



Informatica® Cloud Data Integration

Adobe Experience Platform Connector Guide

© Copyright Informatica LLC 2019, 2022

This software and documentation are provided only under a separate license agreement containing restrictions on use and disclosure. No part of this document may be reproduced or transmitted in any form, by any means (electronic, photocopying, recording or otherwise) without prior consent of Informatica LLC.

U.S. GOVERNMENT RIGHTS Programs, software, databases, and related documentation and technical data delivered to U.S. Government customers are "commercial computer software" or "commercial technical data" pursuant to the applicable Federal Acquisition Regulation and agency-specific supplemental regulations. As such, the use, duplication, disclosure, modification, and adaptation is subject to the restrictions and license terms set forth in the applicable Government contract, and, to the extent applicable by the terms of the Government contract, the additional rights set forth in FAR 52.227-19, Commercial Computer Software License.

Informatica, the Informatica logo, Informatica Cloud, and PowerCenter are trademarks or registered trademarks of Informatica LLC in the United States and many jurisdictions throughout the world. A current list of Informatica trademarks is available on the web at <https://www.informatica.com/trademarks.html>. Other company and product names may be trade names or trademarks of their respective owners.

Portions of this software and/or documentation are subject to copyright held by third parties. Required third party notices are included with the product.

See patents at <https://www.informatica.com/legal/patents.html>.

DISCLAIMER: Informatica LLC provides this documentation "as is" without warranty of any kind, either express or implied, including, but not limited to, the implied warranties of noninfringement, merchantability, or use for a particular purpose. Informatica LLC does not warrant that this software or documentation is error free. The information provided in this software or documentation may include technical inaccuracies or typographical errors. The information in this software and documentation is subject to change at any time without notice.

NOTICES

This Informatica product (the "Software") includes certain drivers (the "DataDirect Drivers") from DataDirect Technologies, an operating company of Progress Software Corporation ("DataDirect") which are subject to the following terms and conditions:

1. THE DATADIRECT DRIVERS ARE PROVIDED "AS IS" WITHOUT WARRANTY OF ANY KIND, EITHER EXPRESSED OR IMPLIED, INCLUDING BUT NOT LIMITED TO, THE IMPLIED WARRANTIES OF MERCHANTABILITY, FITNESS FOR A PARTICULAR PURPOSE AND NON-INFRINGEMENT.
2. IN NO EVENT WILL DATADIRECT OR ITS THIRD PARTY SUPPLIERS BE LIABLE TO THE END-USER CUSTOMER FOR ANY DIRECT, INDIRECT, INCIDENTAL, SPECIAL, CONSEQUENTIAL OR OTHER DAMAGES ARISING OUT OF THE USE OF THE ODBC DRIVERS, WHETHER OR NOT INFORMED OF THE POSSIBILITIES OF DAMAGES IN ADVANCE. THESE LIMITATIONS APPLY TO ALL CAUSES OF ACTION, INCLUDING, WITHOUT LIMITATION, BREACH OF CONTRACT, BREACH OF WARRANTY, NEGLIGENCE, STRICT LIABILITY, MISREPRESENTATION AND OTHER TORTS.

The information in this documentation is subject to change without notice. If you find any problems in this documentation, report them to us at infa_documentation@informatica.com.

Informatica products are warranted according to the terms and conditions of the agreements under which they are provided. INFORMATICA PROVIDES THE INFORMATION IN THIS DOCUMENT "AS IS" WITHOUT WARRANTY OF ANY KIND, EXPRESS OR IMPLIED, INCLUDING WITHOUT ANY WARRANTIES OF MERCHANTABILITY, FITNESS FOR A PARTICULAR PURPOSE AND ANY WARRANTY OR CONDITION OF NON-INFRINGEMENT.

