Perceptive Connector for Infor Lawson AP Invoice Automation

Installation and Setup Guide

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Table of Contents

What is Perceptive Connector for Infor Lawson Accounts Payable Invoice Automation?

Perceptive Connector for Infor Lawson APIA (Accounts Payable Invoice Automation) integrates Perceptive Content and Infor Lawson APIA, facilitating the exchange of invoice metadata and images captured in Perceptive Content and automating the invoice creation process in APIA.

The Infor Lawson connector relies upon Perceptive Connect Runtime, which provides independent messaging and data exchange between applications. Perceptive Connect Runtime acts as a connector hub that allows you to configure, create, and maintain operation mapping between Perceptive products and Infor Lawson APIA without the need to access the file system. This guide outlines the procedures to install and configure the connector on Perceptive Connect Runtime. For more information on installing Perceptive Connect Runtime, refer to the *Perceptive Connect Runtime Installation Guide*.

Overview of the set up process

To install and configure the Perceptive Connector for Infor Lawson AP Invoice Automation, complete the following sections.

- Install the connector
- Configure Perceptive Content to use the connector
- Create and configure the channels

Install the connector

The Perceptive Connector for Infor Lawson 2.0.0-all.zip file includes the files required to integrate Perceptive Connector for Infor Lawson AP Invoice Automation, Perceptive Content, and your Infor Lawson APIA.

You can install Perceptive Connector for Infor Lawson and related files manually using Perceptive Connect Runtime Web Console or from the “Upload new bundles” section in Perceptive Connect Runtime. You must install the connector on the same computer as the Perceptive Connect Runtime service.

Obtain and store the installation files

You can obtain the **Perceptive Connector for Infor Lawson 2.0.0** installation files and store them in a temporary directory on your computer for installation purposes.

To obtain the installation files, contact the Hyland Software Technical Support group. For a list of Technical Support contact numbers, go to hyland.com/pswtscontact.

Install the connector using the drag-and-drop feature in Perceptive Connect Runtime

To install Infor Lawson connector in Perceptive Connect Runtime, complete the following steps.

1. In a browser, type the Dashboard address in the format `http://<Perceptive Connect Runtime machine name>:<port>`.
2. Enter values for **User Name** and **Password**, if prompted. The default user name and password is `admin`.

3. In the left pane, under **Manage**, click **Install a Connector**.
4. In the **Perceptive Connect Runtime** homepage, on the **Upload new bundles** page, drag the **perceptive-connector-inforlawson-2.0.0.jar** file to the area designated by the box.

   Result Complete, queued, and processing files appear at the bottom of the page. After Perceptive Connect Runtime processes an item, a summary of the processed files, as well as an overview describing how many channels were affected by the installation, is displayed.

   Note: The affected channel summary contains the following lists.

   - **Fixed**. Channels that previously failed to validate and became valid after the installation.
   - **Broken**. Channels that previously validated and became invalid after the installation.
   - **Unknown**. Channels that PCR cannot verify as valid or invalid for the report. Usually, this is a byproduct of older channels with trigger parameters that are not stored in the database as plain text.
5. Perform one of the following actions.
   - Click **Accept** to accept the installation.
   - Click **Roll back** to undo the installation.

   Note: You must accept or roll back the installation before PCR can process the next item. The bundle installation summary contains the following categories.

   - **Installed**. Bundles installed from the file or archive and uploaded by the user.
   - **Failed**. Bundles that failed to install. This includes a message with the reason for failure.
   - **Skipped**. Files that PCR cannot install, such as non-JAR files.

Install the connector manually using Perceptive Connect Runtime

You can install the Infor Lawson connector and related files manually from the Perceptive Connect Runtime Web Console page on Perceptive Connect Runtime. To install the Infor Lawson connector, complete the following steps.

Important If you want to install Infor Lawson connector on the latest version of Perceptive Connect Runtime, you must first uninstall the current version of Perceptive Connect Runtime and then install the latest version of Perceptive Connect Runtime. However, uninstalling the earlier version of Perceptive Connect Runtime uninstalls all Perceptive products installed on Perceptive Connect Runtime. Before you uninstall an earlier version of Perceptive Connect Runtime, make sure that you have the latest versions of Perceptive products that are compatible with the Perceptive Connect Runtime version you are installing.

