Informatica

Informatica® Cloud Data Integration

XML Source Connector

Informatica Cloud Data Integration XML Source Connector
January 2020

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Preface

Use *XML Source Connector* to learn how to read from an XML Source by using Cloud Data Integration. Learn to create an XML Source connection, develop and run synchronization tasks, mappings, and mapping tasks in Cloud Data Integration.

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CHAPTER 1

XML Source Connector

This chapter includes the following topics:

- XML Source Connector Overview, 6
- XML Source Connector Supported Task Operation and Object Types, 6
- XML Source Connector Example, 6

XML Source Connector Overview

You can use XML Source Connector to connect to XML Source from Data Integration. Use XML Source Connector to read data from XML Source and integrate data with other applications, databases, and flat files. You can use XML Source objects as sources in synchronization tasks, mapping tasks, and mappings.

When you run a task or mapping, the Secure Agent uses the XML Source to perform the specified operation and reads data from XML Source. Use XML Source Connector to parse data within a document and to attach a child object with a parent object in a synchronization task.

XML Source Connector Supported Task Operation and Object Types

The following table lists the object and operations that XML Source Connector supports:

Object	Read	Insert	Update	Upsert	Delete	Data Preview	Look Up
XML File	Yes	No	No	No	No	Yes	No

XML Source Connector Example

The XML document contains customer account details. The following shows an example of XML file:

```
<?xml version="1.0"?>
  <CustomerAaccountSummary>
```

```
<Customers>
 <Customer Id="CUST12001">
   <name>Premkumar S</name>
   <DOB>10-05-1972<DOB>
   <Salutation>Sir.</Salutation>
   <Status>Verification</Status>
   <Accounts>
       <Account Account No="TAXACCNT23490796">
          <PhoneNumbers>
             <Phone type="Work">
               <Number>+91 (080) 78092132</Number>
             </Phone>
             <Phone type="Home">
               <Number>+91 (080) 32153345</Number>
             </Phone>
             <Phone type="Mobile">
               <Number>+91 9676531675 </Number>
             </Phone>
          <PhoneNumbers>
          <Addresses>
             <Address>
               <Address type="Work">
                 <Line1>Informatica Buss Soln.</Line1>
                 <Line2>Bagmane Tech Park</Line2>
                 <City>Bengaluru</City>
                 <Territory>Karnataka</Territory>
                 <Country>India</Country>
                 <ZipCode>560088</ZipCode>
               </Address>
               <Address type="Home">
                 <Line1>DNo-17, Achan Street</Line1>
                 <Line2>Indiranagar</Line2>
                 <City>Bengaluru</City>
                 <Territory>Karnataka</Territory>
                 <Country>India</Country>
                 <ZipCode>560078</ZipCode>
               </Address>
           <Addresses>
        </Account>
    </Accounts>
  </Customer>
 </Customers>
</CustomerAccountSummary>
```

The XML Source Connector organizes the elements into tables and fields, and segregates unbound elements as separate tables.

The following table lists the tables and fields that XML Source Connector creates after parsing the XML file:

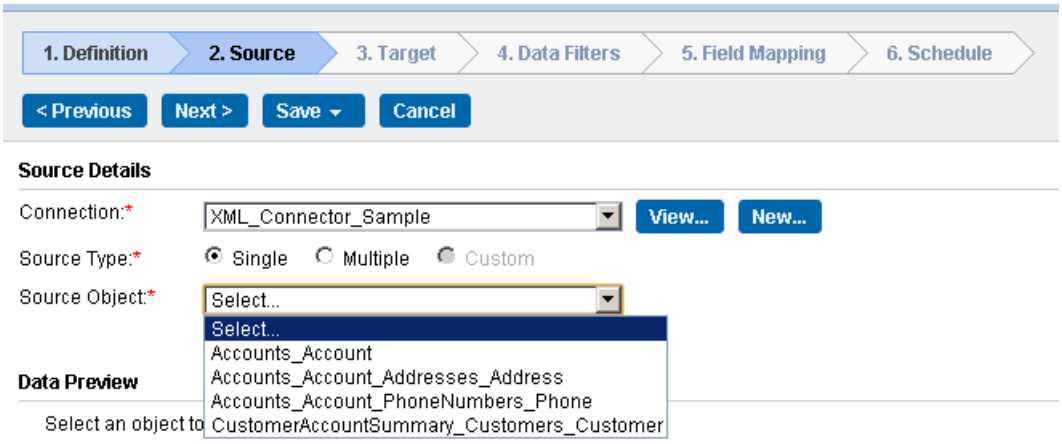
Table ID	Table Name	XML Path
Table-1	`CustomerAccountSummary_Customers_Customer`	`/CustomerAccountSummary/Customers/Customer`
Table-2	`Accounts_Account`	`/CustomerAccountSummary/Customers/Customer/Accounts/Account`

