Step-by-Step REST Example for a Load Management Event

Retrieve unacknowledged Load Management Events

This request returns a list of unacknowledged Load Management Events. The list of returned Events will include any Load Response Event not acknowledged within 62 minutes of the Event End Time.

In this the first example of the series we retrieve the Active load management event.

https://servername.pjm.com/drhub/rest/secure/download/event/loadmanagement/acknowledgeable

```xml
<?xml version="1.0" encoding="UTF-8" standalone="yes"?>
<ns2:events xmlns:ns2="http://drhub.pjm.com/">
    <eventSummary>
        <id>2492363</id>
        <eventSummaryInfo>
            <eventDate>2023-02-21T00:00:00.000-05:00</eventDate>
            <eventType>Load Management Summary</eventType>
            <notifyTime>2023-02-21T16:15:00.000-05:00</notifyTime>
            <startTime>2023-02-21T16:45:00.000-05:00</startTime>
            <status>Active</status>
            <regProduct>Capacity Performance DR</regProduct>
            <regResource>Pre-Emergency</regResource>
            <regLeadTime>Quick_30</regLeadTime>
            <zone>PSEG</zone>
        </eventSummaryInfo>
        <eventDetail>
            <event>
                <id>2497920</id>
                <parentId>2492363</parentId>
                <eventRegistration>
                    <registrationId>1234567</registrationId>
                    <CSP>
                        <name>PJM</name>
                    </CSP>
                </eventRegistration>
                <eventType>Load Management</eventType>
                <target>1095.696</target>
            </event>
        </eventDetail>
    </eventSummary>
</ns2:events>
```

Acknowledge the Load Management Event

Acknowledgement requires one of two approaches. CSPs may use the complete response from the unacknowledged response or a modified version of the complete response that includes just the Load Management ids.

Shown below is an example of each approach.

The file uploaded must be included in the request path.

See the PJMCLI documentation for additional detail on uploading attachments.

Below is an example of the acknowledgement to the event and its <u>Start Time</u>.

https://servername.pjm.com/drhub/rest/secure/upload/event/loadmanagement/acknowledge/your_filename.xml

```xml
<?xml version="1.0" encoding="UTF-8" standalone="yes"?>
<ns2:events xmlns:ns2="http://drhub.pjm.com/">
    <eventSummary>
        <id>2492363</id>
        <eventSummaryInfo>
            <eventDate>2023-02-21T00:00:00.000-05:00</eventDate>
            <eventType>Load Management Summary</eventType>
            <notifyTime>2023-02-21T16:15:00.000-05:00</notifyTime>
            <startTime>2023-02-21T16:45:00.000-05:00</startTime>
            <status>Active</status>
            <regProduct>Capacity Performance DR</regProduct>
            <regResource>Pre-Emergency</regResource>
            <regLeadTime>Quick_30</regLeadTime>
            <zone>PSEG</zone>
        </eventSummaryInfo>
        <eventDetail>
            <event>
                <id>2497990</id>
                <parentId>2492363</parentId>
                <eventRegistration>
                    <registrationId>1234567</registrationId>
                    <CSP>
                        <name>PJM</name>
                    </CSP>
                </eventRegistration>
                <eventType>Load Management</eventType>
                <acknowledgeDate>2023-02-21T16:09:52.557-05:00</acknowledgeDate>
                <target>1174.502</target>
            </event>
        </eventDetail>
    </eventSummary>
</ns2:events>
```

The below example represents the minimum set of elements and information required to acknowledge events. This structure applies to all event types and thus be used interchangeably.

```xml
<?xml version="1.0" encoding="UTF-8" standalone="true"?>
- <ns2:events xmlns:ns2="http://drhub.pjm.com/">
    - <eventSummary>
        - <eventDetail>
            - <event>
                <id>706727</id>
            </event>
        </eventDetail>
    </eventSummary>
</ns2:events>
```

Acknowledging multiple Events in the same upload follows the structure above appending the individual event ids.

Note: The ids to be included for acknowledgement are those within the eventDetail tag for each event.

Acknowledge Multiple Events Example

```xml
<?xml version="1.0" encoding="UTF-8" standalone="true"?>
- <ns2:events xmlns:ns2="http://drhub.pjm.com/">
    - <eventSummary>
        - <eventDetail>
            - <event>
                <id>706727</id>
            </event>
            - <event>
                <id>706728</id>
            </event>
            - <event>
                <id>706729</id>
            </event>
        </eventDetail>
    </eventSummary>
</ns2:events>
```

Note: The Acknowledgement of Events follows the same pattern for all event types. For brevity, this example applies to each step.

There are **four** acknowledgable Event Types and four acknowledgeable URLs to acknowledge these event Types

Event Types

Version 1.0

1. Load Management Event
2. Real Time Dispatch Event
3. Synchronized Reserved Event
4. Zonal Emergency Energy Event

Acknowledgement URLs

https://servername.pjm.com/drhub/rest/secure/upload/event/loadmanagement/acknowledge/your_filename.xml

https://servername.pjm.com/drhub/rest/secure/upload/event/testloadmanagementevent/acknowledge/your_filename.xml

https://servername.pjm.com/drhub/rest/secure/upload/event/realtimedispatch/acknowledge/your_filename.xml

https://servername.pjm.com/drhub/rest/secure/upload/event/synchronizedreserve/acknowledge/your_filename.xml

https://servername.pjm.com/drhub/rest/secure/upload/event/zonalemergencyenergy/acknowledge/yourfilename.xml

Retrieve new unacknowledged Load Management Events

This request returns a list of unacknowledged Load Management Events. The list of returned Events will include any Load Response Event not acknowledged within 62 minutes of the Event End Time.

