



Informatica® Data Integration - Free & PayGo

Box Connector

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Preface

Use *Box Connector* to learn how to read from Box by using Data Integration. Learn to create a connection, develop mappings, and mapping tasks in Data Integration.

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CHAPTER 1

Introduction to Box Connector

You can use Box Connector to securely connect to Box from Data Integration.

Box is a cloud-based file storage and content management service for enterprises. You can use Box to securely store, manage, and share files in your enterprise. The users in the enterprise can set access permissions to content in Box and collaborate seamlessly.

You can read data from CSV files in Box. You can specify a search string to search Box based on name, description, content, comments, or tags.

When you read data from CSV files in Box, you can specify the Hosted Agent or the Secure Agent. The agent connects to Box through OAuth after authenticating user credentials.

You can use Box objects as source in mappings and mapping tasks. When you run a mapping or a mapping task, the agent uses the Box API to perform the specified operation.

Box Connector task and object types

When you use Box Connector, you can include the following Data Integration assets:

- Data transfer task
- Mapping
- Mapping task

For more information about configuring assets and transformations, see *Mappings*, *Transformations*, and *Tasks* in the Data Integration documentation.

Operations with Box objects

You can use a Box connection to perform the following operations with Box objects:

Box Sources

- Read data from CSV files in Box.
- Search objects in Box.

Read data from CSV files in Box

You can specify Box sources in mappings and mapping tasks to read data from CSV files in Box.

Specify a Box connection that connects to the Hosted Agent or the Secure Agent as the source connection and specify the source object.

Search Box objects

You can specify Box sources in mappings and mapping tasks to search Box objects.

To search objects to Box, perform the following tasks:

- Specify the search criteria in the **URI Request Parameters** field when you create the Box connection.
- To configure a mapping to search Box objects, specify a Box connection as the source connection and enter `Entities` as the source object.

When you specify `Entities` as the source object, the Secure Agent searches all objects in the root folder on the Secure Agent machine based on the URI request parameters you specify in the Box connections.

Specify the search string in the **URI Request Parameters** field using the following syntax:

```
query=search_string;content_types=<name|description|file_content|comments|tags;limit=<number>;offset=<number>
```

The following table describes the **URI Request Parameters** field options:

Options	Description
Query	Searches the Box objects based on the word or phrase you specify. When you specify a phrase, verify that you enclose the phrase in single quote.
content_types	Specifies the scope of the search. You can use one of the following values: <ul style="list-style-type: none">- Name - Searches based names of Box objects.- Description - Searches based on the description associated with Box objects.- File_content - Searches based on contents in the Box objects.- Comments - Searches based on comments associated with Box objects.- Tags - Searches based on tags associated with Box objects.

Administration of Box Connector

A user can create connections and use the connections in mappings and mapping tasks after an organization administrator performs configuration tasks in Box.

As a user, you can use Box Connector after the organization administrator performs the following tasks:

1. Set up user accounts in Box.
2. Log in to Box and create a Box application to generate a developer token to access the Box accounts.

Note: Because the access token is valid for a limited time, specify the `redirect_URI` parameter to regenerate the access token when you create the Box connection.

3. Verify that OAuth is configured for Box. Contact Informatica Global Customer Support for information.

CHAPTER 2

Box connections

Create a Box connection to access Box data from Data Integration.

You can create a Box connection on the Connections page and use it in the Mapping Designer when you create a mapping.

Box connection properties

When you set up a Box connection, configure the connection properties.

The following table describes the Box connection properties:

Property	Description
Connection Name	Name of the connection. Each connection name must be unique within the organization. Connection names can contain alphanumeric characters, spaces, and the following special characters: _ . + -, Maximum length is 255 characters.
Description	Description of the connection. Maximum length is 4000 characters.
Type	The Box connection type.
Runtime Environment	The name of the runtime environment where you want to run the tasks. You can specify a Secure Agent or a Hosted Agent.
OAuth Access Token	Access token generated by Box.
URI Request Parameters	Parameters to search for files or folders in Box. For example, to search for objects that contain the word "generate", you can use the following string: <code>query=generate;content_types=name;limit=0;offset=0</code> . You can use wildcard characters and enclose phrases or multiple query strings within double quotes.
Source File Path	Not applicable.
Target File Path	Not applicable.

