Informatica

Informatica® Cloud Data Integration

Filelo Connector

Informatica Cloud Data Integration Filelo Connector
October 2020

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Preface

Use *FileIo Connector* to learn how to export Salesforce attachments to a file system and upload files from a local system to Salesforce by using Cloud Data Integration. Learn to create a FileIo connection and run synchronization tasks in Cloud Data Integration.

Informatica Resources

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

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CHAPTER 1

Introduction to FileIo Connector

This chapter includes the following topics:

- FileIo Connector Overview, 7
- Supported Modules and Task Operations, 7
- Pre-requisites to Install FileIo Connector, 7
- Enabling FileIo Connector, 8

FileIo Connector Overview

The FileIo Connector exports Salesforce attachments to a file system. It also uploads files from a local file system to Salesforce. FileIo Connector works with any source or target that supports binary or base64 encoded content.

Supported Modules and Task Operations

The following table provides the list of supported modules and operations by FileIo Connector.

Objects	Read	Insert	Update	Upsert	Delete	Data Preview	Lookup
anyfileobject	Yes	Yes	NA	NA	NA	NA	NA

Pre-requisites to Install FileIo Connector

You need Salesforce application/portal access (user credentials) to create integration tasks for FileIo to Salesforce or vice-versa in Data Integration. You need to have `.infaccess` file in the folder from where you need to upload attachment or download attachment.

Note: `.infaccess` is an empty file. For more information about how to create a `.infaccess` file, see "Creating a .infaccess file" on page 17

Enabling FileIo Connector

To enable FileIo Connector, contact Informatica support or Informatica representative. It usually takes 15 minutes for the connector to download to secure agent, after it is enabled.

CHAPTER 2

FileIo Connections

This chapter includes the following topics:

- FileIo Connections Overview, 9
- Creating a FileIo Connection, 10
- FileIO connection properties, 11

FileIo Connections Overview

Create a FileIo connection in Data Integration before you use FileIo Connector in a synchronization task.

You can create a FileIo connection on the **Connections** page. When you create the FileIo connection, you can enter the connection attributes specific to FileIo Connector. You can use FileIo connections to specify sources and targets in a synchronization tasks.

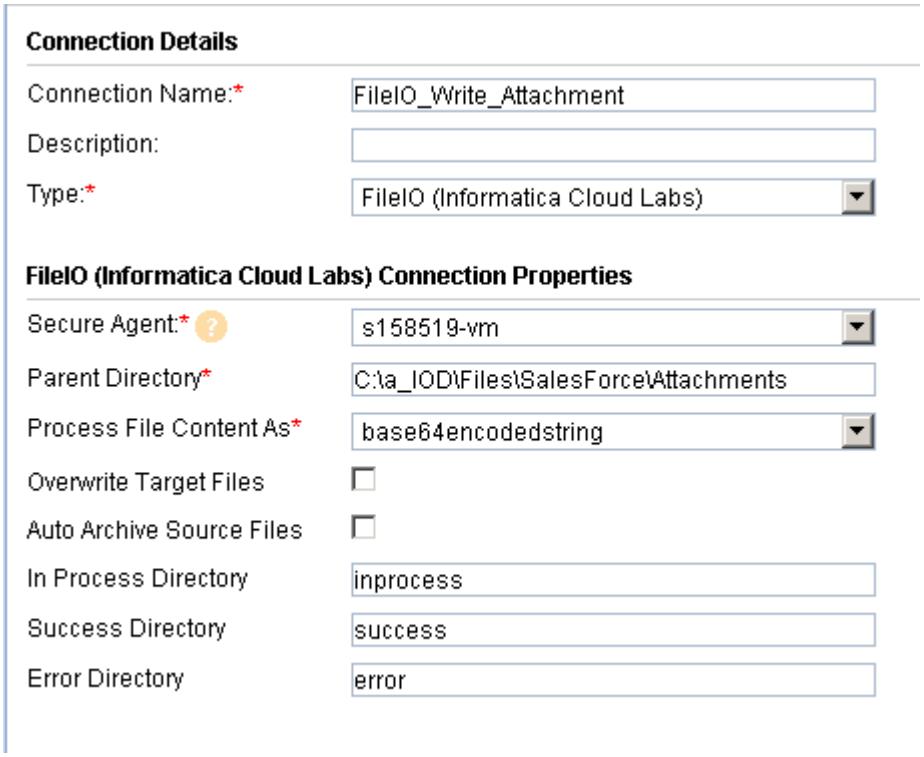
Creating a FileIo Connection

To use FileIo Connector in synchronization task, you must create a connection in Data Integration.

