API Documentation for Omnissa Intelligence - V1

Introduction

The Omnissa Intelligence (**formerly Workspace ONE Intelligence**) API documentation describes how to query and extract data for use in other business intelligence tools. It also helps with building General Data Protection Regulation (GDPR) compliant tools and applications with REST APIs.

Intended Audience

This content is intended for experienced developers who are familiar with Omnissa Intelligence data and controls.

Terms

Omnissa Workspace ONE UEM: The name of the product formerly known as AirWatch.

Omnissa Intelligence for Consumer Apps (Omnissa Intelligence SDK): The name of the product formerly known as Apteligent or Workspace ONE Intelligence for Consumer Apps

API Concepts

Host Names

Examples in this document refer to the host ***https://api.sandbox.data.vmwservices.com***. As a customer you will need to substitute the host name specific to the region in which your data resides. For a list of the regions and endpoints, access URLs to Whitelist for On-Premises by Region.

HTTP Methods

GET: Used to request a single, specific entity/object.

POST: Used to submit a request that requires a JSON body. The JSON body can provide information used to create a new object (for example, Create Report API) or it can provide information used to control the result set of a query (for example, pagination, search).

Path Parameters

When a URL requires path parameters, those parameters are denoted with curly braces. For example:

URL	Path Parameter	
https://api.sandbox.data.vmwservices.com/v1/reports/{a}	{a}	When making this API call, the value "{a}" must be substituted with an appropriate value.

Data Formats

Any HTTP Request Body must be submitted as JSON. The following HTTP header must be included with such requests:

Header Name	Header Value
Content-Type	application/json

Data returned from the Omnissa Intelligence APIs is likewise returned as JSON. A client should always indicate its ability to process JSON in any request:

Header Name	Header Value
Accept	application/json OR */*

Paging

API requests that return more than a single object are always paged. Paging is controlled with 2 parameters:

Parameter Name	Parameter Description	Min	Max	Default
page_size	The number of records to return.	1	1000	100
offset	Offset across the entire data set at which the current page starts.	0	<any>	0

Example Request Body (default sort)

```
{
    "offset": 2000,
    "page_size": 100
}
```

Paging requires the data set to be sorted. Each dataset has a default sort order, but that can be controlled by specifying “sort_ons”, which consist of 2 parameters:

Parameter Name	Parameter Description	Default Value (for reports)
field	The field to sort on.	name
order	The sort order (ASC or DESC)	ASC

Example Request Body (custom sort)

```
{
    "offset": 200,
    "page_size": 1000,
    "sort_ons": [
        {
            "field": "device_enrollment_user_first_name",
            "order": "DESC"
        }
    ]
}
```

Search Terms

Search terms is are provided in request as an array. This takes three parameters :

> ⚠ These search terms only apply to Omnissa SDK Apps APIs

Parameter Name	Parameter Description	Default Value
`value`	String value used for searching	
`fields`	**Optiona**l Array of fields to search the value.	
operator	**Optional** Search operator specified as a String. This can accept one of the three values : "START_WITH", "CONTAINS", "ENDS_WITH"	"CONTAINS"

Example Request Body :

```
{
    "search_terms": [{
        "value": "crash",
        "fields": ["name"],
        "operator": "CONTAINS"
    }],
}
```

Authentication

API calls to Omnissa Intelligence are always authenticated using a JSON Web Token (JWT). JWT tokens are submitted as Bearer tokens in an HTTP Authorization header.

Header Name	Header Value
Authorization	Bearer <jwt-token>

> ⚠ More information about JSON Web Tokens can be found in the RFC: https://tools.ietf.org/html/rfc7519
>
> The site https://jwt.io/ is a helpful tool for parsing JSON Web Tokens.

If access tokens are expired or invalid, the API invoked returns an HTTP status 401 (Unauthorized).

API Error Handling

Input errors always generate an HTTP BAD Request (status 400) along with a JSON body that provides further details about the error. For example:

```
{
  "errors" : [ {
    "code" : "FIELD-VALIDATION",
    "message" : "Invalid value [DES]. Must be one of [asc, desc].",
    "violated_property" : "sort_ons[0].order"
  } ]
}
```

Errors is an array with the following fields:

code	The error code indicating the type of error.
message	More information about the specific error
violated_property	A specific property name (if applicable)

Messages that cannot be parsed, often because they have invalid (unsupported) fields, return an error as follows:

```
{
  "errors" : [ {
    "code" : "UNPARSEABLE-MESSAGE",
    "message" : ""
  } ]
}
```

Requests that result in constraint violations (for example, 2 reports with the same name) return errors as follows:

```
{
  "errors" : [ {
    "code" : "DUPLICATE-KEY",
    "message" : ""
  } ]
}
```

Other standard errors include:

HTTP Status Code	Description
401	Authentication failed. Likely your access-token needs to be renewed.
403	Authorization failed. You attempted to access a resource or perform an operation that you are not permitted to do.
404	The resource you attempted to access does not exist.
429	Rate limit exceeded.

Credentials for API Access

Configure a Service Account

A service account provides you with a clientId and clientSecret that can be used to obtain a JSON Web Token for calling Omnissa Intelligence APIs.

1. In the Omnissa Intelligence UI, go to Settings → Service Accounts.
2. Create a service account.
3. The browser downloads a JSON credentials file with the credential.

Example Credentials File

```
{
    "name": "reportscript",
    "tokenEndpoint": "https://api.staging.dpa0.org/auth/console/token",
    "clientId": "reportscript@538f619e-2db4-4f07-974b-efb3e5326116.data.vmwservices.com",
    "clientSecret": "5b3b835b2adedd28b1862b3bb714e48f03423010903f2ec7159031ba1995ad0e",
    "authorizedGrantType": [
        "CLIENT_CREDENTIALS"
    ],
    "resourceIds": [
        "api.data.vmwservices.com"
    ]
}
```

- The ***clientSecret*** is a password and must be protected.
- After creating the service account, you cannot retrieve the clientSecret again. You may generate a new ***clientSecret***, but this replaces (invalidates) the original **clientSecret**.

Obtain an Access Token

Example Request

```
POST https://auth.sandbox.data.vmwservices.com/oauth/token?grant_type=client_credentials
```

Header Name	Header Value	Notes	Example Value
Authorization	Basic <Base64 encoded username:password>	The username is the ***clientId***. The password is the ***clientSecret***.	`Basic cmVwb3J0c2NyaXB0QDUzOGY2MTllLTJkYjQtNGYwNy05NzRiLWVmYjNlNTMyNjExNi5kYXRhLnZtd3NlcnZpY2VzLmNvbTo1YjNiODM1YjJhZGVkZDI4YjE4NjJiM2JiNzE0ZTQ4ZjAzNDI`

Notice the "auth" prefix on the URI. All other APIs are accessed with an "api" prefix. Only the token endpoint uses the "auth" prefix.

