Infor LN Configuration Guide for Infor ION API

Infor LN 10.4 or LN 10.5 and later
Infor Operating System 12.0.23 and later

Contents

About this guide

This guide provides information for the configuration of Infor LN web services with Infor ION API.

Use this guide when Infor LN and Infor Operating Service (OS) are both installed on-premises.

Intended audience

This guide is intended for the system administrator or consultant who configures Infor LN web services for use with Operating Service, specifically with ION API.

Contacting Infor

If you have questions about Infor products, go to the Infor Xtreme Support portal at www.infor.com/inforxtreme.

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.

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Chapter 1 Requirements

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Ensure that all the requirements are met.

Required products

Install and configure these products:

- Infor Operating Service (OS) version 12.0.23 and later.

    The installation of Infor OS includes these products:

    1 Infor Ming.le

    2 Infor ION and ION API

    3 Infor Document Management

    4 ION Grid

    The server on which the Infor XI is installed must connect to the servers on which Infor LN and Infor Enterprise Server connector for Web services are installed.

    SAML session provider is installed with Infor OS and must be configured correctly for your application.

    See the *Infor Operating Service (*OS) *Installation Guide*.

- Infor LN 10.4 or LN 10.5 and later.
- LN Tools version ES 10.6 or later.
- Infor Enterprise Server connector for Web services (C4WS).

    The latest solution from KB 22881149 must be installed.

    See the *Enterprise Server Connector for Web Services Administration and User guide*.

Required information

During the planning phase, you must provide this information:

- An administrator account for Infor Ming.le and ION API.
- Name of the Infor LN instance or logical ID that is used to connect with Infor ION.
- Tenant ID that is used to connect the product to Infor OS in Infor ION.

> **Note:** See Integrating Infor Ming.le – LN Application (Infor OS version) section of the *Infor LN UI Administration Guide*.

- LN Connections configured during installation of Infor Enterprise Server Connector for Web Services. See ERP server configuration section of the *Infor Enterprise Server Connector for Web Services Administration and User guide.*

Chapter 2 Setting up ION APIs for LN

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This chapter explains the configuration of ION API for Infor LN web services.

The ION API acts as an intermediary between API consumers (such as web, mobile, and fat client applications) and backend providers (API servers). In this case, C4WS and Ln Client Service are the API servers for Infor LN.

> **Note:** The Customers must first configure **Connector for Web Services** and **LN Client Service**, before they start deploying **ION API LN Suite**.

Configuring an API suite for LN

To configure the LN API Suite:

1 Log on to the Infor Ming.le portal.

   These security roles are required:

   - Infor-SystemAdministrator
   - IFSApplicationAdmin
   - ION API Administrator

2 Click on the Application Switcher (▦) and select Infor ION API.

3 Click + to add a new API Suite on the ION API Application screen. This lists the API Suite templates for supported LN versions. Select the required LN version API Suite. The **Add New API Suite** screen with application related details is displayed.

   > **Note:** Ensure that the LN version is the same as the LN backend to which the C4WS's ERP server points.

4 Specify this information:

   API Context

   The default value is LN. Do not modify this value.

   Suite Icon

   Select an appropriate icon.

5 Click + on the **Deployment Information** tab.

   Use HTTPS

Enable this feature.

Ignore Certificate Errors

Disable this feature.

Host Name

Specify the fully qualified C4WS web server name.

Port

Specify the port number of C4WS server.

Context

This value must be the LN ERP Server name defined in C4WS that exposes the web services. For more details, check ERP Servers configuration section of the *InforEnterprise Server Connector for Web Services Guide*.

Default Tenant ID

The default Tenant ID. If there is a {TenantID} placeholder in the Target endpoint URL definition, the {TenantID} is replaced by this value.

Target Endpoint Security

The allowed authentication values:

a   **OAuth 1.0a**

Specify this information for this authentication type:

- **Target Endpoint Access Key**: This value must match the value of the **Consumer key** in the C4WS OAuth 1.0a settings.
- **Target Endpoint Secret Key**: This value must match the value of the **Consumer Secret** in the C4WS OAuth 1.0a settings.

  Note: Consumer Key and Consumer Secret are specified on the C4WS Advanced Settings page. For the OAuth 1.0a type, the Activation type of the ERP Server in C4WS is baanlogin_ssl.

b   **Basic**

Specify this information for this authentication type:

- **User ID:** The NT login of a user.
- **Password:** The NT password of a user.

