



Informatica® Cloud Data Integration
10.5

Data Integration Hub Connector Guide

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Preface

See the *Data Integration Hub Connector Guide* to learn how to create connections, mappings, Data Synchronization tasks, and Mapping Configuration tasks. You can also use this guide to learn how to use the Data Integration Hub Connector to connect to the Data Integration Hub publication repository when you create publication and subscription mappings.

Informatica Resources

Informatica provides you with a range of product resources through the Informatica Network and other online portals. Use the resources to get the most from your Informatica products and solutions and to learn from other Informatica users and subject matter experts.

Informatica Documentation

Use the Informatica Documentation Portal to explore an extensive library of documentation for current and recent product releases. To explore the Documentation Portal, visit <https://docs.informatica.com>.

If you have questions, comments, or ideas about the product documentation, contact the Informatica Documentation team at infa_documentation@informatica.com.

Informatica Intelligent Cloud Services web site

You can access the Informatica Intelligent Cloud Services web site at <http://www.informatica.com/cloud>. This site contains information about Informatica Cloud integration services.

Informatica Intelligent Cloud Services Communities

Use the Informatica Intelligent Cloud Services Community to discuss and resolve technical issues. You can also find technical tips, documentation updates, and answers to frequently asked questions.

Access the Informatica Intelligent Cloud Services Community at:

<https://network.informatica.com/community/informatica-network/products/cloud-integration>

Developers can learn more and share tips at the Cloud Developer community:

<https://network.informatica.com/community/informatica-network/products/cloud-integration/cloud-developers>

Informatica Intelligent Cloud Services Marketplace

Visit the Informatica Marketplace to try and buy Data Integration Connectors, templates, and mapplets:

<https://marketplace.informatica.com/>

Data Integration connector documentation

You can access documentation for Data Integration Connectors at the Documentation Portal. To explore the Documentation Portal, visit <https://docs.informatica.com>.

Informatica Knowledge Base

Use the Informatica Knowledge Base to find product resources such as how-to articles, best practices, video tutorials, and answers to frequently asked questions.

To search the Knowledge Base, visit <https://search.informatica.com>. If you have questions, comments, or ideas about the Knowledge Base, contact the Informatica Knowledge Base team at KB_Feedback@informatica.com.

Informatica Intelligent Cloud Services Trust Center

The Informatica Intelligent Cloud Services Trust Center provides information about Informatica security policies and real-time system availability.

You can access the trust center at <https://www.informatica.com/trust-center.html>.

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Informatica Global Customer Support

You can contact a Customer Support Center by telephone or online.

For online support, click **Submit Support Request** in Informatica Intelligent Cloud Services. You can also use Online Support to log a case. Online Support requires a login. You can request a login at <https://network.informatica.com/welcome>.

The telephone numbers for Informatica Global Customer Support are available from the Informatica web site at <https://www.informatica.com/services-and-training/support-services/contact-us.html>.

CHAPTER 1

Introduction to Data Integration Hub Connector

This chapter includes the following topics:

- [Data Integration Hub Connector Overview, 7](#)
- [Data Integration Hub Connector Task and Object Types, 7](#)
- [Administration of Data Integration Hub Connector, 8](#)

Data Integration Hub Connector Overview

Use Data Integration Hub Connector to enable connectivity to the Data Integration Hub publication repository when you create publication and subscription mappings.

You use Data Integration Hub Connector when you create a Data Integration Hub connection, which you then use in Informatica Intelligent Cloud Services mappings and tasks. In mappings and tasks that Data Integration Hub uses for publication, the Data Integration Hub publication repository is the target of the mapping or task. In mappings and tasks that Data Integration Hub uses for subscription, the Data Integration Hub publication repository is the source of the mapping or task.

Data Integration Hub Connector Task and Object Types

The following table lists the Data Integration Hub object types that you can include in Informatica Cloud tasks:

Task Type	Source	Target	Lookup
Data Synchronization	Yes	Yes	No
Mapping Configuration	Yes	Yes	No

Administration of Data Integration Hub Connector

Before you use the Data Integration Hub connections as sources or targets in mappings and tasks, an administrator must install and configure the Data Integration Hub Connector.