Example Response

```
{
    "access_token": "eyJhbGciOiJSUzI1NiIsInR5cCI6IkpXVCJ9.eyJzdWIiOiJyZXBvcnRzY3JpcHRANTM4ZjYxOWUtMmRiNC00ZjA3LTk3NGItZWZiM2U1MzI2MTE2LmRhdGEudm13c2VydmljZXMuY29tIiwiYXVkIjpbImFw
    "expires_in": 3599,
    "iss": "https://auth.staging.dpa0.org",
    "jti": "a3a990fb-b5f8-4ed9-afc0-4a671dd5758b",
    "nbf": 1559613306,
    "scope": "dpa.sweetwater.service.actiontemplate dpa.balvenie.query dpa.sweetwater.servicemeta dpa.sweetwater.automation dpa.knockout.query dpa.merlot.reportmetadata dpa.pranc
    "token_type": "bearer",
    "dpa.org_id": "538f619e-2db4-4f07-974b-efb3e5326116"
}
```

The access_token in the response can be used to call Omnissa Intelligence APIs.

Structure of Data

Data is organized in a 3-level hierarchy: / Integration / Entity of Event Type / Attribute.

		Example (1)	Example (2)	Example (3)
Integration Note: This field is not applicable for Omnissa Intelligence for Consumer Apps APIs)	Usually the name of the vendor or product that is sourcing the data.	airwatch	airwatch	Not Applicable
Entity or Event Type	An ***Entity*** would be an object for which the system tracks attributes over time. For example, device and users would be entities. An ***Event Type*** is an event that occurs at a point in time. For example, an app launch or a notification from a security vendor would both be events.	device	application	Intelligence SDK / Android Crashes
Attribute	An ***Attribute*** is a key-value pair associated with an entity or an event type. For example, a "Device Friendly Name" could be an attribute of a device.	device_friendly_name	app_package_id	Android App Version

For API resoponses, the following integration/entity combinations are available:

Category	Integration	Entity	Category (as seen in the Omnissa Intelligence UI)
Apps	airwatch	application	Apps
Devices	airwatch	device	Devices
OS Updates	airwatch	windowspatch	OS Updates
Device Sensors	airwatch	devicesensors	Device Sensors
Intelligence SDK	*Not Applicable*	e.g. Android Crashes	Intelligence SDK

Omnissa Intelligence SDK Apps Metrics Metadata API

a. Entities API

Entities API returns list of all entities . A searchterm can be used to filter the entities.

Request

POST /v1/metadata/entities

Request information requires following fields in a JSON body :

Field	Data Type	Default Value	Description	Validation
offset	integer	0	Offset across the entire data set at which the current page starts.	Greater than or equal to 0. Must be less than the total result size
page_size	integer	100	Min and max values are listed in the Paging section.	Greater than 0 and less than MAX PAGE SIZE
sort_ons	Array	"entity" in ascending order	**Optional**: An ordered array of fields to sort on.	Valid sort field. entity is the only sortable field.
search_terms	Array	n/a	**Optional**: An array of search terms and the corresponding fields which should be inspected	Must be a searchable field; "name" is the only searchable field so only one search term is expected in the request.

Sample Request

```
{
    "offset": 0,
    "page_size": 5,
    "search_terms": [{
        "value": "air",
        "fields": ["name"],
        "operator": "CONTAINS"
    }],
    "sort_ons": [{
        "field": "name",
        "order": "ASC"
    }]
}
```

Response

Response includes pagination details and list of entities. Pagination details in response can be referred in Paging section.

Field	Data Type	Description
offset	integer	Offset across the entire data set at which the current page starts.
page_size	integer	Min and max values are listed in the Paging section.
total_count	integer	Total count of result set.
results	Array	An array of entities. Details are provided in the following table.

Entities have the following parameters :

Field	Data Type	Description
name	String	Name of entity.
label	String	User friendly/well known name of entity.
description	String	Description of that entity.

Sample Response

```
"data": {
    "page_size": 5,
    "offset": 0,
    "total_count": 25,
    "results": [{
            "name": "airwatch.userriskscore",
            "label": "User Risk Score",
            "description": ""
        },
        {
            "name": "airwatch.userriskscore_timeseries",
            "label": "User Risk Score For Timeseries data",
            "description": ""
        }
    ]
}
```

2. Attributes API

Attributes API returns list of all attributes for the requested entity. Entity information can be obtained from Entities API listed above.

- Request

POST /v1/metadata/entity/{name}/attributes

"name" is "entity_name" that can be learned from Entities API which is a required field and if not provided will result in validation error response.

Request requires following information in a JSON request body :

Field	Data Type	Default Value	Description	Validation
offset	integer	0	Offset across the entire data set at which the current page starts.	Greater than or equal to 0. Must be less than the total result size
page_size	integer	100	Min and max values are listed in the Paging section.	Greater than 0 and less than MAX PAGE SIZE
sort_ons	Array	"name" in ascending order	**Optional**: An ordered array of fields to sort on.	Valid sort field. "name" is the only allowed sort fields.
search_terms	Array	n/a	**Optional**: An array of search terms and the corresponding fields which should be inspected	"name" is the only searchable field, so only one search term is expected in the request.

Sample json request

```
{
    "offset": 0,
    "page_size": 100,
    "search_terms": [{
        "value": "version",
        "fields": ["name"],
        "operator": "CONTAINS"
    }],
    "sort_ons": [{
        "field": "name",
        "order": "ASC"
    }]
}
```

- Response

The response has the list of attributes along with entity name and pagination values as follows:

Field	Data Type	Description
offset	integer	Offset across the entire data set at which the current page starts.
page_size	integer	Min and max values are listed in the Paging section.
total_count	integer	Total count of result set.
entity	String	Entity from request.
results	Array	Array of attributes for the requested entity. The description and fields for each attribute in the list is mentioned in the following table.

The following is the data sent for each attribute :

Field	Data Type	Description
name	String	Name of the attribute
label	String	Label gives better understanding of attribute name.
description	String	Description of the attribute.
data_type	String	Attribute data type.
bucketing_allowed	Boolean	Bucketing / Filtering for Metrics API will be allowed only when the value is true for the attribute.