  Note: For the Basic Authentication type, the Activation Type is rexec or baanlogin. Refer to the *Infor Enterprise Server Connector for Web Services Administration and User Guide* for information on ERP server setup in C4WS.

6   Click **Save**.

Double click on the created LN Suite. You can view all the endpoints on the Endpoints tab. All these endpoints, except the *Endpoint used to connect the LN Client Service* must be deployed in the C4WS.

Adding API deployment instance for LN Client Service

These steps are mandatory only when access to LN Client Service is required. The steps to configure the API suite for LN (see above) must be completed.

Note: Infor Operating Service (OS) must be version 12.0.24 and above.

To add API deployment instance for LN client service:

1 Log on to the Infor Ming.le portal.

These security roles are required:

- Infor-SystemAdministrator
- IFSApplicationAdmin
- ION API Administrator

2 Click on the Application Switcher (▦) and select Infor ION API.

3 Select Infor LN from the available APIs.

4 Select + to add a deployment in the Deployment Information section.

5 Specify this information:

Deployment Name

The LN Client Service.

Use HTTPS

Select this check box to enable the HTTPS service.

Ignore Certificate Errors

Select this check box to enable the HTTPS connection to the LN UI web server using an SSL certificate signed by a non-public Certificate Authority. Else, disable the feature.

Host Name

Specify the fully qualified domain name of the LN UI web server.

Port

Specify the HTTPS port number of the LN UI web server.

Context

Specify webui.

Default Tenant ID

This is not a mandatory field.

Use Mutual SSL

Disable the feature.

Authentication Type

Select OAuth 1.0a.

Algorithm

Select HMAC-SHA256.

Target Endpoint Access Key

The value in this field must match the value of the Access Key in the LN UI administration settings for LN Client Service.

Target Endpoint Secret Key

The value must match the value of the Secret Key in the LN UI administration settings for LN Client Service

6   Click **Save**.

7   Select Associate Endpoints for deployment instance LN Client Service.

8   Navigate to the endpoint with description '*Endpoint used to connect to the LN Client Service*; select the Associated Endpoint in dialog Associate Endpoint for a Deployment checkbox and click **Save**.

Adding an authorized app

To add an authorized app:

1   Access **Infor Ming.leTM/Infor OS**.

2   Log on to the correct tenant environment, in a multi-tenant cloud installation.

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

4   Select **Authorized Apps**.

5   Click **+** to add a new app, on the *Authorized Apps* page.

6   Specify the required information.

This information must be specified, for each application:

Application	Required Information
Infor Cloud Printing Service	**Name** Specify a name, such as **LNCloudPrinting** or **InforCloudPrinting**. **Type** Select **Backend Service**. **Description** Specify a description, such as **Infor Cloud Printing Service**. **OAuth 2.0 Access Token** The value in this field is set to **2 Hours**. **Issue Refresh Tokens** This option must be **enabled**. **Refresh Token Grant Lifetime** The value in this field is set to **0 Hours**.
Infor LN Studio	**Name** Specify a name, such as **LN Studio**. **Type** Select **Web**. **Description** Specify a description, such as **Infor LN Studio**. **Redirect URL** Specify **oob://localhost/lnstudio**. **Authorized Javascript Origins** Specify **http://localhost**. **OAuth 2.0 Access Token** The value in this field is set to **2 Hours**. **Issue Refresh Tokens** This option must be **enabled**. **Refresh Token Grant Lifetime** The value in this field is set to **0 Hours**.

