Informatica® Cloud Data Integration

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Eloqua REST Connector

Informatica Cloud Data Integration Eloqua REST Connector

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October 2022

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Preface

Use *Eloqua REST Connector* to learn how to read from or write to the Eloqua applications by using Cloud Data Integration. Learn to create a Eloqua REST connection, develop and run mappings, and mapping tasks in Cloud Data Integration.

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CHAPTER 1

Introduction to Eloqua REST Connector

This chapter includes the following topics:

- Eloqua REST Connector Overview, 7
- Eloqua REST Supported Task Types and Feature Types, 7

Eloqua REST Connector Overview

You can use Eloqua REST Connector to connect to Eloqua from Data Integration to read data from or write data to the Eloqua application. You can use Eloqua objects as sources or targets in Mapping tasks and mappings.

You can switch mappings to advanced mode to include transformations and functions that enable advanced functionality.

When you run a mapping, the Secure Agent uses the Eloqua REST API to perform the specified operation and reads data from or writes data to the Eloqua application.

Eloqua REST Supported Task Types and Feature Types

You can use Eloqua REST Connector to perform the insert, update, and delete operations.

The following table lists the Eloqua REST task types that you can include in Data Integration tasks:

Task Type	Source	Target
Mapping	Yes	Yes

CHAPTER 2

Eloqua REST Connections

This chapter includes the following topics:

- Eloqua REST Connections Overview, 8
- Eloqua REST connection properties, 8

Eloqua REST Connections Overview

You can create an Eloqua REST connection to connect to Eloqua. Use the Eloqua REST connection to read data from or write data to the Eloqua application.

You can use the Eloqua REST connections in Mapping tasks and mappings.

Eloqua REST connection properties

When you create an Eloqua REST connection, you must configure the connection properties.

The following table describes the Eloqua REST connection properties:

Property	Description
Runtime Environment	Runtime environment that contains Secure Agent used to access Eloqua.
Base Url	Endpoint URL of the Eloqua application server. Do not specify the query parameters with the Base URL. For example, `https://rest.apisandbox.eloqua.com`
Username	User name of the Eloqua application.
Domain	Domain of the Eloqua application.
Password	Password for the Eloqua application.
Client ID	The client ID created in the Eloqua application. You must enter the client ID if you select **OAuth 2.0** as the **Authentication Type**.

Property	Description
Client Secret	The client secret key created in the Eloqua application. You must enter the client secret key if you select **OAuth 2.0** as the **Authentication Type**.
Authentication Type	The type of user authentication to connect to the Eloqua application. Select the authentication type that Eloqua REST Connector must use to login to the Eloqua application. You can select the following authentication types: - Basic Auth - OAuth 2.0 Default is OAuth 2.0.
Enable Debug Logger	Displays the message in the session logs to debug the mapping. Default is false.
Eloqua Swagger	The swagger file that you want to use for the Eloqua REST connection. Select **Eloqua Swagger API V1_2017_09_06**.

CHAPTER 3

Eloqua REST Operations

This chapter includes the following topics:

- Eloqua REST Operations Overview, 10
- Eloqua REST Objects and Operations, 10
- Eloqua REST Source Operations, 16
- Eloqua REST Target Operations, 18

Eloqua REST Operations Overview

Eloqua exposes the web service API that the Secure Agent uses to perform integration tasks through the REST protocol.

When you create a mapping, you can associate an Eloqua REST connection and an operation. The Secure Agent connects to the web service to access, transform, or write data. The request and response are REST messages. The REST request and response messages contain hierarchical data in the JSON format. If you want to write data to a relational target, the Secure Agent converts the hierarchical data fetched from Eloqua to relational data.

Eloqua REST Objects and Operations

The following table lists the supported Eloqua REST objects and operations:

Eloqua REST Object	Relative Path to the Object	Operation
Accounts	/api/REST/1.0/data/account	POST
	/api/REST/1.0/data/account/{id}	DELETE, GET, and PUT
	/api/REST/1.0/data/accounts	GET
	/api/REST/2.0/data/account/{id}/membership	GET
	/api/REST/2.0/data/accounts	POST

Eloqua REST Object	Relative Path to the Object	Operation
Account groups	/api/REST/2.0/assets/account/group	POST
	/api/REST/2.0/assets/account/group/{id}	DELETE, GET, and PUT
	/api/REST/2.0/assets/account/groups	GET
Activities	/api/REST/1.0/data/activities/contact/{id}	GET
Campaigns	/api/REST/2.0/assets/campaign/active/{id}	POST
	/api/REST/2.0/assets/campaign	POST
	/api/REST/2.0/assets/campaign/draft/{id}	POST
	/api/REST/2.0/assets/campaign/{id}	DELETE, GET, and PUT
	/api/REST/2.0/assets/campaigns	GET
Contacts	/api/REST/1.0/data/contact	POST
	/api/REST/1.0/data/contact/{id}	DELETE, GET, and PUT
	/api/REST/1.0/data/contacts	GET
	/api/REST/2.0/data/contacts	POST
	/api/REST/2.0/data/contact/{id}/membership	GET
Contact fields	/api/REST/1.0/assets/contact/field	POST
	/api/REST/1.0/assets/contact/field/{id}	DELETE, GET, and PUT
	/api/REST/1.0/assets/contact/fields	GET
Contact list	/api/REST/1.0/assets/contact/list	POST
	/api/REST/1.0/assets/contact/list/{id}	DELETE, GET, and PUT
	/api/REST/1.0/assets/contact/lists	GET

