



Informatica® PowerExchange for Facebook 10.2

User Guide

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Table of Contents

Preface	6
Informatica Resources.	6
Informatica Network.	6
Informatica Knowledge Base.	6
Informatica Documentation.	6
Informatica Product Availability Matrixes.	7
Informatica Velocity.	7
Informatica Marketplace.	7
Informatica Global Customer Support.	7
 Chapter 1: Introduction to PowerExchange for Facebook.....	 8
PowerExchange for Facebook Overview.	8
Facebook Data Extraction.	8
 Chapter 2: PowerExchange for Facebook Configuration.....	 10
PowerExchange for Facebook Configuration Overview.	10
Facebook Application Creation.	10
Open Authentication Configuration.	11
Open Authentication Configuration Properties.	11
Configuring Open Authentication.	12
Configuring Open Authentication in the Developer Tool.	13
Configuring HTTP Proxy Options at Design-Time.	13
Configuring HTTP Proxy Options at Design-Time.	13
Configuring HTTP Proxy Options while Using the OAuth Utility.	14
Configuring HTTP Proxy Options at Run-Time.	14
 Chapter 3: Facebook Connections.....	 15
Facebook Connections Overview.	15
Facebook Connection Properties.	15
Creating a Facebook Connection.	16
 Chapter 4: Facebook Data Objects.....	 17
Facebook Data Objects Overview.	17
Facebook Data Object Views.	17
Facebook Data Object Overview Properties.	18
Facebook Data Object Operation Properties.	18
Facebook Resources.	20
Query Parameter for Facebook Resources.	22
Token File.	24
Pagination.	25

Parameterization.	26
Creating a Facebook Data Object.	26
Creating a Facebook Data Object Operation.	27
Chapter 5: Facebook Mappings.	28
Facebook Mappings Overview.	28
Facebook API Rate Limits	28
Facebook Mapping Example.	29
Appendix A: Datatype Reference.	30
Datatype Reference Overview.	30
Facebook and Transformation Datatypes.	30
Index.	31

Preface

The *Informatica PowerExchange® for Facebook User Guide* provides information about extracting data from Facebook. The guide is written for database administrators and developers who are responsible for developing mappings that read data from Facebook.

This book assumes you have knowledge of Facebook API and Informatica Data Services.

Informatica Resources

Informatica Network

Informatica Network hosts Informatica Global Customer Support, the Informatica Knowledge Base, and other product resources. To access Informatica Network, visit <https://network.informatica.com>.

As a member, you can:

- Access all of your Informatica resources in one place.
- Search the Knowledge Base for product resources, including documentation, FAQs, and best practices.
- View product availability information.
- Review your support cases.
- Find your local Informatica User Group Network and collaborate with your peers.

Informatica Knowledge Base

Use the Informatica Knowledge Base to search Informatica Network for product resources such as documentation, how-to articles, best practices, and PAMs.

To access the Knowledge Base, visit <https://kb.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 Documentation

To get the latest documentation for your product, browse the Informatica Knowledge Base at https://kb.informatica.com/_layouts/ProductDocumentation/Page/ProductDocumentSearch.aspx.

If you have questions, comments, or ideas about this documentation, contact the Informatica Documentation team through email at infa_documentation@informatica.com.

Informatica Product Availability Matrixes

Product Availability Matrixes (PAMs) indicate the versions of operating systems, databases, and other types of data sources and targets that a product release supports. If you are an Informatica Network member, you can access PAMs at

<https://network.informatica.com/community/informatica-network/product-availability-matrices>.

Informatica Velocity

Informatica Velocity is a collection of tips and best practices developed by Informatica Professional Services. Developed from the real-world experience of hundreds of data management projects, Informatica Velocity represents the collective knowledge of our consultants who have worked with organizations from around the world to plan, develop, deploy, and maintain successful data management solutions.

If you are an Informatica Network member, you can access Informatica Velocity resources at <http://velocity.informatica.com>.

If you have questions, comments, or ideas about Informatica Velocity, contact Informatica Professional Services at ips@informatica.com.

Informatica Marketplace

The Informatica Marketplace is a forum where you can find solutions that augment, extend, or enhance your Informatica implementations. By leveraging any of the hundreds of solutions from Informatica developers and partners, you can improve your productivity and speed up time to implementation on your projects. You can access Informatica Marketplace at <https://marketplace.informatica.com>.

Informatica Global Customer Support

You can contact a Global Support Center by telephone or through Online Support on Informatica Network.

