

**JP1 Version 11**

**JP1/Operations Analytics  
REST API Reference Guide**

**3021-3-B94-10(E)**

## Notices

### ■ Relevant program products

P-2A2C-DCBL JP1/Operations Analytics 11-50 (for Windows Server 2008 R2, Windows Server 2012, Windows Server 2012 R2 and Windows Server 2016)

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## Summary of amendments

The following table lists changes in this manual (3021-3-B94-10(E)) and product changes related to this manual.

Changes	Location
The member <code>deviceClassificationLabel</code> was added to the members of the search range (IPAddrRange resource).	1.3.1, 1.8.2
The members <code>productName</code> , <code>providerName</code> , and <code>refreshDateForApp</code> were added to the members of collectors (Collectors resource).	1.3.3
The member <code>deviceClassificationLabel</code> was added to the members of hosts (Hosts resource).	1.3.13
The following members were added to or deleted from the members of applications (Applications resource). <ul style="list-style-type: none"> <li>The members <code>applicationDetailType</code> and <code>applicationHosts</code> were added.</li> <li>The members <code>resourceID</code> and <code>resourceType</code> were deleted.</li> </ul>	1.3.18
Descriptions were added about the members of application resource information (the ApplicationHost resource).	1.3.19
CUSTOM and APPLICATION_CUSTOM were added to the enumerators.	1.6
The attribute <code>deviceClassificationLabel</code> was added to the IPAddrRange (Type: IPAddrRange) object. <ul style="list-style-type: none"> <li>Obtaining Retrieval Ranges</li> <li>Obtaining Retrieval Range Information</li> <li>Creating Retrieval Ranges</li> <li>Updating Retrieval Ranges</li> </ul>	2.2.1, 2.2.2, 2.2.3, 2.2.4
The description of status code 400 was changed. <ul style="list-style-type: none"> <li>Creating Collector</li> <li>Updating Collector</li> </ul>	2.3.3, 2.3.4
A description of status code 400 was added. <ul style="list-style-type: none"> <li>Deleting Collector</li> </ul>	2.3.5
The attribute <code>applicationDetailType</code> was added to the Application (Type: Application) object. <ul style="list-style-type: none"> <li>Obtaining Application List</li> </ul>	2.7.1
The attribute <code>deviceClassificationLabel</code> was added to the Host (Type: Host) object. <ul style="list-style-type: none"> <li>Obtaining Host List</li> </ul>	2.10.1

In addition to the above changes, minor editorial corrections were made.

# Preface

This manual describes the API functions of JP1/Operations Analytics.

## ■ Intended readers

This manual is intended for:

- System administrators who are responsible for introducing and operating JP1/Operations Analytics.

## ■ Organization of this manual

PART 1: Overview

This part gives an overview of API.

PART 2: List of API functions

This part is an API reference for the APIs provided by JP1/OA.

APPENDIX A: Version Changes

This part describes the changes in each version.

## ■ Microsoft product name abbreviations

This manual uses the following abbreviations for Microsoft product names.

Abbreviation	Full name or meaning
Hyper-V	Microsoft(R) Windows Server(R) 2008 R2 Hyper-V(R)
	Microsoft(R) Windows Server(R) 2012 Hyper-V(R)
	Microsoft(R) Windows Server(R) 2012 R2 Hyper-V(R)
	Microsoft(R) Windows Server(R) 2016 Hyper-V(R)
Windows Server 2008 R2	Microsoft(R) Windows Server(R) 2008 R2 Datacenter
	Microsoft(R) Windows Server(R) 2008 R2 Enterprise
	Microsoft(R) Windows Server(R) 2008 R2 Standard
Windows Server 2012	Microsoft(R) Windows Server(R) 2012 Datacenter
	Microsoft(R) Windows Server(R) 2012 Standard
Windows Server 2012 R2	Microsoft(R) Windows Server(R) 2012 R2 Datacenter
	Microsoft(R) Windows Server(R) 2012 R2 Standard
Windows Server 2016	Microsoft(R) Windows Server(R) 2016 Datacenter
	Microsoft(R) Windows Server(R) 2016 Standard

Windows Server 2016, Windows Server 2012 R2, Windows Server 2012, and Windows Server 2008 R2 are sometimes collectively abbreviated as "Windows".

## ■ Conventions: Version numbers

The version numbers of Hitachi program products are usually written as two sets of two digits each, separated by a hyphen. For example:

- Version 1.00 (or 1.0) is written as 01-00.
- Version 2.05 is written as 02-05.
- Version 2.50 (or 2.5) is written as 02-50.
- Version 12.25 is written as 12-25.

The version number might be shown on the spine of a manual as *Ver. 2.00*, but the same version number would be written in the program as *02-00*.

## ■ Conventions: Abbreviations for product names

This manual uses the following abbreviations for product names.

Abbreviation	Full name or meaning
ESX	VMware vSphere(R) ESXi(TM)
JP1/AJS3	JP1/Automatic Job Management System 3
JP1/IM	JP1/Integrated Management
JP1/OA	JP1/Operations Analytics
JP1/PFM	JP1/Performance Management
Linux	A generic term used to refer to the following OSs monitored by JP1/OA: CentOS, Oracle Linux(R), Red Hat Enterprise Linux(R), and SUSE Linux(R)
UNIX	UNIX(R)
vCenter Server or vCenter	VMware vCenter Server(R)
VMware	VMware(R)

## ■ Conventions: Acronyms

This manual uses the following acronyms.

Acronym	Full name or meaning
FC	Fibre Channel
SMI-S	Storage Management Initiative - Specification
SMTP	Simple Mail Transfer Protocol
SNMP	Simple Network Management Protocol
SSH	Secure Shell
SSL	Secure Sockets Layer
VM	Virtual Machine

Acronym	Full name or meaning
WBEM	Web-Based Enterprise Management
WMI	Windows Management Instrumentation

## ■ Conventions: KB, MB, GB, and TB

This manual uses the following conventions: 1 KB (kilobyte) is 1,024 bytes, 1 MB (megabyte) is 1,024<sup>2</sup> bytes, 1 GB (gigabyte) is 1,024<sup>3</sup> bytes, and 1 TB (terabyte) is 1,024<sup>4</sup> bytes.

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# 1

## Overview

This chapter describes the overview of the APIs provided by JP1/OA.

## 1.1 API architecture

---

The API functions enable you to use HTTP or HTTPS to collect various types of information such as information about devices monitored by JP1/OA.

The API functions of JP1/OA conform to the REST (Representational State Transfer) architecture style.

Compliance with the REST architecture style has the following benefits:

- Independent of platforms and languages
- Compliant with the standard HTTP interface(GET/PUT/POST/DELETE methods available)
- Security tools for HTTP
- Returns standard HTTP status codes, making error processing easy.
- Uses a URI (Uniform Resource Identifier) for each resource, making it easy to access resources. The relationships between resources are easy to understand.

## 1.2 Common specifications of the API functions

---

The following specifications are common to the API functions provided by JP1/OA.

### 1.2.1 Communication protocols and port numbers

The following lists the communication protocols and port numbers that are used by APIs:

- **Communication protocol**

The HTTP and HTTPS are supported by APIs. An API uses a protocol that is used by JP1/OA for communicating with a Web browser. The supported version of HTTP or HTTPS is version 1.1. For details on communication protocols, see the following standards:

- **For the HTTP:**  
RFC 2616
- **For the HTTPS:**  
RFC 2818

- **Port number**

The default setting of the port number depends on the communication protocol.

- **For the HTTP:**  
22015
- **For the HTTPS:**  
22016

If you want to change the port number, see the section describing how to change the port number between JP1/OA server and the web browser, in the *JP1/Operations Analytics Configuration and Administration Guide*.

### 1.2.2 Security and authentication

User authentication is required in order to send an API request and receive the response. JP1/OA API functions use Basic authentication (Basic Access Authentication) or an authentication using the HSSO token.

The HSSO token is necessary for Single Sign-On. The HSSO token times out after 1,000 seconds.

In the request header, specify the authentication information to be used for user authentication. The following example specifies authentication information in the request header.

Example for basic authentication:

```
Authorization: Basic△c3lzdGVtOmlhbmFnZXI=
```

Legend: △: Single-byte space

Basic authentication requires you to specify the authentication header indicating "Basic" (authentication method) followed by a string consisting of the user name and password separated by a colon (ASCII: 0x3A), encoded with Base64 (referred to as "basic token").

Example for authentication using the HSSO token:

```
Authorization:HSSO△32bd25936120d68dceabcb49493079f8ef82a4_V0300
```

Legend: Δ: Single-byte space

The HSSO token authentication requires you to specify the authorization header indicating "HSSO" (authentication method) followed by an HSSO token.

For unauthorized requests, JP1/OA servers return status code "401" and requests user authentication.

If you use Basic authentication or authentication using the HSSO token to connect to the JP1/OA server, WWW-Authenticate: HSSO *hssso token* is returned in the response header. If you want to reconnect with the JP1/OA server by using the same session to run an API function, specify the request header as follows:

```
Authorization:HSSOΔhssso token
```

Legend: Δ: Single-byte space

JP1/OA servers return the status code "401" for unauthorized requests, and request user authentication.

### 1.2.3 Request and response formats

The JSON format is available as the data format for API requests and responses. Specify a data format in the request header. Use UTF-8 character encoding for the input and output format.

Example:

```
Accept:application/json  
Content-Type:application/json
```

### 1.2.4 Request format of the API

A request format contains a URI, method, request line, and request header. The request formats to use JP1/OA's features through APIs are as follows:

#### (1) URI format

Use URIs to specify resources for API functions. A URI contains a basic URI (from <schema> to <version>) and a relative URI (<domain> and followings). Resources are identified with the relative URI (starting from <domain>).

See the following example format and URI components list:

Format of a URI:

```
<scheme>://<host>:<port>/<application>/<version>/<domain>/<object-type>[?<query-string>]
```

or

```
<scheme>://<host>:<port>/<application>/<version>/<domain>/<object-type>/actions/  
[<action-identifier>/invoke]
```

In this manual, "<scheme>://<host>:<port>/<application>" may transcribe it into "baseURL".

The following list describes the URI components.

Item	Description	Reference
<scheme>	Protocol. Specify "HTTP" or "HTTPS".	--
<host>	Host name or IP address of the JP1/OA host accessed from an API client.	--
<port>	Port number of the JP1/OA host accessed from an API client. The default port number is 22015 for HTTP, and 22016 for HTTPS.	--
<application>	(Fixed Analytics value) Name of the application that provides the API functions.	--
<version>	Your version of the API functions. Specify "v1".	See the API version of each API function.
<domain>	Category of the resource specified for the API function.	<a href="#">1.4 Resources managed through the API</a>
<object-type>	Indicates the resource or service.	
<query-string>	Query parameter that specifies a query parameter. This specifies a condition for reducing or sorting <object-type>. The available query parameters depend on resources. The query parameters can be in any order.	<a href="#">1.2.9 HQL syntax relationships and operators</a>
<action-identifier>	This indicates the action for the resource.	--
--: Not applicable.		

The components and other details of URIs vary for each API function. For more information, see the descriptions of the applicable API function.

## (2) Supported HTTP methods

Among the handling methods defined in HTTP, the GET, POST, PUT, and DELETE methods are supported.

The available methods depend on the resources. For details about the available methods, see the description for each API.

## (3) Request Line format description

The request line consists of the following items:

```
Method△Request Path (URI) △Query△HTTP Version
```

△: Single-byte space

Item	Description	Example
Method	Request method	GET
Request Path (URI)	Path for the resource	/Analytics/v1/objects/Credentials
Query	Query parameters in the request	?\$query=instanceId+eq+50
HTTP Version	String indicating the HTTP version	HTTP/1.1

A request line is limited to 8,190 or fewer bytes. For request lines larger than the maximum, the status code 414 (Request-URI Too Long) is returned.

## (4) Information in the request header

A request header includes a data format and the language code of the responses.



Header	Description	Specifiable value	Required or not
Host	The following host information: Host name or IP address: Host name or IP address of the JP1/OA server Port number: Port number API uses to connect with JP1/OA	Depends on the user's environments	Optional
Accept	Data format of the response data.	application/json	Required
Accept-Language	Language of the response data. Specify this if with the GET, POST, or PUT method.	ja: Japanese en: English	Required
Content-Type	Format of the request bodies for the POST or PUT method.	application/json	Required
Authorization	Authentication information.	Basic authentication: User information HSSO token: hssso token	Required
Content-Length	The request body size as a decimal number for the POST or PUT method.	Request body size (unit: bytes)	Required

## 1.2.5 Response format of the API

A response for a request contains a status line, response header, and response body.

### (1) Status description

A status line contains the elements listed below.

Item	Description	Reference
Protocol	Displays the communication protocol used by the API.	--
Protocol version	Displays the version of the communication protocol used by the API.	--
Status code	Result of the request in a status code.	See the status codes of each API. For details about the status codes from errors prior to running the API, see <a href="#">1.2.6 HTTP status codes description</a> .
Message	Displays the content of the status code	
--: Not applicable.		

### (2) Response headers descriptions

Header	Description
Cache-Control	Controls the response information in the cache for the API where the GET method was specified.
Content-Type	Data format of response data.
Language	Language code of response data.
WWW-Authenticate	Outputs the authenticated HSSO token.
Warning	When the API completes successfully but there is a problem with the status of the server, details display in U.S. English (only U.S. English is allowed in the HTTP standard specification).

### (3) Response body description

The response body includes the response data returned when an API function is called. The data format of the response data is defined in the request header. The format of the response data depends on the API function. See the description for each API function.

#### 1.2.6 HTTP status codes description

Status code	Name	Description
200	OK	Request processed normally
201	Created	Returned instead of 200 when a resource is successfully created
204	No Content	Returned instead of 200 when a request was successful but there is no response to return
303	See Other	Returned instead of 200 if another URI processes the request
400	Bad Request	The request is invalid. This includes invalid values specified for the query parameter.
401	Unauthorized	Notifies you that access to the resource requires authentication. The authentication method is shown in the WWW-Authenticate header. If the request including the authorization header is already applied, this code indicates that the authentication for the user information or the HSSO token was rejected. Possible reasons include incorrect user information (user ID or password) incorrect HSSO token, and a lack of rights to use JP1/OA.
403	Forbidden	The user does not have the permissions required to do the operation.
404	Not found	The specified resource or operation was not found.
405	Method Not Allowed	A valid method was not available for the specified resource. Always list the available methods.
406	Not Acceptable	The specified response format is not supported.
409	Conflict	Conflicts with other data in the server prevent the request from completing.
412	Precondition Failed	The request was not accepted because of a failure in the preconditions.
414	Request-URI Too Long	The request line is too long.
415	Unsupported Media Type	The specified request format is not supported.
500	Server-Side Error	An error occurred in a server process.
503	Service Unavailable	An error occurred on the repository server.

For the status codes of 4XX and 5XX, a response body might be returned in "text/html" or "text/plain" form. In this case, "Content-Type: text/html" or "Content-Type: text/plain" is in a response header.

Responses provide more detailed content.

Whether to use these status codes depend on the APIs. See the description for each API.

#### 1.2.7 Error information for errors in API requests

If an error occurs in an API request, the schema in the following table is returned as the response information. For details on error information for schemas other than the schema in the following table, see the *JP1/Operations Analytics Messages*.

Member name	Data type	Description
errorSource	string	API function for which the error occurred.
message	string	Message about the error.
messageID	string	Message ID of the error. If an error occurs in a request because of a reason such as incorrect JSON syntax, the message ID is "generic error."
application	string	Information about the application that provides the API function for which the error occurred (Analytics).

## 1.2.8 Query parameters in the API

If you add search conditions to a request by using query parameters, you can filter or sort the output results of the response.

### (1) Query parameter for all APIs

Parameter	Description	Value	Default value
Alt	Specify input/output data format in the same way as the Content-Type header and Accept header in a request.	json	Not applicable.

### (2) Query parameters for some APIs

The following table lists the parameters you can specify in the requests to obtain a list of resources (for example, monitored profiles and virtual machines). The parameters depend on the APIs. See the description for each API.

Parameter	Description	Value#	Default value
\$query	Filters the output results by using the specified conditions.	See <a href="#">1.2.9 HQL syntax relationships and operators</a> .	Not applicable.
\$order-by	Sorts the output results by the specified member name.	Member name [{ASC  DESC}](), member name [{ASC  DESC}] ASC: Ascending order DESC: Descending order	ASC
\$offset	Specifies the position of the initial object of the range of information collection. Specify the maximum number of objects in a response with \$count. page is given priority over \$offset.	0 to 2147483647	0
\$count	Specifies the maximum number of objects in a response, starting from the initial object's position specified by \$offset. pageSize has priority over \$count. If the sum of \$count and \$offset exceeds 2,147,483,647, the IDs of the obtained objects	1 to 2147483647	100

Parameter	Description	Value#	Default value
Scout	range from the value of \$offset to 2,147,483,647.	1 to 2147483647	100
page	Gets information about a specific page when resources are divided into pages. You also need to specify pageSize. page has priority over \$offset.	1 to 2147483647	Not applicable.
pageSize	Specifies the maximum number of objects to be displayed on one page. pageSize has priority over \$count.	1 to 2147483647	Not applicable.

#:If you want to specify a character string that cannot be expressed as a URL, use UTF-8 encoding and encode the character string. pageSize refers to the maximum number of objects in one page. Page refers to the page number to display. If you set page and pageSize, the pagination object receives the total number of resources and pages. This value enables you to see whether there are any of the following pages: As shown in the expression below, page and pageSize are converted the values of \$offset.

$\$offset = \text{pageSize} * (\text{page} - 1)$

The status code 400 (Bad Request) is returned if page and pageSize are out of the range of \$offset.

## 1.2.9 HQL syntax relationships and operators

HQL is a query language that can filter collections of data by using various query parameters, including \$query and supported operators.

Use UTF-8 encoding and encode characters and symbols that cannot be expressed as a URL.

### Syntax

To define a collection of a resource request, use the following expressions:

```

expression ::= (" expression ") | binary-expression | expression junction
expression
junction ::= ( "and" | "or" )

binary-expression ::= (compare-expression | tuple-expression)

compare-expression ::= name-expression compare-operation value-expression

name-expression ::= property-name | "[" property-name "]"
compare-operation ::= ( "eq" | "=" | "ne" | "<>" | "!=" | "gt" | ">" | "lt" | "<"
| "ge" | ">=" | "le" | "<=" | "starts" | "ends" )
value-expression ::= ( string-expression | number-expression | boolean-
expression )

string-expression ::= "'" ([^'] | [']{2})* "'"
number-expression ::= ( "0" | "1" | "2" | "3" | "4" | "5" | "6" | "7" | "8" | "9" )
+
boolean-expression ::= "true" | "false" | "TRUE" | "FALSE"

tuple-expression ::= name-expression tuple-operation tuple-value-expression
tuple-value-expression ::= "[" value-expression ("," value-expression)* "]"
tuple-operation ::= ( "in" | "not in" )

```

*property-name* is a member name defined in a resource.

*value-expression* displays a string expression, number expression, or Boolean expression. This value is different from the actual data type of the member defined in a resource. The "ISO8601String" type, for example, is dealt with as a string in ISO 8601 format. As a result, it displays as a *string-expression*.

The following table describes the relationship between the data types and expression formats:

Type	Expression
int/long/float	number-expression
enum	string-expression
String	string-expression
ISO8601String	string-expression
URLString	string-expression
boolean	boolean-expression

The following table lists and describes the operators supported by HQL in priority as indicated in the Priority column.

Operator	Description	Expression	Priority (1-3)
eq	Equal	number-expression, string-expression (string, enum), boolean-expression	1
ne	Not equal	number-expression, string-expression (string, enum), boolean-expression	1
gt	Greater than	number-expression, string-expression (string, enum),	1
lt	Smaller than	number-expression, string-expression (string, enum),	1
ge	Equal or greater than	number-expression, string-expression (string, enum),	1
le	Equal or smaller than	number-expression, string-expression (string, enum),	1
starts <sup>#</sup>	Start value	string-expression (string, excluding ISO8601String)	1
ends <sup>#</sup>	End value	string-expression (string, excluding ISO8601String)	1
likes <sup>#</sup>	Included	string-expression (string, excluding ISO8601String)	1
in	Included	number-expression, string-expression (string, enum), boolean-expression	1
not in	Not included	number-expression, string-expression (string, enum), boolean-expression	1
and	Both true	compare-expression, tuple-expression	2
or	Either of them true	compare-expression, tuple-expression	3
# The operator name is not case sensitive.			

Example:

Before URL encoding:

```
...?$query=instanceID in [1000,1001,1002] and status eq 'Warning'
```

After URL encoding:

```
...?$query=instanceID%20in%20%5b1000%2c1001%2c1002%5d%20and%20status%20eq%20%27Warning%27
```

## 1.2.10 Domain object format

A domain refers to the storage location supported by JP1/OA. A domain object refers to a resource.

Supported data type

The following table describes the supported data types.

Type	Description
boolean	True or false
float	Floating-point decimal
int	32-bit signed integer
long	64-bit signed integer
string	Text data

ISO8601String, URLString, and enum are extended expressions for the string type.

Date and time format

To specify the date and time, use ISO 8601 format. In this format, you can omit all information except year (yyyy). If the date or time is omitted, the minimum value is automatically added. If the time zone is omitted, the time zone set for the JP1/OA server is the default.

Note, however, that you cannot omit the date and time if you use \$query to specify them. If you get time information in JSON format, the time is output in a format where a colon is not used for time zone information (for example, 2014-12-09T18:50:30.500+0900). To specify the time information in JSON format as an input for an API, add a colon in the time zone (for example, 2014-12-09T18:50:30.500+09:00). If you do not add a colon, an error occurs.

If the data type of a member of a resource is "ISO8601String," the year, month, date, time, and time zone display in the response body in the format shown in the following table:

Format	Example	Time processed by JP1/OA
yyyy-mm-ddThh:mm:ss.mmmTZD	2015-12-09T18:50:30.500+09:00	2015-12-09T18:50:30.500+09:00
yyyy-mm-ddThh:mm:ss.mmm	2015-12-09T18:50:30.500.000	2015-12-09T18:50:30.500.000[time-zone-of-the hostserver]
yyyy-mm-ddThh:mm:ssTZD	2015-12-09T18:50:30+09:00	2015-12-09T18:50:30.000+09:00
yyyy-mm-ddThh:mmTZD	2015-12-09T18:50+09:00	2015-12-09T18:50:00.000+09:00
yyyy-mm-ddThhTZD	-12-09T18+09:00	2015-12-09T18:00:00.000+09:00
yyyy-mm-dd	2015-12-09	2015-12-09T00:00:00.000[time-zone-of-the host-server]
yyyy-mm	2015-12	2015-12-01T00:00:00.000[time-zone-of-the host-server]

Format	Example	Time processed by JP1/OA
yyyy	2015	2015-01-01T00:00:00.000[ time-zone-of-the host-server]

## 1.3 Resource members

Functions provided by JP1/OA are categorized as resources. As a member, you can acquire information about resources through response bodies. The following tables show the member names, data types, and descriptions of the resources to be returned, and whether each member is applicable to \$query and \$order-by for each function.

Points:

- When a response is returned and the value of a member does not exist, the member might be omitted in the response body.
- JP1/OA might return unsupported members. For details about supported members, see the tables for each function below.
- When you acquire the list of resources, the members of each function are acquired as a list. For details about the list format, see [1.3.20 Members of an acquired list of resources](#).
- Unless otherwise specified, specify dates according to [1.2.10 Domain object format](#).

### 1.3.1 Members of the search range

This section describes the members of the search range (IPAddrRange resource).

Member name	Data type	Description	Whether to change	Whether applicable to filter conditions (\$query)	Whether applicable to sort conditions (\$order-by)
instanceID	long	ID for identifying the instance	N	N	N
name	string	Name of the search range	Y	N	N
ipAddrRange	string[]	Search range. Specify the start IP address of the search in the number 0 item of the list. Specify the end IP address of the search in the number 1 item of the list.	Y	N	N
usePing	boolean	Whether to use ping on the target device when performing a search <ul style="list-style-type: none"><li>• true: Ping is used.</li><li>• false: Ping is not used.</li></ul>	Y	N	N
useAllCredential	boolean	Whether to use all Credential resources <ul style="list-style-type: none"><li>• true: All Credential resources are used.</li><li>• false: Not all Credential resources are used.</li></ul>	Y	N	N
selectedCredentails	Credential[]	List of authentication information items to be used in a search	Y	N	N
deviceClassificationLabel	string	Name of the classification label assigned to the device	Y	N	N

(Legend) Y: Applicable, N: Not applicable



## 1.3.2 Members of the authentication information

This section explains the Members of the authentication information (Credentials resource).

Member name	Data type	Description	Whether to change	Whether applicable to filter conditions (\$query)	Whether applicable to sort conditions (\$order-by)
instanceID	long	ID for identifying instances	N	Y	Y
name	string	Name of authentication information	Y	Y	Y
credentialType	enum	Protocol used for connections to monitoring targets. For details about the specifiable values, see the table ProtocolType in 1.6 List of enumerators.	N	Y (only to eq, ne, in, not in)	N
userId	string	Use 64 or fewer characters. If you use SNMP v3 for connections to monitoring targets, the value of the username member is set.	Y	Y	N
password	string	Password used for authentication. Specify a Base64 encoded string of 255 or fewer bytes.	Y	N	N
passwordNotRequired	boolean	Whether a password is needed for authentication. <ul style="list-style-type: none"> <li>true: A password is needed</li> <li>false: A password is not needed</li> </ul> If this member is omitted, false is set. This setting takes effect only if WMI is used for connection to the monitoring target.	Y	N	N
portNumber	integer	Port number. This member is only set when the protocol used for connections to monitoring targets is SSH, SMI-S WBEM, or SNMP.	Y	N	N
rootPassword	string	Root password used for authentication. Specify a Base64 encoded string of 255 or fewer bytes. This member is only enabled when SSH is used for connections to monitoring targets.	Y	N	N
updatePassword	boolean	Whether to change the password (password). <ul style="list-style-type: none"> <li>true: Password is changed</li> <li>false: Password is not changed</li> </ul> If this member is omitted, false is set.	Y	N	N
updateRootPassword	boolean	Whether to change the root password (rootPassword). <ul style="list-style-type: none"> <li>true: Root password is changed</li> <li>false: Root password is not changed</li> </ul> If this member is omitted, false is set. This member is only enabled when SSH is used for connections to monitoring targets.	Y	N	N
ssl	boolean	Whether to use SSL (HTTPS) for connections to monitoring targets. <ul style="list-style-type: none"> <li>true: SSL is used</li> <li>false: SSL is not used</li> </ul>	Y	N	N

Member name	Data type	Description	Whether to change	Whether applicable to filter conditions (\$query)	Whether applicable to sort conditions (\$order-by)
ssl	boolean	If this member is omitted, false is set. This member is only enabled when SMI-S WBEM is used for connections to monitoring targets.	Y	N	N
domainname	string	Domain name. This member is only enabled when WMI is used for connections to monitoring targets.	Y	N	N
namespace	string	Name space. This member is only enabled when SMI-S WBEM is used for connections to monitoring targets.	Y	N	N
community	string	Community name. This member is only enabled when SNMP is used for connections to monitoring targets.	Y	N	N
snmpVersion	enum	SNMP version. This member is only enabled when SNMP is used for connections to monitoring targets. For details about the specifiable values, see the table SnmpVersion in 1.6 <a href="#">List of enumerators</a> .	Y	N	N
username	string	User name used for authentication. Use 64 or fewer characters. Only specify this member when using SNMP v3 for connections to monitoring targets.	Y	N	N
authenticationEnabled	boolean	Whether to perform SMTP authentication. <ul style="list-style-type: none"> <li>true: SMTP authentication is enabled</li> <li>false: SMTP authentication is disabled</li> </ul> If this member is omitted, false is set. Only specify this member when using SNMP v3 for connections to monitoring targets.	Y	N	N
authenticationPassphrase	string	Authentication pass phrase. Encode a string of 255 or fewer bytes in Base64. Only specify this member when using SNMP v3 for connections to monitoring targets.	Y	N	N
updateAuthenticationPassphrase	boolean	Whether to change the authentication pass phrase. <ul style="list-style-type: none"> <li>true: Authentication pass phrase is changed</li> <li>false: Authentication pass phrase is not changed</li> </ul> If this member is omitted, false is set. Only specify this member when using SNMP v3 for connections to monitoring targets.	Y	N	N
authenticationProtocol	enum	Protocol for authentication. Only specify this member when using SNMP v3 for connections to monitoring targets. For details about the specifiable values, see the table AuthenticationProtocol in 1.6 <a href="#">List of enumerators</a> .	Y	N	N
privacyEnabled	boolean	Whether to enable privacy. <ul style="list-style-type: none"> <li>true: Privacy is enabled</li> </ul>	Y	N	N

Member name	Data type	Description	Whether to change	Whether applicable to filter conditions (\$query)	Whether applicable to sort conditions (\$order-by)
privacyEnabled	boolean	<ul style="list-style-type: none"> <li>false: Privacy is disabled</li> </ul> If this member is omitted, false is set. Only specify this member when using SNMP v3 for connections to monitoring targets.	Y	N	N
privacyPassphrase	string	Pass phrase for privacy. Encode a string of 255 or fewer bytes in Base64. Only specify this member when using SNMP v3 for connections to monitoring targets.	Y	N	N
updatePrivacyPassphrase	boolean	Whether to change the pass phrase for privacy. <ul style="list-style-type: none"> <li>true: Pass phrase is changed</li> <li>false: Pass phrase is not changed</li> </ul> If this member is omitted, false is set. Only specify this member when using SNMP v3 for connections to monitoring targets.	Y	N	N
privacyProtocol	string	Protocol for privacy. <ul style="list-style-type: none"> <li>DES: DES is used</li> <li>AES128: AES128 is used</li> </ul> Only specify this member when using SNMP v3 for connections to monitoring targets.	Y	N	N
numOfRelatedResources	integer	Number of resources found by using authentication information	N	N	N

(Legend) Y: Applicable, N: Not applicable

### 1.3.3 Members of collectors

This section explains the Members of collectors (Collectors resource).

Member name	Data type	Description	Whether to change	Whether applicable to filter conditions (\$query)	Whether applicable to sort conditions (\$order-by)
instanceID	long	ID for identifying instances	N	Y	Y
name	string	Collector name	Y	Y	Y
collectorType	string	Collector type. <ul style="list-style-type: none"> <li>VCENTER: The management software is vCenter.</li> <li>AJS: The management software is JP1/AJS3 - Manager.</li> <li>IM: The management software is JP1/IM - Manager.</li> </ul>	N	Y (only to eq, ne, in, not in)	N

Member name	Data type	Description	Whether to change	Whether applicable to filter conditions (\$query)	Whether applicable to sort conditions (\$order-by)
collectorType	string	<ul style="list-style-type: none"> <li>PFM: The management software is JP1/PFM - Manager.</li> <li>CUSTOM: The management software is custom application.</li> </ul>	N	Y (only to eq, ne, in, not in)	N
osType	enum	Type of OS. This member is only set when the collectorType is AJS, PFM, or IM. For details about the specifiable values, see the table CollectorOsType in <a href="#">1.6 List of enumerators</a> .	N	N	N
autoCollectionType	enum	Settings for periodic executions of the collector. For details about the specifiable values, see the table ConnectType in <a href="#">1.6 List of enumerators</a> .	N	Y (only to eq, ne, in, not in)	N
connectResult	enum	Last execution result of the collector. For details about the specifiable values, see the table ConnectStatusType in <a href="#">1.6 List of enumerators</a> .	N	Y (only to eq, ne, in, not in)	N
refreshStatus	enum	Execution status of the collector. For details about the specifiable values, see the table ConnectStatusType in <a href="#">1.6 List of enumerators</a> .	N	N	N
message	string	Message of the execution result of the collector	N	N	N
lastRefreshed	ISO8601String	Last refresh date and time	N	N	N
refreshDateForInventory	ISO8601String	Refresh date and time for the configuration information	N	N	N
refreshDateForPerformance	ISO8601String	Refresh date and time for the performance information	N	N	N
numOfHypervisors	integer	Number of hypervisors found by the collector	N	N	N
numOfVms	integer	Number of virtual machines found by the collector	N	N	N
numOfApplications	integer	Number of applications found by the collector	N	N	N
collectorCredentials	CollectorCredential[]	Authentication information used for connections to monitoring targets. For details, see <a href="#">1.3.4 Members of authentication information used by collectors</a> .	--	--	--
productName	string	Collected-product name	N	Y	Y
providerName	string	Provider name	N	Y	Y

Member name	Data type	Description	Whether to change	Whether applicable to filter conditions (\$query)	Whether applicable to sort conditions (\$order-by)
refreshDateForApp	ISO8601String	Date definition was applied	N	N	N

(Legend) Y: Applicable, N: Not applicable, --: Not supported

### 1.3.4 Members of authentication information used by collectors

This section explains the Members of authentication information used by collectors (Collector Credential resource).

Member name	Data type	Description	Whether to change	Whether applicable to filter conditions (\$query)	Whether applicable to sort conditions (\$order-by)
instanceID	long	ID for identifying instances	N	N	N
ipAddress	string	IP address or host name used for connections to management software	N	N	N
userId	string	User ID used for connections to management software. Specify a string of 255 or fewer bytes.	Y	N	N
password	string	Password used for connections to management software. Encode a string of 255 or fewer bytes in Base64.	Y	N	N
updatePassword	boolean	Whether to change the password used for connections to management software. <ul style="list-style-type: none"> <li>true: Password is changed</li> <li>false: Password is not changed</li> </ul> If this member is omitted, false is set.	Y	N	N
portNumber	string	Port number used for connections to management software	Y	N	N
hypertextTransferProtocolType	enum	Whether to use SSL (HTTPS) for connections to management software. For details about the specifiable values, see the table HypertextTransferProtocolType in <a href="#">1.6 List of enumerators</a> . If this member is omitted, false is set.	N	N	N
domainName	string	Domain name: Used for application linkage when Windows is selected.	Y	N	N
rootPassword	string	root password: Used for application linkage when Unix is selected.	Y	N	N
updateRootPassword	boolean	To change the password, set true. Use only for updates.	Y	N	N
useAdministrativeShares	boolean	To share management, set true.	Y	N	N
shareName	string	share Name	Y	N	N

Member name	Data type	Description	Whether to change	Whether applicable to filter conditions (\$query)	Whether applicable to sort conditions (\$order-by)
sharedFolder	string	shared Folder	Y	N	N
logicalHostName	string	Logical Host Name	Y	N	N
useLogicalHostName	boolean	To use logical host name, set true.	Y	N	N

(Legend) Y: Applicable, N: Not applicable

### 1.3.5 Members of a user profile

This section explains the Members of a user profile (UserThresholdProfiles resource).

Member name	Data type	Description	Whether to change	Whether applicable to filter conditions (\$query)	Whether applicable to sort conditions (\$order-by)
instanceID	long	ID for identifying instances	N	Y	Y
profileName	string	User profile name. Use 128 or fewer characters.	Y	Y	Y
description	string	Description of the user profile. Use 256 or fewer characters.	Y	Y	Y
resourceType	string	Resource type to which the user profile can be applied. <ul style="list-style-type: none"> <li>VM: Virtual machine</li> <li>VOLUME: Volume</li> <li>WINDOWS: Windows</li> <li>LINUX_UNIX: Linux or UNIX</li> </ul>	Y (only when a new profile is created)	Y (only to eq)	N
profileType	string	Change type of the user profile. <ul style="list-style-type: none"> <li>User: Profile is created by a user</li> <li>Default: Profile is registered by default</li> <li>Preset: Profile for which the initial settings are set</li> </ul>	N(Specify User when creating a new profile)	Y (only to eq, ne, in, not in)	N
thresholdValues	UserThresholdValue[]	Details of the threshold set in the user profile. For details, see <a href="#">1.3.6 Members of a user profile threshold</a> .	--	--	--
numOfResources	integer	Number of resources to which the user profile is assigned	N	N	N
autoAssignFilters	string[]	Name of the automatic assignment rule	N	N	N

(Legend) Y: Applicable, N: Not applicable, --: Not supported

## 1.3.6 Members of a user profile threshold

This section explains the Members of a user profile threshold (UserThresholdValue resource).

Member name	Data type	Description	Whether to change	Whether applicable to filter conditions (\$query)	Whether applicable to sort conditions (\$order-by)
instanceID	long	ID for identifying instances	N	N	N
monitoring	boolean	Whether the threshold is monitored. <ul style="list-style-type: none"><li>true: Threshold is monitored</li><li>false: Threshold is not monitored</li></ul> If this member is omitted, false is set.	Y	N	N
metricType	string	Identifier of the threshold. This member is not supported.	N	N	N
displayName	string	Display name of the threshold	N	N	N
unit	string	String indicating the unit of the threshold	N	N	N
proportion	boolean	Direction of the threshold. <ul style="list-style-type: none"><li>true: When the measured value falls below the threshold, an error or warning occurs.</li><li>false: When the measured value exceeds the threshold, an error or warning occurs.</li></ul>	N	N	N
thresholdValueOfWarning	float	Threshold for displaying warnings. You need to specify this threshold according to the following conditions: <ul style="list-style-type: none"><li>Multiple of step</li><li>SizeLess than or equal to max</li><li>Greater than or equal to min</li></ul>	Y	N	N
thresholdValueOfError	float	Threshold for showing errors. You need to specify this threshold according to the following conditions: <ul style="list-style-type: none"><li>Multiple of step</li><li>SizeLess than or equal to max</li><li>Greater than or equal to min</li></ul>	Y	N	N
stepSize	float	Increment for the threshold	N	N	N
max	float	Maximum value that can be specified for the threshold	N	N	N
min	float	Minimum value that can be specified for the threshold	N	N	N

(Legend) Y: Applicable, N: Not applicable

## 1.3.7 Members of a system profile

This section explains the Members of a system profile (SystemThresholdProfiles resource).

Member name	Data type	Description	Whether to change	Whether applicable to filter conditions (\$query)	Whether applicable to sort conditions (\$order-by)
instanceID	long	ID for identifying instances	N	Y	Y
profileName	string	System profile name. Use 128 or fewer characters.	Y	Y	Y
description	string	Description of the system profile. Use 256 or fewer characters.	Y	Y	Y
resourceType	string	Resource type to which the system profile can be applied. <ul style="list-style-type: none"> <li>ESX: ESX server</li> <li>HYPERV: Hyper-V server</li> <li>IPSWITCH: IP Switch</li> <li>FCSWITCH: FC Switch</li> </ul>	Y (only when a new profile is created)	Y (only to eq)	N
profileType	string	Change type of the system profile. <ul style="list-style-type: none"> <li>User: Profile is created by a user</li> <li>Default: Profile is registered by default</li> <li>Preset: Profile for which the initial settings are set</li> </ul>	N(Specify User when creating a new profile)	Y (only to eq, ne, in, not in)	N
thresholdValues	SystemThresholdValue[]	Details of the threshold set in the system profile. For details, see <a href="#">1.3.8 Members of a system profile threshold</a> .	--	--	--
numOfResources	integer	Number of resources to which the system profile is assigned	N	N	N

(Legend) Y: Applicable, N: Not applicable, --: Not supported

### 1.3.8 Members of a system profile threshold

This section explains the Members of a system profile threshold (SystemThresholdValue resource).

Member name	Data type	Description	Whether to change	Whether applicable to filter conditions (\$query)	Whether applicable to sort conditions (\$order-by)
instanceID	long	ID for identifying instances	N	N	N
monitoring	boolean	Whether the threshold is monitored. <ul style="list-style-type: none"> <li>true: Threshold is monitored</li> <li>false: Threshold is not monitored</li> </ul> If this member is omitted, false is set.	Y	N	N
metricType	string	Identifier of the threshold. This member is not supported.	N	N	N
displayName	string	Display name of the threshold.	N	N	N



Member name	Data type	Description	Whether to change	Whether applicable to filter conditions (\$query)	Whether applicable to sort conditions (\$order-by)
unit	string	String indicating the unit of the threshold.	N	N	N
proportion	boolean	Direction of the threshold. <ul style="list-style-type: none"> <li>true: When the measured value falls below the threshold, an error or warning occurs.</li> <li>false: When the measured value exceeds the threshold, an error or warning occurs.</li> </ul>	N	N	N
thresholdValueOfWarning	float	Threshold for displaying warnings. You need to specify this threshold according to the following conditions: <ul style="list-style-type: none"> <li>Multiple of step</li> <li>SizeLess than or equal to max</li> <li>Greater than or equal to min</li> </ul>	Y	N	N
thresholdValueOfError	float	Threshold for displaying errors. You need to specify this threshold according to the following conditions: <ul style="list-style-type: none"> <li>Multiple of step</li> <li>SizeLess than or equal to max</li> <li>Greater than or equal to min</li> </ul>	Y	N	N
stepSize	float	Increment for the threshold	N	N	N
max	float	Maximum value that can be specified for the threshold	N	N	N
min	float	Minimum value that can be specified for the threshold	N	N	N

(Legend) Y: Applicable, N: Not applicable

### 1.3.9 Members of a consumer

This section explains the Members of a consumer (Groups resource).

Member name	Data type	Description	Whether to change	Whether applicable to filter conditions (\$query)	Whether applicable to sort conditions (\$order-by)
instanceID	long	ID for identifying instances	N	Y	Y
name	string	Consumer name. Use 128 or fewer characters.	Y	Y	Y
status	enum	Status of the consumer. For details about the specifiable values, see the table NodeStatusType in 1.6 List of enumerators.	N	N	N
gradeKey	string	ID for identifying grades	Y	Y	Y
gradeName	string	Grade name	N	N	N

Member name	Data type	Description	Whether to change	Whether applicable to filter conditions (\$query)	Whether applicable to sort conditions (\$order-by)
gradeDisplayOrder	integer	Priority of the grade	N	N	N
description	string	Description of the consumer. Use 1000 or fewer characters.	Y	Y	Y
templateCreatorType	enum	Change type of the consumer. For details about the specifiable values, see the table <a href="#">TemplateCreatorType</a> in <a href="#">1.6 List of enumerators</a> .	Y (only when a new profile is created)	Y (only to eq, ne, in, not in)	N
numOfVolumes	integer	Number of volumes to which the consumer is assigned.	N	N	N
numOfVMs	integer	Number of virtual machines to which the consumer is assigned	N	N	N
numOfHosts	integer	Number of hosts to which the consumer is assigned	N	N	N
numOfHypervisors	integer	Number of hypervisors to which the consumer is assigned	N	N	N
numOfApplications	integer	Number of applications to which the consumer is assigned	N	N	N
vmAutoAssignFilters	string[]	Name of the automatic assignment rule set for the virtual machines	N	N	N
hostAutoAssignFilters	string[]	Name of the automatic assignment rule set for the hosts	N	N	N

(Legend) Y: Applicable, N: Not applicable

### 1.3.10 Members of a grade

This section explains the Members of a grade (Grade resource).

Member name	Data type	Description	Whether to change	Whether applicable to filter conditions (\$query)	Whether applicable to sort conditions (\$order-by)
gradeKey	string	ID for identifying grades	N	Y	Y
name	string	Grade name	N	Y	Y
displayOrder	string	Priority of the grade	N	Y	Y

(Legend) Y: Applicable, N: Not applicable

### 1.3.11 Members of a virtual machine

This section explains the Members of a virtual machine (VirtualMachines resource).

Member name	Data type	Description	Whether to change	Whether applicable to filter conditions (\$query)	Whether applicable to sort conditions (\$order-by)
instanceID	long	ID for identifying instances	N	Y	Y
name	string	Virtual machine name	N	Y	Y
ipAddress	string	IP address of the virtual machine	N	N	N
status	enum	Status of the virtual machine. For details about the specifiable values, see the table <a href="#">NodeStatusType</a> in <a href="#">1.6 List of enumerators</a> .	N	Y (only to eq, ne, in, not in)	N
monitorStatus	enum	Monitoring status of the virtual machine. For details about the specifiable values, see the table <a href="#">ComponentMonitorType</a> in <a href="#">1.6 List of enumerators</a> .	N	Y (only to eq, ne, in, not in)	N
description	string	Detailed information about the virtual machine	N	Y	Y
collectorID	long	ID for identifying a collector used for detection	N	N	N
collectorName	string	Name of a collector used for detection	N	N	N
autoCollectionType	enum	Settings for periodic executions of the collector. For details about the specifiable values, see the table <a href="#">ConnectType</a> in <a href="#">1.6 List of enumerators</a> .	N	N	N
clusterName	string	Cluster environment where the virtual machine is registered	N	Y	Y
hypervisorType	enum	Type of hypervisor to which the virtual machine belongs. For details about the specifiable values, see the table <a href="#">ArgusNodeType</a> in <a href="#">1.6 List of enumerators</a> .	N	Y (only to eq, ne, in, not in)	N
hypervisorID	long	ID for identifying the hypervisor to which the virtual machine belongs	N	Y	Y
hypervisorName	string	Name of the hypervisor to which the virtual machine belongs	N	Y	Y
hypervisorMonitorStatus	enum	Monitoring status of the hypervisor. For details about the specifiable values, see the table <a href="#">ManagementLevelType</a> in <a href="#">1.6 List of enumerators</a> .	N	Y (only to eq, ne, in, not in)	N
hostName	string	Name of a host running on the virtual machine	N	Y	Y
thresholdProfileID	long	ID for identifying the assigned profile	N	N	N
thresholdProfileName	string	Name of the assigned profile	N	N	N
groupIDs	long[]	ID for identifying the assigned consumer	N	N	N
groupNames	String[]	Name of the assigned consumer	N	N	N
usedCredentialID	long	ID for identifying authentication information used for detection	N	N	N
usedCredentials	string	Name of authentication information used for detection	N	N	N

Member name	Data type	Description	Whether to change	Whether applicable to filter conditions (\$query)	Whether applicable to sort conditions (\$order-by)
accessPointType	enum	Type of the protocol or collector for authentication information used for detection. For details about the specifiable values, see the table ProtocolType in 1.6 List of enumerators.	N	N	N
accessPointIpAddress	string	IP address or host name used for connections to monitoring targets or management software	N	N	N
accessPointUser	string	User ID used for connections to monitoring targets or management software	N	N	N

(Legend) Y: Applicable, N: Not applicable

### 1.3.12 Members of a hypervisor

This section explains the Members of a hypervisor (Hypervisors resource).

Member name	Data type	Description	Whether to change	Whether applicable to filter conditions (\$query)	Whether applicable to sort conditions (\$order-by)
instanceID	long	ID for identifying instances	N	Y	Y
name	string	Name of the hypervisor	N	Y	Y
ipAddress	string	IP address of the hypervisor	N	N	N
status	enum	Status of the hypervisor. For details about the specifiable values, see the table NodeStatusType in 1.6 List of enumerators.	N	Y (only to eq, ne, in, not in)	N
monitorStatus	enum	Monitoring status of the hypervisor. For details about the specifiable values, see the table ManagementLevelType in 1.6 List of enumerators.	N	Y (only to eq, ne, in, not in)	N
description	string	Detailed information about the hypervisor	N	Y	Y
collectorID	long	ID for identifying a collector used for detection	N	N	N
collectorName	string	Name of a collector used for detection	N	N	N
autoCollectionType	enum	Settings for periodic executions of the collector. For details about the specifiable values, see the table ConnectType in 1.6 List of enumerators.	N	N	N
clusterName	string	Name of the cluster where the hypervisor is registered	N	Y	Y
usedCredentialID	long	ID for identifying authentication information used for detection	N	N	N
usedCredentials	string	Name of authentication information used for detection	N	N	N

Member name	Data type	Description	Whether to change	Whether applicable to filter conditions (\$query)	Whether applicable to sort conditions (\$order-by)
hypervisorType	string	Type of the hypervisor. <ul style="list-style-type: none"> <li>SERVER_ESX: ESX server</li> <li>SERVER_HYPERV: Hyper-V server</li> </ul>	N	Y (only to eq, ne, in, not in)	N
thresholdProfileID	long	ID for identifying the assigned profile	N	N	N
thresholdProfileName	string	Name of the assigned profile	N	N	N
accessPointType	enum	Type of the protocol or collector for authentication information used for detection. For details about the specifiable values, see the table ProtocolType in 1.6 List of enumerators.	N	N	N
accessPointIpAddress	string	IP address or host name used for connections to monitoring targets or management software	N	N	N
accessPointUser	string	User ID used for connections to monitoring targets or management software	N	N	N
groupIDs	long[]	ID of the consumer assigned to the hypervisor	N	N	N
groupNames	string[]	Name of the consumer assigned to the hypervisor	N	N	N
gradeNames	string[]	ID of the grade of the consumer assigned to the hypervisor	N	N	N
gradeOrders	integer[]	Priority of the grade of the consumer assigned to the hypervisor	N	N	N

(Legend) Y: Applicable, N: Not applicable

### 1.3.13 Members of a host

This section explains the Members of a host (Hosts resource).

Member name	Data type	Description	Whether to change	Whether applicable to filter conditions (\$query)	Whether applicable to sort conditions (\$order-by)
instanceID	long	ID for identifying instances	N	Y	Y
name	string	Host name	N	Y	Y
ipAddress	string	IP address of the host	N	N	N
osType	string	OS type of the host. <ul style="list-style-type: none"> <li>SERVER_WINDOWS: The OS is Windows.</li> <li>SERVER_LINUX: The OS is Linux.</li> <li>SERVER_SOL: The OS is Solaris.</li> <li>SERVER_HPUX: The OS is HP-UX.</li> <li>SERVER_AIX: The OS is AIX.</li> </ul>	N	Y (only to eq, ne, in, not in)	N

Member name	Data type	Description	Whether to change	Whether applicable to filter conditions (\$query)	Whether applicable to sort conditions (\$order-by)
status	enum	Status of the host. For details about the specifiable values, see the table NodeStatusType in 1.6 List of enumerators.	N	Y (only to eq, ne, in, not in)	N
monitorStatus	enum	Monitoring status of the host. For details about the specifiable values, see the table ManagementLevelType in 1.6 List of enumerators.	N	Y (only to eq, ne, in, not in)	N
description	string	Detailed information about the host	N	Y	Y
vmName	string	Name of the virtual machine if the host is running on a virtual machine	N	Y	Y
usedCredentialID	long	ID for identifying authentication information used for detection	N	N	N
usedCredentials	string	Name of authentication information used for detection	N	N	N
thresholdProfileID	long	ID for identifying the assigned profile	N	N	N
thresholdProfileName	string	Name of the assigned profile	N	N	N
groupIDs	long[]	ID for identifying the assigned consumer	N	N	N
groupNames	string[]	Name of the assigned consumer	N	N	N
deviceClassificationLabel	string	Name of the classification label assigned to the host	N	N	N
accessPointType	enum	Type of authentication information used for detection. For details about the specifiable values, see the table ProtocolType in 1.6 List of enumerators.	N	N	N
accessPointIpAddress	string	IP address used for connections to monitoring targets	N	N	N
accessPointUser	string	User ID used for connections to monitoring targets	N	N	N

(Legend) Y: Applicable, N: Not applicable

### 1.3.14 Members of an IP Switch

This section explains the Members of an IP Switch (IPSwitches resource).

Member name	Data type	Description	Whether to change	Application to filter conditions (\$query)	Application to sort conditions (\$order-by)
instanceID	long	ID for identifying instances	N	Y	Y
name	string	IP Switch name	N	Y	Y
ipAddress	string	IP address of the IP Switch	N	N	N

Member name	Data type	Description	Whether to change	Application to filter conditions (\$query)	Application to sort conditions (\$order-by)
status	enum	Status of the IP Switch. For details about the specifiable values, see the table NodeStatusType in 1.6 List of enumerators.	N	Y (only to eq, ne, in, not in)	N
monitorStatus	enum	Monitoring status of the IP Switch. For details about the specifiable values, see the table ManagementLevelType in 1.6 List of enumerators.	N	Y (only to eq, ne, in, not in)	N
description	string	Detailed information about the IP Switch	N	Y	Y
usedCredentialID	long	ID for identifying authentication information used for detection	N	N	N
usedCredentials	string	Name of authentication information used for detection	N	N	N
thresholdProfileID	long	ID for identifying the assigned profile	N	N	N
thresholdProfileName	string	Name of the assigned profile	N	N	N
accessPointType	enum	Type of authentication information used for detection. For details about the specifiable values, see the table ProtocolType in 1.6 List of enumerators.	N	N	N
accessPointSnmVersion	enum	Version of SNMP used for detection. For details about the specifiable values, see the table SnmpVersion in 1.6 List of enumerators.	N	N	N
accessPointIpAddress	string	IP address used for connections to monitoring targets	N	N	N
accessPointUser	string	User ID used for connections to monitoring targets	N	N	N

(Legend) Y: Applicable, N: Not applicable

### 1.3.15 Members of an FC Switch

This section explains the Members of an FC Switch (FCSwitches resource).

Member name	Data type	Description	Whether to change	Whether applicable to filter conditions (\$query)	Whether applicable to sort conditions (\$order-by)
instanceID	long	ID for identifying instances	N	Y	Y
name	string	FC Switch name	N	Y	Y
ipAddress	string	IP address of the FC Switch	N	N	N
status	enum	Status of the FC Switch. For details about the specifiable values, see the table NodeStatusType in 1.6 List of enumerators.	N	Y (only to eq, ne, in, not in)	N

Member name	Data type	Description	Whether to change	Whether applicable to filter conditions (\$query)	Whether applicable to sort conditions (\$order-by)
monitorStatus	enum	Monitoring status of the FC Switch. For details about the specifiable values, see the table ManagementLevelType in 1.6 List of enumerators.	N	Y (only to eq, ne, in, not in)	N
description	string	Detailed information about the FC Switch	N	Y	Y
usedCredentialID	long	ID for identifying authentication information used for detection	N	N	N
usedCredentials	string	Name of authentication information used for detection	N	N	N
wwn	string	WWM assigned to the FC Switch	N	Y	Y
thresholdProfileID	long	ID for identifying the assigned profile	N	N	N
thresholdProfileName	string	Name of the assigned profile	N	N	N
accessPointType	enum	Type of authentication information used for detection. For details about the specifiable values, see the table ProtocolType in 1.6 List of enumerators.	N	N	N
accessPointIpAddress	string	IP address used for connections to monitoring targets	N	N	N
accessPointUser	string	User ID used for connections to monitoring targets	N	N	N

(Legend) Y: Applicable, N: Not applicable

### 1.3.16 Members of a storage system

This section explains the Members of a storage system (StorageSystems resource).

Member name	Data type	Description	Whether to change	Whether applicable to filter conditions (\$query)	Whether applicable to sort conditions (\$order-by)
instanceID	long	ID for identifying instances	N	Y	Y
name	string	Storage system name	N	Y	Y
ipAddress	string	IP address of the storage system	N	N	N
status	enum	Status of the storage system. For details about the specifiable values, see the table NodeStatusType in 1.6 List of enumerators.	N	Y (only to eq, ne, in, not in)	N
monitorStatus	enum	Monitoring status of the storage system. For details about the specifiable values, see the table ManagementLevelType in 1.6 List of enumerators.	N	Y (only to eq, ne, in, not in)	N
description	string	Detailed information about the storage system	N	Y	Y



Member name	Data type	Description	Whether to change	Whether applicable to filter conditions (\$query)	Whether applicable to sort conditions (\$order-by)
usedCredentialID	string	Name of authentication information used for detection	N	N	N
usedCredentials	long	ID for identifying the assigned profile	N	N	N
thresholdProfileID	long	ID for identifying the assigned profile	N	N	N
thresholdProfileName	string	Name of the assigned profile	N	N	N
accessPointType	enum	Type of authentication information used for detection. For details about the specifiable values, see the table ProtocolType in <a href="#">1.6 List of enumerators</a> .	N	N	N
accessPointIpAddress	string	IP address used for connections to monitoring targets	N	N	N
accessPointUser	string	User ID used for connections to monitoring targets	N	N	N

(Legend) Y: Applicable, N: Not applicable

### 1.3.17 Members of a volume

This section explains the Members of a volume (Volumes resource).

Member name	Data type	Description	Whether to change	Whether applicable to filter conditions (\$query)	Whether applicable to sort conditions (\$order-by)
instanceID	long	ID for identifying instances	N	Y	Y
status	enum	Status of the volume. For details about the specifiable values, see the table NodeStatusType in <a href="#">1.6 List of enumerators</a> .	N	Y (only to eq, ne, in, not in)	N
ldev	string	LDEV name of the volume	N	Y	Y
storageSubsystemID	long	ID for identifying the storage system to which the volume belongs	N	N	N
storageSubsystem	string	Name of the storage system to which the volume belongs	N	N	N
storageSubsystemMonitorStatus	enum	Monitoring status of the storage system to which the volume belongs. For details about the specifiable values, see the table ManagementLevelType in <a href="#">1.6 List of enumerators</a> .	N	Y (only to eq, ne, in, not in)	N
parityGroup	string	Name of the parity group to which the volume belongs	N	N	N

Member name	Data type	Description	Whether to change	Whether applicable to filter conditions (\$query)	Whether applicable to sort conditions (\$order-by)
storagePool	string	Name of the storage pool to which the volume belongs	N	N	N
thresholdProfileID	long	ID for identifying the assigned profile	N	N	N
thresholdProfileName	string	Name of the assigned profile	N	N	N
groupIDs	long[]	ID for identifying the assigned consumer	N	N	N
groupNames	string[]	Name of the assigned consumer	N	N	N

(Legend) Y: Applicable, N: Not applicable

### 1.3.18 Members of the application

This section explains the Members of the application (Applications resource).

Member name	Data type	Description	Whether to change	Application to filter conditions (\$query)	Application to sort conditions (\$order-by)
instanceID	long	ID for identifying instances	N	N	N
name	string	Name of the detected application	N	N	N
applicationType	enum	Application type. For details about the specifiable values, see the table ApplicationType in 1.6 List of enumerators.	N	N	N
applicationDetailType	string	Type of the custom application	N	N	N
ipAddress	string	IP address of the application	N	N	N
description	string	Detailed information about the application	N	N	N
collectorID	long	ID identifying the collector used for detection	N	N	N
collectorName	string	Name of the collector used for detection	N	N	N
applicationHosts	ApplicationHost[]	Resources to which the application belongs	N	N	N
autoCollectionType	enum	Settings for periodic execution of the collector. For details about the specifiable values, see the table ConnectType in 1.6 List of enumerators.	N	N	N
groupIDs	long[]	ID identifying the consumer to which the application is allocated	N	N	N

Member name	Data type	Description	Whether to change	Application to filter conditions (\$query)	Application to sort conditions (\$order-by)
groupNames	string[]	Name of the consumer to which the application is allocated	N	N	N
gradeNames	string[]	Grade of the consumer to which the application is allocated	N	N	N
gradeOrders	int[]	Priority of the grade of the consumer to which the application is allocated	N	N	N
usedCredentialID	int[]	ID identifying the authentication information used at detection	N	N	N
usedCredentials	string	Authentication information used at detection	N	N	N
accessPointType	enum	Type of collector used at detection. For details about the specifiable values, see the table ProtocolType in 1.6 List of enumerators.	N	N	N
accessPointIpAddress	string	IP address or host name of the authentication information	N	N	N
accessPointUser	string	User ID used to connect to monitoring targets or management software	N	N	N

(Legend) Y: Applicable, N: Not applicable

### 1.3.19 Members of application resource information

This section explains the Members of application resource information (ApplicationHost resource).

Member name	Data type	Description	Whether to change	Application to filter conditions (\$query)	Application to sort conditions (\$order-by)
resourceID	long	ID of the resource to which the application belongs	N	N	N
resourceType	enum	Type of the resource to which the application belongs. For details about the specifiable values, see the table ApplicationResourceType in 1.6 List of enumerators.	N	N	N

(Legend) Y: Applicable, N: Not applicable

### 1.3.20 Members of an acquired list of resources

This section explains the Members of an acquired list of resources.