1. From the temporary directory where the **Perceptive Connector for Infor Lawson 2.0.0-all.zip** file is extracted, navigate to the **script** folder and copy the following files to the **[*drive:*]\inserver6\script** directory.
   - **GetDCExportObject.js**
   - **LawsonUpdateNotes.js**
   - **Util_Debug.js**
2. Copy the **PerceptiveConnectExtensions.js** from **[*drive*:]\Perceptive Connect\script** file to the **[*drive*:]\inserver6\script** directory.

3. In a browser, navigate to the **Perceptive Connect Runtime Web Console** URL in the format `http://<Perceptive Connect Runtime machine name or IP>:<port>`.

   Note The Perceptive Connect Runtime service runs on port 80 by default. Each instance of Perceptive Connect Runtime that runs on a single host machine requires a unique port number.

4. In the browser dialog box, enter the Web Console user name and password.

   Note The default user name and password are `admin`. However, the administrator can change the default settings during the Perceptive Connect Runtime installation process.

5. In the **OSGI Bundles** page, click **Install/Update**.
6. In the **Upload/Install Bundles** dialog box, complete the following substeps.
   1. Select the **Start Bundle** check box.
   2. Clear the **Refresh Packages** check box.

   Note The **Start Level** remains at the default value.

7. To install the JAR files included in the connector ZIP file, complete the following substeps.
   1. Click **Choose Files** and navigate to the connector in your temporary directory.
   2. Select the **perceptive-connector-inforlawson-2.0.0.jar** file, and click **Open**.
   3. Click **Install or Update**.

Upgrade the connector

Before upgrading the connector from version 1.x to 2.0.x, you must delete all the existing bundles and channels and follow the installation procedure as discussed above.

Configure Integration Server using the web console

Complete the following steps to provide Integration Server credentials in Perceptive Connect Runtime Web Console.

1. Log in to **Perceptive Connect Runtime Web Console**.
2. In the left pane, under **MANAGE**, click **Configure**. In the **Configuration** page, in the **Perceptive Content Connector** section, click **Edit the configuration values**  next to **Connection Manager**.
3. In the **Connection Manager** dialog box, complete the following substeps.
   1. In the **Connection Provider Target** list, select the specific version of your Integration Server.
   2. In the **User Name** box, type the user name of the service or admin account that is used to access Perceptive Content through Integration Server.
   3. In the **Password box**, type your password.
   4. Click **Save**.

Configure Infor Lawson AP Invoice Automation connectivity

You can configure multiple Infor Lawson APIA connections in the connector. To configure the Infor Lawson APIA connection, complete the following steps.

1. In the left pane, under **MANAGE**, click **Configure**.
2. In the **Configuration** page, under **Perceptive Content Connector**, select the specific version of your Integration Server.
3. In the **Integration Server <version number> Connection** dialog box, ensure that the **Integration Server URL** box displays the correct URL.
4. Navigate to the **View Configuration** page. Under **Perceptive Connector for Infor Lawson APIA**, click **Edit the configuration values** next to **Perceptive Connector for Infor Lawson APIA Configuration**.
5. In the **Infor Lawson APIA Configuration** dialog box, complete the following substeps.
    1. In the **Client Hostname** box, enter the hostname/IP Address of the system where Infor Lawson APIA is installed.
    2. In the **Lawson Service** list, select **SOAP**.
    3. In the **Invoice Header WSDL** box, enter the Infor Lawson WSDL for Invoice header posting.
    4. In the **Invoice Detail WSDL** box, enter the Infor Lawson WSDL for Invoice line posting.
    5. In the **Invoice Header Namespace** box, enter the Infor Lawson header namespace for Invoice header posting.
    6. In the **Invoice Details Namespace** box, enter the Infor Lawson details namespace for Invoice lines posting.
    7. In the **Base URL Indicator** list, select the appropriate version name of WebNow or Perceptive Web.
    8. In the **Perceptive Web URL** box, type the Perceptive Web URL that facilitates viewing of invoice.
    9. In the **WebNow URL** box, type the WebNow URL that facilitates viewing of invoice.
    10. Select the **Anonymous Login** check box to allow users to view invoices stored in Perceptive Content from Infor Lawson APIA without logging in to Perceptive Content.
    11. Select the **Success Message** check box to enable adding of success messages to the **Notes** box of the Perceptive Content document.
    12. Select the **Error Message** check box to enable adding of error messages to the **Notes** box of the Perceptive Content document.
    13. Click **Save**.

Configure Perceptive Content to use the connector

Perceptive Content workflow with Envoy services facilitates back-end integration of Perceptive Content with your Infor Lawson AP Invoice Automation application. The Integration automated system queue you implement in your workflow process sends a web service notification using the Envoy service operation name you define.