To find your local Informatica Global Customer Support telephone number, visit the Informatica website at the following link:

<http://www.informatica.com/us/services-and-training/support-services/global-support-centers>.

If you are an Informatica Network member, you can use Online Support at <http://network.informatica.com>.

CHAPTER 1

Introduction to PowerExchange for Facebook

This chapter includes the following topics:

- [PowerExchange for Facebook Overview, 8](#)
- [Facebook Data Extraction, 8](#)

PowerExchange for Facebook Overview

Use PowerExchange for Facebook to extract Facebook data through the Data Integration Service.

Use PowerExchange for Facebook to search and extract Facebook data such as Facebook user profiles and posts. You can create a Facebook connection to read Facebook data into a Facebook data object. You use open authentication (OAuth) to send secure authorized requests to Facebook.

PowerExchange for Facebook uses Facebook API methods and resources to search and extract Facebook data. You can use Facebook search operators to define the search criteria. For example, you can search and extract all public posts and events that contain a keyword. You can load the extracted data to a target and then use the data for data mining and analysis.

For information about the Facebook APIs, see the Facebook API documentation at the following web site:

<http://developers.facebook.com/>

For information about Facebook Platform usage policies, see the Facebook Platform Policies at the following web site:

<https://developers.facebook.com/policy/>

Facebook Data Extraction

Complete the following tasks to use PowerExchange for Facebook to extract Facebook data:

1. Create a Facebook application in the Facebook developer web site.
2. Configure OAuth.
3. Create a Facebook connection.

4. Create a Facebook data object.
5. Create a Facebook data object operation.
6. Create a mapping and use the Facebook data object operation as a source to extract Facebook data.

CHAPTER 2

PowerExchange for Facebook Configuration

This chapter includes the following topics:

- [PowerExchange for Facebook Configuration Overview, 10](#)
- [Facebook Application Creation, 10](#)
- [Open Authentication Configuration, 11](#)
- [Configuring HTTP Proxy Options at Design-Time, 13](#)
- [Configuring HTTP Proxy Options at Run-Time, 14](#)

PowerExchange for Facebook Configuration Overview

PowerExchange for Facebook is installed with the Informatica services. You enable PowerExchange for Facebook with a license key.

Before you use PowerExchange for Facebook to access Facebook data, create a Facebook application and configure open authentication (OAuth) to send secure authorized requests to Facebook.

Optionally, you can configure HTTP proxy server authentication to access the Internet.

Facebook Application Creation

Before you configure open authentication, you must create a Facebook application.

Create a Facebook application in the following Facebook developer site:

<https://developers.facebook.com/>

In the application settings, you must specify the OAuth callback URL in the following format for the Website Site URL application setting: `http://<hostname.domain.com>:<port>/ows/jrs/callback`

Where

- `hostname` is the fully qualified system name of the master gateway node.

- `port` is the port number of the Administrator tool in an HTTP domain or an HTTPS port in an HTTPS domain. For example, 6008 if domain port is 6005 in an HTTP domain or 8443 in an HTTPS domain.
- `port` is the port number of the Administrator tool. For example, 7008 if the domain port is 7005 in an HTTP domain.

You use the App ID and App Secret listed in the application settings to configure the consumer key and consumer secret in the OAuth Utility.

Open Authentication Configuration

A Facebook connection requires open authentication (OAuth).

You configure OAuth in the OAuth Utility to send secure authorized requests to Facebook API. You can configure OAuth in the following tools:

- OAuth Utility. Open authentication configuration utility. You use the OAuth Utility to get the access token. You use the OAuth configuration details such as access token when you create a Facebook connection.
- Developer tool. You can create a Facebook connection in the Developer tool. You can launch the OAuth Utility from the **Connection** wizard to get the access token.

Open Authentication Configuration Properties

Use the OAuth Utility to configure open authentication.

The following table describes the OAuth Utility properties that you configure to connect to Facebook:

Property	Description
Application	Social media web site. Select Facebook to configure OAuth for a Facebook application.
Consumer Key	The App ID that you get when you create the application in Facebook. Facebook uses the key to identify the application.
Consumer Secret	The App Secret that you get when you create the application in Facebook. Facebook uses the secret to establish ownership of the consumer key.
Scope	Permissions for the Facebook application. Select the permissions for the application to access private profile information. Without the scope permissions, the application can access only public information.
Selected Scope	List of comma-separated selected permissions. You use this list when you create a Facebook connection.
Callback Url	OAuth callback URL that the user is redirected after successful authentication. This property is read only. You can use the URL when you create the Facebook application.