Member name	Data type	Description	Whether to change	Whether applicable to filter conditions (\$query)	Whether applicable to sort conditions (\$order-by)
data	object[]	The list of acquired resources is set.	N	N	N
page	integer	page (page number) specified in the request	N	N	N
pageSize	integer	pageSize (maximum number of objects that can be contained in a page) specified in the request	N	N	N
numPages	integer	Total number of pages (page number)	N	N	N
totalCount	integer	Total number of returned resources	N	N	N
count	integer	Number of data items according to the query parameter condition	N	N	N

(Legend) Y: Applicable, N: Not applicable

## 1.4 Resources managed through the API

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JP1/OA supports the following API resources:

Resource	Domain
Applications	objects
Collectors	objects
Credentials	objects
E2EView	services
Events	services
FCSwitches	objects
FCSwitches	services
Grades	objects
Groups	objects
Hosts	objects
Hosts	services
Hypervisors	objects
Hypervisors	services
IPSwitches	objects
IPSwitches	services
IpAddrRanges	objects
PerfComponents	services
StorageSystems	objects
StorageSystems	services
SystemThresholdProfiles	objects
UserThresholdProfiles	objects
VirtualMachines	objects
VirtualMachines	services
Volumes	objects
version	configuration

## 1.5 API request list

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The JP1/OA API supports the following requests and HTTP methods:

### Applications(Domain : objects)

Request	Method	URI	Execution permission
Obtaining Application List	GET	/v1/objects/Applications	Admin, Modify

### Collectors(Domain : objects)

Request	Method	URI	Execution permission
Obtaining Collector List	GET	/v1/objects/Collectors	Admin, Modify
Creating Collector	POST	/v1/objects/Collectors	Admin
Obtaining Collector Information	GET	/v1/objects/Collectors/{id}	Admin, Modify
Updating Collector	PUT	/v1/objects/Collectors/{id}	Admin
Deleting Collector	DELETE	/v1/objects/Collectors/{id}	Admin

### Credentials(Domain : objects)

Request	Method	URI	Execution permission
Obtaining Authentication	GET	/v1/objects/Credentials	Admin
Creating Authentication	POST	/v1/objects/Credentials	Admin
Obtaining Authentication Information	GET	/v1/objects/Credentials/{id}	Admin
Updating Authentication	PUT	/v1/objects/Credentials/{id}	Admin
Deleting Authentication	DELETE	/v1/objects/Credentials/{id}	Admin

### E2EView(Domain : services)

Request	Method	URI	Execution permission
Collecting the information required to collect, into a CSV file, information about specified resources or a list of related resources	GET	/v1/services/E2EView/actions/getNodesDataCSV	Admin, Modify
Collecting, into a CSV file, information about specified resources or a list of related resources	POST	/v1/services/E2EView/actions/getNodesDataCSV/invoke	Admin, Modify

## Events(Domain : services)

Request	Method	URI	Execution permission
Collecting the information required to collect, into a CSV file, a list of events	GET	/v1/services/Events/actions/getEventDataCSV	Admin, Modify
Collecting, into a CSV file, a list of events	POST	/v1/services/Events/actions/getEventDataCSV/invoke	Admin, Modify

## FCSwitches(Domain : objects)

Request	Method	URI	Execution permission
Obtaining FC Switch List	GET	/v1/objects/FCSwitches	Admin, Modify

## FCSwitches(Domain : services)

Request	Method	URI	Execution permission
Obtaining FC Switch Operation List	GET	/v1/services/FCSwitches/actions	Admin, Modify
Obtaining FC Switch Monitoring Status Change Information	GET	/v1/services/FCSwitches/actions/changeManagedType	Admin, Modify
Changing FC Switch Monitoring Status	POST	/v1/services/FCSwitches/actions/changeManagedType/invoke	Admin, Modify

## Grades(Domain : objects)

Request	Method	URI	Execution permission
Obtaining Grade List	GET	/v1/objects/Grades	Admin, Modify

## Groups(Domain : objects)

Request	Method	URI	Execution permission
Obtaining Consumer List	GET	/v1/objects/Groups	Admin, Modify
Creating consumer	POST	/v1/objects/Groups	Admin, Modify
Getting specific consumer information	GET	/v1/objects/Groups/{id}	Admin, Modify
Updating consumer	PUT	/v1/objects/Groups/{id}	Admin, Modify
Deleting specific consumer	DELETE	/v1/objects/Groups/{id}	Admin, Modify
Obtaining Consumer Operation List	GET	/v1/objects/Groups/{id}/actions	Admin, Modify
Obtaining Consumer Allocation Information	GET	/v1/objects/Groups/{id}/actions/updateTargetResource	Admin, Modify
Allocating Consumer	POST	/v1/objects/Groups/{id}/actions/updateTargetResource/invoke	Admin, Modify

Request	Method	URI	Execution permission
Obtaining Consumer Allocation Information with a Specified Resource Allocation Category	GET	/v1/objects/Groups/{id}/actions/updateTargetResourceWithAssignmentType	Admin, Modify
Allocating Consumers that Have a Resource Allocation Category Specified	POST	/v1/objects/Groups/{id}/actions/updateTargetResourceWithAssignmentType/invoke	Admin, Modify

## Hosts(Domain : objects)

Request	Method	URI	Execution permission
Obtaining Host List	GET	/v1/objects/Hosts	Admin, Modify

## Hosts(Domain : services)

Request	Method	URI	Execution permission
Obtaining Host Operation List	GET	/v1/services/Hosts/actions	Admin, Modify
Obtaining Host Monitoring Status Change Information	GET	/v1/services/Hosts/actions/changeManagedType	Admin, Modify
Changing Host Monitoring Status	POST	/v1/services/Hosts/actions/changeManagedType/invoke	Admin, Modify

## Hypervisors(Domain : objects)

Request	Method	URI	Execution permission
Obtaining Hypervisor List	GET	/v1/objects/Hypervisors	Admin, Modify

## Hypervisors(Domain : services)

Request	Method	URI	Execution permission
Obtaining Hypervisor Operation List	GET	/v1/services/Hypervisors/actions	Admin, Modify
Obtaining Hypervisor Monitoring Status Change Information	GET	/v1/services/Hypervisors/actions/changeManagedType	Admin, Modify
Changing Hypervisor Monitoring Status	POST	/v1/services/Hypervisors/actions/changeManagedType/invoke	Admin, Modify

## IPSwitches(Domain : objects)

Request	Method	URI	Execution permission
Obtaining IP Switch List	GET	/v1/objects/IPSwitches	Admin, Modify



## IPSwitches(Domain : services)

Request	Method	URI	Execution permission
Obtaining IP Switch Operation List	GET	/v1/services/IPSwitches/actions	Admin, Modify
Obtaining IP Switch Monitoring Status Change Information	GET	/v1/services/IPSwitches/actions/changeManagedType	Admin, Modify
Changing IP Switch Monitoring Status	POST	/v1/services/IPSwitches/actions/changeManagedType/invoke	Admin, Modify

## IpAddrRanges(Domain : objects)

Request	Method	URI	Execution permission
Obtaining Retrieval Ranges	GET	/v1/objects/IpAddrRanges	Admin
Creating Retrieval Ranges	POST	/v1/objects/IpAddrRanges	Admin
Obtaining Retrieval Range Information	GET	/v1/objects/IpAddrRanges/{id}	Admin
Updating Retrieval Ranges	PUT	/v1/objects/IpAddrRanges/{id}	Admin
Deleting Retrieval Ranges	DELETE	/v1/objects/IpAddrRanges/{id}	Admin

## PerfComponents(Domain : services)

Request	Method	URI	Execution permission
Collecting the information required to collect, into a CSV file, the performance values in a time series of specified performance information	GET	/v1/services/PerfComponents/actions/getGraphDataCSV	Admin, Modify
Collecting, into a CSV file, the performance values in a time series of specified performance information	POST	/v1/services/PerfComponents/actions/getGraphDataCSV/invoke	Admin, Modify
Collecting the information required to collect, into a CSV file, the latest value in the performance information that a specified resource holds	GET	/v1/services/PerfComponents/actions/getNodesGraphDataCSV	Admin, Modify
Collecting, into a CSV file, the latest value in the performance information that a specified resource holds	POST	/v1/services/PerfComponents/actions/getNodesGraphDataCSV/invoke	Admin, Modify

## StorageSystems(Domain : objects)

Request	Method	URI	Execution permission
Obtaining Storage System List	GET	/v1/objects/StorageSystems	Admin, Modify

## StorageSystems(Domain : services)

Request	Method	URI	Execution permission
Obtaining Storage System Operation List	GET	/v1/services/StorageSystems/actions	Admin, Modify
Obtaining Storage System Monitoring Status Change Information	GET	/v1/services/StorageSystems/actions/changeManagedType	Admin, Modify
Changing Storage System Monitoring Status	POST	/v1/services/StorageSystems/actions/changeManagedType/invoke	Admin, Modify

## SystemThresholdProfiles(Domain : objects)

Request	Method	URI	Execution permission
Obtaining System Profile List	GET	/v1/objects/SystemThresholdProfiles	Admin, Modify
Creating System Profile	POST	/v1/objects/SystemThresholdProfiles	Admin, Modify
Obtaining System Profile Information	GET	/v1/objects/SystemThresholdProfiles/{id}	Admin, Modify
Updating System Profile	PUT	/v1/objects/SystemThresholdProfiles/{id}	Admin, Modify
Delete System Profiles	DELETE	/v1/objects/SystemThresholdProfiles/{id}	Admin, Modify
Obtaining System Profile Operation List	GET	/v1/objects/SystemThresholdProfiles/{id}/actions	Admin, Modify
Obtaining System Profile Allocation Information	GET	/v1/objects/SystemThresholdProfiles/{id}/actions/updateTargetResource	Admin, Modify
Allocating System Profile	POST	/v1/objects/SystemThresholdProfiles/{id}/actions/updateTargetResource/invoke	Admin, Modify

## UserThresholdProfiles(Domain : objects)

Request	Method	URI	Execution permission
Obtaining User Profile List	GET	/v1/objects/UserThresholdProfiles	Admin, Modify
Creating User Profile	POST	/v1/objects/UserThresholdProfiles	Admin, Modify
Obtaining User Profile Information	GET	/v1/objects/UserThresholdProfiles/{id}	Admin, Modify
Updating User Profile	PUT	/v1/objects/UserThresholdProfiles/{id}	Admin, Modify
Delete User Profiles	DELETE	/v1/objects/UserThresholdProfiles/{id}	Admin, Modify
Obtaining User Profile Operation	GET	/v1/objects/UserThresholdProfiles/{id}/actions	Admin, Modify
Obtaining User Profile Allocation Information	GET	/v1/objects/UserThresholdProfiles/{id}/actions/updateTargetResource	Admin, Modify
Allocating User Profile	POST	/v1/objects/UserThresholdProfiles/{id}/actions/updateTargetResource/invoke	Admin, Modify

## VirtualMachines(Domain : objects)

Request	Method	URI	Execution permission
Obtaining Virtual Machine List	GET	/v1/objects/VirtualMachines	Admin, Modify

## VirtualMachines(Domain : services)

Request	Method	URI	Execution permission
Obtaining Virtual Machine Operation List	GET	/v1/services/VirtualMachines/actions	Admin, Modify
Obtaining Virtual Machine Monitoring Status Change Information	GET	/v1/services/VirtualMachines/actions/changeManagedType	Admin, Modify
Changing Virtual Machine Monitoring Status	POST	/v1/services/VirtualMachines/actions/changeManagedType/ invoke	Admin, Modify

## Volumes(Domain : objects)

Request	Method	URI	Execution permission
Obtaining Volume List	GET	/v1/objects/Volumes	Admin, Modify

## version(Domain : configuration)

Request	Method	URI	Execution permission
Obtaining Version Information	GET	/v1/configuration/version	Admin, Modify

## 1.6 List of enumerators

---

The following tables list the enumerators that can be specified for API functions.

### ProtocolType

enumerator	Description
WMI	WMI is used
SSH	SSH is used
WBEM	SMI-S WBEM is used
SNMP	SNMP is used
VCENTER	The management software is vCenter
AJS	The management software is JP1/AJS3 - Manager
PFM	The management software is JP1/PFM - Manager
IM	The management software is JP1/IM - Manager
CUSTOM	The management software is custom application

### ArgusNodeType

enumerator	Description
NA	Invalid value
UNKNOWN	Unknown
ANY	Any
SERVER_WINDOWS	Windows server
SERVER_LINUX	Linux server
SERVER_ESX	ESX server
SWITCH_FC	FC switch
SWITCH_IP	IP switch
STORAGE_HITACHI	Hitachi storage
STORAGE_OTHER	Non-Hitachi storage systems
SERVER_SOLARIS	Solaris server
SERVER_HYPERV	Hyper-V server
SERVER_HPUX	HP-UX server
SERVER_VCENTER	vCenter server
SERVER_AIX	AIX server

### ManagementLevelType

enumerator	Description
New	Newly detected

enumerator	Description
Manage	Being monitored
ignore	Not monitored
MonitorOff	Monitoring is temporarily stopped

## MonitoringOperationType

enumerator	Description
Monitor	Monitoring is start
Ignore	Monitoring is temporarily stopped

## ComponentMonitorType

enumerator	Description
InUse	Resource is currently being monitored for performance.
NotMonitored	Resource is not monitored.

## ConnectStatusType

enumerator	Description
NoConnect	Not Collected
Waiting	Waiting
InProgress	Currently being executed
Succeeded	Collector Successful
Failed	Collector Failed

## SnmpVersion

enumerator	Description
V1_V2C	SNMP v1 or v2
V3	SNMP v3

## AuthenticationProtocol

enumerator	Description
MD5	MD5 is used
SHA1	SHA1 is used

## PrivacyProtocol

enumerator	Description
DES	DES is used
AES128	AES128 is used

## ConnectType

enumerator	Description
AutoConnect	Collector is periodically executed
NotAutoConnect	Collector is not periodically executed

## HypertextTransferProtocolType

enumerator	Description
HTTP	HTTP is used
HTTPS	HTTPS is used

## TemplateCreatorType

enumerator	Description
User	User Definition
Default	Default

## NodeStatusType

enumerator	Description
Normal	Node status is Normal.
Warning	Node status is Warning.
Error	Node status is Critical.
Unreachable	No response
Unknown	Node status is Unknown.
NotMonitored	Node status is Notmonitored.

## E2ENodeType

enumerator	Description
TAG	Consumer
CLUSTER	Cluster
HYPERVISOR	Hypervisor
VM_HOST	Virtual machine or host
VIRTUAL_MACHINE	Virtual machine
CPU	CPU
MEMORY	Memory
NIC	NIC
HBA	HBA
DISK	Disk

enumerator	Description
HOST	Host
SWITCH	Switch
FC_ZONE	Zone
FC_SWITCH	FC switch
IP_SWITCH	IP switch
STORAGE	Storage
STORAGE_VOLUME	Volume
STORAGE_PORT	Port
STORAGE_MP	Processor
STORAGE_CACHE	Cache
STORAGE_POOL	Pool
STORAGE_PG	Parity Group
APPLICATION	Application
APPLICATION_AJS_MANAGER	AJS-Mamanger
APPLICATION_AJS_AGENT	AJS-Agent
APPLICATION_PFM	PFM
APPLICATION_OS	OS
APPLICATION_CUSTOM	Custom Application

## CollectorOsType

enumerator	Description
Windows	Os type is Windows
Unix	Os type is Unix

## AssignmentType

enumerator	Description
Occupy	Occupy
Share	Share
NoChange	No Change

## ApplicationType

enumerator	Description
AJS_MANAGER	AJS(Manager)
AJS_AGENT	AJS(Agent)
PFM_SERVICERESPONSE	PFM(ServiceResponse)

enumerator	Description
PFM_AJS3	PFM(AJS3)
PFM_DOMINO	PFM(Domino)
PFM_EXCHANGE	PFM(Exchange)
PFM_SAPSYSTEM	PFM(SAP System)
PFM_IBMWEBSPHEREMQ	PFM(IBMWebSphereMQ)
PFM_OPENTP1	PFM(OpenTP1)
PFM_COSMINEXUS	PFM(Cosminexus)
PFM_IIS	PFM(IIS)
PFM_WEBLOGICSERVER	PFM(WebLogic Server)
PFM_WEBSPHEREAPPLICATIONSERVER	PFM(WebSphere Application Server)
PFM_DB2	PFM(DB2)
PFM_HIRDB	PFM(HiRDB)
PFM_SQL	PFM(SQL)
PFM_RMSQLSERVER	PFM(RM SQLServer)
PFM_ORACLE	PFM(Oracle)
PFM_RMORACLE	PFM(RM Oracle)
PFM_RMPLATFORM	PFM(RM Platform)
PFM_UNIX	PFM(UNIX)
PFM_WINDOWS	PFM(Windows)
IM_OS	IM(OS)
PFM_RMVIRTUALMACHINE	PFM(RM VirtualMachine)
PFM_VIRTUALMACHINE	PFM(VirtualMachine)
CUSTOM	Custom

## ApplicationResourceType

enumerator	Description
VirtualMachine	Virtual Machine
Host	Host

## NodeInformationType

enumerator	Description
AllInformation	Acquire basic information and related information
BasicInformation	Acquire Basic Information.Do not acquire related information.



## 1.7 API description format

---

The items below provide descriptions for individual APIs. Note that some items might not be described for some APIs.

### **Function**

Describes the function of an API.

### **Execution permissions**

Indicates the permissions and roles that are required to execute an API.

### **API version**

Indicates the version of an API.

### **Request format**

Describes the request format for requesting the use of an API.

### **Status code**

Describes the status code after you execute an API by using the HTTP or HTTPS protocol. For details about the status code when an error occurs before an API is executed, see [1.2.6 HTTP status codes description](#).

### **Response schema**

Describes schema information of the response that is returned when an API is successfully completed.

### **Usage example**

Provides examples of the request for the use of API, and its response.

Note that the HTTP protocol is used in the examples. If the HTTPS protocol is used, replace HTTP with HTTPS when you read the description.

## 1.8 Operating JP1/OA by using the API functions

This section explains how to operate JP1/OA by using the API functions. However, there are some items that are not explained depending on the API function.

### 1.8.1 Creating authentication information

This section describes the format of requests to be used for creating authentication information and the method for creating a request body.

#### Procedure

1. Determine the protocol (such as WMI or SSH) for the authentication information to be created.
2. Acquire authentication information that has the same protocol as the authentication information that you want to create, so that the acquired authentication information can be used as a template. Issue the request in the following format:

```
GET http://host:port/Analytics/version/objects/Credentials
```

3. Edit the authentication information (Credential resource) acquired in step 2 according to the table below.

Table 1-1: Changes to the Credential resource

Member to change	Whether to change	Description
name	Required	Change the name to the name of the authentication information to be created. You must specify a name that does not exist in the authentication information that is already registered.
userId	Required	The user ID to be specified for authentication. When the SNMP v3 protocol is used, the value specified for userName is set.
password	Required	The password to be used for authentication
passwordNotRequired	Optional	Specify true if no password is required for authentication. This item is enabled only when the WMI protocol is used.
portNumber	Optional	The port number to be used for authentication. This item is enabled only when the SSH, SMIS WBEM, or SNMP protocol is used to connect the management target.
rootPassword	Required	The root password to be used for authentication. This item is enabled only when the SSH protocol is used.
ssl	Optional	Whether SSL (HTTPS) is to be used when connecting the monitoring target. This item is enabled only when SMI-S WBEM is used.
domainname	Optional	The domain name to be used for authentication. This item is enabled only when WMI is used.
namespace	Optional	The namespace to be used for authentication. This item is used only when SMI-S WBEM is used.
community	Optional	The community name to be used for authentication. This item is enabled only when SNMP is used.
snmpVersion	Optional	The version of SNMP. This item is enabled only when SNMP is used.

Member to change	Whether to change	Description
userName	Optional	The user name to be used for authentication. This item is enabled only when SNMP v3 is used.
authenticationEnabled	Optional	To perform an SMTP authentication, specify true. This item is enabled only when SNMP v3 is used.
authenticationPassphrase	Optional	The passphrase to be used for authentication. This item is enabled only when SNMP v3 is used.
authenticationProtocol	Optional	The protocol to be used for authentication. This item is enabled only when SNMP v3 is used.
privacyEnabled	Optional	To enable the privacy function for authentication, specify true. This item is enabled only when SNMP v3 is used.
privacyPassphrase	Optional	The passphrase to be specified when the privacy function is used for authentication. This item is enabled only when SNMP v3 is used.
privacyProtocol	Optional	This item is enabled only when SNMP v3 is used.

4. Issue the request in the format shown below. Specify the authentication information you edited in step 3 in the request body.

```
POST http://host:port/Analytics/version/objects/Credentials
```

## Related topics

- [2.1.2 Obtaining Authentication Information](#)
- [2.1.3 Creating Authentication](#)

## 1.8.2 Creating a search range

This section describes the format of the request to be used for creating a search range and the method for creating a request body.

### Procedure

1. Acquire a search range of your choice, so that the acquired search range can be used as a template. Issue the request in the following format:

```
GET http://host:port/Analytics/version/objects/IpAddrRanges
```

2. Edit the search range (the IpAddrRange resource) that you acquired in step 1 according to the table below.

Table 1-2: Changes to the IpAddrRange resource

Member to change	Whether to change	Description
name	Required	Change the name to the name of the search range to be created. You must specify a name that does not exist in the search range that is already registered.
ipAddrRange	Required	Specify the IP addresses of the range to search. You must specify a range that does not exist in the search ranges that are already registered.
usePing	Optional	To use Ping in the search, specify true.

Member to change	Whether to change	Description
useAllCredential	Optional	To use all authentication information in the search, specify true.
selectCredentials	Optional	Specify the authentication information that you want to use. For details on how to specify authentication information, see <a href="#">1.8.1 Creating authentication information</a> .
deviceClassificationLabel	Optional	Specify the name of the classification label assigned to the device.

3. Issue the request in the following format. Specify the search range you edited in step 2 in the request body.

```
POST http://host:port/Analytics/version/objects/IpAddrRanges
```

## Related topics

- [2.2.3 Creating Retrieval Ranges](#)
- [2.2.2 Obtaining Retrieval Range Information](#)

## 1.8.3 Creating a collector

This section describes the format of the request to be used for creating the collector and the method for creating a request body.

### Procedure

1. Determine the type of collector (such as VCENTER or AJS) is to be created.
2. Acquire a collector that has the same type as the one that you want to create, so that the acquired collector can be used as a template. Issue a request in the following format:

```
GET http://host:port/Analytics/version/objects/Collectors
```

3. Edit the authentication information (Collectors resource, CollectorCredential resource) that you acquired in step 2 according to the table below.

Table 1-3: Changes to the Collector resource

Member to change	Whether the change is required	Description
name	Required	Change the name to the name of the collector that you want to create. You must specify a name that does not exist among the collectors that are already registered.
osType	Optional	Specify the type of the OS that is to be monitored.
collectorCredentials	Optional	Specify the authentication information that is used to connect to the target to be monitored. See the table below for the description.

Table 1-4: Changes to the CollectorCredential resource

Member to change	Whether the change is required	Description
ipAddress	Optional	Specify the IP address or the host name that is used to connect to the management software.
userId	Optional	Specify the user ID that is used to connect to the management software.
password	Optional	Specify the password that is used to connect to the management software.
portNumber	Optional	Specify the port number that is used to connect to the management software.
hypertextTransferProtocolType	Optional	This item can be specified only when the collector type is VCENTER. Specify HTTPS.
domainName	Optional	This item can be specified only when the collector type is AJS, PFM, or IM, and when osType is Windows. Specify a domain name.
rootPassword	Optional	This item can be specified only when the collector type is AJS, PFM, or IM, and when osType is Unix. Specify the root password.
useAdministrativeShares	Optional	This item can be specified only when the collector type is AJS, PFM, or IM, and when osType is Windows. Specify true to use administrative shares. When true is specified, there is no need to specify shareName and sharedFolder.
shareName	Optional	This item can be specified only when the collector type is AJS, PFM, or IM, and when osType is Windows. Specify a shared name. This item is enabled only when useAdministrativeShares is false.
sharedFolder	Optional	This item can be specified only when the collector type is AJS, PFM, or IM, and when osType is Windows. Specify the path to the shared folder. This item is enabled only when false is specified for useAdministrativeShares.

4. Issue a request in the following format. In the request body, specify the collector that you edited in step 3.

```
POST http://host:port/Analytics/version/objects/Collectors
```

**Related topics**

- [2.3.2 Obtaining Collector Information](#)
- [2.3.3 Creating Collector](#)

**1.8.4 Creating a user profile**

This section describes the format of the request to be used for creating a user profile and the method for creating a request body.

**Procedure**

1. Determine the type (such as VM and VOLUME) for the resource that you want to create.
2. Acquire a user profile that has the same type as the one that you want to create, so that the acquired user profile can be used as a template. Issue a request in the following format:

```
GET http://host:port/Analytics/version/objects/UserThresholdProfiles
```

3. Edit the user profile (UserThresholdProfiles resource, UserThresholdValue resource) that you acquired in step 2 according to the table below:

Table 1-5: Changes to the UserThresholdProfiles resource

Member to change	Whether the change is required	Description
name	Required	Change the name to the user profile that you want to create. You must specify a name that does not exist in the user profile or in the system profile that is already registered.
description	Optional	Enter the description of the user profile that you want to create.
profileType	Required	Specify User.
thresholdValues	Optional	Change the threshold value or the monitoring status. Note that when creating a user profile, you must not delete any values that were acquired, because setting of all UserThresholdValue is required even if no changes are made. For the locations to be changed, see the table below.

Table 1-6: Changes to the UserThresholdValue resource

Member to change	Whether the change is required	Description
monitoring	Required	Specify whether to monitor.
thresholdValueOfWarning	Optional	Specify the threshold value for a warning. You must specify a value equal to or less than the maximum member, and a value equal to or greater than the minimum member. In addition, the value must be a multiple of the stepSize member.
thresholdValueOfError	Optional	Specify the threshold value for an error. You must specify a value equal to or less than the maximum member, and a value equal to or greater than the minimum member. In addition, the value must be a multiple of the stepSize member.

4. Issue a request in the following format. In the request body, specify the collector that you edited in step 3.

```
POST http://host:port/Analytics/version/objects/UserThresholdProfiles
```

## Related topics

- [2.4.2 Obtaining User Profile Information](#)
- [2.4.3 Creating User Profile](#)

## 1.8.5 Creating a system profile

This section describes the format of the request to be used for creating a system profile and the method for creating a request body.

### Procedure

1. Determine the type of resource (such as ESX and IPSWITCH) that you want to create.

- Acquire a system profile that has the same type as the one that you want to create, so that the acquired system profile can be used as a template. Issue a request in the following format:

```
GET http://host:port/Analytics/version/objects/SystemThresholdProfiles
```

- Edit the system profile (SystemhresholdProfiles resource, SystemThresholdValue resource) that you acquired in step 2 according to the table below.

Table 1-7: Changes to the SystemhresholdProfiles resource

Member to change	Whether the change is required	Description
name	Required	Change the name to the name of the system profile that you want to create. You must specify a name that does not exist in the user profile or in the system profile that is already registered.
description	Optional	Enter a description of the system profile that you want to create.
profileType	Required	Specify User.
thresholdValues	Optional	Change the threshold value or the monitoring status. Note that when creating a system profile, do not delete any values that were acquired because setting of all SystemThresholdValue is required even if there are no changes made. For the locations to be changed, see the table below.

Table 1-8: Changes to the SystemThresholdValue resource

Member to change	Whether the change is required	Description
monitoring	Required	Specify whether to monitor.
thresholdValueOfWarning	Optional	Specify the threshold value for the warning. You must specify a value equal to or less than the maximum member, and a value equal to or greater than the minimum member. In addition, the value must be a multiple of the value of stepSize.
thresholdValueOfError	Optional	Specify the threshold value for an error. You must specify a value equal to or less than the maximum member, and a value equal to or greater than the minimum member. In addition, the value must be a multiple of the value of stepSize.

- Issue a request in the following format. In the request body, specify the collector that you edited in step 3.

```
POST http://host:port/Analytics/version/objects/SystemThresholdProfiles
```

## Related topics

- [2.5.2 Obtaining System Profile Information](#)
- [2.5.3 Creating System Profile](#)

## 1.8.6 Creating a consumer

This section describes the format of the request to be used for creating a consumer and the method for creating a request body.

## Procedure

1. Acquire a consumer to use as a template. Issue a request in the following format:

```
GET http://host:port/Analytics/version/objects/Groups
```

2. Edit the consumer (Groups resource) that you acquired in step 1 according to the table below.

Table 1-9: Changes to the Groups resource

Member to change	Whether the change is required	Description
name	Required	Change the name to the name of the consumer that you want to create. You must specify a name that is not already registered.
description	Optional	Enter a description of the consumer.
templateCreatorType	Required	Specify User.
gradeKey	Required	Specify the ID to identify the grade. To acquire the ID to identify the grade, see <a href="#">2.6.3 Obtaining Grade List</a> .
urls	Optional	The URL that can be specified for the consumer.
vmAutoAssignment	Optional	Specify whether to automatically assign, to the consumer, virtual machines on a hypervisor when that hypervisor is assigned to the consumer. To assign virtual machines on a hypervisor, specify true. If nothing is specified, false is assumed.
applicationAssignFollow	Optional	Specify whether to automatically assign, to the consumer, any applications on a virtual machine or virtual host when that virtual machine or virtual host is assigned to the consumer. To assign applications on a virtual machine or virtual host, specify true. If nothing is specified, false is assumed.

3. Issue a request in the following format. In the request body, specify the consumer you edited in step 2.

```
POST http://host:port/Analytics/version/objects/Groups
```

---

## Related topics

- [2.6.2 Getting specific consumer information](#)
  - [2.6.4 Creating consumer](#)
- 

## 1.8.7 Assigning a user profile

This section describes the format of the request to be used for assigning resources (virtual machines, hosts, volumes) to a user profile and the contents to be specified in the request body.

## Procedure

1. Issue a request in the following format:

```
POST http://host:port/Analytics/version/objects/UserThresholdProfiles/id/actions/updateTargetResource
```

The objects to be specified as members of parameters in the request body are as follows:



Member	Whether the change is required	Description
instanceID	Required	<p>Specify the ID of the monitoring target to which the user profile is to be assigned as a list. You must include the IDs of monitoring targets that are already assigned.</p> <p>Example specification when applying the user profile only to the monitoring target for instanceID=50:</p> <pre>"parameters" : [ { "instanceID" : 50 } ]</pre> <p>Example specification when adding the monitoring target for instance=51 to the user profile that is already assigned to the monitoring target for instanceID=50 (link and specify all IDs that are to be assigned):</p> <pre>"parameters" : [ { "instanceID" : 50 } , { "instanceID" : 51 } ]</pre> <p>Example specification when canceling assignment from all monitoring targets (use an empty value for parameters):</p> <pre>"parameters" : [ ]</pre>

The IDs of the monitoring target that can be specified as member of parameters that can be acquired from the API are indicated in the following references:

Resource type of the user profile	Reference
VM	<a href="#">2.8.1 Obtaining Virtual Machine List</a>
WINDOWS or LINUX_UNIX	<a href="#">2.10.1 Obtaining Host List</a>
VOLUME	<a href="#">2.14.1 Obtaining Volume List</a>

## Related topics

- [2.4.7 Obtaining User Profile Allocation Information](#)
- [2.4.8 Allocating User Profile](#)

## 1.8.8 Assigning a system profile

This section describes the format of requests to be used when assigning resources (hypervisors, IP switches, and FC switches) to the system profile, and the contents to be specified in the request body.

### Procedure

1. Issue a request in the following format:

```
POST http://host:port/Analytics/version/objects/SystemThresholdProfiles/id/actions/updateTargetResource
```

The objects to be specified as members of parameters in the request body are as follows:

Member	Whether to specify	Description
instanceID	Optional	<p>Specify the ID of the monitoring target to which the system profile is to be assigned as a list. You must include the IDs of monitoring targets that are already assigned.</p> <p>Example specification when applying the system profile only to the monitoring target for instanceID=50:</p> <pre>"parameters" : [ { "instanceID" : 50 } ]</pre>

Member	Whether to specify	Description
instanceID	Optional	<p>Example specification when adding the monitoring target for instanceID=51 to the system profile that is already assigned to the monitoring target for instanceID=50 (link and specify all IDs that are to be assigned):</p> <pre>"parameters" : [ { "instanceID" : 50 } , { "instanceID" : 51 } ]</pre> <p>Example specification when canceling assignment of all monitoring targets (use an empty value for parameters):</p> <pre>"parameters" : [ ]</pre>

The IDs of the monitoring targets that can be specified as members of parameters can be acquired from the API functions indicated in the following reference:

Resource type of the user profile	Reference
ESX or HYPERV	<a href="#">2.9.1 Obtaining Hypervisor List</a>
IPSWITCH	<a href="#">2.11.1 Obtaining IP Switch List</a>
FCSWITCH	<a href="#">2.12.1 Obtaining FC Switch List</a>

## Related topics

- [2.5.7 Obtaining System Profile Allocation Information](#)
- [2.5.8 Allocating System Profile](#)

## 1.8.9 Acquiring event information in CSV format

This section explains the format of requests that are used to output event information in CSV format, and the contents to be specified for the request body.

### Procedure

1. Issue a request in the following format:

```
POST http://host:port/Analytics/version/services/Events/actions/getEventDataCSV/
invoke
```

The object to be specified as the member of parameters in the request body is as follows:

Table 1-10: Members that can be specified when acquiring the CSV file for the event information

Member to change	Whether the change is required	Description
hqlFilter	Optional	Specify the formula if you want to filter the event to be acquired. Describe the formula in the order of <i>parameter + operator + value</i> . The values that can be specified for the fomula are shown in the following table. You can combine expressions with AND or OR.
fqlSort	Optional	Specify this member to sort the events to be acquired.
page	Optional	Specify the number of pages to be acquired.
pageSize	Optional	Specify the number of items to be acquired for a single page.

Table 1-11: Parameters that can be specified for hqlFilter

Parameters	Operators	Values
status	eq, ne	NOTACK, ACK
level	eq, ne	INFO, WARNING, CRITICAL
category	eq, ne	PERFORMANCE, STATUS,EVENT, SETTING, CANGE
deviceName	eq, ne, starts, ends, contains	Any character string
deviceType	eq, ne	Server, Storage, NetworkDevice, Collector
componentName	eq, ne, starts, ends, contains	Any character string
componentType	eq, ne	CPU,MEMORY, LAN_PORT, FC_HBA_PORT, [DISK_DRIVE, SCSI_DISK_DRIVE], [STORAGE_CONTROLLER, STORAGE_MPB], STORAGE_FC_PORT, STORAGE_POOL, SOTRAGE_volume, STORAGE_CACHE, VIRTUAL_MACHINE, HYPERVISOR_CLUSTER, STORAGE_DP_POOL
userName	eq, ne, starts, ends, contains	Any character string

## Related topics

- [2.15.2 Collecting, into a CSV file, a list of events](#)

## 1.8.10 Acquiring basic information and performance information for resources in CSV format

This section describes the formats of the requests to be used to output the following information in CSV format: basic information of the target resource, the latest performance information of each metric owned by the target resource, and performance information (in chronological order) of a specific metric owned by the target resource. This section also describes the contents to be specified in the request body.

### Context

Acquire basic information and performance information for a resource step-by-step. The following is the acquisition procedure:

1. Use the API function for acquiring the list of resources to acquire the resource ID.
2. Use the API function for acquiring resource information in CSV format to acquire resource information. Specify the resource ID acquired in step 1 in the request body.
3. Use the API function for acquiring the latest resource performance information in CSV format to acquire the latest resource performance information. Specify the resource ID acquired in step 1 or step 2 in the request body.
4. Use the API function for acquiring metric performance information (in chronological order) in CSV format to acquire metric performance information (in chronological order). Specify the metric ID acquired in step 3 in the request body.

The following describes the acquisition procedure by using an example of acquiring the usage of CPU01, a resource of hypervisor 01.

## Procedure

1. Acquire the list of hypervisors to acquire the ID of hypervisor 01, which owns CPU01. Issue the request in the following format:

```
GET http://host:port/Analytics/version/objects/Hypervisors
```

In the response body that is output as follows, confirm that the ID of hypervisor 01 is "4".

```
{
  "data" : [ {
    "instanceID" : 4,
    "name" : "hyperV",
    ...
  }, ...
}
```

2. Specify the ID of hypervisor 01 in the request body to acquire information about hypervisor 01. Issue the request in the following format:

```
POST http://host:port/Analytics/version/services/E2EView/actions/getNodesDataCSV/
invoke
```

The table below shows the objects to be specified as the members of the parameters in the request body.

Table 1-12: Members to be specified when acquiring basic resource information

Member	Whether to specify	Description
basePointNodes	Required	For nodeID, specify "4", which is the ID acquired in step 1. For nodeType, specify the type of the node. For the values that can be specified as a node type, see the table for E2ENodeType in 1.6 <a href="#">List of enumerators</a> .
getType	Required	To acquire basic information only, specify BasicInformation. To also acquire related information, specify AllInformation. To acquire information about the components, such as the CPU, memory, and NICs, specify AllInformation.

In the response body that is output as follows, confirm that the ID of CPU01 is "4".

```
{
  "instanceID" : "0052a2e2-713c-4cfb-892c-e9aaefb32b50",
  "created" : "2016-11-22T11:53:42.188+09:00",
  "updated" : "2016-11-22T11:53:42.354+09:00",
  "completed" : "2016-11-22T11:53:42.354+09:00",
  "state" : "success",
  "affectedResource" : [ ],
  "result" : [ {
    "data": "\"#JP1/Operations Analytics\", \"111000\", \"UTF-8 (BOM)\"\\n\"#Resource
Information\"\\n...\", ..., ResourceID, ResourceName, ResourceType, ..., cpu4, CPU01, CPU, ...
, vm1, VM001, VM, ...
  } ]
}
```

3. Specify the ID of CPU01 in the request body to acquire the latest performance information for the resource. Issue the request in the following format:

```
POST http://host:port/Analytics/version/services/PerfComponents/actions/
getNodesGraphDataCSV/invoke
```

The table below shows the objects to be specified as members of parameters in the request body.

**Table 1-13: Members to be specified when acquiring the latest resource performance information**

Member	Whether to specify	Description
basePointNodes	Required	For nodeID, specify "4", which is the ID that was acquired in step 2. For nodeType, specify the type of the node. For the values can be specified as a node type, see the table for E2ENodeType in 1.6 <a href="#">List of enumerators</a> .
baseTime	Optional	The time of the base point to acquire performance information. If you omit this item, the time that the API function is executed is used as the base point.

In the response body that is output as follows, confirm that the ID of CPU usage is "2".

```
{
  "instanceID" : "0052a2e2-713c-4cfb-892c-e9aaefb32b50",
  "created" : "2016-11-22T11:53:42.188+09:00",
  "updated" : "2016-11-22T11:53:42.354+09:00",
  "completed" : "2016-11-22T11:53:42.354+09:00",
  "state" : "success",
  "affectedResource" : [ ],
  "result" : [ {
    "data": "\"#JP1/Operations Analytics\", \"111000\", \"UTF-8 (BOM)\"\\n\"#Latest PerformanceInformation\"\\n...\", ..., Performance ID, ..., 1, ..., 2, ..., 3, ...
  } ]
}
```

- Specify the ID of CPU usage in the request body to acquire resource performance information (in chronological order). Issue the request in the following format:

```
POST http://host:port/Analytics/version/services/PerfComponents/actions/getNodesGraphDataCSV/invoke
```

The table below shows the objects to be specified as members of parameters in the request body.

**Table 1-14: Members to be specified when acquiring resource performance information (in chronological order)**

Member	Whether to specify	Description
perfComponentIDs	Required	For perfComponentIDs, specify "2", which is the ID acquired in step 3.
baseTime	Optional	The time of the base point to acquire performance information. If you omit this item, the time that the API function is executed is used as the base point.
pointTimeRange	Required	Specify the period (in milliseconds) for acquiring performance information.

## Result

You can acquire, in CSV format, basic information of the target resource by performing step 2, the latest performance information of each metric owned by the target resource by performing step 3, and performance information (in chronological order) of a specific metric owned by the target resource by performing step 4.

---

## Related topics

- [2.9.1 Obtaining Hypervisor List](#)
  - [2.16.2 Collecting, into a CSV file, information about specified resources or a list of related resources](#)
  - [2.17.4 Collecting, into a CSV file, the latest value in the performance information that a specified resource holds](#)
  - [2.17.2 Collecting, into a CSV file, the performance values in a time series of specified performance information](#)
-

# 2

## List of API functions

This chapter describes the API functions provided by JP1/OA.

## 2.1 List of APIs related to authentication information

---

This section describes the operations for authentication information used by JP1/OA for connections to monitored resources.

### 2.1.1 Obtaining Authentication

This API acquires a list of authentication information to be used by JP1/OA for connections to monitored resources.

#### Execution permission

Admin

#### API version

v1

#### Request format

```
GET http[s]://host:port/Analytics/version/objects/Credentials
```

#### Request body

Not applicable.

#### Response body

The structure of the response body and the object attributes are as follows:

##### Collections

```
{
  "data":["...", ...],
  "pagination":{
    "page":"...",
    "pageSize":"...",
    "numPages":"...",
    "totalCount":"..."
  },
  "count":"..."
}
```

##### Collections (Type: Collections)

Attribute	Type	Description
data	anyType[]	A list of Credential objects. For details about Credential, see the table below.
pagination	Pagination	Page information. This parameter is displayed only when the relevant resource exists.
count	int	Number of data items that meet the conditions.

##### pagination (Type: Pagination)



Attribute	Type	Description
page	integer	page
pageSize	integer	Size of the pages
numPages	integer	Number of the pages
totalCount	integer	Number of the objects

## Credential

```
{
  "instanceID": "...",
  "name": "...",
  "credentialType": "...",
  "userId": "...",
  "passwordNotRequired": "...",
  "portNumber": "...",
  "ssl": "...",
  "domainname": "...",
  "namespace": "...",
  "community": "...",
  "snmpVersion": "...",
  "userName": "...",
  "authenticationEnabled": "...",
  "authenticationProtocol": "...",
  "privacyEnabled": "...",
  "privacyProtocol": "...",
  "numOfRelatedResources": "..."}
}
```

## Credential (Type: Credential)

Attribute	Type	Description
instanceID	long	ID for identifying instances.
name	string	Name of authentication information
credentialType	enum	Protocol used for connections to monitoring targets. (For details about the specifiable values, see the table ProtocolType in <i>List of enumerators</i> .) The specifiable values are as follows: <ul style="list-style-type: none"> <li>• WMI</li> <li>• SSH</li> <li>• WBEM</li> <li>• SNMP</li> </ul>
userId	string	Use 64 or fewer characters. If you use SNMP v3 for connections to monitoring targets, the value of the username member is set.
passwordNotRequired	boolean	Whether a password is needed for authentication. If this member is omitted, false is set. This setting takes effect only if WMI is used for connection to the monitoring target. <ul style="list-style-type: none"> <li>• true: A password is needed</li> <li>• false: A password is not needed</li> </ul>
portNumber	int	Port number. This member is only set when the protocol used for connections to monitoring targets is SSH, SMI-S WBEM, or SNMP.
ssl	boolean	Whether to use SSL (HTTPS) for connections to monitoring targets. <ul style="list-style-type: none"> <li>• true: SSL is used</li> </ul>

Attribute	Type	Description
ssl	boolean	<ul style="list-style-type: none"> <li>• false: SSL is not used</li> </ul> If this member is omitted, false is set. This member is only enabled when SMI-S WBEM is used for connections to monitoring targets.
domainname	string	Domain name. This member is only enabled when WMI is used for connections to monitoring targets.
namespace	string	Name space. This member is only enabled when SMI-S WBEM is used for connections to monitoring targets.
community	string	Community name. This member is only enabled when SNMP is used for connections to monitoring targets.
snmpVersion	enum	SNMP version. This member is only enabled when SNMP is used for connections to monitoring targets. (For details about the specifiable values, see the table SnmpVersion in <i>List of enumerators</i> .) The specifiable values are as follows: <ul style="list-style-type: none"> <li>• V1_V2C</li> <li>• V3</li> </ul>
userName	string	User name used for authentication. Use 64 or fewer characters. Only specify this member when using SNMP v3 for connections to monitoring targets.
authenticationEnabled	boolean	Whether to perform SMTP authentication. <ul style="list-style-type: none"> <li>• true: SMTP authentication is enabled</li> <li>• false: SMTP authentication is disabled</li> </ul> If this member is omitted, false is set. Only specify this member when using SNMP v3 for connections to monitoring targets.
authenticationProtocol	enum	Protocol for authentication. Only specify this member when using SNMP v3 for connections to monitoring targets. (For details about the specifiable values, see the table AuthenticationProtocol in <i>List of enumerators</i> .) The specifiable values are as follows: <ul style="list-style-type: none"> <li>• MD5</li> <li>• SHA1</li> </ul>
privacyEnabled	boolean	Whether to enable privacy. <ul style="list-style-type: none"> <li>• true: Privacy is enabled</li> <li>• false: Privacy is disabled</li> </ul> If this member is omitted, false is set. Only specify this member when using SNMP v3 for connections to monitoring targets.
privacyProtocol	enum	Protocol for privacy. Only specify this member when using SNMP v3 for connections to monitoring targets. (For details about the specifiable values, see the table PrivacyProtocol in <i>List of enumerators</i> .) The specifiable values are as follows: <ul style="list-style-type: none"> <li>• DES</li> <li>• AES128</li> </ul>
numOfRelatedResources	int	Number of resources found by using authentication information.

## Status codes

Status code	Reason phrase	Description
200	OK	Success.

Status code	Reason phrase	Description
401	Unauthorized	No login privilege.
403	Forbidden	No reference privilege.
412	Precondition Failed	The server is not available.
500	Internal Server Error	Server processing error.

## Example code

```
[Request Header]
GET /Analytics/v1/objects/Credentials HTTP/1.1
Authorization: Basic c3lzdGVtOmlhbmFnZXI=
User-Agent: curl/7.33.0
Host: localhost:22015
Accept: application/json
Accept-Language: ja

[Response Header]
HTTP/1.1 200 OK
Date: Fri, 27 Nov 2015 05:21:49 GMT
Server: Cosminexus HTTP Server
Cache-Control: no-cache
WWW-Authenticate: HSSO
1d392a3baad40eab4e3a05ad6e71e3a1fcd577_Vlo8Y30Idn8EY0BdB3IEfwgabiA=_V0810
X-Frame-Options: SAMEORIGIN
Transfer-Encoding: chunked
Content-Type: application/json

[Response Body]
{
  "data" : [ {
    "instanceID" : 5,
    "name" : "smis",
    "credentialType" : "WBEM",
    "userId" : "smis",
    "portNumber" : 5989,
    "ssl" : true,
    "namespace" : "root/smis/current",
    "numOfRelatedResources" : 0
  }, {
    "instanceID" : 4,
    "name" : "snmpv3",
    "credentialType" : "SNMP",
    "userId" : "snmp",
    "portNumber" : 161,
    "community" : "",
    "snmpVersion" : "V3",
    "userName" : "snmp",
    "authenticationEnabled" : true,
    "authenticationProtocol" : "MD5",
    "privacyEnabled" : true,
    "privacyProtocol" : "DES",
    "numOfRelatedResources" : 0
  }, {
    "instanceID" : 3,
    "name" : "snmpv1",
    "credentialType" : "SNMP",
    "portNumber" : 161,
```

```
    "community" : "public",
    "snmpVersion" : "V1_V2C",
    "numOfRelatedResources" : 0
  }, {
    "instanceID" : 2,
    "name" : "ssh",
    "credentialType" : "SSH",
    "userId" : "ssh",
    "portNumber" : 22,
    "numOfRelatedResources" : 0
  }, {
    "instanceID" : 1,
    "name" : "wmi",
    "credentialType" : "WMI",
    "userId" : "wmi",
    "domainname" : "workspace",
    "numOfRelatedResources" : 0
  } ],
  "count" : 5
}
```

---

## Related topics

- [1.3 Resource members](#)
  - [1.6 List of enumerators](#)
- 

## 2.1.2 Obtaining Authentication Information

This API acquires the specified authentication information.

### Execution permission

Admin

### API version

v1

### Request format

```
GET http[s]://host:port/Analytics/version/objects/Credentials/{id}
```

### Request body

Not applicable.

### Response body

The structure of the response body and the object attributes are as follows:

#### Credential

```
{
  "instanceID": "...",
  "name": "...",
  "credentialType": "...",
```

```

    "userId": "...",
    "passwordNotRequired": "...",
    "portNumber": "...",
    "ssl": "...",
    "domainname": "...",
    "namespace": "...",
    "community": "...",
    "snmpVersion": "...",
    "userName": "...",
    "authenticationEnabled": "...",
    "authenticationProtocol": "...",
    "privacyEnabled": "...",
    "privacyProtocol": "...",
    "numOfRelatedResources": "...
}

```

## Credential (Type: Credential)

Attribute	Type	Description
instanceID	long	ID for identifying instances.
name	string	Name of authentication information
credentialType	enum	Protocol used for connections to monitoring targets. (For details about the specifiable values, see the table ProtocolType in <i>List of enumerators</i> .) The specifiable values are as follows: <ul style="list-style-type: none"> <li>• WMI</li> <li>• SSH</li> <li>• WBEM</li> <li>• SNMP</li> </ul>
userId	string	Use 64 or fewer characters. If you use SNMP v3 for connections to monitoring targets, the value of the username member is set.
passwordNotRequired	boolean	Whether a password is needed for authentication. If this member is omitted, false is set. This setting takes effect only if WMI is used for connection to the monitoring target. <ul style="list-style-type: none"> <li>• true: A password is needed</li> <li>• false: A password is not needed</li> </ul>
portNumber	int	Port number. This member is only set when the protocol used for connections to monitoring targets is SSH, SMI-S WBEM, or SNMP.
ssl	boolean	Whether to use SSL (HTTPS) for connections to monitoring targets. <ul style="list-style-type: none"> <li>• true: SSL is used</li> <li>• false: SSL is not used</li> </ul> If this member is omitted, false is set. This member is only enabled when SMI-S WBEM is used for connections to monitoring targets.
domainname	string	Domain name. This member is only enabled when WMI is used for connections to monitoring targets.
namespace	string	Name space. This member is only enabled when SMI-S WBEM is used for connections to monitoring targets.
community	string	Community name. This member is only enabled when SNMP is used for connections to monitoring targets.
snmpVersion	enum	SNMP version. This member is only enabled when SNMP is used for connections to monitoring targets. (For details about the specifiable values, see the table SnmpVersion in <i>List of enumerators</i> .)

Attribute	Type	Description
snmpVersion	enum	The specifiable values are as follows: <ul style="list-style-type: none"> <li>• V1_V2C</li> <li>• V3</li> </ul>
userName	string	User name used for authentication. Use 64 or fewer characters. Only specify this member when using SNMP v3 for connections to monitoring targets.
authenticationEnabled	boolean	Whether to perform SMTP authentication. <ul style="list-style-type: none"> <li>• true: SMTP authentication is enabled</li> <li>• false: SMTP authentication is disabled</li> </ul> If this member is omitted, false is set. Only specify this member when using SNMP v3 for connections to monitoring targets.
authenticationProtocol	enum	Protocol for authentication. Only specify this member when using SNMP v3 for connections to monitoring targets. (For details about the specifiable values, see the table AuthenticationProtocol in <i>List of enumerators</i> .) The specifiable values are as follows: <ul style="list-style-type: none"> <li>• MD5</li> <li>• SHA1</li> </ul>
privacyEnabled	boolean	Whether to enable privacy. <ul style="list-style-type: none"> <li>• true: Privacy is enabled</li> <li>• false: Privacy is disabled</li> </ul> If this member is omitted, false is set. Only specify this member when using SNMP v3 for connections to monitoring targets.
privacyProtocol	enum	Protocol for privacy. Only specify this member when using SNMP v3 for connections to monitoring targets. (For details about the specifiable values, see the table PrivacyProtocol in <i>List of enumerators</i> .) The specifiable values are as follows: <ul style="list-style-type: none"> <li>• DES</li> <li>• AES128</li> </ul>
numOfRelatedResources	int	Number of resources found by using authentication information.

## Status codes

Status code	Reason phrase	Description
200	OK	Success.
401	Unauthorized	No login privilege.
403	Forbidden	No reference privilege.
404	Not Found	The resource was not found.
412	Precondition Failed	The server is not available.
500	Internal Server Error	Server processing error.

## Example code

```
[Request Header]
GET /Analytics/v1/objects/Credentials/1 HTTP/1.1
Authorization: Basic c3lzdGVtOmlhbmFnZXI=
```

```
User-Agent: curl/7.33.0
Host: localhost:22015
Accept: application/json
Accept-Language: ja
```

[Response Header]

```
HTTP/1.1 200 OK
Date: Fri, 27 Nov 2015 07:19:44 GMT
Server: Cosminexus HTTP Server
Cache-Control: no-cache
WWW-Authenticate: HSSO c0e8bc66dc88c9cd2bc76bb834cbc281e5358_WV1GcHsLfg5ffg0I_V0810
X-Frame-Options: SAMEORIGIN
Transfer-Encoding: chunked
Content-Type: application/json
```

[Response Body]

```
{
  "instanceID" : 1,
  "name" : "aaa",
  "credentialType" : "WMI",
  "userId" : "aaaa",
  "domainname" : "hogegege",
  "numOfRelatedResources" : 0
}
```

---

## Related topics

- [1.3 Resource members](#)
  - [1.6 List of enumerators](#)
- 

## 2.1.3 Creating Authentication

This API creates an authentication.

### Execution permission

Admin

### API version

v1

### Request format

```
POST http[s]://host:port/Analytics/version/objects/Credentials
```

### Request body

The structure of the request body and the object attributes are as follows:

#### Credential

```
{
  "name": "...",
```

```

"credentialType": "...",
"userId": "...",
"password": "...",
"passwordNotRequired": "...",
"portNumber": "...",
"rootPassword": "...",
"updatePassword": "...",
"updateRootPassword": "...",
"ssl": "...",
"domainname": "...",
"namespace": "...",
"community": "...",
"snmpVersion": "...",
"userName": "...",
"authenticationEnabled": "...",
"authenticationPassphrase": "...",
"updateAuthenticationPassphrase": "...",
"authenticationProtocol": "...",
"privacyEnabled": "...",
"privacyPassphrase": "...",
"updatePrivacyPassphrase": "...",
"privacyProtocol": "..."
}

```

## Credential (Type: Credential)

Attribute	Type	Description
name	string	Name of authentication information
credentialType	enum	Protocol used for connections to monitoring targets. (For details about the specifiable values, see the table ProtocolType in <i>List of enumerators</i> .) The specifiable values are as follows: <ul style="list-style-type: none"> <li>• WMI</li> <li>• SSH</li> <li>• WBEM</li> <li>• SNMP</li> </ul>
userId	string	Use 64 or fewer characters. If you use SNMP v3 for connections to monitoring targets, the value of the username member is set.
password	string	Password used for authentication. Specify a Base64 encoded string of 255 or fewer bytes. To update the password, specify true for updatePassword.
passwordNotRequired	boolean	Whether a password is needed for authentication. If this member is omitted, false is set. This setting takes effect only if WMI is used for connection to the monitoring target. <ul style="list-style-type: none"> <li>• true: A password is needed</li> <li>• false: A password is not needed</li> </ul>
portNumber	int	Port number. This member is only set when the protocol used for connections to monitoring targets is SSH, SMI-S WBEM, or SNMP.
rootPassword	string	Root password used for authentication. Specify a Base64 encoded string of 255 or fewer bytes. This member is only enabled when SSH is used for connections to monitoring targets. To update the rootPassword, specify true for updateRootPassword.
updatePassword	boolean	Whether to change the password (password). <ul style="list-style-type: none"> <li>• true: Password is changed</li> <li>• false: Password is not changed</li> </ul> If this member is omitted, false is set.



Attribute	Type	Description
updateRootPassword	boolean	Whether to change the root password (rootPassword). <ul style="list-style-type: none"> <li>• true: Root password is changed</li> <li>• false: Root password is not changed</li> </ul> If this member is omitted, false is set. This member is only enabled when SSH is used for connections to monitoring targets.
ssl	boolean	Whether to use SSL (HTTPS) for connections to monitoring targets. <ul style="list-style-type: none"> <li>• true: SSL is used</li> <li>• false: SSL is not used</li> </ul> If this member is omitted, false is set. This member is only enabled when SMI-S WBEM is used for connections to monitoring targets.
domainname	string	Domain name. This member is only enabled when WMI is used for connections to monitoring targets.
namespace	string	Name space. This member is only enabled when SMI-S WBEM is used for connections to monitoring targets.
community	string	Community name. This member is only enabled when SNMP is used for connections to monitoring targets.
snmpVersion	enum	SNMP version. This member is only enabled when SNMP is used for connections to monitoring targets. (For details about the specifiable values, see the table SnmpVersion in <i>List of enumerators</i> .) The specifiable values are as follows: <ul style="list-style-type: none"> <li>• V1_V2C</li> <li>• V3</li> </ul>
userName	string	User name used for authentication. Use 64 or fewer characters. Only specify this member when using SNMP v3 for connections to monitoring targets.
authenticationEnabled	boolean	Whether to perform SMTP authentication. <ul style="list-style-type: none"> <li>• true: SMTP authentication is enabled</li> <li>• false: SMTP authentication is disabled</li> </ul> If this member is omitted, false is set. Only specify this member when using SNMP v3 for connections to monitoring targets.
authenticationPassphrase	string	Authentication pass phrase. Encode a string of 255 or fewer bytes in Base64. Only specify this member when using SNMP v3 for connections to monitoring targets. To update the authenticationPassphrase, specify true for updateAuthenticationPassphrase.
updateAuthenticationPassphrase	boolean	Whether to change the authentication pass phrase. <ul style="list-style-type: none"> <li>• true: Authentication pass phrase is changed</li> <li>• false: Authentication pass phrase is not changed</li> </ul> If this member is omitted, false is set. Only specify this member when using SNMP v3 for connections to monitoring targets.
authenticationProtocol	enum	Protocol for authentication. Only specify this member when using SNMP v3 for connections to monitoring targets. (For details about the specifiable values, see the table AuthenticationProtocol in <i>List of enumerators</i> .) The specifiable values are as follows: <ul style="list-style-type: none"> <li>• MD5</li> <li>• SHA1</li> </ul>
privacyEnabled	boolean	Whether to enable privacy. <ul style="list-style-type: none"> <li>• true: Privacy is enabled</li> <li>• false: Privacy is disabled</li> </ul>

Attribute	Type	Description
privacyEnabled	boolean	If this member is omitted, false is set. Only specify this member when using SNMP v3 for connections to monitoring targets.
privacyPassphrase	string	Pass phrase for privacy. Encode a string of 255 or fewer bytes in Base64. Only specify this member when using SNMP v3 for connections to monitoring targets. To update the privacyPassphrase, specify true for updatePrivacyPassphrase.
updatePrivacyPassphrase	boolean	Whether to change the pass phrase for privacy. <ul style="list-style-type: none"> <li>• true: Pass phrase is changed</li> <li>• false: Pass phrase is not changed</li> </ul> If this member is omitted, false is set. Only specify this member when using SNMP v3 for connections to monitoring targets.
privacyProtocol	enum	Protocol for privacy. Only specify this member when using SNMP v3 for connections to monitoring targets. (For details about the specifiable values, see the table PrivacyProtocol in <i>List of enumerators</i> .) The specifiable values are as follows: <ul style="list-style-type: none"> <li>• DES</li> <li>• AES128</li> </ul>

## Response body

The structure of the response body and the object attributes are as follows:

### Credential

```

{
  "instanceID": "...",
  "name": "...",
  "credentialType": "...",
  "userId": "...",
  "passwordNotRequired": "...",
  "portNumber": "...",
  "ssl": "...",
  "domainname": "...",
  "namespace": "...",
  "community": "...",
  "snmpVersion": "...",
  "userName": "...",
  "authenticationEnabled": "...",
  "authenticationProtocol": "...",
  "privacyEnabled": "...",
  "privacyProtocol": "...",
  "numOfRelatedResources": "..."
}

```

### Credential (Type: Credential)

Attribute	Type	Description
instanceID	long	ID for identifying instances.
name	string	Name of authentication information
credentialType	enum	Protocol used for connections to monitoring targets. (For details about the specifiable values, see the table ProtocolType in <i>List of enumerators</i> .) The specifiable values are as follows: <ul style="list-style-type: none"> <li>• WMI</li> </ul>

Attribute	Type	Description
credentialType	enum	<ul style="list-style-type: none"> <li>• SSH</li> <li>• WBEM</li> <li>• SNMP</li> </ul>
userId	string	Use 64 or fewer characters. If you use SNMP v3 for connections to monitoring targets, the value of the username member is set.
passwordNotRequired	boolean	<p>Whether a password is needed for authentication. If this member is omitted, false is set. This setting takes effect only if WMI is used for connection to the monitoring target.</p> <ul style="list-style-type: none"> <li>• true: A password is needed</li> <li>• false: A password is not needed</li> </ul>
portNumber	int	Port number. This member is only set when the protocol used for connections to monitoring targets is SSH, SMI-S WBEM, or SNMP.
ssl	boolean	<p>Whether to use SSL (HTTPS) for connections to monitoring targets.</p> <ul style="list-style-type: none"> <li>• true: SSL is used</li> <li>• false: SSL is not used</li> </ul> <p>If this member is omitted, false is set. This member is only enabled when SMI-S WBEM is used for connections to monitoring targets.</p>
domainname	string	Domain name. This member is only enabled when WMI is used for connections to monitoring targets.
namespace	string	Name space. This member is only enabled when SMI-S WBEM is used for connections to monitoring targets.
community	string	Community name. This member is only enabled when SNMP is used for connections to monitoring targets.
snmpVersion	enum	<p>SNMP version. This member is only enabled when SNMP is used for connections to monitoring targets.</p> <p>(For details about the specifiable values, see the table SnmpVersion in <i>List of enumerators</i>.)</p> <p>The specifiable values are as follows:</p> <ul style="list-style-type: none"> <li>• V1_V2C</li> <li>• V3</li> </ul>
userName	string	User name used for authentication. Use 64 or fewer characters. Only specify this member when using SNMP v3 for connections to monitoring targets.
authenticationEnabled	boolean	<p>Whether to perform SMTP authentication.</p> <ul style="list-style-type: none"> <li>• true: SMTP authentication is enabled</li> <li>• false: SMTP authentication is disabled</li> </ul> <p>If this member is omitted, false is set. Only specify this member when using SNMP v3 for connections to monitoring targets.</p>
authenticationProtocol	enum	<p>Protocol for authentication. Only specify this member when using SNMP v3 for connections to monitoring targets.</p> <p>(For details about the specifiable values, see the table AuthenticationProtocol in <i>List of enumerators</i>.)</p> <p>The specifiable values are as follows:</p> <ul style="list-style-type: none"> <li>• MD5</li> <li>• SHA1</li> </ul>
privacyEnabled	boolean	<p>Whether to enable privacy.</p> <ul style="list-style-type: none"> <li>• true: Privacy is enabled</li> <li>• false: Privacy is disabled</li> </ul> <p>If this member is omitted, false is set. Only specify this member when using SNMP v3 for connections to monitoring targets.</p>

Attribute	Type	Description
privacyProtocol	enum	Protocol for privacy. Only specify this member when using SNMP v3 for connections to monitoring targets. (For details about the specifiable values, see the table PrivacyProtocol in <i>List of enumerators</i> .) The specifiable values are as follows: <ul style="list-style-type: none"> <li>• DES</li> <li>• AES128</li> </ul>
numOfRelatedResources	int	Number of resources found by using authentication information.

