**Resource: data_definition**

A single data definition from a report instance

```
http://{device}/api/npm.reports/1.0/instances/items/{report_id}/data_defs/items/{id}
```
<table>
<thead>
<tr>
<th>Property Name</th>
<th>Type</th>
<th>Description</th>
<th>Notes</th>
</tr>
</thead>
<tbody>
<tr>
<td>data_definition</td>
<td>&lt;object&gt;</td>
<td>A single data definition from a report instance</td>
<td>Required properties: [source]</td>
</tr>
<tr>
<td>data_definition.act_as_source</td>
<td>&lt;boolean&gt;</td>
<td>Make this object available to other data requests (using source.reference_id)</td>
<td>Optional;</td>
</tr>
</tbody>
</table>


<table>
<thead>
<tr>
<th>Field</th>
<th>Type</th>
<th>Description</th>
<th>Read-only</th>
<th>Optional</th>
</tr>
</thead>
<tbody>
<tr>
<td><code>data_definition.actual_centricity</code></td>
<td><code>&lt;string&gt;</code></td>
<td>Actual centrality used by the back-end data source. Used by network flow sources. When AUTO is requested, the back-end sets this to HOST or INTERFACE.</td>
<td>Optional</td>
<td>Values: HOST, INTERFACE;</td>
</tr>
<tr>
<td><code>data_definition.actual_filters</code></td>
<td><code>&lt;filter_criteria&gt;</code></td>
<td>Array of filter criteria.</td>
<td>Optional</td>
<td></td>
</tr>
<tr>
<td><code>data_definition.actual_source</code></td>
<td><code>&lt;data_def_source&gt;</code></td>
<td>Data source specificiation for a data definition.</td>
<td>Optional</td>
<td></td>
</tr>
<tr>
<td><code>data_definition.actual_time</code></td>
<td><code>&lt;object&gt;</code></td>
<td>Actual time frame returned by the data source based on data availability.</td>
<td>Optional</td>
<td></td>
</tr>
<tr>
<td><code>data_definition.actual_time.granularities</code></td>
<td><code>&lt;array of &lt;string&gt;&gt;</code></td>
<td>Array of actual granularities used in the query.</td>
<td>Optional</td>
<td></td>
</tr>
<tr>
<td><code>data_definition.actual_time.granularities.items</code></td>
<td><code>&lt;string&gt;</code></td>
<td>Actual granularity used in the query.</td>
<td>Optional</td>
<td></td>
</tr>
<tr>
<td><code>data_definition.actual_time.resolution</code></td>
<td><code>&lt;string&gt;</code></td>
<td>Array of resolution used in the query.</td>
<td>Optional</td>
<td></td>
</tr>
<tr>
<td><code>data_definition.actual_time.ranges</code></td>
<td><code>&lt;time_pairs&gt;</code></td>
<td>Array of time range pairs.</td>
<td>Optional</td>
<td></td>
</tr>
<tr>
<td><code>data_definition.available_columns</code></td>
<td><code>&lt;column_list&gt;</code></td>
<td>Collection of data column IDs.</td>
<td>Optional</td>
<td></td>
</tr>
<tr>
<td><code>data_definition.centrality</code></td>
<td><code>&lt;string&gt;</code></td>
<td>For network flow sources, this parameter hints the back-end to calculate metrics from hosts point of view or from interfaces point of view.</td>
<td>Optional</td>
<td>Values: AUTO, HOST, INTERFACE;</td>
</tr>
<tr>
<td><code>data_definition.columns</code></td>
<td><code>&lt;column_list&gt;</code></td>
<td>Collection of data column IDs.</td>
<td>Optional</td>
<td></td>
</tr>
<tr>
<td><code>data_definition.data</code></td>
<td><code>&lt;data_matrix&gt;</code></td>
<td>Array of results data rows within a data definition.</td>
<td>Optional</td>
<td></td>
</tr>
<tr>
<td><code>data_definition.datasource_id</code></td>
<td><code>&lt;string&gt;</code></td>
<td>Data source to which the data definition belongs. Globally unique within the system.</td>
<td>Read-only</td>
<td>Optional;</td>
</tr>
<tr>
<td><code>data_definition.datasource_storage_key</code></td>
<td><code>&lt;string&gt;</code></td>
<td>Location within the datasource in which data is stored</td>
<td>Read-only</td>
<td>Optional;</td>
</tr>
<tr>
<td><code>data_definition.definition</code></td>
<td><code>&lt;data_definition&gt;</code></td>
<td>A single data definition from a report instance.</td>
<td>Optional</td>
<td></td>
</tr>
<tr>
<td><code>data_definition.filters</code></td>
<td><code>&lt;filter_criteria&gt;</code></td>
<td>Array of filter criteria.</td>
<td>Optional</td>
<td></td>
</tr>
<tr>
<td><code>data_definition.group_by</code></td>
<td><code>&lt;column_list&gt;</code></td>
<td>Collection of data column IDs.</td>
<td>Optional</td>
<td></td>
</tr>
<tr>
<td><code>data_definition.id</code></td>
<td><code>&lt;integer&gt;</code></td>
<td>ID for the data definition. Unique within a single report instance.</td>
<td>Read-only</td>
<td>Optional;</td>
</tr>
<tr>
<td><code>data_definition.limit</code></td>
<td><code>&lt;integer&gt;</code></td>
<td>Limit returned data rows to the specified number.</td>
<td>Optional</td>
<td></td>
</tr>
<tr>
<td><code>data_definition.others</code></td>
<td><code>&lt;data_row&gt;</code></td>
<td>Row of results data within a data definition.</td>
<td>Optional</td>
<td></td>
</tr>
<tr>
<td><code>data_definition.reference_id</code></td>
<td><code>&lt;string&gt;</code></td>
<td>Corresponding data definition ID in the client system.</td>
<td>Optional</td>
<td></td>
</tr>
<tr>
<td><code>data_definition.report_id</code></td>
<td><code>&lt;integer&gt;</code></td>
<td>Report instance ID to which the data definition belongs.</td>
<td>Optional</td>
<td></td>
</tr>
<tr>
<td><code>data_definition.source</code></td>
<td><code>&lt;data_def_source&gt;</code></td>
<td>Data source specificiation for a data definition.</td>
<td>Optional</td>
<td></td>
</tr>
<tr>
<td><code>data_definition.stats</code></td>
<td><code>&lt;object&gt;</code></td>
<td>Overall statistics for a data definition.</td>
<td>Read-only</td>
<td>Optional;</td>
</tr>
<tr>
<td><code>data_definition.stats.completed</code></td>
<td><code>&lt;string&gt;</code></td>
<td>Date and time when the data definition execution was ended (regardless of final status). High-precision timestamp in Unix Epoch format.</td>
<td>Read-only</td>
<td>Optional;</td>
</tr>
<tr>
<td><code>data_definition.stats.created</code></td>
<td><code>&lt;string&gt;</code></td>
<td>Date and time when the data definition was created. High-precision timestamp in Unix Epoch format.</td>
<td>Read-only</td>
<td>Optional;</td>
</tr>
<tr>
<td><code>data_definition.stats.exec_time</code></td>
<td><code>&lt;string&gt;</code></td>
<td>The time it took to execute. High-precision duration (seconds).</td>
<td>Read-only</td>
<td>Optional;</td>
</tr>
<tr>
<td><code>data_definition.stats.executing</code></td>
<td><code>&lt;string&gt;</code></td>
<td>Date and time when the data definition started executing. High-precision timestamp in Unix Epoch format.</td>
<td>Read-only</td>
<td>Optional;</td>
</tr>
<tr>
<td><code>data_definition.stats.init_time</code></td>
<td><code>&lt;string&gt;</code></td>
<td>The time it took initialize. High-precision duration (seconds).</td>
<td>Read-only</td>
<td>Optional;</td>
</tr>
<tr>
<td><code>data_definition.stats.initial_queue_pos</code></td>
<td><code>&lt;integer&gt;</code></td>
<td>The queue position at the time it was first placed in the queue.</td>
<td>Read-only</td>
<td>Optional;</td>
</tr>
<tr>
<td><code>data_definition.stats.initialized</code></td>
<td><code>&lt;string&gt;</code></td>
<td>Deprecated and unused anymore.</td>
<td>Read-only</td>
<td>Optional;</td>
</tr>
<tr>
<td><code>data_definition.stats.initializing</code></td>
<td><code>&lt;string&gt;</code></td>
<td>Date and time when the data definition started initializing. High-precision timestamp in Unix Epoch format.</td>
<td>Read-only</td>
<td>Optional;</td>
</tr>
<tr>
<td><code>data_definition.stats.queue_time</code></td>
<td><code>&lt;string&gt;</code></td>
<td>The time it took waiting in the queue. High-precision duration (seconds).</td>
<td>Read-only</td>
<td>Optional;</td>
</tr>
<tr>
<td><code>data_definition.stats.queued</code></td>
<td><code>&lt;string&gt;</code></td>
<td>Date and time when the data definition was placed on the queue. High-precision timestamp in Unix Epoch format.</td>
<td>Read-only</td>
<td>Optional;</td>
</tr>
<tr>
<td><code>data_definition.status</code></td>
<td><code>&lt;data_def_status&gt;</code></td>
<td>Status for a data definition.</td>
<td>Read-only</td>
<td></td>
</tr>
<tr>
<td><code>data_definition.summary_max_values</code></td>
<td><code>&lt;data_row&gt;</code></td>
<td>Row of results data within a data definition.</td>
<td>Optional</td>
<td></td>
</tr>
<tr>
<td><code>data_definition.summary_min_values</code></td>
<td><code>&lt;data_row&gt;</code></td>
<td>Row of results data within a data definition.</td>
<td>Optional</td>
<td></td>
</tr>
<tr>
<td><code>data_definition.time</code></td>
<td><code>&lt;object&gt;</code></td>
<td>The time frame that was requested for a reporting query.</td>
<td>Optional</td>
<td></td>
</tr>
<tr>
<td>Field</td>
<td>Type</td>
<td>Description</td>
<td></td>
<td></td>
</tr>
<tr>
<td>-------</td>
<td>------</td>
<td>-------------</td>
<td></td>
<td></td>
</tr>
<tr>
<td>time.duration</td>
<td>string</td>
<td>Time frame duration. When combined with either a start time or end time (but not both), determines the desired report time frame. If specified, and no start/end time is present, it is used with an end time of now. Optional;</td>
<td></td>
<td></td>
</tr>
<tr>
<td>time.end</td>
<td>string</td>
<td>The start time. This is a high-precision time value in Unix Epoch format. Optional;</td>
<td></td>
<td></td>
</tr>
<tr>
<td>time.granularity</td>
<td>string</td>
<td>For sources that support multiple data granularity/rollup levels, the preferred granularity. If unspecified, the system will choose a granularity. Optional;</td>
<td></td>
<td></td>
</tr>
<tr>
<td>time.max_num_bins</td>
<td>integer</td>
<td>For auto-resolution, the maximum number of bins that the client supports. The system will not exceed this. Optional; Range: 1 to 20000;</td>
<td></td>
<td></td>
</tr>
<tr>
<td>time.offset</td>
<td>string</td>
<td>Offset the start/end time by the given amount (e.g., '5 min' to offset the start and end time back by 5 minutes). Optional;</td>
<td></td>
<td></td>
</tr>
<tr>
<td>time.optimal_num_bins</td>
<td>integer</td>
<td>For auto-resolution, the preferred number of bins for the client. The system will attempt to pick a resolution as close to this as possible. Optional; Range: 1 to 5000;</td>
<td></td>
<td></td>
</tr>
<tr>
<td>time.required_resolutions</td>
<td>array of string</td>
<td>Array of resolutions. When auto-resolution is requested, the back end will limit its choice to one of these. Optional;</td>
<td></td>
<td></td>
</tr>
<tr>
<td>time.resolution</td>
<td>string</td>
<td>The requested resolution bin time-range for returned data (e.g., show in 1-hour bins). System will automatically pick if not specified. Optional;</td>
<td></td>
<td></td>
</tr>
<tr>
<td>time.retention_time</td>
<td>string</td>
<td>Specifies the time to retain data before rolling it off the query. Required for live data definitions. Optional;</td>
<td></td>
<td></td>
</tr>
<tr>
<td>time.start</td>
<td>string</td>
<td>The start time. This is a high-precision time value in Unix Epoch format. Optional;</td>
<td></td>
<td></td>
</tr>
<tr>
<td>time.time_ranges</td>
<td>time_pairs</td>
<td>Array of time range pairs. Optional;</td>
<td></td>
<td></td>
</tr>
<tr>
<td>time.timezone</td>
<td>string</td>
<td>FUTURE - Time zone for the time frame. Not yet available. Optional;</td>
<td></td>
<td></td>
</tr>
<tr>
<td>timeout</td>
<td>string</td>
<td>Maximum time within which to return data. Optional;</td>
<td></td>
<td></td>
</tr>
<tr>
<td>top_by</td>
<td>array of object</td>
<td>Array of sort criteria. Optional;</td>
<td></td>
<td></td>
</tr>
<tr>
<td>top_by.id</td>
<td>string</td>
<td>ID to sort by Optional;</td>
<td></td>
<td></td>
</tr>
<tr>
<td>total_number_rows</td>
<td>integer</td>
<td>Total number of available data rows. Optional;</td>
<td></td>
<td></td>
</tr>
<tr>
<td>totals</td>
<td>data_row</td>
<td>Row of results data within a data definition. Optional;</td>
<td></td>
<td></td>
</tr>
<tr>
<td>ts_max_values</td>
<td>ts_statistical_results</td>
<td>Array of statistical result rows. Read-only; Optional;</td>
<td></td>
<td></td>
</tr>
<tr>
<td>ts_min_values</td>
<td>ts_statistical_results</td>
<td>Array of statistical result rows. Optional;</td>
<td></td>
<td></td>
</tr>
<tr>
<td>ts_percentile_values</td>
<td>ts_statistical_results</td>
<td>Array of statistical result rows. Optional;</td>
<td></td>
<td></td>
</tr>
<tr>
<td>user_agent</td>
<td>string</td>
<td>User agent string for the client that generated the report. Read-only; Optional;</td>
<td></td>
<td></td>
</tr>
<tr>
<td>with_max_values</td>
<td>boolean</td>
<td>Whether to return column max value with the data results when querying. Optional;</td>
<td></td>
<td></td>
</tr>
<tr>
<td>with_min_values</td>
<td>boolean</td>
<td>Whether to return column min value with the data results when querying. Optional;</td>
<td></td>
<td></td>
</tr>
<tr>
<td>with_percentile_values</td>
<td>integer</td>
<td>Whether to return column percentile value with the data results when querying. Optional; Range: 80 to 95; Values: 80, 85, 90, 95;</td>
<td></td>
<td></td>
</tr>
<tr>
<td>with_totals</td>
<td>boolean</td>
<td>Whether to return column totals with the data results when querying. Optional;</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

