

Pega Foundation for Financial Services

ENRICHMENT USING IHS MARKIT GUIDE

8.4



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About this document

This document explains how to use and extend the IHS Markit connector available in the Pega Foundation for Financial Services, including how to submit a request using the SOAP Web Service, receive a response, handle errors, and then use the data on the Pega Platform clipboard in an application.

IHS Markit offers a wide range of solutions and the examples described in this document may require IHS Markit licenses. You should consult with IHS Markit for the specifics on licenses, information they provide, inputs they require, and expected outputs.

Introduction

Enriching customer and company data from financial information providers enables financial services organizations many benefits including: operational efficiencies, more efficiently managing credit decisions, verifying identity, increasing fraud awareness, providing more targeted and personalized cross-sell and upsell strategies, and optimizing collections treatments.

It is likely that you'll want to use several providers to automate customer journeys depending on the location, type of client, sort of data required, and agreements in place. Also, you'll want to take advantage of new services and information as providers make it available.

Therefore, Pega provides a single, unified approach for creating and extending integrations to any financial information provider that all the Pega CRM and CLM applications can access.

There are also pre-defined connectors to some of the leading providers, including Equifax, Refinitiv's World-Check One, IHS Markit, and Dun & Bradstreet.

Intended audience

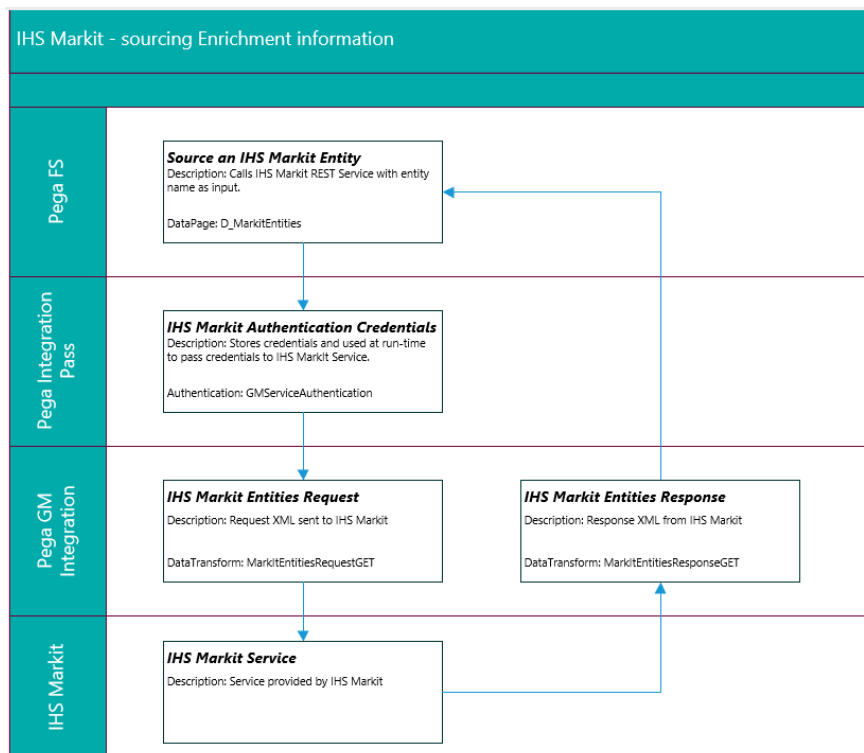
This guide is intended for Pega Platform developers looking to learn how to utilize the Markit connector provided within the Pega Foundation for Financial Services.

Solution summary

The IHS Markit solution is implemented using the following assets within the following Pega Foundation for Financial Services:

Name	Type	Description
D_Trigger_SearchEntity	Data Page	Unified data page referred to as “Business Service” functionality, that retrieves data from any of the available 3rd party connectors.
Trigger_SearchEntity	Data Transform	Selects the applicable data page for the intended provider.
D_MarkitEntities	Data Page	Calls Markit Rest Service with request data transform MarkItEntitiesRequestGET and response data transform MarkItEntitiesResponseGET.
MarkItEntitiesRequestGET	Data Transform	Request data.
MarkItEntitiesResponseGET	Data Transform	Response data.
GMServiceAuthentication	Authentication Profile	Stores credentials and used at run-time to pass credentials to MarkIt Service from PegaFSIntPass.