## Status codes

Status code	Reason phrase	Description
201	Created	Success.
400	Bad Request	A format of request body is invalid.
401	Unauthorized	No login privilege.
403	Forbidden	No create privilege.
409	Conflict	A resource with the same name exists.
412	Precondition Failed	The server is not available.
500	Internal Server Error	Server processing error.

## Example code

```
[Request Header]
POST http://localhost:22015/Analytics/v1/objects/Credentials HTTP/1.1
Host: localhost:22015
Accept: application/json
Accept-Language: ja
Content-Type: application/json
Authorization: Basic c3lzdGVtOmlhbmFnZXI=

[Request Body]
{
  "name": "windows-001",
  "credentialType": "WMI",
  "userId": "admin",
  "password": "cGFzcmQ=",
  "passwordNotRequired": "false",
  "domainname": ""
}

[Response Header]
HTTP/1.1 201 Created
Date: Wed, 07 Dec 2016 10:25:35 GMT
Server: Cosminexus HTTP Server
Cache-Control: no-cache
WWW-Authenticate: HSSO
492298acc985fe9bf3099a9ca1e52548c6c8cdb_Vlo8Y30Idn8EY0BdB3IEfwgabiA=_V0810
Location: http://localhost:22015/Analytics/v1/objects/Credentials/7
X-Frame-Options: SAMEORIGIN
Keep-Alive: timeout=5, max=100
Connection: Keep-Alive
Content-Type: application/json
```

```
[Response Body]
{
  "instanceID" : 7,
  "name" : "windows-001",
  "credentialType" : "WMI",
  "userId" : "admin",
  "passwordNotRequired" : false,
  "domainname" : "",
  "numOfRelatedResources" : 0
}
```

---

## Related topics

- [1.3 Resource members](#)
  - [1.6 List of enumerators](#)
- 

## 2.1.4 Updating Authentication

This API updates the user ID and password contained in the specified authentication information.

### Execution permission

Admin

### API version

v1

### Request format

```
PUT http[s]://host:port/Analytics/version/objects/Credentials/{id}
```

### Request body

The structure of the request body and the object attributes are as follows:

#### Credential

```
{
  "name": "...",
  "credentialType": "...",
  "userId": "...",
  "password": "...",
  "passwordNotRequired": "...",
  "portNumber": "...",
  "rootPassword": "...",
  "updatePassword": "...",
  "updateRootPassword": "...",
  "ssl": "...",
  "domainname": "...",
  "namespace": "...",
  "community": "...",
  "snmpVersion": "...",
  "userName": "...",
  "authenticationEnabled": "...",
}
```

```

"authenticationPassphrase":"...",
"updateAuthenticationPassphrase":"...",
"authenticationProtocol":"...",
"privacyEnabled":"...",
"privacyPassphrase":"...",
"updatePrivacyPassphrase":"...",
"privacyProtocol":"..."
}

```

## Credential (Type: Credential)

Attribute	Type	Description
name	string	Name of authentication information
credentialType	enum	Protocol used for connections to monitoring targets. (For details about the specifiable values, see the table ProtocolType in <i>List of enumerators</i> .) The specifiable values are as follows: <ul style="list-style-type: none"> <li>• WMI</li> <li>• SSH</li> <li>• WBEM</li> <li>• SNMP</li> </ul>
userId	string	Use 64 or fewer characters. If you use SNMP v3 for connections to monitoring targets, the value of the username member is set.
password	string	Password used for authentication. Specify a Base64 encoded string of 255 or fewer bytes. To update the password, specify true for updatePassword.
passwordNotRequired	boolean	Whether a password is needed for authentication. If this member is omitted, false is set. This setting takes effect only if WMI is used for connection to the monitoring target. <ul style="list-style-type: none"> <li>• true: A password is needed</li> <li>• false: A password is not needed</li> </ul>
portNumber	int	Port number. This member is only set when the protocol used for connections to monitoring targets is SSH, SMI-S WBEM, or SNMP.
rootPassword	string	Root password used for authentication. Specify a Base64 encoded string of 255 or fewer bytes. This member is only enabled when SSH is used for connections to monitoring targets. To update the rootPassword, specify true for updateRootPassword.
updatePassword	boolean	Whether to change the password (password). <ul style="list-style-type: none"> <li>• true: Password is changed</li> <li>• false: Password is not changed</li> </ul> If this member is omitted, false is set.
updateRootPassword	boolean	Whether to change the root password (rootPassword). <ul style="list-style-type: none"> <li>• true: Root password is changed</li> <li>• false: Root password is not changed</li> </ul> If this member is omitted, false is set. This member is only enabled when SSH is used for connections to monitoring targets.
ssl	boolean	Whether to use SSL (HTTPS) for connections to monitoring targets. <ul style="list-style-type: none"> <li>• true: SSL is used</li> <li>• false: SSL is not used</li> </ul> If this member is omitted, false is set. This member is only enabled when SMI-S WBEM is used for connections to monitoring targets.
domainname	string	Domain name. This member is only enabled when WMI is used for connections to monitoring targets.

Attribute	Type	Description
namespace	string	Name space. This member is only enabled when SMI-S WBEM is used for connections to monitoring targets.
community	string	Community name. This member is only enabled when SNMP is used for connections to monitoring targets.
snmpVersion	enum	SNMP version. This member is only enabled when SNMP is used for connections to monitoring targets. (For details about the specifiable values, see the table SnmpVersion in <i>List of enumerators</i> .) The specifiable values are as follows: <ul style="list-style-type: none"> <li>• V1_V2C</li> <li>• V3</li> </ul>
userName	string	User name used for authentication. Use 64 or fewer characters. Only specify this member when using SNMP v3 for connections to monitoring targets.
authenticationEnabled	boolean	Whether to perform SMTP authentication. <ul style="list-style-type: none"> <li>• true: SMTP authentication is enabled</li> <li>• false: SMTP authentication is disabled</li> </ul> If this member is omitted, false is set. Only specify this member when using SNMP v3 for connections to monitoring targets.
authenticationPassphrase	string	Authentication pass phrase. Encode a string of 255 or fewer bytes in Base64. Only specify this member when using SNMP v3 for connections to monitoring targets. To update the authenticationPassphrase, specify true for updateAuthenticationPassphrase.
updateAuthenticationPassphrase	boolean	Whether to change the authentication pass phrase. <ul style="list-style-type: none"> <li>• true: Authentication pass phrase is changed</li> <li>• false: Authentication pass phrase is not changed</li> </ul> If this member is omitted, false is set. Only specify this member when using SNMP v3 for connections to monitoring targets.
authenticationProtocol	enum	Protocol for authentication. Only specify this member when using SNMP v3 for connections to monitoring targets. (For details about the specifiable values, see the table AuthenticationProtocol in <i>List of enumerators</i> .) The specifiable values are as follows: <ul style="list-style-type: none"> <li>• MD5</li> <li>• SHA1</li> </ul>
privacyEnabled	boolean	Whether to enable privacy. <ul style="list-style-type: none"> <li>• true: Privacy is enabled</li> <li>• false: Privacy is disabled</li> </ul> If this member is omitted, false is set. Only specify this member when using SNMP v3 for connections to monitoring targets.
privacyPassphrase	string	Pass phrase for privacy. Encode a string of 255 or fewer bytes in Base64. Only specify this member when using SNMP v3 for connections to monitoring targets. To update the privacyPassphrase, specify true for updatePrivacyPassphrase.
updatePrivacyPassphrase	boolean	Whether to change the pass phrase for privacy. <ul style="list-style-type: none"> <li>• true: Pass phrase is changed</li> <li>• false: Pass phrase is not changed</li> </ul> If this member is omitted, false is set. Only specify this member when using SNMP v3 for connections to monitoring targets.
privacyProtocol	enum	Protocol for privacy. Only specify this member when using SNMP v3 for connections to monitoring targets.

Attribute	Type	Description
privacyProtocol	enum	(For details about the specifiable values, see the table PrivacyProtocol in <i>List of enumerators</i> .) The specifiable values are as follows: <ul style="list-style-type: none"> <li>• DES</li> <li>• AES128</li> </ul>

## Response body

The structure of the response body and the object attributes are as follows:

### Credential

```
{
  "instanceID": "...",
  "name": "...",
  "credentialType": "...",
  "userId": "...",
  "passwordNotRequired": "...",
  "portNumber": "...",
  "ssl": "...",
  "domainname": "...",
  "namespace": "...",
  "community": "...",
  "snmpVersion": "...",
  "userName": "...",
  "authenticationEnabled": "...",
  "authenticationProtocol": "...",
  "privacyEnabled": "...",
  "privacyProtocol": "...",
  "numOfRelatedResources": "..."
}
```

### Credential (Type: Credential)

Attribute	Type	Description
instanceID	long	ID for identifying instances.
name	string	Name of authentication information
credentialType	enum	Protocol used for connections to monitoring targets. (For details about the specifiable values, see the table ProtocolType in <i>List of enumerators</i> .) The specifiable values are as follows: <ul style="list-style-type: none"> <li>• WMI</li> <li>• SSH</li> <li>• WBEM</li> <li>• SNMP</li> </ul>
userId	string	Use 64 or fewer characters. If you use SNMP v3 for connections to monitoring targets, the value of the username member is set.
passwordNotRequired	boolean	Whether a password is needed for authentication. If this member is omitted, false is set. This setting takes effect only if WMI is used for connection to the monitoring target. <ul style="list-style-type: none"> <li>• true: A password is needed</li> <li>• false: A password is not needed</li> </ul>
portNumber	int	Port number. This member is only set when the protocol used for connections to monitoring targets is SSH, SMI-S WBEM, or SNMP.



Attribute	Type	Description
ssl	boolean	Whether to use SSL (HTTPS) for connections to monitoring targets. <ul style="list-style-type: none"> <li>• true: SSL is used</li> <li>• false: SSL is not used</li> </ul> If this member is omitted, false is set. This member is only enabled when SMI-S WBEM is used for connections to monitoring targets.
domainname	string	Domain name. This member is only enabled when WMI is used for connections to monitoring targets.
namespace	string	Name space. This member is only enabled when SMI-S WBEM is used for connections to monitoring targets.
community	string	Community name. This member is only enabled when SNMP is used for connections to monitoring targets.
snmpVersion	enum	SNMP version. This member is only enabled when SNMP is used for connections to monitoring targets. (For details about the specifiable values, see the table SnmpVersion in <i>List of enumerators</i> .) The specifiable values are as follows: <ul style="list-style-type: none"> <li>• V1_V2C</li> <li>• V3</li> </ul>
userName	string	User name used for authentication. Use 64 or fewer characters. Only specify this member when using SNMP v3 for connections to monitoring targets.
authenticationEnabled	boolean	Whether to perform SMTP authentication. <ul style="list-style-type: none"> <li>• true: SMTP authentication is enabled</li> <li>• false: SMTP authentication is disabled</li> </ul> If this member is omitted, false is set. Only specify this member when using SNMP v3 for connections to monitoring targets.
authenticationProtocol	enum	Protocol for authentication. Only specify this member when using SNMP v3 for connections to monitoring targets. (For details about the specifiable values, see the table AuthenticationProtocol in <i>List of enumerators</i> .) The specifiable values are as follows: <ul style="list-style-type: none"> <li>• MD5</li> <li>• SHA1</li> </ul>
privacyEnabled	boolean	Whether to enable privacy. <ul style="list-style-type: none"> <li>• true: Privacy is enabled</li> <li>• false: Privacy is disabled</li> </ul> If this member is omitted, false is set. Only specify this member when using SNMP v3 for connections to monitoring targets.
privacyProtocol	enum	Protocol for privacy. Only specify this member when using SNMP v3 for connections to monitoring targets. (For details about the specifiable values, see the table PrivacyProtocol in <i>List of enumerators</i> .) The specifiable values are as follows: <ul style="list-style-type: none"> <li>• DES</li> <li>• AES128</li> </ul>
numOfRelatedResources	int	Number of resources found by using authentication information.

## Status codes

Status code	Reason phrase	Description
200	OK	Success.
400	Bad Request	A format of request body is invalid.
401	Unauthorized	No login privilege.
403	Forbidden	No update privilege.
404	Not Found	The resource was not found.
409	Conflict	A resource with the same name exists.
412	Precondition Failed	The server is not available.
500	Internal Server Error	Server processing error.

## Example code

```
[Request Header]
PUT /Analytics/v1/objects/Credentials/13 HTTP/1.1
Authorization: Basic c3lzdGVtOmlhbmFnZXI=
User-Agent: curl/7.33.0
Host: localhost:22015
Accept: application/json
Content-Type: application/json
Accept-Language: ja
Content-Length: 256
```

```
[Request Body]
{
  "instanceID" : 13,
  "name" : "WindowsMonitoring",
  "credentialType" : "WMI",
  "userId" : "Administrator",
  "passwordNotRequired" : false,
  "updatePassword" : true,
  "password" : "c3lzdGVtOmlhbmFnZXI=",
  "domainname" : "domain",
  "numOfRelatedResources" : 0
}
```

```
[Response Header]
HTTP/1.1 200 OK
Date: Fri, 27 Nov 2015 08:42:45 GMT
Server: Cosminexus HTTP Server
Cache-Control: no-cache
WWW-Authenticate: HSSO 4afe674fe8a4e569aa824d8786b0ac5b53e4a_WV1GcHsLfg5ffg0I_V0810
X-Frame-Options: SAMEORIGIN
Transfer-Encoding: chunked
Content-Type: application/json
```

```
[Response Body]
{
  "instanceID" : 13,
  "name" : "WindowsMonitoring",
  "credentialType" : "WMI",
  "userId" : "Administrator",
```

```
"passwordNotRequired" : false,
"domainname" : "domain",
"numOfRelatedResources" : 0
}
```

---

## Related topics

- [1.3 Resource members](#)
  - [1.6 List of enumerators](#)
- 

## 2.1.5 Deleting Authentication

This API deletes the specified authentication information.

### Execution permission

Admin

### API version

v1

### Request format

```
DELETE http[s]://host:port/Analytics/version/objects/Credentials/{id}
```

### Request body

Not applicable.

### Response body

Not applicable.

### Status codes

Status code	Reason phrase	Description
204	No Content	Success.
401	Unauthorized	No login privilege.
403	Forbidden	No delete privilege.
404	Not Found	The resource was not found.
412	Precondition Failed	The server is not available.
500	Internal Server Error	Server processing error.

### Example code

```
[Request Header]
DELETE http://localhost:22015/Analytics/v1/objects/Credentials/7 HTTP/1.1
```

```
Host: localhost:22015
User-Agent: curl/7.33.0
Host: localhost:22015
Accept: application/json
Content-Type: application/json
Accept-Language: ja
Authorization: Basic c3lzdGVtOmlhbmFnZXI=
```

```
[Response Header]
HTTP/1.1 204 No Content
Date: Wed, 07 Dec 2016 10:26:30 GMT
Server: Cosminexus HTTP Server
Cache-Control: no-cache
WWW-Authenticate: HSSO
7d842f5055c8b12c777296e3cd4f756ace9b528_Vlo8Y30Idn8EY0BdB3IEfwgabiA=_V0810
X-Frame-Options: SAMEORIGIN
Content-Length: 0
Keep-Alive: timeout=5, max=100
Connection: Keep-Alive
Content-Type: application/json
```

---

## Related topics

- [1.3 Resource members](#)
  - [1.6 List of enumerators](#)
-

## 2.2 List of API functions related to retrieving management targets

This chapter describes how to specify settings for retrieving management targets.

### 2.2.1 Obtaining Retrieval Ranges

This API obtains a list of retrieval ranges used by JP1/OA in retrievals of monitoring targets.

#### Execution permission

Admin

#### API version

v1

#### Request format

```
GET http[s]://host:port/Analytics/version/objects/IpAddrRanges
```

#### Request body

Not applicable.

#### Response body

The structure of the response body and the object attributes are as follows:

##### Collections

```
{
  "data":["...", ...],
  "pagination":{
    "page":"...",
    "pageSize":"...",
    "numPages":"...",
    "totalCount":"..."
  },
  "count":"..."
}
```

##### Collections (Type: Collections)

Attribute	Type	Description
data	anyType[]	A list of IPAddrRange objects. For details about IPAddrRange, see the table below.
pagination	Pagination	Page information. This parameter is displayed only when the relevant resource exists.
count	int	Number of data items that meet the conditions.

##### pagination (Type: Pagination)

Attribute	Type	Description
page	integer	page
pageSize	integer	Size of the pages
numPages	integer	Number of the pages
totalCount	integer	Number of the objects

## IPAddrRange

```
{
  "instanceID": "...",
  "name": "...",
  "ipAddrRange": ["...", ...],
  "usePing": "...",
  "useAllCredential": "...",
  "selectedCredentials": [{
    "instanceID": "...",
    "name": "...",
    "credentialType": "...",
    "userId": "...",
    "passwordNotRequired": "...",
    "portNumber": "...",
    "ssl": "...",
    "domainname": "...",
    "namespace": "...",
    "community": "...",
    "snmpVersion": "...",
    "userName": "...",
    "authenticationEnabled": "...",
    "authenticationProtocol": "...",
    "privacyEnabled": "...",
    "privacyProtocol": "...",
    "numOfRelatedResources": "..."
  }],
  "deviceClassificationLabel": "..."
}
```

## IPAddrRange (Type: IPAddrRange)

Attribute	Type	Description
instanceID	long	ID for identifying instances.
name	string	Name of a retrieval range
ipAddrRange	string[]	Specify a retrieval range. The IP address from which retrieval starts is set at position 0 in the list, and the IP address at which retrieval ends is set at position 1.
usePing	boolean	Specify whether to execute ping on the target devices during retrieval. - true: Use ping. - false: Do not use ping.
useAllCredential	boolean	Flag indicating whether all the credentials are to be used. To use all the credentials, specify true.
selectedCredentials	Credential[]	List of the authentication information to be used for retrieval
deviceClassificationLabel	string	Name of the classification label assigned to the device

## selectedCredentials (Type: Credential)

Attribute	Type	Description
instanceID	long	ID for identifying instances.
name	string	Name of authentication information
credentialType	enum	Protocol used for connections to monitoring targets. (For details about the specifiable values, see the table ProtocolType in <i>List of enumerators</i> .) The specifiable values are as follows: <ul style="list-style-type: none"><li>• WMI</li><li>• SSH</li><li>• WBEM</li><li>• SNMP</li></ul>
userId	string	Use 64 or fewer characters. If you use SNMP v3 for connections to monitoring targets, the value of the username member is set.
passwordNotRequired	boolean	Whether a password is needed for authentication. If this member is omitted, false is set. This setting takes effect only if WMI is used for connection to the monitoring target. <ul style="list-style-type: none"><li>• true: A password is needed</li><li>• false: A password is not needed</li></ul>
portNumber	int	Port number. This member is only set when the protocol used for connections to monitoring targets is SSH, SMI-S WBEM, or SNMP.
ssl	boolean	Whether to use SSL (HTTPS) for connections to monitoring targets. <ul style="list-style-type: none"><li>• true: SSL is used</li><li>• false: SSL is not used</li></ul> If this member is omitted, false is set. This member is only enabled when SMI-S WBEM is used for connections to monitoring targets.
domainname	string	Domain name. This member is only enabled when WMI is used for connections to monitoring targets.
namespace	string	Name space. This member is only enabled when SMI-S WBEM is used for connections to monitoring targets.
community	string	Community name. This member is only enabled when SNMP is used for connections to monitoring targets.
snmpVersion	enum	SNMP version. This member is only enabled when SNMP is used for connections to monitoring targets. (For details about the specifiable values, see the table SnmpVersion in <i>List of enumerators</i> .) The specifiable values are as follows: <ul style="list-style-type: none"><li>• V1_V2C</li><li>• V3</li></ul>
userName	string	User name used for authentication. Use 64 or fewer characters. Only specify this member when using SNMP v3 for connections to monitoring targets.
authenticationEnabled	boolean	Whether to perform SMTP authentication. <ul style="list-style-type: none"><li>• true: SMTP authentication is enabled</li><li>• false: SMTP authentication is disabled</li></ul> If this member is omitted, false is set. Only specify this member when using SNMP v3 for connections to monitoring targets.
authenticationProtocol	enum	Protocol for authentication. Only specify this member when using SNMP v3 for connections to monitoring targets.

Attribute	Type	Description
authenticationProtocol	enum	(For details about the specifiable values, see the table AuthenticationProtocol in <i>List of enumerators</i> .) The specifiable values are as follows: <ul style="list-style-type: none"> <li>• MD5</li> <li>• SHA1</li> </ul>
privacyEnabled	boolean	Whether to enable privacy. <ul style="list-style-type: none"> <li>• true: Privacy is enabled</li> <li>• false: Privacy is disabled</li> </ul> If this member is omitted, false is set. Only specify this member when using SNMP v3 for connections to monitoring targets.
privacyProtocol	enum	Protocol for privacy. Only specify this member when using SNMP v3 for connections to monitoring targets. (For details about the specifiable values, see the table PrivacyProtocol in <i>List of enumerators</i> .) The specifiable values are as follows: <ul style="list-style-type: none"> <li>• DES</li> <li>• AES128</li> </ul>
numOfRelatedResources	int	Number of resources found by using authentication information.

## Status codes

Status code	Reason phrase	Description
200	OK	Success.
401	Unauthorized	No login privilege.
412	Precondition Failed	The server is not available.
500	Internal Server Error	Server processing error.

## Example code

```
[Request Header]
GET http://localhost:22015/Analytics/v1/objects/IpAddrRanges/ HTTP/1.1
Host: localhost:22015
User-Agent: curl/7.33.0
Accept: application/json
Accept-Language: ja
Content-Type: application/json
Authorization: Basic c3lzdGVtOm1hbmFnZXI=

[Response Header]
HTTP/1.1 200 OK
Date: Wed, 07 Dec 2016 09:58:26 GMT
Server: Cosminexus HTTP Server
Cache-Control: no-cache
WWW-Authenticate: HSSO
2d4c182d7464f34a4e9bc256db5f543f66efac9e_Vlo8Y30Idn8EY0BdB3IEfwgabiA=_V0810
X-Frame-Options: SAMEORIGIN
Keep-Alive: timeout=5, max=100
Connection: Keep-Alive
Content-Type: application/json
Content-Length: 242
```



```
[Response Body]
{
  "data" : [ {
    "instanceID" : 0,
    "name" : "IP Range-0",
    "ipAddrRange" : [ "255.255.255.0", "255.255.255.0" ],
    "usePing" : true,
    "useAllCredential" : false,
    "selectedCredentials" : [ ]
  } ,
  {
    "instanceID" : 1,
    "name" : "IP Range-1",
    "ipAddrRange" : [ "192.168.1.0", "192.168.1.254" ],
    "usePing" : true,
    "useAllCredential" : false,
    "selectedCredentials" : [
      {
        "instanceID": 3,
        "name": "WMI2_Cloud",
        "credentialType": "WMI",
        "userId": "Administrator",
        "passwordNotRequired": false,
        "domainname": "",
        "numOfRelatedResources": 3
      }
    ]
  },
  "deviceClassificationLabel": "Cloud Env"
}],
"count" : 2
}
```

---

## Related topics

- [1.3 Resource members](#)
  - [1.6 List of enumerators](#)
- 

## 2.2.2 Obtaining Retrieval Range Information

This API acquires information about the specified retrieval ranges.

### Execution permission

Admin

### API version

v1

### Request format

```
GET http[s]://host:port/Analytics/version/objects/IpAddrRanges/{id}
```

## Request body

Not applicable.

## Response body

The structure of the response body and the object attributes are as follows:

### IPAddrRange

```
{
  "instanceID": "...",
  "name": "...",
  "ipAddrRange": ["...", ...],
  "usePing": "...",
  "useAllCredential": "...",
  "selectedCredentials": [{
    "instanceID": "...",
    "name": "...",
    "credentialType": "...",
    "userId": "...",
    "passwordNotRequired": "...",
    "portNumber": "...",
    "ssl": "...",
    "domainname": "...",
    "namespace": "...",
    "community": "...",
    "snmpVersion": "...",
    "userName": "...",
    "authenticationEnabled": "...",
    "authenticationProtocol": "...",
    "privacyEnabled": "...",
    "privacyProtocol": "...",
    "numOfRelatedResources": "..."
  }],
  "deviceClassificationLabel": "..."
}
```

### IPAddrRange (Type: IPAddrRange)

Attribute	Type	Description
instanceID	long	ID for identifying instances.
name	string	Name of a retrieval range
ipAddrRange	string[]	Specify a retrieval range. The IP address from which retrieval starts is set at position 0 in the list, and the IP address at which retrieval ends is set at position 1.
usePing	boolean	Specify whether to execute ping on the target devices during retrieval. - true: Use ping. - false: Do not use ping.
useAllCredential	boolean	Flag indicating whether all the credentials are to be used. To use all the credentials, specify true.
selectedCredentials	Credential[]	List of the authentication information to be used for retrieval
deviceClassificationLabel	string	Name of the classification label assigned to the device

### selectedCredentials (Type: Credential)

Attribute	Type	Description
instanceID	long	ID for identifying instances.
name	string	Name of authentication information
credentialType	enum	Protocol used for connections to monitoring targets. (For details about the specifiable values, see the table ProtocolType in <i>List of enumerators</i> .) The specifiable values are as follows: <ul style="list-style-type: none"> <li>• WMI</li> <li>• SSH</li> <li>• WBEM</li> <li>• SNMP</li> </ul>
userId	string	Use 64 or fewer characters. If you use SNMP v3 for connections to monitoring targets, the value of the username member is set.
passwordNotRequired	boolean	Whether a password is needed for authentication. If this member is omitted, false is set. This setting takes effect only if WMI is used for connection to the monitoring target. <ul style="list-style-type: none"> <li>• true: A password is needed</li> <li>• false: A password is not needed</li> </ul>
portNumber	int	Port number. This member is only set when the protocol used for connections to monitoring targets is SSH, SMI-S WBEM, or SNMP.
ssl	boolean	Whether to use SSL (HTTPS) for connections to monitoring targets. <ul style="list-style-type: none"> <li>• true: SSL is used</li> <li>• false: SSL is not used</li> </ul> If this member is omitted, false is set. This member is only enabled when SMI-S WBEM is used for connections to monitoring targets.
domainname	string	Domain name. This member is only enabled when WMI is used for connections to monitoring targets.
namespace	string	Name space. This member is only enabled when SMI-S WBEM is used for connections to monitoring targets.
community	string	Community name. This member is only enabled when SNMP is used for connections to monitoring targets.
snmpVersion	enum	SNMP version. This member is only enabled when SNMP is used for connections to monitoring targets. (For details about the specifiable values, see the table SnmpVersion in <i>List of enumerators</i> .) The specifiable values are as follows: <ul style="list-style-type: none"> <li>• V1_V2C</li> <li>• V3</li> </ul>
userName	string	User name used for authentication. Use 64 or fewer characters. Only specify this member when using SNMP v3 for connections to monitoring targets.
authenticationEnabled	boolean	Whether to perform SMTP authentication. <ul style="list-style-type: none"> <li>• true: SMTP authentication is enabled</li> <li>• false: SMTP authentication is disabled</li> </ul> If this member is omitted, false is set. Only specify this member when using SNMP v3 for connections to monitoring targets.
authenticationProtocol	enum	Protocol for authentication. Only specify this member when using SNMP v3 for connections to monitoring targets. (For details about the specifiable values, see the table AuthenticationProtocol in <i>List of enumerators</i> .) The specifiable values are as follows:

Attribute	Type	Description
authenticationProtocol	enum	<ul style="list-style-type: none"> <li>MD5</li> <li>SHA1</li> </ul>
privacyEnabled	boolean	Whether to enable privacy. <ul style="list-style-type: none"> <li>true: Privacy is enabled</li> <li>false: Privacy is disabled</li> </ul> If this member is omitted, false is set. Only specify this member when using SNMP v3 for connections to monitoring targets.
privacyProtocol	enum	Protocol for privacy. Only specify this member when using SNMP v3 for connections to monitoring targets. (For details about the specifiable values, see the table PrivacyProtocol in <i>List of enumerators</i> .) The specifiable values are as follows: <ul style="list-style-type: none"> <li>DES</li> <li>AES128</li> </ul>
numOfRelatedResources	int	Number of resources found by using authentication information.

## Status codes

Status code	Reason phrase	Description
200	OK	Success.
401	Unauthorized	No login privilege.
404	Not Found	The resource was not found.
412	Precondition Failed	The server is not available.
500	Internal Server Error	Server processing error.

## Example code

```
[Request Header]
GET http://localhost:22015/Analytics/v1/objects/IpAddrRanges/50 HTTP/1.1
Host: localhost:22015
User-Agent: curl/7.33.0
Accept: application/json
Accept-Language: ja
Content-Type: application/json
Authorization: Basic c3lzdGVtOm1hbmFnZXI=

[Response Header]
HTTP/1.1 200 OK
Date: Wed, 07 Dec 2016 10:02:50 GMT
Server: Cosminexus HTTP Server
Cache-Control: no-cache
WWW-Authenticate: HSSO
684796b49f478df4995ed24766979cff90f05ea9_Vl08Y30Idn8EY0BdB3IEfwgabiA=_V0810
X-Frame-Options: SAMEORIGIN
Keep-Alive: timeout=5, max=100
Connection: Keep-Alive
Content-Type: application/json

[Response Body]
{
  "instanceID" : 50,
```

```
"name" : "IP Addr Range 01",
"ipAddrRange" : [ "192.168.0.110", "192.168.0.118" ],
"usePing" : true,
"useAllCredential" : false,
"selectedCredentials" : [ ]
}
```

---

## Related topics

- [1.3 Resource members](#)
  - [1.6 List of enumerators](#)
- 

## 2.2.3 Creating Retrieval Ranges

This API creates a retrieval ranges.

### Execution permission

Admin

### API version

v1

### Request format

```
POST http[s]://host:port/Analytics/version/objects/IpAddrRanges
```

### Request body

The structure of the request body and the object attributes are as follows:

#### IPAddrRange

```
{
  "name":"...",
  "ipAddrRange":["...", ...],
  "usePing":"...",
  "useAllCredential":"...",
  "selectedCredentials":[{"
    "name":"...",
    "credentialType":"...",
    "userId":"...",
    "password":"...",
    "passwordNotRequired":"...",
    "portNumber":"...",
    "rootPassword":"...",
    "updatePassword":"...",
    "updateRootPassword":"...",
    "ssl":"...",
    "domainname":"...",
    "namespace":"...",
    "community":"...",
    "snmpVersion":"...",
    "userName":"...",
    "authenticationEnabled":"...",
  }]
```

```

        "authenticationPassphrase": "...",
        "updateAuthenticationPassphrase": "...",
        "authenticationProtocol": "...",
        "privacyEnabled": "...",
        "privacyPassphrase": "...",
        "updatePrivacyPassphrase": "...",
        "privacyProtocol": "...",
    },
    :
  ],
  "deviceClassificationLabel": "...",
}

```

## IPAddrRange (Type: IPAddrRange)

Attribute	Type	Description
name	string	Name of a retrieval range
ipAddrRange	string[]	Specify a retrieval range. The IP address from which retrieval starts is set at position 0 in the list, and the IP address at which retrieval ends is set at position 1.
usePing	boolean	Specify whether to execute ping on the target devices during retrieval. - true: Use ping. - false: Do not use ping.
useAllCredential	boolean	Flag indicating whether all the credentials are to be used. To use all the credentials, specify true.
selectedCredentials	Credential[]	List of the authentication information to be used for retrieval
deviceClassificationLabel	string	Name of the classification label assigned to the device

## selectedCredentials (Type: Credential)

Attribute	Type	Description
name	string	Name of authentication information
credentialType	enum	Protocol used for connections to monitoring targets. (For details about the specifiable values, see the table ProtocolType in <i>List of enumerators</i> .) The specifiable values are as follows: <ul style="list-style-type: none"> <li>• WMI</li> <li>• SSH</li> <li>• WBEM</li> <li>• SNMP</li> </ul>
userId	string	Use 64 or fewer characters. If you use SNMP v3 for connections to monitoring targets, the value of the username member is set.
password	string	Password used for authentication. Specify a Base64 encoded string of 255 or fewer bytes. To update the password, specify true for updatePassword.
passwordNotRequired	boolean	Whether a password is needed for authentication. If this member is omitted, false is set. This setting takes effect only if WMI is used for connection to the monitoring target. <ul style="list-style-type: none"> <li>• true: A password is needed</li> <li>• false: A password is not needed</li> </ul>
portNumber	int	Port number. This member is only set when the protocol used for connections to monitoring targets is SSH, SMI-S WBEM, or SNMP.

Attribute	Type	Description
rootPassword	string	Root password used for authentication. Specify a Base64 encoded string of 255 or fewer bytes. This member is only enabled when SSH is used for connections to monitoring targets. To update the rootPassword, specify true for updateRootPassword.
updatePassword	boolean	Whether to change the password (password). • true: Password is changed • false: Password is not changed If this member is omitted, false is set.
updateRootPassword	boolean	Whether to change the root password (rootPassword). • true: Root password is changed • false: Root password is not changed If this member is omitted, false is set. This member is only enabled when SSH is used for connections to monitoring targets.
ssl	boolean	Whether to use SSL (HTTPS) for connections to monitoring targets. • true: SSL is used • false: SSL is not used If this member is omitted, false is set. This member is only enabled when SMI-S WBEM is used for connections to monitoring targets.
domainname	string	Domain name. This member is only enabled when WMI is used for connections to monitoring targets.
namespace	string	Name space. This member is only enabled when SMI-S WBEM is used for connections to monitoring targets.
community	string	Community name. This member is only enabled when SNMP is used for connections to monitoring targets.
snmpVersion	enum	SNMP version. This member is only enabled when SNMP is used for connections to monitoring targets. (For details about the specifiable values, see the table SnmpVersion in <i>List of enumerators</i> .) The specifiable values are as follows: • V1_V2C • V3
userName	string	User name used for authentication. Use 64 or fewer characters. Only specify this member when using SNMP v3 for connections to monitoring targets.
authenticationEnabled	boolean	Whether to perform SMTP authentication. • true: SMTP authentication is enabled • false: SMTP authentication is disabled If this member is omitted, false is set. Only specify this member when using SNMP v3 for connections to monitoring targets.
authenticationPassphrase	string	Authentication pass phrase. Encode a string of 255 or fewer bytes in Base64. Only specify this member when using SNMP v3 for connections to monitoring targets. To update the authenticationPassphrase, specify true for updateAuthenticationPassphrase.
updateAuthenticationPassphrase	boolean	Whether to change the authentication pass phrase. • true: Authentication pass phrase is changed • false: Authentication pass phrase is not changed If this member is omitted, false is set. Only specify this member when using SNMP v3 for connections to monitoring targets.
authenticationProtocol	enum	Protocol for authentication. Only specify this member when using SNMP v3 for connections to monitoring targets.

Attribute	Type	Description
authenticationProtocol	enum	(For details about the specifiable values, see the table AuthenticationProtocol in <i>List of enumerators</i> .) The specifiable values are as follows: <ul style="list-style-type: none"> <li>• MD5</li> <li>• SHA1</li> </ul>
privacyEnabled	boolean	Whether to enable privacy. <ul style="list-style-type: none"> <li>• true: Privacy is enabled</li> <li>• false: Privacy is disabled</li> </ul> If this member is omitted, false is set. Only specify this member when using SNMP v3 for connections to monitoring targets.
privacyPassphrase	string	Pass phrase for privacy. Encode a string of 255 or fewer bytes in Base64. Only specify this member when using SNMP v3 for connections to monitoring targets. To update the privacyPassphrase, specify true for updatePrivacyPassphrase.
updatePrivacyPassphrase	boolean	Whether to change the pass phrase for privacy. <ul style="list-style-type: none"> <li>• true: Pass phrase is changed</li> <li>• false: Pass phrase is not changed</li> </ul> If this member is omitted, false is set. Only specify this member when using SNMP v3 for connections to monitoring targets.
privacyProtocol	enum	Protocol for privacy. Only specify this member when using SNMP v3 for connections to monitoring targets. (For details about the specifiable values, see the table PrivacyProtocol in <i>List of enumerators</i> .) The specifiable values are as follows: <ul style="list-style-type: none"> <li>• DES</li> <li>• AES128</li> </ul>

## Response body

The structure of the response body and the object attributes are as follows:

### IPAddrRange

```
{
  "instanceID": "...",
  "name": "...",
  "ipAddrRange": ["...", ...],
  "usePing": "...",
  "useAllCredential": "...",
  "selectedCredentials": [{
    "instanceID": "...",
    "name": "...",
    "credentialType": "...",
    "userId": "...",
    "passwordNotRequired": "...",
    "portNumber": "...",
    "ssl": "...",
    "domainname": "...",
    "namespace": "...",
    "community": "...",
    "snmpVersion": "...",
    "userName": "...",
    "authenticationEnabled": "...",
    "authenticationProtocol": "...",
    "privacyEnabled": "...",
    "privacyProtocol": "...",
    "numOfRelatedResources": "..."
  }
}
```



```

    },
    :
  ],
  "deviceClassificationLabel": "...
}

```

### IPAddrRange (Type: IPAddrRange)

Attribute	Type	Description
instanceID	long	ID for identifying instances.
name	string	Name of a retrieval range
ipAddrRange	string[]	Specify a retrieval range. The IP address from which retrieval starts is set at position 0 in the list, and the IP address at which retrieval ends is set at position 1.
usePing	boolean	Specify whether to execute ping on the target devices during retrieval. - true: Use ping. - false: Do not use ping.
useAllCredential	boolean	Flag indicating whether all the credentials are to be used. To use all the credentials, specify true.
selectedCredentials	Credential[]	List of the authentication information to be used for retrieval
deviceClassificationLabel	string	Name of the classification label assigned to the device

### selectedCredentials (Type: Credential)

Attribute	Type	Description
instanceID	long	ID for identifying instances.
name	string	Name of authentication information
credentialType	enum	Protocol used for connections to monitoring targets. (For details about the specifiable values, see the table ProtocolType in <i>List of enumerators</i> .) The specifiable values are as follows: <ul style="list-style-type: none"> <li>• WMI</li> <li>• SSH</li> <li>• WBEM</li> <li>• SNMP</li> </ul>
userId	string	Use 64 or fewer characters. If you use SNMP v3 for connections to monitoring targets, the value of the username member is set.
passwordNotRequired	boolean	Whether a password is needed for authentication. If this member is omitted, false is set. This setting takes effect only if WMI is used for connection to the monitoring target. <ul style="list-style-type: none"> <li>• true: A password is needed</li> <li>• false: A password is not needed</li> </ul>
portNumber	int	Port number. This member is only set when the protocol used for connections to monitoring targets is SSH, SMI-S WBEM, or SNMP.
ssl	boolean	Whether to use SSL (HTTPS) for connections to monitoring targets. <ul style="list-style-type: none"> <li>• true: SSL is used</li> <li>• false: SSL is not used</li> </ul> If this member is omitted, false is set. This member is only enabled when SMI-S WBEM is used for connections to monitoring targets.

Attribute	Type	Description
domainname	string	Domain name. This member is only enabled when WMI is used for connections to monitoring targets.
namespace	string	Name space. This member is only enabled when SMI-S WBEM is used for connections to monitoring targets.
community	string	Community name. This member is only enabled when SNMP is used for connections to monitoring targets.
snmpVersion	enum	SNMP version. This member is only enabled when SNMP is used for connections to monitoring targets. (For details about the specifiable values, see the table SnmpVersion in <i>List of enumerators</i> .) The specifiable values are as follows: <ul style="list-style-type: none"> <li>• V1_V2C</li> <li>• V3</li> </ul>
userName	string	User name used for authentication. Use 64 or fewer characters. Only specify this member when using SNMP v3 for connections to monitoring targets.
authenticationEnabled	boolean	Whether to perform SMTP authentication. <ul style="list-style-type: none"> <li>• true: SMTP authentication is enabled</li> <li>• false: SMTP authentication is disabled</li> </ul> If this member is omitted, false is set. Only specify this member when using SNMP v3 for connections to monitoring targets.
authenticationProtocol	enum	Protocol for authentication. Only specify this member when using SNMP v3 for connections to monitoring targets. (For details about the specifiable values, see the table AuthenticationProtocol in <i>List of enumerators</i> .) The specifiable values are as follows: <ul style="list-style-type: none"> <li>• MD5</li> <li>• SHA1</li> </ul>
privacyEnabled	boolean	Whether to enable privacy. <ul style="list-style-type: none"> <li>• true: Privacy is enabled</li> <li>• false: Privacy is disabled</li> </ul> If this member is omitted, false is set. Only specify this member when using SNMP v3 for connections to monitoring targets.
privacyProtocol	enum	Protocol for privacy. Only specify this member when using SNMP v3 for connections to monitoring targets. (For details about the specifiable values, see the table PrivacyProtocol in <i>List of enumerators</i> .) The specifiable values are as follows: <ul style="list-style-type: none"> <li>• DES</li> <li>• AES128</li> </ul>
numOfRelatedResources	int	Number of resources found by using authentication information.

## Status codes

Status code	Reason phrase	Description
201	Created	Success.
400	Bad Request	A format of request body is invalid.
401	Unauthorized	No login privilege.

Status code	Reason phrase	Description
403	Forbidden	No update privilege.
409	Conflict	A resource with the same name exists.
412	Precondition Failed	The server is not available.
500	Internal Server Error	Server processing error.

## Example code

```
[Request Header]
POST http://localhost:22015/Analytics/v1/objects/IpAddrRanges/ HTTP/1.1
Host: localhost:22015
User-Agent: curl/7.33.0
Accept: application/json
Accept-Language: ja
Content-Type: application/json
Authorization: Basic c3lzdGVtOmlhbmFnZXI=

[Request Body]
{
  "name": "IP Addr Range 03",
  "ipAddrRange": ["192.168.1.0", "192.168.1.110"],
  "usePing": false,
  "useAllCredential": false,
  "selectedCredentials": [
    { "instanceID": 14, "name": "ssh_dev_env" }
  ],
  "deviceClassificationLabel": "Linux Development Env"
}

[Response Header]
HTTP/1.1 201 Created
Date: Wed, 07 Dec 2016 10:01:12 GMT
Server: Cosminexus HTTP Server
Cache-Control: no-cache
WWW-Authenticate: HSSO
6e512042356e389d5b981969d46d963c5ef24a_Vlo8Y30Idn8EY0BdB3IEfwgabiA= V0810
Location: http://localhost:22015/Analytics/v1/objects/IpAddrRanges//50
X-Frame-Options: SAMEORIGIN
Keep-Alive: timeout=5, max=100
Connection: Keep-Alive
Content-Type: application/json

[Response Body]
{
  "instanceID" : 3,
  "name" : "IP Addr Range 03",
  "ipAddrRange" : [ "192.168.1.0", "192.168.1.110" ],
  "usePing" : false,
  "useAllCredential" : false,
  "selectedCredentials" : [ {
    "instanceID" : 14,
    "name" : "ssh_dev_env",
    "credentialType" : "SSH",
    "userId" : "root",
    "portNumber" : 22,
    "numOfRelatedResources" : 2
  } ],
}
```

```
"deviceClassificationLabel" : "Linux Development Env"
}
```

---

## Related topics

- [1.3 Resource members](#)
  - [1.6 List of enumerators](#)
- 

## 2.2.4 Updating Retrieval Ranges

This API updates the specified retrieval ranges.

### Execution permission

Admin

### API version

v1

### Request format

```
PUT http[s]://host:port/Analytics/version/objects/IpAddrRanges/{id}
```

### Request body

The structure of the request body and the object attributes are as follows:

#### IPAddrRange

```
{
  "name": "...",
  "ipAddrRange": ["...", ...],
  "usePing": "...",
  "useAllCredential": "...",
  "selectedCredentials": [{
    "name": "...",
    "credentialType": "...",
    "userId": "...",
    "password": "...",
    "passwordNotRequired": "...",
    "portNumber": "...",
    "rootPassword": "...",
    "updatePassword": "...",
    "updateRootPassword": "...",
    "ssl": "...",
    "domainname": "...",
    "namespace": "...",
    "community": "...",
    "snmpVersion": "...",
    "userName": "...",
    "authenticationEnabled": "...",
    "authenticationPassphrase": "...",
    "updateAuthenticationPassphrase": "...",
    "authenticationProtocol": "...",
    "privacyEnabled": "...",
```

```

        "privacyPassphrase": "...",
        "updatePrivacyPassphrase": "...",
        "privacyProtocol": "...",
    },
    :
  ],
  "deviceClassificationLabel": "...",
}

```

### IPAddrRange (Type: IPAddrRange)

Attribute	Type	Description
name	string	Name of a retrieval range
ipAddrRange	string[]	Specify a retrieval range. The IP address from which retrieval starts is set at position 0 in the list, and the IP address at which retrieval ends is set at position 1.
usePing	boolean	Specify whether to execute ping on the target devices during retrieval. - true: Use ping. - false: Do not use ping.
useAllCredential	boolean	Flag indicating whether all the credentials are to be used. To use all the credentials, specify true.
selectedCredentials	Credential[]	List of the authentication information to be used for retrieval
deviceClassificationLabel	string	Name of the classification label assigned to the device

### selectedCredentials (Type: Credential)

Attribute	Type	Description
name	string	Name of authentication information
credentialType	enum	Protocol used for connections to monitoring targets. (For details about the specifiable values, see the table ProtocolType in <i>List of enumerators</i> .) The specifiable values are as follows: <ul style="list-style-type: none"> <li>• WMI</li> <li>• SSH</li> <li>• WBEM</li> <li>• SNMP</li> </ul>
userId	string	Use 64 or fewer characters. If you use SNMP v3 for connections to monitoring targets, the value of the username member is set.
password	string	Password used for authentication. Specify a Base64 encoded string of 255 or fewer bytes. To update the password, specify true for updatePassword.
passwordNotRequired	boolean	Whether a password is needed for authentication. If this member is omitted, false is set. This setting takes effect only if WMI is used for connection to the monitoring target. <ul style="list-style-type: none"> <li>• true: A password is needed</li> <li>• false: A password is not needed</li> </ul>
portNumber	int	Port number. This member is only set when the protocol used for connections to monitoring targets is SSH, SMI-S WBEM, or SNMP.
rootPassword	string	Root password used for authentication. Specify a Base64 encoded string of 255 or fewer bytes. This member is only enabled when SSH is used for connections to monitoring targets. To update the rootPassword, specify true for updateRootPassword.

Attribute	Type	Description
updatePassword	boolean	Whether to change the password (password). <ul style="list-style-type: none"> <li>• true: Password is changed</li> <li>• false: Password is not changed</li> </ul> If this member is omitted, false is set.
updateRootPassword	boolean	Whether to change the root password (rootPassword). <ul style="list-style-type: none"> <li>• true: Root password is changed</li> <li>• false: Root password is not changed</li> </ul> If this member is omitted, false is set. This member is only enabled when SSH is used for connections to monitoring targets.
ssl	boolean	Whether to use SSL (HTTPS) for connections to monitoring targets. <ul style="list-style-type: none"> <li>• true: SSL is used</li> <li>• false: SSL is not used</li> </ul> If this member is omitted, false is set. This member is only enabled when SMI-S WBEM is used for connections to monitoring targets.
domainname	string	Domain name. This member is only enabled when WMI is used for connections to monitoring targets.
namespace	string	Name space. This member is only enabled when SMI-S WBEM is used for connections to monitoring targets.
community	string	Community name. This member is only enabled when SNMP is used for connections to monitoring targets.
snmpVersion	enum	SNMP version. This member is only enabled when SNMP is used for connections to monitoring targets. (For details about the specifiable values, see the table SnmpVersion in <i>List of enumerators</i> .) The specifiable values are as follows: <ul style="list-style-type: none"> <li>• V1_V2C</li> <li>• V3</li> </ul>
userName	string	User name used for authentication. Use 64 or fewer characters. Only specify this member when using SNMP v3 for connections to monitoring targets.
authenticationEnabled	boolean	Whether to perform SMTP authentication. <ul style="list-style-type: none"> <li>• true: SMTP authentication is enabled</li> <li>• false: SMTP authentication is disabled</li> </ul> If this member is omitted, false is set. Only specify this member when using SNMP v3 for connections to monitoring targets.
authenticationPassphrase	string	Authentication pass phrase. Encode a string of 255 or fewer bytes in Base64. Only specify this member when using SNMP v3 for connections to monitoring targets. To update the authenticationPassphrase, specify true for updateAuthenticationPassphrase.
updateAuthenticationPassphrase	boolean	Whether to change the authentication pass phrase. <ul style="list-style-type: none"> <li>• true: Authentication pass phrase is changed</li> <li>• false: Authentication pass phrase is not changed</li> </ul> If this member is omitted, false is set. Only specify this member when using SNMP v3 for connections to monitoring targets.
authenticationProtocol	enum	Protocol for authentication. Only specify this member when using SNMP v3 for connections to monitoring targets. (For details about the specifiable values, see the table AuthenticationProtocol in <i>List of enumerators</i> .) The specifiable values are as follows: <ul style="list-style-type: none"> <li>• MD5</li> <li>• SHA1</li> </ul>

Attribute	Type	Description
privacyEnabled	boolean	Whether to enable privacy. <ul style="list-style-type: none"> <li>• true: Privacy is enabled</li> <li>• false: Privacy is disabled</li> </ul> If this member is omitted, false is set. Only specify this member when using SNMP v3 for connections to monitoring targets.
privacyPassphrase	string	Pass phrase for privacy. Encode a string of 255 or fewer bytes in Base64. Only specify this member when using SNMP v3 for connections to monitoring targets. To update the privacyPassphrase, specify true for updatePrivacyPassphrase.
updatePrivacyPassphrase	boolean	Whether to change the pass phrase for privacy. <ul style="list-style-type: none"> <li>• true: Pass phrase is changed</li> <li>• false: Pass phrase is not changed</li> </ul> If this member is omitted, false is set. Only specify this member when using SNMP v3 for connections to monitoring targets.
privacyProtocol	enum	Protocol for privacy. Only specify this member when using SNMP v3 for connections to monitoring targets. (For details about the specifiable values, see the table PrivacyProtocol in <i>List of enumerators</i> .) The specifiable values are as follows: <ul style="list-style-type: none"> <li>• DES</li> <li>• AES128</li> </ul>

## Response body

The structure of the response body and the object attributes are as follows:

### IPAddrRange

```
{
  "instanceID": "...",
  "name": "...",
  "ipAddrRange": ["...", ...],
  "usePing": "...",
  "useAllCredential": "...",
  "selectedCredentials": [{
    "instanceID": "...",
    "name": "...",
    "credentialType": "...",
    "userId": "...",
    "passwordNotRequired": "...",
    "portNumber": "...",
    "ssl": "...",
    "domainname": "...",
    "namespace": "...",
    "community": "...",
    "snmpVersion": "...",
    "userName": "...",
    "authenticationEnabled": "...",
    "authenticationProtocol": "...",
    "privacyEnabled": "...",
    "privacyProtocol": "...",
    "numOfRelatedResources": "..."
  }],
  "deviceClassificationLabel": "..."
}
```

## IPAddrRange (Type: IPAddrRange)

Attribute	Type	Description
instanceID	long	ID for identifying instances.
name	string	Name of a retrieval range
ipAddrRange	string[]	Specify a retrieval range. The IP address from which retrieval starts is set at position 0 in the list, and the IP address at which retrieval ends is set at position 1.
usePing	boolean	Specify whether to execute ping on the target devices during retrieval. - true: Use ping. - false: Do not use ping.
useAllCredential	boolean	Flag indicating whether all the credentials are to be used. To use all the credentials, specify true.
selectedCredentials	Credential[]	List of the authentication information to be used for retrieval
deviceClassificationLabel	string	Name of the classification label assigned to the device

## selectedCredentials (Type: Credential)

Attribute	Type	Description
instanceID	long	ID for identifying instances.
name	string	Name of authentication information
credentialType	enum	Protocol used for connections to monitoring targets. (For details about the specifiable values, see the table ProtocolType in <i>List of enumerators</i> .) The specifiable values are as follows: <ul style="list-style-type: none"><li>• WMI</li><li>• SSH</li><li>• WBEM</li><li>• SNMP</li></ul>
userId	string	Use 64 or fewer characters. If you use SNMP v3 for connections to monitoring targets, the value of the username member is set.
passwordNotRequired	boolean	Whether a password is needed for authentication. If this member is omitted, false is set. This setting takes effect only if WMI is used for connection to the monitoring target. <ul style="list-style-type: none"><li>• true: A password is needed</li><li>• false: A password is not needed</li></ul>
portNumber	int	Port number. This member is only set when the protocol used for connections to monitoring targets is SSH, SMI-S WBEM, or SNMP.
ssl	boolean	Whether to use SSL (HTTPS) for connections to monitoring targets. <ul style="list-style-type: none"><li>• true: SSL is used</li><li>• false: SSL is not used</li></ul> If this member is omitted, false is set. This member is only enabled when SMI-S WBEM is used for connections to monitoring targets.
domainname	string	Domain name. This member is only enabled when WMI is used for connections to monitoring targets.
namespace	string	Name space. This member is only enabled when SMI-S WBEM is used for connections to monitoring targets.
community	string	Community name. This member is only enabled when SNMP is used for connections to monitoring targets.



Attribute	Type	Description
snmpVersion	enum	SNMP version. This member is only enabled when SNMP is used for connections to monitoring targets. (For details about the specifiable values, see the table SnmpVersion in <i>List of enumerators</i> .) The specifiable values are as follows: <ul style="list-style-type: none"> <li>• V1_V2C</li> <li>• V3</li> </ul>
userName	string	User name used for authentication. Use 64 or fewer characters. Only specify this member when using SNMP v3 for connections to monitoring targets.
authenticationEnabled	boolean	Whether to perform SMTP authentication. <ul style="list-style-type: none"> <li>• true: SMTP authentication is enabled</li> <li>• false: SMTP authentication is disabled</li> </ul> If this member is omitted, false is set. Only specify this member when using SNMP v3 for connections to monitoring targets.
authenticationProtocol	enum	Protocol for authentication. Only specify this member when using SNMP v3 for connections to monitoring targets. (For details about the specifiable values, see the table AuthenticationProtocol in <i>List of enumerators</i> .) The specifiable values are as follows: <ul style="list-style-type: none"> <li>• MD5</li> <li>• SHA1</li> </ul>
privacyEnabled	boolean	Whether to enable privacy. <ul style="list-style-type: none"> <li>• true: Privacy is enabled</li> <li>• false: Privacy is disabled</li> </ul> If this member is omitted, false is set. Only specify this member when using SNMP v3 for connections to monitoring targets.
privacyProtocol	enum	Protocol for privacy. Only specify this member when using SNMP v3 for connections to monitoring targets. (For details about the specifiable values, see the table PrivacyProtocol in <i>List of enumerators</i> .) The specifiable values are as follows: <ul style="list-style-type: none"> <li>• DES</li> <li>• AES128</li> </ul>
numOfRelatedResources	int	Number of resources found by using authentication information.

## Status codes

Status code	Reason phrase	Description
200	OK	Success.
400	Bad Request	A format of request body is invalid.
401	Unauthorized	No login privilege.
403	Forbidden	No update privilege.
404	Not Found	The resource was not found.
409	Conflict	A resource with the same name exists.
412	Precondition Failed	The server is not available.
500	Internal Server Error	Server processing error.

## Example code

```
[Request Header]
PUT http://localhost:22015/Analytics/v1/objects/IpAddrRanges/50 HTTP/1.1
Host: localhost:22015
User-Agent: curl/7.33.0
Accept: application/json
Accept-Language: ja
Content-Type: application/json
Authorization: Basic c3lzdGVtOmlhbmFnZXI=

[Request Body]
{
  "name" : "IP Addr Range 01",
  "ipAddrRange" : [ "192.168.0.110", "192.168.0.210" ],
  "usePing" : false,
  "useAllCredential" : true,
  "selectedCredentials" : [ ],
  "deviceClassificationLabel":"Hitachi Cloud"
}

[Response Header]
HTTP/1.1 200 OK
Date: Wed, 07 Dec 2016 10:03:58 GMT
Server: Cosminexus HTTP Server
Cache-Control: no-cache
WWW-Authenticate: HSSO
1d392a3baad40eab4e3a05ad6e71e3a1fcd577_Vlo8Y30Idn8EY0BdB3IEfwgabiA=_V0810
X-Frame-Options: SAMEORIGIN
Keep-Alive: timeout=5, max=100
Connection: Keep-Alive
Content-Type: application/json

[Response Body]
{
  "instanceID" : 50,
  "name" : "IP Addr Range 01",
  "ipAddrRange" : [ "192.168.0.110", "192.168.0.210" ],
  "usePing" : false,
  "useAllCredential" : true
  "deviceClassificationLabel":"Hitachi Cloud"
}
```

---

### Related topics

- [1.3 Resource members](#)
  - [1.6 List of enumerators](#)
- 

## 2.2.5 Deleting Retrieval Ranges

This API deletes the specified retrieval ranges.

### Execution permission

Admin

## API version

v1

## Request format

```
DELETE http[s]://host:port/Analytics/version/objects/IpAddrRanges/{id}
```

## Request body

Not applicable.

## Response body

Not applicable.

## Status codes

Status code	Reason phrase	Description
204	No Content	Success.
401	Unauthorized	No login privilege.
403	Forbidden	No delete privilege.
404	Not Found	The resource was not found.
412	Precondition Failed	The server is not available.
500	Internal Server Error	Server processing error.

## Example code

```
[Request Header]
DELETE http://localhost:22015/Analytics/v1/objects/IpAddrRanges/50 HTTP/1.1
Host: localhost:22015
User-Agent: curl/7.33.0
Accept: application/json
Accept-Language: ja
Content-Type: application/json
Authorization: Basic c3lzdGVtOm1hbmFnZXI=

[Response Header]
HTTP/1.1 204 No Content
Date: Wed, 07 Dec 2016 10:13:58 GMT
Server: Cosminexus HTTP Server
Cache-Control: no-cache
WWW-Authenticate: HSSO f1f0fbl1a6ac21a0695f6536ba8950b641c263a4_WV1GcHsLfg5ffg0I_V0810
X-Frame-Options: SAMEORIGIN
Content-Length: 0
Content-Type: application/json
```

---

## Related topics

- [1.3 Resource members](#)
  - [1.6 List of enumerators](#)
-

## 2.3 List of APIs related to collectors

---

This section describes the operations for collectors used by JP1/OA for connections to management software.

### 2.3.1 Obtaining Collector List

This API acquires a list of collectors to be used by JP1/OA for connections to management software.

#### Execution permission

Admin, Modify

#### API version

v1

#### Request format

```
GET http[s]://host:port/Analytics/version/objects/Collectors
```

#### Request body

Not applicable.

#### Response body

The structure of the response body and the object attributes are as follows:

##### Collections

```
{
  "data":["...", ...],
  "pagination":{
    "page":"...",
    "pageSize":"...",
    "numPages":"...",
    "totalCount":"..."
  },
  "count":"..."
}
```

##### Collections (Type: Collections)

Attribute	Type	Description
data	anyType[]	A list of Collector objects. For details about Collector, see the table below.
pagination	Pagination	Page information. This parameter is displayed only when the relevant resource exists.
count	int	Number of data items that meet the conditions.

