Informatica®

Informatica® Cloud Data Integration

JSON Target Connector

Informatica Cloud Data Integration JSON Target Connector
November 2024

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Preface

Use *JSON Target Connector* to learn how to read from or write to a REST based web service application by using Cloud Data Integration. Learn to create a connection and run synchronization tasks in Cloud Data Integration.

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CHAPTER 1

Introduction to JSON Target Connector

You can use JSON Target Connector to connect to JSON Target from Data Integration. Use JSON Target Connector to write data to a REST based Web Services.

The JSON Target Connector converts source data into JSON format by providing JSON template. You can use JSON Target Connector objects as targets in synchronization tasks.

JSON Target Supported Task Types and Objects Types

The following table lists the JSON Target object and operation types that you can include in Data Integration tasks:

Objects	Select	Insert	Update	Upsert	Delete	Data Preview	Lookup
JSON Target	NA	Yes	Yes	NA	NA	NA	NA

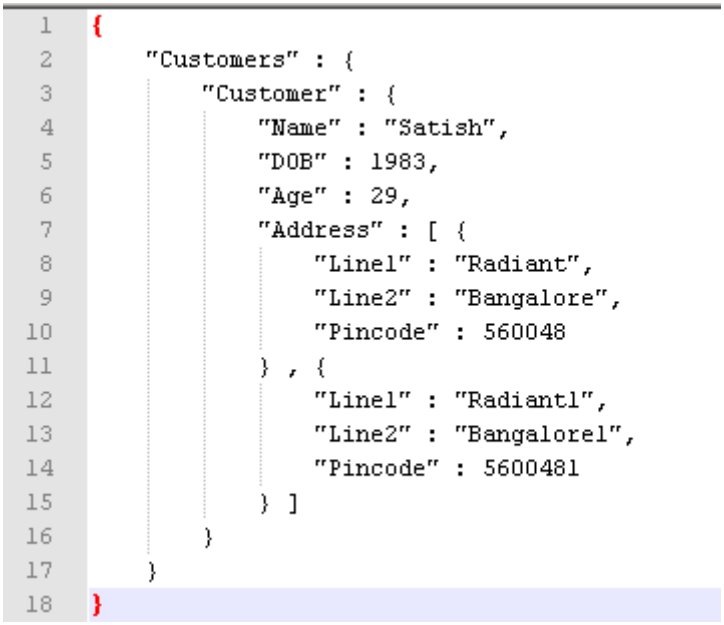
How JSON Target Connector Works

Let us consider a sample JSON file, which provides Customer-Address details, to explain how JSON Target Connector works.

JSON Target Connector is based on the following principles:

- The XPaths are the building blocks of JSON Target Connector.
- JSON Target Connector parses the JSON file and generates the XPaths of each JSON object or JSON array.
- JSON Target Connector uses the XPaths to generate XML file with adequate primary and foreign key relationships.
- The XMLStreamReader and XMLStreamWriter cleans the generated XML file.
- The cleaned XML file is transformed into a valid JSON file based on the SAXevent parsing approach.

The following figure shows a sample JSON file of Customer - Address details.