As a user, you can use Data Integration Hub Connector after an administrator performs the following tasks:

- Create and maintain an Informatica Intelligent Cloud Services organization. For more information, see the Informatica Intelligent Cloud Services online help.
- Install the cloud Data Integration Hub Connector. Data Integration Hub Connector is an add-on connector that you must download and install. You cannot install Data Integration Hub Connector as a free trial. For more information, see the *Informatica Cloud Administrator Guide*.

Note: If you do not download and install Data Integration Hub Connector, it does not appear on the **Add-On Connectors** page and is not available for selection when you create a connection.

CHAPTER 2

Data Integration Hub Connections

This chapter includes the following topics:

- [Data Integration Hub Connection Overview, 9](#)
- [Data Integration Hub Connection Properties, 9](#)
- [Rules and Guidelines for Data Integration Hub Connections, 10](#)
- [Creating a Data Integration Hub Connection, 11](#)
- [Configuring Data Integration Hub to Connect to Multiple Secure Agents, 11](#)

Data Integration Hub Connection Overview

Create a Data Integration Hub connection to access data in the Data Integration Hub publication repository. You can use Data Integration Hub connections to specify sources and targets in Informatica Cloud tasks. When you create a Data Integration Hub connection, you enter properties that are specific to the Data Integration Hub environment.

You can create a Data Integration Hub connection on the **Connections** page, or in the Data Synchronization task wizard. The connection becomes available to the entire organization.

Data Integration Hub Connection Properties

When you set up a Data Integration Hub connection, you must configure the connection properties.

The following list describes Data Integration Hub connection properties:

Runtime Environment

The name of the runtime environment where you want to run the tasks.

Data Integration Hub Console URL

The Data Integration Hub Operation Console URL. The default is `https://localhost:18443/dih-console`.

Data Integration Hub Console Username

User name to connect to the Data Integration Hub Operation Console.

Data Integration Hub Console Password

Password to connect to the Data Integration Hub Operation Console.

Data Integration Hub Server URL

The Data Integration Hub server URL. The default is `https://localhost:19553/dx-server-rest-api`.

Must be identical to the URL in the `dx-configuration.properties` file that resides in the Data Integration Hub installation.

Data Integration Hub Internal Username

User name to connect to the Data Integration Hub server.

It must be identical to the username in the `dx-configuration.properties` file that resides in the Data Integration Hub installation.

Data Integration Hub Internal Password

Password to connect to the Data Integration Hub server.

The password must be unencrypted and in the plain text format as in the `dx-configuration.properties` file that resides in the Data Integration Hub installation.

Publication Repository JDBC Connection URL

Optional. The Data Integration Hub publication repository URL.

Must point to the Data Integration Hub publication repository.

For Oracle the format must be `jdbc:informatica:oracle://<host>:<port>;sid=<sidName>`

For Microsoft SQL Server the format must be `jdbc:informatica:sqlserver://<host>:<port>;databaseName=<dbname>`

Publication Repository JDBC Jar Directory

The path where the Data Integration Hub publication repository JAR files reside. The default is `<DIHInstallationDir>/shared/lib`.

Must be local to the Secure Agent that resides in the location that you specify in **Runtime Environment**.

If you don't specify a directory path here, the Secure Agent obtains the JAR files from the directory that is specified in the `CLASSPATH` system variable.

Publication Repository Schema

Microsoft SQL Server only. The publication repository schema.

Publication Repository Username

User name to connect to the publication repository.

Publication Repository Password

Password to connect to the publication repository.

Rules and Guidelines for Data Integration Hub Connections

Consider the following rules and guidelines for Data Integration Hub connections:

- By default, quoted identifiers are enabled and vary by the database.
- The Data Integration Hub cloud connectivity system properties must be configured in Data Integration Hub. For more information, see the *Data Integration Hub Administrator Guide*.

