LN software that is running on the same machine.

Example

Suppose you have installed the LN Transfer Service on a desktop machine, and you are using that same machine to sign in to LN UI. You are consuming two licenses: one for the service user and one for the human user.

Chapter 2: Installation

To install the Infor LN Transfer Service and the configuration console:

1   Download the Infor LN Transfer Service solution. See Infor Support Portal KB <u>1629931</u>.

2   Run `LNTransferServiceSetup.exe.`

3   Accept the license terms.

4   Specify the destination folder. The default folder is `C:\Program Files\Infor\LN Transfer`
.

5   Click **Install**.

Architecture

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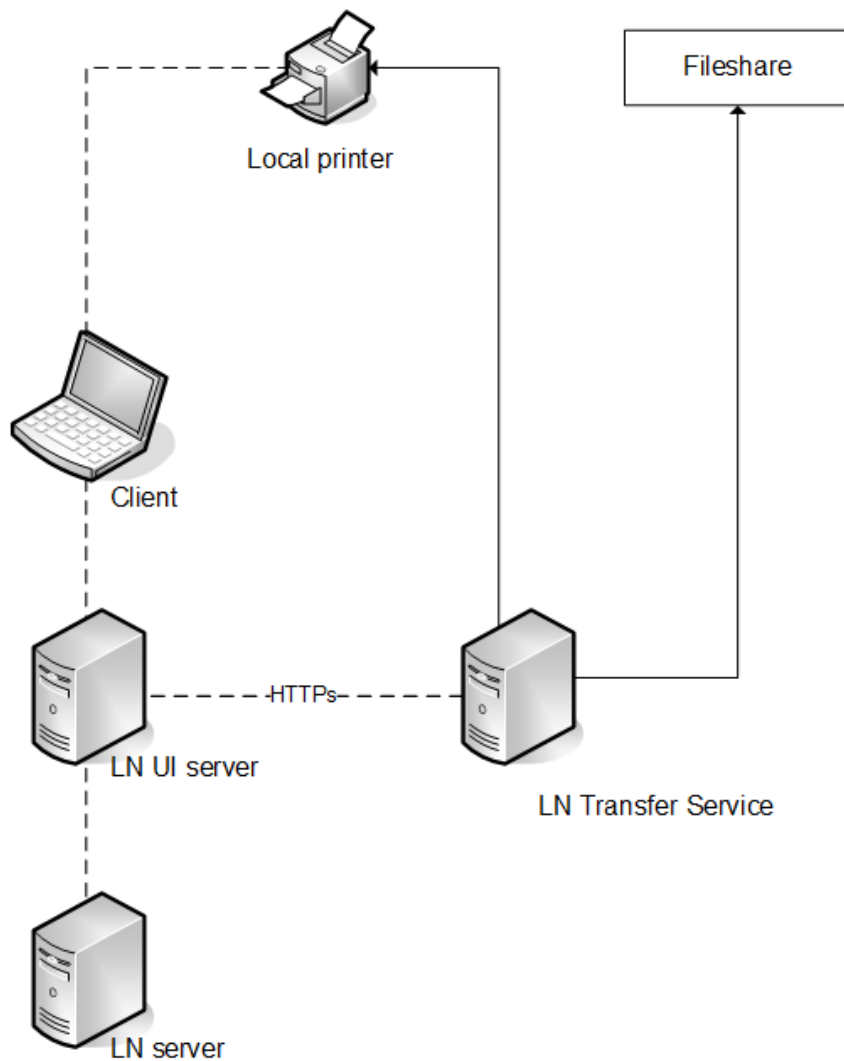
The diagram shows the typical architecture, where the LN Transfer Service is installed on a separate print server. This print server is connected, through HTTPS, to the LN UI server. The LN Transfer Service can print to a local printer or to a file share.

Alternatively, the LN Transfer Service can be installed on the client.

Chapter 3: Uninstallation

To uninstall the Infor LN Transfer Service and the configuration console:

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

Chapter 4: Configuring the LN UI server

To obtain print requests and to transfer files, the LN Transfer Service must establish an HTTP(S) connection to the LN server. The "LN Client Service" of LN UI is used to communicate with the LN server.