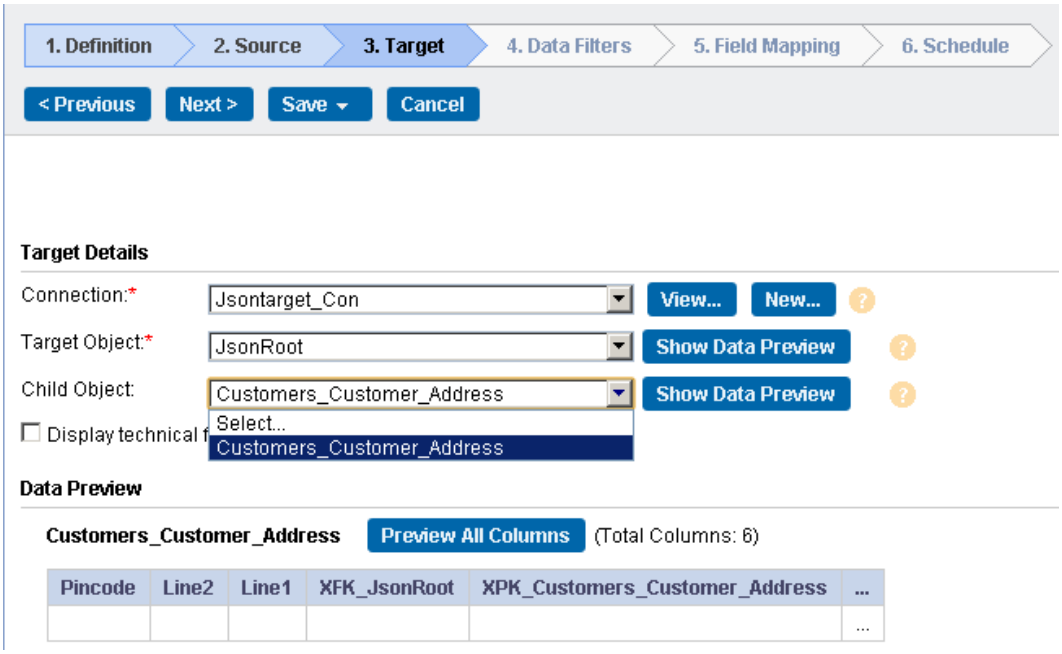


```
{
    "Customers" : {
        "Customer" : {
            "Name" : "Satish",
            "DOB" : 1983,
            "Age" : 29,
            "Address" : [ {
                "Line1" : "Radiant",
                "Line2" : "Bangalore",
                "Pincode" : 560048
            } , {
                "Line1" : "Radiant1",
                "Line2" : "Bangalore1",
                "Pincode" : 5600481
            } ]
        }
    }
}
```

JSON Target Connector follows the following principles to group elements into tables or fields:

- JSON file must have root element. When the JSON file does not contain any root element, then the connector creates a dummy root called JSONRoot. The root element is used for further processing of files.
- All the simple and attribute elements are considered as fields. Complex elements are not considered as fields.
- Unbound elements are segregated and considered as separate tables.
- Any bound element to the former element becomes the child element of the former element.
  Based on the sample file shown in the above figure, the following tables are created:
  - Table-1: JsonRoot with XPath/JsonRoot
  - Table-2: Customers_Customer_Address with XPath/Customers/Customer/Address

The following figure shows the tables written to the target:



CHAPTER 2

JSON Target Connections

This chapter includes the following topics:

- JSON Target Connections Overview, 9
- JSON Target connection properties, 9
- Rules and Guidelines for JSON Target Connections, 10

JSON Target Connections Overview

Create a JSON Target connection to connect to JSON Target and write data to a REST based Web Services. You can use JSON Target connections in a synchronization task.

JSON Target connection properties

When you create a JSON Target connection, you must configure the connection properties.

Important: JSON Target Connector is deprecated and has been moved to maintenance mode. Informatica intends to drop support in a future release.

The following table describes the JSON Target connection properties:

Connection property	Description
Secure Agent	Select the appropriate Secure Agent from the list.
Sample JSON Schema Name	Enter sample JSON file path. For example, `ABCD.JSON`.
JSON Working Directory	Enter the folder path for JSON working directory.
Final JSON File Name	Enter final JSON file path with the file name.
Requires JSON Customization	Allows JSON customization. Default is **NO**.
Final Customized JSON File Name	Enter final customized JSON file path with the file name.

Rules and Guidelines for JSON Target Connections

Consider the following rules and guidelines when you create a JSON Target connection:

- The JSON file must have a valid `.JSON` file extension.
- The JSON file must not have references pertaining to other JSON files.
- The JSON files from the same root element can be merged together.
- Do not run the same synchronization task repeatedly. It creates duplicate JSON records.
- When you perform the insert operation, the Secure Agent creates a new merged file.
- After you have created a clean file, the synchronization task generates `*.JSON` file which contains XPK and XFK elements with suffix removed.
- JSON Target Connector does not support data preview.

CHAPTER 3

Synchronization Tasks with JSON Target Connector

This chapter includes the following topics:

- JSON Target Targets in Synchronization Tasks, 11
- Working with the JSON File, 11

JSON Target Targets in Synchronization Tasks

You can use a JSON Target object as a target in a synchronization task.