Property	Description
Response Folder Path	Not applicable.
Box File or Folder ID	File ID or the Folder ID of the file or folder in Box from where you want to read the data fromBox. You can get the File ID or Folder ID from the Box URL of the file or folder. For example, the folder Reports has the following Box URL: https://app.box.com/folder/50016834230 In the URL, 50016834230 is the Folder ID of Reports.
Access Token type	Select Manual or Auto Generated.
Access Token	Enter the manually generated access token value.
Client Id	The client identifier issued to the client during the application registration process.
Client secret	The client secret key issued to the client during the application registration process.
Grant type	Enter the string refresh_token .
Refresh token	Enter the refresh token value. If the access token expires, you can use the refresh token to generate a new access token.

Creating a Box connection

To use Box Connector in a mapping or a mapping task, you must first create a connection in Data Integration.

You can configure a connection on the Connections page or in a wizard as you configure a task.

- On the **Connections** page, click **New Connection** to create a connection.
The **New Connection** page appears.
- Enter a name for the Box connection.
A connection name can contain alphanumeric characters, spaces, and the following special characters:
_ . + -
A connection name is not case sensitive.
- Enter a description for the connection.
The description can have a maximum length of 255 characters.
- Select **Box** as the connection type.
The Box Connector Connection Properties appear.
- Select the name of the runtime environment where you want to run the tasks.
- Click **Get Token** to generate the OAuth access token.
- To use the connection to search Box objects, enter a search criteria in the **URI Request Parameters** field.
- Enter the file ID or the folder ID of the file or folder for which you want to use the connection.

9. Click **Save** to save the connection.

You should test the connection before you save the connection details. You can click **Test Connection** to verify if the connection is successful.

Generating the OAuth Access Token

You must generate an OAuth access token when you create a Box connection. The Secure Agent uses the token to securely connect to Box.

1. On the **Connections** page in Data Integration, click **Get Token**.
The **Log In** page appears.
2. Enter the user credentials. You can choose one of the following options:
 - To use Box user account credentials, enter an email address and password associated with the user.
 - To use the single sign on option, click **Use Single Sign On (SSO)** and enter an email address.
3. Click **Authorize**.
4. Click **Grant access to Box**.

The **OAuth Access Token** field in the **Connection** page is updated with the generated token.

CHAPTER 3

Mappings and mapping tasks with Box

You can configure a Source transformation in a mapping to represent a file or folder in Box. When you want to read data from CSV files or search objects in Box, you can specify a Box connection in the Source transformation.

Box sources in mappings

The general properties display the name and description of the Box source. Configure the source and advanced properties for the source object.

The following table describes the source properties that you can configure in a Source transformation:

Property	Description
Connection	Name of the source connection.
Source Type	Source type. Select Single for a single source object.
Source Object	Source object for the mapping. Choose one of the following options: <ul style="list-style-type: none">- Enter the name of the CSV file from which you want to read data.- Enter <code>Entities</code> to search Box objects based on the search criteria specified in the Box connection.

Configure the advanced properties on the Source tab of the Properties panel.

The following table describes the advanced properties of Box sources that you can configure in a Source transformation:

Advanced Property	Description
Source Filter	Not applicable in Box Connector.
Box Source File ID	The file ID or the folder ID that you want to use when you read data from a CSV file in Box. The ID you enter in this property overrides the value specified in the Box File or Folder ID field when you create the Box connection. If you do not enter a value, the mapping uses the Box File or Folder ID that is specified in the Box connection.
Tracing Level	Sets the amount of detail that appears in the log file. You can choose terse, normal, verbose initialization or verbose data. Default is normal.

Creating a Mapping with Box Sources

1. In Data Integration, click **New > Mapping**, and then click **Create**.
2. Specify the name, location, and description. Click **Ok**
You can use alphanumeric characters and underscores (_) in the mapping name.
3. Click **Source** to configure the source properties.
4. In the **Properties** panel, on the **General** tab, enter a name and description.
5. Click the **Source** tab and configure source details.
6. Specify the source type as a **Single Object**.
7. You can choose one of the following options:
 - Enter the name of the CSV file in Box from which you want to read data.
 - Enter **Entities** to search Box objects based on the URI request parameters you specified in the Box connection.
8. Click **Advanced** to specify the advanced source properties.
9. To add a transformation, on the **Transformation palette**, click the transformation name. Or, drag the transformation onto the mapping canvas.
 - a. On the **General** tab, you can enter a name and description for the transformation.
 - b. Draw a link to connect the previous transformation to the transformation.
When you link transformations, the downstream transformation inherits the incoming fields from the previous transformation.
For a Joiner transformation, draw a master link and a detail link.
 - c. To preview fields, configure the field rules, or rename fields, click **Incoming Fields**.
 - d. Configure additional transformation properties, as needed.
The properties that you configure depend on the type of transformation you create.
For more information, see *Transformations*.
 - e. To add another transformation, repeat these steps.

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