Sample Response

```
{
    "data": {
        "offset": 0,
        "page_size": 100,
        "total_count": 25,
        "entity": "apteligent.crash_android",
        "results": [{
```

```
                "name": "devicetype",
                "label": "",
                "description": "Device type",
                "data_type": "STRING",
                "bucketing_allowed" : true
            },
            {
                "name": "app_version",
                "label": "Android App Version",
                "description": "Android App Version",
                "data_type": "STRING",
                "bucketing_allowed : false
            }
        ]
    }
}
```

Omnissa Intelligence SDK Apps Metrics API

POST request : ***v1/metrics/entity/****

Metrics API returns a metric values for each of the metric names provided in the request body. Currently we only support a single metric name in the request body.

Metrics API **does not** support **pagination** and a maximum of 1k metrics will be returned per request. Request will **timeout** after 20 seconds.

- ### Supported Metrics

  The following metrics are supported with this API:

METRIC TYPE	ATTRIBUTE DATA TYPES SUPPORTED	RESULT DATA TYPE
AVG	DOUBLE, FLOAT, INTEGER, LONG	DOUBLE
SUM	DOUBLE, FLOAT, INTEGER, LONG	LONG
MIN	DOUBLE, FLOAT, INTEGER, LONG	LONG
MAX	DOUBLE, FLOAT, INTEGER, LONG	LONG
COUNT	All	LONG
COUNT_DISTINCT	All	LONG

If metrics are requested with unsupported metric type or on attributes with datatypes that are not supported, HTTP 400 error response will be returned with appropriate error message.

- ### Request

POST v1/metrics/entity/*

payload for any entity metrics end point have the following common parameters :

Field	Data Type	Description	Validation
entity	String	Entity name and this is a **required** field. This can be known from Entities API.	Non empty String and a valid entity name.
time_window	Json Object	This object takes **time range** in one of the time span or date range with start and end time or just start time. This is **required** and if none are provided in the request it results in **validation error** .	Validation of date values or time span. 1)The timewindow cannot exceed 90 days. 2) Either of start_time or Timespan should be present in the request but not both. 3) Only end_time is not valid.
metrics	Json Object	Specifies an array of the metric function to be applied on the attribute. The attributes can be known from the Attributes Metadata API. This is a **required** object and takes "name" and "function" required fields.	Should be one of the listed aggregation functions. Upto 5 metrics are allowed in each request. At this point only one Metric is supported.
filter	String	String of filter attributes that follows ANTLR grammar. **Optional.**	Only attributes that have bucketing/filtering set to true from Attributes API are allowed.
bucketing_attributes	Array	Array of grouping attributes known from Attributes Metadata API. Metrics will be returned within the time range for each bucket. **Optional**. Currently this field is not supported for Rolling window type requests. If provided in the request, it will be ignored.	Only attributes that have bucketing/filtering set to true from Attributes API are allowed. Maximum of 10 bucketing attributes per request are allowed but the more the number of bucketing attributes, number of buckets per data point will be less.
num_results_per_bucketing_attribute	Integer	An **optional** field that defines number of buckets per data point. A data point corresponds to sampling interval size. "simple_timerange" will have one data point and "histogram" or "rolling window" number of data points is based on number of sampling intervals.	
date_attribute_name	String	**Optional** date field to be used for computing metrics and the data type of the attribute should be date.	

time_window has the following fields :

Field	Data Type	Description	Validation
start_time	String	Date in the format "yyyy-mm-ddTHH:MM:SSz". **Optional. Either this or timespan should be present. Otherwise results in validation error.**	Date format validation.
end_time	String	Date in the format "yyyy-mm-ddTHH:MM:SSz" . **Optional**, if not provided considered as current time.	Date format validation.

timespan	String	Mentions the span of time to calculate metrics. Accepted time units and sample are provided in the following table.**Optional**, either **this or start_time** are mandatory in the request.
		timespan {
		"duration" : duration of the request,
		"unit" : time unit
		}
			Valid Time Units :
			Seconds, Minutes, Hours, Days, Weeks, Months, Years.

Sample Request

Sample Request

```
{
    "entity": "apteligent.net_event",
```

```
    "time_window" : {
      "timespan" : {
        "duration" : 10,
        "unit" : "DAYS"
      }
    },

    "date_attribute_name": "adp_modified_at",

    "metrics": [{
        "name": "bytes_sent",
        "function": "AVG"
    }],

    "filter": "app_id = 'e7f33c1d0df740a1a436f64ed5d43f7600555305'",

    "bucketing_attributes" : [ "_url_host","http_status_code" ],

    "num_results_per_bucketing_attribute": 40
}
```

- Response

Response has the following fields :

Field	Data Type	Description
entity	String	entity received in request.
result_type	String	Result type is the request end point type sent back in response.
is_complete_dataset	Boolean	If this field is present it indicates that entire dataset is not returned in response and to retrieve additional data, request should be adjusted (time window or sampling interval size or cardinality) and re tried.
metadata	Object	`This contains metadata for all the aggregation and bucketing attributes and date_attribute_name` `"metadata": { "date_attribute_name": date attribute used for aggregations, "attributes": { "attribute_name": { "label": <attribute_label>, "data_type": <attribute_datatype> } } }`
result	Array	Array of response objects as shown in the next table.

Each object in result array has the following fields :

Field	Data Type	Description
metric_value	Array of objects that contain metric details from request and value whose Result data type varies based on the aggregate function, aggregation attribute and aggregation function.	The result data type differs by aggregation functions and is listed in Supported Metrics section above.
start_time	String	Start time for the metric will be returned in the format "yyyy-mm-ddTHH:MM:ssZ" if milliseconds equals 0. If milliseconds has value then format will be "yyyy-mm-ddTHH:MM:ss.SSSZ". Start time and end time will be set to current time for non- time series/snapshot requests.
end_time	String	End time for that metric will be returned in the format "yyyy-mm-ddTHH:MM:ssZ" or if milliseconds has value then "yyyy-mm-ddTHH:MM:ss.SSSZ"
bucketing_attributes	Object	This is returned only if request has bucketing attributes. This has key, value pairs for each bucketing attribute in the request.