Creating a Data Integration Hub Connection

1. In Informatica Cloud, click **Configure > Connections**.
The **Connections** page appears.
2. Click **New**.
The **New Connection** page appears.
3. Enter a name for the Data Integration Hub connection.
A connection name can contain alphanumeric characters, spaces, and the following special characters:
_ . + -
A connection name is not case sensitive.
4. Enter a description for the connection.
The description can have a maximum length of 255 characters.
5. Select **Data Integration Hub (Informatica LLC)** as the connection type.
The Data Integration Hub Connection Properties appear.
6. Specify the Data Integration Hub connection properties and then click **OK**.
7. Click **Test** to evaluate the connection.
A message informs you that the test is successful.
8. Click **OK**.

Configuring Data Integration Hub to Connect to Multiple Secure Agents

The Informatica Intelligent Cloud Services can have a single Secure Agent or multiple Secure Agents that are installed on separate Linux machines. You can configure Data Integration Hub to Informatica Intelligent Cloud Services.

1. Delete the `userparameters` folder within the `<AGENT_HOME>/apps/Data_Integration_Server/data/userparameters` directory on all servers where the separate Secure Agents are installed.
2. Create a `userparameters` folder on a common mount, where the folder will be accessible by all Secure Agents.
3. Create a softlink from the `<AGENT_HOME>/apps/Data_Integration_Server/data/` directory to the common folder that you created in the previous step.
4. Create a cloud group on Informatica Intelligent Cloud Services and group all Secure Agents under the same cloud group.
5. Update the System Properties on Data Integration Hub with the following Informatica Intelligent Cloud Services environment variables:
 - `dih.ics.installation.folder`. Location where the Informatica Cloud Secure Agent is installed.
 - `dih.ics.runtime.environment`. Runtime environment that contains the Secure Agent that runs automatic cloud publications and subscriptions.
 - `dih.ics.url`. <https://dm-us.informaticacloud.com>

- *dih.ics.username*. User name for the Informatica Intelligent Cloud Services server.
- *dih.ics.password*. Password for the Informatica Intelligent Cloud Services server.

The user parameters folder is shared to all Secure Agents and the publication session of the Data Integration Hub runs on cloud agents in a round-robin fashion.

CHAPTER 3

Mappings with Data Integration Hub Connector

This chapter includes the following topics:

- [Mappings with Data Integration Hub Connector Overview, 13](#)
- [Mapping Configuration Process, 13](#)

Mappings with Data Integration Hub Connector Overview

Use the Data Integration Hub Connector for Data Integration Hub cloud publications and subscriptions with automatic mappings.

You develop mappings for Data Integration Hub automatic publications and subscriptions in the same way that you develop other Informatica Cloud mappings.

Note: Do not run mappings that you create for Data Integration Hub from within Informatica Cloud. You must run Data Integration Hub mappings from Data Integration Hub by running the publication or the subscription to which the mapping is associated.

Mapping Configuration Process

You create Informatica Cloud mappings to use in automatic cloud publications and subscriptions in Informatica Cloud Mapping Designer.

The Data Integration Hub operator can then select the mapping when creating an automatic cloud publication or subscription in Data Integration Hub.

When you create a mapping for a publication, the source is the publishing cloud application and the target is the topic table in the Data Integration Hub publication repository into which to publish the data.

When you create the mapping, you can parameterize the connection to the Data Integration Hub publication repository. The operator then fills in the connection values when they create the publication or subscription in the Data Integration Hub Operation Console.

If you do not parameterize the mapping, you must select the Data Integration Hub connection as the target in publication mappings and as the source in subscription mappings.