**Links**

**data_definition: delete**
Delete a single data definition from a report instance

DELETE http://{device}/api/npm.reports/1.0/instances/items/{report_id}/data_defs/items/{id}

**Response Body**
On success, the server does not provide any body in the responses.
**data_definition: get**
Get a single data definition from a report instance

```
GET http://{device}/api/npm.reports/1.0/instances/items/{report_id}/data_defs/items/{id}
```

Response Body
Returns a `data_definition` data object.

**data_definition: get_data**
Get data definition data. For live data feeds, this will also trigger a data definition update.

```
GET http://{device}/api/npm.reports/1.0/instances/items/{report_id}/data_defs/items/{id}/data{?limit,offset,start_time,end_time,resolution,top_by,nsamples,sort_by,filter,columns,test_error,stream}
```

Response Body
Returns a `data_def_results` data object.

**data_definition: get_status**
Get the status for a single data definition from a report instance. For live data feeds, this will also trigger a data definition update.

```
GET http://{device}/api/npm.reports/1.0/instances/items/{report_id}/data_defs/items/{id}/status
```

Response Body
Returns a `data_def_status` data object.

**data_definition: set**
In a live report instance, update data for a single data definition

```
PUT http://{device}/api/npm.reports/1.0/instances/items/{report_id}/data_defs/items/{id}
```

Request Body
Provide a `data_definition` data object.

Response Body
Returns a `data_definition` data object.

---

**Resource: data_definitions**
Data definitions for a report instance

```
http://{device}/api/npm.reports/1.0/instances/items/{report_id}/data_defs
```

<table>
<thead>
<tr>
<th>Property Name</th>
<th>Type</th>
<th>Description</th>
<th>Notes</th>
</tr>
</thead>
<tbody>
<tr>
<td>data_definitions</td>
<td>&lt;object&gt;</td>
<td>Data definitions for a report instance</td>
<td>Required properties: [items];</td>
</tr>
<tr>
<td>data_definitions.items</td>
<td>&lt;data_defs_list&gt;</td>
<td>Array of data definitions.</td>
<td></td>
</tr>
<tr>
<td>data_definitions.report_id</td>
<td>&lt;integer&gt;</td>
<td>Report instance to which the data definitions belong.</td>
<td>Optional;</td>
</tr>
</tbody>
</table>

**Links**

**data_definitions: bulk_create**
Run multiple new data definition on an existing instance
### POST http://{device}/api/npm.reports/1.0/instances/items/{report_id}/data_defs/bulk_create

Request Body
- Provide a **data_defs_list** data object.

Response Body
- Returns a **data_defs_list** data object.

### **data_definitions: bulk_delete**
Delete multiple data definitions from an instance

### POST http://{device}/api/npm.reports/1.0/instances/items/{report_id}/data_defs/bulk_delete

Request Body
- Provide a **multiple_ids** data object.

Response Body
- Returns a **multiple_ids** data object.

### **data_definitions: create**
Run a new data definition on an existing instance

### POST http://{device}/api/npm.reports/1.0/instances/items/{report_id}/data_defs

Request Body
- Provide a **data_definition** data object.

Response Body
- Returns a **data_definition** data object.

### **data_definitions: get**
Get all data definitions for an instance

### GET http://{device}/api/npm.reports/1.0/instances/items/{report_id}/data_defs

Response Body
- Returns a **data_definitions** data object.

### Resource: instance
A single report instance

### http://{device}/api/npm.reports/1.0/instances/items/{id}

### JSON
<table>
<thead>
<tr>
<th>Property Name</th>
<th>Type</th>
<th>Description</th>
<th>Notes</th>
</tr>
</thead>
<tbody>
<tr>
<td>instance</td>
<td>&lt;object&gt;</td>
<td>A single report instance</td>
<td>Required properties: [data_defs];</td>
</tr>
<tr>
<td>instance.access_rights</td>
<td>&lt;access_rights_obj&gt;</td>
<td>Specifies roles that have read/write access to an object. Users with read_write roles can read, update and delete the object. They can also share the object with other roles.</td>
<td></td>
</tr>
<tr>
<td>instance.created</td>
<td>&lt;string&gt;</td>
<td>Date and time at which the report was created.</td>
<td>Optional;</td>
</tr>
<tr>
<td>instance.data_defs</td>
<td>&lt;data_defs_list&gt;</td>
<td>Array of data definitions.</td>
<td>Optional;</td>
</tr>
<tr>
<td>instance.id</td>
<td>&lt;integer&gt;</td>
<td>ID of the report instance</td>
<td>Optional;</td>
</tr>
<tr>
<td>instance.idle_timeout</td>
<td>&lt;string&gt;</td>
<td>Specifies the time to keep processing live data requests after last access (get info or get data).</td>
<td>Optional;</td>
</tr>
<tr>
<td>instance.info</td>
<td>&lt;report_instance_info&gt;</td>
<td>General information for a report instance</td>
<td>Optional;</td>
</tr>
<tr>
<td>instance.last_modified</td>
<td>&lt;string&gt;</td>
<td>Date and time at which the report was last modified. High precision timestamp in Unix Epoch format.</td>
<td>Optional;</td>
</tr>
<tr>
<td>instance.live</td>
<td>&lt;boolean&gt;</td>
<td>Whether the instance is a live (continuously updating) instance, rather than a static instance.</td>
<td>Optional;</td>
</tr>
<tr>
<td>instance.presentation</td>
<td>&lt;report_instance_presentation&gt;</td>
<td>Client presentation information for a report instance</td>
<td>Optional;</td>
</tr>
<tr>
<td>instance.priority</td>
<td>&lt;string&gt;</td>
<td>FUTURE - Report instance priority. Not yet used.</td>
<td>Optional; Values:  low, medium, high;</td>
</tr>
<tr>
<td>instance.schedule_id</td>
<td>&lt;integer&gt;</td>
<td>Schedule ID which generated the report instance.</td>
<td>Optional; Minimum 0;</td>
</tr>
<tr>
<td>instance.schedule_name</td>
<td>&lt;string&gt;</td>
<td>Schedule name which generated the report instance.</td>
<td>Optional;</td>
</tr>
<tr>
<td>instance.template_id</td>
<td>&lt;integer&gt;</td>
<td>Template ID on which the report instance was based.</td>
<td>Optional; Minimum 0;</td>
</tr>
<tr>
<td>instance.template_name</td>
<td>&lt;string&gt;</td>
<td>Template name on which the report instance was based.</td>
<td>Optional;</td>
</tr>
<tr>
<td>instance.user_agent</td>
<td>&lt;string&gt;</td>
<td>User agent string for the client that generated the report.</td>
<td>Read-only;</td>
</tr>
<tr>
<td>instance.views</td>
<td>&lt;object&gt;</td>
<td>Indicates which views, PDF or JSON (raw), are available for an instance</td>
<td>Required properties: [pdf, raw_data]; Optional;</td>
</tr>
<tr>
<td>instance.views.pdf</td>
<td>&lt;boolean&gt;</td>
<td>Whether rendered PDF is available.</td>
<td>Read-only;</td>
</tr>
<tr>
<td>instance.views.raw_data</td>
<td>&lt;boolean&gt;</td>
<td>Whether raw JSON data is available.</td>
<td>Read-only;</td>
</tr>
<tr>
<td>instance.&lt;prop&gt;</td>
<td>&lt;any&gt;</td>
<td></td>
<td>Optional;</td>
</tr>
</tbody>
</table>

**Links**

**instance: delete**

Delete a report instance

DELETE http://{device}/api/npm.reports/1.0/instances/items/{id}

**Response Body**

On success, the server does not provide any body in the responses.
instance: get
Get a report instance. For live data feeds, this will also trigger an instance update to latest.

GET http://{device}/api/npm.reports/1.0/instances/items/{id}

Response Body
Returns an instance data object.

instance: get_data
Get data for all data definitions on an instance. For live data feeds, this will also trigger an instance update to latest.

