

HULFT Integrate

G Suite Adapter OAuth 2.0

Configuration Guide

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HULFT


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Table of Contents

1.	Before Use	3
1.1.	Precautions.....	4
1.1.1.	Copyright Notice.....	4
1.1.2.	Trademarks.....	4
1.2.	About the notations used in this guide	5
1.3.	About the icons used in this Guide.....	6
2.	Global resource of G Suite Adapters	7
2.1.	Authentication flow of OAuth 2.0.....	7
3.	Setting of OAuth 2.0 connection	8
3.1.	Flow of setting	8
3.2.	Setting of the Google Cloud Platform	9
3.2.1.	Creating projects	9
3.2.2.	Setting up APIs	10
3.2.3.	Adding credentials	11
3.3.	Creating global resource for Google Drive Adapter.....	12
3.4.	Creating global resource for Google Sheets Adapter.....	13


1. Before Use


OAuth 2.0 connection setting method of HULFT Integrate G Suite Adapter (below shows G Suite Adapter) is described in this guide.

 Refer to "HULFT Integrate Help" for the usage of G Suite Adapter.

 Operation procedure of the Google Cloud Platform in this guide takes the information of the Google Cloud Platform at the time of Oct 4, 2018, as the base. Hereafter, the specification may be changed.

 Refer to Cloud Platform Console Help (<https://support.google.com/cloud>) for the details on the Google Cloud Platform.

 Refer to G Suite Administrator Help "Supported browsers" (<https://support.google.com/a/answer/33864>) for the details on the supported browsers for G Suite.

 For documents with latest information, refer to "myHULFT"(<https://his.hulft.com/mypage>).

1.1. Precautions

1.1.1. Copyright Notice

- The copyright of this software is owned by HULFT, Inc. or its licensors.
- Unauthorized copy, reprinting of this software and this manual is prohibited.
- While preparing this manual every effort has been taken to ensure its correctness but in case of any mistakes, mismatch, and suggestions please contact us.
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1.2. About the notations used in this guide

The rules of notations of this document are as follows.




- Menu name, tab name, property item name, value, and button name displayed on screen are enclosed with **[]** and in bold letters. Moreover, the one without title of screens and other function names are enclosed with "" and distinguished from the former.
- "\$INTEGRATE_HOME" shows the directory where HULFT Integrate is installed. By default, it is "C:¥Program Files¥HULFT Integrate" for Windows edition and "<HOME>/HULFT Integrate" for UNIX/Linux edition.
- "x86 version" means 32bit OS.
"x64 version" means 64bit OS of 64bit CPU (Intel 64/AMD64).
- Names enclosed with < > are variable values.

Example: \$INTEGRATE_HOME/server/logs/<Date directory>

- URLs of the Web sites shown in this document are as of October 2018, and are subject to change without notice due to reasons of the Web site.
- "Studio means "Integrate Studio", and "Studio for Web" means "Integrate Studio for Web".
- The descriptions of the Windows and UNIX/Linux editions of IntegrateServer have been standardized.
Please replace descriptions of operating system dependent items (such as path delimiter characters) as necessary.
- The numbers beginning with "DSS-" are unique IDs for controlling each corresponding problem.


1.3. About the icons used in this Guide

The icons used in this guide are explained as follows.

Icon	Description
	Indicates that there are hints about operations or configurations.
	Indicates that there are warnings about operations or configurations.
	Indicates that there are detailed descriptions in other resources.

2. Global resource of G Suite Adapters

G Suite Adapters use difference authentication methods according to the service to be connected to. If an adapter uses OAuth 2.0, it is necessary to configure the service provider with OAuth 2.0 in advance, and then specify corresponding authentication information in its global resource.

Adapter	Authentication method	Name of the global resource type
Gmail Adapter	As OAuth 2.0 is not used, Gmail Adapter will be out of scope for this manual.  For details, refer to "HULFT Integrate Help".	
Google Drive Adapter	OAuth 2.0	Google Drive OAuth 2.0 Authentication setting
Google Sheets Adapter	OAuth 2.0	Google Sheets OAuth 2.0 Authentication setting

Among the above, setting of OAuth 2.0 connection for Google Drive Adapter and Google Sheets Adapter, is described in this document.

2.1. Authentication flow of OAuth 2.0

Authentication flow can be realized by the usage (Authorization Code Grant Flow) of authorization code in OAuth 2.0 connection. Refer to below page to know about the authentication flow.

- Using OAuth 2.0 for Installed Applications – Overview
(<https://developers.google.com/accounts/docs/OAuth2InstalledApp#overview>)

As access token and refresh token are used in Google Drive Adapter and Google Sheets Adapter, it should be obtained while creating global resource.

3. Setting of OAuth 2.0 connection

OAuth 2.0 connection setting is done both in Google Cloud Platform (on web browser) and Google Drive Adapter/Google Sheets Adapter (on Integrate Studio and Integrate Studio for Web).

3.1. Flow of setting

The flow of setting for each adapter is as follows.



For details, refer to the description of respective link.