Sample Response

Sample Response

```
{
    "data": {
        "entity": "apteligent.net_event",
        "result_type": "SIMPLE_TIMERANGE",
        "metadata": {
            "date_attribute_name": "adp_modified_at",
            "attributes": {
                "http_status_code": {
                    "label": "HTTP Status Code",
                    "data_type": "INTEGER"
                },
                "_url_host": {
                    "label": "URL",
                    "data_type": "STRING"
                },
                "bytes_sent": {
                    "label": "Data Out",
                    "data_type": "LONG"
                }
            }
        },
        "is_complete_dataset": false,
        "result": [{
                "start_time": "2020-08-23T00:00:00Z",
                "end_time": "2020-09-02T18:43:02.25Z",
                "bucketing_attributes": {
                    "http_status_code": 505,
                    "_url_host": "api.event.gov"
                },
                "metrics_values": [{
```

```
                    "name": "bytes_sent",
                    "function": "AVG",
                    "value": 498.22222222222223
                }]
            },
            {
                "start_time": "2020-08-23T00:00:00Z",
                "end_time": "2020-09-02T18:43:02.25Z",
                "bucketing_attributes": {
                    "http_status_code": 413,
                    "_url_host": "api.event.gov"
                },
                "metrics_values": [{
                    "name": "bytes_sent",
                    "function": "AVG",
                    "value": 506.64814814814815
                }]
            }
        ]
    }
}


... Truncated for sample
```

Requests With Simple Time Window

POST /v1/metrics/entity/simple_timerange

simple_timerange end point takes the time window and returns result over the time range. If the entity has non time-series data the metrics will be calculated over the entire data and not for the time window. "start_time" and "end_time" will be set to current time in results for non timeseries/snapshot requests.

This end point does not have any additional request fields and uses the fields defined here.

Sample Request

Sample Request

```
{
        "data": {
            "entity": "apteligent.net_event",

            "time_window": {
                "timespan": {
                    "duration": 59,
                    "unit": "DAYS"
                }
            },

            "metrics": [{
                "name": "bytes_sent",
                "function": "AVG"
            }]
        }
    }
```

Sample Response

Sample Response

```
{
         "data": {
             "entity": "apteligent.net_event",
             "result_type": "SIMPLE_TIMERANGE",
             "metadata": {
                 "date_attribute_name": "adp_modified_at",
                 "attributes": {
                     "bytes_sent": {
                         "label": "Data Out",
                         "data_type": "LONG"
                     }
                 }
             },
             "result": [{
                 "start_time": "2020-06-28T00:00:00Z",
                 "end_time": "2020-08-26T23:50:59.354Z",
                 "bucketing_attributes": {},
                 "metrics_values": [{
                     "name": "bytes_sent",
                     "function": "AVG",
                     "value": 499.3219479430131
                 }]
             }]
         }
     }
```

Histogram Requests

v1/metrics/entity/histogram

The histogram option return metrics for each sampling interval size within the specified time window.

Request :
The other time_window fields common for all requests can be found here. In addition to them the following is needed for histogram requests.

Field	Data Type	Description	Validation
sampling_interval	Object	interval for which metrics have to be calculated. This is **required** attribute. This takes two fields unit to specify the time unit and	Interval should be less than the time range specified. If request start and end date range is for 1 days and interval size is 2 days, error response will be

Field	Data Type	Description	Validation
		duration for the interval size.	returned with invalid interval size.

Sample Request

Sample Request

```
{
    "data": {
        "entity": "apteligent.crash_ios",

        "time_window": {
            "start_time": "2020-08-18T23:06:31.000Z",
            "end_time": "2020-08-25T00:33:18.000Z"
        },

        "sampling_interval": {
            "duration": 1,
            "unit": "DAYS"
        },

        "date_attribute_name": "adp_modified_at",

        "metrics": [{
            "name": "device_model",
            "function": "COUNT"
        }],

        "num_results_per_bucketing_attribute": 10
    }
}
```

Sample Response

Sample Response

```
{
    "data": {
        "entity": "apteligent.crash_ios",
        "result_type": "HISTOGRAM",
        "metadata": {
            "date_attribute_name": "adp_modified_at",
            "attributes": {
                "device_model": {
                    "label": "Device Model",
                    "data_type": "STRING"
                }
            }
        },
        "result": [{
                "start_time": "2020-08-18T23:06:31Z",
                "end_time": "2020-08-19T00:00:00Z",
                "bucketing_attributes": {},
                "metrics_values": [{
                    "name": "device_model",
                    "function": "COUNT",
                    "value": 765
                }]
            },
            {
                "start_time": "2020-08-19T00:00:00Z",
                "end_time": "2020-08-20T00:00:00Z",
                "bucketing_attributes": {},
                "metrics_values": [{
                    "name": "device_model",
                    "function": "COUNT",
                    "value": 18402
                }]
            }
        ]
    }
}
Response truncated for demonstration.
```

Rolling Window Requests

v1/metrics/entity/rolling_window

Rolling window is a specialized variation of histogram requests. Rolling window will calculate metrics using the interval and the rolling window size. For each interval within the requested time range, metrics will be calculated for rolling window size.

Note : Rolling window supports only "COUNT_DISTICT" aggregation function.

For example if rolling window request is as follows :

"time_window" : {

"type" : "rolling_window",

"start_time": "2020-04-27",
"end_time": "2020-04-30",
"sampling_interval" : "1 DAYS",
"window_size" : "7 DAYS"

}

Response metrics will approximately be returned for following intervals:

2020-04-18 to 2020-04-27
2020-04-19 to 2020-04-28
2020-04-20 to 2020-04-29
2020-04-21 to 2020-04-30

The above is for demonstration purpose only and the actual values may differ slightly depending on the current time or if any time is specified in request along with date.

Request :

Rolling window request is similar to histogram, "window_size" is the only additional attribute from histogram. The following are additional fields for rolling_window in addition to the common fields :

Field	Data Type	Description	Validation
sampling_interval	Object	Similar to API Documentation for Omnissa Intelligence - V1#sampling_interval	Accepted time units are "HOURS" and "DAYS". The interval size should be within the requested time range otherwise results in validation error.
window_size	Object	**Required**. This also takes duration for window size and time unit similar to sampling interval.	Accepted time units are "HOURS" and "DAYS".

Note : "bucketing_attributes" is currently not supported for rolling window requests and will be ignored if present in the request .