GET http://{device}/api/npm.reports/1.0/instances/items/{id}/data

Response Body
On success, the server returns a response body with the following structure:

```json
{
  "data_defs": [ data_def_results ]
}
```

<table>
<thead>
<tr>
<th>Property Name</th>
<th>Type</th>
<th>Description</th>
<th>Notes</th>
</tr>
</thead>
<tbody>
<tr>
<td>instance.links.get_data.response</td>
<td>object</td>
<td>Data for all data definitions within a report instance.</td>
<td></td>
</tr>
<tr>
<td>instance.links.get_data.response.data_defs</td>
<td>array of</td>
<td>Array of data definition result sets.</td>
<td>Optional;</td>
</tr>
<tr>
<td></td>
<td>data_def_results</td>
<td></td>
<td></td>
</tr>
<tr>
<td>instance.links.get_data.response.data_defs.items</td>
<td>data_def_results</td>
<td>Data results for one data definition</td>
<td></td>
</tr>
</tbody>
</table>

instance: get_rights
Get the access rights for an instance

GET http://{device}/api/npm.reports/1.0/instances/items/{id}/access_rights

Response Body
Returns an access_rights_obj data object.

instance: get_status
Get status for all data definitions on an instance. For live data feeds, this will also trigger an instance update to latest.

GET http://{device}/api/npm.reports/1.0/instances/items/{id}/status

Response Body
On success, the server returns a response body with the following structure:

```json
[
  data_def_status
]
```

<table>
<thead>
<tr>
<th>Property Name</th>
<th>Type</th>
<th>Description</th>
<th>Notes</th>
</tr>
</thead>
<tbody>
<tr>
<td>instance.links.get_status.response</td>
<td>array of</td>
<td>Array of data definition statuses.</td>
<td></td>
</tr>
<tr>
<td></td>
<td>data_def_status</td>
<td></td>
<td></td>
</tr>
<tr>
<td>instance.links.get_status.response</td>
<td>[items]</td>
<td>Status for a data definition.</td>
<td></td>
</tr>
<tr>
<td></td>
<td>data_def_status</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

instance: get_view
Download an instance as PDF. The only accepted content-type is application-pdf.

GET http://{device}/api/npm.reports/1.0/instances/items/{id}/view
Response Body
On success, the server does not provide any body in the responses.

**instance: replace_sync**
Update a report instance. This call will not return until the report completes.

```
PUT http://{device}/api/npm.reports/1.0/instances/items/{id}/sync
```

Request Body
Provide an instance data object.

Response Body
Returns an instance data object.

**instance: set**
Update a report instance

```
PUT http://{device}/api/npm.reports/1.0/instances/items/{id}
```

Request Body
Provide an instance data object.

Response Body
Returns an instance data object.

**instance: set_rights**
Update the access rights for an instance

```
PUT http://{device}/api/npm.reports/1.0/instances/items/{id}/access_rights
```

Request Body
Provide an access_rights_obj data object.

Response Body
On success, the server does not provide any body in the responses.

**instance: sync**
Get a report instance. If the instance is still running, this call will not return until it completes

```
GET http://{device}/api/npm.reports/1.0/instances/items/{id}/sync
```

Response Body
Returns an instance data object.

**Resource: instances**
Collection of report instances. When limiting results via query, all parameters must match a report instance for it to show.

```
http://{device}/api/npm.reports/1.0/instances{?sort,name,state,template_name,schedule_name,access_rights,access,schedule_id,tag,limit,sortby,offset,owner,template_id,description}
```

JSON
```json
{
  "items": [ "instance" ],
  "meta": {
    "access": string,
    "access_rights": string,
    "count": integer,
    "description": string,
    "limit": integer,
    "name": string,
    "offset": integer,
    "owner": string,
    "schedule_id": string,
    "schedule_name": string,
    "sort": string,
    "sortby": string,
    "state": string,
    "tag": string,
    "template_id": string,
    "template_name": string,
    "total": integer
  }
}
```

<table>
<thead>
<tr>
<th>Property Name</th>
<th>Type</th>
<th>Description</th>
<th>Notes</th>
</tr>
</thead>
<tbody>
<tr>
<td>instances</td>
<td>&lt;object&gt;</td>
<td>Collection of report instances. When limiting results via query, all parameters must match a report instance for it to show.</td>
<td>Required properties: [items];</td>
</tr>
<tr>
<td>instances.items</td>
<td>&lt;array of &lt;instance&gt;&gt;</td>
<td>Array of report instances</td>
<td></td>
</tr>
<tr>
<td>instances.items[items]</td>
<td>&lt;instance&gt;</td>
<td>A single report instance</td>
<td></td>
</tr>
<tr>
<td>instances.meta</td>
<td>&lt;object&gt;</td>
<td>Meta data of the data set returned when a list of reports are fetched.</td>
<td>Optional;</td>
</tr>
<tr>
<td>instances.meta.access</td>
<td>&lt;string&gt;</td>
<td>Filters instances based on access. &quot;all&quot;, returns all instances that the current authenticated user has access to. &quot;private&quot;, returns all instances not shared with any roles that the current authenticated user has access to. &quot;shared&quot;, returns all instances shared with one or more roles. &quot;public&quot; returns all objects marked public.</td>
<td>Optional; Values: all, private, shared, public;</td>
</tr>
<tr>
<td>instances.meta.access_rights</td>
<td>&lt;string&gt;</td>
<td>Filters instances based on access_rights. &quot;all&quot;, returns all instances with read_only or read_write rights that the authenticated user has access to. &quot;read_only&quot;, returns all instances with read_only rights that the authenticated user has access to. &quot;read_write&quot;, Returns all instances with read_write rights that the authenticated user has access to.</td>
<td>Optional; Values: all, read_only, read_write;</td>
</tr>
<tr>
<td>instances.meta.count</td>
<td>&lt;integer&gt;</td>
<td>The actual number of reports returned for this request.</td>
<td>Optional;</td>
</tr>
<tr>
<td>instances.meta.description</td>
<td>&lt;string&gt;</td>
<td>Filters report instances based on the description param passed. Does a case-insensitive substring match.</td>
<td>Optional;</td>
</tr>
<tr>
<td>instances.meta.limit</td>
<td>&lt;integer&gt;</td>
<td>Maximum number report instances to be returned.</td>
<td>Optional;</td>
</tr>
<tr>
<td>instances.meta.name</td>
<td>&lt;string&gt;</td>
<td>Filters report instances based on the name param passed. Does a case-insensitive substring match.</td>
<td>Optional;</td>
</tr>
<tr>
<td>instances.meta.offset</td>
<td>&lt;integer&gt;</td>
<td>Start returning report instances from offset specified.</td>
<td>Optional;</td>
</tr>
<tr>
<td>instances.meta.owner</td>
<td>&lt;string&gt;</td>
<td>Filters report instances based on the owner param passed. Does a case sensitive exact match of each owner, not a substring comparison of each owner. Owners can be passed as comma-separated values. Report instances with at least one of the owners passed in the query string will be matched.</td>
<td>Optional;</td>
</tr>
<tr>
<td>instances.meta.schedule_id</td>
<td>&lt;string&gt;</td>
<td>Filters report instances based on the schedule_id param passed. schedule_id can be passed as comma-separated values. Report instances with one of the schedule_ids passed in the query string param will be matched.</td>
<td>Optional;</td>
</tr>
<tr>
<td>instances.meta.schedule_name</td>
<td>&lt;string&gt;</td>
<td>Filters report instances based on the schedule_name param passed. Does a case-sensitive exact match of each schedule_name.</td>
<td>Optional;</td>
</tr>
<tr>
<td>instances.meta.sort</td>
<td>&lt;string&gt;</td>
<td>Sort direction.</td>
<td>Optional; Values: asc, desc;</td>
</tr>
<tr>
<td>instances.meta.sortby</td>
<td>&lt;string&gt;</td>
<td>Sort by specified field.</td>
<td>Optional; Values: name, description, owner, created, last_modified;</td>
</tr>
<tr>
<td>instances.meta.state</td>
<td>&lt;string&gt;</td>
<td>Filter by specified state.</td>
<td>Optional; Values: temporary, saved;</td>
</tr>
<tr>
<td>instances.meta.tag</td>
<td>&lt;string&gt;</td>
<td>Filters report instances based on the tag param passed. Does a case-insensitive exact match of each tag, not a substring comparison of each tag. Tags can be passed as comma-separated values. Report instances with at least one of the passed tags will be matched.</td>
<td>Optional;</td>
</tr>
<tr>
<td>Property Name</td>
<td>Type</td>
<td>Description</td>
<td>Notes</td>
</tr>
<tr>
<td>-----------------------------------</td>
<td>-----------------</td>
<td>-----------------------------------------------------------------------------</td>
<td>-------------</td>
</tr>
<tr>
<td>instances.meta.template_id</td>
<td>&lt;string&gt;</td>
<td>Filters report instances based on the template_id param passed. template_id</td>
<td>Optional;</td>
</tr>
<tr>
<td></td>
<td></td>
<td>can be passed as comma-separated values. Report instances with one of the</td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td>template_ids passed in the query string param will be matched.</td>
<td></td>
</tr>
<tr>
<td>instances.meta.template_name</td>
<td>&lt;string&gt;</td>
<td>Filters report instances based on the template_name param passed. Does a</td>
<td>Optional;</td>
</tr>
<tr>
<td></td>
<td></td>
<td>case-insensitive substring match.</td>
<td></td>
</tr>
<tr>
<td>instances.meta.total</td>
<td>&lt;integer&gt;</td>
<td>Total number of reports in the system that match the filter criteria.</td>
<td>Optional;</td>
</tr>
</tbody>
</table>

### Links

**instances: bulk_delete**

Bulk-delete multiple instances. Delete operation will be aborted and none of the instances will be deleted if the user does not have R/W access to any of the ids in the input list. Instance ids that do not exist (already deleted) will be ignored.

**POST** http://{device}/api/npm.reports/1.0/instances/bulk_delete

**Request Body**

Provide a request body with the following structure:

**JSON**

```json
[
  integer
]
```

<table>
<thead>
<tr>
<th>Property Name</th>
<th>Type</th>
<th>Description</th>
<th>Notes</th>
</tr>
</thead>
<tbody>
<tr>
<td>instances.links.bulk_delete.request</td>
<td>&lt;array of integer&gt;</td>
<td>Array of report instance IDs</td>
<td></td>
</tr>
<tr>
<td>instances.links.bulk_delete.request[items]</td>
<td>&lt;integer&gt;</td>
<td>Report instance ID</td>
<td></td>
</tr>
</tbody>
</table>

**Response Body**

On success, the server does not provide any body in the responses.

**instances: bulk_delete_matching**

Bulk-delete multiple instances. Delete operation will be aborted for the instances the user does not have R/W access to.