CHAPTER 4

Data Synchronization Tasks with Data Integration Hub Connector

This chapter includes the following topics:

- [Data Synchronization Tasks with Data Integration Hub Connector Overview, 14](#)
- [Data Synchronization Task Configuration Process, 15](#)
- [Creating a Synchronization Task for a Publication, 15](#)
- [Creating a Synchronization Task for a Subscription, 17](#)
- [Data Synchronization Examples , 19](#)

Data Synchronization Tasks with Data Integration Hub Connector Overview

Use Data Integration Hub Connector in Data Synchronization tasks that you create for custom Data Integration Hub cloud publications and subscriptions.

You develop Data Synchronization tasks for Data Integration Hub custom publications and subscriptions in the same way that you develop other Data Synchronization tasks.

Note: Do not run tasks that you create for Data Integration Hub from within Informatica Cloud. You must run Data Integration Hub tasks from Data Integration Hub by running the publication or the subscription to which the task is associated.

In tasks that Data Integration Hub uses for publication, the Data Integration Hub publication repository is the target of the task. In tasks that Data Integration Hub uses for subscription, the Data Integration Hub publication repository is the source of the task.

Data Synchronization Task Configuration Process

You create Informatica Cloud Data Synchronization tasks to use in custom cloud publications and subscriptions.

To use Data Synchronization tasks with Data Integration Hub Connector, perform the following tasks:

1. Create a mapping in Informatica Cloud Mapping Designer.
When you create a mapping for a publication, the source is the publishing cloud application and the target is the topic table in the Data Integration Hub publication repository into which to publish the data.
When you create a mapping for a subscription, the source is the topic table in the Data Integration Hub publication repository from which to consume data and the target is the subscribing cloud application.
Note: The topic must exist in Data Integration Hub before you create the mapping.
2. Create a Data Synchronization task in the Mapping Designer and select the appropriate mapping. The Data Integration Hub operator can then select the task when creating a custom cloud publication or subscription in Data Integration Hub.

Creating a Synchronization Task for a Publication

To create a synchronization task for a publication, perform the following tasks:

- Define task details.
- Select the publication source. The source is the cloud application from which you want to publish data.
- Select the publication target. The target is the topic table in the Data Integration Hub publication repository, into which the cloud application publishes the data. The topic must exist in Data Integration Hub before you create the task.
- Optionally, define data filters. Data Integration Hub does not support the use of advanced filters in synchronization tasks.
- Configure field mapping. Map source fields to topic fields.
- Save and close the task.

Step 1. Define Task Details

Define task properties in the **Definition** page of the **Synchronization Task Wizard**.

1. Click **Task Wizards > Data Synchronization**.
The **Synchronization Task Wizard** appears.
2. Specify the following details:

Task Name

Enter a name for the task.

The name of the task must be unique within the organization. The task name is not case sensitive.

The task name can contain alphanumeric characters, spaces, and the following special characters: _ . + -

Tip: Indicate the type of the task in the task name. This will ensure that when you select a task to use in a Data Integration Hub publication workflow, you select a publication task. For example, name the task Pub_<TaskName>.

Description

Optionally, enter a description for the task. The description can contain up to 255 characters.

Task Operation

Choose **Insert**.

3. Click **Next**

The **Source** page appears.

Step 2. Select Publication Source

Select the publication source in the **Source** page of the **Synchronization Task Wizard**.

- Specify the following details and then click **Next**:

Connection

Select a source connection that connects to the source from which you want to publish data.

Source Type

The source type depends on the number of tables that you want to publish:

- To publish a single table, select **Single**.
- To publish multiple tables, select **Multiple** and then create a relationship between the tables.

Source Object

Select the source from which you want to publish data.

The **Target** page appears.

Step 3. Select Publication Target

Select the publication target in the **Target** page of the **Synchronization Task Wizard**. The publication target is the topic table in the Data Integration Hub publication repository to which you want to publish data.

1. Specify the following details:

Connection

Select the connection.

Target Object

Select the topic table to which you want to publish data. The format of the target object is `TopicNametableName`.

2. Click **Next**.

The **Data Filters** page appears.

3. Optionally, configure data filters. You configure data filters for Data Integration Hub publications in the same way that you configure data filters for other Data Integration tasks.

