

# Sesam REST API V2

---

*Reference Guide*

*Jaglion*

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## 1. Introduction

Since SEP sesam Tigon, a new version of the SEP sesam REST API has been introduced, version 2. Over time, the REST API version 2 got constantly enhanced and stabilized. This document gives a high level overview over the available end points and documents the parameter to use.

## 2. REST API V2

### 2.1. General

In the past, the full client has been reworked from using a Java RMI based communication layer towards using a HTTP/HTTPS based REST API. The first version of the REST API is providing low level data base access methods and a very few higher level service functions. The REST API V1 service functions have been provided on a “as needed by the full client” base and are therefore very similar to what had been existed in the Java RMI based communication layer.

With the addition of the web based client, the version 1 of the REST API proved quickly to be difficult to use and insufficient in the design. With the available functionality growing in the web based client, the demand for a higher level, more service oriented and better designed REST API has been growing as well.

Also, the first version of the REST API is pretty hard to use by external users. The API is too low level and requires a lot of technical knowledge about the SEP sesam data model. The REST API version 2 design aims to ease the usage of the API and provide services to execute SEP sesam operations without the need of knowing the SEP sesam data model internals.

Starting with SEP sesam Tigon, a new version of the REST API has been introduced in parallel to the existing REST API version. Over time, the REST API version 2 has been extended and more and more widgets from the web based client have been rebased to use the V2 endpoints. The process is still ongoing and the REST API version 2 will continue to grow.

All routes of the REST API version 2 are prefixed with “/sep/api/v2/”.

### 2.2. Common Object Properties

The REST API V2 returns objects representing a data base row or data objects containing computed data. If the object returned represents a data base row, the object may contain the following common properties.

Name	Description
<b>mtime</b> Long	The point in time where the object was last modified. The last modification time is represented as UNIX Epoch time. The point in time is the server time (server local time) of the last modification access (SQL Insert or Update).
<b>uuid</b> String	A 40 character unique ID.

### 2.3. Common State Values

Any kind of result, like the result of a backup or restore, does have a state. The common state values are the following:

Value	Description
<b>q</b>	‘In queue’ ... The task has been queued for execution but not started yet.
<b>a</b>	‘Active’ ... The task has been started and is still running.
<b>0</b>	‘Successful’ ... The task has been completed successfully.
<b>1 or l</b>	‘Warning’ ... The task has been completed with warnings.
<b>2 or X or e</b>	‘Error’ ... The task has been completed with error.
<b>3 or C or c</b>	‘Cancelled’ ... The task has been cancelled.
<b>d</b>	‘Partially deleted’ ... Some data, produced by the task, has been deleted.

For media results, the states are defined as following:

Value	Description
0 or O or o	'OK' ... The media is OK. No error or warning detected.
1 or W	'Warning' ... A warning has been detected.
2 or E	'Error' ... Not enough space on the media.
3 or C or c	'Error' ... Not enough arguments.
4	'Error' ... Can't open LIS file.
5	'Error' ... Can't open NOT file.
6	'Error' ... Can't access data store.
7	'Error' ... Invalid arguments.
8	'Error' ... Remote CMD failed.
9	'Error' ... Unknown reason.
10	'Error' ... Problem with LIS file parsing.
11	'Error' ... Can't close file handle correctly.
X or x	'Error' ... Media action failed.
a	'Active' ... The media is active.
l	'Load failed' ... Loading the media failed.

## 2.4. Result Set Filtering

Each of the REST API V2 endpoints, which allows filtering the result set, will take a filter object as only input parameter. All supported filter criteria has to be represented as properties, set in the filter object. Besides the properties special to the corresponding API, all filter may support the following common properties.

Name	Description
<b>maxResults</b> Integer	The maximum number of results returned. If not set, the property defaults to '-1', which means no result set limit is applied and all matching rows are returned.
<b>offset</b> Integer	The offset in the result set from where to start. Applies only if maxResults is set to a value larger than 0.
<b>orderBy</b> String	The name of the data base column the result set is ordered by. When multiple column names are required to be specified, separate the column names by comma.
<b>asc</b> Boolean	Ascending or descending sort order. When not specified, the property defaults to 'true', the ascending sort order.
<b>excludeNotWritable</b> Boolean	Flag to indicate if not writeable items are included in the result set or not. Defaults to include not writeable items.
<b>excludeNotExecutable</b> Boolean	Flag to indicate if not executab items are included in the result set or not. Defaults to include not executable items.

## 2.5. Error Handling

When calling a REST API V2 end point fails, the server respond with an error status and a JSON encoded error object providing the details why the call failed. The returned error object has the following properties.

Name	Description
<b>error</b> String	The error ID.
<b>message</b>	The error message. The error message is the only property of the error object which

Name	Description
String	should be presented to the user.
<b>parameter</b> array[String]	The list of error parameters. The meaning of the parameters depends on the error type.
<b>type</b> enum	The error type. Valid values are 'AUTHENTICATION', 'CONNECTION', 'ILLEGAL_PARAMETER', 'INVALID_VALUE', 'NOT_EDITABLE', 'OBJECT_IN_USE', 'OBJECT_NOT_FOUND' and 'OPERATION_NOT_POSSIBLE'.
<b>url</b> String	The URL of the end point failed to call.

### Examples

```
{
  "error": "duplicate.pk",
  "message": "The primary key ('2') is not unique.",
  "parameter": [
    "2"
  ],
  "type": "ILLEGAL_PARAMETER",
  "url": "/sep/api/v2/acs/create"
}
```

The returned error status is one of the standard HTTP response codes. The following error status codes may be returned by the REST API V2 endpoints.

Response Code	Description
400	CLIENT_ERROR_BAD_REQUEST. Something is not correct in the request sent by the client. The error object, returned in the response body, contains the details of what went wrong.
401	CLIENT_ERROR_UNAUTHORIZED. The client is not authenticated to do the request.
403	CLIENT_ERROR_FORBIDDEN. The authenticated user does not have the required permissions to do the request.
404	CLIENT_ERROR_NOT_FOUND. The requested end point does not exist.
405	CLIENT_ERROR_METHOD_NOT_ALLOWED. The target object is not editable (error type = 'NOT_EDITABLE').
500	SERVER_ERROR_INTERNAL. A general error occurred on the server while processing the request. The error object returned in the response body contains the details of what went wrong.
503	SERVER_ERROR_SERVICE_UNAVAILABLE. The connection to the server is unavailable or got terminated.

## 3. Services

### 3.1. Authentication Service

The authentication service is responsible for granting access to the SEP sesam REST API. A client, no matter if it is the Web client, the full client or the command line client, has to authenticate to the SEP sesam server before accessing any data. On server side, each client will be assigned to a session. The session holds the information about the user and the configured roles. This information is used to return only those information the user is allowed to see.

The authentication service allows to use the legacy Java policy file based authentication method and the newer database based authentication method. The database based authentication method can be backed up by LDAP and AD directories. The authentication method to use has to be configured before the UI server starts (via sm.ini or the full client). Once the UI server is started, the configured authentication method is loaded and cannot be changed as long as the server runs. When the user decides to change the configured authentication method, the UI server has to be restarted and any active session is disconnected. The clients have to re-authenticate themselves once the UI server restarted with the new authentication method. Which authentication method is configured, can be queried from the server service.

On login, the server will respond with a session ID, which has to be passed back to the server for any subsequent REST API calls. The session ID will be added as property *X-SEP-Session* to the header of each request.

The server supports 2 kinds of authentication modes, the on request authentication method and the session based authentication method. When using the on request authentication method, each request is required to authenticate before the request can be execute. While this method is simpler to handle, it might come with a performance penalty when executing multiple requests in a row.

#### 3.1.1. On Request Authentication

When doing single API calls, i.e. using curl from command line to test the API, you can send the authentication information directly in the request header using [Basic Auth](#). The encoded credentials are attached to the request via the "Authorization: Basic <encoded credentials>" HTTP header.

**Note:** Using the on request authentication method will create a new session for each call. The session will be destroyed immediately when the request is completed. There is no session ID involved. Using this authentication method is **not recommend** when doing multiple API calls in a row.

The *Authorization* field is constructed as following:

- The user name and password are combined into a string separated by a colon, e.g.: `username:password`
- The resulting string is encoded using the RFC2045-MIME variant of [Base64](#), except not limited to 76 char/line.
- The authorization method and a space, i.e. "Basic ", is then put before the encoded string.

For more details, see

<http://tools.ietf.org/html/rfc1945#section-10.2>

<http://tools.ietf.org/html/rfc1945#section-11>

<http://tools.ietf.org/html/rfc1945#section-11.1>



## Examples

---

If “Aladdin” is the user name and “OpenSesam” is the password, then the field is formed as follows:

```
Authorization: Basic QWxhZGRpbjPcGVuU2VzYQ11
```

### 3.1.2. Session Based Authentication

In order to execute multiple API calls in a row, like when scripting SEP sesam, the session based authentication method should be used. To obtain a session, the client or script first needs to login to the SEP sesam server.

A session is an object with the following properties:

Name	Description
<b>id</b> * required String	The session ID.
<b>name</b> * required String	The name of the user logged in to the session.
<b>roles</b> array[String]	The roles assigned to the session.
<b>sessionType</b> enum	The session type. Possible session types are ‘CLASSIC’ or ‘WEB’.

Following methods are provided by the authentication service for the session based authentication method:

<b>POST</b>	<code>/sep/api/v2/auth/login</code>	Since: Beefalo
Minimum required role: None		

Log in with user name and an optional secret key. On login, a new session will be created at the server. The session will be valid until logging out.

If the session is inactive for 10 minutes, the session will be auto logged out.

## Parameters

---

The login configuration is passed in as JSON object in the body of the request. The following JSON object properties are defined:

Name	Description
<b>username</b> * required String	The name of the user logging in.
<b>secret</b> String	The secret to use to authenticate the user. This can be either a password or any other secret key.
<b>type</b> * required enum	The session type. Possible session types are ‘CLASSIC’ or ‘WEB’. When a web session is requested, the API server additionally generates a cookie.

## Responses

---

Response Code and Content	Description
<b>200</b> Session ID String	The ID of the newly created session. Pass on this ID in any subsequent requests via the “X-SEP-Session” request header property.

## Examples

---

Login with user name and password:

```
POST /sep/api/v2/auth/login
{ "username": "Aladdin", "secret": "Jasmin", "type": "CLASSIC" }
```

**GET**

/sep/api/v2/auth/logout

Minimum required role: None

Since: Beefalo

Log out from an active session. The ID of the session to close is given to the server by setting the “X-SEP-Session” request header property.

## Responses

---

Response Code and Content	Description
<b>200</b> Status Boolean	The logout succeeded and the session got destroyed.

## Examples

---

Logout from the session specified by the “X-SEP-Session” request header property:

```
GET /sep/api/v2/auth/logout

Response:
true
```

**GET**

/sep/api/v2/auth/getSession

Minimum required role: None

Since: Beefalo

Get information about an active session. The ID of the session to query is given to the server by setting the “X-SEP-Session” request header property.

The response include information about the user name, the assigned roles and the session type.

## Responses

---

Response Code and Content	Description
<b>200</b> Session JSON object	The session information are returned in the response body.

## Examples

---

Get information for the session specified by the "X-SEP-Session" request header property:

```
GET /sep/api/v2/auth/getSession
```

Response:

```
{  
  "id": "6d0be305-6fcf-499f-94f8-fa3e3a3ceee9",  
  "name": "Aladdin",  
  "roles": [  
    ...  
  ],  
  "sessionType": "CLASSIC"  
}
```

### 3.2. Access Control List Service

The access control list service provides access to the access control lists (ACLs) stored for each object. Access control lists describes which user or group has permission to see the object (read access), to change the object (write access) or to execute an operation with the object (execute access). Access control lists are associated with objects via the objects unique id and the object origin (database table).

An ACL is an object with the following properties:

Name	Description
<b>id</b> * required Long	The unique ID of the ACL.
<b>object</b> * required String	The unique ID of the object the ACL is associated with. If the object ID is '-1', then the ACL describes the default permissions set for objects from the origin set.
<b>origin</b> * required String	The object origin. The origin is the name of the database table in capitalized form and without any separator. In example, if the object is a data store (DB:data_stores), then the origin is "Datastores".
<b>value</b> * required String	The encoded access control list. The access control list is persisted as a list of JSON objects, each object describing the granted or denied permissions for a user or group.

#### Examples

An ACL for the location with the unique object ID 0:

```
{
  "id": 0,
  "object": "0",
  "origin": "Locations",
  "value": "[
    {
      \"type\": \"GROUP\",
      \"permissions\": { \"allow\": \"f---\" }
    },
    {
      \"id\": \"3\",
      \"type\": \"GROUP\",
      \"permissions\": { \"deny\": \"f---\" }
    }
  ]",
}
```

An ACL permission is an object with the following properties:

Name	Description
<b>id</b> Long	The unique ID of the user or group.
<b>type</b> * required String	The permission type. Valid values are "USER" and "GROUP".
<b>permissions</b> * required String	The permissions granted and/or denied encoded as JSON object.

If the ACL permission type is "GROUP" and no ID is set, the permissions apply to the special user "Everybody". The "Everybody" user is the fallback user when no other ACL permission, associated with the object, applies.

The permission itself is an object with currently two properties:

Name	Description
<b>allow</b> String	The list of granted permissions.
<b>deny</b> String	The list of denied permissions.

At least one of the two properties has to be set.

The value of the permission is an ordered string, where each character stands for a permission. Up to this day, the following four permission are supported (in order):

Name	Description
'f'	The user or group is granted or denied the full control over the object. Full control means the user or group has access to the object (read), can manipulate or delete the object (write) and can perform operations with the object (execute).
'w'	The user is granted or denied write access to the object. Write access means the user or group can manipulate or delete the object.
'r'	The user is granted or denied read access to the object. Read access means the user or group can access the object and all sub objects.
'x'	The user is granted or denied execute access to the object. Execute access means the user or group can perform operations like backups or restores with the object.

Permissions which are not granted or denied have to be replaced by the placeholder '-'. The list of permissions may extend in the future. New permissions will be added to the end of the ordered list.

Following methods are provided by the access control service:

GET	/sep/api/v2/ac1s	Since: Beefalo
Minimum required role: None		

Get all stored access control lists.

The response body contains the list of access control lists encoded as JSON objects. The properties of the access control list object are described above.

#### Responses

Response Code and Content	Description
200 ACLs array[JSON object]	The access control lists are returned in the response body.

#### Examples

Get all stored access control lists:

```
GET /sep/api/v2/ac1s

Response:
[
  {
    "id": 0,
    "object": "-1",
```

```

        "origin": "LocationsDao",
        "value": "[{"type":"GROUP","permissions":{"allow":"f---"},{"id":"3","type":"GROUP","permissions":{"deny":"f---"}}, {"id":"3","type":"USER","permissions":{"allow":"f---"}}]"
    ]

```

**GET**

/sep/api/v2/acs/<id>

Minimum required role: None

Since: Beefalo

Get the access control lists matching the given ID.

The response body contains the access control list encoded as JSON object. The properties of the access control list object are described above.

Responses

Response Code and Content	Description
200 ACL JSON object	The access control list is returned in the response body.

Examples

Get the access control list with the ID 0:

```

GET /sep/api/v2/acs/0

Response:
{
  "id": 0,
  "object": "0",
  "origin": "LocationsDao",
  "value": "[{"type":"GROUP","permissions":{"allow":"f---"}]"
}

```

**POST**

/sep/api/v2/acs/find

Minimum required role: None

Since: Beefalo

Search for access control lists matching the specified filter parameters.

Parameters

The filter configuration is passed in as JSON object in the body of the request. The following JSON object properties are defined:

Name	Description
------	-------------

Name	Description
<b>object</b> String	The object ID.
<b>origin</b> String	The object origin.

Responses

Response Code and Content	Description
<b>200</b> <b>ACLs</b> array[JSON object]	The matching access control lists are returned in the response body.

Examples

Get all access control lists from the 'Locations' origin:

```
POST /sep/api/v2/acls/find
{ "origin":"Locations" }

Response:
[
  {
    "id": 0,
    "object": "0",
    "origin": "LocationsDao",
    "value": "[{"type":"GROUP","permissions":{"allow":"f--"}]"
  }
]
```

**POST** /sep/api/v2/acls/create

Minimum required role: Super user

Since: Beefalo

Creates a new access control list. If an ID is given, the access control list will be created with the given ID. If an access control list with the given ID already exists, the call will fail. If no ID is given, the access control list is automatically assigned the next free ID (maximum ID + 1).

Parameters

The access control list is passed in as JSON object in the body of the request. The properties of the access control list are described above.

Responses

Response Code and Content	Description
<b>200</b> <b>ACL</b> JSON object	The newly created access control list is returned in the response body.

## Examples

---

Creates a new access control list for the object with the ID 1 of the 'Clients' origin:

```
POST /sep/api/v2/acls/create
{ "object": "1", "origin": "Clients", "value": "[{\\"type\\":\\"GROUP\\", \\"permissions\\":{\\"allow\\":\\"f---\\"}},
{\\"id\\":\\"3\\",\\"type\\":\\"USER\\",\\"permissions\\":{\\"deny\\":\\"f---\\"}}]"

Response:
{
  "id": 2,
  "object": "1",
  "origin": "Clients",
  "value": "[{\\"type\\":\\"GROUP\\",\\"permissions\\":{\\"allow\\":\\"f---\\"}}, {\\"id\\":\\"3\\", \\"type\\":\\"USER\\",
  \\"permissions\\":{\\"deny\\":\\"f---\\"}}]"
}
```

Creates a new access control list for the object with the ID 1 of the 'Clients' origin with an existing ID:

```
POST /sep/api/v2/acls/create
{ "id": 2, "object": "1", "origin": "Clients", "value": "[{\\"type\\":\\"GROUP\\",
  \\"permissions\\":{\\"allow\\":\\"f---\\"}}, {\\"id\\":\\"3\\",\\"type\\":\\"USER\\",\\"permissions\\":{\\"deny\\":\\"f---
  \\"}}]"

Response:
{
  "error": "duplicate.pk",
  "message": "The primary key ('2') is not unique.",
  "header": "Illegal Parameter",
  "parameter": [
    "2"
  ],
  "type": "ILLEGAL_PARAMETER",
  "url": "/sep/api/v2/acls/create"
}
```

**POST**

/sep/api/v2/acls/update

Minimum required role: Super user

Since: Beefalo

Updates an access control list. An access control list with the given ID must exist, otherwise the call will fail.

## Parameters

---

The access control list is passed in as JSON object in the body of the request. The properties of the access control list are described above.

## Responses

---

Response Code and Content	Description
200 ACL JSON object	The updated access control list is returned in the response body.

## Examples

---

Updates the access control list with ID 2:



```
POST /sep/api/v2/acls/update
{ "id": 2, "object": "2", "origin": "Clients", "value": "[{"type":"GROUP",
"permissions":{"allow":"f--"}]"}
```

Response:

```
{
  "id": 2,
  "object": "2",
  "origin": "Clients",
  "value": "[{"type":"GROUP", "permissions":{"allow":"f--"}]"
}
```

**POST**

/sep/api/v2/acls/persist

Minimum required role: Super user

Since: Jaglion

Persists an access control list. If no access control list with the given ID exists, a new access control list will be created. Otherwise, the properties of an existing access control list are updated.

#### Parameters

The access control list is passed in as JSON object in the body of the request. The properties of the access control list are described above.

#### Responses

Response Code and Content	Description
200 ACL JSON object	The created or updated access control list is returned in the response body.

#### Examples

Persists the access control list with ID 2:

```
POST /sep/api/v2/acls/persist
{ "id": 2, "object": "2", "origin": "Clients", "value": "[{"type":"GROUP",
"permissions":{"allow":"f--"}]"}
```

Response:

```
{
  "id": 2,
  "object": "2",
  "origin": "Clients",
  "value": "[{"type":"GROUP", "permissions":{"allow":"f--"}]"
}
```

POST

/sep/api/v2/ac1s/delete

Minimum required role: Super user

Since: Beefalo

Deletes an access control list.

#### Parameters

The unique ID of the access control list is passed in as JSON number in the body of the request.

#### Responses

Response Code and Content	Description
200 id Long	The unique ID of the deleted access control list is returned in the response body. If no access control list existed with the given ID, then null is returned.

#### Examples

Deletes the access control list with the ID 2 (exists):

```
POST /sep/api/v2/ac1s/delete
2

Response:
2
```

Deletes the access control list with the ID 99 (does not exist):

```
POST /sep/api/v2/ac1s/delete
99

Response:
null
```

POST

/sep/api/v2/ac1s/deleteByEntity

Minimum required role: Super user

Since: Jaglion

Deletes the access control list matching the given entity.

#### Parameters

The entity to match is passed in the body of the request as JSON object. The only required entity property is the primary key of the entity.

#### Responses

Response Code and Content	Description
200 ID Long	The ID of the deleted access control list is returned in the response body.

## Examples

---

Delete the access control list with the unique ID "101":

```
POST /sep/api/v2/acls/deleteByEntity
{ "is": 101 }

Response:
{
  "id": 101,
  "object": "NewdayTest",
  "origin": "Schedules",
  ...
}
```

**POST**

/sep/api/v2/acls/check

Minimum required role: None

Since: Beefalo

Check the access to a given object by evaluating the access control lists associated with the given object.

## Parameters

---

The properties to match are passed in as JSON object in the body of the request. The following JSON object properties are defined:

Name	Description
<b>object</b> * required String	The unique ID of the object to check the access for.
<b>origin</b> * required String	The object origin.
<b>user</b> String	The name of the user to perform the check for.

## Responses

---

Response Code and Content	Description
<b>200</b> <b>Access Information</b> String	The access information are returned in the response body.

## Examples

---

Check the access to the object with ID 2 from the 'Clients' origin:

```
POST /sep/api/v2/acls/check
{ "object" : "2", "origin" : "Clients" }

Response:
"Session Context\n  User: api (ID: 3)\n  Groups: ADMIN\n\nObject Information\n  Object ID: 2\n  Object Origin: Clients\n  Origin DAO Class: de.sep.sesam.restapi.dao.ClientsDaoServer\n  Display Label:
```

```
ws2008x64\n\n Associated ACL:\n      N/A\n\n Access: YES\n      \n Parent Information\n\n Parent
Object ID: 3\n      Parent Object Origin: LocationsDao\n      Parent Origin DAO Class:
de.sep.sesam.restapi.dao.LocationsDaoServer\n      Display Label: Virtualization/VMware\n\n Associated
ACL:\n      N/A\n\n Access: YES\n\n      Parent Object ID: 7\n      Parent Object Origin:
LocationsDao\n      Parent Origin DAO Class: de.sep.sesam.restapi.dao.LocationsDaoServer\n      Display
Label: Virtualization\n\n      Associated ACL:\n      Object ID: null\n      Object Origin:
null\n      Object Display Label: Default ACL\n\n      Group or user names: \n      ID:
3\n      Type: GROUP\n      Name: RESTORE\n      Permissions: \n
Access : Deny\n\n      Access: YES\n"
```

POST

/sep/api/v2/acIs/getAcIs


---

Minimum required role: None
Since: Beefalo

Returns the list of associated access control lists for a given object.

### Parameters

A JSON list with 3 parameters has to be passed in in the body of the request. The JSON list is composed out of the following elements (in order):

Name	Description
<b>object</b> * required JSON object	The object to get the associated access control lists for. The only object property required to be set is the objects primary key property.
<b>origin</b> * required String	The object origin.
<b>parentsOnly</b> * required Boolean	If 'true', then return only those access control lists which are associated with the parents of the given object. If 'false', all access control lists are returned.

### Responses

Response Code and Content	Description
<b>200</b> <b>ACLs</b> array[JSON object]	The list of associated access control lists are returned in the response body. If no access control list is associated with the given object, then null is returned.

### Examples

Get the ACLs associated with the object with ID 2 from the 'Clients' origin:

```
POST /sep/api/v2/acIs/getAcIs
[ { "id" : 2 }, "Clients", false ]

Response:
[
  {
    "id": 99,
    "object": "2",
    "origin": "Clients",
    "value": "[{"type":"GROUP","permissions":{"allow":"f--"}]"
  }
]
```

POST

/sep/api/v2/ac1s/canRead

Minimum required role: None

Since: Beefalo

Check if read access is granted for the given object.

#### Parameters

A JSON list with 2 parameters has to be passed in in the body of the request. The JSON list is composed out of the following elements (in order):

Name	Description
<b>object</b> * required JSON object	The object to get the associated access control lists for. The only object property required to be set is the objects primary key property.
<b>origin</b> * required String	The object origin.

#### Responses

Response Code and Content	Description
<b>200</b> <b>Access</b> Boolean	The access information is returned in the response body. If 'true', read access to the object is granted. If 'false', read access to the object is denied.

#### Examples

Check if read access is granted for the object with ID 2 from the 'Clients' origin:

```
POST /sep/api/v2/ac1s/canRead
[ { "id" : 2 }, "Clients" ]

Response:
true
```

POST

/sep/api/v2/ac1s/canWrite

Minimum required role: None

Since: Beefalo

Check if write access is granted for the given object.

#### Parameters

A JSON list with 2 parameters has to be passed in in the body of the request. The JSON list is composed out of the following elements (in order):

Name	Description
<b>object</b> * required JSON object	The object to get the associated access control lists for. The only object property required to be set is the objects primary key property.
<b>origin</b> * required String	The object origin.

Responses

Response Code and Content	Description
<b>200</b> <b>Access</b> Boolean	The access information is returned in the response body. If 'true', write access to the object is granted. If 'false', write access to the object is denied.

Examples

Check if write access is granted for the object with ID 2 from the 'Clients' origin:

```
POST /sep/api/v2/ac1s/canWrite
[ { "id" : 2 }, "Clients" ]

Response:
true
```

**POST**

/sep/api/v2/ac1s/canExecute

Since: Beefalo

Minimum required role: None

Check if execute access is granted for the given object.

Parameters

A JSON list with 2 parameters has to be passed in in the body of the request. The JSON list is composed out of the following elements (in order):

Name	Description
<b>object</b> * required JSON object	The object to get the associated access control lists for. The only object property required to be set is the objects primary key property.
<b>origin</b> * required String	The object origin.

Responses

Response Code and Content	Description
<b>200</b> <b>Access</b> Boolean	The access information is returned in the response body. If 'true', execute access to the object is granted. If 'false', execute access to the object is denied.

Examples

Check if execute access is granted for the object with ID 2 from the 'Clients' origin:

```
POST /sep/api/v2/ac1s/canExecute
[ { "id" : 2 }, "Clients" ]

Response:
```

true

### 3.3. Backup Group Service

The backup group services provides access to the backup group objects. Backup groups are a set of backup tasks which are executed all in once when the backup group is executed.

A backup group is an object with the following properties:

Name	Description
<b>name</b> * required String	The name of the backup group. The maximum length of the name is 50 characters. The name can contain only letters, digits, the '-' and the '_' character.
<b>sepcomment</b> String	The comment or note from Sesam. The maximum length of the SEP comment is 1024 characters.
<b>text</b> String	The free form text associated with the backup group. The maximum length of the free form text is 100 characters.
<b>resultsSts</b> String	The status of the last backup run. Valid values are '0' (success), '2' (error), 'a' (active), 'q' (in queue) and more. This property is set by the Sesam kernel.
<b>prepost</b> String	A 4 character string controlling the pre/post backup behavior. The valid values for each character are 'y' (yes) or 'n' (no). The meaning of the characters are: <ol style="list-style-type: none"> <li>1. activate pre interface</li> <li>2. execute backup despite pre error</li> <li>3. activate post interface</li> <li>4. execute post despite backup error</li> </ol>
<b>prepostSwitch</b> String	Flag to indicate if the pre/post backup behavior is active or not. The maximum length of the switch is 1 character.
<b>usercomment</b> String	The comment or note from the user. The maximum length of the user comment is 1024 characters.
<b>exec</b> Boolean	Flag to indicate if the backup group is enabled for execution.
<b>options</b> String	The execution options. The maximum length of the execution options is 1024 character.
<b>backupType</b> String	The name of the associated backup type. The maximum length of the backup type name is 32 character. This property is currently not used.
<b>groupType</b> String	The name of the associated group type. The maximum length of the group type name is 64 character. This property is currently not used.

Following methods are provided by the backup events service:

GET

/sep/api/v2/backupgroups

Minimum required role: None

Since: Jaglion

Get all backup groups.

The response body contains the list of backup groups encoded as JSON objects. The properties of the backup group object are described above.

#### Responses

Response Code and Content	Description
200 <b>Backup Groups</b> array[JSON object]	The backup groups are returned in the response body.



## Examples

---

Get all backup groups:

```
GET /sep/api/v2/backupgroups

Response:
[
  {
    "name": "vm_taskgen_group",
    "exec": true
  },
  {
    "name": "virtualization_hyperv_group",
    "resultsSts": "SUCCESSFUL",
    "exec": true
  },
  ...
]
```

**GET**

/sep/api/v2/backupgroups/&lt;name&gt;

Minimum required role: None

Since: Jaglion

Get the backup group matching the given name.

The response body contains the backup group encoded as JSON object. The properties of the backup group object are described above.

## Responses

---

Response Code and Content	Description
<b>200</b> <b>Backup Group</b> JSON object	The backup group is returned in the response body.

## Examples

---

Get the backup group with the name 'virtualization\_hyperv\_group':

```
GET /sep/api/v2/backupgroups/virtualization_hyperv_group

Response:
{
  "name": "virtualization_hyperv_group",
  "resultsSts": "SUCCESSFUL",
  "exec": true
}
```

POST

/sep/api/v2/backupgroups/find

Minimum required role: None

Since: Jaglion

Search for backup groups matching the specified filter parameters.

#### Parameters

The filter configuration is passed in as JSON object in the body of the request. The following JSON object properties are defined:

Name	Description
<b>name</b> String	The name of the backup group to match.

#### Responses

Response Code and Content	Description
<b>200</b> <b>Backup Groups</b> array[JSON object]	The matching backup groups are returned in the response body.

#### Examples

Get all backup groups matching the name 'virtualization\_hyperv\_group':

```
POST /sep/api/v2/backupgroups/find
{ "name": "virtualization_hyperv_group" }

Response:
[
  {
    "name": "virtualization_hyperv_group",
    "resultsSts": "SUCCESSFUL",
    "exec": true
  }
]
```

GET

/sep/api/v2/backupgroups/&lt;name&gt;/tasks

Minimum required role: None

Since: Jaglion

Get all backup tasks assigned to the backup group matching the given name.

The response body contains the backup tasks encoded as JSON object. The properties of the backup task object are described in the backups service section.

#### Responses

Response Code and Content	Description
<b>200</b> <b>Backup Tasks</b> JSON object	The backup tasks assigned to the backup group are returned in the response body.

## Examples

---

Get all backup tasks of the backup group with the name 'virtualization\_hyperv\_group':

```
GET /sep/api/v2/backupgroups/virtualization_hyperv_group/tasks
```

Response:

```
[
  {
    "name": "my_hyperv_backup_task",
    "type": {
      "name": "Hyper-V",
      "displayName": "Hyper-V",
      "shortName": "hyperv",
      "backupCmd": "sbc",
      "prepost": {
        "activatePreInterface": false,
        "executeBackupDespitePreError": false,
        "activatePostInterface": false,
        "executePostDespiteBackupError": false,
        "value": "nnnn"
      },
      "sourcePrefix": "HYPERV:",
      "suitablePlatform": {
        "extern": false,
        "unix": false,
        "windows": true,
        "netware": false,
        "ndmp": false
      },
      "interpreter": "MTF",
      ...
    },
    "client": {
      "id": 12,
      "name": "hypervdev",
      "location": {
        "id": 9,
        "name": "Hyper-V",
        "parentId": 7,
        "displayLabel": "Virtualization/Hyper-V"
      },
      "operSystem": {
        "name": "Windows Server 2012 R2",
        "platform": "WINDOWS"
      },
      "permit": true
    },
    "source": "my_hyperv_vm",
    "excludeType": "PATTERN",
    "resultsSts": "SUCCESSFUL",
    "exec": true,
    "lastFullBackup": "SF20210714090003897@7-1P80W-A8I",
    "lastFdiBackup": "SF20210714090003897@7-1P80W-A8I"
    ...
  }
]
```

### 3.4. Backup Events Service

The backup event services provides access to the backup event objects, which are associated with a schedule and a backup task or backup group.

A backup event is an object with the following properties:

Name	Description
<b>id</b> * required String	The unique ID of the backup event.
<b>name</b> String	The name of the backup event. The maximum length of the name is 255 characters. The name can contain only letters, digits, the '-' and the '_' character.
<b>object</b> * required String	The name of the associated backup task. The maximum length of the backup task name is 128 character.
<b>exec</b> Boolean	Flag to indicate if the backup event is enabled for execution.
<b>Eol</b> Long	The retention time in days.
<b>scheduleName</b> String	The name of the schedule the backup event is associated with. The maximum length of the schedule name is 30 character.
<b>priority</b> Long	The priority of the backup event.
<b>suppress</b> Boolean	Flag to indicate if the backup event is a blocking event.
<b>followUp</b> String	The follow up actions to execute when the backup event finished successfully. The maximum length of the follow up is 1024 character.
<b>grpFlag</b> Boolean	Flag to indicate if the associated object is a backup task (false) or a backup group (true).
<b>owner</b> String	The backup event owner. The maximum length of the backup event owner is 30 character.
<b>fdiType</b> String	The CFDI type to match.
<b>mediaPool</b> String	The name of the media pool to use. The maximum length of the media pool name is 16 character.
<b>mediaLabel</b> String	The label of the media to use. The maximum length of the media label is 30 character.
<b>driveNum</b> Long	The unique ID of the drive to use.
<b>ifaceName</b> String	The name of the client interface to use. The maximum length of the client interface is 255 character.
<b>srvifaceName</b> String	The name of the server interface to use. The maximum length of the server interface is 255 character.
<b>dataMover</b> String	The name of the data mover to use. The maximum length of the data mover name is 255 character.
<b>dataMoverId</b> Long	The unique ID of the data mover to use.
<b>maxSinceFull</b> String	The maximum number of DIFF and/or INCREMENT backups before another FULL backup is forced.
<b>enforceFull</b> Boolean	Flag to indicate if a FULL backup will be enforced. If set to true, this property does override the maxSinceFull property.
<b>migrationTask</b> String	The name of the migration task to execute once the backup finished successfully.
<b>referenceType</b> String	The reference type. Valid values are 'START' and 'RESTART'.
<b>referenceld</b> String	The reference ID. The maximum length of the reference ID is 80 character.
<b>onlineFlag</b>	Flag to indicate to backup the backup source, even if currently in use.

Name	Description
Boolean	
<b>ssddFlag</b> Boolean	Flag to indicate if source side deduplication is used for the backup.
<b>options</b> String	The execution options. The maximum length of the execution options is 255 character.
<b>sepcomment</b> String	The comment or note from Sesam. The maximum length of the SEP comment is 1024 characters.
<b>usercomment</b> String	The comment or note from the user. The maximum length of the user comment is 1024 characters.
<b>immediateFlag</b> Boolean	Flag to indicate if the neday event has to be started immediately.

Following methods are provided by the backup events service:

GET

/sep/api/v2/backupevents

Since: Jaglion

Minimum required role: None

Get all backup events.

The response body contains the list of backup events encoded as JSON objects. The properties of the backup events object are described above.

Responses

Response Code and Content	Description
200 <b>Backup Events</b> array[JSON object]	The backup events are returned in the response body.

Examples

Get all backup events:

```
GET /sep/api/v2/backupevents

Response:
[
  {
    "id": "20200509104046634",
    "name": "TEST_BACKUP-20200509104046634",
    "object": "TEST_BACKUP",
    "exec": true,
    "scheduleName": "Daily-1900",
    "priority": 1,
    "suppress": false,
    "grpFlag": false,
    "owner": "Administrator",
    "fdiType": {
      "value": "F",
      "cfdi": "FULL"
    },
    "mediaPool": "TEST-POOL",
    "enforceFull": false,
    "onlineFlag": true,
    "ssddFlag": false
  },
  ...
]
```

]

GET

/sep/api/v2/backupevents/&lt;id&gt;

Minimum required role: None

Since: Jaglion

Get the backup event matching the given ID.

The response body contains the backup event encoded as JSON object. The properties of the backup events object are described above.

#### Responses

Response Code and Content	Description
200 Backup Event JSON object	The backup event is returned in the response body.

#### Examples

Get the backup event with the unique ID '20200509104046634':

```
GET /sep/api/v2/backupevents/20200509104046634
```

Response:

```
{
  "id": "20200509104046634",
  "name": "TEST_BACKUP-20200509104046634",
  "object": "TEST_BACKUP",
  "exec": true,
  "scheduleName": "Daily-1900",
  "priority": 1,
  "suppress": false,
  "grpFlag": false,
  "owner": "Administrator",
  "fdiType": {
    "value": "F",
    "cfdi": "FULL"
  },
  "mediaPool": "TEST-POOL",
  "enforceFull": false,
  "onlineFlag": true,
  "ssddFlag": false
}
```

**POST**

/sep/api/v2/backupevents/find

Minimum required role: None

Since: Jaglion

Search for backup events matching the specified filter parameters.

Parameters

The filter configuration is passed in as JSON object in the body of the request. The following JSON object properties are defined:

Name	Description
<b>id</b> Long	The unique id of the event to match.
<b>sesamDate</b> array[String]	An array of one or two date/time strings. The first element in the array represents the beginning of the date/time range (<from>) and the second element in the array represents the end of the date/time range (<to>). Either <from> or <to> can be null, but one of them has to be not null. The presence of the two values controls the condition generated. <ul style="list-style-type: none"> <li>• If both values are specified, than the condition will be generated as date range (between “&lt;from&gt;” and “&lt;to&gt;”).</li> <li>• If both values are specified and “&lt;to&gt;” is null, the condition will be generated as greater or equal than “&lt;from&gt;”.</li> <li>• If both values are specified and “&lt;from&gt;” is null, the condition will be generated as less or equal than “&lt;to&gt;”.</li> </ul> If only one value is specified (array length = 1), than the condition is generated as equals.
<b>clientId</b> String	The unique ID of the client to match.
<b>clientName</b> String	The name of the client to match.
<b>clientOs</b> String	The operating system to match, running at the client.
<b>states</b> array[String]	An array of states to match. The most common valid states are 0 (success), 1 (warning), 2 (error) and c (cancelled).
<b>schedule</b> String	The name of the associated schedule to match.
<b>ifaceName</b> array[String]	An array of client interface names to match.
<b>taskName</b> String	The name of the associated backup task to match. If set, the grpFlag property has to be set to false.
<b>taskGroupName</b> String	The name of the associated backup group to match. If set, the grpFlag property has to be set to true.
<b>grpFlag</b> Boolean	Flag to indicate if the search will look for backup tasks or backup groups.
<b>driveNum</b> Long	The unique ID of the drive to match.
<b>poolNames</b> array[String]	An array of media pool names to match.
<b>migrationTaskName</b> String	The migration task name to match.

Responses

Response Code and Content	Description
<b>200</b> Backup Events array[JSON object]	The matching backup events are returned in the response body.

## Examples

---

Get all backup events assigned to the task 'TEST\_BACKUP':

```
POST /sep/api/v2/backupevents/find
{ "taskName": "TEST_BACKUP", "grpFlag": false }

Response:
[
  {
    "id": "20200509104046634",
    "name": "TEST_BACKUP-20200509104046634",
    "object": "TEST_BACKUP",
    "exec": true,
    "scheduleName": "Daily-1900",
    "priority": 1,
    "suppress": false,
    "grpFlag": false,
    "owner": "Administrator",
    "fdiType": {
      "value": "F",
      "cfdi": "FULL"
    },
    "mediaPool": "TEST-POOL",
    "enforceFull": false,
    "onlineFlag": true,
    "ssddFlag": false
  },
  ...
]
```

**POST**

/sep/api/v2/backupevents/create

Minimum required role: Backup

Since: Jaglion

Creates a new backup event.

### Parameters

---

The backup event is passed in as JSON object in the body of the request. The properties of the backup event are described above.

### Responses

---

Response Code and Content	Description
200 Backup Event JSON object	The newly created backup event is returned in the response body.

## Examples

---

Creates a new backup event:

```
POST /sep/api/v2/backupevents/create
{
  "object": "TEST_BACKUP",
  "grpFlag": false,
  "scheduleName": "Daily-1900",
  "fdiType": {
    "value": "F"
  }
}
```



```

    },
    "mediaPool": "TEST-POOL"
  }
}

Response:
{
  "id": "20210628110920610",
  "name": "TEST_BACKUP-20210628110920610",
  "object": "TEST_BACKUP",
  "exec": true,
  "scheduleName": "Daily-1900",
  "priority": 1,
  "suppress": false,
  "grpFlag": false,
  "owner": "ust",
  "fdiType": {
    "value": "F",
    "cfdi": "FULL"
  },
  "mediaPool": "TEST-POOL",
  "immediateFlag": false
}

```

POST

/sep/api/v2/backupevents/update

Minimum required role: Backup

Since: Jaglion

Updates a backup event. A backup event with the given ID must exist, otherwise the call will fail.

#### Parameters

The backup event is passed in as JSON object in the body of the request. The properties of the backup event are described above.

#### Responses

Response Code and Content	Description
200 Backup Event JSON object	The updated backup event is returned in the response body.

#### Examples

Sets a new name for the backup event with the ID '20210628110920610':

```

POST /sep/api/v2/backupevents/update
{
  "id": "20210628110920610",
  "name": "Custom Backup Event",
  "object": "TEST_BACKUP",
  "exec": true,
  "scheduleName": "Daily-1900",
  "priority": 1,
  "suppress": false,
  "grpFlag": false,
  "owner": "ust",
  "fdiType": {
    "value": "F",
    "cfdi": "FULL"
  },
  "mediaPool": "TEST-POOL",
}

```

```

    "immediateFlag": false
  }
  Response:
  {
    "id": "20210628110920610",
    "name": "Custom Backup Event",
    "object": "TEST_BACKUP",
    "exec": true,
    "scheduleName": "Daily-1900",
    "priority": 1,
    "suppress": false,
    "grpFlag": false,
    "owner": "ust",
    "fdiType": {
      "value": "F",
      "cfdi": "FULL"
    },
    "mediaPool": "TEST-POOL",
    "immediateFlag": false
  }

```

POST

/sep/api/v2/backupevents/persist

Minimum required role: Super user

Since: Jaglion

Persists an backup event. If no backup event with the given ID exists, a new backup event will be created. Otherwise, the properties of an existing backup event are updated.

#### Parameters

The backup event is passed in as JSON object in the body of the request. The properties of the backup event are described above.

#### Responses

Response Code and Content	Description
200 Backup Event JSON object	The created or updated backup event is returned in the response body.

#### Examples

Persists the backup event with ID 20210628110920610:

```

POST /sep/api/v2/backupevents/persist
{
  "id": "20210628110920610",
  "name": "Custom Backup Event",
  "object": "TEST_BACKUP",
  "exec": true,
  "scheduleName": "Daily-1900",
  "priority": 1,
  "suppress": false,
  "grpFlag": false,
  "owner": "ust",
  "fdiType": {
    "value": "F",
    "cfdi": "FULL"
  },
  "mediaPool": "TEST-POOL",

```

```

    "immediateFlag": false
  }
  Response:
  {
    "id": "20210628110920610",
    "name": "Custom Backup Event",
    "object": "TEST_BACKUP",
    "exec": true,
    "scheduleName": "Daily-1900",
    "priority": 1,
    "suppress": false,
    "grpFlag": false,
    "owner": "ust",
    "fdiType": {
      "value": "F",
      "cfdi": "FULL"
    },
    "mediaPool": "TEST-POOL",
    "immediateFlag": false
  }

```

POST

/sep/api/v2/backupevents/delete

Minimum required role: Backup

Since: Jaglion

Deletes a backup event.

#### Parameters

The unique ID of the backup event is passed in as JSON number in the body of the request.

#### Responses

Response Code and Content	Description
200 id Long	The unique ID of the deleted backup event is returned in the response body. If no backup event existed with the given ID, then null is returned.

#### Examples

Deletes the backup event with the ID '20210628110920610' (exists):

```
POST /sep/api/v2/backupevents/delete
20210628110920610
```

```
Response:
20210628110920610
```

POST

/sep/api/v2/backupevents/deleteBySchedule

Minimum required role: Backup

Since: Jaglion

Deletes all backup events which are associated with the given schedule.

#### Parameters

The name of the schedule is passed in as JSON string in the body of the request.

#### Responses

Response Code and Content	Description
<b>200</b> <b>Success</b> Boolean	The success of deleting the backup events for the given schedule is returned in the response body.

#### Examples

Deletes all backup events of the schedule 'Daily-1900':

```
POST /sep/api/v2/backupevents/deleteBySchedule
"Daily-1900"
```

```
Response:
true
```

POST

/sep/api/v2/backupevents/deleteByEntity

Minimum required role: Backup

Since: Jaglion

Deletes the backup event matching the given entity.

#### Parameters

The entity to match is passed in the body of the request as JSON object. The only required entity property is the primary key of the entity.

#### Responses

Response Code and Content	Description
<b>200</b> <b>ID</b> Long	The ID of the backup event is returned in the response body.

#### Examples

Delete the backup event with the unique ID "101":

```
POST /sep/api/v2/backupevents/deleteByEntity
{ "id": 101 }
```

```
Response:
```

101

### 3.5. Backup Service

The backup service provides access to the backup objects. A backup is the result of executing a configured backup task. The ID of a backup is the ID of the save set created by the backup task execution.

A backup is an object with the following properties:

Name	Description
<b>name</b> *required String	The unique name of the backup. The name is the ID of the save set where the backup data is stored. The maximum length of the name is 64 characters.
<b>task</b> *required String	The name of the backup task. The maximum length of the backup task name is 50 characters.
<b>sesamDate</b> *required Date	The sesam date when the backup executed.
<b>cnt</b> *required Long	The consecutive backup number.
<b>client</b> String	The name of the client backed up. The maximum length of the client name is 255 characters.
<b>clientId</b> Long	The unique ID of the client backed up.
<b>driveNum</b> Long	The ID of the drive used to write the backup data.
<b>duration</b> Long	The duration of the backup in seconds.
<b>entry</b> Long	The entry number.
<b>ifaceName</b> String	The name of the interface used for the backup. The maximum length of the interface name is 255 characters.
<b>sepcomment</b> String	The comment or note from Sesam. The maximum length of the SEP comment is 254 characters.
<b>pid</b> Long	The PID of the backup as long the backup is still executing.
<b>priority</b> Long	The priority the backup has been executed with.
<b>schedule</b> String	The schedule name. The maximum length of the schedule name is 30 character.
<b>sessionId</b> String	The ID of the parent backup. The maximum length of the ID is 64 character.
<b>size</b> Long	The data size in bytes.
<b>ssddFlag</b> Boolean	Flag to mark if the data was backed up with source side deduplication.
<b>startTime</b> Date	The date and time when the backup started.
<b>state</b> String	The backup state. The most common values are '0' (OK) and 'X' or '2' (Error).
<b>stopTime</b> Date	The date and time when the backup finished.
<b>throughput</b> Double	The throughput of the backup in B/s.
<b>usercomment</b> String	The comment or note from the user. The maximum length of the user comment is 1024 characters.
<b>fdiType</b> JSON object	The backup level the backup has been executed with. Valid values are 'COPY', 'FULL', 'DIFF', 'INC', 'MIGRATION', 'NEWDAY', 'STARTUP' and 'EXECUTE'.
<b>fdiTypeSet</b> JSON object	The backup level originally configured for the backup. Valid values are 'COPY', 'FULL', 'DIFF' and 'INC'.
<b>isBackup</b> Long	Flag to mark if the backup is indeed a backup.

Name	Description
<b>mediaPool</b> String	The media pool where the backup is stored.
<b>startMedia</b> String	The label of the media where the first data of the backup is stored. The maximum length of the start media label is 32 characters.
<b>lblCnt</b> Long	The number of labels associated with this backup.
<b>driveNumSet</b> String	The originally configured ID of the drive to use for writing the backup data.
<b>clientUuid</b> String	The UUID of the client backed up.
<b>clientOs</b> String	The operating system name of the client backed up.
<b>sesamVersion</b> String	The version ID of the Sesam server used for the backup.
<b>dataMover</b> String	The host name or IP address of the data mover to use. The maximum length of the data mover name is 255 character.
<b>sbcVersion</b> String	The Sesam backup client version ID. The maximum length of the SBC version is 64 character.
<b>smsVersion</b> String	The SMS version ID. The maximum length of the SMS version is 16 character.
<b>locationId</b> Long	The uniques ID of the location the client belongs too.
<b>source</b> String	The comma separated list of backup source pattern to match. The maximum length of the source is 4096 character.
<b>sourceEncoding</b> String	The encoding of the backup source pattern. The maximum length of the source encoding is 64 character.
<b>sourceUuid</b> String	The backup source unique ID. Reserved for future use. The maximum length of the source UUID is 128 character.
<b>additionalSourceInfo</b> String	The additional backup source information. The maximum length of the addition source information is 4096 character.
<b>exclude</b> String	The comma separated list of backup source exclude pattern. The maximum length of the exclude pattern is 1024 character.
<b>excludeType</b> String	The type of the backup source exclude pattern. Valid values are 'pattern' and 'regex'. The maximum length of the exclude type is 16 character.
<b>versionId</b> Long	The version ID.
<b>locked</b> Boolean	Flag to mark if the backup is locked.
<b>eol</b> Date	The backup end-of-life date and time.
<b>eolChangedBy</b> String	The object or action which changed the backup end-of-life date last. The maximum length of the object or action is 64 character.
<b>eolChangedByUser</b> String	The user which changed the backup end-of-life date last. The maximum length of the user is 255 character.
<b>eolChangedByMsg</b> String	The message set when the backup end-of-life date changed last. The maximum length of the message is 254 character.
<b>blocks</b> Double	The number of blocks.
<b>estimatedSize</b> Double	The estimated data size in bytes.
<b>dataSize</b> Double	The data size in bytes.
<b>skippedSize</b> Double	The skipped size in bytes.
<b>storedSize</b> Double	The stored size in bytes.

Name	Description
<b>totalSize</b> Double	The total size in bytes.
<b>smsFlag</b> String	The SMS flag. The maximum length of the SMS flag is 1 character.
<b>sbcStart</b> String	The date and time when the SBC started to back up the data.
<b>savesetExist</b> String	The save set exist marker. The maximum length of the saveset exit marker is 2 character.
<b>savesetState</b> String	The save set state. The maximum length of the save set state is 32 character.
<b>resultsState</b> String	The result state. The maximum length of the result state is 32 character.
<b>backupCmd</b> String	The backup command. The maximum length of the backup command is 20 character.
<b>backupType</b> String	The backup type. The maximum length of the backup type is 32 character.
<b>backupSubType</b> String	The backup sub type. The maximum length of the backup sub type is 32 character.
<b>checkpoint</b> String	The checkpoint. The maximum length of the checkpoint is 255 character.
<b>interpreter</b> String	The interpreter to use. The maximum length of the interpreter is 32 character.
<b>backupOptions</b> String	The backup options. The maximum length of the backup options is 255 character.
<b>restoreOptions</b> String	The restore options. The maximum length of the restore options is 255 character.
<b>bsrFlag</b> Boolean	Flag to indicate if the backup is a BSR backup.
<b>externFlag</b> Boolean	Flag to indicate if the backup is an external backup.
<b>onlineFlag</b> String	The backup online type. Valid values are 'HOT', 'WARM' and 'COLD'.
<b>subtaskFlag</b> String	Flag to indicate of the backup is a sub task of a parent backup.
<b>compressFlag</b> Boolean	Flag to control if the backup data will be compressed (true) or not (false).
<b>cryptFlag</b> String	Flag to control if the backup data will be encrypted. Valid values are 'a' (AES256) or 'b' (Blowfish64).
<b>cryptKey</b> String	The encrypted encryption key to encrypt the backup data with. The maximum length of the encryption key is 128 characters.
<b>cryptFlagMedia</b> String	Flag to indicate if the backup media will be encrypted. Valid values are 'a' (AES256) or 'b' (Blowfish64).
<b>cryptKeyMedia</b> String	The backup media encryption key. The maximum length of the encryption key is 128 characters.
<b>verifyState</b> String	The backup verify state. The most common values are '0' (OK) and 'X' or '2' (Error).
<b>verifyDate</b> Date	The date and time of the backup verification.
<b>checksum</b> String	The checksum of the backup. The maximum length of the checksum is 128 character.
<b>originalSaveset</b> String	The save set ID of the original save set. The maximum length of the original save set ID is 80 character.
<b>copyFrom</b> String	The save set ID the backup data got copied from. The maximum length of the copy from save set ID is 80 character.
<b>referenceType</b> String	The reference type. Valid values are 'start' and 'restart'.
<b>referenceSsid</b>	The reference source save set ID. The maximum length of the reference source save



Name	Description
String	set ID is 80 character.
<b>basedOnFull</b> String	The save set ID of the FULL backup, a DIFF or INC backup is based on. The maximum length of the based on FULL save set ID is 64 character.
<b>basedOn</b> String	The save set ID of the backup, a DIFF or INC backup is based on. The maximum length of the based on save set ID is 64 character.
<b>processed</b> Long	The number of processed items.
<b>notProcessed</b> Long	The number of not processed items.
<b>excluded</b> Long	The number of excluded items.
<b>skipped</b> Long	The number of skipped items.
<b>savesetCnt</b> Long	The number of copies of the backup.
<b>label</b> String	The label of the media where the backup is stored. The maximum length of the label is 30 characters.
<b>savesetId</b> String	The ID of the save set where the backup data is stored in. The maximum length of the save set ID is 64 character.
<b>savesetEol</b> Date	The end-of-life date and time of the save set.
<b>savesetPool</b> String	The name of the media pool where the save set is stored. The maximum length of the media pool name is 32 character.
<b>savesetCount</b> Long	The zero based consecutive number of the save set.
<b>totalCount</b> Long	The total number of records in the result set.
<b>lastFullBackup</b> Date	The date and time of the last FULL backup.
<b>lastSuccessfulBackup</b> Date	The date and time of the last successful backup.
<b>lockUpdateMode</b> String	Flag to control how changes to the locked state of the backup affects the backup chain. Valid values are 'CHAIN', 'SELF' and 'CHILDREN'.

Following methods are provided by the backup service:

GET

/sep/api/v2/backups

Minimum required role: None

Since: Beefalo

Get all backups.

This end point should be used with care, as the returned list of backups is completely unfiltered and therefore the returned result set can be huge. On Sesam servers with a large amount of backups, getting the list of backup's unfiltered can easily take very long and might even lead to exceeding the available memory on the Sesam server.

To limit the number of returned backups, the *backups/find* or the *clients/<id>/backups* API should be used instead.

The response body contains the backup encoded as JSON object. The properties of the backup object are described above.

## Responses

---

Response Code and Content	Description
200 Backup JSON object	The backup is returned in the response body.

## Examples

---

The backup with the unique name 'SD20190919080005305@084sm1F11EQ':

```
GET /sep/api/v2/backups

Response:
[
  {
    "name": "SD20190919080005305@084sm1F11EQ",
    "task": "my-backup",
    ...
  },
  ...
]
```

GET
</sep/api/v2/backups/<name>>

Minimum required role: None

Since: Beefalo

Gets the backup matching the given name.

The response body contains the backup encoded as JSON object. The properties of the backup object are described above.

## Responses

---

Response Code and Content	Description
200 Backup JSON object	The backup is returned in the response body.

## Examples

---

The backup with the unique name 'SD20190919080005305@084sm1F11EQ':

```
GET /sep/api/v2/backups/SD20190919080005305@084sm1F11EQ

Response:
{
  "name": "SD20190919080005305@084sm1F11EQ",
  "task": "my-backup",
  ...
}
```

POST

/sep/api/v2/backups/find

Minimum required role: None

Since: Beefalo

Search for the number of backups matching the specified filter parameters.

### Parameters

The filter configuration is passed in as JSON object in the body of the request. The following JSON object properties are defined:

Name	Description
<b>sesamDate</b> array[String]	An array of one or two date/time strings. The first element in the array represents the beginning of the date/time range (<from>) and the second element in the array represents the end of the date/time range (<to>). Either <from> or <to> can be null, but one of them has to be not null. The presence of the two values controls the condition generated. <ul style="list-style-type: none"> <li>If both values are specified, than the condition will be generated as date range (between "&lt;from&gt;" and "&lt;to&gt;").</li> <li>If both values are specified and "&lt;to&gt;" is null, the condition will be generated as greater or equal than "&lt;from&gt;".</li> <li>If both values are specified and "&lt;from&gt;" is null, the condition will be generated as less or equal than "&lt;to&gt;".</li> <li>If only one value is specified (array length = 1), than the condition is generated as equals.</li> </ul>
<b>startTime</b> array[String]	An array of one or two date/time strings. See the description of the "sesamDate" filter property for details.
<b>stopTime</b> array[String]	An array of one or two date/time strings. See the description of the "sesamDate" filter property for details.
<b>brokenBackups</b> Boolean	Flag to include broken backups in the result set.
<b>clients</b> array[Long]	The IDs of the client to match. <b>ClientNames must not be set for this parameter to take effect.</b>
<b>clientNames</b> array[String]	The names or IDs of the clients to match. . <b>If set this overrides the "clients"-parameter.</b>
<b>clientOs</b> String	The operating system of the client to match. The wild cards "*" and "?" might be used.
<b>cnt</b> Long	The sequence number of the backup to match.
<b>drive</b> Long	The drive number to match.
<b>excludeEventType</b> array[String]	The event types to exclude. Valid values are 'COPY', 'FULL', 'DIFF', 'INC', 'MIGRATION', 'NEWDAY', 'STARTUP' and 'EXECUTE'
<b>fdiTypes</b> array[JSON object]	The event types to match.
<b>filterSavesets</b> Boolean	Flag to exclude deleted backups.
<b>hidePartiallyDeleted</b> Boolean	Flag to exclude partially deleted backups.
<b>noEolFree</b> Boolean	Flag to include only not EOL free backups into the result set. Typically used together with the 'datastore' or 'label' filter attributes.
<b>label</b> String	The media label to match.
<b>mediaPoolName</b> String	The media pool name to match.
<b>name</b> String	The unique name of the backup to match.
<b>dataSize</b>	A list of data sizes the backup size has to outmatch.

Name	Description
array[Double]	
<b>throughputSet</b> Boolean	Flag to exclude backups where not throughput value is set.
<b>original</b> String	The unique name of the original backup to match.
<b>sessionId</b> String	The unique name of the parent backup to match.
<b>sessionIds</b> array[String]	The list of unique names of the parent backups to match.
<b>skipChildren</b> Boolean	Flag to exclude backups, which are children of a parent backup.
<b>groupsModeFlag</b> Boolean	Flag to exclude parent backup groups.
<b>showExternResults</b> Boolean	Flag to include external backups. Defaults to 'true'.
<b>restoreExtern</b> String	Flag to include backup which require external restore. Defaults to 'true'
<b>lastBackupState</b> Boolean	Flag to indicate that the "last backup state" is queried.
<b>showNonExistingTasks</b> Boolean	Flag to indicate to include backups without existing backup tasks in the "last backup state" query.
<b>showExistingTasks</b> Boolean	Flag to indicate to include backups with existing backup tasks in the "last backup state" query.
<b>showInactiveTasks</b> Boolean	Flag to indicate to include never executed backup tasks in the "last backup state" query.
<b>states</b> array[String]	The list of states to match.
<b>taskName</b> String	The name of the backup task to match.
<b>tasks</b> array[String]	The list of names of the backup tasks to match.
<b>restartOnly</b> Boolean	Flag to include only restart able backups.
<b>fillLastSuccessful</b> Boolean	Flag to fill in the date and time of the last successful backup.
<b>location</b> Long	The ID of the location to match.
<b>backupTypes</b> array[String]	The list of backup types to match.
<b>datastore</b> String	The unique name of the data store to match.

## Responses

Response Code and Content	Description
<b>200</b> <b>Backup</b> array[JSON object]	The matching backups are returned in the response body.

## Examples

Get all backups executed yesterday:

```
POST /sep/api/v2/backups/find
{ "dateFlagYesterday" : true }
```

```
Response:
[
  {
    "name": "SD20190919080005305@084sm1F11EQ",
    "task": "my-backup",
    ...
  },
  ...
]
```

**POST**

/sep/api/v2/backups/update

Minimum required role: Backup

Since: Jaglion

Updates a backup. A backup with the given name must exist, otherwise the call will fail.

The end-point will look up the original backup object by the given name. If found, the original backup object is updated with the 'locked' and 'usercomment' properties from the passed in backup object. The other properties of a backup object cannot be changed.

The property 'lockUpdateMode' controls if the locked state of the whole backup chain ('CHAIN'), the backup itself only ('SELF') or the backup itself and its sub backups ('CHILDREN') is changed.

Parameters

The backup is passed in as JSON object in the body of the request. The properties of the backup are described above.

Responses

Response Code and Content	Description
200 Backup JSON object	The updated backup is returned in the response body.
500 Error JSON object	SERVER_ERROR_INTERNAL. The error object returned in the response body contains the details of what went wrong.

Examples

Updates the locked state for the whole backup chain of the backup with the name 'SI20200618080238540@5iruXgHZzYX':

```
POST /sep/api/v2/backups/update
{ "name": "SI20200618080238540@5iruXgHZzYX", "locked": true }

Response:
{
  "name": "SI20200618080238540@5iruXgHZzYX",
  "task": "my-backup",
  "locked": true,
  ...
}
```

Updates the locked state for only the backup with the name 'SI20200618080238540@5iruXgHZzYX':

```
POST /sep/api/v2/backups/update
{ "name": "SI20200618080238540@5iruXgHZzYX", "locked": true, "lockUpdateMode": "SELF" }

Response:
{
  "name": "SI20200618080238540@5iruXgHZzYX",
  "task": "my-backup",
  "locked": true,
  ...
}
```

**POST**`/sep/api/v2/backups/count`

Minimum required role: None

Since: Jaglion

Get the number of backups matching the specified filter parameters.

#### Parameters

---

The filter configuration is passed in as JSON object in the body of the request. The JSON object properties are the same as defined for POST /sep/api/v2/backups/find.

#### Examples

---

Get number of all backups executed yesterday:

```
POST /sep/api/v2/backups/count
{ "dateFlagYesterday" : true }

Response:
17
```

**POST**`/sep/api/v2/backups/countTasks`

Minimum required role: None

Since: Jaglion

Get the number of backup tasks matching the specified filter parameters.

#### Parameters

---

The filter configuration is passed in as JSON object in the body of the request. The JSON object properties are the same as defined for POST /sep/api/v2/backups/findTasks.

#### Examples

---

Get number of all backups for the client with the name "workstation17":

```
POST /sep/api/v2/backups/countTasks
{ "client" : "workstation17" }

Response:
12
```

POST

/sep/api/v2/backups/contentBrowse

Minimum required role: None

Since: Beefalo

Browse the content of the backup matching the specified filter parameters.

### Parameters

The filter configuration is passed in as JSON object in the body of the request. The following JSON object properties are defined:

Name	Description
<b>savesetId</b> * required String	The unique name of the backup to browse.
<b>path</b> String	The relative path to browse.
<b>searchPattern</b> String	The search pattern to match.
<b>genMode</b> Boolean	Flag to enable the generation mode.
<b>mailMode</b> Boolean	Flag to enable the mail mode.

### Responses

The response is a list of remote file system item. The remote file system item object properties are described in the remote file system access section.

Response Code and Content	Description
<b>200</b> <b>Remote File System Item</b> array[JSON object]	The list of remote file system items is returned in the response body.

### Examples

Browse the path 'C:/NoScan/' of the backup with the name 'SI20190919160501692@mR\_LVbirzPu':

```
POST /sep/api/v2/backups/contentBrowse
{ "savesetId" : "SI20190919160501692@mR_LVbirzPu", "path" : "C:/NoScan/" }
```

Response:

```
[
  "items": [
    {
      "path": "C:/NoScan/AppData",
      "type": "d_",
      "segmentNum": "1",
      "startPos": "34816",
      "endPos": "35840",
      "infoData": "SD20190919160000629@YDM_C-B7G0g 21",
      "parentPath": "C:/NoScan/",
      "name": "AppData",
      "size": 1024,
      "created": 1526579059000,
      "lastModified": 1568894385000
    }
  ]
]
```

POST

/sep/api/v2/backups/contentFind

Minimum required role: None

Since: Beefalo

Search in the content of the backup matching the specified filter parameters.

#### Parameters

The filter configuration is passed in as JSON object in the body of the request. The JSON object properties are defined above.

#### Responses

The response is a list of remote file system item. The remote file system item object properties are described in the remote file system access section.

Response Code and Content	Description
200 Remote File System Item array[JSON object]	The list of remote file system items is returned in the response body.

#### Examples

Search the path 'C:/NoScan/' for items matching the pattern '\*.ini' of the backup with the name 'SI20190919160501692@mR\_LVbirzPu':

```
POST /sep/api/v2/backups/contentFind
{ "saveSetId" : "SI20190919160501692@mR_LVbirzPu", "path" : "C:/NoScan/", "searchPattern" : "*.ini" }

Response:
[
  "items": [
    {
      "path": "C:/NoScan/AppData/Temp/trkcfg.ini",
      "type": "f_",
      "segmentNum": "1",
      "startPos": "132982784",
      "endPos": "132983808",
      "infoData": "SF20190919081003256@jzE0Xe550kQ 128",
      "parentPath": "C:/NoScan/AppData/Temp/",
      "name": "trkcfg.ini",
      "size": 1024,
      "created": 1568606319000,
      "lastModified": 1568606319000
    }
  ]
]
```



POST

/sep/api/v2/backups/contentSearch

Minimum required role: None

Since: Beefalo

Search in the content of all backups matching the specified filter parameters.

As this end point has to search through a potentially long list of backups, it may take a while to respond.

### Parameters

The filter configuration is passed in as JSON object in the body of the request. The following JSON object properties are defined:

Name	Description
<b>clientId</b> * required Long	The unique ID of the client to match.
<b>pattern</b> * required String	The search pattern to match.
<b>backupTypes</b> * required array[String]	The list of backup types to match.
<b>patternType</b> String	The type of the search pattern. Valid values are 'strsr', 'regex', 'iregex'.
<b>task</b> String	The unique name of the backup task to match.
<b>dateRange</b> array[Date]	The start and the end date and time of the date range to match. The date range is an 2 element array, where the first element is the start and the second element is the end of the date range.

### Responses

The response is a list of backups with content matching the search pattern. The backup object properties are described above.

Response Code and Content	Description
200 <b>Backup</b> array[JSON object]	The list of backups is returned in the response body.

### Examples

Search all backups of the client with ID 0 for containing the file 'sm.ini':

```
POST /sep/api/v2/backups/contentSearch
{ "clientId" : 0, "pattern" : "sm.ini", "backupTypes" : [ "PATH" ] }

Response:
[
  {
    "name": "SF20190726093003096@M_0keRs_5dk",
    "task": "client01_all",
    ...
  },
  ...
]
```

POST

/sep/api/v2/backups/createTask

Minimum required role: Backup

Since: Jaglion

Creates a new backup task with the given name. If a backup task with the given name already exists, the call will fail.

#### Parameters

---

The backup task is passed in as JSON object in the body of the request. The properties of the backup task are described in the client service section.

#### Responses

---

Response Code and Content	Description
<b>200</b> <b>Backup Task</b> JSON object	The newly created backup task is returned in the response body.

#### Examples

---

Creates a new backup task:

```

POST /sep/api/v2/backups/createTask
{ "name" : "My_Backup_Task", "client" : { "name" : "my-client" }, "source" : "C:/tmp", "type" : { "name" : "Path" } }

Response:
{
  "name": "My_Backup_Task",
  "type": {
    "name": "Path",
    ...
  },
  "client": {
    "id": 50,
    "name": "my-client",
    "location": {
      "id": 0,
      "name": "LOCAL",
      ...
    },
    "operSystem": {
      "name": "Windows 10",
      "platform": "WINDOWS"
    },
    "permit": true
  },
  "source": "C:/tmp",
  ...
  "exec": true
}

```

POST

/sep/api/v2/backups/updateTask

Minimum required role: Backup

Since: Jaglion

Updates a backup task. A backup task with the given name must exist, otherwise the call will fail.

## Parameters

---

The backup task is passed in as JSON object in the body of the request. The properties of the backup task are described in the client service section.

## Responses

---

Response Code and Content	Description
<b>200</b> <b>Backup Task</b> JSON object	The updated backup task is returned in the response body.

## Examples

---

Updates the backup task with the name "My\_Backup\_Task":

```
POST /sep/api/v2/backups/updateTask
{ "name" : "My_Backup_Task", ..., "usercomment" : "Backup important data." }
```

Response:

```
{
  "name": "My_Backup_Task",
  "type": {
    "name": "Path",
    ...
  },
  "client": {
    "id": 50,
    "name": "my-client",
    "location": {
      "id": 0,
      "name": "LOCAL",
      ...
    },
    "operSystem": {
      "name": "Windows 10",
      "platform": "WINDOWS"
    },
    "permit": true
  },
  "source": "C:/tmp",
  "usercomment": "Backup important data.",
  ...
  "exec": true
}
```

GET

/sep/api/v2/backups/&lt;name&gt;/tasks

Minimum required role: None

Since: Jaglion

Get the backup task for the backup matching the given backup name.

The response body contains the backup task encoded as JSON object. The properties of the backup task are described in the client service section.

#### Responses

Response Code and Content	Description
200 Backup Task JSON object	The matching backup task is returned in the response body.

#### Examples

Get the backup task of the backup with the name "SC20200410090002734@9IGQp67g0Bj":

```
GET /sep/api/v2/backups/SC20200410090002734@9IGQp67g0Bj/tasks
```

```
Response:
```

```
{
  "name": "My_Backup_Task",
  "type": {
    "name": "Path",
    ...
  },
  "client": {
    "id": 0,
    "name": "my-backup-server",
    ...
  },
  ...
}
```

GET

/sep/api/v2/backups/tasks/&lt;name&gt;

Minimum required role: None

Since: Jaglion

Get the backup task matching the given backup task name.

The response body contains the backup task encoded as JSON object. The properties of the backup task are described in the client service section.

Responses

Response Code and Content	Description
200 Backup Task JSON object	The matching backup task is returned in the response body.

Examples

Get the backup task with the name "My\_Backup\_Task":

```
GET /sep/api/v2/backups/tasks/My_Backup_Task

Response:
{
  "name": "My_Backup_Task",
  "type": {
    "name": "Path",
    ...
  },
  "client": {
    "id": 0,
    "name": "my-backup-server",
    ...
  },
  ...
}
```

**GET** /sep/api/v2/backups/findTasks Since: Jaglion  
 Minimum required role: None

Get the list of all available backup tasks.

The end point supports filtering the result set by passing in a backup tasks filter as JSON object in the body of the request. The HTTP request method has to be changed to POST when using the filter.

**POST** /sep/api/v2/backups/findTasks Since: Jaglion  
 Minimum required role: None

Search for backup tasks matching the specified filter parameters.

Parameters

The filter configuration is passed in as JSON object in the body of the request. The following JSON object properties are defined:

Name	Description
<b>clientId</b> Long	The ID of the client to match.
<b>client</b> String	The name of the client to match.
<b>names</b> array[String]	The list of backup task names to match.

Name	Description
<b>taskGroup</b> String	The name of the backup group to match.
<b>backupTypes</b> array[String]	The list of backup types to match.
<b>backupTypesNotIn</b> array[String]	The list of backup types to not match. Only applicable if the 'extern' filter property is also set.
<b>extern</b> Boolean	Flag to control if the 'backupTypesNotIn' filter property applies for external backups or for non-external backups. If not specified, the 'backupTypesNotIn' filter property is ignored.
<b>unstarted</b> Boolean	Matches all tasks that have never been started, meaning there is no result containing that respective task.
<b>notScheduled</b> Boolean	True, if only tasks should be found, which are not scheduled in any task event yet.

## Responses

Response Code and Content	Description
<b>200</b> <b>Backup Task</b> array[JSON object]	The matching backup tasks are returned in the response body.

## Examples

Get all available backup tasks:

```
GET /sep/api/v2/backups/findTasks
```

Response:

```
[
  {
    "name": "My_Other_Backup_Task",
    "type": {
      "name": "Path",
      ...
    },
    "client": {
      "id": 1,
      "name": "my-second-backup-server",
      ...
    },
    ...
  },
  ...
]
```

Get the backup tasks for the client with ID '0':

```
POST /sep/api/v2/backups/findTasks
{ "clientId" : 0 }
```

Response:

```
[
  {
    "name": "My_Backup_Task",
    "type": {
      "name": "Path",
      ...
    },
    ...
  },
  ...
]
```

```

    "client": {
      "id": 0,
      "name": "my-backup-server",
      ...
    },
    ...
  },
  ...
]

```

**POST**

/sep/api/v2/backups/importTasks

Minimum required role: Backup

Since: Jaglion

Imports a list of backup tasks. Recreates each backup task from the list with the given properties. If a backup task with the same name already exists, the import will fail as a whole.

#### Parameters

---

The list of backup tasks to import is passed in as JSON array in the body of the request.

#### Responses

---

Response Code and Content	Description
<b>200</b> <b>Backup Tasks</b> array[JSON object]	The list of newly created backup tasks is returned in the response body.

#### Examples

---

Import the given list of backup tasks:

```

POST /sep/api/v2/clients/import
[
  {
    "name": "My_Backup_Task",
    "type": {
      "name": "Path",
      ...
    },
    "client": {
      "id": 50,
      "name": "my-client",
      "location": {
        "id": 0,
        "name": "LOCAL",
        ...
      },
      "operSystem": {
        "name": "Windows 10",
        "platform": "WINDOWS"
      },
      "permit": true
    },
    "source": "C:/tmp",
    ...
    "exec": true
  },
  {
    "name": "My_Other_Backup_Task",
    "type": {

```

```

    "name": "Path",
    ...
  },
  "client": {
    "id": 50,
    "name": "my-client",
    "location": {
      "id": 0,
      "name": "LOCAL",
      ...
    },
    "operSystem": {
      "name": "Windows 10",
      "platform": "WINDOWS"
    },
    "permit": true
  },
  "source": "C:/opt",
  ...
  "exec": true
}
]

Response:
[
  {
    "name": "My_Backup_Task",
    "type": {
      "name": "Path",
      ...
    },
    "client": {
      "id": 50,
      "name": "my-client",
      "location": {
        "id": 0,
        "name": "LOCAL",
        ...
      },
      "operSystem": {
        "name": "Windows 10",
        "platform": "WINDOWS"
      },
      "permit": true
    },
    "source": "C:/tmp",
    ...
    "exec": true
  },
  {
    "name": "My_Other_Backup_Task",
    "type": {
      "name": "Path",
      ...
    },
    "client": {
      "id": 50,
      "name": "my-client",
      "location": {
        "id": 0,
        "name": "LOCAL",
        ...
      },
      "operSystem": {
        "name": "Windows 10",
        "platform": "WINDOWS"
      },
      "permit": true
    },
    "source": "C:/opt",
    ...
    "exec": true
  }
]

```



]

**POST**`/sep/api/v2/backups/<taskName>/deleteTask`

Minimum required role: Backup

Since: Jaglion

Deletes the backup task matching the provided name. If the backup task should be deleted with all associated backup events, the flag “forceRemove” must be set in the request body.