When connecting to a cloud installation of LN, the LN Client Service is already available.

You can also use the LN Transfer Service in combination with an on-premises installation of LN. In this case, you must ensure the LN Client Service has been activated on the LN UI server.

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.

Note: To utilize environments with the "BaanLogin SSL" protocol, the LN UI server must be configured for Single Sign On using Infor Federation Services.

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.

Chapter 5: Configuring the Infor LN Transfer Service

To configure the Infor LN Transfer Service:

1 To start the configuration console, select **Start > Infor > Infor LN Transfer Service > Infor LN Transfer Service**.

2 Add a connection.

3 Test the connection.

4 Add a printer, a file share, an upload folder, or a download folder 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 LN Transfer Service**, 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.
        If this check box is cleared, the LN Transfer Service does not handle printers, file shares, download folders, or upload folders for the connection.

        Even printers, file shares, download folders, or upload folders, for which the **Enabled** check box in the Printer view is selected, are not handled.

        Authentication Type
        Authentication type to be used when connecting to the LN UI server:
        • Select `Basic` if the user authentication is performed by the LN server. This is the case for on-premises or single-tenant cloud installations of LN that do not use ION API.

- Select **OAuth2** if the user authentication is performed by ION API. This is the case for all multi-tenant cloud installations of LN, and for some on-premises or single-tenant cloud installations that are using the ION API gateway.

  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.

You can use environments that use the "BaanLogin" or "Rexec" protocol.

If the LN UI server has been configured for Single Sign On using Infor Federation Services, you can also use environments with the "BaanLogin SSL" protocol.

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.

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 LN Transfer Service as a client application in the ION-API application in Infor Ming.leTM.
See Adding an authorized app for the Infor LN Transfer Service on page 32 and Downloading the credentials of an authorized app on page 33.
Click **Browse** to select the `.ionapi` file. You can use the **Tenant ID** and **URL** fields to verify that the correct file was chosen.

Environment
This property is only applicable for on-premises installations and single-tenant cloud installations.
Specify the environment name that identifies the LN server, as defined on the LN UI server.

Only use environments that use the "BaanLogin SSL" protocol.

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.

Keep Connection Open
If this check box is selected, the connection to the LN server is not closed during the polling interval. Select this check box for polling intervals of less than a minute, to prevent the overhead of closing and reopening connections.
If this check box is cleared, the connection to the LN server is closed when the polling interval starts. The connection is reopened when the polling interval has ended. Clear this check box for polling intervals of several minutes, to prevent idle connections.

Handle all Printers
If this check box is selected, these printers are handled by the LN Transfer Service: all available printers defined on the LN server, except those that have been configured in the LN Transfer Service and are not enabled.
If this check box is cleared, only the printers that have been explicitly configured in the LN Transfer Service are handled. Any additional printers that are defined on the LN server are not handled.
See Enabling a printer or file share on page 25.

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 LN Transfer Service" service, and start the service in the usual way.
- On a command line prompt, type `net start InforLNTransfer`

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 Infor LN Transfer 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: `\\`*`server name\printername`* .

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

2 Add the printer in the LN Transfer 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`.

Note: The service must be running to obtain the printer status. If the service is not running, this
printer status is displayed: `Unknown (Please start the Service)`

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.

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 File Share**.

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:

Executable
Specify the command to be executed after the file has been published to the share. You can specify the command manually, or use the **Browse** button to find and select a command.

Arguments
Specify the command line arguments for the specified command executable. You can use the "`$file`" placeholder for the file name of the published file.

Run commands one at a time

If this check box is selected, commands are executed sequentially if multiple files are processed simultaneously.

If this check box is cleared, commands are executed in parallel if multiple files are processed simultaneously.

Select this check box if the selected executable cannot be run multiple times in parallel.

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. A zero exit code of the command is interpreted as success. A non-zero exit code is interpreted as failure. Files are only removed if a command is performed on them.

Stop the command if running longer than...

If this check box is selected, the command is terminated if it has not completed after the amount of time specified in the **minutes** box. Use this to prevent hanging processes.
If this check box is cleared the command keeps running until it is completed.