4. Click **Next**.

The **Field Mapping** page appears.

Step 4. Configure Field Mapping

Map source fields to topic fields in the **Field Mapping** page of the **Synchronization Task Wizard**.

1. Map fields in the **Source** column to fields in the **Target** column and then click **Next**.
The **Schedule** page appears.
2. Verify that the option **Do not run this task on a schedule** is selected. The task runs according to the schedule of the publication that uses the task.
3. Select **Save > Save and Close** to save the task.

Creating a Synchronization Task for a Subscription

To create a synchronization task for a subscription, perform the following tasks:

- Define task details.
- Select the subscription source. The source is the topic table in the Data Integration Hub publication repository, from which you want to consume data. The topic must exist in Data Integration Hub before you create the task.
- Select the subscription target. The target is the cloud application that you want to consume the data.
- Optionally, define data filters. Data Integration Hub does not support the use of advanced filters in synchronization tasks.
- Configure field mapping. Map topic fields to target fields.
- Save and close the task.

Step 1. Define Task Details

Define task properties in the **Definition** page of the **Synchronization Task Wizard**.

1. Click **Task Wizards > Data Synchronization**.
The **Synchronization Task Wizard** appears.
2. Specify the following details and then click **Next**:

Task Name

Enter a name for the synchronization task.

The name of the task must be unique within the organization. The task name is not case sensitive.

The task name can contain alphanumeric characters, spaces, and the following special characters: `_ . + -`

Tip: Indicate the type of the task in the task name. This will ensure that when you select a task to use in a Data Integration Hub subscription workflow, you select a subscription task. For example, name the task `Sub_<TaskName>`.

Description

Optionally, enter a description for the task. The description can contain up to 255 characters.

Task Operation

Choose **Insert**.

The **Source** page appears.

Step 2. Select Subscription Source

Select the subscription source in the **Source** page of the **Synchronization Task Wizard**. The subscription source is the topic table in the Data Integration Hub publication repository from which you want to consume data.

- ▶ Specify the following details and then click **Next**:

Connection

Select the connection.

Source Type

The source type depends on the number of tables that you want to consume and on the subscription type:

- To consume a single table, select **Single**.
- To consume multiple tables, or when the subscription is a compound subscription, select **Multiple** and then create a relationship between the tables.

Source Object

Select the topic table from which you want to consume data. The format of the object is `TopicName.tableName`.

The **Target** page appears.

Step 3. Select Subscription Target

Select the subscription target in the **Target** page of the **Synchronization Task Wizard**.

1. Specify the following details:

Connection

Select a target connection that connects to the target into which you want to consume data.

Target Object

Select the target into which you want to consume the data.

2. Click **Next**.
The **Data Filters** page appears.
3. Optionally, configure data filters. You configure data filters for Data Integration Hub subscriptions in the same way that you configure data filters for other Data Integration tasks.
4. Click **Next**.
The **Field Mapping** page appears.

Step 4. Configure Field Mapping

Map topic fields to target fields in the **Field Mapping** page of the **Synchronization Task Wizard**.

1. Map fields in the **Source** column to fields in the **Target** column and then click **Next**.
The **Schedule** page appears.
2. Verify that the option **Do not run this task on a schedule** is selected. The task runs according to the schedule of the publication that uses the task.
3. Select **Save > Save and Close** to save the task.

Data Synchronization Examples

The following examples show the configuration of tasks for publication to and subscription from the topic `topice2e`, table `test1`.

Publication Example

The following image shows Data Integration Hub as a target for the publication task:

The screenshot displays the Informatica Cloud interface for configuring a Data Synchronization Task Wizard (publisher). The wizard is currently on the '3 Target' step. The 'Target Details' section shows the connection set to 'dih_amir_windows', the target object set to 'topice2e.test1', and the child object set to 'None Found'. There are checkboxes for 'Display technical names instead of labels' and 'Display target fields in alphabetical order'. The 'Data Preview' section shows a table with 4 columns: Field1, Field2, DIH_PUBLICATION_INSTANCE_DATE, and DIH_PUBLICATION_INSTANCE_ID. The table contains 14 rows of data.