### Parameters

---

The delete task options are passed in as JSON object in the body of the request. The following JSON object properties are defined:

Name	Description
<b>forceRemove</b> Boolean	Flag to indicate if the backup task will be removed together with all associated restore events.

### Responses

---

Response Code and Content	Description
<b>200</b> <b>Name</b> String	The unique name of the deleted backup task is returned in the response body. If no backup task existed with the given name, then null is returned.

### Examples

---

Deletes the backup task with the name “My\_Backup\_Task”, which is associated to a restore event:

```
POST /sep/api/v2/backups/My_Backup_Task/deleteTask
{ "forceRemove" : "true" }
```

```
Response:
"My_Backup_Task"
```

Deletes the backup task with the name “My\_Other\_Backup\_Task”, which is not associated to any events:

```
POST /sep/api/v2/backups/My_Other_Backup_Task/deleteTask
{ "forceRemove" : "false" }
```

```
Response:
"My_Other_Backup_Task"
```

Deletes the backup task with the name “Yet\_Another\_Backup\_Task” (does not exist):

```
POST /sep/api/v2/backups/Yet_Another_Restore_Task/deleteTask
{ "forceRemove" : "false" }
```

```
Response:
null
```

POST

/sep/api/v2/backups/start

Minimum required role: Backup

Since: Jaglion

Starts all backup tasks provided in a list of JSON objects, where tasks matching the given parameters could be found. If the restart-flag is set, already failed backup tasks can be restarted.

#### Parameters

The start configuration of each backup task is passed in as JSON object in the body of the request. The following JSON object properties are defined:

Name	Description
<b>taskName</b> * required (if it is not a restart) String	The unique name of the backup task to start.
<b>mediaPoolName</b> * required (if it is not a restart) String	The name of the media pool in which the backup should be saved.
<b>grpFlag</b> Boolean	Must be "true", if the given taskName is the name of a task group.
<b>immediateFlag</b> Boolean	Must be "false" if the task should not start immediately.
<b>priority</b> Long	The priority of the task.
<b>backupLevel</b> String	Determines if the backup should be "full", "copy", "inc" or "diff".
<b>interfaceName</b> String	The name of the interface which should be used to transfer the backup.
<b>migrationTaskName</b> String	The name of the migration task which should be started once the backup is finished.
<b>followUp</b> String	The name of the follow-up event allowing to start new actions after the backup is finished.
<b>driveId</b> Long	The ID of the drive which should be used to execute the backup task.
<b>sourceDedup</b> Boolean	Must be "true", if the given media pool is a S13 Deduplication Store.
<b>startTime</b> Date	The time at which the given backup task should be started.
<b>startTimeFrame</b> Long	The time period sesam should try to start the task, if starting at the given time is not possible.
<b>cancelAfter</b> Long	The time period in minutes after which the started task will be cancelled, if it is not finished yet at this moment.
<b>isRestart</b> Boolean	True, if a savesetId is provided and an already failed backup should be restarted.
<b>savesetId</b> String	The ID of the saveset of the failed task, which should be restarted.

#### Responses

The response is a list of JSON formatted StartBackupResultsDto-objects with the following parameters:

Name	Description
<b>StartBackupDto</b> String	The StartBackupDto which contained the data to start the respective backup task.

Name	Description
<b>eventId</b> Long	The ID of the created task event.
<b>success</b> Boolean	True, if respective task could be started, false otherwise.
<b>error</b> RestError	If start of the backup task failed, this is containing the corresponding error message.

### Examples

Start the restore task with the name matching "My\_Restore\_Task":

```
POST /sep/api/v2/backups/start

[
  { "taskName" : "My_Backup_Task",
    "mediaPoolName" : "My_Media_Pool",
    "backupLevel" : "DIFF" }
]

Response:

[
  {
    "inputDto": {
      "taskName": " My_Backup_Task ",
      "mediaPoolName": " My_Media_Pool ",
      "backupLevel": "DIFF"
    },
    "eventId": 20200602145207951,
    "success": true
  }
]
```

Restart the failed task "My\_failed\_task" with the savesetId "":

```
POST /sep/api/v2/backups/start

[
  {"savesetId": "SD20200703094846400@KnXT92uW9-y",
    "isRestart": "true"}
]

Response:

[
  {
    "inputDto": {
      "isRestart": true,
      "savesetId": " SD20200703094846400@KnXT92uW9-y "
    },
    "eventId": 20200602145207951,
    "success": true
  }
]
```

GET

/sep/api/v2/backups/&lt;name&gt;/tree

Minimum required role: None

Since: Jaglion

Get the save set tree of the selected backup.

The end point supports filtering the result set by passing in a save set chain filter as JSON object in the body of the request. The HTTP request method has to be changed to POST when using the filter.

POST

/sep/api/v2/backups/&lt;name&gt;/tree

Minimum required role: None

Since: Jaglion

Get the save set tree of the selected backup matching the specified filter parameters.

The response will be a save set tree. A save set tree is an object with the following properties:

Name	Description
<b>savesettree</b> array[JSON object]	The list of save sets associated with the selected backup.
<b>status</b> JSON object	The save set tree state.
<b>preferredMediaPools</b> array[String]	The list of preferred media pool names.
<b>driveGroups</b> array[JSON object]	The list of drive groups.

A save set is an object with the following properties:

Name	Description
<b>saveset</b> String	The save set ID.
<b>savesets</b> array[JSON object]	The list of save sets.
<b>pool</b> String	The name of the media pool where the save set is stored.
<b>avail</b> Long	The save set availability state.
<b>reason</b> String	The reason.
<b>drivegroup</b> String	The drive group.
<b>drives</b> array[JSON object]	The list of drives.
<b>labels</b> array[JSON object]	The list of save set labels.
<b>eol</b> String	The end-of-life date and time.
<b>starttime</b> String	The start time.
<b>level</b> String	The backup level. Valid values are 'C', 'F', 'D' and 'I'.
<b>backupeol</b> String	The backup end-of-life date and time.

A save set label is an object with the following properties:

Name	Description
<b>label</b> String	The label of the media where the save set is stored.
<b>barcode</b> String	The bar code of the media where the save set is stored.
<b>prio</b> Long	The priority of the save set.
<b>comment</b> String	The comment or note.

A save set status is an object with the following properties:

Name	Description
<b>status</b> String	The save set state. Valid values are 'OK', 'ERROR', 'WARNING'.
<b>message</b> String	The save set state message.
<b>availability</b> Long	The save set availability.

#### Parameters

The filter configuration is passed in as JSON object in the body of the request. The following JSON object properties are defined:

Name	Description
<b>mediaPool</b> String	The name of the preferred media pool.
<b>driveId</b> Long	The unique drive ID.

#### Responses

The response is a save set tree object.

Response Code and Content	Description
<b>200</b> <b>SavesetTree</b> JSON object	The save set tree is returned in the response body.

#### Examples

Get the save set tree of the backup with the name 'SI20190919160501692@mR\_LVbirzPu':

```
POST /sep/api/v2/backups/SI20190919160501692@mR_LVbirzPu/tree
{ "mediaPool" : "MY-POOL" }

Response:
{
  "savesettree": [
    {
      "saveset": "SI20190919160501692@mR_LVbirzPu",
      "savesets": [
        {
          "saveset": "SI20190919160501692@mR_LVbirzPu",
```

```

    "pool": "MY-POOL",
    "avail": 7,
    "reason": "REQUESTED_POOL",
    "drivegroup": "21",
    "drives": [
      {
        "id": 1,
        ...
      },
      ...
    ],
    ...
  },
  ...
],
...
},
...
],
...
},
...
],
...
}
    
```

**GET** /sep/api/v2/backups/<name>/chain

Minimum required role: None Since: Jaglion

Get the list of all save sets in the save set chain of the selected backup.

The end point supports filtering the result set by passing in a save set chain filter as JSON object in the body of the request. The HTTP request method has to be changed to POST when using the filter.

**POST** /sep/api/v2/backups/<name>/chain

Minimum required role: None Since: Jaglion

Get the list of all save sets in the save set chain of the selected backup matching the specified filter parameters.

The response will be a list of save set IDs.

Parameters

The filter configuration is passed in as JSON object in the body of the request. The following JSON object properties are defined:

Name	Description
<b>excludeSubSavesets</b> Boolean	When set to 'true', the sub save sets are filtered from the returned list.
<b>excludeParentSavesets</b> Boolean	When set to 'true', the parent save sets are filtered from the returned list.

Responses

The response is a list of save set IDs.

Response Code and Content	Description
<b>200</b> Saveset ID array[String]	The list of save set IDs is returned in the response body.

## Examples

Get the save set chain of the backup with the name 'SI20200618080238540@5iruXgHZzYX':

```
GET /sep/api/v2/backups/SI20200618080238540@5iruXgHZzYX/chain
```

Response:

```
[
  "SD20200618075930400@Fa82IFpoMFD",
  "SF20200616090002401@kuqW5SMZU9o1",
  "SI20200618080238540@5iruXgHZzYX",
  "VD20200618075957352@wLpjId0BiV-",
  "VF20200616090027056@b8xwYIuKVTt",
  "VI20200618080306056@MJSszdLBRae"
]
```

Get the save set chain of the backup with the name 'SI20200618080238540@5iruXgHZzYX', excluding the sub save sets:

```
POST /sep/api/v2/backups/SI20200618080238540@5iruXgHZzYX/chain
{ "excludeSubSavesets" : true }
```

Response:

```
[
  "SD20200618075930400@Fa82IFpoMFD",
  "SF20200616090002401@kuqW5SMZU9o1",
  "SI20200618080238540@5iruXgHZzYX"
]
```

Get the save set chain of the backup with the name 'SI20200618080238540@5iruXgHZzYX', excluding the parent sets:

```
POST /sep/api/v2/backups/SI20200618080238540@5iruXgHZzYX/chain
{ "excludeSubSavesets" : true }
```

Response:

```
[
  "SI20200618080238540@5iruXgHZzYX",
  "VI20200618080306056@MJSszdLBRae"
]
```

**GET**

/sep/api/v2/backups/<name>/labels

Minimum required role: None

Since: Jaglion

Get the list of all save set names and media labels associated with the selected backup.

The response will be a list of backup labels. A backup label is an object with the following properties:

Name	Description
<b>backupId</b> String	The unique ID of the backup. The maximum length of the backup ID is 64 character.
<b>label</b> String	The label of the media where the backup is stored. The maximum length of the media label is 30 character.

Name	Description
<b>pool</b> String	The name of the media pool where the backup is stored. The maximum length of the media pool name is 32 character.
<b>id</b> Long	The ID.
<b>num</b> Long	The consecutive number of the chunk when the backup is splitted over multiple media.
<b>segment</b> String	The segment number.
<b>location</b> String	The location. The maximum length of the location is 64 character.
<b>checksum</b> String	The checksum of the backup. The maximum length of the checksum is 64 character.
<b>creationTime</b> Date	The date and time when the backup got created on the referenced media.
<b>eol</b> Date	The backup end-of-life date and time.
<b>eolChangedBy</b> String	The object or action which changed the backup end-of-life date last. The maximum length of the object or action is 64 character.
<b>eolChangedByUser</b> String	The user which changed the backup end-of-life date last. The maximum length of the user is 255 character.
<b>eolChangedByMsg</b> String	The message set when the backup end-of-life date changed last. The maximum length of the message is 254 character.
<b>state</b> String	The backup state. The most common values are '0' (OK) and 'X' or '2' (Error).
<b>sesamDate</b> Date	The sesam date when the backup executed.
<b>cnt</b> Long	The consecutive backup number.

## Responses

The response is a list of backup label objects.

Response Code and Content	Description
<b>200</b> <b>Backup Label</b> array[JSON object]	The list of backup labels is returned in the response body.

## Examples

Get the backup labels of the backup with the name 'SI20200618080238540@5iruXgHZzYX':

```
GET /sep/api/v2/backups/SF20200901081001062@uABZE7FHQf-/labels
```

Response:

```
[
  {
    "backupId": "SF20200901081001062@uABZE7FHQf-",
    "label": "MY-POOL00001",
    "pool": "MY-POOL",
    "creationTime": 1598940601000,
    "eol": 1599113489000,
    "eolChangedBy": "SF20200901081001062@uABZE7FHQf-",
    "eolChangedByUser": "SEPsasam",
    "eolChangedByMsg": "EOL adapted for 1 saveset",
    "name": "SF20200901081001062@uABZE7FHQf-"
  },
]
```



```

{
  "backupId": "SF20200901081001062@uABZE7FHQf-",
  "label": "MyMigration-Pool0001",
  "pool": "MyMigration-Pool",
  "creationTime": 1598947203000,
  "eol": 1599292817000,
  "eolChangedBy": "RF20200901100002517@7BmwmjWR2f8",
  "name": "RF20200901100002517@7BmwmjWR2f8"
}
]
    
```

**POST**

/sep/api/v2/backups/<name>/map

Minimum required role: None

Since: Jaglion

Get the list of all save set names and media labels with the same backup ID as the given save set. The returned list of save sets is ordered ascending from oldest to newest by default.

The response will be a list of backup labels. The properties of the backup label object are described for the '/sep/api/v2/backups/<name>/labels' endpoint.

Parameters

The filter configuration is passed in as JSON object in the body of the request. The following JSON object properties are defined:

Name	Description
<b>descending</b> Boolean	When set to 'true', the list of save sets will be ordered descending from newest to oldest.

Responses

The response is a list of backup label objects.

Response Code and Content	Description
<b>200</b> <b>Backup Label</b> array[JSON object]	The list of backup labels is returned in the response body.

Examples

Get the list of save sets with the same backup ID as the save set with the name 'SF20200901081001062@uABZE7FHQf-':

```

POST /sep/api/v2/backups/SF20200901081001062@uABZE7FHQf- /maps
{ "descending" : false }

Response:
[
  {
    "backupId": "SF20200901081001062@uABZE7FHQf-",
    "label": "MY-POOL0001",
    "pool": "MY-POOL",
    "creationTime": 1598940601000,
    "eol": 1599113489000,
    "eolChangedBy": "SF20200901081001062@uABZE7FHQf-",
    "eolChangedByUser": "SEPsasam",
  }
]
    
```

```

    "eolChangedByMsg": "EOL adapted for 1 saveset",
    "name": "SF20200901081001062@uABZE7FHQf-"
  },
  {
    "backupId": "SF20200901081001062@uABZE7FHQf-",
    "label": "MyMigration-Pool100001",
    "pool": "MyMigration-Pool",
    "creationTime": 1598947203000,
    "eol": 1599292817000,
    "eolChangedBy": "RF20200901100002517@7BmwmjWR2f8",
    "name": "RF20200901100002517@7BmwmjWR2f8"
  }
]

```

GET

/sep/api/v2/backups/&lt;backupID&gt;/drive

Minimum required role: None

Since: Jaglion

Get the drive on which a backup task was being executed.

The response body contains the drive encoded as JSON object. The properties of the drive object are described in the drives service section.

#### Responses

Response Code and Content	Description
200 HwDrives JSON object	The matching drive is returned in the response body.

#### Examples

Get the drive on which the result "SD38234234324" is stored:

```
GET /sep/api/v2/backups/SD38234234324/drive
```

Response:

```

{
  "id": 1,
  "device": "DS@Test-Store_1",
  "client": {
    "id": 0,
    ...
  },
  "driveType": {
    "name": "DISK_STORE",
    "genericType": "DISK",
    "mtime": 1583224746000
  },
  "name": "Drive-1",
  "compress": false,
  "occupy": false,
  "accessMode": "READWRITE",
  "smsCnts": 10,
  "mediaTimeout": 0,
  "cleanBit": false,
  "path": "C:/NoScan/work/Sesam/SEPsесam//var/work/datastores",
  "dataStore": "Test-Store",
  "ejectFlag": false,
  "blockSize": 0,
  "smsNr": 0,

```

```

"encryptionCapable": false,
"mtime": 1620369485000,
"groupId": 1
}

```

**POST**`/sep/api/v2/backups/cancel`

Minimum required role: Backup

Since: Jaglion

**Cancels an active backup task.****Parameters**

The filter configuration is passed in as JSON object in the body of the request. The following JSON object properties are defined:

Name	Description
<b>backupId</b> String	The ID of the currently running backup task to cancel.

**Responses**

Response Code and Content	Description
<b>200</b> Boolean	True, if cancellation was successful, false otherwise.

**Examples**

Cancel the active backup task with the ID 'SD20200901081001062@uABZE7FHQf':

```

POST /sep/api/v2/backups/cancel
{ "backupId" : "SD20200901081001062@uABZE7FHQf" }

Response:
true

```

### 3.6. Browser Service

The browser services provides access to the remote file system or remote services of a client object. The browser server therefore allows the discovery of items to backup. Remote services of a client might provide access to hypervisors or specialized storage locations.

The response body contains the remote file system items encoded as JSON object. A remote file system item is an object with the following properties:

Name	Description
<b>lisFileName</b> String	The absolute name of the list file. Applies only when browsing the content of a backup.
<b>rawData</b> String	The raw data as returned by the remote file system browser service.
<b>clientName</b> String	The name of the client.
<b>name</b> String	The name of the represented remote file system item.
<b>type</b> * required String	The remote file system item type. The type is a 2 character string, where the first character is the main type and the second character is the sub type. The main type can be either 'f' (file) or 'd' (directory). The sub type depends on the remote file system browsed and allows a more detailed differentiation. Common sub types are in example 'E' (error), 'l' (link), 'b' (data base) and 'm' (mount point).
<b>path</b> String	The absolute path of the represented remote file system item.
<b>parentPath</b> String	The absolute path of the parent remote file system item.
<b>forcedParentPath</b> String	The forced absolute path of the parent remote file system item. This property overwrites the 'parentPath' property when creating the text representation of the item.
<b>created</b> Date	The creation time stamp.
<b>lastModified</b> Date	The last modification time stamp.
<b>segmentNum</b> String	The segment number.
<b>startPos</b> String	The start position.
<b>endPos</b> String	The end position.
<b>infoData</b> String	The information part of the raw data, containing additional information about the represented remote file system item.
<b>diskFreeData</b> String	The raw data part containing the disk free information.
<b>size</b> Double	The size of the represented remote file system item in bytes.
<b>capacity</b> Double	The total capacity available in bytes.
<b>free</b> Double	The number of bytes free.
<b>used</b> Double	The number of bytes used.
<b>usedPercent</b> Double	The number of bytes used in percent of the total capacity.
<b>tasks</b> array[String]	The names of backup tasks associated with the remote file system item.

Following methods are provided by the browser service:

**POST**

/sep/api/v2/browser/browse

Minimum required role: None

Since: Jaglion

Queries the remote file system items matching the specified filter parameters.

### Parameters

The filter configuration is passed in as JSON object in the body of the request. The following JSON object properties are defined:

Name	Description
<b>path</b> String	The path to browse. The path contains the full root path, including the client or remote virtualization server name, to browse. When browsing the root level, some special marker might be used.
<b>viewType</b> String	The browser view type. If omitted, the view type defaults to 'DEFAULT'. The available values depends on the remote service to browse. For VMware vSphere, other view types might be 'VSPHERE_HOST_AND_CLUSTERS' or 'VSPHERE_VM_AND_TEMPLATES'.
<b>filterPathPrefix</b> Boolean	Flag to indicate that the path prefix ("path:") needs to be removed from the path before executing the browse.
<b>prefixWithClient</b> Boolean	Flag to indicate that the paths in the textual representation have to be prefixed with the client name.
<b>forceRemoteBuffer</b> Boolean	Flag to indicate that the remote virtualization buffer has to be used to browse the given path.
<b>forceRefresh</b> Boolean	Flag to indicate that the remote buffer shall be refreshed before getting the requested information.
<b>restoreMode</b> Boolean	Flag to indicate if the browsing happens in restore mode.
<b>diskFreeMode</b> Boolean	Flag to indicate if the browsing should include "disk free" (df) information.
<b>credentialsId</b> String	The credentials ID to use for authentication when browsing the client.
<b>nameRegexIncludeFilter</b> String	The regular expression to match by the result item's name to get added to the result set.
<b>nameRegexExcludeFilter</b> String	The regular expression to match by the result item's name to get remove from the result set.
<b>attributeRegexIncludeFilter</b> String	The regular expression to match by any of the result item's additional attributes to get included in the result set. Possible forms are: "<key>=<value>", "<key>" or "<key regex>=<value regex>".
<b>includeVirtualMachinesOnly</b> Boolean	Flag to indicate to include virtual machine objects only into the result set.
<b>vmHostSystemRegexIncludeFilter</b> String	The regular expression to match by the result item's host system property to get added to the result set. Applies only if the result item is a virtual machine.
<b>vmDatastoreRegexIncludeFilter</b> String	The regular expression to match by the result item's data store property to get added to the result set. Applies only if the result item is a virtual machine.
<b>vmFolderRegexIncludeFilter</b> String	The regular expression to match by the result item's folder property to get added to the result set. Applies only if the result item is a virtual machine.
<b>vmVirtualAppRegexIncludeFilter</b> String	The regular expression to match by the result item's virtual application property to get added to the result set. Applies only if the result item is a virtual machine.
<b>vmPowerStateRegexIncludeFilter</b> String	The regular expression to match by the result item's power state property to get added to the result set. Applies only if the result item is a virtual machine.
<b>vmOperSystemRegexIncludeFilter</b> String	The regular expression to match by the result item's operating system property to get added to the result set. Applies only if the result item is a virtual machine.
<b>vmTagRegexIncludeFilter</b>	The regular expression to match by the result item's tags to get added to the result

Name	Description
String	set. Applies only if the result item is a virtual machine.
<b>excludeVmsWithoutExistingTask</b> Boolean	Flag to indicate if virtual machines without an existing backup task are excluded from the result list or not.
<b>excludeVmsWithExistingTask</b> Boolean	Flag to indicate if virtual machines with an existing backup task are excluded from the result list or not.
<b>includeTasksWithoutExistingVm</b> Boolean	Flag to indicate if backup tasks, being associated with a no longer existing virtual machine, will be included in the result list or not.

Responses

Response Code and Content	Description
<b>200</b> <b>Remote File System Item</b> array[JSON object]	The list of remote file system items is returned in the response body.

Examples

Browse the root items of the client 'MyClient':

```

POST /sep/api/v2/browser/browse
{ "path" : "/my-sesam-host", "prefixWithClient" : true }

Response:
[
  {
    "rawData": "\"BSR Windows:\ db - - - 0 - ,Bare System Recovery (BSR Recovery Pro - Windows Image Backup) Version 6.4 Build 196",
    "clientName": "my-sesam-host",
    "name": "BSR Windows:",
    "type": "db",
    "path": "BSR Windows:",
    "infoData": ",Bare System Recovery (BSR Recovery Pro - Windows Image Backup) Version 6.4 Build 196",
    "size": 0
  },
  {
    "rawData": "\"C:\ dt - - - 440610451456 - ,Fixed Drive, Label: OS,df=1022300778496/440610451456/581690327040/43.1",
    "clientName": "my-sesam-host",
    "name": "C:",
    "type": "dt",
    "path": "C:",
    "infoData": ",Fixed Drive, Label: OS",
    "diskFreeData": "df=1022300778496/440610451456/581690327040/43.1",
    "size": 440610451456,
    "capacity": 1.022300778496E12,
    "free": 5.8169032704E11,
    "used": 4.40610451456E11,
    "usedPercent": 43.1
  },
  ...
]
    
```

Browse the content of drive 'C' of the client 'MyClient' and include items starting with 'Prog':

```
POST /sep/api/v2/clients/find
{ "path" : "/MyClient/C:", "prefixWithClient" : true, "nameRegexIncludeFilter" : "^Prog.*" }

Response:
[
  {
    "rawData": "\"C:/Program Files\" d_ 2017.09.29 15:46:33 2020.09.19 08:53:40 0 - ,RD",
    "clientName": "MyClient",
    "name": "Program Files",
    "type": "d_",
    "path": "C:/Program Files",
    "parentPath": "C:/",
    "created": 1506692793000,
    "lastModified": 1600498420000,
    "infoData": ",RD",
    "size": 0
  },
  {
    "rawData": "\"C:/Program Files (x86)\" d_ 2017.09.29 15:46:33 2019.12.15 08:14:28 0 - ,RD",
    "clientName": "MyClient",
    "name": "Program Files (x86)",
    "type": "d_",
    "path": "C:/Program Files (x86)",
    "parentPath": "C:/",
    "created": 1506692793000,
    "lastModified": 1576394068000,
    "infoData": ",RD",
    "size": 0
  },
  ...
]
```

### 3.7. Calendars Service

The calendars services provides access to the user defined calendar objects. User defined calendars are useful to either execute or block backups, restores and other operation on certain days.

A user defined calendar is an object with the following properties:

Name	Description
<b>uuid</b> * required Long	The unique ID of the calendar. The maximum length of the unique ID is 128 character.
<b>name</b> * required String	The name of the calendar. The maximum length of the name is 128 characters.
<b>summary</b> String	The summary or description of the calendar. The maximum length of the summary is 256 character.
<b>dateCreated</b> Date	The date and time when the calendar had been created.
<b>active</b> Boolean	Flag to indicate if the calendar is active.
<b>comment</b> String	The user comment. The maximum length of the user comment is 1024 character.

Following methods are provided by the calendars service:

GET	<code>/sep/api/v2/calendars</code>	Since: Jaglion
Minimum required role: None		

Get all user defined calendars.

The response body contains the list of user defined calendars encoded as JSON objects. The properties of the calendars object are described above.

#### Responses

Response Code and Content	Description
200 <b>Calendars</b> array[JSON object]	The calendars are returned in the response body.

#### Examples

Get all user defined calendars:

```
GET /sep/api/v2/calendars

Response:
[
  {
    "uuid": "aa0cf031-ab4e-4699-9b11-dd62ebafda83",
    "name": "MyUserDefinedCalendar",
    "dateCreated": 1528460207000,
    "active": true,
    "comment": "Nothing important"
  },
  {
    "uuid": "2cf7cbbc-2160-405c-8eac-9976a9e2b972",
    "name": "MyHolidays",
    "dateCreated": 1571982425000,
  }
]
```



```

    "active": true
  },
  ...
]

```

**GET**

/sep/api/v2/calendars/&lt;id&gt;

Minimum required role: None

Since: Jaglion

Get the user defined calendar matching the given ID.

The response body contains the calendar encoded as JSON object. The properties of the calendar object are described above.

#### Responses

Response Code and Content	Description
200 Calendar JSON object	The calendar is returned in the response body.

#### Examples

Get the user defined calendar with the unique ID '2cf7cbbc-2160-405c-8eac-9976a9e2b972':

```
GET /sep/api/v2/calendars/2cf7cbbc-2160-405c-8eac-9976a9e2b972
```

Response:

```

{
  "uuid": "2cf7cbbc-2160-405c-8eac-9976a9e2b972",
  "name": "MyHolidays",
  "dateCreated": 1571982425000,
  "active": true
}

```

**POST**

/sep/api/v2/calendars/find

Minimum required role: None

Since: Jaglion

Search for user defined calendars matching the specified filter parameters.

#### Parameters

The filter configuration is passed in as JSON object in the body of the request. The following JSON object properties are defined:

Name	Description
name String	The name of the user defined calendar.

## Responses

---

Response Code and Content	Description
200 Calendars array[JSON object]	The matching calendars are returned in the response body.

## Examples

---

Get the user defined calendars with the name 'MyHolidays':

```
POST /sep/api/v2/calendars/find
{ "name" : "MyHolidays" }

Response:
[
  {
    "uuid": "2cf7cbbc-2160-405c-8eac-9976a9e2b972",
    "name": "MyHolidays",
    "dateCreated": 1571982425000,
    "active": true
  }
]
```

**POST**

/sep/api/v2/calendars/create

Minimum required role: Administrator

Since: Jaglion

Creates a new user defined calendar.

## Parameters

---

The user defined calendar is passed in as JSON object in the body of the request. The properties of the calendar are described above.

## Responses

---

Response Code and Content	Description
200 Calendar JSON object	The newly created calendar is returned in the response body.

## Examples

---

Creates a new user defined calendar:

```
POST /sep/api/v2/calendars/create
{ "name" : "my_new_calendar", "active" : true, "comment" : "A newly created user defined calendar." }

Response:
{
  "uuid": "d755f500-2189-4a07-9320-38564583a571",
  "name": "my_new_calendar",
  "dateCreated": 1624262570077,
  "active": true,
  "comment": "A newly created user defined calendar."
}
```

}

**POST**

/sep/api/v2/calendars/update

Minimum required role: Administrator

Since: Jaglion

Updates a user defined calendar. A user defined calendar with the given ID must exist, otherwise the call will fail.

#### Parameters

---

The user defined calendar is passed in as JSON object in the body of the request. The properties of the calendar are described above.

#### Responses

---

Response Code and Content	Description
200 Calendar JSON object	The updated user defined calendar is returned in the response body.

#### Examples

---

Sets a new comment for the user defined calendar with the ID 'd755f500-2189-4a07-9320-38564583a571':

```
POST /sep/api/v2/calendars/update
{
  "uuid": "d755f500-2189-4a07-9320-38564583a571",
  "name": "my_new_calendar",
  "dateCreated": 1624262570077,
  "active": true,
  "comment": "Changed comment"
}

Response:
{
  "uuid": "d755f500-2189-4a07-9320-38564583a571",
  "name": "my_new_calendar",
  "dateCreated": 1624262570077,
  "active": true,
  "comment": "Changed comment"
}
```

**POST**

/sep/api/v2/calendars/persist

Minimum required role: Super user

Since: Jaglion

Persists a calendar. If no calendar with the given UUID exists, a new calendar will be created. Otherwise, the properties of an existing calendar are updated.

#### Parameters

---

The calendar is passed in as JSON object in the body of the request. The properties of the calendar are described above.

#### Responses

---

Response Code and Content	Description
200 Calendar JSON object	The created or updated calendar is returned in the response body.

## Examples

Persists the calendar with the name "my\_new\_calendar":

```
POST /sep/api/v2/calendars/persist
{
  "uuid": "d755f500-2189-4a07-9320-38564583a571",
  "name": "my_new_calendar",
  "dateCreated": 1624262570077,
  "active": true,
  "comment": "Changed comment"
}

Response:
{
  "uuid": "d755f500-2189-4a07-9320-38564583a571",
  "name": "my_new_calendar",
  "dateCreated": 1624262570077,
  "active": true,
  "comment": "Changed comment"
}
```

**POST**

/sep/api/v2/calendars/delete

Minimum required role: Administrator

Since: Jaglion

Deletes a user defined calendar.

## Parameters

The unique ID of the user defined calendar is passed in as JSON string in the body of the request.

## Responses

Response Code and Content	Description
200 id String	The unique ID of the deleted user defined calendar is returned in the response body. If no calendar existed with the given ID, then null is returned.

## Examples

Deletes the user defined calendar with the ID 'd755f500-2189-4a07-9320-38564583a571' (exists):

```
POST /sep/api/v2/calendars/delete
"d755f500-2189-4a07-9320-38564583a571"

Response:
```

"d755f500-2189-4a07-9320-38564583a571"

**POST**

/sep/api/v2/calendars/<id>/deleteForced

Minimum required role: Administrator

Since: Jaglion

Deletes a user defined calendar and all associated events. If there are associated schedules, the association will be removed.

Parameters

The unique ID of the user defined calendar is passed in the URL. The delete options are passed in as JSON object in the body of the request. The following JSON object properties are defined:

Name	Description
<b>forceRemoveData</b> Boolean	Flag to indicate if all related data shall be removed together with the user defined calendar.

Responses

Response Code and Content	Description
<b>200</b> ID String	The unique ID of the deleted user defined calendar is returned in the response body. If no calendar existed with the given ID, then null is returned.

Examples

Deletes the user defined calendar with the ID 'd755f500-2189-4a07-9320-38564583a571' (exists):

```
POST /sep/api/v2/calendars/d755f500-2189-4a07-9320-38564583a571/deleteForced
null

Response:
"d755f500-2189-4a07-9320-38564583a571"
```

```
POST /sep/api/v2/calendars/d755f500-2189-4a07-9320-38564583a571/deleteForced
{}

Response:
"d755f500-2189-4a07-9320-38564583a571"
```

**POST**

/sep/api/v2/calendars/deleteByEntity

Minimum required role: Administrator

Since: Jaglion

Deletes the calendar matching the given entity.

Parameters

The entity to match is passed in the body of the request as JSON object. The only required entity property is the primary key of the entity.

#### Responses

Response Code and Content	Description
200 UUID String	The UUID of the calendar is returned in the response body.

#### Examples

Delete the calendar with the UUID "d3706ca8-9d7f-41b0-ac76-036bd8b6f876":

```
POST /sep/api/v2/calendars/deleteByEntity
{ "uuid": "d3706ca8-9d7f-41b0-ac76-036bd8b6f876" }

Response:
"d3706ca8-9d7f-41b0-ac76-036bd8b6f876"
```

**POST**

/sep/api/v2/calendars/export

Minimum required role: None

Since: Jaglion

Get all calendar events of the user defined calendar matching the given unique ID or name.

The response body contains the list of associated calendar events encoded as JSON objects. The properties of the calendar event object are described in the calendar events service section.

#### Parameters

The unique ID or name of the user defined calendar is passed in as JSON string in the body of the request.

#### Responses

Response Code and Content	Description
200 CalendarEvents array[JSON object]	The list of calendar events associated with the matching user defined calendar is returned in the response body. If no calendar existed with the given ID or name, then null is returned.

#### Examples

Get all calendar events being associated with the user defined calendar with the Name 'MyHolidays':

```
POST /sep/api/v2/calendars/export
"MyHolidays"

Response:
[
  {
    "calendar": "2cf7cbbc-2160-405c-8eac-9976a9e2b972",
    "dateStart": 1577193300000,
    "dateEnd": 1578351599000,
    "active": true,
    "allDay": false,
```

```

    "uuid": "fcce968a-9c8e-4f20-aa6c-881905cc7a61"
  },
  ...
]

```

**POST**`/sep/api/v2/calendars/import`

Minimum required role: None

Since: Jaglion

Imports all given calendar events in the user defined calendar matching the given unique ID or name.

The response body contains the updated user defined calendar encoded as JSON objects. The properties of the calendar object are described above.

#### Parameters

---

The unique ID or name of the user defined calendar is passed in as JSON string in the body of the request.

#### Responses

---

Response Code and Content	Description
200 Calendar JSON object	The updated user defined calendar is returned in the response body. If no calendar existed with the given ID or name, then null is returned.

#### Examples

---

Get all calendar events being associated with the user defined calendar with the Name 'MyHolidays':

```

POST /sep/api/v2/calendars/import
[ "MyHolidays", [{ "calendar": "2cf7cbbc-2160-405c-8eac-9976a9e2b972", "dateStart": 1577193300000, "dateEnd":
1578351599000, "active": true, "allDay": false, "uuid": "fcce968a-9c8e-4f20-aa6c-881905cc7a61" }] ]

Response:
{
  "uuid": "2cf7cbbc-2160-405c-8eac-9976a9e2b972",
  "name": "MyHolidays",
  "dateCreated": 1571982425000,
  "active": true
}

```

### 3.8. Calendar Events Service

The calendar event services provides access to the calendar event objects which are associated with a user defined calendar.

A calendar event is an object with the following properties:

Name	Description
<b>calendar</b> *required String	The unique ID of the user defined calendar to associate the calendar event with. The maximum length of the calendar ID is 128 character.
<b>uuid</b> *required String	The unique ID of the calendar event. The maximum length of the unique ID is 128 characters.
<b>summary</b> String	The summary or description of the calendar event. The maximum length of the summary is 256 character.
<b>dateStart</b> Date	The start date and time of the calendar event.
<b>dateEnd</b> Date	The end date and time of the calendar event.
<b>active</b> Boolean	Flag to indicate if the calendar event is active.
<b>allDay</b> Boolean	Flag to indicate if the calendar event is an all day event.
<b>singleDay</b> Date	The date to span a whole day. When set, no time value is allowed and the 'allDay' property needs to be set to 'true'. This field overrides the 'dateStart' and 'dateEnd' fields.
<b>usercomment</b> String	The user comment. The maximum length of the user comment is 1024 character.

Following methods are provided by the calendar events service:

GET

/sep/api/v2/calendarevents

Minimum required role: None

Since: Jaglion

Get all calendar events.

The response body contains the list of calendar events encoded as JSON objects. The properties of the calendar events object are described above.

#### Responses

Response Code and Content	Description
200 Calendar Events array[JSON object]	The calendar events are returned in the response body.



## Examples

---

Get all calendar events:

```
GET /sep/api/v2/calendarevents

Response:
[
  {
    "calendar": "a5b1ad05-ce81-4022-99b8-202322570117",
    "dateStart": 1615892400000,
    "dateEnd": 1615935599000,
    "active": true,
    "allDay": false,
    "uuid": "1e554bf3-3cde-49fa-94c6-f9faa3b58243"
  },
  ...
]
```

**GET**

/sep/api/v2/calendarevents/&lt;id&gt;

Minimum required role: None

Since: Jaglion

Get the calendar event matching the given ID.

The response body contains the calendar event encoded as JSON object. The properties of the calendar events object are described above.

## Responses

---

Response Code and Content	Description
200 Calendar Event JSON object	The calendar event is returned in the response body.

## Examples

---

Get the calendar event with the unique ID '1e554bf3-3cde-49fa-94c6-f9faa3b58243':

```
GET /sep/api/v2/calendarevents/1e554bf3-3cde-49fa-94c6-f9faa3b58243

Response:
{
  "calendar": "a5b1ad05-ce81-4022-99b8-202322570117",
  "dateStart": 1615892400000,
  "dateEnd": 1615935599000,
  "active": true,
  "allDay": false,
  "uuid": "1e554bf3-3cde-49fa-94c6-f9faa3b58243"
}
```

POST

/sep/api/v2/calendarevents/find

Minimum required role: None

Since: Jaglion

Search for calendar events matching the specified filter parameters.

### Parameters

The filter configuration is passed in as JSON object in the body of the request. The following JSON object properties are defined:

Name	Description
<b>calendar</b> String	The unique ID of the user defined calendar to match.
<b>summary</b> String	The summary or description of the calendar event to match.
<b>active</b> Boolean	The active flag to match.
<b>dateStart</b> array[Date]	The start and the end date and time of the start date range to match. The start date range is an 2 element array, where the first element is the start and the second element is the end of the start date range.
<b>dateEnd</b> array[Date]	The start and the end date and time of the end date range to match. The end date range is an 2 element array, where the first element is the start and the second element is the end of the end date range.

### Responses

Response Code and Content	Description
200 Calendar Events array[JSON object]	The matching calendar events are returned in the response body.

### Examples

Get all calendar events for the user defined calendars with the ID 'a5b1ad05-ce81-4022-99b8-202322570117':

```
POST /sep/api/v2/calendarevents/find
{ "calendar": "a5b1ad05-ce81-4022-99b8-202322570117" }

Response:
[
  {
    "calendar": "a5b1ad05-ce81-4022-99b8-202322570117",
    "dateStart": 1615892400000,
    "dateEnd": 1615935599000,
    "active": true,
    "allDay": false,
    "uuid": "1e554bf3-3cde-49fa-94c6-f9faa3b58243"
  },
  {
    "calendar": "a5b1ad05-ce81-4022-99b8-202322570117",
    "dateStart": 1616065200000,
    "dateEnd": 1616108399000,
    "active": true,
    "allDay": false,
    "uuid": "27f0dc4f-a327-4e5b-bfc3-66df27f876c1"
  },
  ...
]
```

POST

/sep/api/v2/calendarevents/create

Minimum required role: Administrator

Since: Jaglion

Creates a new calendar event.

#### Parameters

The calendar event is passed in as JSON object in the body of the request. The properties of the calendar event are described above.

#### Responses

Response Code and Content	Description
200 Calendar Event JSON object	The newly created calendar event is returned in the response body.

#### Examples

Creates a new calendar event:

```
POST /sep/api/v2/calendarevents/create
{ "calendar" : " a5b1ad05-ce81-4022-99b8-202322570117", "active" : true, "allDay" : true, "dateStart":
1616065200000, "dateEnd": 1616108399000 }
```

Response:

```
{
  "calendar": "a5b1ad05-ce81-4022-99b8-202322570117",
  "dateStart": 1616065200000,
  "dateEnd": 1616108399000,
  "active": true,
  "allDay": true,
  "uuid": "81dbc4e6-1d0d-4a16-83f2-b389acbd70ad"
}
```

POST

/sep/api/v2/calendarevents/update

Minimum required role: Administrator

Since: Jaglion

Updates a calendar event. A calendar event with the given ID must exist, otherwise the call will fail.

#### Parameters

The calendar event is passed in as JSON object in the body of the request. The properties of the calendar event are described above.

#### Responses

Response Code and Content	Description
200 Calendar Event JSON object	The updated calendar event is returned in the response body.

## Examples

---

Sets a new comment for the user defined calendar with the ID 'd755f500-2189-4a07-9320-38564583a571':

```
POST /sep/api/v2/calendarevents/update
{ "calendar" : " a5b1ad05-ce81-4022-99b8-202322570117", "active" : true, "allDay" : true, "dateStart":
1616065200000, "dateEnd": 1616108399000, "usercomment": "My new comment" }
```

Response:

```
{
  "calendar": "a5b1ad05-ce81-4022-99b8-202322570117",
  "dateStart": 1616065200000,
  "dateEnd": 1616108399000,
  "active": true,
  "allDay": true,
  "uuid": "81dbc4e6-1d0d-4a16-83f2-b389acbd70ad"
  "comment": "My new comment"
}
```

**POST**

/sep/api/v2/calendarevents/persist

Minimum required role: Super user

Since: Jaglion

Persists a calendar event. If no calendar event with the UUID name exists, a new calendar event will be created. Otherwise, the properties of an existing calendar event are updated.

## Parameters

---

The calendar event is passed in as JSON object in the body of the request. The properties of the calendar are described above.

## Responses

---

Response Code and Content	Description
200 Calendar Event JSON object	The created or updated calendar event is returned in the response body.

## Examples

---

Persists the calendar event with the name "my\_new\_calendar":

```
POST /sep/api/v2/calendarevents/persist
{ "calendar" : " a5b1ad05-ce81-4022-99b8-202322570117", "active" : true, "allDay" : true, "dateStart":
1616065200000, "dateEnd": 1616108399000, "usercomment": "My new comment" }
```

Response:

```
{
  "calendar": "a5b1ad05-ce81-4022-99b8-202322570117",
  "dateStart": 1616065200000,
  "dateEnd": 1616108399000,
  "active": true,
  "allDay": true,
  "uuid": "81dbc4e6-1d0d-4a16-83f2-b389acbd70ad"
  "comment": "My new comment"
}
```

POST

/sep/api/v2/calendarevents/delete

Minimum required role: Administrator

Since: Jaglion

Deletes a calendar event.

#### Parameters

Either the unique ID of the calendar event or the name or ID of a calendar whose events should be deleted is passed in as JSON string in the body of the request.

#### Responses

Response Code and Content	Description
200 id String	The unique ID of the deleted calendar event or the ID/ name of a calendar is returned in the response body. If neither a calendar event nor a calendar with the given ID/name exist, an error message is being returned.

#### Examples

Deletes the calendar event with the ID '81dbc4e6-1d0d-4a16-83f2-b389acbd70ad' (exists):

```
POST /sep/api/v2/calendarevents/delete
"81dbc4e6-1d0d-4a16-83f2-b389acbd70ad"

Response:
"81dbc4e6-1d0d-4a16-83f2-b389acbd70ad"
```

Deletes all calendar events of the calendar with the unique name "MyCalendar":

```
POST /sep/api/v2/calendarevents/delete
"MyCalendar"

Response:
"MyCalendar"
```

POST

/sep/api/v2/calendarevents/deleteByEntity

Minimum required role: Administrator

Since: Jaglion

Deletes the calendar event matching the given entity.

#### Parameters

The entity to match is passed in the body of the request as JSON object. The only required entity property is the primary key of the entity.

#### Responses

Response Code and Content	Description
200 UUID String	The UUID of the calendar event is returned in the response body.

## Examples

---

Delete the calendar event with the UUID "d3706ca8-9d7f-41b0-ac76-036bd8b6f876":

```
POST /sep/api/v2/calendareventss/deleteByEntity  
{ "uuid": "d3706ca8-9d7f-41b0-ac76-036bd8b6f876" }
```

```
Response:  
"d3706ca8-9d7f-41b0-ac76-036bd8b6f876"
```

### 3.9. Client Service

The client services provides access to the client objects. Clients are the second level objects in the topology. SEP sesam operations, like backups and restores, are associated with clients.

A client is an object with the following properties:

Name	Description
<b>id</b> * required Long	The unique ID of the client.
<b>name</b> * required String	The name of the client. The maximum length of the name is 255 characters. The name can contain only letters, digits, '-', '_' and the '.' character.
<b>location</b> JSON object	The location the client is associated with.
<b>operSystem</b> JSON object	The operating system the client is running.
<b>accessmode</b> String	The access mode used to connect to the client. Valid values are 'RSH', 'CTRL', 'PROXY', 'SSH', 'SMSSH' and 'VIRTUAL'.
<b>accessState</b> Integer	The client access state. This property is set by the Sesam kernel. Valid values are 0 (accessible) and 1 (inaccessible).
<b>accessTime</b> Date	The time of the last access attempt to the client. This property is set by the Sesam kernel.
<b>accessSuccess</b> Date	The time of the last successful access to the client. This property is set by the Sesam kernel.
<b>accessOptions</b> String	The additional options to use when connecting to the client. The valid options depend on the selected access mode. The maximum length of the access options is 255 character.
<b>macAddress</b> String	The MAC address of the client. This property is set by the Sesam kernel.
<b>netProt</b> String	The network protocol used to communicate with the client. Only valid value is 'TCP/IP'.
<b>sepcomment</b> String	The last Sesam system message. The maximum length of the Sesam system message is 1024 characters.
<b>usercomment</b> String	The comment or note from the user. The maximum length of the user comment is 1024 characters.
<b>permit</b> Boolean	Flag to control the execution state for the client. When false, then no backups or any other operation are executed for this client.
<b>wolFlag</b> Boolean	Flag to control if the client shall be "waked up over LAN" when turned off.
<b>updateFlag</b> Boolean	Flag to control if the client can be updated from remote via 'sm_update_client'.
<b>userName</b> String	The user name to use for connecting to a virtualization host, when configured via the 'vmServerType' property. The maximum length of the user name is 255 character.
<b>password</b> String	The encrypted password to use for connecting to a virtualization host, when configured via the 'vmServerType' property. The maximum length of the password is 512 character.
<b>osUser</b> String	The operating system user name to use when installing or updating the Sesam client package. This field is deprecated. Use the 'osCredentialId' field instead. The maximum length of the operating system user name is 255 character.
<b>osPassword</b> String	The operating system users encrypted password to use when installing or updating the Sesam client package. This field is deprecated. The maximum length of the operating system user password is 512 character.
<b>osCredentialId</b> Long	The id of the credentials set to use when installing or updating the Sesam client package.
<b>osCredentialUuid</b> String	The UUID of the credentials set to use when installing or updating the Sesam client package. Reserved for future use. The maximum length of the credentials set UUID is 40 characters.

Name	Description
<b>stpdPort</b> Long	The STPD daemon port.
<b>stpdOptions</b> String	The STPD daemon options. The maximum length of the STPD daemon options is 255 character.
<b>stpdHttpPort</b> Long	The STPD daemon HTTP port.
<b>stpdHttpOptions</b> String	The STPD daemon HTTP options. The maximum length of the STPD HTTP daemon options is 255 character.
<b>stpdHttpsPort</b> Long	The STPD daemon HTTPS port.
<b>stpdHttpsOptions</b> String	The STPD daemon HTTPS options. The maximum length of the STPD HTTPS daemon options is 255 character.
<b>sshdPort</b> Long	The SSH daemon port.
<b>sshdOptions</b> String	The SSH daemon options. The maximum length of the SSH daemon options is 255 character.
<b>sbcVersion</b> String	The version string of the SBC running at the client. This property is set by the Sesam kernel. The maximum length of the SBC version string is 20 character.
<b>jarVersion</b> String	The version string of the Sesam REST server package installed at the Sesam server. This property is set by the Sesam kernel. The maximum length of the Sesam REST server version string is 256 character.
<b>jarVersionNumber</b> Long	The version number of the Sesam REST server package installed at the Sesam server. This property is set by the Sesam kernel.
<b>jarAvailableVersion</b> String	The version string of the Sesam REST server package available to be installed at the Sesam server. This property is set by the Sesam kernel. The maximum length of the Sesam REST server version string is 256 character.
<b>jarAvailableNumber</b> Long	The version number of the Sesam REST server package available to be installed at the Sesam server. This property is set by the Sesam kernel.
<b>jarUpdateDate</b> Date	The date and time when the Sesam REST server package got last updated at the client. This property is set by the Sesam kernel.
<b>sesamVersion</b> JSON object	The version string of the Sesam package installed at the client. This property is set by the Sesam kernel. The maximum length of the installed package version string is 64 character.
<b>availableVersion</b> String	The version string of the Sesam package available to be installed at the client. This property is set by the Sesam kernel. The maximum length of the available package version string is 64 character.
<b>versionNumber</b> Long	The version number of the Sesam package installed at the client. This property is set by the Sesam kernel.
<b>availableNumber</b> Long	The version number of the Sesam package available to be installed at the client. This property is set by the Sesam kernel.
<b>servicepackVersionNumber</b> Long	The version number of the Sesam service pack installed at the client. This property is set by the Sesam kernel.
<b>servicepackAvailableNumber</b> Long	The version number of the Sesam service pack available to be installed at the client. This property is set by the Sesam kernel.
<b>moduleVersion</b> String	The module version. This property is set by the Sesam kernel. The maximum length of the module version string is 1024 character.
<b>genPack</b> String	The name of the installed Sesam package. The maximum length of the installed package name is 128 character.
<b>servicepackGenPack</b> String	The name of the installed Sesam service pack. The maximum length of the installed service pack name is 128 character.
<b>excludeType</b> String	The exclude type. Valid values are 'pattern' and 'regex'.
<b>hwPlatform</b> String	The hardware platform of the client. This property is set by the Sesam kernel. The maximum length of the hardware platform is 32 character.
<b>cores</b> Long	The number of CPU cores available at the client. This property is set by the Sesam kernel.



Name	Description
<b>dataMover</b> String	The host name or IP address of the data mover to use. The maximum length of the data mover name is 255 character.
<b>vmHost</b> String	The host name or IP address of the virtualization host to use. The maximum length of the virtualization host name is 255 character.
<b>vmHostType</b> String	The virtualization host type. Valid values are 'vCenter', 'citrix', 'KVM', 'RHEV-Management-Server', 'Hyper-V-Server', 'Hyper-V-Cluster' and 'Proxmox-VE'. The maximum length of the virtualization host type is 32 character.
<b>vmName</b> String	The name of the virtual machine the client is representing. The maximum length of the virtual machine name is 255 character.
<b>vmServerType</b> String	The virtualization server type, if the client is a virtualization server. Valid values are 'vCenter', 'citrix', 'KVM', 'RHEV-Management-Server', 'Hyper-V-Server', 'Hyper-V-Cluster' and 'Proxmox-VE'. The maximum length of the virtualization server type is 32 character.
<b>licenseLevel</b> String	The license level of the client. The maximum length of the license level is 32 character.
<b>sesamPasswd</b> <small>deprecated</small> String	The encrypted password to protect the access to the client. The maximum length of the encrypted password is 512 character.
<b>installationDate</b> Date	The date and time when the Sesam package got installed at the client. This property is set by the Sesam kernel.
<b>servicepackDate</b> Date	The date and time when the Sesam service pack got installed at the client. This property is set by the Sesam kernel.
<b>updateDate</b> Date	The date and time when the Sesam package got last updated at the client. This property is set by the Sesam kernel.
<b>updateState</b> String	The state of the last Sesam package update. Valid values are '0' (success), '2' (error), 'a' (active) and 'q' (in queue). This property is set by the Sesam kernel.
<b>updateMessage</b> String	The message of the last Sesam package update. This property is set by the Sesam kernel.
<b>dateChanged</b> Date	The date and time when the properties of the client got last changed.
<b>dateCreated</b> Date	The date and time when the client got created.
<b>changedBy</b> String	The ID of the user who last changed the client properties.
<b>autoGenerated</b> Boolean	Flat to indicate if the client has been auto generated, in example by the task generation.
<b>availableBackupTypes</b> array[String]	List of available backup types for this client.
<b>orphaned</b> Boolean	Flag to mark if a client is orphaned. Orphaned means that backups for this client still exist but the client object has been deleted.

Following methods are provided by the client service:

GET

/sep/api/v2/clients

Minimum required role: None

Since: Beefalo

Get all clients.

The response body contains the list of clients encoded as JSON objects. The properties of the client object are described above.

## Responses

---

Response Code and Content	Description
<b>200</b> <b>Clients</b> array[JSON object]	The clients are returned in the response body.

## Examples

---

Get all clients:

```
GET /sep/api/v2/clients

Response:
[
  {
    "id": 0,
    "name": "my-local-server",
    ...
  },
  {
    "id": 1,
    "name": "my-other-local-server",
    ...
  },
  ...
]
```

GET
</sep/api/v2/clients/<id>>

Minimum required role: None

Since: Beefalo

Get the client matching the given ID.

The response body contains the client encoded as JSON object. The properties of the client object are described above.

## Responses

---

Response Code and Content	Description
<b>200</b> <b>Client</b> JSON object	The client is returned in the response body.

## Examples

---

The client with the unique object ID 0:

```
GET /sep/api/v2/clients/0

Response:
{
  "id": 0,
  "name": "my-local-server",
  ...
}
```

POST

/sep/api/v2/clients/find

Minimum required role: None

Since: Beefalo

Search for clients matching the specified filter parameters.

### Parameters

The filter configuration is passed in as JSON object in the body of the request. The following JSON object properties are defined:

Name	Description
<b>name</b> String	The name of the client.
<b>location</b> Long	The ID of the parent location.
<b>accessMode</b> array[String]	A list of access modes to match. See the client properties description for valid values.
<b>accessState</b> array[Integer]	A list of access states to match. See the client properties description for valid values.
<b>permit</b> Boolean	The enabled state. Either true or false.
<b>operSystems</b> array[JSON object]	A list of operating system names to match.
<b>vmServerType</b> String	The virtualization server type. See the client properties description for valid values.
<b>vmName</b> String	The name of the virtual machine the client is representing.
<b>matchWithSavesetID</b> String	A save set ID. When specified, the filter returns a list of clients compatible with the backup's type.
<b>queryMode</b> String	The query mode is used to customize the behavior of the end point. Depending on the specified value, the end point may prefilter the result set to eliminate invalid results. Valid values are DEFAULT, RESTORE and BACKUP.
<b>includeAvailableBackupTypes</b> Boolean	Flag to indicate to include the list of backup types of available backups for the client.

### Responses

Response Code and Content	Description
<b>200</b> <b>Clients</b> array[JSON object]	The matching clients are returned in the response body.

### Examples

Get all enabled clients from the location with the ID '5':

```
POST /sep/api/v2/clients/find
{ "location" : 5, "permit" : true }

Response:
[
  {
    "id": 0,
    "name": "my-local-server",
    ...
  }
  ...
]
```

```
]
```

Get all clients with operating system LINUX:

```
POST /sep/api/v2/clients/find
{ "operSystems" : [ { "name" : "LINUX" } ] }

Response:
[
  {
    "id": 5,
    "name": "my-linux-server",
    ...
  }
  ...
]
```

**POST**

/sep/api/v2/clients/create

Minimum required role: Administrator

Since: Beefalo

Creates a new client. If an ID is given, the client will be created with the given ID. If a client with the given ID already exists, the call will fail. If no ID is given, the client is automatically assigned the next free ID (maximum ID + 1).

#### Parameters

The client is passed in as JSON object in the body of the request. The properties of the client are described above.

#### Responses

Response Code and Content	Description
200 Client JSON object	The newly created client is returned in the response body.

#### Examples

Creates a new client:

```
POST /sep/api/v2/client/create
{ "name" : "my_new_client", "location" : 5, "usercomment" : "My newly created client" }

Response:
{
  "id": 17,
  "name": "my_new_client",
  "location": 5,
  "usercomment": "My newly created client",
  ...
}
```

Creates a new client with an existing ID:

```
POST /sep/api/v2/clients/create
{ "id": 2, "name" : "my_new_client", "location" : 5, "usercomment" : "My newly created client" }

Response:
{
  "error": "duplicate.pk",
  "message": "The primary key ('2') is not unique.",
  "header": "Illegal Parameter",
  "parameter": [
    "2"
  ],
  "type": "ILLEGAL_PARAMETER",
  "url": "/sep/api/v2/clients/create"
}
```

**POST**

/sep/api/v2/clients/update

Minimum required role: Administrator

Since: Beefalo

Updates a client. A client with the given ID or name must exist, otherwise the call will fail.

The end-point will look up the original client object by the given ID or name. If found, the original client object is updated with any non-null property from the passed in client object. That means that only the changed properties needs to be present in the given client object.

#### Parameters

The client is passed in as JSON object in the body of the request. The properties of the client are described above.

#### Responses

Response Code and Content	Description
<b>200</b> <b>Client</b> JSON object	The updated client is returned in the response body.
<b>500</b> <b>Error</b> JSON object	SERVER_ERROR_INTERNAL. The error object returned in the response body contains the details of what went wrong.

#### Examples

Updates the client with ID 17:

```
POST /sep/api/v2/clients/update
{ "id": 17, "usercomment": "My updated client" }

Response:
{
  "id": 17,
  "name": "my_new_client",
  "location": 5,
  "usercomment": "My updated client",
  ...
}
```

POST

/sep/api/v2/clients/persist

Minimum required role: Super user

Since: Jaglion

Persists a client. If no client with the given ID exists, a new client will be created. Otherwise, the properties of an existing client are updated.

#### Parameters

The client is passed in as JSON object in the body of the request. The properties of the client are described above.

#### Responses

Response Code and Content	Description
200 Client JSON object	The created or updated client is returned in the response body.

#### Examples

Persists the client with the ID "7":

```
POST /sep/api/v2/clients/persist
{ "id": 17, "usercomment": "My updated client" }

Response:
{
  "id": 17,
  "name": "my_new_client",
  "location": 5,
  "usercomment": "My updated client",
  ...
}
```

POST

/sep/api/v2/clients/import

Minimum required role: Administrator

Since: Jaglion

Imports a list of clients. Recreates each client from the list with the given properties. If the client ID is provided and a client with the same ID already exists, the import will fail as a whole. To create new clients, the client ID has to be omitted.

#### Parameters

The list of clients to import is passed in as JSON array in the body of the request.

#### Responses

Response Code and Content	Description
200 Clients	The list of newly created clients is returned in the response body.

## Response Code and Content

## Description

array[JSON object]

## Examples

Import the given list of clients:

```
POST /sep/api/v2/clients/import
[
  {
    "name": "my-new-client",
    "location": {
      "id": 9
    },
    "operSystem": {
      "name": "Windows Server 2016",
      "platform": "WINDOWS"
    },
    "netProt": "TCP/IP",
    "accessmode": "SMSSH",
    "permit": true
  },
  {
    "name": "my-other-new-client",
    "location": {
      "id": 9
    },
    "operSystem": {
      "name": "Windows Server 2019",
      "platform": "WINDOWS"
    },
    "netProt": "TCP/IP",
    "accessmode": "SMSSH",
    "permit": true,
  }
]
```

Response:

```
[
  {
    "id": 75,
    "name": "my-new-client",
    "location": {
      "id": 9,
      "name": "My Location",
      "displayLabel": "My Location"
    },
    "operSystem": {
      "name": "Windows Server 2016",
      "platform": "WINDOWS"
    },
    "netProt": "TCP/IP",
    "accessmode": "SMSSH",
    "accessState": 0,
    "accessTime": 1629785929000,
    "accessSuccess": 1629785929000,
    ...
  },
  {
    "id": 76,
    "name": "my-other-new-client",
    "location": {
      "id": 9,
      "name": "My Location",
      "displayLabel": "My Location"
    },
    "operSystem": {
      "name": "Windows Server 2019",
      "platform": "WINDOWS"
    }
  }
]
```

```

    },
    "netProt": "TCPIP",
    "accessmode": "SMSSH",
    "accessState": 0,
    "accessTime": 1629785922000,
    "accessSuccess": 1629785922000,
    ...
  }
]

```

POST

/sep/api/v2/clients/delete

Minimum required role: Administrator

Since: Beefalo

Deletes a client.

#### Parameters

The unique ID of the client is passed in as JSON number in the body of the request.

#### Responses

Response Code and Content	Description
200 id Long	The unique ID of the deleted client is returned in the response body. If no client existed with the given ID, then null is returned.

#### Examples

Deletes the client with the ID 17 (exists):

```

POST /sep/api/v2/clients/delete
17

Response:
17

```

Deletes the client with the ID 99 (does not exist):

```

POST /sep/api/v2/clients/delete
99

Response:
null

```

In SEP sesam, operations are linked to the client for which the operation is performed. A backup task is linked to the client which should be backed up. A restore is linked to the client where the data should be restored. SEP sesam data model objects, which are linked to a client, are queried via the client object.

At this point of time, a backup is a data row of the database table *“results”*. A backup is available when the backup complete with state *“successful”* or *“warning”*.



When querying objects associated with a client, most of the end points allow filtering the result set by certain criteria. While more filter criteria might be defined in future, the current list of filter criteria is the following:

Name	Description
<b>sesamDate</b> array[String]	An array of one or two date/time strings. The first element in the array represents the beginning of the date/time range (<from>) and the second element in the array represents the end of the date/time range (<to>). Either <from> or <to> can be null, but one of them has to be not null. The presence of the two values controls the condition generated. <ul style="list-style-type: none"> <li>• If both values are specified, than the condition will be generated as date range (between “&lt;from&gt;” and “&lt;to&gt;”).</li> <li>• If both values are specified and “&lt;to&gt;” is null, the condition will be generated as greater or equal than “&lt;from&gt;”.</li> <li>• If both values are specified and “&lt;from&gt;” is null, the condition will be generated as less or equal than “&lt;to&gt;”.</li> <li>• If only one value is specified (array length = 1), than the condition is generated as equals.</li> </ul>
<b>startTime</b> array[String]	An array of one or two date/time strings. See the description of the “sesamDate” filter property for details.
<b>stopTime</b> array[String]	An array of one or two date/time strings. See the description of the “sesamDate” filter property for details.
<b>clientName</b> String	The name of the client.
<b>clientOs</b> String	The operating system running at the client.
<b>states</b> array[String]	An array of states to match. The most common valid states are 0 (success), 1 (warning), 2 (error) and c (cancelled).
<b>backupTypes</b> array[String]	An array of backup types to match.
<b>restoreableOnly</b> boolean	Boolean flag to control if only restorable backups should be included in the result set. If not provided, the flag defaults to false.
<b>template</b> Boolean	Applies to filter restores only. Boolean flag to control if only restore tasks marked as template should be included in the result set. If not provided, the flag defaults to null (not applicable).
<b>immutableFlags</b> Boolean	Applies to filter restores only. Boolean flag to control if only restore task templates marked as read-only should be included in the result set. If not provided, the flag defaults to null (not applicable).
<b>taskNames</b> array[String]	An array of backup task names to match.
<b>interfaceNames</b> array[String]	An array of client interfaces names to match.
<b>queryMode</b> String	The query mode is used to customize the behavior of the end point. Depending on the specified value, the end point may prefilter the result set to eliminate invalid results. Valid values are DEFAULT, RESTORE and BACKUP.

POST

/sep/api/v2/clients/deleteByEntity

Minimum required role: Administrator

Since: Jaglion

Deletes the client matching the given entity.

Parameters

The entity to match is passed in the body of the request as JSON object. The only required entity property is the primary key of the entity.

Responses

Response Code and Content	Description
200 client_id Long	The ID of the client is returned in the response body.

Examples

Delete the client with the client\_id "3":

```
POST /sep/api/v2/clients/deleteByEntity
{ "client_id": 3 }

Response:
3
```

**GET** /sep/api/v2/clients/<id>/backups Since: Beefalo  
 Minimum required role: None

Get the list of all available backups for the selected client, with FDI type "F\*", "D\*", "I\*" and "C\*" only. No group backups or "newday" (N) or "sm\_startup" (S) results are included in the result set.

The end point supports filtering the result set by passing in a client backup filter as JSON object in the body of the request. The HTTP request method has to be changed to POST when using the filter.

**POST** /sep/api/v2/clients/<id>/backups Since: Beefalo  
 Minimum required role: None

Get the filtered list of available backups for the selected client, with FDI type "F\*", "D\*", "I\*" and "C\*" only. No group backups or "newday" (N) or "sm\_startup" (S) results are included in the result set.

The response body contains the backups encoded as JSON object. The properties of the backup object are described in the backup service section.

Responses

Response Code and Content	Description
200 Backup array[JSON object]	The list of backups is returned in the response body.

Examples

Get the list of all available backups for the client with the ID 0:

```
GET /sep/api/v2/clients/0/backups

Response:
[
  {
    "name": "SI20190611093502863@XGgxTjDI09V",
    "task": "my_backup_task",
    ...
  },
  ...
]
```

Get the list of available backups for the client with the ID 0 and the backup task with the name 'my\_backup\_task':

```
POST /sep/api/v2/clients/0/backups
{ "taskNames" : [ "my_backup_task" ] }

Response:
[
  {
    "name": "SI20190611093502863@XGgxTjDI09V",
    "task": "my_backup_task",
    ...
  },
  ...
]
```

GET

/sep/api/v2/clients/&lt;id&gt;/tasks

Minimum required role: None

Since: Beefalo

Get the list of all available backup tasks for the selected client.

The end point supports filtering the result set by passing in a client backup filter as JSON object in the body of the request. The HTTP request method has to be changed to POST when using the filter.

POST

/sep/api/v2/clients/&lt;id&gt;/tasks

Minimum required role: None

Since: Beefalo

Get the filtered list of available backup tasks for the selected client.

The response body contains the backup task encoded as JSON object. A backup task is an object with the following properties:

Name	Description
<b>name</b> * required String	The name of the backup task. The maximum length of the name is 50 characters. The name can contain only letters, digits, the '-' and the '_' character.
<b>type</b> JSON object	The backup task type. The backup task type is an object from the 'task_types' database table.
<b>subType</b> JSON object	The backup task sub type. Primarily used with virtualization backup task types, like "VMware vSphere". Valid values are '_CONFIG' and '_IMG'.

Name	Description
<b>client</b> JSON object	The client the backup task is associated with.
<b>source</b> String	A semicolon separated list of source items the backup task will process. The maximum length of the source is 1024 characters.
<b>sourceEncoding</b> String	The character encoding of the source, when different from UTF-8.
<b>sourceUuid</b> String	The source unique ID.
<b>exclude</b> String	A semicolon separated list of exclude items the backup task will skip over. The maximum length of the exclude is 1024 characters.
<b>excludeType</b> String	The exclude type. Valid values are 'pattern' and 'regex'.
<b>usercomment</b> String	The comment or note from the user. The maximum length of the user comment is 1024 characters.
<b>resultsSts</b> String	The status of the last backup run. Valid values are '0' (success), '2' (error), 'a' (active), 'q' (in queue) and more. This property is set by the Sesam kernel.
<b>taskSts</b> String	Flag to force a FULL backup. When set to 'F', the next INCR or DIFF backup will be forced to run as FULL backup. The flag is reset by the Sesam kernel afterwards.
<b>autoGenerated</b> Boolean	Flat to indicate if the task has been auto generated, in example by the task generation.
<b>backupOptions</b> String	Options to pass on to the SEP sesam backup process when starting a backup. The maximum length of the backup options is 255 characters.
<b>backupSrvOptions</b> String	Options to pass on to the SEP sesam backup server process when starting a backup. The maximum length of the backup server options is 512 characters.
<b>restoreOptions</b> String	Options to pass on to the SEP sesam restore process when starting a restore. The maximum length of the restore options is 255 characters.
<b>restoreSrvOptions</b> String	Options to pass on to the SEP sesam restore server process when starting a restore. The maximum length of the restore server options is 512 characters.
<b>prepost</b> String	A 4 character string controlling the pre/post backup behavior. The valid values for each character are 'y' (yes) or 'n' (no). The meaning of the characters are: <ul style="list-style-type: none"> <li>5. activate pre interface</li> <li>6. execute backup despite pre error</li> <li>7. activate post interface</li> <li>8. execute post despite backup error</li> </ul>
<b>rPrepost</b> String	A 4 character string controlling the pre/post restore behavior. The valid values for each character are 'y' (yes) or 'n' (no). The meaning of the characters are: <ul style="list-style-type: none"> <li>1. activate pre interface</li> <li>2. execute restore despite pre error</li> <li>3. activate post interface</li> <li>4. execute post despite restore error</li> </ul>
<b>nfsMount</b> Boolean	Flag to control if data stored on NFS mounted paths are included or not.
<b>filesystem</b> Boolean	Flag to control if the backup process shall stop (false) or cross (true) file system boundaries.
<b>granularity</b> String	Flag to control the granularity for mail system backups. Valid values are 'all', 'mailbox' or 'folder'.
<b>bsrFlag</b> String	Flag to control the depth of the bare system recovery backup. Valid values are '0' (off), '1' (minimal system backup), '2' (system volume backup) and '3' (full local system backup).
<b>compressFlag</b> Boolean	Flag to control if the backup data will be compressed (true) or not (false).
<b>cryptFlag</b> String	Flag to control if the backup data will be encrypted. Valid values are 'a' (AES256) or 'b' (Blowfish64).
<b>cryptKey</b> String	The encrypted encryption key to encrypt the backup data with. The maximum length of the encryption key is 128 characters.
<b>cryptSavekeyFlag</b> Boolean	Flag to control if the encryption key is stored in the database (true) or not (false).

Name	Description
<b>snapshotFlags</b> String	The snapshot type used. Valid values are 'vss' and 'LVM'.
<b>dataMover</b> String	The host name or IP address of the data mover to use. The maximum length of the data mover name is 255 character.
<b>nodeFlag</b> Boolean	The node flag.
<b>preferredMode</b> String	The preferred mode. The maximum length of the preferred mode is 8 characters.
<b>allowOtherMode</b> Boolean	Flag to control if other mode are allowed (true) or not (false).
<b>userName</b> String	The user name to use for connecting to the client, The maximum length of the user name is 255 character.
<b>password</b> String	The encrypted password to use for connecting to the client. The maximum length of the password is 512 character.
<b>exec</b> Boolean	Flag to control the execution state of the backup task. When false, then the backup task will be not executed.
<b>lastFullBackup</b> String	The id of the last executed FULL backup. The maximum length of the last FULL backup id is 64 character. This property is set by the Sesam kernel.
<b>lastDiffBackup</b> String	The id of the last executed DIFF backup. The maximum length of the last DIFF backup id is 64 character. This property is set by the Sesam kernel.
<b>lastIncrBackup</b> String	The id of the last executed INCR backup. The maximum length of the last INCR backup id is 64 character. This property is set by the Sesam kernel.
<b>lastFdiBackup</b> String	The id of the last executed FDI backup. The maximum length of the last FDI backup id is 64 character. This property is set by the Sesam kernel.
<b>lastCopyBackup</b> String	The id of the last executed COPY backup. The maximum length of the last COPY backup id is 64 character. This property is set by the Sesam kernel.

Responses

Response Code and Content	Description
<b>200</b> <b>Backup Tasks</b> array[JSON object]	The list of backup tasks is returned in the response body.

Examples

Get the list of all available backup tasks for the client with the ID 0:

```
GET /sep/api/v2/clients/0/tasks

Response:
[
  {
    "name": "my_backup_task",
    "type": {
      "name": "Path",
      ...
    }
  },
  ...
]
```

```
]
```

Get the list of available backup tasks for the client with the ID 0 matching the name 'my\_backup\_task':

```
POST /sep/api/v2/clients/0/tasks
{ "taskNames" : [ "my_backup_task" ] }

Response:
[
  {
    "name": "my_backup_task",
    "type": {
      "name": "Path",
      ...
    }
  },
  ...
]
```

**GET** /sep/api/v2/clients/<id>/backupCountByDay  
 Minimum required role: None Since: Beefalo

Get the count of backups, with FDI type "F\*", "D\*", "I\*" and "C\*", for the selected client per day. No group backups or "newday" (N) or "sm\_startup" (S) results are included in the result set.

The end point supports filtering the result set by passing in a client backup filter as JSON object in the body of the request. The HTTP request method has to be changed to POST when using the filter.

**POST** /sep/api/v2/clients/<id>/backupCountByDay  
 Minimum required role: None Since: Beefalo

Get the filtered count of backups, with FDI type "F\*", "D\*", "I\*" and "C\*", for the selected client per day. No group backups or "newday" (N) or "sm\_startup" (S) results are included in the result set.

The response body contains the backup count per day statistics encoded as JSON object. A statistics result is an object with the following properties:

Name	Description
<b>clients</b> array[String]	The list of client IDs or names represented in the collected statistics.
<b>type</b> JSON object	The statistics type. Valid values are 'COUNT', 'DATA_SIZE' and 'STATE'.
<b>subType</b> JSON object	The statistics sub type. Valid values are 'BACKUP', 'LATEST_BACKUP' and 'RESTORE'.
<b>children</b> array[JSON object]	The list of child statistics. A child is either a statistics result group or a statistics result item.

A statistics result group is an object with the following properties:

Name	Description
------	-------------

Name	Description
<b>id</b> String	The group object ID.
<b>type</b> String	The group object type.
<b>children</b> array[JSON object]	The list of child statistics. A child is either a statistics result group or a statistics result item.
<b>values</b> JSON object	A key/value pair map containing the data information for the collected statistic.

A statistics result item is an object with the following properties:

Name	Description
<b>id</b> String	The group object ID.
<b>values</b> JSON object	A key/value pair map containing the data information for the collected statistic.

## Responses

Response Code and Content	Description
<b>200</b> Statistics Result JSON object	The backup count per day is returned as statistics in the response body.

## Examples

Get the count of all backups for the client with the ID 0:

```
GET /sep/api/v2/clients/0/backupCountByDay
```

Response:

```
{
  "clients": [
    "my-local-server"
  ],
  "type": "COUNT",
  "subtype": "BACKUP",
  "children": [
    {
      "id": "0",
      "type": "Clients",
      "children": [
        {
          "values": {
            "date": 1536444000000,
            "count": 1
          }
        },
        ...
      ],
      "values": {
        "count": 142
      }
    }
  ]
}
```

```

    },
    ...
  ]
}

```

**GET**`/sep/api/v2/clients/<id>/restores`

Minimum required role: None

Since: Beefalo

Get the list of all available restores for the selected client.