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

1. On the **Connections** page, click **New Connection** to create a connection.

   The **New Connection** page appears.
   The following image shows the Connection page:



2. Specify the following details.

Connection Property	Description
Connection Name	Enter a unique name for the connection.
Description	Provide a relevant description for the connection.
Type	Select **FileIo** from the list.
Secure Agent	Select the appropriate secure agent from the list.

Connection Property	Description
Parent Directory	Enter the parent directory path. The parent directory is the folder that contains the files to perform read and write operations. The parent directory must contain an `.infaccess` empty file. Create a folder within the parent directory with any name other than inprocess, success, and error. For example, you can create a `read`, `write`, or `test` folder. The empty file will be listed as objects when you select this connection as source or target in the task.
Process File Content As	Select the required option from the list of available options to process the file content. The following file processing options are available: - Binary: When you select Binary, you must map FileContentAsBinary in the **Field Mapping** tab of the synchronization task. - base64 encoded string: By default this option is selected. When you select this option, you must map FileContentAsBase64String in the **Field Mapping** tab of the synchronization task.
Overwrite Target Files	Check the box to enable overwrite target files. Otherwise the file containing same names will be created in the incrementing naming order using a counter. For example, when you do not enable overwrite target file option, the existing file ABCD will not be overwritten. Instead a new file ABCD(1) will be created.
Auto Archive Source Files	Check the box to enable automatic archiving of source files. This option allows you to move the files from source directory after the file is processed.
In Process Directory	Mention the directory path to be used for file processing. By default, parent directory is considered.
Success Directory	Mention the directory path where the files will be moved after processing. By default, parent directory is considered. Mention the success directory path only when **Auto Archive Source Files** option is enabled.
Error Directory	Mention the error directory path. When they are issues/errors in file processing. Such files are moved to error directory.

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

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

FileIO connection properties

When you set up a FileIO connection, you must configure the connection properties.

The following table describes the FileIO connection properties:

Connection property	Description
Connection Name	Enter a unique name for the connection.
Description	Provide a relevant description for the connection.

Connection property	Description
Type	Select **FileIo** from the list.
Secure Agent	Select the appropriate secure agent from the list.
Parent Directory	Enter the parent directory path. The parent directory is the folder that contains the files to perform read and write operations. The parent directory must contain an `.infaccess` empty file. Create a folder within the parent directory with any name other than inprocess, success, and error. For example, you can create a `read`, `write`, or `test` folder. The empty file will be listed as objects when you select this connection as source or target in the task.
Process File Content As	Select the required option from the list of available options to process the file content. The following file processing options are available: - Binary: When you select Binary, you must map FileContentAsBinary in the **Field Mapping** tab of the synchronization task. - base64 encoded string: By default this option is selected. When you select this option, you must map FileContentAsBase64String in the **Field Mapping** tab of the synchronization task.
Overwrite Target Files	Check the box to enable overwrite target files. Otherwise the file containing same names will be created in the incrementing naming order using a counter. For example, when you do not enable overwrite target file option, the existing file ABCD will not be overwritten. Instead a new file ABCD(1) will be created.
Auto Archive Source Files	Check the box to enable automatic archiving of source files. This option allows you to move the files from source directory after the file is processed.
In Process Directory	Mention the directory path to be used for file processing. By default, parent directory is considered.
Success Directory	Mention the directory path where the files will be moved after processing. By default, parent directory is considered. Mention the success directory path only when **Auto Archive Source Files** option is enabled.
Error Directory	Mention the error directory path. When they are issues/errors in file processing. Such files are moved to error directory.

CHAPTER 3

Synchronization Tasks with FileIo

This chapter includes the following topics:

- Creating a FileIo Synchronization Task, 13
- Data Filters, 15
- Editing the Data Types in the Field Mapping, 16
- Unmapping Fields, 16
- Creating a .infaccess file, 17
- Maintaining the Lookup File for Salesforce Attachment Parent Object ID, 17

Creating a FileIo Synchronization Task

Perform the following tasks to create a synchronization task in Data Integration.