Eloqua REST Object	Relative Path to the Object	Operation
Contact segments	/api/REST/1.0/assets/contact/segment	POST
	/api/REST/1.0/assets/contact/segment/{id}	DELETE, GET, and PUT
	/api/REST/1.0/assets/contact/segments	GET
	/api/REST/2.0/assets/contact/segment	POST
	/api/REST/2.0/assets/contact/segment/{id}/copy	POST
	/api/REST/2.0/assets/contact/segment/{id}	DELETE, GET, and PUT
	/api/REST/2.0/assets/contact/segments	GET
Content sections	/api/REST/1.0/assets/contentSection	POST
	/api/REST/1.0/assets/contentSection/{id}	DELETE, GET, and PUT
	/api/REST/1.0/assets/contentSections	GET
Custom objects	/api/REST/1.0/assets/customObject	POST
	/api/REST/1.0/assets/customObject/{id}	DELETE, GET, and PUT
	/api/REST/1.0/assets/customObjects	GET
	/api/REST/2.0/assets/customObject	POST
	/api/REST/2.0/assets/customObject/{id}	DELETE, GET, and PUT
	/api/REST/2.0/assets/customObjects	GET
Custom object data	/api/REST/1.0/data/customObject/{id}	POST
	/api/REST/1.0/data/customObject/{id}	GET

Eloqua REST Object	Relative Path to the Object	Operation
	/api/REST/2.0/data/customObject/{parentId}/instance	POST
	/api/REST/2.0/data/customObject/{parentId}/instance/{id}	DELETE, GET, and PUT
	/api/REST/2.0/data/customObject/{parentId}/instances	GET
Emails	/api/REST/1.0/assets/email	POST
	/api/REST/1.0/assets/email/{id}	DELETE, GET, and PUT
	/api/REST/1.0/assets/emails	GET
	/api/REST/2.0/assets/email	POST
	/api/REST/2.0/assets/emails	GET
	/api/REST/2.0/assets/email/{id}	DELETE, GET, and PUT
Email deployment	/api/REST/2.0/assets/email/deployment	POST
	/api/REST/2.0/assets/email/deployment/{id}	GET
Email folders	/api/REST/1.0/assets/email/folder	POST
	/api/REST/1.0/assets/email/folder/{id}	DELETE, GET, and PUT
	/api/REST/1.0/assets/email/folders	GET
Email footers	/api/REST/1.0/assets/email/footer	POST
	/api/REST/1.0/assets/email/footer/{id}	DELETE, GET, and PUT
	/api/REST/1.0/assets/email/footers	GET
Email groups	/api/REST/1.0/assets/email/group	POST
	/api/REST/1.0/assets/email/group/{id}	DELETE, GET, and PUT

Eloqua REST Object	Relative Path to the Object	Operation
	/api/REST/1.0/assets/email/groups	GET
Email headers	/api/REST/1.0/assets/email/header	POST
	/api/REST/1.0/assets/email/header/{id}	DELETE, GET, and PUT
	/api/REST/1.0/assets/email/headers	GET
Events	/api/REST/2.0/assets/eventRegistration	POST
	/api/REST/2.0/assets/eventRegistration/{id}	DELETE, GET, and PUT
	/api/REST/2.0/assets/eventRegistrations	GET
Event registrants	/api/REST/2.0/data/eventRegistration/{parentId}/instance	POST
	/api/REST/2.0/data/eventRegistration/{parentId}/instance/{id}	DELETE, GET, and PUT
	/api/REST/2.0/data/eventRegistration/{parentId}/instances	GET
External activities	/api/REST/2.0/data/activity	POST
	/api/REST/2.0/data/activity/{id}	GET
External assets	/api/REST/2.0/assets/external	POST
	/api/REST/2.0/assets/external/{id}	DELETE, GET, and PUT
	/api/REST/2.0/assets/externals	GET
External asset types	/api/REST/2.0/assets/external/type	POST
	/api/REST/2.0/assets/external/type/{id}	DELETE, GET, and PUT
	/api/REST/2.0/assets/external/types	GET
Forms	/api/REST/1.0/assets/form	POST

Eloqua REST Object	Relative Path to the Object	Operation
	/api/REST/1.0/assets/form/{id}	DELETE, GET, and PUT
	/api/REST/1.0/assets/forms	GET
Form data	/api/REST/1.0/data/form/{id}	POST
	/api/REST/1.0/data/form/{id}	GET
Images	/api/REST/1.0/assets/image/content	POST
	/api/REST/1.0/assets/image/{id}	DELETE, GET, and PUT
	/api/REST/1.0/assets/images	GET
Landing pages	/api/REST/1.0/assets/landingPage	POST
	/api/REST/1.0/assets/landingPage/{id}	/api/REST/1.0/assets/image/{id}
	/api/REST/1.0/assets/landingPages	GET
Microsites	/api/REST/1.0/assets/microsite	POST
	/api/REST/1.0/assets/microsite/{id}	DELETE, GET, and PUT
	/api/REST/1.0/assets/microsites	GET
Option lists	/api/REST/1.0/assets/optionList	POST
	/api/REST/1.0/assets/optionList/{id}	DELETE, GET, and PUT
	/api/REST/1.0/assets/optionLists	GET
Programs	/api/REST/2.0/assets/program/active/{id}	POST
	/api/REST/2.0/assets/program	POST
	/api/REST/2.0/assets/program/draft/{id}	POST
	/api/REST/2.0/assets/program/{id}	DELETE, GET, and PUT
	/api/REST/2.0/assets/program/pause/{id}	DELETE, GET, and PUT
	/api/REST/2.0/assets/programs	GET

Eloqua REST Object	Relative Path to the Object	Operation
Users	/api/REST/1.0/system/users	GET
	/api/REST/1.0/system/user/{id}	GET and PUT
Visitors	/api/REST/2.0/data/visitors	GET
Visitor profile fields	/api/REST/2.0/assets/visitor/fields	GET

For information about the operations, see the Eloqua API documentation.

Eloqua REST Source Operations

Create a Source transformation in the Mapping Task wizard to read data from Eloqua.

After you select a Eloqua REST connection for a Source transformation in a mapping, you can select an operation from the list of operations.

After you specify the connection, specify the operation on the **Source** tab of the Source transformation.

Select the operation you require, use the sample template to configure the request message in the JSON format, provide the sample template, and configure the advanced properties for the operation.

Configuring a Request Using Request Message Editor

When you create a Source transformation, configure an JSON request message for the operation that you want to perform in Eloqua.