Field1	Field2	DIH_PUBLICATION_INSTANCE_DATE	DIH_PUBLICATION_INSTANCE_ID
ALFKI	Alfreds Futterkiste	2015-11-29 13:14:08.0	3002
ANATR	Ana Trujillo Emparedados y hel...	2015-11-29 13:14:08.0	3002
ANTON	Antonio Moreno Taquería	2015-11-29 13:14:08.0	3002
AROUT	Around the Horn	2015-11-29 13:14:08.0	3002
BERGS	Berglunds snabbköp	2015-11-29 13:14:08.0	3002
BLAUS	Blauer See Delikatessen	2015-11-29 13:14:08.0	3002
BLONP	Blondesdsi père et fils	2015-11-29 13:14:08.0	3002
BOLID	Bólido Comidas preparadas	2015-11-29 13:14:08.0	3002
BONAP	Bon app'	2015-11-29 13:14:08.0	3002
BOTTM	Bottom-Dollar Markets	2015-11-29 13:14:08.0	3002

Subscription Example

The following image shows Data Integration Hub as a source for the subscription task:

The screenshot displays the Informatica Cloud interface for the Data Synchronization Task Wizard (subscriber). The navigation bar includes Overview, Task Wizards (active), Design, Monitor, Configure, and Administer. The wizard progress shows 6 steps: 1 Definition, 2 Source (active), 3 Target, 4 Data Filters, 5 Field Mapping, and 6 Schedule. Navigation buttons include < Previous, Next >, Save, and Cancel.

Source Details

Connection: dih_amir_windows [View... New... ?]
Source Type: Single Multiple Saved Query
Source Object: topice2e.test1 [Select... ?]
 Display technical names instead of labels
 Display source fields in alphabetical order

Data Preview

topice2e.test1 [Preview All Columns] (Total Columns: 4)

Field1	Field2	DIH_PUBLICATION_INSTANCE_DATE	DIH_PUBLICATION_INSTANCE_ID
ALFKI	Alfreds Futterkiste	2015-11-29 13:14:08.0	3002
ANATR	Ana Trujillo Emparedados y hel...	2015-11-29 13:14:08.0	3002
ANTON	Antonio Moreno Taquería	2015-11-29 13:14:08.0	3002
AROUT	Around the Horn	2015-11-29 13:14:08.0	3002
BERGS	Berglunds snabbköp	2015-11-29 13:14:08.0	3002
BLAUS	Blauer See Delikatessen	2015-11-29 13:14:08.0	3002
BLONP	Blondesdsi père et fils	2015-11-29 13:14:08.0	3002
BOLID	Bólido Comidas preparadas	2015-11-29 13:14:08.0	3002
BONAP	Bon app'	2015-11-29 13:14:08.0	3002
BOTTM	Bottom-Dollar Markets	2015-11-29 13:14:08.0	3002

CHAPTER 5

Mapping Configuration Tasks with Data Integration Hub Connector

This chapter includes the following topics:

- [Mapping Tasks with Data Integration Hub Connector Overview, 21](#)
- [Mapping Configuration Task Configuration Process, 22](#)
- [Creating the Mapping and Task for a Publication, 22](#)
- [Creating the Mapping and Task for a Subscription, 23](#)

Mapping Tasks with Data Integration Hub Connector Overview

Use Data Integration Hub Connector in mapping tasks that you create for custom Data Integration Hub cloud publications and subscriptions.

You develop mapping tasks for Data Integration Hub custom publications and subscriptions in the same way that you develop other mapping tasks.

Note: Do not run tasks that you create for Data Integration Hub from within Informatica Cloud. You must run Data Integration Hub tasks from Data Integration Hub by running the publication or the subscription to which the task is associated.

Mapping Configuration Task Configuration Process

You create Informatica Cloud Mapping Configuration tasks to use in custom cloud publications and subscriptions.