Property	Description
Access Token	OAuth user token that the OAuth Utility returns when you authorize the Facebook application. Facebook uses this token instead of the user credentials to access the protected resources.
Access Secret	Access secret is not required for Facebook connection.

Configuring Open Authentication

Use the OAuth Utility to get the access token.

Before you configure open authentication, create an application in Facebook.

1. In the address field of a browser, enter the following URL for the OAuth Utility page:

`http://<hostname.domain.com>:<port>/ows/`

The OAuth Utility page appears.

2. Select **Facebook** in the Application.
3. Enter the consumer key and secret from the Facebook application settings.
4. Select the permissions for the Facebook application from the **Select Scope** field.

The selected comma-separated permissions are listed in the **Selected Scopes** field.

The following image displays the OAuth Utility page:

INFORMATICA OAuth Utility

OAuth Utility for Social Media Adapters

Application:

Do not have consumer key and secret? [Click here](#)

Consumer Key:

Consumer Secret:

Select Scope:

Selected Scopes:

OAuth Callback URL:

Access Token:

Access Secret:

5. Click **Authorize**.
- The Facebook developer login page appears.
6. Log in to the Facebook developer site.
 7. Navigate to the Facebook application page.

8. Click **Authorize** to authorize the application.
The **Authentication Successful** page appears.
 9. Close the **Authentication Successful** page.
The OAuth Utility lists the access token.
- You use the access token to configure a Facebook connection.

Configuring Open Authentication in the Developer Tool

You can configure OAuth in the Developer tool when you create a Facebook connection.

In the **Connection** wizard, you can launch the OAuth Utility. The OAuth Utility opens the Facebook developer site in a browser. You authorize the Facebook application. The OAuth Utility populates the access token.

Configuring HTTP Proxy Options at Design-Time

If your organization uses a proxy server to access the internet, you can configure the HTTP proxy server authentication settings at design time. You can configure the HTTP proxy server authentication from the developerCore.ini file and from the web browser when you use the OAuth utility.

Configuring HTTP Proxy Options at Design-Time

If your organization uses a proxy server to access the internet, you can configure the HTTP proxy server authentication settings from the developerCore.ini file.

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- Ensure that you enable the proxy server settings from your web browser.
- Access the developerCore.ini file from the following location:
`<Informatica Installation Location>\clients\DeveloperClient`
- Add the following properties to the developerCore.ini file:

Property	Description
-Dhttp.proxyHost=	Name of the HTTP proxy server.
-Dhttp.proxyPort=	Port number of the HTTP proxy server.
-Dhttp.proxyUser=	Authenticated user name for the HTTP proxy server. This is required if the proxy server requires authentication.
-Dhttp.proxyPassword=	Password for the authenticated user. This is required if the proxy server requires authentication. Note: The password is in plain text and not encrypted.

Property	Description
-Dhttp.nonProxyHosts=	List of host names or IP addresses for which you must not use the proxy server. Separate the list of IP addresses or host names with a pipe symbol (). For example, <code>localhost:10.20.30.40 myHost</code> Specify the IP address or name of the machine on which the Informatica gateway node runs so that the Developer tool connects to the domain.
-Dhttps.proxyHost=	Name of the HTTPS proxy server.
-Dhttps.proxyPort=	Port number of the HTTPS proxy server.

Configuring HTTP Proxy Options while Using the OAuth Utility

You can use a proxy server to access the internet when you use the OAuth utility. Enable the proxy server settings from your web browser.

Configuring HTTP Proxy Options at Run-Time

If your organization uses a proxy server to access the internet, you must configure the HTTP proxy server authentication settings for the Data Integration Service.

1. Open the Administrator tool.
2. Click the **Administration** tab, and then select the Data Integration Service.
3. Click the **Properties** tab.
4. Click **Edit** in the HTTP Proxy Server Properties section.
5. Configure the following properties:

Property	Description
HTTP Proxy Server Host	Name of the HTTP proxy server.
HTTP Proxy Server Port	Port number of the HTTP proxy server. Default is 8080.
HTTP Proxy Server User	Authenticated user name for the HTTP proxy server. This is required if the proxy server requires authentication.
HTTP Proxy Server Password	Password for the authenticated user. This is required if the proxy server requires authentication.
HTTP Proxy Server Domain	Domain for authentication.