Use the Request Message Editor to create a request message. The request message is in JSON format and contains request parameters exposed by Eloqua REST API for a specific operation. You can use the default request message for the operation and then customize the request message to specify the data that you want to include.

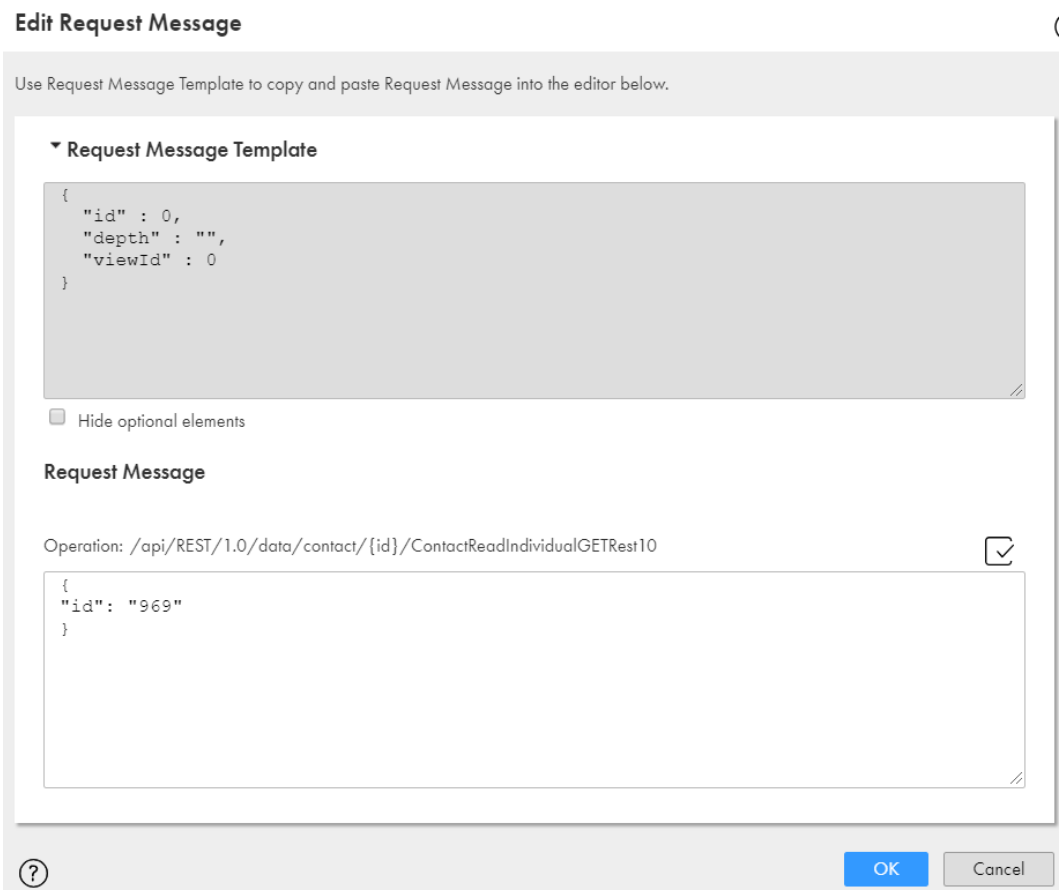
To customize your request, copy the request message from the sample template to the Request Message Editor pane where you can edit the JSON message and add the attributes for the request. Remove unnecessary and empty tags from the request message to avoid operation failure. You can hide the optional elements to see the mandatory elements required for the request message.

For example, you want to perform the GET_Contacts operation using Eloqua REST Connector to retrieve reports for all users.

The following JSON sample shows the filters used for the GET_Contacts operation:

```
{
  "id" : 0,
  "depth" : "",
  "viewId" : 0
}
```

The following image shows the validated request message in a GET_Contacts operation in the Mapping Designer:



The request message format in Eloqua REST Connector follows the service request definition in Eloqua. Ensure that you use well-formed JSON formatting in the request message. You can verify if the JSON request is valid to ensure that the JSON matches the structure expected by the operation.

Field Mapping in a Source Transformation

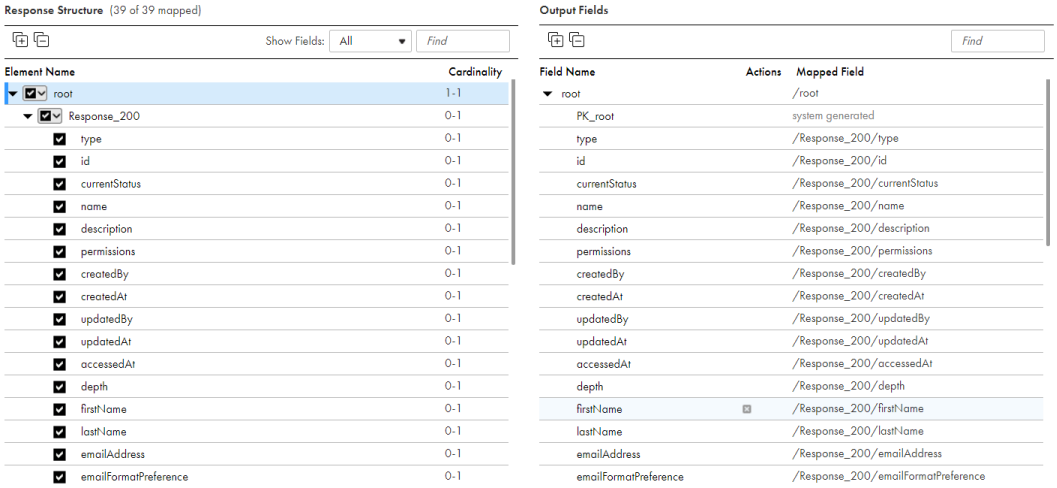
The response message format follows the service response definition in Eloqua. You can map response fields from a hierarchical to a relational structure of output groups and fields.