To use Mapping Configuration tasks with Data Integration Hub Connector, perform the following tasks:

1. Create a mapping in Informatica Cloud Mapping Designer.
When you create a mapping for a publication, the source is the publishing cloud application and the target is the topic table in the Data Integration Hub publication repository into which to publish the data.
When you create a mapping for a subscription, the source is the topic table in the Data Integration Hub publication repository from which to consume data and the target is the subscribing cloud application.
Note: The topic must exist in Data Integration Hub before you create the mapping.
2. Create a Mapping Configuration task in the Mapping Designer and select the appropriate mapping. The Data Integration Hub operator can then select the task when creating a custom cloud publication or subscription in Data Integration Hub.

Creating the Mapping and Task for a Publication

The mappings and tasks that you create to use in Data Integration Hub publications include a source and a target.

In publication mappings and tasks the source is the cloud application from which to publish data and the target is the topic table in the Data Integration Hub publication repository to which the publication publishes data.

Creating a Mapping for a Publication

Create the mapping to use in the mapping task for the publication.

The topic must exist in Data Integration Hub before you create the mapping.

1. Click **Design > Mappings**, and then click **New Mapping**.
2. In the **New Mapping** dialog box, enter the mapping name and description, and click **OK**.
You can use alphanumeric characters and underscores (_) in the mapping name.
3. Add a source to the mapping canvas and configure source properties.
4. Add a target to the mapping canvas and configure target properties.
 - a. In the **Properties** panel, on the **General** tab, you can enter a name and description.
 - b. Click the **Target** tab. From the **Connection** list, select .
5. On the mapping canvas, connect the source to the target.
6. Click **Save > Save and Close**.

Creating a Mapping Task for a Publication

When you create a publication task you select mapping that you created for the publication.

The mapping must exist in Mapping Designer before you create the task.

1. In Data Integration, click **New > Task > Mapping Task > Create**.

2. Specify the following task details:

Task Name

Enter a name for the task.

The name of the task must be unique within the organization. The task name is not case sensitive.

The task name can contain alphanumeric characters, spaces, and the following special characters: _ . + -

Tip: Indicate the type of the task in the task name. This will ensure that when you select a task to use in a Data Integration Hub publication workflow, you select a publication task. For example, name the task Pub_<TaskName>.

Description

Optionally, enter a description for the task. The description can contain up to 255 characters.

Runtime Environment

Runtime environment that contains the Secure Agent to run the task.

Mapping

Mapping associated with the task. Select the publication mapping.

To select a mapping, click **Select**. The **Select a Mapping** dialog box displays up to 200 mappings. If the mapping you want to use does not display, enter a search string to reduce the number of mappings that display.

Select a mapping and click **OK**.

An image of the mapping displays below the mapping name.

3. Click **Finish**.

Creating the Mapping and Task for a Subscription

The mappings and tasks that you create to use in Data Integration Hub subscriptions include a source and a target.

In subscription mappings and tasks the source is the topic table in the Data Integration Hub publication repository from where to consume data and the target is the cloud application that consumes the data.

The topic must exist in the Data Integration Hub before you create the mapping and task.

Creating a Mapping for a Subscription

Create the mapping to use in the mapping task for the subscription.

The topic must exist in Data Integration Hub before you create the mapping.

1. Click **Design > Mappings**, and then click **New Mapping**.
2. In the **New Mapping** dialog box, enter the mapping name and description, and click **OK**.
You can use alphanumeric characters and underscores (_) in the mapping name.
3. Add a source to the mapping canvas and configure source properties.
 - a. In the **Properties** panel, on the **General** tab, you can enter a name and description.
 - b. Click the **Source** tab. From the **Connection** list, select .

- c. Click **Select**. To consume multiple topic tables select **Multiple Objects** and then, in the actions menu, click **Add Source Object**.
The **Select Source Object** dialog box shows.
- d. Select the database table or tables to consume and then click **OK**.
- e. Click **Partitions** and enter the number of partitions to process data in parallel.
4. Add a target to the mapping canvas and configure target properties.
5. On the mapping canvas, connect the source to the target.
6. Click **Save > Save and Close**.