CHAPTER 3

Facebook Connections

This chapter includes the following topics:

- [Facebook Connections Overview, 15](#)
- [Facebook Connection Properties, 15](#)
- [Creating a Facebook Connection, 16](#)

Facebook Connections Overview

Create the Facebook connection to create Facebook data objects, specify resources, preview data, and run mappings.

Use a Facebook connection to to extract Facebook data such as user profiles, posts, and friends. A Facebook connection requires OAuth to access the Facebook data. You must create a Facebook application before you create a Facebook connection. You can configure OAuth in the OAuth Utility or in the Developer tool.

Facebook Connection Properties

Use a Facebook connection to access data from the Facebook web site. A Facebook connection is a social media connection. You can create and manage a Facebook connection in the Administrator tool or the Developer tool.

Note: The order of the connection properties might vary depending on the tool where you view them.

The following table describes Facebook connection properties:

Property	Description
Name	Name of the connection. The name is not case sensitive and must be unique within the domain. The name cannot exceed 128 characters, contain spaces, or contain the following special characters: ~ ` ! \$ % ^ & * () - + = { [] } \ : ; " ' < , > . ? /
ID	String that the Data Integration Service uses to identify the connection. The ID is not case sensitive. It must be 255 characters or less and must be unique in the domain. You cannot change this property after you create the connection. Default value is the connection name.

Property	Description
Description	The description of the connection. The description cannot exceed 765 characters.
Location	The domain where you want to create the connection.
Type	The connection type. Select Facebook.
Do you have OAuth details?	Indicates whether you want to configure OAuth. Select one of the following values: - Yes. Indicates that you have the access token. - No. Launches the OAuth Utility.
Consumer Key	The App ID that you get when you create the application in Facebook. Facebook uses the key to identify the application.
Consumer Secret	The App Secret that you get when you create the application in Facebook. Facebook uses the secret to establish ownership of the consumer key.
Access Token	Access token that the OAuth Utility returns. Facebook uses this token instead of the user credentials to access the protected resources.
Access Secret	Access secret is not required for Facebook connection.
Scope	Permissions for the application. Enter the permissions you used to configure OAuth.

Creating a Facebook Connection

Create a Facebook connection before you create physical data objects.

1. Click **Window > Preferences**.
2. Select **Informatica > Connections**.
3. Expand the domain in the **Available Connections**.
4. Select the connection type in **Social Media > Facebook** and click **Add**.
5. Enter a connection name and optional description.
6. Click **Next**.
7. Enter the consumer key and consumer secret.
8. Select whether you have the access token.
 - Select **Yes** if you have the access token.
 - Select **No** if you want to generate the access token. The OAuth Utility opens the Facebook developer login page. Authorize the application. The **Authentication Successful** window appears. Close the window. The OAuth Utility populates the access token in the **Connection** wizard.
9. Click **Test Connection** to verify the connection to Facebook.
10. Click **Finish**.

CHAPTER 4

Facebook Data Objects

This chapter includes the following topics:

- [Facebook Data Objects Overview, 17](#)
- [Facebook Data Object Views, 17](#)
- [Facebook Data Object Overview Properties, 18](#)
- [Facebook Data Object Operation Properties, 18](#)
- [Facebook Resources, 20](#)
- [Query Parameter for Facebook Resources, 22](#)
- [Token File, 24](#)
- [Pagination, 25](#)
- [Parameterization, 26](#)
- [Creating a Facebook Data Object, 26](#)
- [Creating a Facebook Data Object Operation, 27](#)

Facebook Data Objects Overview

A Facebook data object is a physical data object that represents data based on a Facebook resource. Create a Facebook data object to read data from resources such as Events, Groups, and Friends.

After you create a Facebook data object, you create a data object operation. You can specify the resources that you want to search such as Friends and Groups. You can specify a search criteria using search operators in the data object operation.

You can use a Facebook data object operation as source in mappings and mapplets. You can create a profile on a Facebook data object operation.

Facebook Data Object Views

After you create a Facebook data object, you can modify the data object properties in the following data object views:

- **Overview** view. Use the **Overview** view to edit the Facebook data object name, description, and resources.

- **Data Object Operation** view. Use the **Data Object Operation** view to modify the properties that the Data Integration Service uses when it reads data from the Facebook.

When you create mappings that use Facebook sources, you can view the data object properties in the **Properties** view.

Facebook Data Object Overview Properties

The **Overview** properties include general properties that apply to the Facebook data object. They also include object properties that apply to the resources in the Facebook data object.