The following table describes the JSON Target target properties:

Property	Description
Connection	Name of the JSON Target target connection.
Target Object	Name of the JSON Target target object.
Child Object	This attribute is not applicable for JSON Target Connector.
Display target fields in alphabetical order	Displays target fields in alphabetical order. By default, fields appear in the order returned by the target system.

Working with the JSON File

You can perform the following tasks with a JSON file in a synchronization task.

Updating or Merging the Existing JSON File

When you want to add other modules such as address, phone numbers, location, references to existing JSON file, select **Update** as the task operation.

1. Create a new synchronization task.

2. In **Definition** tab, select **Update** as the task operation.
3. Follow the same procedure of creating a JSON Target file using Insert task operation to update the existing JSON file.

Note: In Source tab, select the source object file with which you want to update-merge the existing JSON file.

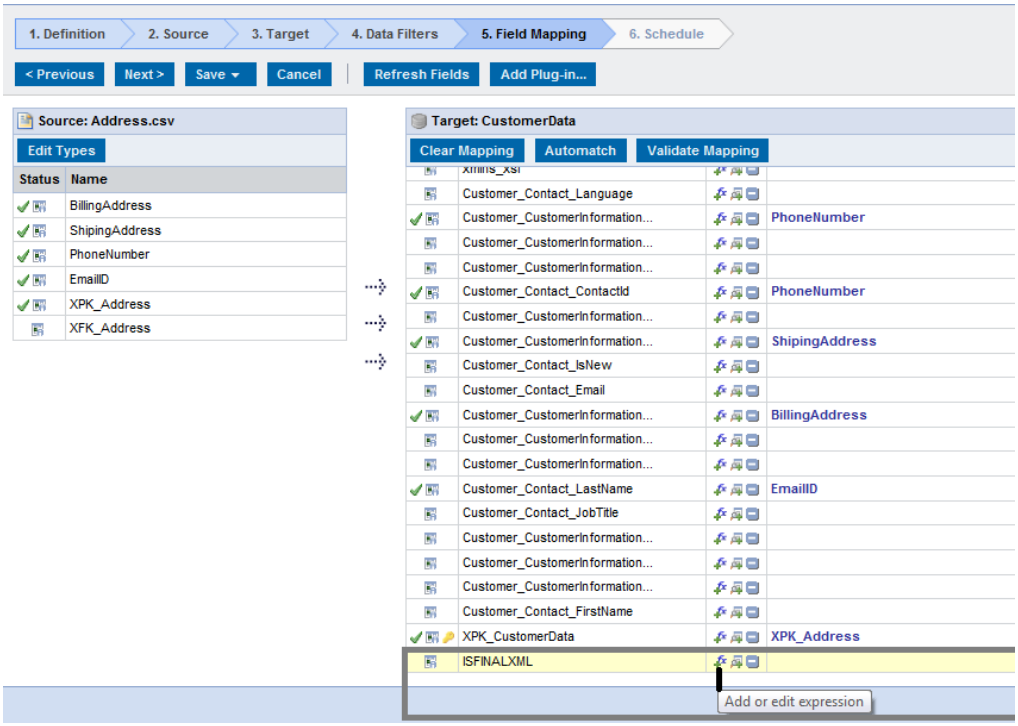
Note: In Target tab, select the target object that is the child element of the element present in the existing JSON target file.