Creating a Mapping Task for a Subscription

When you create a subscription task you select mapping that you created for the subscription.

The mapping must exist in Mapping Designer before you configure the task.

1. In Data Integration, click **New > Mapping Task > Create**.
2. Specify the following task details:

Task Name

Enter a name for the task.

The name of the task must be unique within the organization. The task name is not case sensitive.

The task name can contain alphanumeric characters, spaces, and the following special characters: `_ . + -`

Tip: Indicate the type of the task in the task name. This will ensure that when you select a task to use in a Data Integration Hub publication workflow, you select a publication task. For example, name the task `Pub_<TaskName>`.

Description

Optionally, enter a description for the task. The description can contain up to 255 characters.

Runtime Environment

Runtime environment that contains the Secure Agent to run the task.

Mapping

Mapping associated with the task. Select the subscription mapping.

To select a mapping, click **Select**. The **Select a Mapping** dialog box displays up to 200 mappings. If the mapping you want to use does not display, enter a search string to reduce the number of mappings that display.

Select a mapping and click **OK**.

An image of the mapping displays below the mapping name.

3. Click **Finish**.

CHAPTER 6

Data Integration Hub Data Type Reference

This chapter includes the following topic:

- [Data Integration Hub and Transformation Data Types, 25](#)

Data Integration Hub and Transformation Data Types

Informatica Cloud uses the JDBC type 4 driver to read data. The Secure Agent converts the Data Integration Hub data type to the transformation data type, and uses the transformation data type to move data across platforms.

When Informatica Cloud writes to a Data Integration Hub target, the Secure Agent converts the transformation data type to the corresponding Data Integration Hub data type. When Informatica Cloud reads from a Data Integration Hub source, the Secure Agent converts the Data Integration Hub data type to the corresponding transformation data type.

The following table compares the Data Integration Hub data types that Informatica Clouds supports to the transformation data types:

Data Integration Hub Data Type	Transformation Data Type	Range
BIGINT	Bigint	-9,223,372,036,854,775,808 to 9,223,372,036,854,775,807 Precision 19, scale 0
BINARY	Binary	1 to 104,857,600 bytes
BIT	Integer	-2,147,483,648 to 2,147,483,647 Precision 10, scale 0
BLOB	Binary	1 to 104,857,600 bytes
BOOLEAN	Integer	-2,147,483,648 to 2,147,483,647 Precision 10, scale 0
CHAR	String	1 to 104,857,600 characters

Data Integration Hub Data Type	Transformation Data Type	Range
CLOB	Text	1 to 104,857,600 characters
DATE	Date/Time	Jan 1, 0001 A.D. to Dec 31, 9999 A.D. (precision to the nanosecond)
DECIMAL	Decimal	Precision 1 to 28, scale 0 to 28
DOUBLE	Double	Precision 15
FLOAT	Double	Precision 15
INTEGER	Integer	-2,147,483,648 to 2,147,483,647 Precision 10, scale 0
LONGVARBINARY	Binary	1 to 104,857,600 bytes
LONGVARCHAR	Text	1 to 104,857,600 characters
NUMERIC	Decimal	Precision 1 to 28, scale 0 to 28
REAL	Double	Precision 15
SMALLINT	Integer	-2,147,483,648 to 2,147,483,647 Precision 10, scale 0
TIME	Date/Time	Jan 1, 0001 A.D. to Dec 31, 9999 A.D. (precision to the nanosecond)
TIMESTAMP	Date/Time	Jan 1, 0001 A.D. to Dec 31, 9999 A.D. (precision to the nanosecond)
TINYINT	Integer	-2,147,483,648 to 2,147,483,647 Precision 10, scale 0
VARBINARY	Binary	1 to 104,857,600 bytes
VARCHAR	String	1 to 104,857,600 characters

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