##### pagination (Type: Pagination)

Attribute	Type	Description
page	integer	page
pageSize	integer	Size of the pages
numPages	integer	Number of the pages
totalCount	integer	Number of the objects

## Collector

```
{
  "instanceID": "...",
  "name": "...",
  "collectorType": "...",
  "osType": "...",
  "autoCollectionType": "...",
  "connectResult": "...",
  "refreshStatus": "...",
  "message": "...",
  "lastRefreshed": "...",
  "refreshDateForInventory": "...",
  "refreshDateForPerformance": "...",
  "numOfHypervisors": "...",
  "numOfVms": "...",
  "numOfApplications": "...",
  "collectorCredentials": [{
    "ipAddress": "...",
    "userId": "...",
    "portNumber": "...",
    "hypertextTransferProtocolType": "...",
    "domainName": "...",
    "useAdministrativeShares": "...",
    "shareName": "...",
    "sharedFolder": "...",
    "logicalHostName": "...",
    "useLogicalHostName": "..."
  }],
  :
  ],
  "productName": "...",
  "providerName": "...",
  "refreshDateForApp": "..."
}
```

## Collector (Type: Collector)

Attribute	Type	Description
instanceID	long	ID for identifying instances.
name	string	Collector name
collectorType	enum	Collector type. (For details about the specifiable values, see the table ProtocolType in <i>List of enumerators</i> .) The specifiable values are as follows: <ul style="list-style-type: none"> <li>VCENTER</li> <li>AJS</li> <li>PFM</li> <li>IM</li> </ul>

Attribute	Type	Description
osType	enum	Type of OS. This member is only set when the collectorType is AJS, PFM, or IM. (For details about the specifiable values, see the table CollectorOsType in <i>List of enumerators</i> .)
autoCollectionType	enum	Settings for periodic executions of the collector. (For details about the specifiable values, see the table ConnectType in <i>List of enumerators</i> .) The specifiable values are as follows: <ul style="list-style-type: none"> <li>• AutoConnect</li> <li>• NotAutoConnect</li> </ul>
connectResult	enum	Last execution result of the collector. (For details about the specifiable values, see the table ConnectStatusType in <i>List of enumerators</i> .) The specifiable values are as follows: <ul style="list-style-type: none"> <li>• NoConnect</li> <li>• Succeeded</li> <li>• Failed</li> </ul>
refreshStatus	enum	Execution status of the collector. (For details about the specifiable values, see the table ConnectStatusType in <i>List of enumerators</i> .) The specifiable values are as follows: <ul style="list-style-type: none"> <li>• NoConnect</li> <li>• InProgress</li> </ul>
message	string	Message of the execution result of the collector
lastRefreshed	dateTime	Last refresh date and time
refreshDateForInventory	dateTime	Refresh date and time for the configuration information
refreshDateForPerformance	dateTime	Refresh date and time for the performance information
numOfHypervisors	int	Number of hypervisors found by the collector
numOfVms	int	Number of virtual machines found by the collector
numOfApplications	int	Number of applications found by the collector.
collectorCredentials	CollectorCredential[]	Authentication information used for connections to monitoring targets.
productName	string	Collected-product name
providerName	string	Provider name
refreshDateForApp	dateTime	Date definition was applied

### collectorCredentials (Type: CollectorCredential)

Attribute	Type	Description
ipAddress	string	IP address or host name used for connections to management software.
userId	string	User ID used for connections to management software. Specify a string of 255 or fewer bytes.
portNumber	int	Port number used for connections to management software.
hypertextTransferProtocolType	enum	Whether to use SSL (HTTPS) for connections to management software.

Attribute	Type	Description
hypertextTransferProtocolType	enum	(For details about the specifiable values, see the table HypertextTransferProtocolType in <i>List of enumerators</i> .) The specifiable values are as follows: <ul style="list-style-type: none"> <li>• HTTP</li> <li>• HTTPS</li> </ul>
domainName	string	Domain name: Used for application linkage when Windows is selected.
useAdministrativeShares	boolean	To share management, set true.
shareName	string	share Name
sharedFolder	string	shared Folder
logicalHostName	string	Logical Host Name
useLogicalHostName	boolean	To use logical host name, set true.

## Status codes

Status code	Reason phrase	Description
200	OK	Success.
401	Unauthorized	No login privilege.
403	Forbidden	No reference privilege.
412	Precondition Failed	The server is not available.
500	Internal Server Error	Server processing error.

## Example code

```
[Request Header]
GET /Analytics/v1/objects/Collectors HTTP/1.1
Authorization: Basic c3lzdGVtOmlhbmFnZXI=
User-Agent: curl/7.33.0
Host: localhost:22015
Accept: application/json
Accept-Language: ja

[Response Header]
HTTP/1.1 200 OK
Date: Fri, 27 Nov 2015 05:21:49 GMT
Server: Cosminexus HTTP Server
Cache-Control: no-cache
WWW-Authenticate: HSSO
b9719717b548c1da1798ed5a2b2c22dbda7f40cd_WVlGcHsLfg5ffg0I_V0810
X-Frame-Options: SAMEORIGIN
Transfer-Encoding: chunked
Content-Type: application/json

[Response Body]
{
  "data" : [ {
    "instanceID" : 0,
    "name" : "192.168.0.115",
    "collectorType" : "VCENTER",
```

```

"autoCollectionType" : "AutoConnect",
"connectResult" : "Succeeded",
"refreshStatus" : "NoConnect",
"lastRefreshed" : "2015-11-27T14:17:09.160+09:00",
"refreshDateForInventory" : "2015-11-27T13:25:03.943+09:00",
"refreshDateForPerformance" : "2015-11-27T14:17:09.160+09:00",
"numOfHypervisors" : 2,
"numOfVms" : 27,
"numOfStorages" : 0,
"collectorCredentials" : [ {
  "ipAddress" : "192.168.0.115",
  "userId" : "Administrator",
  "portNumber" : 443,
  "hypertextTransferProtocolType" : "HTTPS"
} ]
},
{
  "instanceID": 1,
  "name": "jplajs_v11",
  "collectorType": "AJS",
  "osType": "Windows",
  "autoCollectionType": "AutoConnect",
  "connectResult": "Succeeded",
  "refreshStatus": "NoConnect",
  "lastRefreshed": "2017-09-26T00:46:59.296+09:00",
  "refreshDateForInventory": "2017-09-26T00:46:59.296+09:00",
  "numOfHypervisors": 0,
  "numOfVms": 0,
  "numOfStorages": 0,
  "numOfApplications": 12,
  "collectorCredentials":
  [
    {
      "ipAddress": "192.168.1.118",
      "userId": "administrator",
      "domainName": "",
      "useAdministrativeShares": true,
      "useLogicalHostName": false
    }
  ]
},
{
  "instanceID": 3,
  "name": "customCollector",
  "collectorType": "CUSTOM_APP",
  "autoCollectionType": "AutoConnect",
  "connectResult": "Succeeded",
  "refreshStatus": "NoConnect",
  "lastRefreshed": "2017-09-26T10:15:26.991+09:00",
  "refreshDateForInventory": "2017-09-26T10:15:26.991+09:00",
  "numOfHypervisors": 0,
  "numOfVms": 0,
  "numOfStorages": 0,
  "numOfApplications": 10,
  "productName": "User Product",
  "providerName": "XXYY System",
  "refreshDateForApp": "2017-08-04T12:10:00.775+09:00"
}
],
"count" : 3
}

```



---

## Related topics

- [1.3 Resource members](#)
  - [1.6 List of enumerators](#)
- 

## 2.3.2 Obtaining Collector Information

This API acquires information about the specified collector.

### Execution permission

Admin, Modify

### API version

v1

### Request format

```
GET http[s]://host:port/Analytics/version/objects/Collectors/{id}
```

### Request body

Not applicable.

### Response body

The structure of the response body and the object attributes are as follows:

#### Collector

```
{
  "instanceID": "...",
  "name": "...",
  "collectorType": "...",
  "osType": "...",
  "autoCollectionType": "...",
  "connectResult": "...",
  "refreshStatus": "...",
  "message": "...",
  "lastRefreshed": "...",
  "refreshDateForInventory": "...",
  "refreshDateForPerformance": "...",
  "numOfHypervisors": "...",
  "numOfVms": "...",
  "numOfApplications": "...",
  "collectorCredentials": [{
    "ipAddress": "...",
    "userId": "...",
    "portNumber": "...",
    "hypertextTransferProtocolType": "...",
    "domainName": "...",
    "useAdministrativeShares": "...",
    "shareName": "...",
    "sharedFolder": "...",
    "logicalHostName": "...",
    "useLogicalHostName": "..."
  ]
}
```

```

    },
    :
  ],
  "productName": "...",
  "providerName": "...",
  "refreshDateForApp": "...
}

```

## Collector (Type: Collector)

Attribute	Type	Description
instanceID	long	ID for identifying instances.
name	string	Collector name
collectorType	enum	Collector type. (For details about the specifiable values, see the table ProtocolType in <i>List of enumerators</i> .) The specifiable values are as follows: <ul style="list-style-type: none"> <li>VCENTER</li> <li>AJS</li> <li>PFM</li> <li>IM</li> </ul>
osType	enum	Type of OS. This member is only set when the collectorType is AJS, PFM, or IM. (For details about the specifiable values, see the table CollectorOsType in <i>List of enumerators</i> .)
autoCollectionType	enum	Settings for periodic executions of the collector. (For details about the specifiable values, see the table ConnectType in <i>List of enumerators</i> .) The specifiable values are as follows: <ul style="list-style-type: none"> <li>AutoConnect</li> <li>NotAutoConnect</li> </ul>
connectResult	enum	Last execution result of the collector. (For details about the specifiable values, see the table ConnectStatusType in <i>List of enumerators</i> .) The specifiable values are as follows: <ul style="list-style-type: none"> <li>NoConnect</li> <li>Succeeded</li> <li>Failed</li> </ul>
refreshStatus	enum	Execution status of the collector. (For details about the specifiable values, see the table ConnectStatusType in <i>List of enumerators</i> .) The specifiable values are as follows: <ul style="list-style-type: none"> <li>NoConnect</li> <li>InProgress</li> </ul>
message	string	Message of the execution result of the collector
lastRefreshed	dateTime	Last refresh date and time
refreshDateForInventory	dateTime	Refresh date and time for the configuration information
refreshDateForPerformance	dateTime	Refresh date and time for the performance information
numOfHypervisors	int	Number of hypervisors found by the collector
numOfVms	int	Number of virtual machines found by the collector

Attribute	Type	Description
numOfApplications	int	Number of applications found by the collector.
collectorCredentials	CollectorCredential[]	Authentication information used for connections to monitoring targets.
productName	string	Collected-product name
providerName	string	Provider name
refreshDateForApp	dateTime	Date definition was applied

### collectorCredentials (Type: CollectorCredential)

Attribute	Type	Description
ipAddress	string	IP address or host name used for connections to management software.
userId	string	User ID used for connections to management software. Specify a string of 255 or fewer bytes.
portNumber	int	Port number used for connections to management software.
hypertextTransferProtocolType	enum	Whether to use SSL (HTTPS) for connections to management software. (For details about the specifiable values, see the table HypertextTransferProtocolType in <i>List of enumerators</i> .) The specifiable values are as follows: <ul style="list-style-type: none"> <li>• HTTP</li> <li>• HTTPS</li> </ul>
domainName	string	Domain name: Used for application linkage when Windows is selected.
useAdministrativeShares	boolean	To share management, set true.
shareName	string	share Name
sharedFolder	string	shared Folder
logicalHostName	string	Logical Host Name
useLogicalHostName	boolean	To use logical host name, set true.

### Status codes

Status code	Reason phrase	Description
200	OK	Success.
401	Unauthorized	No login privilege.
403	Forbidden	No reference privilege.
404	Not Found	The resource was not found.
412	Precondition Failed	The server is not available.
500	Internal Server Error	Server processing error.

### Example code

```
[Request Header]
GET /Analytics/v1/objects/Collectors/0 HTTP/1.1
Authorization: Basic c3lzdGVtOm1hbmFnZXI=
```

```
User-Agent: curl/7.33.0
Host: localhost:22015
Accept: application/json
Accept-Language: ja
```

[Response Header]

```
HTTP/1.1 200 OK
Date: Fri, 27 Nov 2015 07:19:44 GMT
Server: Cosminexus HTTP Server
Cache-Control: no-cache
WWW-Authenticate: HSSO d81476c07bc464b6d3c785f80b0b87eb0549f62_WV1GcHsLfg5ffg0I_V0810
X-Frame-Options: SAMEORIGIN
Transfer-Encoding: chunked
Content-Type: application/json
```

[Response Body]

```
{
  "instanceID" : 0,
  "name" : "172.17.17.115",
  "collectorType" : "VCENTER",
  "autoCollectionType" : "AutoConnect",
  "connectResult" : "Succeeded",
  "refreshStatus" : "NoConnect",
  "lastRefreshed" : "2015-11-27T16:18:41.710+09:00",
  "refreshDateForInventory" : "2015-11-27T15:25:04.098+09:00",
  "refreshDateForPerformance" : "2015-11-27T16:18:41.710+09:00",
  "numOfHypervisors" : 2,
  "numOfVms" : 27,
  "numOfStorages" : 0,
  "collectorCredentials" : [ {
    "ipAddress" : "172.17.17.115",
    "userId" : "Administrator",
    "portNumber" : 443,
    "hypertextTransferProtocolType" : "HTTPS"
  } ]
}
```

---

## Related topics

- [1.3 Resource members](#)
  - [1.6 List of enumerators](#)
- 

## 2.3.3 Creating Collector

This API creates a collector. However, it cannot create a collector for a custom application.

### Execution permission

Admin

### API version

v1

## Request format

```
POST http[s]://host:port/Analytics/version/objects/Collectors
```

## Request body

The structure of the request body and the object attributes are as follows:

### Collector

```
{
  "name": "...",
  "collectorType": "...",
  "osType": "...",
  "autoCollectionType": "...",
  "collectorCredentials": [{
    "ipAddress": "...",
    "userId": "...",
    "password": "...",
    "updatePassword": "...",
    "portNumber": "...",
    "hypertextTransferProtocolType": "...",
    "domainName": "...",
    "rootPassword": "...",
    "updateRootPassword": "...",
    "useAdministrativeShares": "...",
    "shareName": "...",
    "sharedFolder": "...",
    "logicalHostName": "...",
    "useLogicalHostName": "..."
  }],
  :
}
```

### Collector (Type: Collector)

Attribute	Type	Description
name	string	Collector name
collectorType	enum	Collector type. (For details about the specifiable values, see the table ProtocolType in <i>List of enumerators</i> .) The specifiable values are as follows: <ul style="list-style-type: none"><li>• VCENTER</li><li>• AJS</li><li>• PFM</li><li>• IM</li></ul>
osType	enum	Type of OS. This member is only set when the collectorType is AJS, PFM, or IM. (For details about the specifiable values, see the table CollectorOsType in <i>List of enumerators</i> .)
autoCollectionType	enum	Settings for periodic executions of the collector. (For details about the specifiable values, see the table ConnectType in <i>List of enumerators</i> .) The specifiable values are as follows: <ul style="list-style-type: none"><li>• AutoConnect</li><li>• NotAutoConnect</li></ul>

Attribute	Type	Description
collectorCredentials	CollectorCredential[]	Authentication information used for connections to monitoring targets.

### collectorCredentials (Type: CollectorCredential)

Attribute	Type	Description
ipAddress	string	IP address or host name used for connections to management software.
userId	string	User ID used for connections to management software. Specify a string of 255 or fewer bytes.
password	string	Password used for connections to management software. Encode a string of 255 or fewer bytes in Base64.
updatePassword	boolean	Whether to change the password used for connections to management software. <ul style="list-style-type: none"> <li>• true: Password is changed</li> <li>• false: Password is not changed</li> </ul> If this member is omitted, false is set.
portNumber	int	Port number used for connections to management software.
hypertextTransferProtocolType	enum	Whether to use SSL (HTTPS) for connections to management software. (For details about the specifiable values, see the table HypertextTransferProtocolType in <i>List of enumerators</i> .) The specifiable values are as follows: <ul style="list-style-type: none"> <li>• HTTP</li> <li>• HTTPS</li> </ul>
domainName	string	Domain name: Used for application linkage when Windows is selected.
rootPassword	string	root password: Used for application linkage when Unix is selected.
updateRootPassword	boolean	To change the password, set true. Use only for updates.
useAdministrativeShares	boolean	To share management, set true.
shareName	string	share Name
sharedFolder	string	shared Folder
logicalHostName	string	Logical Host Name
useLogicalHostName	boolean	To use logical host name, set true.

## Response body

The structure of the response body and the object attributes are as follows:

### Collector

```
{
  "instanceID": "...",
  "name": "...",
  "collectorType": "...",
  "osType": "...",
  "autoCollectionType": "...",
  "connectResult": "...",
  "refreshStatus": "...",
  "message": "...",
  "lastRefreshed": "...",
  "refreshDateForInventory": "...",
}
```

```

    "refreshDateForPerformance": "...",
    "numOfHypervisors": "...",
    "numOfVms": "...",
    "numOfApplications": "...",
    "collectorCredentials": [{
      "ipAddress": "...",
      "userId": "...",
      "portNumber": "...",
      "hypertextTransferProtocolType": "...",
      "domainName": "...",
      "useAdministrativeShares": "...",
      "shareName": "...",
      "sharedFolder": "...",
      "logicalHostName": "...",
      "useLogicalHostName": "..."
    }],
    :
  ],
  "productName": "...",
  "providerName": "...",
  "refreshDateForApp": "..."
}

```

### Collector (Type: Collector)

Attribute	Type	Description
instanceID	long	ID for identifying instances.
name	string	Collector name
collectorType	enum	Collector type. (For details about the specifiable values, see the table ProtocolType in <i>List of enumerators</i> .) The specifiable values are as follows: <ul style="list-style-type: none"> <li>VCENTER</li> <li>AJS</li> <li>PFM</li> <li>IM</li> </ul>
osType	enum	Type of OS. This member is only set when the collectorType is AJS, PFM, or IM. (For details about the specifiable values, see the table CollectorOsType in <i>List of enumerators</i> .)
autoCollectionType	enum	Settings for periodic executions of the collector. (For details about the specifiable values, see the table ConnectType in <i>List of enumerators</i> .) The specifiable values are as follows: <ul style="list-style-type: none"> <li>AutoConnect</li> <li>NotAutoConnect</li> </ul>
connectResult	enum	Last execution result of the collector. (For details about the specifiable values, see the table ConnectStatusType in <i>List of enumerators</i> .) The specifiable values are as follows: <ul style="list-style-type: none"> <li>NoConnect</li> <li>Succeeded</li> <li>Failed</li> </ul>
refreshStatus	enum	Execution status of the collector.

Attribute	Type	Description
refreshStatus	enum	(For details about the specifiable values, see the table ConnectStatusType in <i>List of enumerators</i> .) The specifiable values are as follows: <ul style="list-style-type: none"> <li>NoConnect</li> <li>InProgress</li> </ul>
message	string	Message of the execution result of the collector
lastRefreshed	dateTime	Last refresh date and time
refreshDateForInventory	dateTime	Refresh date and time for the configuration information
refreshDateForPerformance	dateTime	Refresh date and time for the performance information
numOfHypervisors	int	Number of hypervisors found by the collector
numOfVms	int	Number of virtual machines found by the collector
numOfApplications	int	Number of applications found by the collector.
collectorCredentials	CollectorCredential[]	Authentication information used for connections to monitoring targets.
productName	string	Collected-product name
providerName	string	Provider name
refreshDateForApp	dateTime	Date definition was applied

### collectorCredentials (Type: CollectorCredential)

Attribute	Type	Description
ipAddress	string	IP address or host name used for connections to management software.
userId	string	User ID used for connections to management software. Specify a string of 255 or fewer bytes.
portNumber	int	Port number used for connections to management software.
hypertextTransferProtocolType	enum	Whether to use SSL (HTTPS) for connections to management software. (For details about the specifiable values, see the table HypertextTransferProtocolType in <i>List of enumerators</i> .) The specifiable values are as follows: <ul style="list-style-type: none"> <li>HTTP</li> <li>HTTPS</li> </ul>
domainName	string	Domain name: Used for application linkage when Windows is selected.
useAdministrativeShares	boolean	To share management, set true.
shareName	string	share Name
sharedFolder	string	shared Folder
logicalHostName	string	Logical Host Name
useLogicalHostName	boolean	To use logical host name, set true.



## Status codes

Status code	Reason phrase	Description
201	Created	Success.
400	Bad Request	- A format of request body is invalid - A request is invalid.
401	Unauthorized	No login privilege.
403	Forbidden	No create privilege.
409	Conflict	A resource with the same name exists.
412	Precondition Failed	The server is not available.
500	Internal Server Error	Server processing error.

## Example code

```
[Request Header]
POST /Analytics/v1/objects/Collectors HTTP/1.1
Authorization: Basic c3lzdGVtOmlhbmFnZXI=
User-Agent: curl/7.33.0
Host: localhost:22015
Accept: application/json
Content-Type: application/json
Accept-Language: ja
Content-Length: 236

[Request Body]
{
  "name": "test Collector",
  "autoCollectionType": "AutoConnect",
  "collectorType": "VCENTER",
  "collectorCredentials": [
    {
      "ipAddress": "172.17.17.113",
      "userId": "test",
      "password": "dGVzdA==",
      "portNumber": 443,
      "hypertextTransferProtocolType": "HTTPS"
    }
  ]
}

[Response Header]
HTTP/1.1 201 Created
Date: Fri, 27 Nov 2015 08:23:46 GMT
Server: Cosminexus HTTP Server
Cache-Control: no-cache
WWW-Authenticate: HSSO bfb7bb1ac5122d4e95bddc86cfb215f4c04715_WVlGcHsLfg5ffg0I_V0810
Location: http://localhost:22015/Analytics/v1/objects/Collectors/13
X-Frame-Options: SAMEORIGIN
Transfer-Encoding: chunked
Content-Type: application/json

[Response Body]
{
  "instanceID" : 13,
  "name" : "vCenter_71",
```

```
"collectorType" : "VCENTER",
"autoCollectionType" : "AutoConnect",
"connectResult" : "Succeeded",
"refreshStatus" : "NoConnect",
"lastRefreshed" : "2016-11-21T17:17:59.926+09:00",
"refreshDateForInventory" : "2016-11-21T16:52:03.271+09:00",
"refreshDateForPerformance" : "2016-11-21T17:17:59.926+09:00",
"numOfHypervisors" : 3,
"numOfVms" : 33,
"numOfStorages" : 0,
"numOfApplications" : 0,
"collectorCredentials" : [ {
  "ipAddress" : "172.25.73.71",
  "userId" : "administrator@vsphere.local",
  "portNumber" : 443,
  "hypertextTransferProtocolType" : "HTTPS"
} ]
}
```

---

## Related topics

- [1.3 Resource members](#)
  - [1.6 List of enumerators](#)
- 

## 2.3.4 Updating Collector

This API updates the user ID and password contained in the specified collector. However, it cannot update a collector for a custom application.

### Execution permission

Admin

### API version

v1

### Request format

```
PUT http[s]://host:port/Analytics/version/objects/Collectors/{id}
```

### Request body

The structure of the request body and the object attributes are as follows:

#### Collector

```
{
  "name": "...",
  "collectorType": "...",
  "osType": "...",
  "autoCollectionType": "...",
  "collectorCredentials": [{
    "ipAddress": "...",
    "userId": "...",
    "password": "...",
  }
}
```

```

        "updatePassword": "...",
        "portNumber": "...",
        "hypertextTransferProtocolType": "...",
        "domainName": "...",
        "rootPassword": "...",
        "updateRootPassword": "...",
        "useAdministrativeShares": "...",
        "shareName": "...",
        "sharedFolder": "...",
        "logicalHostName": "...",
        "useLogicalHostName": "...
    },
    :
]
}

```

## Collector (Type: Collector)

Attribute	Type	Description
name	string	Collector name
collectorType	enum	Collector type. (For details about the specifiable values, see the table ProtocolType in <i>List of enumerators</i> .) The specifiable values are as follows: <ul style="list-style-type: none"> <li>• VCENTER</li> <li>• AJS</li> <li>• PFM</li> <li>• IM</li> </ul>
osType	enum	Type of OS. This member is only set when the collectorType is AJS, PFM, or IM. (For details about the specifiable values, see the table CollectorOsType in <i>List of enumerators</i> .)
autoCollectionType	enum	Settings for periodic executions of the collector. (For details about the specifiable values, see the table ConnectType in <i>List of enumerators</i> .) The specifiable values are as follows: <ul style="list-style-type: none"> <li>• AutoConnect</li> <li>• NotAutoConnect</li> </ul>
collectorCredentials	CollectorCredential[]	Authentication information used for connections to monitoring targets.

## collectorCredentials (Type: CollectorCredential)

Attribute	Type	Description
ipAddress	string	IP address or host name used for connections to management software.
userId	string	User ID used for connections to management software. Specify a string of 255 or fewer bytes.
password	string	Password used for connections to management software. Encode a string of 255 or fewer bytes in Base64.
updatePassword	boolean	Whether to change the password used for connections to management software. <ul style="list-style-type: none"> <li>• true: Password is changed</li> <li>• false: Password is not changed</li> </ul> If this member is omitted, false is set.

Attribute	Type	Description
portNumber	int	Port number used for connections to management software.
hypertextTransferProtocolType	enum	Whether to use SSL (HTTPS) for connections to management software. (For details about the specifiable values, see the table HypertextTransferProtocolType in <i>List of enumerators</i> .) The specifiable values are as follows: <ul style="list-style-type: none"> <li>• HTTP</li> <li>• HTTPS</li> </ul>
domainName	string	Domain name: Used for application linkage when Windows is selected.
rootPassword	string	root password: Used for application linkage when Unix is selected.
updateRootPassword	boolean	To change the password, set true. Use only for updates.
useAdministrativeShares	boolean	To share management, set true.
shareName	string	share Name
sharedFolder	string	shared Folder
logicalHostName	string	Logical Host Name
useLogicalHostName	boolean	To use logical host name, set true.

## Response body

The structure of the response body and the object attributes are as follows:

### Collector

```
{
  "instanceID": "...",
  "name": "...",
  "collectorType": "...",
  "osType": "...",
  "autoCollectionType": "...",
  "connectResult": "...",
  "refreshStatus": "...",
  "message": "...",
  "lastRefreshed": "...",
  "refreshDateForInventory": "...",
  "refreshDateForPerformance": "...",
  "numOfHypervisors": "...",
  "numOfVms": "...",
  "numOfApplications": "...",
  "collectorCredentials": [{
    "ipAddress": "...",
    "userId": "...",
    "portNumber": "...",
    "hypertextTransferProtocolType": "...",
    "domainName": "...",
    "useAdministrativeShares": "...",
    "shareName": "...",
    "sharedFolder": "...",
    "logicalHostName": "...",
    "useLogicalHostName": "..."
  }],
  :
  ],
  "productName": "...",
  "providerName": "..."
}
```

```

    "refreshDateForApp": "...
}

```

## Collector (Type: Collector)

Attribute	Type	Description
instanceID	long	ID for identifying instances.
name	string	Collector name
collectorType	enum	Collector type. (For details about the specifiable values, see the table ProtocolType in <i>List of enumerators</i> .) The specifiable values are as follows: <ul style="list-style-type: none"> <li>VCENTER</li> <li>AJS</li> <li>PFM</li> <li>IM</li> </ul>
osType	enum	Type of OS. This member is only set when the collectorType is AJS, PFM, or IM. (For details about the specifiable values, see the table CollectorOsType in <i>List of enumerators</i> .)
autoCollectionType	enum	Settings for periodic executions of the collector. (For details about the specifiable values, see the table ConnectType in <i>List of enumerators</i> .) The specifiable values are as follows: <ul style="list-style-type: none"> <li>AutoConnect</li> <li>NotAutoConnect</li> </ul>
connectResult	enum	Last execution result of the collector. (For details about the specifiable values, see the table ConnectStatusType in <i>List of enumerators</i> .) The specifiable values are as follows: <ul style="list-style-type: none"> <li>NoConnect</li> <li>Succeeded</li> <li>Failed</li> </ul>
refreshStatus	enum	Execution status of the collector. (For details about the specifiable values, see the table ConnectStatusType in <i>List of enumerators</i> .) The specifiable values are as follows: <ul style="list-style-type: none"> <li>NoConnect</li> <li>InProgress</li> </ul>
message	string	Message of the execution result of the collector
lastRefreshed	dateTime	Last refresh date and time
refreshDateForInventory	dateTime	Refresh date and time for the configuration information
refreshDateForPerformance	dateTime	Refresh date and time for the performance information
numOfHypervisors	int	Number of hypervisors found by the collector
numOfVms	int	Number of virtual machines found by the collector
numOfApplications	int	Number of applications found by the collector.
collectorCredentials	CollectorCredential[]	Authentication information used for connections to monitoring targets.

Attribute	Type	Description
productName	string	Collected-product name
providerName	string	Provider name
refreshDateForApp	dateTime	Date definition was applied

### collectorCredentials (Type: CollectorCredential)

Attribute	Type	Description
ipAddress	string	IP address or host name used for connections to management software.
userId	string	User ID used for connections to management software. Specify a string of 255 or fewer bytes.
portNumber	int	Port number used for connections to management software.
hypertextTransferProtocolType	enum	Whether to use SSL (HTTPS) for connections to management software. (For details about the specifiable values, see the table HypertextTransferProtocolType in <i>List of enumerators</i> .) The specifiable values are as follows: <ul style="list-style-type: none"> <li>• HTTP</li> <li>• HTTPS</li> </ul>
domainName	string	Domain name: Used for application linkage when Windows is selected.
useAdministrativeShares	boolean	To share management, set true.
shareName	string	share Name
sharedFolder	string	shared Folder
logicalHostName	string	Logical Host Name
useLogicalHostName	boolean	To use logical host name, set true.

### Status codes

Status code	Reason phrase	Description
200	OK	Success.
400	Bad Request	- A format of request body is invalid - A request is invalid.
401	Unauthorized	No login privilege.
403	Forbidden	No update privilege.
404	Not Found	The resource was not found.
412	Precondition Failed	The server is not available.
500	Internal Server Error	Server processing error.

### Example code

```
[Request Header]
PUT /Analytics/v1/objects/Collectors/11 HTTP/1.1
Authorization: Basic c3lzZGVtOmlhbmFnZXI=
User-Agent: curl/7.33.0
```

```
Host: localhost:22015
Accept: application/json
Content-Type: application/json
Accept-Language: ja
Content-Length: 482
```

[Request Body]

```
{
  "instanceID" : 11,
  "name" : "vCenterMonitoring",
  "collectorType" : "VCENTER",
  "autoCollectionType" : "AutoConnect",
  "connectResult" : "NoConnect",
  "refreshStatus" : "NoConnect",
  "numOfHypervisors" : 0,
  "numOfVms" : 0,
  "numOfStorages" : 0,
  "collectorCredentials" : [ {
    "ipAddress" : "172.17.17.116",
    "userId" : "Administrator",
    "updatePassword" : true,
    "password" : "c31zdGVtOmlhbmFnZXI=",
    "portNumber" : 443,
    "hypertextTransferProtocolType" : "HTTPS"
  } ]
}
```

[Response Header]

```
HTTP/1.1 200 OK
Date: Fri, 27 Nov 2015 08:42:46 GMT
Server: Cosminexus HTTP Server
Cache-Control: no-cache
WWW-Authenticate: HSSO ea7ee5beeebb36f7aeb0571ff9adba9e12fca4_WVlGcHsLfg5ffg0I_V0810
X-Frame-Options: SAMEORIGIN
Transfer-Encoding: chunked
Content-Type: application/json
```

[Response Body]

```
{
  "instanceID" : 11,
  "name" : "vCenterMonitoring",
  "collectorType" : "VCENTER",
  "autoCollectionType" : "AutoConnect",
  "connectResult" : "NoConnect",
  "refreshStatus" : "NoConnect",
  "numOfHypervisors" : 0,
  "numOfVms" : 0,
  "numOfStorages" : 0,
  "collectorCredentials" : [ {
    "ipAddress" : "172.17.17.116",
    "userId" : "Administrator",
    "portNumber" : 443,
    "hypertextTransferProtocolType" : "HTTPS"
  } ]
}
```

---

## Related topics

- [1.3 Resource members](#)

## 2.3.5 Deleting Collector

This API deletes the specified collector. However, it cannot delete a collector for a custom application.

### Execution permission

Admin

### API version

v1

### Request format

```
DELETE http[s]://host:port/Analytics/version/objects/Collectors/{id}
```

### Request body

Not applicable.

### Response body

Not applicable.

### Status codes

Status code	Reason phrase	Description
204	No Content	Success.
400	Bad Request	Resources not to be deleted.
401	Unauthorized	No login privilege.
403	Forbidden	No delete privilege.
404	Not Found	The resource was not found.
412	Precondition Failed	The server is not available.
500	Internal Server Error	Server processing error.

### Example code

```
[Request Header]
DELETE http://localhost:22015/Analytics/v1/objects/Collectors/0 HTTP/1.1
User-Agent: curl/7.33.0
Host: localhost:22015
Accept: application/json
Content-Type: application/json
Accept-Language: ja
Content-Type: application/json
Authorization: Basic c3lzdGVtOmlhbmFnZXI=
```



```
[Response Header]
HTTP/1.1 204 No Content
Date: Wed, 07 Dec 2016 10:27:46 GMT
Server: Cosminexus HTTP Server
Cache-Control: no-cache
WWW-Authenticate: HSSO
d5133e9e3ece3f258eda94ad4ed3fc2c8e7eda63_Vlo8Y30Idn8EY0BdB3IEfwgabiA=_V0810
X-Frame-Options: SAMEORIGIN
Content-Length: 0
Keep-Alive: timeout=5, max=100
Connection: Keep-Alive
Content-Type: application/json
```

---

## Related topics

- [1.3 Resource members](#)
  - [1.6 List of enumerators](#)
-

## 2.4 List of APIs related to user profiles

---

This section describes the operations for user profiles used by JPI/OA for the monitoring of monitoring targets.

### 2.4.1 Obtaining User Profile List

This API acquires a list of user profiles.

#### Execution permission

Admin, Modify

#### API version

v1

#### Request format

```
GET http[s]://host:port/Analytics/version/objects/UserThresholdProfiles
```

#### Request body

Not applicable.

#### Response body

The structure of the response body and the object attributes are as follows:

##### Collections

```
{
  "data":["...", ...],
  "pagination":{
    "page":"...",
    "pageSize":"...",
    "numPages":"...",
    "totalCount":"..."
  },
  "count":"..."
}
```

##### Collections (Type: Collections)

Attribute	Type	Description
data	anyType[]	A list of UserThresholdProfile objects. For details about UserThresholdProfile, see the table below.
pagination	Pagination	Page information. This parameter is displayed only when the relevant resource exists.
count	int	Number of data items that meet the conditions.

##### pagination (Type: Pagination)

Attribute	Type	Description
page	integer	page
pageSize	integer	Size of the pages
numPages	integer	Number of the pages
totalCount	integer	Number of the objects

## UserThresholdProfile

```

{
  "instanceID": "...",
  "profileName": "...",
  "description": "...",
  "resourceType": "...",
  "profileType": "...",
  "thresholdValues": [{
    "instanceID": "...",
    "monitoring": "...",
    "metricType": "...",
    "displayName": "...",
    "unit": "...",
    "proportion": "...",
    "thresholdValueOfWarning": "...",
    "thresholdValueOfError": "...",
    "stepSize": "...",
    "max": "...",
    "min": "..."
  }],
  :
  ],
  "numOfResources": "...",
  "autoAssignFilters": ["...", ...]
}

```

## UserThresholdProfile (Type: UserThresholdProfile)

Attribute	Type	Description
instanceID	long	ID for identifying instances.
profileName	string	User profile name. Use 128 or fewer characters.
description	string	Description of the user profile. Use 256 or fewer characters.
resourceType	string	Resource type to which the user profile can be applied. The following value can be specified. <ul style="list-style-type: none"> <li>• VM: Virtual machine</li> <li>• VOLUME: Volume</li> <li>• WINDOWS: Windows</li> <li>• LINUX_UNIX: Linux or UNIX</li> </ul>
profileType	string	Change type of the user profile. <ul style="list-style-type: none"> <li>• User: Profile is created by a user</li> <li>• Default: Profile is registered by default</li> <li>• Preset: Profile for which the initial settings are set</li> </ul>
thresholdValues	UserThresholdValue[]	Details of the threshold set in the user profile.
numOfResources	int	Number of resources to which the user profile is assigned

Attribute	Type	Description
autoAssignFilters	string[]	Name of the automatic assignment rule

### thresholdValues (Type: UserThresholdValue)

Attribute	Type	Description
instanceID	long	ID for identifying instances
monitoring	boolean	Whether the threshold is monitored. <ul style="list-style-type: none"> <li>• true: Threshold is monitored</li> <li>• false: Threshold is not monitored</li> </ul> If this member is omitted, false is set.
metricType	string	Identifier of the threshold. This member is not supported.
displayName	string	Display name of the threshold
unit	string	String indicating the unit of the threshold
proportion	boolean	Direction of the threshold. true: When the measured value falls below the threshold, an error or warning occurs. false: When the measured value exceeds the threshold, an error or warning occurs.
thresholdValueOfWarning	float	Threshold for displaying warnings. You need to specify this threshold according to the following conditions: <ul style="list-style-type: none"> <li>• Multiple of stepSize</li> <li>• Less than or equal to max</li> <li>• Greater than or equal to min</li> </ul>
thresholdValueOfError	float	Threshold for showing errors. You need to specify this threshold according to the following conditions: <ul style="list-style-type: none"> <li>• Multiple of stepSize</li> <li>• Less than or equal to max</li> <li>• Greater than or equal to min</li> </ul>
stepSize	float	Increment for the threshold
max	double	Maximum value that can be specified for the threshold
min	double	Minimum value that can be specified for the threshold

## Status codes

Status code	Reason phrase	Description
200	OK	Success.
400	Bad Request	A query parameter is invalid.
401	Unauthorized	No login privilege.
403	Forbidden	No reference privilege.
412	Precondition Failed	The server is not available.
500	Internal Server Error	Server processing error.

## Example code

```
[Request Header]
```

```
GET /Analytics/v1/objects/UserThresholdProfiles HTTP/1.1
Authorization: Basic c3lzdGVtOmlhbmFnZXI=
User-Agent: curl/7.33.0
Host: localhost:22015
Accept: application/json
Accept-Language: ja
```

[Response Header]

```
HTTP/1.1 200 OK
Date: Fri, 27 Nov 2015 05:42:22 GMT
Server: Cosminexus HTTP Server
Cache-Control: no-cache
WWW-Authenticate: HSSO ef807fefafe4f3d3f3058e252907ae61ed6a63a_WVlGcHsLfg5ffg0I_V0810
X-Frame-Options: SAMEORIGIN
Transfer-Encoding: chunked
Content-Type: application/json
```

[Response Body]

```
{
  "instanceID" : 62,
  "profileName" : "Default Profile for Volume",
  "description" : "Default Profile for Volume",
  "resourceType" : "VOLUME",
  "profileType" : "User",
  "thresholdValues" : [ {
    "instanceID" : 763,
    "monitoring" : false,
    "metricType" : "STO_VOLUME_TOTAL_IO_RATE",
    "displayName" : "Volume IOPS ",
    "unit" : "transfers/sec",
    "proportion" : false,
    "thresholdValueOfWarning" : 0.0,
    "thresholdValueOfError" : 2222.0,
    "stepSize" : 1.0,
    "max" : 3.4028235E38,
    "min" : 0.0
  }, {
    "instanceID" : 761,
    "monitoring" : false,
    "metricType" : "STO_VOLUME_TOTAL_XFER_RATE",
    "displayName" : "Volume IO Rate",
    "unit" : "MBps",
    "proportion" : false,
    "thresholdValueOfWarning" : 421.0,
    "thresholdValueOfError" : 450.0,
    "stepSize" : 1.0,
    "max" : 3.4028235E38,
    "min" : 0.0
  }, {
    "instanceID" : 762,
    "monitoring" : true,
    "metricType" : "STO_IO_RESPONSE_TIME_ON_CTRL0",
    "displayName" : "Volume Response Time Per IO Request",
    "unit" : "msec/transfer",
    "proportion" : false,
    "thresholdValueOfWarning" : 499.9,
    "thresholdValueOfError" : 500.1,
    "stepSize" : 0.1,
    "max" : 3.4028235E38,
    "min" : 0.0
  } ],
  "numOfResources" : 0,
```

```
"autoAssignFilters" : [ ]
}
```

---

## Related topics

- [1.3 Resource members](#)
  - [1.6 List of enumerators](#)
- 

## 2.4.2 Obtaining User Profile Information

This API acquires information about the specified user profile.

### Execution permission

Admin, Modify

### API version

v1

### Request format

```
GET http[s]://host:port/Analytics/version/objects/UserThresholdProfiles/{id}
```

### Request body

Not applicable.

### Response body

The structure of the response body and the object attributes are as follows:

#### UserThresholdProfile

```
{
  "instanceID": "...",
  "profileName": "...",
  "description": "...",
  "resourceType": "...",
  "profileType": "...",
  "thresholdValues": [{
    "instanceID": "...",
    "monitoring": "...",
    "metricType": "...",
    "displayName": "...",
    "unit": "...",
    "proportion": "...",
    "thresholdValueOfWarning": "...",
    "thresholdValueOfError": "...",
    "stepSize": "...",
    "max": "...",
    "min": "..."
  }],
  "numOfResources": "...",
}
```

```

    "autoAssignFilters":["...", ...]
}

```

## UserThresholdProfile (Type: UserThresholdProfile)

Attribute	Type	Description
instanceID	long	ID for identifying instances.
profileName	string	User profile name. Use 128 or fewer characters.
description	string	Description of the user profile. Use 256 or fewer characters.
resourceType	string	Resource type to which the user profile can be applied. The following value can be specified. <ul style="list-style-type: none"> <li>• VM: Virtual machine</li> <li>• VOLUME: Volume</li> <li>• WINDOWS: Windows</li> <li>• LINUX_UNIX: Linux or UNIX</li> </ul>
profileType	string	Change type of the user profile. <ul style="list-style-type: none"> <li>• User: Profile is created by a user</li> <li>• Default: Profile is registered by default</li> <li>• Preset: Profile for which the initial settings are set</li> </ul>
thresholdValues	UserThresholdValue[]	Details of the threshold set in the user profile.
numOfResources	int	Number of resources to which the user profile is assigned
autoAssignFilters	string[]	Name of the automatic assignment rule

## thresholdValues (Type: UserThresholdValue)

Attribute	Type	Description
instanceID	long	ID for identifying instances
monitoring	boolean	Whether the threshold is monitored. <ul style="list-style-type: none"> <li>• true: Threshold is monitored</li> <li>• false: Threshold is not monitored</li> </ul> If this member is omitted, false is set.
metricType	string	Identifier of the threshold. This member is not supported.
displayName	string	Display name of the threshold
unit	string	String indicating the unit of the threshold
proportion	boolean	Direction of the threshold. <ul style="list-style-type: none"> <li>true: When the measured value falls below the threshold, an error or warning occurs.</li> <li>false: When the measured value exceeds the threshold, an error or warning occurs.</li> </ul>
thresholdValueOfWarning	float	Threshold for displaying warnings. You need to specify this threshold according to the following conditions: <ul style="list-style-type: none"> <li>• Multiple of stepSize</li> <li>• Less than or equal to max</li> <li>• Greater than or equal to min</li> </ul>
thresholdValueOfError	float	Threshold for showing errors. You need to specify this threshold according to the following conditions: <ul style="list-style-type: none"> <li>• Multiple of stepSize</li> </ul>

Attribute	Type	Description
thresholdValueOfError	float	<ul style="list-style-type: none"> <li>• Less than or equal to max</li> <li>• Greater than or equal to min</li> </ul>
stepSize	float	Increment for the threshold
max	double	Maximum value that can be specified for the threshold
min	double	Minimum value that can be specified for the threshold

## Status codes

Status code	Reason phrase	Description
200	OK	Success.
401	Unauthorized	No login privilege.
403	Forbidden	No reference privilege.
404	Not Found	The resource was not found.
412	Precondition Failed	The server is not available.
500	Internal Server Error	Server processing error.

## Example code

```
[Request Header]
GET /Analytics/v1/objects/UserThresholdProfiles/62 HTTP/1.1
Authorization: Basic c3lzdGVtOmlhbmFnZXI=
User-Agent: curl/7.33.0
Host: localhost:22015
Accept: application/json
Accept-Language: ja

[Response Header]
HTTP/1.1 200 OK
Date: Fri, 27 Nov 2015 07:19:45 GMT
Server: Cosminexus HTTP Server
Cache-Control: no-cache
WWW-Authenticate: HSSO fe84f16f0bb366a0b4d1226353e169d76c5ee_WVlGcHsLfg5ffg0I_V0810
X-Frame-Options: SAMEORIGIN
Transfer-Encoding: chunked
Content-Type: application/json

[Response Body]
{
  "instanceID" : 23,
  "profileName" : "Default Profile for Hyper-V",
  "description" : "Default Profile for Hyper-V",
  "resourceType" : "HYPERV",
  "profileType" : "Default",
  "thresholdValues" : [ {
    "instanceID" : 539,
    "monitoring" : true,
    "metricType" : "WIN_CPU_LOAD",
    "displayName" : "CPU Use",
    "unit" : "%",
    "proportion" : false,
```



```
"thresholdValueOfWarning" : 80.0,
"thresholdValueOfError" : 90.0,
"stepSize" : 1.0,
"max" : 100.0,
"min" : 0.0
}, {
.....
},
.....
],
"numOfResources" : 1
}
```

---

## Related topics

- [1.3 Resource members](#)
  - [1.6 List of enumerators](#)
- 

## 2.4.3 Creating User Profile

This API creates a user profile.

### Execution permission

Admin, Modify

### API version

v1

### Request format

```
POST http[s]://host:port/Analytics/version/objects/UserThresholdProfiles
```

### Request body

The structure of the request body and the object attributes are as follows:

#### UserThresholdProfile

```
{
  "profileName": "...",
  "description": "...",
  "resourceType": "...",
  "profileType": "...",
  "thresholdValues": [{
    "monitoring": "...",
    "metricType": "...",
    "displayName": "...",
    "unit": "...",
    "proportion": "...",
    "thresholdValueOfWarning": "...",
    "thresholdValueOfError": "...",
    "stepSize": "...",
    "max": "...",
    "min": "..."}
  ]
}
```

```

    },
    :
  ]
}

```

## UserThresholdProfile (Type: UserThresholdProfile)

Attribute	Type	Description
profileName	string	User profile name. Use 128 or fewer characters.
description	string	Description of the user profile. Use 256 or fewer characters.
resourceType	string	Resource type to which the user profile can be applied. The following value can be specified. <ul style="list-style-type: none"> <li>• VM: Virtual machine</li> <li>• VOLUME: Volume</li> <li>• WINDOWS: Windows</li> <li>• LINUX_UNIX: Linux or UNIX</li> </ul>
profileType	string	Change type of the user profile. <ul style="list-style-type: none"> <li>• User: Profile is created by a user</li> <li>• Default: Profile is registered by default</li> <li>• Preset: Profile for which the initial settings are set</li> </ul>
thresholdValues	UserThresholdValue[]	Details of the threshold set in the user profile.

## thresholdValues (Type: UserThresholdValue)

Attribute	Type	Description
monitoring	boolean	Whether the threshold is monitored. <ul style="list-style-type: none"> <li>• true: Threshold is monitored</li> <li>• false: Threshold is not monitored</li> </ul> If this member is omitted, false is set.
metricType	string	Identifier of the threshold. This member is not supported.
displayName	string	Display name of the threshold
unit	string	String indicating the unit of the threshold
proportion	boolean	Direction of the threshold. <ul style="list-style-type: none"> <li>true: When the measured value falls below the threshold, an error or warning occurs.</li> <li>false: When the measured value exceeds the threshold, an error or warning occurs.</li> </ul>
thresholdValueOfWarning	float	Threshold for displaying warnings. You need to specify this threshold according to the following conditions: <ul style="list-style-type: none"> <li>• Multiple of stepSize</li> <li>• Less than or equal to max</li> <li>• Greater than or equal to min</li> </ul>
thresholdValueOfError	float	Threshold for showing errors. You need to specify this threshold according to the following conditions: <ul style="list-style-type: none"> <li>• Multiple of stepSize</li> <li>• Less than or equal to max</li> <li>• Greater than or equal to min</li> </ul>
stepSize	float	Increment for the threshold
max	double	Maximum value that can be specified for the threshold

Attribute	Type	Description
min	double	Minimum value that can be specified for the threshold

## Response body

The structure of the response body and the object attributes are as follows:

### UserThresholdProfile

```

{
  "instanceID": "...",
  "profileName": "...",
  "description": "...",
  "resourceType": "...",
  "profileType": "...",
  "thresholdValues": [{
    "instanceID": "...",
    "monitoring": "...",
    "metricType": "...",
    "displayName": "...",
    "unit": "...",
    "proportion": "...",
    "thresholdValueOfWarning": "...",
    "thresholdValueOfError": "...",
    "stepSize": "...",
    "max": "...",
    "min": "..."
  }],
  "numOfResources": "...",
  "autoAssignFilters": ["...", ...]
}

```

### UserThresholdProfile (Type: UserThresholdProfile)

Attribute	Type	Description
instanceID	long	ID for identifying instances.
profileName	string	User profile name. Use 128 or fewer characters.
description	string	Description of the user profile. Use 256 or fewer characters.
resourceType	string	Resource type to which the user profile can be applied. The following value can be specified. <ul style="list-style-type: none"> <li>• VM: Virtual machine</li> <li>• VOLUME: Volume</li> <li>• WINDOWS: Windows</li> <li>• LINUX_UNIX: Linux or UNIX</li> </ul>
profileType	string	Change type of the user profile. <ul style="list-style-type: none"> <li>• User: Profile is created by a user</li> <li>• Default: Profile is registered by default</li> <li>• Preset: Profile for which the initial settings are set</li> </ul>
thresholdValues	UserThresholdValue[]	Details of the threshold set in the user profile.
numOfResources	int	Number of resources to which the user profile is assigned
autoAssignFilters	string[]	Name of the automatic assignment rule

## thresholdValues (Type: UserThresholdValue)

Attribute	Type	Description
instanceID	long	ID for identifying instances
monitoring	boolean	Whether the threshold is monitored. <ul style="list-style-type: none"><li>• true: Threshold is monitored</li><li>• false: Threshold is not monitored</li></ul> If this member is omitted, false is set.
metricType	string	Identifier of the threshold. This member is not supported.
displayName	string	Display name of the threshold
unit	string	String indicating the unit of the threshold
proportion	boolean	Direction of the threshold. true: When the measured value falls below the threshold, an error or warning occurs. false: When the measured value exceeds the threshold, an error or warning occurs.
thresholdValueOfWarning	float	Threshold for displaying warnings. You need to specify this threshold according to the following conditions: <ul style="list-style-type: none"><li>• Multiple of stepSize</li><li>• Less than or equal to max</li><li>• Greater than or equal to min</li></ul>
thresholdValueOfError	float	Threshold for showing errors. You need to specify this threshold according to the following conditions: <ul style="list-style-type: none"><li>• Multiple of stepSize</li><li>• Less than or equal to max</li><li>• Greater than or equal to min</li></ul>
stepSize	float	Increment for the threshold
max	double	Maximum value that can be specified for the threshold
min	double	Minimum value that can be specified for the threshold

## Status codes

Status code	Reason phrase	Description
201	Created	Success.
400	Bad Request	A format of request body is invalid.
401	Unauthorized	No login privilege.
403	Forbidden	No update privilege.
404	Not Found	The resource was not found.
409	Conflict	A resource with the same name exists.
412	Precondition Failed	The server is not available.
500	Internal Server Error	Server processing error.

## Example code

```
[Request Header]
POST /Analytics/v1/objects/UserThresholdProfiles HTTP/1.1
```

```
Authorization: Basic c3lzdGVtOmlhbmFnZXI=
User-Agent: curl/7.33.0
Host: localhost:22015
Accept: application/json
Content-Type: application/json
Accept-Language: ja
Content-Length: 1330
```

[Request Body]

```
{
  "instanceID" : 0,
  "profileName" : "Default Profile for Volume",
  "description" : "Default Profile for Volume",
  "resourceType" : "VOLUME",
  "profileType" : "User",
  "thresholdValues" : [ {
    "instanceID" : 763,
    "monitoring" : false,
    "metricType" : "STO_VOLUME_TOTAL_IO_RATE",
    "displayName" : "Volume IOPS",
    "unit" : "transfers/sec",
    "proportion" : false,
    "thresholdValueOfWarning" : 0.0,
    "thresholdValueOfError" : 2222.0,
    "stepSize" : 1.0,
    "max" : 3.4028235E38,
    "min" : 0.0
  }, {
    "instanceID" : 761,
    "monitoring" : false,
    "metricType" : "STO_VOLUME_TOTAL_XFER_RATE",
    "displayName" : "Volume IO Rate",
    "unit" : "MBps",
    "proportion" : false,
    "thresholdValueOfWarning" : 421.0,
    "thresholdValueOfError" : 450.0,
    "stepSize" : 1.0,
    "max" : 3.4028235E38,
    "min" : 0.0
  }, {
    "instanceID" : 762,
    "monitoring" : true,
    "metricType" : "STO_IO_RESPONSE_TIME_ON_CTRL0",
    "displayName" : "Volume Response Time Per IO Request",
    "unit" : "msec/transfer",
    "proportion" : false,
    "thresholdValueOfWarning" : 499.9,
    "thresholdValueOfError" : 500.1,
    "stepSize" : 0.1,
    "max" : 3.4028235E38,
    "min" : 0.0
  } ],
  "numOfResources" : 0,
  "autoAssignFilters" : [ ]
}
```

[Response Header]

```
HTTP/1.1 201 Created
Date: Fri, 27 Nov 2015 07:59:59 GMT
Server: Cosminexus HTTP Server
Cache-Control: no-cache
WWW-Authenticate: HSSO 92912a219d69363f390aa8d6fa84157ab1e58d6_WV1GcHsLfg5ffg0I_V0810
Location: http://localhost:22015/Analytics/v1/objects/UserThresholdProfiles/63
```

X-Frame-Options: SAMEORIGIN  
Transfer-Encoding: chunked  
Content-Type: application/json

[Response Body]

```
{
  "instanceID" : 63,
  "profileName" : "Default Profile for Volume",
  "description" : "Default Profile for Volume",
  "resourceType" : "VOLUME",
  "profileType" : "User",
  "thresholdValues" : [ {
    "instanceID" : 769,
    "monitoring" : false,
    "metricType" : "STO_VOLUME_TOTAL_IO_RATE",
    "displayName" : "Volume IOPS",
    "unit" : "transfers/sec",
    "proportion" : false,
    "thresholdValueOfWarning" : 0.0,
    "thresholdValueOfError" : 2222.0,
    "stepSize" : 1.0,
    "max" : 3.4028235E38,
    "min" : 0.0
  }, {
    "instanceID" : 768,
    "monitoring" : false,
    "metricType" : "STO_VOLUME_TOTAL_XFER_RATE",
    "displayName" : "Volume IO Rate",
    "unit" : "MBps",
    "proportion" : false,
    "thresholdValueOfWarning" : 421.0,
    "thresholdValueOfError" : 450.0,
    "stepSize" : 1.0,
    "max" : 3.4028235E38,
    "min" : 0.0
  }, {
    "instanceID" : 767,
    "monitoring" : true,
    "metricType" : "STO_IO_RESPONSE_TIME_ON_CTRL0",
    "displayName" : "Volume Response Time Per IO Request",
    "unit" : "msec/transfer",
    "proportion" : false,
    "thresholdValueOfWarning" : 499.9,
    "thresholdValueOfError" : 500.1,
    "stepSize" : 0.1,
    "max" : 3.4028235E38,
    "min" : 0.0
  } ],
  "numOfResources" : 0,
  "autoAssignFilters" : [ ]
}
```

---

## Related topics

- [1.3 Resource members](#)
  - [1.6 List of enumerators](#)
-

## 2.4.4 Updating User Profile

This API updates the specified user profile.

### Execution permission

Admin, Modify

### API version

v1

### Request format

```
PUT http[s]://host:port/Analytics/version/objects/UserThresholdProfiles/{id}
```

### Request body

The structure of the request body and the object attributes are as follows:

#### UserThresholdProfile

```
{
  "profileName": "...",
  "description": "...",
  "resourceType": "...",
  "profileType": "...",
  "thresholdValues": [{
    "monitoring": "...",
    "metricType": "...",
    "displayName": "...",
    "unit": "...",
    "proportion": "...",
    "thresholdValueOfWarning": "...",
    "thresholdValueOfError": "...",
    "stepSize": "...",
    "max": "...",
    "min": "..."
  }],
  :
}
```

#### UserThresholdProfile (Type: UserThresholdProfile)

Attribute	Type	Description
profileName	string	User profile name. Use 128 or fewer characters.
description	string	Description of the user profile. Use 256 or fewer characters.
resourceType	string	Resource type to which the user profile can be applied. The following value can be specified. <ul style="list-style-type: none"><li>• VM: Virtual machine</li><li>• VOLUME: Volume</li><li>• WINDOWS: Windows</li><li>• LINUX_UNIX: Linux or UNIX</li></ul>
profileType	string	Change type of the user profile.

Attribute	Type	Description
profileType	string	<ul style="list-style-type: none"> <li>• User: Profile is created by a user</li> <li>• Default: Profile is registered by default</li> <li>• Preset: Profile for which the initial settings are set</li> </ul>
thresholdValues	UserThresholdValue[]	Details of the threshold set in the user profile.

### thresholdValues (Type: UserThresholdValue)

Attribute	Type	Description
monitoring	boolean	Whether the threshold is monitored. <ul style="list-style-type: none"> <li>• true: Threshold is monitored</li> <li>• false: Threshold is not monitored</li> </ul> If this member is omitted, false is set.
metricType	string	Identifier of the threshold. This member is not supported.
displayName	string	Display name of the threshold
unit	string	String indicating the unit of the threshold
proportion	boolean	Direction of the threshold. <ul style="list-style-type: none"> <li>true: When the measured value falls below the threshold, an error or warning occurs.</li> <li>false: When the measured value exceeds the threshold, an error or warning occurs.</li> </ul>
thresholdValueOfWarning	float	Threshold for displaying warnings. You need to specify this threshold according to the following conditions: <ul style="list-style-type: none"> <li>• Multiple of stepSize</li> <li>• Less than or equal to max</li> <li>• Greater than or equal to min</li> </ul>
thresholdValueOfError	float	Threshold for showing errors. You need to specify this threshold according to the following conditions: <ul style="list-style-type: none"> <li>• Multiple of stepSize</li> <li>• Less than or equal to max</li> <li>• Greater than or equal to min</li> </ul>
stepSize	float	Increment for the threshold
max	double	Maximum value that can be specified for the threshold
min	double	Minimum value that can be specified for the threshold

## Response body

The structure of the response body and the object attributes are as follows:

### UserThresholdProfile

```
{
  "instanceID": "...",
  "profileName": "...",
  "description": "...",
  "resourceType": "...",
  "profileType": "...",
  "thresholdValues": [{
    "instanceID": "...",
    "monitoring": "...",
    "metricType": "...",
    "displayName": "...",
```



```

        "unit": "...",
        "proportion": "...",
        "thresholdValueOfWarning": "...",
        "thresholdValueOfError": "...",
        "stepSize": "...",
        "max": "...",
        "min": "...",
    },
    :
  ],
  "numOfResources": "...",
  "autoAssignFilters": ["...", ...]
}

```

### UserThresholdProfile (Type: UserThresholdProfile)

Attribute	Type	Description
instanceID	long	ID for identifying instances.
profileName	string	User profile name. Use 128 or fewer characters.
description	string	Description of the user profile. Use 256 or fewer characters.
resourceType	string	Resource type to which the user profile can be applied. The following value can be specified. <ul style="list-style-type: none"> <li>• VM: Virtual machine</li> <li>• VOLUME: Volume</li> <li>• WINDOWS: Windows</li> <li>• LINUX_UNIX: Linux or UNIX</li> </ul>
profileType	string	Change type of the user profile. <ul style="list-style-type: none"> <li>• User: Profile is created by a user</li> <li>• Default: Profile is registered by default</li> <li>• Preset: Profile for which the initial settings are set</li> </ul>
thresholdValues	UserThresholdValue[]	Details of the threshold set in the user profile.
numOfResources	int	Number of resources to which the user profile is assigned
autoAssignFilters	string[]	Name of the automatic assignment rule

### thresholdValues (Type: UserThresholdValue)

Attribute	Type	Description
instanceID	long	ID for identifying instances
monitoring	boolean	Whether the threshold is monitored. <ul style="list-style-type: none"> <li>• true: Threshold is monitored</li> <li>• false: Threshold is not monitored</li> </ul> If this member is omitted, false is set.
metricType	string	Identifier of the threshold. This member is not supported.
displayName	string	Display name of the threshold
unit	string	String indicating the unit of the threshold
proportion	boolean	Direction of the threshold. <ul style="list-style-type: none"> <li>true: When the measured value falls below the threshold, an error or warning occurs.</li> <li>false: When the measured value exceeds the threshold, an error or warning occurs.</li> </ul>

Attribute	Type	Description
thresholdValueOfWarning	float	Threshold for displaying warnings. You need to specify this threshold according to the following conditions: <ul style="list-style-type: none"> <li>• Multiple of stepSize</li> <li>• Less than or equal to max</li> <li>• Greater than or equal to min</li> </ul>
thresholdValueOfError	float	Threshold for showing errors. You need to specify this threshold according to the following conditions: <ul style="list-style-type: none"> <li>• Multiple of stepSize</li> <li>• Less than or equal to max</li> <li>• Greater than or equal to min</li> </ul>
stepSize	float	Increment for the threshold
max	double	Maximum value that can be specified for the threshold
min	double	Minimum value that can be specified for the threshold

## Status codes

Status code	Reason phrase	Description
200	OK	Success.
400	Bad Request	A format of request body is invalid.
401	Unauthorized	No login privilege.
403	Forbidden	No update privilege.
404	Not Found	The resource was not found.
409	Conflict	A resource with the same name exists.
412	Precondition Failed	The server is not available.
500	Internal Server Error	Server processing error.