Cleaning the Merged JSON File

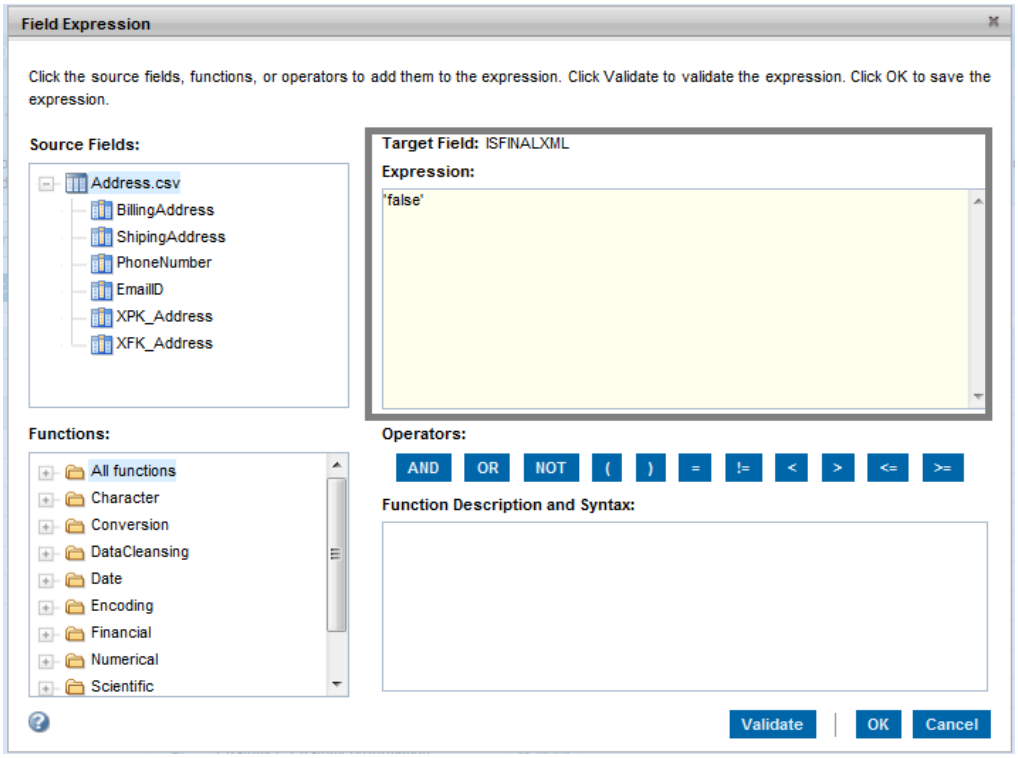
You must clean the merged JSON file to remove all the unnecessary syntax and quotes.

1. Select the updated synchronization task in the synchronization page.
2. Create a copy of the task.
3. Click **Edit** to rename the task.
4. In the **Field Mapping** tab, click edit next to the **ISFINALJSON** field.

   The Field Expression page appears. The following image shows the **Field Mapping** tab:



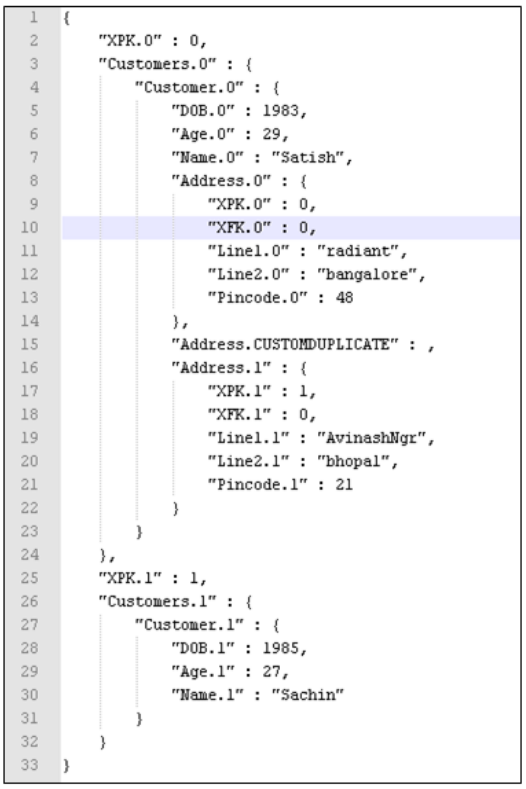
5. Enter the value of the **ISFINALJSON** field as 'false' to 'true accordingly.



- Enter ‘false’ for creating and updating the JSON target file
- Enter ‘true’ for cleaning the JSON target file.