Sample Request

Sample Request

```
{
        "entity": "apteligent.net_error",
        "time_window": {
            "start_time": "2020-09-25T15:30:00z",
            "end_time": "2020-09-29T15:30:00z"
        },
        "sampling_interval": {
            "duration":1,
            "unit": "DAYS"
        },
        "window_size" : {
            "duration" : 7,
            "unit" : "DAYS"
        },
        "metrics": [{
            "name": "bytes_sent",
            "function": "COUNT_DISTINCT"
        }]
    }
```

Sample Respone

Sample Response

```
{
  "data": {
    "entity": "apteligent.net_error",
    "result_type": "ROLLING_WINDOW",
    "metadata": {
      "date_attribute_name": "adp_modified_at",
      "attributes": {
        "bytes_sent": {
          "label": "Data Out",
          "data_type": "LONG"
        }
      }
    },
    "result": [
      {
        "start_time": "2020-09-19T15:30:00Z",
        "end_time": "2020-09-26T15:30:00Z",
        "metrics_values": [
          {
            "name": "bytes_sent",
            "function": "COUNT_DISTINCT",
            "value": 400
          }
        ]
      },
      {
        "start_time": "2020-09-20T15:30:00Z",
        "end_time": "2020-09-27T15:30:00Z",
        "metrics_values": [
          {
            "name": "bytes_sent",
            "function": "COUNT_DISTINCT",
            "value": 400
          }
        ]
      },
      {
        "start_time": "2020-09-21T15:30:00Z",
        "end_time": "2020-09-28T15:30:00Z",
        "metrics_values": [
          {
            "name": "bytes_sent",
            "function": "COUNT_DISTINCT",
            "value": 400
          }
        ]
      },
      {
        "start_time": "2020-09-22T15:30:00Z",
        "end_time": "2020-09-29T15:30:00Z",
        "metrics_values": [
          {
            "name": "bytes_sent",
            "function": "COUNT_DISTINCT",
            "value": 400
          }
        ]
      }
    ]
  }
}
```

Report Metadata API

> ⚠ *For Omnissa Intelligence SDK Apps, Report APIs are not available (Coming soon!).*

A meta-data API is available to show which attributes are available for a particular entity. The general form of this query is:

`GET https://api.sandbox.data.vmwservices.com/v1/meta/integration/{integration}/entity/{entity}/attributes.`

The following example shows how to retrieve attribute information for integration ***airwatch*** and entity ***device***.

Example Request

`GET https://api.sandbox.data.vmwservices.com/v1/meta/integration/airwatch/entity/device/attributes`

Example Response

```
200 OK
{
    "data": [
        {
            "classifications": [
                {
                    "label": "Device",
                    "name": "DEVICE"
                }
            ],
            "custom": false,
            "data_type": "BOOLEAN",
            "description": "Personal Hotspot Enabled",
            "description_available": false,
            "entity": "device",
            "groups": [
                {
                    "description": "Status of a device",
                    "id": "a16e37d7-5a96-4236-8787-7ab9b177cf4b",
                    "label": "Device Status",
                    "name": "device_status"
                },
                {
                    "description": "Attributes of a device",
                    "id": "1e56f89a-12eb-41c6-a6a6-a96808275951",
                    "label": "Device Attributes",
                    "name": "device_attributes"
                }
            ],
            "integration": "airwatch",
            "label": "Personal Hotspot Enabled",
            "name": "device_personal_hotspot_enabled",
            "presentation_type": "RADIO",
            "suggestion_supported": false,
            "supported_operators": [
                {
                    "description": "Equals",
                    "label": "Equals",
                    "name": "EQUALS",
                    "single": true,
                    "value": "="
                }
            ]
        }
    ]
    < RESULTS TRUNCATED FOR READABILITY >
}
```

Create Report API

Report creation requires the following information get encoded in a JSON request body:

Field	Value (see example below)	Description	Required/Optional	Default Value
name	`BK - API Test1 - Enrolled Devices`	Free-form text string naming the report. It must be unique within the context of a customer.	required	
description	`All enrolled devices with details`	Free-form text string describing the report.	optional	<empty>
integration	`airwatch`	Identifies the integration from which the data will be sourced.	required	
entity	`device`	Identifies the entity from which the data will be sourced.	required	
column_names	`Any array of column names`	Indicates which attributes of / airwatch / device / will appear in the report.	required	
filter	`A filter expression`	Selects which devices will appear in this report. In this case, the filter specified “Enrolled” devices.	required	
recipients	`An array of email address objects`	Indicates who should receive the output of the report.	optional	<empty>

Example Request

`POST https://api.sandbox.data.vmwservices.com/v1/reports`

JSON body:

```
{
    "column_names": [
        "device_last_seen",
        "device_friendly_name",
        "device_corp_liable",
        "device_enrollment_user_name",
        "device_enrollment_user_first_name",
        "device_enrollment_user_last_name",
        "device_enrollment_user_email",
        "device_platform",
        "device_os_version",
        "device_model_name"
    ],
    "description": "All enrolled devices with details",
    "entity": "device",
    "filter": " device_enrollment_status = 'Enrolled' ",
    "integration": "airwatch",
```

```
    "name": "BK - API Test1 - Enrolled Devices",
    "recipients": [
        {
            "email": "Margaret.thatcher@omnissa.com"
        }
    ]
}
```

Example Response

```
201 CREATED
{
    "data": {
        "column_names": [
            "device_last_seen",
            "device_friendly_name",
            "device_corp_liable",
            "device_enrollment_user_name",
            "device_enrollment_user_first_name",
            "device_enrollment_user_last_name",
            "device_enrollment_user_email",
            "device_platform",
            "device_os_version",
            "device_model_name"
        ],
        "created_at": "2019-06-03T17:13:07.440Z",
        "created_by": "f65716f4-0d44-4c50-8cca-05d1306fbf77",
        "description": "All enrolled devices with details",
        "entity": "device",
        "entity_label": "Devices",
        "filter": "device_enrollment_status = 'Enrolled'",
        "filter_condition": {
            "attribute": "device_enrollment_status",
            "custom_attribute": false,
            "operand_collection_present": false,
            "operands": [
                {
                    "data_type": "STRING",
                    "operand_type": "BasicOperand",
                    "value": "Enrolled"
                }
            ],
            "operator": "=",
            "parenthesized": false
        },
        "id": "5f2c2fa1-e9ec-4c55-9649-b3fbabf4d116",
        "integration": "airwatch",
        "modified_at": "2019-06-03T17:13:07.440Z",
        "name": "BK - API Test1 - Enrolled Devices",
        "recipients": [
            {
                "created_at": "2019-06-03T17:13:07.440Z",
                "created_by": "f65716f4-0d44-4c50-8cca-05d1306fbf77",
                "email": "Margaret.thatcher@omnissa.com"
            }
        ],
        "total_downloads": 0,
        "total_schedules": 0
    }
}
```

IMPORTANT

The important part of the JSON response is the "ID" returned by the system.

```
"5f2c2fa1-e9ec-4c55-9649-b3fbabf4d116"
```

This report identifier is used in subsequent API calls to setup schedules, run the report, and download the results.