Retrieving information from IHS Markit uses the following steps:



Making the connection

Setting up an IHS MarkIt account

To use this component, you need a valid IHS MarkIt account. For more information about licensing and account setup contact IHS MarkIt. To contact IHS MarkIt [click here](#).

Installing the IHS MarkIt component

Ensure that your application stack includes the latest versions of the components by selecting **Definition** from the Application menu and ensure the following are included:

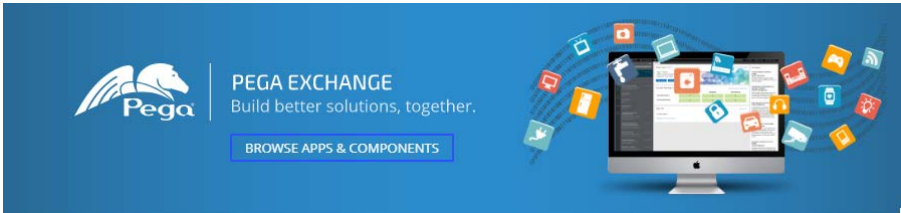
Enabled components

[+ Add component](#)

	Component	Version	
1	Markit_20191217T190835605	08.04	 

[Manage components](#)

- If the components are not included, click on **Manage components** and check the Enabled box for Markit:



Available components

Name	Version	Publisher	Status
 Markit	08.04	Pega Foundation ...	☒ Enabled

 Browse

 Download



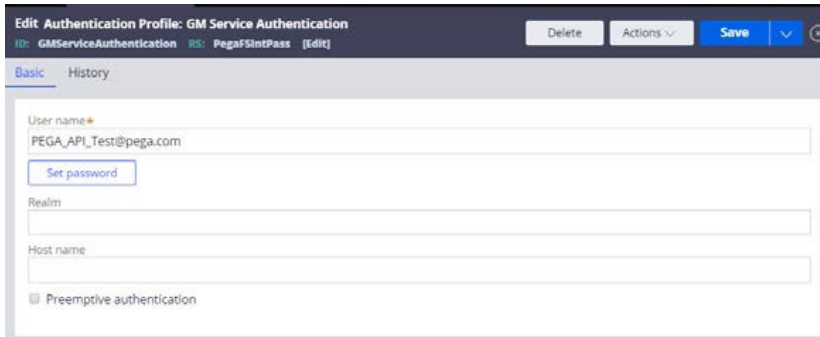
[Install new](#)

[OK](#)

- Click **OK** and the IHS MarkIt component has now been added
- Click **Save** to save these changes to the application.

Establishing connectivity

Enter the IHS Markit authentication credentials that will be used when calling the service at run time into the Pega Foundation for Financial Services application, within an Authentication Profile called **GMServiceAuthentication**:



The screenshot shows a web interface for editing an authentication profile. The title bar reads 'Edit Authentication Profile: GM Service Authentication'. Below the title bar, there are tabs for 'Basic' and 'History', with 'Basic' being the active tab. The main form area contains the following fields and controls:

- User name***: A text input field containing 'PEGA_API_Test@pega.com'.
- Set password**: A button with a circular arrow icon.
- Realm**: A text input field.
- Host name**: A text input field.
- Preemptive authentication**: A checkbox that is currently unchecked.

At the top right of the form, there are buttons for 'Delete', 'Actions' (with a dropdown arrow), and 'Save' (with a dropdown arrow).