The end point supports filtering the result set by passing in a client backup filter as JSON object in the body of the request. The HTTP request method has to be changed to POST when using the filter.

**POST**`/sep/api/v2/clients/<id>/restores`

Minimum required role: None

Since: Beefalo

Get the filtered list of available restores for the selected client.

The response body contains the restores encoded as JSON object. The properties of the restore object are described in the restore service section.

#### Responses

Response Code and Content	Description
200 Restore array[JSON object]	The list of restores is returned in the response body.

#### Examples

Get the list of all available restores for the client with the ID 0:

```
GET /sep/api/v2/clients/0/restores
```

```
Response:
```

```

[
  {
    "name": "20190528120036877",
    "startTime": 1559037636000,
    "rTask": {
      "name": "my_restore_task",
      ...
    }
  },
  ...
]

```

Get the list of available restores for the client with the ID 0 and the backup task with the name 'my\_backup\_task':



```

POST /sep/api/v2/clients/0/restores
{ "taskNames" : [ "my_backup_task" ] }

Response:
[
  {
    "name": "20190528120036877",
    "startTime": 1559037636000,
    "rTask": {
      "name": "my_restore_task",
      ...
    },
    ...
    "task": {
      "name": "my_backup_task",
      ...
    }
  },
  ...
]
    
```

**GET** /sep/api/v2/clients/<id>/restoreTasks

Minimum required role: None Since: Beefalo

Get the list of all available restore tasks for the selected client.

The end point supports filtering the result set by passing in a client backup filter as JSON object in the body of the request. The HTTP request method has to be changed to POST when using the filter.

**POST** /sep/api/v2/clients/<id>/restoreTasks

Minimum required role: None Since: Beefalo

Get the filtered list of available restore tasks for the selected client.

The response body contains the restore task encoded as JSON object. A restore task is an object with the following properties:

Name	Description
<b>name</b> * required String	The name of the restore task. The maximum length of the name is 128 characters. The name can contain only letters, digits, the '-' and the '_' character.
<b>type</b> * required String	The restore task type. The restore task type is a 2 character string, where the first character is the restore type (full = 'f' or selective = 's') and the second character is the restore transaction type (no recover = 'n', recover = 'r' and online = 'o').
<b>genmode</b> Boolean	Flag to control if a generation restore is performed.
<b>treeType</b> * required String	The restore tree type. The maximum length of the restore tree type is 2 characters. Valid values are 'f' (FLAT) or 'd' (DEEP).
<b>overwrite</b> String	The restore overwrite mode. Valid values are 'NO_OVERWRITE', 'OVERWRITE', 'OVERWRITE_NEWER' and 'OVERWRITE_OLDER'.
<b>rename</b> Boolean	Flag to control the rename mode. When set to true, the restore will create a new version of the item to restore, if the item already exist.
<b>original</b> Boolean	Flag to control if the items are restored to the original location or not.
<b>recover</b> Boolean	Flag to control the recovery mode. Used mainly for database recovery.

Name	Description
<b>attachClient</b> String	The name of the client to attach or mount virtual disks to. The maximum length of the name is 64 characters.
<b>client</b> * required JSON object	The name of the client to restore the items to.
<b>targetPath</b> * required String	The path on the selected client to restore the items to.
<b>targetServer</b> String	The virtualization host to restore the items to. Only used when restoring virtual backup items.
<b>targetStore</b> String	The virtualization data store to restore the items to. Only used when restoring virtual backup items.
<b>targetFolder</b> String	The virtualization folder to restore the items to. Only used when restoring virtual backup items.
<b>targetNetwork</b> String	The virtualization network to use for the items to restore. Only used when restoring virtual backup items.
<b>targetResource</b> String	The virtualization resource to use for the items to restore. Only used when restoring virtual backup items.
<b>immutableFlags</b> Boolean	Flag to control if the restore task template is read only. Has effect only if the 'template' property is set.
<b>template</b> Boolean	Flag to control if the restore task is a template.
<b>userName</b> * required String	The name of the user who created the restore task. The maximum length of the user name is 255 characters.
<b>username</b> String	The user name to use for authentication with the remote service, if necessary. This field is deprecated. Use the 'credentialId' field instead. The maximum length of the user name is 255 characters.
<b>password</b> String	The password to use for the authentication with the remote service, if necessary. This field is deprecated. The maximum length of the password is 512 characters.
<b>credentialId</b> Long	The id of the credentials set to use for authentication with the remote service, if necessary.
<b>credentialUuid</b> String	The UUID of the credentials set to use for the authentication with the remote service, if necessary. Reserved for future use. The maximum length of the credentials set UUID is 40 characters.
<b>subtaskFlag</b> Boolean	Flag to mark this restore task to be a sub task of another restore task. This property is set by the Sesam kernel.
<b>pathFlag</b> Boolean	Flag to mark if the path backup type is forced. Used for some backup types, like VMware vSphere.
<b>dumpFlag</b> Boolean	Flag to mark if the restored data is written into a dump file.
<b>parentTask</b> JSON object	The name of the parent restore tasks. This property is set by the Sesam kernel.
<b>ifaceName</b> String	The name of the interface to use.
<b>mediaPool</b> String	The name of the media pool to use. The maximum length of the media pool name is 255 characters.
<b>filter</b> String	A filter to be matched by the data elements to restore. The filter can be either an inclusion or an exclusion filter. More details about the format to use can be found in the Restore Assistant. The maximum length of the filter is 2048 characters.
<b>selFile</b> String	The absolute file name of a file containing a list of items to restore. Used for Single Item Restore (SIR) restore tasks. The maximum length of the selection file name is 1024 characters.
<b>relocSource</b> String	The backup source relocation rules. The maximum length of the relocation rules is 1024 characters.
<b>rPrepost</b> JSON object	A 4 character string controlling the pre/post restore behavior. The valid values for each character are 'y' (yes) or 'n' (no). The meaning of the characters are: <ol style="list-style-type: none"> <li>1. activate pre interface</li> <li>2. execute restore despite pre error</li> </ol>

Name	Description
	<ol style="list-style-type: none"> <li>3. activate post interface</li> <li>4. execute post despite restore error</li> </ol>
<b>makeStamp</b> Date	The restore task creation time stamp.
<b>eol</b> Long	The life time of the restore task in days. '0' means that the default life time from the 'DB:params_fix' table is used. '-1' means that the restore task is deleted immediately after completion.
<b>dataMover</b> String	The host name or IP address of the data mover to use. The maximum length of the data mover name is 255 character.
<b>restoreCmd</b> String	The restore command. The maximum length of the restore command is 64 characters. This property is set by the Sesam kernel.
<b>cryptFlag</b> String	Flag to mark if the backup data is encrypted. Valid values are 'a' (AES256) or 'b' (Blowfish64).
<b>cryptKey</b> String	The encrypted encryption key to decrypt the backup data with. The maximum length of the encryption key is 128 characters.
<b>sepcomment</b> String	The comment or note from Sesam. The maximum length of the SEP comment is 1024 characters.
<b>usercomment</b> String	The comment or note from the user. The maximum length of the user comment is 1024 characters.
<b>result</b> JSON object	The backup to restore the data from.
<b>drive</b> JSON object	The drive to use.
<b>options</b> String	The list of options to add to the restore command. The maximum length of the options is 255 characters.
<b>srvOptions</b> String	The list of server options to add to the restore command on server side. The maximum length of the options is 512 characters.
<b>verify</b> String	Verify the restored data. Valid values are 'VERIFY' (check for data validity errors). The maximum length of the verify is 32 characters.
<b>savesetId</b> String	The ID of the backup to restore the data from. When set, the 'result' property will be populated with the matching data from the DB.
<b>selectedFiles</b> array[JSON object]	The list of items to restore. When set, the list of items is written to a selection file and the 'selfFile' property is populated accordingly.
<b>restoreOptions</b> JSON object	The restore options. When set, the corresponding fields are populated accordingly.

The restore options property is an object with the following properties:

Name	Description
<b>restoreToOriginalPath</b> boolean	When 'true', restore the data to the original path. If omitted, the flag defaults to 'true'.
<b>restoreToPath</b> String	The path to restore the data to. Applies only when 'restoreToOriginalPath' is set to 'false'.
<b>keepOriginalTreeStructure</b> boolean	When 'true', the original tree structure is restored. When 'false', the data is restored flat. If omitted, the flag defaults to 'true'.
<b>restoreMode</b> String	The restore mode. Valid values are 'v' (new version), 'o' (overwrite), 'f' (full) and 's' (selective).

## Responses

Response Code and Content	Description
<b>200</b> <b>Restore Tasks</b> array[JSON object]	The list of restore tasks is returned in the response body.

## Examples

---

Get the list of all available restore tasks for the client with the ID 0:

```
GET /sep/api/v2/clients/0/restoreTasks
Response:
[
  {
    "name": "my_restore_task",
    "type": {
      "mode": "SELECTIVE",
      "transaction": "NONE"
    },
    "treeType": "DEEP",
    ...
  },
  ...
]
```

Get the list of available restore tasks for the client with the ID 0 matching the name 'my\_restore\_task':

```
POST /sep/api/v2/clients/0/restoreTasks
{ "taskNames" : [ "my_restore_task" ] }

Response:
[
  {
    "name": "my_restore_task",
    "type": {
      "mode": "SELECTIVE",
      "transaction": "NONE"
    },
    "treeType": "DEEP",
    ...
  },
  ...
]
```

**GET** /sep/api/v2/clients/<id>/interfaces

Minimum required role: None

Since: Jaglion

Get the list of all available interfaces for the selected client.

The end point supports filtering the result set by passing in a client backup filter as JSON object in the body of the request. The HTTP request method has to be changed to POST when using the filter.

**POST** /sep/api/v2/clients/<id>/interfaces

Minimum required role: None

Since: Jaglion

Get the filtered list of available interfaces for the selected client.

The response body contains the interfaces encoded as JSON object. An interface is an object with the properties described in the chapter Interfaces Service.

## Responses

---

Response Code and Content	Description
200 Interfaces array[JSON object]	The list of interfaces is returned in the response body.

## Examples

Get the list of all available interfaces for the client with the ID 0:

```
GET /sep/api/v2/clients/0/interfaces
```

Response:

```
[
  {
    "name": "MyInterface",
    "client": {
      "id": 0,
      "name": "MyClient",
      ...
    }
  },
  ...
]
```

Get the list of available interfaces for the client with the ID 0 matching the name 'MyInterface':

```
POST /sep/api/v2/clients/0/tasks
{ "interfaceNames" : [ "MyInterface" ] }
```

Response:

```
[
  {
    "name": "MyInterface",
    "client": {
      "id": "0",
      ...
    }
  }
]
```

### 3.9.1. Remote Client File System Access

When the user is asked to select a directory to where to restore the data or what exactly to backup, the user would like to browse the file system of the client, as it were a local file system. The client service also provide end points to access the client file system.

POST

/sep/api/v2/clients/<id>/browseFS

Since: Beefalo

Minimum required role: None

Browse the file system of the selected client.

The response body contains the remote file system items encoded as JSON object. The properties of the remote file system item are defined in browser service section.

#### Parameters

The filter configuration is passed in as JSON object in the body of the request. The following JSON object properties are defined:

Name	Description
<b>path</b> * required String	The path to browse. To get all root path elements, pass in '/'. For a Windows client, this will return the list of all Windows drives and other backup sources.
<b>restoreMode</b> Boolean	Flag to control if the client file system browsing is for the restore assistant ('true') or for the backup assistant ('false'). If omitted, the flag will default to 'false'.
<b>diskFreeMode</b> Boolean	Flag to control if the client file system browsing shall contain information about the disk usage for the specified path. If omitted, the flag will default to 'false'.
<b>backupType</b> String	The name of the backup type.
<b>credentialsId</b> Long	The id of the credentials set to use for authentication with the remote service, if necessary.

#### Responses

Response Code and Content	Description
200 Remote File System Item array[JSON object]	The list of remote file system items is returned in the response body.

#### Examples

Get the list of root remote file system items for the client with the ID 0:

```
POST /sep/api/v2/clients/0/browseFS
{ "path" : "/" }

Response:
[
  {
    "type": "dt",
    "name": "Volume{b30b0e38-babf-426f-ab32-74eef4c24a0f}",
    "infoData": ",Fixed Drive, boot, active, Label: ESP",
    ...
  },
  {
    "type": "dt",
    "name": "C:",
    ...
  }
]
```

```

    "infoData": ",Fixed Drive, Label: OS",
    ...
    "size": 326502817792,
    "capacity": 1.022300778496E12,
    "free": 6.95797960704E11,
    "used": 3.26502817792E11,
    "usedPercent": 31.9
    ...
  },
  ...
]

```

**POST**`/sep/api/v2/clients/<id>/mkdirFS`

Minimum required role: Restore

Since: Beefalo

Creates a new directory in the remote file system of the selected client.

#### Parameters

The filter configuration is passed in as JSON object in the body of the request. The following JSON object properties are defined:

Name	Description
<b>path</b> *required String	The absolute path to create in the remote file system of the selected client.

#### Responses

Response Code and Content	Description
<b>200</b> <b>State</b> Boolean	The state of the operation is returned in the response body.

#### Examples

Create a new directory in remote file system items for the client with the ID 0:

```

POST /sep/api/v2/clients/0/mkdirFS
{ "path" : "/tmp/my_new_directory" }

```

```

Response:
true

```

**GET**`/sep/api/v2/clients/<id>/drives`

Minimum required role: None

Since: Jaglion

Get all drives associated with the given client ID.

The response body contains the drive encoded as JSON object. The properties of the drive object are described in the drives service section.

---

## Responses

---

Response Code and Content	Description
200 HwDrivess array[JSON object]	The matching drives are returned in the response body.

---

## Examples

---

Get the drives of the client with the ID 7:

```
GET /sep/api/v2/clients/7/drives

Response:
{
  "id": 1,
  "device": "DS@Test-Store_1",
  "client": {
    "id": 0,
    ...
  },
  "driveType": {
    "name": "DISK_STORE",
    "genericType": "DISK",
  },
  "name": "Drive-1",
  "compress": false,
  "occupy": false,
  "accessMode": "READWRITE",
  "smsCnts": 10,
  "cleanBit": false,
  "path": "C:/datastores",
  "dataStore": "Test-Store",
  "ejectFlag": false,
  "blockSize": 0,
  "smsNr": 0,
  "groupId": 1
}
```



### 3.10. Command Line (CLI) Service

The command line or CLI service is the server side service part of the SEP sesam command line interface 'sm\_cmd'. The CLI service allows the execution of text based commands describing the action and action parameters.

Following methods are provided by the command line service:

<b>POST</b>	<code>/sep/api/v2/cli/process</code>	Since: Jaglion
Minimum required role: None		

Analyze and execute the command specified by the given parameters.

#### Parameters

The command and associated files are passed in as JSON object in the body of the request. The following JSON object properties are defined:

Name	Description
<b>args</b> array[String]	The array of command line arguments.
<b>files</b> array[String]	The list of file names to attach to an e-mail, when sending an e-mail is requested.
<b>uploadedFiles</b> JSON object	A map containing the content of client side local files to be uploaded to the server for further processing.

#### Responses

Response Code and Content	Description
<b>200</b> <b>CliResultEntity</b> JSON object	When the command has been analyzed and execute, the command result is returned in the response body.

The command result is returned as JSON object in the body of the response. The following JSON object properties are defined:

Name	Description
<b>results</b> String	The text based result of the executed command.
<b>exitCode</b> Integer	An optional exit code to be passed from the server to the client for use.
<b>downloadCommandDto</b> JSON object	The result data in case a download request is executed.
<b>showCommandDto</b> JSON object	The result data in case a show request is executed.
<b>exportCalendarEventsCommandDto</b> JSON object	The result data in case a export calendar events request is executed.

The download command DTO is a JSON object with following properties defined:

Name	Description
<b>server</b> String	The name of the server to connect to.
<b>port</b> Integer	The port of the server to connect to.
<b>command</b> String	The command type.
<b>verbosity</b> Integer	The verbosity.
<b>obj</b> String	The command object.
<b>files</b> array[JSON object]	The list of files to download or show.
<b>queryParams</b> JSON object	The map of key/value query parameter pairs.
<b>fileFilter</b> JSON object	The file filter applied.
<b>path</b> String	The local file system path to download the files too.
<b>sessionId</b> String	The unique session ID.
<b>session</b> String	The encrypted session information.

The show command DTO is a JSON object with following properties defined:

Name	Description
<b>sessionId</b> String	The unique session ID.
<b>session</b> String	The encrypted session information.
<b>server</b> String	The name of the server to connect to.
<b>port</b> Integer	The port of the server to connect to.
<b>logLevel</b> String	The log level.
<b>shouldContinue</b> Boolean	Flag to indicate that more data to show is available.

The export calendar events DTO is a JSON object with following properties defined:

Name	Description
<b>fileName</b> String	The file name to save the calendar events too.
<b>calendarName</b> String	The name of the exported calendar.
<b>calendarEvents</b> array[JSON object]	The list of calendar events to save.

## Examples

List all clients:

```
POST /sep/api/v2/cli/process
{ "args" : [ "list", "clients" ] }

Response:
{
  "results": "Name                Client ID  Location          OS ..."
```

POST
/sep/api/v2/cli/executeSql

Minimum required role: Super user Since: Jaglion

Directly executes the given SQL statement and return the result set or the number of effected rows.

## Parameters

The SQL statement to execute is passed in as JSON object in the body of the request. The following JSON object properties are defined:

Name	Description
<b>query</b> String	The SQL statement to execute. Note that quotes inside the statements are required to be masked by <code>\`</code> .
<b>delimiter</b> String	The delimiter to use for separating the colums when writing a record of the result set. Defaults to <code>;</code> when not specified.
<b>format</b> String	The output format to use when writing a record of the result set. Valid values are <code>'HEADER'</code> , <code>'NOHEADER'</code> , <code>'EXPORT'</code> , <code>'NAMED'</code> , <code>'JSON'</code> and <code>'RYTHM'</code> . Defaults to <code>'NOHEADER'</code> when not specified.
<b>template</b> String	The name of the rythm template to use for formatting a record of the result set, when the format property is set to <code>'RYTHM'</code> .

## Responses

Response Code and Content	Description
<b>200</b> <b>Result Set</b> array[String]	The result set or the number of rows affected by the SQL statement is returned in the response body.

## Examples

List all records of the clients table and output the records as JSON objects:

```
POST /sep/api/v2/cli/process
{ "query" : "select * from clients", "format" : "JSON" }

Response:
[
  "\n  { \"client_id\": 0, \"name\": \"my-client\", \"location\": 0, \"os\": \"Windows 10\",
  \"net_prot\": \"TCP/IP\", \"mac_address\": NULL, \"accessmode\": \"SMSSH\", \"access_state\": \"0\",
  \"access_time\": \"2021-06-10 15:05:02\", \"access_success\": \"2021-06-10 15:05:02\", \"comment\": \"I005-
  HOSTS SEP sesam client is already installed on my-client, access is valid\", \"msg\": NULL,
  \"user_comment\": NULL, \"permit\": \"1\", \"wol_flag\": \"0\", \"update_flag\": \"1\", \"credential_id\":
```

```
null, \"credential_uuid\": NULL, \"user_name\": NULL, \"password\": NULL, \"os_credential_id\": null,  
\"os_credential_uuid\": NULL, \"os_user\": NULL, \"os_password\": NULL, \"access_options\": NULL, ...]"  
]
```

### 3.11. Commands Service

The commands service provides access to commands persisted in the database.

A commands object has the following properties:

Name	Description
<b>name</b> * required String	The unique name of the command. The maximum length is 64 characters. Possible characters are a-z, A-Z, 0-9, “_” and “-”.
<b>owner</b> * required String	The user name of the owner of the command. The maximum length is 30 characters.
<b>type</b> * required CommandType	The type of the command. Valid values are “x” (Execute) and “-” (None).
<b>host</b> String	The name of the client, on which the command should be executed. The maximum length is 512 characters.
<b>command</b> * required String	The actual command. The maximum length is 2048 characters.
<b>exitOptions</b> String	The maximum length is 64 characters.
<b>options</b> String	The maximum length is 1024 characters.
<b>userName</b> String	The name of the user account which is used to execute the command. The maximum length is 255 characters.
<b>sepcomment</b> String	The comment or note from Sesam. The maximum length of the SEP comment is 1024 characters.
<b>usercomment</b> String	The comment or note from the user. The maximum length of the user comment is 1024 characters.
<b>duration</b> String	The duration of the command in seconds.
<b>lifetime</b> String	The lifetime of the command in seconds.
<b>mtime</b> Date	The time at which the notification object was modified at last.

Following methods are provided by the commands service:

GET

/sep/api/v2/commands


---

Minimum required role: None
Since: Jaglion

#### Get all stored commands

The response body contains the list of commands encoded as JSON objects. The properties of the command object are described above.

#### Responses

Response Code and Content	Description
200 Commands array[JSON object]	The commands are returned in the response body.

## Examples

---

Get all stored commands:

```
GET /sep/api/v2/commands

Response:
[
  {
    "name": "Command",
    "owner": "mha",
    "type": "EXECUTE",
    "userName": "mha",
    "command": "echo 'command'",
    "mtime": 1614340554000
  },
  ...
]
```

**GET**

/sep/api/v2/commands/<name>

Minimum required role: None

Since: Jaglion

Get the command matching the given name.

The response body contains the command encoded as JSON object. The properties of the command object are described above.

## Responses

---

Response Code and Content	Description
200 Command JSON object	The command is returned in the response body.

## Examples

---

The command with the unique name 'testCommand':

```
GET /sep/api/v2/commands/testCommand

Response:
{
  "name": "testCommand",
  "owner": "mha",
  "type": "EXECUTE",
  "userName": "mha",
  "command": "echo 'command'",
  "mtime": 1614340554000
}
```

POST

/sep/api/v2/commands/find

Minimum required role: None

Since: Jaglion

Search for commands matching the specified filter parameters.

#### Parameters

The filter configuration is passed in as JSON object in the body of the request. The properties of the filter are the same as of commands described above.

#### Responses

Response Code and Content	Description
200 Commands array[JSON object]	The matching commands are returned in the response body.

#### Examples

Get all commands of the owner mha:

```
POST /sep/api/v2/commands/find
{ "owner" : "mha" }

Response:
[
  {
    "name": "creaeFile",
    "owner": "mha",
    "type": "EXECUTE",
    "userName": "mha",
    "command": "test >> C:\\meinedate.txt",
    "mtime": 1614340540000
  },
  {
    "name": "createFolder",
    "owner": "mha",
    "type": "EXECUTE",
    "userName": "mha",
    "command": "md C:\\meinOrdner",
    "mtime": 1614340548000
  },
  .
  .
  .
]
```

POST

/sep/api/v2/commands/create

Minimum required role: Administrator

Since: Jaglion

Creates a new command.

#### Parameters

The command is passed in as JSON object in the body of the request. The properties of the command are described above.

## Responses

---

Response Code and Content	Description
200 <b>Command</b> JSON object	The newly created command is returned in the response body.

## Examples

---

Creates a new command:

```
POST /sep/api/v2/commands/create
{
  "name": "newerCommand",
  "owner": "Marcus",
  "type": "EXECUTE",
  "command": "echo 'command'"
}

Response:
{
  "name": "newerCommand",
  "owner": "Marcus",
  "type": "EXECUTE",
  "command": "echo 'command'"
}
```

**POST**

/sep/api/v2/commands/update

Minimum required role: Administrator

Since: Jaglion

Updates a command. A command with the given name must exist, otherwise the call will fail.

The end-point will look up the original command object by the given name. If found, the original command object is updated with any non-null property from the passed in command object. That means, that only the changed properties needs to be present in the given command object.

## Parameters

---

The command is passed in as JSON object in the body of the request. The properties of the command are described above.

## Responses

---

Response Code and Content	Description
200 <b>Commands</b> JSON object	The updated command is returned in the response body.
500 <b>Error</b> JSON object	SERVER_ERROR_INTERNAL. The error object returned in the response body contains the details of what went wrong.



## Examples

---

Updates the command with the name "myCommand":

```
POST /sep/api/v2/commands/update
{
  "name" : "myCommand",
  "command" : "echo 'myCommand'"
}

Response:
{
  "name" : "myCommand",
  "command" : "echo 'myCommand'"
}
```

**POST**

/sep/api/v2/commands/persist

Minimum required role: Super user

Since: Jaglion

Persists a command. If no command with the given name exists, a new command will be created. Otherwise, the properties of an existing command are updated.

## Parameters

---

The command is passed in as JSON object in the body of the request. The properties of the command are described above.

## Responses

---

Response Code and Content	Description
200 Command JSON object	The created or updated command is returned in the response body.

## Examples

---

Persists the command with the name "myCommand":

```
POST /sep/api/v2/commands/persist
{
  "name" : "myCommand",
  "command" : "echo 'myCommand'"
}

Response:
{
  "name" : "myCommand",
  "command" : "echo 'myCommand'"
}
```

POST

/sep/api/v2/commands/delete

Minimum required role: Administrator

Since: Jaglion

Deletes a command.

#### Parameters

The unique name of the command is passed in as String in the body of the request.

#### Responses

Response Code and Content	Description
200 <b>name</b> String	The unique name of the deleted command is returned in the response body. If no command with the given name exists, then null is returned.

#### Examples

Deletes the command with the name "myCommand":

```
POST /sep/api/v2/commands/delete
"myCommand"

Response:
"myCommand"
```

POST

/sep/api/v2/commands/deleteByEntity

Minimum required role: Administrator

Since: Jaglion

Deletes the command matching the given entity.

#### Parameters

The entity to match is passed in the body of the request as JSON object. The only required entity property is the primary key of the entity.

#### Responses

Response Code and Content	Description
200 <b>Name</b> String	The unique name of the command is returned in the response body.

#### Examples

Delete the command with the unique name "createFolder":

```
POST /sep/api/v2/commands/deleteByEntity
{ "name": "createFolder" }

Response:
```

```
"createFolder"
```

**POST**

/sep/api/v2/commands/start

Minimum required role: Administrator

Since: Jaglion

Starts a command.

Possible methods are:

- Providing an ID of an existing command event to start this event.
- Providing the name of the client together with the name of an existing command object.
- Providing the name of the client together with the command itself, so a temporary command object is being created.

#### Parameters

Either the command event ID or the host name together with the command resp. command name is passed in as JSON object in the body of the request.

**If a host name is provided, it is mandatory to provide either the name of a command object or a command!**

#### Responses

Response Code and Content	Description
<b>200</b> <b>StartCommandResultDto</b> String	A JSON object containing the provided start information and a Boolean flag if the start was successful is returned in the response body.

#### Examples

Starts the command with the name "createFolder" on host with name "host1":

```
POST /sep/api/v2/commands/start
[
  "host" : "host1",
  "commandName" : "createFolder"
]

Response:
{
  "inputDto": {
    "host": "host1",
    "commandName": "createFolder",
    "start": 1615192144733
  },
  "success": true
}
```

Starts the command event with the ID "20210225122417811" immediately:

```
POST /sep/api/v2/commands/start
[
```

```
"immediateStart" : "true",  
"eventId" : "20210225122417811"]
```

Response:

```
{  
  "inputDto": {  
    "eventId": 20210225122417811  
  },  
  "success": true  
}
```

### 3.12. Command Events Service

The command event services provides access to the command event objects which are associated with a schedule and a command.

A command event is an object with the following properties:

Name	Description
<b>id</b> * required String	The unique ID of the command event.
<b>name</b> * required String	The name of the command event. The maximum length of the name is 255 characters. The name can contain only letters, digits, the '-' and the '_' character.
<b>object</b> String	The name of the associated command. The maximum length of the object is 50 character.
<b>exec</b> Boolean	Flag to indicate if the command event is enabled for execution.
<b>eol</b> Long	The retention time in days.
<b>scheduleName</b> String	The name of the schedule the command event is associated with. The maximum length of the schedule name is 30 character.
<b>priority</b> Long	The priority of the command event.
<b>suppress</b> Boolean	Flag to indicate if the command event is a blocking event.
<b>followUp</b> String	The follow up actions to execute when the executed command finished successfully. The maximum length of the follow up is 1024 character.
<b>owner</b> String	The command owner. The maximum length of the command owner is 30 character.
<b>type</b> String	The command type. Possible value is 'EXECUTE'.
<b>clientId</b> String	The unique ID of the client where to execute the associated command.
<b>host</b> String	The host name. The maximum length of the host name is 64 character.
<b>userName</b> String	The name of the user used to execute the associated command. The maximum length of the user name is 255 character.
<b>options</b> String	The execution options. The maximum length of the execution options is 1024 character.
<b>serverOptions</b> String	The server side execution options. The maximum length of the server side execution options is 1024 character.
<b>command</b> String	The command to execute. The maximum length of the command is 2048 character.
<b>commandName</b> String	The name of the command to execute. The maximum length of the command name is 64 character.
<b>sepcomment</b> String	The comment or note from Sesam. The maximum length of the system message is 1024 character.
<b>usercomment</b> String	The comment or note from the user. The maximum length of the user comment is 1024 character.
<b>immediateFlag</b> Boolean	Flag to indicate if the command event has to be started immediately.

Following methods are provided by the command events service:

GET

/sep/api/v2/commandevents

Minimum required role: None

Since: Jaglion

Get all command events.

The response body contains the list of command events encoded as JSON objects. The properties of the command events object are described above.

#### Responses

Response Code and Content	Description
200 Command Events array[JSON object]	The command events are returned in the response body.

#### Examples

Get all command events:

```
GET /sep/api/v2/commandevents
```

Response:

```
[
  {
    "id": "20200409083144472",
    "object": "my_custom_command",
    "exec": true,
    "eol": 30,
    "scheduleName": "Weekly_FR_1100",
    "priority": 1,
    "suppress": false,
    "owner": "myself",
    "type": "EXECUTE",
    "clientId": 0,
    "userName": "myself",
    "commandName": " my_custom_command "
  },
  ...
]
```

GET

/sep/api/v2/commandevents/&lt;id&gt;

Minimum required role: None

Since: Jaglion

Get the command event matching the given ID.

The response body contains the command event encoded as JSON object. The properties of the command events object are described above.

#### Responses

Response Code and Content	Description
200 Command Event JSON object	The command event is returned in the response body.

## Examples

Get the command event with the unique ID '20200409083144472':

```
GET /sep/api/v2/commandevents/20200409083144472
```

Response:

```
{
  "id": "20200409083144472",
  "object": "my_custom_command",
  "exec": true,
  "eol": 30,
  "scheduleName": "Weekly_FR_1100",
  "priority": 1,
  "suppress": false,
  "owner": "myself",
  "type": "EXECUTE",
  "clientId": 0,
  "userName": "myself",
  "commandName": " my_custom_command "
}
```

**POST**

/sep/api/v2/commandevents/find

Minimum required role: None

Since: Jaglion

Search for command events matching the specified filter parameters.

## Parameters

The filter configuration is passed in as JSON object in the body of the request. The following JSON object properties are defined:

Name	Description
<b>id</b> Long	The unique id of the event to match.
<b>sesamDate</b> array[String]	An array of one or two date/time strings. The first element in the array represents the beginning of the date/time range (<from>) and the second element in the array represents the end of the date/time range (<to>). Either <from> or <to> can be null, but one of them has to be not null. The presence of the two values controls the condition generated. <ul style="list-style-type: none"> <li>• If both values are specified, than the condition will be generated as date range (between "&lt;from&gt;" and "&lt;to&gt;").</li> <li>• If both values are specified and "&lt;to&gt;" is null, the condition will be generated as greater or equal than "&lt;from&gt;".</li> <li>• If both values are specified and "&lt;from&gt;" is null, the condition will be generated as less or equal than "&lt;to&gt;".</li> </ul> <p>If only one value is specified (array length = 1), than the condition is generated as equals.</p>
<b>clientId</b> String	The unique ID of the client to match.
<b>clientName</b> String	The name of the client to match.
<b>clientOs</b> String	The operating system to match, running at the client.
<b>states</b> array[String]	An array of states to match. The most common valid states are 0 (success), 1 (warning), 2 (error) and c (cancelled).
<b>schedule</b> String	The name of the associated schedule to match.

<b>ifaceName</b> array[String]	An array of client interface names to match.
<b>object</b> String	The name of the associated command to match.

Responses

Response Code and Content	Description
200 <b>Command Events</b> array[JSON object]	The matching command events are returned in the response body.

Examples

Get all command events for the command 'my\_custom\_command':

```
POST /sep/api/v2/commandevents/find
{ "object": "my_custom_command" }

Response:
[
  {
    "id": "20200409083144472",
    "object": "my_custom_command",
    "exec": true,
    "eol": 30,
    "scheduleName": "Weekly_FR_1100",
    "priority": 1,
    "suppress": false,
    "owner": "myself",
    "type": "EXECUTE",
    "clientId": 0,
    "userName": "myself",
    "commandName": " my_custom_command "
  },
  ...
]
```

**POST** /sep/api/v2/commandevents/create

Minimum required role: Backup

Since: Jaglion

Creates a new command event.

Parameters

The command event is passed in as JSON object in the body of the request. The properties of the command event are described above.

Responses

Response Code and Content	Description
200 <b>Command Event</b> JSON object	The newly created command event is returned in the response body.



## Examples

---

Creates a new command event:

```
POST /sep/api/v2/commandevents/create
{ "object" : "my_custom_command", "clientId" : 0, "scheduleName" : "Weekly_FR_1100", "owner" : "myself",
  "commandName" : "my_custom_command", "command" : "echo \"My custom command\""}

Response:
{
  "id": "20210622092051011",
  "name": "my_custom_command-20210622092051011",
  "object": "my_custom_command",
  "exec": true,
  "scheduleName": "Weekly_FR_1100",
  "priority": 1,
  "suppress": false,
  "owner": "myself",
  "type": "EXECUTE",
  "clientId": 0,
  "command": "echo \"My custom command\"",
  "commandName": "my_custom_command",
  "immediateFlag": false
}
```

**POST**

/sep/api/v2/commandevents/update

Minimum required role: Backup

Since: Jaglion

Updates a command event. A command event with the given ID must exist, otherwise the call will fail.

## Parameters

---

The command event is passed in as JSON object in the body of the request. The properties of the command event are described above.

## Responses

---

Response Code and Content	Description
200 Command Event JSON object	The updated command event is returned in the response body.

## Examples

---

Sets a new comment for the command event with the ID '20210622092051011':

```
POST /sep/api/v2/commandevents/update
{
  "id": "20210622092051011",
  "name": "my_custom_command-20210622092051011",
  "object": "my_custom_command",
  "exec": true,
  "scheduleName": "Weekly_FR_1100",
  "priority": 1,
  "suppress": false,
  "owner": "ust",
  "type": "EXECUTE",
  "clientId": 0,
  "command": "echo \"My custom command\"",
}
```

```

    "commandName": "my_custom_command",
    "immediateFlag": false,
    "usercomment": "Newly set comment"
  }
}

Response:
{
  "id": "20210622092051011",
  "name": "my_custom_command-20210622092051011",
  "object": "my_custom_command",
  "exec": true,
  "scheduleName": "Weekly_FR_1100",
  "priority": 1,
  "suppress": false,
  "owner": "ust",
  "type": "EXECUTE",
  "clientId": 0,
  "command": "echo \"My custom command\"",
  "commandName": "my_custom_command",
  "usercomment": "Newly set comment",
  "immediateFlag": false
}

```

POST

/sep/api/v2/commandevents/persist

Minimum required role: Super user

Since: Jaglion

Persists a command event. If no command event with the given ID exists, a new command event will be created. Otherwise, the properties of an existing command event are updated.

#### Parameters

The command event is passed in as JSON object in the body of the request. The properties of the command event are described above.

#### Responses

Response Code and Content	Description
200 Command Event JSON object	The created or updated command event is returned in the response body.

#### Examples

Persists the command event with the ID "20210622092051011":

```

POST /sep/api/v2/commandevents/persist
{
  "id": "20210622092051011",
  "name": "my_custom_command-20210622092051011",
  "object": "my_custom_command",
  "exec": true,
  "scheduleName": "Weekly_FR_1100",
  "priority": 1,
  "suppress": false,
  "owner": "ust",
  "type": "EXECUTE",
  "clientId": 0,
}

```

```

    "command": "echo \"My custom command\"",
    "commandName": "my_custom_command",
    "immediateFlag": false,
    "usercomment": "Newly set comment"
  }

Response:
{
  "id": "20210622092051011",
  "name": "my_custom_command-20210622092051011",
  "object": "my_custom_command",
  "exec": true,
  "scheduleName": "Weekly_FR_1100",
  "priority": 1,
  "suppress": false,
  "owner": "ust",
  "type": "EXECUTE",
  "clientId": 0,
  "command": "echo \"My custom command\"",
  "commandName": "my_custom_command",
  "usercomment": "Newly set comment",
  "immediateFlag": false
}

```

POST

/sep/api/v2/commandevents/delete

Minimum required role: Backup

Since: Jaglion

Deletes a command event.

#### Parameters

The unique ID of the command event is passed in as JSON number in the body of the request.

#### Responses

Response Code and Content	Description
200 id Long	The unique ID of the deleted command event is returned in the response body. If no command event existed with the given ID, then null is returned.

#### Examples

Deletes the command event with the ID '20210622092051011' (exists):

```

POST /sep/api/v2/commandevents/delete
20210622092051011

Response:
20210622092051011

```

POST

`/sep/api/v2/commandevents/deleteBySchedule`

Minimum required role: Backup

Since: Jaglion

Deletes all command events belonging to the provided schedule name.

#### Parameters

The unique ID of the schedule whose events should be deleted is passed in as JSON string in the body of the request. The only required entity property is the primary key of the entity.

#### Responses

Response Code and Content	Description
200 Boolean	True is returned, if any event was deleted, false otherwise.

#### Examples

Deletes the command events belonging to the schedule with the name "daily tasks":

```
POST /sep/api/v2/commandevents/deleteBySchedule
"daily tasks"
```

```
Response:
true
```

POST

`/sep/api/v2/commandevents/deleteByEntity`

Minimum required role: Administrator

Since: Jaglion

Deletes the command event matching the given entity.

#### Parameters

The entity to match is passed in the body of the request as JSON object.

#### Responses

Response Code and Content	Description
200 ID Long	The ID of the command event is returned in the response body.

#### Examples

Delete the command event with the ID "17":

```
POST /sep/api/v2/commandEvents/deleteByEntity
{ "id": "17" }
```

```
Response:
17
```

### 3.13. Credentials Service

The credentials service provides access to credential sets persisted in the database. Credentials are linked with SEP sesam objects, like data stores, where needed to gain access to certain resources.

A credential set is an object with the following properties:

Name	Description
<b>id</b> Long	The unique ID of the ACL.
<b>name</b> * required String	The name of the credential set. When not specified, an auto name has to be generated in the format 'auth.<type>.<uuid>'.
<b>type</b> * required String	The credentials type. The following values are currently defined: 'LDAP', 'AD', 'HPE Storeonce' and 'AWS S3'.
<b>enabled</b> Boolean	The credentials enabled flag. This flag is used for 'LDAP' or 'AD' type credentials only.
<b>accessName</b> String	The access name. For 'HPE Storeonce' type credentials, this is the identifier. For 'AWS S3' type credentials, this is the access key. For 'LDAP' type credentials, this is the user base.
<b>osAccessName</b> String	The OS access name. For 'LDAP' type credentials, this is the manager user DN to access the LDAP server.
<b>secret</b> String	The secret. For 'HPE Storeonce' type credentials, this is the password. For 'AWS S3' type credentials, this is the secret access key. For 'LDAP' type credentials, this is the password to access the LDAP server.
<b>privateKey</b> String	The private key.
<b>publicKey</b> String	The public key. For 'LDAP' type credentials, this is the group base. For 'AD' type credentials, this is the root DN.
<b>hostName</b> String	The host name. For 'HPE Storeonce' type credentials, this is the host name of the HPE Storeonce system. For 'AWS S3' type credentials, this is the name of the endpoint. For 'AD' type credentials, this is the domain name.
<b>port</b> Long	The port.
<b>storeName</b> String	The store name. For 'AWS S3' type credentials, this is the bucket name. For 'LDAP' type credentials, this is the group filter. For 'AD' type credentials, this is the search filter.
<b>path</b> String	The path. For 'AWS S3' type credentials, this is the prefix. For 'LDAP' and 'AD' type credentials, this is the URL.
<b>rank</b> Long	The rank. Used to determine the order of credentials of the same type. Only used for 'LDAP' or 'AD' type credentials.
<b>userComment</b> String	The description or users comment.

Following methods are provided by the credentials service:

GET

/sep/api/v2/credentials

Minimum required role: None

Since: Beefalo

Get all stored credential sets.

The response body contains the list of credential sets encoded as JSON objects. The properties of the credential set object are described above.

## Responses

Response Code and Content	Description
200 <b>Credentials</b> array[JSON object]	The credential sets are returned in the response body.

## Examples

Get all stored access control lists:

```
GET /sep/api/v2/credentials

Response:
[
  {
    "id": 8,
    "name": "My S3 Credentials",
    "type": "AWS S3",
    "accessName": "aaa",
    "secret": "4b8d8487a1be54a7744084ecc1b56581",
    "hostname": "Custom Endpoint",
    "storeName": "My Bucket",
    "path": "store_it_here"
  },
]
```

**GET**

/sep/api/v2/credentials/&lt;id&gt;

Minimum required role: None

Since: Beefalo

Get the credential set matching the given ID.

The response body contains the credential set encoded as JSON object. The properties of the credential set object are described above.

## Responses

Response Code and Content	Description
200 <b>Credentials</b> JSON object	The credential set is returned in the response body.

## Examples

Get the credential set with the ID 8:

```
GET /sep/api/v2/credentials/8

Response:
{
  "id": 8,
  "name": "My S3 Credentials",
  "type": "AWS S3",
  "accessName": "aaa",
  "secret": "4b8d8487a1be54a7744084ecc1b56581",
  "hostname": "Custom Endpoint",
}
```

```

    "storeName": "My Bucket",
    "path": "store_it_here"
  }

```

**POST**

/sep/api/v2/credentials/find

Minimum required role: None

Since: Beefalo

Search for credential sets matching the specified filter parameters.

#### Parameters

The filter configuration is passed in as JSON object in the body of the request. The following JSON object properties are defined:

Name	Description
<b>type</b> String	The credentials type.
<b>name</b> String	The name of the credentials to find.

#### Responses

Response Code and Content	Description
<b>200</b> <b>Credentials</b> array[JSON object]	The matching credential sets are returned in the response body.

#### Examples

Get all credential sets of type 'AWS S3':

```

POST /sep/api/v2/credentials/find
{ "type": "AWS S3" }

Response:
[
  {
    "id": 8,
    "name": "My S3 Credentials",
    "type": "AWS S3",
    "accessName": "aaa",
    "secret": "4b8d8487a1be54a7744084ecc1b56581",
    "hostname": "Custom Endpoint",
    "storeName": "My Bucket",
    "path": "store_it_here"
  },
  ...
]

```

POST

/sep/api/v2/credentials/create

Minimum required role: Backup

Since: Beefalo

Creates a new credential set. If an ID is given, the credential set will be created with the given ID. If a credential set with the given ID already exists, the call will fail. If no ID is given, the credential set is automatically assigned the next free ID (maximum ID + 1).

### Parameters

The credential set is passed in as JSON object in the body of the request. The properties of the credential set are described above.

### Responses

Response Code and Content	Description
200 Credentials JSON object	The newly created credential set is returned in the response body.

### Examples

Creates a new credential set:

```
POST /sep/api/v2/credentials/create
{ "name": "Another S3 Credentials", "type": "AWS S3", "accessName": "bbb", "secret":
"4b8d8487a1be54a7744084ecc1b56581", "hostname": "Custom Endpoint", "storeName": "Another Bucket", "path":
"store_it_here" }

Response:
{
  "id": 14,
  "name": "Another S3 Credentials",
  "type": "AWS S3",
  "accessName": "bbb",
  "secret": "4b8d8487a1be54a7744084ecc1b56581",
  "hostname": "Custom Endpoint",
  "storeName": "Another Bucket",
  "path": "store_it_here"
}
```

Creates a new credential set with an existing ID:

```
POST /sep/api/v2/credentials/create
{ "id": 8, "name": "Another S3 Credentials", "type": "AWS S3", "accessName": "bbb", "secret":
"4b8d8487a1be54a7744084ecc1b56581", "hostname": "Custom Endpoint", "storeName": "Another Bucket", "path":
"store_it_here" }

Response:
{
  "error": "duplicate.pk",
  "message": "The primary key ('8') is not unique.",
  "header": "Illegal Parameter",
  "parameter": [
    "2"
  ],
  "type": "ILLEGAL_PARAMETER",
  "url": "/sep/api/v2/credentials/create"
}
```



}

**POST**

/sep/api/v2/credentials/update

Minimum required role: Backup

Since: Beefalo

Updates a credential set. A credential set with the given ID or name must exist, otherwise the call will fail.

The end-point will look up the original credential set by the given ID or name. If found, the original credential set is updated with any non-null property from the passed in credential set. That means that only the changed properties needs to be present in the given credential set.

#### Parameters

---

The credential set is passed in as JSON object in the body of the request. The properties of the credential set are described above.

#### Responses

---

Response Code and Content	Description
<b>200</b> <b>Credentials</b> JSON object	The updated credential set is returned in the response body.
<b>500</b> <b>Error</b> JSON object	SERVER_ERROR_INTERNAL. The error object returned in the response body contains the details of what went wrong.

#### Examples

---

Updates the credential set with ID 14:

```
POST /sep/api/v2/credentials/update
{ "id": 14, "name": "Another S3 Credentials", "type": "AWS S3", "accessName": "new access name", "secret":
"4b8d8487a1be54a7744084ecc1b56581", "hostname": "Custom Endpoint", "storeName": "Another Bucket", "path":
"store_it_here" }
```

Response:

```
{
  "id": 14,
  "name": "Another S3 Credentials",
  "type": "AWS S3",
  "accessName": "new access name",
  "secret": "4b8d8487a1be54a7744084ecc1b56581",
  "hostname": "Custom Endpoint",
  "storeName": "Another Bucket",
  "path": "store_it_here"
}
```

POST

/sep/api/v2/credentials/persist

Minimum required role: Super user

Since: Jaglion

Persists a credential set. If no credential set with the given ID exists, a new credential set will be created. Otherwise, the properties of an existing credential set are updated.

#### Parameters

The credential set is passed in as JSON object in the body of the request. The properties of the credential set are described above.

#### Responses

Response Code and Content	Description
200 Credential Set JSON object	The created or updated credential set is returned in the response body.

#### Examples

Persists the credential set with the ID "14":

```
POST /sep/api/v2/credentials/persist
{ "id": 14, "name": "Another S3 Credentials", "type": "AWS S3", "accessName": "new access name", "secret":
"4b8d8487a1be54a7744084ecc1b56581", "hostname": "Custom Endpoint", "storeName": "Another Bucket", "path":
"store_it_here" }

Response:
{
  "id": 14,
  "name": "Another S3 Credentials",
  "type": "AWS S3",
  "accessName": "new access name",
  "secret": "4b8d8487a1be54a7744084ecc1b56581",
  "hostname": "Custom Endpoint",
  "storeName": "Another Bucket",
  "path": "store_it_here"
}
```

POST

/sep/api/v2/credentials/delete

Minimum required role: Backup

Since: Beefalo

Deletes a credential set.

#### Parameters

The unique ID or name of the credential set is passed in as JSON number in the body of the request.

#### Responses

Response Code and Content	Description
200 id Long	The unique ID of the deleted credential set is returned in the response body. If no credential set existed with the given ID, then null is returned.
500	SERVER_ERROR_INTERNAL.

Response Code and Content	Description
<b>Error</b> JSON object	The error object returned in the response body contains the details of what went wrong.

### Examples

Deletes the credential set with the ID 14 (exists):

```
POST /sep/api/v2/credentials/delete
14

Response:
14
```

Deletes the credential set with the ID 99 (does not exist):

```
POST /sep/api/v2/credentials/delete
99

Response:
null
```

Deletes a credential set with is still used:

```
POST /sep/api/v2/credentials/delete
6

Response:
{
  "error": "object.in.use",
  "message": "Unable to comply. The given entity is still in use",
  "parameter": [
    "credentials",
    "6"
  ],
  "type": "OBJECT_IN_USE",
  "url": "/sep/api/v2/credentials/delete"
}
```

**POST** /sep/api/v2/credentials/deleteByEntity

Minimum required role: Administrator

Since: Jaglion

Deletes the credentials matching the given entity.

### Parameters

The entity to match is passed in the body of the request as JSON object. The only required entity property is the primary key of the entity.

### Responses

Response Code and Content	Description
---------------------------	-------------

Response Code and Content	Description
200 ID Long	The ID of the credentials object is returned in the response body.

Examples

Delete the credentials with the UUID "17":

```
POST /sep/api/v2/credentials/deleteByEntity
{ "id": 17 }

Response:
17
```

**POST** /sep/api/v2/credentials/link Since: Beefalo

Minimum required role: Administrator

Links a credential set with a Sesam object.

Parameters

The link parameter are passed in as JSON object in the body of the request. The following JSON object properties are defined:

Name	Description
<b>id</b> * required String	The credential set ID.
<b>type</b> * required String	The object type. The following values are currently defined: 'datastore'.
<b>name</b> * required String	The name or ID of the object.

Responses

Response Code and Content	Description
200 null	In case of success, always null is returned.
500 Error JSON object	SERVER_ERROR_INTERNAL. The error object returned in the response body contains the details of what went wrong.

Examples

Linking the credential set with the ID 8 with the data store 'Test-Store':

```
POST /sep/api/v2/credentials/link
{ "id" : 8, "type" : "datastore", "name" : "Test-Store" }

Response:
true
```

Linking the credential set with the ID 15 (does not exist) with the data store 'Test-Store':

```
POST /sep/api/v2/credentials/link
{ "id" : 15, "type" : "datastore", "name" : "Test-Store" }

Response:
{
  "error": "invalid.value",
  "message": "Invalid Value: id",
  "parameter": [
    "id"
  ],
  "type": "INVALID_VALUE",
  "url": "/sep/api/v2/credentials/link"
}
```

Linking the credential set with the ID 2 (incompatible credentials type) with the data store 'HPE-Store':

```
POST /sep/api/v2/credentials/link
{ "id" : 2, "type" : "datastore", "name" : "Test-Store" }

Response:
{
  "error": "invalid.value",
  "message": "Invalid Value: credentials type",
  "parameter": [
    "credentials type"
  ],
  "type": "INVALID_VALUE",
  "url": "/sep/api/v2/credentials/link"
}
```

**POST** /sep/api/v2/credentials/unlink

---

Minimum required role: Administrator Since: Beefalo

Unlinks a credential set from a Sesam object.

Parameters

The unlink parameter are passed in as JSON object in the body of the request. The following JSON object properties are defined:

Name	Description
<b>type</b> * required String	The object type. The following values are currently defined: 'datastore'.
<b>name</b> * required String	The name or ID of the object.

Responses

Response Code and Content	Description
200 null	In case of success, always null is returned.

Response Code and Content	Description
500 Error JSON object	SERVER_ERROR_INTERNAL. The error object returned in the response body contains the details of what went wrong.

### Examples

---

Unlinking the currently associated credential set from the data store 'Test-Store':

```
POST /sep/api/v2/credentials/unlink  
{ "type" : "datastore", "name" : "Test-Store" }
```

```
Response:  
true
```

### 3.14. Data Store Service

The data store services provides access to the data store objects. Data stores defines the physical location of data written or read by SEP sesam. Data stores are typically disc based or cloud based.

A data store is an object with the following properties:

Name	Description
<b>name</b> * required String	The unique name of the data store. The maximum length of the name is 32 characters. The name can contain only letters, digits, the '-' and the '_' character.
<b>sepcomment</b> String	The comment or note from Sesam. The maximum length of the SEP comment is 1024 characters.
<b>usercomment</b> String	The comment or note from the user. The maximum length of the user comment is 1024 characters.
<b>options</b> String	The data store options. The maximum length of the options is 1024 characters.
<b>typed</b> String	The data store type. Valid values are 'Path', 'SEP S3 Deduplication Store', 'NetApp Snap Store' and 'HPE StoreOnce'. The maximum length of the options is 64 characters.
<b>calculation</b> String	The data store capacity calculation mode. Valid values are 'auto', 'capacity' and 'disk-stat'. The maximum length of the options is 64 characters.
<b>credentialId</b> Long	The credentials set id to use to authenticate with a cloud service, when synchronizing the data store with a cloud store.
<b>capacity</b> Double	The data store capacity in GiB.
<b>lowWaterMark</b> Double	The data store low water mark in GiB. This property is deprecated.
<b>highWaterMark</b> Double	The data store high water mark in GiB.
<b>filled</b> Double	The number of bytes filled in GiB.
<b>stored</b> Double	The number of bytes stored in GiB. When the data store is not using deduplication technology, the properties 'filled' and 'stored' contains the same values.
<b>total</b> Double	The total number of bytes available in GiB.
<b>used</b> Double	The number of bytes used in GiB.
<b>free</b> Double	The number of bytes free in GiB.
<b>lastAction</b> String	The last data store action executed.
<b>timestamp</b> Date	The date and time when the last data store action was executed.
<b>accessMode</b> String	The data store access mode. Reserved for future use. The maximum length of the options is 255 characters.
<b>status</b> String	The data store state. The most common values are '0' (OK) and 'X' or '2' (Error). The maximum length of the state is 255 characters. This property is set by the Sesam kernel.
<b>message</b> String	The data store state message. The maximum length of the state message is 1024 characters. This property is set by the Sesam kernel.
<b>dedupMessage</b> String	The data store S3 deduplication state message. The maximum length of the S3 deduplication state message is 4096 characters. This property is set by the Sesam kernel.
<b>cloneStatus</b> String	The data store clone state. The most common values are '0' (OK) and 'X' or '2' (Error). The maximum length of the clone state is 2 characters. This property is set by the Sesam kernel.
<b>cloneMessage</b> String	The data store clone state message. The maximum length of the clone state message is 512 characters. This property is set by the Sesam kernel.

Name	Description
<b>cloneTime</b> Date	The date and time of the last clone. This property is set by the Sesam kernel.
<b>diskStatus</b> String	The data store disk state. The most common values are '0' (OK) and 'X' or '2' (Error). The maximum length of the disk state is 2 characters. This property is set by the Sesam kernel.
<b>diskMessage</b> String	The data store disk state message. The maximum length of the disk state message is 512 characters. This property is set by the Sesam kernel.
<b>gcStatus</b> String	The data store garbage collector state. The most common values are '0' (OK) and 'X' or '2' (Error). The maximum length of the garbage collector state is 2 characters. This property is set by the Sesam kernel.
<b>gcMessage</b> String	The data store garbage collector state message. The maximum length of the garbage collector state message is 512 characters. This property is set by the Sesam kernel.
<b>gcStartTime</b> Date	The date and time when the garbage collector last started. This property is set by the Sesam kernel.
<b>gcStopTime</b> Date	The date and time when the garbage collector last finished. This property is set by the Sesam kernel.
<b>fsckStatus</b> String	The data store file system check state. The most common values are '0' (OK) and 'X' or '2' (Error). The maximum length of the file system check state is 2 characters. This property is set by the Sesam kernel.
<b>fsckMessage</b> String	The data store file system check state message. The maximum length of the disk state message is 512 characters. This property is set by the Sesam kernel.
<b>fsckStartTime</b> Date	The date and time when the file system check last started. This property is set by the Sesam kernel.
<b>fsckStopTime</b> Date	The date and time when the file system check last finished. This property is set by the Sesam kernel.
<b>fsckFullTime</b> Date	The date and time of the last full file system check. This property is set by the Sesam kernel.
<b>readcheckStatus</b> String	The data store read check state. The most common values are '0' (OK) and 'X' or '2' (Error). The maximum length of the read check state is 2 characters. This property is set by the Sesam kernel.
<b>readcheckMessage</b> String	The data store read check state message. The maximum length of the read check state message is 512 characters. This property is set by the Sesam kernel.
<b>sanityStatus</b> String	The data store sanity state. The most common values are '0' (OK) and 'X' or '2' (Error). The maximum length of the sanity state is 2 characters. This property is set by the Sesam kernel.
<b>sanityMessage</b> String	The data store sanity state message. The maximum length of the sanity state message is 512 characters. This property is set by the Sesam kernel.
<b>sanityTime</b> Date	The date and time of the last sanity state check. This property is set by the Sesam kernel.
<b>sesamServer</b> String	The device server to use when creating the data store drives. Applies only when creating a data store.
<b>path</b> String	The path to use when creating the data store drives. Applies only when creating a data store.
<b>smsCnts</b> Long	The number of channels to set when creating the data store drives. Applies only when creating a data store.
<b>eol</b> Long	The number of days to set as life time when creating the data store media pool. Applies only when creating a data store.
<b>configDrive</b> Boolean	Flag to mark if the data store drives are reconfigured after creating or updating a data store.
<b>dsDriveMode</b> String	The data store drive configuration mode. Valid values are 'ADD-DS-DRIVE' and 'CHANGE-DS-DRIVE'. The data store drive configuration mode applies only when the property 'configDrive' is set to 'true'.
<b>countOfDrivesChanged</b> Boolean	Flag to mark if the number of data store drives changed. Applies only when creating or updating a data store.
<b>credentialsChanged</b> Boolean	Flag to mark if the credentials set used has changed. Applies only when creating or updating a data store.



Following methods are provided by the data store service:

GET

/sep/api/v2/datastores

---

Minimum required role: None
Since: Beefalo

Get all data stores.

The response body contains the list of data stores encoded as JSON objects. The properties of the data store object are described above.

Responses

Response Code and Content	Description
<b>200</b> <b>Datastore</b> array[JSON object]	The data stores are returned in the response body.

Examples

Get all data stores:

```

GET /sep/api/v2/datastores

Response:
[
  {
    "name": "my-data-store",
    "typeId": "Path",
    ...
  },
  {
    "name": "my-dedup-data-store",
    "typeId": "SEP Si3 Deduplication Store",
    ...
  },
  ...
]
```

GET

/sep/api/v2/datastores/<name>

---

Minimum required role: None
Since: Beefalo

Get the data store matching the given name.

The response body contains the data store encoded as JSON object. The properties of the data store object are described above.

Responses

Response Code and Content	Description
<b>200</b> <b>Datastore</b> JSON object	The data store is returned in the response body.

## Examples

---

The data store with the unique name 'my-data-store':

```
GET /sep/api/v2/datastores/my-data-store

Response:
{
  "name": "my-data-store",
  "typeId": "Path",
  ...
}
```

**POST**

/sep/api/v2/datastores/find

Minimum required role: None

Since: Beefalo

Search for data stores matching the specified filter parameters.

## Parameters

---

The filter configuration is passed in as JSON object in the body of the request. The following JSON object properties are defined:

Name	Description
<b>name</b> String	The unique data store name.
<b>types</b> array[String]	The list of data store types to match.
<b>driveGroups</b> array[String]	The list of drive group names or IDs to match.
<b>mediaPoolNames</b> array[String]	The list of media pool names to match.

## Responses

---

Response Code and Content	Description
<b>200</b> <b>Datstore</b> array[JSON object]	The matching data stores are returned in the response body.

## Examples

---

Get all Si3 deduplication data stores:

```
POST /sep/api/v2/datastores/find
{ "types" : [ "SEP Si3 Deduplication Store" ] }

Response:
[
  {
    "name": "my-dedup-data-store",
    "typeId": "SEP Si3 Deduplication Store",
    ...
  },
  ...
]
```

]

**POST**`/sep/api/v2/datastores/create`

Minimum required role: Administrator

Since: Beefalo

Creates a new data store.

#### Parameters

The data store is passed in as JSON object in the body of the request. The properties of the data store are described above.

#### Responses

Response Code and Content	Description
<b>200</b> <b>Datastore</b> JSON object	The newly created data store is returned in the response body.

#### Examples

Creates a new data store:

```
POST /sep/api/v2/datastores/create
{
  "name": "my-new-datastore",
  "typeId": "Path",
  "capacity": 20,
  "highWaterMark": 18,
  "calculation": "CAPACITY",
  "sesamServer": "my-server",
  "path": "/path/to/data/stores",
  "smsCnts": 10
}

Response:
{
  "name": "my-new-datastore",
  "typeId": "Path",
  "calculation": "CAPACITY",
  "capacity": 20.0,
  "lowWaterMark": 0.0,
  "highWaterMark": 18.0,
  ...
}
```

**POST**`/sep/api/v2/datastores/update`

Minimum required role: Administrator

Since: Beefalo

Updates a data store. A data store with the given name must exist, otherwise the call will fail.

The end-point will look up the original data store object by the given name. If found, the original data store object is updated with any non-null property from the passed in data store object. That means, that only the changed properties needs to be present in the given data store object.

## Parameters

---

The data store is passed in as JSON object in the body of the request. The properties of the data store are described above.

## Responses

---

Response Code and Content	Description
<b>200</b> <b>Datstore</b> JSON object	The updated data store is returned in the response body.
<b>500</b> <b>Error</b> JSON object	SERVER_ERROR_INTERNAL. The error object returned in the response body contains the details of what went wrong.

## Examples

---

Updates the data store with the name “my-new-datstore”:

```
POST /sep/api/v2/datastores/update
{ "name": "my-new-datstore", "highWaterMark": 15.0 }

Response:
{
  "name": "my-new-datstore",
  "typeId": "Path",
  "calculation": "CAPACITY",
  "capacity": 20.0,
  "lowWaterMark": 0.0,
  "highWaterMark": 15.0,
  ...
}
```

**POST**

/sep/api/v2/datastores/persist

Minimum required role: Super user

Since: Jaglion

Persists a data store. If no data store with the given name exists, a new data store will be created. Otherwise, the properties of an existing data store are updated.

## Parameters

---

The data store is passed in as JSON object in the body of the request. The properties of the data store are described above.

## Responses

---

Response Code and Content	Description
<b>200</b> <b>Data Store</b> JSON object	The created or updated data store is returned in the response body.

## Examples

---

Persists the data store with the name “my-new-datstore”:

```
POST /sep/api/v2/datastores/persist
```

```
{ "name": "my-new-datastore", "highWaterMark": 15.0 }
```

Response:

```
{
  "name": "my-new-datastore",
  "typeId": "Path",
  "calculation": "CAPACITY",
  "capacity": 20.0,
  "lowWaterMark": 0.0,
  "highWaterMark": 15.0,
  ...
}
```

**POST**

/sep/api/v2/datastores/delete

Minimum required role: Administrator

Since: Beefalo

Deletes a data store.

#### Parameters

The unique name of the data store is passed in as JSON string in the body of the request.

#### Responses

Response Code and Content	Description
200 <b>name</b> String	The unique name of the deleted data store is returned in the response body. If no data store existed with the given name, then null is returned.

#### Examples

Deletes the data store with the name 'my-new-datastore' (exists):

```
POST /sep/api/v2/datastores/delete
my-new-datastore
```

```
Response:
my-new-datastore
```

Deletes the data store with the name 'my-other-datastore' (does not exist):

```
POST /sep/api/v2/datastores/delete
my-other-datastore
```

```
Response:
```

null

**POST**

/sep/api/v2/datastores/<name>/deleteForced

Minimum required role: Administrator

Since: Beefalo

Forces the deletion of the provided data store.

#### Parameters

The unique name of the data store is passed in the URL. The delete options are passed in as JSON object in the body of the request. The following JSON object properties are defined:

Name	Description
<b>forceRemoveData</b> Boolean	Flag to indicate if all related data shall be removed together with the data store.

#### Responses

Response Code and Content	Description
<b>200</b> <b>Name</b> String	The unique name of the deleted data store is returned in the response body. If no data store existed with the given name, then null is returned.

#### Examples

Deletes the data store with the name 'my-new-datastore' (exists):

```
POST /sep/api/v2/datastores/my-new-datastore/deleteForced
{}
```

```
Response:
my-new-datastore
```

Deletes the data store with the name 'my-other-datastore' (does not exist):

```
POST /sep/api/v2/datastores/my-other-datastore/deleteForced
my-other-datastore
```

```
Response:
null
```

**POST**

/sep/api/v2/datastores/deleteByEntity

Minimum required role: Administrator

Since: Jaglion

Deletes the data store matching the given entity.

#### Parameters

The entity to match is passed as JSON object in the body of the request. The only required entity property is the primary key of the entity.

## Responses

Response Code and Content	Description
200 id Long	The name of the deleted data store is returned in the response body. If no data store existed with the given ID, then null is returned.

## Examples

Deletes the data store matching the given entity:

```
POST /sep/api/v2/datastores/deleteByEntity
{
  "name": "my-new-datastore",
  "typeId": "Path",
  "calculation": "CAPACITY",
  "capacity": 20.0,
  "lowWaterMark": 0.0,
  "highWaterMark": 15.0,
  ...
}

Response:
my-new-datastore
```

GET

/sep/api/v2/datastores/&lt;name&gt;/drives

Minimum required role: None

Since: Beefalo

Get the list of all drives associated with the selected data store.

The end point supports filtering the result set by passing in a drives filter as JSON object in the body of the request. The HTTP request method has to be changed to POST when using the filter.

POST

/sep/api/v2/datastores/&lt;name&gt;/drives

Minimum required role: None

Since: Beefalo

Get the filtered list of available drives associated with the selected data store.

The response body contains the drive encoded as JSON object. The properties of the drives object are described in the drives service section.

## Parameters

The filter configuration is passed in as JSON object in the body of the request. The following JSON object properties are defined:

Name	Description
group array[Long]	The list of drive group IDs to match.

Name	Description
<b>mediaPool</b> array[JSON object]	The media pool to match. Either the ID or name property has to be set.
<b>loader</b> array[Long]	The list of loader IDs to match.
<b>loaderDrives</b> array[Long]	The list of loader drive IDs to match.
<b>client</b> array[Long]	The list of client IDs to match.
<b>device</b> array[String]	The list of devices to match. The wild cards '*' and '?' might be used.
<b>name</b> String	The drive name to match. The wild cards '*' and '?' might be used.
<b>label</b> String	The drive label to match.

## Responses

Response Code and Content	Description
<b>200</b> <b>Drive</b> array[JSON object]	The matching drives are returned in the response body.

## Examples

Get all drives associated with the data store with the name "my-new-datastore":

```
GET /sep/api/v2/datastore/my-new-datastore/drives
```

Response:

```
[
  {
    "id": 4,
    "device": "DS@my-new-data_4",
    "client": {
      "id": 0,
      "name": "my-server",
      ...
    }
    "driveType": {
      "name": "DISK_STORE",
      "genericType": "DISK",
    },
    "name": "Drive-4",
    "accessMode": "READWRITE",
    ...
  }
]
```

**GET**

/sep/api/v2/datastores/<name>/driveGroups

Minimum required role: None

Since: Beefalp

Get the list of all drive groups associated with the selected data store.

The end point supports filtering the result set by passing in a drive group filter as JSON object in the body of the request. The HTTP request method has to be changed to POST when using the filter.



POST

/sep/api/v2/datastores/&lt;name&gt;/driveGroups

Minimum required role: None

Since: Beefalo

Get the filtered list of available drive groups associated with the selected data store.

The response body contains the drive group encoded as JSON object. A drive group is an object with the following properties:

Name	Description
<b>id</b> * required String	The unique ID of the drive group.
<b>name</b> String	The name of the drive group. The maximum length of the name is 50 characters. The name can contain only letters, digits, the '-' and the '_' character.
<b>smsFlag</b> String	The SMS flag. Valid values are 'SESAM' or 'NDMP'. If omitted, the flag will default to 'SESAM'.
<b>restoreDrive</b> JSON object	The ID of the default drive to be used for restore.
<b>usercomment</b> String	The comment or note from the user. The maximum length of the user comment is 100 characters.
<b>defaultIFace</b> JSON object	The name of the default interface to use.
<b>encryptionCapable</b> Boolean	Flag to indicate if the drive group can encrypt/decrypt the data.

#### Parameters

The filter configuration is passed in as JSON object in the body of the request. The following JSON object properties are defined:

Name	Description
<b>name</b> String	The drive group name to match. The wild cards '*' and '?' might be used.

#### Responses

Response Code and Content	Description
200 <b>Drive Group</b> array[JSON object]	The matching drive groups are returned in the response body.

#### Examples

Get all drive groups associated with the data store with the name "my-new-datastore":

```
GET /sep/api/v2/datastore/my-new-datastore/driveGroups
```

```
Response:
```

```
[
  {
    "id": 3,
```

```

    "name": "My-DS-Drives",
    "smsFlag": "SESAM",
    "restoreDrive": {
      "id": 4
    }
    ...
  }
]

```

**GET** /sep/api/v2/datastores/<name>/media

Minimum required role: None Since: Jaglion

Get the list of all media associated with the selected data store.

The end point supports filtering the result set by passing in a media filter as JSON object in the body of the request. The HTTP request method has to be changed to POST when using the filter.

**POST** /sep/api/v2/datastores/<name>/media

Minimum required role: None Since: Jaglion

Get the filtered list of available media associated with the selected data store.

The response body contains the media encoded as JSON object. The properties of the media object are described in the media service section.

Parameters

The filter configuration is passed in as JSON object in the body of the request. The following JSON object properties are defined:

Name	Description
<b>pool</b> array[String]	An array of media pool names to match.
<b>driveNum</b> Long	The loader drive ID to match.
<b>resultDay</b> Date	The date when a backup has been written to the media.
<b>locked</b> array[String]	An array of locked states to match.
<b>readcheckState</b> array[String]	An array of read check states to match.
<b>eol</b> array[Date]	An array of one or two date/time strings. The first element in the array represents the beginning of the date/time range (<from>) and the second element in the array represents the end of the date/time range (<to>). Either <from> or <to> can be null, but one of them has to be not null. The presence of the two values controls the condition generated. <ul style="list-style-type: none"> <li>• If both values are specified, than the condition will be generated as date range (between “&lt;from&gt;” and “&lt;to&gt;”).</li> <li>• If both values are specified and “&lt;to&gt;” is null, the condition will be generated as greater or equal than “&lt;from&gt;”.</li> <li>• If both values are specified and “&lt;from&gt;” is null, the condition will be generated as less or equal than “&lt;to&gt;”.</li> </ul> If only one value is specified (array length = 1), than the condition is generated as

Name	Description
<b>current</b> Boolean	equals. Flag to indicate to include currently usable media in the result list.

Responses

Response Code and Content	Description
<b>200</b> <b>Media</b> array[JSON object]	The matching media are returned in the response body.

Examples

Get all media associated with the data store with the name “my-new-datastore”:

```
GET /sep/api/v2/datastore/my-new-datastore/media

Response:
[
  {
    "name": "MyPool00001",
    "poolName": "MyPool",
    "idNum": 1,
    "locked": "UNLOCKED",
    "sesamDate": 946681200000,
    "eol": 1628324417000,
    "eolChangedby": "SD20210708101504469@51GsPCimbYE",
    ...
  }
]
```

GET
/sep/api/v2/datastores/<name>/mediaPools
Minimum required role: None Since: Beefalo

Get the list of all media pool associated with the selected data store.

The end point supports filtering the result set by passing in a media pool filter as JSON object in the body of the request. The HTTP request method has to be changed to POST when using the filter.

POST
/sep/api/v2/datastores/<name>/mediaPools
Minimum required role: None Since: Beefalo

Get the filtered list of available media pools associated with the selected data store.

The response body contains the media pool encoded as JSON object. The properties of the media pool object are described in the media pools service section.

Parameters

The filter configuration is passed in as JSON object in the body of the request. The following JSON object properties are defined:

Name	Description
------	-------------

Name	Description
<b>driveGroup</b> Long	The ID of the drive group to match.
<b>name</b> String	The media pool name to match. The wild cards '*' and '?' might be used.
<b>excludeName</b> String	The media pool name to exclude from the match. The wild cards '*' and '?' might be used.

#### Responses

Response Code and Content	Description
<b>200</b> <b>MediaPool</b> array[JSON object]	The matching media pools are returned in the response body.

#### Examples

Get all media pools associated with the data store with the name "my-new-datastore":

```
GET /sep/api/v2/datastore/my-new-datastore/mediaPools

Response:
[
  {
    "id": 3,
    "name": "My-DS-MediaPool",
    "eol": 30,
    "driveGroupId": 3,
    ...
  }
]
```

GET

/sep/api/v2/datastores/&lt;name&gt;/mediaResults

Minimum required role: None

Since: Beefalo

Get the list of all media results associated with the selected data store.

Media results describe the actions performed on a media, like purging the end-of-life free save sets from a data store. The media result records are created and updated by the Sesam kernel only.

The end point supports filtering the result set by passing in a media results filter as JSON object in the body of the request. The HTTP request method has to be changed to POST when using the filter.

POST

/sep/api/v2/datastores/&lt;name&gt;/mediaResults

Minimum required role: None

Since: Beefalo

Get the filtered list of available media results associated with the selected data store.

The response body contains the media result encoded as JSON object. For details on the media result object properties, see the media results service section.

#### Parameters

The filter configuration is passed in as JSON object in the body of the request. For details on the media results filter object properties, see the media results service section.

## Responses

---

Response Code and Content	Description
<b>200</b> <b>MediaResult</b> array[JSON object]	The matching media results are returned in the response body.

## Examples

---

Get all media results associated with the data store with the name “my-new-datastore”:

```
GET /sep/api/v2/datastore/my-new-datastore/mediaResults
```

Response:

```
[
  {
    "name": "20190905085113160@5PNgkvvYGgy",
    "action": "CHECKSPACE",
    "state": "OK",
    ...
  },
  ...
]
```

**POST**

/sep/api/v2/datastores/<name>/history

Minimum required role: None

Since: Jaglion

Returns a list of data store history objects. A data store with the given name must exist, otherwise an empty list is being returned.

The end-point will look up all specified media results for the given datastore and transform them into a `datastoreHistoryDto`. If there is more than one media result in one hour, only the newest one is considered.

## Parameters

---

The filter configuration is passed in as JSON object in the body of the request. The following JSON object properties are defined:

Name	Description
<b>states</b> array[String]	The names of the media result states to match.
<b>types</b> array[String]	The names of the media action types to match.

## Examples

---

Returns the data store history DTOs for the datastore “My-Store”:

```
POST /sep/api/v2/datastores/my-store/history
{ "name": "my-new-datastore", "highWaterMark": 15.0 }
```

Response:

```
[
  {
    "sesamDate" : "16025200000",
    "startTime" : "16025420000",
    "datastore": "my-new-datastore",
    "capacity": 20.0,
    "lowWaterMark": 0.0,
    "highWaterMark": 15.0,
    ...
  },
  ...
]
```

**POST**

/sep/api/v2/datastores/<name>/updatestate

Minimum required role: None

Since: Jaglion

Triggers an asynchronous update of the data store state. When the end point is called, a global trigger is set to signal the SEP sesam kernel to execute a “CHECKSPACE” action for the specified data store.