Publication Date: 2022-10-28

Table of Contents

Preface	4
Informatica Resources.	4
Informatica Documentation.	4
Informatica Intelligent Cloud Services web site.	4
Informatica Intelligent Cloud Services Communities.	4
Informatica Intelligent Cloud Services Marketplace.	5
Data Integration connector documentation.	5
Informatica Knowledge Base.	5
Informatica Intelligent Cloud Services Trust Center.	5
Informatica Global Customer Support.	5
 Chapter 1: Introduction to Adobe Experience Platform Connector.....	6
Adobe Experience Platform Connector Overview.	6
Adobe Experience Platform Supported Objects and Task Operations.	6
Introduction to Adobe Experience Platform.	7
Administration of Adobe Experience Platform Connector.	7
Generate a Service Integration.	7
 Chapter 2: Adobe Experience Platform Connections.....	9
Adobe Experience Platform Connections Overview.	9
Adobe Experience Platform connection properties.	9
Adobe Experience Platform Objects.	10
 Chapter 3: Mappings and Mapping Tasks with Adobe Experience Platform Connector.....	11
Adobe Experience Platform Sources in Mappings and Mapping Tasks.	11
Adobe Experience Platform Targets in Mappings and Mapping Tasks.	12
Mapping Task Example.	12
 Chapter 4: Troubleshooting.....	14
System Properties.	14
 Chapter 5: Data Type Reference.....	15
Data Type Reference Overview.	15
Adobe Experience Platform Transformation Data Types.	15
 Index.....	17

Preface

The *Data Integration Adobe Experience Platform Connector Guide* contains information about how to set up and use Adobe Experience Platform Connector. The guide explains how organization administrators and business users can use Adobe Experience Platform Connector to read data from and write data to Adobe Experience Platform.

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 Data Integration editions and applications as well as information about other 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>

To find resources on using Application Integration (the Informatica Cloud Real Time service), access the community at:

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

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/community/collections/cloud_integration

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>.

Subscribe to the Informatica Intelligent Cloud Services Trust Center to receive upgrade, maintenance, and incident notifications. The [Informatica Intelligent Cloud Services Status](#) page displays the production status of all the Informatica cloud products. All maintenance updates are posted to this page, and during an outage, it will have the most current information. To ensure you are notified of updates and outages, you can subscribe to receive updates for a single component or all Informatica Intelligent Cloud Services components. Subscribing to all components is the best way to be certain you never miss an update.

To subscribe, go to the [Informatica Intelligent Cloud Services Status](#) page and click **SUBSCRIBE TO UPDATES**. You can then choose to receive notifications sent as emails, SMS text messages, webhooks, RSS feeds, or any combination of the four.

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 Adobe Experience Platform Connector

This chapter includes the following topics:

- [Adobe Experience Platform Connector Overview, 6](#)
- [Adobe Experience Platform Supported Objects and Task Operations, 6](#)
- [Introduction to Adobe Experience Platform, 7](#)
- [Administration of Adobe Experience Platform Connector, 7](#)

Adobe Experience Platform Connector Overview

You can use Adobe Experience Platform Connector to connect to Adobe Experience Platform from Data Integration and securely read data from or write data to Adobe Experience Platform.

You can use Adobe Experience Platform objects as source or target in mapping tasks.

Adobe Experience Platform Supported Objects and Task Operations

You can perform insert operation with Adobe Experience Platform Connector.

The following table lists the Adobe Experience Platform Connector task types that you can include in Data Integration tasks:

Task Type	Source	Target	Lookup
Mapping	Yes	Yes	No

Introduction to Adobe Experience Platform

Adobe Experience Platform provides marketers and solution developers services to easily implement, manage, and build integrated Adobe and partner solutions.

As a customer data platform, the Adobe Experience Platform ingests and unifies customer data from all types of marketing, sales, and service channels. Adobe Experience Platform then maps the data to a standard schema within the Experience Data Model (XDM). The Adobe Experience Platform semantic data layer structures your data for common usage across all Adobe Experience Cloud solutions and core services.

Administration of Adobe Experience Platform Connector

You can use Adobe Experience Platform Connector after the organisation administrator performs the following tasks:

1. Create the Enterprise ID with administrative privileges for your organization to log in to the Adobe I/O Console and create a new Service Account Integration.
2. Generate a service integration to get the client ID, key, and the technical account from the Adobe Experience Platform.
3. Install the Secure Agent on a 64-bit Windows Operating System and on the same network as the Adobe Experience Platform. The Secure Agent accesses the Adobe APIs using the Adobe I/O API gateway over HTTP to connect to the Adobe Experience Platform.
4. When you install the Secure Agent on a Windows machine, define the `HADOOP_HOME` environment variable and point it to the `bin` folder that contains the `winutils.exe` file. Complete Hadoop installation is not required.

Generate a Service Integration

The Adobe Experience Platform uses a JWT-based authentication. You need to configure a Service Account Integration. Service accounts are similar to user accounts, but they are unique to your application and have additional security requirements.