Testing a command for a file share

To test whether the specified command works as expected:

1. In the configuration console, open the connection node and select the file share.

2. In the **File Share** view, click **Test Command**.

3. In the **Select file** dialog box, select a file on which you want to execute the command. Typically PDF files are published to the share. Therefore, the dialog box only shows PDF files. To use a different type of file, select `All files (*.*)` instead of `PDF files (*.pdf)` in the drop-down box of the dialog box.

4. Click **Open** to use the selected file.

5. Verify the summary in the **Confirm Command Execution** message window, and click **OK** to proceed.

   After the command has finished a **Command Execution** message window shows success or failure.

6. Click **OK** to close the message window.

   Note:

   • **Delete file after executing command** is not performed in this test. Therefore, you can repeat the test several times without losing the test file.

   • The test is executed based on the command executable and arguments as specified in the view. You do not have to save those settings before you start the test.

   • The service must be running when you test a command.

Adding a download folder to a connection

Note: Download folders are only supported for LN environments that run on a Windows platform. On the LN server, Tools version 10.6.0.1 or later is required.

You can use two types of storage for the location of a download folder in the cloud:

- A location relative to the `${BSE}/appdata` folder on the LN server
- A location relative to a tenant-specific path in an Amazon S3 bucket

In the configuration console, these storage types are displayed as "LN" and "S3" respectively.

To use the "S3" functionality, Tools version 10.7.0.1 is required on the LN server. The `ttrpiln-transfer-service.javaapp` Java application must be deployed on the LN server. If required, use the **Deploy Java Applications (ttadv2570m300)** LN session to deploy the latest version of this application.

1   This step is only applicable for the "LN" storage type. On the LN server, create a folder to be used as "source folder" for the download. Create this folder as a subfolder of `${BSE}/appdata`.

   The service downloads all files from this source folder and its subfolders, and places them in a matching folder structure on a local system. After downloading the files, they are removed from the source folder. If an `archive` folder has been defined under `${BSE}/appdata` on the LN server, the files are placed in that folder. Otherwise the files are deleted.

2   This step is only applicable for the "LN" storage type. Specify the appropriate folder permissions for the source folder and, if applicable, the archive folder.

   Ensure that the LN account that is used for the connection has read and write access for these folders.

3   On the local system, create a folder to be used as target folder for the download.

   Create this folder on the file system of the system that runs the LN Transfer Service or on a share in the local network.

   Ensure the permissions on the folder allow read and write access to the account that runs the service.

4   In the configuration console, select the connection node in the tree and click **Add Download Folder**.

   a   Specify a name for the download folder. This name is displayed in the tree. It does not have to match the actual folder name on the LN server or the local system.

   b   Click **OK**.

5   After the download folder is added, it is displayed in the tree as a child node of the connection. Select the download folder node to open the **Download Folder** view.

6   Specify this information:

   Enabled
   If this check box is selected, the download folder is processed by the service, if the connection itself is also enabled.
   If this check box is cleared, the download folder is not processed.

   Storage Type
   Specify the desired type of storage by selecting one of these options:

- **LN**

  The source and archive paths are relative to the `${BSE}/appdata` folder in LN.

- **S3**

  The source and archive paths are relative to the tenant-specific data area in the S3 bucket.

Note: The "LN" storage type can only be used for files smaller than 10 MB.

Remote Source
Specify the folder from which the files must be downloaded:
- For the "LN" storage type, this is a path on the LN server, relative to `${BSE}/appdata`. For example, if you specify **lndata/download**, the `${BSE}/appdata/lndata/download` folder is defined as source folder.
- For the "S3" storage type, this is a folder path relative to the tenant-specific data area in the S3 bucket.

The path consists of folder names, separated by "/" characters.

Archive files after transfer
If this check box is selected, the files from the source folder are relocated to the archive folder after a successful download by the service.
If this check box is cleared, the files from the source folder are deleted after a successful download by the service.

Remote Archive
Specify the folder where the processed files must be placed:
- For the "LN" storage type, this is a path on the LN server, relative to `${BSE}/appdata`.