> Once a report has been created, there are 2 facilities available for running the report. You may run the report any time by calling the "run report" API. You may also schedule the report to execute periodically.

Run Report API

Example Request

> Note that the report identifier obtained via the "create report API" (see above) is used in this API call to run the report.

```
POST https://api.sandbox.data.vmwservices.com/v1/reports/5f2c2fa1-e9ec-4c55-9649-b3fbabf4d116/run
```

Example Response

```
{
    "data": {
        "active": true,
        "created_at": "2019-06-03T17:28:24.554Z",
        "created_by": "f65716f4-0d44-4c50-8cca-05d1306fbf77",
        "cron_expression_detail": {
            "frequency": "ONCE"
        },
        "id": "749b30e0-6e75-4d58-ba90-3e175e2b8b8e",
        "modified_at": "2019-06-03T17:28:24.554Z",
        "modified_by": "f65716f4-0d44-4c50-8cca-05d1306fbf77",
        "name": "Single run report request 5f5abb88-ea63-43bf-8738-ed0c6a7b345a",
        "report_id": "5f2c2fa1-e9ec-4c55-9649-b3fbabf4d116",
        "schedule_type": "ADHOC",
        "start": "2019-06-03T17:28:24.553Z"
    }
}
```

> The ID returned in the JSON response ("749b30e0-6e75-4d58-ba90-3e175e2b8b8e") is the internal report schedule ID. This identifier is not referenced further in this document.

Schedule Report API

Report Schedule creation requires the following information get encoded in a JSON request body:

Field	Value (see example below)	Description	Required	Default Value
name	`Schedule Test Hourly`	The schedule name	yes	
report_id	`5f2c2fa1-e9ec-4c55-9649-b3fbabf4d116`	The report ID returned by the Create Report API	yes	
schedule_type	`CRON`	CRON (meaning scheduled)	yes	
start	`2019-06-03T19:00:00.000Z`	The time at which the schedule takes effect (maybe be in the future)	yes	
cron_expression_details	`{ "frequency": "HOURLY", "hourly": { "interval": 4 } }`	Specifies that the report should be run every 4 hours	yes	

Example Request

`POST https://api.sandbox.data.vmwservices.com/v1/reports/schedules`

```
{
    "cron_expression_detail": {
        "frequency": "HOURLY",
        "hourly": {
            "interval": 4
        }
    },
    "name": "Schedule Test Hourly",
    "report_id": "5f2c2fa1-e9ec-4c55-9649-b3fbabf4d116",
    "schedule_type": "CRON",
    "start": "2019-06-03T19:00:00.000Z"
}
```

Example Response

```
{
    "data": {
        "active": true,
        "created_at": "2019-06-03T18:24:56.199Z",
        "created_by": "f65716f4-0d44-4c50-8cca-05d1306fbf77",
        "cron_expression_detail": {
            "frequency": "HOURLY",
            "hourly": {
                "interval": 4
            }
        },
        "id": "5a384bd7-9ac4-46bb-a810-59e0b498d99f",
        "modified_at": "2019-06-03T18:24:56.199Z",
        "modified_by": "f65716f4-0d44-4c50-8cca-05d1306fbf77",
        "name": "Schedule Test Hourly",
        "report_id": "5f2c2fa1-e9ec-4c55-9649-b3fbabf4d116",
        "schedule_type": "CRON",
        "start": "2019-06-03T19:00:00.000Z"
    }
}
```

Additional Scheduling Options

The example above shows ***hourly*** scheduling. The following enumerates the complete list of cron expressions supported:

Desired Frequency	frequency	JSON format
Only once	ONCE	`"cron_expression_detail" : { "frequency" : "ONCE" }`
Each hour	HOUR	`"cron_expression_detail": { "frequency": "HOURLY", "hourly": { "interval": 4 } }`
Each day	DAILY	`"cron_expression_detail": { "frequency": "DAILY", "hour": 17, "minute": 15 }`
Each week	WEEKLY	`"cron_expression_detail": { "frequency": "WEEKLY", "hour": 17, "minute": 15, "weekly": { "days_of_week": [ "SUN", "WED" ] } }`
Each month	MONTHLY	`"cron_expression_detail": { "frequency": "MONTHLY", "hour": 17, "minute": 15, "monthly": { "day_of_month": 5 } }`
Each year	YEARLY	`"cron_expression_detail": { "frequency": "YEARLY", "hour": 17, "minute": 15, "yearly": { "day_of_month": 5, "month": "JANUARY"`

Desired Frequency	frequency	JSON format
		} }

Available Downloads API

When data from your report execution is available, it displays as an available download in the available downloads API.

`POST https://api.sandbox.data.vmwservices.com/v1/reports/5f2c2fa1-e9ec-4c55-9649-b3fbabf4d116/downloads/search`

JSON Request Body

```
{
    "offset": 0,
    "page_size": 100
}
```

The JSON body can be unspecified ({}). This defaults the paging parameters to page_size: 100 and offset:0. The value of these parameters are reflected back in the JSON response below.

JSON Response Body


```
{
    "data": {
        "offset": 0,
        "page_size": 100,
        "results": [
            {
                "created_at": "2019-06-03T17:28:47.146Z",
                "created_by": "f65716f4-0d44-4c50-8cca-05d1306fbf77",
                "id": "416c1890-70d5-4261-a440-d2dc402e52cf",
                "location": "reports/538f619e-2db4-4f07-974b-efb3e5326116/5f2c2fa1-e9ec-4c55-9649-b3fbabf4d116/BK---API-Test1---Enrolled-Devices-2019-06-03-17-28-UTC.csv",
                "modified_at": "2019-06-03T17:29:01.873Z",
                "modified_by": "11223344-5500-0000-0000-000000000000",
                "processing_time_millis": 12660,
                "report_id": "5f2c2fa1-e9ec-4c55-9649-b3fbabf4d116",
                "report_schedule_id": "749b30e0-6e75-4d58-ba90-3e175e2b8b8e",
                "start_time": "2019-06-03T17:28:47.740Z",
                "status": "COMPLETED"
            },
            {
                "created_at": "2019-06-03T17:13:15.545Z",
                "created_by": "f65716f4-0d44-4c50-8cca-05d1306fbf77",
                "id": "397e00fb-5c32-439d-b4fc-a657458c9f6d",
                "location": "reports/538f619e-2db4-4f07-974b-efb3e5326116/5f2c2fa1-e9ec-4c55-9649-b3fbabf4d116/BK---API-Test1---Enrolled-Devices-2019-06-03-17-13-UTC.csv",
                "modified_at": "2019-06-03T17:13:33.616Z",
                "modified_by": "11223344-5500-0000-0000-000000000000",
                "processing_time_millis": 13967,
                "report_id": "5f2c2fa1-e9ec-4c55-9649-b3fbabf4d116",
                "report_schedule_id": "600300be-7958-4158-a550-dcca31186fd4",
                "start_time": "2019-06-03T17:13:17.546Z",
                "status": "COMPLETED"
            }
        ],
        "total_count": 2
    }
}
```