Perform the following steps to generate a service integration:

1. Login to <https://console.adobe.io> using your Adobe credentials.
The **Integrations** page appears. An Integration is a service account that is created for the selected IMS Organization. If you are associated with multiple organizations, you can select the appropriate organization from the menu.
2. On the **Integrations** tab, click **New Integration**.
3. Select **Access an API** and click **Continue**.
4. In the **Experience Cloud** section, select **Data Services**.
5. Click **New integration** to create a new integration for the service and click **Continue**.
6. Enter a name and description for the integration and upload a public certificate.
When you generate a public certificate the private key is generated along with the certificate. The private key is required to generate the JWT and the certificate is used to create an API key.
For more information about generating a public certificate, see the Adobe documentation.

7. Click **Create integration**.
8. After creating the integration, you can get the client ID, technical account ID, and client secret key. The following image shows the service integration details:

Adobe I/O

Audience Experiments

[Overview](#) [Insights](#) [Services](#) [Events](#) [JWT](#)

Client Credentials

API Key (Client ID)
6fd33beebf874480b50ea1927906f9ef [Copy](#)

Technical account ID
39C3B11A59104F760A49413B@techacct.adobe.com [Copy](#)

Technical account email
4269d9e3-e12c-40b3-8bf1-a0a5442a6241@techacct.adobe.com [Copy](#)

Organization ID
7B119290550B751E7F000101@AdobeOrg [Copy](#)

Client secret
[Retrieve client secret](#)

Integration Details

Name
 6 to 25 characters

Description
 6 to 1000 characters

[Update](#)

Public keys

FINGERPRINT	EXPIRY DATE
906a3a444467097acf433741e39a5e1c8c9884ee	Mar 1, 2018 Delete

[Add a public key](#)

Details

Integration type
Service Account

Created on
May 8, 2017

Last updated on
May 8, 2017

Actions:

[Add New Service](#)

[Terms of use](#) [Privacy policy](#) [Cookies](#) [Support](#)

© Adobe Systems Incorporated. All rights reserved.

CHAPTER 2

Adobe Experience Platform Connections

This chapter includes the following topics:

- [Adobe Experience Platform Connections Overview, 9](#)
- [Adobe Experience Platform connection properties, 9](#)
- [Adobe Experience Platform Objects, 10](#)

Adobe Experience Platform Connections Overview

Create an Adobe Experience Platform connection to read data from and write data to Adobe Experience Platform.

You can create an Adobe Experience Platform connection on the Connections page or when you create a mapping. Use the Adobe Experience Platform connection in mappings and mapping tasks.

Adobe Experience Platform connection properties

When you set up an Adobe Experience Platform connection, you must configure the connection properties.

After you generate a service integration, you can get the organization specific properties that are required to generate the access token.

To obtain access token for your integration, you must first create a JSON Web Token (JWT) that encapsulates your client credentials. For each API session, you can exchange your JWT for an access token from Adobe IMS. The token identifies your integration and grants access to the services you have configured.

The following table describes the Adobe Experience Platform connection properties that are required to generate a JWT token every time you connect to Adobe Experience Platform:

Property	Description
env	The Adobe Experience Platform environment. Select Prod.
imsOrg	The Adobe Identity Management System (IMS) Organization ID.

Property	Description
privateKeyPath	Path of the private key on the Secure Agent machine. Example, <code>file:///etc/secrets/secret.key</code> The path must start with <code>file:///</code>
clientId	Client ID in Adobe Experience Platform required for generating a valid access token.
clientSecret	The client secret key in Adobe Experience Platform required for generating a valid access token.
accountID	The Adobe Experience Platform Account ID.

Adobe Experience Platform Objects

A dataset represents an Adobe Experience Platform object. Each dataset entity includes the following information:

- Schema
 - Fields and their types
 - Field description
 - Enumeration values
- Creation or Modification dates and users
- Child objects, such as file entities
- Format

A dataset can have both a flat schema and a hierarchical schema. Hierarchical schemas have complex objects and arrays. Data for hierarchical schemas, most common in XDM schemas, is in parquet file format. Data for a flat schema is in delimited file format.

When you create a source or target connection, you can select a source or target object from the list. After you select the object, you can view the columns for the selected object on the Fields tab.

CHAPTER 3

Mappings and Mapping Tasks with Adobe Experience Platform Connector

This chapter includes the following topics:

- [Adobe Experience Platform Sources in Mappings and Mapping Tasks, 11](#)
- [Adobe Experience Platform Targets in Mappings and Mapping Tasks, 12](#)
- [Mapping Task Example, 12](#)

Adobe Experience Platform Sources in Mappings and Mapping Tasks

In a mapping, you can configure a Source transformation to represent an Adobe Experience Platform object as the source to read data from Adobe Experience Platform.