## Example code

```
[Request Header]
PUT /Analytics/v1/objects/UserThresholdProfiles/63 HTTP/1.1
Authorization: Basic c3lzdGVtOmlhbmFnZXI=
User-Agent: curl/7.33.0
Host: localhost:22015
Accept: application/json
Content-Type: application/json
Accept-Language: ja
Content-Length: 1331
```

```
[Request Body]
{
  "instanceID" : 63,
  "profileName" : "Default Profile for Volume",
  "description" : "Default Profile for Volume",
  "resourceType" : "VOLUME",
  "profileType" : "User",
  "thresholdValues" : [ {
    "instanceID" : 763,
```

```

"monitoring" : false,
"metricType" : "STO_VOLUME_TOTAL_IO_RATE",
"displayName" : "Volume IOPS",
"unit" : "transfers/sec",
"proportion" : false,
"thresholdValueOfWarning" : 0.0,
"thresholdValueOfError" : 2222.0,
"stepSize" : 1.0,
"max" : 3.4028235E38,
"min" : 0.0
}, {
"instanceID" : 761,
"monitoring" : false,
"metricType" : "STO_VOLUME_TOTAL_XFER_RATE",
"displayName" : "Volume IO Rate",
"unit" : "MBps",
"proportion" : false,
"thresholdValueOfWarning" : 421.0,
"thresholdValueOfError" : 450.0,
"stepSize" : 1.0,
"max" : 3.4028235E38,
"min" : 0.0
}, {
"instanceID" : 762,
"monitoring" : true,
"metricType" : "STO_IO_RESPONSE_TIME_ON_CTRL0",
"displayName" : "Volume Response Time Per IO Request",
"unit" : "msec/transfer",
"proportion" : false,
"thresholdValueOfWarning" : 499.9,
"thresholdValueOfError" : 500.1,
"stepSize" : 0.1,
"max" : 3.4028235E38,
"min" : 0.0
} ],
"numOfResources" : 0,
"autoAssignFilters" : [ ]
}

```

[Response Header]

```

HTTP/1.1 200 OK
Date: Fri, 27 Nov 2015 08:42:46 GMT
Server: Cosminexus HTTP Server
Cache-Control: no-cache
WWW-Authenticate: HSSO e6ef783f42e697183f8c7a8539cf44beed12e8c_WV1GcHsLfg5ffg0I_V0810
X-Frame-Options: SAMEORIGIN
Transfer-Encoding: chunked
Content-Type: application/json

```

[Response Body]

```

{
"instanceID" : 63,
"profileName" : "Default Profile for Volume",
"description" : "Default Profile for Volume",
"resourceType" : "VOLUME",
"profileType" : "User",
"thresholdValues" : [ {
"instanceID" : 769,
"monitoring" : false,
"metricType" : "STO_VOLUME_TOTAL_IO_RATE",
"displayName" : "Volume IOPS",
"unit" : "transfers/sec",
"proportion" : false,

```

```

"thresholdValueOfWarning" : 0.0,
"thresholdValueOfError" : 2222.0,
"stepSize" : 1.0,
"max" : 3.4028235E38,
"min" : 0.0
}, {
"instanceID" : 768,
"monitoring" : false,
"metricType" : "STO_VOLUME_TOTAL_XFER_RATE",
"displayName" : "Volume IO Rate",
"unit" : "MBps",
"proportion" : false,
"thresholdValueOfWarning" : 421.0,
"thresholdValueOfError" : 450.0,
"stepSize" : 1.0,
"max" : 3.4028235E38,
"min" : 0.0
}, {
"instanceID" : 767,
"monitoring" : true,
"metricType" : "STO_IO_RESPONSE_TIME_ON_CTRL0",
"displayName" : "Volume Response Time Per IO Request",
"unit" : "msec/transfer",
"proportion" : false,
"thresholdValueOfWarning" : 499.9,
"thresholdValueOfError" : 500.1,
"stepSize" : 0.1,
"max" : 3.4028235E38,
"min" : 0.0
} ],
"numOfResources" : 0,
"autoAssignFilters" : [ ]
}

```

---

## Related topics

- [1.3 Resource members](#)
  - [1.6 List of enumerators](#)
- 

## 2.4.5 Delete User Profiles

This API deletes the specified user profile. The default user profile is reassigned to the monitored resource to which the deleted user profile is assigned.

### Execution permission

Admin, Modify

### API version

v1

### Request format

```
DELETE http[s]://host:port/Analytics/version/objects/UserThresholdProfiles/{id}
```

## Request body

Not applicable.

## Response body

Not applicable.

## Status codes

Status code	Reason phrase	Description
204	No Content	Success.
401	Unauthorized	No login privilege.
403	Forbidden	No delete privilege.
404	Not Found	The resource was not found.
412	Precondition Failed	The server is not available.
500	Internal Server Error	Server processing error.

## Example code

```
[Request Header]
DELETE /Analytics/v1/objects/UserThresholdProfiles/63 HTTP/1.1
Authorization: Basic c3lzdGVtOmlhbmFnZXI=
User-Agent: curl/7.33.0
Host: localhost:22015
Accept: application/json
Accept-Language: ja
```

```
[Response Header]
HTTP/1.1 204 No Content
Date: Fri, 27 Nov 2015 11:24:22 GMT
Server: Cosminexus HTTP Server
Cache-Control: no-cache
WWW-Authenticate: HSSO
ca54892ac23952deaf9c5aa71d7eb117d5f5e0c1_WVlGcHsLfg5ffg0I_V0810
X-Frame-Options: SAMEORIGIN
Content-Length: 0
Content-Type: application/json
```

---

## Related topics

- [1.3 Resource members](#)
  - [1.6 List of enumerators](#)
- 

## 2.4.6 Obtaining User Profile Operation

This API acquires a list of executable operations for the specified user profile.

## Execution permission

Admin, Modify

## API version

v1

## Request format

```
GET http[s]://host:port/Analytics/version/objects/UserThresholdProfiles/{id}/actions
```

## Request body

Not applicable.

## Response body

The structure of the response body and the object attributes are as follows:

### Collections

```
{
  "data":["...", ...],
  "pagination":{
    "page":"...",
    "pageSize":"...",
    "numPages":"...",
    "totalCount":"..."
  },
  "count":"..."
}
```

### Collections (Type: Collections)

Attribute	Type	Description
data	anyType[]	A list of Action objects. For details about Action, see the table below.
pagination	Pagination	Page information. This parameter is displayed only when the relevant resource exists.
count	int	Number of data items that meet the conditions.

### pagination (Type: Pagination)

Attribute	Type	Description
page	integer	page
pageSize	integer	Size of the pages
numPages	integer	Number of the pages
totalCount	integer	Number of the objects

### Action

```
{
  "name":"...",
  "href":"..."
}
```

```

    "method": "...",
    "type": "...",
    "parameters": ["...", ...]
}

```

## Action (Type: Action)

Attribute	Type	Description
name	string	Name of the execute an operation.
href	string	URL of the execute an operation.
method	string	Name of the method.
type	string	Data format of the object.
parameters	anyType[]	A list of objects necessary to execute an operation. No value is set.

## Status codes

Status code	Reason phrase	Description
200	OK	Success.
401	Unauthorized	No login privilege.
403	Forbidden	No reference privilege.
412	Precondition Failed	The server is not available.
500	Internal Server Error	Server processing error.

## Example code

```

[Request Header]
GET /Analytics/v1/objects/UserThresholdProfiles/62/actions HTTP/1.1
Authorization: Basic c3lzdGVtOmlhbmFnZXI=
User-Agent: curl/7.33.0
Host: localhost:22015
Accept: application/json
Accept-Language: ja

[Response Header]
HTTP/1.1 200 OK
Date: Fri, 27 Nov 2015 08:52:29 GMT
Server: Cosminexus HTTP Server
Cache-Control: no-cache
WWW-Authenticate: HSSO 6e5ebd331dec95678b4ba4fa76694f61b8bb7_WV1GcHsLfg5ffg0I_V0810
X-Frame-Options: SAMEORIGIN
Transfer-Encoding: chunked
Content-Type: application/json

[Response Body]
{
  "data" : [ {
    "name" : "updateTargetResource",
    "href" : "http://localhost:22015/Analytics/v1/objects/UserThresholdProfiles/62/
actions/updateTargetResource/invoke",
    "method" : "POST",

```

```
    "type" : "application/json",
    "parameters" : [ ]
  } ],
  "count" : 1
}
```

---

## Related topics

- [1.3 Resource members](#)
  - [1.6 List of enumerators](#)
- 

## 2.4.7 Obtaining User Profile Allocation Information

This API acquires information required for assigning the specified user profile to a monitored resource.

### Execution permission

Admin, Modify

### API version

v1

### Request format

```
GET http[s]://host:port/Analytics/version/objects/UserThresholdProfiles/{id}/actions/
updateTargetResource
```

### Request body

Not applicable.

### Response body

The structure of the response body and the object attributes are as follows:

#### Action

```
{
  "name": "...",
  "href": "...",
  "method": "...",
  "type": "...",
  "parameters": ["...", ...]
}
```

#### Action (Type: Action)

Attribute	Type	Description
name	string	Name of the execute an operation.
href	string	URL of the execute an operation.
method	string	Name of the method.



Attribute	Type	Description
type	string	Data format of the object.
parameters	anyType[]	A list of InstanceID objects necessary to execute an operation. For details about InstanceID, see the table below.

## InstanceID

```
{
  "instanceID": "..."}
}
```

## InstanceID (Type: InstanceID)

Attribute	Type	Description
instanceID	long	InstanceID

## Status codes

Status code	Reason phrase	Description
200	OK	Success.
401	Unauthorized	No login privilege.
403	Forbidden	No reference privilege.
404	Not Found	The resource was not found.
412	Precondition Failed	The server is not available.
500	Internal Server Error	Server processing error.

## Example code

```
[Request Header]
GET /Analytics/v1/objects/UserThresholdProfiles/62/actions/updateTargetResource HTTP/
1.1
Authorization: Basic c3lzdGVtOmlhbmFnZXI=
User-Agent: curl/7.33.0
Host: localhost:22015
Accept: application/json
Accept-Language: ja
```

```
[Response Header]
HTTP/1.1 200 OK
Date: Fri, 27 Nov 2015 09:01:05 GMT
Server: Cosminexus HTTP Server
Cache-Control: no-cache
WWW-Authenticate: HSSO 5c177954bed8e8afe14a6e3b6c9e7607d453e1_WV1GcHsLfg5ffg0I_V0810
X-Frame-Options: SAMEORIGIN
Transfer-Encoding: chunked
Content-Type: application/json
```

```
[Response Body]
{
```

```

    "name" : "updateTargetResource",
    "href" : "http://localhost:22015/Analytics/v1/objects/UserThresholdProfiles/62/
actions/updateTargetResource/invoke",
    "method" : "POST",
    "type" : "application/json",
    "parameters" : [ ]
}

```

## Related topics

- [1.3 Resource members](#)
- [1.6 List of enumerators](#)

## 2.4.8 Allocating User Profile

This API assigns the specified user profile to monitoring targets.

### Execution permission

Admin, Modify

### API version

v1

### Request format

```

POST http[s]://host:port/Analytics/version/objects/UserThresholdProfiles/{id}/
actions/updateTargetResource/invoke

```

### Request body

The structure of the request body and the object attributes are as follows:

#### Action

```

{
    "name":"...",
    "href":"...",
    "method":"...",
    "type":"...",
    "parameters":["...", ...]
}

```

#### Action (Type: Action)

Attribute	Type	Description
name	string	Name of the execute an operation.
href	string	URL of the execute an operation.
method	string	Name of the method.
type	string	Data format of the object.

Attribute	Type	Description
parameters	anyType[]	A list of InstanceID objects necessary to execute an operation. For details about InstanceID, see the table below.

## InstanceID

```
{
  "instanceID": "... "
}
```

### InstanceID (Type: InstanceID)

Attribute	Type	Description
instanceID	long	InstanceID

## Response body

The structure of the response body and the object attributes are as follows:

### Job

```
{
  "instanceID": "...",
  "created": "...",
  "updated": "...",
  "completed": "...",
  "state": "...",
  "affectedResource": ["...", ...],
  "result": ["...", ...]
}
```

### Job (Type: Job)

Attribute	Type	Description
instanceID	string	Indicates the ID of the Instance.
created	string	Indicates the date the object is generated in ISO 8601 format.
updated	string	Indicates the time the object is updated in ISO 8601 format. The same value as for "created" is set.
completed	string	Indicates the time the processing completed in ISO 8601 format. The same value as for "created" is set.
state	string	One of the following values is set: "failed": The operation did not terminate normally. "success": The operation terminated normally.
affectedResource	string[]	Indicates the URL of the API resource created or updated as a result of the operation. If no resources exist, this parameter is empty.
result	anyType[]	A list of objects. No value is set.

## Status codes

Status code	Reason phrase	Description
200	OK	Success.
400	Bad Request	A format of request body is invalid.
401	Unauthorized	No login privilege.
403	Forbidden	No update privilege.
404	Not Found	The resource was not found.
412	Precondition Failed	The server is not available.
500	Internal Server Error	Server processing error.

## Example code

```
[Request Header]
POST /Analytics/v1/objects/UserThresholdProfiles/62/actions/updateTargetResource/
invoke HTTP/1.1
Authorization: Basic c3lzdGVtOmlhbmFnZXI=
User-Agent: curl/7.33.0
Host: localhost:22015
Accept: application/json
Content-Type: application/json
Accept-Language: ja
Content-Length: 251

[Request Body]
{
  "name" : "updateTargetResource",
  "href" : "http://localhost:22015/Analytics/v1/objects/UserThresholdProfiles/62/
actions/updateTargetResource/invoke",
  "method" : "POST",
  "type" : "application/json",
  "parameters" : [ {
    "instanceID" : 540
  }, {
    "instanceID" : 541
  } ]
}

[Response Header]
HTTP/1.1 200 OK
Date: Fri, 27 Nov 2015 09:16:00 GMT
Server: Cosminexus HTTP Server
Cache-Control: no-cache
WWW-Authenticate: HSSO 64b88abff57b911327c0d26c6394beea311ae7a_WVlGcHsLfg5ffg0I_V0810
X-Frame-Options: SAMEORIGIN
Transfer-Encoding: chunked
Content-Type: application/json

[Response Body]
{
  "instanceID" : "7bdbb872-18a0-42dd-9481-51ca3f66758c",
  "created" : "2015-11-27T18:16:00.996+09:00",
  "updated" : "2015-11-27T18:16:01.372+09:00",
```

```
"completed" : "2015-11-27T18:16:01.373+09:00",  
"state" : "success",  
"affectedResource" : [ ],  
"result" : [ ]  
}
```

---

## Related topics

- [1.3 Resource members](#)
  - [1.6 List of enumerators](#)
-

## 2.5 List of APIs related to system profiles

This section describes the operations for system profiles used by JP1/OA for the monitoring of monitoring targets.

### 2.5.1 Obtaining System Profile List

This API acquires a list of system profiles.

#### Execution permission

Admin, Modify

#### API version

v1

#### Request format

```
GET http[s]://host:port/Analytics/version/objects/SystemThresholdProfiles
```

#### Request body

Not applicable.

#### Response body

The structure of the response body and the object attributes are as follows:

##### Collections

```
{
  "data":["...", ...],
  "pagination":{
    "page":"...",
    "pageSize":"...",
    "numPages":"...",
    "totalCount":"..."
  },
  "count":"..."
}
```

##### Collections (Type: Collections)

Attribute	Type	Description
data	anyType[]	A list of SystemThresholdProfile objects. For details about SystemThresholdProfile, see the table below.
pagination	Pagination	Page information. This parameter is displayed only when the relevant resource exists.
count	int	Number of data items that meet the conditions.

##### pagination (Type: Pagination)

Attribute	Type	Description
page	integer	page
pageSize	integer	Size of the pages
numPages	integer	Number of the pages
totalCount	integer	Number of the objects

## SystemThresholdProfile

```

{
  "instanceID": "...",
  "profileName": "...",
  "description": "...",
  "resourceType": "...",
  "profileType": "...",
  "thresholdValues": [{
    "instanceID": "...",
    "monitoring": "...",
    "metricType": "...",
    "displayName": "...",
    "unit": "...",
    "proportion": "...",
    "thresholdValueOfWarning": "...",
    "thresholdValueOfError": "...",
    "stepSize": "...",
    "max": "...",
    "min": "..."
  }],
  :
  ],
  "numOfResources": "..."
}

```

## SystemThresholdProfile (Type: SystemThresholdProfile)

Attribute	Type	Description
instanceID	long	ID for identifying instances
profileName	string	System profile name. Use 128 or fewer characters.
description	string	Description of the system profile. Use 256 or fewer characters.
resourceType	string	Resource type to which the system profile can be applied. <ul style="list-style-type: none"> <li>• ESX: ESX server</li> <li>• HYPERV: Hyper-V server</li> <li>• IPSWITCH: IP Switch</li> <li>• FCSWITCH: FC Switch</li> </ul>
profileType	string	Change type of the system profile. <ul style="list-style-type: none"> <li>• User: Profile is created by a user</li> <li>• Default: Profile is registered by default</li> <li>• Preset: Profile for which the initial settings are set</li> </ul>
thresholdValues	SystemThresholdValue[]	Details of the threshold set in the system profile.
numOfResources	int	Number of resources to which the system profile is assigned

## thresholdValues (Type: SystemThresholdValue)

Attribute	Type	Description
instanceID	long	ID for identifying instances
monitoring	boolean	Whether the threshold is monitored. <ul style="list-style-type: none"><li>• true: Threshold is monitored</li><li>• false: Threshold is not monitored</li></ul> If this member is omitted, false is set.
metricType	string	Identifier of the threshold. This member is not supported.
displayName	string	Display name of the threshold.
unit	string	String indicating the unit of the threshold.
proportion	boolean	Direction of the threshold. <ul style="list-style-type: none"><li>• true: When the measured value falls below the threshold, an error or warning occurs.</li><li>• false: When the measured value exceeds the threshold, an error or warning occurs.</li></ul>
thresholdValueOfWarning	float	Threshold for displaying warnings. You need to specify this threshold according to the following conditions: <ul style="list-style-type: none"><li>• Multiple of stepSize</li><li>• Less than or equal to max</li><li>• Greater than or equal to min</li></ul>
thresholdValueOfError	float	Threshold for displaying errors. You need to specify this threshold according to the following conditions: <ul style="list-style-type: none"><li>• Multiple of stepSize</li><li>• Less than or equal to max</li><li>• Greater than or equal to min</li></ul>
stepSize	float	Increment for the threshold
max	double	Maximum value that can be specified for the threshold
min	double	Minimum value that can be specified for the threshold

## Status codes

Status code	Reason phrase	Description
200	OK	Success.
400	Bad Request	A query parameter is invalid.
401	Unauthorized	No login privilege.
403	Forbidden	No reference privilege.
412	Precondition Failed	The server is not available.
500	Internal Server Error	Server processing error.

## Example code

```
[Request Header]
GET /Analytics/v1/objects/SystemThresholdProfiles HTTP/1.1
Authorization: Basic c3lzdGVtOmlhbmFnZXI=
User-Agent: curl/7.33.0
Host: localhost:22015
```



```
Accept: application/json
Accept-Language: ja
```

```
[Response Header]
HTTP/1.1 200 OK
Date: Fri, 27 Nov 2015 05:21:49 GMT
Server: Cosminexus HTTP Server
Cache-Control: no-cache
WWW-Authenticate: HSSO
d4ca28827d6fe35b964eeeece674e3fbda29b5a11_WVlGcHsLfg5ffg0I_V0810
X-Frame-Options: SAMEORIGIN
Transfer-Encoding: chunked
Content-Type: application/json
```

```
[Response Body]
{
  "data" : [ {
    "instanceID" : 23,
    "profileName" : "Default Profile for Hyper-V",
    "description" : "Default Profile for Hyper-V",
    "resourceType" : "HYPERV",
    "profileType" : "Default",
    "thresholdValues" : [ {
      "instanceID" : 539,
      "monitoring" : true,
      "metricType" : "WIN_CPU_LOAD",
      "displayName" : "CPU Use",
      "unit" : "%",
      "proportion" : false,
      "thresholdValueOfWarning" : 80.0,
      "thresholdValueOfError" : 90.0,
      "stepSize" : 1.0,
      "max" : 100.0,
      "min" : 0.0
    }, {
      .....
    },
    .....
  ],
  "numOfResources" : 0
}
"count" : 8
}
```

---

## Related topics

- [1.3 Resource members](#)
  - [1.6 List of enumerators](#)
- 

## 2.5.2 Obtaining System Profile Information

This API acquires information about the specified system profile.

### Execution permission

Admin, Modify

## API version

v1

## Request format

```
GET http[s]://host:port/Analytics/version/objects/SystemThresholdProfiles/{id}
```

## Request body

Not applicable.

## Response body

The structure of the response body and the object attributes are as follows:

### SystemThresholdProfile

```
{
  "instanceID": "...",
  "profileName": "...",
  "description": "...",
  "resourceType": "...",
  "profileType": "...",
  "thresholdValues": [{
    "instanceID": "...",
    "monitoring": "...",
    "metricType": "...",
    "displayName": "...",
    "unit": "...",
    "proportion": "...",
    "thresholdValueOfWarning": "...",
    "thresholdValueOfError": "...",
    "stepSize": "...",
    "max": "...",
    "min": "..."
  }],
  :
  ],
  "numOfResources": "..."
}
```

### SystemThresholdProfile (Type: SystemThresholdProfile)

Attribute	Type	Description
instanceID	long	ID for identifying instances
profileName	string	System profile name. Use 128 or fewer characters.
description	string	Description of the system profile. Use 256 or fewer characters.
resourceType	string	Resource type to which the system profile can be applied. <ul style="list-style-type: none"><li>• ESX: ESX server</li><li>• HYPERV: Hyper-V server</li><li>• IPSWITCH: IP Switch</li><li>• FC SWITCH: FC Switch</li></ul>
profileType	string	Change type of the system profile. <ul style="list-style-type: none"><li>• User: Profile is created by a user</li></ul>

Attribute	Type	Description
profileType	string	<ul style="list-style-type: none"> <li>• Default: Profile is registered by default</li> <li>• Preset: Profile for which the initial settings are set</li> </ul>
thresholdValues	SystemThresholdValue[]	Details of the threshold set in the system profile.
numOfResources	int	Number of resources to which the system profile is assigned

### thresholdValues (Type: SystemThresholdValue)

Attribute	Type	Description
instanceID	long	ID for identifying instances
monitoring	boolean	Whether the threshold is monitored. <ul style="list-style-type: none"> <li>• true: Threshold is monitored</li> <li>• false: Threshold is not monitored</li> </ul> If this member is omitted, false is set.
metricType	string	Identifier of the threshold. This member is not supported.
displayName	string	Display name of the threshold.
unit	string	String indicating the unit of the threshold.
proportion	boolean	Direction of the threshold. <ul style="list-style-type: none"> <li>• true: When the measured value falls below the threshold, an error or warning occurs.</li> <li>• false: When the measured value exceeds the threshold, an error or warning occurs.</li> </ul>
thresholdValueOfWarning	float	Threshold for displaying warnings. You need to specify this threshold according to the following conditions: <ul style="list-style-type: none"> <li>• Multiple of stepSize</li> <li>• Less than or equal to max</li> <li>• Greater than or equal to min</li> </ul>
thresholdValueOfError	float	Threshold for displaying errors. You need to specify this threshold according to the following conditions: <ul style="list-style-type: none"> <li>• Multiple of stepSize</li> <li>• Less than or equal to max</li> <li>• Greater than or equal to min</li> </ul>
stepSize	float	Increment for the threshold
max	double	Maximum value that can be specified for the threshold
min	double	Minimum value that can be specified for the threshold

## Status codes

Status code	Reason phrase	Description
200	OK	Success.
401	Unauthorized	No login privilege.
403	Forbidden	No reference privilege.
404	Not Found	The resource was not found.
412	Precondition Failed	The server is not available.
500	Internal Server Error	Server processing error.

## Example code

```
[Request Header]
GET /Analytics/v1/objects/SystemThresholdProfiles/23 HTTP/1.1
Authorization: Basic c3lzdGVtOmlhbmFnZXI=
User-Agent: curl/7.33.0
Host: localhost:22015
Accept: application/json
Accept-Language: ja

[Response Header]
HTTP/1.1 200 OK
Date: Fri, 27 Nov 2015 07:19:45 GMT
Server: Cosminexus HTTP Server
Cache-Control: no-cache
WWW-Authenticate: HSSO 15b057d2c5566e657ce642a6811075512e0cb95_WV1GcHsLfg5ffg0I_V0810
X-Frame-Options: SAMEORIGIN
Transfer-Encoding: chunked
Content-Type: application/json

[Response Body]
{
  "instanceID" : 23,
  "profileName" : "Default Profile for Hyper-V",
  "description" : "Default Profile for Hyper-V",
  "resourceType" : "HYPERV",
  "profileType" : "Default",
  "thresholdValues" : [ {
    "instanceID" : 539,
    "monitoring" : true,
    "metricType" : "WIN_CPU_LOAD",
    "displayName" : "CPU Use",
    "unit" : "%",
    "proportion" : false,
    "thresholdValueOfWarning" : 80.0,
    "thresholdValueOfError" : 90.0,
    "stepSize" : 1.0,
    "max" : 100.0,
    "min" : 0.0
  }, {
    .....
  },
  .....
],
  "numOfResources" : 1
}
```

---

### Related topics

- [1.3 Resource members](#)
  - [1.6 List of enumerators](#)
- 

## 2.5.3 Creating System Profile

This API creates a system profile.

## Execution permission

Admin, Modify

## API version

v1

## Request format

```
POST http[s]://host:port/Analytics/version/objects/SystemThresholdProfiles
```

## Request body

The structure of the request body and the object attributes are as follows:

### SystemThresholdProfile

```
{
  "profileName": "...",
  "description": "...",
  "resourceType": "...",
  "profileType": "...",
  "thresholdValues": [{
    "monitoring": "...",
    "metricType": "...",
    "displayName": "...",
    "unit": "...",
    "proportion": "...",
    "thresholdValueOfWarning": "...",
    "thresholdValueOfError": "...",
    "stepSize": "...",
    "max": "...",
    "min": "..."
  }],
  :
}
```

### SystemThresholdProfile (Type: SystemThresholdProfile)

Attribute	Type	Description
profileName	string	System profile name. Use 128 or fewer characters.
description	string	Description of the system profile. Use 256 or fewer characters.
resourceType	string	Resource type to which the system profile can be applied. <ul style="list-style-type: none"><li>• ESX: ESX server</li><li>• HYPERV: Hyper-V server</li><li>• IPSWITCH: IP Switch</li><li>• FCSWITCH: FC Switch</li></ul>
profileType	string	Change type of the system profile. <ul style="list-style-type: none"><li>• User: Profile is created by a user</li><li>• Default: Profile is registered by default</li><li>• Preset: Profile for which the initial settings are set</li></ul>
thresholdValues	SystemThresholdValue[]	Details of the threshold set in the system profile.

## thresholdValues (Type: SystemThresholdValue)

Attribute	Type	Description
monitoring	boolean	Whether the threshold is monitored. <ul style="list-style-type: none"><li>• true: Threshold is monitored</li><li>• false: Threshold is not monitored</li></ul> If this member is omitted, false is set.
metricType	string	Identifier of the threshold. This member is not supported.
displayName	string	Display name of the threshold.
unit	string	String indicating the unit of the threshold.
proportion	boolean	Direction of the threshold. <ul style="list-style-type: none"><li>• true: When the measured value falls below the threshold, an error or warning occurs.</li><li>• false: When the measured value exceeds the threshold, an error or warning occurs.</li></ul>
thresholdValueOfWarning	float	Threshold for displaying warnings. You need to specify this threshold according to the following conditions: <ul style="list-style-type: none"><li>• Multiple of stepSize</li><li>• Less than or equal to max</li><li>• Greater than or equal to min</li></ul>
thresholdValueOfError	float	Threshold for displaying errors. You need to specify this threshold according to the following conditions: <ul style="list-style-type: none"><li>• Multiple of stepSize</li><li>• Less than or equal to max</li><li>• Greater than or equal to min</li></ul>
stepSize	float	Increment for the threshold
max	double	Maximum value that can be specified for the threshold
min	double	Minimum value that can be specified for the threshold

## Response body

The structure of the response body and the object attributes are as follows:

### SystemThresholdProfile

```
{
  "instanceID": "...",
  "profileName": "...",
  "description": "...",
  "resourceType": "...",
  "profileType": "...",
  "thresholdValues": [{
    "instanceID": "...",
    "monitoring": "...",
    "metricType": "...",
    "displayName": "...",
    "unit": "...",
    "proportion": "...",
    "thresholdValueOfWarning": "...",
    "thresholdValueOfError": "...",
    "stepSize": "...",
    "max": "...",
    "min": "..."
  }],
  :
}
```

```

    ],
    "numOfResources": "... "
}

```

## SystemThresholdProfile (Type: SystemThresholdProfile)

Attribute	Type	Description
instanceID	long	ID for identifying instances
profileName	string	System profile name. Use 128 or fewer characters.
description	string	Description of the system profile. Use 256 or fewer characters.
resourceType	string	Resource type to which the system profile can be applied. <ul style="list-style-type: none"> <li>• ESX: ESX server</li> <li>• HYPERV: Hyper-V server</li> <li>• IPSWITCH: IP Switch</li> <li>• FCSWITCH: FC Switch</li> </ul>
profileType	string	Change type of the system profile. <ul style="list-style-type: none"> <li>• User: Profile is created by a user</li> <li>• Default: Profile is registered by default</li> <li>• Preset: Profile for which the initial settings are set</li> </ul>
thresholdValues	SystemThresholdValue[]	Details of the threshold set in the system profile.
numOfResources	int	Number of resources to which the system profile is assigned

## thresholdValues (Type: SystemThresholdValue)

Attribute	Type	Description
instanceID	long	ID for identifying instances
monitoring	boolean	Whether the threshold is monitored. <ul style="list-style-type: none"> <li>• true: Threshold is monitored</li> <li>• false: Threshold is not monitored</li> </ul> If this member is omitted, false is set.
metricType	string	Identifier of the threshold. This member is not supported.
displayName	string	Display name of the threshold.
unit	string	String indicating the unit of the threshold.
proportion	boolean	Direction of the threshold. <ul style="list-style-type: none"> <li>• true: When the measured value falls below the threshold, an error or warning occurs.</li> <li>• false: When the measured value exceeds the threshold, an error or warning occurs.</li> </ul>
thresholdValueOfWarning	float	Threshold for displaying warnings. You need to specify this threshold according to the following conditions: <ul style="list-style-type: none"> <li>• Multiple of stepSize</li> <li>• Less than or equal to max</li> <li>• Greater than or equal to min</li> </ul>
thresholdValueOfError	float	Threshold for displaying errors. You need to specify this threshold according to the following conditions: <ul style="list-style-type: none"> <li>• Multiple of stepSize</li> <li>• Less than or equal to max</li> <li>• Greater than or equal to min</li> </ul>

Attribute	Type	Description
stepSize	float	Increment for the threshold
max	double	Maximum value that can be specified for the threshold
min	double	Minimum value that can be specified for the threshold

## Status codes

Status code	Reason phrase	Description
201	Created	Success.
400	Bad Request	A format of request body is invalid.
401	Unauthorized	No login privilege.
403	Forbidden	No update privilege.
404	Not Found	The resource was not found.
409	Conflict	A resource with the same name exists.
412	Precondition Failed	The server is not available.
500	Internal Server Error	Server processing error.

## Example code

```
[Request Header]
POST /Analytics/v1/objects/SystemThresholdProfiles HTTP/1.1
Authorization: Basic c3lzZGVtOmlhbmFnZXI=
User-Agent: curl/7.33.0
Host: localhost:22015
Accept: application/json
Content-Type: application/json
Accept-Language: ja
Content-Length: 6861
Expect: 100-continue
```

```
[Request Body]
{
  "instanceID" : 23,
  "profileName" : "Default Profile for Hyper-V",
  "description" : "Default Profile for Hyper-V",
  "resourceType" : "HYPERV",
  "profileType" : "User",
  "thresholdValues" : [ {
    "instanceID" : 539,
    "monitoring" : true,
    "metricType" : "WIN_CPU_LOAD",
    "displayName" : "CPU Use",
    "unit" : "%",
    "proportion" : false,
    "thresholdValueOfWarning" : 80.0,
    "thresholdValueOfError" : 90.0,
    "stepSize" : 1.0,
    "max" : 100.0,
    "min" : 0.0
  }
], {
  211
}, {
```



```

.....
},
.....
],
"numOfResources" : 1
}

[Response Header]
HTTP/1.1 100 Continue
HTTP/1.1 201 Created
Date: Fri, 27 Nov 2015 07:59:59 GMT
Server: Cosminexus HTTP Server
Cache-Control: no-cache
WWW-Authenticate: HSSO 2dfd66512c3fb3d859df167fc452989dd389797_WV1GcHsLfg5ffg0I_V0810
Location: http://localhost:22015/Analytics/v1/objects/SystemThresholdProfiles/64
X-Frame-Options: SAMEORIGIN
Transfer-Encoding: chunked
Content-Type: application/json

[Response Body]
{
"instanceID" : 64,
"profileName" : "Default Profile for Hyper-V",
"description" : "Default Profile for Hyper-V",
"resourceType" : "HYPERV",
"profileType" : "User",
"thresholdValues" : [ {
"instanceID" : 807,
"monitoring" : true,
"metricType" : "WIN CPU_LOAD",
"displayName" : "CPU Use",
"unit" : "%",
"proportion" : false,
"thresholdValueOfWarning" : 80.0,
"thresholdValueOfError" : 90.0,
"stepSize" : 1.0,
"max" : 100.0,
"min" : 0.0
}, {
.....
}],
.....
],
"numOfResources" : 0
}

```

---

## Related topics

- [1.3 Resource members](#)
  - [1.6 List of enumerators](#)
- 

## 2.5.4 Updating System Profile

This API updates the specified user profile.

### Execution permission

Admin, Modify

## API version

v1

## Request format

```
PUT http[s]://host:port/Analytics/version/objects/SystemThresholdProfiles/{id}
```

## Request body

The structure of the request body and the object attributes are as follows:

### SystemThresholdProfile

```
{
  "profileName": "...",
  "description": "...",
  "resourceType": "...",
  "profileType": "...",
  "thresholdValues": [{
    "monitoring": "...",
    "metricType": "...",
    "displayName": "...",
    "unit": "...",
    "proportion": "...",
    "thresholdValueOfWarning": "...",
    "thresholdValueOfError": "...",
    "stepSize": "...",
    "max": "...",
    "min": "..."
  }],
  :
  ]
}
```

### SystemThresholdProfile (Type: SystemThresholdProfile)

Attribute	Type	Description
profileName	string	System profile name. Use 128 or fewer characters.
description	string	Description of the system profile. Use 256 or fewer characters.
resourceType	string	Resource type to which the system profile can be applied. <ul style="list-style-type: none"><li>• ESX: ESX server</li><li>• HYPERV: Hyper-V server</li><li>• IPSWITCH: IP Switch</li><li>• FCSWITCH: FC Switch</li></ul>
profileType	string	Change type of the system profile. <ul style="list-style-type: none"><li>• User: Profile is created by a user</li><li>• Default: Profile is registered by default</li><li>• Preset: Profile for which the initial settings are set</li></ul>
thresholdValues	SystemThresholdValue[]	Details of the threshold set in the system profile.

### thresholdValues (Type: SystemThresholdValue)

Attribute	Type	Description
monitoring	boolean	Whether the threshold is monitored. <ul style="list-style-type: none"> <li>• true: Threshold is monitored</li> <li>• false: Threshold is not monitored</li> </ul> If this member is omitted, false is set.
metricType	string	Identifier of the threshold. This member is not supported.
displayName	string	Display name of the threshold.
unit	string	String indicating the unit of the threshold.
proportion	boolean	Direction of the threshold. <ul style="list-style-type: none"> <li>• true: When the measured value falls below the threshold, an error or warning occurs.</li> <li>• false: When the measured value exceeds the threshold, an error or warning occurs.</li> </ul>
thresholdValueOfWarning	float	Threshold for displaying warnings. You need to specify this threshold according to the following conditions: <ul style="list-style-type: none"> <li>• Multiple of stepSize</li> <li>• Less than or equal to max</li> <li>• Greater than or equal to min</li> </ul>
thresholdValueOfError	float	Threshold for displaying errors. You need to specify this threshold according to the following conditions: <ul style="list-style-type: none"> <li>• Multiple of stepSize</li> <li>• Less than or equal to max</li> <li>• Greater than or equal to min</li> </ul>
stepSize	float	Increment for the threshold
max	double	Maximum value that can be specified for the threshold
min	double	Minimum value that can be specified for the threshold

## Response body

The structure of the response body and the object attributes are as follows:

### SystemThresholdProfile

```

{
  "instanceID": "...",
  "profileName": "...",
  "description": "...",
  "resourceType": "...",
  "profileType": "...",
  "thresholdValues": [{
    "instanceID": "...",
    "monitoring": "...",
    "metricType": "...",
    "displayName": "...",
    "unit": "...",
    "proportion": "...",
    "thresholdValueOfWarning": "...",
    "thresholdValueOfError": "...",
    "stepSize": "...",
    "max": "...",
    "min": "..."
  }],
  :
},

```

```

    "numOfResources": "...
}

```

### SystemThresholdProfile (Type: SystemThresholdProfile)

Attribute	Type	Description
instanceID	long	ID for identifying instances
profileName	string	System profile name. Use 128 or fewer characters.
description	string	Description of the system profile. Use 256 or fewer characters.
resourceType	string	Resource type to which the system profile can be applied. <ul style="list-style-type: none"> <li>• ESX: ESX server</li> <li>• HYPERV: Hyper-V server</li> <li>• IPSWITCH: IP Switch</li> <li>• FCSWITCH: FC Switch</li> </ul>
profileType	string	Change type of the system profile. <ul style="list-style-type: none"> <li>• User: Profile is created by a user</li> <li>• Default: Profile is registered by default</li> <li>• Preset: Profile for which the initial settings are set</li> </ul>
thresholdValues	SystemThresholdValue[]	Details of the threshold set in the system profile.
numOfResources	int	Number of resources to which the system profile is assigned

### thresholdValues (Type: SystemThresholdValue)

Attribute	Type	Description
instanceID	long	ID for identifying instances
monitoring	boolean	Whether the threshold is monitored. <ul style="list-style-type: none"> <li>• true: Threshold is monitored</li> <li>• false: Threshold is not monitored</li> </ul> If this member is omitted, false is set.
metricType	string	Identifier of the threshold. This member is not supported.
displayName	string	Display name of the threshold.
unit	string	String indicating the unit of the threshold.
proportion	boolean	Direction of the threshold. <ul style="list-style-type: none"> <li>• true: When the measured value falls below the threshold, an error or warning occurs.</li> <li>• false: When the measured value exceeds the threshold, an error or warning occurs.</li> </ul>
thresholdValueOfWarning	float	Threshold for displaying warnings. You need to specify this threshold according to the following conditions: <ul style="list-style-type: none"> <li>• Multiple of stepSize</li> <li>• Less than or equal to max</li> <li>• Greater than or equal to min</li> </ul>
thresholdValueOfError	float	Threshold for displaying errors. You need to specify this threshold according to the following conditions: <ul style="list-style-type: none"> <li>• Multiple of stepSize</li> <li>• Less than or equal to max</li> <li>• Greater than or equal to min</li> </ul>

Attribute	Type	Description
stepSize	float	Increment for the threshold
max	double	Maximum value that can be specified for the threshold
min	double	Minimum value that can be specified for the threshold

## Status codes

Status code	Reason phrase	Description
200	OK	Success.
400	Bad Request	A format of request body is invalid.
401	Unauthorized	No login privilege.
403	Forbidden	No update privilege.
404	Not Found	The resource was not found.
409	Conflict	A resource with the same name exists.
412	Precondition Failed	The server is not available.
500	Internal Server Error	Server processing error.

## Example code

```
[Request Header]
PUT /Analytics/v1/objects/SystemThresholdProfiles/64 HTTP/1.1
Authorization: Basic c3lzdGVtOm1hbmFnZXI=
User-Agent: curl/7.33.0
Host: localhost:22015
Accept: application/json
Content-Type: application/json
Accept-Language: ja
Content-Length: 6861
```

```
[Request Body]
{
  "instanceID" : 64,
  "profileName" : "Default Profile for Hyper-V",
  "description" : "Default Profile for Hyper-V",
  "resourceType" : "HYPERV",
  "profileType" : "User",
  "thresholdValues" : [ {
    "instanceID" : 807,
    "monitoring" : true,
    "metricType" : "WIN_CPU_LOAD",
    "displayName" : "CPU Use",
    "unit" : "%",
    "proportion" : false,
    "thresholdValueOfWarning" : 80.0,
    "thresholdValueOfError" : 90.0,
    "stepSize" : 1.0,
    "max" : 100.0,
    "min" : 0.0
  }, {
    .....
  },
}
```

```

.....
],
"numOfResources" : 0
}

[Response Header]
HTTP/1.1 200 OK
Date: Fri, 27 Nov 2015 08:42:46 GMT
Server: Cosminexus HTTP Server
Cache-Control: no-cache
WWW-Authenticate: HSSO ef29b28697744f4dbd5de75038b9fb5aea9f502_WV1GcHsLfg5ffg0I_V0810
X-Frame-Options: SAMEORIGIN
Transfer-Encoding: chunked
Content-Type: application/json

[Response Body]
{
  "instanceID" : 64,
  "profileName" : "Default Profile for Hyper-V",
  "description" : "Default Profile for Hyper-V",
  "resourceType" : "HYPERV",
  "profileType" : "User",
  "thresholdValues" : [ {
    "instanceID" : 807,
    "monitoring" : true,
    "metricType" : "WIN_CPU_LOAD",
    "displayName" : " CPU Use",
    "unit" : "%",
    "proportion" : false,
    "thresholdValueOfWarning" : 80.0,
    "thresholdValueOfError" : 90.0,
    "stepSize" : 1.0,
    "max" : 100.0,
    "min" : 0.0
  }, {
    .....
  },
  .....
],
"numOfResources" : 0
}

```

---

## Related topics

- [1.3 Resource members](#)
  - [1.6 List of enumerators](#)
- 

## 2.5.5 Delete System Profiles

This API deletes the specified user profile. The default user profile is reassigned to the monitored resource to which the deleted user profile is assigned.

### Execution permission

Admin, Modify

## API version

v1

## Request format

```
DELETE http[s]://host:port/Analytics/version/objects/SystemThresholdProfiles/{id}
```

## Request body

Not applicable.

## Response body

Not applicable.

## Status codes

Status code	Reason phrase	Description
204	No Content	Success.
401	Unauthorized	No login privilege.
403	Forbidden	No delete privilege.
404	Not Found	The resource was not found.
412	Precondition Failed	The server is not available.
500	Internal Server Error	Server processing error.

## Example code

```
[Request Header]
DELETE /Analytics/v1/objects/SystemThresholdProfiles/64 HTTP/1.1
Authorization: Basic c3lzdGVtOmlhbmFnZXI=
User-Agent: curl/7.33.0
Host: localhost:22015
Accept: application/json
Accept-Language: ja

[Response Header]
HTTP/1.1 204 No Content
Date: Fri, 27 Nov 2015 11:24:22 GMT
Server: Cosminexus HTTP Server
Cache-Control: no-cache
WWW-Authenticate: HSSO cb3bc1b920fd9b534c57538990506d5ab5258cc_WV1GcHsLfg5ffg0I_V0810
X-Frame-Options: SAMEORIGIN
Content-Length: 0
Content-Type: application/json
```

---

## Related topics

- [1.3 Resource members](#)
  - [1.6 List of enumerators](#)
-

## 2.5.6 Obtaining System Profile Operation List

This API acquires a list of executable operations for the specified system profile.

### Execution permission

Admin, Modify

### API version

v1

### Request format

```
GET http[s]://host:port/Analytics/version/objects/SystemThresholdProfiles/{id}/actions
```

### Request body

Not applicable.

### Response body

The structure of the response body and the object attributes are as follows:

#### Collections

```
{
  "data":["...", ...],
  "pagination":{
    "page":"...",
    "pageSize":"...",
    "numPages":"...",
    "totalCount":"..."
  },
  "count":"..."
}
```

#### Collections (Type: Collections)

Attribute	Type	Description
data	anyType[]	A list of Action objects. For details about Action, see the table below.
pagination	Pagination	Page information. This parameter is displayed only when the relevant resource exists.
count	int	Number of data items that meet the conditions.

#### pagination (Type: Pagination)

Attribute	Type	Description
page	integer	page
pageSize	integer	Size of the pages
numPages	integer	Number of the pages
totalCount	integer	Number of the objects



## Action

```
{
  "name": "...",
  "href": "...",
  "method": "...",
  "type": "...",
  "parameters": ["...", ...]
}
```

### Action (Type: Action)

Attribute	Type	Description
name	string	Name of the execute an operation.
href	string	URL of the execute an operation.
method	string	Name of the method.
type	string	Data format of the object.
parameters	anyType[]	A list of objects necessary to execute an operation. No value is set.

## Status codes

Status code	Reason phrase	Description
200	OK	Success.
401	Unauthorized	No login privilege.
403	Forbidden	No reference privilege.
412	Precondition Failed	The server is not available.
500	Internal Server Error	Server processing error.

## Example code

```
[Request Header]
GET /Analytics/v1/objects/SystemThresholdProfiles/23/actions HTTP/1.1
Authorization: Basic c3lzdGVtOmlhbmFnZXI=
User-Agent: curl/7.33.0
Host: localhost:22015
Accept: application/json
Accept-Language: ja

[Response Header]
HTTP/1.1 200 OK
Date: Fri, 27 Nov 2015 08:52:29 GMT
Server: Cosminexus HTTP Server
Cache-Control: no-cache
WWW-Authenticate: HSSO 4d3178ead3e093e934287dcb05187272788ae5c_WVlGcHsLfg5ffg0I_V0810
X-Frame-Options: SAMEORIGIN
Transfer-Encoding: chunked
Content-Type: application/json

[Response Body]
```

```
{
  "data" : [ {
    "name" : "updateTargetResource",
    "href" : "http://localhost:22015/Analytics/v1/objects/SystemThresholdProfiles/23/
actions/updateTargetResource/invoke",
    "method" : "POST",
    "type" : "application/json",
    "parameters" : [ ]
  } ],
  "count" : 1
}
```

---

## Related topics

- [1.3 Resource members](#)
  - [1.6 List of enumerators](#)
- 

## 2.5.7 Obtaining System Profile Allocation Information

This API acquires information required for assigning the specified system profile to a monitored resource.

### Execution permission

Admin, Modify

### API version

v1

### Request format

```
GET http[s]://host:port/Analytics/version/objects/SystemThresholdProfiles/{id}/
actions/updateTargetResource
```

### Request body

Not applicable.

### Response body

The structure of the response body and the object attributes are as follows:

#### Action

```
{
  "name": "...",
  "href": "...",
  "method": "...",
  "type": "...",
  "parameters": ["...", ...]
}
```

#### Action (Type: Action)

Attribute	Type	Description
name	string	Name of the execute an operation.
href	string	URL of the execute an operation.
method	string	Name of the method.
type	string	Data format of the object.
parameters	anyType[]	A list of InstanceID objects necessary to execute an operation. For details about InstanceID, see the table below.

## InstanceID

```
{
  "instanceID": "... "
}
```

## InstanceID (Type: InstanceID)

Attribute	Type	Description
instanceID	long	InstanceID

## Status codes

Status code	Reason phrase	Description
200	OK	Success.
401	Unauthorized	No login privilege.
403	Forbidden	No reference privilege.
404	Not Found	The resource was not found.
412	Precondition Failed	The server is not available.
500	Internal Server Error	Server processing error.

## Example code

```
[Request Header]
GET /Analytics/v1/objects/SystemThresholdProfiles/23/actions/updateTargetResource
HTTP/1.1
Authorization: Basic c3lzdGVtOmlhbmFnZXI=
User-Agent: curl/7.33.0
Host: localhost:22015
Accept: application/json
Accept-Language: ja

[Response Header]
HTTP/1.1 200 OK
Date: Fri, 27 Nov 2015 09:01:05 GMT
Server: Cosminexus HTTP Server
Cache-Control: no-cache
WWW-Authenticate: HSSO
b996edeeab148c282cf3cbeb6cbec37584796239_WV1GcHsLfg5ffg0I_V0810
X-Frame-Options: SAMEORIGIN
```

```
Transfer-Encoding: chunked
Content-Type: application/json
```

```
[Response Body]
{
  "name" : "updateTargetResource",
  "href" : "http://localhost:22015/Analytics/v1/objects/SystemThresholdProfiles/23/
actions/updateTargetResource/invoke",
  "method" : "POST",
  "type" : "application/json",
  "parameters" : [ {
    "instanceID" : 4
  } ]
}
```

---

## Related topics

- [1.3 Resource members](#)
  - [1.6 List of enumerators](#)
- 

## 2.5.8 Allocating System Profile

This API assigns the specified system profile to monitoring targets.

### Execution permission

Admin, Modify

### API version

v1

### Request format

```
POST http[s]://host:port/Analytics/version/objects/SystemThresholdProfiles/{id}/
actions/updateTargetResource/invoke
```

### Request body

The structure of the request body and the object attributes are as follows:

#### Action

```
{
  "name": "...",
  "href": "...",
  "method": "...",
  "type": "...",
  "parameters": ["...", ...]
}
```

#### Action (Type: Action)

Attribute	Type	Description
name	string	Name of the execute an operation.
href	string	URL of the execute an operation.
method	string	Name of the method.
type	string	Data format of the object.
parameters	anyType[]	A list of InstanceID objects necessary to execute an operation. For details about InstanceID, see the table below.

### InstanceID

```
{
  "instanceID": "..."}

```

### InstanceID (Type: InstanceID)

Attribute	Type	Description
instanceID	long	InstanceID

## Response body

The structure of the response body and the object attributes are as follows:

### Job

```
{
  "instanceID": "...",
  "created": "...",
  "updated": "...",
  "completed": "...",
  "state": "...",
  "affectedResource": ["...", ...],
  "result": ["...", ...]}

```

### Job (Type: Job)

Attribute	Type	Description
instanceID	string	Indicates the ID of the Instance.
created	string	Indicates the date the object is generated in ISO 8601 format.
updated	string	Indicates the time the object is updated in ISO 8601 format. The same value as for "created" is set.
completed	string	Indicates the time the processing completed in ISO 8601 format. The same value as for "created" is set.
state	string	One of the following values is set: "failed": The operation did not terminate normally. "success": The operation terminated normally.
affectedResource	string[]	Indicates the URL of the API resource created or updated as a result of the operation. If no resources exist, this parameter is empty.

Attribute	Type	Description
result	anyType[]	A list of objects. No value is set.

## Status codes

Status code	Reason phrase	Description
200	OK	Success.
400	Bad Request	A format of request body is invalid.
401	Unauthorized	No login privilege.
403	Forbidden	No update privilege.
404	Not Found	The resource was not found.
412	Precondition Failed	The server is not available.
500	Internal Server Error	Server processing error.

## Example code

```
[Request Header]
POST /Analytics/v1/objects/SystemThresholdProfiles/23/actions/updateTargetResource/
invoke HTTP/1.1
Authorization: Basic c3lzdGVtOmlhbmFnZXI=
User-Agent: curl/7.33.0
Host: localhost:22015
Accept: application/json
Content-Type: application/json
Accept-Language: ja
Content-Length: 251

[Request Body]
{
  "name" : "updateTargetResource",
  "href" : "http://localhost:22015/Analytics/v1/objects/SystemThresholdProfiles/23/
actions/updateTargetResource/invoke",
  "method" : "POST",
  "type" : "application/json",
  "parameters" : [ {
    "instanceID" : 4
  } ]
}

[Response Header]
HTTP/1.1 200 OK
Date: Fri, 27 Nov 2015 09:11:06 GMT
Server: Cosminexus HTTP Server
Cache-Control: no-cache
WWW-Authenticate: HSSO 2cf2b949bc23ff176de6c674e95e8d7b2cb3148_WVlGcHsLfg5ffg0I_V0810
X-Frame-Options: SAMEORIGIN
Transfer-Encoding: chunked
Content-Type: application/json

[Response Body]
{
```

```
"instanceID" : "2d8efa39-3ce7-475e-a0a3-7e16504edb97",
"created" : "2015-11-27T18:11:06.459+09:00",
"updated" : "2015-11-27T18:11:06.525+09:00",
"completed" : "2015-11-27T18:11:06.526+09:00",
"state" : "success",
"affectedResource" : [ ],
"result" : [ ]
}
```

---

## Related topics

- [1.3 Resource members](#)
  - [1.6 List of enumerators](#)
-

## 2.6 List of APIs related to consumers

---

This section describes the operations for consumers, and the grades set for consumers.

### 2.6.1 Obtaining Consumer List

This API acquires a list of consumers.

#### Execution permission

Admin, Modify

#### API version

v1

#### Request format

```
GET http[s]://host:port/Analytics/version/objects/Groups
```

#### Request body

Not applicable.

#### Response body

The structure of the response body and the object attributes are as follows:

##### Collections

```
{
  "data":["...", ...],
  "pagination":{
    "page":"...",
    "pageSize":"...",
    "numPages":"...",
    "totalCount":"..."
  },
  "count":"..."
}
```

##### Collections (Type: Collections)

Attribute	Type	Description
data	anyType[]	A list of Group objects. For details about Group, see the table below.
pagination	Pagination	Page information. This parameter is displayed only when the relevant resource exists.
count	int	Number of data items that meet the conditions.

##### pagination (Type: Pagination)



Attribute	Type	Description
page	integer	page
pageSize	integer	Size of the pages
numPages	integer	Number of the pages
totalCount	integer	Number of the objects

## Group

```

{
  "instanceID": "...",
  "name": "...",
  "status": "...",
  "gradeKey": "...",
  "gradeName": "...",
  "gradeDisplayOrder": "...",
  "description": "...",
  "urls": ["...", ...],
  "urlDisplayNames": ["...", ...],
  "templateCreatorType": "...",
  "vmAutoAssignment": "...",
  "applicationAssignFollow": "...",
  "numOfVolumes": "...",
  "numOfVMs": "...",
  "numOfHosts": "...",
  "numOfHypervisors": "...",
  "numOfApplications": "...",
  "vmAutoAssignFilters": ["...", ...],
  "hostAutoAssignFilters": ["...", ...],
  "volumeIDs": ["...", ...],
  "vmIDs": ["...", ...],
  "hostIDs": ["...", ...],
  "hypervisorIDs": ["...", ...],
  "applicationIDs": ["...", ...]
}

```

## Group (Type: Group)

Attribute	Type	Description
instanceID	long	ID for identifying instances
name	string	Consumer name. Use 128 or fewer characters.
status	enum	Status of the consumer. (For details about the specifiable values, see the table <code>NodeStatusType</code> in <i>List of enumerators</i> .) The specifiable values are as follows: <ul style="list-style-type: none"> <li>• Normal</li> <li>• Warning</li> <li>• Error</li> </ul>
gradeKey	string	ID for identifying grades
gradeName	string	Grade name
gradeDisplayOrder	int	Priority of the grade
description	string	Description of the consumer. Use 1000 or fewer characters.

Attribute	Type	Description
urls	string[]	URL
urlDisplayNames	string[]	Character string displayed for the URL
templateCreatorType	enum	Change type of the consumer. (For details about the specifiable values, see the table TemplateCreatorType in <i>List of enumerators</i> .) The specifiable values are as follows: <ul style="list-style-type: none"> <li>• User</li> <li>• Default</li> </ul>
vmAutoAssignment	boolean	Set true if you assign a virtual machine under the hypervisor that belong to this Group automatically
applicationAssignFollow	boolean	Set true if you assign a application under the resource that belong to this Group automatically
numOfVolumes	int	Number of volumes to which the consumer is assigned.
numOfVMs	int	Number of virtual machines to which the consumer is assigned.
numOfHosts	int	Number of hosts to which the consumer is assigned.
numOfHypervisors	int	Number of hypervisors to which the consumer is assigned.
numOfApplications	int	Number of applications to which the consumer is assigned.
vmAutoAssignFilters	string[]	Name of the automatic assignment rule set for the virtual machines
hostAutoAssignFilters	string[]	Name of the automatic assignment rule set for the hosts
volumeIDs	long[]	List of IDs identifying volumes allocated to consumers
vmIDs	long[]	List of IDs identifying virtual machines allocated to consumers
hostIDs	long[]	List of IDs identifying hosts allocated to consumers
hypervisorIDs	long[]	List of IDs identifying hypervisors allocated to consumers
applicationIDs	long[]	List of IDs identifying applications allocated to consumers

## Status codes

Status code	Reason phrase	Description
200	OK	Success.
400	Bad Request	A query parameter is invalid.
401	Unauthorized	No login privilege.
403	Forbidden	No reference privilege.
412	Precondition Failed	The server is not available.
500	Internal Server Error	Server processing error.

## Example code

```
[Request Header]
GET /Analytics/v1/objects/Groups HTTP/1.1
Authorization: Basic c3lzdGVtOmlhbmFnZXI=
User-Agent: curl/7.33.0
```

```
Host: localhost:22015
Accept: application/json
Accept-Language: ja
```

[Response Header]

```
HTTP/1.1 200 OK
Date: Fri, 27 Nov 2015 05:21:50 GMT
Server: Cosminexus HTTP Server
Cache-Control: no-cache
WWW-Authenticate: HSSO
3ffa18cbf3e9f46049c06aaf52a1c5444c5e2c3a_WVlGcHsLfg5ffg0I_V0810
X-Frame-Options: SAMEORIGIN
Transfer-Encoding: chunked
Content-Type: application/json
```

[Response Body]

```
{
  "data" : [ {
    "instanceID" : 0,
    "name" : "#Unassigned Resources",
    "description" : "Resources which have not been assigned to a consumer.",
    "templateCreatorType" : "Default",
    "numOfVolumes" : 0,
    "numOfVMs" : 27,
    "numOfHosts" : 0,
    "volumeAutoAssignFilters" : [ ],
    "vmAutoAssignFilters" : [ ],
    "hostAutoAssignFilters" : [ ]
  } ],
  "count" : 1
}
```

---

## Related topics

- [1.3 Resource members](#)
  - [1.6 List of enumerators](#)
- 

## 2.6.2 Getting specific consumer information

This API acquires information about the specified consumer.

### Execution permission

Admin, Modify

### API version

v1

### Request format

```
GET http[s]://host:port/Analytics/version/objects/Groups/{id}
```

## Request body

Not applicable.

## Response body

The structure of the response body and the object attributes are as follows:

### Group

```
{
  "instanceID": "...",
  "name": "...",
  "status": "...",
  "gradeKey": "...",
  "gradeName": "...",
  "gradeDisplayOrder": "...",
  "description": "...",
  "urls": ["...", ...],
  "urlDisplayNames": ["...", ...],
  "templateCreatorType": "...",
  "vmAutoAssignment": "...",
  "applicationAssignFollow": "...",
  "numOfVolumes": "...",
  "numOfVMs": "...",
  "numOfHosts": "...",
  "numOfHypervisors": "...",
  "numOfApplications": "...",
  "vmAutoAssignFilters": ["...", ...],
  "hostAutoAssignFilters": ["...", ...],
  "volumeIDs": ["...", ...],
  "vmIDs": ["...", ...],
  "hostIDs": ["...", ...],
  "hypervisorIDs": ["...", ...],
  "applicationIDs": ["...", ...]
}
```

### Group (Type: Group)

Attribute	Type	Description
instanceID	long	ID for identifying instances
name	string	Consumer name. Use 128 or fewer characters.
status	enum	Status of the consumer. (For details about the specifiable values, see the table <i>NodeStatusType</i> in <i>List of enumerators</i> .) The specifiable values are as follows: <ul style="list-style-type: none"><li>• Normal</li><li>• Warning</li><li>• Error</li></ul>
gradeKey	string	ID for identifying grades
gradeName	string	Grade name
gradeDisplayOrder	int	Priority of the grade
description	string	Description of the consumer. Use 1000 or fewer characters.
urls	string[]	URL

Attribute	Type	Description
urlDisplayNames	string[]	Character string displayed for the URL
templateCreatorType	enum	Change type of the consumer. (For details about the specifiable values, see the table TemplateCreatorType in <i>List of enumerators</i> .) The specifiable values are as follows: <ul style="list-style-type: none"> <li>• User</li> <li>• Default</li> </ul>
vmAutoAssignment	boolean	Set true if you assign a virtual machine under the hypervisor that belong to this Group automatically
applicationAssignFollow	boolean	Set true if you assign a application under the resource that belong to this Group automatically
numOfVolumes	int	Number of volumes to which the consumer is assigned.
numOfVMs	int	Number of virtual machines to which the consumer is assigned.
numOfHosts	int	Number of hosts to which the consumer is assigned.
numOfHypervisors	int	Number of hypervisors to which the consumer is assigned.
numOfApplications	int	Number of applications to which the consumer is assigned.
vmAutoAssignFilters	string[]	Name of the automatic assignment rule set for the virtual machines
hostAutoAssignFilters	string[]	Name of the automatic assignment rule set for the hosts
volumeIDs	long[]	List of IDs identifying volumes allocated to consumers
vmIDs	long[]	List of IDs identifying virtual machines allocated to consumers
hostIDs	long[]	List of IDs identifying hosts allocated to consumers
hypervisorIDs	long[]	List of IDs identifying hypervisors allocated to consumers
applicationIDs	long[]	List of IDs identifying applications allocated to consumers

## Status codes

Status code	Reason phrase	Description
200	OK	Success.
401	Unauthorized	No login privilege.
403	Forbidden	No reference privilege.
404	Not Found	The resource was not found.
412	Precondition Failed	The server is not available.
500	Internal Server Error	Server processing error.