The JSON body provides "report tracking" identifiers for 2 different data sets that are available for download (both have a status "COMPLETED"):

- "id": "416c1890-70d5-4261-a440-d2dc402e52cf"
- "id": "397e00fb-5c32-439d-b4fc-a657458c9f6d"

These identifiers can now be used to *download* the contents of this run of the report, now or at any other point in the future.

Download Report API

Using the report tracking identifiers from the previous step, we can now download the data associated with our report. This is a 2-step sequence:

1. Get a URL to the actual location of the report output.
2. Download the report data from that location.

Get the Location of the Report Output

Example Request

`GET https://api.sandbox.data.vmwservices.com/v1/reports/tracking/416c1890-70d5-4261-a440-d2dc402e52cf/download`

Example Response

```
302 FOUND
date: Mon, 03 Jun 2019 17:52:20 GMT
content-length: 0
location: https://storage.staging.dpa0.org/reports/538f619e-2db4-4f07-974b-efb3e5326116/5f2c2fa1-e9ec-4c55-9649-b3fbabf4d116/BK---API-Test1---Enrolled-Devices-2019-06-03-17-28-UT
```

⚠ The response is an HTTP redirect to a secure URL where the report contents can be downloaded.

Download the Report Output

Example Request (following the redirect)

`GET https://storage.staging.dpa0.org/reports/538f619e-2db4-4f07-974b-efb3e5326116/5f2c2fa1-e9ec-4c55-9649-b3fbabf4d116/BK---API-Test1---Enrolled-Devices-2019-06-03-17-28-UTC.csv?Expires=1559587`

Example Response

```
200 OK
content-type: application/octet-stream
content-length: 463736
...


device_last_seen_utc,device_friendly_name,device_corp_liable,device_enrollment_user_name,device_enrollment_user_first_name,device_enrollment_user_last_name,device_enrollment_user
"2019-05-04-17:40:30 UTC","VELMA's iPad Pro",CorporateDedicated,ws1intel.12983,VELMA,Bvworks,"ws1intel.12983@ws1.intelligent.staging.dpa0.org",Apple,8.4.1,"iPhone SE"
```

```
"2019-05-31-13:10:33 UTC","INGER's iPhone 7 Plus",CorporateDedicated,ws1intel.1488,INGER,Becquart,"ws1intel.1488@ws1.intelligent.staging.dpa0.org",Apple,9.0.2,"iPad Air 2"
"2019-04-29-22:36:32 UTC","KRISTEEN's iPhone 6S",CorporateDedicated,ws1intel.13390,KRISTEEN,Dayberry,"ws1intel.13390@ws1.intelligent.staging.dpa0.org",Apple,9.3.2,"iPad Air"
...
```

Report Preview API

For small searches for targeted data, the report preview API can be used to extract data. This API returns no more than 1000 results. Calling it repeatedly is discouraged and you will likely exceed the rate limits for your organization.

Example Request

`POST https://api.sandbox.data.vmwservices.com/v1/reports/5f2c2fa1-e9ec-4c55-9649-b3fbabf4d116/preview`

JSON Request Body:

```
{
    "offset": 0,
    "page_size": 3,
    "sort_ons": [
        {
            "field": "device_enrollment_user_first_name",
            "order": "DESC"
        }
    ]
}
```

Example Response

```
200 OK
{
    "data": {
        "offset": 0,
        "page_size": 3,
        "results": [
            {
                "device_corp_liable": "Undefined",
                "device_enrollment_user_email": "ws1intel.18218@ws1.intelligent.staging.dpa0.org",
                "device_enrollment_user_first_name": "ZULEMA",
                "device_enrollment_user_last_name": "Playatuna",
                "device_enrollment_user_name": "ws1intel.18218",
                "device_friendly_name": "ZULEMA's iPad Mini 4",
                "device_last_seen": 1543530146000,
                "device_os_version": "8.2.3",
                "device_platform": "Apple",
                "document_id": "538f619e-2db4-4f07-974b-18218",
                "entity_name": "airwatch_device",
                "integration": "airwatch"
            },
            {
                "device_corp_liable": "Undefined",
                "device_enrollment_user_email": "ws1intel.14386@ws1.intelligent.staging.dpa0.org",
                "device_enrollment_user_first_name": "ZULEMA",
                "device_enrollment_user_last_name": "Tonelli",
                "device_enrollment_user_name": "ws1intel.14386",
                "device_friendly_name": "ZULEMA's iPad Mini 4",
                "device_last_seen": 1505741655000,
                "device_os_version": "8.1.1",
                "device_platform": "Apple",
                "document_id": "538f619e-2db4-4f07-974b-14386",
                "entity_name": "airwatch_device",
                "integration": "airwatch"
            },
            {
                "device_corp_liable": "EmployeeOwned",
                "device_enrollment_user_email": "ws1intel.17123@ws1.intelligent.staging.dpa0.org",
                "device_enrollment_user_first_name": "ZULA",
                "device_enrollment_user_last_name": "Whaley",
                "device_enrollment_user_name": "ws1intel.17123",
                "device_friendly_name": "ZULA's Apple TV 4th Generation",
                "device_last_seen": 1559000190000,
                "device_model_name": "iPad Pro",
                "device_os_version": "9.2.3",
                "device_platform": "Apple",
                "document_id": "538f619e-2db4-4f07-974b-0000000042e3",
                "entity_name": "airwatch_device",
                "integration": "airwatch"
            }
        ],
        "total_count": 2796
    }
}
```

Report Search API

This API allows you to see which reports have been created. The "results" array in the response is an array of report definitions.