The Infor Lawson application receives the data you configure. After this process is complete, your Infor Lawson APIA sends a success or failure response using Perceptive Integration Server. Perceptive Content can route the file forward in the Perceptive Content workflow for additional processing.

For additional information, refer to the "Configure Perceptive Content" section in the *Perceptive Connector for Infor Lawson AP Invoice Automation Integration Guide*.

Create and configure the channels

A channel is a combination of a trigger, an action, and one or more results. You create and configure channels using the Perceptive Connect Runtime Web Console. When you create a channel, you first select a trigger and then select a compatible action available with the connector. Finally, you map the channel to write the results to Perceptive Content. The following table provides a list of triggers you need to create and the actions you need to associate to allow Infor Lawson connector to map data processed between Infor Lawson APIA and Perceptive Content.

Trigger	**Action**
Integration ASQ Trigger	Lawson Create Invoice Action
Lawson Document Update Trigger	Lawson Document Update Action

The triggers and associated actions are interdependent and enable the connector to process invoice data in Infor Lawson APIA, and update custom properties of the invoice document in Perceptive Content after successful processing of data.

Channel creation details

- You need to create two channels in Perceptive Connect Runtime for proper functioning of the Infor Lawson connector – one to create an invoice in Infor Lawson APIA and the other to update the Perceptive Content document custom properties when an inbound call is initiated from the Infor Lawson APIA system. You may also create further channels to update the document's APIA status in Perceptive Content. There is also an option to import a channel in XML format to enhance the channel creation process.
- The Create Invoice Channel initiates when a document in Perceptive Content is transferred to a preconfigured workflow queue of type Integration ASQ or Connect ASQ. The Integration ASQ Trigger initiates as soon as it receives a document ID. The Invoice Object Reader used in the channel (see the sample mapping for the Create Invoice Channel) reads the DC Sub Object of the document by its document ID. Following this action, the Lawson Create Invoice Action creates an invoice in the Infor Lawson APIA system with the assistance of the exposed SOAP service from Infor Lawson APIA. In case of any failure in the process, the document routes to the preconfigured failure queue.
- The Document Update channel initiates when it receives an inbound call from Infor Lawson APIA, after creation of an invoice. The Lawson Document Update Trigger enables data transmission to the channel and the document properties are updated in Perceptive Content with the help of the Object Property Writer (see sample mapping for the Update Invoice Channel).

Create an invoice creation channel using the Integration ASQ Trigger

To create the channel, complete the following steps.

1. Log in to **Perceptive Connect Runtime Web Console**.
2. In the left pane, under **Manage**, click **Create a Channel**.
3. Optional. In the right pane, in the **Channel** section, enter a name and description for the channel.
4. In the **Select a trigger** list, select the **Integration ASQ Trigger**.
5. In the **Workflow Queue ID** box, type the Submit Queue ID from Perceptive Content Workflow Designer.
6. Click **Continue**.
7. In the **Select an action** list, select the **Lawson Create Invoice Action**. A configurable XML appears.
8. From the temporary directory where you downloaded the connector files, open the **Create Invoice.txt** file in the **Channel Mappings** folder under **Sample Mappings**.
9. Replace the contents of the **Inputs** XML text editor with the contents of the **INPUT MAPPING** section.

   Note Ensure that the **InputDateFormat** and **LawsonDateFormat** are correctly configured in the **INPUT MAPPING**.
10. Optional. You can click **Save Inputs** to save the input mapping.
11. Optional. You can click **Validate Inputs** to validate the input mapping.
12. Replace the contents of the **Outputs** XML text editor with the contents of the **OUTPUT MAPPING** section.
13. Optional. You can click **Save Outputs** to save the output mapping.
14. Optional. You can click **Validate Outputs** to validate the output mapping.
15. Click **Enable channel**. When you are prompted to enable the channel, click **OK**.

Create an update invoice channel using the Lawson Document Update Trigger

To create an update invoice channel, complete the following steps.

1. Log in to **Perceptive Connect Runtime Web Console**.
2. In the left pane, under **Manage**, click **Create a Channel**.
3. Optional. In the right pane, in the **Channel** section, enter a name and description for the channel.
4. In the **Select a trigger** list, select the **Lawson Document Update Trigger**.
5. In the **Trigger Identifier** input box, enter `GLOBAL`.
6. Click **Continue**.
7. In the **Select an action** list, select the **Lawson Document Update Action**. A configurable XML appears.
8. From the temporary directory where you downloaded the connector files, open the **Update Invoice**.txt file in the **Channel Mappings** folder under **Sample Mappings**.
9. Replace the contents of the **Inputs** XML text editor with the contents of the **INPUT MAPPING** section.