General Properties

The following table describes the general properties that you configure for Facebook data objects:

Property	Description
Name	Name of the Facebook data object.
Description	Description of the Facebook data object.
Connection	Name of the Facebook connection.

Object Properties

The following table describes the object properties that you can view for Facebook resources:

Property	Description
Name	Name of the resource.
Type	Type of the resource.
Description	Description of the resource.

Facebook Data Object Operation Properties

The data object operation properties include general, ports, sources, and advanced properties that the Data Integration Service uses to read data from Facebook.

General Properties

The general properties lists the name and description of the data object operation.

The following table describes the general properties that you can view for a Facebook data object operation:

Property	Description
Name	Name of the Facebook data object operation.
Description	Description of the Facebook data object operation.

Column Properties

The column properties lists the datatypes, precision, and scale of the source transformation.

The following table describes the column properties that you can view for a Facebook data object operation:

Property	Description
Name	Name of the Facebook data object operation.
Type	Transformation datatype of the metadata.
Precision	Maximum number of significant digits for numeric datatypes, or maximum number of characters for string datatypes. For numeric datatypes, precision includes scale.
Scale	Maximum number of digits after the decimal point for numeric values.
Description	Description of the Facebook data object operation.

Advanced Properties

The advanced properties lists the resource physical name of the source transformation.

Ports Properties

The ports properties lists the datatypes, precision, and scale of the Input transformation.

The following table describes the ports properties that you can view for a Facebook data object operation:

Property	Description
Name	Name of the Facebook metadata such as id, start-time, and first-name of the resource.
Type	Native datatype of the metadata.
Precision	Maximum number of characters for string datatypes.
Description	Description of the metadata.

Sources Properties

The sources properties lists the resources of the Input transformation.

The following table describes the sources properties that you configure for a Facebook data object operation:

Property	Description
Sources	List of the Facebook resources in the data object operation. You can add or delete resources.

Advanced Properties

The advanced properties includes the run-time properties of the Input transformation. You can specify the search criteria to extract Facebook data in the query parameter. When you run the mapping, the Data Integration Service uses the search criteria to extract data.

The following table describes the data object operation properties that you configure for a Facebook data object operation:

Property	Description
Query Parameter	Facebook search criteria. You can use Facebook search operators to define the search criteria.
Token File	<p>File name and format of a file that contains a list of access tokens. The CSV file must be on the machine where Informatica Services is installed. The Data Integration Service uses the access token at run time to establish a connection. If one set of access token fails, the Data Integration Service uses the next set. Review the session log for details.</p> <p>Specify the fully qualified path and format of the file in one of the following formats:</p> <ul style="list-style-type: none">- <code><file path>;{accesstoken}</code> or <code><file path></code> <p>Use one of the formats if the file contains only the mandatory comma-separated columns of access token.</p> <ul style="list-style-type: none">- <code><file path>;{col1,accesstoken,col4}</code> <p>Use this format to specify optional columns such as col1 and col4. For example, <code>\\hostname\OAuth\fb_tokens.csv;{accesstoken,ID,name}</code> specifies the location of a file named <code>fb_tokens.csv</code> that contains the following mandatory comma-separated column of <code>accesstoken</code>. The Data Integration Service ignores the optional columns, ID and name, at run time.</p>
Ends After	<p>Facebook pagination property. Controls the number of rows requested. Specify a time or a positive numeral:</p> <ul style="list-style-type: none">- Amount of time that the Data Integration Service runs the mapping. Enter the duration in the following format: <code>hh:mm</code> <p>Default is blank, which indicates that the Data Integration Service runs the mapping until you stop it or until there is data.</p> <ul style="list-style-type: none">- Number of rows that are requested. The Data Integration Service will request the minimum number of rows which is 500. The maximum number of rows requested is based on the rows returned by the Facebook application. Enter the number of rows as a positive numeral. <p>Configure for Profile Feed, Search-Group, Search-Page, and Search-Post resources.</p>

Facebook Resources

PowerExchange for Facebook uses the Facebook API to search and retrieve Facebook data. The Facebook API resources allow access to Facebook data. These resources provide information such as user profiles, friends, and group information. Each resource includes metadata such as FollowersCount, FriendsCount, and Username.

For information about the Facebook API, see the Facebook API documentation at <https://developers.facebook.com>.

When you create a Facebook data object or create a Facebook data object operation, you specify the resources based on the information you want to extract.