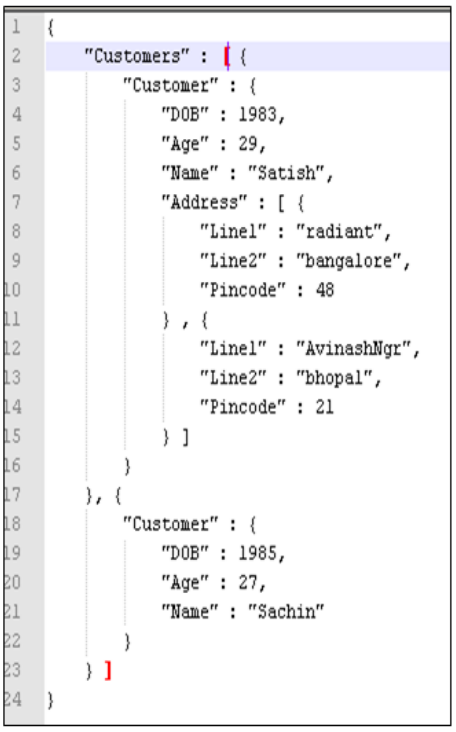
6. Click **Save and run** the task.

The following image shows the updated and cleaned JSON Target File:



```
{
    "XPK.0" : 0,
    "Customers.0" : {
        "Customer.0" : {
            "DOB.0" : 1983,
            "Age.0" : 29,
            "Name.0" : "Satish",
            "Address.0" : {
                "XPK.0" : 0,
                "XFK.0" : 0,
                "Line1.0" : "radiant",
                "Line2.0" : "bangalore",
                "Pincode.0" : 48
            },
            "Address.CUSTOMDUPLICATE" : ,
            "Address.1" : {
                "XPK.1" : 1,
                "XFK.1" : 0,
                "Line1.1" : "AvinashNgr",
                "Line2.1" : "bhopal",
                "Pincode.1" : 21
            }
        }
    },
    "XPK.1" : 1,
    "Customers.1" : {
        "Customer.1" : {
            "DOB.1" : 1985,
            "Age.1" : 27,
            "Name.1" : "Sachin"
        }
    }
}
```

UPDATED JSON Target File



```
{
    "Customers" : [ {
        "Customer" : {
            "DOB" : 1983,
            "Age" : 29,
            "Name" : "Satish",
            "Address" : [ {
                "Line1" : "radiant",
                "Line2" : "bangalore",
                "Pincode" : 48
            } , {
                "Line1" : "AvinashNgr",
                "Line2" : "bhopal",
                "Pincode" : 21
            } ]
        }
    }, {
        "Customer" : {
            "DOB" : 1985,
            "Age" : 27,
            "Name" : "Sachin"
        }
    } ]
}
```

Cleaned JSON Target File

The following are the XPK and XFK values for the given sample JSON file.

	A	B	C	D	E	F	G	H
1	Name	DOB	Age	Line1	Line2	Pincode	XPK	XFK
2	Satish	1983	29	radiant	bangalore	48	0	0
3	Sachin	1985	27	AvinashNgr	bhopal	21	1	0

Passing Null Values in the Source File

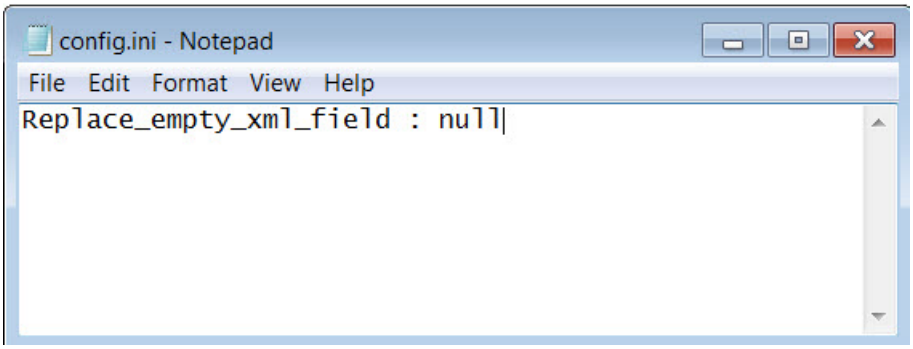
You can use the `config.ini` file to pass null values to the empty fields in the source file.

The values provided in the `config.ini` file replaces all empty fields of the source file in the target JSON file.