Application	Required Information
Cloud Exchange Synchronizer	**Name** Specify a name, such as **Cloud Exchange Synchronizer**. **Type** Select **Backend Service**. **Description** Specify a Description, such as **Infor LN UI**. **Issue Refresh Token** This option must be enabled. **Refresh Token Grant Lifetime** The duration of time and whether the value is in hours or days. If you specify 0, the token does not expire. **Note:** The **Refresh Token Grant Lifetime** value must be greater than or equal to the **OAuth2.0 Access Token** value.
Infor Mobile Service	**Name** Specify a name, such as **Mobile Service**. **Type** Select **Mobile** > **Windows**, if the app runs on Windows devices. Select **Mobile** > **Android**, if the app runs on Android devices. **Description** Specify a description, such as **Mobile Service Application**. **Redirect URL** A redirect URL, such as **http://localhost/mobileservice**. We recommend that you specify a redirect URL in this format: **http://localhost/<a_name>**. **Download URL** Specify https://play.google.com/store/apps/details?id=com.infor.lnmobileservice, if the app runs on Android devices. **Package Name** Specify **com.infor.lnmobileservice**, if the app runs on Android devices. **OAuth 2.0 Access Token** Specify a refresh time. **Issue Refresh Tokens** This option must be **enabled**. **Refresh Token Grant Lifetime** Specify a value, such as **8 Hours**. Specify **0 Hours** if the refresh token must never expire.

7   Click **Save**.

Downloading credentials of an authorized app

To download the credentials:

1   Access **Infor Ming.le/Infor OS**.

2   Log on to the correct tenant environment, in a multi-tenant cloud installation.

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

4   Select **Authorized Apps**.

5   Select the application. The details of the application are displayed.

6   Click **Download Credentials**. The **Download Credentials** dialog box is displayed.

7   Activate the **Create Service Account** option if the app is of the **Backend Service** type.

8   Specify a service user in the **User Name** field. This user is created and maintained by the administrator.

9   Click **DOWNLOAD**.

    The credentials are downloaded as the `.ionapi` file to the download folder. The file name matches the application name specified in the **Authorized Apps** page.

Chapter 3   Verifying the configuration

<div style="text-align:right">**3**</div>

You must verify the ION API configuration.

After the configuration, the endpoints are tested either by using the Postman or the SoapUI tool.

Use the POST method for testing. Specify the URL; the endpoints of the newly created LN ION API Suite. You can consider any simple end point to test the data flow from ION API.

The **Context** value is added as a suffix to the endpoint URL that is displayed in ION API. For testing, this value must be removed from the URL as ION API can handle it internally.

For example, if the endpoint is,

https://<<domain>>:<<port>>/infor/LN/c4ws/services/PurchaseOrder_v2/<<Context>>

then, to test the endpoint, the URL must not have the Context value as the suffix. The endpoint is:

https://<<domain>>:<<port>>/infor/LN/c4ws/services/PurchaseOrder_v2

Note: Ensure that you use the OAuth1.0a Authentication Type.

The authorization token accepted by the ION API, is obtained from *https://<<domain>>:<<port number>>/grid/rest/security/sessions/oauth.*

The token obtained from this url must be passed as one of the headers. This token is active for 2 hours. When expired, you can fetch a new token from the URL.

Headers:

Authorization: Bearer <<token>>

Content-Type: text/xml

Payload:

Currently, LN APIs are SOAP based. Therefore, to test the API, the SOAP request must be added as request body.

Sample payload for Purchase Order:

Note: Replace the Company and Purchase Order number values.

<soapenv:Envelope xmlns:soapenv="http://schemas.xmlsoap.org/soap/envelope/" xmlns:pur="http://www.infor.com/businessinterface/PurchaseOrder_v2" >

   <soapenv:Header>

   <pur:Activation>

         <company>XXXX</company>

```
            </pur:Activation>
        </soapenv:Header>
        <soapenv:Body>
            <pur:Show>
        <ShowRequest>
                    <DataArea>
                        <PurchaseOrder_v2>
                            <PurchaseOrderID>XXXXXXXXX</PurchaseOrderID>
                        </PurchaseOrder_v2>
                    </DataArea>
            </ShowRequest>
            </pur:Show>
        </soapenv:Body>
    </soapenv:Envelope>
```

Now try to test the API call.

Appendix A Documents

A
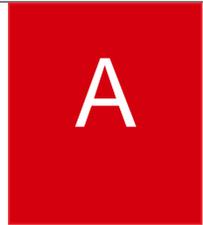
This table lists the guides referred in this document.

Application	Software version	Related installation documentation
LN UI	Infor LN 10.5.1	Infor LN UI Administration Guide
C4WS	10.5.1.1	Infor Enterprise Server Connector for Web Services Administration and User Guide
ION API	ionapi_12.0.X_ionapiag__en-us	Infor ION API Administration Guide
Infor Operating Service (OS)	tsplt_12.0.x_tspltig__en-us	Infor Operating Service Installation Guide.