Note: You need to create a connection before you create a synchronization task.

Using FileIo as Source

Let us consider the task operation Insert to perform the synchronization task.

1. In Data Integration, click **New** > **Tasks**.
2. Select **Synchronization Tasks**, and click **Create**.

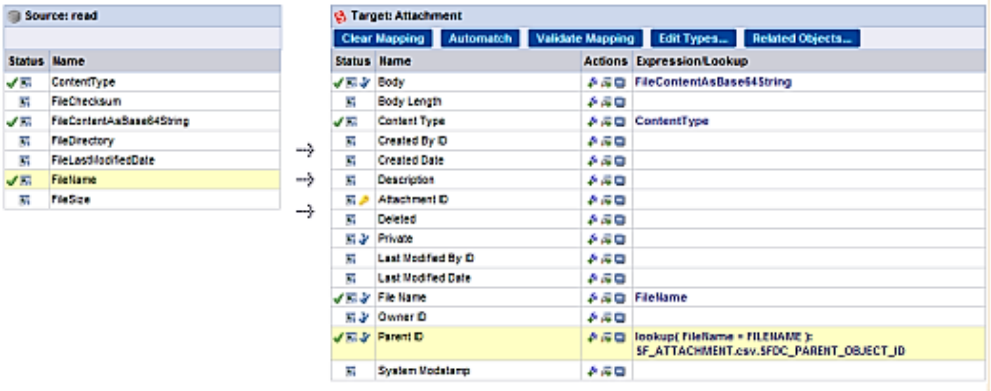
   The **Definition** tab appears.
3. Specify the **Task Name**, provide a **Description** and select Insert as the **Task Operation**.
4. Click **Next**.

   The Source tab appears.

5. In the **Source** tab, select **FileIo** as the **Connection** and **read** as the **Source Object**.

6. Click **Next**.
7. In the **Target** tab, select **Connection Salesforce** and **Target Object Attachment**.

8. Click **Next**.
9. In **Data Filters** tab by default, Process all rows is selected by default. See "Using FileIo as Target" on page 14.
10. Click **Next**.
11. In the **Field Mapping** tab, map source fields to target fields accordingly.



12. Click **Next**.

    The **Schedule** tab appears.
13. In **Schedule** tab, you can schedule the task as per the requirement, and save.
14. Click **Save** and then **Finish**.
15. From the **Explore** page, select the task, and click **Actions** > **Run**.

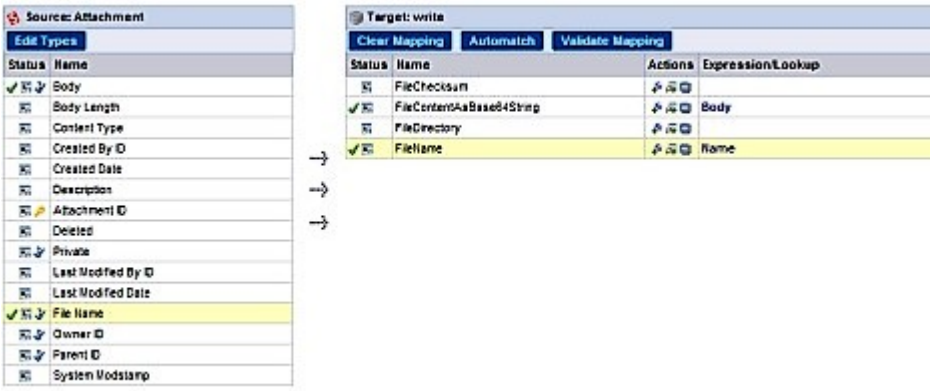
    In Monitor, you can monitor the status of the logs after you run the task.

Using FileIo as Target

When you use FileIo as a Target connection, follow the same procedures mentioned above to setup a synchronization task.

1. In the **Definition** tab, mention the generic details of the task.
2. In the **Source** tab, select **Salesforce** as the **Connection** and **Attachment** as the **Source Object**.
3. In the **Target** tab, select **Connection FileIo** and **Write** as the **Target object**.
4. In the **Data Filters** tab, Process all rows is selected by default. See "Data Filters" on page 15.