Indicating the Endpoint URL

You can set the Endpoint URL Dynamic System Settings (DSS):

- PegaGMInt • KYC/MarkItKYCService/pyEndpointURL = <https://data.uat.kyc.com>
- PegaGMInt • KYC/MarkItKYCTokenService/Path = /oauth/token
- PegaGMInt • KYC/MarkItKYCEntityService/Path = /data-api/entities

Calling IHS Markit data page

D_MarkItEntities in PegaFS-Int-ExtProvider-MarkIt-Entities-MarkItEntities connects to the data source (IHS MarkitEntities service) using entity name as input.

Data Page: Source a Markit entity [Available]
ID: D_MarkitEntities RS: PegaGM08-01-01

This record has 1 info warning (including 1 unjustified) [View](#)

Definition Load Management Parameters Pages & Classes Test cases Usage Specifications History

Data page definition

Structure
Page
Object type
PegaFS-Data-ExtProvider-Markit-Entities
Mode
Read-Only
☐ Restricted feature set for high throughput ⓘ
Scope
Thread

Data sources

If there are multiple sources, the first IF that evaluates to true is used. If none evaluate to true, the OTHERWISE source is used.

☐ Simulate data source

Source
Connector
Type
REST
Name
MarkitEntities
Request Data Transform
MarkitEntitiesRequestGET
Response Data Transform
MarkitEntitiesResponseGET
Endpoint URL
Method
Get
Create Data Source
Add source

The REST connect rule, **MarkitEntities** contains Endpoint URL, Authentication and KeyStore rule references.

Request Data Transform

MarkItEntitiesRequestGET sets Authorization Token for the connection and creates request query using legal name of the entity parameter.

Data Transform: MarkItEntitiesRequestGET [Available]
CL: PegaFS-Int-ExtProvider-Markit-Entities-MarkitEntities ID: MarkItEntitiesRequestGET RS: PegaGMInt08-01-01

Definition Parameters Pages & Classes Test cases Specifications History

	Action	Target	Relation	Source
1	Comment	Request Data Transform		
2	Apply Data Transform	SetAuthorizationToken		
3	Set	.request.query_GET.legalName	equal to	Param.legalName

+ Collapse All Expand All
☐ Call superclass data transform ⓘ

Response Data Transform

MarkItEntitiesResponseGET maps values returned by the service.

Data Transform: MarkitEntitiesResponseGET [Available]
 CL: PegaFS-Data-ExtProvider-Markit-Entities ID: MarkitEntitiesResponseGET RS: PegaFS:08-01-01

This record has 1 info warning [View](#)

Definition Parameters Pages & Classes Test cases Specifications History

	Action	Target	Relation	Source
1	Comment	Response Data Transform		
2	When	DataSource.pyHTTPResponseCode="200"		
2.1	Set	.pyErrorPage	equal to	DataSource.pyErrorPage
2.2	Exit Data Transform			
3	Update Page	Primary	with values from	DataSource.response_GET
3.1	Append and Map to	.rows	each page in	.rows
3.2	Set	.pyErrorPage.pyStatus	equal to	DataSource.pyStatusValue
3.3	Set	.pyErrorPage.pyHTTPResponseCode	equal to	DataSource.pyHTTPResponseCode

[Collapse All](#) [Expand All](#)

Call superclass data transform

Clipboard View

Search Results:

Pega Clipboard HPIM5IOTLHQAQTMZD27MMPUKD8MY5FFC

Clipboard page: pyWorkPage.MarkitEntityList(1)

[Edit](#) [Refresh](#) [Actions](#)

Property	Value
bookingJurisdiction	United States
contactAddressCity	Cambridge
contactAddressLine1	One Rogers St
contactAddressLine2	
contactAddressState	Al Mafraq
contactCountry	US
contactEmail	rangan.krish@pega.com
contactFaxNumber	
contactFirstName	Ranjan
contactLastName	Krish
contactMiddleName	
contactPhoneNumber	8888888888
ContactShortName	Ranjan Krish
contactZipCode	
countryCode	US
entityType	Corporation
eventStatus	Completed
eventType	Annual Review
lastReviewCompletionDate	2016-02-26
legalName	Pegasystems Advanced Technologies Inc
lei	PEGA-22300-14
mei	USOC001150
nextScheduledReviewDate	2017-05-26
pxObjClass	PegaFS-Data-ExtProvider-Markit-Entities-Rows
refreshCycle	1
requestedProfileDeliveryDate	
subscriptionLevel	Vantage
subscriptionStatus	Subscribed