## Example code

```
[Request Header]
GET /Analytics/v1/objects/Groups/10 HTTP/1.1
Authorization: Basic c3lzZGVtOm1hbmFnZXI=
User-Agent: curl/7.33.0
Host: localhost:22015
Accept: application/json
```

```
Accept-Language: ja
```

```
[Response Header]
```

```
HTTP/1.1 200 OK
Date: Fri, 27 Nov 2015 07:19:45 GMT
Server: Cosminexus HTTP Server
Cache-Control: no-cache
WWW-Authenticate: HSSO 0163c9c89df447c5a31b2b14c4b4e94aca5afa4_WVlGcHsLfg5ffg0I_V0810
X-Frame-Options: SAMEORIGIN
Transfer-Encoding: chunked
Content-Type: application/json
```

```
[Response Body]
```

```
{
  "instanceID" : 10,
  "name" : "Group A",
  "status" : "Normal",
  "gradeKey" : "0",
  "gradeName" : "Platinum",
  "gradeDisplayOrder" : 0,
  "description" : "Tel:XXX-YYYYY, User:Administrator",
  "templateCreatorType" : "User",
  "numOfVolumes" : 0,
  "numOfVMs" : 0,
  "numOfHosts" : 0,
  "volumeAutoAssignFilters" : [ ],
  "vmAutoAssignFilters" : [ ],
  "hostAutoAssignFilters" : [ ]
}
```

---

## Related topics

- [1.3 Resource members](#)
  - [1.6 List of enumerators](#)
- 

## 2.6.3 Obtaining Grade List

This API acquires a list of grades contained in a consumer.

### Execution permission

Admin, Modify

### API version

v1

### Request format

```
GET http[s]://host:port/Analytics/version/objects/Grades
```

### Request body

Not applicable.

## Response body

The structure of the response body and the object attributes are as follows:

### Collections

```
{
  "data":["...", ...],
  "pagination":{
    "page":"...",
    "pageSize":"...",
    "numPages":"...",
    "totalCount":"..."
  },
  "count":"..."
}
```

### Collections (Type: Collections)

Attribute	Type	Description
data	anyType[]	A list of Grade objects. For details about Grade, see the table below.
pagination	Pagination	Page information. This parameter is displayed only when the relevant resource exists.
count	int	Number of data items that meet the conditions.

### pagination (Type: Pagination)

Attribute	Type	Description
page	integer	page
pageSize	integer	Size of the pages
numPages	integer	Number of the pages
totalCount	integer	Number of the objects

### Grade

```
{
  "gradeKey":"...",
  "name":"...",
  "displayOrder":"..."
}
```

### Grade (Type: Grade)

Attribute	Type	Description
gradeKey	string	ID for identifying grades
name	string	Grade name
displayOrder	int	Priority of the grade

## Status codes

Status code	Reason phrase	Description
200	OK	Success.
400	Bad Request	A query parameter is invalid.
401	Unauthorized	No login privilege.
403	Forbidden	No reference privilege.
412	Precondition Failed	The server is not available.
500	Internal Server Error	Server processing error.

## Example code

```
[Request Header]
GET /Analytics/v1/objects/Grades HTTP/1.1
Authorization: Basic c3lzdGVtOmlhbmFnZXI=
User-Agent: curl/7.33.0
Host: localhost:22015
Accept: application/json
Accept-Language: ja

[Response Header]
HTTP/1.1 200 OK
Date: Fri, 27 Nov 2015 05:21:50 GMT
Server: Cosminexus HTTP Server
Cache-Control: no-cache
WWW-Authenticate: HSSO 723cc9c7dbae3aa85bad85fc46d1bc9edb64d_WV1GcHsLfg5ffg0I_V0810
X-Frame-Options: SAMEORIGIN
Transfer-Encoding: chunked
Content-Type: application/json

[Response Body]
{
  "data" : [ {
    "instanceID" : 410,
    "gradeKey" : "0",
    "name" : "Platinum",
    "displayOrder" : 0
  }, {
    "instanceID" : 413,
    "gradeKey" : "10",
    "name" : "Gold",
    "displayOrder" : 10
  }, {
    "instanceID" : 412,
    "gradeKey" : "20",
    "name" : "Silver",
    "displayOrder" : 20
  }, {
    "instanceID" : 411,
    "gradeKey" : "30",
    "name" : "Bronze",
    "displayOrder" : 30
  } ],
  "count" : 4
}
```



---

## Related topics

- [1.3 Resource members](#)
  - [1.6 List of enumerators](#)
- 

## 2.6.4 Creating consumer

This API creates a consumer.

### Execution permission

Admin, Modify

### API version

v1

### Request format

```
POST http[s]://host:port/Analytics/version/objects/Groups
```

### Request body

The structure of the request body and the object attributes are as follows:

#### Group

```
{
  "name": "...",
  "gradeKey": "...",
  "description": "...",
  "urls": ["...", ...],
  "urlDisplayNames": ["...", ...],
  "templateCreatorType": "...",
  "vmAutoAssignment": "...",
  "applicationAssignFollow": "..."
}
```

#### Group (Type: Group)

Attribute	Type	Description
name	string	Consumer name. Use 128 or fewer characters.
gradeKey	string	ID for identifying grades
description	string	Description of the consumer. Use 1000 or fewer characters.
urls	string[]	URL
urlDisplayNames	string[]	Character string displayed for the URL
templateCreatorType	enum	Change type of the consumer. (For details about the specifiable values, see the table <i>TemplateCreatorType</i> in <i>List of enumerators</i> .) The specifiable values are as follows: <ul style="list-style-type: none"><li>• User</li></ul>

Attribute	Type	Description
templateCreatorType	enum	<ul style="list-style-type: none"> <li>Default</li> </ul>
vmAutoAssignment	boolean	Set true if you assign a virtual machine under the hypervisor that belong to this Group automatically
applicationAssignFollow	boolean	Set true if you assign a application under the resource that belong to this Group automatically

## Response body

The structure of the response body and the object attributes are as follows:

### Group

```
{
  "instanceID": "...",
  "name": "...",
  "status": "...",
  "gradeKey": "...",
  "gradeName": "...",
  "gradeDisplayOrder": "...",
  "description": "...",
  "urls": ["...", ...],
  "urlDisplayNames": ["...", ...],
  "templateCreatorType": "...",
  "vmAutoAssignment": "...",
  "applicationAssignFollow": "...",
  "numOfVolumes": "...",
  "numOfVMs": "...",
  "numOfHosts": "...",
  "numOfHypervisors": "...",
  "numOfApplications": "...",
  "vmAutoAssignFilters": ["...", ...],
  "hostAutoAssignFilters": ["...", ...],
  "volumeIDs": ["...", ...],
  "vmIDs": ["...", ...],
  "hostIDs": ["...", ...],
  "hypervisorIDs": ["...", ...],
  "applicationIDs": ["...", ...]
}
```

### Group (Type: Group)

Attribute	Type	Description
instanceID	long	ID for identifying instances
name	string	Consumer name. Use 128 or fewer characters.
status	enum	Status of the consumer. (For details about the specifiable values, see the table NodeStatusType in <i>List of enumerators</i> .) The specifiable values are as follows: <ul style="list-style-type: none"> <li>Normal</li> <li>Warning</li> <li>Error</li> </ul>
gradeKey	string	ID for identifying grades
gradeName	string	Grade name

Attribute	Type	Description
gradeDisplayOrder	int	Priority of the grade
description	string	Description of the consumer. Use 1000 or fewer characters.
urls	string[]	URL
urlDisplayNames	string[]	Character string displayed for the URL
templateCreatorType	enum	Change type of the consumer. (For details about the specifiable values, see the table <code>TemplateCreatorType</code> in <i>List of enumerators</i> .) The specifiable values are as follows: <ul style="list-style-type: none"> <li>User</li> <li>Default</li> </ul>
vmAutoAssignment	boolean	Set true if you assign a virtual machine under the hypervisor that belong to this Group automatically
applicationAssignFollow	boolean	Set true if you assign a application under the resource that belong to this Group automatically
numOfVolumes	int	Number of volumes to which the consumer is assigned.
numOfVMs	int	Number of virtual machines to which the consumer is assigned.
numOfHosts	int	Number of hosts to which the consumer is assigned.
numOfHypervisors	int	Number of hypervisors to which the consumer is assigned.
numOfApplications	int	Number of applications to which the consumer is assigned.
vmAutoAssignFilters	string[]	Name of the automatic assignment rule set for the virtual machines
hostAutoAssignFilters	string[]	Name of the automatic assignment rule set for the hosts
volumeIDs	long[]	List of IDs identifying volumes allocated to consumers
vmIDs	long[]	List of IDs identifying virtual machines allocated to consumers
hostIDs	long[]	List of IDs identifying hosts allocated to consumers
hypervisorIDs	long[]	List of IDs identifying hypervisors allocated to consumers
applicationIDs	long[]	List of IDs identifying applications allocated to consumers

## Status codes

Status code	Reason phrase	Description
201	Created	Success.
400	Bad Request	A format of request body is invalid.
401	Unauthorized	No login privilege.
403	Forbidden	No update privilege.
404	Not Found	The grade is invalid.
409	Conflict	A resource with the same name exists.
412	Precondition Failed	The server is not available.
500	Internal Server Error	Server processing error.

## Example code

```
[Request Header]
POST /Analytics/v1/objects/Groups HTTP/1.1
Authorization: Basic c3lzdGVtOmlhbmFnZXI=
User-Agent: curl/7.33.0
Host: localhost:22015
Accept: application/json
Content-Type: application/json
Accept-Language: ja
Content-Length: 147

[Request Body]
{
  "instanceID" : 0,
  "name" : "Group A",
  "description" : "Tel:XXX-YYYYY, User:Administrator",
  "templateCreatorType" : "User",
  "gradeKey" : "0"
}

[Response Header]
HTTP/1.1 201 Created
Date: Fri, 27 Nov 2015 08:23:46 GMT
Server: Cosminexus HTTP Server
Cache-Control: no-cache
WWW-Authenticate: HSSO bfb7bb1ac5122d4e95bddc86cfb215f4c04715_WVlGcHsLfg5ffg0I_V0810
Location: http://localhost:22015/Analytics/v1/objects/Groups/10
X-Frame-Options: SAMEORIGIN
Transfer-Encoding: chunked
Content-Type: application/json

[Response Body]
{
  "instanceID" : 10,
  "name" : "Group A",
  "status" : "Normal",
  "gradeKey" : "0",
  "gradeName" : "Platinum",
  "gradeDisplayOrder" : 0,
  "description" : "Tel:XXX-YYYYY, User:Administrator",
  "templateCreatorType" : "User",
  "numOfVolumes" : 0,
  "numOfVMs" : 0,
  "numOfHosts" : 0,
  "volumeAutoAssignFilters" : [ ],
  "vmAutoAssignFilters" : [ ],
  "hostAutoAssignFilters" : [ ]
}
```

---

## Related topics

- [1.3 Resource members](#)
  - [1.6 List of enumerators](#)
-

## 2.6.5 Updating consumer

This API updates the specified consumer.

### Execution permission

Admin, Modify

### API version

v1

### Request format

```
PUT http[s]://host:port/Analytics/version/objects/Groups/{id}
```

### Request body

The structure of the request body and the object attributes are as follows:

#### Group

```
{
  "name": "...",
  "gradeKey": "...",
  "description": "...",
  "urls": ["...", ...],
  "urlDisplayNames": ["...", ...],
  "templateCreatorType": "...",
  "vmAutoAssignment": "...",
  "applicationAssignFollow": "..."
}
```

#### Group (Type: Group)

Attribute	Type	Description
name	string	Consumer name. Use 128 or fewer characters.
gradeKey	string	ID for identifying grades
description	string	Description of the consumer. Use 1000 or fewer characters.
urls	string[]	URL
urlDisplayNames	string[]	Character string displayed for the URL
templateCreatorType	enum	Change type of the consumer. (For details about the specifiable values, see the table <i>TemplateCreatorType</i> in <i>List of enumerators</i> .) The specifiable values are as follows: <ul style="list-style-type: none"><li>User</li><li>Default</li></ul>
vmAutoAssignment	boolean	Set true if you assign a virtual machine under the hypervisor that belong to this Group automatically
applicationAssignFollow	boolean	Set true if you assign a application under the resource that belong to this Group automatically

## Response body

The structure of the response body and the object attributes are as follows:

### Group

```
{
  "instanceID": "...",
  "name": "...",
  "status": "...",
  "gradeKey": "...",
  "gradeName": "...",
  "gradeDisplayOrder": "...",
  "description": "...",
  "urls": ["...", ...],
  "urlDisplayNames": ["...", ...],
  "templateCreatorType": "...",
  "vmAutoAssignment": "...",
  "applicationAssignFollow": "...",
  "numOfVolumes": "...",
  "numOfVMs": "...",
  "numOfHosts": "...",
  "numOfHypervisors": "...",
  "numOfApplications": "...",
  "vmAutoAssignFilters": ["...", ...],
  "hostAutoAssignFilters": ["...", ...],
  "volumeIDs": ["...", ...],
  "vmIDs": ["...", ...],
  "hostIDs": ["...", ...],
  "hypervisorIDs": ["...", ...],
  "applicationIDs": ["...", ...]
}
```

### Group (Type: Group)

Attribute	Type	Description
instanceID	long	ID for identifying instances
name	string	Consumer name. Use 128 or fewer characters.
status	enum	Status of the consumer. (For details about the specifiable values, see the table <code>NodeStatusType</code> in <i>List of enumerators</i> .) The specifiable values are as follows: <ul style="list-style-type: none"><li>• Normal</li><li>• Warning</li><li>• Error</li></ul>
gradeKey	string	ID for identifying grades
gradeName	string	Grade name
gradeDisplayOrder	int	Priority of the grade
description	string	Description of the consumer. Use 1000 or fewer characters.
urls	string[]	URL
urlDisplayNames	string[]	Character string displayed for the URL
templateCreatorType	enum	Change type of the consumer. (For details about the specifiable values, see the table <code>TemplateCreatorType</code> in <i>List of enumerators</i> .)

Attribute	Type	Description
templateCreatorType	enum	The specifiable values are as follows: <ul style="list-style-type: none"> <li>User</li> <li>Default</li> </ul>
vmAutoAssignment	boolean	Set true if you assign a virtual machine under the hypervisor that belong to this Group automatically
applicationAssignFollow	boolean	Set true if you assign a application under the resource that belong to this Group automatically
numOfVolumes	int	Number of volumes to which the consumer is assigned.
numOfVMs	int	Number of virtual machines to which the consumer is assigned.
numOfHosts	int	Number of hosts to which the consumer is assigned.
numOfHypervisors	int	Number of hypervisors to which the consumer is assigned.
numOfApplications	int	Number of applications to which the consumer is assigned.
vmAutoAssignFilters	string[]	Name of the automatic assignment rule set for the virtual machines
hostAutoAssignFilters	string[]	Name of the automatic assignment rule set for the hosts
volumeIDs	long[]	List of IDs identifying volumes allocated to consumers
vmIDs	long[]	List of IDs identifying virtual machines allocated to consumers
hostIDs	long[]	List of IDs identifying hosts allocated to consumers
hypervisorIDs	long[]	List of IDs identifying hypervisors allocated to consumers
applicationIDs	long[]	List of IDs identifying applications allocated to consumers

## Status codes

Status code	Reason phrase	Description
200	OK	Success.
400	Bad Request	A format of request body is invalid.
401	Unauthorized	No login privilege.
403	Forbidden	No update privilege.
404	Not Found	The resource was not found.
409	Conflict	A resource with the same name exists.
412	Precondition Failed	The server is not available.
500	Internal Server Error	Server processing error.

## Example code

```
[Request Header]
PUT /Analytics/v1/objects/Groups/10 HTTP/1.1
Authorization: Basic c3lzdGVtOmlhbmFnZXI=
User-Agent: curl/7.33.0
Host: localhost:22015
Accept: application/json
Content-Type: application/json
```

Accept-Language: ja  
Content-Length: 376

[Request Body]

```
{
  "instanceID" : 10,
  "name" : "Group A",
  "status" : "Normal",
  "gradeKey" : "0",
  "gradeName" : "Platinum",
  "gradeDisplayOrder" : 0,
  "description" : "Tel:XXX-YYYYY, User:Administrator",
  "templateCreatorType" : "User",
  "numOfVolumes" : 0,
  "numOfVMs" : 0,
  "numOfHosts" : 0,
  "volumeAutoAssignFilters" : [ ],
  "vmAutoAssignFilters" : [ ],
  "hostAutoAssignFilters" : [ ]
}
```

[Response Header]

HTTP/1.1 200 OK  
Date: Fri, 27 Nov 2015 08:42:47 GMT  
Server: Cosminexus HTTP Server  
Cache-Control: no-cache  
WWW-Authenticate: HSSO f2eae1699945a979e8c7285d8923241d67ed782\_WV1GcHsLfg5ffg0I\_V0810  
X-Frame-Options: SAMEORIGIN  
Transfer-Encoding: chunked  
Content-Type: application/json

[Response Body]

```
{
  "instanceID" : 10,
  "name" : "Group A",
  "status" : "Normal",
  "gradeKey" : "0",
  "gradeName" : "Platinum",
  "gradeDisplayOrder" : 0,
  "description" : "Tel:XXX-YYYYY, User:Administrator",
  "templateCreatorType" : "User",
  "numOfVolumes" : 0,
  "numOfVMs" : 0,
  "numOfHosts" : 0,
  "volumeAutoAssignFilters" : [ ],
  "vmAutoAssignFilters" : [ ],
  "hostAutoAssignFilters" : [ ]
}
```

---

## Related topics

- [1.3 Resource members](#)
  - [1.6 List of enumerators](#)
-



## 2.6.6 Deleting specific consumer

This API deletes the specified consumer. The resource assigned to the deleted consumer is set as an unassigned resource (#Unassigned Resources).

### Execution permission

Admin, Modify

### API version

v1

### Request format

```
DELETE http[s]://host:port/Analytics/version/objects/Groups/{id}
```

### Request body

Not applicable.

### Response body

Not applicable.

### Status codes

Status code	Reason phrase	Description
204	No Content	Success.
401	Unauthorized	No login privilege.
403	Forbidden	No delete privilege.
404	Not Found	The resource was not found.
412	Precondition Failed	The server is not available.
500	Internal Server Error	Server processing error.

### Example code

```
[Request Header]
DELETE /Analytics/v1/objects/Groups/10 HTTP/1.1
Authorization: Basic c3lzdGVtOmlhbmFnZXI=
User-Agent: curl/7.33.0
Host: localhost:22015
Accept: application/json
Accept-Language: ja

[Response Header]
HTTP/1.1 204 No Content
Date: Fri, 27 Nov 2015 11:24:22 GMT
Server: Cosminexus HTTP Server
Cache-Control: no-cache
WWW-Authenticate: HSSO f1f0fb1a6ac21a0695f6536ba8950b641c263a4_WV1GcHsLfg5ffg0I_V0810
```

```
X-Frame-Options: SAMEORIGIN
Content-Length: 0
Content-Type: application/json
```

## Related topics

- [1.3 Resource members](#)
- [1.6 List of enumerators](#)

## 2.6.7 Obtaining Consumer Operation List

This API acquires a list of executable operations for the specified consumer.

### Execution permission

Admin, Modify

### API version

v1

### Request format

```
GET http[s]://host:port/Analytics/version/objects/Groups/{id}/actions
```

### Request body

Not applicable.

### Response body

The structure of the response body and the object attributes are as follows:

#### Collections

```
{
  "data":["...", ...],
  "pagination":{
    "page":"...",
    "pageSize":"...",
    "numPages":"...",
    "totalCount":"..."
  },
  "count":"..."
}
```

#### Collections (Type: Collections)

Attribute	Type	Description
data	anyType[]	A list of Action objects. For details about Action, see the table below.
pagination	Pagination	Page information. This parameter is displayed only when the relevant resource exists.
count	int	Number of data items that meet the conditions.

## pagination (Type: Pagination)

Attribute	Type	Description
page	integer	page
pageSize	integer	Size of the pages
numPages	integer	Number of the pages
totalCount	integer	Number of the objects

## Action

```
{
  "name": "...",
  "href": "...",
  "method": "...",
  "type": "...",
  "parameters": ["...", ...]
}
```

## Action (Type: Action)

Attribute	Type	Description
name	string	Name of the execute an operation.
href	string	URL of the execute an operation.
method	string	Name of the method.
type	string	Data format of the object.
parameters	anyType[]	A list of objects necessary to execute an operation. No value is set.

## Status codes

Status code	Reason phrase	Description
200	OK	Success.
401	Unauthorized	No login privilege.
403	Forbidden	No reference privilege.
412	Precondition Failed	The server is not available.
500	Internal Server Error	Server processing error.

## Example code

```
[Request Header]
GET /Analytics/v1/objects/Groups/10/actions HTTP/1.1
Authorization: Basic c3lzdGVtOm1hbmFnZXI=
User-Agent: curl/7.33.0
Host: localhost:22015
Accept: application/json
Accept-Language: ja
```

```
[Response Header]
HTTP/1.1 200 OK
Date: Fri, 27 Nov 2015 09:00:14 GMT
Server: Cosminexus HTTP Server
Cache-Control: no-cache
WWW-Authenticate: HSSO dfce93dd9ddb2e8fbf06da99384c2cd301a_WVlGcHsLfg5ffg0I_V0810
X-Frame-Options: SAMEORIGIN
Transfer-Encoding: chunked
Content-Type: application/json
```

```
[Response Body]
{
  "data" : [ {
    "name" : "updateTargetResource",
    "href" : "http://localhost:22015/Analytics/v1/objects/Groups/10/actions/
updateTargetResource/invoke",
    "method" : "POST",
    "type" : "application/json",
    "parameters" : [ ]
  } ],
  "count" : 1
}
```

---

## Related topics

- [1.3 Resource members](#)
  - [1.6 List of enumerators](#)
- 

## 2.6.8 Obtaining Consumer Allocation Information

This API acquires information required for assigning the specified consumer to a monitored resource.

### Execution permission

Admin, Modify

### API version

v1

### Request format

```
GET http[s]://host:port/Analytics/version/objects/Groups/{id}/actions/
updateTargetResource
```

### Request body

Not applicable.

### Response body

The structure of the response body and the object attributes are as follows:

#### Action

```

{
  "name": "...",
  "href": "...",
  "method": "...",
  "type": "...",
  "parameters": ["...", ...]
}

```

## Action (Type: Action)

Attribute	Type	Description
name	string	Name of the execute an operation.
href	string	URL of the execute an operation.
method	string	Name of the method.
type	string	Data format of the object.
parameters	anyType[]	A list of UpdateTargetResourceParam objects necessary to execute an operation. For details about UpdateTargetResourceParam, see the table below.

## UpdateTargetResourceParam

```

{
  "volumeIDs": ["...", ...],
  "vmIDs": ["...", ...],
  "resourceIDs": ["...", ...]
}

```

## UpdateTargetResourceParam (Type: UpdateTargetResourceParam)

Attribute	Type	Description
volumeIDs	long[]	Specify IDs for identifying volumes to which the consumer is to be assigned. To assign the consumer to multiple volumes, specify the IDs concurrently. The IDs of monitoring targets to which the consumer has already been assigned also need to be set. "volumeIDs" : [ 81, 87 ] To release the assignment of all the volumes, set the member value to a blank. "volumeIDs" : [ ]
vmIDs	long[]	Specify IDs for identifying virtual machines to which the consumer is to be assigned. To assign the consumer to multiple virtual machines, specify the IDs concurrently. The IDs of monitoring targets to which the consumer has already been assigned also need to be set. " vmIDs " : [ 81, 87 ] To release the assignment of all the virtual machines, set the member value to a blank. " vmIDs " : [ ]
resourceIDs	long[]	Specify IDs for identifying hosts to which the consumer is to be assigned. To assign the consumer to multiple hosts, specify the IDs concurrently. The IDs of monitoring targets to which the consumer has already been assigned also need to be set. " resourceIDs " : [ 81, 87 ] To release the assignment of all the virtual machines, set the member value to a blank. " resourceIDs " : [ ]

## Status codes

Status code	Reason phrase	Description
200	OK	Success.
401	Unauthorized	No login privilege.
403	Forbidden	No reference privilege.
404	Not Found	The resource was not found.
412	Precondition Failed	The server is not available.
500	Internal Server Error	Server processing error.

## Example code

```
[Request Header]
GET /Analytics/v1/objects/Groups/10/actions/updateTargetResource HTTP/1.1
Authorization: Basic c3lzdGVtOm1hbmFnZXI=
User-Agent: curl/7.33.0
Host: localhost:22015
Accept: application/json
Accept-Language: ja

[Response Header]
HTTP/1.1 200 OK
Date: Fri, 27 Nov 2015 09:04:21 GMT
Server: Cosminexus HTTP Server
Cache-Control: no-cache
WWW-Authenticate: HSSO ba4d83751660bee033d1ccdaf4d78e97f6c893a_WVlGcHsLfg5ffg0I_V0810
X-Frame-Options: SAMEORIGIN
Transfer-Encoding: chunked
Content-Type: application/json

[Response Body]
{
  "name" : "updateTargetResource",
  "href" : "http://localhost:22015/Analytics/v1/objects/Groups/10/actions/
updateTargetResource/invoke",
  "method" : "POST",
  "type" : "application/json",
  "parameters" : [ {
    "volumeIDs" : [ ],
    "vmIDs" : [ 97 ],
    "resourceIDs" : [ ]
  } ]
}
```

---

## Related topics

- [1.3 Resource members](#)
  - [1.6 List of enumerators](#)
-

## 2.6.9 Allocating Consumer

This API assigns the specified consumer to monitoring targets.

### Execution permission

Admin, Modify

### API version

v1

### Request format

```
POST http[s]://host:port/Analytics/version/objects/Groups/{id}/actions/  
updateTargetResource/invoke
```

### Request body

The structure of the request body and the object attributes are as follows:

#### Action

```
{  
  "name": "...",  
  "href": "...",  
  "method": "...",  
  "type": "...",  
  "parameters": ["...", ...]  
}
```

#### Action (Type: Action)

Attribute	Type	Description
name	string	Name of the execute an operation.
href	string	URL of the execute an operation.
method	string	Name of the method.
type	string	Data format of the object.
parameters	anyType[]	A list of UpdateTargetResourceParam objects necessary to execute an operation. For details about UpdateTargetResourceParam, see the table below.

#### UpdateTargetResourceParam

```
{  
  "volumeIDs": ["...", ...],  
  "vmIDs": ["...", ...],  
  "resourceIDs": ["...", ...]  
}
```

#### UpdateTargetResourceParam (Type: UpdateTargetResourceParam)

Attribute	Type	Description
volumeIDs	long[]	Specify IDs for identifying volumes to which the consumer is to be assigned. To assign the consumer to multiple volumes, specify the IDs concurrently. The IDs of monitoring targets to which the consumer has already been assigned also need to be set. "volumeIDs" : [ 81, 87 ] To release the assignment of all the volumes, set the member value to a blank. "volumeIDs" : [ ]
vmIDs	long[]	Specify IDs for identifying virtual machines to which the consumer is to be assigned. To assign the consumer to multiple virtual machines, specify the IDs concurrently. The IDs of monitoring targets to which the consumer has already been assigned also need to be set. " vmIDs " : [ 81, 87 ] To release the assignment of all the virtual machines, set the member value to a blank. " vmIDs " : [ ]
resourceIDs	long[]	Specify IDs for identifying hosts to which the consumer is to be assigned. To assign the consumer to multiple hosts, specify the IDs concurrently. The IDs of monitoring targets to which the consumer has already been assigned also need to be set. " resourceIDs " : [ 81, 87 ] To release the assignment of all the virtual machines, set the member value to a blank. " resourceIDs " : [ ]

## Response body

The structure of the response body and the object attributes are as follows:

### Job

```
{
  "instanceID": "...",
  "created": "...",
  "updated": "...",
  "completed": "...",
  "state": "...",
  "affectedResource": ["...", ...],
  "result": ["...", ...]
}
```

### Job (Type: Job)

Attribute	Type	Description
instanceID	string	Indicates the ID of the Instance.
created	string	Indicates the date the object is generated in ISO 8601 format.
updated	string	Indicates the time the object is updated in ISO 8601 format. The same value as for "created" is set.
completed	string	Indicates the time the processing completed in ISO 8601 format. The same value as for "created" is set.
state	string	One of the following values is set: "failed": The operation did not terminate normally. "success": The operation terminated normally.
affectedResource	string[]	Indicates the URL of the API resource created or updated as a result of the operation. If no resources exist, this parameter is empty.
result	anyType[]	A list of objects. No value is set.



## Status codes

Status code	Reason phrase	Description
200	OK	Success.
400	Bad Request	A format of request body is invalid.
401	Unauthorized	No login privilege.
403	Forbidden	No update privilege.
404	Not Found	The resource was not found.
412	Precondition Failed	The server is not available.
500	Internal Server Error	Server processing error.

## Example code

```
[Request Header]
POST /Analytics/v1/objects/Groups/10/actions/updateTargetResource/invoke HTTP/1.1
Authorization: Basic c3lzdGVtOmlhbmFnZXI=
User-Agent: curl/7.33.0
Host: localhost:22015
Accept: application/json
Content-Type: application/json
Accept-Language: ja
Content-Length: 288

[Request Body]
{
  "name" : "updateTargetResource",
  "href" : "http://localhost:22015/Analytics/v1/objects/Groups/10/actions/
updateTargetResource/invoke",
  "method" : "POST",
  "type" : "application/json",
  "parameters" : [ {
    "volumeIDs" : [ 534 ],
    "vmIDs" : [ 97, 31 ],
    "resourceIDs" : [ ]
  } ]
}

[Response Header]
HTTP/1.1 200 OK
Date: Fri, 27 Nov 2015 09:11:06 GMT
Server: Cosminexus HTTP Server
Cache-Control: no-cache
WWW-Authenticate: HSSO 154d18c71a465150d5e228e8f16bf42c4dd280_WVlGcHsLfg5ffg0I_V0810
X-Frame-Options: SAMEORIGIN
Transfer-Encoding: chunked
Content-Type: application/json

[Response Body]
{
  "instanceID" : "e89f633c-700d-4e75-9f81-d2d59c95a7bf",
  "created" : "2015-11-27T18:11:06.679+09:00",
  "updated" : "2015-11-27T18:11:07.023+09:00",
  "completed" : "2015-11-27T18:11:07.023+09:00",
```

```
"state" : "success",
"affectedResource" : [ ],
"result" : [ ]
}
```

## Related topics

- [1.3 Resource members](#)
- [1.6 List of enumerators](#)

## 2.6.10 Obtaining Consumer Allocation Information with a Specified Resource Allocation Category

This API acquires information required for allocating the specified consumer to monitoring targets based on the specified allocation category.

### Execution permission

Admin, Modify

### API version

v1

### Request format

```
GET http[s]://host:port/Analytics/version/objects/Groups/{id}/actions/
updateTargetResourceWithAssignmentType
```

### Request body

Not applicable.

### Response body

The structure of the response body and the object attributes are as follows:

#### Action

```
{
  "name":"...",
  "href":"...",
  "method":"...",
  "type":"...",
  "parameters":["...", ...]
}
```

#### Action (Type: Action)

Attribute	Type	Description
name	string	Name of the execute an operation.
href	string	URL of the execute an operation.

Attribute	Type	Description
method	string	Name of the method.
type	string	Data format of the object.
parameters	anyType[]	A list of UpdateTargetResourceWithAssignmentType objects necessary to execute an operation. For details about UpdateTargetResourceWithAssignmentType, see the table below.

### UpdateTargetResourceWithAssignmentType

```

{
  "volumes": [{
    "id": "...",
    "assignmentType": "...",
  },
  :
  ],
  "vms": [{
    "id": "...",
    "assignmentType": "...",
  },
  :
  ],
  "resources": [{
    "id": "...",
    "assignmentType": "...",
  },
  :
  ],
  "hypervisors": [{
    "id": "...",
    "assignmentType": "...",
  },
  :
  ],
  "applications": [{
    "id": "...",
    "assignmentType": "...",
  },
  :
  ]
}

```

### UpdateTargetResourceWithAssignmentType (Type: UpdateTargetResourceWithAssignmentType)

Attribute	Type	Description
volumes	TargetResource[]	List of volumes to be allocated
vms	TargetResource[]	List of virtual machines to be allocated
resources	TargetResource[]	List of hosts to be allocated
hypervisors	TargetResource[]	List of hypervisors to be allocated
applications	TargetResource[]	List of applications to be allocated

## volumes (Type: TargetResource)

Attribute	Type	Description
id	long	ID of the resource
assignmentType	enum	Resource owned division (For details about the specifiable values, see the table AssignmentType in <i>List of enumerators</i> .)

## vms (Type: TargetResource)

Attribute	Type	Description
id	long	ID of the resource
assignmentType	enum	Resource owned division (For details about the specifiable values, see the table AssignmentType in <i>List of enumerators</i> .)

## resources (Type: TargetResource)

Attribute	Type	Description
id	long	ID of the resource
assignmentType	enum	Resource owned division (For details about the specifiable values, see the table AssignmentType in <i>List of enumerators</i> .)

## hypervisors (Type: TargetResource)

Attribute	Type	Description
id	long	ID of the resource
assignmentType	enum	Resource owned division (For details about the specifiable values, see the table AssignmentType in <i>List of enumerators</i> .)

## applications (Type: TargetResource)

Attribute	Type	Description
id	long	ID of the resource
assignmentType	enum	Resource owned division (For details about the specifiable values, see the table AssignmentType in <i>List of enumerators</i> .)

## Status codes

Status code	Reason phrase	Description
200	OK	Success.
401	Unauthorized	No login privilege.
403	Forbidden	No reference privilege.

Status code	Reason phrase	Description
404	Not Found	The resource was not found.
412	Precondition Failed	The server is not available.
500	Internal Server Error	Server processing error.

## Example code

```
[Request Header]
GET /Analytics/v1/objects/Groups/10/actions/updateTargetResourceWithAssignmentType
HTTP/1.1
Authorization: Basic c3lzdGVtOmlhbmFnZXI=
User-Agent: curl/7.33.0
Host: localhost:22015
Accept: application/json
Accept-Language: ja

[Response Header]
HTTP/1.1 200 OK
Date: Fri, 27 Nov 2015 09:04:21 GMT
Server: Cosminexus HTTP Server
Cache-Control: no-cache
WWW-Authenticate: HSSO ba4d83751660bee033d1ccdaf4d78e97f6c893a_WVlGcHsLfg5ffg0I_V0810
X-Frame-Options: SAMEORIGIN
Transfer-Encoding: chunked
Content-Type: application/json

[Response Body]
{
  "name" : "updateTargetResourceWithAssignmentType",
  "href" : "http://10.197.198.106:22015/Analytics/v1/objects/Groups/10/actions/
updateTargetResourceWithAssignmentType/invoke",
  "method" : "POST",
  "type" : "application/json",
  "parameters" : [ {
    "volumes" : [ ],
    "vms" : [ {
      "id" : 578,
      "assignmentType" : "NoChange"
    }, {
      "id" : 619,
      "assignmentType" : "NoChange"
    } ],
    "resources" : [ ],
    "hypervisors" : [ ]
  } ]
}
```

---

## Related topics

- [1.3 Resource members](#)
  - [1.6 List of enumerators](#)
-

## 2.6.11 Allocating Consumers that Have a Resource Allocation Category Specified

This API allocates the specified consumer to monitoring targets based on the specified allocation category.

### Execution permission

Admin, Modify

### API version

v1

### Request format

```
POST http[s]://host:port/Analytics/version/objects/Groups/{id}/actions/
updateTargetResourceWithAssignmentType/invoke
```

### Request body

The structure of the request body and the object attributes are as follows:

#### Action

```
{
  "name": "...",
  "href": "...",
  "method": "...",
  "type": "...",
  "parameters": ["...", ...]
}
```

#### Action (Type: Action)

Attribute	Type	Description
name	string	Name of the execute an operation.
href	string	URL of the execute an operation.
method	string	Name of the method.
type	string	Data format of the object.
parameters	anyType[]	A list of UpdateTargetResourceWithAssignmentType objects necessary to execute an operation. For details about UpdateTargetResourceWithAssignmentType, see the table below.

#### UpdateTargetResourceWithAssignmentType

```
{
  "volumes": [{
    "id": "...",
    "assignmentType": "...",
  },
  :
  ],
  "vms": [{
    "id": "...",
  }
]
```

```

        "assignmentType": "...",
    },
    :
  ],
  "resources": [{
    "id": "...",
    "assignmentType": "...",
  },
  :
  ],
  "hypervisors": [{
    "id": "...",
    "assignmentType": "...",
  },
  :
  ],
  "applications": [{
    "id": "...",
    "assignmentType": "...",
  },
  :
  ]
}

```

### UpdateTargetResourceWithAssignmentType (Type: UpdateTargetResourceWithAssignmentType)

Attribute	Type	Description
volumes	TargetResource[]	List of volumes to be allocated
vms	TargetResource[]	List of virtual machines to be allocated
resources	TargetResource[]	List of hosts to be allocated
hypervisors	TargetResource[]	List of hypervisors to be allocated
applications	TargetResource[]	List of applications to be allocated

### volumes (Type: TargetResource)

Attribute	Type	Description
id	long	ID of the resource
assignmentType	enum	Resource owned division (For details about the specifiable values, see the table AssignmentType in <i>List of enumerators</i> .)

### vms (Type: TargetResource)

Attribute	Type	Description
id	long	ID of the resource
assignmentType	enum	Resource owned division (For details about the specifiable values, see the table AssignmentType in <i>List of enumerators</i> .)

## resources (Type: TargetResource)

Attribute	Type	Description
id	long	ID of the resource
assignmentType	enum	Resource owned division (For details about the specifiable values, see the table AssignmentType in <i>List of enumerators</i> .)

## hypervisors (Type: TargetResource)

Attribute	Type	Description
id	long	ID of the resource
assignmentType	enum	Resource owned division (For details about the specifiable values, see the table AssignmentType in <i>List of enumerators</i> .)

## applications (Type: TargetResource)

Attribute	Type	Description
id	long	ID of the resource
assignmentType	enum	Resource owned division (For details about the specifiable values, see the table AssignmentType in <i>List of enumerators</i> .)

## Response body

The structure of the response body and the object attributes are as follows:

### Job

```
{
  "instanceID": "...",
  "created": "...",
  "updated": "...",
  "completed": "...",
  "state": "...",
  "affectedResource": ["...", ...],
  "result": ["...", ...]
}
```

### Job (Type: Job)

Attribute	Type	Description
instanceID	string	Indicates the ID of the Instance.
created	string	Indicates the date the object is generated in ISO 8601 format.
updated	string	Indicates the time the object is updated in ISO 8601 format. The same value as for "created" is set.
completed	string	Indicates the time the processing completed in ISO 8601 format. The same value as for "created" is set.
state	string	One of the following values is set:



Attribute	Type	Description
state	string	"failed": The operation did not terminate normally. "success": The operation terminated normally.
affectedResource	string[]	Indicates the URL of the API resource created or updated as a result of the operation. If no resources exist, this parameter is empty.
result	anyType[]	A list of objects. No value is set.

## Status codes

Status code	Reason phrase	Description
200	OK	Success.
400	Bad Request	A format of request body is invalid.
401	Unauthorized	No login privilege.
403	Forbidden	No reference privilege.
404	Not Found	The resource was not found.
412	Precondition Failed	The server is not available.
500	Internal Server Error	Server processing error.

## Example code

```
[Request Header]
POST /Analytics/v1/objects/Groups/10/actions/updateTargetResourceWithAssignmentType/
invoke HTTP/1.1
Authorization: Basic c3lzZGVtOmlhbmFnZXI=
User-Agent: curl/7.33.0
Host: localhost:22015
Accept: application/json
Content-Type: application/json
Accept-Language: ja
Content-Length: 288

[Request Body]
{
  "name" : "updateTargetResourceWithAssignmentType",
  "href" : "http://10.197.198.106:22015/Analytics/v1/objects/Groups/10/actions/
updateTargetResourceWithAssignmentType/invoke",
  "method" : "POST",
  "type" : "application/json",
  "parameters" : [ {
    "volumes" : [ ],
    "vms" : [ {
      "id" : 578,
      "assignmentType" : "NoChange"
    }, {
      "id" : 619,
      "assignmentType" : "NoChange"
    } ],
    "resources" : [ ],
    "hypervisors" : [ ]
  } ]
}
```

```
[Response Header]
HTTP/1.1 200 OK
Date: Fri, 27 Nov 2015 09:11:06 GMT
Server: Cosminexus HTTP Server
Cache-Control: no-cache
WWW-Authenticate: HSSO 154d18c71a465150d5e228e8f16bf42c4dd280_WV1GcHsLfg5ffg0I_V0810
X-Frame-Options: SAMEORIGIN
Transfer-Encoding: chunked
Content-Type: application/json
```

```
[Response Body]
{
  "instanceID" : "092d8a40-9bb3-4067-9d39-404c5c646101",
  "created" : "2016-11-22T11:30:45.805+09:00",
  "updated" : "2016-11-22T11:30:47.122+09:00",
  "completed" : "2016-11-22T11:30:47.122+09:00",
  "state" : "success",
  "affectedResource" : [ ],
  "result" : [ ]
}
```

---

## Related topics

- [1.3 Resource members](#)
  - [1.6 List of enumerators](#)
-

## 2.7 List of APIs related to application

---

This section describes the operations for application.

### 2.7.1 Obtaining Application List

The API acquires a list of applications.

#### Execution permission

Admin, Modify

#### API version

v1

#### Request format

```
GET http[s]://host:port/Analytics/version/objects/Applications
```

#### Request body

Not applicable.

#### Response body

The structure of the response body and the object attributes are as follows:

##### Collections

```
{
  "data":["...", ...],
  "pagination":{
    "page":"...",
    "pageSize":"...",
    "numPages":"...",
    "totalCount":"..."
  },
  "count":"..."
}
```

##### Collections (Type: Collections)

Attribute	Type	Description
data	anyType[]	A list of Application objects. For details about Application, see the table below.
pagination	Pagination	Page information. This parameter is displayed only when the relevant resource exists.
count	int	Number of data items that meet the conditions.

##### pagination (Type: Pagination)

Attribute	Type	Description
page	integer	page
pageSize	integer	Size of the pages
numPages	integer	Number of the pages
totalCount	integer	Number of the objects

## Application

```

{
  "instanceID": "...",
  "name": "...",
  "applicationType": "...",
  "applicationDetailType": "...",
  "ipAddress": "...",
  "description": "...",
  "collectorID": "...",
  "collectorName": "...",
  "applicationHosts": [{
    "resourceID": "...",
    "resourceType": "..."
  }],
  :
],
  "autoCollectionType": "...",
  "groupIDs": ["...", ...],
  "groupNames": ["...", ...],
  "gradeNames": ["...", ...],
  "gradeOrders": ["...", ...],
  "usedCredentialID": "...",
  "usedCredentials": "...",
  "accessPointType": "...",
  "accessPointIpAddress": "...",
  "accessPointUser": "..."
}

```

### Application (Type: Application)

Attribute	Type	Description
instanceID	long	Instance ID
name	string	Name of the detected application
applicationType	enum	<p>Application type (For details about the specifiable values, see the table ApplicationType in <i>List of enumerators</i>.)</p> <p>The specifiable values are as follows:</p> <ul style="list-style-type: none"> <li>• AJS_MANAGER</li> <li>• AJS_AGENT</li> <li>• PFM_SERVICERESPONSE</li> <li>• PFM_AJS3</li> <li>• PFM_DOMINO</li> <li>• PFM_EXCHANGE</li> <li>• PFM_SAPSYSTEM</li> <li>• PFM_IBMWEBSPPHEREMQ</li> <li>• PFM_OPENTP1</li> <li>• PFM_COSMINEXUS</li> </ul>

Attribute	Type	Description
applicationType	enum	<ul style="list-style-type: none"> <li>• PFM_IIS</li> <li>• PFM_WEBLOGICSERVER</li> <li>• PFM_WEBSHEREAPPLICATIONSERVER</li> <li>• PFM_DB2</li> <li>• PFM_HIRDB</li> <li>• PFM_SQL</li> <li>• PFM_RMSQLSERVER</li> <li>• PFM_ORACLE</li> <li>• PFM_RMORACLE</li> <li>• PFM_RMPLATFORM</li> <li>• PFM_UNIX</li> <li>• PFM_WINDOWS</li> <li>• IM_OS</li> <li>• PFM_RMVIRTUALMACHINE</li> <li>• PFM_VIRTUALMACHINE</li> </ul>
applicationDetailType	string	Type of the custom application
ipAddress	string	IP address of the application
description	string	Detailed information about the application
collectorID	long	ID identifying the collector used for detection
collectorName	string	Name of the collector used for detection
applicationHosts	ApplicationHost[]	Resources to which the application belongs
autoCollectionType	enum	Settings for periodic execution of the collector (For details about the specifiable values, see the table ConnectType in <i>List of enumerators</i> .)
groupIDs	long[]	ID identifying the consumer to which the application is allocated
groupNames	string[]	Name of the consumer to which the application is allocated
gradeNames	string[]	Grade of the consumer to which the application is allocated
gradeOrders	integer[]	Priority of the grade of the consumer to which the application is allocated
usedCredentialID	long	ID identifying the authentication information used at detection
usedCredentials	string	Authentication information used at detection
accessPointType	enum	Type of collector used at detection (For details about the specifiable values, see the table ProtocolType in <i>List of enumerators</i> .)
accessPointIpAddress	string	IP address or host name of the authentication information
accessPointUser	string	User ID used to connect to monitoring targets or management software

### applicationHosts (Type: ApplicationHost)

Attribute	Type	Description
resourceID	long	ID of the resource to which the application belongs
resourceType	enum	Type of the resource to which the application belongs (For details about the specifiable values, see the table ApplicationResourceType in <i>List of enumerators</i> .)

## Status codes

Status code	Reason phrase	Description
200	OK	Success.
401	Unauthorized	No login privilege.
403	Forbidden	No reference privilege.
412	Precondition Failed	The server is not available.
500	Internal Server Error	Server processing error.

## Example code

```
[Request Header]
GET /Analytics/v1/objects/Applications HTTP/1.1
Authorization: Basic c3lzdGVtOmlhbmFnZXI=
User-Agent: curl/7.33.0
Host: localhost:22015
Accept: application/json
Accept-Language: ja

[Response Header]
HTTP/1.1 200 OK
Date: Fri, 27 Nov 2015 05:21:50 GMT
Server: Cosminexus HTTP Server
Cache-Control: no-cache
WWW-Authenticate: HSSO
3ffa18cbf3e9f46049c06aaf52a1c5444c5e2c3a_WV1GcHsLfg5ffg0I_V0810
X-Frame-Options: SAMEORIGIN
Transfer-Encoding: chunked
Content-Type: application/json

[Response Body]
{
  "pagination" : {
    "page" : 1,
    "pageSize" : 1,
    "numPages" : 569,
    "totalCount" : 569
  },
  "data" : [ {
    "instanceID" : 568,
    "name" : "IMM-HOST02",
    "applicationType" : "IM_OS",
    "ipAddress" : "IMM-HOST02",
    "description" : "10.197.73.120",
    "collectorID" : 4,
    "collectorName" : "10.197.73.120",
    "applicationHosts":
    [
      {
        "resourceID": 13,
        "resourceType": "Host"
      }
    ],
    "autoCollectionType": "AutoConnect",
    "groupIDs":
    [
```

```

    0
  ],
  "groupNames":
  [
    "#Unassigned Resources"
  ],
  "gradeNames":
  [
    ""
  ],
  "gradeOrders":
  [
    -1
  ],
  "usedCredentialID" : 17,
  "accessPointType" : "IM",
  "accessPointIpAddress" : "10.197.73.120",
  "accessPointUser" : "Administrator"
},
{
  "instanceID": 567,
  "name": "Zabbix server1",
  "applicationType": "CUSTOM",
  "applicationDetailType": "App Zabbix Server",
  "ipAddress": "192.168.1.251",
  "description": "XX Monitoring System",
  "collectorID": 3,
  "collectorName": "customCollector",
  "applicationHosts":
  [
  ],
  "autoCollectionType": "AutoConnect",
  "groupIDs":
  [
    0
  ],
  "groupNames":
  [
    "#Unassigned Resources"
  ],
  "gradeNames":
  [
    ""
  ],
  "gradeOrders":
  [
    -1
  ],
  "usedCredentialID": 0,
  "accessPointType": "CUSTOM"
} ],
"count" : 2
}

```

---

## Related topics

- [1.3 Resource members](#)
  - [1.6 List of enumerators](#)
-

## 2.8 List of APIs related to virtual machines

---

This section describes the operations for virtual machines.

### 2.8.1 Obtaining Virtual Machine List

This API acquires a list of virtual machines.

#### Execution permission

Admin, Modify

#### API version

v1

#### Request format

```
GET http[s]://host:port/Analytics/version/objects/VirtualMachines
```

#### Request body

Not applicable.

#### Response body

The structure of the response body and the object attributes are as follows:

##### Collections

```
{
  "data":["...", ...],
  "pagination":{
    "page":"...",
    "pageSize":"...",
    "numPages":"...",
    "totalCount":"..."
  },
  "count":"..."
}
```

##### Collections (Type: Collections)

Attribute	Type	Description
data	anyType[]	A list of VirtualMachine objects. For details about VirtualMachine, see the table below.
pagination	Pagination	Page information. This parameter is displayed only when the relevant resource exists.
count	int	Number of data items that meet the conditions.

##### pagination (Type: Pagination)



Attribute	Type	Description
page	integer	page
pageSize	integer	Size of the pages
numPages	integer	Number of the pages
totalCount	integer	Number of the objects

## VirtualMachine

```

{
  "instanceID": "...",
  "name": "...",
  "ipAddress": "...",
  "status": "...",
  "monitorStatus": "...",
  "description": "...",
  "collectorID": "...",
  "collectorName": "...",
  "autoCollectionType": "...",
  "clusterName": "...",
  "hypervisorType": "...",
  "hypervisorID": "...",
  "hypervisorName": "...",
  "hypervisorMonitorStatus": "...",
  "hostName": "...",
  "thresholdProfileID": "...",
  "thresholdProfileName": "...",
  "groupIDs": ["...", ...],
  "groupNames": ["...", ...],
  "gradeNames": ["...", ...],
  "gradeOrders": ["...", ...],
  "usedCredentialID": "...",
  "usedCredentials": "...",
  "accessPointType": "...",
  "accessPointIpAddress": "...",
  "accessPointUser": "..."
}

```

## VirtualMachine (Type: VirtualMachine)

Attribute	Type	Description
instanceID	long	ID of the virtual machine
name	string	Name of the virtual machine
ipAddress	string	IP Address set for the virtual machine
status	enum	Status of the virtual machine (For details about the specifiable values, see the table NodeStatusType in <i>List of enumerators</i> .) The specifiable values are as follows: <ul style="list-style-type: none"> <li>• Normal</li> <li>• Warning</li> <li>• Error</li> <li>• Unreachable</li> <li>• Unknown</li> <li>• NotMonitored</li> </ul>

Attribute	Type	Description
monitorStatus	enum	Monitoring status of the virtual machine (For details about the specifiable values, see the table ComponentMonitorType in <i>List of enumerators</i> .) The specifiable values are as follows: <ul style="list-style-type: none"> <li>• InUse</li> <li>• NotMonitored</li> </ul>
description	string	Detailed information about the virtual machine
collectorID	long	ID for identifying a collector used for detection
collectorName	string	Name of a collector used for detection
autoCollectionType	enum	Settings for periodic executions of the collector. (For details about the specifiable values, see the table ConnectType in <i>List of enumerators</i> .) The specifiable values are as follows: <ul style="list-style-type: none"> <li>• AutoConnect</li> <li>• NotAutoConnect</li> </ul>
clusterName	string	Name of the Cluster that the virtual machine belongs to
hypervisorType	enum	Type of hypervisor that the virtual machine belongs to (For details about the specifiable values, see the table ArgusNodeType in <i>List of enumerators</i> .) The specifiable values are as follows: <ul style="list-style-type: none"> <li>• SERVER_ESX</li> <li>• SERVER_HYPERV</li> </ul>
hypervisorID	long	ID of the hypervisor that the virtual machine belongs to
hypervisorName	string	Name of the hypervisor that the virtual machine belongs to
hypervisorMonitorStatus	enum	Monitoring status of the hypervisor that the virtual machine belongs to (For details about the specifiable values, see the table ManagementLevelType in <i>List of enumerators</i> .) The specifiable values are as follows: <ul style="list-style-type: none"> <li>• New</li> <li>• Manage</li> <li>• ignore</li> <li>• MonitorOff</li> </ul>
hostName	string	The name of host which is installed on virtual machine
thresholdProfileID	long	ID of the threshold profile assigned to the virtual machine
thresholdProfileName	string	Name of the threshold profile assigned to the virtual machine
groupIDs	long[]	ID of the consumer assigned to the virtual machine
groupNames	string[]	Name of the consumer assigned to the virtual machine
gradeNames	string[]	ID of the grade of the consumer assigned to the virtual machine
gradeOrders	integer[]	Priority of the grade of the consumer assigned to the virtual machine
usedCredentialID	long	ID for identifying authentication information used for detection
usedCredentials	string	Name of authentication information used for detection
accessPointType	enum	Type of the protocol or collector for authentication information used for detection. (For details about the specifiable values, see the table ProtocolType in <i>List of enumerators</i> .)

Attribute	Type	Description
accessPointType	enum	The specifiable values are as follows: <ul style="list-style-type: none"> <li>WMI</li> <li>VCENTER</li> </ul>
accessPointIpAddress	string	IP address or host name used for connections to monitoring targets or management software
accessPointUser	string	User ID used for connections to monitoring targets or management software

## Status codes

Status code	Reason phrase	Description
200	OK	Success.
401	Unauthorized	No login privilege.
403	Forbidden	No reference privilege.
412	Precondition Failed	The server is not available.
500	Internal Server Error	Server processing error.

## Example code

```
[Request Header]
GET /Analytics/v1/objects/VirtualMachines HTTP/1.1
Authorization: Basic c3lzZGVtOmlhbmFnZXI=
User-Agent: curl/7.33.0
Host: localhost:22015
Accept: application/json
Accept-Language: ja

[Response Header]
HTTP/1.1 200 OK
Date: Fri, 27 Nov 2015 05:21:50 GMT
Server: Cosminexus HTTP Server
Cache-Control: no-cache
WWW-Authenticate: HSSO
7ca86aa5a44eb9b1c86c97c990674963cf98534d_WVlGcHsLfg5ffg0I_V0810
X-Frame-Options: SAMEORIGIN
Transfer-Encoding: chunked
Content-Type: application/json

[Response Body]
{
  "data" : [ {
    "instanceID" : 31,
    "name" : "vm017182",
    "ipAddress" : "172.17.17.182",
    "status" : "Normal",
    "monitorStatus" : "InUse",
    "description" : "vm017182 : 564d326f-e63b-1ec9-2cf0-7d1ae7755abe",
    "collectorID" : 0,
    "collectorName" : "172.17.17.115",
    "autoCollectionType" : "AutoConnect",
    "hypervisorType" : "SERVER_ESX",
    "hypervisorID" : 1,
```

```
"hypervisorName" : "172.17.17.181",
"hypervisorMonitorStatus" : "Manage",
"hostName" : "vm017182",
"thresholdProfileID" : 19,
"thresholdProfileName" : "Default Profile for VM",
"groupIDs" : [ 0 ],
"groupNames" : [ "#Unassigned Resources" ],
"gradeNames" : [ "" ],
"gradeOrders" : [ -1 ],
"accessPointType" : "VCENTER",
"accessPointIpAddress" : "172.17.17.115",
"accessPointUser" : "Administrator"
} ],
"count" : 11
}
```

---

## Related topics

- [1.3 Resource members](#)
  - [1.6 List of enumerators](#)
- 

## 2.8.2 Obtaining Virtual Machine Operation List

This API acquires a list of executable operations for virtual machines.

### Execution permission

Admin, Modify

### API version

v1

### Request format

```
GET http[s]://host:port/Analytics/version/services/VirtualMachines/actions
```

### Request body

Not applicable.

### Response body

The structure of the response body and the object attributes are as follows:

#### Collections

```
{
  "data":["...", ...],
  "pagination":{
    "page":"...",
    "pageSize":"...",
    "numPages":"...",
    "totalCount":"..."
  },
}
```

```

    "count": "...",
  }

```

## Collections (Type: Collections)

Attribute	Type	Description
data	anyType[]	A list of Action objects. For details about Action, see the table below.
pagination	Pagination	Page information. This parameter is displayed only when the relevant resource exists.
count	int	Number of data items that meet the conditions.

## pagination (Type: Pagination)

Attribute	Type	Description
page	integer	page
pageSize	integer	Size of the pages
numPages	integer	Number of the pages
totalCount	integer	Number of the objects

## Action

```

{
  "name": "...",
  "href": "...",
  "method": "...",
  "type": "...",
  "parameters": ["...", ...]
}

```

## Action (Type: Action)

Attribute	Type	Description
name	string	Name of the execute an operation.
href	string	URL of the execute an operation.
method	string	Name of the method.
type	string	Data format of the object.
parameters	anyType[]	A list of objects necessary to execute an operation. No value is set.

## Status codes

Status code	Reason phrase	Description
200	OK	Success.
401	Unauthorized	No login privilege.
403	Forbidden	No reference privilege.
412	Precondition Failed	The server is not available.
500	Internal Server Error	Server processing error.

## Example code

```
[Request Header]
GET /Analytics/v1/services/VirtualMachines/actions/changeManagedType HTTP/1.1
Authorization: Basic c3lzdGVtOmlhbmFnZXI=
User-Agent: curl/7.33.0
Host: localhost:22015
Accept: application/json
Accept-Language: ja

[Response Header]
HTTP/1.1 200 OK
Date: Fri, 27 Nov 2015 09:19:21 GMT
Server: Cosminexus HTTP Server
Cache-Control: no-cache
WWW-Authenticate: HSSO 5120405fb8a980d12331c748369039cf28af252_WVlGcHsLfg5ffg0I_V0810
X-Frame-Options: SAMEORIGIN
Transfer-Encoding: chunked
Content-Type: application/json

[Response Body]
{
  "data" : [ {
    "name" : "changeManagedType",
    "href" : "http://localhost:22015/Analytics/v1/services/VirtualMachines/actions/
changeManagedType/invoke",
    "method" : "POST",
    "type" : "application/json",
    "parameters" : [ ]
  } ],
  "count" : 1
}
```

---

## Related topics

- [1.3 Resource members](#)
  - [1.6 List of enumerators](#)
- 

## 2.8.3 Obtaining Virtual Machine Monitoring Status Change Information

This API acquires information required for changing the monitoring status of virtual machines.

### Execution permission

Admin, Modify

### API version

v1

## Request format

```
GET http[s]://host:port/Analytics/version/services/VirtualMachines/actions/changeManagedType
```

## Request body

Not applicable.

## Response body

The structure of the response body and the object attributes are as follows:

### Action

```
{
  "name": "...",
  "href": "...",
  "method": "...",
  "type": "...",
  "parameters": ["...", ...]
}
```

### Action (Type: Action)

Attribute	Type	Description
name	string	Name of the execute an operation.
href	string	URL of the execute an operation.
method	string	Name of the method.
type	string	Data format of the object.
parameters	anyType[]	A list of ChangeManagedTypeParamForVM objects necessary to execute an operation. For details about ChangeManagedTypeParamForVM, see the table below.

### ChangeManagedTypeParamForVM

```
{
  "newMonitoringOperationType": "...",
  "virtualMachineIds": ["...", ...]
}
```

### ChangeManagedTypeParamForVM (Type: ChangeManagedTypeParamForVM)

Attribute	Type	Description
newMonitoringOperationType	enum	Specify the monitoring status to be changed to. (For details about the specifiable values, see the table MonitoringOperationType in <i>List of enumerators</i> .) The specifiable values are as follows: <ul style="list-style-type: none"><li>• Monitor</li><li>• Ignore</li></ul>
virtualMachineIds	long[]	Specify the ID for identifying the virtual machine. To specify multiple virtual machines, specify the IDs concurrently. To set virtual machines whose instanceID is 50 and 51, specify the settings as follows:

Attribute	Type	Description
virtualMachineIds	long[]	virtualMachineIds : [ 50, 51 ]

## Status codes

Status code	Reason phrase	Description
200	OK	Success.
401	Unauthorized	No login privilege.
403	Forbidden	No reference privilege.
412	Precondition Failed	The server is not available.
500	Internal Server Error	Server processing error.