The following table describes the Facebook resources:

Resource	Description
Page-Feed	Extracts the news feed from a page. The Page-Feed resource includes metadata such as actions, description, and message.
Page-Info	Extracts basic information about the page. The Page-Info resource includes metadata such as category, company_overview, and location.
Friends	Extracts the list of Facebook friends for the specified user profile. The Friends resource includes metadata such as id and name.
Group Feed	Extracts the news feed of the group. The Group Feed resource includes metadata such as actions, description, and message.
Group Info	Extracts information about the group. The Group Info resource includes metadata such description, email, and owner_name.
Group Members	Extracts the list of members in the group. The Group Members resource includes metadata such as administrator, id, and name.
Profile Feed	Extracts the user's news feeds or Facebook Posts objects. The Profile Feed resource includes metadata such as from, to, and message.
Self	Extracts the user profile. The Self resource includes metadata such as id, first-name, and lastname.
Search-Event	Extracts event information including the location, event name, and the invitees based on a search criteria. The User, Page, and Application objects have an events connection. You can extract only public events. The Search-Event resource includes metadata such as start-time, end-time, and location.
Search-Group	Extracts the group information based on a search criteria. The User and Page objects have a group connection. The Search-Group resource includes metadata such as id, name, and version.
Search-Page	Extracts Facebook pages based on a search criteria. You can access public pages and pages that may be restricted based on demographic information such as the current user's age or location. The Search-Page resource includes metadata such as id, name, and category.
Search-Post	Extracts the profile's feed or posts for the users based on a search criteria. Facebook objects such as the User, Page, Application, and Group have feed connections containing post objects that represent their walls. The Search-Post resource includes metadata such as from, to, and message.

Query Parameter for Facebook Resources

Use the query parameter to specify the search criteria.

When you create a Facebook data object, you specify the query parameter that the Data Integration Service uses to search for Facebook data. The query parameter must include the mandatory parameter. Each resource has one mandatory parameter.

You can use Facebook search operators in the query parameter for all the resources. The operators are defined in the Facebook developer documentation. For example, you specify the following query parameter to extract the pages that contain the keywords BMW and limit the number of results to 100:

```
QUERY=BMW&limit=100
```

The following table describes the mandatory parameter for each resource:

Resource	Mandatory Parameter	Description
Page-Feed	PAGE_ID	<p>Page feed search. Specify the ID or name of a page for the news feed you want to retrieve from the page. For example, you specify the following parameter to extract news feed from a page: <code>PAGE_ID=natgeotv.india</code> or <code>PAGE_ID=62103854902</code></p> <p>The query parameter does not support a comma separated list of IDs or names.</p>
Page-Info	PAGE_ID	<p>Page search. Specify the Page-Info query parameter in the following formats:</p> <ul style="list-style-type: none">- In the following query parameter, specify the ID of the page you want to retrieve: <code>PAGE_ID=131747896861126</code>- In the following query parameter, specify the name of the page you want to retrieve: <code>PAGE_ID=Samsung</code>- In the following query parameter, specify a list of IDs or names of the pages you want to retrieve: <code>PAGE_ID=file:///export/qa_adp/ FB_Page_ID.txt</code>
Friends	USER	<p>Current user. Specify the user ID or the Facebook operator <code>me</code> for the list of friends of the current user. For example, you specify the following query parameter to extract a list of IDs and names of the friends of the active user's profile:</p> <p><code>USER=me</code></p>
Group Feed	GROUP_ID	<p>Group feed search. Specify the ID or name of the group for the group news feed you want to retrieve. The query parameter does not support a comma separated list of IDs or names. For example, you specify the following parameter to extract information about the news feed of the group:</p> <p><code>GROUP_ID=Harvard</code> or <code>GROUP_ID=218871661504742</code></p>