  For example, if you specify **lndata/archive**, the `${BSE}/appdata/lndata/archive` folder is defined as archive folder.

- For the "S3" storage type, this is a folder path relative to the tenant-specific data area in the S3 bucket. Do not specify a subfolder of the **Remote Source** here.

The path consists of folder names, separated by "/" characters.

Local Target
Specify the folder where the downloaded files are placed. This is a folder on a local system. For example:
- If you specify **C:\data\lndata\download**, the `C:\data\lndata\download` folder on the local machine that runs the service is used as target folder for downloaded files.
- If you specify **\\server\share\download**, the `download` folder on the `\\server\share` network share is used as target folder.

Optionally, click **Browse** to browse to a folder instead of manually typing the path.

Overwrite existing files
If this check box is selected, new download files overwrite old download files with the same name.
If this check box is cleared, new download files do not overwrite old download files with the same name; instead, new files are renamed so that both old and new files can exist in the same folder.

File Name Filter
If this check box is selected, file name filtering is applied to the files in the source folder. Only files that match the pattern are downloaded.

If this check box is cleared, all files in the source folder are downloaded. The filter is applied to the file name only; the folder path of the file is not filtered.

See File name filtering on page 34.

Pattern
The pattern expression. This is either a "wildcard expression" or a "regular expression". For example:

- You specify this wildcard expression: `*.pdf`

  The `abc.pdf` and `123.pdf` files are downloaded. The `abc.dat` and `123.txt` files are not downloaded.

- You specify this regular expression: `.+\.(pdf|txt)$`

  The `abc.pdf` and `123.txt` files are downloaded. The `abc.dat` and `123.txt.tmp` files are not downloaded.

Regular expression
If this check box is selected, the specified pattern is interpreted as a regular expression.
If this check box is cleared, the specified pattern is interpreted as a wildcard expression.

Case sensitive
If this check box is selected, the pattern is interpreted as case-sensitive.
If this check box is cleared, the specified pattern is interpreted as case-insensitive.
For example:

- A case-sensitive wildcard pattern `a*.txt` accepts file name `all.txt`, but does not accept `ALL.txt`.
- A case-insensitive wildcard pattern `a*.txt` accepts both `all.txt` and `ALL.txt`.

7 Optionally, test the status of the folders, to ensure you specified the correct paths for the folders.

8 Click **Save**.

Testing the status of a download folder

1 In the configuration console, select the download folder. The **Download Folder** view is displayed.

2 Click **Test**.

A **Test Folder Access** dialog box is displayed. After a few seconds the status of the three folders is displayed. If everything has been configured correctly, all three folders are marked as "OK".

If messages, such as `Folder does not exist` or `Folder is not writable` are displayed, verify that the folder is indeed present and has the correct permissions.

3 Click **Close**.

Adding an upload folder to a connection

Note: Upload folders are only supported for LN environments that run on a Windows platform. On the LN server, Tools version 10.6.0.1 or later is required.

You can use two types of storage for the location of an upload folder in the cloud:

- A location relative to the `${BSE}/appdata` folder on the LN server
- A location relative to a tenant-specific path in an Amazon S3 bucket

In the configuration console, these storage types are displayed as "LN" and "S3" respectively.

To use the "S3" functionality, Tools version 10.7.0.1 is required on the LN server. The `ttrpiln-transfer-service.javaapp` Java application must be deployed on the LN server. If required, use the **Deploy Java Applications (ttadv2570m300)** LN session to deploy the latest version of this application.

1   This step is only applicable for the "LN" storage type. On the LN server, create a folder to be used as "target folder" for the upload. Create this folder as a subfolder of `${BSE}/appdata`.

    The service uploads files from a source folder on a local system into this target folder, and creates subfolders as required.

2   This step is only applicable for the "LN" storage type. Ensure that the folder permissions allow read and write access to the LN account that is used for the connection.

