Step-by-Step REST Examples for Tasks

Contents

About this Document

The purpose of this document is to provide examples of the web service functionality available for retrieving and action pending Tasks.

The information is provided for learning and demonstration only and does not represent actual tasks or other factual event or account information.

An associated collection of sample XML files is available for download on the DR Hub home page.

The below examples are demonstrated using the PJM provided CLI tool.

A note on uploading files to DR Hub. There are numerous approaches to uploading files to our RESTful web service, however we will demonstrate using the approach found in the PJM provided CLI tool. When uploading files to DR Hub, the file must be attached to the request using a http compliant header form consistent with the multipart/form-data format. How file uploads are achieved is a function of the tools available to the user and the extent to which automation is required in the enterprise.

Release History

Release	Date	Description
1.0.0	November 14, 2016	Initial Document Created
2.0.0	December 12, 2016	Modified description of Get All Tasks and added a Paragraph on Settlements

Retrieving Task Information

This request retrieves Tasks to be reviewed by the CSP, LSE or EDC. Tasks can be viewed as items which require some kind of action if only visual confirmation. Note: this query returns all task information without filtering.

Downloading All Task Information involves a simple one line query as shown below. This request is designed specifically for downloading a list of tasks that may require attention by the assoicated party. This request is not actionalble with respect to modifying information related to tasks.

PJM CLI Command File: Required Authentication via CLI

%CLIENT% -s %APP_URL% -a /rest/secure/download/task

The HTTP Equivalent (requires browser or token authentication)

https://drhubtrain.pjm.com/drhub/rest/secure/download/task/

When complete, a response will be returned with details about the task(s) and their current status.

Here is a sample response.

```xml
<?xml version="1.0" encoding="UTF-8" standalone="yes"?>
<ns2:tasks xmlns:ns2="http://drhub.pjm.com/">
    <taskInfo>
        <taskName>CSP Review Denial</taskName>
        <registrationId>1618522</registrationId>
        <registrationStatus>DENIED</registrationStatus>
        <CSP>
            <name>MYCSP</name>
        </CSP>
        <EDC>
            <name>AECI</name>
        </EDC>
        <LSE>
            <name>AECI</name>
        </LSE>
        <taskDue>2016-10-29T23:59:59.000-04:00</taskDue>
    </taskInfo>
    <taskInfo>
        <taskName>EDC Registration</taskName>
        <registrationId>1527356</registrationId>
        <registrationStatus>PENDING</registrationStatus>
        <CSP>
            <name>AE</name>
        </CSP>
        <EDC>
            <name>PE</name>
        </EDC>
        <LSE>
```

```
            <name>BC</name>
        </LSE>
        <taskDue>2016-12-23T23:59:59.000-05:00</taskDue>
    </taskInfo>
```

Retrieving Registration Specific Tasks as an EDC

This request retrieves Registrations Tasks to be reviewed by the EDC. The response is actionable. We will create a new request to approve or deny selected items later in this document.

Downloading Registration Tasks involves a simple one line query as shown below.

PJM CLI Command File: Required Authentication via CLI

%CLIENT% -s %APP_URL% -a /rest/secure/download/task/registration/edc

The HTTP Equivalent (requires browser or token authentication)

https://drhubtrain.pjm.com/drhub/rest/secure/download/task/registration/edc

When complete, a response will be returned with details about the task(s) and their current status.

Here is a sample response.

```
<?xml version="1.0" encoding="UTF-8" standalone="yes"?>
<ns2:registrationTasks xmlns:ns2="http://drhub.pjm.com/">
    <registrationTask>
        <registrationId>1618591</registrationId>
        <locationId>65340</locationId>
        <extension>false</extension>
        <dueDate>2016-11-17T23:59:59.000-05:00</dueDate>
        <field>EDC_METER</field>
        <stringValue>EDC Meter</stringValue>
        <status>PENDING</status>
    </registrationTask>
    <registrationTask>
        <registrationId>1618591</registrationId>
        <locationId>65340</locationId>
        <extension>false</extension>
        <dueDate>2016-11-17T23:59:59.000-05:00</dueDate>
        <field>PRICING_POINT</field>
        <stringValue>DOM_RESID_AGG</stringValue>
        <status>PENDING</status>
    </registrationTask>
    <registrationTask>
        <registrationId>1618591</registrationId>
```

```
        <locationId>65340</locationId>
        <extension>false</extension>
        <dueDate>2016-11-17T23:59:59.000-05:00</dueDate>
        <field>RERRA</field>
        <status>PENDING</status>
    </registrationTask>
```

Retrieving Registration Specific Tasks as an LSE

This request retrieves Registrations Tasks to be reviewed by the LSE. The response is actionable. We will create a new request to approve or deny selected items later in this document.

Downloading Registration Tasks involves a simple one line query as shown below.

PJM CLI Command File: Required Authentication via CLI

%CLIENT% -s %APP_URL% -a /rest/secure/download/task/registration/lse

The HTTP Equivalent (requires browser or token authentication)

https://drhubtrain.pjm.com/drhub/rest/secure/download/task/registration/lse

When complete, a response will be returned with details about the task(s) and their current status.