After you configure an operation for a source and specify the request message, create the relational format from the hierarchical data to include groups and fields that you want in the output.

Select the elements in the response structure that you want to include as output fields. The Secure Agent converts the JSON response in the hierarchical structure to relational groups at run time.

The output groups along with the primary and foreign keys are generated. You can pause on the output field to view the XPath expression, which indicates which field the output field is mapped to in the response structure of the hierarchy tree.

The following image shows an example hierarchical response structure generated from the request JSON for the GET_Contacts operation and the corresponding relational output fields for the response:



You can edit the data type, precision, and scale for the groups and fields after mapping the fields.

Eloqua REST Target Operations

Create a Target transformation in the Mapping Task wizard to write data to Eloqua. When you select an Eloqua REST connection for a Target transformation in a mapping, you can select an operation from the list of operations. When you want to write data that is in relational format to Eloqua, the Secure Agent converts the relational data to a hierarchical format before you write the data to Eloqua.

When you configure an Eloqua target, you can select **Operations** on the **Target** tab to display the list of operations. The Secure Agent creates target fields based on the request message structure of the operation you select on the **Target** tab.

When you write data to Eloqua, the Secure Agent includes all the input fields from the source, by default. You can exclude the incoming fields, if required. You can add multiple input sources to write data to Eloqua target object and define the primary and foreign key relationships between the input sources before you run the mapping. Each input source appears as separate group in the **Field Mapping** tab in the target transformation. You can define key relationships on the **Field Mapping** tab.

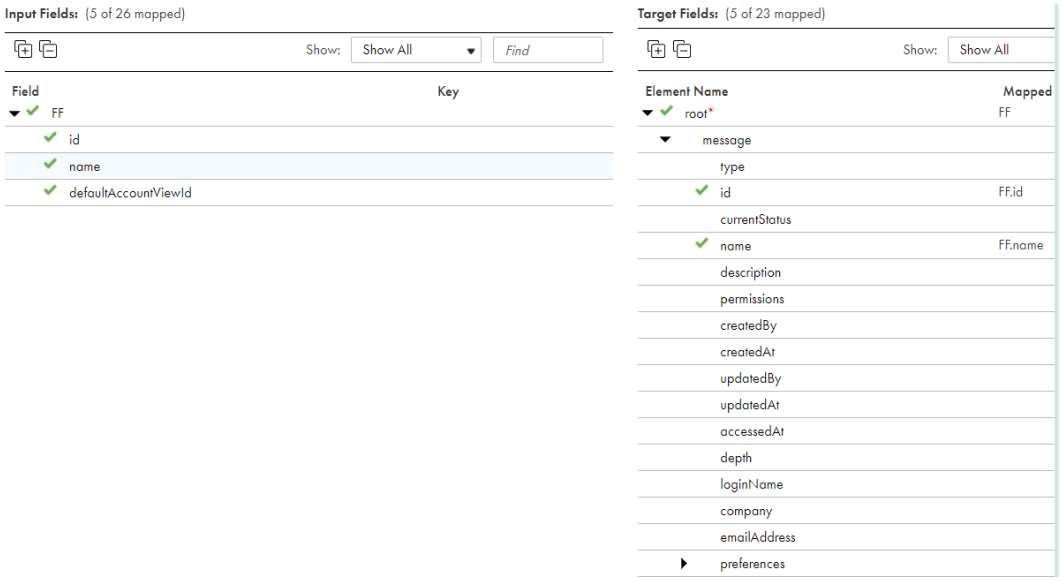
Field Mapping in a Target Transformation

You can map fields that are in a relational structure to the hierarchical structure used by an Eloqua target.

On the **Field Mapping** tab for the Target transformation, the fields in the **Target Fields** appear in hierarchical format. The target fields are determined by the request message structure of the operation you select for the Target transformation.

Each source object displays as a group in the **Input Fields** area. You can select fields in the **Input Fields** area to map the fields to the request. If the input fields include multiple input groups, map the groups to the corresponding nodes in the request. Be sure to map all of the fields that you require in the request.

The following image shows an example of mapped input fields from the source file with the Eloqua target in an operation to insert data:



CHAPTER 4

Mappings and Mapping Tasks with Eloqua REST Connector

Use the Data Integration Mapping Designer to create a mapping. When you create a mapping, you configure a source or target to represent the object.

In advanced mode, the Mapping Designer updates the mapping canvas to include transformations and functions that enable advanced functionality.

Eloqua REST Source Transformation in Mappings

When you configure a Source transformation, select the Eloqua REST connection and choose an operation to represent an Eloqua source. You can parameterize an Eloqua REST connection.

When you select an Eloqua REST connection for a source, you can select an operation from the list of operations. You can use the request message template to configure the request message in a JSON format. You can parameterize the input values in the request message. Configure the advanced properties to set the tracing level and the cache size for the web service response.

You can view the response structure in the field mapping. When you map the elements from the response structure to the output fields, the Secure Agent creates the output groups, along with the primary and foreign keys for the field names. When you deploy the mapping in a mapping task and run the task, the Secure Agent reads the data from Eloqua.

Source Transformation Properties

You can use one or more source transformations in a mapping.

When you select a source, the **Properties** panel displays the following information:

- **General**. Configure the name and a description for the source.
- **Source**. Select the connection and the operation, configure the request message in the request options, and configure the advanced source properties.
- **Field Mapping**. Map elements of the response structure with the output fields.
- **Fields**. Edit the metadata source field metadata that you want to use in the mapping.