3   On the local system, create a folder to be used as "source folder" for the upload.

    Create this folder on one of these locations:

    - The file system of the system that runs the LN Transfer Service
    - A network share of a Windows system in the local network

    Files from this source folder and its subfolders are uploaded to the remote LN server into a matching folder structure in the "target folder". After a successful upload, the files are removed from the source folder. If an `archive` folder has been defined on a local system, the files are placed in that folder. Otherwise the files are deleted. Ensure the permissions on the source folder and, if applicable, `archive` folder allow read and write access to the account that runs the service.

4   In the configuration console, select the connection node in the tree and click **Add Upload Folder**.

    a   Specify a name for the upload folder. This name is displayed in the tree. It does not have to match the actual folder name on the LN server or the local system.

    b   Click **OK**.

5   After the upload folder is added, it is displayed in the tree as a child node of the connection. Select the upload folder node to open the **Upload Folder** view.

6   Specify this information:

    Enabled
    If this check box is selected, the upload folder is processed by the service, if the connection itself is also enabled.
    If this check box is cleared, the upload folder is not processed.

    Local Source
    Specify the folder that contains the files to be uploaded.
    This is a folder on a local system. For example:

- If you specify **C:\data\lndata\upload**, the `C:\data\lndata\upload` folder on the local machine that runs the service is used as source folder for files to be uploaded.
- If you specify **\\server\share\upload**, the `upload` folder on the `\\`*server*`\`*share* network share is used as source folder.

Optionally, click **Browse** to browse to a folder instead of manually typing the path.

Archive files after transfer
If this check box is selected, the files from the source folder are relocated to the archive folder after a successful upload by the service.
If this check box is cleared, the files from the source folder are deleted after a successful upload by the service.

Local archive
Specify the folder where the processed files must be placed.
This is a folder on a local system. For example:
- If you specify **C:\data\lndata\archive**, the `C:\data\lndata\archive` folder on the local machine that runs the service is used as archive folder for files to be uploaded.
- If you specify **\\server\share\archive**, the `archive` folder on the `\\`*server*`\`*share* network share is used as archive folder

Optionally, click **Browse** to browse to a folder instead of manually typing the path.

Storage Type
Specify the desired type of storage by selecting one of these options:
- **LN**

  The target path is a path relative to the `${BSE}/appdata` folder in LN.

- **S3**

  The target path is a path relative to the tenant-specific data area in the S3 bucket.

Note: The "LN" storage type can only be used for files smaller than 10 MB.

Remote Target
Specify the folder to which the files must be uploaded:
- For the "LN" storage type, this is a path on the LN server, relative to `${BSE}/appdata`. For example, if you specify **lndata/upload**, `${BSE}/appdata/lndata/upload` is defined as target folder.
- For the "S3" storage type, this is a folder path relative to the tenant-specific data area in the S3 bucket.

The path consists of folder names, separated by "/" characters.

Overwrite existing files
If this check box is selected, new upload files overwrite old upload files with the same name.
If this check box is cleared, new upload files do not overwrite old upload files with the same name; instead, new files are renamed so that both old and new files can exist in the same folder.

File Name Filter
If this check box is selected, file name filtering is applied to the files in the source folder. Only files that match the pattern are uploaded.
If this check box is cleared, all files in the source folder are uploaded. The filter is applied to the file name only; the folder path of the file is not filtered.

See

Pattern
The pattern expression. This is either a "wildcard expression" or a "regular expression". For example:

- You specify this wildcard expression: `*.pdf`

  The `abc.pdf` and `123.pdf` files are uploaded. The `abc.dat` and `123.txt` files are not uploaded.

- You specify this regular expression: `.+\.(pdf|txt)$`

  The `abc.pdf` and `123.txt` files are uploaded. The `abc.dat` and `123.txt.tmp` files are not uploaded.

The pattern expression. This is either a "wildcard expression" or a "regular expression". For example:

Regular expression
If this check box is selected, the specified pattern is interpreted as a regular expression.
If this check box is cleared, the specified pattern is interpreted as a wildcard expression.

Case sensitive
If this check box is selected, the pattern is interpreted as case-sensitive.
If this check box is cleared, the specified pattern is interpreted as case-insensitive.
For example:

- A case-sensitive wildcard pattern `a*.txt` accepts file name `all.txt`, but does not accept `ALL.txt`.
- A case-insensitive wildcard pattern `a*.txt` accepts both `all.txt` and `ALL.txt`.