5. In the **Field Mapping** tab, map source fields to target fields accordingly.



- File Directory Field: By default, the file will be written to the directory that is selected as the target object. If you wish to overwrite the default target directory, map a valid directory to the FileDirectory field.
- FileCheckSum Field: If you wish, map the MD5 checksum of the file you want to write. This field will help to verify whether the content of the file is not modified.

And then follow the procedures provided in Creating Synchronization Task (DSS) to proceed further.

Data Filters

Data filters help you to fetch specific data of a particular object. The synchronization task will process the data based on the filter field assigned to the object.

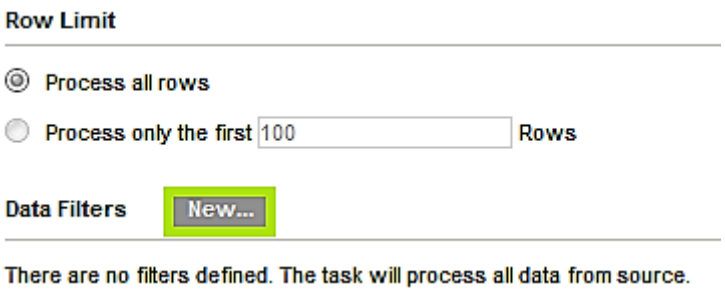
Note: You cannot use Advanced Data Filters with FileIo Connector.

Note: Data filter operator Ends With is in feature enhancement mode. It will be available in the future release.

Follow the steps given below to set data filters:

1. In the Synchronization Task wizard, select **Data Filters** tab.

   The **Data Filters** tab appears.
2. Click **New** as shown in the following figure.



   The **Data Filter** dialog box appears.

3. Specify the following details.

Field Type	Description
Object	Select the object for which you want to assign filter fields.
Filter By	Select the Filter Field.
Operator	Select the corresponding operator.
Filter Value	Enter the Filter value.

4. Click **OK**.

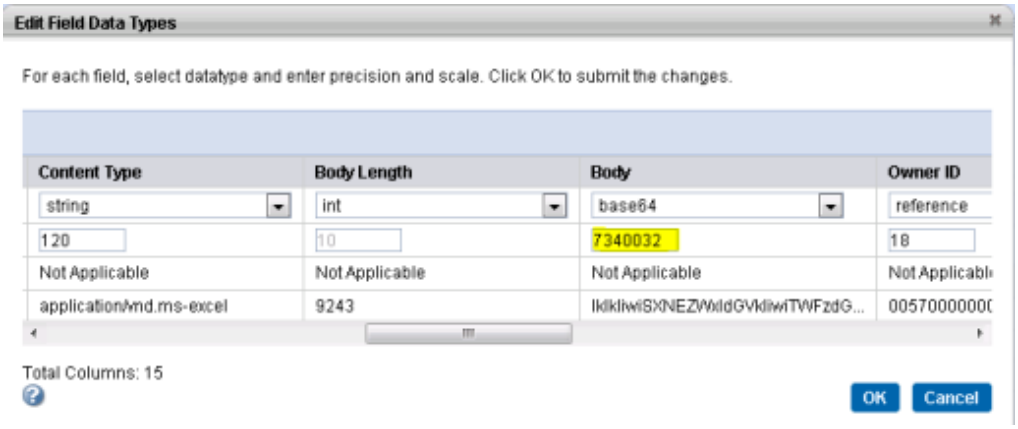
Editing the Data Types in the Field Mapping

You can edit field data types to customize the precision, scale and data types of fields.

Perform the following steps to edit field data types in Field Mapping.

1. In **Field Mapping** tab, click **Edit Types**.

   The Edit Field Data Types page appears.



2. From the list of available fields, select the field which you want to modify.

   You can modify the Datatype, Precision, and scale for each of the available fields.

3. Click **OK** to save.

Unmapping Fields

Perform the following steps to unmap the file content:

1. In **Field Mapping** tab, select field you want to unmap.

2. Click (clear expression/lookup) to unmap file content.

   The field appears blank after you unmap the corresponding field. Refresh field mapping, once the required fields are unmapped.

Creating a .infaccess file

The FileIo Connector accesses directories that have an empty file named `.infaccess`. The connection fails if the file does not exist.