Resource	Mandatory Parameter	Description
Group Info	GROUP_ID	<p>Group search. Specify the Group Info query parameter in the following formats:</p> <ul style="list-style-type: none"> - In the following query parameter, specify the ID of the group for the group information you want to retrieve: GROUP_ID=218871661504742 - In the following query parameter, specify a list of user IDs of the group for the group information you want to retrieve: GROUP_ID= file:///export/qa_adp/ FB_Profile_ID.txt
Group Members	GROUP_ID	<p>Group search. Specify the ID of the group for the list of members you want to retrieve. For example, you specify the following parameter to extract information about the list of members in a group.</p> <p>GROUP_ID=218871661504742</p>
Profile Feed	USER	<p>Current user or user. Specify the Profile Feed query parameter in the following formats:</p> <ul style="list-style-type: none"> - In the following query parameter, specify the user ID to extract the news feeds of the user: USER=100003672900818 - In the following query parameter, specify the user name to extract the news feed of the user: USER=chris12 - In the following query parameter, specify the Facebook operator <code>me</code> for the news feeds of the current user: USER=me
Self	USER	<p>Current user or user. Specify the Self query parameter in the following formats:</p> <ul style="list-style-type: none"> - In the following query parameter, specify the user ID for the profile of the user you want to extract: USER=100003672900818 - In the following query parameter, specify the user name for the profile of the user you want to extract: : USER=chris12 - In the following query parameter, specify the Facebook operator <code>me</code> for the profile of the current user: USER=me - In the following query parameter, specify a list of user IDs or user names for the profile of the user: USER=file:///export/qa_adp/ FB_Profile_ID.txt
Search-Event	QUERY	<p>Search keyword. Specify the keyword to search for events. For example, you specify the following query parameter to extract the events that contain the keywords Apple Developer:</p> <p>QUERY=Apple Developer</p>

Resource	Mandatory Parameter	Description
Search-Group	QUERY	Search keyword. Specify the keyword to search for groups. For example, you specify the following query parameter to extract the groups that contain the keywords Jackson: QUERY=Jackson
Search-Page	QUERY	Search keyword. Specify the keyword to search for pages. For example, you specify the following query parameter to extract the pages that contain the keywords BMW: QUERY=BMW
Search-Post	QUERY	Search keyword. Specify the keyword to search for posts. For example, you specify the following query parameter to extract the posts that contain the keywords iPad: QUERY=iPad

Token File

You can specify the file name and format of a file that contains a list of access tokens and access secrets.

The following table provides the list of Facebook resources and whether the token file is applicable:

Resource	Token File
Page-Feed	No
Page-Info	No
Friends	Yes
Group Feed	No
Group Info	No
Group Members	No
Profile Feed	Yes
Self	Yes
Search-Event	No
Search-Group	No
Search-Page	No
Search-Post	No

Pagination

PowerExchange for Facebook uses the Facebook API to control the number of rows that you request when the mapping runs.

When you create a Facebook data object operation, you can specify the amount of time the mapping runs or the number of rows that you request. PowerExchange for Facebook uses the time-based pagination. For more information about time-based pagination, see the Facebook API documentation at:

<https://developers.facebook.com/docs/reference/api/pagination/>

The following table specifies the pagination impact for each Facebook resource, and whether the Ends After Property is applicable for each Facebook resource:

Resource	Pagination Impact	Ends After Property Applicable?
Friends	No	No
Profile	No	No
Profile-Feed	Yes	Yes
Search-Event	No	No
Search-Group	Yes	Yes
Search-Page	Yes	Yes
Search-Post	Yes	Yes
Group-Info	No	No
Page-Info	No	No
Group-Feed	Yes	Yes
Page-Feed	Yes	Yes
Group-Members	Yes	Yes

Parameterization

You can parameterize the Facebook connection and read operation properties to override the properties at run time.

The following table lists the read operation properties that you can parameterize and the type of parameterization supported:

Property	Type of Parameterization Supported
Query Parameter	Partial
Token File	Partial
Ends After	Full

Creating a Facebook Data Object

Create a Facebook data object to specify the Facebook resources.

Before you create a Facebook data object, you configure a Facebook connection.

1. Select a project or folder in the Object Explorer view.
2. Click **File > New > Data Object**.
3. Select **Facebook Data Object** and click **Next**.
The **New Facebook Data Object** dialog box appears.
4. Click **Browse** next to the **Location** option and select the target project or folder.
5. Click **Browse** next to the **Connection** option and select a connection from which you want to import the Facebook resource.
6. To add a resource to the Data Object, click **Add** next to the **Resource** option.
The **Add sources to the data object** dialog box appears.
7. Navigate or search for the resources to add to the data object and click **OK**.
8. Select the resource and click **OK**.
9. Optionally, enter a name for the data object.
10. Click **Finish**.

The data object appears under Data Object in the project or folder in the **Object Explorer** view. You can also add resources to a data object after you create it.

Creating a Facebook Data Object Operation

Create a data object operation from a data object. You can create multiple data object operations from a data object. Each data object operation must have only one resource.

Before you create a data object operation, you must create the data object with the resource.

1. Select the data object in the **Object Explorer** view.
2. Right-click and select **New > Data Object Operation**.

The **Data Object Operation** dialog box appears.

