

ISCSI INITIATOR FOR VMWARE ESX

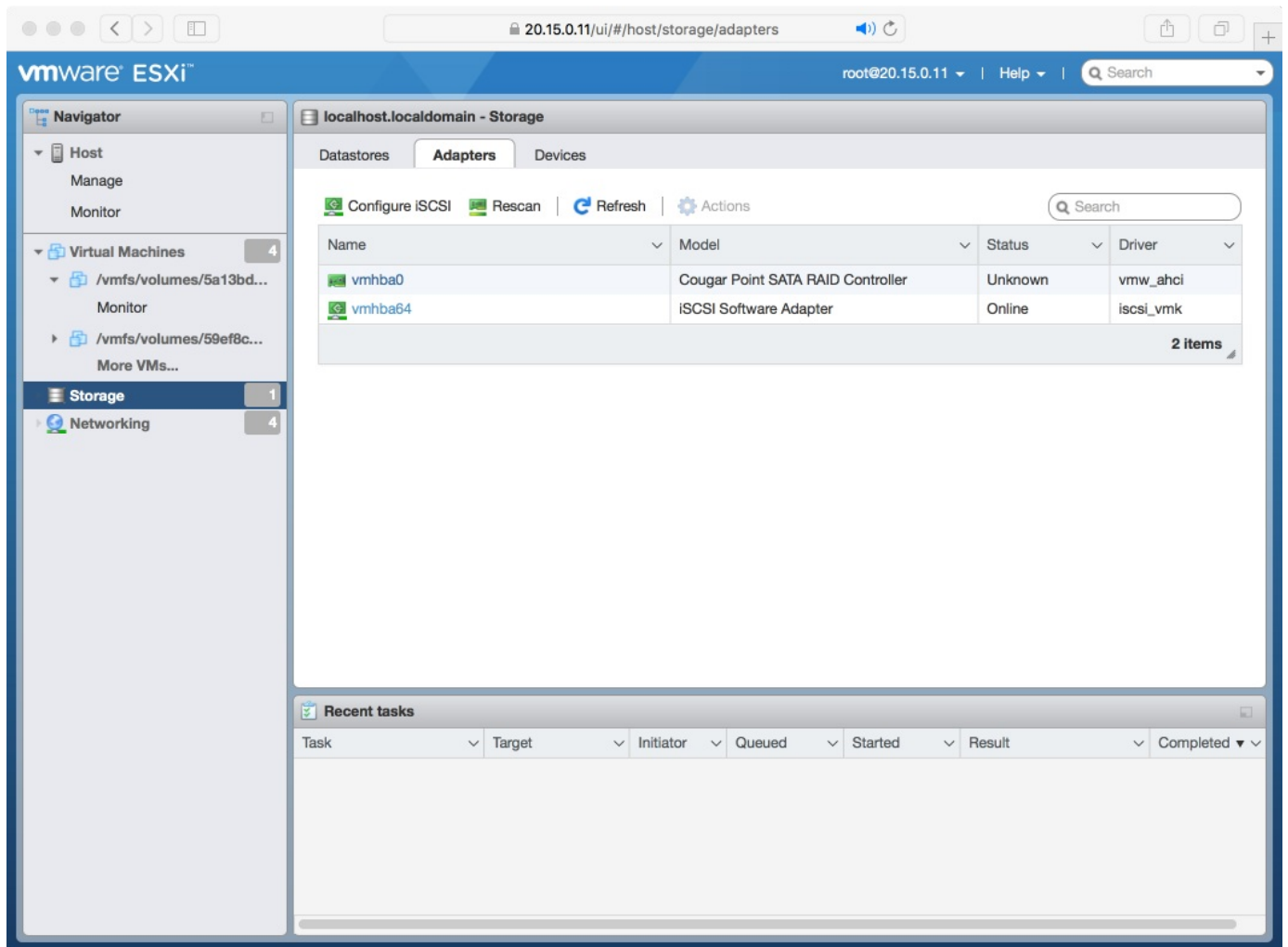
Prerequisite:

- VMware ESX 6.5 or later using Virtual Machine compatibility 6.5 with VMFS 6.

iSCSI Discovery and Multipath Device Setup:

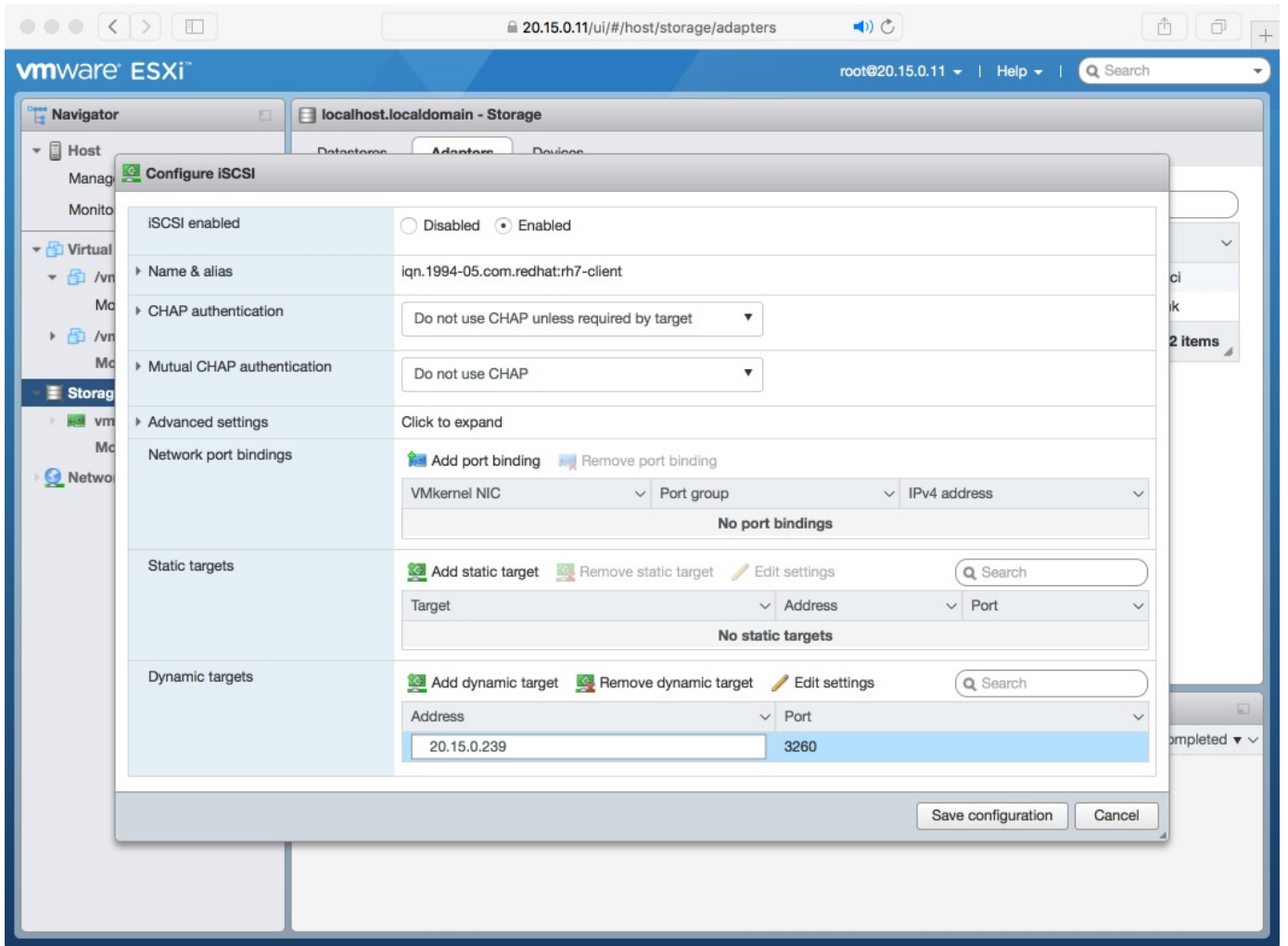
The following instructions will use the default vSphere web client and esxcli.

1. Enable Software iSCSI



Click on "Storage" from "Navigator", and select the "Adapters" tab. From there right click "Configure iSCSI".

2. Set Initiator Name



If the initiator name in the “Name & alias” section is not the same name used when creating the client during gwcli setup or the initiator name used in the ansible client_connections client variable, then ssh to the ESX host and run the following esxcli commands to change the name.