Create an empty file .infaccess in the directory where you want to read or write files

1. Open a command prompt.
2. Specify the parent directory where you want to read or write the file.
3. Enter the following commands:
   - For Windows users: `echo %CD% >.infaccess`
   - For Linux users: `touch .infaccess`

Maintaining the Lookup File for Salesforce Attachment Parent Object ID

You must know the Parent ID of the associated file in order to upload a file to Salesforce attachment object.

Maintain the filename and parent ID relationship information in a csv file.

FILENAME	SFDC_PARENT_OBJECT_ID
Account.csv	5007000000R07NJAAZ
CookBook.doc	5007000000Qz9lFAAR
CookBook.docx	5007000000QdHLpAAN
EWMBA_295A_Entrepreneurship_Syllabus_Fall_2010.pdf	5007000000Di9xaAAB
Facebook_Presentation031311.ppt	5007000000Di9xaAAB
Informatica cloud toolkit - technical enblement.ppt	5007000000R07NJAAZ
informatica_file_connector.zip	5007000000R07NJAAZ
ItineraryReceipt_NYC_121412.pdf	5007000000QzJ7QAAV
Large.txt	5007000000Qz9lFAAR
wrapper.txt	0067000000Ul0S9AAJ

CHAPTER 4

Troubleshooting

This chapter includes the following topics:

- Troubleshooting Overview, 18
- Troubleshooting Synchronization Task, 18
- Handling Duplicate Files, 18
- Handling Large Attachments, 19

Troubleshooting Overview

The log and exception messages thrown are captured in the log files. The log files are saved in specific location.

For example, `<Secure Agent installation directory>\apps\Data_Integration_Server\logs`.

Troubleshooting Synchronization Task

While creating a synchronization task, the NULL error message appears when a connector with invalid configuration is selected. The null error message files are saved in specific location.

For example, `<Secure Agent installation directory>\apps\Data_Integration_Server\logs`

The log and exception details of a failed synchronization task are captured under Session Log. You require special permission privileges to run the application in debug mode.

Note: You can enable logs to verify request and SOAP response. For higher batch size (Fetch size) such as 5000 and above, the connector throws a DTM termination error. In such case, it is recommended to set False in Enable Debugger present in connection parameters.

Handling Duplicate Files

When the connector encounters a file which already exists in the target directory and `overwrite files` flag is set to false, then connector assigns a number to the file name and saves it. For example, if a file name is `wrapper.txt` then the duplicate file name will be 001_wrapper.txt, 002_wrapper.txt and so on.

Handling Large Attachments

You can transfer large files by the following ways:

- Increasing the field buffer size
- Increasing Secure Agent memory

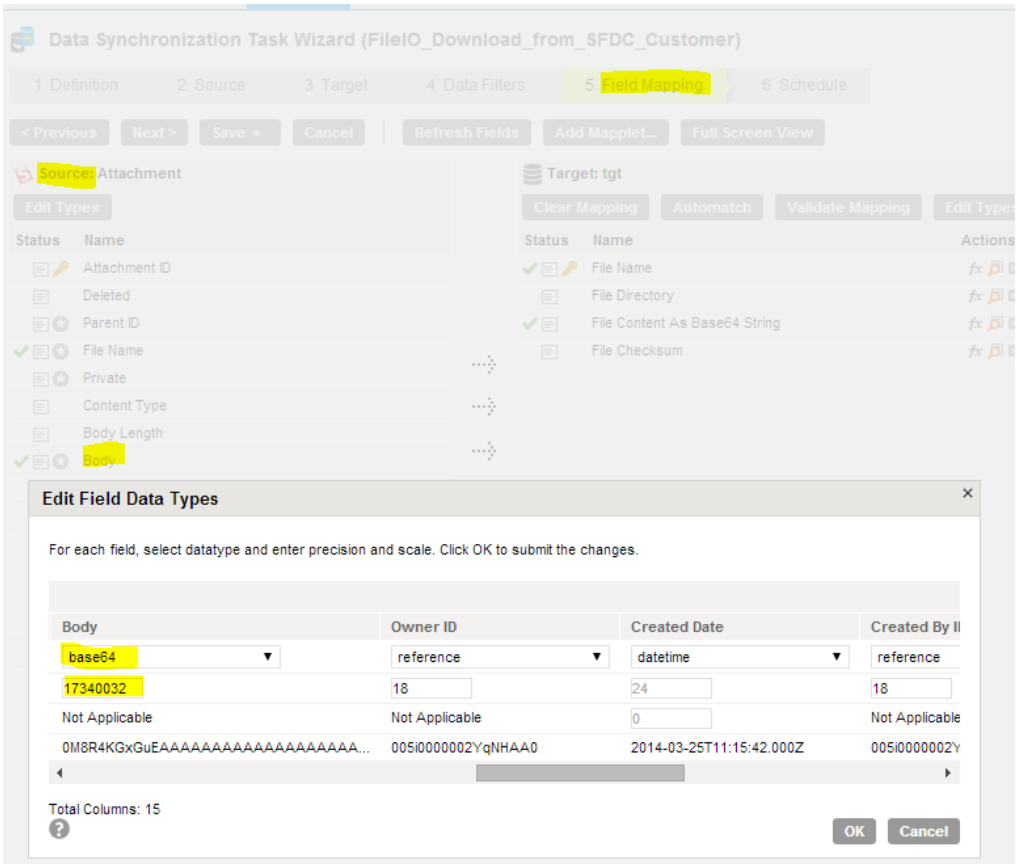
Note: You can upload or download files with maximum size of 75 MB using FileIO Connector.