7 Optionally, test the status of the folders, to ensure you specified the correct paths for the folders.
8 Click **Save**.

Testing the status of an upload folder

1 In the configuration console, select the upload folder. The **Upload Folder** view is displayed.
2 Click **Test**.

A **Test Folder Access** dialog box is displayed. After a few seconds the status of the three folders is displayed. If everything has been configured correctly, all three folders are marked as "OK".

If messages, such as `Folder does not exist` or `Folder is not writable` are displayed, verify that the folder is indeed present and has the correct permissions.

3 Click **Close**.

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 12.

Configuring logging

1 In the configuration console, select the top-level node, **Infor LN Transfer Service**, 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 26.

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

If the log file reaches its maximum size of 1 MB, `LNTransferService.log` is renamed to `LNTransferService.log.1`. The existing `LNTransferService.log.1` is renamed to `LNTransferService.log.2`, and so on. `LNTransferService.log.9` is renamed to `LNTransfer Service.log.10`, and the existing `LNTransferService.log.10` is deleted.

Chapter 6: Configuration console UI

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 27.

Using the main view

1 To open the main view, select the top-level node, **Infor LN Transfer Service**, 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 25.

c   If the top-level node, **Infor LN Transfer Service**, 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 12.

Save
Saves all changes that were made in the console screens to the configuration file of the Infor LN Transfer 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 12.
- 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 14.

Printer view

Use this view to perform these actions:

- View the status of a printer.
  See Viewing the status of a printer on page 16.
- Enable or disable a printer.

See Enabling a printer or file share on page 25.

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 17.
- Test a command for a file share.
  See Testing a command for a file share on page 18.
- Retry failed commands.
  See Handling failed commands on page 32.
- Test a file share.
  See Testing a file share on page 17.
- Enable or disable a file share.
  See Enabling a printer or file share on page 25.

Download Folder view

Use this view to perform these actions:

- Configure source, archive, and target for the download folder.
  See Adding a download folder to a connection on page 19.
- Test the download folder.
  See Testing the status of a download folder on page 21.

Upload Folder view

Use this view to perform these actions:

- Configure source, archive, and target for the upload folder.
  See Adding an upload folder to a connection on page 22.
- Test the upload folder.
  See Testing the status of an upload folder on page 24.

Configure Logging dialog box

Use this view to specify logging settings.

See [Configuring logging](#) on page 25.

Chapter 7: Advanced Topics

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 LN Transfer 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 LN Transfer 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 executable and arguments. For details, see the documentation of the PDF reader.
      For example, if you installed Sumatra PDF on the client, browse to the `SumatraPDF.exe` file to specify the correct path for the executable. For example: `C:\Program Files\Sumatra PDF\SumatraPDF.exe`

Specify the command line arguments, containing the UNC path of the printer and the `$file` placeholder. For example: `-print-to \\SRV_DEV2\PNL0123 -exit-when-done $file`

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

Handling failed commands

At runtime, commands may be executed on files that are published to a file share. If such a command does not finish successfully, the file is copied to a `failures` subfolder of the file share. In the configuration console, you can retry the command on the failed items.

To perform a retry:

1 In the configuration console, open the connection node and select the file share.

The number of failures is listed in the **Failures** section. If there are any failures, the **Retry** button is enabled.

2 Click **Retry** to retry the command on all failed items.

When processing more than one item, you can click **Cancel** to interrupt the retry process. In that case the command for the current item continues, but the remainder of the items is not processed.

After all items have been processed, a message box is displayed, showing how many items succeeded, and how many items failed.

3 Click **OK** to close the message box.

If a retry is successful, the corresponding file is removed from the `failures` subfolder of the file share. If **Delete file after executing command** is selected, the original file on the file share is also removed.

If a retry failed, the corresponding file remains in the `failures` subfolder. In this case, you should try and find the cause for the failure, fix the problem, and try again.