#### Responses

Response Code and Content	Description
200 Success Boolean	The success state of the operation is returned in the response body.

#### Examples

Trigger a refresh of the data store state for the data store with the name ‘MyDatastore’:

```
POST /sep/api/v2/datastores/MyDatastore/updatestate
{ }
```

Response:  
TRUE

### 3.15. Defaults Service

The defaults service provides access to the server default property objects. The server default properties influence the behavior of the server and the connected clients.

The unique primary key of the default property object is formed out of all 2 required fields (key and userName).

A custom data object is an object with the following properties:

Name	Description
<b>key</b> * required String	The default property object key. The maximum length of the key is 32 characters.
<b>userName</b> * required String	The name of the user owning the default property object. The maximum length of the user name is 255 characters.
<b>value</b> String	The default property object value. The maximum length of the value is 4096 characters.
<b>protection</b> String	The default property object protection. Valid values are 'w' (writable) and 'r' (read-only). The maximum length of the protection is 4 characters.

Following methods are provided by the defaults service:

GET	/sep/api/v2/defaults	Since: Beefalo
Minimum required role: None		

Get all default property objects.

The response body contains the list of default property objects encoded as JSON objects. The properties of the default property object are described above.

#### Responses

Response Code and Content	Description
200 Default Property array[JSON object]	The default property objects are returned in the response body.

#### Examples

Get all default property objects:

```
GET /sep/api/v2/defaults

Response:
[
  {
    "key": "gui.enable.action.install.update",
    "userName": "sesam",
    "value": "1",
    "protection": "w"
  },
  {
    "key": "sep_remote_access_url",
    "userName": "sesam",
    "value": "http://www.sep.de/remotesupport/"
  },
  ...
]
```

]

**POST**`/sep/api/v2/defaults/get`

Minimum required role: None

Since: Beefalo

Get the default property object matching the given primary key.

The response body contains the default property object encoded as JSON object. The properties of the default property object are described above.

#### Responses

Response Code and Content	Description
200 Default Property JSON object	The default property object is returned in the response body.

#### Examples

Get the default property object matching the given primary key:

```
POST /sep/api/v2/defaults/get
{ "key": "gui.enable.action.install.update", "userName": "sesam" }

Response:
{
  "key": "gui.enable.action.install.update",
  "userName": "sesam",
  "value": "1",
  "protection": "w"
}
```

**POST**`/sep/api/v2/defaults/find`

Minimum required role: None

Since: Beefalo

Search for default property objects matching the specified filter parameters.

#### Parameters

The filter configuration is passed in as JSON object in the body of the request. The following JSON object properties are defined:

Name	Description
<b>key</b> String	The key to match. The maximum length of the key is 32 characters.
<b>userName</b> String	The name of the user to match. The maximum length of the user name is 255 characters.



## Responses

---

Response Code and Content	Description
200 Default Property array[JSON object]	The matching default property objects are returned in the response body.

## Examples

---

Get all default property objects of the user 'sesam':

```
POST /sep/api/v2/defaults/find
{ "userName": "sesam" }

Response:
[
  {
    "key": "gui.enable.action.install.update",
    "userName": "sesam",
    "value": "1",
    "protection": "w"
  },
  {
    "key": "sep_remote_access_url",
    "userName": "sesam",
    "value": "http://www.sep.de/remotesupport/"
  },
  ...
]
```

**POST**

/sep/api/v2/defaults/create

Minimum required role: None

Since: Beefalo

Creates a new default property object. If a default property object with the given primary key already exists, the call will fail.

**Note:** System wide default properties can be added, changed or removed by administrators or super users only.

## Parameters

---

The default property object is passed in as JSON object in the body of the request. The properties of the default property object are described above.

## Responses

---

Response Code and Content	Description
200 Default Property JSON object	The newly created default property object is returned in the response body.

## Examples

---

Creates a new default property object:

```
POST /sep/api/v2/defaults/create
{ "key": "MyKey", "userName": "user2", "value": "Some data to store." }

Response:
{
  "key": "MyKey",
  "userName": "user2",
  "value": "Some data to store."
}
```

**POST**

/sep/api/v2/defaults/update

Minimum required role: None

Since: Beefalo

Updates a default property object. A default property object with the given primary key must exist, otherwise the call will fail.

**Note:** System wide default properties can be added, changed or removed by administrators or super users only.

## Parameters

---

The default property object is passed in as JSON object in the body of the request. The properties of the default property object are described above.

## Responses

---

Response Code and Content	Description
200 Default Property JSON object	The updated default property object is returned in the response body.

## Examples

---

Updates the default property object matching the given primary key:

```
POST /sep/api/v2/defaults/update
{ "key": "MyKey", "userName": "user2", "value": "Some other data to store.", "protection" : "r" }

Response:
{
  "key": "MyKey",
  "userName": "user2",
  "value": "Some other data to store.",
  "protection": "r"
}
```

POST

/sep/api/v2/defaults/persist

Minimum required role: None

Since: Jaglion

Persists a default property object. If no default property object with the given name exists, a new default property object will be created. Otherwise, the properties of an existing default property object are updated.

**Note:** System wide default properties can be added, changed or removed by administrators or super users only.

#### Parameters

The default property object is passed in as JSON object in the body of the request. The properties of the default property object are described above.

#### Responses

Response Code and Content	Description
200 Default Property JSON object	The created or updated default property object is returned in the response body.

#### Examples

Persists the default property object with the given primary key:

```
POST /sep/api/v2/defaults/persist
{ "key": "MyKey", "userName": "user2", "value": "Some other data to store.", "protection" : "r" }

Response:
{
  "key": "MyKey",
  "userName": "user2",
  "value": "Some other data to store.",
  "protection": "r"
}
```

POST

/sep/api/v2/defaults/delete

Minimum required role: None

Since: Beefalo

Deletes a default property object.

**Note:** System wide default properties can be added, changed or removed by administrators or super users only.

#### Parameters

The primary key of the default property object is passed in as JSON object in the body of the request.

#### Responses

Response Code and Content	Description
200 Primary Key JSON object	The primary key of the deleted default property object is returned in the response body. If no default property object existed matching the given primary key, then null is returned.

## Examples

---

Deletes the default property object matching the given primary key:

```
POST /sep/api/v2/defaults/delete
{ "key": "MyKey", "userName": "user2" }

Response:
{
  "key": "MyKey",
  "userName": "user2"
}
```

**POST**

/sep/api/v2/defaults/deleteByEntity

Minimum required role: None

Since: Jaglion

Deletes the defaults object matching the given entity.

**Note:** System wide default properties can be added, changed or removed by administrators or super users only.

## Parameters

---

The entity to match is passed in the body of the request as JSON object. The only required entity property is the primary key of the entity.

## Responses

---

Response Code and Content	Description
200 <b>Defaults Key</b> jsonObject	The key and the username of the deleted defaults object are returned in the response body.

## Examples

---

Delete the given defaults object:

```
POST /sep/api/v2/defaults/deleteByEntity
{ "key": "MyKey", "userName": "user2" }

Response:
{
  "key": "MyKey",
  "userName": "user2"
}
```

### 3.16. Drive Group Service

The drive group service provides access to drive group objects.

A drive group object has the following properties:

Name	Description
<b>id</b> * required Long	The unique id of the drive group.
<b>name</b> String	The unique name of the drive group. The maximum length is 50 characters. Possible characters are a-z, A-Z, 0-9, “_” and “-”.
<b>smsFlag</b> SmsFlag	Can be "S" for Sesam or "N" for NDMP, at the moment only "S" is used.
<b>restoreDrive</b> HwDrives	The ID of the default drive to be used for restore.
<b>usercomment</b> String	The comment or note from the user. The maximum length of the user comment is 100 characters.
<b>defaultInterface</b> String	The name of the default interface used by this drive group.
<b>drives</b> HwDrives[]	The list of the drives belonging to this drive group.
<b>encryptionCapable</b> Boolean	Flag to mark if the the drive group supports encryption.
<b>mtime</b> Date	The time at which the object was modified the last time.

Following methods are provided by the drive group service:

<b>POST</b>	<code>/sep/api/v2/drivegroups/resolveDriveGroupId</code>	Since: Jaglion
Minimum required role: None		

Returns the ID of a drive group matching the given name.

#### Parameters

The name of the drive group has to be provided as string in the body of the request.

#### Responses

Response Code and Content	Description
200 Drive Group ID Long	The resolved drive group ID is returned in the response body.

#### Examples

Get all interfaces from the client with the id 4:

<pre>POST /sep/api/v2/drivegroups/resolveDriveGroupId "MyDriveGroup"  Response: 5</pre>
---

GET

/sep/api/v2/drivegroups/&lt;id&gt;

Minimum required role: None

Since: Jaglion

Get the drive group entity matching the given drive group ID.

The response body contains the drive group object encoded as JSON objects. The properties of the drive group object are described above.

#### Responses

Response Code and Content	Description
200 Drive Group JSON object	The drive group object is returned in the response body.

#### Examples

Get the drive group object matching the ID 7:

```
GET /sep/api/v2/drivegroups/7
```

Response:

```
{
  "id": 7,
  "name": "Test-Drives",
  "smsFlag": "SESAM"
  ...
}
```

POST

/sep/api/v2/drivegroups/create

Minimum required role: Administrator

Since: Jaglion

Creates a new drive group.

#### Parameters

The drive group is passed in as JSON object in the body of the request. The properties of the drive group are described above.

#### Responses

Response Code and Content	Description
200 Drive Group JSON object	The newly created drive group is returned in the response body.

#### Examples

Creates a new drive group:

```
POST /sep/api/v2/drivegroups/create
{ "name": "my-new-drive-group", "usercomment": "My new drive group" }
```

```
Response:
{
  "id": "19",
  "name": "my-new-drive-group",
  "usercomment": "My new drive group",
  ...
}
```

**POST**`/sep/api/v2/drivegroups/update`

Minimum required role: Administrator

Since: Jaglion

Updates a drive group. A drive group with the given ID must exist, otherwise the call will fail.

#### Parameters

---

The drive group is passed in as JSON object in the body of the request. The properties of the drive group are described above.

#### Responses

---

Response Code and Content	Description
200 Drive Group JSON object	The updated drive group is returned in the response body.

#### Examples

---

Updates the drive group with the name “my-new-drive-group”:

```
POST /sep/api/v2/drivegroups/update
{ "id": 19, "name": "my-new-drive-group", "usercomment": "changed the drive group", "smsFlag": "SESAM" }

Response:
{
  "id": "19",
  "name": "my-new-drive-group",
  "usercomment": "changed the drive group",
  ...
}
```

**POST**`/sep/api/v2/drivegroups/persist`

Minimum required role: Super user

Since: Jaglion

Persists a drive group. If no drive group with the given name exists, a new drive group will be created. Otherwise, the properties of an existing drive group are updated.

#### Parameters

---

The drive group is passed in as JSON object in the body of the request. The properties of drive group are described above.

#### Responses

---

Response Code and Content	Description
200 Drive Group JSON object	The created or updated drive group is returned in the response body.

### Examples

Persists the drive group with the ID "19":

```
POST /sep/api/v2/drivegroups/persist
{ "id": 19, "name": "my-new-drive-group", "usercomment": "changed the drive group", "smsFlag": "SESAM" }

Response:
{
  "id": "19",
  "name": "my-new-drive-group",
  "usercomment": "changed the drive group",
  ...
}
```

**POST**

/sep/api/v2/drivegroups/delete

Minimum required role: Administrator

Since: Jaglion

Deletes a drive group.

### Parameters

The unique ID of the drive group is passed in as JSON number in the body of the request.

### Responses

Response Code and Content	Description
200 id Long	The unique ID of the deleted drive group is returned in the response body. If no drive group existed with the given ID, then null is returned.

### Examples

Deletes the drive group with the ID 19 (exists):

```
POST /sep/api/v2/drivegroups/delete
19

Response:
19
```

**POST**

/sep/api/v2/drivegroups/deleteByEntity

Minimum required role: Administrator

Since: Jaglion

Deletes the drive group matching the given entity.



## Parameters

---

The entity to match is passed in the body of the request as JSON object. The only required entity property is the primary key of the entity.

## Responses

---

Response Code and Content	Description
<b>200</b> <b>ID</b> Long	The ID of the calendar is returned in the response body.

## Examples

---

Delete the calendar with the ID "17":

```
POST /sep/api/v2/drivegroups/deleteByEntity
{ "grp_id": 17 }

Response:
17
```

**GET**

/sep/api/v2/drivegroups/&lt;id&gt;/drives

Minimum required role: None

Since: Jaglion

Returns all drives associated with the given drive group.

The response body contains the list of default property objects encoded as JSON objects.

## Responses

---

Response Code and Content	Description
<b>200</b> <b>HwDrives</b> array[JSON object]	The drive objects are returned in the response body.

## Examples

---

Get all associated drive objects:

```
GET /sep/api/v2/drivegroups/<driveGroupId>/drives

Response:
[
  {
    "id": "142",
    "device": "/dev/tape0",
    "client": {
      ...
    },
    ...
  },
  {
    ...
  }
]
```

```

        "id": "143",
        "device": "/dev/tape1",
        "client": {
            ...
        },
        ...
    },
    ...
]
    
```

**POST**

/sep/api/v2/drivegroups/<driveGroupId>/drives

Minimum required role: None

Since: Jaglion

A list of drives has to be provided as POST body. The drive group will be reconfigured to reference the list of given drives. If the given list of drives is empty, all drives are removed from the drive group and deleted from the database.

Parameters

The drives to be associated by the drive group are passed in as an array of JSON objects in the body of the request. The properties of the drives object are:

Name	Description
<b>id</b> * required Long	The unique id of the drive.
<b>name</b> String	The unique name of the drive. The maximum length of the name is 32 characters. Possible characters are a-z, A-Z, 0-9, “_” and “-”.
<b>device</b> String	Operating system specific identifier of the device, i.e. in Linux “/dev/nst0” or in windows “Tape0”. The maximum length is 254 characters. Possible characters are a-z, A-Z, 0-9, “_”, “-”, “/”, “\”, “.” and “@”.
<b>client</b> Clients	The client which the drive is associated with.
<b>driveType</b> JSON object	The type of the drive. If omitted, the value defaults to “DISK_STORE”.
<b>loaderNum</b> Long	The number of the loader of the drive.
<b>compress</b> Boolean	True, if the compression on the drive is activated, otherwise false.
<b>sepcomment</b> String	The last Sesam system message. The maximum length of the Sesam system message is 132 characters.
<b>occupy</b> Boolean	Flag to mark if the drive is occupied.
<b>accessMode</b> String	The drive access mode. Valid values are “read”, “read/write” and “write”.
<b>group</b> DriveGroups	The drive group the drive is associated with.
<b>smsCnts</b> Long	The maximum number of channels. If omitted, the value defaults to 10.
<b>label</b> String	The label of the media loaded to the drive. The maximum length of the media label is 30 characters.
<b>lastLabel</b> String	The label of the last media loaded to the drive. The maximum length of the last media label is 30 characters.
<b>timeout</b> Long	The drive timeout.
<b>mediaTimeout</b> Long	The media timeout.

Name	Description
<b>cleanBit</b> Boolean	Flag to mark if the drive is in cleaning mode.
<b>loaderDrive</b> Long	The unique ID of the loader drive.
<b>path</b> String	The absolute path to the drive storage location, if the drive is a disk drive..
<b>datastore</b> String	The name of the data store the drive belongs to.
<b>ejectFlag</b> Boolean	Flag to mark if the drive is ejecting the media.
<b>mountCmd</b> String	The command to use for mounting the drive. The maximum length of the mount command is 255 characters.
<b>umountCmd</b> String	The command to use for unmounting the drive. The maximum length of the unmount command is 255 characters.
<b>onlineCmd</b> String	The command to use for bringing the drive online. The maximum length of the online command is 255 characters.
<b>loadCmd</b> String	The command to use for loading a media to the drive. The maximum length of the load command is 255 characters.
<b>unloadCmd</b> String	The command to use for unloading a media from the drive. The maximum length of the unload command is 255 characters.
<b>ejectCmd</b> String	The command to use for ejecting the media from the drive. The maximum length of the eject command is 255 characters.
<b>credentialId</b> Long	The unique ID of the credentials set which is associated with the drive.
<b>username</b> String	The user name which is associated with the drive. The maximum length of the user name is 128 characters.
<b>password</b> String	The password which is associated with the drive. The maximum length of the password is 512 characters.
<b>storageServer</b> String	The name of the storage server. The maximum length of the storage server is 255 characters.
<b>blockSize</b> Long	The block size used to write and read tapes if the drive is a tape drive.
<b>defaultBlockSize</b> Long	The default block size of tapes.
<b>smsNr</b> Long	The channel number.
<b>segmentSize</b> Long	The segment size.
<b>options</b> String	The drive options. The maximum length of the drive options is 255 characters.
<b>encryptionCapable</b> Boolean	True, if the drive can be encrypted, false otherwise.
<b>encryptionPassword</b> String	The encryption password, if the drive encryption is enabled. The maximum length of the encryption password is 512 characters.
<b>previousPassword</b> String	The previous encryption password when the current encryption password is changed. The maximum length of the previous encryption password is 512 character.
<b>configDrive</b> Boolean	Flag to mark if the external 'sm_config_drives' command shall be invoked when the drive properties are updated.
<b>dsDriveMode</b> DSDriveMode	The config drive mode to use when calling the external 'sm_config_drives' command for a data store drive. Valid values are "ADD-DS-DRIVE" and "CHANGE-DS-DRIVE"

## Responses

Response Code and Content	Description
200	The associated drives are returned in the response body.

Response Code and Content	Description
HwDrives array[JSON object]	

### Examples

Delete all associated drives from the drive group with the id 5:

**Important:** When providing an empty array to delete all associated drives, you have to provide an empty array within an array, as shown in the example below.

```
POST /sep/api/v2/drivegroups/5/drives
[[]]

Response:
[]
```

Associate new drives to the drive group with the id 5:

**Important:** The array of drives has to be in another array, as shown in the example below.

```
POST /sep/api/v2/drivegroups/5/drives
[[
  {
    "name": "My Drive 1",
    "driveType": "DISK_STORE",
    "id": "30",
    "device": "DS@my_datastore_30",
    "client": {
      "name": "my-server",
      "location": {
        "name": "LOCAL"
      }
    }
  },
  {
    "name": "My Drive 2",
    "driveType": "DISK_STORE",
    "id": "31",
    "device": "DS@my_datastore_31",
    "client": {
      "name": "my-server",
      "location": {
        "name": "LOCAL"
      }
    }
  }
]]

Response:
[
  {
    "name": "My Drive 1",
    "driveType": "DISK_STORE",
    "id": "30",
    "device": "DS@my_datastore_30",
    "client": {
      "name": "my-server",
      "location": {
        "name": "LOCAL"
      }
    }
  },
  {
    "name": "My Drive 2",
    "driveType": "DISK_STORE",
    "id": "31",
    "device": "DS@my_datastore_31",
    "client": {
      "name": "my-server",
      "location": {
        "name": "LOCAL"
      }
    }
  }
]
```

```

{
  "name": "My Drive 2",
  "driveType": "DISK_STORE",
  "id": "31",
  "device": "DS@my_datastore_31",
  "client": {
    "name": "my-server",
    "location" : {
      "name" : "LOCAL"
    }
  }
}
]

```

**POST**

/sep/api/v2/drivegroups/&lt;driveGroupId&gt;/remove

Minimum required role: Administrator

Since: Jaglion

Removes the drive from the provided drive group and deletes it completely from the database. In the return body all drives left in the drive group are listed.

**Parameters**

The name or the id of the drive to be removed to the drive group is passed in the body of the request.

**Responses**

Response Code and Content	Description
200 Drive JSON object	The removed drive object is returned in the response body. If no drive with the given name or ID exist, null is returned.

**Examples**

Remove the drive with the name "driveToBeRemoved" from the drive group with the id 5:

```

POST /sep/api/v2/drivegroups/5/remove
"My Drive 2"

Response:
[
  {
    "name": "My Drive 1",
    "driveType": "DISK_STORE",
    "id": "30",
    "device": "DS@my_datastore_30",
    "client": {
      "name": "my-server",
      "location" : {
        "name" : "LOCAL"
      }
    }
  }
]

```

POST

/sep/api/v2/drivegroups/&lt;driveGroupId&gt;/add

Minimum required role: Administrator

Since: Jaglion

Add the provided drive to the given drive group. In the return body all drives in the drive group are listed.

#### Parameters

The drive to be added to the drive group is passed in as an array of JSON objects in the body of the request.

#### Responses

Response Code and Content	Description
200 Drives array[JSON object]	The new list of drive objects, associated with the drive group, is returned in the response body.

#### Examples

Add a new drive to the drive group with the id 5:

```
POST /sep/api/v2/drivegroups/5/add
{ "name": "My Drive 2", "driveType": "DISK_STORE", "id": "31", "device": "DS@my_datastore_31", "client": {
  "name": "my-server", "location" : { "name" : "LOCAL" } } }

Response:
[
  {
    "name": "My Drive 1",
    "driveType": "DISK_STORE",
    "id": "30",
    "device": "DS@my_datastore_30",
    "client": {
      "name": "my-server",
      "location" : {
        "name" : "LOCAL"
      }
    }
  },
  {
    "name": "My Drive 2",
    "driveType": "DISK_STORE",
    "id": "31",
    "device": "DS@my_datastore_31",
    "client": {
      "name": "my-server",
      "location" : {
        "name" : "LOCAL"
      }
    }
  }
]
```

### 3.17. Drives Service

The drives service provides reading access to all drives.

A drive is an object with the following properties:

Name	Description
<b>id</b> * required Long	The unique ID of the drive.
<b>device</b> * required String	The name of the device to use. For drives associated with a tape loader, the device is typically the OS device. For drives associated with a data store, the device name is generated. The maximum length of the device is 254 characters. The name can contain only letters, digits, the '-', '_', '/', '\', ':' and the '@' character.
<b>clientId</b> * required Long	The unique ID of device server the drive is attached to.
<b>driveType</b> * required String	The drive type. Has to be the name of one of the drive types from the 'drive_types' database table.
<b>name</b> String	The name of the drive. The maximum length of the name is 32 characters. The name can contain only letters, digits, the '-' and the '_' character.
<b>loader</b> JSON object	The ID of the loader the drive is associated with.
<b>compress</b> Boolean	Flag to mark if the drive compresses the data.
<b>sepcomment</b> String	The comment or note from Sesam. The maximum length of the SEP comment is 132 characters.
<b>occupy</b> Boolean	Flag to mark if the drive is occupied.
<b>accessMode</b> String	The drive access mode. Valid values are 'READ', 'READWRITE' and 'WRITE'.
<b>group</b> JSON object	The drive group the drive is associated with. Either the ID or name property has to be set.
<b>smsCnts</b> Long	The number of channels.
<b>loaderDrive</b> Long	The number of the loader drive.
<b>path</b> String	The absolute path to the location in the file system where the drive write the data to. Applies to drives associated with a data store only. The maximum length of the path is 255 characters.
<b>dataStore</b> String	The name of the data store. The maximum length of the data store is 32 characters.
<b>ejectFlag</b> Boolean	Flag to mark if the loaded medium will be unloaded if another medium will be required.
<b>mountCmd</b> String	The mount command. The maximum length of the mount command is 255 characters.
<b>umountCmd</b> String	The unmount command. The maximum length of the unmount command is 255 characters.
<b>onlineCmd</b> String	The online command. The maximum length of the online command is 255 characters.
<b>loadCmd</b> String	The load command. The maximum length of the load command is 255 characters.
<b>unloadCmd</b> String	The unload command. The maximum length of the unload command is 255 characters.
<b>ejectCmd</b> String	The eject command. The maximum length of the eject command is 255 characters.
<b>credentialId</b> Long	The id of the credentials set to use when the 'path' property points to a network share.
<b>credentialUuid</b> String	The UUID of the credentials set to use when the 'path' property points to a network share. Reserved for future use. The maximum length of the credentials set UUID is

Name	Description
	40 characters.
<b>storageServer</b> String	The name of the storage server. The maximum length of the storage server is 255 character.
<b>blockSize</b> Long	The block size used.
<b>smsNr</b> Long	The SMS number used.
<b>segmentSize</b> Long	The segment size used.
<b>options</b> String	The drive options used. The maximum length of the options is 512 characters.
<b>encryptionCapable</b> Boolean	Flag to mark if the drive can encrypt/decrypt the data.
<b>encryptionPassword</b> String	The password used to encrypt/decrypt the data. The maximum length of the options is 512 characters.
<b>previousPassword</b> String	The previous password used to encrypt/decrypt the data. The maximum length of the options is 512 characters.
<b>configDrive</b> Boolean	Flag to mark if the drive is reconfigured after creating or updating the drive.
<b>dsDriveMode</b> String	The drive configuration mode. Valid values are 'ADD-DS-DRIVE' and 'CHANGE-DS-DRIVE'. The drive configuration mode applies only when the property 'configDrive' is set to 'true'.

Following methods are provided by the drives service:

GET

/sep/api/v2/drives

Minimum required role: None

Since: Jaglion

Get the list of all drives.

The response body contains the list of drives encoded as array of JSON objects.

#### Responses

Response Code and Content	Description
200 HwDrives array[JSON object]	The drives are returned in the response body.

#### Examples

Get the list of all existing drives:

```
GET /sep/api/v2/drives
```

```
Response:
```

```
[
  {
    "id": 1,
    "device": "DS@Test-Store_1",
    "client": {
      "id": 0,
      ...
    },
    "driveType": {
```



```

        "name": "DISK_STORE",
        "genericType": "DISK",
        "mtime": 1583224746000
    },
    "name": "Drive-1",
    "compress": false,
    "occupy": false,
    "accessMode": "READWRITE",
    "smsCnts": 10,
    "mediaTimeout": 0,
    "cleanBit": false,
    "path": "C:/NoScan/work/Sesam/SEPsam//var/work/datastores",
    "dataStore": "Test-Store",
    "ejectFlag": false,
    "blockSize": 0,
    "smsNr": 0,
    "encryptionCapable": false,
    "mtime": 1620369485000,
    "groupId": 1
}
...
]

```

GET

/sep/api/v2/drives/&lt;id&gt;

Minimum required role: None

Since: Jaglion

Get the list of all drives.

The response body contains the requested drive encoded as JSON object.

#### Responses

Response Code and Content	Description
200 HwDrives JSON object	The drive is returned in the response body.

#### Examples

Get the drive with the id 7:

```
GET /sep/api/v2/drives
```

```
Response:
```

```

{
  "id": 7,
  "device": "DS@Test-Store_1",
  "client": {
    "id": 0,
    ...
  },
  "driveType": {
    "name": "DISK_STORE",
    "genericType": "DISK",
    "mtime": 1583224746000
  },
  "name": "Drive-7",
  "compress": false,
  "occupy": false,
  "accessMode": "READWRITE",
  "smsCnts": 10,

```

```

    "mediaTimeout": 0,
    "cleanBit": false,
    "path": "C:/NoScan/work/Sesam/SEPs/esam/var/work/datastores",
    "dataStore": "Test-Store",
    "ejectFlag": false,
    "blockSize": 0,
    "smsNr": 0,
    "encryptionCapable": false,
    "mtime": 1620369485000,
    "groupId": 1
  }

```

POST

/sep/api/v2/drives/find

Minimum required role: None

Since: Jaglion

Returns all drives matching the properties specified in the provided filter.

### Parameters

The object configuration is passed in as JSON object in the body of the request. The following JSON object properties are defined:

Name	Description
<b>name</b> String	The name of the drive to match.
<b>dataStore</b> String	The name of the data store, whose drives should be matched.
<b>mediaPoolName</b> String	The name of the media pool, whose associated drives should be matched.
<b>group</b> array[Long]	The IDs of the groups, whose drives should be matched.
<b>clientId</b> Long	The ID of the client to match.
<b>loader</b> array[Long]	The ID of the loader, whose drives should be matched.
<b>loaderDrive</b> array[Long]	The numbers/ IDs of the drives in a loader.
<b>client</b> array[Long]	The IDs of the clients whose drives should be matched.
<b>device</b> String	The name of the device whose drives should be matched.
<b>drive</b> Long	The drive number to match.
<b>label</b> String	The label of a medium in a drive, that should be matched. Null if no medium is in the drive.

### Responses

Response Code and Content	Description
<b>200</b> <b>HwDrives</b> array[JSON object]	The drives objects are returned in the response body.

### Examples

Get all drives associated with the media pool "TEST-POOL":

```

POST /sep/api/v2/drives/find
{
  "mediaPoolName": "TEST-POOL"
}

Response:
[
  {
    "id": 1,
    "device": "DS@Test-Store_1",
    "client": {
      "id": 0,
      ...
    },
    "driveType": {
      "name": "DISK_STORE",
      "genericType": "DISK",
      "mtime": 1583224746000
    },
    "name": "Drive-1",
    "compress": false,
    "occupy": false,
    "accessMode": "READWRITE",
    "smsCnts": 10,
    "mediaTimeout": 0,
    "cleanBit": false,
    "path": "C:/NoScan/work/Sesam/SEPsasam//var/work/datastores",
    "dataStore": "Test-Store",
    "ejectFlag": false,
    "blockSize": 0,
    "smsNr": 0,
    "encryptionCapable": false,
    "mtime": 1620369485000,
    "groupId": 1
  },
  ...
]

```

**POST**

/sep/api/v2/drives/create

Minimum required role: Administrator

Since: Jaglion

Creates a new drive.

#### Parameters

The drive is passed in as JSON object in the body of the request. The properties of the drive are described above.

#### Responses

Response Code and Content	Description
200 Drive JSON object	The newly created drive object is returned in the response body.

## Examples

---

Creates a new drive:

```
POST /sep/api/v2/drives/create
{ "device" : "DS@my_device_1", "accessMode" : "READWRITE", "groupId" : 9 }

Response:
{
  "id": "36",
  "device": "DS@my_device_1",
  "client": {
    "name": "my-server",
    "location" : {
      "name" : "LOCAL"
      ...
    }
  },
  " groupId ": "9",
  ...
}
```

**POST**

/sep/api/v2/drives/update

Minimum required role: Administrator

Since: Jaglion

Updates a drive. A drive with the given ID must exist, otherwise the call will fail.

## Parameters

---

The drive is passed in as JSON object in the body of the request. The properties of the drive are described above.

## Responses

---

Response Code and Content	Description
200 Drive JSON object	The updated drive object is returned in the response body.

## Examples

---

Updates the drive with the ID 36 and add a comment:

```
POST /sep/api/v2/drives/update
{
  "id": "36",
  "device": "DS@my_device_1",
  "usercomment": "My backup device",
  "client": {
    "name": "my-server",
    "location" : {
      "name" : "LOCAL"
      ...
    }
  },
  " groupId ": "9",
  ...
}

Response:
{
```

```

    "id": "36",
    "device": "DS@my_device_1",
    "usercomment": "My backup device",
    "client": {
      "name": "my-server",
      "location" : {
        "name" : "LOCAL"
        ...
      }
    },
    " groupId ": "9",
    ...
  }

```

**POST**

/sep/api/v2/drives/persist

Minimum required role: Super user

Since: Jaglion

Persists a drive. If no drive with the given ID exists, a new drive will be created. Otherwise, the properties of an existing drive are updated.

#### Parameters

---

The drive is passed in as JSON object in the body of the request. The properties of a drive are described above.

#### Responses

---

Response Code and Content	Description
200 Drive JSON object	The created or updated drive is returned in the response body.

#### Examples

---

Persists the drive with the ID "36":

```

POST /sep/api/v2/drives/persist
{
  "id": "36",
  "device": "DS@my_device_1",
  "usercomment": "My backup device",
  "client": {
    "name": "my-server",
    "location" : {
      "name" : "LOCAL"
      ...
    }
  },
  " groupId ": "9",
  ...
}

Response:
{
  "id": "36",
  "device": "DS@my_device_1",
  "usercomment": "My backup device",
  "client": {
    "name": "my-server",

```

```

    "location" : {
      "name" : "LOCAL"
      ...
    }
  },
  "groupId" : "9",
  ...
}

```

**POST**`/sep/api/v2/drives/delete`

Minimum required role: Administrator

Since: Jaglion

Deletes a drive.

Parameters

The unique ID of the drive is passed in as JSON number in the body of the request.

Responses

Response Code and Content	Description
200 id Long	The unique ID of the deleted drive is returned in the response body. If no drive existed with the given ID, then null is returned.

Examples

Deletes the drive group with the ID 36 (exists):

```

POST /sep/api/v2/drives/delete
36

Response:
36

```

**POST**`/sep/api/v2/drives/deleteByEntity`

Minimum required role: Administrator

Since: Jaglion

Deletes the drive matching the given entity.

Parameters

The entity to match is passed in the body of the request as JSON object. The only required entity property is the primary key of the entity.

Responses

Response Code and Content	Description
---------------------------	-------------

Response Code and Content	Description
200 ID String	The UUID of the calendar is returned in the response body.

## Examples

Delete the drive with the ID "17":

```
POST /sep/api/v2/drives/deleteByEntity
{ "id": 17 }
```

Response:  
17

**POST**

/sep/api/v2/drives/<driveId>/execute

Minimum required role: Administrator

Since: Jaglion

Execute a drive action for the the given drive.

The type of the drive is passed to the end point via the drive action DTO.

A drive action DTO is an object with the following properties:

Name	Description
<b>action</b> String	The drive action to execute. Valid drive actions are 'RELEASE', 'RELEASE_GROUP', 'INFO', 'MOUNT', 'DISMOUNT', 'UNLOAD', 'RECONFIGURE', 'PURGE', 'START', 'CLEANUP'.

## Parameters

The drive action DTO is passed in as JSON object in the body of the request.

## Responses

Response Code and Content	Description
200 Drive JSON object	The affected drive object is returned in the response body.

## Examples

Initiate a purge for the drive with ID 36:

```
POST /sep/api/v2/drives/36/execute
{
  "action" : "PURGE"
}

Response:
{
  "id": "36",
  "device": "DS@my_device_1",
  "usercomment": "My backup device",
  "client": {
    "name": "my-server",
    "location" : {
      "name" : "LOCAL"
    }
    ...
  },
  "groupId" : "9",
  ...
}
```



### 3.18. Events Service

The events service provides reading access to media events, command events, migration events, media pool events, restore events and backup events.

An event is an object with the following properties:

Name	Description
<b>id</b> * required Long	The unique ID of the event.
<b>name</b> String	The name of the event. The maximum length of the event name is 255 characters.
<b>exec</b> Boolean	Flag to control the execution state of the event. When false, then the event will be not executed.
<b>eol</b> Long	The end of life time of the event.
<b>priority</b> * required Long	The priority of the event. Defaults to priority 0.
<b>suppress</b> Boolean	Flag to mark if the event is a blocking event.
<b>followUp</b> String	The follow up command to execute. The maximum length of the follow up command is 1024 characters.
<b>owner</b> * required String	The name of the event owner. The maximum length of the event owner name is 30 characters.
<b>immediateFlag</b> Boolean	Flag to control if the event is immediately executed or not.
<b>term</b> JSON object	The associated terms entry.
<b>poolName</b> String	The name of the media pool used.
<b>poolEol</b> String	The media pool retention time in days. This property is set only when the pool name property is set.
<b>subTaskName</b> String	The name of the backup task, in case the event type is one of the backup types. When the group flag property is set, the sub task name contains a comma separated list of backup task names belonging to the backup group.
<b>type</b> JSON object	The type of the event.
<b>object</b> String	The name of the object the event is associated with.
<b>grpFlag</b> Boolean	Flag to mark if the event denotes a task group or not.
<b>driveNum</b> Long	The ID of the drive used.
<b>driveName</b> String	The name of the drive used. This property is set only when the drive number property is set.
<b>ifaceName</b> String	The name of the interface used.
<b>dataMover</b> String	The name of the data mover used.

Following methods are provided by the events service:

GET

/sep/api/v2/events

Minimum required role: None

Since: Jaglion

Get the list of all events.

The response body contains the list of events encoded as array of JSON objects.

#### Responses

Response Code and Content	Description
200 Events array[JSON object]	The list of events is returned in the response body.

#### Examples

Get the list of all existing events:

```
GET /sep/api/v2/events

Response:
[
  {
    "id": "20542045450250",
    "priority": 1,
    "poolName": "Lokal-MP",
    "type": {
      "type": "FULL",
      "cfdiType": {
        "cfdi": "FULL",
        "value": "F"
      },
      "task": true
    },
    "object": "Gruppe2",
    "grpFlag": false
  },
  ...
]
```

GET

/sep/api/v2/events/commands

Minimum required role: None

Since: Jaglion

Get the list of all command events.

The response body contains the command events encoded as array of JSON objects.

#### Responses

Response Code and Content	Description
200 CommandEvents array[JSON object]	The list of command events is returned in the response body.

## Examples

---

Get the list of all command events:

```
GET /sep/api/v2/events/commandEvents

Response:
[
  {
    "id": "20210225122417811",
    "name": "newCommand-20210225122417811",
    "exec": true,
    "eol": 30,
    "scheduleName": "Daily-0810",
    "priority": 1,
    "suppress": false,
    "owner": "mha",
    "type": "EXECUTE",
    "clientId": 0,
    "userName": "mha",
    "commandName": "newCommand"
  },
  ...
]
```

**GET**

/sep/api/v2/events/commands/<id>

Minimum required role: None

Since: Jaglion

Get the event associated with the given ID.

The response body contains the event encoded as JSON object.

## Responses

---

Response Code and Content	Description
200 CommandEvent JSON object	The command event is returned in the response body.

## Examples

---

Get the command event with the ID "3498322343323":

```
GET /sep/api/v2/events/commands/3498322343323

Response:
{
  "id": "20210225122417811",
  "name": "newCommand-20210225122417811",
  "exec": true,
  "eol": 30,
  "scheduleName": "Daily-0810",
  "priority": 1,
  "suppress": false,
  "owner": "mha",
  "type": "EXECUTE",
  "clientId": 0,
  "userName": "mha",
  "commandName": "newCommand"
}
```

}

GET

/sep/api/v2/events/mediapools

Minimum required role: None

Since: Jaglion

Get the list of all media pool events.

The response body contains the media pool events encoded as array of JSON objects.

### Responses

Response Code and Content	Description
200 <b>MediapoolsEvents</b> array[JSON object]	The list of media pool events is returned in the response body.

### Examples

Get the list of all media pool events:

```
GET /sep/api/v2/events/mediapools
```

Response:

```
[
  {
    "id": "20200423164112445",
    "poolName": "Loader1",
    "exec": true,
    "scheduleName": "Daily-2300",
    "priority": 1,
    "suppress": false,
    "owner": "ust",
    "grpFlag": false,
    "action": "READCHECK",
    "driveNum": 15,
    "mcount": 1,
    "mtime": 1587652872000
  },
  ...
]
```

GET

/sep/api/v2/events/mediapools/&lt;id&gt;

Minimum required role: None

Since: Jaglion

Get the media pool event associated with the given ID.

The response body contains the event encoded as JSON object.

## Responses

---

Response Code and Content	Description
200 <b>MediapoolsEvent</b> JSON object	The media pool event is returned in the response body.

## Examples

---

Get the media pool event with the ID "3498322343323":

```
GET /sep/api/v2/events/mediapools/3498322343323
```

Response:

```
{
  "id": "20200423164112445",
  "poolName": "Loader1",
  "exec": true,
  "scheduleName": "Daily-2300",
  "priority": 1,
  "suppress": false,
  "owner": "ust",
  "grpFlag": false,
  "action": "READCHECK",
  "driveNum": 15,
  "mcount": 1,
  "mtime": 1587652872000
}
```

**GET**

/sep/api/v2/events/media

Minimum required role: None

Since: Jaglion

Get the list of all media events.

The response body contains the media events encoded as array of JSON objects.

## Responses

---

Response Code and Content	Description
200 <b>MediaEvents</b> array[JSON object]	The list of media events is returned in the response body.

## Examples

---

Get the list of all media events:

```
GET /sep/api/v2/events/media
```

Response:

```
[
  {
    "id": "20200423164112445",
    "poolName": "Loader1",
    "exec": true,
```

```

    "scheduleName": "Daily-2300",
    "priority": 1,
    "suppress": false,
    "owner": "ust",
    "grpFlag": false,
    "action": "READCHECK",
    "driveNum": 15,
    "mcount": 1,
    "mtime": 1587652872000
  },
  ...
]

```

GET

/sep/api/v2/events/media/&lt;id&gt;

Minimum required role: None

Since: Jaglion

Get the media event associated with the given ID.

The response body contains the event encoded as JSON object.

#### Responses

Response Code and Content	Description
200 <b>MediaEvent</b> JSON object	The media event is returned in the response body.

#### Examples

Get the media event with the ID "3498322343323":

```
GET /sep/api/v2/events/media/3498322343323
```

Response:

```

{
  "id": "20200423164112445",
  "poolName": "Loader1",
  "exec": true,
  "scheduleName": "Daily-2300",
  "priority": 1,
  "suppress": false,
  "owner": "ust",
  "grpFlag": false,
  "action": "READCHECK",
  "driveNum": 15,
  "mcount": 1,
  "mtime": 1587652872000
}

```

GET

/sep/api/v2/events/migrations

Minimum required role: None

Since: Jaglion

Get the list of all migration events.

The response body contains the migration events encoded as array of JSON objects.

#### Responses

Response Code and Content	Description
200 <b>MigrationEvents</b> array[JSON object]	The list of migration events is returned in the response body.

#### Examples

Get the list of all migration events:

```
GET /sep/api/v2/events/migration

Response:
[
  {
    "id": "20201103101843579",
    "name": "MigrationEvent-20201103101843579",
    "migrationTask": "MyMigrationTask",
    "exec": false,
    "priority": 1,
    "suppress": false,
    "grpflag": false,
    "saveSetCnt": 0,
    "targetPool": "Lokal-MP",
    "migratedFlag": false,
    "cfdiType": {
      "generation": false,
      "copy": false,
      "full": false,
      "diff": false,
      "incr": true
    }
  },
  ...
],
...
]
```

GET

/sep/api/v2/events/migrations/&lt;id&gt;

Minimum required role: None

Since: Jaglion

Get the migration event associated with the given ID.

The response body contains the event encoded as JSON object.

#### Responses

Response Code and Content	Description
200 <b>MigrationEvent</b> JSON object	The migration event is returned in the response body.

## Examples

---

Get the migration event with the ID "3498322343323":

```
GET /sep/api/v2/events/migrations/3498322343323
```

Response:

```
{
  "id": "234234234324",
  "name": "MyMigrationEvent",
  "migrationTask": "RepTask",
  "exec": true,
  "priority": 1,
  "suppress": false,
  "grpflag": false,
  "migratedFlag": false,
  "submitFlag": false,
  "visible": false
}
```

GET

/sep/api/v2/events/restores

Minimum required role: None

Since: Jaglion

Get the list of all restore events.

The response body contains the restore events encoded as array of JSON objects.

## Responses

---

Response Code and Content	Description
200 RestoreEvents array[JSON object]	The list of restore events is returned in the response body.

## Examples

---

Get the list of all restore events:

```
GET /sep/api/v2/events/restores
```

Response:

```
[
  {
    "id": "20210315171957820",
    "name": "DownloadNeu-Restore-20210315171957820",
    "restoreTask": "DownloadNeu-Restore",
    ...
  },
  ...
]
```



GET

/sep/api/v2/events/restores/&lt;id&gt;

Minimum required role: None

Since: Jaglion

Get the restore event associated with the given ID.

The response body contains the event encoded as JSON object.

#### Responses

Response Code and Content	Description
200 RestoreEvent JSON object	The restore event is returned in the response body.

#### Examples

Get the restore event with the ID "3498322343323":

```
GET /sep/api/v2/events/restores/3498322343323

Response:
{
  "id": "20210315171957820",
  "name": "DownloadNeu-Restore-20210315171957820",
  "restoreTask": "DownloadNeu-Restore",
  ...
}
```

GET

/sep/api/v2/events/backups

Minimum required role: None

Since: Jaglion

Get the list of all backup task events.

The response body contains the backup task events encoded as array of JSON objects.

#### Responses

Response Code and Content	Description
200 BackupTaskEvents array[JSON object]	The list of backup task events is returned in the response body.

#### Examples

Get the list of all backup task events:

```
GET /sep/api/v2/events/backups

Response:
[
  {
    "id": "20210111152251360",
```

```

    "name": "my-sesam-host_temp-20210111152251360",
    "object": "my-sesam-host_temp",
    "exec": true,
    "scheduleName": "Every-30-minutes",
    "priority": 1,
    "suppress": false,
    "grpFlag": false,
    "owner": "Administrator",
    "fdiType": {
      "cfdi": "INCR",
      "value": "I"
    },
    "mediaPool": "Lokal-MP",
    "enforceFull": false,
    "onlineFlag": true,
    "ssddFlag": false
  },
  ...
]

```

GET

/sep/api/v2/events/backups/&lt;id&gt;

Minimum required role: None

Since: Jaglion

Get the backup task event associated with the given ID.

The response body contains the backup task event encoded as JSON object.

#### Responses

Response Code and Content	Description
200 <b>BackupTaskEvent</b> JSON object	The backup task event is returned in the response body.

#### Examples

Get the backup task event with the ID "20210111152251360":

```

GET /sep/api/v2/events/restores/20210111152251360

Response:
{
  "id": "20210111152251360",
  "name": "my-sesam-host_temp-20210111152251360",
  "object": "my-sesam-host_temp",
  "exec": true,
  "scheduleName": "Every-30-minutes",
  "priority": 1,
  "suppress": false,
  "grpFlag": false,
  "owner": "Administrator",
  "fdiType": {
    "cfdi": "INCR",
    "value": "I"
  },
  "mediaPool": "Lokal-MP",
  "enforceFull": false,
  "onlineFlag": true,
  "ssddFlag": false
}

```

POST

/sep/api/v2/events/find

Minimum required role: None

Since: Jaglion

Search for events matching the specified filter parameters.

### Parameters

The filter configuration is passed in as JSON object in the body of the request. The following JSON object properties are defined:

Name	Description
<b>id</b> Long	The ID of the events that should match the filter.
<b>pool</b> String	The media pool on which the events should be executed.
<b>type</b> AllEventFlag	The type of the events which should be matched. Valid values are "COMMAND" ("X"), "MEDIA" ("M"), "MIGRATION" ("c"), "REPLICATION" ("r"), "NEWDAY" ("N"), "RESTORE" ("R"), "STARTUP" ("S"), "TASKGROUP" ("G"), "TASK" ("B"). If the value is "TASK" or "B", all backups types (copy, full, diff, inc) are being matched.
<b>sesamDate</b> Date	The sesam date when the event is being executed.
<b>grpFlag</b> Boolean	If true, only task groups are being matched by the filter.
<b>schedule</b> String	The name of the schedule, whose events should be matched.

### Responses

Response Code and Content	Description
200 Events array[JSON object]	The matching events are returned in the response body.

### Examples

Get all backup events of the schedule "apiSchedule":

```
POST /sep/api/v2/events/find
{ "type" : "B",
  "schedule" : "apiSchedule"
}

Response:
[
  {
    "id": "20542045450250",
    "scheduleName": "apiSchedule",
    "priority": 1,
    "poolName": "Lokal-MP",
    "type": {
      "type": "FULL",
      "cfdiType": {
        "cfdi": "FULL",
        "value": "F"
      }
    },
    "task": true
  },
  "object": "Gruppe2",

```

```

    "grpFlag": false
  },
  ...
]

```

**POST**`/sep/api/v2/events/schedule`

Minimum required role: None

Since: Jaglion

Get the schedule associated with the event matching the given ID. The schedule is returned as JSON object. For details on the schedule properties, see the schedules section.

### Parameters

---

The event ID is passed in as JSON number in the body of the request.

### Responses

---

Response Code and Content	Description
200 Schedule JSON object	The schedule associated with the event is returned in the response body.

### Examples

---

Get the schedule for the event with ID '20180522132126977':

```

POST /sep/api/v2/events/schedule
20180522132126977

```

Response:

```

{
  "startDate": 1526940000000,
  "startTime": 25800000,
  "name": "Daily-0810",
  "cycFlag": true,
  "absFlag": true,
  "pCount": 1,
  "pSubCount": 0,
  "pBase": "DAILY",
  ...
}

```

### 3.19. External Groups Service

The external groups service provides access to external groups objects.

An external groups object is an object with the following properties:

Name	Description
<b>id</b> Long	The unique identifier of the groups object. Must not be null.
<b>externalId</b> * required String	The external name (i.e. the LDAP name) of the group. The maximum length of the externalId is 255 characters. Must not be null.
<b>enabled</b> * required Boolean	True, if the external group should be enabled, false otherwise.
<b>relations</b> array[ExternalGroupRelations]	The list of relations to sesam user groups belonging to this external group. When creating a new group a role can be either presented by its ID or its name. The roles association can not be changed after the creation of the group!
<b>type</b> ExternalGroupsType	The type of the external group. Valid values are "NONE", "AD" and "LDAP".
<b>mtime</b> Date	The time at which the notification object was modified at last.
<b>usercomment</b> String	A comment by the user about the external group.

Following methods are provided by the external groups service:

GET

/sep/api/v2/externalgroups

Minimum required role: Super user

Since: Jaglion

Get all external groups objects.

The response body contains the list of external groups objects encoded as array of JSON objects.

#### Responses

Response Code and Content	Description
200 <b>ExternalGroups</b> array[JSON object]	The external groups objects are returned in the response body.

#### Examples

Get all external groups objects:

```
GET /sep/api/v2/externalgroups

Response:
[
  {
    "id": 1,
    "externalId": "1",
    "enabled": true,
    "usercomment": "comment of external group",
    "mtime": 1617218518000
  }
  ...
]
```

GET

/sep/api/v2/externalgroups/&lt;id&gt;

Minimum required role: Super user

Since: Jaglion

Get the external group matching the given ID.

The response body contains the external groups object encoded as array of JSON objects.

#### Responses

Response Code and Content	Description
200 ExternalGroups JSON object	The external groups object is returned in the response body.

#### Examples

Get the external group with the ID 17:

```
GET /sep/api/v2/externalgroups/17

Response:
{
  "id": 1,
  "externalId": "1",
  "enabled": true,
  "usercomment": "comment of external group",
  "mtime": 1617218518000
}
```

POST

/sep/api/v2/externalgroups/find

Minimum required role: Super user

Since: Jaglion

Search for external groups matching the specified filter parameters.

#### Parameters

The filter configuration is passed in as JSON object in the body of the request. The following JSON object properties are defined:

Name	Description
externalId String	The external ID of the external group to match.

#### Responses

Response Code and Content	Description
200 ExternalGroups array[JSON object]	The matched external groups are returned in the response body.

## Examples

---

Get all external groups with the external ID "ExternalGroup":

```
POST /sep/api/v2/externalgroups/find
{ "externalId": "ExternalGroup" }

Response:
[
  {
    "id": 1,
    "externalId": "ExternalGroup",
    "enabled": true
  }
]
```

**POST**

/sep/api/v2/externalgroups/create

Minimum required role: Super user

Since: Jaglion

Creates a new external group.

## Parameters

---

The external group is passed in as JSON object in the body of the request. The properties of the external group are described above.

## Responses

---

Response Code and Content	Description
200 <b>ExternalGroups</b> JSON object	The created external groups object is returned in the response body.

## Examples

---

Create a new external group with the name "my-new-external-group":

```
POST /sep/api/v2/externalgroups/create
{
  "externalId": "my-new-external-group",
  "enabled": "true"
}

Response:
{
  "id": 8,
  "externalId": "my-new-external-group",
  "enabled": true
}
```

**POST**`/sep/api/v2/externalgroups/update`

Minimum required role: Super user

Since: Jaglion

Updates the properties of an already existing external group.

Be aware that for updating an external group you always have to provide the ID of the external group you want to update. Providing the name is not sufficient, as you can update the name of the external group itself.

#### Parameters

The external group is passed in as JSON object in the body of the request. The properties of the external group are described above.

#### Responses

Response Code and Content	Description
200 ExternalGroups JSON object	The updated external groups object is returned in the response body.

#### Examples

Update the name of the external group with the ID 8 to "UpdatedExternalGroup" and set enabled to "true":

```
POST /sep/api/v2/externalgroups/update
{
  "id": 8,
  "name": "UpdatedExternalGroup",
  "enabled": "false"
}

Response:
{
  "id": 8,
  "name": "UpdatedExternalGroup",
  "enabled": true
}
```

**POST**`/sep/api/v2/externalgroups/persist`

Minimum required role: Super user

Since: Jaglion

Persists an external group. If no external group with the given ID exists, a new external group will be created. Otherwise, the properties of an existing external group are updated.

#### Parameters

The external group is passed in as JSON object in the body of the request. The properties of an external group are described above.

#### Responses



Response Code and Content	Description
200 External Group JSON object	The created or updated external group is returned in the response body.

Examples

Persists the external group with the ID "8":

```
POST /sep/api/v2/externalgroups/persist
{
  "id": 8,
  "name": "UpdatedExternalGroup",
  "enabled": "false"
}

Response:
{
  "id": 8,
  "name": "UpdatedExternalGroup",
  "enabled": true
}
```

**POST** /sep/api/v2/externalgroups/delete Since: Jaglion  
 Minimum required role: Super user

Deletes the external groups object with the given ID.

Parameters

The unique ID is passed in the body of the request as JSON number.

Responses

Response Code and Content	Description
200 ID Long	The unique ID of the deleted external group is returned in the response body.

Examples

Delete the external group with the ID "8":

```
POST /sep/api/v2/externalGroups/delete
8

Response:
8
```

**POST** /sep/api/v2/externalgroups/deleteByEntity Since: Jaglion  
 Minimum required role: Administrator

Deletes the external group matching the given entity.

## Parameters

---

The entity to match is passed in the body of the request as JSON object. The only required entity property is the primary key of the entity.

## Responses

---

Response Code and Content	Description
200 ID Long	The ID of the external group is returned in the response body.

## Examples

---

Delete the external group with the ID "17":

```
POST /sep/api/v2/externalgroups/deleteByEntity
{ "id": 17 }
```

```
Response:
17
```

GET

`/sep/api/v2/externalgroups/<id>/groups`

Minimum required role: Super user

Since: Jaglion

Get the sesam user groups associated with the external group matching the given ID.

The response body contains the sesam user groups objects encoded as array of JSON objects.

## Responses

---

Response Code and Content	Description
200 Groups JSON object	The groups objects are returned in the response body.

## Examples

---

Get the groups associated with the external group with the ID 17:

```
GET /sep/api/v2/externalgroups/17/groups
```

```
Response:
[
  {
    "id": 4,
    "name": "SesamGroup",
    "enabled": true
  }
]
```

POST

/sep/api/v2/externalgroups/delete/&lt;id&gt;/groups

Minimum required role: Super user

Since: Jaglion

Sets the sesam user groups associated to the given external group. Exactly the groups provided in the request body are set, for every group associated to the external group but not provided in the request body the relation to the external group is being deleted.

#### Parameters

The IDs or the names of the sesam groups are passed in the body of the request as array of JSON objects. **The array of users has to be inside an extra array (see example)!**

#### Responses

Response Code and Content	Description
200 Groups array[JSON object]	The unique ID of the deleted external group is returned in the response body.

#### Examples

Associate the sesam groups with the ID 4 and the name "Group5" with the external group with the ID 3:

```
POST /sep/api/v2/externalgroups/3/groups
[["4", "Group5"]]
```

Response:

```
[
  {
    "id": 4,
    "name": "Group4",
    "enabled": true
  },
  {
    "id": 5,
    "name": "Group5",
    "enabled": true
  }
]
```

GET

/sep/api/v2/externalgroups/&lt;id&gt;/roles

Minimum required role: Super user

Since: Jaglion

Get the roles associated to the external group matching the given ID. The end point returns all roles belonging to a sesam group that is associated with the given external group.

The response body contains the roles objects encoded as array of JSON objects.

#### Responses

Response Code and Content	Description
200 Roles JSON object	The roles objects are returned in the response body.

## Examples

---

Get all roles associated with the external group with the ID 17:

```
GET /sep/api/v2/externalgroups/17/roles
```

Response:

```
[  
  {  
    "id": 4,  
    "name": "ReadOnly",  
    "enabled": true,  
    "usercomment": "Role with read-only permissions"  
  },  
  ...  
]
```

### 3.20. Groups Service

The groups service provides access to group objects. A group represents a list of users with the same permissions.

A group object is an object with the following properties:

Name	Description
<b>id</b> * required Long	The unique ID of the group.
<b>name</b> * required String	The name of the group. The maximum length of the user name is 255 characters.
<b>enabled</b> Boolean	Flag to indicate if the group is enabled. If the group is disabled, users who belong to this group only will not be able to log in.
<b>rolesList</b> * required array[String]	The list of roles the group is associated with. When creating a new group, a role can be either presented by its ID or its name. The roles association can not be changed after the creation of the group! Valid values are 'SuperUser', 'All' (Administrator), 'Disabled', 'ReadOnly' (Operator), 'Restore' and 'Backup'.
<b>usersList</b> array[String]	The list of users belonging to this group.
<b>usercomment</b> String	A comment by the user about the group.

Following methods are provided by the groups service:

GET

/sep/api/v2/groups

Minimum required role: Super user

Since: Jaglion

Get all groups.

The response body contains the list of groups encoded as array of JSON objects.

Responses

Response Code and Content	Description
200 Groups array[JSON object]	The groups are returned in the response body.

Examples

Get all groups:

```
GET /sep/api/v2/groups
```

```
Response:
```

```
[
  {
    "id": 0,
    "name": "SUPERUSER",
    "enabled": true,
    "usercomment": "Automatically generated super user group"
  },
  {
    "id": 1,
    "name": "ADMIN",
    "enabled": true,
    "usercomment": "Automatically generated administration group"
  },
]
```

] ...

**GET**`/sep/api/v2/groups/<id>`

Minimum required role: Super user

Since: Jaglion

Get the group matching the given ID.

The response body contains the group encoded as JSON object.

#### Responses

Response Code and Content	Description
200 Group JSON object	The group is returned in the response body.

#### Examples

Get the group with the ID 1:

```
GET /sep/api/v2/groups/1

Response:
{
  "id": 1,
  "name": "ADMIN",
  "enabled": true,
  "usercomment": "Automatically generated administration group"
}
```

**POST**`/sep/api/v2/groups/create`

Minimum required role: Super user

Since: Jaglion

Creates a new group. The optional and required parameters are described above.

#### Parameters

The group is passed in as JSON object in the body of the request. The properties of the group are described above.

#### Responses

Response Code and Content	Description
200 Group JSON object	The created group is returned in the response body.

## Examples

---

Create a new group with the name “newGroup” and the role “Backup”:

```
POST /sep/api/v2/groups/create
{
  "name": "newGroup",
  "rolesList": [
    "Backup"
  ]
}

Response:
{
  "id": 8,
  "name": "newGroup",
  "enabled": true,
  "rolesList": [
    "Backup"
  ]
}
```

**POST**

/sep/api/v2/groups/update

Minimum required role: Super user

Since: Jaglion

Updates the properties of an already existing group. The roles associated to a group can not be changed after its creation!

Be aware that for updating a group, always the group ID of the group to update has to be provided. Providing the group name only is not sufficient, as the name of the group can be updated itself.

## Parameters

---

The group is passed in as JSON object in the body of the request. The properties of the group are described above.

## Responses

---

Response Code and Content	Description
200 Group JSON object	The updated group is returned in the response body.

## Examples

---

Update the name of the group with the ID 8 to “UpdatedGroup” and set enabled to “true”:

```
POST /sep/api/v2/groups/update
{
  "id": 8,
  "name": "my_group",
  "enabled": "false"
}

Response:
{
  "id": 8,
```

```

    "name": "my_group",
    "enabled": false
  }

```

**POST**

/sep/api/v2/groups/persist

Minimum required role: Super user

Since: Jaglion

Persists a group. If no group with the given ID exists, a new group will be created. Otherwise, the properties of an existing group are updated.

#### Parameters

---

The group is passed in as JSON object in the body of the request. The properties of a group are described above.

#### Responses

---

Response Code and Content	Description
200 Group JSON object	The created or updated group is returned in the response body.

#### Examples

---

Persists the group with the ID "8":

```

POST /sep/api/v2/groups/persist
{
  "id": 8,
  "name": "my_group",
  "enabled": "false"
}

Response:
{
  "id": 8,
  "name": " my_group",
  "enabled": false
}

```

**POST**

/sep/api/v2/groups/delete

Minimum required role: Super user

Since: Jaglion

Deletes the group with the given ID.

#### Parameters

---

The unique ID of the group is passed in the body of the request as JSON number.

#### Responses

---



Response Code and Content	Description
200 ID Long	The unique ID of the deleted group is returned in the response body.

### Examples

Deletes the group with the ID "8":

```
POST /sep/api/v2/groups/delete
8

Response:
8
```

**POST**

/sep/api/v2/groups/deleteByEntity

Minimum required role: Administrator

Since: Jaglion

Deletes the group matching the given entity.

### Parameters

The entity to match is passed in the body of the request as JSON object. The only required entity property is the primary key of the entity.

### Responses

Response Code and Content	Description
200 ID Long	The ID of the group is returned in the response body.

### Examples

Delete the external group with the ID "17":

```
POST /sep/api/v2/groups/deleteByEntity
{ "id": 17 }

Response:
17
```

**POST**

/sep/api/v2/groups/<id>/users

Minimum required role: Super user

Since: Jaglion

Sets the users associated with the given group. Exactly the users provided in the request body are set. For every user associated to the group, but not provided in the request body, the relation to the group will be deleted.

### Parameters

The user IDs or names are provided as JSON string in the body of the request. **The array of users has to be inside an extra array (see example)!**

Responses

Response Code and Content	Description
200 Users array[JSON object]	The newly set user list is returned in the response body.

Examples

Sets the users with the IDs 3, 4 and the Name “user3” to the group with the ID 5:

```

POST /sep/api/v2/groups/5/users
[[
  "3",
  "4",
  "user3"
]]

Response:
[
  {
    "id": 3,
    "name": "user1",
    "password": "*****",
    "accountExpired": false,
    "locked": false,
    "passwordExpired": false,
    "enabled": true,
    "origin": "USER",
    "fromJavaPolicy": false,
    "allowHostAuth": false
  },
  ...
]
    
```

GET

/sep/api/v2/groups/<id>/users

Minimum required role: Super user
Since: Jaglion

Get all users associated to the given group ID.

The response body contains the user encoded as an array of JSON objects.

Responses

Response Code and Content	Description
200 Users array[JSON object]	The user list is returned in the response body.

Examples

Get all users associated to the group with the ID 5:

```
GET /sep/api/v2/groups/5/users
```

Response:

```
[
  {
    "id": 3,
    "name": "user1",
    "password": "*****",
    "accountExpired": false,
    "locked": false,
    "passwordExpired": false,
    "enabled": true,
    "origin": "USER",
    "fromJavaPolicy": false,
    "allowHostAuth": false
  },
  ...
]
```

**GET**

/sep/api/v2/groups/<id>/roles

Minimum required role: Super user

Since: Jaglion

Get all roles associated to the given group ID.

The response body contains the roles encoded as an array of JSON objects.

Responses

Response Code and Content	Description
<b>200</b> <b>Roles</b> array[JSON object]	The roles list is returned in the response body.

Examples

Get all roles associated to the group with the ID 5:

```
GET /sep/api/v2/groups/5/roles
```

Response:

```
[
  {
    "id": 4,
    "name": "ReadOnly",
    "enabled": true,
    "usercomment": "Role with read-only permissions"
  },
  ...
]
```

POST

/sep/api/v2/groups/&lt;id&gt;/add

Minimum required role: Super user

Since: Jaglion

Adds a new user to the group associated with the given ID. In contrast to the users end point described above, with add only one user is added to the already existing relations, none is being deleted.

#### Parameters

---

The users ID or name is passed in as JSON string in the body of the request.

#### Responses

---

Response Code and Content	Description
200 User JSON object	The user is returned in the response body.

#### Examples

---

Add the user with the ID "2" to the group with the ID "8":

```
POST /sep/api/v2/groups/8/add
{ "2" }

Response:
{
  "id": 2,
  "name": "sesam",
  "password": "*****",
  "accountExpired": false,
  "locked": false,
  "passwordExpired": false,
  "enabled": true,
  "origin": "INTERNAL",
  "fromJavaPolicy": false,
  "allowHostAuth": false,
  "usercomment": "Internal System user",
  "mtime": 1618214611000
}
```

POST

/sep/api/v2/groups/&lt;id&gt;/remove

Minimum required role: Super user

Since: Jaglion

Removes a user from the group matching the given ID.

#### Parameters

---

The users ID or name is passed in as JSON string in the body of the request.

#### Responses

---

Response Code and Content	Description
200 <b>id</b> String	The deleted users ID or name is returned in the response body.

### Examples

Remove the user with the name “user3” of the group with the ID “8”:

```
POST /sep/api/v2/groups/8/remove
{ "2" }
```

Response:  
"2"

**POST**

/sep/api/v2/groups/find

Minimum required role: Super user

Since: Jaglion

Search for groups matching the specified filter parameters.

### Parameters

The filter configuration is passed in as JSON object in the body of the request. The following JSON object properties are defined:

Name	Description
<b>name</b> String	The unique name of the group that should match the filter.

### Responses

Response Code and Content	Description
200 <b>Groups</b> array[JSON object]	The matching groups are returned in the response body.

### Examples

Get the group with the name “FilterGroup”:

```
POST /sep/api/v2/groups/find
{
  "name" : "FilterGroup"
}
```

Response:

```
[
  {
    "id": 8,
    "name": "asdGroup",
```

```
    "enabled": true  
  },  
  ...  
]
```

### 3.21. Interfaces Service

The interfaces service provides access to the interfaces objects. Interfaces represent the connection between the client and the server.

An interfaces object has the following properties:

Name	Description
<b>name</b> *required String	The name of the interface. The maximum length of the name is 255 characters. The name can contain only letters, digits, '-', '_' and the space character.
<b>clientId</b> Long	The ID of the client the interface is associated with.
<b>clientName</b> String	The name of the client the interface is associated with.
<b>flags</b> String	The flags of the interface.
<b>order</b> Long	The order of the interface (0... highest).
<b>type</b> String	The type of the interface.

Following methods are provided by the interfaces service:

GET	<code>/sep/api/v2/interfaces</code>	Since: Jaglion
Minimum required role: None		

Get all interfaces.

The response body contains the list of interfaces encoded as JSON objects. The properties of the interfaces object are described above.

#### Responses

Response Code and Content	Description
<b>200</b> <b>Interfaces</b> array[JSON object]	The interfaces are returned in the response body.

#### Examples

Get all interfaces:

```
GET /sep/api/v2/interfaces

Response:
[
  {
    "name": "FirstInterface",
    "clientId": "4",
    ...
  },
  {
    "name": "SecondInterface",
    "clientId": "5",
    ...
  }
]
```

```

    }, ...
  ], ...
]
    
```

**GET** /sep/api/v2/interfaces/<name>

Minimum required role: None Since: Jaglion

Get the first interface matching the given name.

The response body contains the interface encoded as JSON objects. The properties of the interfaces object are described above.

Note that the interface name is not the full key necessary to identify a interface uniquely. The interface objects are uniquely identified by the name and the ID of the client the interface is associated with. Use the “find” end point to list all interfaces with the given name.

Responses

Response Code and Content	Description
200 <b>Interfaces</b> JSON object	The interface is returned in the response body.

Examples

Get the first interface matching the name “SecondInterface”:

```

GET /sep/api/v2/interfaces/SecondInterface

Response:
{
  "name": "SecondInterface",
  "clientId": "5",
  ...
}
    
```

**POST** /sep/api/v2/interfaces/find

Minimum required role: None Since: Jaglion

Search for interfaces matching the specified filter parameters.

Parameters

The filter configuration is passed in as JSON object in the body of the request. The following JSON object properties are defined:

Name	Description
<b>names</b> array[String]	An array of the interface names to match.



Name	Description
<b>clientId</b> Long	The ID of the client to match.
<b>queryMode</b> String	The query mode is used to customize the behavior of the end point. Depending on the specified value, the end point may prefilter the result set to eliminate invalid results. Valid values are DEFAULT, RESTORE and BACKUP.

## Responses

Response Code and Content	Description
<b>200</b> <b>Interfaces</b> array[JSON object]	The matching interfaces are returned in the response body.

## Examples

Get all interfaces from the client with the id 4:

```
POST /sep/api/v2/interfaces/find
{ "clientId" : 4 }
```

Response:

```
[
  {
    "name": "FirstInterface",
    "clientId": "4",
    ...
  }
]
```

**POST**

/sep/api/v2/interfaces/create

Minimum required role: Administrator

Since: Jaglion

Creates a new interface.

## Parameters

The interface is passed in as JSON object in the body of the request. The properties of the interface are described above.

## Responses

Response Code and Content	Description
<b>200</b> <b>Interface</b> JSON object	The created interface object is returned in the response body.

## Examples

---

Create a new interface with the name "my-new-interface":

```
POST /sep/api/v2/interfaces/create
{ "name" : "my-new-interface", "clientId" : 70 }

Response:
{
  "name": "my-new-interface",
  "clientId": 70
}
```

**POST**

/sep/api/v2/interfaces/update

Minimum required role: Administrator

Since: Jaglion

Updates the properties of an already existing interface.

## Parameters

---

The interface is passed in as JSON object in the body of the request. The properties of the interface are described above.

## Responses

---

Response Code and Content	Description
<b>200</b> <b>Interfaces</b> JSON object	The updated interface object is returned in the response body.

## Examples

---

Update the interface with the name "my-new-interface" and set order to 0:

```
POST /sep/api/v2/interfaces/update
{ "name" : "my-new-interface", "clientId" : 70, "order" : 0}

Response:
{
  "name": "my-new-interface",
  "clientId": 70,
  "order" : 0
}
```

**POST**

/sep/api/v2/interfaces/persist

Minimum required role: Super user

Since: Jaglion

Persists an interface. If no interface with the given name exists, a new interface will be created. Otherwise, the properties of an existing interface are updated.

## Parameters

---

The interface is passed in as JSON object in the body of the request. The properties of an interface are described above.

Responses

Response Code and Content	Description
200 <b>Interface</b> JSON object	The created or updated interface is returned in the response body.

Examples

Persists the interface with the name "my\_interface":

```
POST /sep/api/v2/interfaces/persist
{ "name" : "my_interface", "clientId" : 70, "order" : 0}

Response:
{
  "name": "my_interface",
  "clientId": 70,
  "order" : 0
}
```

POST

/sep/api/v2/interfaces/import

Minimum required role: Administrator Since: Jaglion

Imports a list of interfaces. Recreates each interface from the list with the given properties. If the interface name is provided and an interface with the same name already exists for the provided client, the import will fail as a whole. To create new interface, the interface name has to be unique.

Parameters

The list of interfaces to import is passed in as JSON array in the body of the request.

Responses

Response Code and Content	Description
200 <b>Interfaces</b> array[JSON object]	The list of newly created interfaces is returned in the response body.

Examples

Import the given list of interfaces:

```
POST /sep/api/v2/interfaces/import
[
  {
    "name": "my-imported-client",
    "clientName": "my-imported-client"
  },
  {
```

```

    "name": "http://my-imported-client:11000",
    "clientName": "my-imported-client"
  },
  {
    "name": "https://my-imported-client:11001",
    "clientName": "my-imported-client"
  }
]

```

Response:

```

[
  {
    "name": "my-imported-client",
    "clientId": 70,
    "clientName": "my-imported-client"
  },
  {
    "name": "http://my-imported-client:11000",
    "clientId": 70,
    "clientName": "my-imported-client"
  },
  {
    "name": "https://my-imported-client:11001",
    "clientId": 70,
    "clientName": "my-imported-client"
  }
]

```

**POST**

/sep/api/v2/interfaces/delete

Minimum required role: Administrator

Since: Jaglion

Deletes all interfaces matching the given name.

#### Parameters

The interface name to match is passed in the body of the request as JSON string.

#### Responses

Response Code and Content	Description
200 String JSON string	The matched interface name of the deleted interfaces is returned in the response body.

#### Examples

Delete all interfaces matching the name "my-new-interface":

```

POST /sep/api/v2/interfaces/delete
"my-new-interface"

```

```

Response:
"my-new-interface"

```

**POST**`/sep/api/v2/interfaces/deleteByEntity`

Minimum required role: Administrator

Since: Jaglion

Deletes the interface matching the given entity.

#### Parameters

---

The entity to match is passed in the body of the request as JSON object. The only required entity property is the primary key of the entity.

#### Responses

---

Response Code and Content	Description
<b>200</b> <b>Name</b> String	The name of interface is returned in the response body.

#### Examples

---

Delete the interface with the name "my\_awesome\_interface":

```
POST /sep/api/v2/interfaces/deleteByEntity
{ "name": "my_awesome_interface" }
```

```
Response:
"my_awesome_interface"
```

### 3.2.2. Licenses Service

The licenses service provides access to the SEP sesam server license information. License information are plain text information.

Following methods are provided by the interfaces service:

GET

/sep/api/v2/licenses/info

Minimum required role: None

Since: Jaglion

Gets the SEP sesam license information.

The response body contains the license information as plain text.

#### Responses

Response Code and Content	Description
200 License Information String	The license information are returned in the response body.

#### Examples

Get the license information of the SEP sesam server:

```
GET /sep/api/v2/licenses/info
```

```
Response:
```

```
[
  "2020-09-09 15:15:04: sm_info c, Build: $Id: 8ad8714913 ... $",
  "License: ok ",
  "Edition: Ultimate Volume",
  "Customer      : SEP-AG",
  "Customer No.  : ...",
  "...",
  "Issued        : 2019-07-04 09:29:14",
  "Service Modality: Maintenance",
  "Support       : support@sep.de",
  "Service       : service@sep.de",
  "eMail        : sales@sep.de",
  "Hotline       : +49 700-SEP_SUPPORT||+49 700-737_7877678",
  "Version: 4.4.3.85, Brand: 20200715160049",
  "Server Name: my-sesam-srv, Name in license: my-sesam-srv",
  "IP Address: 10.10.10.10, IP Address in license: 10.10.10.10",
  "Time : Date of Installation 201805220847 lasting unlimited days",
  "      : Maintenance expiration date 2020-12-31",
  "Volume Based License:",
  " 1.023 TB of 21 TB FrontSide",
  "{",
  " FrontSide / Storage : 1.023 TB / 1.275 TB ( 1 : 1.25 )",
  "}",
  "...
]
```

**POST**

/sep/api/v2/licenses/remote

Minimum required role: None

Since: Jaglion

Gets the license information summary for configured remote servers.

Parameters

The filter configuration is passed in as JSON object in the body of the request. The following JSON object properties are defined:

Name	Description
<b>servers</b> array[String]	The list of remote server names to match. If not provided, all configured remote servers are included.
<b>types</b> array[String]	The list of remote server types. Valid values are 'GENERIC' and 'VSPHERE'. If not provided, only remote servers of type 'VSPHERE' are included.
<b>forceRefresh</b> Boolean	Flag to indicate that the remote server license information are refreshed before returned.