Advanced Source Properties

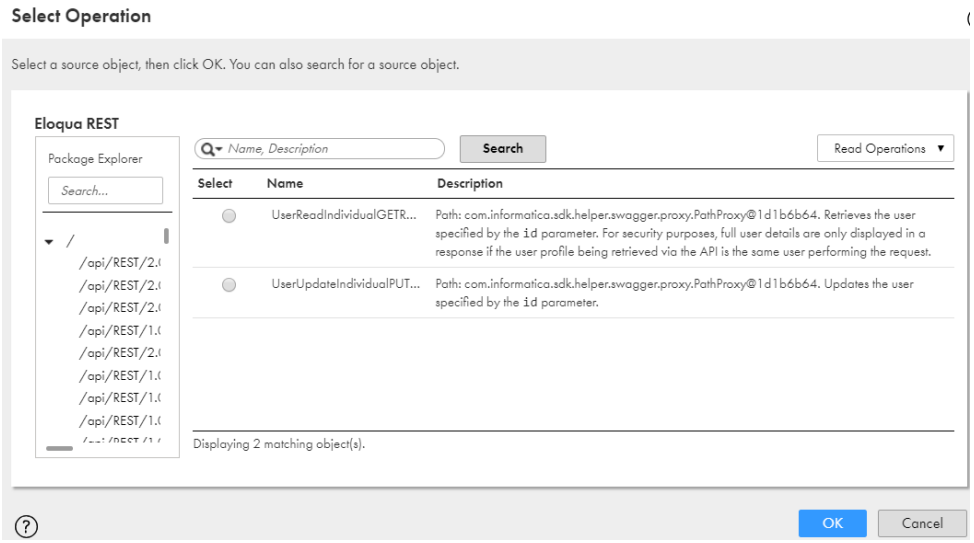
In a mapping, you can configure a source to represent an Eloqua REST source. For Eloqua REST connections used in Mapping tasks, you can configure advanced properties on the **Source** page of the Mapping Task wizard.

Property	Description
Tracing Level	Amount of detail that appears in the log. Use the following tracing levels: - Terse - Normal - Verbose Initialization - Verbose data Default is normal.
Cache Size for Web Service Response (KB)	Not Applicable. **Note:** Do not change the value of this property unless Informatica Global Customer Support instructs you to do so.

Source Transformation Mapping Example

To read data from Eloqua and write to a flat file using Eloqua REST connection, perform the following tasks:

1. Create an Eloqua REST connection to read data from an Eloqua source.
2. Create a flat file connection to write data to the flat file.
3. Create a Eloqua REST mapping.
4. Add a Source transformation. Specify a name and description in the general properties.
5. On the **Source** tab, perform the following steps:
   a. In the **Connection** field, select the configured Eloqua REST connection to connect to Eloqua.
   b. In the **Operation** field, select the required operation.
   The following image shows the **Operation** field:



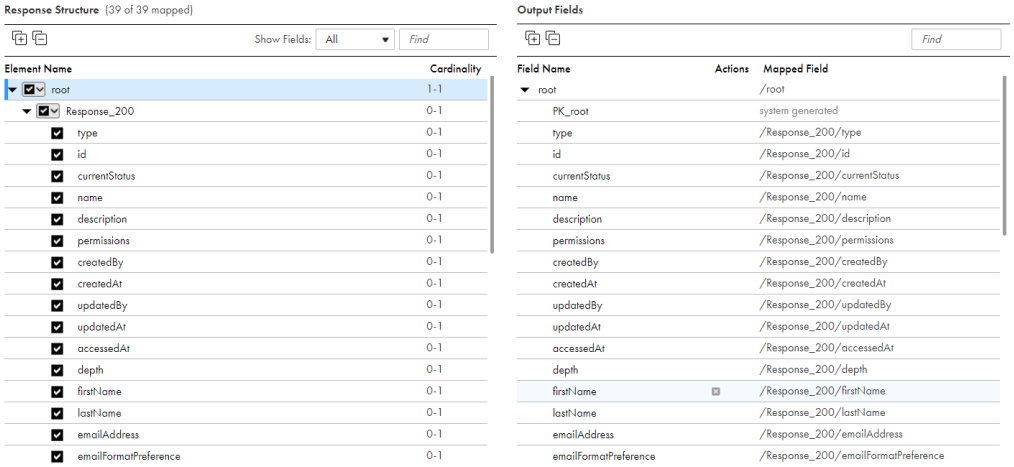
c. In the **Request Options** section, configure the request message in the following JSON format, specify the attributes in the message, and validate the message:

```
{
  "id" : 0,
  "depth" : "",
  "viewId" : 0
}
```

You can hide the optional elements to see the mandatory elements required for the request message.

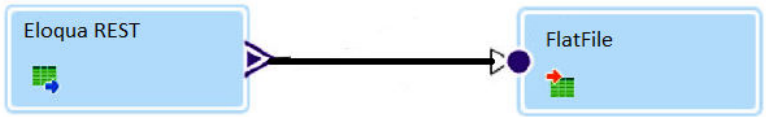
d. In the **Advanced Properties** section, set the tracing level to Normal, and use the default cache size of 1024 MB.

6. On the **Field Mapping** tab, select the elements in the response structure that you want to map to the output fields.
The following image shows the response structure on the left pane in a hierarchical format and the output groups on the right pane in a relational format:



7. Add a Target transformation to include the flat file object and add the flat file connection. Specify name and description in the general properties.

8. Draw a link to connect the Eloqua REST source to the flat file.
The following image shows the Eloqua REST mapping:



9. On the **Field Mapping** tab, select the automatic field map option.

10. Save and run the mapping.

Eloqua REST Target Transformation in Mappings

When you select an Eloqua REST connection for a target, you can select an operation from the list of operations.

You can add multiple input groups into the Eloqua REST target and define the primary and foreign key relationships between the multiple input groups before the mapping.

Target Transformation Properties

You can configure target properties, such as target details and advanced properties, based on the connection type you select. Configure target transformation properties on the **Target** tab of the Properties panel.

When you select a target, the **Properties** panel displays the following areas and information:

- **General**. Defines the transformation name and a description.
- **Incoming Fields**. Includes the field rules that define the data written to the target. Allows a preview of target fields.
- **Target**. Defines the target connection, operation, and advanced options.
- **Target Fields**. Not applicable for Web Service targets.
- **Field Mapping**. Defines the field mappings from the upstream transformation to the target.