Adding an authorized app for the Infor LN Transfer Service

1 Start Infor Ming.le/Infor OS.

2 In a multi-tenant cloud installation, log on to the correct tenant environment.

3 Click the **App Menu** icon and select **Infor ION API**.

4 Select **Authorized Apps**.

5 On the **Authorized Apps** page, click **+** to add a new app.

6 Specify this information:

Name
Specify a name, such as `LNTransferService`.

Type
Select `Backend Service`.

Description
Specify a description, such as `Infor LN Transfer Service`.

OAuth 2.0 Access Token
Leave the value at `2 Hours`.

Issue Refresh Tokens
Ensure this option is enabled.

Refresh Token Grant Lifetime
Leave the value at `0 Hours`.

7   Click **Save**.

Downloading the credentials of an authorized app

1   Start Infor Ming.le/Infor OS.
2   In a multi-tenant cloud installation, log on to the correct tenant environment.
3   Click the **App Menu** icon and select **Infor ION API**.
4   Select **Authorized Apps**.
5   Select the "LNTransferService" app. The details of the app are displayed.
6   Click **Download Credentials**.The **Download Credentials** dialog box is displayed.
7   Complete one of these steps:
   a   In a multi-tenant cloud installation, activate the **Create Service Account** option and leave the **User Name** field blank.
   b   In a single-tenant cloud installation, activate the **Create Service Account** option. In the **User Name** field, specify a service user. Usually, a user called "cloudprinting" is provisioned by the Infor Cloud team.
   c   In an on-premises installation, activate the **Create Service Account** option. In the **User Name** field, specify a service user. This user is created and maintained by your administrator.
8   Click **DOWNLOAD**.
   The credentials are downloaded as `.ionapi` file to your downloads folder. The file name matches the app name you specified in the **Authorized Apps** page. For example, `LNTransferService.ionapi`.

File name filtering

In the **Upload Folder** and **Download Folder** views, you can define a filter that determines which files in the source folder are considered for upload or download.

This can be useful in this situation:

You want to download data files with a `.dat` file name extension, but the process that writes those files takes a long time. To prevent that partially written files are downloaded, the process that writes the files should write them with a `.tmp` extension. After a file has been completely written, it should be renamed to `.dat`. To ensure that only the completed `.dat` files are downloaded, you must use a file name filter that matches `.dat` but not `.tmp`.

The filter is applied to the name of the file, not to any folders in the file path. For example, if the source folder contains a subfolder `abc` with a file called `123.dat`, the filter is applied to `123.dat`, not to `abc/123.dat`.

You can specify the filter as a wildcard expression or as a regular expression. The filter can be case-sensitive or case-insensitive.

In a wildcard expression, two characters have a special meaning:

- A question mark (?) matches any character.
- An asterisk (*) matches zero or more characters.

A regular expression has more characters with a special meaning. It can be used for more complicated filters where a wildcard does not suffice. For more information on regular expressions, see https://docs.microsoft.com/en-us/dotnet/standard/base-types/regular-expression-language-quick-reference.

Examples

This table shows some examples of wildcard expressions:

Wildcard expression	Description
`*.dat`	Matches all files with a `.dat` extension. `abc.dat` and `ABC.dat` match. `abc.DaT` does not match if the expression is case-sensitive, but matches if the expression is case-insensitive. `abc.tmp` and `abc.dat2` do not match.
`a*.txt`	Matches all files that start with "a" and end in a `.txt` extension. `a.txt`, `a1.txt`, and `abc.txt` match. `Abc.txt` and `abc.TXT` only match if the expression is case-insensitive. `0a.txt` and `a.txt.tmp` do not match.

Wildcard expression	Description
`a??.txt`	Matches all files that start with "`a`" followed by two characters, and end in a `.txt` extension. `abc.txt` and `a12.txt` match. `ABC.txt` and `a12.txT` only match if the expression is case-insensitive. `a1.txt` and `a123.txt` do not match.

This table shows some examples of regular expressions:

Regular expression	Description
`\.(txt|dat)$`	Matches all files with a `.txt` or `.dat` extension.
`\.(?!tmp$)[^.]+$`	Matches all files with an extension other than `.tmp`.
`^a\d{2}\.txt$`	Matches all files that start with "`a`" followed by two digits, and end in a `.txt` extension.