Increasing the Field Buffer Size

In case you need to process or transfer a large file, you must increase the body field size in both source and target section of field mapping tab. Refer field Mapping on page 14

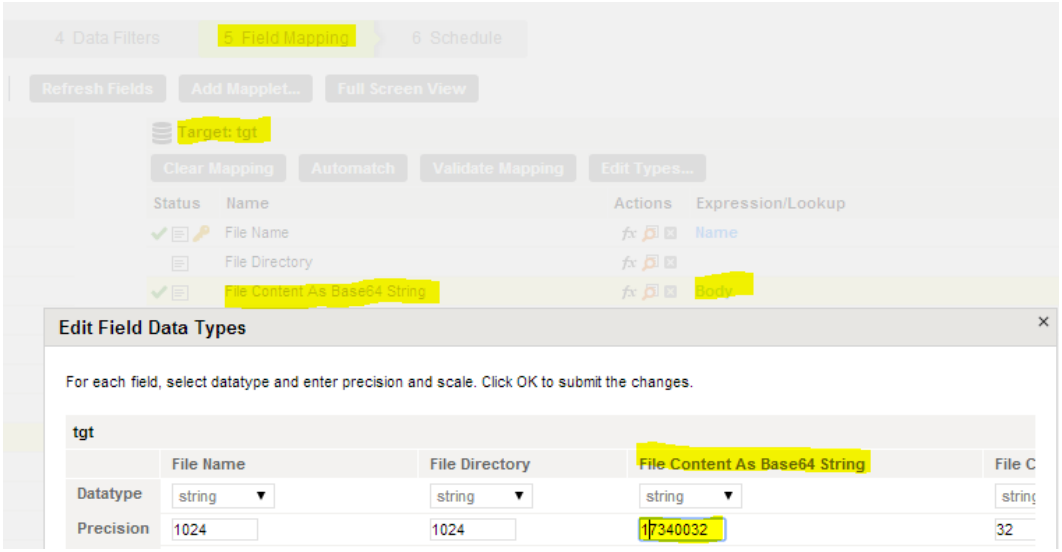
Follow the steps given below to increase the field buffer size:

1. In **Field Mapping** section of the synchronization task, click **Edit Types** and select **Body** field in the Source section. Refer 11.
2. **Edit Field Data Types** dialog box appears
3. Select **Base64** from the list.
4. Mention the character Size in the field as shown in the figure.
5. Click **OK**.



6. In the Target section, click **Edit Types** and select **Body** field next to **File Content As Base64 String** field as shown in figure given below.

7. The **Edit Field Data Types** dialog box appears.
8. Increase the character size in precision field of **File Content as Base64 String**.
9. Click **OK**.



This will increase the file size. An error `FATAL ERROR: Failed to allocate memory. Out of virtual memory` is thrown, when you try to transfer the file which exceeds the maximum limit.

