REST API CLI DOC FOR Provisioning DECISION SUPPORT

Use case: HBA Replacement

APIs: Provides details of all the WWNs in a given port

1.http://<som>/som-ws/rs/portConfigurationDetails

Input: List of Port WWNs

Output:

List of Zone aliases, Zones that each of the given port WWN is configured in

List of HSGs which present volumes to each of the given port WWN

How to use?

1. A typical use case is when a HBA fails on a host and has to be replaced. Replacing the hardware and installing the new drivers is only one part of the task. A bigger challenge is to figure out all the fabric and array configurations that include ports on the replaced HBA and reconfigure them with the new ports. Use this API to find all the Zones, Zone aliases and HSGs in which a given HBA port is configured.

Resource Name:

portConfigurationDetails

Request Url:

URL: http://localhost:port/som-ws/rs/portConfigurationDetails

Support Method:

GET

Parameter:

GET:

wwn=<WWNLIST>

example:

http://localhost:port/som-ws/rs/portConfigurationDetails?wwn=10000000c974e354,10000000c95c763f,10000000c959ab3

Request Content:

NA

Response Content:

xml/json

Pagination Support:

NO

Description:

This API returns

List of Zone aliases, Zones that each of the given port WWN is configured in
List of HSGs which present volumes to each of the given port WWN

Use case: Find suitable storage

1. http://<som>/som-ws/rs/storageSystemsInZoneWithHost

Input: Host

Output:

List of storage systems that are in zone with the host, along with vendor/model information

How to use?

Resource Name:

storageSystemsInZoneWithHost

Request Url:

URL: http://localhost:port/som-ws/rs/storageSystemsInZoneWithHost

Support Method:

GET

Parameter:

GET:

hostId

example:

http://localhost:port/som-ws/rs/storageSystemsInZoneWithHost?hostId=123142

Request Content:

NA

Response Content:

xml/json

Pagination Support:

NO

Description:

This API returns

List of storage systems that are in zone with the host, along with vendor/model information

2.http://<som>/som-ws/rs/storageSystemsNotInZoneWithHost

Input: Host

Output:

List of storage systems that are not in zone with the host, but in the same fabric as the host, along with vendor/model information

How to use?

Resource Name:

storageSystemsNotInZoneWithHost

Request Url:

URL: http://localhost:port/som-ws/rs/storageSystemsNotInZoneWithHost

Support Method:

GET

Parameter:

GET:

hostId

example:

http://localhost:port/som-ws/rs/storageSystemsNotInZoneWithHost?hostId=123142

Request Content:

NA

Response Content:

xml/json

Pagination Support:

NO

Description:

This API returns

List of storage systems that are not in zone with the host, but in the same fabric as the host, along with vendor/model information

3.http://<som>/som-ws/rs/storageSystemsInFabricWithHost

Input: Host

Output:

List of storage systems that are not in the same fabric as the host, along with vendor/model information

How to use?

Resource Name:

storageSystemsInFabricWithHost

Request Url:

URL: http://localhost:port/som-ws/rs/storageSystemsInFabricWithHost

Support Method:

GET

Parameter:

GET:

hostId

example:

http://localhost:port/som-ws/rs/storageSystemsInFabricWithHost?hostId=123142

Request Content:

NA

Response Content:

xml/json

Pagination Support:

NO

Description:

This API returns

List of storage systems that are not in the same fabric as the host, along with vendor/model information

4.http://<som>/som-ws/rs/findSuitableStorageSystems

Input:

List of storage systems

Criteria to choose storage systems/Volumes:

Requested Volume Capacity (mandatory parameter)

Storage Tier (optional parameter, as defined in SOM - **check** if there is API to get storage tiers)

RAID Level: (optional parameter)

Non-redundant striped (RAID 0)

Redundant, Striped, Parity based (RAID 1)
Redundant, Striped, Mirrored (RAID 5)
Custom (String - device specific RAID description)

Output:

List of storage pools and storage systems (along with vendor/model information) in which the requested volume can be provisioned

How to use?

This API can be used to identify the storage systems from which a requested set of volume(s) can be provisioned. Use the storageSystemsInZoneWithHost, storageSystemsNotInZoneWithHost and storageSystemsNotInFabricWithHost APIs to identify the list of candidate storage systems and then apply the criteria using this API to refine the list and identify the storage pools in which the volumes can be provisioned. When dealing with workflow automation systems, the list of pools can be handed over to the native tools using the vendor/model information.

Resource Name:

findSuitableStorageSystems

Request Url:

URL: http://localhost:port/som-ws/rs/findSuitableStorageSystems

Support Method:

GET

Parameter:

GET:

storageSystemIds

redundancy

size

customRaidSpecification

storageTier

example:

http://localhost:port/som-ws/rs/findSuitableStorageSystems?storageSystemIds=123142&redundancy=RAID 5&size=100&customRaidSpecification=null&storageTier=null

Request Content:

NA

Response Content:

xml/json

Pagination Support:

NO

Description:

This API returns

List of storage pools and storage systems (along with vendor/model information) in which the requested volume can be provisioned

Sample Rest Client Program:

```
WSCertificateClient ws = new WSCertificateClient();
            //Content Type
            ws.setContentType("application/json");
            ws.setAccept("application/xml");
            ws.setConnectionTimeoutinSeconds(60 * 60); //timeout of 1 hr
            ws.setReadTimeOutinSeconds(60 * 60); //optional
            //ws.setHostName("srmesx7-vm5.ind.hp.com");
            ws.setHostName("localhost");
            ws.setUsername("client");
            ws.setPassword("client");
            //ws.setMethodType(RequestMethodType.METHOD_POST);
            ws.setMethodType(RequestMethodType.METHOD_POST);

ws.setResourceName("portConfigurationDetails?wwn=10000000c974e354,10000000c95c763f,
10000000c959ab3");

//ws.setResourceName("storageSystemsInFabricWithHost?hostId=45169");
//ws.setResourceName("storageSystemsInZoneWithHost?hostId=2147484269");
ws.setResourceName("storageSystemsNotInZoneWithHost?hostId=123142");

//Following steps Required for findSuitableStorageSystems Resource
String data=IRestSelectionConstants.VALUE_REDUNDANT_STORAGE;
//Encoded URL because String contain with space which
            String redundant = URLEncoder.encode(data, "UTF-8");
            String
url="findSuitableStorageSystems?storageSystemIds=2147485202&redundancy="+
redundant+"&size=100";
ws.setResourceName(url);
```

System.out.println(ws.executeGet().getResponseAsString());