- Google Drive Adapter
 1. [Perform settings in the Google Cloud Platform in \(3.2.\)](#)
 2. [Create global resource of Google Drive Adapter in \(3.3.\)](#)
- Google Sheets Adapter
 1. [Perform settings in the Google Cloud Platform in \(3.2.\)](#)
 2. [Create global resource of Google Sheets Adapter in \(3.4.\)](#)

3.2. Setting of the Google Cloud Platform

Access the Google Cloud Platform (<https://console.cloud.google.com/apis/dashboard>) and login to the site.

Set up the APIs for the project in the Google Cloud Platform and add credentials (Client ID and Client secret) to the project for connection. Create a project if not yet created.

3.2.1. Creating projects

Create new projects in the Google Cloud Platform. Since the authentication information is managed within the projects, at least one or more projects should be created.



It is not necessary to perform this procedure if using an existing project.

1. Select the drop-down menu "<Project name> ▼" at the top of the Google Cloud Platform (if you have not selected the project, then "Select a project ▼") and click "NEW PROJECT".
2. Set "Project name" and "Project ID" in "New project" dialog, and click "Create".
3. After completing the creation process, when you select a project with the drop-down menu at the top of the screen, the dashboard of the project is displayed.

3.2.2. Setting up APIs

Set up the API to be used in the project that is created in the Google Cloud Platform.



It is not necessary to perform this procedure if APIs of the project are already configured.

1. Select the target project with the drop-down menu "<Project name> ▼" at the top of the Google Cloud Platform.
2. Click "Library" on the side bar and display the search page.
3. Select "Google Drive API" and click "ENABLE". When a message urging for credentials settings is displayed, perform ["3.2.3. Adding credentials"](#) after completing the activation of API.
4. Click "≡" available on the left top of the screen, and click "Dashboard" in "APIs & Services". Disable the unused API from dashboard "API".

3.2.3. Adding credentials

Add credentials to the project in the Google Cloud Platform. The added credentials will be used in the global resource of HULFT Integrate.



It is possible to add multiple credentials in a single project.



Sometimes, it will take time to reflect information completely to the Google service after issuing/updating the credentials.

1. Select the target project with the drop-down menu "<Project name> ▼" at the top of the Google Cloud Platform.
2. Click "☰" available on the left top of the screen, and click "Credentials" in "APIs & Services". Click "OAuth client ID" of drop-down menu "Create credentials ▼".
3. If a warning message saying that a product name should be set is displayed, click "Configure consent screen", fill in required fields, and click "Save".
4. Select "Other", specify the name of the client, and click "Create".
5. Client credential will be created, and its detail will be displayed in "OAuth client" dialog.

3.3. Creating global resource for Google Drive Adapter

Create the global resource of Google Drive Adapter with the credentials registered in "[3.2.3. Adding credentials](#)".



Global resource is tied-up to the Google account which has been used during approval. It is recommended to use a resource name such that the Google account can be easily identified.



Should you reset the client secret in "Credentials" page in the Google Cloud Platform, it will be necessary to update **[Client secret]** and reissue **[Refresh token]** in the global resources where the outdated client secret is used.

1. Create **[Google Drive OAuth 2.0 authentication settings]** global resource of Google Drive Adapter newly.
2. Specify **[Client ID]** and **[Client secret]** of global resource with the values obtained in the Google Cloud Platform.
3. Press **[Publish refresh token...]** in the Property Action.
4. Press **[Acquire authorization code...]** of "Authorization Code Setup" dialog and displays the screen for logging into Google by using the default browser.
5. Log in by using Google user account and approve the access permission.
6. Copy authorization code displayed on the browser window, and configure by pasting the code to "Authorization Code" on "Authorization Code Setup" dialog.
7. The issued token is set to **[Refresh token]**.

3.4. Creating global resource for Google Sheets Adapter

Create the global resource of Google Sheets Adapter with the credentials registered in "[3.2.3. Adding credentials](#)".



Global resource is tied-up to the Google account which has been used during approval. It is recommended to use a resource name such that the Google account can be easily identified.



Should you reset the client secret in "Credentials" page in the Google Cloud Platform, it will be necessary to update **[Client secret]** and reissue **[Refresh token]** in the global resources where the outdated client secret is used.

1. Create **[Google Sheets OAuth 2.0 authentication settings]** global resource of Google Sheets Adapter newly.
2. Specify **[Client ID]** and **[Client secret]** of global resource with the values obtained in the Google Cloud Platform.
3. Press **[Publish refresh token...]** in the Property Action.
4. Press **[Acquire authorization code...]** of "Authorization Code Setup" dialog and displays the screen for logging into Google by using the default browser.
5. Log in by using Google user account and approve the access permission.
6. Copy authorization code displayed on the browser window, and configure by pasting the code to "Authorization Code" on "Authorization Code Setup" dialog.
7. The issued token is set to **[Refresh token]**.

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HULFT, Inc.
1820 Gateway Drive, Suite 120
San Mateo, CA 94404
www.hulftinc.com