Table ID	Table Name	XML Path
Table-3	`Accounts_Account_PhoneNumbers_Phone`	`/CustomerAccountSummary/Customers/Customer/Accounts/Account/PhoneNumbers/Phone`
Table-4	`Accounts_Account_Addresses_Address`	`/CustomerAccountSummary/Customers/Customer/Accounts/Account/Addresses/Address`

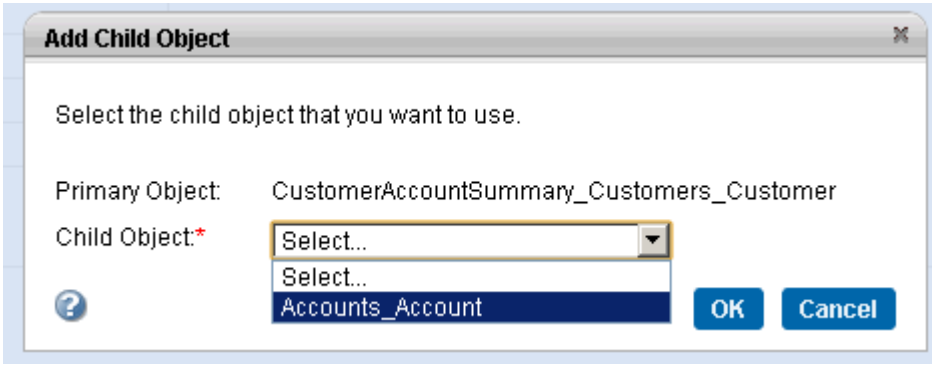
Note: Any bound element to the former element becomes the child element of the former element. For example, `PhoneNumbers` is the child element of `Accounts` and `Accounts` is the child element of `Customers`.

Note: All simple and attribute elements are considered as fields. Complex elements are not considered as fields to the table.

The following image shows the tables on the **Source** tab:

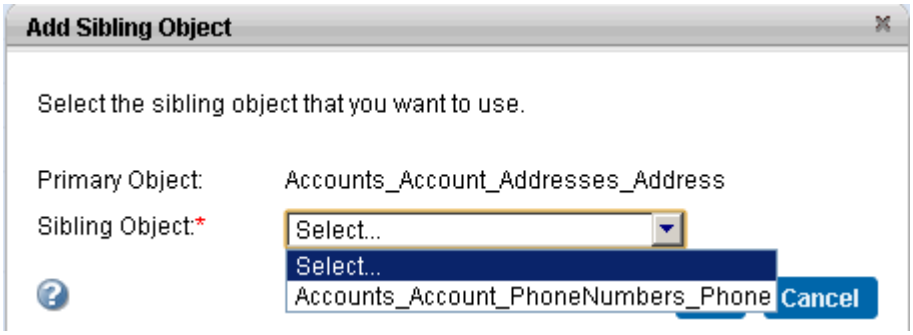


The following image shows the relations between different tables:



- Table-1 and Table-2 has a parent-child relation.
- Table-2 is parent to Table-3 and Table-4.

The following image shows the sibling relation between tables:



- Table-3 is sibling to Table-4

CHAPTER 2

XML Source Connections

This chapter includes the following topics:

- XML Source Connection Overview, 10
- XML Source Connection Properties, 10
- Rules and Guidelines for XML Source Connections, 11

XML Source Connection Overview

Create an XML source connection to connect to an XML source so that the Secure Agent can read data from the XML source. You can specify the XML source in mappings, mapping tasks, or synchronization tasks.

You can create an XML source connection on the **Connections** page. Use the connection when you create a synchronization task or a mapping task.

XML Source Connection Properties

When you create an XML Source connection, you must configure the connection properties.

The following table describes the XML Source connection properties:

Connection property	Description
Connection Name	Name of the XML Source connection.
Description	Description of the connection. The description cannot exceed 765 characters.
Type	Type of connection. Select XML Source from the list.
Runtime Environment	The name of the runtime environment where you want to run the tasks.
Sample XML File Name	Enter the XML file path.
Sample XSD Schema Name	Enter the XSD file path.