In this example, we retrieve the load management event, which includes a Start Time change. This would be related to a DARA request for the immediate reduction of energy prior to the normal Lead Time. We must acknowledge the new start time of the event.

https://servername.pjm.com/drhub/rest/secure/download/event/loadmanagement/acknowledgeable

```xml
<?xml version="1.0" encoding="UTF-8" standalone="yes"?>
<ns2:events xmlns:ns2="http://drhub.pjm.com/">
    <eventSummary>
        <id>2492363</id>
        <eventSummaryInfo>
            <eventDate>2023-02-21T00:00:00.000-05:00</eventDate>
            <eventType>Load Management Summary</eventType>
            <notifyTime>2023-02-21T16:15:00.000-05:00</notifyTime>
            <startTime>2023-02-21T16:20:00.000-05:00</startTime>
            <status>Active</status>
            <regProduct>Capacity Performance DR</regProduct>
            <regResource>Pre-Emergency</regResource>
            <regLeadTime>Quick_30</regLeadTime>
            <zone>PSEG</zone>
        </eventSummaryInfo>
        <eventDetail>
            <event>
                <id>2497920</id>
                <parentId>2492363</parentId>
                <eventRegistration>
                    <registrationId>1234567</registrationId>
                    <CSP>
                        <name>PJM</name>
                    </CSP>
                </eventRegistration>
                <eventType>Load Management</eventType>
                <target>1095.696</target>
            </event>
        </eventDetail>
    </eventSummary>
</ns2:events>
```

Acknowledge the Load Management Event as Described Above

Retrieve new unacknowledged Load Management Events

This request returns a list of unacknowledged Load Management Events. The list of returned Events will include any Load Response Event not acknowledged within 62 minutes of the Event End Time.

In this example, we retrieve the load management event, which includes an <u>End Time</u>. We must acknowledge the end time of the event.

https://servername.pjm.com/drhub/rest/secure/download/event/loadmanagement/acknowledgeable

```xml
<?xml version="1.0" encoding="UTF-8" standalone="yes"?>
<ns2:events xmlns:ns2="http://drhub.pjm.com/">
    <eventSummary>
        <id>2492363</id>
        <eventSummaryInfo>
            <eventDate>2023-02-21T00:00:00.000-05:00</eventDate>
            <eventType>Load Management Summary</eventType>
            <notifyTime>2023-02-21T16:15:00.000-05:00</notifyTime>
            <startTime>2023-02-21T16:45:00.000-05:00</startTime>
            <endTime>2023-02-21T17:00:00.000-05:00</endTime>
            <status>Completed</status>
            <regProduct>Capacity Performance DR</regProduct>
            <regResource>Pre-Emergency</regResource>
            <regLeadTime>Quick_30</regLeadTime>
            <zone>PSEG</zone>
        </eventSummaryInfo>
        <eventDetail>
            <event>
                <id>2499432</id>
                <parentId>2492363</parentId>
                <eventRegistration>
                    <registrationId>1234567</registrationId>
                    <CSP>
                        <name>PJM</name>
                    </CSP>
                </eventRegistration>
                <eventType>Load Management</eventType>
                <target>0</target>
            </event>
        </eventDetail>
    </eventSummary>
</ns2:events>
```

Below: Sample response received following the acknowlededement of the Load Management Event

Version 1.0

```xml
<?xml version="1.0" encoding="UTF-8" standalone="yes"?>
<ns2:events xmlns:ns2="http://drhub.pjm.com/">
    <eventSummary>
        <id>2492363</id>
        <eventSummaryInfo>
            <eventDate>2023-02-21T00:00:00.000-05:00</eventDate>
            <eventType>Load Management Summary</eventType>
            <notifyTime>2023-02-21T16:15:00.000-05:00</notifyTime>
            <startTime>2023-02-21T16:45:00.000-05:00</startTime>
            <endTime>2023-02-21T17:00:00.000-05:00</endTime>
            <status>Completed</status>
            <regProduct>Capacity Performance DR</regProduct>
            <regResource>Pre-Emergency</regResource>
            <regLeadTime>Quick_30</regLeadTime>
            <zone>PSEG</zone>
        </eventSummaryInfo>
        <eventDetail>
            <event>
                <id>2499430</id>
                <parentId>2492363</parentId>
                <eventRegistration>
                    <registrationId>1234567</registrationId>
                    <CSP>
                        <name>PJM</name>
                    </CSP>
                </eventRegistration>
                <eventType>Load Management</eventType>
                <acknowledgeDate>2023-02-21T16:59:52.565-05:00</acknowledgeDate>
                <target>0</target>
            </event>
        </eventDetail>
    </eventSummary>
</ns2:events>
```