3. Enter a name for the data object operation.
4. Select the type of data object operation.
5. Click **Add**.

The **Select a resource** dialog box appears.

6. Select the resources for which you want to create the read operation and click **OK**. You can specify only one resource for a data object operation.
7. Click **Finish**.

The Developer tool creates the data object operation for the selected data object.

CHAPTER 5

Facebook Mappings

This chapter includes the following topics:

- [Facebook Mappings Overview, 28](#)
- [Facebook API Rate Limits , 28](#)
- [Facebook Mapping Example, 29](#)

Facebook Mappings Overview

After you create the Facebook data object operation, you can develop a mapping. You can define the following objects in the mapping:

- Facebook data object operation as the source to read data from Facebook
- Transformations
- A target

Validate and run the mapping to extract the Facebook data and load it to a target.

Facebook API Rate Limits

Facebook API imposes rate limits by default to provide fair use of API resources to all users.

Facebook imposes different types of rate limits based on the number of API calls for each API key, number of Facebook applications for each account, and the number of calls for each account type.

Review the Facebook policies when you design the frequency of the API calls. If the number of requests exceeds the permitted limits, the Facebook API returns an error response with more information about the error. Facebook may also prohibit users from future API access if guidelines are continuously and persistently violated. Users will have to directly contact Facebook to reset their API access.

To avoid being prohibited, review the Facebook guidelines at the following web site:

<https://developers.facebook.com>

Facebook Mapping Example

Your organization, HypoMarket Corporation, creates a Facebook page for a proposed product called HypoBasket. As a promotion, you post questions and invite customers to comment on the product. You review all the wall posts to analyze customer reaction.

Create a mapping that reads the posts from the Facebook wall of HypoBasket and writes those records to a table.

You can use the following objects in a Facebook mapping:

Facebook input

The mapping source is a Facebook data object that contains the Profile Feed resource.

Create a Facebook data object and add the data object to the mapping. Add the Profile Feed resource to the data object. The resource does not require a query parameter.

Mapping output

Add a relational data object to the mapping as a target.

After you run the mapping, Data Integration Service writes the extracted posts to the target table. You can use text analytics and sentiment analysis tools to analyze the posts.

APPENDIX A

Datatype Reference

This appendix includes the following topics:

- [Datatype Reference Overview, 30](#)
- [Facebook and Transformation Datatypes, 30](#)

Datatype Reference Overview

Informatica Developer uses the following datatypes in Facebook mappings:

- Facebook native datatypes. Facebook datatypes appear in the physical data object column properties.
- Transformation datatypes. Set of datatypes that appear in the transformations. They are internal datatypes based on ANSI SQL-92 generic datatypes, which the Data Integration Service uses to move data across platforms. Transformation datatypes appear in all transformations in a mapping.

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

Facebook and Transformation Datatypes

The following table lists the Facebook datatypes that Data Integration Service supports and the corresponding transformation datatypes:

Facebook Datatype	Transformation Datatype	Range and Description
String	String	1 to 104,857,600 characters

INDEX

A

API Rate Limits [28](#)

C

callback URL [10](#)
configuring
 HTTP proxy options [14](#)
 OAuth [12](#)
configuring HTTP proxy options
 Developer tool [13](#)
configuring OAuth
 Developer tool [13](#)
creating
 data object operation [27](#)
 Facebook application [10](#)
 Facebook connection [16](#)
 Facebook data object [26](#)

D

data object [26](#)
data object operation
 creating [27](#)
datatype reference overview
 description [30](#)
datatypes
 Facebook [30](#)
 Transformation [30](#)

E

extraction
 Facebook data [8](#)

F

Facebook
 token file [24](#)
Facebook connection
 creating [16](#)
 overview [15](#)

Facebook connections
 properties [15](#)
Facebook data object
 creating [26](#)
 general properties [18](#)
 object properties [18](#)
 overview properties [18](#)
 views [17](#)
Facebook data object operation
 advanced properties [18](#)
 general properties [18](#)
 ports properties [18](#)
 properties [18](#)
 sources properties [18](#)
Facebook data object overview
 description [17](#)
Facebook mappings overview
 description [28](#)
Facebook resources [20](#)

M

mapping example [29](#)

O

OAuth
 configuring [12](#)
OAuth configuration
 properties [11](#)
open authentication [11](#)

P

pagination
 Facebook [25](#)
PowerExchange for Facebook overview
 description [8](#)

Q

query parameter
 Facebook resources [22](#)