Rules and Guidelines for XML Source Connections

The following guidelines help you to use XML source connections:

- The XML file must have a valid XSD (XML schema directory).
- The XML file must not contain the path of DTD or XSD files.
- The XML file must not have references pertaining to other XML files.
- The XML file must not contain name spaces with the root element.
- You must not run the same synchronization task repeatedly, as it will create duplicate XML records.
- Use the XML file for the XSD schema path in a connection.
- When the XSD file signifies the namespace that needs to be present in XML file, avoid using schema file for metadata parsing.

CHAPTER 3

Synchronization Tasks with XML Source Connector

This chapter includes the following topics:

- XML Sources in Synchronization Tasks, 12
- XML Source Synchronization Task Example, 12

XML Sources in Synchronization Tasks

Use an XML source object as multiple source in a synchronization task. You configure XML source properties on the **Source** page of the Synchronization Task wizard.

The following table describes the XML source properties:

Property	Description
Connection	Name of the source connection.
Source Type	Select Single.
Source Object	Name of the source object. The Source Object corresponds to tables present in the sample XML file used for creating a connection.

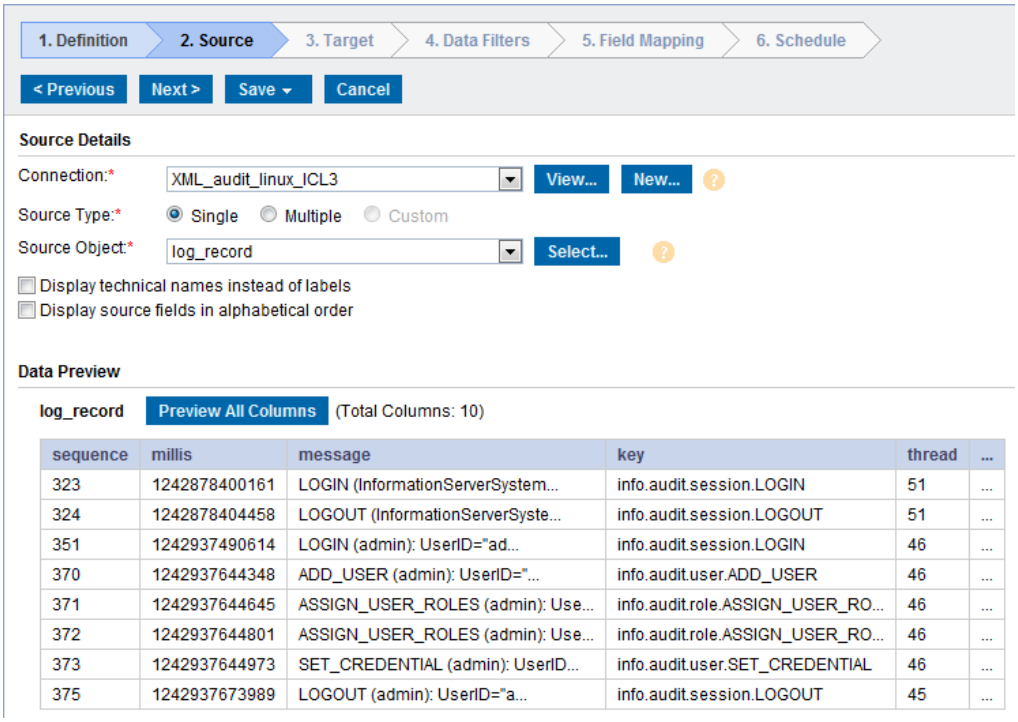
XML Source Synchronization Task Example

Perform the following task to configure the following objects and a synchronization task with the insert operation:

Source

The source object for a synchronization task corresponds to tables present in the sample XML file used for creating a connection. Use the XML source connection to connect to a XML source and read data from the XML source.