10. Optional. You can click **Save Inputs** to save the input mapping.
11. Optional. You can click **Validate Inputs** to validate the input mapping.
12. Replace the contents of the **Outputs** XML text editor with the contents of the **OUTPUT MAPPING** section.
13. Optional. You can click **Save Outputs** to save the output mapping.
14. Optional. You can click **Validate Outputs** to validate the output mapping.
15. Click **Enable channel**. When you are prompted to enable the channel, click **OK**.

Import Configured Channels

You can import channels in the form of XML files to fast forward the channel creation process.

Note Before importing the channels, you should replace the Workflow Queue ID in the Create Invoice XML with the Submit Queue ID from from Perceptive Content Workflow Designer.

Import channels

To import channels, complete the following steps.

1. Log in to **Perceptive Connect Runtime Web Console**.
2. In the left pane, under **Manage**, click **Import Channels**.
3. Optional. In the right pane, in the **Channel** section, enter a name and description for the channel.
4. From the temporary directory where you downloaded the connector files, open the relevant XML files in the **Importable Channels – PCR 1.5.40 onwards** folder under **Sample Mappings**.
5. On the **Upload New Channels** page, drag and drop the relevant files in the area designated by the box.

Note All files processed are displayed at the bottom of the page in a list view. When a file is expanded from the files list view, the following information is available.

- A list of all the files processed as per the file that was imported.

  You can select each file by clicking on the file name. When a file is selected, a report appears on the right. A report may contain the following information based on results from the import.

  - Channel information
  - ID
  - Name
  - Action
  - General errors
  - Trigger errors
  - Input errors
  - Output errors

6. Click the expand icon above the report to view the details of the entire report.

Appendix: List of invoice header and detail elements

The following table lists all the “header” and “detail” elements that you can map between DCExport data and Infor Lawson APIA.

Header	Detail
FINANCEGROUP	LINENO
IMAGENOWDOCID	PONUMBER
INVOICEIND	POCODE
DOCTYPE	PORELEASE
INVOICETYPE	POLINE
POTYPE	DESCRIPTION
COMPANYCODE	QUANTITY
INVOICENO	UNITPRICE
INVOICEDATE	INVOICEUOM
VENDORID	VENDORITEM
REMITTO	COMMODITYCODE
VENDORNAME	PRODUCTTAXCATEGORY
BILLTONAME	
PONUMBER	
TAX	
AMOUNT	
CURRENCY	
ICMS	
DELCOST	
FREIGHT	
CREDITMEMONUMBER	
VENDORGROUP	
PORELEASE	

Header	Detail
DUEDATE	
DISCOUNTDATE	
ALLOWABLEAMOUNT	
TAXABLEAMOUNT	
TERMSDESCRIPTION	
PROCESSLEVEL	
APCLERK	
RETURNNUMBER	
HIGHPRIORITY	
DESCRIPTION	
FILENAME	
SOURCE	
SCANDATE	
OVERRIDEEXCHANGERATE	
MAINCONTACTFAMILYNAME	
MAINCONTACTGIVENNAME	
COUNTRYNAME	
ADDRESSLINE1	
ADDRESSLINE2	
ADDRESSLINE3	
ADDRESSLINE4	
MUNICIPALITY	
STATEPROVINCECODE	
POSTALCODE	
COUNTY	

Header	Detail
WEBADDRESS	
INVOICECURRENCY	
EXTERNALREASONCODE	
EXTERNALREASON	
EXTERNALBATCHNAME	
ROUTINGCATEGORY	
ALPHAATTRIBUTE1	
ALPHAATTRIBUTE2	
ALPHAATTRIBUTE3	
ALPHAATTRIBUTE4	
ALPHAATTRIBUTE5	
ALPHAATTRIBUTE6	
ALPHAATTRIBUTE7	
ALPHAATTRIBUTE8	
NUMERICATTRIBUTE1	
NUMERICATTRIBUTE2	
NUMERICATTRIBUTE3	
NUMERICATTRIBUTE4	
NUMERICATTRIBUTE5	
DATEATTRIBUTE1	
DATEATTRIBUTE2	
HANDLINGCODE	
CREATIONSOURCE	
SOURCENAME	
SOURCETELEPHONENUMBER	

Header	Detail
SOURCEEMAILADDRESS	
VENDORAGREEMENT	
PAYMENTCODE	
DISTRIBUTIONDATE	