**POST** http://{device}/api/npm.reports/1.0/instances/bulk_delete_matching

**Request Body**

Provide a request body with the following structure:

**JSON**

```json
{
  "older_than": string,
  "schedule_id": integer,
  "template_id": integer,
  "user": string
}
```

<table>
<thead>
<tr>
<th>Property Name</th>
<th>Type</th>
<th>Description</th>
<th>Notes</th>
</tr>
</thead>
<tbody>
<tr>
<td>instances.links.bulk_delete_matching.request</td>
<td>&lt;object&gt;</td>
<td>Parameters to filter report instances</td>
<td></td>
</tr>
<tr>
<td>instances.links.bulk_delete_matching.request.older_than</td>
<td>&lt;string&gt;</td>
<td>High precision timestamp in Unix Epoch format. Matches report instances</td>
<td>Optional;</td>
</tr>
<tr>
<td>instances.links.bulk_delete_matching.request.schedule_id</td>
<td>&lt;integer&gt;</td>
<td>older than the provided timestamp.</td>
<td></td>
</tr>
<tr>
<td>instances.links.bulk_delete_matching.request.template_id</td>
<td>&lt;integer&gt;</td>
<td>Matches if the report instance was created as part of the specified</td>
<td>Optional;</td>
</tr>
<tr>
<td>instances.links.bulk_delete_matching.request.user</td>
<td>&lt;string&gt;</td>
<td>schedule ID.</td>
<td>Minimum 0;</td>
</tr>
<tr>
<td>instances.links.bulk_delete_matching.request.template_id</td>
<td>&lt;integer&gt;</td>
<td>Matches if the report instance is based on the specified template ID.</td>
<td>Optional;</td>
</tr>
<tr>
<td>instances.links.bulk_delete_matching.request.user</td>
<td>&lt;string&gt;</td>
<td>Performs a case-insensitive exact match against the owner of each report</td>
<td>Optional;</td>
</tr>
</tbody>
</table>


Response Body
On success, the server does not provide any body in the responses.

**instances: create**
Run a report asynchronously

```plaintext
POST http://{device}/api/npm.reports/1.0/instances
```

Request Body
Provide an instance data object.

Response Body
Returns an instance data object.

**instances: create_sync**
Run a report synchronously. This call will not return until the report completes.

```plaintext
POST http://{device}/api/npm.reports/1.0/instances/sync
```

Request Body
Provide an instance data object.

Response Body
Returns an instance data object.

**instances: get**
Get a list of report instances

```plaintext
GET http://{device}/api/npm.reports/1.0/instances{?sort,name,state,template_name,schedule_name,access_rights,access,schedule_id,tag,limit,sortby,offset,owner,template_id,description}
```

Response Body
Returns an instances data object.

**instances: get_tags**
Collect tags from all instances by owner

```plaintext
GET http://{device}/api/npm.reports/1.0/instances/tags
```

Response Body
Returns a rpt_tags data object.

**instances: refresh**
Request a saved snapshots disk utilization refresh. This operation is executed in the background, and should complete within a few seconds.

```plaintext
POST http://{device}/api/npm.reports/1.0/instances/snapshots_disk_usage/refresh
```

Request Body
Do not provide a request body.

Response Body
On success, the server does not provide any body in the responses.

**instances: snapshots_disk_usage**
Current quota and disk utilization of saved snapshots

```plaintext
GET http://{device}/api/npm.reports/1.0/instances/snapshots_disk_usage
```
On success, the server returns a response body with the following structure:

```json
{
    "current_size_kb": integer,
    "quota_size_kb": integer
}
```

<table>
<thead>
<tr>
<th>Property Name</th>
<th>Type</th>
<th>Description</th>
<th>Notes</th>
</tr>
</thead>
<tbody>
<tr>
<td>instances.links.snapshots_disk_usage.response</td>
<td>&lt;object&gt;</td>
<td>Current size and allowed quota of snapshots</td>
<td>Required properties: [quota_size_kb, current_size_kb];</td>
</tr>
<tr>
<td>instances.links.snapshots_disk_usage.response.current_size_kb</td>
<td>&lt;integer&gt;</td>
<td>Current snapshots disk usage (collected hourly, or by manual update)</td>
<td>Read-only;</td>
</tr>
<tr>
<td>instances.links.snapshots_disk_usage.response.quota_size_kb</td>
<td>&lt;integer&gt;</td>
<td>Maximum quota for all disk snapshots</td>
<td>Read-only;</td>
</tr>
</tbody>
</table>

**instances: stream**

Run a report synchronously, streaming data from the data source. If the report does not complete within 50 seconds, it will return a 201 Created response, and the client must re-attach as with a synchronous request.

```http
POST http://{device}/api/npm.reports/1.0/instances/stream
```

**Request Body**

Provide an instance data object.

**Response Body**

Returns an instance data object.

---

**Resource: report_instance_info**

General information for a report instance

```http
http://{device}/api/npm.reports/1.0/instances/items/{report_id}/info
```

```json
{
    "description": string,
    "name": string,
    "report_id": integer,
    "state": string,
    "tags": tags_obj,
    <prop>: any
}
```

<table>
<thead>
<tr>
<th>Property Name</th>
<th>Type</th>
<th>Description</th>
<th>Notes</th>
</tr>
</thead>
<tbody>
<tr>
<td>report_instance_info</td>
<td>&lt;object&gt;</td>
<td>General information for a report instance</td>
<td></td>
</tr>
<tr>
<td>report_instance_info.description</td>
<td>&lt;string&gt;</td>
<td>Description of the report instance</td>
<td>Optional;</td>
</tr>
<tr>
<td>report_instance_info.name</td>
<td>&lt;string&gt;</td>
<td>Name of the report instance</td>
<td>Optional;</td>
</tr>
<tr>
<td>report_instance_info.report_id</td>
<td>&lt;integer&gt;</td>
<td>ID of the report instance</td>
<td>Read-only; Optional;</td>
</tr>
<tr>
<td>report_instance_info.state</td>
<td>&lt;string&gt;</td>
<td>Persistence state of the report instance</td>
<td>Optional; Values: temporary, saved, transient;</td>
</tr>
<tr>
<td>report_instance_info.tags</td>
<td>&lt;tags_obj&gt;</td>
<td>Container for a set of report tags.</td>
<td></td>
</tr>
<tr>
<td>report_instance_info.&lt;prop&gt;</td>
<td>&lt;any&gt;</td>
<td></td>
<td>Optional;</td>
</tr>
</tbody>
</table>

**Links**

**report_instance_info: get**

Get the report info for an instance

```http
GET http://{device}/api/npm.reports/1.0/instances/items/{report_id}/info
```
**Response Body**

Returns a `report_instance_info` data object.

### `report_instance_info: set`

Replace the report info for an instance

PUT http://{device}/api/npm.reports/1.0/instances/items/{report_id}/info

**Request Body**

Provide a `report_instance_info` data object.

**Response Body**

On success, the server does not provide any body in the responses.

---

### Resource: `report_instance_presentation`

Client presentation information for a report instance

http://{device}/api/npm.reports/1.0/instances/items/{report_id}/presentation

<table>
<thead>
<tr>
<th>Property Name</th>
<th>Type</th>
<th>Description</th>
<th>Notes</th>
</tr>
</thead>
<tbody>
<tr>
<td>report_instance_presentation</td>
<td>&lt;object&gt;</td>
<td>Client presentation information for a report instance</td>
<td></td>
</tr>
<tr>
<td>report_instance_presentation:report_id</td>
<td>&lt;integer&gt;</td>
<td>Instance ID to which the presentation belongs.</td>
<td>Read-only; Optional;</td>
</tr>
<tr>
<td>report_instance_presentation: &lt;prop&gt;</td>
<td>&lt;any&gt;</td>
<td></td>
<td>Optional;</td>
</tr>
</tbody>
</table>

**Links**

### `report_instance_presentation: get`

Get the presentation for an instance

GET http://{device}/api/npm.reports/1.0/instances/items/{report_id}/presentation

**Response Body**

Returns a `report_instance_presentation` data object.

### `report_instance_presentation: set`

Replace the presentation for an instance

PUT http://{device}/api/npm.reports/1.0/instances/items/{report_id}/presentation

**Request Body**

Provide a `report_instance_presentation` data object.

**Response Body**

On success, the server does not provide any body in the responses.

---

### Resource: `schedule`

A single report schedule.

http://{device}/api/npm.reports/1.0/schedules/items/{id}

JSON
```json
{
  "access_rights": access_rights_obj,
  "created": string,
  "enabled": boolean,
  "err_message": run_message,
  "execute_on": execution_timestamps,
  "executing": boolean,
  "executing_job_id": integer,
  "id": integer,
  "info": schedule_info,
  "last_executed": string,
  "last_modified": string,
  "notification_attachment_name": string,
  "notification_enabled": boolean,
  "notification_message": string,
  "num_instances": integer,
  "rrule": recurrence_rule,
  "subscription": {
    "recipient_ids": [integer]
  },
  "subscription_id": integer,
  "to": [string]
}
```

<table>
<thead>
<tr>
<th>Property Name</th>
<th>Type</th>
<th>Description</th>
<th>Notes</th>
</tr>
</thead>
<tbody>
<tr>
<td>schedule</td>
<td>&lt;object&gt;</td>
<td>A single report schedule.</td>
<td>Required properties: [enabled, info, template_id, rrule, time];</td>
</tr>
<tr>
<td>schedule.access_rights</td>
<td>&lt;access_rights_obj&gt;</td>
<td>Specifies roles that have read/write access to an object. Users with read_write roles can read, update and delete the object. They can also share the object with other roles.</td>
<td></td>
</tr>
<tr>
<td>schedule.created</td>
<td>&lt;string&gt;</td>
<td>Optional;</td>
<td></td>
</tr>
<tr>
<td>schedule.enabled</td>
<td>&lt;boolean&gt;</td>
<td></td>
<td></td>
</tr>
<tr>
<td>schedule.err_message</td>
<td>&lt;run_message&gt;</td>
<td>Runtime status message for a data definition.</td>
<td></td>
</tr>
<tr>
<td>schedule.execute_on</td>
<td>&lt;execution_timestamps&gt;</td>
<td>Report Schedule's next execution times in relative to the Unix Epoch format.</td>
<td></td>
</tr>
<tr>
<td>schedule.executing</td>
<td>&lt;boolean&gt;</td>
<td>Flag indicating if the schedule is executing at the moment</td>
<td>Read-only; Optional;</td>
</tr>
<tr>
<td>schedule.executing_job_id</td>
<td>&lt;integer&gt;</td>
<td></td>
<td>Optional;</td>
</tr>
<tr>
<td>schedule.id</td>
<td>&lt;integer&gt;</td>
<td></td>
<td>Read-only; Optional;</td>
</tr>
<tr>
<td>schedule.info</td>
<td>&lt;schedule_info&gt;</td>
<td>Information on a scheduled report</td>
<td></td>
</tr>
<tr>
<td>schedule.last_executed</td>
<td>&lt;string&gt;</td>
<td>Number of snapshots already generated by this schedule</td>
<td>Read-only; Optional;</td>
</tr>
<tr>
<td>schedule.last_modified</td>
<td>&lt;string&gt;</td>
<td></td>
<td></td>
</tr>
<tr>
<td>schedule.num_instances</td>
<td>&lt;integer&gt;</td>
<td></td>
<td></td>
</tr>
<tr>
<td>schedule.subscription</td>
<td>&lt;object&gt;</td>
<td></td>
<td>Optional;</td>
</tr>
<tr>
<td>schedule.subscription.recipient_ids</td>
<td>&lt;array of &lt;integer&gt;&gt;</td>
<td>List of pre-defined recipient IDs.</td>
<td>Optional;</td>
</tr>
<tr>
<td>schedule.subscription.subscription_id</td>
<td>&lt;integer&gt;</td>
<td></td>
<td>Read-only; Optional;</td>
</tr>
<tr>
<td>schedule.subscription.to</td>
<td>&lt;array of &lt;string&gt;&gt;</td>
<td>List of emails.</td>
<td>Optional;</td>
</tr>
<tr>
<td>schedule.subscription.&lt;prop&gt;</td>
<td>&lt;any&gt;</td>
<td></td>
<td></td>
</tr>
<tr>
<td>schedule.template_id</td>
<td>&lt;integer&gt;</td>
<td></td>
<td></td>
</tr>
<tr>
<td>schedule.template_name</td>
<td>&lt;string&gt;</td>
<td>Name of the report template used for this schedule</td>
<td>Read-only; Optional;</td>
</tr>
<tr>
<td>Property Name</td>
<td>Type</td>
<td>Description</td>
<td>Notes</td>
</tr>
<tr>
<td>-------------------------------</td>
<td>--------------</td>
<td>-------------------------------------------------------</td>
<td>--------------------------------------------</td>
</tr>
<tr>
<td>schedule_info</td>
<td>&lt;object&gt;</td>
<td>Information on a scheduled report</td>
<td>Required properties: [name];</td>
</tr>
<tr>
<td>schedule_info.description</td>
<td>&lt;string&gt;</td>
<td>Information on a scheduled report</td>
<td>Optional properties: [name];</td>
</tr>
<tr>
<td>schedule_info.name</td>
<td>&lt;string&gt;</td>
<td>Information on a scheduled report</td>
<td>Optional properties: [name];</td>
</tr>
<tr>
<td>schedule_info.schedule_id</td>
<td>&lt;integer&gt;</td>
<td>Information on a scheduled report</td>
<td>Read-only; Optional;</td>
</tr>
<tr>
<td>schedule_info.tags</td>
<td>&lt;tags_obj&gt;</td>
<td>Information on a scheduled report</td>
<td>Optional properties: [name];</td>
</tr>
</tbody>
</table>