Data Page:

The screenshot shows the Pega Clipboard interface. On the left, a tree view lists various data pages. The 'D_MarkItEntities' page is selected, and its 'rows' property is expanded, showing a list of 12 rows. The first row is selected. On the right, the 'Clipboard page: D_MarkItEntities_pa8288398928389361pz.rows(1)' is displayed, showing a table of properties and values for the selected entity.

Property	Value
bookingJurisdiction	United States
contactAddressCity	Cambridge
contactAddressLine1	One Rogers St
contactAddressLine2	
contactAddressState	Al Mafrq
contactCountry	US
contactEmail	rangan.krish@pega.com
contactFaxNumber	
contactFirstName	Ranjan
contactLastName	Krish
contactMiddleName	
contactPhoneNumber	8888888888
ContactShortName	Ranjan Krish
contactZipCode	
countryCode	US
entityType	Corporation
eventStatus	Completed
eventType	Annual Review
lastReviewCompletionDate	2016-02-26
legalName	Pegasystems Advanced Technologies Inc
lei	PEGA-22300-14
mei	US0C001150
nextScheduledReviewDate	2017-05-26
pxObjClass	PegaFS-Data-ExtProvider-MarkIt-Entities-Rows
refreshCycle	1

After selecting an entity from search results, detailed view:

The screenshot shows the Pega Clipboard interface. On the left, a tree view lists various data pages. The 'SelectedMarkItEntity' page is selected. On the right, the 'Clipboard page: pyWorkPage.SelectedMarkItEntity' is displayed, showing a table of properties and values for the selected entity.

Property	Value
bookingJurisdiction	United States
contactAddressCity	Cambridge
contactAddressLine1	One Rogers St
contactAddressLine2	
contactAddressState	Al Mafrq
contactCountry	US
contactEmail	rangan.krish@pega.com
contactFaxNumber	
contactFirstName	Ranjan
contactLastName	Krish
contactMiddleName	
contactPhoneNumber	8888888888
ContactShortName	Ranjan Krish
contactZipCode	
countryCode	US
entityType	Corporation
eventStatus	Completed
eventType	Annual Review
lastReviewCompletionDate	2016-02-26
legalName	Pegasystems Advanced Technologies Inc
lei	PEGA-22300-14
mei	US0C001150
nextScheduledReviewDate	2017-05-26
pxObjClass	PegaFS-Data-ExtProvider-MarkIt-Entities-Rows
refreshCycle	1