## Example code

```
[Request Header]
GET /Analytics/v1/services/VirtualMachines/actions HTTP/1.1
Authorization: Basic c3lzdGVtOmlhbmFnZXI=
User-Agent: curl/7.33.0
Host: localhost:22015
Accept: application/json
Accept-Language: ja

[Response Header]
HTTP/1.1 200 OK
Date: Fri, 27 Nov 2015 09:17:42 GMT
Server: Cosminexus HTTP Server
Cache-Control: no-cache
WWW-Authenticate: HSSO 1e89694342cfad52de32bd8e1a2921a48b8d8_WV1GcHsLfg5ffg0I_V0810
X-Frame-Options: SAMEORIGIN
Transfer-Encoding: chunked
Content-Type: application/json

[Response Body]
{
  "name" : "changeManagedType",
  "href" : "http://localhost:22015/Analytics/v1/services/VirtualMachines/actions/changeManagedType/invoke",
  "method" : "POST",
  "type" : "application/json",
  "parameters" : [ {
    "newMonitoringOperationType" : "Monitor",
    "virtualMachineIds" : [ ]
  } ]
}
```

## Related topics

- [1.3 Resource members](#)
- [1.6 List of enumerators](#)



## 2.8.4 Changing Virtual Machine Monitoring Status

This API changes the monitoring status of virtual machines.

### Execution permission

Admin, Modify

### API version

v1

### Request format

```
POST http[s]://host:port/Analytics/version/services/VirtualMachines/actions/
changeManagedType/invoke
```

### Request body

The structure of the request body and the object attributes are as follows:

#### Action

```
{
  "name": "...",
  "href": "...",
  "method": "...",
  "type": "...",
  "parameters": ["...", ...]
}
```

#### Action (Type: Action)

Attribute	Type	Description
name	string	Name of the execute an operation.
href	string	URL of the execute an operation.
method	string	Name of the method.
type	string	Data format of the object.
parameters	anyType[]	A list of ChangeManagedTypeParamForVM objects necessary to execute an operation. For details about ChangeManagedTypeParamForVM, see the table below.

#### ChangeManagedTypeParamForVM

```
{
  "newMonitoringOperationType": "...",
  "virtualMachineIds": ["...", ...]
}
```

#### ChangeManagedTypeParamForVM (Type: ChangeManagedTypeParamForVM)

Attribute	Type	Description
newMonitoringOperationType	enum	Specify the monitoring status to be changed to.

Attribute	Type	Description
newMonitoringOperationType	enum	(For details about the specifiable values, see the table MonitoringOperationType in <i>List of enumerators</i> .) The specifiable values are as follows: <ul style="list-style-type: none"> <li>• Monitor</li> <li>• Ignore</li> </ul>
virtualMachineIds	long[]	Specify the ID for identifying the virtual machine. To specify multiple virtual machines, specify the IDs concurrently. To set virtual machines whose instanceID is 50 and 51, specify the settings as follows: virtualMachineIds : [ 50, 51 ]

## Response body

The structure of the response body and the object attributes are as follows:

### Job

```

{
  "instanceID": "...",
  "created": "...",
  "updated": "...",
  "completed": "...",
  "state": "...",
  "affectedResource": ["...", ...],
  "result": ["...", ...]
}

```

### Job (Type: Job)

Attribute	Type	Description
instanceID	string	Indicates the ID of the Instance.
created	string	Indicates the date the object is generated in ISO 8601 format.
updated	string	Indicates the time the object is updated in ISO 8601 format. The same value as for "created" is set.
completed	string	Indicates the time the processing completed in ISO 8601 format. The same value as for "created" is set.
state	string	One of the following values is set: "failed": The operation did not terminate normally. "success": The operation terminated normally.
affectedResource	string[]	Indicates the URL of the API resource created or updated as a result of the operation. If no resources exist, this parameter is empty.
result	anyType[]	A list of objects. No value is set.

## Status codes

Status code	Reason phrase	Description
200	OK	Success.
400	Bad Request	A format of request body is invalid.
401	Unauthorized	No login privilege.

Status code	Reason phrase	Description
403	Forbidden	No update privilege.
404	Not Found	The resource was not found.
412	Precondition Failed	The server is not available.
500	Internal Server Error	Server processing error.

## Example code

```
[Request Header]
POST /Analytics/v1/services/VirtualMachines/actions/changeManagedType/invoke HTTP/1.1
Authorization: Basic c3lzdGVtOmlhbmFnZXI=
User-Agent: curl/7.33.0
Host: localhost:22015
Accept: application/json
Content-Type: application/json
Accept-Language: ja
Content-Length: 296
```

```
[Request Body]
{
  "name" : "changeManagedType",
  "href" : "http://localhost:22015/Analytics/v1/services/VirtualMachines/actions/
changeManagedType/invoke",
  "method" : "POST",
  "type" : "application/json",
  "parameters" : [ {
    "newMonitoringOperationType" : "Ignore",
    "virtualMachineIds" : [ 31, 80 ]
  } ]
}
```

```
[Response Header]
HTTP/1.1 200 OK
Date: Fri, 27 Nov 2015 09:22:28 GMT
Server: Cosminexus HTTP Server
Cache-Control: no-cache
WWW-Authenticate: HSSO 284045794595c1ed7a98d2184419b8656e48a15_WVlGcHsLfg5ffg0I_V0810
X-Frame-Options: SAMEORIGIN
Transfer-Encoding: chunked
Content-Type: application/json
```

```
[Response Body]
{
  "instanceID" : "53b1e702-9750-4c1c-9857-d1a3a8d4cac7",
  "created" : "2015-11-27T18:22:28.528+09:00",
  "updated" : "2015-11-27T18:22:28.647+09:00",
  "completed" : "2015-11-27T18:22:28.647+09:00",
  "state" : "success",
  "affectedResource" : [ ],
  "result" : [ ]
}
```

---

## Related topics

- [1.3 Resource members](#)
  - [1.6 List of enumerators](#)
-

## 2.9 List of APIs related to hypervisors

---

This section describes the operations for hypervisors.

### 2.9.1 Obtaining Hypervisor List

The API acquires a list of hypervisors.

#### Execution permission

Admin, Modify

#### API version

v1

#### Request format

```
GET http[s]://host:port/Analytics/version/objects/Hypervisors
```

#### Request body

Not applicable.

#### Response body

The structure of the response body and the object attributes are as follows:

##### Collections

```
{
  "data":["...", ...],
  "pagination":{
    "page":"...",
    "pageSize":"...",
    "numPages":"...",
    "totalCount":"..."
  },
  "count":"..."
}
```

##### Collections (Type: Collections)

Attribute	Type	Description
data	anyType[]	A list of Hypervisor objects. For details about Hypervisor, see the table below.
pagination	Pagination	Page information. This parameter is displayed only when the relevant resource exists.
count	int	Number of data items that meet the conditions.

##### pagination (Type: Pagination)

Attribute	Type	Description
page	integer	page
pageSize	integer	Size of the pages
numPages	integer	Number of the pages
totalCount	integer	Number of the objects

## Hypervisor

```
{
  "instanceID": "...",
  "name": "...",
  "ipAddress": "...",
  "status": "...",
  "monitorStatus": "...",
  "description": "...",
  "collectorID": "...",
  "collectorName": "...",
  "autoCollectionType": "...",
  "clusterName": "...",
  "usedCredentialID": "...",
  "usedCredentials": "...",
  "hypervisorType": "...",
  "thresholdProfileID": "...",
  "thresholdProfileName": "...",
  "accessPointType": "...",
  "accessPointIpAddress": "...",
  "accessPointUser": "...",
  "groupIDs": ["...", ...],
  "groupNames": ["...", ...],
  "gradeNames": ["...", ...],
  "gradeOrders": ["...", ...]
}
```

### Hypervisor (Type: Hypervisor)

Attribute	Type	Description
instanceID	long	ID of the hypervisor
name	string	Name of the hypervisor
ipAddress	string	IP address of the hypervisor
status	enum	Status of the hypervisor (For details about the specifiable values, see the table NodeStatusType in <i>List of enumerators</i> .) The specifiable values are as follows: <ul style="list-style-type: none"> <li>• Normal</li> <li>• Warning</li> <li>• Error</li> <li>• Unreachable</li> <li>• Unknown</li> <li>• NotMonitored</li> </ul>
monitorStatus	enum	Monitoring status of the hypervisor. (For details about the specifiable values, see the table ManagementLevelType in <i>List of enumerators</i> .) The specifiable values are as follows:

Attribute	Type	Description
monitorStatus	enum	<ul style="list-style-type: none"> <li>• New</li> <li>• Manage</li> <li>• ignore</li> <li>• MonitorOff</li> </ul>
description	string	Detailed information about the hypervisor
collectorID	long	ID for identifying a collector used for detection
collectorName	string	Name of a collector used for detection
autoCollectionType	enum	Settings for periodic executions of the collector. (For details about the specifiable values, see the table <i>ConnectType</i> in <i>List of enumerators</i> .) The specifiable values are as follows: <ul style="list-style-type: none"> <li>• AutoConnect</li> <li>• NotAutoConnect</li> </ul>
clusterName	string	Name of the cluster where the hypervisor is registered
usedCredentialID	long	ID for identifying authentication information used for detection
usedCredentials	string	Name of authentication information used for detection
hypervisorType	string	Type of the hypervisor. The following the value can be specified. <ul style="list-style-type: none"> <li>• SERVER_ESX: ESX server</li> <li>• SERVER_HYPERV: Hyper-V server</li> </ul>
thresholdProfileID	long	ID of the threshold profile assigned to the hypervisor
thresholdProfileName	string	Name of the threshold profile assigned to the hypervisor
accessPointType	enum	Type of the protocol or collector for authentication information used for detection. (For details about the specifiable values, see the table <i>ProtocolType</i> in <i>List of enumerators</i> .) The specifiable values are as follows: <ul style="list-style-type: none"> <li>• WMI</li> <li>• VCENTER</li> </ul>
accessPointIpAddress	string	IP address or host name used for connections to monitoring targets or management software
accessPointUser	string	User ID used for connections to monitoring targets or management software
groupIDs	long[]	ID of the consumer assigned to the hypervisor
groupNames	string[]	Name of the consumer assigned to the hypervisor
gradeNames	string[]	ID of the grade of the consumer assigned to the hypervisor
gradeOrders	integer[]	Priority of the grade of the consumer assigned to the hypervisor

## Status codes

Status code	Reason phrase	Description
200	OK	Success.
401	Unauthorized	No login privilege.
403	Forbidden	No reference privilege.
412	Precondition Failed	The server is not available.

Status code	Reason phrase	Description
500	Internal Server Error	Server processing error.

## Example code

```
[Request Header]
GET /Analytics/v1/objects/Hypervisors HTTP/1.1
Authorization: Basic c3lzdGVtOmlhbmFnZXI=
User-Agent: curl/7.33.0
Host: localhost:22015
Accept: application/json
Accept-Language: ja

[Response Header]
HTTP/1.1 200 OK
Date: Fri, 27 Nov 2015 20:11:36 GMT
Server: Cosminexus HTTP Server
Cache-Control: no-cache
WWW-Authenticate: HSSO
87d94e387ca516a82287ff4254ddac7f44e18bd4_WVlGcHsLfg5ffg0I_V0810
X-Frame-Options: SAMEORIGIN
Transfer-Encoding: chunked
Content-Type: application/json

[Response Body]
{
  "data" : [ {
    "instanceID" : 4,
    "name" : "hyperV",
    "ipAddress" : "10.197.87.56",
    "status" : "Unknown",
    "monitorStatus" : "Manage",
    "description" : "Hyper-V 4C4C4544-0037-4710-8036-B7C04F504258",
    "usedCredentialID" : 9,
    "usedCredentials" : "10.197.87.56",
    "hypervisorType" : "HYPERV",
    "thresholdProfileID" : 23,
    "thresholdProfileName" : "Default Profile for Hyper-V",
    "accessPointType" : "WMI",
    "accessPointIpAddress" : "10.197.87.56",
    "accessPointUser" : "Administrator"
  }, {
    "instanceID" : 1,
    "name" : "172.17.17.181",
    "ipAddress" : "172.17.17.181",
    "status" : "Normal",
    "monitorStatus" : "Manage",
    "description" : "ESX 42234bf5-2c85-4bd6-7452-5b235faae0d2",
    "collectorID" : 0,
    "collectorName" : "172.17.17.115",
    "autoCollectionType" : "AutoConnect",
    "hypervisorType" : "ESX",
    "thresholdProfileID" : 6,
    "thresholdProfileName" : "Default Profile for ESX",
    "accessPointType" : "VCENTER",
    "accessPointIpAddress" : "172.17.17.115",
    "accessPointUser" : "Administrator"
  }
]
```



```
} ], "count" : 2
}
```

## Related topics

- [1.3 Resource members](#)
- [1.6 List of enumerators](#)

## 2.9.2 Obtaining Hypervisor Operation List

This API acquires a list of executable operations for the specified hypervisor.

### Execution permission

Admin, Modify

### API version

v1

### Request format

```
GET http[s]://host:port/Analytics/version/services/Hypervisors/actions
```

### Request body

Not applicable.

### Response body

The structure of the response body and the object attributes are as follows:

#### Collections

```
{
  "data":["...", ...],
  "pagination":{
    "page":"...",
    "pageSize":"...",
    "numPages":"...",
    "totalCount":"..."
  },
  "count":"..."
}
```

#### Collections (Type: Collections)

Attribute	Type	Description
data	anyType[]	A list of Action objects. For details about Action, see the table below.
pagination	Pagination	Page information. This parameter is displayed only when the relevant resource exists.
count	int	Number of data items that meet the conditions.

## pagination (Type: Pagination)

Attribute	Type	Description
page	integer	page
pageSize	integer	Size of the pages
numPages	integer	Number of the pages
totalCount	integer	Number of the objects

## Action

```
{
  "name": "...",
  "href": "...",
  "method": "...",
  "type": "...",
  "parameters": ["...", ...]
}
```

## Action (Type: Action)

Attribute	Type	Description
name	string	Name of the execute an operation.
href	string	URL of the execute an operation.
method	string	Name of the method.
type	string	Data format of the object.
parameters	anyType[]	A list of objects necessary to execute an operation. No value is set.

## Status codes

Status code	Reason phrase	Description
200	OK	Success.
401	Unauthorized	No login privilege.
403	Forbidden	No reference privilege.
412	Precondition Failed	The server is not available.
500	Internal Server Error	Server processing error.

## Example code

```
[Request Header]
GET /Analytics/v1/services/Hypervisors/actions HTTP/1.1
Authorization: Basic c3lzdGVtOm1hbmFnZXI=
User-Agent: curl/7.33.0
Host: localhost:22015
Accept: application/json
Accept-Language: ja
```

```
[Response Header]
HTTP/1.1 200 OK
Date: Fri, 27 Nov 2015 09:17:42 GMT
Server: Cosminexus HTTP Server
Cache-Control: no-cache
WWW-Authenticate: HSSO 1e89694342cfad52de32bd8e1a2921a48b8d8_WV1GcHsLfg5ffg0I_V0810
X-Frame-Options: SAMEORIGIN
Transfer-Encoding: chunked
Content-Type: application/json
```

```
[Response Body]
{
  "data" : [ {
    "name" : "changeManagedType",
    "href" : "http://localhost:22015/Analytics/v1/services/Hypervisors/actions/
changeManagedType/invoke",
    "method" : "POST",
    "type" : "application/json",
    "parameters" : [ ]
  } ],
  "count" : 1
}
```

---

## Related topics

- [1.3 Resource members](#)
  - [1.6 List of enumerators](#)
- 

## 2.9.3 Obtaining Hypervisor Monitoring Status Change Information

This API acquires information required for changing the monitoring status of hypervisors.

### Execution permission

Admin, Modify

### API version

v1

### Request format

```
GET http[s]://host:port/Analytics/version/services/Hypervisors/actions/
changeManagedType
```

### Request body

Not applicable.

### Response body

The structure of the response body and the object attributes are as follows:

#### Action

```
{
  "name": "...",
  "href": "...",
  "method": "...",
  "type": "...",
  "parameters": ["...", ...]
}
```

### Action (Type: Action)

Attribute	Type	Description
name	string	Name of the execute an operation.
href	string	URL of the execute an operation.
method	string	Name of the method.
type	string	Data format of the object.
parameters	anyType[]	A list of ChangeManagedTypeParamForRes objects necessary to execute an operation. For details about ChangeManagedTypeParamForRes, see the table below.

### ChangeManagedTypeParamForRes

```
{
  "newMonitorStatus": "...",
  "ids": ["...", ...]
}
```

### ChangeManagedTypeParamForRes (Type: ChangeManagedTypeParamForRes)

Attribute	Type	Description
newMonitorStatus	enum	Monitor status of Node (For details about the specifiable values, see the table ManagementLevelType in <i>List of enumerators</i> .) The specifiable values are as follows: <ul style="list-style-type: none"> <li>• New</li> <li>• Manage</li> <li>• ignore</li> <li>• MonitorOff</li> </ul>
ids	long[]	List of IDs about Resource

### Status codes

Status code	Reason phrase	Description
200	OK	Success.
401	Unauthorized	No login privilege.
403	Forbidden	No reference privilege.
412	Precondition Failed	The server is not available.
500	Internal Server Error	Server processing error.

## Example code

```
[Request Header]
GET /Analytics/v1/services/Hypervisors/actions/changeManagedType HTTP/1.1
Authorization: Basic c3lzdGVtOmlhbmFnZXI=
User-Agent: curl/7.33.0
Host: localhost:22015
Accept: application/json
Accept-Language: ja

[Response Header]
HTTP/1.1 200 OK
Date: Fri, 27 Nov 2015 09:19:21 GMT
Server: Cosminexus HTTP Server
Cache-Control: no-cache
WWW-Authenticate: HSSO 5120405fb8a980d12331c748369039cf28af252_WV1GcHsLfg5ffg0I_V0810
X-Frame-Options: SAMEORIGIN
Transfer-Encoding: chunked
Content-Type: application/json

[Response Body]
{
  "name" : "changeManagedType",
  "href" : "http://localhost:22015/Analytics/v1/services/Hypervisors/actions/
changeManagedType/invoke",
  "method" : "POST",
  "type" : "application/json",
  "parameters" : [ {
    "newMonitorStatus": "Manage",
    "ids" : [ ]
  } ]
}
```

---

### Related topics

- [1.3 Resource members](#)
  - [1.6 List of enumerators](#)
- 

## 2.9.4 Changing Hypervisor Monitoring Status

This API changes the monitoring status of hypervisors.

### Execution permission

Admin, Modify

### API version

v1

## Request format

```
POST http[s]://host:port/Analytics/version/services/Hypervisors/actions/
changeManagedType/invoke
```

## Request body

The structure of the request body and the object attributes are as follows:

### Action

```
{
  "name": "...",
  "href": "...",
  "method": "...",
  "type": "...",
  "parameters": ["...", ...]
}
```

### Action (Type: Action)

Attribute	Type	Description
name	string	Name of the execute an operation.
href	string	URL of the execute an operation.
method	string	Name of the method.
type	string	Data format of the object.
parameters	anyType[]	A list of ChangeManagedTypeParamForRes objects necessary to execute an operation. For details about ChangeManagedTypeParamForRes, see the table below.

### ChangeManagedTypeParamForRes

```
{
  "newMonitorStatus": "...",
  "ids": ["...", ...]
}
```

### ChangeManagedTypeParamForRes (Type: ChangeManagedTypeParamForRes)

Attribute	Type	Description
newMonitorStatus	enum	Monitor status of Node (For details about the specifiable values, see the table ManagementLevelType in <i>List of enumerators</i> .) The specifiable values are as follows: <ul style="list-style-type: none"><li>• New</li><li>• Manage</li><li>• ignore</li><li>• MonitorOff</li></ul>
ids	long[]	List of IDs about Resource

## Response body

The structure of the response body and the object attributes are as follows:

## Job

```
{
  "instanceID": "...",
  "created": "...",
  "updated": "...",
  "completed": "...",
  "state": "...",
  "affectedResource": ["...", ...],
  "result": ["...", ...]
}
```

### Job (Type: Job)

Attribute	Type	Description
instanceID	string	Indicates the ID of the Instance.
created	string	Indicates the date the object is generated in ISO 8601 format.
updated	string	Indicates the time the object is updated in ISO 8601 format. The same value as for "created" is set.
completed	string	Indicates the time the processing completed in ISO 8601 format. The same value as for "created" is set.
state	string	One of the following values is set: "failed": The operation did not terminate normally. "success": The operation terminated normally.
affectedResource	string[]	Indicates the URL of the API resource created or updated as a result of the operation. If no resources exist, this parameter is empty.
result	anyType[]	A list of objects. No value is set.

## Status codes

Status code	Reason phrase	Description
200	OK	Success.
400	Bad Request	A format of request body is invalid.
401	Unauthorized	No login privilege.
403	Forbidden	No update privilege.
404	Not Found	The resource was not found.
412	Precondition Failed	The server is not available.
500	Internal Server Error	Server processing error.

## Example code

```
[Request Header]
POST /Analytics/v1/services/Hypervisors/actions/changeManagedType/invoke HTTP/1.1
Authorization: Basic c3lzdGVtOm1hbmFnZXI=
User-Agent: curl/7.33.0
Host: localhost:22015
Accept: application/json
Content-Type: application/json
```

Accept-Language: ja  
Content-Length: 287

[Request Body]

```
{
  "name" : "changeManagedType",
  "href" : "http://localhost:22015/Analytics/v1/services/Hypervisors/actions/
changeManagedType/invoke",
  "method" : "POST",
  "type" : "application/json",
  "parameters" : [ {
    "newMonitorStatus" : "MonitorOff",
    "ids" : [ 50 ]
  } ]
}
```

[Response Header]

HTTP/1.1 200 OK  
Date: Fri, 27 Nov 2015 09:22:28 GMT  
Server: Cosminexus HTTP Server  
Cache-Control: no-cache  
WWW-Authenticate: HSSO 284045794595c1ed7a98d2184419b8656e48a15\_WVlGcHsLfg5ffg0I\_V0810  
X-Frame-Options: SAMEORIGIN  
Transfer-Encoding: chunked  
Content-Type: application/json

[Response Body]

```
{
  "instanceID" : "53b1e702-9750-4c1c-9857-d1a3a8d4cac7",
  "created" : "2015-11-27T18:22:28.528+09:00",
  "updated" : "2015-11-27T18:22:28.647+09:00",
  "completed" : "2015-11-27T18:22:28.647+09:00",
  "state" : "success",
  "affectedResource" : [ ],
  "result" : [ ]
}
```

---

## Related topics

- [1.3 Resource members](#)
  - [1.6 List of enumerators](#)
-



## 2.10 List of APIs related to hosts

---

This section describes the operations for hosts.

### 2.10.1 Obtaining Host List

The API acquires a list of hosts.

#### Execution permission

Admin, Modify

#### API version

v1

#### Request format

```
GET http[s]://host:port/Analytics/version/objects/Hosts
```

#### Request body

Not applicable.

#### Response body

The structure of the response body and the object attributes are as follows:

##### Collections

```
{
  "data":["...", ...],
  "pagination":{
    "page":"...",
    "pageSize":"...",
    "numPages":"...",
    "totalCount":"..."
  },
  "count":"..."
}
```

##### Collections (Type: Collections)

Attribute	Type	Description
data	anyType[]	A list of Host objects. For details about Host, see the table below.
pagination	Pagination	Page information. This parameter is displayed only when the relevant resource exists.
count	int	Number of data items that meet the conditions.

##### pagination (Type: Pagination)

Attribute	Type	Description
page	integer	page
pageSize	integer	Size of the pages
numPages	integer	Number of the pages
totalCount	integer	Number of the objects

## Host

```
{
  "instanceID": "...",
  "name": "...",
  "ipAddress": "...",
  "osType": "...",
  "status": "...",
  "monitorStatus": "...",
  "description": "...",
  "vmName": "...",
  "usedCredentialID": "...",
  "usedCredentials": "...",
  "thresholdProfileID": "...",
  "thresholdProfileName": "...",
  "groupIDs": ["...", ...],
  "groupNames": ["...", ...],
  "deviceClassificationLabel": "...",
  "accessPointType": "...",
  "accessPointIpAddress": "...",
  "accessPointUser": "..."
}
```

## Host (Type: Host)

Attribute	Type	Description
instanceID	long	ID for identifying instances
name	string	Name of the host
ipAddress	string	IP address of the host
osType	string	OS type of the host. The following the value can be specified. <ul style="list-style-type: none"> <li>• SERVER_WINDOWS: The OS is Windows.</li> <li>• SERVER_LINUX: The OS is Linux.</li> <li>• SERVER_SOL: The OS is Solaris.</li> <li>• SERVER_HPUX: The OS is HP-UX.</li> <li>• SERVER_AIX: The OS is AIX.</li> </ul>
status	enum	Status of the host (For details about the specifiable values, see the table NodeStatusType in <i>List of enumerators</i> .) The specifiable values are as follows: <ul style="list-style-type: none"> <li>• Normal</li> <li>• Warning</li> <li>• Error</li> <li>• Unreachable</li> <li>• Unknown</li> <li>• NotMonitored</li> </ul>

Attribute	Type	Description
monitorStatus	enum	Monitoring status of the host. (For details about the specifiable values, see the table ManagementLevelType in <i>List of enumerators</i> .) The specifiable values are as follows: <ul style="list-style-type: none"> <li>• New</li> <li>• Manage</li> <li>• ignore</li> <li>• MonitorOff</li> </ul>
description	string	Detailed information about the host
vmName	string	Name of the virtual machine if the host is running on a virtual machine
usedCredentialID	long	ID for identifying authentication information used for detection
usedCredentials	string	Name of authentication information used for detection
thresholdProfileID	long	ID of the threshold profile assigned to the host
thresholdProfileName	string	Name of the threshold profile assigned to the host
groupIDs	long[]	ID of the consumer assigned to the host
groupNames	string[]	Name of the consumer assigned to the host
deviceClassificationLabel	string	Name of the classification label assigned to the host
accessPointType	enum	Type of authentication information used for detection. (For details about the specifiable values, see the table ProtocolType in <i>List of enumerators</i> .) The specifiable values are as follows: <ul style="list-style-type: none"> <li>• WMI</li> <li>• SSH</li> </ul>
accessPointIpAddress	string	IP address used for connections to monitoring targets
accessPointUser	string	User ID used for connections to monitoring targets

## Status codes

Status code	Reason phrase	Description
200	OK	Success.
401	Unauthorized	No login privilege.
403	Forbidden	No reference privilege.
412	Precondition Failed	The server is not available.
500	Internal Server Error	Server processing error.

## Example code

```
[Request Header]
GET /Analytics/v1/objects/Hosts HTTP/1.1
Authorization: Basic c3lzdGVtOmlhbmFnZXI=
User-Agent: curl/7.33.0
Host: localhost:22015
Accept: application/json
Accept-Language: ja
```

```
[Response Header]
HTTP/1.1 200 OK
Date: Fri, 27 Nov 2015 07:11:36 GMT
Server: Cosminexus HTTP Server
Cache-Control: no-cache
WWW-Authenticate: HSSO
87d94e387ca516a82287ff4254ddac7f44e18bd4_WVlGcHsLfg5ffg0I_V0810
X-Frame-Options: SAMEORIGIN
Transfer-Encoding: chunked
Content-Type: application/json
```

```
[Response Body]
{
  "data" : [ {
    "instanceID" : 8,
    "name" : "fuji",
    "ipAddress" : "10.197.87.43",
    "status" : "Unknown",
    "osType" : "SERVER_LINUX",
    "monitorStatus" : "Manage",
    "description" : "XXXX YYYY/ZZ Linux Server",
    "deviceClassificationLabel":"Linux Development Env",
    "usedCredentialID" : 17,
    "usedCredentials" : "10.197.87.43",
    "thresholdProfileID" : 4,
    "thresholdProfileName" : "Default Profile for Linux/UNIX",
    "groupIDs" : [ 0 ],
    "groupNames" : [ "#Unassigned Resources" ],
    "accessPointType" : "SSH",
    "accessPointIpAddress" : "10.197.87.43",
    "accessPointUser" : "root"
  } ],
  "count" : 1
}
```

---

## Related topics

- [1.3 Resource members](#)
  - [1.6 List of enumerators](#)
- 

## 2.10.2 Obtaining Host Operation List

This API acquires a list of executable operations for the specified host.

### Execution permission

Admin, Modify

### API version

v1

## Request format

```
GET http[s]://host:port/Analytics/version/services/Hosts/actions
```

## Request body

Not applicable.

## Response body

The structure of the response body and the object attributes are as follows:

### Collections

```
{
  "data":["...", ...],
  "pagination":{
    "page":"...",
    "pageSize":"...",
    "numPages":"...",
    "totalCount":"..."
  },
  "count":"..."
}
```

### Collections (Type: Collections)

Attribute	Type	Description
data	anyType[]	A list of Action objects. For details about Action, see the table below.
pagination	Pagination	Page information. This parameter is displayed only when the relevant resource exists.
count	int	Number of data items that meet the conditions.

### pagination (Type: Pagination)

Attribute	Type	Description
page	integer	page
pageSize	integer	Size of the pages
numPages	integer	Number of the pages
totalCount	integer	Number of the objects

### Action

```
{
  "name":"...",
  "href":"...",
  "method":"...",
  "type":"...",
  "parameters":["...", ...]
}
```

### Action (Type: Action)

Attribute	Type	Description
name	string	Name of the execute an operation.
href	string	URL of the execute an operation.
method	string	Name of the method.
type	string	Data format of the object.
parameters	anyType[]	A list of objects necessary to execute an operation. No value is set.

## Status codes

Status code	Reason phrase	Description
200	OK	Success.
401	Unauthorized	No login privilege.
403	Forbidden	No reference privilege.
412	Precondition Failed	The server is not available.
500	Internal Server Error	Server processing error.

## Example code

```
[Request Header]
GET /Analytics/v1/services/Hosts/actions HTTP/1.1
Authorization: Basic c3lzdGVtOmlhbmFnZXI=
User-Agent: curl/7.33.0
Host: localhost:22015
Accept: application/json
Accept-Language: ja

[Response Header]
HTTP/1.1 200 OK
Date: Fri, 27 Nov 2015 09:17:42 GMT
Server: Cosminexus HTTP Server
Cache-Control: no-cache
WWW-Authenticate: HSSO 1e89694342cfad52de32bd8e1a2921a48b8d8_WV1GcHsLfg5ffg0I_V0810
X-Frame-Options: SAMEORIGIN
Transfer-Encoding: chunked
Content-Type: application/json

[Response Body]
{
  "data" : [ {
    "name" : "changeManagedType",
    "href" : "http://localhost:22015/Analytics/v1/services/Hosts/actions/
changeManagedType/invoke",
    "method" : "POST",
    "type" : "application/json",
    "parameters" : [ ]
  } ],
  "count" : 1
}
```

---

## Related topics

- [1.3 Resource members](#)
  - [1.6 List of enumerators](#)
- 

## 2.10.3 Obtaining Host Monitoring Status Change Information

This API acquires information required for changing the monitoring status of hosts.

### Execution permission

Admin, Modify

### API version

v1

### Request format

```
GET http[s]://host:port/Analytics/version/services/Hosts/actions/changeManagedType
```

### Request body

Not applicable.

### Response body

The structure of the response body and the object attributes are as follows:

#### Action

```
{
  "name": "...",
  "href": "...",
  "method": "...",
  "type": "...",
  "parameters": ["...", ...]
}
```

#### Action (Type: Action)

Attribute	Type	Description
name	string	Name of the execute an operation.
href	string	URL of the execute an operation.
method	string	Name of the method.
type	string	Data format of the object.
parameters	anyType[]	A list of ChangeManagedTypeParamForRes objects necessary to execute an operation. For details about ChangeManagedTypeParamForRes, see the table below.

#### ChangeManagedTypeParamForRes

```
{
  "newMonitorStatus": "...",
  "ids": ["...", ...]
}
```

## ChangeManagedTypeParamForRes (Type: ChangeManagedTypeParamForRes)

Attribute	Type	Description
newMonitorStatus	enum	Monitor status of Node (For details about the specifiable values, see the table ManagementLevelType in <i>List of enumerators</i> .) The specifiable values are as follows: <ul style="list-style-type: none"> <li>• New</li> <li>• Manage</li> <li>• ignore</li> <li>• MonitorOff</li> </ul>
ids	long[]	List of IDs about Resource

## Status codes

Status code	Reason phrase	Description
200	OK	Success.
401	Unauthorized	No login privilege.
403	Forbidden	No reference privilege.
412	Precondition Failed	The server is not available.
500	Internal Server Error	Server processing error.

## Example code

```
[Request Header]
GET /Analytics/v1/services/Hosts/actions/changeManagedType HTTP/1.1
Authorization: Basic c3lzdGVtOmlhbmFnZXI=
User-Agent: curl/7.33.0
Host: localhost:22015
Accept: application/json
Accept-Language: ja

[Response Header]
HTTP/1.1 200 OK
Date: Fri, 27 Nov 2015 09:19:21 GMT
Server: Cosminexus HTTP Server
Cache-Control: no-cache
WWW-Authenticate: HSSO 5120405fb8a980d12331c748369039cf28af252_WV1GcHsLfg5ffg0I_V0810
X-Frame-Options: SAMEORIGIN
Transfer-Encoding: chunked
Content-Type: application/json

[Response Body]
{
  "name" : "changeManagedType",
  "href" : "http://localhost:22015/Analytics/v1/services/Hosts/actions/"
```



```
changeManagedType/invoke",
  "method" : "POST",
  "type" : "application/json",
  "parameters" : [ {
    "newMonitorStatus": "Manage",
    "ids" : [ ]
  } ]
}
```

---

## Related topics

- [1.3 Resource members](#)
  - [1.6 List of enumerators](#)
- 

## 2.10.4 Changing Host Monitoring Status

This API changes the monitoring status of hosts.

### Execution permission

Admin, Modify

### API version

v1

### Request format

```
POST http[s]://host:port/Analytics/version/services/Hosts/actions/changeManagedType/invoke
```

### Request body

The structure of the request body and the object attributes are as follows:

#### Action

```
{
  "name":"...",
  "href":"...",
  "method":"...",
  "type":"...",
  "parameters":["...", ...]
}
```

#### Action (Type: Action)

Attribute	Type	Description
name	string	Name of the execute an operation.
href	string	URL of the execute an operation.
method	string	Name of the method.
type	string	Data format of the object.

Attribute	Type	Description
parameters	anyType[]	A list of ChangeManagedTypeParamForRes objects necessary to execute an operation. For details about ChangeManagedTypeParamForRes, see the table below.

### ChangeManagedTypeParamForRes

```

{
    "newMonitorStatus": "...",
    "ids": ["...", ...]
}

```

### ChangeManagedTypeParamForRes (Type: ChangeManagedTypeParamForRes)

Attribute	Type	Description
newMonitorStatus	enum	Monitor status of Node (For details about the specifiable values, see the table ManagementLevelType in <i>List of enumerators</i> .) The specifiable values are as follows: <ul style="list-style-type: none"> <li>• New</li> <li>• Manage</li> <li>• ignore</li> <li>• MonitorOff</li> </ul>
ids	long[]	List of IDs about Resource

## Response body

The structure of the response body and the object attributes are as follows:

### Job

```

{
    "instanceID": "...",
    "created": "...",
    "updated": "...",
    "completed": "...",
    "state": "...",
    "affectedResource": ["...", ...],
    "result": ["...", ...]
}

```

### Job (Type: Job)

Attribute	Type	Description
instanceID	string	Indicates the ID of the Instance.
created	string	Indicates the date the object is generated in ISO 8601 format.
updated	string	Indicates the time the object is updated in ISO 8601 format. The same value as for "created" is set.
completed	string	Indicates the time the processing completed in ISO 8601 format. The same value as for "created" is set.
state	string	One of the following values is set: "failed": The operation did not terminate normally. "success": The operation terminated normally.

Attribute	Type	Description
affectedResource	string[]	Indicates the URL of the API resource created or updated as a result of the operation. If no resources exist, this parameter is empty.
result	anyType[]	A list of objects. No value is set.

## Status codes

Status code	Reason phrase	Description
200	OK	Success.
400	Bad Request	A format of request body is invalid.
401	Unauthorized	No login privilege.
403	Forbidden	No update privilege.
404	Not Found	The resource was not found.
412	Precondition Failed	The server is not available.
500	Internal Server Error	Server processing error.

## Example code

```
[Request Header]
POST /Analytics/v1/services/Hosts/actions/changeManagedType/invoke HTTP/1.1
Authorization: Basic c3lzdGVtOmlhbmFnZXI=
User-Agent: curl/7.33.0
Host: localhost:22015
Accept: application/json
Content-Type: application/json
Accept-Language: ja
Content-Length: 279

[Request Body]
{
  "name" : "changeManagedType",
  "href" : "http://localhost:22015/Analytics/v1/services/Hosts/actions/
changeManagedType/invoke",
  "method" : "POST",
  "type" : "application/json",
  "parameters" : [ {
    "newMonitorStatus" : "MonitorOff",
    "ids" : [ 50 ]
  } ]
}

[Response Header]
HTTP/1.1 200 OK
Date: Fri, 27 Nov 2015 09:22:28 GMT
Server: Cosminexus HTTP Server
Cache-Control: no-cache
WWW-Authenticate: HSSO 284045794595c1ed7a98d2184419b8656e48a15_WVlGcHsLfg5ffg0I_V0810
X-Frame-Options: SAMEORIGIN
Transfer-Encoding: chunked
Content-Type: application/json
```

```
[Response Body]
{
  "instanceID" : "53b1e702-9750-4c1c-9857-d1a3a8d4cac7",
  "created" : "2015-11-27T18:22:28.528+09:00",
  "updated" : "2015-11-27T18:22:28.647+09:00",
  "completed" : "2015-11-27T18:22:28.647+09:00",
  "state" : "success",
  "affectedResource" : [ ],
  "result" : [ ]
}
```

---

## Related topics

- [1.3 Resource members](#)
  - [1.6 List of enumerators](#)
-

## 2.11 List of APIs related to IP switches

---

This section describes the operations for IP switches.

### 2.11.1 Obtaining IP Switch List

The API acquires a list of IP switches.

#### Execution permission

Admin, Modify

#### API version

v1

#### Request format

```
GET http[s]://host:port/Analytics/version/objects/IPSwitches
```

#### Request body

Not applicable.

#### Response body

The structure of the response body and the object attributes are as follows:

##### Collections

```
{
  "data":["...", ...],
  "pagination":{
    "page":"...",
    "pageSize":"...",
    "numPages":"...",
    "totalCount":"..."
  },
  "count":"..."
}
```

##### Collections (Type: Collections)

Attribute	Type	Description
data	anyType[]	A list of IPSwitch objects. For details about IPSwitch, see the table below.
pagination	Pagination	Page information. This parameter is displayed only when the relevant resource exists.
count	int	Number of data items that meet the conditions.

##### pagination (Type: Pagination)

Attribute	Type	Description
page	integer	page
pageSize	integer	Size of the pages
numPages	integer	Number of the pages
totalCount	integer	Number of the objects

## IPSwitch

```
{
  "instanceID": "...",
  "name": "...",
  "ipAddress": "...",
  "status": "...",
  "monitorStatus": "...",
  "description": "...",
  "usedCredentialID": "...",
  "usedCredentials": "...",
  "thresholdProfileID": "...",
  "thresholdProfileName": "...",
  "accessPointType": "...",
  "accessPointSnmpVersion": "...",
  "accessPointIpAddress": "...",
  "accessPointUser": "..."
}
```

### IPSwitch (Type: IPSwitch)

Attribute	Type	Description
instanceID	long	ID of the IP switch
name	string	Name of the IP switch
ipAddress	string	IP address of the IP switch
status	enum	Status of the IP switch (For details about the specifiable values, see the table NodeStatusType in <i>List of enumerators</i> .) The specifiable values are as follows: <ul style="list-style-type: none"> <li>• Normal</li> <li>• Warning</li> <li>• Error</li> <li>• Unreachable</li> <li>• Unknown</li> <li>• NotMonitored</li> </ul>
monitorStatus	enum	Monitoring status of the IP switch. (For details about the specifiable values, see the table ManagementLevelType in <i>List of enumerators</i> .) The specifiable values are as follows: <ul style="list-style-type: none"> <li>• New</li> <li>• Manage</li> <li>• ignore</li> <li>• MonitorOff</li> </ul>
description	string	Detailed information about the IP Switch

Attribute	Type	Description
usedCredentialID	long	ID for identifying authentication information used for detection
usedCredentials	string	Name of authentication information used for detection
thresholdProfileID	long	ID of the threshold profile assigned to the IP switch
thresholdProfileName	string	Name of the threshold profile assigned to the IP switch
accessPointType	enum	Type of authentication information used for detection. (For details about the specifiable values, see the table ProtocolType in <i>List of enumerators</i> .) The specifiable values are as follows: <ul style="list-style-type: none"> <li>• SNMP</li> </ul>
accessPointSnmVersion	enum	Version of SNMP used for detection (For details about the specifiable values, see the table SnmpVersion in <i>List of enumerators</i> .) The specifiable values are as follows: <ul style="list-style-type: none"> <li>• V1_V2C</li> <li>• V3</li> </ul>
accessPointIpAddress	string	IP address used for connections to monitoring targets
accessPointUser	string	User ID used for connections to monitoring targets

## Status codes

Status code	Reason phrase	Description
200	OK	Success.
401	Unauthorized	No login privilege.
403	Forbidden	No reference privilege.
412	Precondition Failed	The server is not available.
500	Internal Server Error	Server processing error.

## Example code

```
[Request Header]
GET /Analytics/v1/objects/IPSwitches HTTP/1.1
Authorization: Basic c3lzdGVtOm1hbmFnZXI=
User-Agent: curl/7.33.0
Host: localhost:22015
Accept: application/json
Accept-Language: ja

[Response Header]
HTTP/1.1 200 OK
Date: Fri, 27 Nov 2015 21:15:36 GMT
Server: Cosminexus HTTP Server
Cache-Control: no-cache
WWW-Authenticate: HSSO
87d94e387ca516a82287ff4254ddac7f44e18bd4_WVlGcHsLfg5ffg0I_V0810
X-Frame-Options: SAMEORIGIN
Transfer-Encoding: chunked
Content-Type: application/json
```

```
[Response Body]
{
  "data" : [ {
    "instanceID" : 3,
    "name" : "dell2",
    "ipAddress" : "10.197.87.242",
    "status" : "Unknown",
    "monitorStatus" : "Manage",
    "description" : "YYYY Ethernet Switch",
    "usedCredentialID" : 7,
    "usedCredentials" : "10.197.87.242",
    "thresholdProfileID" : 10,
    "thresholdProfileName" : "Default Profile for IP Switch",
    "accessPointType" : "SNMP",
    "accessPointSnmpVersion" : "V1_V2C",
    "accessPointIpAddress" : "10.197.87.242",
  } ],
  "count" : 1
}
```

---

## Related topics

- [1.3 Resource members](#)
  - [1.6 List of enumerators](#)
- 

## 2.11.2 Obtaining IP Switch Operation List

This API acquires a list of executable operations for the specified IP switch.

### Execution permission

Admin, Modify

### API version

v1

### Request format

```
GET http[s]://host:port/Analytics/version/services/IPSwitches/actions
```

### Request body

Not applicable.

### Response body

The structure of the response body and the object attributes are as follows:

#### Collections

```
{
  "data":["...", ...],
  "pagination":{
```



```

        "page": "...",
        "pageSize": "...",
        "numPages": "...",
        "totalCount": "...",
    },
    "count": "..."
}

```

## Collections (Type: Collections)

Attribute	Type	Description
data	anyType[]	A list of Action objects. For details about Action, see the table below.
pagination	Pagination	Page information. This parameter is displayed only when the relevant resource exists.
count	int	Number of data items that meet the conditions.

## pagination (Type: Pagination)

Attribute	Type	Description
page	integer	page
pageSize	integer	Size of the pages
numPages	integer	Number of the pages
totalCount	integer	Number of the objects

## Action

```

{
    "name": "...",
    "href": "...",
    "method": "...",
    "type": "...",
    "parameters": ["...", ...]
}

```

## Action (Type: Action)

Attribute	Type	Description
name	string	Name of the execute an operation.
href	string	URL of the execute an operation.
method	string	Name of the method.
type	string	Data format of the object.
parameters	anyType[]	A list of objects necessary to execute an operation. No value is set.

## Status codes

Status code	Reason phrase	Description
200	OK	Success.
401	Unauthorized	No login privilege.

Status code	Reason phrase	Description
403	Forbidden	No reference privilege.
412	Precondition Failed	The server is not available.
500	Internal Server Error	Server processing error.

## Example code

```
[Request Header]
GET /Analytics/v1/services/IPSwitches/actions HTTP/1.1
Authorization: Basic c3lzdGVtOmlhbmFnZXI=
User-Agent: curl/7.33.0
Host: localhost:22015
Accept: application/json
Accept-Language: ja

[Response Header]
HTTP/1.1 200 OK
Date: Fri, 27 Nov 2015 09:17:42 GMT
Server: Cosminexus HTTP Server
Cache-Control: no-cache
WWW-Authenticate: HSSO 1e89694342cfad52de32bd8e1a2921a48b8d8_WV1GcHsLfg5ffg0I_V0810
X-Frame-Options: SAMEORIGIN
Transfer-Encoding: chunked
Content-Type: application/json

[Response Body]
{
  "data" : [ {
    "name" : "changeManagedType",
    "href" : "http://localhost:22015/Analytics/v1/services/IPSwitches/actions/
changeManagedType/invoke",
    "method" : "POST",
    "type" : "application/json",
    "parameters" : [ ]
  } ],
  "count" : 1
}
```

---

## Related topics

- [1.3 Resource members](#)
  - [1.6 List of enumerators](#)
- 

## 2.11.3 Obtaining IP Switch Monitoring Status Change Information

This API acquires information required for changing the monitoring status of IP switches.

### Execution permission

Admin, Modify

## API version

v1

## Request format

```
GET http[s]://host:port/Analytics/version/services/IPSwitches/actions/  
changeManagedType
```

## Request body

Not applicable.

## Response body

The structure of the response body and the object attributes are as follows:

### Action

```
{  
  "name": "...",  
  "href": "...",  
  "method": "...",  
  "type": "...",  
  "parameters": ["...", ...]  
}
```

### Action (Type: Action)

Attribute	Type	Description
name	string	Name of the execute an operation.
href	string	URL of the execute an operation.
method	string	Name of the method.
type	string	Data format of the object.
parameters	anyType[]	A list of ChangeManagedTypeParamForRes objects necessary to execute an operation. For details about ChangeManagedTypeParamForRes, see the table below.

### ChangeManagedTypeParamForRes

```
{  
  "newMonitorStatus": "...",  
  "ids": ["...", ...]  
}
```

### ChangeManagedTypeParamForRes (Type: ChangeManagedTypeParamForRes)

Attribute	Type	Description
newMonitorStatus	enum	Monitor status of Node (For details about the specifiable values, see the table ManagementLevelType in <i>List of enumerators</i> .) The specifiable values are as follows: <ul style="list-style-type: none"><li>• New</li><li>• Manage</li></ul>

Attribute	Type	Description
newMonitorStatus	enum	<ul style="list-style-type: none"> <li>ignore</li> <li>MonitorOff</li> </ul>
ids	long[]	List of IDs about Resource

## Status codes

Status code	Reason phrase	Description
200	OK	Success.
401	Unauthorized	No login privilege.
403	Forbidden	No reference privilege.
412	Precondition Failed	The server is not available.
500	Internal Server Error	Server processing error.

## Example code

```
[Request Header]
GET /Analytics/v1/services/IPSwitches/actions/changeManagedType HTTP/1.1
Authorization: Basic c3lzdGVtOmlhbmFnZXI=
User-Agent: curl/7.33.0
Host: localhost:22015
Accept: application/json
Accept-Language: ja

[Response Header]
HTTP/1.1 200 OK
Date: Fri, 27 Nov 2015 09:19:21 GMT
Server: Cosminexus HTTP Server
Cache-Control: no-cache
WWW-Authenticate: HSSO 5120405fb8a980d12331c748369039cf28af252_WVlGcHsLfg5ffg0I_V0810
X-Frame-Options: SAMEORIGIN
Transfer-Encoding: chunked
Content-Type: application/json

[Response Body]
{
  "name" : "changeManagedType",
  "href" : "http://localhost:22015/Analytics/v1/services/IPSwitches/actions/
changeManagedType/invoke",
  "method" : "POST",
  "type" : "application/json",
  "parameters" : [ {
    "newMonitorStatus": "Manage",
    "ids" : [ ]
  } ]
}
```

## Related topics

- [1.3 Resource members](#)
- [1.6 List of enumerators](#)

## 2.11.4 Changing IP Switch Monitoring Status

This API changes the monitoring status of IP switches.

### Execution permission

Admin, Modify

### API version

v1

### Request format

```
POST http[s]://host:port/Analytics/version/services/IPSwitches/actions/
changeManagedType/invoke
```

### Request body

The structure of the request body and the object attributes are as follows:

#### Action

```
{
  "name": "...",
  "href": "...",
  "method": "...",
  "type": "...",
  "parameters": ["...", ...]
}
```

#### Action (Type: Action)

Attribute	Type	Description
name	string	Name of the execute an operation.
href	string	URL of the execute an operation.
method	string	Name of the method.
type	string	Data format of the object.
parameters	anyType[]	A list of ChangeManagedTypeParamForRes objects necessary to execute an operation. For details about ChangeManagedTypeParamForRes, see the table below.

#### ChangeManagedTypeParamForRes

```
{
  "newMonitorStatus": "...",
  "ids": ["...", ...]
}
```

#### ChangeManagedTypeParamForRes (Type: ChangeManagedTypeParamForRes)

Attribute	Type	Description
newMonitorStatus	enum	Monitor status of Node

Attribute	Type	Description
newMonitorStatus	enum	(For details about the specifiable values, see the table ManagementLevelType in <i>List of enumerators</i> .) The specifiable values are as follows: <ul style="list-style-type: none"> <li>• New</li> <li>• Manage</li> <li>• ignore</li> <li>• MonitorOff</li> </ul>
ids	long[]	List of IDs about Resource

## Response body

The structure of the response body and the object attributes are as follows:

### Job

```
{
  "instanceID": "...",
  "created": "...",
  "updated": "...",
  "completed": "...",
  "state": "...",
  "affectedResource": ["...", ...],
  "result": ["...", ...]
}
```

### Job (Type: Job)

Attribute	Type	Description
instanceID	string	Indicates the ID of the Instance.
created	string	Indicates the date the object is generated in ISO 8601 format.
updated	string	Indicates the time the object is updated in ISO 8601 format. The same value as for "created" is set.
completed	string	Indicates the time the processing completed in ISO 8601 format. The same value as for "created" is set.
state	string	One of the following values is set: "failed": The operation did not terminate normally. "success": The operation terminated normally.
affectedResource	string[]	Indicates the URL of the API resource created or updated as a result of the operation. If no resources exist, this parameter is empty.
result	anyType[]	A list of objects. No value is set.

## Status codes

Status code	Reason phrase	Description
200	OK	Success.
400	Bad Request	A format of request body is invalid.
401	Unauthorized	No login privilege.
403	Forbidden	No update privilege.

Status code	Reason phrase	Description
404	Not Found	The resource was not found.
412	Precondition Failed	The server is not available.
500	Internal Server Error	Server processing error.

## Example code

```
[Request Header]
POST /Analytics/v1/services/IPSwitches/actions/changeManagedType/invoke HTTP/1.1
Authorization: Basic c3lzdGVtOmlhbmFnZXI=
User-Agent: curl/7.33.0
Host: localhost:22015
Accept: application/json
Content-Type: application/json
Accept-Language: ja
Content-Length: 284

[Request Body]
{
  "name" : "changeManagedType",
  "href" : "http://localhost:22015/Analytics/v1/services/IPSwitches/actions/
changeManagedType/invoke",
  "method" : "POST",
  "type" : "application/json",
  "parameters" : [ {
    "newMonitorStatus" : "MonitorOff",
    "ids" : [ 50 ]
  } ]
}

[Response Header]
HTTP/1.1 200 OK
Date: Fri, 27 Nov 2015 09:22:28 GMT
Server: Cosminexus HTTP Server
Cache-Control: no-cache
WWW-Authenticate: HSSO 284045794595c1ed7a98d2184419b8656e48a15_WV1GcHsLfg5ffg0I_V0810
X-Frame-Options: SAMEORIGIN
Transfer-Encoding: chunked
Content-Type: application/json

[Response Body]
{
  "instanceID" : "53b1e702-9750-4c1c-9857-d1a3a8d4cac7",
  "created" : "2015-11-27T18:22:28.528+09:00",
  "updated" : "2015-11-27T18:22:28.647+09:00",
  "completed" : "2015-11-27T18:22:28.647+09:00",
  "state" : "success",
  "affectedResource" : [ ],
  "result" : [ ]
}
```

## Related topics

- [1.3 Resource members](#)

- 1.6 List of enumerators
-



## 2.12 List of APIs related to FC switches

---

This section describes the operations for FC switches.

### 2.12.1 Obtaining FC Switch List

The API acquires a list of FC switches.

#### Execution permission

Admin, Modify

#### API version

v1

#### Request format

```
GET http[s]://host:port/Analytics/version/objects/FCSwitches
```

#### Request body

Not applicable.

#### Response body

The structure of the response body and the object attributes are as follows:

##### Collections

```
{
  "data":["...", ...],
  "pagination":{
    "page":"...",
    "pageSize":"...",
    "numPages":"...",
    "totalCount":"..."
  },
  "count":"..."
}
```

##### Collections (Type: Collections)

Attribute	Type	Description
data	anyType[]	A list of FCSSwitch objects. For details about FCSSwitch, see the table below.
pagination	Pagination	Page information. This parameter is displayed only when the relevant resource exists.
count	int	Number of data items that meet the conditions.

##### pagination (Type: Pagination)

Attribute	Type	Description
page	integer	page
pageSize	integer	Size of the pages
numPages	integer	Number of the pages
totalCount	integer	Number of the objects

## FCSwitch

```
{
  "instanceID": "...",
  "name": "...",
  "ipAddress": "...",
  "status": "...",
  "monitorStatus": "...",
  "description": "...",
  "usedCredentialID": "...",
  "usedCredentials": "...",
  "wwn": "...",
  "thresholdProfileID": "...",
  "thresholdProfileName": "...",
  "accessPointType": "...",
  "accessPointIpAddress": "...",
  "accessPointUser": "..."
}
```

### FCSwitch (Type: FCSwitch)

Attribute	Type	Description
instanceID	long	ID of the FC switch
name	string	Name of the FC switch
ipAddress	string	IP address of the FC switch
status	enum	Status of the FC switch (For details about the specifiable values, see the table NodeStatusType in <i>List of enumerators</i> .) The specifiable values are as follows: <ul style="list-style-type: none"> <li>• Normal</li> <li>• Warning</li> <li>• Error</li> <li>• Unreachable</li> <li>• Unknown</li> <li>• NotMonitored</li> </ul>
monitorStatus	enum	Monitoring status of the FC switch. (For details about the specifiable values, see the table ManagementLevelType in <i>List of enumerators</i> .) The specifiable values are as follows: <ul style="list-style-type: none"> <li>• New</li> <li>• Manage</li> <li>• ignore</li> <li>• MonitorOff</li> </ul>
description	string	Detailed information about the FC Switch

Attribute	Type	Description
usedCredentialID	long	ID for identifying authentication information used for detection
usedCredentials	string	Name of authentication information used for detection
wwn	string	WWN of the FC switch
thresholdProfileID	long	ID of the threshold profile assigned to the FC switch
thresholdProfileName	string	Name of the threshold profile assigned to the FC switch
accessPointType	enum	Type of authentication information used for detection. (For details about the specifiable values, see the table ProtocolType in <i>List of enumerators</i> .) The specifiable values are as follows: <ul style="list-style-type: none"> <li>• WBEM</li> <li>• SNMP</li> </ul>
accessPointIpAddress	string	IP address used for connections to monitoring targets
accessPointUser	string	User ID used for connections to monitoring targets

## Status codes

Status code	Reason phrase	Description
200	OK	Success.
401	Unauthorized	No login privilege.
403	Forbidden	No reference privilege.
412	Precondition Failed	The server is not available.
500	Internal Server Error	Server processing error.

## Example code

```
[Request Header]
GET /Analytics/v1/objects/FCSwitches HTTP/1.1
Authorization: Basic c3lzZGVtOmlhbmFnZXI=
User-Agent: curl/7.33.0
Host: localhost:22015
Accept: application/json
Accept-Language: ja

[Response Header]
HTTP/1.1 200 OK
Date: Fri, 27 Nov 2015 07:11:36 GMT
Server: Cosminexus HTTP Server
Cache-Control: no-cache
WWW-Authenticate: HSSO
87d94e387ca516a82287ff4254ddac7f44e18bd4_WVlGcHsLfg5ffg0I_V0810
X-Frame-Options: SAMEORIGIN
Transfer-Encoding: chunked
Content-Type: application/json

[Response Body]
{
  "data" : [ {
```

```
"instanceID" : 5,
"name" : "SANbox",
"ipAddress" : "10.197.87.222",
"status" : "Unknown",
"monitorStatus" : "Manage",
"description" : "FC Switch",
"usedCredentialID" : 6,
"usedCredentials" : "10.197.87.222",
"wwn" : "10:00:00:C0:DD:0D:62:E4",
"thresholdProfileID" : 8,
"thresholdProfileName" : "Default Profile for FC Switch",
"accessPointType" : "WBEM",
"accessPointIpAddress" : "10.197.87.222",
"accessPointUser" : "admin"
} ],
"count" : 1
}
```

---

## Related topics

- [1.3 Resource members](#)
  - [1.6 List of enumerators](#)
- 

## 2.12.2 Obtaining FC Switch Operation List

This API acquires a list of executable operations for the specified FC switch.

### Execution permission

Admin, Modify

### API version

v1

### Request format

```
GET http[s]://host:port/Analytics/version/services/FCSwitches/actions
```

### Request body

Not applicable.

### Response body

The structure of the response body and the object attributes are as follows:

#### Collections

```
{
  "data":["...", ...],
  "pagination":{
    "page":"...",
    "pageSize":"...",
    "numPages":"...",
    "totalCount":"..."
  }
}
```

```

    },
    "count": "...
}

```

## Collections (Type: Collections)

Attribute	Type	Description
data	anyType[]	A list of Action objects. For details about Action, see the table below.
pagination	Pagination	Page information. This parameter is displayed only when the relevant resource exists.
count	int	Number of data items that meet the conditions.

## pagination (Type: Pagination)

Attribute	Type	Description
page	integer	page
pageSize	integer	Size of the pages
numPages	integer	Number of the pages
totalCount	integer	Number of the objects

## Action

```

{
  "name": "...",
  "href": "...",
  "method": "...",
  "type": "...",
  "parameters": ["...", ...]
}

```

## Action (Type: Action)

Attribute	Type	Description
name	string	Name of the execute an operation.
href	string	URL of the execute an operation.
method	string	Name of the method.
type	string	Data format of the object.
parameters	anyType[]	A list of objects necessary to execute an operation. No value is set.

## Status codes

Status code	Reason phrase	Description
200	OK	Success.
401	Unauthorized	No login privilege.
412	Precondition Failed	The server is not available.
500	Internal Server Error	Server processing error.

## Example code

```
[Request Header]
GET /Analytics/v1/services/FCSwitches/actions HTTP/1.1
Authorization: Basic c3lzdGVtOmlhbmFnZXI=
User-Agent: curl/7.33.0
Host: localhost:22015
Accept: application/json
Accept-Language: ja

[Response Header]
HTTP/1.1 200 OK
Date: Fri, 27 Nov 2015 09:17:42 GMT
Server: Cosminexus HTTP Server
Cache-Control: no-cache
WWW-Authenticate: HSSO 1e89694342cfad52de32bd8e1a2921a48b8d8_WV1GcHsLfg5ffg0I_V0810
X-Frame-Options: SAMEORIGIN
Transfer-Encoding: chunked
Content-Type: application/json

[Response Body]
{
  "data" : [ {
    "name" : "changeManagedType",
    "href" : "http://localhost:22015/Analytics/v1/services/FCSwitches/actions/
changeManagedType/invoke",
    "method" : "POST",
    "type" : "application/json",
    "parameters" : [ ]
  } ],
  "count" : 1
}
```

---

## Related topics

- [1.3 Resource members](#)
  - [1.6 List of enumerators](#)
- 

## 2.12.3 Obtaining FC Switch Monitoring Status Change Information

This API acquires information required for changing the monitoring status of FC switches.

### Execution permission

Admin, Modify

### API version

v1

## Request format

```
GET http[s]://host:port/Analytics/version/services/FCSwitches/actions/
changeManagedType
```

## Request body

Not applicable.