Here is a sample response.

```xml
<?xml version="1.0" encoding="UTF-8" standalone="yes"?>
<ns2:registrationTasks xmlns:ns2="http://drhub.pjm.com/">
    <registrationTask>
        <registrationId>1618644</registrationId>
        <locationId>65354</locationId>
        <extension>false</extension>
        <dueDate>2016-11-29T23:59:59.000-05:00</dueDate>
        <field>EDC_ACCOUNT_NUMBER</field>
        <stringValue>KS109990909</stringValue>
        <status>PENDING</status>
    </registrationTask>
    <registrationTask>
        <registrationId>1618644</registrationId>
        <locationId>65357</locationId>
        <extension>false</extension>
        <dueDate>2016-11-29T23:59:59.000-05:00</dueDate>
        <field>EDC_ACCOUNT_NUMBER</field>
        <stringValue>Kq09990909</stringValue>
        <status>PENDING</status>
    </registrationTask>
```

Action Registration Tasks as an EDC or LSE

As an EDC/LSE you have the ability to action a task related to registrations in the response list. This functionality replicates that which is found in the UI under the tasks tab.

To approve or deny a task element, an action field must be appended to the initial response and that response file uploaded with the actions related to each approval task for a registration. Below is a partial example of a registration with pending approvals. In this case we deny and approve selected items but ultimately upload a decision on all approval dependent elements of the registration task.

The upload file must include all approval eligible columns for a registration task to be submitted. It is not required that you upload all registrations at one time, but all items associated with an individual registration (a single row in the UI) must be included.

Download the XML samples associated with this document for more complete examples. Approving all elements in the response is equivalent to selecting the entire row of elements for a task via the UI and then clicking the Submit button.

```xml
<?xml version="1.0" encoding="UTF-8" standalone="yes"?>
<ns2:registrationTasks xmlns:ns2="http://drhub.pjm.com/"
    <registrationTask>
        <registrationId>1618591</registrationId>
        <locationId>65340</locationId>
        <extension>false</extension>
        <dueDate>2016-11-17T23:59:59.000-05:00</dueDate>
        <field>ENERGY_LOSS_FACTOR</field>
        <numberValue>1.4</numberValue>
        <status>PENDING</status>
        <action>APPROVE</action>
    </registrationTask>
    <registrationTask>
        <registrationId>1618591</registrationId>
        <locationId>65340</locationId>
        <extension>false</extension>
        <dueDate>2016-11-17T23:59:59.000-05:00</dueDate>
        <field>EDC_ACCOUNT_NUMBER</field>
        <stringValue>8884213323</stringValue>
        <status>PENDING</status>
        <action>DENY</action>
    </registrationTask>
```

This request uploads the Registrations Tasks to be approved or denied by the EDC/LSE.

This action requires that we upload the existing list of action items with the appropriate actions for all elements. There exists a separate endpoint for uploading EDC and LSE registrations tasks.

PJM CLI Command File: Required Authentication via CLI

REM Upload EDC Registration Tasks

%CLIENT% -s %APP_URL% -a /rest/secure/upload/task/registration/edc -file .\edc-registration-task.xml

REM Upload LSE Registration Tasks

rem %CLIENT% -s %APP_URL% -a /rest/secure/upload/task/registration/lse -file .\lse-registration-task.xml

When complete, a response will be returned with details about yet incomplete task(s) and their current status.

Here is a sample response. Notice that the list of items to be approved will be from a yet incomplete lists of tasks for additional registrations. If the response returns empty, all required approvals have been submitted.

```xml
<?xml version="1.0" encoding="UTF-8" standalone="yes"?>
<ns2:registrationTasks xmlns:ns2="http://drhub.pjm.com/">
    <registrationTask>
        <registrationId>1618644</registrationId>
        <locationId>65354</locationId>
        <extension>false</extension>
        <dueDate>2016-11-29T23:59:59.000-05:00</dueDate>
        <field>ENERGY_LOSS_FACTOR</field>
        <numberValue>1.88889</numberValue>
        <status>PENDING</status>
    </registrationTask>
    <registrationTask>
        <registrationId>1618644</registrationId>
        <locationId>65354</locationId>
        <extension>false</extension>
        <dueDate>2016-11-29T23:59:59.000-05:00</dueDate>
        <field>EDC_ACCOUNT_NUMBER</field>
        <stringValue>KS109990909</stringValue>
        <status>PENDING</status>
    </registrationTask>
    <registrationTask>
        <registrationId>1618644</registrationId>
        <locationId>65354</locationId>
        <extension>false</extension>
        <dueDate>2016-11-29T23:59:59.000-05:00</dueDate>
        <field>ZONE</field>
        <stringValue>PECO</stringValue>
        <status>PENDING</status>
```

Managing Settlement Related Tasks

Unlike Registrations, Settlements do not include specific Task endpoints for downloading and uploading settlement related tasks.

Settlement actions are completed through the Settlement specific endpoints as provided in the DR Hub Users Guide. Additional information and examples for Settlement related actions is available on the DR Hub Home Page. Please reference this information when planning an approach to Settlement automation.

End of Document