**Links**

**schedule: delete**
Delete a report schedule

```
DELETE http://{device}/api/npm.reports/1.0/schedules/items/{id}
```

**Response Body**
On success, the server does not provide any body in the responses.

**schedule: get**
Get a report schedule

```
GET http://{device}/api/npm.reports/1.0/schedules/items/{id}
```

**Response Body**
Returns a `schedule` data object.

**schedule: set**
Update a report schedule

```
PUT http://{device}/api/npm.reports/1.0/schedules/items/{id}
```

**Request Body**
Provide a `schedule` data object.

**Response Body**
Returns a `schedule` data object.

**Resource: schedule_info**
Information on a scheduled report

```
http://{device}/api/npm.reports/1.0/schedules/items/{schedule_id}/info
```

**JSON**

```json
{
  "description": string,
  "name": string,
  "schedule_id": integer,
  "tags": tags_obj,
  <prop>: any
}
```
Links

schedule_info: get
Get the info for a scheduled report

GET http://{device}/api/npm.reports/1.0/schedules/items/{schedule_id}/info

Response Body
Returns a schedule_info data object.

schedule_info: set
Replace the info for a scheduled report

PUT http://{device}/api/npm.reports/1.0/schedules/items/{schedule_id}/info

Request Body
Provide a schedule_info data object.

Response Body
On success, the server does not provide any body in the responses.

Resource: schedules
List of scheduled reports

http://{device}/api/npm.reports/1.0/schedules{?sort,name,template_name,access_rights,access,tag,limit,sortby,offset,owner,template_id,description}

<table>
<thead>
<tr>
<th>Property Name</th>
<th>Type</th>
<th>Description</th>
<th>Notes</th>
</tr>
</thead>
<tbody>
<tr>
<td>schedules</td>
<td>&lt;object&gt;</td>
<td>List of scheduled reports</td>
<td>Required properties: [items];</td>
</tr>
<tr>
<td>schedules.items</td>
<td>&lt;array of</td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>&lt;schedule&gt;</td>
<td></td>
<td></td>
</tr>
<tr>
<td>schedules.items[items]</td>
<td>&lt;schedule&gt;</td>
<td>A single report schedule.</td>
<td></td>
</tr>
<tr>
<td>schedules.meta</td>
<td>&lt;object&gt;</td>
<td>Meta data of the data set returned when a list of schedules are fetched.</td>
<td>Optional;</td>
</tr>
<tr>
<td>schedules.meta.access</td>
<td>&lt;string&gt;</td>
<td>Schedules filtered by this access param in the query string</td>
<td>Optional;</td>
</tr>
<tr>
<td>schedules.meta.access_rights</td>
<td>&lt;string&gt;</td>
<td>Schedules filtered by this access_rights param in the query string</td>
<td>Optional;</td>
</tr>
<tr>
<td>schedules.meta.count</td>
<td>&lt;integer&gt;</td>
<td>The actual number of rows returned as for this request.</td>
<td>Optional;</td>
</tr>
<tr>
<td>schedules.meta.description</td>
<td>&lt;string&gt;</td>
<td>Schedules filtered by this description param in the query string</td>
<td>Optional;</td>
</tr>
<tr>
<td>schedules.meta.limit</td>
<td>&lt;integer&gt;</td>
<td>The maximum number rows to return. 0 means no limit.</td>
<td>Optional;</td>
</tr>
<tr>
<td>schedules.meta.name</td>
<td>&lt;string&gt;</td>
<td>Schedules filtered by this name param in the query string</td>
<td>Optional;</td>
</tr>
<tr>
<td>schedules.meta.offset</td>
<td>&lt;integer&gt;</td>
<td>Number of schedules to be skipped as specified by offset. Offset value of 0 will be ignored.</td>
<td>Optional;</td>
</tr>
<tr>
<td>schedules.meta.owner</td>
<td>&lt;string&gt;</td>
<td>Schedules filtered by this owner param in the query string</td>
<td>Optional;</td>
</tr>
<tr>
<td>schedules.meta.sort</td>
<td>&lt;string&gt;</td>
<td>Schedules sorted on param in the query string</td>
<td>Optional;</td>
</tr>
<tr>
<td>schedules.meta.sortby</td>
<td>&lt;string&gt;</td>
<td>Schedules sorted by ascending or descending</td>
<td>Optional;</td>
</tr>
<tr>
<td>schedules.meta.tag</td>
<td>&lt;string&gt;</td>
<td>Schedules filtered by this tag/tags param in the query string</td>
<td>Optional;</td>
</tr>
<tr>
<td>schedules.meta.template_id</td>
<td>&lt;string&gt;</td>
<td>Schedules filtered by this template name param in the query string</td>
<td>Optional;</td>
</tr>
<tr>
<td>schedules.meta.template_name</td>
<td>&lt;string&gt;</td>
<td>Schedules filtered by this template name param in the query string</td>
<td>Optional;</td>
</tr>
<tr>
<td>schedules.meta.total</td>
<td>&lt;integer&gt;</td>
<td>Total number of rows that exists for the requested resource</td>
<td>Optional;</td>
</tr>
</tbody>
</table>

**Links**

**schedules: bulk_delete**

Bulk-delete multiple scheduled reports. Delete operation will be aborted and none of the schedules will be deleted if the user does not have R/W access to any of the ids in the input list. Schedule ids that do not exist will be ignored.

```
POST http://{device}/api/npm.reports/1.0/schedules/bulk_delete
```

**Request Body**

Provide a `schedule_ids` data object.

**Response Body**

Returns a `schedule_ids` data object.

**schedules: create**

Set up a scheduled report.

```
POST http://{device}/api/npm.reports/1.0/schedules{?sort,name,template_name,access_rights,access,tag,limit,sortby,offset,owner,template_id,description}
```

**Request Body**

Provide a `schedule` data object.

**Response Body**

Returns a `schedule` data object.

**schedules: execute_rule**

For the given recurrence rule, calculate the corresponding schedule execution times.

```
POST http://{device}/api/npm.reports/1.0/schedules/execute_rule
```

**Request Body**

Provide a `recurrence_rule` data object.

**Response Body**

Returns an `execution_timestamps` data object.

**schedules: export**

Get full version of all scheduled reports.

```
GET http://{device}/api/npm.reports/1.0/schedules/export
```

**Response Body**
schedules: get
Get a list of scheduled reports.

GET http://{device}/api/npm.reports/1.0/schedules{?sort,name,template_name,access_rights,access,tag,limit,sortby,offset,owner,template_id,description}

Response Body
Returns a schedules data object.

schedules: get_tags
Collect tags from all schedules by owner

GET http://{device}/api/npm.reports/1.0/schedules/tags

Response Body
Returns a rpt_tags data object.

Resource: template
A single report template

http://{device}/api/npm.reports/1.0/templates/items/{id}

JSON

<table>
<thead>
<tr>
<th>Property Name</th>
<th>Type</th>
<th>Description</th>
<th>Notes</th>
</tr>
</thead>
<tbody>
<tr>
<td>template</td>
<td>&lt;object&gt;</td>
<td>A single report template</td>
<td>Required properties: [info];</td>
</tr>
<tr>
<td>template.access_rights</td>
<td>&lt;access_rights_obj&gt;</td>
<td>Specifies roles that have read/write access to an object. Users with read_write roles can read, update and delete the object. They can also share the object with other roles.</td>
<td></td>
</tr>
<tr>
<td>template.created</td>
<td>&lt;string&gt;</td>
<td></td>
<td>Optional;</td>
</tr>
<tr>
<td>template.id</td>
<td>&lt;integer&gt;</td>
<td></td>
<td>Read-only; Optional;</td>
</tr>
<tr>
<td>template.info</td>
<td>&lt;template_info&gt;</td>
<td>Information about a report template</td>
<td></td>
</tr>
<tr>
<td>template.last_modified</td>
<td>&lt;string&gt;</td>
<td></td>
<td>Optional;</td>
</tr>
<tr>
<td>template.num_schedules</td>
<td>&lt;integer&gt;</td>
<td>Number of schedules already generated by this template</td>
<td>Optional;</td>
</tr>
<tr>
<td>template.&lt;prop&gt;</td>
<td>&lt;any&gt;</td>
<td></td>
<td>Optional;</td>
</tr>
</tbody>
</table>

Links

template: delete
Delete a report template

DELETE http://{device}/api/npm.reports/1.0/templates/items/{id}

Response Body
On success, the server does not provide any body in the responses.

template: get
Get a report template

GET http://{device}/api/npm.reports/1.0/templates/items/{id}

Response Body
Returns a template data object.

**template: get_rights**
Get the access rights for a report template

GET http://{device}/api/npm.reports/1.0/templates/items/{id}/access_rights

Response Body
Returns an access_rights_obj data object.

**template: set**
Update a report template

PUT http://{device}/api/npm.reports/1.0/templates/items/{id}

Request Body
Provide a template data object.

Response Body
Returns a template data object.

**template: set_rights**
Update the access rights for a report template

PUT http://{device}/api/npm.reports/1.0/templates/items/{id}/access_rights

Request Body
Provide an access_rights_obj data object.

Response Body
On success, the server does not provide any body in the responses.