## Response body

The structure of the response body and the object attributes are as follows:

### Action

```
{
  "name": "...",
  "href": "...",
  "method": "...",
  "type": "...",
  "parameters": ["...", ...]
}
```

### Action (Type: Action)

Attribute	Type	Description
name	string	Name of the execute an operation.
href	string	URL of the execute an operation.
method	string	Name of the method.
type	string	Data format of the object.
parameters	anyType[]	A list of ChangeManagedTypeParamForRes objects necessary to execute an operation. For details about ChangeManagedTypeParamForRes, see the table below.

### ChangeManagedTypeParamForRes

```
{
  "newMonitorStatus": "...",
  "ids": ["...", ...]
}
```

### ChangeManagedTypeParamForRes (Type: ChangeManagedTypeParamForRes)

Attribute	Type	Description
newMonitorStatus	enum	Monitor status of Node (For details about the specifiable values, see the table ManagementLevelType in <i>List of enumerators</i> .) The specifiable values are as follows: <ul style="list-style-type: none"><li>• New</li><li>• Manage</li><li>• ignore</li><li>• MonitorOff</li></ul>
ids	long[]	List of IDs about Resource

## Status codes

Status code	Reason phrase	Description
200	OK	Success.
401	Unauthorized	No login privilege.
412	Precondition Failed	The server is not available.
500	Internal Server Error	Server processing error.

## Example code

```
[Request Header]
GET /Analytics/v1/services/FCSwitches/actions/changeManagedType HTTP/1.1
Authorization: Basic c3lzdGVtOmlhbmFnZXI=
User-Agent: curl/7.33.0
Host: localhost:22015
Accept: application/json
Accept-Language: ja

[Response Header]
HTTP/1.1 200 OK
Date: Fri, 27 Nov 2015 09:19:21 GMT
Server: Cosminexus HTTP Server
Cache-Control: no-cache
WWW-Authenticate: HSSO 5120405fb8a980d12331c748369039cf28af252_WV1GcHsLfg5ffg0I_V0810
X-Frame-Options: SAMEORIGIN
Transfer-Encoding: chunked
Content-Type: application/json

[Response Body]
{
  "name" : "changeManagedType",
  "href" : "http://localhost:22015/Analytics/v1/services/FCSwitches/actions/
changeManagedType/invoke",
  "method" : "POST",
  "type" : "application/json",
  "parameters" : [ {
    "newMonitorStatus": "Manage",
    "ids" : [ ]
  } ]
}
```

---

## Related topics

- [1.3 Resource members](#)
  - [1.6 List of enumerators](#)
- 

## 2.12.4 Changing FC Switch Monitoring Status

This API changes the monitoring status of FC switches.



## Execution permission

Admin, Modify

## API version

v1

## Request format

```
POST http[s]://host:port/Analytics/version/services/FCSwitches/actions/changeManagedType/invoke
```

## Request body

The structure of the request body and the object attributes are as follows:

### Action

```
{
  "name": "...",
  "href": "...",
  "method": "...",
  "type": "...",
  "parameters": ["...", ...]
}
```

### Action (Type: Action)

Attribute	Type	Description
name	string	Name of the execute an operation.
href	string	URL of the execute an operation.
method	string	Name of the method.
type	string	Data format of the object.
parameters	anyType[]	A list of ChangeManagedTypeParamForRes objects necessary to execute an operation. For details about ChangeManagedTypeParamForRes, see the table below.

### ChangeManagedTypeParamForRes

```
{
  "newMonitorStatus": "...",
  "ids": ["...", ...]
}
```

### ChangeManagedTypeParamForRes (Type: ChangeManagedTypeParamForRes)

Attribute	Type	Description
newMonitorStatus	enum	Monitor status of Node (For details about the specifiable values, see the table ManagementLevelType in <i>List of enumerators</i> .) The specifiable values are as follows: <ul style="list-style-type: none"><li>• New</li><li>• Manage</li></ul>

Attribute	Type	Description
newMonitorStatus	enum	<ul style="list-style-type: none"> <li>ignore</li> <li>MonitorOff</li> </ul>
ids	long[]	List of IDs about Resource

## Response body

The structure of the response body and the object attributes are as follows:

### Job

```

{
  "instanceID": "...",
  "created": "...",
  "updated": "...",
  "completed": "...",
  "state": "...",
  "affectedResource": ["...", ...],
  "result": ["...", ...]
}

```

### Job (Type: Job)

Attribute	Type	Description
instanceID	string	Indicates the ID of the Instance.
created	string	Indicates the date the object is generated in ISO 8601 format.
updated	string	Indicates the time the object is updated in ISO 8601 format. The same value as for "created" is set.
completed	string	Indicates the time the processing completed in ISO 8601 format. The same value as for "created" is set.
state	string	One of the following values is set: "failed": The operation did not terminate normally. "success": The operation terminated normally.
affectedResource	string[]	Indicates the URL of the API resource created or updated as a result of the operation. If no resources exist, this parameter is empty.
result	anyType[]	A list of objects. No value is set.

## Status codes

Status code	Reason phrase	Description
200	OK	Success.
400	Bad Request	A format of request body is invalid.
401	Unauthorized	No login privilege.
403	Forbidden	No update privilege.
404	Not Found	The resource was not found.
412	Precondition Failed	The server is not available.
500	Internal Server Error	Server processing error.

## Example code

```
[Request Header]
POST /Analytics/v1/services/FCSwitches/actions/changeManagedType/invoke HTTP/1.1
Authorization: Basic c3lzdGVtOmlhbmFnZXI=
User-Agent: curl/7.33.0
Host: localhost:22015
Accept: application/json
Content-Type: application/json
Accept-Language: ja
Content-Length: 284

[Request Body]
{
  "name" : "changeManagedType",
  "href" : "http://localhost:22015/Analytics/v1/services/FCSwitches/actions/
changeManagedType/invoke",
  "method" : "POST",
  "type" : "application/json",
  "parameters" : [ {
    "newMonitorStatus" : "MonitorOff",
    "ids" : [ 50 ]
  } ]
}

[Response Header]
HTTP/1.1 200 OK
Date: Fri, 27 Nov 2015 09:22:28 GMT
Server: Cosminexus HTTP Server
Cache-Control: no-cache
WWW-Authenticate: HSSO 284045794595c1ed7a98d2184419b8656e48a15_WVlGcHsLfg5ffg0I_V0810
X-Frame-Options: SAMEORIGIN
Transfer-Encoding: chunked
Content-Type: application/json

[Response Body]
{
  "instanceID" : "53b1e702-9750-4c1c-9857-d1a3a8d4cac7",
  "created" : "2015-11-27T18:22:28.528+09:00",
  "updated" : "2015-11-27T18:22:28.647+09:00",
  "completed" : "2015-11-27T18:22:28.647+09:00",
  "state" : "success",
  "affectedResource" : [ ],
  "result" : [ ]
}
```

---

## Related topics

- [1.3 Resource members](#)
  - [1.6 List of enumerators](#)
-

## 2.13 List of APIs related to storage systems

---

This section describes the operations for storage systems.

### 2.13.1 Obtaining Storage System List

The API acquires a list of storage systems.

#### Execution permission

Admin, Modify

#### API version

v1

#### Request format

```
GET http[s]://host:port/Analytics/version/objects/StorageSystems
```

#### Request body

Not applicable.

#### Response body

The structure of the response body and the object attributes are as follows:

##### Collections

```
{
  "data":["...", ...],
  "pagination":{
    "page":"...",
    "pageSize":"...",
    "numPages":"...",
    "totalCount":"..."
  },
  "count":"..."
}
```

##### Collections (Type: Collections)

Attribute	Type	Description
data	anyType[]	A list of StorageSystem objects. For details about StorageSystem, see the table below.
pagination	Pagination	Page information. This parameter is displayed only when the relevant resource exists.
count	int	Number of data items that meet the conditions.

##### pagination (Type: Pagination)

Attribute	Type	Description
page	integer	page
pageSize	integer	Size of the pages
numPages	integer	Number of the pages
totalCount	integer	Number of the objects

## StorageSystem

```
{
  "instanceID": "...",
  "name": "...",
  "ipAddress": "...",
  "status": "...",
  "monitorStatus": "...",
  "description": "...",
  "usedCredentialID": "...",
  "usedCredentials": "...",
  "thresholdProfileID": "...",
  "thresholdProfileName": "...",
  "accessPointType": "...",
  "accessPointIpAddress": "...",
  "accessPointUser": "..."
}
```

### StorageSystem (Type: StorageSystem)

Attribute	Type	Description
instanceID	long	ID of the storage system
name	string	Name of the storage system
ipAddress	string	IP address of the storage system
status	enum	Status of the storage system (For details about the specifiable values, see the table NodeStatusType in <i>List of enumerators</i> .) The specifiable values are as follows: <ul style="list-style-type: none"> <li>• Normal</li> <li>• Warning</li> <li>• Error</li> <li>• Unreachable</li> <li>• Unknown</li> <li>• NotMonitored</li> </ul>
monitorStatus	enum	Monitoring status of the storage system. (For details about the specifiable values, see the table ManagementLevelType in <i>List of enumerators</i> .) The specifiable values are as follows: <ul style="list-style-type: none"> <li>• New</li> <li>• Manage</li> <li>• ignore</li> <li>• MonitorOff</li> </ul>
description	string	Detailed information about the storage system
usedCredentialID	long	Name of authentication information used for detection

Attribute	Type	Description
usedCredentials	string	ID for authentication information used for detection
thresholdProfileID	long	ID of the threshold profile assigned to the storage system
thresholdProfileName	string	Name of the threshold profile assigned to the storage system
accessPointType	enum	Type of authentication information used for detection. (For details about the specifiable values, see the table ProtocolType in <i>List of enumerators</i> .) The specifiable values are as follows: <ul style="list-style-type: none"> <li>WBEM</li> </ul>
accessPointIpAddress	string	IP address used for connections to monitoring targets
accessPointUser	string	User ID used for connections to monitoring targets

## Status codes

Status code	Reason phrase	Description
200	OK	Success.
401	Unauthorized	No login privilege.
403	Forbidden	No reference privilege.
412	Precondition Failed	The server is not available.
500	Internal Server Error	Server processing error.

## Example code

```
[Request Header]
GET /Analytics/v1/objects/StorageSystems HTTP/1.1
Authorization: Basic c3lzZGVtOmlhbmFnZXI=
User-Agent: curl/7.33.0
Host: localhost:22015
Accept: application/json
Accept-Language: ja

[Response Header]
HTTP/1.1 200 OK
Date: Fri, 27 Nov 2015 07:11:36 GMT
Server: Cosminexus HTTP Server
Cache-Control: no-cache
WWW-Authenticate: HSSO
87d94e387ca516a82287ff4254ddac7f44e18bd4_WV1GcHsLfg5ffg0I_V0810
X-Frame-Options: SAMEORIGIN
Transfer-Encoding: chunked
Content-Type: application/json

[Response Body]
{
  "data" : [ {
    "instanceID" : 6,
    "name" : "storage",
    "ipAddress" : "10.197.87.17, 192.168.20.54",
    "status" : "Unknown",
    "monitorStatus" : "Manage",
```

```
    "description" : "Storage Systems",
    "usedCredentialID" : 10,
    "usedCredentials" : "172.17.3.107",
    "thresholdProfileID" : 14,
    "thresholdProfileName" : "Default Profile for Storage (SMI-S WBEM)",
    "accessPointType" : "WBEM",
    "accessPointIpAddress" : "172.17.3.107",
    "accessPointUser" : "Administrator"
  } ],
  "count" : 1
}
```

---

## Related topics

- [1.3 Resource members](#)
  - [1.6 List of enumerators](#)
- 

## 2.13.2 Obtaining Storage System Operation List

This API acquires a list of executable operations for the specified storage system.

### Execution permission

Admin, Modify

### API version

v1

### Request format

```
GET http[s]://host:port/Analytics/version/services/StorageSystems/actions
```

### Request body

Not applicable.

### Response body

The structure of the response body and the object attributes are as follows:

#### Collections

```
{
  "data":["...", ...],
  "pagination":{
    "page":"...",
    "pageSize":"...",
    "numPages":"...",
    "totalCount":"..."
  },
  "count":"..."
}
```

#### Collections (Type: Collections)

Attribute	Type	Description
data	anyType[]	A list of Action objects. For details about Action, see the table below.
pagination	Pagination	Page information. This parameter is displayed only when the relevant resource exists.
count	int	Number of data items that meet the conditions.

### pagination (Type: Pagination)

Attribute	Type	Description
page	integer	page
pageSize	integer	Size of the pages
numPages	integer	Number of the pages
totalCount	integer	Number of the objects

### Action

```
{
  "name": "...",
  "href": "...",
  "method": "...",
  "type": "...",
  "parameters": ["...", ...]
}
```

### Action (Type: Action)

Attribute	Type	Description
name	string	Name of the execute an operation.
href	string	URL of the execute an operation.
method	string	Name of the method.
type	string	Data format of the object.
parameters	anyType[]	A list of objects necessary to execute an operation. No value is set.

### Status codes

Status code	Reason phrase	Description
200	OK	Success.
401	Unauthorized	No login privilege.
403	Forbidden	No reference privilege.
412	Precondition Failed	The server is not available.
500	Internal Server Error	Server processing error.

### Example code

```
[Request Header]
```



```
GET /Analytics/v1/services/StorageSystems/actions HTTP/1.1
Authorization: Basic c3lzdGVtOmlhbmFnZXI=
User-Agent: curl/7.33.0
Host: localhost:22015
Accept: application/json
Accept-Language: ja
```

```
[Response Header]
HTTP/1.1 200 OK
Date: Fri, 27 Nov 2015 09:17:42 GMT
Server: Cosminexus HTTP Server
Cache-Control: no-cache
WWW-Authenticate: HSSO 1e89694342cfad52de32bd8e1a2921a48b8d8_WVlGcHsLfg5ffg0I_V0810
X-Frame-Options: SAMEORIGIN
Transfer-Encoding: chunked
Content-Type: application/json
```

```
[Response Body]
{
  "data" : [ {
    "name" : "changeManagedType",
    "href" : "http://localhost:22015/Analytics/v1/services/StorageSystems/actions/
changeManagedType/invoke",
    "method" : "POST",
    "type" : "application/json",
    "parameters" : [ ]
  } ],
  "count" : 1
}
```

---

## Related topics

- [1.3 Resource members](#)
  - [1.6 List of enumerators](#)
- 

## 2.13.3 Obtaining Storage System Monitoring Status Change Information

This API acquires information necessary for changing the monitoring status of the storage system.

### Execution permission

Admin, Modify

### API version

v1

### Request format

```
GET http[s]://host:port/Analytics/version/services/StorageSystems/actions/
changeManagedType
```

## Request body

Not applicable.

## Response body

The structure of the response body and the object attributes are as follows:

### Action

```
{
  "name": "...",
  "href": "...",
  "method": "...",
  "type": "...",
  "parameters": ["...", ...]
}
```

### Action (Type: Action)

Attribute	Type	Description
name	string	Name of the execute an operation.
href	string	URL of the execute an operation.
method	string	Name of the method.
type	string	Data format of the object.
parameters	anyType[]	A list of ChangeManagedTypeParamForRes objects necessary to execute an operation. For details about ChangeManagedTypeParamForRes, see the table below.

### ChangeManagedTypeParamForRes

```
{
  "newMonitorStatus": "...",
  "ids": ["...", ...]
}
```

### ChangeManagedTypeParamForRes (Type: ChangeManagedTypeParamForRes)

Attribute	Type	Description
newMonitorStatus	enum	Monitor status of Node (For details about the specifiable values, see the table ManagementLevelType in <i>List of enumerators</i> .) The specifiable values are as follows: <ul style="list-style-type: none"><li>• New</li><li>• Manage</li><li>• ignore</li><li>• MonitorOff</li></ul>
ids	long[]	List of IDs about Resource

## Status codes

Status code	Reason phrase	Description
200	OK	Success.

Status code	Reason phrase	Description
401	Unauthorized	No login privilege.
403	Forbidden	No reference privilege.
412	Precondition Failed	The server is not available.
500	Internal Server Error	Server processing error.

## Example code

```
[Request Header]
GET /Analytics/v1/services/StorageSystems/actions/changeManagedType HTTP/1.1
Authorization: Basic c3lzdGVtOmlhbmFnZXI=
User-Agent: curl/7.33.0
Host: localhost:22015
Accept: application/json
Accept-Language: ja

[Response Header]
HTTP/1.1 200 OK
Date: Fri, 27 Nov 2015 09:19:21 GMT
Server: Cosminexus HTTP Server
Cache-Control: no-cache
WWW-Authenticate: HSSO 5120405fb8a980d12331c748369039cf28af252_WVlGcHsLfg5ffg0I_V0810
X-Frame-Options: SAMEORIGIN
Transfer-Encoding: chunked
Content-Type: application/json

[Response Body]
{
  "name" : "changeManagedType",
  "href" : "http://localhost:22015/Analytics/v1/services/StorageSystems/actions/
changeManagedType/invoke",
  "method" : "POST",
  "type" : "application/json",
  "parameters" : [ {
    "newMonitorStatus": "Manage",
    "ids" : [ ]
  } ]
}
```

---

## Related topics

- [1.3 Resource members](#)
  - [1.6 List of enumerators](#)
- 

## 2.13.4 Changing Storage System Monitoring Status

This API changes the monitoring status of the storage system.

### Execution permission

Admin, Modify

## API version

v1

## Request format

```
POST http[s]://host:port/Analytics/version/services/StorageSystems/actions/changeManagedType/invoke
```

## Request body

The structure of the request body and the object attributes are as follows:

### Action

```
{
  "name": "...",
  "href": "...",
  "method": "...",
  "type": "...",
  "parameters": ["...", ...]
}
```

### Action (Type: Action)

Attribute	Type	Description
name	string	Name of the execute an operation.
href	string	URL of the execute an operation.
method	string	Name of the method.
type	string	Data format of the object.
parameters	anyType[]	A list of ChangeManagedTypeParamForRes objects necessary to execute an operation. For details about ChangeManagedTypeParamForRes, see the table below.

### ChangeManagedTypeParamForRes

```
{
  "newMonitorStatus": "...",
  "ids": ["...", ...]
}
```

### ChangeManagedTypeParamForRes (Type: ChangeManagedTypeParamForRes)

Attribute	Type	Description
newMonitorStatus	enum	Monitor status of Node (For details about the specifiable values, see the table ManagementLevelType in <i>List of enumerators</i> .) The specifiable values are as follows: <ul style="list-style-type: none"><li>• New</li><li>• Manage</li><li>• ignore</li><li>• MonitorOff</li></ul>
ids	long[]	List of IDs about Resource

## Response body

The structure of the response body and the object attributes are as follows:

### Job

```
{
  "instanceID": "...",
  "created": "...",
  "updated": "...",
  "completed": "...",
  "state": "...",
  "affectedResource": ["...", ...],
  "result": ["...", ...]
}
```

### Job (Type: Job)

Attribute	Type	Description
instanceID	string	Indicates the ID of the Instance.
created	string	Indicates the date the object is generated in ISO 8601 format.
updated	string	Indicates the time the object is updated in ISO 8601 format. The same value as for "created" is set.
completed	string	Indicates the time the processing completed in ISO 8601 format. The same value as for "created" is set.
state	string	One of the following values is set: "failed": The operation did not terminate normally. "success": The operation terminated normally.
affectedResource	string[]	Indicates the URL of the API resource created or updated as a result of the operation. If no resources exist, this parameter is empty.
result	anyType[]	A list of objects. No value is set.

## Status codes

Status code	Reason phrase	Description
200	OK	Success.
400	Bad Request	A format of request body is invalid.
401	Unauthorized	No login privilege.
403	Forbidden	No update privilege.
404	Not Found	The resource was not found.
412	Precondition Failed	The server is not available.
500	Internal Server Error	Server processing error.

## Example code

```
[Request Header]
POST /Analytics/v1/services/StorageSystems/actions/changeManagedType/invoke HTTP/1.1
Authorization: Basic c3lzdGVtOm1hbmFnZXI=
User-Agent: curl/7.33.0
```

```
Host: localhost:22015
Accept: application/json
Content-Type: application/json
Accept-Language: ja
Content-Length: 288
```

[Request Body]

```
{
  "name" : "changeManagedType",
  "href" : "http://localhost:22015/Analytics/v1/services/StorageSystems/actions/
changeManagedType/invoke",
  "method" : "POST",
  "type" : "application/json",
  "parameters" : [ {
    "newMonitorStatus" : "MonitorOff",
    "ids" : [ 50 ]
  } ]
}
```

[Response Header]

```
HTTP/1.1 200 OK
Date: Fri, 27 Nov 2015 09:22:28 GMT
Server: Cosminexus HTTP Server
Cache-Control: no-cache
WWW-Authenticate: HSSO 284045794595c1ed7a98d2184419b8656e48a15_WVlGcHsLfg5ffg0I_V0810
X-Frame-Options: SAMEORIGIN
Transfer-Encoding: chunked
Content-Type: application/json
```

[Response Body]

```
{
  "instanceID" : "53b1e702-9750-4c1c-9857-d1a3a8d4cac7",
  "created" : "2015-11-27T18:22:28.528+09:00",
  "updated" : "2015-11-27T18:22:28.647+09:00",
  "completed" : "2015-11-27T18:22:28.647+09:00",
  "state" : "success",
  "affectedResource" : [ ],
  "result" : [ ]
}
```

---

## Related topics

- [1.3 Resource members](#)
  - [1.6 List of enumerators](#)
-

## 2.14 List of APIs related to Volumes

---

This section describes the operations for volumes.

### 2.14.1 Obtaining Volume List

The API acquires a list of volumes.

#### Execution permission

Admin, Modify

#### API version

v1

#### Request format

```
GET http[s]://host:port/Analytics/version/objects/Volumes
```

#### Request body

Not applicable.

#### Response body

The structure of the response body and the object attributes are as follows:

##### Collections

```
{
  "data":["...", ...],
  "pagination":{
    "page":"...",
    "pageSize":"...",
    "numPages":"...",
    "totalCount":"..."
  },
  "count":"..."
}
```

##### Collections (Type: Collections)

Attribute	Type	Description
data	anyType[]	A list of Volume objects. For details about Volume, see the table below.
pagination	Pagination	Page information. This parameter is displayed only when the relevant resource exists.
count	int	Number of data items that meet the conditions.

##### pagination (Type: Pagination)

Attribute	Type	Description
page	integer	page
pageSize	integer	Size of the pages
numPages	integer	Number of the pages
totalCount	integer	Number of the objects

## Volume

```

{
  "instanceID": "...",
  "status": "...",
  "ldev": "...",
  "storageSubsystemID": "...",
  "storageSubsystem": "...",
  "storageSubsystemMonitorStatus": "...",
  "parityGroup": "...",
  "storagePool": "...",
  "thresholdProfileID": "...",
  "thresholdProfileName": "...",
  "groupIDs": ["...", ...],
  "groupNames": ["...", ...],
  "gradeNames": ["...", ...],
  "gradeOrders": ["...", ...]
}

```

## Volume (Type: Volume)

Attribute	Type	Description
instanceID	long	ID of the volume
status	enum	Status of the volume (For details about the specifiable values, see the table NodeStatusType in <i>List of enumerators</i> .) The specifiable values are as follows: <ul style="list-style-type: none"> <li>• Normal</li> <li>• Warning</li> <li>• Error</li> <li>• Unreachable</li> <li>• Unknown</li> </ul>
ldev	string	Name of the LDEV
storageSubsystemID	long	ID of the storage system that the volume belongs to
storageSubsystem	string	Name of the storage system that the volume belongs to
storageSubsystemMonitorStatus	enum	Monitoring status of the storage system that the volume belongs to (For details about the specifiable values, see the table ManagementLevelType in <i>List of enumerators</i> .) The specifiable values are as follows: <ul style="list-style-type: none"> <li>• New</li> <li>• Manage</li> <li>• ignore</li> <li>• MonitorOff</li> </ul>
parityGroup	string	Name of the parity group that the volume belongs to



Attribute	Type	Description
storagePool	string	Name of the storage system pool that the volume belongs to
thresholdProfileID	long	ID of the threshold profile assigned to the volume
thresholdProfileName	string	Name of the threshold profile assigned to the volume
groupIDs	long[]	ID of the consumer assigned to the volume
groupNames	string[]	Name of the consumer assigned to the volume
gradeNames	string[]	Name of the grade of the consumer assigned to the volume
gradeOrders	integer[]	Priority of the grade of the consumer assigned to the volume

## Status codes

Status code	Reason phrase	Description
200	OK	Success.
401	Unauthorized	No login privilege.
403	Forbidden	No reference privilege.
412	Precondition Failed	The server is not available.
500	Internal Server Error	Server processing error.

## Example code

```
[Request Header]
GET /Analytics/v1/objects/Volumes HTTP/1.1
Authorization: Basic c3lzdGVtOm1hbmFnZXI=
User-Agent: curl/7.33.0
Host: localhost:22015
Accept: application/json
Accept-Language: ja

[Response Header]
HTTP/1.1 200 OK
Date: Fri, 27 Nov 2015 07:11:36 GMT
Server: Cosminexus HTTP Server
Cache-Control: no-cache
WWW-Authenticate: HSSO df3a7ac35f3b99a9b2afafd22d433167067da9_WVlGcHsLfg5ffg0I_V0810
X-Frame-Options: SAMEORIGIN
Transfer-Encoding: chunked
Content-Type: application/json

[Response Body]
{
  "data" : [ {
    "instanceID" : 540,
    "status" : "Unknown",
    "ldev" : "vol0 (LU NUM=699d3b60-18f9-11de-a169-00a09810f3f4)",
    "storageSubsystemID" : 6,
    "storageSubsystem" : "FAS2050A-2",
    "storageSubsystemMonitorStatus" : "Manage",
    "thresholdProfileID" : 21,
    "thresholdProfileName" : "Default Profile for Volume",
```

```
"groupIDs" : [ 0 ],
"groupNames" : [ "#Unassigned Resources" ],
"gradeNames" : [ "" ],
"gradeOrders" : [ -1 ]
}, {
"instanceID" : 534,
"status" : "Unknown",
"ldev" : "vol1 (LU NUM=7cb5b900-1c0e-11de-9f89-00a09810f3f4)",
"storageSubsystemID" : 6,
"storageSubsystem" : "FAS2050A-2",
"storageSubsystemMonitorStatus" : "Manage",
"thresholdProfileID" : 21,
"thresholdProfileName" : "Default Profile for Volume",
"groupIDs" : [ 0 ],
"groupNames" : [ "#Unassigned Resources" ],
"gradeNames" : [ "" ],
"gradeOrders" : [ -1 ]
} ],
"count" : 2
}
```

---

## Related topics

- [1.3 Resource members](#)
  - [1.6 List of enumerators](#)
-

## 2.15 List of API functions related to the event information

---

This section explains how to obtain event information.

### 2.15.1 Collecting the information required to collect, into a CSV file, a list of events

This request collects the information required to collect, into a CSV file, a list of events.

#### Execution permission

Admin, Modify

#### API version

v1

#### Request format

```
GET http[s]://host:port/Analytics/version/services/Events/actions/getEventDataCSV
```

#### Request body

Not applicable.

#### Response body

The structure of the response body and the object attributes are as follows:

##### Action

```
{
  "name": "...",
  "href": "...",
  "method": "...",
  "type": "...",
  "parameters": ["...", ...]
}
```

#### Action (Type: Action)

Attribute	Type	Description
name	string	Name of the execute an operation.
href	string	URL of the execute an operation.
method	string	Name of the method.
type	string	Data format of the object.
parameters	anyType[]	A list of ListGetParam objects necessary to execute an operation. For details about ListGetParam, see the table below.

## ListGetParam

```
{
  "hqlFilter": "...",
  "hqlSort": "...",
  "page": "...",
  "pageSize": "...
}
```

### ListGetParam (Type: ListGetParam)

Attribute	Type	Description
hqlFilter	string	filter
hqlSort	string	Sort information
page	integer	page number
pageSize	integer	Size of The page

## Status codes

Status code	Reason phrase	Description
200	OK	Success.
401	Unauthorized	No login privilege.
412	Precondition Failed	The server is not available.
500	Internal Server Error	Server processing error.

## Example code

```
[Request Header]
GET /Analytics/v1/services/Events/actions/getEventDataCSV HTTP/1.1
Authorization: Basic c3lzdGVtOmlhbmFnZXI=
User-Agent: curl/7.33.0
Host: localhost:22015
Accept: application/json
Accept-Language: ja

[Response Header]
HTTP/1.1 200 OK
Date: Fri, 27 Nov 2015 09:17:42 GMT
Server: Cosminexus HTTP Server
Cache-Control: no-cache
WWW-Authenticate: HSSO 1e89694342cfad52de32bd8e1a2921a48b8d8_WV1GcHsLfg5ffg0I_V0810
X-Frame-Options: SAMEORIGIN
Transfer-Encoding: chunked
Content-Type: application/json

[Response Body]
{
  "data": [{
    "name": "getNodeGraphDataCSV",
    "href": "http://localhost:22015/Analytics/v1/services/Events/actions/getEventDataCSV/invoke",
```

```
"method": "POST",
"type": "application/json",
"parameters": [ {
  "hqlFilter" : "",
  "hqlSort" : "",
  "page" : 1,
  "pageSize" : 0
}],
"count": 1
}]
}
```

---

## Related topics

- [1.3 Resource members](#)
  - [1.6 List of enumerators](#)
- 

## 2.15.2 Collecting, into a CSV file, a list of events

This request collects, into a CSV file, a list of events.

### Execution permission

Admin, Modify

### API version

v1

### Request format

```
POST http[s]://host:port/Analytics/version/services/Events/actions/getEventDataCSV/
invoke
```

### Request body

The structure of the request body and the object attributes are as follows:

#### Action

```
{
  "name":"...",
  "href":"...",
  "method":"...",
  "type":"...",
  "parameters":["...", ...]
}
```

#### Action (Type: Action)

Attribute	Type	Description
name	string	Name of the execute an operation.
href	string	URL of the execute an operation.

Attribute	Type	Description
method	string	Name of the method.
type	string	Data format of the object.
parameters	anyType[]	A list of ListGetParam objects necessary to execute an operation. For details about ListGetParam, see the table below.

### ListGetParam

```
{
  "hqlFilter": "...",
  "hqlSort": "...",
  "page": "...",
  "pageSize": "..."
}
```

### ListGetParam (Type: ListGetParam)

Attribute	Type	Description
hqlFilter	string	filter
hqlSort	string	Sort information
page	integer	page number
pageSize	integer	Size of The page

### Response body

The structure of the response body and the object attributes are as follows:

#### Job

```
{
  "instanceID": "...",
  "created": "...",
  "updated": "...",
  "completed": "...",
  "state": "...",
  "affectedResource": ["...", ...],
  "result": ["...", ...]
}
```

### Job (Type: Job)

Attribute	Type	Description
instanceID	string	Indicates the ID of the Instance.
created	string	Indicates the date the object is generated in ISO 8601 format.
updated	string	Indicates the time the object is updated in ISO 8601 format. The same value as for "created" is set.
completed	string	Indicates the time the processing completed in ISO 8601 format. The same value as for "created" is set.
state	string	One of the following values is set: "failed": The operation did not terminate normally.

Attribute	Type	Description
state	string	"success": The operation terminated normally.
affectedResource	string[]	Indicates the URL of the API resource created or updated as a result of the operation. If no resources exist, this parameter is empty.
result	anyType[]	A list of CsvData objects. For details about CsvData, see the table below.

## CsvData

```
{
  "data": "... "
}
```

### CsvData (Type: CsvData)

Attribute	Type	Description
data	string	The CSV data is stored.

## Status codes

Status code	Reason phrase	Description
200	OK	Success.
400	Bad Request	A format of request body is invalid.
401	Unauthorized	No login privilege.
403	Forbidden	No execute privilege.
412	Precondition Failed	The server is not available.
500	Internal Server Error	Server processing error.

## Example code

```
[Request Header]
POST /Analytics/v1/services/Events/actions/getEventDataCSV/invoke HTTP/1.1
Authorization: Basic c3lzdGVtOmlhbmFnZXI=
User-Agent: curl/7.33.0
Host: localhost:22015
Accept: application/json
Content-Type: application/json
Accept-Language: ja
Content-Length: 296

[Request Body]
{
  "name" : "getNodesGraphDataCSV",
  "href" : "http://localhost:22015/Analytics/v1/services/Events/actions/
getEventDataCSV/invoke",
  "method" : "POST",
  "type" : "application/json",
  "parameters" : [ {
    "hqlFilter" : "",
    "hqlSort" : "",
    "page" : 1,
```

```
    "pageSize" : 0
  } ]
}
```

[Response Header]

HTTP/1.1 200 OK

Date: Fri, 27 Nov 2015 09:22:28 GMT

Server: Cosminexus HTTP Server

Cache-Control: no-cache

WWW-Authenticate: HSSO 284045794595c1ed7a98d2184419b8656e48a15\_WV1GcHsLfg5ffg0I\_V0810

X-Frame-Options: SAMEORIGIN

Transfer-Encoding: chunked

Content-Type: application/json

[Response Body]

```
{
  "instanceID" : "0052a2e2-713c-4cfb-892c-e9aaefb32b50",
  "created" : "2016-11-22T11:53:42.188+09:00",
  "updated" : "2016-11-22T11:53:42.354+09:00",
  "completed" : "2016-11-22T11:53:42.354+09:00",
  "state" : "success",
  "affectedResource" : [ ],
  "result" : [ {
    "data": ""#JP1/Operations Analytics","111000","UTF-8 (BOM)"\n"#Event
Information"\n..."
  } ]
}
```

---

## Related topics

- [1.3 Resource members](#)
  - [1.6 List of enumerators](#)
-



## 2.16 List of API functions related to the [E2E View] window

This section explains how to obtain information about specified resources or a list of resources that are related.

### 2.16.1 Collecting the information required to collect, into a CSV file, information about specified resources or a list of related resources

This request collects the information required to collect, into a CSV file, information about specified resources or a list of related resources.

#### Execution permission

Admin, Modify

#### API version

v1

#### Request format

```
GET http[s]://host:port/Analytics/version/services/E2EView/actions/getNodesDataCSV
```

#### Request body

Not applicable.

#### Response body

The structure of the response body and the object attributes are as follows:

##### Action

```
{
  "name": "...",
  "href": "...",
  "method": "...",
  "type": "...",
  "parameters": ["...", ...]
}
```

#### Action (Type: Action)

Attribute	Type	Description
name	string	Name of the execute an operation.
href	string	URL of the execute an operation.
method	string	Name of the method.
type	string	Data format of the object.
parameters	anyType[]	A list of GetNodesDataCSVParam objects necessary to execute an operation. For details about GetNodesDataCSVParam, see the table below.

## GetNodesDataCSVParam

```
{
  "basePointNodes": [ {
    "nodeID": "...",
    "nodeType": "..."
  },
  :
  ],
  "getType": "..."
}
```

### GetNodesDataCSVParam (Type: GetNodesDataCSVParam)

Attribute	Type	Description
basePointNodes	E2ENodeKey[ ]	List of nodes to be collected, specified as a base point
getType	enum	Type of information to be collected (For details about the specifiable values, see the table NodeInformationType in <i>List of enumerators</i> .)

### basePointNodes (Type: E2ENodeKey)

Attribute	Type	Description
nodeID	long	ID for identifying node
nodeType	enum	Type of the node (For details about the specifiable values, see the table E2ENodeType in <i>List of enumerators</i> .)

## Status codes

Status code	Reason phrase	Description
200	OK	Success.
401	Unauthorized	No login privilege.
412	Precondition Failed	The server is not available.
500	Internal Server Error	Server processing error.

## Example code

```
[Request Header]
GET http://127.0.0.1:22015/Analytics/v1/services/E2EView/actions/getNodesDataCSV
Authorization: Basic c3lzdGVtOm1hbmFnZXI=
Host: localhost:22015
Accept: application/json
Content-Type: application/json

[Response Header]
HTTP/1.1 200 OK
Date: Tue, 22 Nov 2016 02:43:37 GMT
Server: Cosminexus HTTP Server
Cache-Control: no-cache
WWW-Authenticate: HSSO
```

```
33659a74fcee4358dc272b34eca6ded1bf1131ec_YXZvNFIMehp3UB4jbmVyPGUgT3Q=_V0810
X-Frame-Options: SAMEORIGIN
X-XSS-Protection: 1; mode=block
X-Content-Type-Options: nosniff
Transfer-Encoding: chunked
Content-Type: application/json
```

```
[Response Body]
{
  "name": "getNodeDataCSV",
  "href": "http://10.197.196.239:22015/Analytics/v1/services/E2EView/actions/
getNodeDataCSV/invoke",
  "method": "POST",
  "type": "application/json",
  "parameters": [
    {
      "basePointNodes": [{
        "nodeID": 1,
        "nodeType": "VIRTUAL_MACHINE"
      }],
      "selectedNodes": [{
        "nodeID": 1,
        "nodeType": "VIRTUAL_MACHINE"
      }],
      "highlightNodes": [{
        "nodeID": 1,
        "nodeType": "VIRTUAL_MACHINE"
      }],
      "getType": "AllInformation"
    }
  ]
}
```

---

## Related topics

- [1.3 Resource members](#)
  - [1.6 List of enumerators](#)
- 

## 2.16.2 Collecting, into a CSV file, information about specified resources or a list of related resources

This request collects, into a CSV file, information about specified resources or a list of related resources.

### Execution permission

Admin, Modify

### API version

v1

### Request format

```
POST http[s]://host:port/Analytics/version/services/E2EView/actions/getNodeDataCSV/
invoke
```

## Request body

The structure of the request body and the object attributes are as follows:

### Action

```
{
  "name": "...",
  "href": "...",
  "method": "...",
  "type": "...",
  "parameters": ["...", ...]
}
```

### Action (Type: Action)

Attribute	Type	Description
name	string	Name of the execute an operation.
href	string	URL of the execute an operation.
method	string	Name of the method.
type	string	Data format of the object.
parameters	anyType[]	A list of GetNodesDataCSVParam objects necessary to execute an operation. For details about GetNodesDataCSVParam, see the table below.

### GetNodesDataCSVParam

```
{
  "basePointNodes": [{
    "nodeID": "...",
    "nodeType": "..."
  }],
  :
  ],
  "getType": "..."
}
```

### GetNodesDataCSVParam (Type: GetNodesDataCSVParam)

Attribute	Type	Description
basePointNodes	E2ENodeKey[]	List of nodes to be collected, specified as a base point
getType	enum	Type of information to be collected (For details about the specifiable values, see the table NodeInformationType in <i>List of enumerators</i> .)

### basePointNodes (Type: E2ENodeKey)

Attribute	Type	Description
nodeID	long	ID for identifying node
nodeType	enum	Type of the node (For details about the specifiable values, see the table E2ENodeType in <i>List of enumerators</i> .)

## Response body

The structure of the response body and the object attributes are as follows:

### Job

```
{
  "instanceID": "...",
  "created": "...",
  "updated": "...",
  "completed": "...",
  "state": "...",
  "affectedResource": ["...", ...],
  "result": ["...", ...]
}
```

### Job (Type: Job)

Attribute	Type	Description
instanceID	string	Indicates the ID of the Instance.
created	string	Indicates the date the object is generated in ISO 8601 format.
updated	string	Indicates the time the object is updated in ISO 8601 format. The same value as for "created" is set.
completed	string	Indicates the time the processing completed in ISO 8601 format. The same value as for "created" is set.
state	string	One of the following values is set: "failed": The operation did not terminate normally. "success": The operation terminated normally.
affectedResource	string[]	Indicates the URL of the API resource created or updated as a result of the operation. If no resources exist, this parameter is empty.
result	anyType[]	A list of CsvData objects. For details about CsvData, see the table below.

### CsvData

```
{
  "data": "...
}
```

### CsvData (Type: CsvData)

Attribute	Type	Description
data	string	The CSV data is stored.

## Status codes

Status code	Reason phrase	Description
200	OK	Success.
400	Bad Request	A format of request body is invalid.
401	Unauthorized	No login privilege.
412	Precondition Failed	- The server is not available.

Status code	Reason phrase	Description
412	Precondition Failed	- The threshold of a query parameter was exceeded.
500	Internal Server Error	Server processing error.

## Example code

```
[Request Header]
POST http://127.0.0.1:22015/Analytics/v1/services/E2EView/actions/getNodesDataCSV/
invoke
Authorization: Basic c3lzdGVtOmlhbmFnZXI=
Host: localhost:22015
Accept: application/json
Content-Type: application/json

[Request Body]
{
  "basePointNodes": [{
    "nodeID": 1,
    "nodeType": "VIRTUAL_MACHINE"
  }],
  "selectedNodes": [{
    "nodeID": 1,
    "nodeType": "VIRTUAL_MACHINE"
  }],
  "highlightNodes": [{
    "nodeID": 1,
    "nodeType": "VIRTUAL_MACHINE"
  }],
  "getType": "AllInformation"
}

[Response Header]
HTTP/1.1 200 OK
Date: Tue, 22 Nov 2016 02:43:37 GMT
Server: Cosminexus HTTP Server
Cache-Control: no-cache
WWW-Authenticate: HSSO
33659a74fcee4358dc272b34eca6ded1bf1131ec_YXZvNFIMehp3UB4jbmVyPGUgT3Q=_V0810
X-Frame-Options: SAMEORIGIN
X-XSS-Protection: 1; mode=block
X-Content-Type-Options: nosniff
Transfer-Encoding: chunked
Content-Type: application/json

[Response Body]
{
  "instanceID" : "0052a2e2-713c-4cfb-892c-e9aaefb32b50",
  "created" : "2016-11-22T11:53:42.188+09:00",
  "updated" : "2016-11-22T11:53:42.354+09:00",
  "completed" : "2016-11-22T11:53:42.354+09:00",
  "state" : "success",
  "affectedResource" : [ ],
  "result" : [ {
    "data": ""#JP1/Operations Analytics","111000","UTF-8 (BOM) "\n"#Resource
Information\n..."
  } ]
}
```

---

## Related topics

- [1.3 Resource members](#)
  - [1.6 List of enumerators](#)
-

## 2.17 List of API functions related to performance information

---

This section explains how to obtain performance information.

### 2.17.1 Collecting the information required to collect, into a CSV file, the performance values in a time series of specified performance information

This request collects the information required to collect, into a CSV file, the performance values in a time series of specified performance information.

#### Execution permission

Admin, Modify

#### API version

v1

#### Request format

```
GET http[s]://host:port/Analytics/version/services/PerfComponents/actions/
getGraphDataCSV
```

#### Request body

Not applicable.

#### Response body

The structure of the response body and the object attributes are as follows:

##### Action

```
{
  "name": "...",
  "href": "...",
  "method": "...",
  "type": "...",
  "parameters": ["...", ...]
}
```

##### Action (Type: Action)

Attribute	Type	Description
name	string	Name of the execute an operation.
href	string	URL of the execute an operation.
method	string	Name of the method.
type	string	Data format of the object.



Attribute	Type	Description
parameters	anyType[]	A list of GetGraphDataCSVParam objects necessary to execute an operation. For details about GetGraphDataCSVParam, see the table below.

## GetGraphDataCSVParam

```
{
  "perfComponentIDs":["...", ...],
  "baseTime":"...",
  "pointTimeRange":"..."
}
```

## GetGraphDataCSVParam (Type: GetGraphDataCSVParam)

Attribute	Type	Description
perfComponentIDs	long[]	ID of perfComponents
baseTime	dateTime	Start time for obtaining performance information. The performance information for a certain period before the specified start time is obtained. The period is specified by pointTimeRange. If this item is omitted, the time that the API was executed is used as the start time.
pointTimeRange	long	Period during which performance information is obtained (ms.)

## Status codes

Status code	Reason phrase	Description
200	OK	Success.
401	Unauthorized	No login privilege.
412	Precondition Failed	The server is not available.
500	Internal Server Error	Server processing error.

## Example code

```
[Request Header]
GET /Analytics/v1/services/PerfComponents/actions HTTP/1.1
Authorization: Basic c3lzdGVtOmlhbmFnZXI=
User-Agent: curl/7.33.0
Host: localhost:22015
Accept: application/json
Accept-Language: ja
```

```
[Response Header]
HTTP/1.1 200 OK
Date: Fri, 27 Nov 2015 09:17:42 GMT
Server: Cosminexus HTTP Server
Cache-Control: no-cache
WWW-Authenticate: HSSO 1e89694342cfad52de32bd8e1a2921a48b8d8_WV1GcHsLfg5ffg0I_V0810
X-Frame-Options: SAMEORIGIN
Transfer-Encoding: chunked
Content-Type: application/json
```

```
[Response Body]
{
  "data" : [ {
    "name" : "getGraphDataCSV",
    "href" : "http://localhost:22015/Analytics/v1/services/PerfComponents/actions/
getGraphDataCSV/invoke",
    "method" : "POST",
    "type" : "application/json",
    "parameters" : [ {
      "perfComponentIDs" : [ ],
      "baseTime" : "2016-11-25T11:11:04.489+09:00",
      "pointTimeRange" : 86400000
    } ]
  } ],
  "count" : 1
}
```

---

## Related topics

- [1.3 Resource members](#)
  - [1.6 List of enumerators](#)
- 

## 2.17.2 Collecting, into a CSV file, the performance values in a time series of specified performance information

This request collects, into a CSV file, the performance values in a time series of specified performance information.

### Execution permission

Admin, Modify

### API version

v1

### Request format

```
POST http[s]://host:port/Analytics/version/services/PerfComponents/actions/
getGraphDataCSV/invoke
```

### Request body

The structure of the request body and the object attributes are as follows:

#### Action

```
{
  "name":"...",
  "href":"...",
  "method":"...",
  "type":"...",
  "parameters":["...", ...]
}
```

#### Action (Type: Action)

Attribute	Type	Description
name	string	Name of the execute an operation.
href	string	URL of the execute an operation.
method	string	Name of the method.
type	string	Data format of the object.
parameters	anyType[]	A list of GetGraphDataCSVParam objects necessary to execute an operation. For details about GetGraphDataCSVParam, see the table below.

### GetGraphDataCSVParam

```
{
  "perfComponentIDs":["...", ...],
  "baseTime":"...",
  "pointTimeRange":"..."
}
```

### GetGraphDataCSVParam (Type: GetGraphDataCSVParam)

Attribute	Type	Description
perfComponentIDs	long[]	ID of perfComponents
baseTime	dateTime	Start time for obtaining performance information. The performance information for a certain period before the specified start time is obtained. The period is specified by pointTimeRange. If this item is omitted, the time that the API was executed is used as the start time.
pointTimeRange	long	Period during which performance information is obtained (ms.)

## Response body

The structure of the response body and the object attributes are as follows:

### Job

```
{
  "instanceID":"...",
  "created":"...",
  "updated":"...",
  "completed":"...",
  "state":"...",
  "affectedResource":["...", ...],
  "result":["...", ...]
}
```

### Job (Type: Job)

Attribute	Type	Description
instanceID	string	Indicates the ID of the Instance.
created	string	Indicates the date the object is generated in ISO 8601 format.
updated	string	Indicates the time the object is updated in ISO 8601 format. The same value as for "created" is set.

Attribute	Type	Description
completed	string	Indicates the time the processing completed in ISO 8601 format. The same value as for "created" is set.
state	string	One of the following values is set: "failed": The operation did not terminate normally. "success": The operation terminated normally.
affectedResource	string[]	Indicates the URL of the API resource created or updated as a result of the operation. If no resources exist, this parameter is empty.
result	anyType[]	A list of CsvData objects. For details about CsvData, see the table below.

## CsvData

```
{
  "data": "... "
}
```

### CsvData (Type: CsvData)

Attribute	Type	Description
data	string	The CSV data is stored.

## Status codes

Status code	Reason phrase	Description
200	OK	Success.
400	Bad Request	A format of request body is invalid.
401	Unauthorized	No login privilege.
403	Forbidden	No execute privilege.
412	Precondition Failed	The server is not available.
500	Internal Server Error	Server processing error.

## Example code

```
[Request Header]
POST /Analytics/v1/services/PerfComponents/actions/getGraphDataCSV/invoke HTTP/1.1
Authorization: Basic c3lzdGVtOmlhbmFnZXI=
User-Agent: curl/7.33.0
Host: localhost:22015
Accept: application/json
Content-Type: application/json
Accept-Language: ja
Content-Length: 296

[Request Body]
{
  "name" : "getGraphDataCSV",
  "href" : "http://localhost:22015/Analytics/v1/services/PerfComponents/actions/
getGraphDataCSV/invoke",
```

```
"method" : "POST",
"type" : "application/json",
"parameters" : [ {
  "perfComponentIDs" : [ ],
  "baseTime" : "2016-11-25T11:11:04.489+09:00",
  "pointTimeRange" : 86400000
} ]
}
```

[Response Header]

HTTP/1.1 200 OK

Date: Fri, 27 Nov 2015 09:22:28 GMT

Server: Cosminexus HTTP Server

Cache-Control: no-cache

WWW-Authenticate: HSSO 284045794595c1ed7a98d2184419b8656e48a15\_WVlGcHsLfg5ffg0I\_V0810

X-Frame-Options: SAMEORIGIN

Transfer-Encoding: chunked

Content-Type: application/json

[Response Body]

```
{
  "instanceID" : "0052a2e2-713c-4cfb-892c-e9aaefb32b50",
  "created" : "2016-11-22T11:53:42.188+09:00",
  "updated" : "2016-11-22T11:53:42.354+09:00",
  "completed" : "2016-11-22T11:53:42.354+09:00",
  "state" : "success",
  "affectedResource" : [ ],
  "result" : [ {
    "data": ""#JP1/Operations Analytics","111000","UTF-8 (BOM)"\n"#Time Series
Performance Information"\n..."
  } ]
}
```

---

## Related topics

- [1.3 Resource members](#)
- [1.6 List of enumerators](#)

---

## 2.17.3 Collecting the information required to collect, into a CSV file, the latest value in the performance information that a specified resource holds

This request collects the information required to collect, into a CSV file, the latest value in the performance information that a specified resource holds.

### Execution permission

Admin, Modify

### API version

v1

## Request format

```
GET http[s]://host:port/Analytics/version/services/PerfComponents/actions/  
getNodesGraphDataCSV
```

## Request body

Not applicable.

## Response body

The structure of the response body and the object attributes are as follows:

### Action

```
{  
  "name": "...",  
  "href": "...",  
  "method": "...",  
  "type": "...",  
  "parameters": ["...", ...]  
}
```

### Action (Type: Action)

Attribute	Type	Description
name	string	Name of the execute an operation.
href	string	URL of the execute an operation.
method	string	Name of the method.
type	string	Data format of the object.
parameters	anyType[]	A list of GetNodesGraphDataCSVParam objects necessary to execute an operation. For details about GetNodesGraphDataCSVParam, see the table below.

### GetNodesGraphDataCSVParam

```
{  
  "basePointNodes": [{  
    "nodeID": "...",  
    "nodeType": "..."  
  }],  
  :  
  ],  
  "baseTime": "..."  
}
```

### GetNodesGraphDataCSVParam (Type: GetNodesGraphDataCSVParam)

Attribute	Type	Description
basePointNodes	E2ENodeKey[ ]	List of nodes to be collected, specified as a base point
baseTime	dateTime	Time of the base point when the performance information is collected. If omitted, the time when the API was executed is used as the base point.

## basePointNodes (Type: E2ENodeKey)

Attribute	Type	Description
nodeID	long	ID for identifying node
nodeType	enum	Type of the node (For details about the specifiable values, see the table E2ENodeType in <i>List of enumerators</i> .)

## Status codes

Status code	Reason phrase	Description
200	OK	Success.
401	Unauthorized	No login privilege.
412	Precondition Failed	The server is not available.
500	Internal Server Error	Server processing error.

## Example code

```
[Request Header]
GET /Analytics/v1/services/PerfComponents/actions/getNodesGraphDataCSV HTTP/1.1
Authorization: Basic c3lzdGVtOmlhbmFnZXI=
User-Agent: curl/7.33.0
Host: localhost:22015
Accept: application/json
Accept-Language: ja

[Response Header]
HTTP/1.1 200 OK
Date: Fri, 27 Nov 2015 09:17:42 GMT
Server: Cosminexus HTTP Server
Cache-Control: no-cache
WWW-Authenticate: HSSO 1e89694342cfad52de32bd8e1a2921a48b8d8_WV1GcHsLfg5ffg0I_V0810
X-Frame-Options: SAMEORIGIN
Transfer-Encoding: chunked
Content-Type: application/json

[Response Body]
{
  "data": [{
    "name": "getNodesGraphDataCSV",
    "href": "http://localhost:22015/Analytics/v1/services/PerfComponents/actions/getNodesGraphDataCSV/invoke",
    "method": "POST",
    "type": "application/json",
    "parameters": [{
      "basePointNodes": [{
        "nodeID": 1,
        "nodeType": "VIRTUAL_MACHINE"
      }],
      "selectedNodes": [{
        "nodeID": 1,
        "nodeType": "VIRTUAL_MACHINE"
      }],
      "baseTime": "2016-11-28T16:03:02.592+09:00"
    }
  ]
}
```

```
    }]  
  }],  
  "count": 1  
}
```

---

## Related topics

- [1.3 Resource members](#)
  - [1.6 List of enumerators](#)
- 

## 2.17.4 Collecting, into a CSV file, the latest value in the performance information that a specified resource holds

This request collects, into a CSV file, the latest value in the performance information that a specified resource holds.

### Execution permission

Admin, Modify

### API version

v1

### Request format

```
POST http[s]://host:port/Analytics/version/services/PerfComponents/actions/  
getNodesGraphDataCSV/invoke
```

### Request body

The structure of the request body and the object attributes are as follows:

#### Action

```
{  
  "name": "...",  
  "href": "...",  
  "method": "...",  
  "type": "...",  
  "parameters": ["...", ...]  
}
```

#### Action (Type: Action)

Attribute	Type	Description
name	string	Name of the execute an operation.
href	string	URL of the execute an operation.
method	string	Name of the method.
type	string	Data format of the object.



Attribute	Type	Description
parameters	anyType[]	A list of GetNodesGraphDataCSVParam objects necessary to execute an operation. For details about GetNodesGraphDataCSVParam, see the table below.

### GetNodesGraphDataCSVParam

```
{
  "basePointNodes": [ {
    "nodeID": "...",
    "nodeType": "..."
  } ],
  "baseTime": "..."
}
```

### GetNodesGraphDataCSVParam (Type: GetNodesGraphDataCSVParam)

Attribute	Type	Description
basePointNodes	E2ENodeKey[]	List of nodes to be collected, specified as a base point
baseTime	dateTime	Time of the base point when the performance information is collected. If omitted, the time when the API was executed is used as the base point.

### basePointNodes (Type: E2ENodeKey)

Attribute	Type	Description
nodeID	long	ID for identifying node
nodeType	enum	Type of the node (For details about the specifiable values, see the table E2ENodeType in <i>List of enumerators</i> .)

## Response body

The structure of the response body and the object attributes are as follows:

### Job

```
{
  "instanceID": "...",
  "created": "...",
  "updated": "...",
  "completed": "...",
  "state": "...",
  "affectedResource": ["...", ...],
  "result": ["...", ...]
}
```

### Job (Type: Job)

Attribute	Type	Description
instanceID	string	Indicates the ID of the Instance.
created	string	Indicates the date the object is generated in ISO 8601 format.

Attribute	Type	Description
updated	string	Indicates the time the object is updated in ISO 8601 format. The same value as for "created" is set.
completed	string	Indicates the time the processing completed in ISO 8601 format. The same value as for "created" is set.
state	string	One of the following values is set: "failed": The operation did not terminate normally. "success": The operation terminated normally.
affectedResource	string[]	Indicates the URL of the API resource created or updated as a result of the operation. If no resources exist, this parameter is empty.
result	anyType[]	A list of CsvData objects. For details about CsvData, see the table below.

## CsvData

```
{
  "data": "... "
}
```

## CsvData (Type: CsvData)

Attribute	Type	Description
data	string	The CSV data is stored.

## Status codes

Status code	Reason phrase	Description
200	OK	Success.
400	Bad Request	A format of request body is invalid.
401	Unauthorized	No login privilege.
403	Forbidden	No execute privilege.
412	Precondition Failed	The server is not available.
500	Internal Server Error	Server processing error.

## Example code

```
[Request Header]
POST /Analytics/v1/services/PerfComponents/actions/getNodesGraphDataCSV/invoke HTTP/
1.1
Authorization: Basic c3lzdGVtOmlhbmFnZXI=
User-Agent: curl/7.33.0
Host: localhost:22015
Accept: application/json
Content-Type: application/json
Accept-Language: ja
Content-Length: 296

[Request Body]
{
```

```
"name" : "getNodesGraphDataCSV",
"href" : "http://localhost:22015/Analytics/v1/services/PerfComponents/actions/
getNodesGraphDataCSV/invoke",
"method" : "POST",
"type" : "application/json",
"parameters" : [{
  "basePointNodes": [{
    "nodeID": 1,
    "nodeType": "VIRTUAL_MACHINE"
  }],
  "selectedNodes": [{
    "nodeID": 1,
    "nodeType": "VIRTUAL_MACHINE"
  }],
  "baseTime": "2016-11-28T16:03:02.592+09:00"
} ]
}
```

[Response Header]

```
HTTP/1.1 200 OK
Date: Fri, 27 Nov 2015 09:22:28 GMT
Server: Cosminexus HTTP Server
Cache-Control: no-cache
WWW-Authenticate: HSSO 284045794595c1ed7a98d2184419b8656e48a15_WVlGcHsLfg5ffg0I_V0810
X-Frame-Options: SAMEORIGIN
Transfer-Encoding: chunked
Content-Type: application/json
```

[Response Body]

```
{
  "instanceID" : "0052a2e2-713c-4cfb-892c-e9aaefb32b50",
  "created" : "2016-11-22T11:53:42.188+09:00",
  "updated" : "2016-11-22T11:53:42.354+09:00",
  "completed" : "2016-11-22T11:53:42.354+09:00",
  "state" : "success",
  "affectedResource" : [ ],
  "result" : [ {
    "data": "\"#JP1/Operations Analytics\", \"111000\", \"UTF-8 (BOM)\"\\n\"#Latest
Performance Information\"\\n..."
  } ]
}
```

---

## Related topics

- [1.3 Resource members](#)
  - [1.6 List of enumerators](#)
-

## 2.18 List of API functions related to information management

This section explains how to obtain the version information of JP1/OA and of API functions.

### 2.18.1 Obtaining Version Information

The API acquires the JP1/OA and API version.

#### Execution permission

Admin, Modify

#### API version

v1

#### Request format

```
GET http[s]://host:port/Analytics/version/configuration/version
```

#### Request body

Not applicable.

#### Response body

The structure of the response body and the object attributes are as follows:

##### Version

```
{
  "productName": "...",
  "productVersion": "...",
  "apiVersion": "..."
}
```

##### Version (Type: Version)

Attribute	Type	Description
productName	string	product name
productVersion	string	product version
apiVersion	string	api version

#### Status codes

Status code	Reason phrase	Description
200	OK	Success.
412	Precondition Failed	The server is not available.
500	Internal Server Error	Server processing error.

## Example code

```
[Request Header]
GET /Analytics/v1/configuration/version HTTP/1.1
Authorization: Basic c3lzdGVtOmlhbmFnZXI=
User-Agent: curl/7.33.0
Host: localhost:22015
Accept: application/json
Accept-Language: ja

[Response Header]
HTTP/1.1 200 OK
Date: Mon, 30 Nov 2015 09:11:45 GMT
289
Server: Cosminexus HTTP Server
Cache-Control: no-cache
WWW-Authenticate: HSSO 184593e47ca3e5ff4e150cc8dc32f4f756218e_WV1GcHsLfg5ffg0I_V0810
X-Frame-Options: SAMEORIGIN
Transfer-Encoding: chunked
Content-Type: application/json

[Response Body]
{
  "productName" : "JP1/Operations Analytics",
  "productVersion" : "11.00.01",
  "apiVersion" : "01.00.00"
}
```

---

## Related topics

- [1.3 Resource members](#)
  - [1.6 List of enumerators](#)
-

# Appendix

## A. Version Changes

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### A.1 Changes in version 11-50

- The member `deviceClassificationLabel` was added to the members of the search range (IPAddrRange resource).
- The members `productName`, `providerName`, and `refreshDateForApp` were added to the members of collectors (Collectors resource).
- The member `deviceClassificationLabel` was added to the members of hosts (Hosts resource).
- The following members were added to or deleted from the members of applications (Applications resource).
  - The members `applicationDetailType` and `applicationHosts` were added.
  - The members `resourceID` and `resourceType` were deleted.
- Descriptions were added about the members of application resource information (the ApplicationHost resource).
- `CUSTOM` and `APPLICATION_CUSTOM` were added to the enumerators.
- The attribute `deviceClassificationLabel` was added to the IPAddrRange (Type: IPAddrRange) object.
  - Obtaining Retrieval Ranges
  - Obtaining Retrieval Range Information
  - Creating Retrieval Ranges
  - Updating Retrieval Ranges
- The description of status code 400 was changed.
  - Creating Collector
  - Updating Collector
- A description of status code 400 was added.
  - Deleting Collector
- The attribute `applicationDetailType` was added to the Application (Type: Application) object.
  - Obtaining Application List
- The attribute `deviceClassificationLabel` was added to the Host (Type: Host) object.
  - Obtaining Host List

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