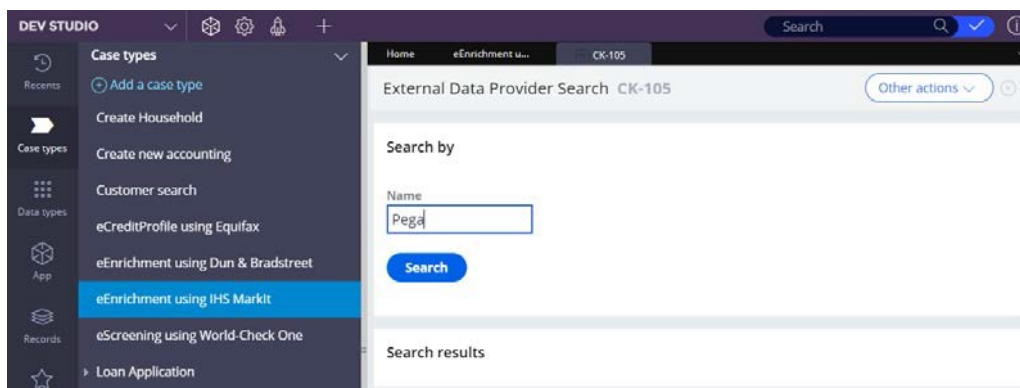
Testing and demonstrating

Testing the Server Authentication

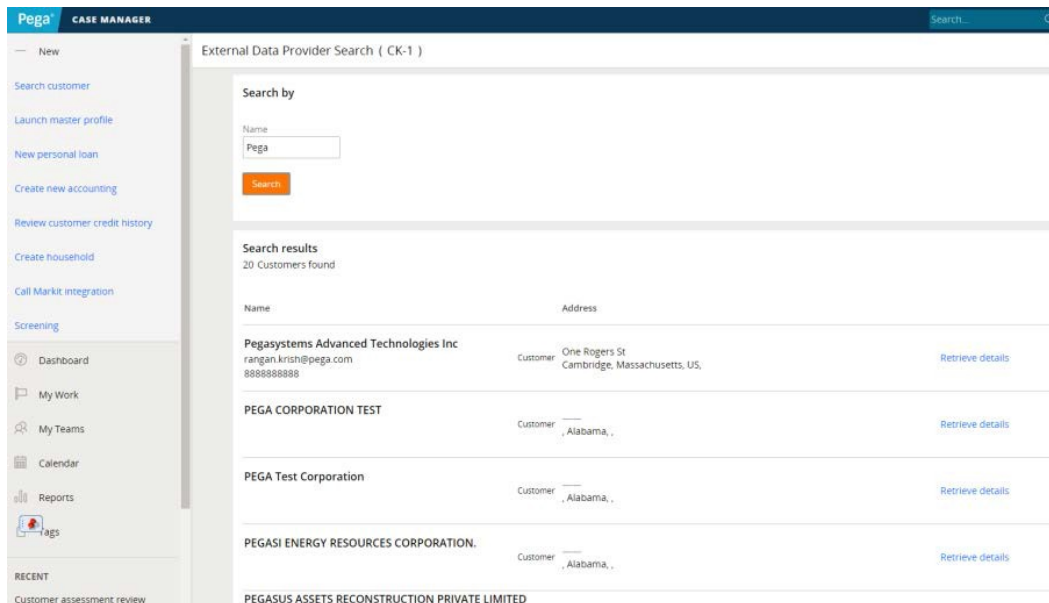
To test and use the IHS MarkIt functionality described in this document, please request test and production credentials from IHS MarkIt.

Testing and Demonstrating the IHS Markit connector

1. Go to Launch> Case Manager > New > Enrichment using IHS Markit and Input entity name as search criteria.



2. Search results return applicable entities.



3. Detailed reports are available.

External Data Provider Search (CK-2)

Actions

Pegasystems Advanced Technologies Inc

Entity type
Corporation

Onboard New Customer

Contact details

Ranjan Krish

One Rogers St

Cambridge , Massachusetts , US

rangan.krish@pega.com

8888888888

Legal entity identifier

PEGA-XXXX-14

Market entity identifier

USOC001150

Subscription level

Vantage

Event type

Annual Review

Last review date

Feb 25, 2016

Subscription status

Subscribed

Event status

Completed

Next review date

May 25, 2017

Review MarkIt Entity Reports

FSIFSADMIN

Due in 7 days from now

Retrieve reports

Select the report type and format then download report(s) or proceed to skip third party integration.

Report type

Format

Value cannot be blank

Retrieve reports

Entity Profile Report

Quality Assurance Report

Evidentiary Source Report

Cancel

Save

Submit

Example:

Retrieve reports

Select the report type and format then download report(s) or proceed to skip third party integration.

Report type

Format

Retrieve reports

Entity Profile Report

PDF

Report documents (Contents of ZIP file)

Folder name

File name

2016-02-26_Annual Review

Entity Profile Report_USOC001150_2016-02-26.pdf

Documents

Certificate of Incorporation_USOC001150_564835200253353.pdf

Attach reports to case

Note: You need to check with IHS Markit for further required details for your licensed products as the inputs required will vary greatly by IHS Markit product.