Advanced Target Properties

In a mapping, you can configure a target to represent an Eloqua REST target. For Eloqua REST target connections used in mapping tasks, you can configure advanced properties in the Targets page of the Mapping Task wizard.

The following table describes the advanced properties that you can configure in a Target transformation:

Property	Description
Cache Size for Web Service Request (KB)	Not Applicable. **Note:** Do not change the value of this property unless Informatica Global Customer Support instructs you to do so.
Transaction Commit Control	Control to commit or roll back transactions based on the set of rows that pass through the transformation. Use the transaction commit control if you have a large amount of data and you want to control how it is processed.

Input settings properties

You can enable **Sorted Input** under **Input Settings**. Sorted Input indicates that input data is presorted. Default is disabled.

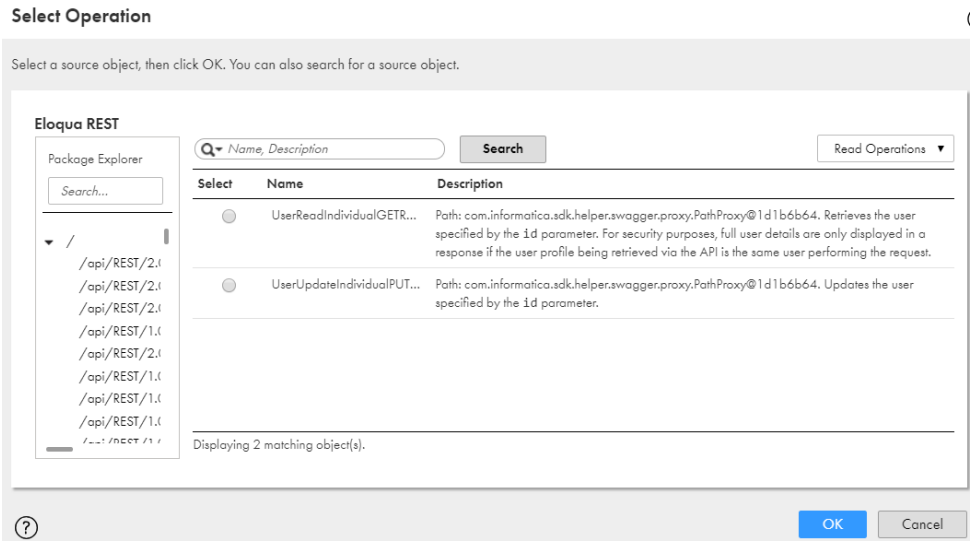
Enable sorted input for better performance.

Note: When **Sorted Input** is enabled and the input is not sorted, the Secure Agent does not process input and the mapping fails.

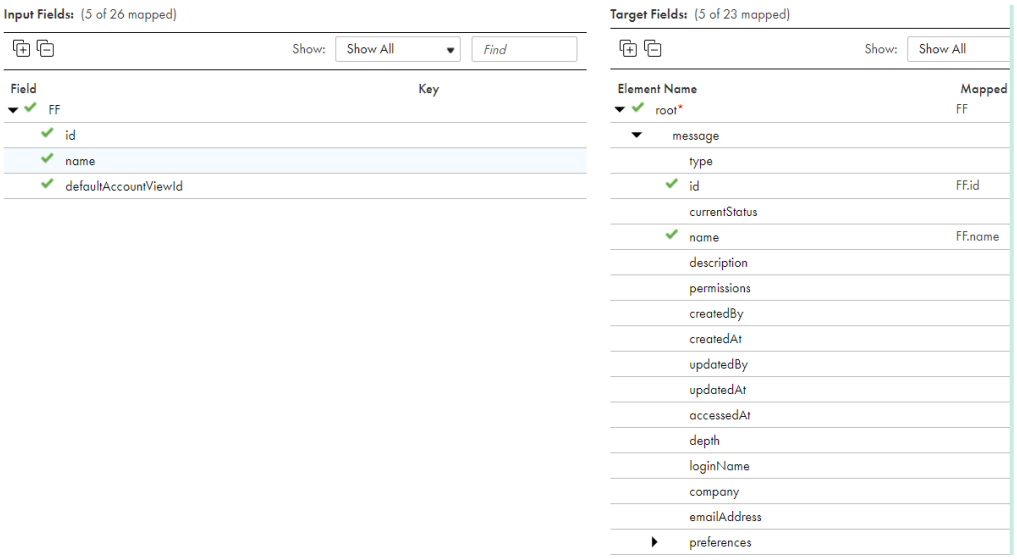
Target Transformation Mapping Example

To write data to Eloqua from a flat file using Eloqua REST connection, perform the following tasks:

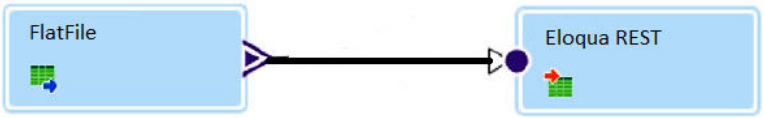
1. Create a flat file connection to read data from the flat file.
2. Create an Eloqua REST connection to write data to Eloqua.
3. Create a Eloqua REST mapping.
4. Add a Source transformation to include the flat file object and add the flat file connection.
5. Add a Target transformation to write data to Eloqua.
   Perform the following tasks on the **Target** tab:
   1. In the **Connection** field, select the Eloqua REST connection to connect to Eloqua.
   2. In the **Operation** field, select the required operation.
      The following image shows the **Operation** field:



   3. In the **Advanced Properties** section, set the cache size and the transaction commit interval.
6. On the **Field Mapping** tab, select the input elements to map to the target fields.
   The following image shows all the mapped fields between the input file and the Eloqua REST target:



7. Save and run the mapping in a mapping task.
   The following image shows the Eloqua REST mapping:



Eloqua REST Midstream Transformation in Mappings

Before you configure a midstream transformation, you must create a business service. Select an Eloqua REST connection and choose an Eloqua REST operation when you create a business service.

Midstream Transformation Properties

When you configure the midstream transformation, select the business service and the operation on the **Web Service** tab.