**Resource: template_info**
Information about a report template

http://{device}/api/npm.reports/1.0/templates/items/{template_id}/info

**JSON**

```json
{
    "built_in": boolean,
    "client_source": string,
    "description": string,
    "name": string,
    "navigator": boolean,
    "schedulable": boolean,
    "tags": tags_obj,
    "template_id": integer,
    "type": string,
    "<prop>": any
}
```

<table>
<thead>
<tr>
<th>Property Name</th>
<th>Type</th>
<th>Description</th>
<th>Notes</th>
</tr>
</thead>
<tbody>
<tr>
<td>template_info</td>
<td>&lt;object&gt;</td>
<td>Information about a report template</td>
<td>Required properties: [name, client_source];</td>
</tr>
<tr>
<td>template_info.built_in</td>
<td>&lt;boolean&gt;</td>
<td></td>
<td>Read-only; Optional;</td>
</tr>
<tr>
<td>template_info.client_source</td>
<td>&lt;string&gt;</td>
<td></td>
<td>Values: ALLOY_CLIENT, WEB_UI;</td>
</tr>
<tr>
<td>template_info.description</td>
<td>&lt;string&gt;</td>
<td></td>
<td>Optional;</td>
</tr>
<tr>
<td>Property Name</td>
<td>Type</td>
<td>Description</td>
<td>Notes</td>
</tr>
<tr>
<td>-------------------</td>
<td>------------------------</td>
<td>----------------------------------</td>
<td>--------------------------------------------</td>
</tr>
<tr>
<td>templates</td>
<td>&lt;object&gt;</td>
<td>List of system report templates</td>
<td>Required properties: [items];</td>
</tr>
<tr>
<td>templates.items</td>
<td>&lt;array of &lt;template&gt;&gt;</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Property Name</td>
<td>Type</td>
<td>Description</td>
<td>Notes</td>
</tr>
<tr>
<td>---------------</td>
<td>------------</td>
<td>-----------------------------------------------------------------------------</td>
<td>-------</td>
</tr>
<tr>
<td>templates.items.[]</td>
<td><code>&lt;template&gt;</code></td>
<td>A single report template</td>
<td></td>
</tr>
<tr>
<td>templates.meta</td>
<td><code>&lt;object&gt;</code></td>
<td>Meta data of the data set returned when a list of templates are fetched.</td>
<td>Optional;</td>
</tr>
<tr>
<td>templates.meta.access</td>
<td><code>&lt;string&gt;</code></td>
<td>Templates filtered by this access param in the query string</td>
<td>Optional;</td>
</tr>
<tr>
<td>templates.meta.access.rights</td>
<td><code>&lt;string&gt;</code></td>
<td>Templates filtered by this access_rights param in the query string</td>
<td>Optional;</td>
</tr>
<tr>
<td>templates.meta.built_in</td>
<td><code>&lt;boolean&gt;</code></td>
<td>Templates filtered by this built_in param in the query string</td>
<td>Optional;</td>
</tr>
<tr>
<td>templates.meta.client_source</td>
<td><code>&lt;string&gt;</code></td>
<td>Templates filtered by this client_source param in the query string</td>
<td>Optional;</td>
</tr>
<tr>
<td>templates.meta.count</td>
<td><code>&lt;integer&gt;</code></td>
<td>The actual number of rows returned as for this request.</td>
<td>Optional;</td>
</tr>
<tr>
<td>templates.meta.description</td>
<td><code>&lt;string&gt;</code></td>
<td>Templates filtered by this description param in the query string</td>
<td>Optional;</td>
</tr>
<tr>
<td>templates.meta.limit</td>
<td><code>&lt;integer&gt;</code></td>
<td>The maximum number rows to return. 0 means no limit.</td>
<td>Optional;</td>
</tr>
<tr>
<td>templates.meta.name</td>
<td><code>&lt;string&gt;</code></td>
<td>Templates filtered by this name param in the query string</td>
<td>Optional;</td>
</tr>
<tr>
<td>templates.meta.navigator</td>
<td><code>&lt;boolean&gt;</code></td>
<td>Templates filtered by this navigator param in the query string</td>
<td>Optional;</td>
</tr>
<tr>
<td>templates.meta.offset</td>
<td><code>&lt;integer&gt;</code></td>
<td>Number of templates to be skipped as specified by offset. Offset value of 0 will be ignored.</td>
<td>Optional;</td>
</tr>
<tr>
<td>templates.meta.owner</td>
<td><code>&lt;string&gt;</code></td>
<td>Templates filtered by this owner param in the query string</td>
<td>Optional;</td>
</tr>
<tr>
<td>templates.meta.schedulable</td>
<td><code>&lt;boolean&gt;</code></td>
<td>Templates filtered by this schedulable param in the query string</td>
<td>Optional;</td>
</tr>
<tr>
<td>templates.meta.sort</td>
<td><code>&lt;string&gt;</code></td>
<td>Templates sorted on param in the query string</td>
<td>Optional;</td>
</tr>
<tr>
<td>templates.meta.sortby</td>
<td><code>&lt;string&gt;</code></td>
<td>Templates sorted by ascending or descending</td>
<td>Optional;</td>
</tr>
<tr>
<td>templates.meta.tag</td>
<td><code>&lt;string&gt;</code></td>
<td>Templates filtered by this tag/tags param in the query string</td>
<td>Optional;</td>
</tr>
<tr>
<td>templates.meta.total</td>
<td><code>&lt;integer&gt;</code></td>
<td>Total number of rows that exists for the requested resource</td>
<td>Optional;</td>
</tr>
<tr>
<td>templates.meta.type</td>
<td><code>&lt;string&gt;</code></td>
<td>Templates filtered by this type param in the query string</td>
<td>Optional;</td>
</tr>
</tbody>
</table>

**Links**

**templates: built_in_version**

Get the current version of built-in template content

GET http://{device}/api/npm.reports/1.0/templates/built_in_version

**Response Body**

On success, the server returns a response body with the following structure:

```json
{
  "version": string,
  <prop>: any
}
```

**templates: bulk_delete**

Bulk-delete multiple templates. Delete operation will be aborted and none of the templates will be deleted if the user does not have R/W access to any of the ids in the input list, or if the template a built-in template. template ids that do not exist will be ignored.

POST http://{device}/api/npm.reports/1.0/templates/bulk_delete
Request Body
Provide a `template_ids` data object.

Response Body
Returns a `template_ids` data object.

**templates: create**
Create a new report template

```plaintext
POST http://{device}/api/npm.reports/1.0/templates{?sort,schedulable,description,access_rights,client_source,access,tag,limit,sortby,offset,owner,built_in,type,navigator,name}
```

Response Body
Returns a `template` data object.

Response Body
Returns a `template` data object.

**templates: export**
Get full version of all report templates

```plaintext
GET http://{device}/api/npm.reports/1.0/templates/export
```

Response Body
Returns a `templates` data object.

**templates: get**
Get a list of report templates

```plaintext
GET http://{device}/api/npm.reports/1.0/templates{?sort,schedulable,description,access_rights,client_source,access,tag,limit,sortby,offset,owner,built_in,type,navigator,name}
```

Response Body
Returns a `templates` data object.

**templates: get_tags**
Collect tags from all templates by owner

```plaintext
GET http://{device}/api/npm.reports/1.0/templates/tags
```

Response Body
Returns a `rpt_tags` data object.

**Type: access_rights_obj**
Specifies roles that have read/write access to an object. Users with read_write roles can read, update and delete the object. They can also share the object with other roles.

```json

```


<table>
<thead>
<tr>
<th>Property Name</th>
<th>Type</th>
<th>Description</th>
<th>Notes</th>
</tr>
</thead>
<tbody>
<tr>
<td>access_rights_obj</td>
<td>&lt;object&gt;</td>
<td>Specifies roles that have read/write access to an object. Users with read_write roles can read, update and delete the object. They can also share the object with other roles.</td>
<td></td>
</tr>
<tr>
<td>access_rights_obj.effective</td>
<td>&lt;object&gt;</td>
<td>Provides a summary of user’s access to the object. This is a read-only type.</td>
<td>Required properties: [access_right]; Optional;</td>
</tr>
<tr>
<td>access_rights_obj.effective.access_right</td>
<td>&lt;string&gt;</td>
<td>Value READ_WRITE implies that the user has read_write access on the object. READ_ONLY implies the user has read only access. NONE implies the user has no access to the object being requested.</td>
<td>Read-only; Values: NONE, READ_ONLY, READ_WRITE;</td>
</tr>
<tr>
<td>access_rights_obj.effective.&lt;prop&gt;</td>
<td>&lt;any&gt;</td>
<td>Optional;</td>
<td></td>
</tr>
<tr>
<td>access_rights_obj.id</td>
<td>&lt;integer&gt;</td>
<td></td>
<td>Read-only; Optional;</td>
</tr>
<tr>
<td>access_rights_obj.owner</td>
<td>&lt;string&gt;</td>
<td></td>
<td>Read-only; Optional;</td>
</tr>
<tr>
<td>access_rights_obj.public</td>
<td>&lt;object&gt;</td>
<td>Indicates if an object/resource is public. All public objects/resource are read_only.</td>
<td>Required properties: [access_right]; Optional;</td>
</tr>
<tr>
<td>access_rights_obj.public.access_right</td>
<td>&lt;string&gt;</td>
<td></td>
<td>Values: READ_ONLY;</td>
</tr>
<tr>
<td>access_rights_obj.public.&lt;prop&gt;</td>
<td>&lt;any&gt;</td>
<td></td>
<td>Optional;</td>
</tr>
<tr>
<td>access_rights_obj.shared</td>
<td>&lt;object&gt;</td>
<td></td>
<td></td>
</tr>
<tr>
<td>access_rights_obj.shared.read_only</td>
<td>&lt;roles_obj&gt;</td>
<td>Property read_only - Specifies a list of roles that have read_only access to the resource/object.</td>
<td>Optional;</td>
</tr>
<tr>
<td>access_rights_obj.shared.read_write</td>
<td>&lt;roles_obj&gt;</td>
<td>Property read_write - Specifies a list of roles that have read_write access to the resource/object.</td>
<td>Optional;</td>
</tr>
<tr>
<td>access_rights_obj.shared.&lt;prop&gt;</td>
<td>&lt;any&gt;</td>
<td></td>
<td>Optional;</td>
</tr>
</tbody>
</table>

**Type: column_list**

Collection of data column IDs.

**JSON**

```
[
  string
]
```

<table>
<thead>
<tr>
<th>Property Name</th>
<th>Type</th>
<th>Description</th>
<th>Notes</th>
</tr>
</thead>
<tbody>
<tr>
<td>column_list</td>
<td>&lt;array of &lt;string&gt;&gt;</td>
<td>Collection of data column IDs.</td>
<td></td>
</tr>
<tr>
<td>column_list.items</td>
<td>&lt;string&gt;</td>
<td>Data column ID.</td>
<td></td>
</tr>
</tbody>
</table>

**Type: data_def_results**

Data results for one data definition

**JSON**

```
```
### Property Name | Type | Description | Notes
---|---|---|---
data_def_results | <object> | Data results for one data definition |  |
data_def_results.columns | <column_list> | Collection of data column IDs. |  |
data_def_results.data | <data_matrix> | Array of results data rows within a data definition. |  |
data_def_results.datasource_id | <string> | Data source to which the results belong. | Read-only; Optional; |
data_def_results.datasource_storage_key | <string> | Location within the datasource in which data is stored | Read-only; Optional; |
data_def_results.errors | <run_messages> | Array of runtime status messages for a data definition. |  |
data_def_results.id | <integer> | Data definition ID to which the results belong. | Read-only; Optional; |
data_def_results.meta | <object> | Information about a data definition's data results. | Optional; |
data_def_results.meta.count | <integer> | The number of data rows returned in the current results after filtering | Optional; |
data_def_results.meta.end_time | <string> | The end time of a live data request. | Optional; |
data_def_results.meta.filter | <string> | A Steelfilter expression to filter results. | Optional; |
data_def_results.meta.filtered | <integer> | Total number of data rows matching the filter. | Optional; |
data_def_results.meta.limit | <integer> | The maximum number of data rows to return. 0 means no limit. | Optional; |
data_def_results.meta.offset | <integer> | Skip the specified number of rows before starting to return data. | Optional; |
data_def_results.meta.resolution | <string> | The resolution to use for a live data request. | Optional; |
data_def_results.meta.sort_by | <string> | Sort by specified column. Format is a comma separated list, with a column id and direction for each entry (column_id1 desc,column_id2 asc) | Optional; |
data_def_results.meta.start_time | <string> | The start time of a live data request. | Optional; |
data_def_results.meta.total | <integer> | Total number of available data rows. | Optional; |
data_def_results.others | <data_row> | Row of results data within a data definition. |  |
data_def_results.reference_id | <string> | Corresponding data definition ID in the client system | Read-only; Optional; |
data_def_results.summary_max_values | <data_row> | Row of results data within a data definition. |  |
data_def_results.summary_min_values | <data_row> | Row of results data within a data definition. |  |
data_def_results.totals | <data_row> | Row of results data within a data definition. |  |
data_def_results.ts_max_values | <ts_statistical_results> | Array of statistical result rows. |  |
data_def_results.ts_min_values | <ts_statistical_results> | Array of statistical result rows. |  |
data_def_results.ts_percentile_values | <ts_statistical_results> | Array of statistical result rows. |  |
**Type: data_def_source**