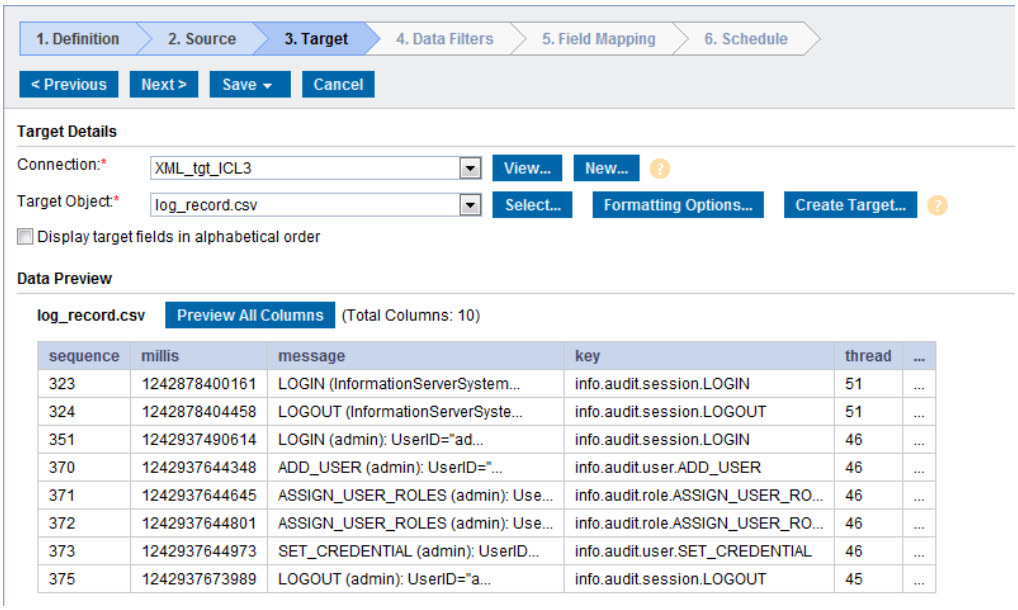
The following image shows the XML source object and its contents:



Target

Use the `.csv` file as the target object in the synchronization task. The target object file must contain the tables you select in the source object.

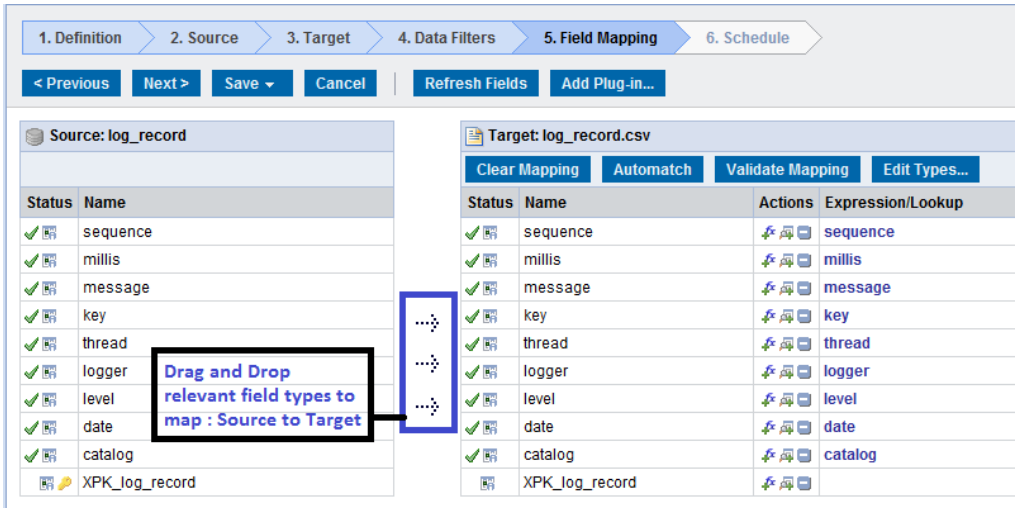
The following image shows the target object and its contents:



Mapping

Map the primary fields of the source object to the flat file target object.

The following image shows mapping of the fields:



Note: When you run the synchronization task, the Secure Agent writes the retrieved tables to the target `.CSV` file.

CHAPTER 4

Working with Large XML Files

This chapter includes the following topics:

- Big Split Feature, 15
- Increasing the Secure Agent Memory, 15

Big Split Feature

When you have an XML file of a large size, the big split feature helps you to divide the large XML file into many smaller files. You can parse the files without facing any memory constraints by splitting the large XML file.

You need to mention the XML file path along with split tag while creating a connection. For example, `C:\MyWorkspace\XML.xml;splitTag=<Patient>`.