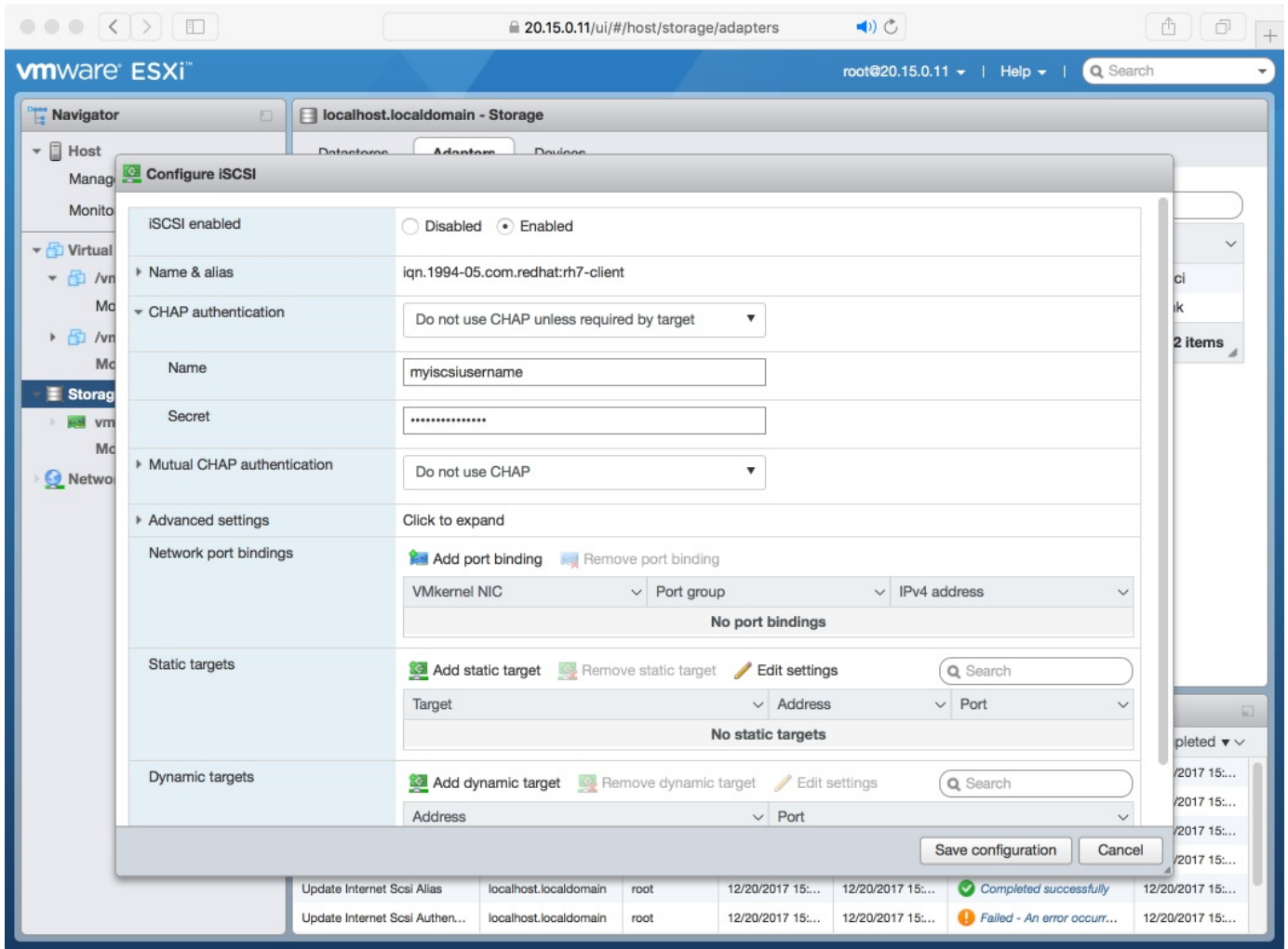
Get the adapter name for Software iSCSI:

```
> esxcli iscsi adapter list
> Adapter Driver State UID Description
> -----
> vmhba64 iscsi_vmk online iscsi.vmhba64 iSCSI Software Adapter
```

In this example the software iSCSI adapter is vmhba64 and the initiator name is iqn.1994-05.com.redhat:rh7-client:

```
> esxcli iscsi adapter set -A vmhba64 -n iqn.1994-05.com.redhat:rh7-client
```

3. Setup CHAP



Expand the CHAP authentication section, select “Do not use CHAP unless required by target” and enter the CHAP credentials used in the gwcli auth command or ansible client_connections credentials variable.