Data source specification for a data definition.

```json
{
    "name": string,
    "origin": string,
    "path": string,
    "reference_id": string,
    "type": string,
    <prop>: any
}
```

<table>
<thead>
<tr>
<th>Property Name</th>
<th>Type</th>
<th>Description</th>
<th>Notes</th>
</tr>
</thead>
<tbody>
<tr>
<td>data_def_source</td>
<td>&lt;object&gt;</td>
<td>Data source specification for a data definition.</td>
<td>Required properties: [name];</td>
</tr>
<tr>
<td>data_def_source.name</td>
<td>&lt;string&gt;</td>
<td>Name of the data source for the data definition.</td>
<td></td>
</tr>
<tr>
<td>data_def_source.origin</td>
<td>&lt;string&gt;</td>
<td>The origin data source for a query that is performing a sub-query into another data source (e.g., alerting requesting into system_metrics). Required in these cases for data column validation.</td>
<td>Optional;</td>
</tr>
<tr>
<td>data_def_source.path</td>
<td>&lt;string&gt;</td>
<td>Reference path to the requested data from within the data source.</td>
<td>Optional;</td>
</tr>
<tr>
<td>data_def_source.reference_id</td>
<td>&lt;string&gt;</td>
<td>Reference to another data_def which will be used as a source to this one.</td>
<td>Optional;</td>
</tr>
<tr>
<td>data_def_source.type</td>
<td>&lt;string&gt;</td>
<td>Data type requested</td>
<td>Optional;</td>
</tr>
</tbody>
</table>

**Type: data_def_status**

Status for a data definition.

```json
{
    "datasource_id": string,
    "datasource_storage_key": string,
    "id": integer,
    "messages": run_messages,
    "progress": {
        "percent": integer,
        "remaining_sec": integer
    },
    "reference_id": string,
    "state": string
}
```

<table>
<thead>
<tr>
<th>Property Name</th>
<th>Type</th>
<th>Description</th>
<th>Notes</th>
</tr>
</thead>
<tbody>
<tr>
<td>data_def_status</td>
<td>&lt;object&gt;</td>
<td>Status for a data definition.</td>
<td></td>
</tr>
<tr>
<td>data_def_status.datasource_id</td>
<td>&lt;string&gt;</td>
<td>Data source to which the data definition belongs.</td>
<td>Read-only; Optional;</td>
</tr>
<tr>
<td>data_def_status.datasource_storage_key</td>
<td>&lt;string&gt;</td>
<td>Location within the datasource in which data is stored</td>
<td>Read-only; Optional;</td>
</tr>
<tr>
<td>data_def_status.id</td>
<td>&lt;integer&gt;</td>
<td>Data definition ID to which the status belongs.</td>
<td>Read-only; Optional;</td>
</tr>
<tr>
<td>data_def_status.messages</td>
<td>&lt;run_messages&gt;</td>
<td>Array of runtime status messages for a data definition.</td>
<td></td>
</tr>
<tr>
<td>data_def_status.progress</td>
<td>&lt;object&gt;</td>
<td>Details about the current progress of a running query.</td>
<td>Optional;</td>
</tr>
<tr>
<td>data_def_status.progress.percent</td>
<td>&lt;integer&gt;</td>
<td>Percentage of the total query that has been executed so far.</td>
<td>Optional; Range: 0 to 100;</td>
</tr>
<tr>
<td>data_def_status.progress.remaining_sec</td>
<td>&lt;integer&gt;</td>
<td>Estimated number of seconds remaining in the query.</td>
<td>Optional; Minimum 0;</td>
</tr>
<tr>
<td>data_def_status.reference_id</td>
<td>&lt;string&gt;</td>
<td>Corresponding data definition ID in the client system</td>
<td>Read-only; Optional;</td>
</tr>
<tr>
<td>data_def_status.state</td>
<td>&lt;string&gt;</td>
<td>Current execution state of the data definition.</td>
<td>Optional; Values: pending, initializing, executing, completed, error, collecting;</td>
</tr>
</tbody>
</table>

**Type: data_defs_list**

Array of data definitions.
**Type: data_definitions**

Array of data definitions.

**Type: data_matrix**

Array of results data rows within a data definition.

**Type: data_row**

Row of results data within a data definition.

**Type: execution_timestamps**

Report Schedule’s next execution times in relative to the Unix Epoch format.

**Type: filter_criteria**

Array of filter criteria.
```json
{
  "context": string,
  "id": string,
  "type": filter_criterion_type,
  "value": string,
  <prop>: any
}
```

<table>
<thead>
<tr>
<th>Property Name</th>
<th>Type</th>
<th>Description</th>
<th>Notes</th>
</tr>
</thead>
<tbody>
<tr>
<td>filter_criteria</td>
<td>&lt;array of &lt;object&gt;&gt;</td>
<td>Array of filter criteria.</td>
<td></td>
</tr>
<tr>
<td>filter_criteria[items]</td>
<td>&lt;object&gt;</td>
<td>A single filter criterion to use on the query data.</td>
<td></td>
</tr>
<tr>
<td>filter_criteria[items].context</td>
<td>&lt;string&gt;</td>
<td>Context from which the filter was applied (e.g., user request, data drill-down, etc).</td>
<td>Optional; Values: NONE, INTERNAL, USER, DRILL_DOWN;</td>
</tr>
<tr>
<td>filter_criteria[items].id</td>
<td>&lt;string&gt;</td>
<td>Filter criterion ID.</td>
<td>Optional;</td>
</tr>
<tr>
<td>filter_criteria[items].type</td>
<td>&lt;filter_criterion_type&gt;</td>
<td>The type of filter used on the data.</td>
<td>Values: STEELFILTER, WIRESHARK, BPF;</td>
</tr>
<tr>
<td>filter_criteria[items].value</td>
<td>&lt;string&gt;</td>
<td>Query filter text to use.</td>
<td>Optional;</td>
</tr>
<tr>
<td>filter_criteria[items].&lt;prop&gt;</td>
<td>&lt;any&gt;</td>
<td></td>
<td>Optional;</td>
</tr>
</tbody>
</table>

**Type: filter_criterion_type**

The type of filter used on the data.

```json
: string
```

<table>
<thead>
<tr>
<th>Property Name</th>
<th>Type</th>
<th>Description</th>
<th>Notes</th>
</tr>
</thead>
<tbody>
<tr>
<td>filter_criterion_type</td>
<td>&lt;string&gt;</td>
<td>The type of filter used on the data.</td>
<td>Values: STEELFILTER, WIRESHARK, BPF;</td>
</tr>
</tbody>
</table>

**Type: multiple_ids**

Array of IDs.

```json
[
  integer
]
```

<table>
<thead>
<tr>
<th>Property Name</th>
<th>Type</th>
<th>Description</th>
<th>Notes</th>
</tr>
</thead>
<tbody>
<tr>
<td>multiple_ids</td>
<td>&lt;array of &lt;integer&gt;&gt;</td>
<td>Array of IDs.</td>
<td></td>
</tr>
<tr>
<td>multiple_ids[items]</td>
<td>&lt;integer&gt;</td>
<td>ID.</td>
<td></td>
</tr>
</tbody>
</table>

**Type: recurrence_rule**


```json
```
<table>
<thead>
<tr>
<th>Property Name</th>
<th>Type</th>
<th>Description</th>
<th>Notes</th>
</tr>
</thead>
<tbody>
<tr>
<td>recurrence_rule</td>
<td>&lt;object&gt;</td>
<td>Recurrence rule specification for report schedule. Implements incompletely</td>
<td>Required properties: [freq];</td>
</tr>
<tr>
<td></td>
<td></td>
<td>the Recurrence Rule Specification from iCalendar RFC - <a href="http://www.ietf.org/">http://www.ietf.org/</a></td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td>.rfc/rfc2445.txt</td>
<td></td>
</tr>
<tr>
<td>recurrence_rule.allow_past_times</td>
<td>&lt;boolean&gt;</td>
<td>Allow calculating rules for times in the past. If not set, or set to false,</td>
<td>Optional;</td>
</tr>
<tr>
<td></td>
<td></td>
<td>the result rules will always be in the future regardless of what dtstart is</td>
<td></td>
</tr>
<tr>
<td>recurrence_rule.byday</td>
<td>&lt;array of</td>
<td>Specifies days of the week.</td>
<td>Optional;</td>
</tr>
<tr>
<td></td>
<td>&lt;string&gt;&gt;</td>
<td></td>
<td></td>
</tr>
<tr>
<td>recurrence_rule.byday[items]</td>
<td>&lt;string&gt;</td>
<td>Values: SU, MO, TU, WE, TH, FR, SA;</td>
<td></td>
</tr>
<tr>
<td>recurrence_rule.byhour</td>
<td>&lt;array of</td>
<td>Specifies hours of the day.</td>
<td>Optional;</td>
</tr>
<tr>
<td></td>
<td>&lt;integer&gt;&gt;</td>
<td></td>
<td></td>
</tr>
<tr>
<td>recurrence_rule.byhour[items]</td>
<td>&lt;integer&gt;</td>
<td>Range: 0 to 23;</td>
<td>Optional;</td>
</tr>
<tr>
<td>recurrence_rule.bymminute</td>
<td>&lt;array of</td>
<td>Specifies minutes within an hour.</td>
<td>Optional;</td>
</tr>
<tr>
<td></td>
<td>&lt;integer&gt;&gt;</td>
<td></td>
<td></td>
</tr>
<tr>
<td>recurrence_rule.bymminute[items]</td>
<td>&lt;integer&gt;</td>
<td>Range: 0 to 59;</td>
<td></td>
</tr>
<tr>
<td>recurrence_rule.bymonth</td>
<td>&lt;array of</td>
<td>Specifies array of the months of the year.</td>
<td>Optional;</td>
</tr>
<tr>
<td></td>
<td>&lt;integer&gt;&gt;</td>
<td></td>
<td></td>
</tr>
<tr>
<td>recurrence_rule.bymonth[items]</td>
<td>&lt;integer&gt;</td>
<td>Range: 1 to 12;</td>
<td>Optional;</td>
</tr>
<tr>
<td>recurrence_rule.bymonthday</td>
<td>&lt;array of</td>
<td>Specifies array of days of the month. 0 is invalid value.</td>
<td>Optional;</td>
</tr>
<tr>
<td></td>
<td>&lt;integer&gt;&gt;</td>
<td></td>
<td></td>
</tr>
<tr>
<td>recurrence_rule.bymonthday[items]</td>
<td>&lt;integer&gt;</td>
<td>Range: -31 to 31;</td>
<td></td>
</tr>
<tr>
<td>recurrence_rule.bysecond</td>
<td>&lt;array of</td>
<td>Specifies seconds within a minute.</td>
<td>Optional;</td>
</tr>
<tr>
<td></td>
<td>&lt;integer&gt;&gt;</td>
<td></td>
<td></td>
</tr>
<tr>
<td>recurrence_rule.bysecond[items]</td>
<td>&lt;integer&gt;</td>
<td>Range: 0 to 59;</td>
<td></td>
</tr>
<tr>
<td>recurrence_rule.bisetpos</td>
<td>&lt;array of</td>
<td>Specifies the nth occurrence within the set of events specified by the</td>
<td>Optional;</td>
</tr>
<tr>
<td></td>
<td>&lt;integer&gt;&gt;</td>
<td>rule. 0 is invalid value. It MUST only be used in conjunction with another</td>
<td></td>
</tr>
<tr>
<td>recurrence_rule.bisetpos[items]</td>
<td>&lt;integer&gt;</td>
<td>BY*** rule part.</td>
<td></td>
</tr>
<tr>
<td>recurrence_rule.count</td>
<td>&lt;integer&gt;</td>
<td>Specifies the number of occurrences, either until or count must be specified,</td>
<td>Optional;</td>
</tr>
<tr>
<td></td>
<td></td>
<td>but not both.</td>
<td></td>
</tr>
<tr>
<td>recurrence_rule.dtstart</td>
<td>&lt;string&gt;</td>
<td>Type of recurrence rule, to specify repeating events based on an interval of</td>
<td>Optional;</td>
</tr>
<tr>
<td></td>
<td></td>
<td>freq.</td>
<td>Values: YEARLY, QUARTERLY,</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td>MONTHLY, WEEKLY, DAILY,</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td>HOURLY, ONETIME;</td>
</tr>
<tr>
<td>recurrence_rule.freq</td>
<td>&lt;string&gt;</td>
<td>Specifies how often the recurrence rule repeats.</td>
<td>Optional;</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>recurrence_rule.interval</td>
<td>&lt;integer&gt;</td>
<td>Specifies when the time zone. Example: Europe/Budapest. If not specified</td>
<td>Optional;</td>
</tr>
<tr>
<td></td>
<td></td>
<td>Etc/Universal is used.</td>
<td></td>
</tr>
<tr>
<td>recurrence_rule.timezone</td>
<td>&lt;string&gt;</td>
<td>Specifies when the recurrence ends, either until or count must be</td>
<td>Optional;</td>
</tr>
<tr>
<td></td>
<td></td>
<td>specified, but not both. High precision timestamp relative to the Unix</td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td>Epoch.</td>
<td></td>
</tr>
<tr>
<td>recurrence_rule.until</td>
<td>&lt;string&gt;</td>
<td></td>
<td>Optional;</td>
</tr>
</tbody>
</table>
### Type: roles_obj