Responses

Response Code and Content	Description
<b>200</b> <b>License Information</b> String	The remote server license information are returned in the response body.

Examples

Get the license information of all configured remote servers:

```

POST /sep/api/v2/licenses/remote
{ "forceRefresh" : true }

Response:
[
  * vCenter MyVSphereServer
  ** Datacenter=MyLab
  esx_server=MyVSphereHost,version=VMware ESXi 6.5.0 build-
  8294253,size(MiB)=147445,cpucount=12,socketcount=2,frequency(Mhz)=2542,countVM=1,runningVM=0
  ...
  ** Datacenter=MyOtherLab
  esx_server=MyOtherVSPHEREHost,version=VMware ESXi 6.0.0 build-
  6921384,size(MiB)=32449,cpucount=2,socketcount=1,frequency(Mhz)=3524,countVM=2,runningVM=2
  ...

  *****
  *          SUMMARY          *
  *****

  Datacenter           : 2
  Standalone ESX       : 0
  ESX Server           : 10
  Total memory         : 441541
  Number of CPUs       : 68
  Number of CPU sockets : 17
  VM count             : 119
  Running VM count     : 50
]
    
```

### 3.23. Loader Devices Service

The loader devices services provides access to the loader device objects.

A loader device is an object with the following properties:

Name	Description
<b>loader</b> * required Long	The unique ID of the loader.
<b>slot</b> * required Long	The unique ID of the loader slot.
<b>devicePath</b> String	The loader device path. The maximum length of the loader device path is 1024 characters.

**Note:** Both the loader and the loader slot ID are forming the loader device primary key.

Following methods are provided by the loader devices service:

GET	/sep/api/v2/loaderdevices	Since: Jaglion
Minimum required role: None		

Get all loader devices.

The response body contains the list of loader devices encoded as JSON objects. The properties of the loader devices object are described above.

#### Responses

Response Code and Content	Description
<b>200</b> <b>Loader Devices</b> array[JSON object]	The loader devices are returned in the response body.

#### Examples

Get all loader devices:

```
GET /sep/api/v2/interfaces

Response:
[
  {
    "devicePath": "/loader/0/device/0",
    "slot": 0,
    "loader": 0
  },
  {
    "devicePath": "/loader/0/device/1",
    "slot": 1,
    "loader": 0
  },
  ...
]
```



POST

/sep/api/v2/loaderdevices/get

Minimum required role: None

Since: Jaglion

Get the loader device matching the given loader device key.

The response body contains the loader device encoded as JSON objects. The properties of the loader device object are described above.

#### Responses

Response Code and Content	Description
200 Loader Device JSON object	The loader device is returned in the response body.

#### Examples

Get the loader device of loader 0 and loader slot 1:

```
POST /sep/api/v2/loaderdevices/get
{ "loader": 0, "slot": 1 }

Response:
{
  "devicePath": "/loader/0/device/1",
  "slot": 1,
  "loader": 0
}
```

POST

/sep/api/v2/loaderdevices/create

Minimum required role: Administrator

Since: Jaglion

Creates a new loader device.

The response body contains the newly created loader device encoded as JSON objects. The properties of the loader device object are described above.

#### Responses

Response Code and Content	Description
200 Loader Device JSON object	The loader device is returned in the response body.

#### Examples

Create a new loader device in loader 2 and loader slot 3:

```
POST /sep/api/v2/loaderdevices/create
{ "loader": 2, "slot": 3 }

Response:
```

```
{
  "loader": 2,
  "slot": 3
}
```

**POST**`/sep/api/v2/loaderdevices/update`

Minimum required role: Administrator

Since: Jaglion

Updates the properties of an already existing loader device.

#### Parameters

The loader device is passed in as JSON object in the body of the request. The properties of the loader device are described above.

#### Responses

Response Code and Content	Description
200 Loader Device JSON object	The updated loader device object is returned in the response body.

#### Examples

Update the loader device of loader 0 and loader slot 1 and set a new device path:

```
POST /sep/api/v2/loaderdevices/update
{ "loader": 0, "slot": 1, "name": "/loader/0/device/2" }

Response:
{
  "devicePath": "/loader/0/device/2",
  "slot": 1,
  "loader": 0
}
```

**POST**`/sep/api/v2/loaderdevices/persist`

Minimum required role: Super user

Since: Jaglion

Persists a loader device. If no loader device with the given name exists, a new loader device will be created. Otherwise, the properties of an existing loader device are updated.

#### Parameters

The loader device is passed in as JSON object in the body of the request. The properties of an loader device are described above.

#### Responses

Response Code and Content	Description
---------------------------	-------------

Response Code and Content	Description
200 Loader Device JSON object	The created or updated loader device is returned in the response body.

### Examples

Persists the loader device with the given primary key:

```
POST /sep/api/v2/loaderdevices/persist
{ "loader": 0, "slot": 1, "name": "/loader/0/device/2" }

Response:
{
  "devicePath": "/loader/0/device/2",
  "slot": 1,
  "loader": 0
}
```

**POST**

/sep/api/v2/loaderdevices/delete

Minimum required role: Administrator

Since: Jaglion

Deletes the loader device matching the given loader device key.

### Parameters

The loader device key to match is passed in the body of the request as JSON object.

### Responses

Response Code and Content	Description
200 Loader Device Key JSON object	The loader device key of the deleted loader device is returned in the response body.

### Examples

Delete the loader device of loader 0 and loader slot 1:

```
POST /sep/api/v2/loaderdevices/delete
{ "loader": 0, "slot": 1 }

Response:
{ "loader": 0, "slot": 1 }
```

**POST**

/sep/api/v2/loaderdevices/deleteByEntity

Minimum required role: Administrator

Since: Jaglion

Deletes the loader device matching the given entity.

### Parameters

The entity to match is passed in the body of the request as JSON object. The only required entity property is the primary key of the entity.

#### Responses

---

Response Code and Content	Description
<b>200</b> <b>Loader Device Key</b> JSON object	The loader device key of the deleted loader device is returned in the response body.

#### Examples

---

Delete the loader device of loader 0 and loader slot 1:

```
POST /sep/api/v2/loaderdevices/deleteByEntity
{ "loader_num": 0, "slot": 1 }

Response:
{ "loader_": 0, "slot": 1 }
```

### 3.24. Loaders Service

The loaders services provides access to the loader objects. Loaders can be physical devices connected to the SEP sesam server or SEP sesam remote device server or virtual tape libraries to simulate a loader.

A loader is an object with the following properties:

Name	Description
<b>id</b> * required Long	The unique ID of the loader.
<b>device</b> * required String	The name of the device the loader is connected to. The maximum length of the device is 254 characters.
<b>clientId</b> * required Long	The unique ID of the client (RDS) the loader is connected to.
<b>name</b> String	The loader name to display to users. The maximum length of the loader name is 32 character.
<b>loaderType</b> * required String	The type of the loader. The maximum length of the loader type is 32 character.
<b>vendor</b> String	The name of the loader vendor. The maximum length of the vendor name is 64 character.
<b>product</b> String	The loader product name. The maximum length of the loader product name is 64 character.
<b>serialNumber</b> String	The loader serial number. The maximum length of the loader serial number is 64 character.
<b>identifier</b> String	The loader identifier. The maximum length of the loader identifier is 255 character.
<b>ctrl</b> * required String	The loader control library type. Valid values are 'DIR_DISK', 'DIR_SLU', 'DIR_VIRT' and 'DIR_ACCLS'.
<b>slots</b> Long	The number of loader slots currently configured.
<b>maxSlots</b> Long	The maximum number of loader slots available.
<b>drives</b> Long	The number of loader drives currently configured.
<b>ports</b> Long	The number of loader ports currently configured.
<b>transport</b> Long	The number of loader transports currently configured.
<b>firstSlot</b> Long	The number of the first configured loader slot.
<b>lastSlot</b> Long	The number of the last configured loader slot.
<b>autounload</b> Boolean	Flag to indicate if auto-unload is enabled
<b>barcode</b> Boolean	Flag to indicate if the loader supports reading barcodes.
<b>loadCmd</b> String	The command to use to load a media. The maximum length of the load command is 255 character.
<b>unloadCmd</b> String	The command to use to unload a media. The maximum length of the unload command is 255 character.
<b>sepcomment</b> String	The comment or note from Sesam. The maximum length of the system message is 1024 character.
<b>usercomment</b> String	The comment or note from the user. The maximum length of the user comment is 1024 character.
<b>loaderDevices</b> array[JSON object]	An array of associated loader devices. The properties of the loader devices object are described in the loader devices service section.

Following methods are provided by the loaders service:

GET

/sep/api/v2/loaders

Minimum required role: None

Since: Jaglion

Get all loaders.

The response body contains the list of loaders encoded as JSON objects. The properties of the loaders object are described above.

#### Responses

Response Code and Content	Description
200 Loaders array[JSON object]	The loaders are returned in the response body.

#### Examples

Get all loaders:

```
GET /sep/api/v2/loaders

Response:
[
  {
    "id": 0,
    "device": "VIRTUAL_ROBOT",
    "clientId": 0,
    "loaderType": "DISK_HARD",
    "ctrl": "DIR_VIRT",
    "slots": 0,
    "drives": 0,
    "autounload": false,
    "barcode": false
  },
  {
    "id": 1,
    "device": "/dev/tape/by-id/scsi-SSTK_L80_XYZZY_B",
    "clientId": 0,
    "name": "Big Loader",
    "loaderType": "STK_L80_0105",
    "ctrl": "DIR_SLU",
    "slots": 4,
    "maxSlots": 6,
    "ports": 4,
    "autounload": false,
    "barcode": false
  },
  ...
]
```

GET

/sep/api/v2/loaders/&lt;id&gt;

Minimum required role: None

Since: Jaglion

Get the loader matching the given ID.

The response body contains the loader encoded as JSON object. The properties of the loader object are described above.

#### Responses

Response Code and Content	Description
200 Loader JSON object	The loader is returned in the response body.

#### Examples

Get the loader with the ID 1:

```
GET /sep/api/v2/loaders/1

Response:
{
  "id": 1,
  "device": "/dev/tape/by-id/scsi-SSTK_L80_XYZZY_B",
  "clientId": 0,
  "name": "Big Loader",
  "loaderType": "STK_L80_0105",
  "ctrl": "DIR_SLU",
  "slots": 4,
  "maxSlots": 6,
  "ports": 4,
  "autounload": false,
  "barcode": false
}
```

POST

/sep/api/v2/loaders/create

Minimum required role: Administrator

Since: Jaglion

Creates a new loader. If an ID is given, the loader will be created with the given ID. If a loader with the given ID already exists, the call will fail. If no ID is given, the loader is automatically assigned the next free ID (maximum ID + 1).

#### Parameters

The loader is passed in as JSON object in the body of the request. The properties of the loader are described above.

#### Responses

Response Code and Content	Description
200 Loader JSON object	The newly created loader is returned in the response body.

## Examples

---

Creates a new loader:

```
POST /sep/api/v2/loaders/create
{
  "device": "/dev/tape/by-id/scsi-SSTK_L80_XYZZY_C",
  "clientId": 0,
  "name": "My New Loader",
  "loaderType": "STK_L80_0105",
  "ctrl": "DIR_SLU",
  "slots": 20,
  "maxSlots": 50,
  "ports": 8,
  "autounload": false,
  "barcode": true
}

Response:
{
  "id": 3,
  "device": "/dev/tape/by-id/scsi-SSTK_L80_XYZZY_C",
  "clientId": 0,
  "name": "My New Loader",
  "loaderType": "STK_L80_0105",
  "ctrl": "DIR_SLU",
  "slots": 20,
  "maxSlots": 50,
  "ports": 8,
  "autounload": false,
  "barcode": true
}
```

**POST**

/sep/api/v2/loaders/update

Minimum required role: Administrator

Since: Jaglion

Updates a loader. A loader with the given ID must exist, otherwise the call will fail.

## Parameters

---

The loader is passed in as JSON object in the body of the request. The properties of the loader are described above.

## Responses

---

Response Code and Content	Description
200 <b>Loader</b> JSON object	The updated loader is returned in the response body.

## Examples

---

Updates the loader with ID 3 and add a user comment:

```
POST /sep/api/v2/loaders/update
{
  "id": 3,
  "device": "/dev/tape/by-id/scsi-SSTK_L80_XYZZY_C",
  "clientId": 0,
  "name": "My New Loader",
  "loaderType": "STK_L80_0105",
```



```

    "ctrl": "DIR_SLU",
    "slots": 20,
    "maxSlots": 50,
    "ports": 8,
    "autounload": false,
    "barcode": true,
    "usercomment" : "A new loader configured."
  }

Response:
{
  "id": 3,
  "device": "/dev/tape/by-id/scsi-SSTK_L80_XYZZY_C",
  "clientId": 0,
  "name": "My New Loader",
  "loaderType": "STK_L80_0105",
  "ctrl": "DIR_SLU",
  "slots": 20,
  "maxSlots": 50,
  "ports": 8,
  "autounload": false,
  "barcode": true,
  "usercomment": "A new loader configured."
}

```

POST

/sep/api/v2/loaders/persist

Minimum required role: Super user

Since: Jaglion

Persists a loader. If no loader with the given name exists, a new loader will be created. Otherwise, the properties of an existing loader are updated.

#### Parameters

The loader is passed in as JSON object in the body of the request. The properties of an loader are described above.

#### Responses

Response Code and Content	Description
200 Loader JSON object	The created or updated loader is returned in the response body.

#### Examples

Persists the loader with the ID "3":

```

POST /sep/api/v2/loaders/persist
{
  "id": 3,
  "device": "/dev/tape/by-id/scsi-SSTK_L80_XYZZY_C",
  "clientId": 0,
  "name": "My New Loader",
  "loaderType": "STK_L80_0105",
  "ctrl": "DIR_SLU",
  "slots": 20,
  "maxSlots": 50,
  "ports": 8,
  "autounload": false,
  "barcode": true,
  "usercomment" : "A new loader configured."
}

```

```

}

Response:
{
  "id": 3,
  "device": "/dev/tape/by-id/scsi-SSTK_L80_XYZZY_C",
  "clientId": 0,
  "name": "My New Loader",
  "loaderType": "STK_L80_0105",
  "ctrl": "DIR_SLU",
  "slots": 20,
  "maxSlots": 50,
  "ports": 8,
  "autounload": false,
  "barcode": true,
  "usercomment": "A new loader configured."
}

```

**POST**`/sep/api/v2/loaders/delete`

Minimum required role: Administrator

Since: Jaglion

Deletes a loader.

Parameters

The unique ID of the loader is passed in as JSON number in the body of the request.

Responses

Response Code and Content	Description
200 <b>id</b> Long	The unique ID of the deleted loader is returned in the response body. If no loader existed with the given ID, then null is returned.

Examples

Deletes the loader with the ID 3 (exists):

```

POST /sep/api/v2/loaders/delete
3

Response:
3

```

**POST**`/sep/api/v2/loaders/deleteByEntity`

Minimum required role: Administrator

Since: Jaglion

Deletes the loader matching the given entity.

Parameters

The entity to match is passed in the body of the request as JSON object. The only required entity property is the primary key of the entity.

## Responses

---

Response Code and Content	Description
200 ID Long	The ID of loader is returned in the response body.

## Examples

---

Delete the loader with the ID "17":

```
POST /sep/api/v2/loaders/deleteByEntity
{ "id": 17 }
```

```
Response:
17
```

**POST**

/sep/api/v2/loaders/start

Minimum required role: Administrator

Since: Jaglion

Starts a loader action. The type of the loader action and the parameters of the action are passed in to the end point via the loader action DTO.

A loader action DTO is an object with the following properties:

Name	Description
<b>action</b> *required String	The loader action to execute. Valid values are 'LOAD', 'UNLOAD', 'IMPORT' and 'EXPORT'.
<b>id</b> *required Long	The unique ID of the loader to execute the loader action for.
<b>slot</b> String	The loader slot to use.
<b>driveNum</b> Long	The number of the loader drive to use. Valid only if the loader action is either 'LOAD' or 'UNLOAD'.
<b>port</b> String	The loader port range to use. Valid only if the loader action is either 'IMPORT' or 'EXPORT'.

## Parameters

---

The loader action DTO is passed in as JSON object in the body of the request.

## Responses

---

Response Code and Content	Description
200 Loader JSON object	The loader object of the loader where the loader action where started, is returned in the response body.

## Examples

---

Load the media from slot 1 to drive 0 for the loader with the ID 0:

```
POST /sep/api/v2/loaders/start
{ "action": "LOAD", "id": 0, "slot": "1", "driveNum": 0 }
```

Response:

```
{
  "id": 0,
  "device": "VIRTUAL_ROBOT",
  "clientId": 0,
  "loaderType": "DISK_HARD",
  "ctrl": "DIR_VIRT",
  "slots": 0,
  "drives": 0,
  "autounload": false,
  "barcode": false
}
```

### 3.25. Locations Service

The locations services provides access to the location objects. Location objects are the first level objects for building a topology.

A location is an object with the following properties:

Name	Description
<b>id</b> * required Long	The unique ID of the location.
<b>name</b> * required String	The name of the location. The maximum length of the name is 50 characters. The name can contain only letters, digits, '-', '_' and the space character.
<b>displayLabel</b> String	The label to display to users. The 'displayLabel' property contains the full location hierarchy.
<b>parentId</b> Long	The unique ID of the parent location. If 'null', then the location is a top level location.
<b>describe</b> String	The description of the location. The maximum length of the description is 128 characters.
<b>contact</b> String	The owner or maintainer of this location. The maximum length of the contact is 128 characters.
<b>osUser</b> String	The user name to be used when installing or updating the Sesam client on clients being associated with the location. This field is deprecated. Use the 'osCredentialId' field instead. The maximum length of the user name is 255 characters.
<b>osPassword</b> String	The password to be used when installing or updating the Sesam client on clients being associated with the location. This field is deprecated.
<b>osCredentialId</b> Long	The id of the credentials set to use when installing or updating the Sesam client on clients being associated with the location.
<b>osCredentialUuid</b> String	The UUID of the credentials set to use when installing or updating the Sesam client on clients being associated with the location. Reserved for future use. The maximum length of the credentials set UUID is 40 characters.
<b>sepcomment</b> String	The last Sesam system message. The maximum length of the Sesam system message is 1024 characters.
<b>usercomment</b> String	The comment or note from the user. The maximum length of the user comment is 1024 characters.
<b>dateCreated</b> Date	The date when the location got created.
<b>dateChanged</b> Date	The date when the location got changed the last time.
<b>changedBy</b> String	The user who created or changed the location the last time.

#### Examples

The location with the unique object ID 0:

```
{
  "id": 0,
  "name": "LOCAL",
  "sepcomment": "comment",
  "usercomment": "another comment",
  "displayLabel": "LOCAL",
}
```

Following methods are provided by the location service:

GET

/sep/api/v2/locations

Minimum required role: None

Since: Beefalp

Get all locations.

The response body contains the list of locations encoded as JSON objects. The properties of the location object are described above.

#### Responses

Response Code and Content	Description
200 Locations array[JSON object]	The locations are returned in the response body.

#### Examples

Get all locations:

```
GET /sep/api/v2/locations
```

```
Response:
```

```
[
  {
    "id": 0,
    "name": "LOCAL",
    "sepcomment": "comment",
    "usercomment": "another comment",
    "displayLabel": "LOCAL",
  },
  {
    "id": 1,
    "name": "Eins",
    "parentId": 0,
    "displayLabel": "LOCAL/Eins",
  },
  ...
]
```

GET

/sep/api/v2/locations/&lt;id&gt;

Minimum required role: None

Since: Beefalo

Get the location matching the given ID.

The response body contains the location encoded as JSON object. The properties of the location object are described above.

#### Responses

Response Code and Content	Description
200 Location JSON object	The location is returned in the response body.

## Examples

---

Get the location with the ID 0:

```
GET /sep/api/v2/locations/0

Response:
{
  "id": 0,
  "name": "LOCAL",
  "sepcomment": "comment",
  "usercomment": "another comment",
  "displayLabel": "LOCAL",
}
```

**POST**

/sep/api/v2/locations/find

Minimum required role: None

Since: Beefalo

Search for locations matching the specified filter parameters.

## Parameters

---

The filter configuration is passed in as JSON object in the body of the request. The following JSON object properties are defined:

Name	Description
<b>parent</b> Long	The ID of the parent location.

## Responses

---

Response Code and Content	Description
<b>200</b> <b>Locations</b> array[JSON object]	The matching locations are returned in the response body.

## Examples

---

Get all locations with the parent ID '0':

```
POST /sep/api/v2/locations/find
{ "parent" : 0 }

Response:
[
  {
    "id": 1,
    "name": "Eins",
    "parentId": 0,
    "displayLabel": "Eins",
  }
]
```

POST

/sep/api/v2/locations/create

Minimum required role: Administrator

Since: Beefalo

Creates a new location. If an ID is given, the location will be created with the given ID. If a location with the given ID already exists, the call will fail. If no ID is given, the location is automatically assigned the next free ID (maximum ID + 1).

### Parameters

The location is passed in as JSON object in the body of the request. The properties of the location are described above.

### Responses

Response Code and Content	Description
<b>200</b> <b>Location</b> JSON object	The newly created location is returned in the response body.

### Examples

Creates a new location:

```
POST /sep/api/v2/locations/create
{ "name" : "my_new_location", "parentId" : 0, "usercomment" : "My newly created location" }

Response:
{
  "id": 15,
  "name": "my_new_location",
  "parentId": 0,
  "usercomment": "My newly created location",
  "displayLabel": "LOCAL/my_new_location"
}
```

Creates a new location with an existing ID:

```
POST /sep/api/v2/locations/create
{ "id": 2, "name" : "my_new_location", "parentId" : 0, "usercomment" : "My newly created location" }

Response:
{
  "error": "duplicate.pk",
  "message": "The primary key ('2') is not unique.",
  "header": "Illegal Parameter",
  "parameter": [
    "2"
  ],
  "type": "ILLEGAL_PARAMETER",
  "url": "/sep/api/v2/locations/create"
}
```



POST

/sep/api/v2/locations/update

Minimum required role: Administrator

Since: Beefalo

Updates a location. A location with the given ID, name or path must exist, otherwise the call will fail.

The end-point will look up the original location object by the given ID, name or path. If found, the original location object is updated with any non-null property from the passed in location object. That means that only the changed properties needs to be present in the given location object.

#### Parameters

The location is passed in as JSON object in the body of the request. The properties of the location are described above.

#### Responses

Response Code and Content	Description
200 Location JSON object	The updated location is returned in the response body.

#### Examples

Updates the location with ID 15:

```
POST /sep/api/v2/locations/update
{ "id": 15, "describe": "Special Location" }

Response:
{
  "id": 15,
  "name": "my_new_location",
  "parentId": 0,
  "describe": "Special Location",
  "usercomment": "My newly created location",
  "displayLabel": "LOCAL/my_new_location",
}
```

POST

/sep/api/v2/locations/persist

Minimum required role: Super user

Since: Jaglion

Persists a location. If no location with the given name exists, a new location will be created. Otherwise, the properties of an existing location are updated.

#### Parameters

The location is passed in as JSON object in the body of the request. The properties of an location are described above.

#### Responses

Response Code and Content	Description
200 Location JSON object	The created or updated location is returned in the response body.

## Examples

---

Persists the location with the ID "15":

```
POST /sep/api/v2/locations/persist
{ "id": 15, "describe": "Special Location" }

Response:
{
  "id": 15,
  "name": "my_new_location",
  "parentId": 0,
  "describe": "Special Location",
  "usercomment": "My newly created location",
  "displayLabel": "LOCAL/my_new_location",
}
```

**POST**

/sep/api/v2/locations/delete

Minimum required role: Administrator

Since: Beefalo

Deletes a location.

## Parameters

---

The unique ID of the location is passed in as JSON number in the body of the request.

## Responses

---

Response Code and Content	Description
<b>200</b> <b>id</b> Long	The unique ID of the deleted location is returned in the response body. If no location existed with the given ID, then null is returned.

## Examples

---

Deletes the location with the ID 15 (exists):

```
POST /sep/api/v2/locations/delete
15

Response:
15
```

Deletes the location with the ID 99 (does not exist):

```
POST /sep/api/v2/locations/delete
99

Response:
null
```

POST

`/sep/api/v2/locations/deleteByEntity`

Minimum required role: Administrator

Since: Jaglion

Deletes the interface matching the given entity.

#### Parameters

The entity to match is passed in the body of the request as JSON object. The only required entity property is the primary key of the entity.

#### Responses

Response Code and Content	Description
200 ID Long	The ID of the location is returned in the response body.

#### Examples

Delete the location with the ID "17":

```
POST /sep/api/v2/locations/deleteByEntity
{ "is": 17 }

Response:
17
```

POST

`/sep/api/v2/locations/<locationID>/deleteForced`

Minimum required role: Administrator

Since: Jaglion

Deletes a location that still has children, if the location itself still has a parent.

#### Parameters

The unique ID of the location is passed in the URL. The delete options are passed in as JSON object in the body of the request. The following JSON object properties are defined:

Name	Description
<b>forceRemoveData</b> Boolean	Flag to indicate if all related data shall be removed together with the location.

#### Responses

Response Code and Content	Description
200 id Long	The unique ID of the deleted location is returned in the response body. If no location existed with the given ID, then null is returned.

#### Examples

Deletes the location with the ID 15 (exists):

```
POST /sep/api/v2/locations/15/deleteForced
{ "forceRemoveData": "false" }
```

Response:  
15

Deletes the location with the ID 99 (does not exist):

```
POST /sep/api/v2/locations/15/deleteForced
{ "forceRemoveData": "false" }
```

Response:  
null

**POST**

/sep/api/v2/locations/resolveLocationToId

Minimum required role: None

Since: Beefalo

Resolves a given location ID, name or path to an ID. If the ID, name or path cannot be resolved to an existing location, 'null' is returned.

#### Parameters

The ID, name or path to resolve is passed in as JSON string in the body of the request.

#### Responses

Response Code and Content	Description
200 ID Long	The resolved location ID is returned in the response body.

#### Examples

Resolve the location ID '2':

```
POST /sep/api/v2/locations/resolveLocationToId
"2"
```

Response:  
2

Resolve the location name 'Zwei':

```
POST /sep/api/v2/locations/resolveLocationToId
"Zwei"
```

Response:  
2

Resolve the location path 'LOCAL/Eins/Zwei':

```
POST /sep/api/v2/locations/resolveLocationToId  
"LOCAL/Eins/Zwei"
```

Response:  
2

### 3.26. Logs Service

The logs services allows to send log messages to the server which are stored in one of the REST server log files.

A log message is an object with the following properties:

Name	Description
<b>level</b> * required String	The log level. Valid values are 'TRACE', 'DEBUG', 'INFO', 'WARN' and 'ERROR'.
<b>message</b> * required String	The message to log.

Following methods are provided by the logs service:

<b>POST</b>	<code>/sep/api/v2/logs/store</code>	Since: Jaglion
Minimum required role: None		

Stores a log message on the server.

#### Parameters

The log message is passed in as JSON object in the body of the request. The properties of the log message object are described above.

#### Responses

Response Code and Content	Description
<b>200</b> <b>Success</b> Boolean	The success is returned in the response body.

#### Examples

Deletes the location with the ID 15 (exists):

```
POST /sep/api/v2/logs/store
{ "level": "INFO", "message": "A log message via REST" }
```

```
Response:
true
```

### 3.27. Media Service

The media service provides access to the media. Media are used by data stores or loaders, via media pools, to store data to or to read data from.

A media is an object with the following properties:

Name	Description
<b>name</b> * required String	The name of the media. The maximum length of the name is 30 characters. The name can contain only letters, digits, the '-' and the '_' character.
<b>label</b> String	The custom label to show to the user instead of the name.
<b>barcode</b> String	The media barcode. The maximum length of the barcode is 30 character.
<b>poolName</b> * required String	The name of the media pool the media is associated with.
<b>idNum</b> * required Long	The media ID.
<b>externalId</b> Long	The media external ID.
<b>locked</b> * required String	The media lock type. Valid values are 'UNLOCKED', 'LOCKED' and 'DEPRECATED'.
<b>sesamDate</b> * required Date	The sesam date.
<b>eol</b> Date	The date and time when the data stored on the media expires.
<b>eolChangedBy</b> String	The name or ID of the entity which has forced a change of the media EOL last.
<b>eolChangedByUser</b> String	The user which changed the backup end-of-life date last. The maximum length of the user is 255 character.
<b>eolChangedByMsg</b> String	The message set when the backup end-of-life date changed last. The maximum length of the message is 254 character.
<b>driveNum</b> Long	The number of the loader drive the media loaded to.
<b>initDrive</b> Long	The number of the loader drive to use when initializing the media.
<b>sequence</b> Long	The sequence number.
<b>previousLabel</b> String	The label of the previous media used, in case a backup stored on the media is also partly stored on other media. The maximum length of the previous label is 30 character.
<b>nextLabel</b> String	The label of the next media used, in case a backup stored on the media is also partly stored on other media. The maximum length of the next label is 30 character.
<b>mediaType</b> * required String	The media type. Valid values are defined in the media types table of the database.
<b>loaderNum</b> Long	The unique ID of the loader the media is associated with.
<b>slot</b> Long	The loader slot ID the media is associated with.
<b>capacity</b> Long	The capacity of the media in bytes.
<b>free</b> Long	The amount of free space available on the media in bytes.
<b>filled</b> Double	The amount of stored data on the media in bytes.
<b>eomState</b> Boolean	Flag to indicate the EOM state of the media.
<b>firstInit</b>	The date and time of the first media initialization.

Name	Description
Date	
<b>lastInit</b> Date	The date and time of the last media initialization.
<b>closeTape</b> Boolean	Flag to indicate if the media will be closed.
<b>initFlag</b> Boolean	Flag to indicate if the media will be initialized.
<b>error</b> Long	The error count.
<b>errorDelta</b> Long	The error count delta.
<b>useCount</b> Long	The use count.
<b>location</b> String	The name of the datastore the media is associated with.
<b>duplFlag</b> Boolean	Flag to indicate if duplication is enabled.
<b>sepcomment</b> String	The comment or note from Sesam. The maximum length of the system message is 1024 character.
<b>purgeFlag</b> Boolean	Flag to indicate if purge is enabled.
<b>usercomment</b> String	The comment or note from the user. The maximum length of the user comment is 1024 character.
<b>readcheckState</b> String	The media read check state. Valid values are 'ACTION_FAILED', 'ACTIVE', 'CANCELED', 'ERROR', 'FAILED', 'LOAD_FAILED', 'NON_REQUESTED', 'OK', 'PAST_DUE', 'PURGE', 'QUEUED', 'SUCCESSFUL', 'TIMEOUT', 'UNREAD' and 'WARNING'.
<b>readcheckMsg</b> String	The read check system message. The maximum length of the read check system message is 254 character.
<b>cryptKeyMedia</b> String	The backup media encryption key. The maximum length of the encryption key is 128 characters.
<b>cryptHashBase64Media</b> String	The backup media encryption hash. The maximum length of the encryption hash is 180 characters.
<b>cryptFlagMedia</b> String	Flag to indicate if the backup media will be encrypted. Valid values are 'a' (AES256) or 'b' (Blowfish64).
<b>encryptionCapable</b> Boolean	Flag to indicate if the media supports encryption.
<b>containsEncryptedBlocks</b> Boolean	Flag to indicate if the media contains any encrypted block.
<b>uniqueCartridgeIdentity</b> String	The unqique cartridge identity. The maximum length of the cartridge identity is 132 character.
<b>serialNumber</b> String	The backup media serial number. The maximum length of the serial number is 128 characters.

Following methods are provided by the media service:

GET

/sep/api/v2/media

Minimum required role: None

Since: Jaglion

Get all media.

The response body contains the list of media encoded as JSON objects. The properties of the media object are described above.



## Responses

---

Response Code and Content	Description
<b>200</b> <b>Media</b> array[JSON object]	The media are returned in the response body.

## Examples

---

Get all media:

```
GET /sep/api/v2/media
```

Response:

```
[
  {
    "name": "s3-cloud1-clone00007",
    "poolName": "s3-cloud1-clone",
    "idNum": 7,
    "externalId": 20201222130924737,
    "locked": "UNLOCKED",
    "sesamDate": 1608591600000,
    "eol": 1609502964000,
    "driveNum": 10,
    "mediaType": "DISK-STORE",
    "readcheckState": "NON_REQUESTED",
    "cryptFlagMedia": false,
    ...
  },
  {
    "name": "Loader200020",
    "barcode": "G03020L6",
    "poolName": "my-sesam-host",
    "idNum": 20,
    "locked": "UNLOCKED",
    "sesamDate": 1503698400000,
    "eol": 1588283999000,
    "eolChangedby": "RF2017082622004452@cdmzW9cOwz - ",
    "driveNum": 6,
    "sequence": 1,
    "previousLabel": "Loader200002",
    "nextLabel": "Loader200021",
    "mediaType": "LTO_Tape",
    "loaderNum": 1,
    "slot": 19,
    ...
  },
  ...
]
```

**GET**

/sep/api/v2/media/<name>

Minimum required role: None

Since: Jaglion

Get the media matching the given name.

The response body contains the media encoded as JSON object. The properties of the media object are described above.

## Responses

Response Code and Content	Description
200 <b>Media</b> JSON object	The media is returned in the response body.

## Examples

Get the media with the name 's3-cloud1-clone00007':

```
GET /sep/api/v2/media/s3-cloud1-clone00007
```

Response:

```
{
  "name": "s3-cloud1-clone00007",
  "poolName": "s3-cloud1-clone",
  "idNum": 7,
  "externalId": 20201222130924737,
  "locked": "UNLOCKED",
  "sesamDate": 1608591600000,
  "eol": 1609502964000,
  "driveNum": 10,
  "mediaType": "DISK-STORE",
  "readcheckState": "NON_REQUESTED",
  "cryptFlagMedia": false,
  ...
}
```

**POST**

/sep/api/v2/media/find

Minimum required role: None

Since: Jaglion

Search for media matching the specified filter parameters.

## Parameters

The filter configuration is passed in as JSON object in the body of the request. The following JSON object properties are defined:

Name	Description
<b>loader</b> array[Long]	An array of loader IDs to match.
<b>pool</b> array[String]	An array of media pool names to match.
<b>driveNum</b> Long	The loader drive ID to match.
<b>location</b> String	The datastore name to match.
<b>resultDay</b> Date	The date when a backup has been written to the media.
<b>locked</b> array[String]	An array of locked states to match.
<b>readcheckState</b> array[String]	An array of read check states to match.
<b>eol</b> array[Date]	An array of one or two date/time strings. The first element in the array represents the beginning of the date/time range (<from>) and the second element in the array represents the end of the date/time range (<to>). Either <from> or <to> can be null,

Name	Description
<b>filterDatastoreMedia</b> Boolean	but one of them has to be not null. The presence of the two values controls the condition generated. <ul style="list-style-type: none"> <li>• If both values are specified, than the condition will be generated as date range (between "&lt;from&gt;" and "&lt;to&gt;").</li> <li>• If both values are specified and "&lt;to&gt;" is null, the condition will be generated as greater or equal than "&lt;from&gt;".</li> <li>• If both values are specified and "&lt;from&gt;" is null, the condition will be generated as less or equal than "&lt;to&gt;".</li> </ul>
<b>current</b> Boolean	If only one value is specified (array length = 1), than the condition is generated as equals. Flag to indicate if datastore media are filtered from the result set.
<b>filterDeprecated</b> Boolean	Flag to indicate to include currently usable media in the result list. Flag to indicate if deprecated media are filtered from the result set.

## Responses

Response Code and Content	Description
<b>200</b> <b>Media</b> array[JSON object]	The matching media are returned in the response body.

## Examples

Get all media associated with the loader with ID 1:

```

POST /sep/api/v2/media/find
{ "loader" : [ 1 ] }

Response:
[
  {
    "name": "Loader200002",
    "barcode": "G03002L6",
    "poolName": "my-sesam-host",
    "idNum": 2,
    "locked": "LOCKED",
    "sesamDate": 1503698400000,
    "eol": 1588283999000,
    "eolChangedby": "RF20170826220004452@cdmzW9cOwz-",
    "driveNum": 6,
    "sequence": 1,
    "previousLabel": "Loader200001",
    "nextLabel": "Loader200020",
    "mediaType": "LTO_Tape",
    ...
  },
  {
    "name": "Loader200003",
    "barcode": "G03003L6",
    "poolName": "my-sesam-host",
    "idNum": 3,
    "locked": "UNLOCKED",
    ...
  },
  ...
]

```

]

**POST**`/sep/api/v2/media/create`

Minimum required role: Administrator

Since: Jaglion

Creates a new media.

#### Parameters

The medium is passed in as JSON object in the body of the request. The properties of the medium are described above.

#### Responses

Response Code and Content	Description
<b>200</b> <b>Medium</b> JSON object	The newly created medium is returned in the response body.

#### Examples

Creates a new medium:

```

POST /sep/api/v2/media/create
{
  "name": "Loader200999",
  "barcode": "G03002L6",
  "poolName": "my-sesam-host",
  "idNum": 999,
  "locked": "UNLOCKED",
  "sesamDate": 1503698400000,
  "mediaType": "LTO_Tape",
  "loaderNum": 1,
  "slot": 999
}

Response:
{
  "name": "Loader200999",
  "barcode": "G03002L6",
  "poolName": "my-sesam-host",
  "idNum": 999,
  "locked": "UNLOCKED",
  "sesamDate": 1503698400000,
  "mediaType": "LTO_Tape",
  "loaderNum": 1,
  "slot": 999,
  "filled": 0.0
}

```

**POST**`/sep/api/v2/media/update`

Minimum required role: Administrator

Since: Jaglion

Updates a medium. A medium with the given name must exist, otherwise the call will fail.

## Parameters

---

The media is passed in as JSON object in the body of the request. The properties of the media are described above.

## Responses

---

Response Code and Content	Description
200 Medium JSON object	The updated medium is returned in the response body.

## Examples

---

Updates the medium with the name 'Loader200999' and set a new user comment:

```

POST /sep/api/v2/media/update
{
  "name": "Loader200999",
  "barcode": "G03002L6",
  "poolName": "my-sesam-host",
  "idNum": 999,
  "locked": "UNLOCKED",
  "sesamDate": 1503698400000,
  "mediaType": "LTO_Tape",
  "loaderNum": 1,
  "slot": 999,
  "filled": 0.0,
  "usercomment": "A media just added"
}

Response:
{
  "name": "Loader200999",
  "barcode": "G03002L6",
  "poolName": "my-sesam-host",
  "idNum": 999,
  "locked": "UNLOCKED",
  "sesamDate": 1503698400000,
  "mediaType": "LTO_Tape",
  "loaderNum": 1,
  "slot": 999,
  "filled": 0.0,
  "usercomment": "A media just added"
}

```

**POST**

/sep/api/v2/media/persist

Minimum required role: Super user

Since: Jaglion

Persists a medium. If no medium with the given name exists, a new medium will be created. Otherwise, the properties of an existing medium are updated.

## Parameters

---

The medium is passed in as JSON object in the body of the request. The properties of a medium are described above.

## Responses

---

Response Code and Content	Description
200 Medium JSON object	The created or updated medium is returned in the response body.

Examples

Persists the medium with the name "Loader200999":

```

POST /sep/api/v2/media/update
{
  "name": "Loader200999",
  "barcode": "G03002L6",
  "poolName": "my-sesam-host",
  "idNum": 999,
  "locked": "UNLOCKED",
  "sesamDate": 1503698400000,
  "mediaType": "LTO_Tape",
  "loaderNum": 1,
  "slot": 999,
  "filled": 0.0,
  "usercomment": "A media just added"
}

Response:
{
  "name": "Loader200999",
  "barcode": "G03002L6",
  "poolName": "my-sesam-host",
  "idNum": 999,
  "locked": "UNLOCKED",
  "sesamDate": 1503698400000,
  "mediaType": "LTO_Tape",
  "loaderNum": 1,
  "slot": 999,
  "filled": 0.0,
  "usercomment": "A media just added"
}
    
```

**POST** /sep/api/v2/media/delete

Minimum required role: Administrator

Since: Jaglion

Deletes a media.

Parameters

The unique name of the media is passed in as JSON number in the body of the request.

Responses

Response Code and Content	Description
200 Name String	The unique name of the deleted media is returned in the response body. If no media existed with the given name, then null is returned.

Examples

---

Deletes the media with the name 'Loader200999' (exists):

```
POST /sep/api/v2/media/delete
"Loader200999"

Response:
"Loader200999"
```

**POST** /sep/api/v2/locations/deleteByEntity Since: Jaglion  
 Minimum required role: Administrator

Deletes the medium matching the given entity.

Parameters

---

The entity to match is passed in the body of the request as JSON object. The only required entity property is the primary key of the entity.

Responses

---

Response Code and Content	Description
200 Name String	The name of the medium is returned in the response body.

Examples

---

Delete the medium with the name "my\_medium":

```
POST /sep/api/v2/media/deleteByEntity
{ "name": "my_medium" }

Response:
"my_medium"
```

**POST** /sep/api/v2/media/<name>/deleteForced Since: Jaglion  
 Minimum required role: Administrator

Deletes a media with all metadata and reinitializes tape if necessary.

Parameters

---

The unique name of the media is passed in the URL. The delete options are passed in as JSON object in the body of the request. The following JSON object properties are defined:

Name	Description
------	-------------

Name	Description
<b>forceRemoveData</b> Boolean	Flag to indicate if all related data shall be removed together with the media.
<b>initialize</b> Boolean	Flag to indicate if the media shall be re-initialized.

Responses

Response Code and Content	Description
<b>200</b> <b>Name</b> String	The unique name of the media to be deleted is returned in the response body. If no media existed with the given name, then null is returned.

Examples

Deletes the media with the name 'Loader200999' and re-initializes the tape:

```
POST /sep/api/v2/media/Loader200999/deleteForced
{ "initialize" : "true" }

Response:
"Loader200999"
```

POST
/sep/api/v2/media/initialize

---

Minimum required role: Administrator
Since: Jaglion

Initialize a media. The media initialization action parameter are passed in to the end point via the media initialization action DTO.

A media initialization action DTO is an object with the following properties:

Name	Description
<b>driveNum</b> *required Long	The number of the loader drive to use.
<b>poolName</b> *required String	The name of the media pool to use.
<b>action</b> String	The media initialization action. Valid values are 'TAKE' and 'OVER'.
<b>options</b> String	The media initialization options
<b>label</b> *required String	The media label to use.
<b>mediaType</b> *required String	The media type.
<b>format</b> String	The format used on the media. Valid values are 'mtf' and 'cpio'.
<b>barCode</b> String	The barcode.
<b>storagePoolLocation</b> String	The storage pool location.



## Parameters

---

The loader action DTO is passed in as JSON object in the body of the request.

## Responses

---

Response Code and Content	Description
200 Exit Code Long	The exit code of the called 'sm_arch' sub process is returned in the response body.

## Examples

---

Initialize a new media for media pool 'my-media-pool':

```
POST /sep/api/v2/media/initialize
{ "poolName": "my-media-pool", "driveNum": 2, "action": "TAKE", "label": "Loader1000200", "mediaType" : "LTO-
Tape" }
```

```
Response:
0
```

### 3.28. Media Pool Events Service

The media pool event services provides access to the media pool event objects, which are associated with a schedule and a media pool.

A media pool event is an object with the following properties:

Name	Description
<b>id</b> * required String	The unique ID of the media pool event.
<b>name</b> String	The name of the media pool event. The maximum length of the name is 255 characters. The name can contain only letters, digits, the '-' and the '_' character.
<b>poolName</b> * required String	The name of the associated media pool. The maximum length of the media pool name is 16 character.
<b>exec</b> Boolean	Flag to indicate if the media pool event is enabled for execution.
<b>eol</b> Long	The retention time in days.
<b>scheduleName</b> String	The name of the schedule the media pool event is associated with. The maximum length of the schedule name is 30 character.
<b>priority</b> Long	The priority of the media pool event.
<b>suppress</b> Boolean	Flag to indicate if the media pool event is a blocking event.
<b>followUp</b> String	The follow up actions to execute when the media pool event finished successfully. The maximum length of the follow up is 1024 character.
<b>owner</b> * required String	The media pool event owner. The maximum length of the media pool event owner is 30 character.
<b>grpFlag</b> * required Boolean	Flag to indicate of the media action is executed for the whole media pool (true) or for a given drive (false).
<b>action</b> String	The media action to execute. Valid values are 'BALANCE', 'CHECK', 'CHECKSPACE', 'CHECK_DATA_FILES', 'CLOSETAPE', 'ENDOFMEDIA', 'EMPTY_TRASH', 'FSCK', 'INITIALIZE', 'INTRODUCE', 'INVENTORY', 'PURGE', 'READCHECK', 'RECLAIMSPACE', 'RECOVER', 'REMOVE', 'RESTORE', 'SETWRITEPROTECT', 'SHREDDER', 'SEED', 'SYNC', 'UNLOAD' and 'UNSETWRITEPROTECT'.
<b>driveNum</b> Long	The unique ID of the drive to execute the media action for. If set, 'grpFlag' has to be set to false.
<b>mcount</b> Long	The media count.
<b>label</b> String	The media label. The maximum length of the media label is 1024 character.
<b>loaderNum</b> Long	The unique ID of the loader to use.
<b>slotRange</b> String	The loader slot range to use. The maximum length of the loader slot range is 128 character.
<b>emergency</b> String	The emergency indicator. The maximum length of the emergency indicator is 30 character.
<b>initFlags</b> String	The initialization flags. The maximum length of the initialization flags is 32 character.
<b>checkFlag</b> String	Flag to indicate the check operation to execute. Valid values are 'CHECK_LABEL_ON_TAPE' and 'ADJUSTMENT_BY_BARCODE_ONLY'.
<b>mediaType</b> String	The media type. The maximum length of the media type is 20 character.
<b>options</b> String	The execution options. The maximum length of the execution options is 255 character.
<b>sepcomment</b> String	The comment or note from Sesam. The maximum length of the system message is 1024 character.

Name	Description
<b>usercomment</b> String	The comment or note from the user. The maximum length of the user comment is 1024 character.
<b>immediateFlag</b> Boolean	Flag to indicate if the media pool event has to be started immediately.

Following methods are provided by the media pools events service:

GET

/sep/api/v2/mediapooevents

Minimum required role: None

Since: Jaglion

Get all media pool events.

The response body contains the list of media pool events encoded as JSON objects. The properties of the media pool events object are described above.

#### Responses

Response Code and Content	Description
<b>200</b> <b>Media Pool Events</b> array[JSON object]	The media pool events are returned in the response body.

#### Examples

Get all media pool events:

```
GET /sep/api/v2/mediapooevents

Response:
[
  {
    "id": "20191224140007668",
    "poolName": "my-media-pool",
    "exec": true,
    "scheduleName": "Daily-2200",
    "priority": 1,
    "suppress": false,
    "owner": "myself",
    "grpFlag": false,
    "action": "INITIALIZE",
    "driveNum": 15,
    "mcount": 1
  },
  ...
]
```

GET

/sep/api/v2/mediapooevents/&lt;id&gt;

Minimum required role: None

Since: Jaglion

Get the media pool event matching the given ID.

The response body contains the media pool event encoded as JSON object. The properties of the media pool events object are described above.

## Responses

Response Code and Content	Description
200 <b>Media Pool Event</b> JSON object	The media pool event is returned in the response body.

## Examples

Get the media pool event with the unique ID '20191224140007668':

```
GET /sep/api/v2/mediapoolevents/20191224140007668
```

Response:

```
{
  "id": "20191224140007668",
  "poolName": "my-media-pool",
  "exec": true,
  "scheduleName": "Daily-2200",
  "priority": 1,
  "suppress": false,
  "owner": "myself",
  "grpFlag": false,
  "action": "INITIALIZE",
  "driveNum": 15,
  "mcount": 1
}
```

**POST**

/sep/api/v2/mediapoolevents/find

Minimum required role: None

Since: Jaglion

Search for media pool events matching the specified filter parameters.

## Parameters

The filter configuration is passed in as JSON object in the body of the request. The following JSON object properties are defined:

Name	Description
<b>id</b> Long	The unique id of the event to match.
<b>poolName</b> String	The name of the associated media pool to match.
<b>scheduleName</b> String	The name of the associated schedule to match.

## Responses

Response Code and Content	Description
200 <b>Media Pool Events</b> array[JSON object]	The matching media pool events are returned in the response body.

## Examples

---

Get all media pool events for the media pool 'my-media-pool':

```
POST /sep/api/v2/mediapoolevents/find
{ "poolName": "my-media-pool" }
```

Response:

```
[
  {
    "id": "20191224140007668",
    "poolName": "my-media-pool",
    "exec": true,
    "scheduleName": "Daily-2200",
    "priority": 1,
    "suppress": false,
    "owner": "myself",
    "grpFlag": false,
    "action": "INITIALIZE",
    "driveNum": 15,
    "mcount": 1
  },
  ...
]
```

**POST**

/sep/api/v2/mediapoolevents/create

Minimum required role: Administrator

Since: Jaglion

Creates a new media pool event.

### Parameters

---

The media pool event is passed in as JSON object in the body of the request. The properties of the media pool event are described above.

### Responses

---

Response Code and Content	Description
<b>200</b> <b>Media Pool Event</b> JSON object	The newly created media pool event is returned in the response body.

## Examples

---

Creates a new media pool event:

```
POST /sep/api/v2/mediapoolevents/create
{
  "poolName": "my-media-pool",
  "scheduleName": "Daily-2200",
  "owner": "myself",
  "grpFlag": false,
  "action": "PURGE",
  "driveNum": 15
}
```

Response:

```
{
  "id": "20210624081228085",
```

```

"name": "my-media-pool_Daily-2200-20210624081228085",
"poolName": "my-media-pool",
"exec": true,
"scheduleName": "Daily-2200",
"priority": 1,
"suppress": false,
"owner": "myself",
"grpFlag": false,
"action": "PURGE",
"driveNum": 15,
"immediateFlag": false
}

```

**POST**

/sep/api/v2/mediapoolevents/update

Minimum required role: Administrator

Since: Jaglion

Updates a media pool event. A media pool event with the given ID must exist, otherwise the call will fail.

## Parameters

The media pool event is passed in as JSON object in the body of the request. The properties of the media pool event are described above.

## Responses

Response Code and Content	Description
<b>200</b> <b>Media Pool Event</b> JSON object	The updated media pool event is returned in the response body.

## Examples

Sets a new comment for the media pool event with the ID '20210624081228085':

```

POST /sep/api/v2/mediapoolevents/update
{
  "id": "20210624081228085",
  "name": "my-media-pool_Daily-2200-20210624081228085",
  "poolName": "my-media-pool",
  "exec": true,
  "scheduleName": "Daily-2200",
  "priority": 1,
  "suppress": false,
  "owner": "myself",
  "grpFlag": false,
  "action": "PURGE",
  "driveNum": 15,
  "immediateFlag": false,
  "usercomment": "Newly set comment"
}

Response:
{
  "id": "20210624081228085",
  "name": "my-media-pool_Daily-2200-20210624081228085",
  "poolName": "my-media-pool",
  "exec": true,
  "scheduleName": "Daily-2200",
  "priority": 1,
  "suppress": false,

```

```

"owner": "myself",
"grpFlag": false,
"action": "PURGE",
"driveNum": 15,
"usercomment": "Newly set comment",
"immediateFlag": false
}

```

POST

/sep/api/v2/mediapoolevents/persist

Minimum required role: Super user

Since: Jaglion

Persists a media pool event. If no media pool event with the given ID exists, a new media pool event will be created. Otherwise, the properties of an existing media pool event are updated.

### Parameters

The media pool event is passed in as JSON object in the body of the request. The properties of a media pool event are described above.

### Responses

Response Code and Content	Description
200 Media Pool Event JSON object	The created or updated media pool event is returned in the response body.

### Examples

Persists the media pool event with the ID "20210624081228085":

```

POST /sep/api/v2/mediapoolevents/persist
{
  "id": "20210624081228085",
  "name": "my-media-pool_Daily-2200-20210624081228085",
  "poolName": "my-media-pool",
  "exec": true,
  "scheduleName": "Daily-2200",
  "priority": 1,
  "suppress": false,
  "owner": "myself",
  "grpFlag": false,
  "action": "PURGE",
  "driveNum": 15,
  "immediateFlag": false,
  "usercomment": "Newly set comment"
}

Response:
{
  "id": "20210624081228085",
  "name": "my-media-pool_Daily-2200-20210624081228085",
  "poolName": "my-media-pool",
  "exec": true,
  "scheduleName": "Daily-2200",
  "priority": 1,
  "suppress": false,
  "owner": "myself",
  "grpFlag": false,
  "action": "PURGE",
  "driveNum": 15,

```

```

    "usercomment": "Newly set comment",
    "immediateFlag": false
  }

```

**POST**`/sep/api/v2/mediapoolevents/delete`

Minimum required role: Administrator

Since: Jaglion

Deletes a media pool event.

#### Parameters

The unique ID of the media pool event is passed in as JSON number in the body of the request.

#### Responses

Response Code and Content	Description
200 ID Long	The unique ID of the deleted media pool event is returned in the response body. If no media pool event existed with the given ID, then null is returned.

#### Examples

Deletes the media pool event with the ID '20210624081228085' (exists):

```

POST /sep/api/v2/mediapoolevents/delete
20210624081228085

```

```

Response:
20210624081228085

```

**POST**`/sep/api/v2/mediapoolevents/deleteByEntity`

Minimum required role: Administrator

Since: Jaglion

Deletes the media pool event matching the given entity.

#### Parameters

The entity to match is passed in the body of the request as JSON object. The only required entity property is the primary key of the entity.

#### Responses

Response Code and Content	Description
200 ID Long	The ID of the deleted media pool event is returned in the response body. If no media pool event existed with the given ID, then null is returned.

#### Examples



Delete the media pool event with the ID "17":

```
POST /sep/api/v2/mediapoolevents/deleteByEntity
{
  "id" : 17,
  "name" : "EventName",
  "poolName" : "TEST-POOL"
}

Response:
17
```

**POST**

/sep/api/v2/mediapoolevents/init

Minimum required role: Administrator

Since: Jaglion

Creates a new media pool event to initialize a media and execute the media pool event immediately.

### Parameters

The media pool event is passed in as JSON object in the body of the request. The properties of the media pool event are described above.

### Responses

Response Code and Content	Description
<b>200</b> <b>Media Pool Event</b> JSON object	The newly created media pool event is returned in the response body.

### Examples

Creates a new media pool event to initialize media with the label 'my-media-label':

```
POST /sep/api/v2/mediapoolevents/init
{
  "label": "my-media-label",
  "owner": "myself",
  "grpFlag": false,
  "driveNum": 15
}

Response:
{
  "id": "20210624081228293",
  "name": "my-media-pool-20210624081228293",
  "poolName": "my-media-pool",
  "exec": true,
  "priority": 0,
  "suppress": false,
  "owner": "myself",
  "grpFlag": false,
  "action": "INITIALIZE",
  "driveNum": 15,
  "immediateFlag": true
}
```

```
}
```

**POST**`/sep/api/v2/mediapoolevents/deleteBySchedule`

Minimum required role: Administrator

Since: Jaglion

Deletes the media pool event matching the given schedule name.

#### Parameters

---

The schedule to match is passed as JSON object in the body of the request.

#### Responses

---

Response Code and Content	Description
<b>200</b> <b>id</b> Long	The ID of the deleted media pool event is returned in the response body. If no media pool event existed with the given ID, then null is returned.

#### Examples

---

Deletes all media pool events belonging to the schedule "Weekly":

```
POST /sep/api/v2/mediapoolevents/deleteBySchedule  
"Weekly"
```

```
Response:  
20210624081228085
```

### 3.29. Media Pools Service

The media pools service provides access to media pools.

A media pool is an object with the following properties:

Name	Description
<b>name</b> * required String	The name of the media pool. The maximum length of the name is 16 characters. The name can contain only letters, digits, the '-' and the '_' character.
<b>id</b> Long	The unique ID of the media pool.
<b>type</b> String	The media pool type. Valid values are 'NONE', 'CLONE' or 'SNAP_NETAP'. If omitted, the flag will default to 'NONE'.
<b>descript</b> String	The description. The maximum length of the description is 80 characters.
<b>inactive</b> Boolean	Flag to mark the media pool inactive.
<b>eol</b> Long	The number of days till the data stored in the media pool expires. If omitted, the property defaults to 7 days.
<b>acceptEmpty</b> Boolean	Flag to mark if the media pool may use empty, foreign media.
<b>acceptEol</b> Boolean	Flag to mark if the media pool may use EOL-free media.
<b>acceptSpare</b> Boolean	Flag to mark if the media pool may use SPARE media.
<b>acceptOther</b> Boolean	Flag to mark if the media pool may use media from another pool.
<b>acceptMove</b> Boolean	Flag to mark if another media pool may use media from this media pool.
<b>mediaStrg</b> String	The media strategy of this media pool.
<b>readcheckLimit</b> Long	The readability check limit in days.
<b>readcheckRepeatrate</b> Long	The readability check repeat rate.
<b>readcheckOverdue</b> Long	The readability check overdue expiration in days.
<b>cryptFlagMedia</b> Boolean	Flag to indicate if the backup media will be encrypted. Valid values are 'a' (AES256) or 'b' (Blowfish64).
<b>cryptKeyMedia</b> String	The backup media encryption key. The maximum length of the encryption key is 128 characters.
<b>cryptSavekeyFlagMedia</b> Boolean	Flag to mark that the encryption key is saved to the database for restore.

Following methods are provided by the media pools service:

GET

/sep/api/v2/mediapools

Minimum required role: None

Since: Jaglion

Get all media pools.

The response body contains the list of media pools encoded as JSON objects. The properties of the media pool object are described above.

## Responses

---

Response Code and Content	Description
<b>200</b> <b>Media Pools</b> array[JSON object]	The list of media pools is returned in the response body.

## Examples

---

Get all media pools:

```
GET /sep/api/v2/mediapools

Response:
[
  {
    "id": "17",
    "name": "MyMediaPool",
    "mediaStrg": "OLD",
    ...
  },
  ...
]
```

GET

/sep/api/v2/mediapools/<name>

Minimum required role: None

Since: Jaglion

Get the media pool matching the given name.

The response body contains the media pool encoded as JSON object. The properties of the media pool object are described above.

## Responses

---

Response Code and Content	Description
<b>200</b> <b>Media Pool</b> JSON object	The media pool is returned in the response body.

## Examples

---

Get the media pool with the unique name 'MyMediaPool':

```
GET /sep/api/v2/mediapools/MyMediaPool

Response:
{
  "id": "17",
  "name": "MyMediaPool",
  "mediaStrg": "OLD",
  ...
}
```

POST

/sep/api/v2/mediapools/find

Minimum required role: None

Since: Jaglion

Search for media pools matching the specified filter parameters.

#### Parameters

The filter configuration is passed in as JSON object in the body of the request. The following JSON object properties are defined:

Name	Description
<b>driveGroups</b> array[String]	The names or the IDs of the drive groups to match.
<b>name</b> String	The media pool name to match. The wild cards '*' and '?' might be used.
<b>excludeName</b> String	The media pool name to exclude from the match. The wild cards '*' and '?' might be used.

#### Responses

Response Code and Content	Description
200 <b>MediaPool</b> array[JSON object]	The matching media pools are returned in the response body.

#### Examples

Get all media pools associated with the drive group with index 4:

```
POST /sep/api/v2/mediapools/find
{"driveGroups" : ["4"]}
```

Response:

```
[
  {
    "id": 4,
    "name": "MyMediaPool",
    "mediaStrg": "OLD",
    ...
  }
]
```

POST

/sep/api/v2/mediapools/&lt;name&gt;/drives

Minimum required role: None

Since: Jaglion

Returns all drives, which are associated via the drive group with the given media pool.

#### Parameters

The filter configuration is passed in as JSON object in the body of the request. The following JSON object properties are defined:

Name	Description
<b>mediaPoolName</b> String	The name of the media pool of which the drives are wanted.
<b>loader</b> Long	The number of the associated loader.
<b>loaderDrive</b> Long[]	The numbers of the drives in the associated loader.
<b>client</b> Long[]	The names of the clients of which the drives are wanted.
<b>device</b> String[]	The names of the devices.
<b>name</b> String	The name of the wanted drive.
<b>label</b> String	The label of the wanted drive

### Responses

Response Code and Content	Description
<b>200</b> <b>HWDives</b> array[JSON object]	The matched drives are returned in the response body.

### Examples

Get all drives of the media pool with the name 'MyMediaPool':

```
POST /sep/api/v2/mediapools/MyMediaPoolName/drives
{}

Response:
[
  {
    "id": 3,
    "device": "DS@MyMediaPool",
    "client": {
      ...
    },
    ...
  },
  ...
]
```

**POST**

/sep/api/v2/mediapools/&lt;name&gt;/clients

Minimum required role: None

Since: Jaglion

Returns all clients, which are associated via the drive group and the corresponding drives with the given media pool.

### Parameters

The filter configuration is passed in as JSON object in the body of the request. For details on the defined filter properties, see the end point `/sep/api/v2/client/find` in the chapter "Client Service".

Responses

Response Code and Content	Description
200 <b>Clients</b> array[JSON object]	The clients are returned in the response body.

Examples

Get all clients associated with the mediapool and backups:

```
POST /sep/api/v2/mediapools/MyMediaPoolName/clients
{"queryMode" : "BACKUP"}

Response:
[
  {
    "id": 3,
    "name": "MyClient",
    "location": {
      ...
    },
    ...
  }
]
```

**POST**

 /sep/api/v2/mediapools/<name>/interfaces

Since: Jaglion

Minimum required role: None

Returns all interfaces, which are associated via the clients drive group and their drives with the given media pool.

Parameters

The filter configuration is passed in as JSON object in the body of the request. For details on the defined filter properties, see the end point `/sep/api/v2/interfaces/find` in the chapter “Interfaces Service”.

Responses

Response Code and Content	Description
200 <b>Interfaces</b> array[JSON object]	The interfaces are returned in the response body.

Examples

Get all interfaces associated with the media pool in context of backups:

```
POST /sep/api/v2/mediapools/MyMediaPoolName/interfaces
{"queryMode" : "BACKUP"}

Response:
[
  {
    "name": "http://myClient:8080",
  }
]
```

```

    "client": {
      ...
    },
    ...
  }
]

```

**POST**`/sep/api/v2/mediapools/create`

Minimum required role: Administrator

Since: Jaglion

Create a new media pool.

The response body contains the newly created media pools object encoded as JSON object. The properties of the media pools object are described above.

#### Parameters

---

The media pool is passed in as JSON object in the body of the request. The properties of the media pool are described above.

#### Responses

---

Response Code and Content	Description
<b>200</b> <b>MediaPools</b> JSON object	The media pool object is returned in the response body.

#### Examples

---

Create a new media pool with the name "MyMediaPool" and drive group id 2:

```

POST /sep/api/v2/mediapools/create
{"name" : "MyMediaPool",
 "driveGroupId" : "2"}

Response:
[
  {
    "name": "MyMediaPool",
    "driveGroupId": "2",
    ...
  }
]

```



POST

/sep/api/v2/mediapools/update

Minimum required role: Administrator

Since: Jaglion

Updates the provided media pools object.

The response body contains the updated media pools object encoded as JSON object. The properties of the media pools object are described above.

#### Parameters

The media pool is passed in as JSON object in the body of the request. The properties of the media pool are described above.

#### Responses

Response Code and Content	Description
200 MediaPools JSON object	The media pool object is returned in the response body.

#### Examples

Updates the media pool with the name "MyMediaPool":

```
POST /sep/api/v2/mediapools/update
{"name" : "MyMediaPool",
 "driveGroupId" : "3"}

Response:
[
  {
    "name": "MyMediaPool",
    " driveGroupId ": "3",
    ...
  }
]
```

POST

/sep/api/v2/mediapools/persist

Minimum required role: Super user

Since: Jaglion

Persists a media pool. If no media pool with the given name exists, a new media pool will be created. Otherwise, the properties of an existing media pool are updated.

#### Parameters

The media pool is passed in as JSON object in the body of the request. The properties of a media pool are described above.

#### Responses

Response Code and Content	Description
200 Media Pool JSON object	The created or updated media pool is returned in the response body.

## Examples

---

Persists the media pool with the name “MyMediaPool”:

```
POST /sep/api/v2/mediapools/persist
{"name": "MyMediaPool",
 "driveGroupId": "3"}

Response:
[
  {
    "name": "MyMediaPool",
    "driveGroupId": "3",
    ...
  }
]
```

**POST**

/sep/api/v2/mediapools/delete

Minimum required role: Administrator

Since: Jaglion

Deletes the media pools object matching the provided name.

## Parameters

---

The unique name of the media pool is passed in as JSON string in the body of the request.

## Responses

---

Response Code and Content	Description
200 <b>Name</b> String	The name of the deleted media pool is returned in the response body.

## Examples

---

Delete the media pool with the name “MyMediaPool”:

```
POST /sep/api/v2/mediapools/delete
"MyMediaPool"

Response:
"MyMediaPool"
```

**POST**

/sep/api/v2/mediapools/deleteByEntity

Minimum required role: Administrator

Since: Jaglion

Deletes the media pool matching the given entity.

## Parameters

---

The entity to match is passed in the body of the request as JSON object. The only required entity property is the primary key of the entity.

#### Responses

Response Code and Content	Description
<b>200</b> <b>Name</b> String	The name of the medium is returned in the response body.

#### Examples

Delete the medium with the name "my\_media\_pool":

```
POST /sep/api/v2/media/deleteByEntity
{ "name": "my_media_pool" }

Response:
"my_media_pool"
```

**POST**

/sep/api/v2/mediapools/&lt;name&gt;/deleteForced

Minimum required role: Administrator

Since: Jaglion

Deletes the media pools object matching the provided name and all corresponding events.

#### Parameters

The unique name of the media pool is passed in the URL. The delete options are passed in as JSON object in the body of the request. The following JSON object properties are defined:

Name	Description
<b>forceRemoveData</b> Boolean	Flag to indicate if all related data shall be removed together with the media pool.

#### Responses

Response Code and Content	Description
<b>200</b> <b>Name</b> String	The name of the deleted media pool is returned in the response body.

#### Examples

Delete the media pool with the name "MyMediaPool":

```
POST /sep/api/v2/mediapools/myMediaPool/deleteForced
{}

Response:
"MyMediaPool"
```

```
POST /sep/api/v2/mediapools/myMediaPool/deleteForced
null
```

```
Response:
"MyMediaPool"
```

**POST**

/sep/api/v2/mediapools/&lt;name&gt;/ssdd

Minimum required role: None

Since: Jaglion

Returns if source side deduplication on this media pool for the given task/ task group is possible, false otherwise.

The response body contains the information if ssdd is possible, the name of the corresponding data store and the type of the data store.

#### Parameters

The filter configuration is passed in as JSON object in the body of the request. The following JSON object properties are defined:

Name	Description
<b>taskName</b> String	The name of the backup task.
<b>isTaskGroup</b> Boolean	Set to true, if the given taskName refers to a task group.

#### Responses

Response Code and Content	Description
<b>200</b> <b>result</b> SSDDResultDto	The information if ssdd is possible is returned in the response body.

#### Examples

Is source side deduplication possible on the media pool with the name "MyMediaPool" and the task "TEST\_BACKUP":

```
POST /sep/api/v2/mediapools/MyMediaPool/ssdd
{"taskName" : "TEST_BACKUP", "isTaskGroup" : "false"}

Response:
{
  "ssdd": true,
  "datastoreName": "SI3NG",
  "datastoreTypeName": "SEP Si3 NG Deduplication Store"
}
```

### 3.30. Media Results Service

The media results services provides access to media results.

Media results describe the actions performed on a media, like purging the end-of-life free save sets from a data store. The media result records are created and updated by the Sesam kernel only.

A media result is an object with the following properties:

Name	Description
<b>name</b> * required String	The unique ID of the media result. The maximum length of the name is 64 characters.
<b>action</b> * required String	The media action type. The maximum length of the media action type is 30 characters.
<b>sesamDate</b> * required Date	The sesam date when the media action executed.
<b>run</b> * required Long	The run sequence number.
<b>client</b> String	The name of the client the media action was executed for. The maximum length of the client name is 255 characters.
<b>clientId</b> Long	The unique ID of the client the media action was executed for.
<b>driveNum</b> JSON object	The ID of the drive the media action was executed for.
<b>duration</b> Long	The duration of the migration or replication in seconds.
<b>eol</b> Date	The end of life date and time of the media action.
<b>ifaceName</b> String	The name of the interface used.
<b>sepcomment</b> String	The comment or note from Sesam. The maximum length of the SEP comment is 1024 characters.
<b>pid</b> Long	The PID of the media action as long the media action is still executing.
<b>priority</b> Long	The priority.
<b>schedule</b> String	The name of the schedule. The maximum length of the schedule is 30 characters.
<b>sesamVersion</b> String	The version ID of the Sesam server used.
<b>sessionId</b> String	The session ID and unique ID of the parent media result. The maximum length of the session id is 32 character.
<b>size</b> Long	The data size in bytes.
<b>state</b> String	The media result state. The most common values are '0' (OK) and 'X' or '2' (Error).
<b>startTime</b> Date	The date and time when the media action started.
<b>stopTime</b> Date	The date and time when the media action stopped.
<b>throughput</b> Double	The throughput.
<b>usercomment</b> String	The comment or note from the user. The maximum length of the user comment is 1024 characters.
<b>checkFlag</b> Boolean	Flag to mark if the barcode of the media was read when the media action executed.
<b>dataStore</b> String	The name of the data store the media action was executed for. The maximum length of the data store name is 32 character.

Name	Description
<b>pool</b> String	The ID or name of the media pool the media action was executed for. The maximum length of the media pool name is 16 character.
<b>mediaLabel</b> String	The name (label) of the media the media action was executed for.
<b>mediaBarcode</b> String	The barcode of the media the media action was executed for.
<b>device</b> String	The name of the device. The maximum length of the device is 254 character.
<b>driveName</b> String	The name of the drive the media action was executed for. The maximum length of the device is 254 character.
<b>loaderNum</b> Long	The ID of the loader the media action was executed for.
<b>slotRange</b> String	The slot range. The maximum length of the slot range is 128 characters.
<b>blocks</b> Long	The number of blocks.
<b>capacity</b> Double	The data store capacity in GiB.
<b>lowWaterMark</b> Double	The data store low water mark in GiB. This property is deprecated.
<b>highWaterMark</b> Double	The data store high water mark in GiB.
<b>filled</b> Double	The number of bytes filled in GiB.
<b>stored</b> Double	The number of bytes stored in GiB. When the data store is not using deduplication technology, the properties 'filled' and 'stored' contains the same values.
<b>total</b> Double	The total number of bytes available in GiB.
<b>used</b> Double	The number of bytes used in GiB.
<b>free</b> Double	The number of bytes free in GiB.
<b>driveType</b> String	The type of the drive the media action was executed for. The maximum length of the drive type is 15 character.
<b>mediaType</b> String	The type of the media the media action was executed for. The maximum length of the media type is 20 character.
<b>message</b> String	The comment or note from Sesam. The maximum length of the SEP comment is 1024 characters.
<b>longMessage</b> String	The long comment or not from Sesam. The maximum length of the long message is 4096 characters.
<b>options</b> String	The media action options. The maximum length of the options is 255 character.
<b>ssddFlag</b> Boolean	Flag to mark if the data was backed up with source side deduplication.

Following methods are provided by the media results service:

GET

/sep/api/v2/mediaresults

Minimum required role: None

Since: Jaglion

Get all media results.

The response body contains the list of media results encoded as JSON objects. The properties of the media result object are described above.

## Responses

---

Response Code and Content	Description
<b>200</b> <b>Media Result</b> array[JSON object]	The media results are returned in the response body.

## Examples

---

Get all media results:

```
GET /sep/api/v2/mediaresults

Response:
[
  {
    "name": "20180909080031138@1KFKRc7hhnt",
    "action": "PURGE",
    "state": "OK",
    ...
  },
  {
    "name": " 20200131122414480",
    "action": "REMOVE",
    "state": "OK",
    ...
  },
  ...
]
```

**GET**

/sep/api/v2/mediaresults/&lt;name&gt;

Minimum required role: None

Since: Jaglion

Get the media result matching the given name.

The response body contains the media result encoded as JSON object. The properties of the media result object are described above.

## Responses

---

Response Code and Content	Description
<b>200</b> <b>Media Result</b> JSON object	The media result are returned in the response body.

## Examples

---

The media result with the unique name '20180909080031138@IKFKRc7hhnt':

```
GET /sep/api/v2/mediaresults/20180909080031138@IKFKRc7hhnt
```

Response:

```
{
  "name": "20180909080031138@IKFKRc7hhnt",
  "action": "PURGE",
  "state": "OK",
  ...
}
```

**POST**

/sep/api/v2/mediaresults/find

Minimum required role: None

Since: Jaglion

Search for media results matching the specified filter parameters.

## Parameters

---

The filter configuration is passed in as JSON object in the body of the request. The following JSON object properties are defined:

Name	Description
<b>mediaPoolName</b> String	The name of the media pool to match.
<b>clientId</b> Long	The ID of the client to match.
<b>clientName</b> String	The name of the client to match. The wild cards '*' and '?' might be used.
<b>clients</b> array[Long]	An array of client IDs to match.
<b>clientOs</b> String	The operating system of the client to match. The wild cards '*' and '?' might be used.
<b>tasks</b> array[JSON object]	An arrays of task names to match.
<b>dataStore</b> String	The name of the data store to match.
<b>state</b> array[String]	An array of media result states to match.
<b>label</b> String	The label of the media to match.
<b>action</b> array[String]	An array of media action types to match.
<b>sessionId</b> String	The unique name of the parent media result to match.
<b>sessionIds</b> array[String]	The list of unique names of the parent media results to match.
<b>skipChildren</b> Boolean	Flag to exclude media results, which are children of a parent media result.



## Responses

---

Response Code and Content	Description
<b>200</b> <b>Media Result</b> array[JSON object]	The matching media results are returned in the response body.

## Examples

---

Get all media results for the data store 'My Datastore':

```
POST /sep/api/v2/mediareresults/find
{ "dataStore" : "My Datastore" }

Response:
[
  {
    "name": "20180909080031138@IKFKRc7hhnt",
    "action": "PURGE",
    "state": "OK",
    "dataStore" : {
      "name" : "My Datastore",
      ...
    },
    ...
  },
  {
    "name": " 20200131122414480",
    "action": "REMOVE",
    "state": "OK",
    "dataStore" : {
      "name" : "My Datastore",
      ...
    },
    ...
  },
  ...
]
```

**POST**

/sep/api/v2/mediapools/count

Minimum required role: None

Since: Jaglion

Get the number of media results matching the specified filter parameters.

## Parameters

---

The filter configuration is passed in as JSON object in the body of the request. For details on the defined filter properties, see the end point 'find' in this chapter.