You can customize the `config.ini` file located in the following directories:

- `<Secure Agent installation directory>\downloads\<latest connector zip package>\package \plugins\<Plugin ID>`
- `<Secure Agent installation directory>\downloads\<latest connector zip package>\package \rdtm\javalib\<Plugin ID>`

For example, you can pass null value for the replace_empty_xml_field field as shown in the following figure:



When you provide the value as null, the value is considered as null for all the empty parameters. You can also provide empty string (“ ”) as a value for this field. Any other values, besides null and empty string (“ ”) are considered as null.

CHAPTER 4

Troubleshooting

This chapter includes the following topic:

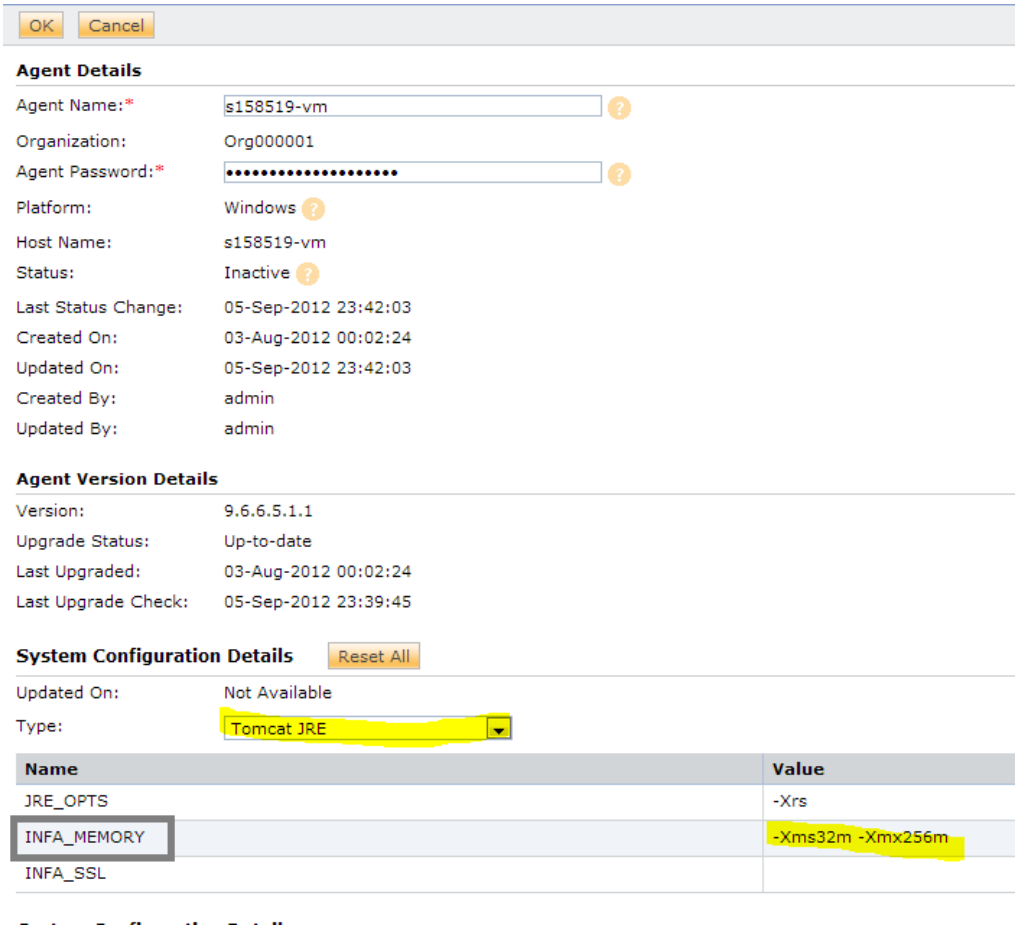
- Increasing Secure Agent Memory, 16

Increasing 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 **System Configuration Details** section, select the **Type** as **TOMCAT JRE** .

The following images shows the **System Configuration Details** box:



4. Edit **INFA_Memory** as **–Xms256m-Xmx512m**.

   The default value is **–Xms32m-Xmx256m**.
5. Click **OK**.
6. In the **System Configuration Details** section, select the **Type** as **DTM**.
7. Edit **JVMOption1** as **–Xmx512m**.
8. Click **OK**.
9. Restart the Secure Agent.

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