



PingFederate[®]

REST Data Source 1.0.0

User Guide

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Note that Ping Identity may not provide support for any sample configurations provided in this document. The variability inherent among security environments prevents full testing and support for all possible platform configurations. If you need special assistance or would like to inquire about implementation or support programs, please contact Ping Identity Global Client Services (support.pingidentity.com).

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System Requirements

This version of the PingFederate REST Data Source requires the following:

- PingFederate 8.3.1 (or higher).

Installation

1. From the /dist in the ZIP file, copy the following file to the <pf_install>/pingfederate/server/default/deploy directory:
commons-jxpath-1.3.jar
rest-data-source-1.0.0.jar
2. Start or restart PingFederate.

Configuring a REST Data Source Instance

1. Log on to the PingFederate administrative console and click **Data Stores** under Server Configuration -> System Settings.
2. On the Manage Data Stores screen, click **Add New Data Store...**
3. On the Data Store Type screen, check **Custom** and click **Next**.
4. Enter a Data Store Instance Name and select **REST Data Source 1.0.0**, and click **Next**.

Manage Data Stores | Data Store

Data Store Type	Custom Data Store Type	Configure Attribute Source Adapter Instance	Summary
Enter a descriptive name, a system-wide unique ID, and select the custom data store adapter to use.			
DATA STORE INSTANCE NAME	<input type="text" value="Upsert"/>		
DATA STORE TYPE	<div><div>- SELECT -</div><div><div>- SELECT -</div><div>REST Data Source 1.0.0</div></div></div>		
<input type="checkbox"/> MASK VALUES IN LOG			

5. Complete the configuration fields as described on the **Configure Attribute Source Adapter Instance** screen and click **Next**.

Manage Data Stores | Data Store

Custom Data Store Type	Configure Attribute Source Adapter Instance	Summary
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Configure the Custom Source Adapter.

Custom datasource calls the User Info REST service for data.

ATTRIBUTE LOOKUP		
ATTRIBUTE NAME	XPATH	Action
Add a new row to 'Attribute Lookup'		

Field Name	Field Value	Description
REST SERVICE ENDPOINT	<input type="text" value="bin.org/status/200?username={0}&pthe"/>	The URI of the service that this REST client accesses.
HTTP ACTION	<input type="radio"/> GET <input type="radio"/> PUT <input checked="" type="radio"/> POST	
BASIC AUTH USERNAME	<input type="text"/>	Optional basic auth username that the REST client will use to access the service
BASIC AUTH PASSWORD	<input type="text"/>	Optional basic auth password that the REST client will use to access the service

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[Done](#)
[Save](#)

Please note that there is variable substitution on the endpoint using the values mapped in the connection in order. For example if the endpoint is `http://httpbin.org/status/200?username={0}&otherparam={1}` and in the connection the filter field is `${username},${lastname}` where `${username}` is john and `${lastname}` is Smith then the endpoint will become `http://httpbin.org/status/200?username=john&otherparam=Smith`. Also note that if PUT or POST are specified then the query parameters will be removed and converted to form parameters.

- Click **Done** and **Save** until you reach the Main Menu screen.

Configure a Data Source on an SP Connection

- From the IdP Adapter Mapping screen, check **Retrieve Additional Attributes From...** and click **Next**.
- Click **Add Attribute Source** and select you defined previously and click **Next**.
- On the Configure Custom Source Filter screen enter the query filter criteria as described on the screen.

Note: You can use expressions to refer to the attribute variables from assertions and Adapters and those you retrieved as fields from the data source.

`${<attribute name>}` – for an attribute from an assertion or an Adapter.

Data Store	Configure Custom Source Filters	Configure Custom Source Fields	Summary
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Perform any filter configuration for the Custom Source.

Provide the connection-specific parameters to execute the user lookup. Attributes may be mapped with the `${attribute_name}` syntax. (e.g. `${username}`)

Field Name	Field Value	Description
HTTP PARAMETERS	<input type="text" value="\${username},avalue"/>	Commas seperated list of paramaters.

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- On the Configure Custom Source Fields screen, check the possible return attributes you would like to include for attribute mapping, click **Next**, **Done** and **Next**.
- On the Adapter Contract Fulfillment screen, map the attributes from the assertion and this data source as needed to fulfill the contract, and click **Next**.
- Click **Done** and **Save** until you are back to the Main Menu screen.

Debugging

To set the log level for this data source (what appears in server.log) one would update the following file:

```
<PingFederateInstall>/server/default/conf/log4j2.xml
```

And add the following entry into

```
<logger name="com.pingidentity.datasource.restdatasource">
    <level value="DEBUG"/>
</logger>
```

After restarting log items like the following will be logged:

```
11:49:00,870 DEBUG [CustomAttributeSource] Custom Attr Src search: search attrNames=[]
11:49:00,871 DEBUG [RemoteCallDataSource] Begin retrieveValues
11:49:00,871 DEBUG [RemoteCallDataSource] Iterating over provided FilterConfiguration Fields.
Size is 1
11:49:00,871 DEBUG [RemoteCallDataSource] Provided Field was: [Field:HTTP
Parameters=john,avalue]
11:49:00,871 DEBUG [RemoteCallDataSource] Iterating over the attributeNamesToFill. Size is 0
```

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11:49:00,875 DEBUG [UserInfoRequest] URL:

<http://httpbin.org/status/200?username=john&otherparam=avalue>

11:49:01,220 DEBUG [JsonUserInfoResponse] JSON String Received:

11:49:01,221 DEBUG [RemoteCallDataSource] End retrieveValues

11:49:01,221 DEBUG [CustomAttributeSource] Custom Attr Src search result: {HTTPStatus=200}

Detailed training on using in ping federate Log4j can be found at:

https://documentation.pingidentity.com/pingfederate/pf83/index.shtml#adminGuide/pf_c_log4j2LoggingServiceAndConfiguration.html