## Examples

---

Get number of all media results for the data store "My Datastore":

```
POST /sep/api/v2/mediareresults/count  
{ "dataStore" : "My Datastore" }
```

```
Response:  
17
```

### 3.31. Migration Events Service

The migration event services provides access to the migration event objects, which are associated with a schedule and a migration task.

A migration event is an object with the following properties:

Name	Description
<b>id</b> * required String	The unique ID of the migration event.
<b>name</b> String	The name of the migration event. The maximum length of the name is 255 characters. The name can contain only letters, digits, the '-' and the '_' character.
<b>migrationTask</b> * required String	The name of the associated migration task. The maximum length of the migration task name is 255 character.
<b>exec</b> Boolean	Flag to indicate if the migration event is enabled for execution.
<b>eol</b> Long	The retention time in days.
<b>scheduleName</b> String	The name of the schedule the migration event is associated with. The maximum length of the schedule name is 30 character.
<b>priority</b> Long	The priority of the migration event.
<b>suppress</b> Boolean	Flag to indicate if the migration event is a blocking event.
<b>followUp</b> String	The follow up actions to execute when the migration event finished successfully. The maximum length of the follow up is 1024 character.
<b>owner</b> String	The migration event owner. The maximum length of the migration event owner is 30 character.
<b>saveset</b> String	The unique ID of the saveset to be migrated.
<b>grpFlag</b> Boolean	Flag to indicate if a backup task or a backup group is migrated.
<b>task</b> String	The name of the backup task to migrate. If set, 'grpFlag' has to be set to false. The maximum length of the backup task name is 64 character.
<b>taskGroup</b> String	The name of the backup group to migrate. If set, 'grpFlag' has to be set to true. The maximum length of the backup group name is 64 character.
<b>savesetCnt</b> Long	The maximum number of copies to create.
<b>targetDrive</b> Long	The unique ID of the target drive to use.
<b>targetPool</b> String	The name of the target media pool to use. The maximum length of the target media pool name is 16 character.
<b>ifaceName</b> String	The name of the client interface to use. The maximum length of the client interface is 255 character.
<b>srvifaceName</b> String	The name of the server interface to use. The maximum length of the server interface is 255 character.
<b>migratedFlag</b> Boolean	Flag to indicate if already migrated backups should be migrated again.
<b>absoluteFlag</b> Boolean	Flag to indicate if the date range selection is based on calendar days (false) or Sesam days (true).
<b>deleteFlag</b> String	Flag to indicate if the original backup will be kept (0), immediately deleted (1) or deleted with the next purge (2).
<b>dateStart</b> JSON object	The date and time when the backup selection starts. The start of the date range can be either a absolute timestamp (via property 'absolute') or a relative difference from the current time in milliseconds (via property 'relative').
<b>dateEnd</b> JSON object	The date and time when the backup selection ends. The end of the date range can be either a absolute timestamp (via property 'absolute') or a relative difference from

Name	Description
	the current time in milliseconds (via property 'relative').
<b>cfdiType</b> JSON object	The migration CFDI type to match.
<b>state</b> String	The backup state to match. The most common values are '0' (OK) and 'X' or '2' (Error).
<b>mediaLabel</b> String	The media label to match. The maximum length of the media label is 30 character.
<b>client</b> String	The name of the client to use. The maximum length of the client name is 255 character.
<b>clientId</b> Long	The unique ID of the client to use.
<b>listmode</b> String	The list mode. The maximum length of the list mode is 32 character.
<b>submitFlag</b> Boolean	Flag to indicate if the migration can be execute in parallel to other migrations.
<b>options</b> String	The execution options. The maximum length of the execution options is 255 character.
<b>dataMover</b> String	The name of the data mover to use. The maximum length of the data mover name is 255 character.
<b>dataMoverId</b> Long	The unique ID of the data mover to use.
<b>migrationCmd</b> String	The migration command. The maximum length of the migration command is 64 character.
<b>referenceType</b> String	The reference type. Valid values are 'START' and 'RESTART'.
<b>referenceId</b> String	The reference ID. The maximum length of the reference ID is 80 character.
<b>migrationId</b> String	The migration ID. The maximum length of the migration ID is 80 character.
<b>usercomment</b> String	The user comment. The maximum length of the user comment is 1024 character.
<b>immediateFlag</b> Boolean	Flag to indicate if the migration event has to be started immediately.

Following methods are provided by the migration events service:

GET

/sep/api/v2/migrationevents

Minimum required role: None

Since: Jaglion

Get all migration events.

The response body contains the list of migration events encoded as JSON objects. The properties of the migration events object are described above.

#### Responses

Response Code and Content	Description
200 <b>Migration Events</b> array[JSON object]	The migration events are returned in the response body.

## Examples

---

Get all migration events:

```
GET /sep/api/v2/migrationevents

Response:
[
  {
    "id": "20210414075400223",
    "name": "MigrationEvent-20210414075400223",
    "migrationTask": "Migrate_full_backups",
    "exec": true,
    "scheduleName": "Weekly_TH_0900",
    "priority": 1,
    "suppress": false,
    "grpflag": false,
    "savesetCnt": 0,
    "targetPool": "Migration-Pool",
    "migratedFlag": true,
    "deleteFlag": "0",
    "cfdiType": {
      "generation": false,
      "copy": true,
      "full": true,
      "diff": false,
      "incr": false
    },
    "state": "INFO",
    "submitFlag": true
  },
  ...
]
```

GET

/sep/api/v2/migrationevents/&lt;id&gt;

Minimum required role: None

Since: Jaglion

Get the migration event matching the given ID.

The response body contains the migration event encoded as JSON object. The properties of the migration events object are described above.

## Responses

---

Response Code and Content	Description
200 Migration Event JSON object	The migration event is returned in the response body.

## Examples

---

Get the migration event with the unique ID '20180601121519937':

```
GET /sep/api/v2/migrationevents/20180601121519937

Response:
{
  "id": "20180601121519937",
  "migrationTask": "si3-1-T0-si3-2",
  ...
}
```

```

"exec": true,
"scheduleName": "Weekly_MI_1300",
"priority": 1,
"suppress": false,
"grpflag": false,
"savesetCnt": 0,
"targetDrive": 8,
"targetPool": "si3-2-pool",
"migratedFlag": true,
"absoluteFlag": true,
"deleteFlag": "0",
"dateStart": {
  "relative": -99999
},
"dateEnd": {
  "relative": 0
},
"cfdiType": {
  "generation": false,
  "copy": true,
  "full": true,
  "diff": true,
  "incr": true
},
"state": "INFO",
"submitFlag": true
}

```

POST

/sep/api/v2/migrationevents/find

Minimum required role: None

Since: Jaglion

Search for migration events matching the specified filter parameters.

### Parameters

The filter configuration is passed in as JSON object in the body of the request. The following JSON object properties are defined:

Name	Description
<b>id</b> Long	The unique id of the event to match.
<b>sesamDate</b> array[String]	<p>An array of one or two date/time strings. The first element in the array represents the beginning of the date/time range (&lt;from&gt;) and the second element in the array represents the end of the date/time range (&lt;to&gt;). Either &lt;from&gt; or &lt;to&gt; can be null, but one of them has to be not null. The presence of the two values controls the condition generated.</p> <ul style="list-style-type: none"> <li>• If both values are specified, than the condition will be generated as date range (between "&lt;from&gt;" and "&lt;to&gt;").</li> <li>• If both values are specified and "&lt;to&gt;" is null, the condition will be generated as greater or equal than "&lt;from&gt;".</li> <li>• If both values are specified and "&lt;from&gt;" is null, the condition will be generated as less or equal than "&lt;to&gt;".</li> </ul> <p>If only one value is specified (array length = 1), than the condition is generated as equals.</p>
<b>clientId</b> String	The unique ID of the client to match.
<b>clientName</b> String	The name of the client to match.
<b>clientOs</b> String	The operating system to match, running at the client.

<b>states</b> array[String]	An array of states to match. The most common valid states are 0 (success), 1 (warning), 2 (error) and c (cancelled).
<b>schedule</b> String	The name of the associated schedule to match.
<b>ifaceName</b> array[String]	An array of client interface names to match.
<b>targetDrive</b> Long	The unique id of the target drive to match.
<b>poolNames</b> array[String]	An array of media pool names to match.
<b>migrationTaskName</b> String	The name of the associated migration task to match.
<b>replicationType</b> String	The replication type to match.

## Responses

Response Code and Content	Description
200 <b>Migration Events</b> array[JSON object]	The matching migration events are returned in the response body.

## Examples

Get all migration events for replications to the target media pool 'si3-2-pool':

```
POST /sep/api/v2/migrationevents/find
{ "poolNames": [ "si3-2-pool" ], "replicationType" : "SEP Si3 Replication" }
```

Response:

```
[
  {
    "id": "20180601121519937",
    "migrationTask": "si3-1-T0-si3-2",
    "exec": true,
    "scheduleName": "Weekly_MI_1300",
    "priority": 1,
    "suppress": false,
    "grpflag": false,
    "savesetCnt": 0,
    "targetDrive": 8,
    "targetPool": "si3-2-pool",
    "migratedFlag": true,
    "absoluteFlag": true,
    "deleteFlag": "0",
    "dateStart": {
      "relative": -99999
    },
    "dateEnd": {
      "relative": 0
    },
    "cfdiType": {
      "generation": false,
      "copy": true,
      "full": true,
      "diff": true,
      "incr": true
    },
    "state": "INFO",
    "submitFlag": true
  },
  ...
]
```

POST

/sep/api/v2/migrationevents/create

Minimum required role: Administrator

Since: Jaglion

Creates a new migration event.

#### Parameters

The migration event is passed in as JSON object in the body of the request. The properties of the migration event are described above.

#### Responses

Response Code and Content	Description
200 Migration Event JSON object	The newly created migration event is returned in the response body.

#### Examples

Creates a new migration event:

```
POST /sep/api/v2/migrationevents/create
{
  "migrationTask": "si3-1-T0-si3-2",
  "scheduleName": "Weekly_MI_1300",
  "saveSetCnt": 0,
  "targetDrive": 8,
  "targetPool": "si3-2-pool",
  "migratedFlag": true,
  "absoluteFlag": true,
  "deleteFlag": "0",
  "dateStart": {
    "relative": -7
  },
  "dateEnd": {
    "relative": 0
  },
  "cfdiType": {
    "generation": false,
    "copy": true,
    "full": false,
    "diff": false,
    "incr": false
  },
  "state": "INFO"
}

Response:
{
  "id": "20210624121625241",
  "name": "ReplicationEvent-20210624121625241",
  "migrationTask": "si3-1-T0-si3-2",
  "scheduleName": "Weekly_MI_1300",
  "priority": 1,
  "suppress": false,
  "saveSetCnt": 0,
  "targetDrive": 8,
  "targetPool": "si3-2-pool",
  "migratedFlag": true,
  "deleteFlag": "0",
  "dateStart": {
    "relative": -7
  },
  "cfdiType": {
    "generation": false,
```



```

    "copy": true,
    "full": false,
    "diff": false,
    "incr": false
  },
  "state": "INFO",
  "submitFlag": true,
  "immediateFlag": false
}

```

POST

/sep/api/v2/migrationevents/update

Minimum required role: Administrator

Since: Jaglion

Updates a migration event. A migration event with the given ID must exist, otherwise the call will fail.

The end-point will look up the original migration event object by the given ID or name. If found, the original migration event object is updated with any non-null property from the passed in migration event object. That means, that only the changed properties needs to be present in the given migration events object.

#### Parameters

The migration event is passed in as JSON object in the body of the request. The properties of the migration event are described above.

#### Responses

Response Code and Content	Description
200 Migration Event JSON object	The updated migration event is returned in the response body.

#### Examples

Sets a new comment for the migration event with the ID '20210624121625241':

```

POST /sep/api/v2/migrationevents/update
{
  "id": "20210624121625241",
  "usercomment": "INFO"
}

Response:
{
  "id": "20210624121625241",
  "name": "ReplicationEvent-20210624121625241",
  "migrationTask": "si3-1-TO-si3-2",
  "exec": false,
  "scheduleName": "Weekly_MI_1300",
  "priority": 1,
  "suppress": false,
  "grpflag": false,
  "savesetCnt": 0,
  "targetDrive": 8,
  "targetPool": "si3-2-pool",
  "migratedFlag": true,
  "deleteFlag": "0",
  "dateStart": {
    "relative": -7
  }
}

```

```

},
"cfdiType": {
  "generation": false,
  "copy": true,
  "full": false,
  "diff": false,
  "incr": false
},
"state": "INFO",
"submitFlag": true,
"visible": false,
"usercomment": "Newly set comment"
}

```

**POST**

/sep/api/v2/migrationevents/persist

Minimum required role: Super user

Since: Jaglion

Persists a migration event. If no migration event with the given ID exists, a new migration event will be created. Otherwise, the properties of an existing migration event are updated.

Parameters

The migration event is passed in as JSON object in the body of the request. The properties of a migration event are described above.

Responses

Response Code and Content	Description
200 Migration Event JSON object	The created or updated migration event is returned in the response body.

Examples

Persists the migration event with the ID "20210624121625241":

```

POST /sep/api/v2/migrationevents/persist
{
  "id": "20210624121625241",
  "usercomment": "INFO"
}

Response:
{
  "id": "20210624121625241",
  "name": "ReplicationEvent-20210624121625241",
  "migrationTask": "si3-1-T0-si3-2",
  "exec": false,
  "scheduleName": "Weekly_MI_1300",
  "priority": 1,
  "suppress": false,
  "grpflag": false,
  "savesetCnt": 0,
  "targetDrive": 8,
  "targetPool": "si3-2-pool",
  "migratedFlag": true,
  "deleteFlag": "0",
  "dateStart": {
    "relative": -7
  }
},

```

```

"cfdiType": {
  "generation": false,
  "copy": true,
  "full": false,
  "diff": false,
  "incr": false
},
"state": "INFO",
"submitFlag": true,
"visible": false,
"usercomment": "Newly set comment"
}

```

POST

/sep/api/v2/migrationevents/delete

Minimum required role: Administrator

Since: Jaglion

Deletes a migration event.

#### Parameters

The unique ID of the migration event is passed in as JSON number in the body of the request.

#### Responses

Response Code and Content	Description
200 id Long	The unique ID of the deleted migration event is returned in the response body. If no migration event existed with the given ID, then null is returned.

#### Examples

Deletes the migration event with the ID '20210624081228085' (exists):

```
POST /sep/api/v2/migrationevents/delete
20210624121625241
```

```
Response:
20210624121625241
```

POST

/sep/api/v2/mediapooevents/deleteByEntity

Minimum required role: Administrator

Since: Jaglion

Deletes the migration event matching the given entity.

#### Parameters

The entity to match is passed as JSON object in the body of the request. The only required entity property is the primary key of the entity.

#### Responses

Response Code and Content	Description
200 <b>id</b> Long	The ID of the deleted migration event is returned in the response body. If no migration event existed with the given ID, then null is returned.

### Examples

Deletes the migration event matching the given entity:

```
POST /sep/api/v2/migrationevents/deleteByEntity
{
  "id" : 20210624081228085
}

Response:
20210624081228085
```

**POST**

/sep/api/v2/migrationevents/deleteBySchedule

Minimum required role: Administrator

Since: Jaglion

Deletes the migration event matching the given schedule name.

### Parameters

The schedule to match is passed as JSON object in the body of the request.

### Responses

Response Code and Content	Description
200 <b>id</b> Long	The ID of the deleted migration event is returned in the response body. If no migration event existed with the given ID, then null is returned.

### Examples

Deletes all migration events belonging to the schedule "Weekly":

```
POST /sep/api/v2/migrationevents/deleteBySchedule
"Weekly"

Response:
20210624081228085
```

### 3.32. Migration Service

The migration services provides access to migrations and replications. Migrations and replications are the result of executing migration or replication tasks.

A migration or replication is an object with the following properties:

Name	Description
<b>name</b> * required String	The unique name of the migration or replication. The maximum length of the name is 64 characters.
<b>migrationTask</b> * required String	The name of the migration or replication task. The maximum length of the migration task name is 49 characters. The name can contain only letters, digits, the '-' and the '_' character.
<b>client</b> String	The name of the backup client. The maximum length of the client name is 255 character.
<b>clientId</b> Long	The unique ID of the backup client.
<b>duration</b> Long	The duration of the migration or replication in seconds.
<b>eol</b> Date	The end of life date and time of the migration or replication.
<b>externalId</b> String	The external id. The maximum length of the external id is 255 character.
<b>ifaceName</b> String	The name of the interface used.
<b>sepcomment</b> String	The comment or note from Sesam. The maximum length of the SEP comment is 255 characters.
<b>pid</b> Long	The migration or replication process ID, if the restore is still running.
<b>priority</b> Long	The migration or replication priority.
<b>backupId</b> String	The name of the backup to migrate or replicate from. The maximum length of the backup name is 64 character.
<b>savesetName</b> String	The name of the saveset to migrate or replicate from. The maximum length of the saveset name is 64 characters.
<b>schedule</b> String	The name of the schedule. The maximum length of the schedule is 30 characters.
<b>sesamDate</b> Date	The sesam date when the migration or replication executed.
<b>sesamVersion</b> String	The version ID of the Sesam server used for the migration or replication.
<b>sessionId</b> String	The session id. The maximum length of the session id is 64 character.
<b>size</b> Long	The size of the original data in bytes.
<b>ssddFlag</b> Boolean	Flag to mark if the data was backed up with source side deduplication.
<b>startTime</b> Date	The date and time when the migration or replication started.
<b>state</b> String	The migration or replication state.
<b>stopTime</b> Date	The date and time when the migration or replication finished.
<b>throughput</b> Double	The throughput of the restore in B/s.
<b>usercomment</b> String	The comment or note from the user. The maximum length of the user comment is 1024 characters.
<b>userName</b>	The user name. The maximum length of the user name is 255 character.

Name	Description
Date	
<b>transferStart</b> Date	The date and time when the migration or replication data transfer started.
<b>sourcePool</b> String	The name of the source media pool used for the migration or replication. The maximum length of the source pool is 32 character.
<b>targetPool</b> String	The name of the target media pool used for the migration or replication. The maximum length of the target pool is 32 character.
<b>sourceDrive</b> Long	The ID of the source drive used for the migration or replication.
<b>targetDrive</b> Long	The ID of the target drive used for the migration or replication.
<b>fromDate</b> JSON object	A relative or absolute date to include matching backups from in the migration or replication.
<b>toDate</b> JSON object	A relative or absolute date to include matching backups to in the migration or replication.
<b>targetSavesetName</b> String	The name of the backup to migrate or replicate to. The maximum length of the backup name is 64 characters.
<b>grpflag</b> Boolean	Flag to indicate if the backup task name to match, denotes a backup group.
<b>taskName</b> String	The unique name of a backup task or backup group to migrate or replicate. The maximum length of the backup task name is 50 characters. The name can contain only letters, digits, the '-' and the '_' character.
<b>savesetDate</b> Date	The date and time when the backup got created.
<b>migratedFlag</b> Boolean	Flag to indicate if the saveset to migrate or replicate had been migrated before.
<b>savesetCnt</b> Long	The consecutive backup number.
<b>backupState</b> String	The backup state.
<b>cfdiType</b> JSON object	The backup level.
<b>mediaLabel</b> String	The name of the media used.
<b>filter</b> String	The filter. The maximum length of the filter is 255 character.
<b>options</b> String	The migration or replication options. The maximum length of the options is 255 character.
<b>genmode</b> Boolean	Flag to indicate if the backup is migrated or replicated in 'generation mode'.
<b>listmode</b> String	The list mode. The maximum length of the list mode is 32 characters.
<b>subtaskFlag</b> Boolean	Flag to indicate if the migration or replication is a sub task.
<b>parent</b> String	The name of the parent migration or replication.
<b>transferred</b> Long	The size of the transferred data in bytes.
<b>transferredBrutto</b> Long	The size of the brutto transferred data in bytes.
<b>speedup</b> Double	The speed up.
<b>migrationCmd</b> String	The migration or replication command. The maximum length of the migration or replication command is 64 character.

Following methods are provided by the migration service:

GET

/sep/api/v2/migrations

Minimum required role: None

Since: Beefalo

Get all migrations or replications.

The response body contains the list of migrations or replications encoded as JSON objects. The properties of the migration object are described above.

#### Responses

Response Code and Content	Description
200 Migration array[JSON object]	The migrations or replications are returned in the response body.

#### Examples

Get all migrations or replications:

```
GET /sep/api/v2/migrations

Response:
[
  {
    "name": "20191203100002278",
    "migrationTask": "Migrate_my_backups",
    ...
  },
  {
    "name": "20191203100002513",
    "migrationTask": "Migrate_more_backups",
    ...
  },
  ...
]
```

GET

/sep/api/v2/migrations/&lt;name&gt;

Minimum required role: None

Since: Beefalo

Get the migration or replication matching the given name.

The response body contains the migration or replication encoded as JSON object. The properties of the migration object are described above.

#### Responses

Response Code and Content	Description
200 Migration JSON object	The migration or replication is returned in the response body.

## Examples

---

The migration with the unique name '20191203100002513':

```
GET /sep/api/v2/migrations/20191203100002513
```

Response:

```
{
  "name": "20191203100002513",
  "migrationTask": "Migrate_more_backups",
  ...
}
```

**POST**

/sep/api/v2/migrations/find

Minimum required role: None

Since: Beefalo

Search for migrations or replications matching the specified filter parameters.

## Parameters

---

The filter configuration is passed in as JSON object in the body of the request. The following JSON object properties are defined:

Name	Description
<b>sesamDate</b> array[String]	An array of one or two date/time strings. The first element in the array represents the beginning of the date/time range (<from>) and the second element in the array represents the end of the date/time range (<to>). Either <from> or <to> can be null, but one of them has to be not null. The presence of the two values controls the condition generated. <ul style="list-style-type: none"> <li>• If both values are specified, than the condition will be generated as date range (between "&lt;from&gt;" and "&lt;to&gt;").</li> <li>• If both values are specified and "&lt;to&gt;" is null, the condition will be generated as greater or equal than "&lt;from&gt;".</li> <li>• If both values are specified and "&lt;from&gt;" is null, the condition will be generated as less or equal than "&lt;to&gt;".</li> <li>• If only one value is specified (array length = 1), than the condition is generated as equals.</li> </ul>
<b>taskName</b> String	The name of the backup task whose migration results should be matched
<b>migrationTaskName</b> String	The name of the migration task whose migration results should be matched
<b>startTime</b> array[String]	An array of one or two date/time strings. See the description of the "sesamDate" filter property for details.
<b>stopTime</b> array[String]	An array of one or two date/time strings. See the description of the "sesamDate" filter property for details.
<b>clientId</b> Long	The ID of the client to match.
<b>clientName</b> String	The name of the client to match. The wild cards '*' and '?' might be used.
<b>clients</b> array[Long]	An array of client IDs to match.
<b>clientOs</b> String	The operating system of the client to match. The wild cards '*' and '?' might be used.
<b>states</b> array[String]	The list of states to match.
<b>label</b>	The label of the media where the backup is stored. The maximum length of the label



Name	Description
String	is 30 characters.
<b>replicationType</b> array[JSON object]	The event types to match.
<b>hideParentTasks</b> Boolean	Flag to exclude migrations or replications where the parent task is not set and the migration or replication has child records associated.
<b>parentTask</b> String	The unique name of the parent migration or replication to match.
<b>parentTasks</b> array[String]	The list of unique names of the parent migration or replication to match.
<b>skipChildren</b> Boolean	Flag to exclude migration or replications, which are children of a parent migration or replication.

## Responses

Response Code and Content	Description
<b>200</b> <b>Migrations</b> array[JSON object]	The matching migrations or replications are returned in the response body.

## Examples

Get all migrations:

```
POST /sep/api/v2/migrations/find
{ "replicationType" : [ " SEP Migration" ] }

Response:
[
  {
    "name": "20191203100002278",
    "migrationTask": "Migrate_my_backups",
    ...
  },
  {
    "name": "20191203100002513",
    "migrationTask": "Migrate_more_backups",
    ...
  },
  ...
]
```

**POST**

/sep/api/v2/migrations/count

Minimum required role: None

Since: Jaglion

Get the number of migrations matching the specified filter parameters.

## Parameters

The filter configuration is passed in as JSON object in the body of the request. For details on the defined filter properties, see the end point 'find' in this chapter.

## Examples

---

Get number of all migrations executed yesterday:

```
POST /sep/api/v2/migrations/count
{ "dateFlagYesterday" : true }
```

Response:  
17

**POST**

/sep/api/v2/migrations/countTasks

Minimum required role: None

Since: Jaglion

Get the number of migration tasks matching the specified filter parameters.

## Parameters

---

The filter configuration is passed in as JSON object in the body of the request. The JSON object properties are the same as defined for POST /sep/api/v2/migrations/findTasks.

## Examples

---

Get number of all migration tasks for the client with the name “workstation17”:

```
POST /sep/api/v2/migrations/countTasks
{ "client" : "workstation17" }
```

Response: 12

**GET**

/sep/api/v2/migrations/<name>/tasks

Minimum required role: None

Since: Jaglion

Get the migration or replication task for the migration or replication matching the given migration or replication name.

The response body contains the migration task encoded as JSON object. The properties of the migration or replication task object are described in the migration tasks service section.

## Responses

---

Response Code and Content	Description
200 Migration Task JSON object	The matching migration or replication task is returned in the response body.

## Examples

---

Get the migration task of the migration with the name “20200410100001014”:

```
GET /sep/api/v2/migrations/20200410100001014/tasks
```

Response:

```
{
  "name": "My_Migration_Task",
  "replicationType": "SEP Migration",
  "sourcePool": "my-media-pool",
  "targetPool": "my-migration-pool",
  ...
}
```

**GET**

/sep/api/v2/migrations/tasks/<name>

Minimum required role: None

Since: Jaglion

Get the migration or replication task matching the given migration or replication task name.

The response body contains the migration or replication task encoded as JSON object. The properties of the migration or replication task object are described in the migration tasks service section.

## Responses

---

Response Code and Content	Description
<b>200</b> <b>Migration Task</b> JSON object	The matching migration or replication task is returned in the response body.

## Examples

---

Get the migration task with the name “My\_Migration\_Task”:

```
GET /sep/api/v2/migrations/tasks/My_Migration_Task
```

Response:

```
{
  "name": "My_Migration_Task",
  "replicationType": "SEP Migration",
  "sourcePool": "my-media-pool",
  "targetPool": "my-migration-pool",
  ...
}
```

GET

/sep/api/v2/migrations/findTasks

Minimum required role: None

Since: Jaglion

Get the list of all available migration or replication tasks.

The end point supports filtering the result set by passing in a migration tasks filter as JSON object in the body of the request. The HTTP request method has to be changed to POST when using the filter.

POST

/sep/api/v2/migrations/findTasks

Minimum required role: None

Since: Jaglion

Search for migration or replication tasks matching the specified filter parameters.

### Parameters

The filter configuration is passed in as JSON object in the body of the request. The following JSON object properties are defined:

Name	Description
<b>replicationType</b> String	The replication type to match. Valid values are 'SEP Migration', 'SEP Si3 Replication' and 'Catalyst Replication'.
<b>sourcePool</b> String	The name of the source media pool to match.
<b>targetPool</b> String	The name of the target media pool to match.
<b>taskGroup</b> String	The name of the backup group to match.
<b>names</b> String[]	The list of migration task names to match.
<b>unstarted</b> Boolean	Matches all migration tasks that have never been started, meaning there is no migration result containing that respective task.

### Responses

Response Code and Content	Description
<b>200</b> <b>Migration Task</b> array[JSON object]	The matching migration or replication tasks are returned in the response body.

### Examples

Get all available migration and replication tasks:

```
GET /sep/api/v2/migrations/findTasks

Response:
[
  {
    "name": "My_Migration_Task",
    "replicationType": "SEP Migration",
    "sourcePool": "my-media-pool",
    "targetPool": "my-migration-pool",
    ...
  },
  ...
]
```

```
]
```

Get the migration and replication tasks for the source media pool 'my-media-pool':

```
POST /sep/api/v2/migrations/findTasks
{ "sourcePool" : "my-media-pool" }

Response:
[
  {
    "name": "My_Migration_Task",
    "replicationType": "SEP Migration",
    "sourcePool": "my-media-pool",
    "targetPool": "my-migration-pool",
    ...
  },
  ...
]
```

**POST**

/sep/api/v2/migrations/start

Minimum required role: Administrator

Since: Jaglion

Start an already configured migration or replication task or restart a failed migration.

#### Parameters

The configuration is passed in as JSON object in the body of the request. The following JSON object properties are defined:

Name	Description
<b>taskName</b> String	The unique name of the migration task to be started.
<b>targetPoolName</b> String	The name of the target pool, to which the saveset should be migrated.
<b>resultId</b> String	The ID of the migration result which should be restarted.
<b>startDate</b> Date	The date and time at which the migration should be started.
<b>cancelAfter</b> Long	The amount of time in milliseconds, after which the migration should be canceled.
<b>isRestart</b> Boolean	True, if a migration should be restarted, false otherwise.
<b>grpFlag</b> Boolean	True, if a task group instead of a single migration task should be started. Has no effect in restart of migrations.
<b>immediateFlag</b> Boolean	True, if the migration task should start instantly.
<b>priority</b> Long	The execution priority of the migration task.

## Responses

Response Code and Content	Description
200 <b>StartMigrationResultDto</b> array[JSON object]	For every migration the provided input informations together with an event id and a status information is returned.

## Examples

Start migration task "MyMigrationTask":

```
POST /sep/api/v2/migrations/start
[
  {
    "taskName" : "MyMigrationTask",
    "startTime" : "2020-11-03T12:47:00",
    "immediateFlag" : "true",
    "targetPoolName" : "Migration-MP",
    "resultId" : "20201103094632594",
  }
]
Response:
[
  {
    "inputDto": {
      "taskName": "MyMigrationTask",
      "targetPoolName": "Migration-MP",
      "resultId": "20201103094632594",
      "startTime": 1604404020000,
      "isRestart": false,
      "immediateFlag": true
    },
    "eventId": 20201104143439687,
    "success": true
  }
]
```

**GET**

/sep/api/v2/migrations/&lt;name&gt;/drives

Minimum required role: None

Since: Jaglion

Get the source and the target drive for the migration or replication matching the given migration or replication name.

The response body contains the drive encoded as JSON object. The properties of the drive object are described in the drives service section.

## Responses

Response Code and Content	Description
200 <b>HwDrives</b> array[JSON object]	The matching drives are returned in the response body.

## Examples

---

Get the source and target drives of the migration with the result id 20210504143138149:

```
GET /sep/api/v2/clients/7/drives
```

Response:

```
{
  "id": 1,
  "device": "DS@Test-Store_1",
  "client": {
    "id": 0,
    ...
  },
  "driveType": {
    "name": "DISK_STORE",
    "genericType": "DISK",
    "mtime": 1583224746000
  },
  "name": "Drive-1",
  "compress": false,
  "occupy": false,
  "accessMode": "READWRITE",
  "smsCnts": 10,
  "mediaTimeout": 0,
  "cleanBit": false,
  "path": "C:/NoScan/work/Sesam/SEPsasam//var/work/datastores",
  "dataStore": "Test-Store",
  "ejectFlag": false,
  "blockSize": 0,
  "smsNr": 0,
  "encryptionCapable": false,
  "mtime": 1620369485000,
  "groupId": 1
}
```

**POST**

/sep/api/v2/migrations/cancel

Minimum required role: Administrator

Since: Jaglion

Cancels an active migration.

### Parameters

---

The filter configuration is passed in as JSON object in the body of the request. The following JSON object properties are defined:

Name	Description
<b>migrationId</b> String	The ID of the currently running migration to cancel.

### Responses

---

Response Code and Content	Description
<b>200</b> Boolean	True, if cancellation was successful, false otherwise.

## Examples

---

Cancel the active migration with the ID '20200901081001062':

```
POST /sep/api/v2/migrations/cancel
{ "migrationId" : "20200901081001062" }
```

```
Response:
true
```



### 3.33. Migration Tasks Service

The migration tasks service provides access to the migration and replication task objects. Migration and replication tasks are different only by the replication type. In this chapter, only the term ‘migration task’ is used to reference to both migration and replication tasks.

A migration task is an object with the following properties:

Name	Description
<b>name</b> * required String	The name of the migration or replication task. The maximum length of the name is 49 characters. The name can contain only letters, digits, the ‘-’ and the ‘_’ character.
<b>sourcePool</b> * required String	The name of the source media pool. The maximum length of the name is 32 characters. The name can contain only letters, digits, the ‘-’ and the ‘_’ character.
<b>targetPool</b> * required String	The name of the target media pool. The maximum length of the name is 32 characters. The name can contain only letters, digits, the ‘-’ and the ‘_’ character.
<b>sourceDrive</b> Long	The unique ID of the source drive to use.
<b>targetDrive</b> Long	The unique ID of the target drive to use.
<b>replicationType</b> String	The replication type to match. Valid values are ‘SEP Migration’, ‘SEP Si3 Replication’ and ‘Catalyst Replication’.
<b>sesamDate</b> Date	The sesam date when the backups to migrate or replicate executed.
<b>savesetCnt</b> Long	The number of the backup copies to migration or replicate.
<b>dateStart</b> Date	The date and time when the backups to migrate or replicate started.
<b>dateEnd</b> Date	The date and time when the backups to migrate or replicate finished.
<b>absoluteFlag</b> Boolean	Flag to control if the date selections are based on sesam days (1) or calendar days (0). Defaults to sesam days (1).
<b>saveset</b> JSON object	The unique ID of the backup to migrate or replicate. The maximum length of the ID is 49 characters.
<b>grpFlag</b> Boolean	Flag to control if a backup task or a backup group is selected.
<b>task</b> String	The name of the backup task. The maximum length of the backup task name is 50 character.
<b>taskGroup</b> String	The name of the backup group. The maximum length of the backup group name is 32 character.
<b>backupState</b> String	The backup state the backups have to match for inclusion.
<b>cfdiType</b> JSON object	The backup level the backups have to match for inclusion.
<b>mediaLabel</b> String	The label of the media to migrate or replicate. The maximum length of the media label is 30 character.
<b>genmode</b> Boolean	Flag to control if generation mode is selected.
<b>deleteFlag</b> String	Flag to control if the original backups are deleted after successful migration. Valid values are ‘0’ (off), ‘1’ (delete immediately) or ‘2’ (delete with next purge).
<b>migratedFlag</b> Boolean	Flag to control if already migrated backups will be migrated again.
<b>client</b> String	The name of the backup client.
<b>sourcefaceName</b> String	The name of the source interface to use.
<b>ifaceName</b> String	The name of the target interface to use.

Name	Description
<b>submitFlag</b> Boolean	Flag to control if parallel migration is enabled or not. Defaults to '1' (parallel migration enabled).
<b>eol</b> Long	The migration or replication task end-of-life time in days.
<b>migrationCmd</b> String	The migration command used.
<b>options</b> String	The migration command options.
<b>usercomment</b> String	The comment or note from the user. The maximum length of the user comment is 1024 characters.

Following methods are provided by the migration tasks service:

GET

/sep/api/v2/migrationtasks

Minimum required role: None

Since: Jaglion

Get all migration and replication tasks.

The response body contains the list of migration and replication tasks encoded as JSON objects. The properties of the migration task object are described above.

#### Responses

Response Code and Content	Description
<b>200</b> <b>Migration Tasks</b> array[JSON object]	The migration and replication tasks are returned in the response body.

#### Examples

Get all migration and replication tasks:

```
GET /sep/api/v2/migrationtasks

Response:
[
  {
    "name": "Migrate_to_LTS",
    "replicationType": {
      "name": "SEP Migration"
    },
    "sourcePool": "Migration-Pool",
    "targetPool": "LTS-Pool",
    "sourceDrive": 2,
    "targetDrive": 4,
    "saveSetCnt": 1,
    "dateStart": {
      "relative": -7
    },
    "dateEnd": {
      "relative": 0
    },
    "absoluteFlag": true,
    "grpflag": false,
    "backupState": "INFO",
    "cfdiType": {
      "generation": false,
      "copy": true,
    }
  }
]
```

```

        "full": true,
        "diff": true,
        "incr": true
    },
    "genmode": false,
    "deleteFlag": "0",
    "migratedFlag": true,
    "original": false,
    "submitFlag": true,
    "makeStamp": 1527516063000
},
...
]

```

GET

/sep/api/v2/migrationtasks/&lt;name&gt;

Minimum required role: None

Since: Jaglion

Get the migration or replication task matching the given name.

The response body contains the migration or replication task encoded as JSON object. The properties of the migration or replication task object are described above.

#### Responses

Response Code and Content	Description
<b>200</b> <b>Migration Task</b> JSON object	The migration or replication task is returned in the response body.

#### Examples

Get the migration task with the name 'Migrate\_to\_LTS':

```
GET /sep/api/v2/migrationevents/Migrate_to_LTS
```

Response:

```

{
  "name": "Migrate_to_LTS",
  "replicationType": {
    "name": "SEP Migration"
  },
  "sourcePool": "Migration-Pool",
  "targetPool": "LTS-Pool",
  "sourceDrive": 2,
  "targetDrive": 4,
  "saveSetCnt": 1,
  "dateStart": {
    "relative": -7
  },
  "dateEnd": {
    "relative": 0
  },
  "absoluteFlag": true,
  "grpflag": false,
  "backupState": "INFO",
  "cfdiType": {
    "generation": false,
    "copy": true,
    "full": true,
    "diff": true,

```

```

    "incr": true
  },
  "genmode": false,
  "deleteFlag": "0",
  "migratedFlag": true,
  "original": false,
  "submitFlag": true,
  "makeStamp": 1527516063000
}
    
```

**POST** /sep/api/v2/migrationtasks/find

Minimum required role: None Since: Jaglion

Search for migration or replication tasks matching the specified filter parameters.

Parameters

The filter configuration is passed in as JSON object in the body of the request. The following JSON object properties are defined:

Name	Description
<b>replicationType</b> array[String]	An array of replication type names to match.
<b>sourcePool</b> String	The name of the source media pool to match.
<b>targetPool</b> String	The name of the target media pool to match.
<b>names</b> array[String]	An array of migration task names to match.
<b>unstarted</b> String	Flag to indicate to return only unstarted migration tasks.
<b>taskGroup</b> String	The name of the backup group to match.
<b>task</b> String	The name of the backup task to match.
<b>client</b> String	The name of the client to match.

Responses

Response Code and Content	Description
<b>200</b> <b>Migration Tasks</b> array[JSON object]	The matching migration or replication tasks are returned in the response body.

Examples

Get all replication tasks being associated with the target media pool 'si3-2-pool':

```

POST /sep/api/v2/migrationtasks/find
{ "targetPool": "si3-2-pool", "replicationType" : [ "SEP Si3 Replication" ] }

Response:
[
  {
    "name": "si3-1-T0-si3-2",
    
```

```

    "replicationType": {
      "name": "SEP Si3 Replication"
    },
    "sourcePool": "si3-1-pool",
    "targetPool": "si3-2-pool",
    "sourceDrive": 7,
    "targetDrive": 8,
    "saveSetCnt": 0,
    "dateStart": {
      "relative": -99999
    },
    "dateEnd": {
      "relative": 0
    },
    "absoluteFlag": true,
    "grpFlag": false,
    "backupState": "INFO",
    "cfdiType": {
      "generation": false,
      "copy": true,
      "full": true,
      "diff": true,
      "incr": true
    },
    "genmode": false,
    "deleteFlag": "0",
    "migratedFlag": true,
    "original": false,
    "submitFlag": true,
    "makeStamp": 1527848087000
  },
  ...
]

```

POST

/sep/api/v2/migrationtasks/create

Minimum required role: Administrator

Since: Jaglion

Creates a new migration or replication task.

#### Parameters

The migration or replication task is passed in as JSON object in the body of the request. The properties of the migration or replication task are described above.

#### Responses

Response Code and Content	Description
200 Migration Task JSON object	The newly created migration or replication task is returned in the response body.

#### Examples

Creates a new replication task:

```

POST /sep/api/v2/mediapoolerevents/create
{
  "name": "my-replication-task",
  "replicationType": {
    "name": "SEP Si3 Replication"
  }
}

```

```

    },
    "sourcePool": "si3-1-pool",
    "targetPool": "si3-2-pool",
    "sourceDrive": 7,
    "targetDrive": 8,
    "dateStart": {
      "relative": -7
    },
    "dateEnd": {
      "relative": 0
    },
    "absoluteFlag": true
  }
}

Response:
{
  "name": "my-replication-task",
  "replicationType": {
    "name": "SEP Si3 Replication"
  },
  "sourcePool": "si3-1-pool",
  "targetPool": "si3-2-pool",
  "sourceDrive": 7,
  "targetDrive": 8,
  "dateStart": {
    "relative": -7
  },
  "dateEnd": {
    "relative": 0
  },
  "absoluteFlag": true,
  "cfdiType": {
    "generation": false,
    "copy": true,
    "full": true,
    "diff": true,
    "incr": true
  },
  "submitFlag": true
}

```

**POST**`/sep/api/v2/migrationtasks/update`

Minimum required role: Administrator

Since: Jaglion

Updates a migration or replication task. A migration or replication task with the given name must exist, otherwise the call will fail.

#### Parameters

---

The migration or replication task is passed in as JSON object in the body of the request. The properties of the migration or replication task are described above.

#### Responses

---

Response Code and Content	Description
200 Migration Task JSON object	The updated migration or replication task is returned in the response body.

## Examples

---

Sets a new comment for the replication task with the name 'my-replication-task':

```
POST /sep/api/v2/migrationtasks/update
{
  "name": "my-replication-task",
  "replicationType": {
    "name": "SEP Si3 Replication"
  },
  "sourcePool": "si3-1-pool",
  "targetPool": "si3-2-pool",
  "sourceDrive": 7,
  "targetDrive": 8,
  "dateStart": {
    "relative": -7
  },
  "dateEnd": {
    "relative": 0
  },
  "absoluteFlag": true,
  "cfdiType": {
    "generation": false,
    "copy": true,
    "full": true,
    "diff": true,
    "incr": true
  },
  "submitFlag": true,
  "usercomment": "Newly set comment"
}
```

Response:

```
{
  "name": "my-replication-task",
  "replicationType": {
    "name": "SEP Si3 Replication"
  },
  "sourcePool": "si3-1-pool",
  "targetPool": "si3-2-pool",
  "sourceDrive": 7,
  "targetDrive": 8,
  "dateStart": {
    "relative": -7
  },
  "dateEnd": {
    "relative": 0
  },
  "absoluteFlag": true,
  "cfdiType": {
    "generation": false,
    "copy": true,
    "full": true,
    "diff": true,
    "incr": true
  },
  "submitFlag": true,
  "usercomment": "Newly set comment"
}
```

**POST**

/sep/api/v2/migrationtasks/persist

Minimum required role: Super user

Since: Jaglion

Persists a migration task. If no migration task with the given name exists, a new migration task will be created. Otherwise, the properties of an existing migration task are updated.

## Parameters

---

The migration task is passed in as JSON object in the body of the request. The properties of a migration task are described above.

## Responses

Response Code and Content	Description
<b>200</b> <b>Migration Task</b> JSON object	The created or updated migration task is returned in the response body.

## Examples

Persists the migration task with the name "my\_migration\_task":

```
POST /sep/api/v2/migrationtasks/update
{
  "name": "my_migration_task",
  "replicationType": {
    "name": "SEP Si3 Replication"
  },
  "sourcePool": "si3-1-pool",
  "targetPool": "si3-2-pool",
  "sourceDrive": 7,
  "targetDrive": 8,
  "dateStart": {
    "relative": -7
  },
  "dateEnd": {
    "relative": 0
  },
  "absoluteFlag": true,
  "cfdiType": {
    "generation": false,
    "copy": true,
    "full": true,
    "diff": true,
    "incr": true
  },
  "submitFlag": true,
  "usercomment": "Newly set comment"
}
```

Response:

```
{
  "name": "my_migration_task",
  "replicationType": {
    "name": "SEP Si3 Replication"
  },
  "sourcePool": "si3-1-pool",
  "targetPool": "si3-2-pool",
  "sourceDrive": 7,
  "targetDrive": 8,
  "dateStart": {
    "relative": -7
  },
  "dateEnd": {
    "relative": 0
  },
  "absoluteFlag": true,
  "cfdiType": {
    "generation": false,
    "copy": true,
    "full": true,
    "diff": true,
    "incr": true
  },
  "submitFlag": true,
  "usercomment": "Newly set comment"
}
```



```
}

```

**POST**`/sep/api/v2/migrationtasks/delete`

Minimum required role: Administrator

Since: Jaglion

Deletes a migration or replication task.

#### Parameters

The name of the migration or replication task is passed in as JSON string in the body of the request.

#### Responses

Response Code and Content	Description
200 <b>id</b> String	The unique ID of the deleted migration or replication task is returned in the response body. If no migration or replication task existed with the given ID, then null is returned.

#### Examples

Deletes the replication task with the name 'my-replication-task' (exists):

```
POST /sep/api/v2/migrationtasks/delete
"my-replication-task"
```

```
Response:
"my-replication-task"
```

**POST**`/sep/api/v2/migrationtasks/deleteByEntity`

Minimum required role: Administrator

Since: Jaglion

Deletes the migration task matching the given entity.

#### Parameters

The entity to match is passed as JSON object in the body of the request. The only required entity property is the primary key of the entity.

#### Responses

Response Code and Content	Description
200 <b>Name</b> String	The name of the deleted migration task is returned in the response body. If no migration task existed with the given ID, then null is returned.

#### Examples

Deletes the migration task matching the given entity:

```
POST /sep/api/v2/migrationtasks/deleteByEntity
{
  "name" : "my_awesome_migration_task"
}

Response:
"my_awesome_migration_task"
```

**POST**

/sep/api/v2/migrationtasks/&lt;name&gt;/deleteForced

Minimum required role: Administrator

Since: Jaglion

Deletes the migration task object matching the provided name and all associated migration events.

#### Parameters

The unique name of the migration task is passed in the URL. The delete options are passed in as JSON object in the body of the request. The following JSON object properties are defined:

Name	Description
<b>forceRemoveData</b> Boolean	Flag to indicate if all related data shall be removed together with the migration task.

#### Responses

Response Code and Content	Description
<b>200</b> <b>Name</b> String	The name of the deleted migration task is returned in the response body.

#### Examples

Delete the migration task with the name "MyMigrationTask":

```
POST /sep/api/v2/migrationtasks/MyMigrationTask/deleteForced
{}

Response:
"MyMigrationTask"
```

```
POST /sep/api/v2/mediapools/MyMigrationTask/deleteForced
null

Response:
"MyMigrationTask"
```

### 3.34. Modification Time Service

The modification time service provides access to the data base tables last modification times. This information can be used by clients to determine if some information changed and needs to be refreshed.

A modification time is an object with the following properties:

Name	Description
<b>tableName</b> *required String	The unique name of the data base table. The maximum length of the name is 255 characters.
<b>modificationTime</b> Date	The last modification time of the time in milliseconds (Unix Epoch Time).

Following methods are provided by the modification time service:

GET

/sep/api/v2/mtimes

Minimum required role: None

Since: Jaglion

Get the last modification times of all data base tables.

The response body contains the list of modification times encoded as JSON objects. The properties of the modification time object are described above.

#### Responses

Response Code and Content	Description
<b>200</b> <b>Modification Time</b> array[JSON object]	The modification times are returned in the response body.

#### Examples

Get the last modification times of all tables:

```
GET /sep/api/v2/mtimes
```

```
Response:
```

```
[
  {
    "tableName": "credentials",
    "modificationTime": 1591081051000
  },
  {
    "tableName": "drive_types",
    "modificationTime": 1591081051000
  },
  ...
]
```

GET

/sep/api/v2/mtimes/&lt;name&gt;

Minimum required role: None

Since: Jaglion

Get the last modification time of the data base table matching the given name.

The response body contains the list of modification times encoded as JSON objects. The properties of the modification time object are described above.

#### Responses

Response Code and Content	Description
200 <b>Modification Time</b> JSON object	The modification time is returned in the response body.

#### Examples

Get the modification time of the table with the name 'credentials':

```
GET /sep/api/v2/mtimes/credentials
```

```
Response:
```

```
{  
  "tableName": "credentials",  
  "modificationTime": 1591081051000  
}
```

### 3.35. Monitoring Service

The monitoring services provides access to generic result objects. This includes result objects from backup and restore operations, but also result objects from migrations and replications or media actions.

A generic result is an object with the following properties:

Name	Description
<b>id</b> * required String	The unique name or ID of the generic result. The maximum length of the name is 64 characters.
<b>fdiType</b> JSON object	The group mode and the generic result type.
<b>state</b> String	The generic result state. See the common state values section for details.
<b>object</b> String	The name of the object the result is created for. This can be the name of the backup, restore or migration task. Or the name of the data store. In case the result is a media result.
<b>task</b> String	The name of the backup, restore or migration task. Can be also the name of the action performed in case of a media result. The maximum length of the task name is 50 characters.
<b>startTime</b> Date	The date and time when the operation started.
<b>stopTime</b> Date	The date and time when the operation finished.
<b>sesamDate</b> Date	The sesam date when the operation executed.
<b>saveset</b> String	The ID of the backup or any other referenced result object. The maximum length of the ID is 64 character.
<b>client</b> String	The name of the client. The maximum length of the client name is 255 characters.
<b>clientId</b> Long	The unique ID of the client.
<b>driveNum</b> Long	The ID of the drive used.
<b>dataSize</b> Double	The data size in bytes.
<b>throughput</b> Double	The throughput in B/s.
<b>duration</b> String	The duration in seconds.
<b>sessionId</b> String	The ID of the parent result. The maximum length of the ID is 64 character.
<b>mediaPool</b> JSON object	The name of the media pool used.
<b>sepcomment</b> String	The comment or note from Sesam. The maximum length of the SEP comment is 254 characters.
<b>usercomment</b> String	The comment or note from the user. The maximum length of the user comment is 1024 characters.
<b>ssddFlag</b> Boolean	Flag to mark if the data was backed up with source side deduplication.
<b>schedule</b> String	The schedule name. The maximum length of the schedule name is 30 character.
<b>eol</b> Date	The end-of-life date and time.
<b>externFlag</b> Boolean	Flag to mark if the result has been created by an external backup.

Following methods are provided by the monitoring service:

GET

/sep/api/v2/monitoring

Minimum required role: None

Since: Beefalo

Get all generic results.

This end point should be used with care, as the returned list of generic results is completely unfiltered and therefore the returned result set can be huge. On Sesam servers with a large amount of generic results, getting the list of generic results unfiltered can easily take very long and might even lead to exceeding the available memory on the Sesam server.

To limit the number of returned generic results, the *monitoring/find* API should be used instead.

The response body contains the list of generic results encoded as JSON objects. The properties of the generic result object are described above.

#### Responses

Response Code and Content	Description
<b>200</b> <b>Generic Result</b> array[JSON object]	The generic results are returned in the response body.

#### Examples

Get all generic results:

```
GET /sep/api/v2/monitoring

Response:
[
  {
    "id": "20180909080000",
    "fdiType": {
      "type": "NEWDAY",
      ...
    },
    "state": "c",
    "object": "sm_newday",
    ...
  },
  {
    "id": "20180909080031138@1KFKRc7hhnt",
    "fdiType": {
      "type": "MEDIA_RESULTS",
      ...
    },
    "state": "0",
    "object": "My-Store",
    ...
  },
  ...
]
```

**GET**`/sep/api/v2/monitoring/<id>`

Minimum required role: None

Since: Beefalo

Get the generic result matching the given ID.

The response body contains the generic result encoded as JSON object. The properties of the generic result object are described above.

#### Responses

Response Code and Content	Description
200 Generic Result JSON object	The generic result is returned in the response body.

#### Examples

The generic result with the unique name '20180909080000':

```
GET /sep/api/v2/monitoring/20180909080000
```

```
Response:
```

```
{
  "id": "20180909080000",
  "fdiType": {
    "type": "NEWDAY",
    ...
  },
  "state": "c",
  "object": "sm_newday",
  ...
}
```

**POST**`/sep/api/v2/monitoring/find`

Minimum required role: None

Since: Beefalo

Search for generic results matching the specified filter parameters.

#### Parameters

The filter configuration is passed in as JSON object in the body of the request. The following JSON object properties are defined:

Name	Description
<b>sesamDate</b> array[String]	<p>An array of one or two date/time strings. The first element in the array represents the beginning of the date/time range (&lt;from&gt;) and the second element in the array represents the end of the date/time range (&lt;to&gt;). Either &lt;from&gt; or &lt;to&gt; can be null, but one of them has to be not null. The presence of the two values controls the condition generated.</p> <ul style="list-style-type: none"> <li>• If both values are specified, than the condition will be generated as date range (between “&lt;from&gt;” and “&lt;to&gt;”).</li> <li>• If both values are specified and “&lt;to&gt;” is null, the condition will be generated as greater or equal than “&lt;from&gt;”.</li> <li>• If both values are specified and “&lt;from&gt;” is null, the condition will be generated as less or equal than “&lt;to&gt;”.</li> <li>• If only one value is specified (array length = 1), than the condition is generated as equals.</li> </ul>
<b>startTime</b> array[String]	<p>An array of one or two date/time strings. See the description of the “sesamDate” filter property for details.</p>
<b>stopTime</b> array[String]	<p>An array of one or two date/time strings. See the description of the “sesamDate” filter property for details.</p>
<b>eol</b> Date	<p>The end of life date to match.</p>
<b>clientNames</b> array[String]	<p>The name of the clients to match. If no name is given all clients are matched.</p>
<b>clients</b> array[Long]	<p>An array of client IDs to match. If no ID is given all clients are matched.</p>
<b>fdiTypes</b> array[JSON object]	<p>An array of generic result types to match. Valid values are restore ("R"), migration ("c"), replication ("r"), media ("m"), backups ("C", "F", "D", "I"), newday ("N"), startup ("S") and execute ("X").</p>
<b>states</b> array[String]	<p>An array of states to match. See the common state values section for details.</p>
<b>mediaStates</b> array[String]	<p>An array of media states to match. See the common state values section for details.</p>
<b>sessionId</b> String	<p>The ID of the parent generic result.</p>
<b>brokenBackups</b> Boolean	<p>Flag to include broken backups in the result set.</p>
<b>excludeEventType</b> array[String]	<p>An array of generic result types to exclude.</p>
<b>size</b> array[Double]	<p>An array of one or two size values to match. The first element in the array represents the beginning of the size range (&lt;from&gt;) and the second element in the array represents the end of the size range (&lt;to&gt;). Either &lt;from&gt; or &lt;to&gt; can be null, but one of them has to be not null. The presence of the two values controls the condition generated.</p> <ul style="list-style-type: none"> <li>• If both values are specified, than the condition will be generated as size range (between “&lt;from&gt;” and “&lt;to&gt;”).</li> <li>• If both values are specified and “&lt;to&gt;” is null, the condition will be generated as greater or equal than “&lt;from&gt;”.</li> <li>• If both values are specified and “&lt;from&gt;” is null, the condition will be generated as less or equal than “&lt;to&gt;”.</li> </ul> <p>If only one value is specified (array length = 1), than the condition is generated as equals.</p>
<b>tasks</b> array[JSON object]	<p>An array of task names to match.</p>
<b>object</b> String	<p>The name of the object to match. The wild cards '*' and '?' might be used.</p>



Responses

Response Code and Content	Description
<b>200</b> <b>Generic Result</b> array[JSON object]	The matching generic results are returned in the response body.

Examples

Get all restore results:

```

POST /sep/api/v2/monitoring/find
{ "fdiTypes" : [ { "type":"RESTORE_RESULTS" } ] }

Response:
[
  {
    "id": "20191219110003453",
    "fdiType": {
      "type": "RESTORE_RESULTS",
      ...
    },
    "state": "0",
    "object": "restore_my_all_backup_new-target_no-overwrite",
    ...
  },
  ...
]
    
```

**GET**

/sep/api/v2/monitoring/count
Since: Jaglion

Minimum required role: None

Get the total number of the available generic results.

The end point supports filtering the result set by passing in a generic results filter as JSON object in the body of the request. The HTTP request method has to be changed to POST when using the filter.

**POST**

/sep/api/v2/monitoring/count
Since: Jaglion

Minimum required role: None

Get the total number of the filtered list of available generic results.

The response body contains the total number of matching generic results encoded as JSON number.

Responses

Response Code and Content	Description
<b>200</b> <b>Total Number</b> Long	The total number of matching generic results are returned in the response body.

## Examples

---

Get the total number of all generic results:

```
GET /sep/api/v2/monitoring/count
```

```
Response:  
2079
```

Get the total number of all restore results:

```
POST /sep/api/v2/monitoring/count  
{ "fdiTypes" : [ { "type":"RESTORE_RESULTS" } ] }
```

```
Response:  
4
```

### 3.36. Mount Service

The mount service allows the mounting of backups or virtual machine disk images, in order to gain access to the files and directories inside of a backup or virtual machine disk image. The end points of the mount service are used to provide the ability of restoring only a sub set of files and directories of the whole backup. The functionality is called Single Item Restore (SIR).

Each end point of the mount service takes a mount data transfer object (DTO) as input and returns a mount result data transfer object as output. Each end point of the mount service can require a different combination of mount DTO properties. The same applies to the mount result DTO properties.

A mount DTO is an object with the following properties:

Name	Description
<b>sessionId</b> String	The unique ID of the mount session. The mount session ID is a required parameter for all end points, except for the 'start' end point.
<b>savesetId</b> String	The unique name of the backup. The name is the ID of the save set where the backup data is stored. The maximum length of the backup name is 64 characters.
<b>genmode</b> Boolean	Flag to indicate if a DIFF or INCR backup will be mounted in "generation" mode. If omitted, the property value will default to 'false'.
<b>backupType</b> String	The backup type. The maximum length of the backup type is 32 character.
<b>type</b> String	The mount type. The mount type is a required parameter for the 'mount' end point. Valid values are 'SAVESET', 'VM' and 'EXCHANGE'.
<b>exchangeMountPath</b> String	The exchange mount path. This property has effect only if calling 'mount' with mount type 'EXCHANGE'.
<b>includeCmdOutput</b> Boolean	Include the remote command output into the response, if available. This property has effect only if calling 'status'. The client has to buffer the returned remote command output. Output included in the response is removed from the buffer at server side.
<b>rdsName</b> String	The name of the RDS or Sesam server to mount the saveset on.
<b>mountPath</b> String	The path on the RDS or Sesam server to mount the saveset to.
<b>mountOptions</b> String	The mount options to append to the mount command. The mount options are free text and passed on as is.
<b>proxyVmUri</b> String	The proxy VM URI. The proxy VM URI has to contain the name of the vCenter, the data store and virtual machine name. The format is '<vcenter>:<data center>/<vm>'.
<b>proxyVmClientName</b> String	The SEP sesam client name of the proxy VM. The maximum length of the name is 255 characters. The name can contain only letters, digits, '-', '_' and the '.' character.
<b>proxyVmNfsInterface</b> String	The NFS interface to use for the proxy VM.

A mount result DTO is an object with the following properties:

Name	Description
<b>sessionId</b> String	The unique ID of the mount session.
<b>restoreId</b> String	The unique ID of the restore result. The maximum length of the restore ID is 64 characters.
<b>state</b> String	The mount session state. Valid values are 'INITIAL', 'MOUNTING', 'MOUNTED', 'UMOUNTING' and 'ERROR'.
<b>remoteCommandRunning</b> Boolean	Flag to indicate that a remote command is currently running.
<b>lastExitCode</b>	The exit code of the last executed remote command. If no remote command has

Name	Description
Integer	been executed for the mount session yet, the property is not set. If the 'state' property is set to 'ERROR', this property can be checked for more information about the failure cause.
<b>output</b> array[String]	The output of the remote command. Set only, if 'includeCmdOutput' is set to 'true' when calling 'status'.
<b>mountPoints</b> array[String]	The list of discovered mount points. The list of mount points is valid only, if the mount session is in state 'MOUNTED'.

POST

/sep/api/v2/mount/start

Minimum required role: Restore

Since: Jaglion

Starts a new mount session for the given backup. If an existing restore task name is passed in also, the mount session will query all needed information from the given restore task. If the restore task name is omitted, an intermediate in-memory restore task is created.

#### Parameters

The mount session configuration is passed in via a mount DTO as JSON object in the body of the request. The following properties of the mount DTO are used:

Name	Description
<b>savesetId</b> * required String	The unique name of the backup. The name is the ID of the save set where the backup data is stored. The maximum length of the backup name is 64 characters.
<b>backupType</b> * required String	The backup type. The maximum length of the backup type is 32 character.
<b>type</b> * required String	The mount type. The mount type is a required parameter for the 'mount' end point. Valid values are 'SAVESET', 'VM' and 'EXCHANGE'.
<b>genmode</b> Boolean	Flag to indicate if a DIFF or INCR backup will be mounted in "generation" mode. If omitted, the property value will default to 'false'.

#### Responses

Response Code and Content	Description
200 <b>MountResultDto</b> JSON object	The result of the mount service operation is returned in the response body.

#### Examples

Start a new mount session for backup 'SF20191122081001839@61ZVhJzj4kv':

```
POST /sep/api/v2/mount/start
{ "savesetId" : "SF20191122081001839@61ZVhJzj4kv", "backupType" : "PATH", "type" : "SAVESET" }

Response:
{
  "sessionId": "c169df8b-1911-4a52-a4aa-09fa2ea2346a",
  "state": "INITIAL"
  "remoteCommandRunning": false
}
```

POST

/sep/api/v2/mount/cancel

Minimum required role: Restore

Since: Jaglion

Cancels the mount session with the specified session ID. If no mount session with the specified ID exists, the end point will do nothing and return immediately. If the mount session exists and has active mounts, cancelling the session will unmount all active mounts.

#### Parameters

The mount session configuration is passed in via a mount DTO as JSON object in the body of the request. The following properties of the mount DTO are used:

Name	Description
<b>sessionId</b> * required String	The unique ID of the mount session.

#### Responses

Response Code and Content	Description
200 <b>MountResultDto</b> JSON object	The result of the mount service operation is returned in the response body.

#### Examples

Cancel the mount session with ID 'c169df8b-1911-4a52-a4aa-09fa2ea2346a':

```
POST /sep/api/v2/mount/cancel
{ "sessionId": "c169df8b-1911-4a52-a4aa-09fa2ea2346a" }

Response:
{
  "sessionId": "c169df8b-1911-4a52-a4aa-09fa2ea2346a",
  "state": "INITIAL"
}
```

POST

/sep/api/v2/mount/status

Minimum required role: Restore

Since: Jaglion

Get the status of the mount session with the specified session ID. If no mount session with the specified ID exists, no status will be returned.

#### Parameters

The mount session configuration is passed in via a mount DTO as JSON object in the body of the request. The following properties of the mount DTO are used:

Name	Description
<b>sessionId</b> * required String	The unique ID of the mount session.

## Responses

Response Code and Content	Description
200 <b>MountResultDto</b> JSON object	The result of the mount service operation is returned in the response body.

## Examples

Get the status of the mount session with ID 'c169df8b-1911-4a52-a4aa-09fa2ea2346a':

```
POST /sep/api/v2/mount/status
{ "sessionId":"c169df8b-1911-4a52-a4aa-09fa2ea2346a", "includeCmdOutput": true }

Response:
{
  "sessionId": "c169df8b-1911-4a52-a4aa-09fa2ea2346a",
  "restoreId": "20191122124608297@cJeRzcAyKw2",
  "state": "MOUNTED",
  "remoteCommandRunning": false,
  "lastExitCode": 0,
  "output": [
    "2019-11-22 12:46:08: INFO: $Id: sm_data_store.py $Id: 979add65fe (HEAD -> master,
origin/master, origin/HEAD) 2019-10-30 16:42:37 +0100 $",
    "2019-11-22 12:46:08: INFO: Arguments: sm_data_store mount_saveset -s
SF20191122081001839@61ZVhJzj4kv -b PATH -I 20191122124608297@cJeRzcAyKw2",
    "2019-11-22 12:46:08: Mount single saveset data file...",
    "2019-11-22 12:46:08: Mount saveset data files...",
    "2019-11-22 12:46:08: Mount saveset data files for: SF20191122081001839@61ZVhJzj4kv",
    ...
  ]
}
```

**POST**

/sep/api/v2/mount/attach

Minimum required role: Restore

Since: Jaglion

Attach the backup data of the mount session with the specified session ID to a proxy VM. The proxy VM to use has to be specified in the mount DTO which is passed in to the 'start' end point. If no mount session with the specified ID exists, no status will be returned.

## Parameters

The mount session configuration is passed in via a mount DTO as JSON object in the body of the request. The following properties of the mount DTO are used:

Name	Description
<b>sessionId</b> *required String	The unique ID of the mount session.

## Responses

Response Code and Content	Description
200 <b>MountResultDto</b> JSON object	The result of the mount service operation is returned in the response body.

## Examples

---

Attach the backup data of the mount session with ID 'c169df8b-1911-4a52-a4aa-09fa2ea2346a' to a proxy VM:

```
POST /sep/api/v2/mount/attach
{ "sessionId":"c169df8b-1911-4a52-a4aa-09fa2ea2346a" }

Response:
{
  "sessionId": "c169df8b-1911-4a52-a4aa-09fa2ea2346a",
  "state": "MOUNTING",
  "remoteCommandRunning": false
}
```

**POST**

/sep/api/v2/mount/mount

Minimum required role: Restore

Since: Jaglion

Mount the backup data of the mount session with the specified session ID. If no mount session with the specified ID exists, no status will be returned.

## Parameters

---

The mount session configuration is passed in via a mount DTO as JSON object in the body of the request. The following properties of the mount DTO are used:

Name	Description
<b>sessionId</b> * <b>required</b> String	The unique ID of the mount session.

## Responses

---

Response Code and Content	Description
<b>200</b> <b>MountResultDto</b> JSON object	The result of the mount service operation is returned in the response body.

## Examples

---

Mount the backup data of the mount session with ID 'c169df8b-1911-4a52-a4aa-09fa2ea2346a':

```
POST /sep/api/v2/mount/mount
{ "sessionId":"c169df8b-1911-4a52-a4aa-09fa2ea2346a" }

Response:
{
  "sessionId": "c169df8b-1911-4a52-a4aa-09fa2ea2346a",
  "state": "MOUNTING",
  "remoteCommandRunning": false
}
```

POST

/sep/api/v2/mount/umount

Minimum required role: Restore

Since: Jaglion

Unmount all active mounts of the mount session with the specified session ID. If no mount session with the specified ID exists, no status will be returned. If the mount session does not have any active mount, the end point returns immediately.

#### Parameters

The mount session configuration is passed in via a mount DTO as JSON object in the body of the request. The following properties of the mount DTO are used:

Name	Description
<b>sessionId</b> * <b>required</b> String	The unique ID of the mount session.

#### Responses

Response Code and Content	Description
<b>200</b> <b>MountResultDto</b> JSON object	The result of the mount service operation is returned in the response body.

#### Examples

Unmount the backup data of the mount session with ID 'c169df8b-1911-4a52-a4aa-09fa2ea2346a':

```
POST /sep/api/v2/mount/umount
{ "sessionId": "c169df8b-1911-4a52-a4aa-09fa2ea2346a" }

Response:
{
  "sessionId": "c169df8b-1911-4a52-a4aa-09fa2ea2346a",
  "state": "INITIAL",
  "remoteCommandRunning": false
}
```



### 3.37. Newday Events Service

The newday event services provides access to the newday event objects, which are associated with a schedule.

A newday event is an object with the following properties:

Name	Description
<b>id</b> * required String	The unique ID of the newday event.
<b>name</b> String	The name of the newday event. The maximum length of the name is 255 characters. The name can contain only letters, digits, the '-' and the '_' character.
<b>object</b> * required String	The name of the associated object. The only valid value is 'SEP-SESAM'. The maximum length of the object is 50 character.
<b>exec</b> Boolean	Flag to indicate if the newday event is enabled for execution.
<b>eol</b> Long	The retention time in days.
<b>scheduleName</b> String	The name of the schedule the newday event is associated with. The maximum length of the schedule name is 30 character.
<b>priority</b> Long	The priority of the newday event.
<b>suppress</b> Boolean	Flag to indicate if the newday event is a blocking event.
<b>followUp</b> String	The follow up actions to execute when the newday event finished successfully. The maximum length of the follow up is 1024 character.
<b>owner</b> String	The newday event owner. The maximum length of the newday event owner is 30 character.
<b>stopFlags</b> JSON object	An JSON object containing a list of suppress flags to indicate which Sesam components will be stopped when the newday event is executed. Valid values are 'ALL_EVENTS', 'BACKUP', 'MEDIA', 'RESTORE', 'COMMAND' and 'MIGRATION_REPLICATION'.
<b>supressFlags</b> JSON object	An JSON object containing a list of suppress flags to indicate which Sesam components will be blocked when the newday event is marked as blocking event. Valid values are 'ALL_EVENTS', 'BACKUP', 'MEDIA', 'RESTORE', 'COMMAND' and 'MIGRATION_REPLICATION'..
<b>immediateFlag</b> Boolean	Flag to indicate if the neday event has to be started immediately.

Following methods are provided by the newday events service:

GET
/sep/api/v2/newdayevents


---

Minimum required role: None Since: Jaglion

Get all newday events.

The response body contains the list of newday events encoded as JSON objects. The properties of the newday events object are described above.

#### Responses

Response Code and Content	Description
200 <b>Newday Events</b> array[JSON object]	The newday events are returned in the response body.

## Examples

---

Get all newday events:

```
GET /sep/api/v2/newdayevents

Response:
[
  {
    "id": "0",
    "object": "SEP-SESAM",
    "exec": true,
    "scheduleName": "Newday",
    "priority": 1,
    "suppress": false,
    "stopFlags": {
      "value": "A"
    },
    "owner": "Administrator",
    "immediateFlag": false
  },
  ...
]
```

**GET**

/sep/api/v2/newdayevents/&lt;id&gt;

Minimum required role: None

Since: Jaglion

Get the newday event matching the given ID.

The response body contains the newday event encoded as JSON object. The properties of the newday events object are described above.

## Responses

---

Response Code and Content	Description
<b>200</b> <b>Newday Event</b> JSON object	The newday event is returned in the response body.

## Examples

---

Get the newday event with the unique ID '0':

```
GET /sep/api/v2/newdayevents/0

Response:
{
  "id": "0",
  "object": "SEP-SESAM",
  "exec": true,
  "scheduleName": "Newday",
  "priority": 1,
  "suppress": false,
  "stopFlags": {
    "value": "A"
  },
  "owner": "Administrator",
  "immediateFlag": false
}
```

}

**POST**

/sep/api/v2/newdayevents/find

Minimum required role: None

Since: Jaglion

Search for newday events matching the specified filter parameters.

#### Parameters

The filter configuration is passed in as JSON object in the body of the request. The following JSON object properties are defined:

Name	Description
<b>scheduleName</b> String	The schedule name to match.

#### Responses

Response Code and Content	Description
<b>200</b> <b>Newday Events</b> array[JSON object]	The matching newday events are returned in the response body.

#### Examples

Get all newday events assigned to the schedule 'Newday':

```
POST /sep/api/v2/newdayevents/find
{ "scheduleName": "Newday" }
```

Response:

```
[
  {
    "id": "0",
    "object": "SEP-SESAM",
    "exec": true,
    "scheduleName": "Newday",
    "priority": 1,
    "suppress": false,
    "stopFlags": {
      "value": "A"
    },
    "owner": "Administrator",
    "immediateFlag": false,
    "mtime": 1576748260000
  },
  ...
]
```

POST

/sep/api/v2/newdayevents/create

Minimum required role: Administrator

Since: Jaglion

Creates a new newday event.

#### Parameters

The newday event is passed in as JSON object in the body of the request. The properties of the newday event are described above.

#### Responses

Response Code and Content	Description
200 Newday Event JSON object	The newly created newday event is returned in the response body.

#### Examples

Creates a new newday event:

```
POST /sep/api/v2/newdayevents/create
{
  "object": "SEP-SESAM",
  "scheduleName": "Newday",
  "stopFlags": {
    "value": "A"
  }
}

Response:
{
  "id": "20210625104222887",
  "name": "SEP-SESAM_Newday-20210625104222887",
  "object": "SEP-SESAM",
  "exec": true,
  "scheduleName": "Newday",
  "priority": 1,
  "suppress": false,
  "stopFlags": {
    "value": "A"
  },
  "owner": "myself",
  "immediateFlag": false
}
```

POST

/sep/api/v2/newdayevents/update

Minimum required role: Administrator

Since: Jaglion

Updates a newday event. A newday event with the given ID must exist, otherwise the call will fail.

#### Parameters

The newday event is passed in as JSON object in the body of the request. The properties of the newday event are described above.

Responses

Response Code and Content	Description
200 Newday Event JSON object	The updated newday event is returned in the response body.

Examples

Sets a new name for the newday event with the ID '20210625104222887':

```

POST /sep/api/v2/newdayevents/update
{
  "id": "20210625104222887",
  "name": "Custom Newday Event",
  "object": "SEP-SESAM",
  "exec": true,
  "scheduleName": "Newday",
  "priority": 1,
  "suppress": false,
  "stopFlags": {
    "value": "A"
  },
  "owner": "myself",
  "immediateFlag": false
}

Response:
{
  "id": "20210625104222887",
  "name": "Custom Newday Event",
  "object": "SEP-SESAM",
  "exec": true,
  "scheduleName": "Newday",
  "priority": 1,
  "suppress": false,
  "stopFlags": {
    "value": "A"
  },
  "owner": "myself",
  "immediateFlag": false
}
    
```

**POST** /sep/api/v2/newdayevents/persist Since: Jaglion

Minimum required role: Super user

Persists a newday event. If no newday event with the given ID exists, a new newday event will be created. Otherwise, the properties of an existing newday event are updated.

Parameters

The newday event is passed in as JSON object in the body of the request. The properties of a newday event are described above.

Responses

Response Code and Content	Description
200 Newday Event	The created or updated newday event is returned in the response body.

Response Code and Content	Description
JSON object	

### Examples

Persists the newday event with the ID "20210625104222887":

```

POST /sep/api/v2/newdayevents/persist
{
  "id": "20210625104222887",
  "name": "Custom Newday Event",
  "object": "SEP-SESAM",
  "exec": true,
  "scheduleName": "Newday",
  "priority": 1,
  "suppress": false,
  "stopFlags": {
    "value": "A"
  },
  "owner": "myself",
  "immediateFlag": false
}

Response:
{
  "id": "20210625104222887",
  "name": "Custom Newday Event",
  "object": "SEP-SESAM",
  "exec": true,
  "scheduleName": "Newday",
  "priority": 1,
  "suppress": false,
  "stopFlags": {
    "value": "A"
  },
  "owner": "myself",
  "immediateFlag": false
}

```

**POST**

/sep/api/v2/newdayevents/delete

Minimum required role: Administrator

Since: Jaglion

Deletes a newday event.

### Parameters

The unique ID of the newday event is passed in as JSON number in the body of the request.