When you select a midstream transformation, the **Properties** panel displays the following areas and information:

General

Use to configure the name and a description for the transformation.

Incoming Fields

Includes the field rules that define the data that you read from the source. Allows a preview of the source fields.

Web Service

Specifies the business service and the operation that you want to perform in an Eloqua application.

Request Mapping

Maps the incoming fields from source file to elements in request structure.

Response Mapping

Maps the selected elements from the response structure with the output fields. You can view the response structure on the **Response Mapping** tab. When you map the elements from the response structure to the output fields, the Secure Agent creates the output groups, along with the primary and foreign keys for the field names.

Output Fields

Displays the fields included in the mapping.

Advanced

The properties required to configure a midstream transformation.

Eloqua REST Advanced Midstream Properties in Mappings

The following table describes the advanced properties that you can configure for a midstream transformation:

Property	Description
Cache Size for Web Service Request (KB)	Memory available for the web service request. If the request is more than 100 KB, you can increase the cache size. Default is 100 KB.
Cache Size for Web Service Response (KB)	Memory available for the web service response. If the web service response contains many rows or columns, you might want to increase the cache size. Default is 100 KB.
Allow Input Flush	Not applicable.
Transaction Commit Control	Not applicable.

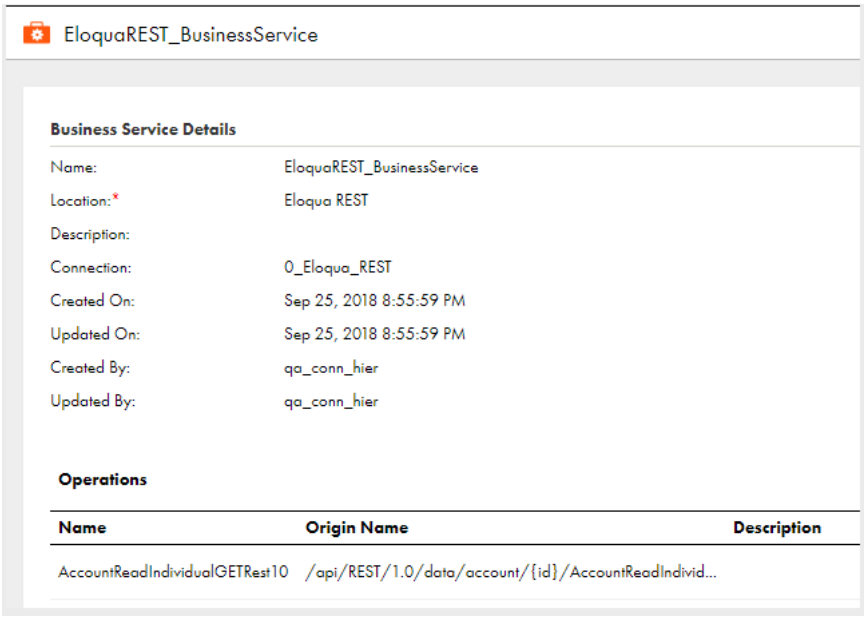
Midstream Transformation Mapping Example

To read data from an Eloqua REST source and to write the data to a flat file, perform the following tasks:

1. Create an Eloqua REST connection to read data from an Eloqua REST source.
2. In Data Integration, click **New** > **Components** > **Business Sevice**.

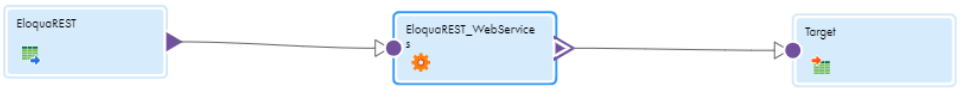
   The **Business Sevice Details** dialog box appears.

   The following image shows the configured business service that associates an Eloqua REST connection and an operation:



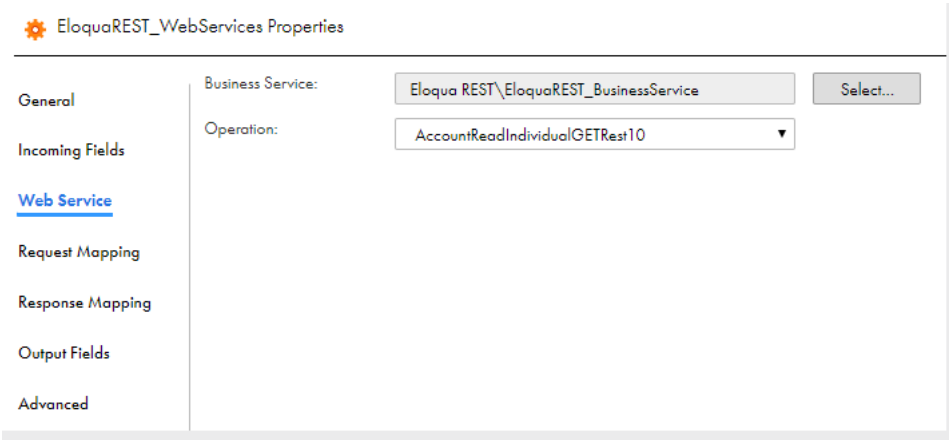
3. Add a Web Services transformation. Specify a name and description in the general properties.

The following image shows the source, web service, and target in the Eloqua REST mapping:



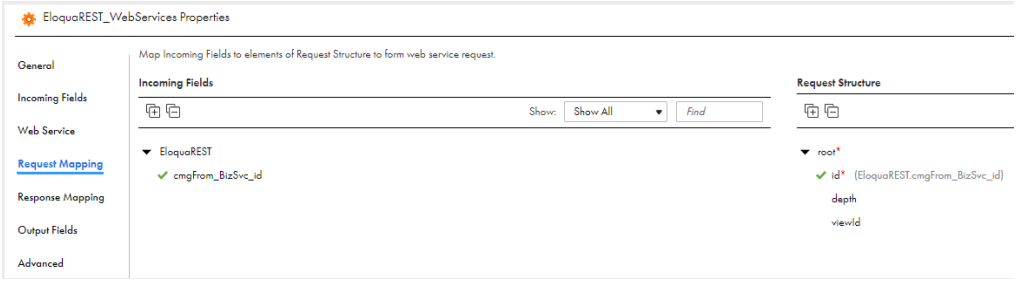
4. On the **Web Service** tab, select the business service and the operation that you configured.