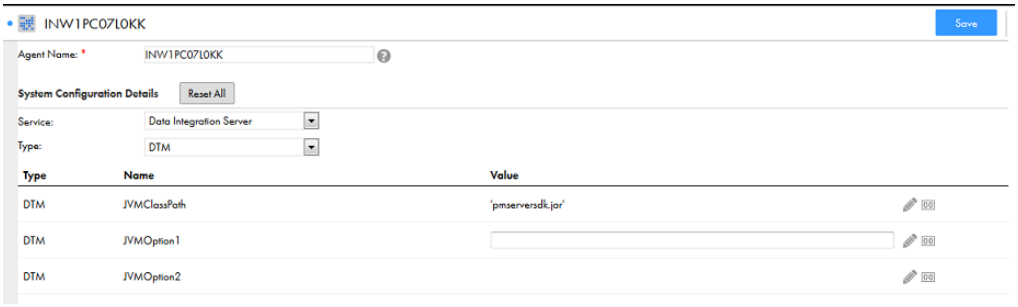
Note: You can implement big spilt feature when the XML file size is greater than 100 MB. Split tag is the first unbound element from root node for a particular schema.

Increasing the Secure Agent Memory

To increase performance and avoid runtime environment memory issues, perform the following steps:

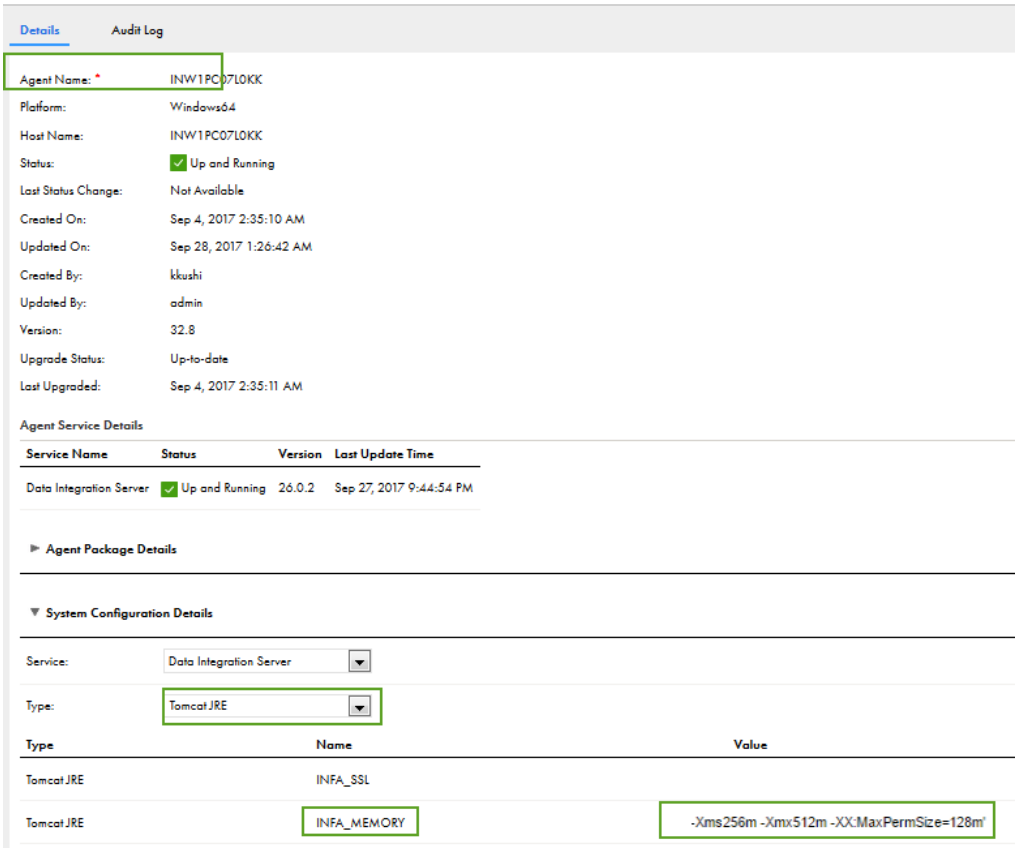
1. In Administrator, select **Runtime Environments**.
2. Select the Secure Agent for which you want to increase memory from the list of available Secure Agents.
3. In the upper-right corner, click **Edit**.
4. In the **System Configuration Details** section, select the **Type** as **DTM** for the Data Integration Service.
5. Edit **JVMOption1** as **-Xms4056m** and **JVMOption2** as **-Xmx4056m**.

The following image shows the **Details** page:



6. In the **System Configuration Details** section, select the **Type** as **TomCatJRE**
7. Edit **INFA_memory** as **-Xms256m -Xmx512m**.

   The following image shows the **Agent Details** page:



   Note: The minimum and maximum values for the Java heap size are given as an example. Specify the size according to your requirements.

8. Restart the Secure Agent.

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