### Responses

Response Code and Content	Description
200 id Long	The unique ID of the deleted newday event is returned in the response body. If no newday event existed with the given ID, then null is returned.

### Examples

Deletes the newday event with the ID '20210625104222887' (exists):

```
POST /sep/api/v2/newdayevents/delete
20210625104222887
```

```
Response:
20210625104222887
```

**POST** /sep/api/v2/newdayevents/deleteByEntity

Minimum required role: Administrator

Since: Jaglion

Deletes the newday event matching the given entity.

Parameters

The entity to match is passed as JSON object in the body of the request. The only required entity property is the primary key of the entity.

Responses

Response Code and Content	Description
200 id Long	The ID of the deleted newday event is returned in the response body. If no newday event existed with the given ID, then null is returned.

Examples

Deletes the newday event matching the given entity:

```
POST /sep/api/v2/newdayevents/deleteByEntity
{
  "id" : 5
}

Response:
5
```

**POST** /sep/api/v2/newdayevents/start

Minimum required role: Administrator

Since: Jaglion

Starts a newday event either immediately or at a given time

Parameters

The start configuration is passed in as JSON object in the body of the request. The following JSON object properties are defined:

Name	Description
ID Long	The unique ID of the newday event to start.
startDate	The date/ time at which the newday event should be started.

Name	Description
Date	
<b>lifetime</b> Long	The maximum amount of time in minutes the event can run.
<b>priority</b> Long	The priority of the newday event.
<b>duration</b> Long	The maximum amount of time in minutes the event can wait for execution in the queue.
<b>options</b> String	The options for the newday event.
<b>suppressFlags</b> SuppressFlags	Suppress all other events on the scheduled days (A = all events, B = backups, M = media events, R = restores, X = command events, C = migrations).
<b>suppress</b> Boolean	Blocking date (if set to true, all events are suppressed by NEWDAY on the scheduled days, except events specified by -F).
<b>stopFlags</b> SuppressFlags	Do not cancel these activities during the NEWDAY event (A = all events).

### Responses

The response is the started newday task.

Response Code and Content	Description
<b>200</b> <b>NewdayEvent</b> JSON object	The started newday event is returned in the response body.

### Examples

Start the newday event with the ID '20210625104222887':

```

POST /sep/api/v2/newdayevents/start
{
  "id": "20210625104222887"
}

Response:
{
  "id": "20210625104222887",
  "name": "Custom Newday Event",
  "object": "SEP-SESAM",
  "exec": true,
  "scheduleName": "Newday",
  "priority": 1,
  "suppress": false,
  "stopFlags": {
    "value": "A"
  },
  "owner": "myself",
  "immediateFlag": false
}
    
```

Start a newday event at the time "17.08.2021 17:30:00":

```

POST /sep/api/v2/newdayevents/start
{
    
```



```
    "startDate": "2021-08-17 17:30:00"  
  }  
}
```

Response:

```
{  
  "id": "20210625104222887",  
  "name": "Custom Newday Event",  
  "object": "SEP-SESAM",  
  "exec": true,  
  "scheduleName": "Newday",  
  "priority": 1,  
  "suppress": false,  
  "stopFlags": {  
    "value": "A"  
  },  
  "owner": "myself",  
  "immediateFlag": false  
}
```

### 3.38. Notifications Service

The notifications service provides access to notification objects. Notifications can be used to provide new information to the user.

A notification is an object with the following properties:

Name	Description
<b>id</b> Long	The unique id of the notifications object.
<b>module</b> * required NotificationsModule	The module represents the part of sesam the notification belongs to. Valid values are LICENSE, LICENSE_EULA, LICENSE_INFO, LICENSE_VIOLATION, CBT_INFO, CLI_INFO, RSS_INFO, EMAIL_INFO, EXCHANGEDOTNET_INFO, MOSS_INFO, KERNEL und UNDEFINED.
<b>sesamDate</b> * required Date	The date when the notification is got created.
<b>timestamp</b> * required Date	The date and time when event, which triggered the notification, has been occurred.
<b>versionConstraint</b> String	The version constraint to match when the notification is valid only for specific Sesam releases.
<b>sesamVersion</b> String	The Sesam version of the Sesam server who created the notification.
<b>severity</b> NotificationsSeverity	Valid values are UNDEFINED, WARNING, INFO, ERROR, CRITICAL, EMERGENCY, PROMOTION, RECOMMENDED, SRTICTLY_RECOMMENDED, SECURITY, SESAM_INFO and IGNORE.
<b>objectType</b> NotificationsObjectType	Valid values are UNDEFINED, ACCEPT_EULA, LICENSE_EXCEEDED, ACCEPT_IMMEDIATE, ACCEPT_LICENSE_INFO, ACCEPT_RSS_INFO, ACCEPT_LATER, ACCEPT_DISASTER_RESTORE, ACCEPT_KERNEL_INFO.
<b>object</b> String	The notification object. The maximum length of the notification object is 64 character.
<b>type</b> NotificationsType	Valid values are UNDEFINED, NEWDAY, TICKER, POPUP, DIALOG, CONFIRM, BROWSE, LOG, TRAY, SILENT.
<b>host</b> String	The name of the computer running the Sesam instance on which the notification was created.
<b>action</b> NotificationAction	The action, which can be performed with the notification. Valid values are OPEN, CLOSE, UNDEFINED.
<b>state</b> String	The notification state. The maximum length of the notification state is 1 character.
<b>acknowledged</b> NotificationsAcknowledgement	This field describes the user reaction on the notification. Valid values are OPEN, ACCEPTED, LATER, DISMISSED, RESOLVED.
<b>ackBy</b> String	The user who reacted on the notification. The maximum length of the acknowledged by field is 64 characters.
<b>resolvedDate</b> Date	The date when the notification was resolved.
<b>resolvedBy</b> String	The user who resolved the notification. The maximum length of the resolved by field is 64 characters.
<b>resubmissionDate</b> Date	The date and time when the notification should be represented to the user again.
<b>pid</b> Long	The process ID of the sub process who triggered the notification.
<b>subject</b> String	The notification subject. The maximum length of the notification subject is 255 characters.
<b>message</b> String	The notification message.
<b>usercomment</b> String	The user comment. The maximum length of the user comment is 4096 characters.

Following methods are provided by the notifications service:

GET

/sep/api/v2/notifications

Minimum required role: None

Since: Jaglion

Get all notifications.

The response body contains the list of notifications encoded as JSON objects. The properties of the notifications object are described above.

#### Responses

Response Code and Content	Description
<b>200</b> <b>Notifications</b> array[JSON object]	The list of notifications is returned in the response body.

#### Examples

Get all notifications:

```
GET /sep/api/v2/notifications
```

```
Response:
```

```
[
  {
    "id": 20200826071433957,
    "module": "LICENSE",
    "sesamDate": 1598392800000,
    "timestamp": 1598418873000,
    "severity": "INFO",
    "type": "POPUP",
    "object": "license_timeout",
    "host": "my-host",
    "action": "CLOSE",
    "acknowledged": "DISMISSED",
    "resolvedDate": 1598428787000,
    "resolvedBy": "Administrator",
    "pid": 0,
    "sepcomment": "I002-LICENSE All license issues have been resolved."
  },
  ...
]
```

GET

/sep/api/v2/notifications/&lt;id&gt;

Minimum required role: None

Since: Jaglion

Get the notification matching the given unique ID.

The response body contains the notification encoded as JSON object. The properties of the notification object are described above.

Responses

Response Code and Content	Description
200 Notification JSON object	The notification is returned in the response body.

Examples

Get the notification with the unique ID '20200826071433957':

```
GET /sep/api/v2/notifications/20200826071433957

Response:
{
  "id": 20200826071433957,
  "module": "LICENSE",
  "sesamDate": 1598392800000,
  "timestamp": 1598418873000,
  "severity": "INFO",
  "type": "POPUP",
  "object": "license_timeout",
  "host": "my-host",
  "action": "CLOSE",
  "acknowledged": "DISMISSED",
  "resolvedDate": 1598428787000,
  "resolvedBy": "Administrator",
  "pid": 0,
  "sepcomment": "I002-LICENSE All license issues have been resolved."
}
```

POST

/sep/api/v2/notifications/find

Since: Jaglion

Minimum required role: None

Search for notifications matching the specified filter parameters.

Parameters

The filter configuration is passed in as JSON object in the body of the request. The following JSON object properties are defined:

Name	Description
<b>module</b> String	The notification module names to match. Valid values are LICENSE, LICENSE_EULA, LICENSE_INFO, LICENSE_VIOLATION, CBT_INFO, CLI_INFO, RSS_INFO, EMAIL_INFO, EXCHANGEDOTNET_INFO, MOSS_INFO and KERNEL.
<b>objectType</b> array[String]	The name of the notification types to match. Valid values are ACCEPT_EULA, LICENSE_EXCEEDED, ACCEPT_IMMEDIATE, ACCEPT_LICENSE_INFO, ACCEPT_RSS_INFO, ACCEPT_LATER, ACCEPT_DISASTER_RESTORE and ACCEPT_KERNEL_INFO.
<b>acknowledged</b> array[String]	The notification acknowledged states to match. Valid values are OPEN, ACCEPTED, LATER, DISMISSED, RESOLVED.
<b>message</b> String	The notification message to match.
<b>timestamp</b> Date	The exact time to match when the notification had been executed.
<b>subject</b>	The notification subject to match.

Name	Description
String	
<b>object</b> String	The notification object to match.
<b>mtime</b> Date	The time range to match at which the notification object had been last modified. The time range starts with the time specified and spans to the current time.
<b>hideNotificationsWithoutComment</b> Boolean	Flag to indicate to not include notifications into the result set, which have either no or an empty message.
<b>listAcknowledged</b> String	The notification search mode. Valid values are "raw", "not_acknowledged" and "acknowledged".

## Responses

Response Code and Content	Description
<b>200</b> <b>Notifications</b> array[JSON object]	The matching notifications are returned in the response body.

## Examples

Get all open notifications of the "CLI\_INFO" module:

```
POST /sep/api/v2/notifications/find
{ "module": "CLI_INFO", "acknowledged" : [ "OPEN" ] }
```

Response:

```
[
  {
    "id": 20190711080125167,
    "module": "CLI_INFO",
    "sesamDate": 1562824885000,
    "timestamp": 1562824885000,
    "severity": "INFO",
    "type": "NEWDAY",
    "host": "my-sesam-host",
    "action": "UNDEFINED",
    "acknowledged": "OPEN",
    "pid": 0
  },
  {
    "id": 20190710080100891,
    "module": "CLI_INFO",
    ...
  },
  ...
]
```

Get all not acknowledged notifications:

```
POST /sep/api/v2/notifications/find
{ "listAcknowledged" : "not_acknowledged" }
```

Response:

```
[
  {
    "id": 20210602130843914,
    "module": "LICENSE",
    "sesamDate": 1622584800000,
    "timestamp": 1622635723000,
    "severity": "INFO",
  }
]
```

```

    "type": "CONFIRM",
    "object": "license_timeout",
    "host": "my-sesam-host",
    "action": "CLOSE",
    "acknowledged": "ACCEPTED",
    "ackBy": "Administrator",
    "ackDate": 1622637253000,
    "pid": 0,
    "sepcomment": "I002-LICENSE All license issues have been resolved."
  },
  ...
]

```

POST

/sep/api/v2/notifications/create

Minimum required role: None

Since: Jaglion

Create a new notifications object.

The response body contains the newly created notifications object encoded as JSON object. The properties of the notification object are described above.

#### Parameters

The notification is passed in as JSON object in the body of the request. The properties of the notification are described above.

#### Responses

Response Code and Content	Description
200 Notifications JSON object	The notifications object is returned in the response body.

#### Examples

Create a notifications object:

```

POST /sep/api/v2/notifications/create
{ "id": "2058755788551", "module": "License"}

Response:
{
  "id": "2058755788551 ",
  "module": "License ",
  "sesamDate": "2020-03-03 00:00:00",
  "timestamp": "2020-03-03 09:39:05"
}

```

POST

/sep/api/v2/notifications/update

Minimum required role: None

Since: Jaglion

Updates the provided notifications object.

The response body contains the updated notifications object encoded as JSON object. The properties of the notification object are described above.

#### Parameters

The notification is passed in as JSON object in the body of the request. The properties of the notification are described above.

#### Responses

Response Code and Content	Description
200 Notifications JSON object	The notifications object is returned in the response body.

#### Examples

Update a notifications object:

```
POST /sep/api/v2/notifications/update
{ "id": "205875578855", "module": "KERNEL" }
```

Response:

```
{
  "id": "205875578855",
  "module": "Kernel",
  "sesamDate": "2020-03-03 00:00:00",
  "timestamp": "2020-03-03 09:39:05"
}
```

POST

/sep/api/v2/notifications/persist

Minimum required role: Super user

Since: Jaglion

Persists a notification. If no notification with the given ID exists, a new notification will be created. Otherwise, the properties of an existing notification are updated.

#### Parameters

The notification is passed in as JSON object in the body of the request. The properties of a newday event are described above.

#### Responses

Response Code and Content	Description
200 Notification JSON object	The created or updated notification is returned in the response body.

## Examples

---

Persists the notification with the ID "205875578855":

```
POST /sep/api/v2/notifications/persist
{ "id": "205875578855", "module": "KERNEL" }

Response:
{
  "id": "205875578855",
  "module": "Kernel",
  "sesamDate": "2020-03-03 00:00:00",
  "timestamp": "2020-03-03 09:39:05"
}
```

**POST**

/sep/api/v2/notifications/delete

Minimum required role: None

Since: Jaglion

Deletes the provided notifications object from the database.

## Parameters

---

The unique ID of the notification is passed in as JSON number in the body of the request.

## Responses

---

Response Code and Content	Description
200 Long	The id of the deleted notifications object is returned in the response body.

## Examples

---

Delete a notifications object by its id:

```
POST /sep/api/v2/notifications/delete
2058755788551

Response:
"2058755788551"
```

**POST**

/sep/api/v2/notifications/deleteByEntity

Minimum required role: Administrator

Since: Jaglion

Deletes the notification matching the given entity.

## Parameters

---

The entity to match is passed as JSON object in the body of the request. The only required entity property is the primary key of the entity.



---

## Responses

---

Response Code and Content	Description
200 <b>id</b> Long	The ID of the deleted notification is returned in the response body. If no notification existed with the given ID, then null is returned.

---

## Examples

---

Deletes the notification matching the given entity:

```
POST /sep/api/v2/notifications/deleteByEntity
{
  "id" : 17
}
Response:
17
```

### 3.39. Operating Systems Service

The operating system service provides access to operating system objects. Operating system objects are associated with client objects to describe the operating system running at the client.

An operating system is an object with the following properties:

Name	Description
<b>name</b> * required String	The name of the operating system. The maximum length of the operating system name is 32 character.
<b>type</b> NotificationsModule	The operating system type. Valid values are 'CITRIX_XENSERVEN', 'ESX_SERVER', 'LINUX', 'MARATHON_EVERRUN', 'NETWARE', 'OES_LINUX', 'UNIX', 'NETAPP', 'NDMP', 'VMS', 'MAC', 'WINDOWS_XP' and 'OTHER'.
<b>platform</b> * required Date	The platform name. Valid values are 'UNIX', 'LINUX', 'NDMP', 'NETWARE', 'VMS' and 'WINDOWS'. The maximum length of the platform name is 20 characters.
<b>loginType</b> String	The login type. A combination of 'u' (user) and 'p' (password). If the letter is in upper case, the corresponding value is required.
<b>proxy</b> String	The data mover type. A combination of 'a' (All), 'u' (Unix/Linux) and 'w' (Windows). If the letter is in upper case, the data mover is required.

Following methods are provided by the operating systems service:

GET

/sep/api/v2/opersystems

Minimum required role: None

Since: Jaglion

Get all operating systems.

The response body contains the list of operating systems encoded as JSON objects. The properties of the operating systems object are described above.

#### Responses

Response Code and Content	Description
200 Operating Systems array[JSON object]	The list of operating systems is returned in the response body.

#### Examples

Get all operating systems:

```
GET /sep/api/v2/opersystems

Response:
[
  {
    "name": "Windows NT",
    "platform": "WINDOWS"
  },
  {
    "name": "Citrix XenServer",
    "platform": "UNIX",
    "loginType": {
      "user": "REQUIRED",
      "password": "REQUIRED"
    },
    "proxy": "A"
  }
]
```

```

    },
    ...
  ]

```

**GET**

/sep/api/v2/opersystems/&lt;name&gt;

Minimum required role: None

Since: Jaglion

Get the operating system matching the given name.

The response body contains the operating system encoded as JSON object. The properties of the operating systems object are described above.

#### Responses

Response Code and Content	Description
200 Operating System JSON object	The operating system is returned in the response body.

#### Examples

Get the operating system with the unique name 'Windows 10':

```

GET /sep/api/v2/opersystems/Windows%2010

Response:
{
  "name": "Windows 10",
  "platform": "WINDOWS"
}

```

**POST**

/sep/api/v2/opersystems/find

Minimum required role: None

Since: Jaglion

Search for operating systems matching the specified filter parameters.

#### Parameters

The filter configuration is passed in as JSON object in the body of the request. The following JSON object properties are defined:

Name	Description
<b>name</b> String	The operating system name to match.
<b>platform</b> array[String]	An array of platform names to match.

## Responses

---

Response Code and Content	Description
200 Operating Systems array[JSON object]	The matching operating systems are returned in the response body.

## Examples

---

Get all operating systems with the platform 'WINDOWS':

```
POST /sep/api/v2/opersystems/find
{ "platform" : [ "WINDOWS" ] }

Response:
[
  {
    "name": "Home Server",
    "platform": "WINDOWS"
  },
  {
    "name": "Storage Server 2003",
    "platform": "WINDOWS"
  },
  {
    "name": "Windows 10",
    "platform": "WINDOWS"
  },
  ...
]
```

### 3.40. Performance Service

The performance service provides access to the performance data of the Sesam drives. The performance data can be used for performance graphs or statistical purpose.

A performance data object is an object with the following properties:

Name	Description
<b>id</b> Long	The unique ID of the drive the performance data is for.
<b>sumThroughput</b> Double	The sum of all per task throughput values.
<b>sumDataSize</b> Double	The sum of all per task data size values.
<b>taskList</b> array[JSON object]	An array with per task performance data.
<b>items</b> array[JSON object]	An array with per drive performance data.

A task performance data object is an object with the following properties:

Name	Description
<b>name</b> String	The task name.
<b>throughput</b> Double	The throughput value.
<b>dataSize</b> Double	The data size value.
<b>driveNum</b> Long	The unique ID of the drive.

A drive performance data object is an object with the following properties:

Name	Description
<b>time</b> Date	The timestamp when the performance data got collected.
<b>throughput</b> Double	The throughput value.
<b>dataSize</b> Double	The data size value.
<b>status</b> String	The status. Valid values are 'READ', 'WRITE' and 'IDLE'
<b>write</b> Long	The number of writing jobs within the current status.
<b>read</b> Long	The number of reading jobs within the current status.
<b>driveNum</b> Long	The unique ID of the drive.

Following methods are provided by the persistence service:

**POST**

/sep/api/v2/performance/getPerformance

Minimum required role: None

Since: Beefalo

Get the performance data for the given drive since the given time stamp.

The response body contains the custom data object encoded as JSON object. The properties of the custom data object are described above.

#### Parameters

The unique ID of the drive is passed in as JSON number and the since time stamp is passed in as JSON string in the body of the request.

#### Responses

Response Code and Content	Description
<b>200</b> <b>Performance Data</b> JSON object	The performance data object is returned in the response body. If no drive exists with the given ID, then null is returned.

#### Examples

Get the performance data object of drive 30 since '2021-05-25 08:00:00':

```
POST /sep/api/v2/performance/getPerformance
[ 30, "2021-05-25 08:00:00" ]
```

Response:

```
{
  "id": 30,
  "sumThroughput": 30.0,
  "sumDataSize": 2.34315580224E11,
  "taskList": [
    {
      "name": "my-sesam-host_all",
      "dataSize": 2.34315580224E11,
      "throughput": 30.0,
      "driveNum": 30
    }
  ],
  "items": [
    {
      "time": 1624621362000,
      "throughput": 30.263386,
      "dataSize": 0.0,
      "status": "WRITE",
      "write": 1,
      "read": 0,
      "driveNum": 30
    },
    ...
  ]
}
```

### 3.41. Persistence Service

The persistence service provides access to custom data objects. Custom data objects can be used to store user specific data at the server. This can be in example the state in which the user closed a client, like opened tabs and applied filters.

The unique primary key of the custom data object is formed out of all 4 required fields (name, node, userName and key).

A custom data object is an object with the following properties:

Name	Description
<b>name</b> * required String	The name of the custom data represented by the custom data object. The maximum length of the name is 64 characters.
<b>node</b> * required String	The name of the node or view of the custom data represented by the custom data object. The maximum length of the node name is 255 characters.
<b>userName</b> * required Boolean	The name of the user owning the custom data represented by the custom data object. The maximum length of the user name is 255 characters.
<b>key</b> * required String	The name of the key of the custom data represented by the custom data object. The maximum length of the key name is 255 characters.
<b>value</b> String	The custom data payload. The value has to be set, but has no maximum length. When storing binary data, the binary data needs to be encoded before storing it.

Following methods are provided by the persistence service:

GET	<code>/sep/api/v2/persistence</code>	Since: Beefalo
Minimum required role: None		

Get all custom data objects.

The response body contains the list of custom data objects encoded as JSON objects. The properties of the custom data object are described above.

#### Responses

Response Code and Content	Description
200 Custom Data array[JSON object]	The custom data objects are returned in the response body.

#### Examples

Get all custom data objects:

```
GET /sep/api/v2/persistence

Response:
[
  {
    "name": "Overview",
    "node": "TaskByStatus",
    "userName": "user1",
    "key": "TaskByStatusGrouped.grouping",
    "value": "NONE",
  },
]
```

```

{
  "name": "Overview",
  "node": "TaskByStatus",
  "userName": "user2",
  "key": "task_filter_key",
  "value": "[]",
},
...
]

```

**POST**

/sep/api/v2/persistence/get

Minimum required role: None

Since: Beefalo

Get the custom data object matching the given primary key.

The response body contains the custom data object encoded as JSON object. The properties of the custom data object are described above.

#### Responses

Response Code and Content	Description
200 Custom Data JSON object	The custom data object is returned in the response body.

#### Examples

Get the custom data object matching the given primary key:

```

POST /sep/api/v2/persistence/get
{ "name": "Overview", "node": "TaskByStatus", "userName": "user2", "key": "task_filter_key" }

Response:
{
  "name": "Overview",
  "node": "TaskByStatus",
  "userName": "user2",
  "key": "task_filter_key",
  "value": "[]"
}

```

**POST**

/sep/api/v2/persistence/find

Minimum required role: None

Since: Beefalo

Search for custom data objects matching the specified filter parameters.

#### Parameters

The filter configuration is passed in as JSON object in the body of the request. The following JSON object properties are defined:

Name	Description
------	-------------



Name	Description
<b>name</b> String	The name to match. The maximum length of the name is 64 characters.
<b>node</b> String	The name of the node or view to match. The maximum length of the node name is 255 characters.
<b>userName</b> String	The name of the user to match. The maximum length of the user name is 255 characters.
<b>key</b> String	The name of the key to match. The maximum length of the key name is 255 characters.

### Responses

Response Code and Content	Description
<b>200</b> <b>Custom Data</b> array[JSON object]	The matching custom data objects are returned in the response body.

### Examples

Get all custom data objects with a key matching 'task\_filter\_key':

```
POST /sep/api/v2/persistence/find
{ "key": "task_filter_key" }
```

Response:

```
[
  {
    "name": "Overview",
    "node": "TaskByStatus",
    "userName": "user2",
    "key": "task_filter_key",
    "value": "[]"
  },
  {
    "name": "Overview",
    "node": "RestoreByStatus",
    "userName": "user2",
    "key": "task_filter_key",
    "value": "[]"
  },
  ...
]
```

**POST**

/sep/api/v2/persistence/create

Minimum required role: None

Since: Beefalo

Creates a new custom data object. If a custom data object with the given primary key already exists, the call will fail.

### Parameters

The custom data object is passed in as JSON object in the body of the request. The properties of the custom data object are described above.

## Responses

---

Response Code and Content	Description
<b>200</b> <b>Custom Data</b> JSON object	The newly created custom data object is returned in the response body.

## Examples

---

Creates a new custom data object:

```
POST /sep/api/v2/persistence/create
{ "name": "MyData", "node": "MyNode", "userName": "user2", "key": "MyKey", "value": "Some data to store." }

Response:
{
  "name": "MyData",
  "node": "MyNode",
  "userName": "user2",
  "key": "MyKey",
  "value": "Some data to store."
}
```

**POST**

/sep/api/v2/persistence/update

Minimum required role: None

Since: Beefalo

Updates a custom data object. A custom data object with the given primary key must exist, otherwise the call will fail.

## Parameters

---

The custom data object is passed in as JSON object in the body of the request. The properties of the custom data object are described above.

## Responses

---

Response Code and Content	Description
<b>200</b> <b>Custom Data</b> JSON object	The updated custom data object is returned in the response body.
<b>500</b> <b>Error</b> JSON object	SERVER_ERROR_INTERNAL. The error object returned in the response body contains the details of what went wrong.

## Examples

---

Updates the custom data object matching the given primary key:

```
POST /sep/api/v2/persistence/update
{ "name": "MyData", "node": "MyNode", "userName": "user2", "key": "MyKey", "value": "Some other data to store." }

Response:
{
```

```

"name": "MyData",
"node": "MyNode",
"userName": "user2",
"key": "MyKey",
"value": "Some other data to store."
}

```

**POST**`/sep/api/v2/persistence/persist`

Minimum required role: Super user

Since: Jaglion

Persists a custom data object. If no custom data object with the given primary key exists, a new custom data object will be created. Otherwise, the properties of an existing custom data object are updated.

### Parameters

---

The custom data object is passed in as JSON object in the body of the request. The properties of a custom data object are described above.

### Responses

---

Response Code and Content	Description
200 Custom Data Object JSON object	The created or updated custom data object is returned in the response body.

### Examples

---

Persists the custom data object with the given primary key:

```

POST /sep/api/v2/persistence/update
{ "name": "MyData", "node": "MyNode", "userName": "user2", "key": "MyKey", "value": "Some other data to store." }

Response:
{
  "name": "MyData",
  "node": "MyNode",
  "userName": "user2",
  "key": "MyKey",
  "value": "Some other data to store."
}

```

**POST**`/sep/api/v2/persistence/delete`

Minimum required role: None

Since: Beefalo

Deletes a custom data object.

### Parameters

---

The primary key of the custom data object is passed in as JSON object in the body of the request.

### Responses

---

Response Code and Content	Description
<b>200</b> <b>Primary Key</b> JSON object	The primary key of the deleted custom data object is returned in the response body. If no custom data object existed matching the given primary key, then null is returned.
<b>500</b> <b>Error</b> JSON object	SERVER_ERROR_INTERNAL. The error object returned in the response body contains the details of what went wrong.

#### Examples

Deletes the custom data object matching the given primary key:

```
POST /sep/api/v2/persistence/delete
{ "name": "MyData", "node": "MyNode", "userName": "user2", "key": "MyKey" }
```

Response:

```
{
  "name": "MyData",
  "node": "MyNode",
  "userName": "user2",
  "key": "MyKey",
}
```

**POST**

/sep/api/v2/persistence/deleteByEntity

Minimum required role: Administrator

Since: Jaglion

Deletes the custom data object matching the given entity.

#### Parameters

The entity to match is passed as JSON object in the body of the request. The only required entity property is the primary key of the entity.

#### Responses

Response Code and Content	Description
<b>200</b> <b>ProfilesKey</b> Object	The profiles key object of the deleted custom data is returned in the response body. If no custom data existed with the given ID, then null is returned.

#### Examples

Deletes the custom data matching the given entity:

```
POST /sep/api/v2/persistence/delete
{ "name": "MyData", "node": "MyNode", "userName": "user2", "key": "MyKey" }
```

Response:

```
{
  "name": "MyData",
  "node": "MyNode",
  "userName": "user2",
  "key": "MyKey",
}
```



### 3.42. Renderer Service

The renderer service allows to render template files or template string using the SEP sesam template rendering engine. The main use case for the renderer service is to render any of the predefined SEP sesam reports.

The result of calling the renderer service is always a text to output to the user on the console or to write into a file.

Following methods are provided by the renderer service:

<b>POST</b>	<code>/sep/api/v2/renderer/render</code>	Minimum required role: None	Since: Jaglion
-------------	--	-----------------------------	----------------

Renders the given template file or template string using the given parameters as input.

#### Parameters

The renderer configuration is passed in as JSON object in the body of the request. The following JSON object properties are defined:

Name	Description
<b>template</b> String	Either the name of a template file to render or the template string itself. The template file has to be located on the server in the folder ' <code>&lt;SESAM_INSTALL&gt;/skel/templates/rythm'</code> .
<b>bundleName</b> String	The name of the resource bundle file to use to localize the template. The resource bundle file has to be located in the same directory as the template file.
<b>locale</b> String	The locale to use to render the template file or template string.
<b>params</b> JSON object	A map containing the input data to use for rendering the template.

#### Responses

Response Code and Content	Description
<b>200</b> Text String	The rendered text is returned in the response body.

#### Examples

Render the list of clients using the template file 'list-clients':

```
POST /sep/api/v2/renderer/render
{
  "template": "list-clients",
  "params": {
    "items": [
      {
        "id": 0,
        "name": "my-sesam-host",
        "location": {
          "id": 0,
          "name": "LOCAL",
          "displayLabel": "LOCAL"
        },
        "operSystem": {
```



POST

/sep/api/v2/renderer/report

Minimum required role: None

Since: Jaglion

Renders the given report file. Report templates are different from normal templates used with the 'render' end point, as report templates contains a set of SQL queries to fetch the input data from the data base directly.

### Parameters

The report renderer configuration is passed in as JSON object in the body of the request. The following JSON object properties are defined:

Name	Description
<b>report</b> String	Either the name of a report template file to render. The template file has to be located on the server in the folder '<SESAM_INSTALL>/skel/templates/rythm/reports'.
<b>bundleName</b> String	The name of the resource bundle file to use to localize the report. The resource bundle file has to be located in the same directory as the report template file.
<b>locale</b> String	The locale to use to render the template file or template string.
<b>params</b> JSON object	A map containing the additional input data to use for rendering the report.

### Responses

Response Code and Content	Description
<b>200</b> <b>Text</b> String	The rendered text is returned in the response body.

### Examples

Render the failed jobs report:

```
POST /sep/api/v2/renderer/report
{
  "report": "failed-jobs-report",
  "params": {}
}
```

Response:

```
"<!DOCTYPE html>\n<html>\n<head>\n<title>Failed Jobs Report</title>\n\n<style>\nbody {\nfont-family: Sans-serif;\nfont-size: 100%;\n}\n\ttable {\nborder-collapse: collapse;\nfont-size: 100%;\n}\n\ttable.auto-nowrap {\n\ttable-layout: auto;\nwhite-space: nowrap;\n}\n\tth {\nfont-size: 115%;\ntext-align: left;\npadding: 15px;\n}\n\ttd {\ntext-align: left;\npadding: 5px;\n}\n\t.n.cell-border {\nborder: 1px solid black;\nborder-collapse: collapse;\n}\n\t.n.cell-border-bottom {\nborder-bottom: 1px solid black;\n}\n\t.n.cell-divider-top {\nborder-top: 2px solid #c5c5c5;\n}\n\t.n.sep-report-header {\nfont-size: 115%;\nfont-weight: bold;\ntext-shadow: 3px 2px lightgray;\n}\n\t.n.sep-title {\nfont-size: 115%;\nfont-weight: bold;\npadding: 15px 20px;\n}\n\t.n.sep-title-label {\nfont-size: 108%;\nfont-weight: bold;\npadding-top: 15px;\npadding-bottom: 15px;\n}\n\t.n.sep-title-ok {\nbackground-color: #28a745;\n}\n\t.n.sep-title-warning {\nbackground-color: #ffc107;\n}\n\t.n.sep-title-error {\nbackground-color: #dc3545;\n}\n\t.n.svg-ok {\ncolor: #28a745;\n}\n\t.n.svg-run {\ncolor: #0000ff;\n}\n\t.n.svg-warning {\ncolor: #ffc107;\n}\n\t.n.svg-cancel {\ncolor: #a02828;\n}\n\t.n.svg-error {\ncolor: #dc3545;\n}\n\t.n.icon {\ndisplay: inline-block;\nwidth: 1em;\nheight: 1em; ... "
```



### 3.43. Restore Events Service

The restore event services provides access to the restore event objects, which are associated with a schedule and a restore task.

A restore event is an object with the following properties:

Name	Description
<b>id</b> * required String	The unique ID of the restore event.
<b>name</b> String	The name of the restore event. The maximum length of the name is 255 characters. The name can contain only letters, digits, the '-' and the '_' character.
<b>restoreTask</b> * required String	The name of the associated restore task. The maximum length of the restore task name is 128 character.
<b>exec</b> Boolean	Flag to indicate if the restore event is enabled for execution.
<b>eol</b> Long	The retention time in days.
<b>scheduleName</b> String	The name of the schedule the restore event is associated with. The maximum length of the schedule name is 30 character.
<b>priority</b> Long	The priority of the restore event.
<b>suppress</b> Boolean	Flag to indicate if the restore event is a blocking event.
<b>followUp</b> String	The follow up actions to execute when the restore event finished successfully. The maximum length of the follow up is 1024 character.
<b>owner</b> String	The restore event owner. The maximum length of the restore event owner is 30 character.
<b>driveNum</b> Long	The unique ID of the drive to use.
<b>ifaceName</b> String	The name of the client interface to use. The maximum length of the client interface is 255 character.
<b>srvIfaceName</b> String	The name of the server interface to use. The maximum length of the server interface is 255 character.
<b>listmode</b> String	The list mode. The maximum length of the list mode is 32 character.
<b>absoluteFlag</b> Boolean	Flag to indicate if the date range selection is based on calendar days (false) or Sesam days (true).
<b>savesetStart</b> Long	The saveset start.
<b>savesetEnd</b> Long	The saveset end.
<b>minMax</b> String	The min/max indicator. Valid values are 'MIN' and 'MAX'.
<b>dateStart</b> JSON object	The date and time when the backup selection starts. The start of the date range can be either a absolute timestamp (via property 'absolute') or a relative difference from the current time in milliseconds (via property 'relative').
<b>dateEnd</b> JSON object	The date and time when the backup selection ends. The end of the date range can be either a absolute timestamp (via property 'absolute') or a relative difference from the current time in milliseconds (via property 'relative').
<b>lifetime</b> Long	The maximum amount of time in minutes the event can run.
<b>duration</b> Long	The maximum amount of time in minutes the event can wait for execution in the queue.
<b>state</b> String	The backup state to match. The most common values are '0' (OK) and 'X' or '2' (Error).
<b>cfdiType</b> String	The CFDI type to match.

Name	Description
<b>mediaPool</b> String	The name of the media pool to use. The maximum length of the media pool name is 255 character.
<b>mediaTolerance</b> String	The media tolerance. The maximum length of the media tolerance is 21 character.
<b>mediaPreference</b> String	The media preference. The maximum length of the media preference is 21 character.
<b>dataMover</b> String	The name of the data mover to use. The maximum length of the data mover name is 255 character.
<b>dataMoverId</b> Long	The unique ID of the data mover to use.
<b>useSaveset</b> String	The ID of the backup to use. The maximum length of the backup ID is 64 character.
<b>restoreCmd</b> String	The restore command. The maximum length of the restore command is 64 character.
<b>options</b> String	The execution options. The maximum length of the execution options is 255 character.
<b>referenceType</b> String	The reference type. Valid values are 'START' and 'RESTART'.
<b>referenceId</b> String	The reference ID. The maximum length of the reference ID is 80 character.
<b>sepcomment</b> String	The comment or note from Sesam. The maximum length of the SEP comment is 1024 characters.
<b>usercomment</b> String	The comment or note from the user. The maximum length of the user comment is 1024 characters.
<b>immediateFlag</b> Boolean	Flag to indicate if the neday event has to be started immediately.

Following methods are provided by the restore events service:

GET
/sep/api/v2/restoreevents

Minimum required role: None Since: Jaglion

Get all restore events.

The response body contains the list of restore events encoded as JSON objects. The properties of the restore events object are described above.

Responses

Response Code and Content	Description
200 Restore Events array[JSON object]	The restore events are returned in the response body.

## Examples

---

Get all restore events:

```
GET /sep/api/v2/restoreevents

Response:
[
  {
    "id": "20190709140610673",
    "restoreTask": "restore_my-client_temp_new-target_no-overwrite",
    "exec": true,
    "scheduleName": "Weekly_TU_1100",
    "priority": 1,
    "suppress": false,
    "owner": "Administrator",
    "absoluteFlag": false,
    "minMax": "MAX",
    "dateStart": {
      "relative": 0
    },
    "dateEnd": {
      "relative": 0
    },
    "state": "0,1",
    "cfdiType": {
      "generation": false,
      "copy": false,
      "full": false,
      "diff": false,
      "incr": false
    }
  },
  ...
]
```

**GET**

/sep/api/v2/restoreevents/<id>

Minimum required role: None

Since: Jaglion

Get the restore event matching the given ID.

The response body contains the restore event encoded as JSON object. The properties of the restore events object are described above.

## Responses

---

Response Code and Content	Description
200 Restore Event JSON object	The restore event is returned in the response body.

## Examples

Get the restore event with the unique ID '20190709140610673':

```
GET /sep/api/v2/restoreevents/20190709140610673
```

Response:

```
{
  "id": "20190709140610673",
  "restoreTask": "restore_my-client_temp_new-target_no-overwrite",
  "exec": true,
  "scheduleName": "Weekly_TU_1100",
  "priority": 1,
  "suppress": false,
  "owner": "Administrator",
  "absoluteFlag": false,
  "minMax": "MAX",
  "dateStart": {
    "relative": 0
  },
  "dateEnd": {
    "relative": 0
  },
  "state": "0,1",
  "cfdiType": {
    "generation": false,
    "copy": false,
    "full": false,
    "diff": false,
    "incr": false
  }
}
```

**POST**

/sep/api/v2/restoreevents/find

Minimum required role: None

Since: Jaglion

Search for restore events matching the specified filter parameters.

## Parameters

The filter configuration is passed in as JSON object in the body of the request. The following JSON object properties are defined:

Name	Description
<b>id</b> Long	The unique id of the event to match.
<b>sesamDate</b> array[String]	<p>An array of one or two date/time strings. The first element in the array represents the beginning of the date/time range (&lt;from&gt;) and the second element in the array represents the end of the date/time range (&lt;to&gt;). Either &lt;from&gt; or &lt;to&gt; can be null, but one of them has to be not null. The presence of the two values controls the condition generated.</p> <ul style="list-style-type: none"> <li>If both values are specified, than the condition will be generated as date range (between "&lt;from&gt;" and "&lt;to&gt;").</li> <li>If both values are specified and "&lt;to&gt;" is null, the condition will be generated as greater or equal than "&lt;from&gt;".</li> <li>If both values are specified and "&lt;from&gt;" is null, the condition will be generated as less or equal than "&lt;to&gt;".</li> </ul> <p>If only one value is specified (array length = 1), than the condition is generated as equals.</p>

<b>clientId</b> String	The unique ID of the client to match.
<b>clientName</b> String	The name of the client to match.
<b>clientOs</b> String	The operating system to match, running at the client.
<b>states</b> array[String]	An array of states to match. The most common valid states are 0 (success), 1 (warning), 2 (error) and c (cancelled).
<b>schedule</b> String	The name of the associated schedule to match.
<b>ifaceName</b> array[String]	An array of client interface names to match.
<b>restoreTaskName</b> String	The name of the associated restore task to match.
<b>driveNum</b> Long	The unique ID of the drive to match.
<b>poolNames</b> array[String]	An array of media pool names to match.

Responses

Response Code and Content	Description
<b>200</b> <b>Restore Events</b> array[JSON object]	The matching restore events are returned in the response body.

Examples

Get all restore events assigned to the schedule 'Weekly\_TU\_1100':

```

POST /sep/api/v2/restoreevents/find
{ "schedule": "Weekly_TU_1100" }

Response:
[
  {
    "id": "20190709140610673",
    "restoreTask": "restore_my-client_temp_new-target_no-overwrite",
    "exec": true,
    "scheduleName": "Weekly_TU_1100",
    "priority": 1,
    "suppress": false,
    "owner": "Administrator",
    "absoluteFlag": false,
    "minMax": "MAX",
    "dateStart": {
      "relative": 0
    },
    "dateEnd": {
      "relative": 0
    },
    "state": "0,1",
    "cfdiType": {
      "generation": false,
      "copy": false,
      "full": false,
      "diff": false,
      "incr": false
    }
  },
  ...
]
    
```

POST

/sep/api/v2/restoreevents/create

Minimum required role: Restore

Since: Jaglion

Creates a new restore event.

#### Parameters

The restore event is passed in as JSON object in the body of the request. The properties of the restore event are described above.

#### Responses

Response Code and Content	Description
200 Restore Event JSON object	The newly created restore event is returned in the response body.

#### Examples

Creates a new restore event:

```
POST /sep/api/v2/restoreevents/create
{
  "restoreTask": "my-restore-task",
  "scheduleName": "Weekly_TU_1100"
}

Response:
{
  "id": "20210628072237759",
  "name": "my-restore-task-20210628072237759",
  "restoreTask": "my-restore-task",
  "exec": true,
  "scheduleName": "Weekly_TU_1100",
  "priority": 1,
  "suppress": false,
  "owner": "ust",
  "ifaceName": "http://my-client:11000",
  "state": "0,1",
  "immediateFlag": false
}
```

POST

/sep/api/v2/restoreevents/update

Minimum required role: Restore

Since: Jaglion

Updates a restore event. A restore event with the given ID must exist, otherwise the call will fail.

#### Parameters

The restore event is passed in as JSON object in the body of the request. The properties of the restore event are described above.

## Responses

---

Response Code and Content	Description
200 Restore Event JSON object	The updated restore event is returned in the response body.

## Examples

---

Sets a new name for the restore event with the ID '20210628072237759':

```
POST /sep/api/v2/restoreevents/update
{
  "id": "20210628072237759",
  "name": "Custom Restore Event",
  "restoreTask": " my-restore-task ",
  "exec": true,
  "scheduleName": "Weekly_TU_1100",
  "priority": 1,
  "suppress": false,
  "owner": "ust",
  "ifaceName": "http://my-client:11000",
  "state": "0,1",
  "immediateFlag": false
}
```

```
Response:
{
  "id": "20210628072237759",
  "name": "Custom Restore Event",
  "restoreTask": " my-restore-task ",
  "exec": true,
  "scheduleName": "Weekly_TU_1100",
  "priority": 1,
  "suppress": false,
  "owner": "ust",
  "ifaceName": "http://my-client:11000",
  "state": "0,1",
  "immediateFlag": false
}
```

**POST**

/sep/api/v2/restoreevents/persist

Minimum required role: Super user

Since: Jaglion

Persists a restore event. If no restore event with the given ID exists, a new restore event will be created. Otherwise, the properties of an existing restore event are updated.

## Parameters

---

The restore event is passed in as JSON object in the body of the request. The properties of a restore event are described above.

## Responses

---

Response Code and Content	Description
200 Restore Event JSON object	The created or updated restore event is returned in the response body.

## Examples

---

Persists restore event with the ID "20210628072237759":

```
POST /sep/api/v2/restoreevents/update
{
  "id": "20210628072237759",
  "name": "Custom Restore Event",
  "restoreTask": " my-restore-task ",
  "exec": true,
  "scheduleName": "Weekly_TU_1100",
  "priority": 1,
  "suppress": false,
  "owner": "ust",
  "ifaceName": "http://my-client:11000",
  "state": "0,1",
  "immediateFlag": false
}

Response:
{
  "id": "20210628072237759",
  "name": "Custom Restore Event",
  "restoreTask": " my-restore-task ",
  "exec": true,
  "scheduleName": "Weekly_TU_1100",
  "priority": 1,
  "suppress": false,
  "owner": "ust",
  "ifaceName": "http://my-client:11000",
  "state": "0,1",
  "immediateFlag": false
}
```

**POST**

/sep/api/v2/restoreevents/delete

Minimum required role: Restore

Since: Jaglion

Deletes a restore event.

### Parameters

---

The unique ID of the restore event is passed in as JSON number in the body of the request.

### Responses

---

Response Code and Content	Description
200 <b>id</b> Long	The unique ID of the deleted restore event is returned in the response body. If no restore event existed with the given ID, then null is returned.

## Examples

---

Deletes the restore event with the ID '20210628072237759' (exists):

```
POST /sep/api/v2/restoreevents/delete
20210628072237759
```



Response:  
20210628072237759

**POST**

/sep/api/v2/restoreevents/deleteByEntity

Minimum required role: Administrator

Since: Jaglion

Deletes the restore event matching the given entity.

#### Parameters

The entity to match is passed as JSON object in the body of the request. The only required entity property is the primary key of the entity.

#### Responses

Response Code and Content	Description
200 id Long	The ID of the deleted restore event is returned in the response body. If no restore event existed with the given ID, then null is returned.

#### Examples

Deletes the restore event matching the given entity:

```
POST /sep/api/v2/restoreevents/deleteByEntity
{
  "id" : 20210624081228085
}

Response:
20210624081228085
```

**POST**

/sep/api/v2/locations/resolveEventToId

Minimum required role: None

Since: Jaglion

Resolves a given restore event ID, name or reference ID to an ID. If the ID, name or reference ID cannot be resolved to an existing restore event, 'null' is returned.

#### Parameters

The ID, name or reference ID to resolve is passed in as JSON string in the body of the request.

#### Responses

Response Code and Content	Description
200 ID Long	The resolved restore event ID is returned in the response body.

## Examples

---

Resolve the restore event name 'Custom Restore Event':

```
POST /sep/api/v2/restoreevents/resolveEventToId  
"Custom Restore Event"
```

```
Response:  
20210628072237759
```

### 3.44. Restore Service

The restore service provides access to the restore objects. A restore is the result of executing a configured restore task.

A restore is an object with the following properties:

Name	Description
<b>name</b> * required String	The unique name of the restore. The maximum length of the name is 64 characters.
<b>startTime</b> * required Date	The date and time when the restore started.
<b>state</b> * required String	The restore state.
<b>restoreTask</b> * required String	The name of the restore task. The maximum length of the restore task name is 128 characters.
<b>client</b> String	The name of the client, where to restore the data to. The maximum length of the client name is 255 characters.
<b>clientId</b> Long	The unique ID of the client, where to restore the data to.
<b>driveNum</b> Long	The unique ID of the drive used for the restore.
<b>duration</b> Long	The duration of the restore in seconds.
<b>eol</b> Date	The end of life date and time of the restore.
<b>ifaceName</b> String	The name of the interface used for the restore. The maximum length of the interface name is 255 characters.
<b>sepcomment</b> String	The comment or note from Sesam. The maximum length of the SEP comment is 255 characters.
<b>pid</b> Long	The restore process ID, if the restore is still running.
<b>priority</b> Long	The priority the restore has been executed with.
<b>saveset</b> String	The name of the backup to restore from. The maximum length of the backup name is 64 characters.
<b>savesetExist</b> Boolean	Flag to indicate of the backup to restore from, exists.
<b>schedule</b> String	The schedule name. The maximum length of the schedule name is 30 character.
<b>sesamDate</b> Date	The sesam date when the restore executed.
<b>sesamVersion</b> String	The version ID of the Sesam server used for the restore.
<b>sessionId</b> String	The session ID and unique ID of the parent restore. The maximum length of the session id is 64 character.
<b>size</b> Double	The size of the original data in bytes.
<b>stopTime</b> Date	The date and time when the restore finished.
<b>throughput</b> String	The throughput of the restore in B/s.
<b>usercomment</b> String	The comment or note from the user. The maximum length of the user comment is 1024 characters.
<b>savesetUsed</b> String	The resolved name of the backup to restore from. The maximum length of the resolved backup name is 64 characters.
<b>task</b> String	The name of the backup task. The maximum length of the backup task name is 50 characters.

Name	Description
<b>savesetDate</b> Date	The date and time when the backup got created.
<b>cnt</b> Long	The consecutive backup number.
<b>restoreType</b> JSON object	The restore type.
<b>genmode</b> Boolean	Flag to indicate if the backup is restored in 'generation mode'.
<b>overwrite</b> Boolean	Flag to indicate if the existing data will be overwritten.
<b>listmode</b> String	The list mode. The maximum length of the list mode is 32 characters.
<b>mapMode</b> String	The map mode. The maximum length of the map mode is 1 character.
<b>treeType</b> String	The restore tree type. Valid values are 'DEEP' and 'FLAT'.
<b>mode</b> String	The restore mount mode. Valid values are 'ATTACH', 'MOUNT' and 'MOUNT_SAVESET'.
<b>rename</b> String	The maximum length of the rename field is 64 character.
<b>original</b> Boolean	Flag to indicate if the data is restored to the original location.
<b>revocer</b> String	The recover options. The maximum length of the recover options is 64 characters.
<b>onlinemode</b> String	The online mode. The maximum length of the online mode is 64 characters.
<b>startmode</b> String	The start mode. The maximum length of the start mode is 64 characters.
<b>dataMover</b> String	The name of the data mover. The maximum length of the data mover name is 255 characters.
<b>attachClient</b> String	The name of the client, where the backup is attached. The maximum length of the name is 64 characters.
<b>target</b> String	The target path where to restore the data to. The maximum length of the target path is 1024 characters.
<b>targetServer</b> String	The target server where to restore the data to. The maximum length of the target server is 255 characters.
<b>targetStore</b> String	The target store where to restore the data to. The maximum length of the target store is 1024 characters.
<b>targetFolder</b> String	The target folder where to restore the data to. The maximum length of the target folder is 2048 characters.
<b>targetNetwork</b> String	The target network. The maximum length of the target network is 2048 characters.
<b>targetResource</b> String	The target resource where to restore the data to. The maximum length of the target resource is 2048 characters.
<b>dumpFlag</b> Boolean	Flag to indicate if the data is restored to a dump file.
<b>pathFlag</b> Boolean	Flag to indicate if the data is restored to the file system.
<b>subtaskFlag</b> Boolean	Flag to indicate if the restore is created by a sub restore task.
<b>userName</b> String	The name of the user who restored the data. The maximum length of the user name is 255 character.
<b>parent</b> String	The name of the parent restore task. The maximum length of the parent restore task name is 64 character.
<b>locationId</b> Long	The unqiues ID of the location the client belongs too.
<b>filter</b>	The filter string. The maximum length of the filter string is 2048 characters.

Name	Description
String	
<b>relocSource</b> String	The source relocation. The maximum length of the source relocation is 1024 characters.
<b>mediaPool</b> String	The name of the media pool used for the restore.
<b>mountState</b> String	The mount state. The maximum length of the mount state is 2 character.
<b>mountPath</b> String	The mount path. The maximum length of the mount path is 2048 character.
<b>dataSize</b> Double	The data size in bytes.
<b>restoreSize</b> Double	The size of the restored data in bytes.
<b>options</b> String	The restore options. The maximum length of the restore options is 255 characters.

A restore type is an object with the following properties:

Name	Description
<b>mode</b> String	The restore mode. Valid values are 'FULL' and 'SELECTIVE'.
<b>transaction</b> String	The restore transaction type. Valid values are 'RECOVER', 'NO_RECOVER', 'ONLINE' and 'NONE'.

Following methods are provided by the restore service:

<b>GET</b>	<code>/sep/api/v2/restores</code>	Minimum required role: None	Since: Beefalo
------------	-----------------------------------	-----------------------------	----------------

Get all restores.

This end point should be used with care, as the returned list of restores is completely unfiltered and therefore the returned result set can be huge. On Sesam servers with a large amount of restores, getting the list of restores unfiltered can easily take very long and might even lead to exceeding the available memory on the Sesam server.

To limit the number of returned restores, the *restores/find* or the *clients/<id>/restores* API should be used instead.

The response body contains the list of restores encoded as JSON objects. The properties of the restores object are described above.

#### Responses

Response Code and Content	Description
<b>200</b> <b>Restores</b> array[JSON object]	The restores are returned in the response body.

## Examples

---

Get all restores:

```
GET /sep/api/v2/restores

Response:
[
  {
    "name": "20191119161537372",
    "startTime": 1574176540000,
    "restorTask": "MY_BACKUP-20191119161538",
    ...
  },
  ...
]
```

**GET**

/sep/api/v2/restores/<name>

Minimum required role: None

Since: Beefalo

Get the restore matching the given name.

The response body contains the restore encoded as JSON object. The properties of the restore object are described above.

## Responses

---

Response Code and Content	Description
200 Restore JSON object	The restore is returned in the response body.

## Examples

---

The restore with the unique name '20191119161537372':

```
GET /sep/api/v2/restores/20191119161537372

Response:
{
  "name": "20191119161537372",
  "startTime": 1574176540000,
  "restoreTask": "MY_BACKUP-20191119161538",
  ...
}
```

POST

/sep/api/v2/restores/find

Minimum required role: None

Since: Beefalo

Search for restores matching the specified filter parameters.

### Parameters

The filter configuration is passed in as JSON object in the body of the request. The following JSON object properties are defined:

Name	Description
<b>sesamDate</b> array[String]	An array of one or two date/time strings. The first element in the array represents the beginning of the date/time range (<from>) and the second element in the array represents the end of the date/time range (<to>). Either <from> or <to> can be null, but one of them has to be not null. The presence of the two values controls the condition generated. <ul style="list-style-type: none"> <li>If both values are specified, than the condition will be generated as date range (between “&lt;from&gt;” and “&lt;to&gt;”).</li> <li>If both values are specified and “&lt;to&gt;” is null, the condition will be generated as greater or equal than “&lt;from&gt;”.</li> <li>If both values are specified and “&lt;from&gt;” is null, the condition will be generated as less or equal than “&lt;to&gt;”.</li> <li>If only one value is specified (array length = 1), than the condition is generated as equals.</li> </ul>
<b>startTime</b> array[String]	An array of one or two date/time strings. See the description of the “sesamDate” filter property for details.
<b>stopTime</b> array[String]	An array of one or two date/time strings. See the description of the “sesamDate” filter property for details.
<b>restoreTask</b> String	The name of the restore task to match. The wild cards ‘*’ and ‘?’ might be used.
<b>backupTypes</b> array[String]	The list of backup types to match.
<b>clientId</b> Long	The ID of the client to match.
<b>clientName</b> String	The name of the client to match. The wild cards ‘*’ and ‘?’ might be used.
<b>clients</b> array[Long]	An array of client IDs to match.
<b>clientOs</b> String	The operating system of the client to match. The wild cards ‘*’ and ‘?’ might be used.
<b>tasks</b> array[String]	The list of names of the backup tasks to match.
<b>states</b> array[String]	The list of states to match.
<b>restoreSize</b> array[Double]	A list of restore sizes the restore has to outmatch.
<b>fdiTypes</b> array[JSON object]	The event types to match.
<b>mediaPoolName</b> String	The media pool name to match.
<b>label</b> String	The media label to match.
<b>savesets</b> array[String]	The list of backup IDs to match.
<b>throughputSet</b> Boolean	Flag to exclude restores where not throughput value is set.
<b>hideSubTasks</b> Boolean	Flag to exclude restores where the sub task flag is set.

Name	Description
<b>parentTask</b> String	The unique name of the parent restore to match.
<b>parentTasks</b> array[String]	The list of unique names of the parent restore to match.
<b>skipChildren</b> Boolean	Flag to exclude restores, which are children of a parent restore.

#### Responses

Response Code and Content	Description
<b>200</b> <b>Restores</b> array[JSON object]	The matching restores are returned in the response body.

#### Examples

Get all restore for all restore tasks matching "MY\_BACKUP\*":

```
POST /sep/api/v2/restores/find
{ "restoreTask" : "MY_BACKUP*" }

Response:
[
  {
    "name": "20191119161537372",
    "startTime": 1574176540000,
    "restoreTask": "MY_BACKUP-20191119161538",
    ...
  },
  ...
]
```

**POST**

/sep/api/v2/restores/count

Minimum required role: None

Since: Jaglion

Get the number of restores matching the specified filter parameters.

#### Parameters

The filter configuration is passed in as JSON object in the body of the request. The JSON object properties are the same as defined for POST /sep/api/v2/restores/find.

#### Examples

Get number of all restores executed yesterday:

```
POST /sep/api/v2/restores/count
{ "dateFlagYesterday" : true }

Response:
17
```



POST

/sep/api/v2/restores/countTasks

Minimum required role: None

Since: Jaglion

Get the number of restore tasks matching the specified filter parameters.

#### Parameters

The filter configuration is passed in as JSON object in the body of the request. The JSON object properties are the same as defined for POST /sep/api/v2/restores/findTasks.

#### Examples

Get number of all restore tasks for the client with the name "workstation17":

```
POST /sep/api/v2/restore/countTasks
{ "client" : "workstation17" }

Response: 12
```

POST

/sep/api/v2/restores/createTask

Minimum required role: Restore

Since: Beefalo

Creates a new restore task with the given name. If a restore task with the given name already exists, the call will fail.

#### Parameters

The restore task is passed in as JSON object in the body of the request. The properties of the restore task are described in the client service section.

#### Responses

Response Code and Content	Description
200 Restore Task JSON object	The newly created restore task is returned in the response body.

#### Examples

Creates a new restore task:

```
POST /sep/api/v2/restores/createTask
{ "name" : "My_Restore_Task", "client" : { "name" : "my-backup-server" }, "targetPath" : "/tmp", "savesetId" : "SF20191221082449263@DnULMvsSqaC" }

Response:
{
  "name": "My_Restore_Task",
  "type": {
    "mode": "FULL",
    "transaction": "NONE"
  },
  "treeType": "DEEP",
  "client": {
```

```

    "id": 0,
    "name": "my-backup-server",
    ...
  },
  ...
}

```

**POST**`/sep/api/v2/restores/updateTask`

Minimum required role: Restore

Since: Beefalo

Updates a restore task. A restore task with the given name must exist, otherwise the call will fail.

The end-point will look up the original restore task object by the given name. If found, the original restore task object is updated with any non-null property from the passed in restore task object. That means, that only the changed properties needs to be present in the given restore task object.

#### Parameters

The restore task is passed in as JSON object in the body of the request. The properties of the restore task are described in the client service section.

#### Responses

Response Code and Content	Description
200 Restore Task JSON object	The updated restore task is returned in the response body.

#### Examples

Updates the restore task with the name "My\_Restore\_Task":

```

POST /sep/api/v2/restores/updateTask
{ "name" : "My_Restore_Task", "usercomment" : "Restore important data." }

Response:
{
  "name": "My_Restore_Task",
  ...
  "usercomment": "Restore important data.",
  ...
}

```

**GET**`/sep/api/v2/restores/<name>/tasks`

Minimum required role: None

Since: Jaglion

Get the restore task for the restore matching the given restore name.

The response body contains the restore task encoded as JSON object. The properties of the restore task are described in the client service section.

## Responses

Response Code and Content	Description
200 Restore Task JSON object	The matching restore task is returned in the response body.

## Examples

Get the restore task of the restore with the name "20200402110006468":

```
GET /sep/api/v2/restores/20200402110006468/tasks
```

Response:

```
{
  "name": "My_Other_Restore_Task",
  "type": {
    "mode": "SELECTIVE",
    "transaction": "NONE"
  },
  "treeType": "DEEP",
  "client": {
    "id": 0,
    "name": "my-backup-server",
    ...
  },
  ...
}
```

GET

/sep/api/v2/restores/tasks/<name>

Minimum required role: None

Since: Jaglion

Get the restore task matching the given restore task name.

The response body contains the restore task encoded as JSON object. The properties of the restore task are described in the client service section.

## Responses

Response Code and Content	Description
200 Restore Task JSON object	The matching restore task is returned in the response body.

## Examples

Get the restore task with the name "My\_Restore\_Task":

```
GET /sep/api/v2/restores/tasks/My_Restore_Task
```

Response:

```
{
  "name": "My_Restore_Task",
  "type": {
    "mode": "FULL",
    "transaction": "NONE"
  }
}
```

```

    },
    "treeType": "DEEP",
    "client": {
      "id": 0,
      "name": "my-backup-server",
      ...
    },
    ...
  }
}

```

**GET** /sep/api/v2/restores/findTasks

---

Minimum required role: None Since: Beefalo

Get the list of all available restore tasks.

The end point supports filtering the result set by passing in a restore tasks filter as JSON object in the body of the request. The HTTP request method has to be changed to POST when using the filter.

**POST** /sep/api/v2/restores/findTasks

---

Minimum required role: None Since: Beefalo

Search for restore tasks matching the specified filter parameters.

Parameters

---

The filter configuration is passed in as JSON object in the body of the request. The following JSON object properties are defined:

Name	Description
<b>clientId</b> Long	The ID of the client to match.
<b>dataMover</b> String	The name of the data mover to match.
<b>savesets</b> array[String]	An array of save set IDs to match.
<b>names</b> array[String]	The list of restore task names to match.
<b>template</b> String	Flag to match only restore task templates. Valid values are '0' or '1'.
<b>immutableFlags</b> String	Flag to match only immutable restore task templates. Valid values are '0' or '1'.
<b>unstarted</b> Boolean	Matches all restore tasks that have never been started, meaning there is no restore result containing that respective task.

Responses

---

Response Code and Content	Description
<b>200</b> <b>Restore Tasks</b> array[JSON object]	The matching restore tasks are returned in the response body.

Examples

---

Get all available restore tasks:

```
GET /sep/api/v2/restores/findTasks

Response:
[
  {
    "name": "My_Other_Restore_Task",
    "type": {
      "mode": "SELECTIVE",
      "transaction": "NONE"
    },
    "treeType": "DEEP",
    "client": {
      "id": 1,
      "name": "my-second-backup-server",
      ...
    },
    ...
  },
  ...
]
```

Get the restore tasks for the client with ID '0':

```
POST /sep/api/v2/restores/findTasks
{ "clientId" : 0 }

Response:
[
  {
    "name": "My_Restore_Task",
    "type": {
      "mode": "FULL",
      "transaction": "NONE"
    },
    "treeType": "DEEP",
    "client": {
      "id": 0,
      "name": "my-backup-server",
      ...
    },
    ...
  },
  ...
]
```

**POST**

/sep/api/v2/restores/startTask

Minimum required role: Restore

Since: Beefalo

Starts the restore task matching the specified parameters.

#### Parameters

The start configuration is passed in as JSON object in the body of the request. The following JSON object properties are defined:

Name	Description
<b>name</b> *required	The unique name of the restore task to start.

Name	Description
String	
<b>password</b> String	The password to use in case the backup is encrypted.

## Responses

The response is a started restore task.

Response Code and Content	Description
<b>200</b> <b>Restore Task</b> JSON object	The started restore task is returned in the response body.

## Examples

Start the restore task with the name matching "My\_Restore\_Task":

```
POST /sep/api/v2/restores/startTask
{ "name" : "My_Restore_Task" }
```

Response:

```
{
  "name": "My_Restore_Task",
  "type": {
    "mode": "FULL",
    "transaction": "NONE"
  },
  "treeType": "DEEP",
  "client": {
    "id": 0,
    "name": "my-backup-server",
    ...
  },
  ...
}
```

**POST**

/sep/api/v2/restores/<taskName>/deleteTask

Minimum required role: Restore

Since: Beefalo

Deletes the restore task matching the provided name. If the restore task should be deleted with all associated restore events, the flag "forceRemove" must be set in the request body.

## Parameters

The delete task options are passed in as JSON object in the body of the request. The following JSON object properties are defined:

Name	Description
<b>forceRemove</b> Boolean	Flag to indicate if the restore task will be removed together with all associated restore events.

## Responses

---

Response Code and Content	Description
<b>200</b> <b>Name</b> String	The unique name of the deleted restore task is returned in the response body. If no restore task existed with the given name, then null is returned.

## Examples

---

Deletes the restore task with the name "My\_Restore\_Task" which is associated to a restore event:

```
POST /sep/api/v2/restores/My_Restore_Task/deleteTask
{ "forceRemove" : "true" }
```

```
Response:
"My_Restore_Task"
```

Deletes the restore task with the name "My\_Other\_Restore\_Task" which is not associated to any events:

```
POST /sep/api/v2/restores/My_Other_Restore_Task/deleteTask
{ "forceRemove" : "false" }
```

```
Response:
"My_Other_Restore_Task"
```

Deletes the restore task with the name "Yet\_Other\_Restore\_Task" (does not exist):

```
POST /sep/api/v2/restores/Yet_Other_Restore_Task/deleteTask
{ "forceRemove" : "false" }
```

```
Response:
null
```

**POST**

/sep/api/v2/restores/cancel

Minimum required role: Restore

Since: Beefalo

Cancel an active restore matching the given restore ID.

## Parameters

---

The unique ID of the active restore to cancel is passed in as JSON object in the body of the request.

## Responses

---

Response Code and Content	Description
<b>200</b> <b>Success</b> Boolean	The success of the cancel operation is returned in the response body.

## Examples

---

Cancels the active restore with the ID "20191119161537372":

```
POST /sep/api/v2/restores/cancel
{ "restoreId" : "20191119161537372" }
```

Response:  
true

**POST**

/sep/api/v2/restores/start

Minimum required role: Restore

Since: Jaglion

Starts all restore tasks provided in a list of JSON objects, where tasks matching the given parameters could be found.

## Parameters

---

The start configuration of each restore task is passed in as JSON object in the body of the request. The following JSON object properties are defined:

Name	Description
<b>name</b> * required String	The unique name of the restore task to start.
<b>password</b> String	The password to use in case the backup is encrypted.
<b>restoreTaskName</b> String	The unique name of the restore task to start. Will replace the parameter "name" in a future release.
<b>restoreId</b> String	The unique ID of the restore to create or update to record the state of the restore operation.

## Responses

---

The response body contains a list of start result DTOs as JSON objects. The following JSON object properties are defined:

Name	Description
<b>inputDto</b> JSON object	The StartRestoreDto which contained the data to start the respective restore task.
<b>eventId</b> Long	The ID of the created Restore Event.
<b>success</b> Boolean	True, if respective task could be started, false otherwise.
<b>error</b> JSON object	If start of the restore task failed, this is containing the corresponding error message.

## Examples

---

Start the restore task with the name matching "My\_Restore\_Task":

```
POST /sep/api/v2/restores/start
{ "restoreTaskName" : "My_Restore_Task",
```



```
“password” : “MySavePassword” }
```

Response:

```
[
  {
    "inputDto": {
      "restoreTaskName": "My_Restore_Task",
      "password": "MySavePassword"
    },
    "eventId": 20200602140145983,
    "success": true
  }
]
```

**GET**

/sep/api/v2/restores/<name>/drive

Minimum required role: None

Since: Jaglion

Get the drive on which the restore was being executed.

The response body contains the drive encoded as JSON object. The properties of the drive object are described in the drives service section.

#### Responses

Response Code and Content	Description
200 Drives JSON object	The matching drive is returned in the response body.

#### Examples

Get the drive on which the restore result “SD38234234324” is stored:

```
GET /sep/api/v2/restores/SD38234234324/drive
```

Response:

```
{
  "id": 1,
  "device": "DS@Test-Store_1",
  "client": {
    "id": 0,
    ...
  },
  "driveType": {
    "name": "DISK_STORE",
    "genericType": "DISK"
  },
  "name": "Drive-1",
  "compress": false,
  "occupy": false,
  "accessMode": "READWRITE",
  "smsCnts": 10,
  "mediaTimeout": 0,
  "cleanBit": false,
  "path": "C:/datastores",
  "dataStore": "Test-Store",
  "ejectFlag": false,
  "blockSize": 0,
  "smsNr": 0,
  "encryptionCapable": false,
}
```

```
} "groupId": 1
```

### 3.45. Schedules Service

The schedules service provides access to schedules for creation, deletion and modification.

A schedule is an object with the following properties:

Name	Description
<b>name</b> * required String	The unique name of the schedule. The maximum length of the name is 30 characters. The name can contain only letters, digits, '-' and the '_' character.
<b>cycFlag</b> * required Boolean	Flag to mark if the schedule is executed recurring or just once.
<b>absFlag</b> * required Boolean	Flag to mark if the schedule is executed at a relative or absolute point in time.
<b>pCount</b> Long	The relative or absolute offset.
<b>pSubCount</b> Long	The number of hours or minutes after the schedule is executed again.
<b>pBase</b> String	The schedule type. The maximum length of the schedule type is 3 characters. Valid values are 'MIN', 'HOU', 'DAY', 'WEE', 'MON', 'YEA', 'CAL' and the empty string.
<b>pSubBase</b> String	The schedule subtype. The maximum length of the schedule subtype is 3 characters. Valid values are 'MIN', 'HOU', 'DAY', 'WEE', 'MON', 'YEA', 'CAL' and the empty string.
<b>mo</b> Boolean	Flag to mark if the schedule executes at Mondays.
<b>tu</b> Boolean	Flag to mark if the schedule executes at Tuesdays.
<b>we</b> Boolean	Flag to mark if the schedule executes at Wednesdays.
<b>th</b> Boolean	Flag to mark if the schedule executes at Thursdays.
<b>fr</b> Boolean	Flag to mark if the schedule executes at Fridays.
<b>sa</b> Boolean	Flag to mark if the schedule executes at Saturdays.
<b>su</b> Boolean	Flag to mark if the schedule executes at Sundays.
<b>dayOfMth</b> Long	The day of the month.
<b>mthOfYea</b> Long	The month of the year.
<b>wkOfMth</b> Long	The week of the month.
<b>dayOfWk</b> String	The day of the week. The maximum length of the day of the week is 10 characters. Valid values are 'day', 'weekday', 'weekendday', 'mo', 'tu', 'we', 'th', 'fr', 'sa' and 'su'.
<b>exec</b> Boolean	Flag to control the execution state of the schedule. When false, then the schedule will be not executed.
<b>dayOffset</b> Long	The offset during the day.
<b>sepcomment</b> String	The last Sesam system message. The maximum length of the Sesam system message is 1024 characters.
<b>usercomment</b> String	The comment or note from the user. The maximum length of the user comment is 1024 characters.
<b>calendar</b> String	The UUID of the referenced user defined calendar.

Following methods are provided by the schedules service:

GET

/sep/api/v2/schedules

Minimum required role: None

Since: Jaglion

Get the list of all schedules.

The response body contains the list of schedules encoded as JSON objects. The properties of the schedules object are described in the scheduling service section.

#### Responses

Response Code and Content	Description
200 Schedules array[JSON object]	The schedules are returned in the response body.

#### Examples

Get the list of all existing schedules:

```
GET /sep/api/v2/schedules
```

```
Response:
```

```
[
  {
    "startDate": 1583276400000,
    "startTime": 25800000,
    "name": "Daily-0810",
    "cycFlag": true,
    "absFlag": true,
    "pCount": 1,
    "pSubCount": 0,
    "pBase": "DAILY",
    "mo": true,
    "tu": true,
    "we": true,
    "th": true,
    "fr": true,
    "sa": true,
    "su": true,
    "exec": true,
    "usercomment": "daily backup",
    "nextExec": 1617862200000,
    "mtime": 1615462845000
  },
  ...
]
```

GET

/sep/api/v2/schedules/&lt;name&gt;

Minimum required role: None

Since: Jaglion

Get the schedule with the given unique name.

The response body contains the schedule encoded as JSON objects. The properties of the schedules object are described in the scheduling service section.

## Responses

---

Response Code and Content	Description
200 schedules JSON object	The schedule is returned in the response body.

## Examples

---

Get the schedule with the name “mySchedule”:

```
GET /sep/api/v2/schedules/mySchedule
```

Response:

```
{
  "startDate": 1583276400000,
  "startTime": 25800000,
  "name": "mySchedule",
  "cycFlag": true,
  "absFlag": true,
  "pCount": 1,
  "pSubCount": 0,
  "pBase": "DAILY",
  "mo": true,
  "tu": true,
  "we": true,
  "th": true,
  "fr": true,
  "sa": true,
  "su": true,
  "exec": true,
  "usercomment": "daily backup",
  "nextExec": 1617862200000,
  "mtime": 1615462845000
}
```

**GET**

/sep/api/v2/schedules/<name>/events

Minimum required role: None

Since: Jaglion

Get all events associated with the schedule with the given unique name.

The response body contains the events encoded as array of JSON objects. The properties of the events object are described in the events service section.

## Responses

---

Response Code and Content	Description
200 events array[JSON object]	The events are returned in the response body.

## Examples

---

Get all events for the schedule with the name “mySchedule”:

```
GET /sep/api/v2/schedules/mySchedule/events
```

Response:

```
[
  {
    "id": "20210111152203832",
    "exec": true,
    "scheduleName": "Hourly",
    "priority": 1,
    "suppress": false,
    "term": {
      "nextExec": 1617807600000
    },
    "poolName": "Lokal-MP",
    "type": {
      "type": "DIFF",
      "cfdiType": {
        "cfdi": "DIFF",
        "value": "D"
      },
      "task": true
    },
    "object": "my-sesam-host_home",
    "grpFlag": false
  },
  ...
]
```

**POST**

/sep/api/v2/schedules/find

Minimum required role: None

Since: Jaglion

Search for schedules matching the specified filter parameters.

#### Parameters

The filter configuration is passed in as JSON object in the body of the request. The properties of the filter are the following:

Name	Description
<b>name</b> String	The unique name of the schedule to match.
<b>uuid</b> String	The calendar_uuid of the schedule to match.

#### Responses

Response Code and Content	Description
<b>200</b> <b>Schedules</b> array[JSON object]	The matching schedules are returned in the response body.

#### Examples

Get the schedule with the name "mySchedule":

```
POST /sep/api/v2/schedules/find
{ "name" : "mySchedule" }
```

```

Response:
[
  {
    "startDate": 1583190000000,
    "startTime": 25200000,
    "duration": 1430,
    "name": " mySchedule ",
    "cycFlag": true,
    "absFlag": false,
    "pCount": 1,
    "pSubCount": 0,
    "pBase": "DAILY",
    "mo": true,
    "tu": true,
    "we": true,
    "th": true,
    "fr": true,
    "sa": true,
    "su": true,
    "exec": true,
    "usercomment": "Testkommentar",
    "nextExec": 1617861600000,
    "mtime": 1605173989000
  }
]

```

POST

/sep/api/v2/schedules/create

Minimum required role: Administrator

Since: Jaglion

Creates a new schedules object.

#### Parameters

The schedule is passed in as JSON object in the body of the request. The properties of the schedule are described in the scheduling service section.

#### Responses

Response Code and Content	Description
200 Schedule JSON object	The newly created schedule is returned in the response body.