Example Request

`POST https://api.sandbox.data.vmwservices.com/v1/reports/search`

JSON request body:

```
{
    "offset": 0,
    "page_size": 2
}
```

Example Response

```
{
    "data": {
        "offset": 0,
```

```
"page_size": 2,
"results": [
    {
        "column_names": [
            "app_name",
            "device_friendly_name",
            "device_platform",
            "device_os_version",
            "app_version",
            "app_package_id",
            "app_install_status",
            "app_install_status_reason",
            "app_last_seen",
            "device_last_seen",
            "app_is_managed",
            "device_location_group_name",
            "app_type",
            "device_enrollment_status",
            "app_bundle_size_bytes",
            "app_is_installed"
        ],
        "created_at": "2019-05-24T18:31:40.298Z",
        "created_by": "f65716f4-0d44-4c50-8cca-05d1306fbf77",
        "description": "All managed and un-managed apps on all devices",
        "entity": "application",
        "entity_label": "Apps",
        "filter": "device_enrollment_status = 'EnrollmentInProgress'  AND  app_name IN ( '-47Sports.Bolts' )",
        "filter_condition": {
            "custom_attribute": false,
            "lhs": {
                "attribute": "device_enrollment_status",
                "custom_attribute": false,
                "operand_collection_present": false,
                "operands": [
                    {
                        "data_type": "STRING",
                        "operand_type": "BasicOperand",
                        "value": "EnrollmentInProgress"
                    }
                ],
                "operator": "=",
                "parenthesized": false
            },
            "logical_operator": "AND",
            "operand_collection_present": false,
            "parenthesized": false,
            "rhs": {
                "attribute": "app_name",
                "custom_attribute": false,
                "operand_collection_present": true,
                "operands": [
                    {
                        "data_type": "STRING",
                        "operand_type": "BasicOperand",
                        "value": "-47Sports.Bolts"
                    }
                ],
                "operator": "IN",
                "parenthesized": false
            }
        },
        "id": "d6af20e2-6bd0-4d89-a7a1-0d5f09507836",
        "integration": "airwatch",
        "modified_at": "2019-05-27T18:37:09.408Z",
        "modified_by": "f65716f4-0d44-4c50-8cca-05d1306fbf77",
        "name": "All Apps",
        "share_view": {
            "created_at": "2019-05-28T05:38:34.535Z",
            "created_by": "f65716f4-0d44-4c50-8cca-05d1306fbf77",
            "share_id": "1c951014-02f4-46f8-8569-0fd55ae88581",
            "shareable_link": "https://api.staging.dpa0.org/share/a/1c951014-02f4-46f8-8569-0fd55ae88581"
        },
        "total_downloads": 12,
        "total_schedules": 1
    },
    {
        "column_names": [
            "device_enrollment_user_name",
            "device_friendly_name",
            "winpatch_revision_id",
            "winpatch_update_id",
            "winpatch_kb_number",
            "winpatch_update_status",
            "winpatch_approval_status",
            "winpatch_assignment_status",
            "winpatch_update_classification",
            "winpatch_approved_date",
            "winpatch_publish_date",
            "device_enrollment_date",
            "device_enrollment_status",
            "device_last_seen",
            "device_unenrollment_date",
            "device_enrollment_user_email",
            "device_os_version",
            "device_model",
            "winpatch_kb_subject",
            "winpatch_update_type",
            "winpatch_kb_desc"
        ],
        "created_at": "2019-05-08T22:22:49.325Z",
        "created_by": "f65716f4-0d44-4c50-8cca-05d1306fbf77",
        "description": "All OS updates on all devices",
        "entity": "windowspatch",
        "entity_label": "OS Updates",
        "id": "9fc985f2-2ee9-40ef-81fb-ba86b7baf116",
```

```
                "integration": "airwatch",
                "modified_at": "2019-05-08T22:22:49.325Z",
                "name": "All Windows OS Updates",
                "total_downloads": 1,
                "total_schedules": 0
            }
        ],
        "total_count": 12
    }
}
```


Set Report Recipients API

This API allows you to specify the recipients of a report. This functionality is identical to specifying recipients when the report is created.

Example Request

`POST https://api.sandbox.data.vmwservices.com/v1/reports/5f2c2fa1-e9ec-4c55-9649-b3fbabf4d116/recipients`

JSON request body


```
{
    "recipients": [
        {
            "email": "margaret.thatcher@omnissa.com"
        },
        {
            "email": "paul.revere@omnissa.com"
        }
    ]
}
```


Example Response


```
200 OK
{
    "data": {
        "recipients": [
            {
                "created_at": "2019-06-03T18:10:51.752Z",
                "created_by": "f65716f4-0d44-4c50-8cca-05d1306fbf77",
                "email": "margaret.thatcher@omnissa.com"
            },
            {
                "created_at": "2019-06-03T18:10:51.752Z",
                "created_by": "f65716f4-0d44-4c50-8cca-05d1306fbf77",
                "email": "paul.revere@omnissa.com"
            }
        ],
        "report_id": "5f2c2fa1-e9ec-4c55-9649-b3fbabf4d116"
    }
}
```


Get Report Recipients API

To determine which recipients are associated with a report, use the GET report recipients API.

Example Request

`GET https://api.sandbox.data.vmwservices.com/v1/reports/5f2c2fa1-e9ec-4c55-9649-b3fbabf4d116/recipients`

Example Response


```
200 OK
{
    "data": {
        "recipients": [
            {
                "created_at": "2019-06-03T18:16:31.262Z",
                "created_by": "f65716f4-0d44-4c50-8cca-05d1306fbf77",
                "email": "margaret.thatcher@omnissa.com"
            },
            {
                "created_at": "2019-06-03T18:16:31.262Z",
                "created_by": "f65716f4-0d44-4c50-8cca-05d1306fbf77",
                "email": "paul.revere@omnissa.com"
            }
        ],
        "report_id": "5f2c2fa1-e9ec-4c55-9649-b3fbabf4d116"
    }
}
```


API Call Limits

The calculations of API request amounts allow sufficient capacity for your organization's number of admin users and user licenses. Omnissa Workspace ONE license levels categorize rate limits by calls per second, calls per hour, and calls per 24 hours.

Table 1. API Call Limits Per Organization

Omnissa Workspace ONE License Level	Total Calls per Second	Total Calls per Hour	Total Calls per 24 Hours
Standard	100	1000	15000
Advanced	100	1000	15000
Enterprise	100	1000	15000
Intelligence Add-On	100	1000	15000