The following table describes the Adobe Experience Platform source properties that you can configure in a Source transformation:

Property	Description
Connection	Name of the source connection.
Source Type	Type of the source object. Select Single to specify a single Adobe Experience Platform object.
Source Object	Name of the source object.

The following table describes the Request Options that you can configure in a Source transformation:

Property	Description
Request Message	It is mandatory to specify a blank JSON object {} in the Request Message.

The following table describes the Adobe Experience Platform advanced source properties:

Property	Description
startTimeInMillis	Optional. Type: long Epoch time in milliseconds. The start time for the time period for which you want to read data.
durationInMillis	Optional. Type: long Epoch time in milliseconds. The duration for which you want to read data, starting from the start time that you set.

Adobe Experience Platform Targets in Mappings and Mapping Tasks

In a mapping, you can configure a Target transformation to represent an Adobe Experience Platform object as the target to write data to Adobe Experience Platform.

The following table describes the Adobe Experience Platform target properties that you can configure in a Target transformation:

Property	Description
Connection	Name of the target connection.
Target Type	Select Single.
Target Object	Target object for the mapping task.

Note: When you write data to Adobe Experience Platform, the column name must not contain Unicode characters.

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.

Mapping Task Example

You can add a mapping that contains an Adobe Experience Platform source or target to a mapping task and run the task based on a schedule.

Example

You are the marketing manager in an organization. Your organization uses Salesforce and the data from Salesforce comes into Adobe Experience Platform once every day.

Mapping task helps run the mapping on schedule or on demand, provides a single level of versioning, and allows a notification to be generated at runtime. Mapping task also allows the setting of performance and session related parameters.

Configure a mapping task to run daily and execute a mapping that reads data from Adobe Experience Platform Connector as the source. The task uses parameterized Adobe Experience Platform source properties to read only the new data. After reading the data, it performs all the transformations and maps it to an Adobe Experience Platform XDM schema, and then writes the data back to the Adobe Experience Platform using the Adobe Experience Platform Connector as a target.

CHAPTER 4

Troubleshooting

This chapter includes the following topic:

- [System Properties, 14](#)

System Properties

If you encounter issues while running a mapping task, set the debugging properties in the JVM arguments.

Configure the following Java system properties in the system configuration details of the Secure Agent to debug the issue:

System Property	Description
com.adobe.platform.connector.loggingLevel	Specify the Java logging level in String format. Default is INFO.

The following table lists other system properties that can be useful:

System Property	Description
adobeioEndPoint	Endpoint or host for all the Adobe Experience Platform APIs.
dataSet.max	The maximum limit of datasets that you can fetch from ACP. Default is -1 (all).

CHAPTER 5

Data Type Reference

This chapter includes the following topics:

- [Data Type Reference Overview, 15](#)
- [Adobe Experience Platform Transformation Data Types, 15](#)

Data Type Reference Overview

Data Integration uses the following data types in mapping tasks with Adobe Experience Platform:

Adobe Experience Platform native data types

Adobe Experience Platform data types appear in the Target transformations when you choose to edit metadata for the fields.

Transformation data types

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

When Data Integration reads source data, it converts the native data types to the comparable transformation data types before transforming the data. When Data Integration writes to a target, it converts the transformation data types to the comparable native data types.

Adobe Experience Platform Transformation Data Types

The following table describes the data types that Data Integration supports for Adobe Experience Platform sources and targets:

Adobe Experience Platform Data Type	Transformation Data Type
String	string
Boolean	integer

Adobe Experience Platform Data Type	Transformation Data Type
Integer	integer
BigInt	bigInteger
Decimal	decimal
Double	double
Long	bigInteger
Array	binary
Object	string
Binary	binary
Date	string
Datetime	string

INDEX

A

Adobe Experience Platform
connection properties [9](#)
Adobe Experience Platform Connector
overview [6](#)

C

Cloud Application Integration community
URL [4](#)
Cloud Developer community
URL [4](#)
connections
Adobe Experience Platform [9](#)

D

Data Integration community
URL [4](#)

I

Informatica Global Customer Support
contact information [5](#)
Informatica Intelligent Cloud Services
web site [4](#)

M

maintenance outages [5](#)

S

status
Informatica Intelligent Cloud Services [5](#)
system status [5](#)

T

trust site
description [5](#)

U

upgrade notifications [5](#)

W

web site [4](#)