#### Examples

Create a new schedule:

```

POST /sep/api/v2/schedules/create
{ "name" : "myNewSchedule", "absFlag" : true }

Response:
{
  "startDate": 1617805227646,
  "startTime": 55227646,
  "name": "TestSchedulePostman",
  "cycFlag": false,
  "absFlag": true,
  "pCount": 1,
  "pSubCount": 0,
  "pBase": "ONCE",

```

```

"mo": false,
"tu": false,
"we": false,
"th": false,
"fr": false,
"sa": false,
"su": false,
"exec": true
}

```

**POST**

/sep/api/v2/schedules/update

Minimum required role: Administrator

Since: Jaglion

Updates a schedule. A schedule with the given name must exist, otherwise the call will fail.

#### Parameters

The schedule is passed in as JSON object in the body of the request. The properties of the schedule are described in the scheduling service section.

#### Responses

Response Code and Content	Description
<b>200</b> <b>Schedule</b> JSON object	The updated schedule is returned in the response body.

#### Examples

Update the schedule with the name "mySchedule":

```

POST /sep/api/v2/schedules/update
{ "name" : "mySchedule", "absFlag" : false }

Response:
{
  "startDate": 1617805227646,
  "startTime": 55227646,
  "name": "mySchedule",
  "cycFlag": false,
  "absFlag": false,
  "pCount": 1,
  "pSubCount": 0,
  "pBase": "ONCE",
  "mo": false,
  "tu": false,
  "we": false,
  "th": false,
  "fr": false,
  "sa": false,
  "su": false,
  "exec": true
}

```



POST

/sep/api/v2/schedules/persist

Minimum required role: Super user

Since: Jaglion

Persists a schedule. If no schedule with the given name exists, a new schedule will be created. Otherwise, the properties of an existing schedule are updated.

#### Parameters

The schedule is passed in as JSON object in the body of the request. The properties of a schedule are described above.

#### Responses

Response Code and Content	Description
200 Schedule JSON object	The created or updated schedule is returned in the response body.

#### Examples

Persists the schedule with the name "mySchedule":

```
POST /sep/api/v2/schedules/persist
{ "name" : "mySchedule", "absFlag" : false }
```

Response:

```
{
  "startDate": 1617805227646,
  "startTime": 55227646,
  "name": "mySchedule",
  "cycFlag": false,
  "absFlag": false,
  "pCount": 1,
  "pSubCount": 0,
  "pBase": "ONCE",
  "mo": false,
  "tu": false,
  "we": false,
  "th": false,
  "fr": false,
  "sa": false,
  "su": false,
  "exec": true
}
```

POST

/sep/api/v2/schedules/delete

Minimum required role: Administrator

Since: Jaglion

Deletes a schedule. A schedule with the given name must exist, otherwise the call will return null.

#### Parameters

The schedule name is passed in as JSON string in the body of the request.

#### Responses

Response Code and Content	Description
---------------------------	-------------

Response Code and Content	Description
200 <b>name</b> String	The unique name of the deleted schedule is returned in the response body. If no schedule existed with the given name, then null is returned.

### Examples

Delete the schedule with the name “myNewSchedule”:

```
POST /sep/api/v2/schedules/delete
"myNewSchedule"
```

```
Response:
"myNewSchedule"
```

**POST**

/sep/api/v2/schedules/deleteByEntity

Minimum required role: Administrator

Since: Jaglion

Deletes the schedule matching the given entity.

### Parameters

The entity to match is passed as JSON object in the body of the request. The only required entity property is the primary key of the entity.

### Responses

Response Code and Content	Description
200 <b>name</b> String	The name of the deleted schedule is returned in the response body. If no schedule existed with the given ID, then null is returned.

### Examples

Deletes the schedule matching the given entity:

```
POST /sep/api/v2/schedules/deleteByEntity
{
  "name" : "my_busy_schedule"
}
```

```
Response:
"my_busy_schedule"
```

**POST**`/sep/api/v2/schedules/start`

Minimum required role: Administrator

Since: Jaglion

Starts a schedule. A schedule with the given name must exist and the schedule has some events associated, otherwise the call will fail.

#### Parameters

---

The start configuration is passed in as JSON object in the body of the request. The properties of the start configuration are the following:

Name	Description
<b>name</b> String	The unique name of the schedule to start.
<b>priority</b> Long	The priority to use for starting the schedule.

#### Examples

---

Update the schedule with the name "myNewSchedule":

```
POST /sep/api/v2/schedules/update
{ "name" : "myNewSchedule", "absFlag" : false }
```

Response:

```
{
  "startDate": 1617805227646,
  "startTime": 55227646,
  "name": "TestSchedulePostman",
  "cycFlag": false,
  "absFlag": false,
  "pCount": 1,
  "pSubCount": 0,
  "pBase": "ONCE",
  "mo": false,
  "tu": false,
  "we": false,
  "th": false,
  "fr": false,
  "sa": false,
  "su": false,
  "exec": true
}
```

### 3.46. Scheduling Service

The scheduling service provides access to the events and related objects, associated with schedules.

A schedule defines when a task of any type shall be executed automatically. In example, a schedule defines that the backup task 'My-Backup-Task' shall be executed every Thursday at 11:00 am.

An event defines the kind of task to be executed for a given schedule.

A schedule is an object with the properties described in the chapter "Schedules Service".

An event is an object with the properties described in the chapter "Events Service".

Following methods are provided by the scheduling service:

**GET**

/sep/api/v2/scheduling/nextEvents

Minimum required role: None

Since: Jaglion

Get the list of all events executing next.

The response body contains the list of events encoded as JSON objects. The properties of the events object are described above.

#### Responses

Response Code and Content	Description
200 Event array[JSON object]	The events are returned in the response body.

#### Examples

Get the list of events executing next:

```
GET /sep/api/v2/scheduling/nextEvents

Response:
[
  {
    "id": 20180522132315606,
    "name": "My-Backup-Task_20180522132315606",
    "exec": true,
    "priority": 1,
    ...
    "term": {
      "eventType": "BACKUP",
      "schedule": "Hourly",
      "nextExec": 1586437200000,
      ...
    },
    "poolName": "TEST-POOL",
    "type": {
      "type": "DIFF",
      "cfdiType": {
        "value": "D",
        "cfdi": "DIFF"
      },
      "task": true
    },
    "object": "My-Backup-Task",
  }
]
```

```

    }, ...
  ], ...
]

```

GET

/sep/api/v2/scheduling/&lt;id&gt;/tasks

Minimum required role: None

Since: Jaglion

Get the list of all tasks being associated with the event matching the given event ID.

The response body contains the list of tasks encoded as JSON objects. The properties of the task objects are described in the corresponding service sections.

#### Responses

Response Code and Content	Description
200 Task array[JSON object]	The tasks are returned in the response body.

#### Examples

Get the list of tasks being associated with the event with the ID '20180522132315606':

```
GET /sep/api/v2/scheduling/20180522132315606/tasks
```

```
Response:
```

```

[
  {
    "name": "My-Backup-Task",
    "type": {
      "name": "Path",
      ...
    },
    "client": {
      "id": 0,
      "name": "my-backup-server",
      ...
    },
    ...
  },
  ...
]

```

### 3.47. Server Service

The server service provides general information about the SEP sesam server. Also, access to server located files is provided.

In some cases, the clients need to show the content of one or more files stored at the server. In example, if a backup or restore task fails, the user might want to have a look into the tasks log file to analyze the issue. In other cases, server administrators want to check the server log files without opening a terminal to the server.

The server information object has the following properties:

Name	Description
<b>name</b> String	The Sesam server name.
<b>ip</b> String	The IP address the Sesam is listening to for requests.
<b>restPort</b> Integer	The port the Sesam server is listening to for requests.
<b>os</b> String	The server operating system as known to the Java runtime.
<b>id</b> String	The Sesam server version identification.
<b>gitId</b> String	The GIT ID where the Sesam server package has been built from.
<b>gitBranch</b> String	The name of the GIT branch where the Sesam server package has been built from.
<b>dateString</b> String	The build date and time of the Sesam package.
<b>fullBuildString</b> String	The full version identification of the Sesam server.
<b>updateRecommendation</b> String	The Sesam server update recommendation. This update recommendation is computed based on the query parameters passed in. The most common update recommendations are 'NO_UPDATE_NEEDED' and 'UPDATE_WEB_UI'.
<b>requireAuth</b> Boolean	Flag to signal the client if an explicit user authentication is required. If 'true', the client should request the user credentials to login to the Sesam server.
<b>allPermission</b> Boolean	Flag to signal if all clients and users can connect to the Sesam server. This flag is valid only if the 'requireAuth' flag is set to 'false'.
<b>message</b> String	The Sesam server update message.
<b>filesToUpdate</b> array[String]	The list of files to retrieve from the server when an update is necessary.
<b>lang</b> String	The resource language used by the Sesam server.
<b>javaVersion</b> String	The version of the Java runtime.
<b>javaRuntime</b> String	The Java runtime identification.
<b>javaVm</b> String	The version of the Java virtual machine.
<b>javaVendor</b> String	The vendor of the Java runtime.
<b>javaOs</b> String	The server operation system as known to the Java runtime (extended format).
<b>release</b> String	The Sesam release version. The value is read from the sm.ini 'now' property.
<b>kernel</b> String	The Sesam kernel version. The value is read from the sm.ini 'version' property.

Name	Description
<b>packageName</b> String	The name of the Sesam server package installed. The value is read from the sm.ini 'package_name' property.
<b>installationDate</b> String	The date and time of the installation of the Sesam server package. The value is read from the sm.ini 'installation_date' property.
<b>brand</b> String	The Sesam kernel brand ID. The value is read from the sm.ini 'brand' property.
<b>encoding</b> String	The server side character encoding. The value is read from the sm.ini 'encoding' property.
<b>buildHost</b> String	The name of the build server where the Sesam package has been built. The value is read from the sm.ini 'build_host' property.
<b>dbType</b> String	The data base type running on the server. Supported data base types are 'sqlite' and 'postgres'. The value is read from the sm.ini 'gv_db_type' property.
<b>serverOs</b> String	The server operating system as known to the Sesam kernel. The value is read from the sm.ini 'os' property.
<b>servicepackDate</b> String	The date and time of the installation of the Sesam service pack package. The value is read from the sm.ini 'servicepack_date' property.
<b>servicepackNumber</b> String	The Sesam service pack version. The value is read from the sm.ini 'servicepack_number' property.
<b>servicepackPackage</b> String	The name of the Sesam server pack package installed. The value is read from the sm.ini 'servicepack_package' property.
<b>timezone</b> String	The name of the timezone the Sesam server is running in.
<b>tzOffset</b> Long	The Sesam server time zone offset in seconds.
<b>sessionId</b> String	When requesting the Sesam server information with valid and authenticated user credentials, then this property contains the session ID of the active session.
<b>capabilities</b> array[String]	The list of server capabilities. Clients may use this capabilities to enable or disable related functionality.

Following methods are provided by the server service:

GET

/sep/api/v2/server/info

Minimum required role: None

Since: Jaglion

Get some general server information. Among others, the information includes the SEP sesam version running and the currently configured authentication method. Later can be used to decide if a user is required to enter a secret or not.

Parameters

The end point supports the following query parameter:

Name	Description
<b>brandId</b> String	The brand ID of the client requesting the server information. If present, the clients brand ID will be used by the server to compute the update recommendation.
<b>gitId</b> String	The GIT ID of the client requesting the server information. If present, the clients GIT ID will be used by the server to compute the update recommendation.
<b>supportsMultiJAR</b> String	Flag to tell the server if the client supports multi-JAR update or not. If 'true', the client supports multi-JAR update and the server will offer the update of multiple JAR files. If 'false', the client does not support multi-JAR update and the server will offer to update the classic 'sm_ui.jar' file only.

The response body contains the server information encoded as JSON object. The properties of the server information object are described above.

## Responses

Response Code and Content	Description
<b>200</b> <b>Server Information</b> JSON object	The server information object is returned in the response body.

## Examples

Get the server information:

```
GET /sep/api/v2/server/info
```

Response:

```
{
  "name": "sesam-srv",
  "restPort": 11409,
  "os": "Windows 10",
  "id": "V4.4 Build 5 A ffffffff",
  ...
  "requireAuth": false,
  ...
  "lang": "en",
  ...
  "javaVersion": "1.8.0_192",
  "javaRuntime": "Java(TM) SE Runtime Environment (build 1.8.0_192-b12)",
  "javaVm": "Java HotSpot(TM) 64-Bit Server VM (build 25.192-b12, mixed mode)",
  "javaVendor": "Oracle Corporation",
  "javaOs": "OS: Windows 10 (amd64, mixed mode)",
  ...
  "kernel": "server,4.4.3.65,20181127113229",
  "packageName": "sesam-srv-4.4.3.65-windows.x64.exe",
  "installationDate": "20181127113229",
  ...
  "dbType": "sqlite",
  ...
  "timeZone": "Europe/Berlin",
  "tzOffset": 3600000,
  "sessionId": "43e88493-4e99-4d77-956f-f30aa6585ad0",
  ...
}
```

**GET**

/sep/api/v2/server/currentTime

Minimum required role: None

Since: Jaglion

Get the current server local time.

## Responses

Response Code and Content	Description
<b>200</b> <b>Server Time</b> Long	The current server local time is returned in the response body. The server time is represented as UNIX Epoch time



## Examples

---

Get the current server time:

```
GET /sep/api/v2/server/currentTime
```

```
Response:
1546607167446
```

**POST**

/sep/api/v2/server/view

Minimum required role: None

Since: Jaglion

Read and returns the content of a file located at the server. The end point supports reading all of the file or only parts of the file.

The API is expected to return a plain text response object. Means, the response header *“Content-Type”* has to be set to *“text/plain; charset=utf-8”*.

Additional to the content type response header, following response headers might be set too:

Name	Description
<b>Last-Modified</b> String	The last modified date of the requested file in “HTTP date” format.
<b>X-Sesam-Content-Length</b> Long	The size in bytes of the requested content of the requested file.
<b>X-Sesam-Total-Length</b> Long	The total size in bytes of the requested file.
<b>X-Sesam-Content-Label</b> String	The name of the requested file without any path information.

If the requested file cannot be found or read, a proper error message has to be returned.

## Parameters

---

The parameters are passed in as JSON object in the body of the request. The following JSON object properties are defined:

Name	Description
<b>type</b> * required String	The type of the requested file. Valid types are: <ul style="list-style-type: none"> <li>- “LOG” ... Get the log of an executed action from the server. Typically this will be the log of a backup, restore, media or migration task. The property “subtype” selects the specific task type.</li> <li>- “CALENDAR” ... Get calendar sheet information.</li> <li>- “CURRENT” ... Get current messages.</li> <li>- “SERVICES” ... Get the Sesam server services status.</li> <li>- “UPDATE” ... Get the specified JAR file update from the server.</li> </ul>
<b>subtype</b> * required String	The sub type of the requested file. For some types, this property is optional. <ul style="list-style-type: none"> <li>- Required if type is “LOG”.</li> <li>- For type “LOG”, valid sub types are “BACKUP”, “RESTORE”, “MEDIA”, “MIGRATION”, “ERROR”, “SESAM”, “NOTIFY” and “STATE”.</li> </ul>
<b>name</b> * required String	The name pattern of the requested file. The interpretation of the name pattern depends on the selected type and sub type.
<b>selector</b> String	The selector. The meaning of this field and the default value to assume, when omitted, depends on the selected type and subtype. Valid combinations known are:

Name	Description
<b>offset</b> Long	<ul style="list-style-type: none"> <li>- Type "LOG", Sub type "BACKUP"                             <ul style="list-style-type: none"> <li>o Valid values are "not", "bck", "pre", "post" and "prt". If omitted, the default value is "not".</li> </ul> </li> <li>- Type "LOG", Sub type "RESTORE"                             <ul style="list-style-type: none"> <li>o Valid values are "pre", "post" and "prt". If omitted, the default value is "prt".</li> </ul> </li> <li>- Type "LOG", Sub type "MEDIA"                             <ul style="list-style-type: none"> <li>o Valid values are "pre", "post" and "prt". If omitted, the default value is "prt".</li> </ul> </li> <li>- Type "LOG", Sub type "MIGRATION"                             <ul style="list-style-type: none"> <li>o Not applicable.</li> </ul> </li> </ul> <p>The offset in bytes within the requested file where to start reading new content. If omitted, the read will always start at the beginning of the requested file.</p> <p><b>Note:</b> If the "offset" property is passed in with the value "-1", then the end point returns only the last "length" bytes of the requested file. If "length" is not specified, the last 512 KB of the requested file are returned, if the requested file is larger than 512 KB. The response header property "X-Sesam-Content-Length" still reports the length of the returned content of the requested file and "X-Sesam-Total-Length" still reports the total length of the requested file. Both can be used by the front-end to calculate the skipped bytes.</p> <p>The number of bytes to return. If omitted and offset is -1, the default length is 512 KB.</p>
<b>Response Code and Content</b> 200 Content String	<b>Description</b> The requested file content is returned in the response body.

Examples

View the current server messages:

```
POST /sep/api/v2/server/view
{ "type" : "CURRENT" }

Response:
"System:\n 14:25:07 Timeout im grünen Bereich: 2024-08-06\n..."
```

View the last 32KB of a backup's main log:

```
POST /sep/api/v2/server/view
{ "type" : "LOG", "subtype" : "BACKUP", "name" : "SI20190419070501552@sgfsEZagQz3", "offset" : -1, "length" : 32000 }

Response:
"2019-04-19 07:05:01: smk-3526: Info: Submit backup task my-sesam-host_temp...\r\n..."
```

GET

/sep/api/v2/server/download

Minimum required role: None

Since: Jaglion

Reads the content of a file located at the server and streams the content to the client for saving.

The API is expected to return a response object triggering a “Save as...” dialog in the browser allowing the user to save the file to the local file system. Means, the response header “Content-Disposition” has to be set and the value is expected to be ‘*attachment; filename=<file name>*’.

If the requested file cannot be found or read, a proper error message has to be returned.

#### Parameters

The parameters are passed in as JSON object in the body of the request. The same parameters as for the “server/view” end point applies here too.

Response Code and Content	Description
200 Content Stream	The requested file content is returned as stream.

POST

/sep/api/v2/server/list

Minimum required role: None

Since: Jaglion

Lists the available server located files.

The end point returns a server file information object with the following properties:

Name	Description
<b>name</b> * required String	The name of the file without any path information.
<b>size</b> * required Long	The total size of the requested file in bytes.
<b>lastModified</b> * required Long	The last modified date of the requested file in milliseconds.
<b>location</b> String	The location of the requested file at the server in form of a Sesam GV variable (i.e. “gv_rw_gui”).
<b>selector</b> String	The file selector (i.e. “not”).
<b>additionalInfo</b> String	Any kind of additional information about the requested file.
<b>hidden</b> Boolean	If present in the return object and if set to true, then the corresponding file should not be visible to the user in any log viewer. File entries marked as hidden should be attached to e-mails only, if send to customer support in example.

#### Parameters

The parameters are passed in as JSON object in the body of the request. The same parameters as for the “server/view” end point applies here too.

Response Code and Content	Description
200 Server File Information JSON	The information object for the requested file is returned in the response body.

### Examples

List the available log files for a backup:

```
POST /sep/api/v2/server/list
{ "type" : "LOG", "subtype" : "BACKUP", "name" : "SI20190419070501552@sgfsEZagQz3" }

Response:
[
  {
    "name": "my-sesam-host_temp-20190418_031_SI20190419070501552@sgfsEZagQz3.not",
    "size": 15820,
    "lastModified": 1555650358870,
    "location": "gv_rw_lis",
    "selector": "not"
  },
  ...
]
```

**GET**

/sep/api/v2/server/clearCaches

Minimum required role: None

Since: Jaglion

Clear the server side data base caches.

### Responses

Response Code and Content	Description
200 Status Boolean	The logout succeeded and the session got destroyed.

### Examples

Clear all server side data base caches:

```
GET /sep/api/v2/server/clearCaches

Response:
true
```

**DELETE**`/sep/api/v2/server`

Minimum required role: Super user

Since: Jaglion

Shutdown the REST server gracefully.

Calling the end point will have an effect only, if the invocation happens on the same server as the REST server is running. Using the end point to shut down a remote server is not permitted.

#### Responses

---

Response Code and Content	Description
200	The REST server will respond with an OK status only.

#### Examples

---

Shutdown the REST server gracefully:

```
DELETE /sep/api/v2/server
```

Response:

### 3.48. Statistics Service

The statistics service provides a common way to access summary information about executed backups, restores, migrations or other operations, without the need to load all base information from the server and to calculate the statistics itself.

The statistics service returns a statistics result object. The statistics result object contains the collected statistical information in a hierarchal way.

A statistic result object is an object with the following properties:

Name	Description
<b>clients</b> array[String]	The list of client IDs or names represented in the collected statistics.
<b>type</b> String	The statistics type. Valid values are 'COUNT', 'DATA_SIZE' and 'STATE'.
<b>subtype</b> String	The statistics sub type. Valid values are 'BACKUP', 'LATEST_BACKUP' and 'RESTORE'.
<b>children</b> array[JSON object]	The list of child statistic result items.

A statistic result item is an object with the following properties:

Name	Description
<b>id</b> * required String	The statistics item ID.
<b>type</b> String	The statistic result item type. There are no predefined values for the result item type. Any text describing the type of the statistics item may appear here.
<b>values</b> JSON object	The statistics item values as key/value pairs.
<b>Children</b> array[JSON object]	The list of child statistic result items.

Following methods are provided by the statistics service:

POST	<code>/sep/api/v2/statistics/find</code>	Since: Beefalo
Minimum required role: None		

Collects the statistics matching the specified statistics filter parameters.

#### Parameters

The filter configuration is passed in as JSON object in the body of the request. The following JSON object properties are defined:

Name	Description
<b>type</b> * required String	<p>The statistics type. Valid values are 'COUNT', 'DATA_SIZE' and 'STATE'.</p> <p>The meaning of the statistics type values are as following:</p> <ul style="list-style-type: none"> <li>'DATA_SIZE' ... Get a summary of the amount of data transferred by the matched backups, restores or other operations.</li> <li>'STATE' ... Get a summary of the execution states by the matched backups, restores or other operations.</li> </ul>

Name	Description
<b>subtype</b> String	<ul style="list-style-type: none"> <li>'COUNT' ... Get count of the requested sub type by day.</li> </ul> <p>The statistics sub type. Valid values are 'BACKUP', 'LATEST_BACKUP' and 'RESTORE'.</p> <p>The meaning of the statistics sub type values are as following:</p> <ul style="list-style-type: none"> <li>'BACKUP' ... Collects the specified statistic for matching backups.</li> <li>'LAST_BACKUP' ... Collects the specified statistic for the last backup state. For this sub type, the specified type is ignored and the statistic type "STATE" is forced.</li> <li>'RESTORE' ... Collects the specified statistic for matching restores.</li> </ul>
<b>groupMode</b> String	<p>The group mode selects how the statistic is grouped. Not all group modes are supported for all statistic type and sub type combinations. Valid values are 'TASK', 'CLIENT', 'TASK_TYPE' and 'STATE'.</p> <p>The meaning of the statistics sub type values are as following:</p> <ul style="list-style-type: none"> <li>'TASK' ... 1st group level is by client and the 2nd group level is by task. This group mode is the default mode for 'DATA_SIZE' statistics. This grouping level is not supported for 'STATE' and 'COUNT' statistic types.</li> <li>'CLIENT' ... 1st group level is by client and the 2nd group level is by date.</li> <li>'TASK_TYPE' ... 1st group level is by client and the 2nd group level is by task (backup) type. This grouping mode is available only for subtype 'BACKUP' and the statistic types 'STATE' and 'COUNT'.</li> <li>'STATE' ... 1st group level is by client and 2nd group level is by execution state. This group mode is the default mode for the 'STATE' statistic type and not supported for the 'COUNT' and the 'DATA_SIZE' statistic types.</li> </ul>
<b>clients</b> array[String]	<p>The list of client IDs or names. If specified, the selected statistic is calculated for data associated with the specified client IDs or names only.</p>
<b>tasks</b> array[String]	<p>The list of task names. If specified, the selected statistic is calculated for data associated with the specified task name only.</p>
<b>states</b> array[String]	<p>The list of result states to include into the statistic. If omitted, only records with the state 'SUCCESSFUL' or 'INFO' are included.</p>
<b>backupTypes</b> array[String]	<p>The list of backup types. If omitted, records from all backup types are included.</p>
<b>attributes</b> JSON object	<p>The map of custom attributes. Which custom attributes are supported by the available statistic type and sub type combinations, is implementation specific.</p>

Responses

Response Code and Content	Description
200 Default Property array[JSON object]	The matching default property objects are returned in the response body.

Examples

Collect the backup state summary statistics for a single day:

```

POST /sep/api/v2/statistics/find
{ "type" : "STATE", "subtype" : "BACKUP", "groupMode" : "CLIENT", "sesamDate": ["2020-02-17"] }

Response:
{
  "clients": [

```

```
"my-sesam-host"  
],  
"type": "STATE",  
"subtype": "BACKUP",  
"children": [  
  {  
    "id": "0",  
    "type": "Clients",  
    "children": [  
      {  
        "id": "SUCCESSFUL",  
        "type": "StateType",  
        "children": [  
          {  
            "values": {  
              "date": 1581894000000,  
              "count": 35  
            }  
          }  
        ],  
        "values": {  
          "count": 35  
        }  
      }  
    ]  
  }  
]
```



### 3.49. Users Service

The users service provides access to user objects. A user represents a principle who can connect to the SEP sesam server and access information.

A user object is an object with the following properties:

Name	Description
<b>id</b> Long	The unique ID of the user.
<b>name</b> * required String	The name of the user. The maximum length of the user name is 255 characters.
<b>password</b> * required String	The user password. The maximum length of the user password is 512 character.
<b>accountExpired</b> Boolean	Flag to indicate if the user account has been expired.
<b>locked</b> Boolean	Flag to indicate if the user account has been locked.
<b>passwordExpired</b> Boolean	Flag to indicate if the user password has been expired.
<b>enabled</b> Boolean	Flag to indicate is the user is enabled.
<b>origin</b> String	The origin of the user. Valid values are 'SYSTEM', 'INTERNAL', 'POLICY', 'LDAP', 'AD' and 'USER'.
<b>fromJavaPolicy</b> Boolean	Flag to indicate if the user is present in the user policy authentication file, when policy based authentication is enabled.
<b>allowHostAuth</b> Boolean	Flag to indicate if host only based authentication is enabled for the user.
<b>usercomment</b> String	The comment or note from the user. The maximum length of the user comment is 1024 characters.
<b>dateChanged</b> Date	The date and time when the user account has last changed.
<b>dateCreated</b> Date	The date and time when the user account has been created.
<b>changedBy</b> String	The unique ID or name of the entity or user, who has changed the user account last.
<b>thumbprint</b> String	The list of valid thumbprints of user authentication certificates.

Following methods are provided by the users service:

GET	<code>/sep/api/v2/users</code>	Since: Jaglion
Minimum required role: Super user		

Get all users.

The response body contains the list of user encoded as an array of JSON objects.

#### Responses

Response Code and Content	Description
200 Users array[JSON object]	The user list is returned in the response body.

## Examples

---

Get all users:

```
GET /sep/api/v2/users

Response:
[
  {
    "id": 3,
    "name": "My User",
    "password": "*****",
    "accountExpired": false,
    "locked": false,
    "passwordExpired": false,
    "enabled": true,
    "origin": "USER",
    "fromJavaPolicy": false,
    "allowHostAuth": true,
    "usercomment": "Lokal User"
  },
  ...
]
```

**GET**

/sep/api/v2/users/<id>

Minimum required role: Super user

Since: Jaglion

Get the user matching the given ID.

The response body contains the user encoded as JSON objects.

## Responses

---

Response Code and Content	Description
200 User JSON object	The user is returned in the response body.

## Examples

---

Get the user with the ID '3':

```
GET /sep/api/v2/users/3

Response:
{
  "id": 3,
  "name": "ust",
  "password": "*****",
  "accountExpired": false,
  "locked": false,
  "passwordExpired": false,
  "enabled": true,
  "origin": "USER",
  "fromJavaPolicy": false,
  "allowHostAuth": true,
  "usercomment": "Lokal User"
}
```

POST

/sep/api/v2/users/create

Minimum required role: Super user

Since: Jaglion

Creates a new user.

#### Parameters

The user is passed in as JSON object in the body of the request. The properties of the user are described above.

#### Responses

Response Code and Content	Description
200 Users JSON object	The created user is returned in the response body.

#### Examples

Create a new user with the name "my\_new\_user":

```
POST /sep/api/v2/users/create
{ "name" : "my_new_user", "password" : "abcdef123456" }

Response:
{
  "id": 17,
  "name": "my_new_user",
  "password": "*****",
  "accountExpired": false,
  "locked": false,
  "passwordExpired": false,
  "enabled": true,
  "origin": "USER",
  "fromJavaPolicy": false
}
```

POST

/sep/api/v2/users/update

Minimum required role: Super user

Since: Jaglion

Updates a user. A user with the given ID must exist, otherwise the call will fail.

Be aware that for updating a user, always the user ID of the user to update has to be provided. Providing the user name only is not sufficient, as the name of the user can be updated itself.

#### Parameters

The user is passed in as JSON object in the body of the request. The properties of the user are described above.

#### Responses

Response Code and Content	Description
200 User JSON object	The updated user is returned in the response body.

## Examples

---

Update the name of the user with the ID '17':

```

POST /sep/api/v2/users/update
{
  "id": 17,
  "name": "my_user_changed",
  "accountExpired": false,
  "locked": false,
  "passwordExpired": false,
  "enabled": true,
  "origin": "USER",
  "fromJavaPolicy": false
}

Response:
{
  "id": 17,
  "name": "my_user_changed",
  "password": "*****",
  "accountExpired": false,
  "locked": false,
  "passwordExpired": false,
  "enabled": true,
  "origin": "USER",
  "fromJavaPolicy": false
}

```

**POST**

/sep/api/v2/schedules/persist

Minimum required role: Super user

Since: Jaglion

Persists a user. If no user with the given ID exists, a new user will be created. Otherwise, the properties of an existing user are updated.

## Parameters

---

The user is passed in as JSON object in the body of the request. The properties of a user are described above.

## Responses

---

Response Code and Content	Description
200 User JSON object	The created or updated user is returned in the response body.

## Examples

---

Persists the user with the name "17":

```

POST /sep/api/v2/users/persist
{
  "id": 17,
  "name": "my_user_changed",
  "accountExpired": false,
  "locked": false,
  "passwordExpired": false,
  "enabled": true,
  "origin": "USER",

```

```

    "fromJavaPolicy": false
  }
  Response:
  {
    "id": 17,
    "name": "my_user_changed",
    "password": "*****",
    "accountExpired": false,
    "locked": false,
    "passwordExpired": false,
    "enabled": true,
    "origin": "USER",
    "fromJavaPolicy": false
  }

```

POST

/sep/api/v2/users/delete

Minimum required role: Super user

Since: Jaglion

Deletes the user with the given ID.

#### Parameters

The unique ID of the user is passed in the body of the request as JSON number.

#### Responses

Response Code and Content	Description
200 id Long	The unique ID of the deleted user is returned in the response body.

#### Examples

Deletes the user with the ID '17':

```

POST /sep/api/v2/groups/delete
17

Response:
17

```

POST

/sep/api/v2/users/deleteByEntity

Minimum required role: Super user

Since: Jaglion

Deletes the user matching the given entity.

#### Parameters

The entity to match is passed as JSON object in the body of the request. The only required entity property is the primary key of the entity.

#### Responses

Response Code and Content	Description
<b>200</b> <b>id</b> Long	The ID of the deleted user is returned in the response body. If no user existed with the given ID, then null is returned.

## Examples

Deletes the user matching the given entity:

```
POST /sep/api/v2/users/deleteByEntity
{
  "id" : 17
}

Response:
17
```

**GET**

/sep/api/v2/users/&lt;id&gt;/groups

Minimum required role: Super user

Since: Jaglion

Get all groups associated to the given user ID.

The response body contains the groups encoded as an array of JSON objects.

## Responses

Response Code and Content	Description
<b>200</b> <b>Groups</b> array[JSON object]	The groups list is returned in the response body.

## Examples

Get all groups associated with the user with the ID '17':

```
GET /sep/api/v2/user/17/groups

Response:
[
  {
    "id": 4,
    "name": "BACKUP",
    "enabled": true,
    "usercomment": "Automatically generated backup group"
  },
  ...
]
```

**GET** /sep/api/v2/users/<id>/roles

Minimum required role: Super user

Since: Jaglion

Get all roles associated to the given user ID.

The response body contains the roles objects encoded as an array of JSON objects.

Responses

Response Code and Content	Description
200 Roles array[JSON object]	The roles list is returned in the response body.

Examples

Get all roles associated to the user with the ID '17':

```
GET /sep/api/v2/users/17/roles

Response:
[
  {
    "id": 6,
    "name": "Backup",
    "enabled": true,
    "usercomment": "Role with backup permissions"
  },
  ...
]
```

**POST** /sep/api/v2/users/find

Minimum required role: Super user

Since: Jaglion

Search for users matching the specified filter parameters.

Parameters

The filter configuration is passed in as JSON object in the body of the request. The following JSON object properties are defined:

Name	Description
<b>name</b> String	The unique name of the user to match.
<b>group</b> Long	The unique ID of the group the user belongs to.

Responses

Response Code and Content	Description
200 Users array[JSON object]	The matching users are returned in the response body.

## Examples

Get the users which belongs to the group with ID '4':

```
POST /sep/api/v2/users/find
{ "group" : 4 }

Response:
[
  {
    "id": 17,
    "name": "my_user_changed",
    "password": "*****",
    "accountExpired": false,
    "locked": false,
    "passwordExpired": false,
    "enabled": true,
    "origin": "USER",
    "fromJavaPolicy": false,
    "allowHostAuth": false,
    "mtime": 1624884850000
  },
  ...
]
```



### 3.50. Virtual Machines Service

The virtual machines services provides access to remote virtualization hosts and the information provided by these hosts. The virtual machines service also allow to execute common operations with virtual machines, like starting and stopping them.

The virtual machines service will return different result object, depending on the end point called. The result objects are documented with the corresponding end points.

Following methods are provided by the virtual machines service:

<b>POST</b>	<code>/sep/api/v2/vms/servers</code>	Since: Jaglion
Minimum required role: None		

Lists the names of the known and valid remote virtualization servers. The remote virtualization server is known, when a corresponding client object exist and the client properties indicates that the client denotes a remote virtualization server. The remote virtualization server is valid, if all necessary properties to connect to the server, like user name and password, are set.

#### Parameters

The filter configuration is passed in as JSON object in the body of the request. The following JSON object properties are defined:

Name	Description
<b>serverTypes</b> array[String]	The list of remote server types to match. Valid values are 'CITRIX', 'HYPER-V-SERVER', 'HYPER-V-CLUSER', 'KVM', 'PROXMOX', 'RHEV' and 'V_CENTER'.
<b>namePatterns</b> array[String]	The list of remote server name regular expression patterns to match. If multiple name patterns are specified, at least one of the given name pattern has to match (OR expression).
<b>connectedOnly</b> Boolean	Flag to specify if or if not only actively connected remote server shall be included in the result set.

#### Responses

Response Code and Content	Description
<b>200</b> <b>Remote Server Names</b> array[String]	The matching remote server names are returned in the response body.

#### Examples

List all remote virtualization servers where the server name contains 'Vcenter':

```
POST /sep/api/v2/vms/servers
{ "namePatterns" : [ ".*[vV]center.*" ] }

Response:
[
  "myVcenterServer"
]
```

GET

/sep/api/v2/vms/&lt;name&gt;/state

Minimum required role: None

Since: Jaglion

Queries the current state of the given remote virtualization server.

A remote virtualization server state is an object with the following properties:

Name	Description
<b>serverValid</b> Boolean	Flag to indicate of the given remote virtualization server name is valid. The flag is set to 'false' if the given remote virtualization server name is not a name known to the remote buffer.
<b>bufferState</b> JSON object	The state of the remote buffer.
<b>connectionState</b> JSON object	The state of the remote virtualization server connection.

A remote buffer state is an object with the following properties:

Name	Description
<b>state</b> String	The state of the remote buffer. Valid values are 'UNINITIALIZED', 'INITIALIZING', 'REFRESHING', 'OK' and 'ERROR'.
<b>lastRefreshTime</b> long	The point in time when the last refresh of the remote buffer happened.
<b>lastRefreshDuration</b> long	The duration of the last refresh in milliseconds.
<b>errorDetail</b> JSON object	When the remote buffer state is 'ERROR', this field contains the detail information about the event having caused the 'ERROR' state.

A remote buffer error detail is an object with the following properties:

Name	Description
<b>type</b> String	The type of the error detail. This is typically the name of the exception occurred.
<b>message</b> String	The message of the error detail. This is typically the message of the exception occurred.
<b>connectionListEvent</b> long	Flag indicating of the error cause is a connection lost event.
<b>errorDetails</b> JSON object	The list of sub errors ultimately having caused the main error. This is typically the flat list of causes of the exception occurred.

A remote buffer connection state is an object with the following properties:

Name	Description
<b>state</b> String	The state of the remote buffer connection. Valid values are 'DISCONNECTED', 'CONNECTED' and 'CONNECTION_LOST'.
<b>connectionLostTime</b> long	The point in time since when the connection got lost.

## Responses

---

Response Code and Content	Description
200 Remote Server State JSON object	The remote virtualization server state is returned in the response body.

## Examples

---

Get the state of the remote virtualization server 'myVcenterServer':

```
GET /sep/api/v2/vms/myVcenterServer/state
```

Response:

```
{
  "serverValid": true,
  "bufferState": {
    "state": "OK",
    "lastRefreshTime": 1593416344712,
    "lastRefreshDuration": 3344
  },
  "connectionState": {
    "state": "CONNECTED",
    "connectionLostTime": 0
  }
}
```

**POST**

/sep/api/v2/vms/refresh

Minimum required role: None

Since: Jaglion

Refresh the buffer for the matching remote virtualization server.

## Parameters

---

The filter configuration is passed in as JSON object in the body of the request. For the defined properties of the filter, see the '/sep/api/v2/vms/servers' end point.

The end point takes a Boolean as second parameter. If set to 'true', the end point will wait until the refresh of the remote buffer is completed. Otherwise, the end point will return immediately.

## Responses

---

Response Code and Content	Description
200 Success Boolean	The success is returned in the response body.

## Examples

---

Refresh the remote buffer of the remote virtualization server 'myVcenterServer':

```
POST /sep/api/v2/vms/refresh
{ "namePatterns" : [ "myVcenterServer" ], "waitForRefresh" : true }
```

Response:  
true

**POST**

/sep/api/v2/vms/version

Minimum required role: None

Since: Jaglion

Queries the full version text of a given remote virtualization server.

If the REST server does not have an already connected connection to the remote virtualization server, the end point will try to connect to the remote virtualization server.

## Parameters

---

The remote virtualization server name to query is passed in as JSON string in the body of the request.

## Responses

---

Response Code and Content	Description
200 Full Remote Server Version String	The full version text is returned in the response body.

## Examples

---

Get the full version text of the remote virtualization server 'myVcenterServer':

```
POST /sep/api/v2/vms/version
"myVcenterServer"
```

Response:  
"VMware vCenter Server 6.7.0 build-14368073"

POST

/sep/api/v2/vms/names

Minimum required role: None

Since: Jaglion

Lists the matching virtual machine names of a given remote virtualization server.

#### Parameters

The filter configuration is passed in as JSON object in the body of the request. The following JSON object properties are defined:

Name	Description
<b>server</b> *required String	The name or ID of the remote server to query.
<b>namePatterns</b> array[String]	The list of virtual machine name regular expression patterns to match. If multiple name patterns are specified, at least one of the given name pattern has to match (OR expression).
<b>datacenterNames</b> array[String]	The list of data center names to match.

#### Responses

Response Code and Content	Description
200 <b>Virtual Machine Names</b> array[String]	The matching virtual machine names are returned in the response body.

#### Examples

List all virtual machines where the name contains 'Linux':

```
POST /sep/api/v2/vms/names
{ "server": "myVcenterServer", "namePatterns" : [ ".*Linux.*" ] }

Response:
[
  "myLinuxVM"
]
```

POST

/sep/api/v2/vms/machines

Minimum required role: None

Since: Jaglion

Lists the matching virtual machine summaries of a given remote virtualization server.

A virtual machine summary is an object with the following properties:

Name	Description
<b>id</b> String	The unique ID of the virtual machine.
<b>name</b> String	The virtual machine name.
<b>cpuCount</b> Long	The number of cores associated with the virtual machine.
<b>memorySizeMiB</b>	The amount of memory available to the virtual machine (in MiB).

Name	Description
<b>Long</b>	
<b>powerState</b> String	The power state of the virtual machine. Valid values are 'off', 'on', 'suspended', 'standby', 'running' and 'halted'.
<b>dataCenter</b> String	The name of the data center the virtual machine is on.
<b>hostSystem</b> String	The name of the host system the virtual machine is on.
<b>guestOs</b> JSON object	The virtual machine guest OS information.
<b>template</b> boolean	Flag to mark if the virtual machine is a template.
<b>virtualDisks</b> array[JSON object]	The list of virtual disks associated with the virtual machine.

A virtual machine guest OS information object is an object with the following properties:

Name	Description
<b>id</b> String	The virtual machine guest OS ID.
<b>family</b> String	The virtual machine guest OS family name.
<b>fullName</b> String	The virtual machine guest OS full name.
<b>hostName</b> String	The virtual machine host name.
<b>ipAddress</b> String	The virtual machine IP address.

A virtual machine disk information object is an object with the following properties:

Name	Description
<b>id</b> String	The virtual machine disk ID.
<b>description</b> String	The virtual machine disk description.
<b>filename</b> String	The virtual machine disk file name.
<b>connected</b> Boolean	Flag to indicate if the virtual machine disk is connected.
<b>controllerKey</b> Long	The virtual machine disk controller key.
<b>unitNumber</b> Long	The virtual machine disk unit number.
<b>capacity</b> Long	The virtual machine disk capacity in bytes.
<b>size</b> Long	The virtual machine disk size in bytes.

#### Parameters

The filter configuration is passed in as JSON object in the body of the request. For the defined properties of the filter, see the '/sep/api/v2/vms/names' end point.

Responses

Response Code and Content	Description
200 <b>Virtual Machine Summary</b> array[JSON object]	The matching virtual machine summaries are returned in the response body.

Examples

List all virtual machines:

```

POST /sep/api/v2/vms/machines
{ "server": "myVcenterServer" }

Response:
[
  {
    "id": "vm-100109",
    "name": "myLinuxVM",
    "cpuCount": 2,
    "memorySizeMiB": 3072,
    "powerState": "on",
    "dataCenter": "My_Datacenter",
    "hostSystem": "myHostSystem",
    "guestOs": {
      "id": "windows9Server64Guest",
      "hostName": "win2019.domain.com",
      "fullName": "Microsoft Windows Server 2016 or later (64-bit)",
      "ipAddress": "1.1.1.1"
    }
  },
  ...
]
    
```

POST

/sep/api/v2/vms/machineByName

Minimum required role: None Since: Jaglion

Gets the matching virtual machine of a given remote virtualization server.

The virtual machine is matched by the virtual machine name, the guest operating system host name or the guest operating system IP address. Any given name pattern, containing only word characters and the '.' character are tried to be resolved to an IP address. The given name patterns are expected to be literals, no regular expressions.

If multiple name patterns are specified, the first virtual machine matching any of the names is returned. If more than one virtual machine is matched, the best match is returned.

A virtual machine is an object with the following properties:

Name	Description
<b>id</b> String	The unique ID of the virtual machine.
<b>name</b> String	The virtual machine name.
<b>cpu</b> JSON object	The virtual machine CPU information.

Name	Description
<b>memory</b> JSON object	The virtual machine memory information.
<b>powerState</b> String	The power state of the virtual machine. Valid values are 'off', 'on', 'suspended', 'standby', 'running' and 'halted'.
<b>dataCenter</b> String	The name of the data center the virtual machine is on.
<b>hostSystem</b> String	The name of the host system the virtual machine is on.
<b>guestOs</b> JSON object	The virtual machine guest OS information.
<b>template</b> boolean	Flag to mark if the virtual machine is a template.
<b>virtualDisks</b> array[JSON object]	The list of virtual disks associated with the virtual machine.

For a description of the virtual machine guest OS information object properties, see the '/sep/api/v2/vms/names' end point.

For a description of the virtual machine disk object properties, see see the '/sep/api/v2/vms/names' end point.

A virtual machine CPU information object is an object with the following properties:

Name	Description
<b>count</b> Long	The number of cores associated with the virtual machine.
<b>coresPerSocket</b> Long	The number of cores associated with the virtual machine.
<b>hotAddEnabled</b> Boolean	Flag indicating if CPU hot add is enabled.
<b>hotRemoveEnabled</b> Boolean	Flag indicating if CPU hot remove is enabled.

A virtual machine memory information object is an object with the following properties:

Name	Description
<b>sizeMiB</b> Long	The amount of memory available to the virtual machine (in MiB).
<b>hotAddEnabled</b> Boolean	Flag indicating if memory hot add is enabled.
<b>hotAddIncrementSizeMiB</b> String	The size in MiB of the memory chunk which can be hot added to the virtual machine in one step.
<b>hotAddLimitMiB</b> String	The maximum amount of memory in MiB which can be assigned to the virtual machine.

#### Parameters

The filter configuration is passed in as JSON object in the body of the request. For the defined properties of the filter, see the '/sep/api/v2/vms/names' end point.



Responses

Response Code and Content	Description
<b>200</b> <b>Virtual Machine</b> array[JSON object]	The matching virtual machine is returned in the response body.

Examples

Get the virtual machines with the name 'myLinuxVM':

```

POST /sep/api/v2/vms/machineByName
{ "server": "myVcenterServer", "namePatterns": [ "myLinuxVM" ] }

Response:
[
  {
    "id": "vm-100109",
    "name": "myLinuxVM",
    "powerState": "on",
    "dataCenter": "My_Datacenter",
    "hostSystem": "myHostSystem",
    "guestOs": {
      "id": "windows9Server64Guest",
      "hostName": "win2019.domain.com",
      "fullName": "Microsoft Windows Server 2016 or later (64-bit)",
      "ipAddress": "1.1.1.1"
    }
    "memory": {
      "sizeMiB": 6144,
      "hotAddEnabled": false
    },
    "cpu": {
      "count": 4,
      "coresPerSocket": 1,
      "hotAddEnabled": false,
      "hotRemoveEnabled": false
    },
    "template": false
  },
  ...
]
    
```

POST

/sep/api/v2/vms/hostSystemForMachine

Since: Jaglion

Minimum required role: None

Gets the host system the given virtual machine is associated with.

Parameters

The filter configuration is passed in as JSON object in the body of the request. The following JSON object properties are defined:

Name	Description
<b>server</b> <span style="color: red; font-weight: normal;">* required</span> String	The name or ID of the remote server to query.
<b>vm</b> String	The unique ID of the virtual machine to match.

## Responses

---

Response Code and Content	Description
200 Host System Name String	The matching virtual machine names are returned in the response body.

## Examples

---

List all virtual machines where the name contains 'Linux':

```
POST /sep/api/v2/vms/hostSystemForMachine
{ "server": "myVcenterServer", "vm" : "vm-95670" }
```

```
Response:
"myHostSystem"
```

**POST**

/sep/api/v2/vms/machineExists

Minimum required role: None

Since: Jaglion

Queries if the virtual machine, matching the given filter, exists.

The virtual machine is matched by the virtual machine name. The given name patterns are expected to be literals, no regular expressions. If more than one name pattern is given, the end point returns 'true' only if all given virtual machine names can be matched to existing virtual machines.

## Parameters

---

The filter configuration is passed in as JSON object in the body of the request. For the defined properties of the filter, see the '/sep/api/v2/vms/names' end point.

## Responses

---

Response Code and Content	Description
200 exists Boolean	'True' when the virtual machine(s) matching the given virtual machine name(s) exists. 'False' otherwise.

## Examples

---

Query if the virtual machines with the name 'myLinuxVM' exists:

```
POST /sep/api/v2/vms/machineExists
{ "server": "myVcenterServer", "namePatterns": [ "myLinuxVM" ] }
```

```
Response:
true
```

POST

/sep/api/v2/vms/datacenterNames

Minimum required role: None

Since: Jaglion

Lists the matching data center names of a given remote virtualization server.

#### Parameters

The filter configuration is passed in as JSON object in the body of the request. The following JSON object properties are defined:

Name	Description
<b>server</b> *required String	The name or ID of the remote server to query.
<b>namePatterns</b> array[String]	The list of data center name regular expression patterns to match. If multiple name patterns are specified, at least one of the given name pattern has to match (OR expression).

#### Responses

Response Code and Content	Description
200 <b>Data Center Names</b> array[String]	The matching data center names are returned in the response body.

#### Examples

List all data centers where the name starts with 'My':

```
POST /sep/api/v2/vms/dataCenterNames
{ "server": "myVcenterServer", "namePatterns" : [ "My.*" ] }

Response:
[
  "MyDataCenter"
]
```

POST

/sep/api/v2/vms/datacenters

Minimum required role: None

Since: Jaglion

Lists the matching data center summaries of a given remote virtualization server.

A data center summary is an object with the following properties:

Name	Description
<b>id</b> String	The unique ID of the data center.
<b>name</b> String	The data center name.
<b>capacity</b> Long	The total capacity of the data center in bytes.
<b>hostSystemNames</b> array[String]	The list of names of the host systems being associated with the data center.

## Parameters

---

The filter configuration is passed in as JSON object in the body of the request. For the defined properties of the filter, see the 'datacenterNames' end point.

## Responses

---

Response Code and Content	Description
<b>200</b> <b>Data Center Summary</b> array[JSON object]	The matching data center summaries are returned in the response body.

## Examples

---

List all data centers:

```
POST /sep/api/v2/vms/datacenters
{ "server": "myVcenterServer" }

Response:
[
  {
    "id": "datacenter-25360",
    "name": "MyDataCenter",
    "capacity": 11033932046336,
    "hostSystemNames": [
      "My Host System"
    ]
  },
  ...
]
```

**POST**

/sep/api/v2/vms/datastoreNames

Minimum required role: None

Since: Jaglion

Lists the matching data store names of a given remote virtualization server.

## Parameters

---

The filter configuration is passed in as JSON object in the body of the request. The following JSON object properties are defined:

Name	Description
<b>server</b> *required String	The name or ID of the remote server to query.
<b>id</b> String	The unique ID of the data store to match.
<b>namePatterns</b> array[String]	The list of data store name regular expression patterns to match. If multiple name patterns are specified, at least one of the given name pattern has to match (OR expression).
<b>hostSystemNames</b> array[String]	The list of host system names to match.

## Responses

Response Code and Content	Description
200 Data Store Names array[String]	The matching data store names are returned in the response body.

## Examples

List all data stores where the name starts with 'My':

```
POST /sep/api/v2/vms/datastoreNames
{ "server": "myVcenterServer", "namePatterns" : [ "My.*" ] }

Response:
[
  "MyDataStore"
]
```

**POST**

/sep/api/v2/vms/datastores

Minimum required role: None

Since: Jaglion

Lists the matching data store summaries of a given remote virtualization server.

A data store summary is an object with the following properties:

Name	Description
<b>id</b> String	The unique ID of the data store.
<b>name</b> String	The data store name.
<b>accessMode</b> String	The data store access mode. Typical values are 'readWrite' and 'readOnly'.
<b>accessible</b> Boolean	Flag to indicate if the data store is accessible.
<b>capacity</b> Long	The capacity of the data store in bytes.
<b>free</b> Long	The free capacity of the data store in bytes.
<b>uncommitted</b> Long	The number of uncommitted bytes of the data store.
<b>mounts</b> JSON object	The list of mounts of the data store.

A data store mount is an object with the following properties:

Name	Description
<b>hostSystem</b> String	The unique ID of the host system where the path is mounted.
<b>path</b> String	The mount path.
<b>accessible</b> Boolean	Flag to indicate if the mount is accessible.

Name	Description
<b>inaccessibleReason</b> String	The reason why a mount is inaccessible. Not set when the mount is accessible.
<b>accessMode</b> String	The mount access mode. Typical values are 'readWrite' and 'readOnly'.
<b>mounted</b> Boolean	Flag to indicate if the mount is mounted.

### Parameters

The filter configuration is passed in as JSON object in the body of the request. For the defined properties of the filter, see the '/sep/api/v2/vms/datastoreNames' end point.

### Responses

Response Code and Content	Description
<b>200</b> <b>Data Store Summary</b> array[JSON object]	The matching data store summaries are returned in the response body.

### Examples

List all data stores:

```
POST /sep/api/v2/vms/datastores
{ "server": "myVcenterServer" }

Response:
[
  {
    "id": "datastore-25385",
    "name": "MyDataStore",
    "mounts": [
      {
        "hostSystem": "host-25384",
        "path": "/vmfs/volumes/5a0df009-36714c32-019f-001e672715a2",
        "accessMode": "readWrite",
        "mounted": true,
        "accessible": true
      }
    ],
    "capacity": 492042190848,
    "free": 424054620160,
    "accessMode": "readWrite",
    "uncommitted": 17646715994,
    "accessible": true
  },
  ...
]
```

**POST**

/sep/api/v2/vms/datastoreById

Minimum required role: None

Since: Jaglion

Gets the matching data store of a given remote virtualization server.

The data store is matched by the unique data store ID only.

A data store is an object with the following properties:

Name	Description
<b>id</b> String	The unique ID of the data store.
<b>name</b> String	The data store name.
<b>accessMode</b> String	The data store access mode. Typical values are 'readWrite' and 'readOnly'.
<b>accessible</b> Boolean	Flag to indicate if the data store is accessible.
<b>capacity</b> Long	The capacity of the data store in bytes.
<b>free</b> Long	The free capacity of the data store in bytes.
<b>uncommitted</b> Long	The number of uncommitted bytes of the data store.
<b>mounts</b> array[JSON object]	The list of mounts of the data store.
<b>type</b> String	The data store type.
<b>virtualMachines</b> array[JSON object]	The list of unique virtual machine IDs associated with the data store.

For the defined properties of the data store mount object, see the '/sep/api/v2/vms/datastores' end point.

#### Parameters

The filter configuration is passed in as JSON object in the body of the request. For the defined properties of the filter, see the '/sep/api/v2/vms/datastoreNames' end point.

#### Responses

Response Code and Content	Description
<b>200</b> <b>Data Store</b> array[JSON object]	The matching data store is returned in the response body.

#### Examples

Get the data store with the ID 'datastore-25385':

```
POST /sep/api/v2/vms/datastoreById
{ "server": "myVcenterServer", "id": "datastore-25385" }

Response:
{
  "id": "datastore-25385",
  "name": "MyDataStore",
  "mounts": [
    {
      "hostSystem": "host-25384",
      "path": "/vmfs/volumes/5a0df009-36714c32-019f-001e672715a2",
      "accessMode": "readWrite",
      "mounted": true,
      "accessible": true
    }
  ]
},
```

```

"virtualMachines": [
  "vm-54637",
  "vm-54645"
],
"type": "VMFS",
"capacity": 492042190848,
"free": 424054620160,
"accessMode": "readWrite",
"uncommitted": 17646715994,
"accessible": true
}

```

POST

/sep/api/v2/vms/folderNames

Minimum required role: None

Since: Jaglion

Lists the matching folder names of a given remote virtualization server.

#### Parameters

The filter configuration is passed in as JSON object in the body of the request. The following JSON object properties are defined:

Name	Description
<b>server</b> * required String	The name or ID of the remote server to query.
<b>namePatterns</b> array[String]	The list of folder name regular expression patterns to match. If multiple name patterns are specified, at least one of the given name pattern has to match (OR expression).

#### Responses

Response Code and Content	Description
200 <b>Folder Names</b> array[String]	The matching folder names are returned in the response body.

#### Examples

List all folders where the name starts with 'My':

```

POST /sep/api/v2/vms/folderNames
{ "server": "myVcenterServer", "namePatterns" : [ "My.*" ] }

Response:
[
  "MyFolder"
]

```



POST

/sep/api/v2/vms/folders

Minimum required role: None

Since: Jaglion

Lists the matching folder summaries of a given remote virtualization server.

A folder summary is an object with the following properties:

Name	Description
<b>id</b> String	The unique ID of the folder.
<b>name</b> String	The folder name.
<b>parentNames</b> array[String]	The list of parent folder names.

#### Parameters

The filter configuration is passed in as JSON object in the body of the request. For the defined properties of the filter, see the '/sep/api/v2/vms/folderNames' end point.

#### Responses

Response Code and Content	Description
<b>200</b> Folder Summary array[JSON object]	The matching folder summary are returned in the response body.

#### Examples

List all folders:

```
POST /sep/api/v2/vms/folders
{ "server": "myVcenterServer" }

Response:
[
  {
    "id": "group-v26348",
    "name": "MyFolder",
    "parentNames": [
      "MyFolder"
    ]
  },
  ...
]
```

POST

/sep/api/v2/vms/hostsystemNames

Minimum required role: None

Since: Jaglion

Lists the matching host system names of a given remote virtualization server.

#### Parameters

The filter configuration is passed in as JSON object in the body of the request. The following JSON object properties are defined:

Name	Description
<b>server</b> *required String	The name or ID of the remote server to query.
<b>namePatterns</b> array[String]	The list of host system name regular expression patterns to match. If multiple name patterns are specified, at least one of the given name pattern has to match (OR expression).
<b>datacenterNames</b> array[String]	The list of data center names to match.

#### Responses

Response Code and Content	Description
200 <b>Host System Names</b> array[String]	The matching host system names are returned in the response body.

#### Examples

List all host systems where the name starts with 'My':

```
POST /sep/api/v2/vms/hostsystemNames
{ "server": "myVcenterServer", "namePatterns" : [ "My.*" ] }

Response:
[
  "MyHostSystem"
]
```

POST

/sep/api/v2/vms/hostsystems

Minimum required role: None

Since: Jaglion

Lists the matching host system summaries of a given remote virtualization server.

A host system summary is an object with the following properties:

Name	Description
<b>id</b> String	The unique ID of the host system.
<b>name</b> String	The host system name.
<b>datacenterId</b> String	The ID of the data center the host system is associated with.
<b>datacenter</b>	The name of the data center the host system is associated with.

Name	Description
String	
<b>powerState</b> String	The power state of the host system. Valid values are 'off', 'on', 'suspended', 'standby', 'running' and 'halted'.
<b>connectionState</b> String	The connection state of the host system. Valid values are 'connected', 'disconnected' and 'not_responding'.

### Parameters

The filter configuration is passed in as JSON object in the body of the request. For the defined properties of the filter, see the '/sep/api/v2/vms/hostsystemNames' end point.

### Responses

Response Code and Content	Description
<b>200</b> <b>Host System Summary</b> array[JSON object]	The matching host system summary are returned in the response body.

### Examples

List all host systems:

```
POST /sep/api/v2/vms/hostsystems
{ "server": "myVcenterServer" }

Response:
[
  {
    "id": "host-13161",
    "name": "MyHostSystem",
    "powerState": "on",
    "connectionState": "connected",
  },
  ...
]
```

**POST**

/sep/api/v2/vms/networkNames

Minimum required role: None

Since: Jaglion

Lists the matching network names of a given remote virtualization server.

### Parameters

The filter configuration is passed in as JSON object in the body of the request. The following JSON object properties are defined:

Name	Description
<b>server</b> * required String	The name or ID of the remote server to query.
<b>namePatterns</b> array[String]	The list of network name regular expression patterns to match. If multiple name patterns are specified, at least one of the given name pattern has to match (OR expression).

Name	Description
<b>hostSystemNames</b> array[String]	The list of host system names to match.

Responses

Response Code and Content	Description
<b>200</b> <b>Network Names</b> array[String]	The matching network names are returned in the response body.

Examples

List all networks where the name starts with 'My':

```
POST /sep/api/v2/vms/networkNames
{ "server": "myVcenterServer", "namePatterns" : [ "My.*" ] }

Response:
[
  "MyNetwork"
]
```

**POST** /sep/api/v2/vms/networks

Minimum required role: None

Since: Jaglion

Lists the matching network summaries of a given remote virtualization server.

A network summary is an object with the following properties:

Name	Description
<b>id</b> String	The unique ID of the network.
<b>name</b> String	The network name.
<b>type</b> String	The network type.
<b>datacenter</b> String	The name of the data center the network is associated with.
<b>hostSystems</b> array[String]	The list of unique host system IDs being associated with the network.

Parameters

The filter configuration is passed in as JSON object in the body of the request. For the defined properties of the filter, see the '/sep/api/v2/vms/networkNames' end point.

Responses

Response Code and Content	Description
<b>200</b> <b>Network Summary</b> array[JSON object]	The matching network summary are returned in the response body.

## Examples

---

List all networks:

```
POST /sep/api/v2/vms/networks
{ "server": "myVcenterServer" }

Response:
[
  {
    "id": "dvportgroup-60645",
    "datacenter": "MyDataCenter",
    "hostSystems": [
      "host-70313",
      "host-25384",
      "host-25391",
      "host-95361",
      "host-25976",
      "host-67492"
    ],
    "name": "MyNetwork",
    "type": "DistributedVirtualPortgroup"  },
  ...
]
```

**POST**

/sep/api/v2/vms/resourcepoolNames

Minimum required role: None

Since: Jaglion

Lists the matching resource pool names of a given remote virtualization server.

## Parameters

---

The filter configuration is passed in as JSON object in the body of the request. The following JSON object properties are defined:

Name	Description
<b>server</b> * <b>required</b> String	The name or ID of the remote server to query.
<b>id</b> String	The unique ID of the resource pool to match.
<b>namePatterns</b> array[String]	The list of resource pool name regular expression patterns to match. If multiple name patterns are specified, at least one of the given name pattern has to match (OR expression).

## Responses

---

Response Code and Content	Description
<b>200</b> <b>Resource Pool Names</b> array[String]	The matching resource pool names are returned in the response body.

## Examples

---

List all resource pools where the name starts with 'My':

```
POST /sep/api/v2/vms/resourcepoolNames
{ "server": "myVcenterServer", "namePatterns" : [ "My.*" ] }

Response:
[
  "MyResourcePool"
]
```

**POST**

/sep/api/v2/vms/resourcepools

Minimum required role: None

Since: Jaglion

Lists the matching resource pool summaries of a given remote virtualization server.

A resource pool summary is an object with the following properties:

Name	Description
<b>id</b> String	The unique ID of the resource pool.
<b>name</b> String	The resource pool name.
<b>parent</b> JSON object	The unique ID and type of the resource pools parent object.
<b>owner</b> JSON object	The unique ID and type of the resource pools owner object.

## Parameters

---

The filter configuration is passed in as JSON object in the body of the request. For the defined properties of the filter, see the '/sep/api/v2/vms/resourcepoolNames' end point.

## Responses

---

Response Code and Content	Description
<b>200</b> <b>Resource Pool Summary</b> array[JSON object]	The matching resource pool summaries are returned in the response body.

## Examples

---

List all resource pools:

```
POST /sep/api/v2/vms/resourcepools
{ "server": "myVcenterServer" }

Response:
[
  {
    "id": "resgroup-25366",
    "name": "MyResourcePool",
    "parent": {
```

```

        "type": "ClusterComputeResource",
        "id": "domain-c25365"
    },
    "owner": {
        "type": "ClusterComputeResource",
        "id": "domain-c25365"
    }
},
...
]

```

POST

/sep/api/v2/vms/resourcepoolById

Minimum required role: None

Since: Jaglion

Gets the matching resource pool of a given remote virtualization server.

The resource pool is matched by the unique resource pool ID only.

A resource pool is an object with the following properties:

Name	Description
<b>id</b> String	The unique ID of the resource pool.
<b>name</b> String	The resource pool name.
<b>parent</b> JSON object	The unique ID and type of the resource pools parent object.
<b>owner</b> JSON object	The unique ID and type of the resource pools owner object.
<b>resourcePools</b> array[JSON object]	The list of unique child resource pool IDs associated with the resource pool.
<b>virtualMachines</b> array[JSON object]	The list of unique virtual machine IDs associated with the resource pool.

#### Parameters

The filter configuration is passed in as JSON object in the body of the request. For the defined properties of the filter, see the '/sep/api/v2/vms/resourcepoolNames' end point.

#### Responses

Response Code and Content	Description
200 <b>Resource Pool</b> array[JSON object]	The matching resource pools are returned in the response body.

## Examples

---

Get the resource pool with the ID 'resgroup-25366':

```
POST /sep/api/v2/vms/resourcepoolById
{ "server": "myVcenterServer", "id": "resgroup-25366" }

Response:
{
  "id": "resgroup-25366",
  "name": "MyResourcePool",
  "virtualMachines": [
    "vm-119044",
    "vm-100109",
    ...
  ],
  "parent": {
    "type": "ClusterComputeResource",
    "id": "domain-c25365"
  },
  "owner": {
    "type": "ClusterComputeResource",
    "id": "domain-c25365"
  },
  "resourcePools": [
    "resgroup-v26608",
    "resgroup-v70326",
    ...
  ]
}
```

**POST**

/sep/api/v2/vms/virtualappNames

Minimum required role: None

Since: Jaglion

Lists the matching virtual application names of a given remote virtualization server.

## Parameters

---

The filter configuration is passed in as JSON object in the body of the request. The following JSON object properties are defined:

Name	Description
<b>server</b> <small>* required</small> String	The name or ID of the remote server to query.
<b>id</b> String	The unique ID of the virtual application to match.
<b>namePatterns</b> array[String]	The list of virtual application name regular expression patterns to match. If multiple name patterns are specified, at least one of the given name pattern has to match (OR expression).

## Responses

---

Response Code and Content	Description
<b>200</b> Virtual Application Names array[String]	The matching virtual application names are returned in the response body.



## Examples

---

List all virtual application where the name starts with 'My':

```
POST /sep/api/v2/vms/virtualappNames
{ "server": "myVcenterServer", "namePatterns" : [ "My.*" ] }

Response:
[
  "MyVirtualApp"
]
```

**POST**

/sep/api/v2/vms/virtualapps

Minimum required role: None

Since: Jaglion

Lists the matching virtual application summaries of a given remote virtualization server.

A virtual application summary is an object with the following properties:

Name	Description
<b>id</b> String	The unique ID of the virtual application.
<b>name</b> String	The virtual application name.
<b>parent</b> JSON object	The unique ID and type of the virtual application parent object.
<b>owner</b> JSON object	The unique ID and type of the virtual application owner object.
<b>state</b> String	The virtual application execution state. Valid values are 'stopping', 'stopped', 'starting' and 'started'.
<b>datacenter</b> String	The name of the parent data center.

## Parameters

---

The filter configuration is passed in as JSON object in the body of the request. For the defined properties of the filter, see the '/sep/api/v2/vms/virtualappNames' end point.

## Responses

---

Response Code and Content	Description
<b>200</b> <b>Virtual Application Summary</b> array[JSON object]	The matching virtual application summary is returned in the response body.

Examples

List all virtual applications:

```

POST /sep/api/v2/vms/virtualapps
{ "server": "myVcenterServer" }

Response:
[
  {
    "id": "resgroup-v95420 ",
    "name": "MyVirtualApp",
    "parent": {
      "type": "ResourcePool",
      "id": "resgroup-25366"
    },
    "owner": {
      "type": "ClusterComputeResource",
      "id": "domain-c25365"
    }
  },
  "state": "started",
  "datacenter": "My Datacenter"
},
  ...
]
    
```

**POST** /sep/api/v2/vms/virtualappById

Minimum required role: None Since: Jaglion

Gets the matching virtual application of a given remote virtualization server.

The virtual application is matched by the unique resource pool ID only.

A virtual application is an object with the following properties:

Name	Description
<b>id</b> String	The unique ID of the virtual application.
<b>name</b> String	The virtual application name.
<b>parent</b> JSON object	The unique ID and type of the virtual applications parent object.
<b>owner</b> JSON object	The unique ID and type of the virtual applications owner object.
<b>parentFolder</b> JSON object	The unique ID and type of the virtual applications parent folder object.
<b>state</b> String	The virtual application execution state. Valid values are 'stopping', 'stopped', 'starting' and 'started'.
<b>datacenter</b> String	The name of the parent data center.
<b>dataStores</b> array[JSON object]	The list of unique data store IDs associated with the virtual application.
<b>networks</b> array[JSON object]	The list of unique network IDs associated with the virtual application.
<b>virtualMachines</b> array[JSON object]	The list of unique virtual machine IDs associated with the virtual application.

## Parameters

---

The filter configuration is passed in as JSON object in the body of the request. For the defined properties of the filter, see the `/sep/api/v2/vms/datastoreNames` end point.

## Responses

---

Response Code and Content	Description
<b>200</b> <b>Virtual Application</b> array[JSON object]	The matching virtual application is returned in the response body.

## Examples

---

Get the virtual application with the ID `'resgroup-v95420'`:

```
POST /sep/api/v2/vms/virtualappById
{ "server": "myVcenterServer", "id": "resgroup-v95420" }
```

Response:

```
{
  "id": "resgroup-v95420",
  "dataStores": [
    "datastore-32379",
    "datastore-25977"
  ],
  "networks": [
    "dvportgroup-60645"
  ],
  "virtualMachines": [
    "vm-60646",
    "vm-60652",
    "vm-60653"
  ],
  "name": "MyVirtualApp",
  "parent": {
    "type": "ResourcePool",
    "id": "resgroup-25366"
  },
  "state": "started",
  "datacenter": "My Datacenter",
  "owner": {
    "type": "ClusterComputeResource",
    "id": "domain-c25365"
  },
  "parentFolder": {
    "type": "Folder",
    "id": "group-v25361"
  }
}
```

**POST**

/sep/api/v2/vms/snapshots

Minimum required role: None

Since: Jaglion

Lists the matching virtual machine snapshot summaries of a given virtual machine. The virtual machine is identified via the virtualization server name, the data center name and the virtual machine name.

A virtual machine snapshot summary is an object with the following properties:

Name	Description
<b>id</b> String	The unique ID of the virtual machine snapshot.
<b>name</b> String	The virtual machine snapshot name.
<b>internalId</b> Integer	The internal virtual machine snapshot ID.
<b>description</b> String	The virtual machine snapshot description.
<b>creationTime</b> Date	The virtual machine snapshot creation date and time.

## Parameters

The filter configuration is passed in as JSON object in the body of the request. The following JSON object properties are defined:

Name	Description
<b>server</b> * required String	The name or ID of the remote server to query.
<b>datacenterName</b> * required String	The name of the data center to match.
<b>vm</b> * required String	The name of the virtual machine to match.
<b>namePatterns</b> array[String]	The list of virtual machine snapshot name regular expression patterns to match. If multiple name patterns are specified, at least one of the given name pattern has to match (OR expression).

## Responses

Response Code and Content	Description
<b>200</b> <b>Snapshot Summary</b> array[JSON object]	The matching virtual machine snapshot summaries are returned in the response body.

## Examples

List all snapshots of the virtual machine matching the name 'My\_Virtual\_Machine':

```
POST /sep/api/v2/vms/folders
{ "server" : "myServer", "datacenterName": "myDatacenter", "vm" : "My_Virtual_Machine" }

Response:
[
  {
    "id": "snapshot-147899",
    "name": "VM Snapshot 12%252f31%252f2020, 11:52:15 AM",
    "creationTime": 1609411962674,
    "description": "A snapshot of a VM",
    "internalId": 90,
    "powerState": "off"
  },
  ...
]
```

POST

/sep/api/v2/vms/cbt

Minimum required role: None

Since: Jaglion

Gets the current changed block tracking (CBT) status of a given virtual machine. The virtual machine is identified via the virtualization server name, the data center name and the virtual machine name.

The response is a Boolean value indicating if changed block tracking is enabled for the given virtual machine or not.

#### Parameters

The filter configuration is passed in as JSON object in the body of the request. The following JSON object properties are defined:

Name	Description
<b>server</b> * required String	The name or ID of the remote server to query.
<b>datacenterName</b> * required String	The name of the data center to match.
<b>vm</b> * required String	The name of the virtual machine to match.
<b>taskName</b> String	The name of the backup task to match. Applies only when the changed block tracking information will be reset for a virtual machine.

#### Responses

Response Code and Content	Description
<b>200</b> CBT Status Boolean	The changed block tracking status for the given virtual machine is returned in the response body.

#### Examples

Get the changed block tracking (CBT) status of the virtual machine matching the name 'My\_Virtual\_Machine':

```
POST /sep/api/v2/vms/cbt
{ "server" : "myServer", "datacenterName": "myDatacenter", "vm" : "My_Virtual_Machine" }
```

```
Response:
true
```

POST

/sep/api/v2/vms/setcbt

Minimum required role: Backup

Since: Jaglion

Sets the changed block tracking (CBT) status of a given virtual machine. The virtual machine is identified via the virtualization server name, the data center name and the virtual machine name.

The desired changed block tracking status for the given virtual machine is passed in as a Boolean value. The response is a Boolean value indicating the success of the operation.

## Parameters

---

The filter configuration is passed in as JSON object in the body of the request. The following JSON object properties are defined:

Name	Description
<b>server</b> * required String	The name or ID of the remote server to query.
<b>datacenterName</b> * required String	The name of the data center to match.
<b>vm</b> * required String	The name of the virtual machine to match.
<b>taskName</b> String	The name of the backup task to match. Applies only when the changed block tracking information will be reset for a virtual machine.

## Responses

---

Response Code and Content	Description
<b>200</b> <b>Success</b> Boolean	The success state of the operation is returned in the response body.

## Examples

---

Enable changed block tracking (CBT) for the virtual machine matching the name 'My\_Virtual\_Machine':

```
POST /sep/api/v2/vms/setcbt
[{"server": "myServer", "datacenterName": "myDatacenter", "vm": "My_Virtual_Machine" }, true]

Response:
true
```

**POST**

/sep/api/v2/vms/resetcbt

Minimum required role: Backup

Since: Jaglion

Reset the changed block tracking (CBT) information of a given virtual machine. The virtual machine is identified via the virtualization server name, the data center name and the virtual machine name.

The passed in Boolean value indicates if a soft (true) or hard (false or NULL) reset of the changed block tracking is performed. The response is a Boolean value indicating the success of the operation.

If the name of the backup task is given, the virtualization server, the data center and virtual machine names are determined from the backup task properties.

## Parameters

---

The filter configuration is passed in as JSON object in the body of the request. The following JSON object properties are defined:

Name	Description
<b>server</b> * required String	The name or ID of the remote server to query.

Name	Description
<b>datacenterName</b> *required String	The name of the data center to match.
<b>vm</b> *required String	The name of the virtual machine to match.
<b>taskName</b> String	The name of the backup task to match. Applies only when the changed block tracking information will be reset for a virtual machine.

### Responses

Response Code and Content	Description
<b>200</b> <b>Success</b> Boolean	The success state of the operation is returned in the response body.

### Examples

Reset (soft) the changed block tracking (CBT) information for the virtual machine matching the name 'My\_Virtual\_Machine':

```
POST /sep/api/v2/vms/resetcbt
[{"server" : "myServer", "datacenterName": "myDatacenter", "vm" : "My_Virtual_Machine" }, true]

Response:
true
```