   The following image shows the configured web service:



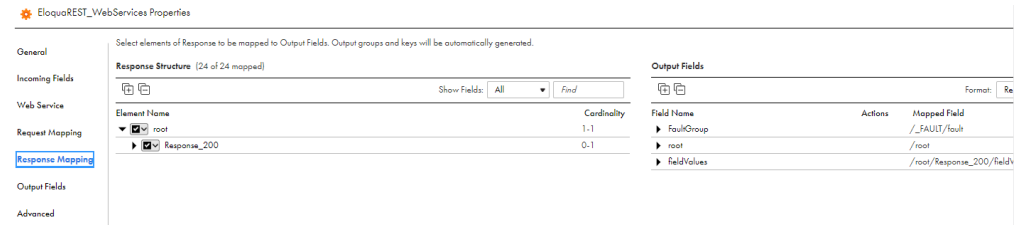
5. On the **Request Mapping** tab, map the incoming fields from the source to the elements of Request Structure to form a web service request:

   The following image shows the fields that you map:



6. On the **Response Mapping** tab, select the source details fields that you want to write to the target file on the **Response Structure**.

   The following image shows the fields that you map:

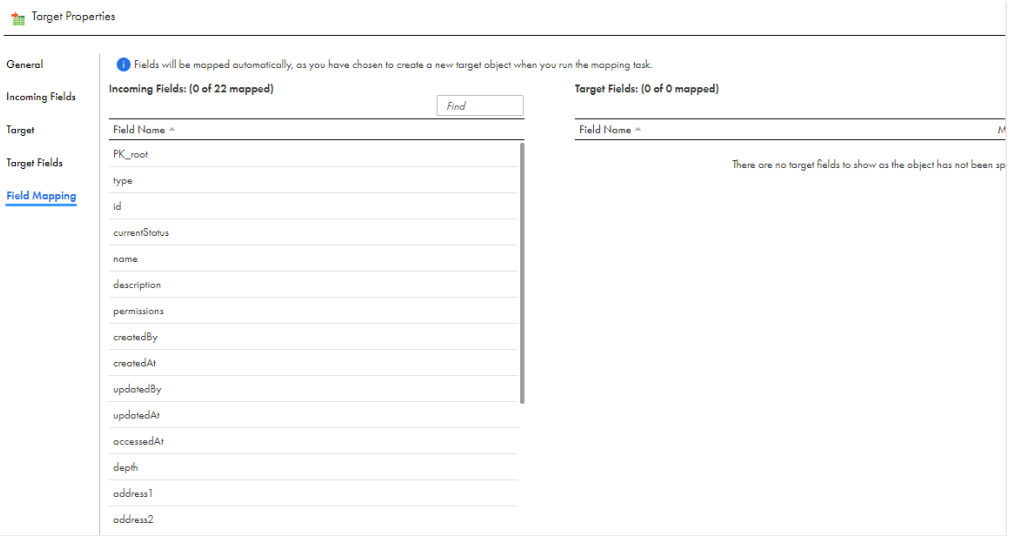


7. On the **Advanced** tab, specify the cache size details.

   The fields that you select from the **Response Structure** of the Web Service transformation appear as incoming fields for the target object.

8. If required, map the incoming fields to the flat file fields.

The following image shows the mapped fields in the **Field Mapping** tab:



9. Click **Task Wizards** > **Mapping Task**, and select the mapping for the task.
10. When you save and run the mapping, the Secure Agent reads the data that you map on the **Request Mapping** tab from Eloqua application and writes the data to the corresponding flat files.

CHAPTER 5

Eloqua REST Data Type Reference

This chapter includes the following topics:

- Data Type Reference Overview, 29
- Eloqua REST and Transformation Data Types, 29

Data Type Reference Overview

Data Integration uses the following data types in mappings and mapping tasks with Eloqua:

Eloqua native data types

Eloqua data types appear in the parameters in the Eloqua REST operations and you cannot change these data types.

Transformation data types

Set of data types that appear in the remaining transformations. They are internal data types based on ANSI SQL-92 generic data types, which Data Integration uses to move data across platforms. Transformation data types appear in all remaining transformations in a mapping or mapping task.

When Data Integration reads or writes Eloqua data, it converts the native data types to the comparable transformation data types before transforming the data.

Eloqua REST and Transformation Data Types

The following table lists the Eloqua REST data types that Data Integration supports and the corresponding transformation data types:

Eloqua REST Data Type	Transformation Data Type	Description
Boolean	string	1 to 65536 characters
Integer	integer	-2,147,483,648 to 2,147,483,647 Precision 12, scale 0
String	string	1 to 65536 characters

CHAPTER 6

Troubleshooting

This chapter includes the following topics:

- Troubleshooting Overview, 30
- Increasing the Secure Agent memory, 30

Troubleshooting Overview

Use the following sections to troubleshoot errors in Eloqua REST Connector.

Note: To troubleshoot a failed mapping or mapping task fails, you can view the session log file at the following location: `<Secure Agent installation directory>/apps/Data_Integration_Server/logs`.

Increasing the Secure Agent memory

For the Eloqua REST mapping to successfully perform a write operation, configure the memory for the Java heap size on the Secure Agent machine.

1. Select **Administer** > **Runtime Environments**.
2. On the **Runtime Environments** page, 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 the **JVMOption1** as **-Xmx2048m**, **JVMOption2** as **-Xmx2048m**, and **INFA_MEMORY** as **-Xms256m -Xmx2048m -XX:MaxPermSize=128m**.

   Note: Specify the maximum and minimum heap size based on the data you want to process.
6. Restart the Secure Agent manually.

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