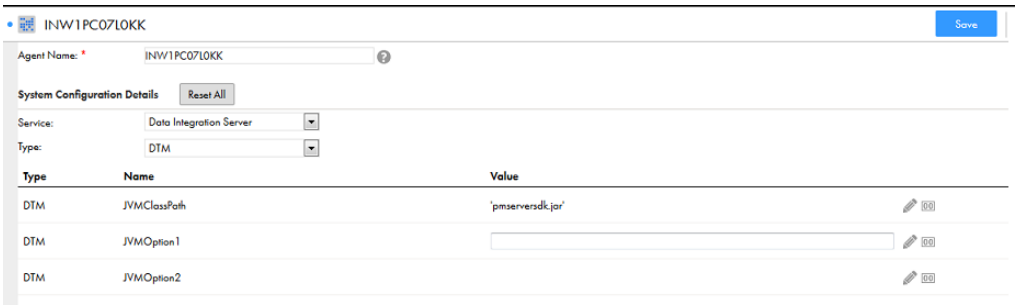
You can overcome the above error by increasing the secure agent memory.

Increasing the Secure Agent Memory

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

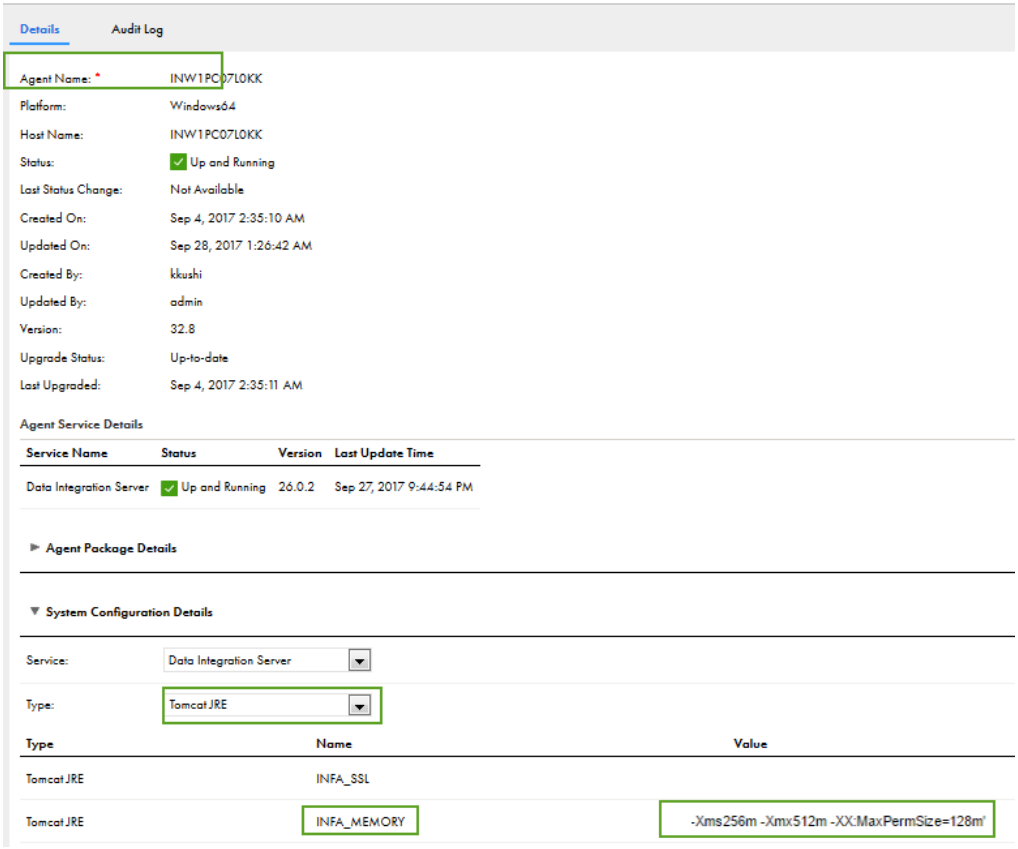
1. In Administrator, select **Runtime Environments**.
2. Select the Secure Agent for which you want to increase memory from the list of available Secure Agents.
3. In the upper-right corner, click **Edit**.
4. In the **System Configuration Details** section, select the **Type** as **DTM** for the Data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