**JSON**

```json
{
    "roles": [integer,
               <prop>: any
    ]
}
```

<table>
<thead>
<tr>
<th>Property Name</th>
<th>Type</th>
<th>Description</th>
<th>Notes</th>
</tr>
</thead>
<tbody>
<tr>
<td>roles_obj</td>
<td>&lt;object&gt;</td>
<td></td>
<td></td>
</tr>
<tr>
<td>roles_obj.roles</td>
<td>&lt;array of</td>
<td>Array of integer elements.</td>
<td></td>
</tr>
<tr>
<td>roles_obj.roles[items]</td>
<td>&lt;integer&gt;</td>
<td></td>
<td></td>
</tr>
<tr>
<td>roles_obj.&lt;prop&gt;</td>
<td>&lt;any&gt;</td>
<td></td>
<td>Optional;</td>
</tr>
</tbody>
</table>

### Type: rpt_tags

Container for all tag sets on a report instance.

**JSON**

```json
{
    "items": [
        {
            "owner": string,
            "tags": tags_obj,
            <prop>: any
        }
    ]
}
```

<table>
<thead>
<tr>
<th>Property Name</th>
<th>Type</th>
<th>Description</th>
<th>Notes</th>
</tr>
</thead>
<tbody>
<tr>
<td>rpt_tags</td>
<td>&lt;object&gt;</td>
<td></td>
<td></td>
</tr>
<tr>
<td>rpt_tags.items</td>
<td>&lt;array of</td>
<td>Array of report instance tag sets.</td>
<td></td>
</tr>
<tr>
<td>rpt_tags.items[items]</td>
<td>&lt;object&gt;</td>
<td></td>
<td></td>
</tr>
<tr>
<td>rpt_tags.items[items].owner</td>
<td>&lt;string&gt;</td>
<td>Owner of the tag set.</td>
<td></td>
</tr>
<tr>
<td>rpt_tags.items[items].tags</td>
<td>tags_obj</td>
<td></td>
<td></td>
</tr>
<tr>
<td>rpt_tags.items[items].&lt;prop&gt;</td>
<td>&lt;any&gt;</td>
<td></td>
<td>Optional;</td>
</tr>
</tbody>
</table>

### Type: run_message

Runtime status message for a data definition.

**JSON**

```json
{
    "details": {
        <prop>: string
    },
    "id": string,
    "module_id": string,
    "nested": run_message,
    "text": string,
    <prop>: any
}
```

<table>
<thead>
<tr>
<th>Property Name</th>
<th>Type</th>
<th>Description</th>
<th>Notes</th>
</tr>
</thead>
<tbody>
<tr>
<td>run_message</td>
<td>&lt;object&gt;</td>
<td>Runtime status message for a data definition.</td>
<td>Optional;</td>
</tr>
<tr>
<td>run_message.details</td>
<td>&lt;object&gt;</td>
<td>Additional message details.</td>
<td>Optional;</td>
</tr>
<tr>
<td>run_message.details.&lt;prop&gt;</td>
<td>&lt;string&gt;</td>
<td></td>
<td>Optional;</td>
</tr>
<tr>
<td>run_message.id</td>
<td>&lt;string&gt;</td>
<td>Machine-parsable message or error code.</td>
<td>Optional;</td>
</tr>
</tbody>
</table>
Type: run_messages
Array of runtime status messages for a data definition.

```
[ run_message ]
```

<table>
<thead>
<tr>
<th>Property Name</th>
<th>Type</th>
<th>Description</th>
<th>Notes</th>
</tr>
</thead>
<tbody>
<tr>
<td>run_messages</td>
<td>&lt;array of &lt;run_message&gt;&gt;</td>
<td>Array of runtime status messages for a data definition.</td>
<td></td>
</tr>
<tr>
<td>run_messages[items]</td>
<td>&lt;run_message&gt;</td>
<td>Runtime status message for a data definition.</td>
<td></td>
</tr>
</tbody>
</table>

Type: schedule_ids
Array of report schedule IDs.

```
[ integer ]
```

<table>
<thead>
<tr>
<th>Property Name</th>
<th>Type</th>
<th>Description</th>
<th>Notes</th>
</tr>
</thead>
<tbody>
<tr>
<td>schedule_ids</td>
<td>&lt;array of &lt;integer&gt;&gt;</td>
<td>Array of report schedule IDs.</td>
<td></td>
</tr>
<tr>
<td>schedule_id[items]</td>
<td>&lt;integer&gt;</td>
<td>Report schedule ID.</td>
<td></td>
</tr>
</tbody>
</table>

Type: tags_obj
Container for a set of report tags.

```
{
  "items": [
    string,
    <prop>: any
  ]
}
```

<table>
<thead>
<tr>
<th>Property Name</th>
<th>Type</th>
<th>Description</th>
<th>Notes</th>
</tr>
</thead>
<tbody>
<tr>
<td>tags_obj</td>
<td>&lt;object&gt;</td>
<td>Container for a set of report tags.</td>
<td></td>
</tr>
<tr>
<td>tags_obj[items]</td>
<td>&lt;array of &lt;string&gt;&gt;</td>
<td>Array of report tags.</td>
<td>Optional;</td>
</tr>
<tr>
<td>tags_obj[items][items]</td>
<td>&lt;string&gt;</td>
<td>Report tag.</td>
<td></td>
</tr>
<tr>
<td>tags_obj[&lt;prop&gt;]</td>
<td>&lt;any&gt;</td>
<td></td>
<td>Optional;</td>
</tr>
</tbody>
</table>

Type: template_ids
Array of report template IDs

```
[ integer ]
```

<table>
<thead>
<tr>
<th>Property Name</th>
<th>Type</th>
<th>Description</th>
<th>Notes</th>
</tr>
</thead>
<tbody>
<tr>
<td>template_ids</td>
<td>&lt;integer&gt;</td>
<td>Array of report template IDs.</td>
<td></td>
</tr>
<tr>
<td>template_ids[items]</td>
<td>&lt;integer&gt;</td>
<td>Report template ID.</td>
<td></td>
</tr>
<tr>
<td>Property Name</td>
<td>Type</td>
<td>Description</td>
<td>Notes</td>
</tr>
<tr>
<td>---------------</td>
<td>------</td>
<td>-------------</td>
<td>-------</td>
</tr>
<tr>
<td>template_ids</td>
<td>&lt;array of &lt;integer&gt;&gt;</td>
<td>Array of report template IDs</td>
<td></td>
</tr>
<tr>
<td>template_id[item]</td>
<td>&lt;integer&gt;</td>
<td>Report template ID</td>
<td></td>
</tr>
</tbody>
</table>

**Type: time_pairs**

Array of time range pairs.

**JSON**

```
[
  {
    "end": string,
    "start": string
  }
]
```

<table>
<thead>
<tr>
<th>Property Name</th>
<th>Type</th>
<th>Description</th>
<th>Notes</th>
</tr>
</thead>
<tbody>
<tr>
<td>time_pairs</td>
<td>&lt;array of &lt;object&gt;&gt;</td>
<td>Array of time range pairs.</td>
<td></td>
</tr>
<tr>
<td>time_pairs[item]</td>
<td>&lt;object&gt;</td>
<td>A time range pair, consisting of a start and end time.</td>
<td>Required properties: [start, end];</td>
</tr>
<tr>
<td>time_pairs[item].end</td>
<td>&lt;string&gt;</td>
<td>The ending time. This is a high-precision time value in Unix Epoch format.</td>
<td></td>
</tr>
<tr>
<td>time_pairs[item].start</td>
<td>&lt;string&gt;</td>
<td>The start time. This is a high-precision time value in Unix Epoch format.</td>
<td></td>
</tr>
</tbody>
</table>

**Type: ts_statistical_results**

Array of statistical result rows.

**JSON**

```
[
  {
    "group_by": data_row,
    "metric": string,
    "value": string
  }
]
```

<table>
<thead>
<tr>
<th>Property Name</th>
<th>Type</th>
<th>Description</th>
<th>Notes</th>
</tr>
</thead>
<tbody>
<tr>
<td>ts_statistical_results</td>
<td>&lt;array of &lt;object&gt;&gt;</td>
<td>Array of statistical result rows.</td>
<td></td>
</tr>
<tr>
<td>ts_statistical_result[item]</td>
<td>&lt;object&gt;</td>
<td>One result from a statistical or compatibility function</td>
<td>Required properties: [value, metric, group_by];</td>
</tr>
<tr>
<td>ts_statistical_result[item].group_by</td>
<td>&lt;data_row&gt;</td>
<td>Row of results data within a data definition.</td>
<td></td>
</tr>
<tr>
<td>ts_statistical_result[item].metric</td>
<td>&lt;string&gt;</td>
<td>The metric column ID</td>
<td></td>
</tr>
<tr>
<td>ts_statistical_result[item].value</td>
<td>&lt;string&gt;</td>
<td>The result value</td>
<td></td>
</tr>
</tbody>
</table>