The Mutual CHAP authentication section should have “Do not use CHAP” selected.

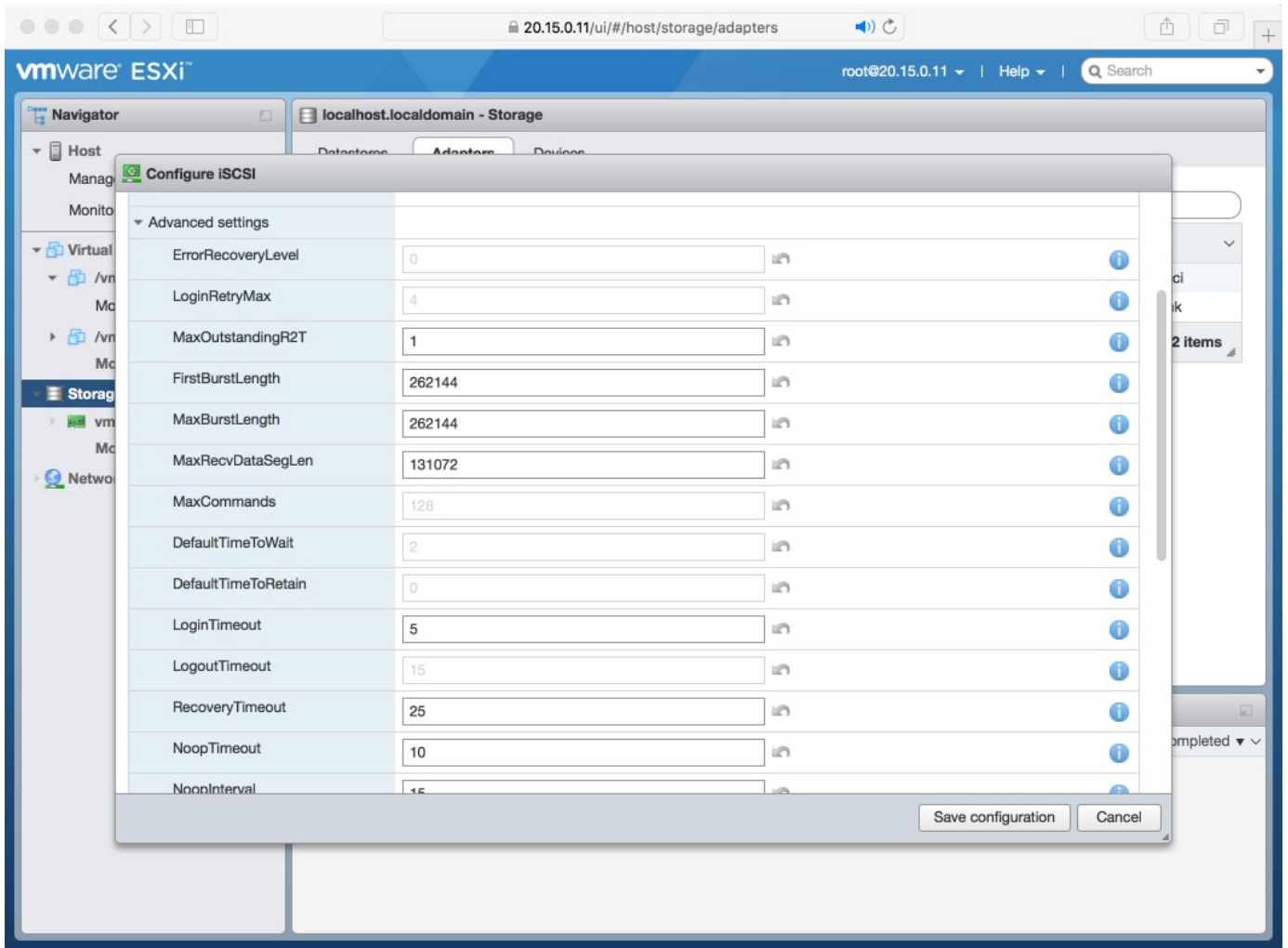
Warning: There is a bug in the web client where the requested CHAP settings are not always used initially. On the iSCSI gateway kernel logs you will see the error:

```
> kernel: CHAP user or password not set for Initiator ACL
> kernel: Security negotiation failed.
> kernel: iSCSI Login negotiation failed.
```

To workaround this set the CHAP settings with the esxcli command. Here authname is the username and secret is the password used in previous examples:

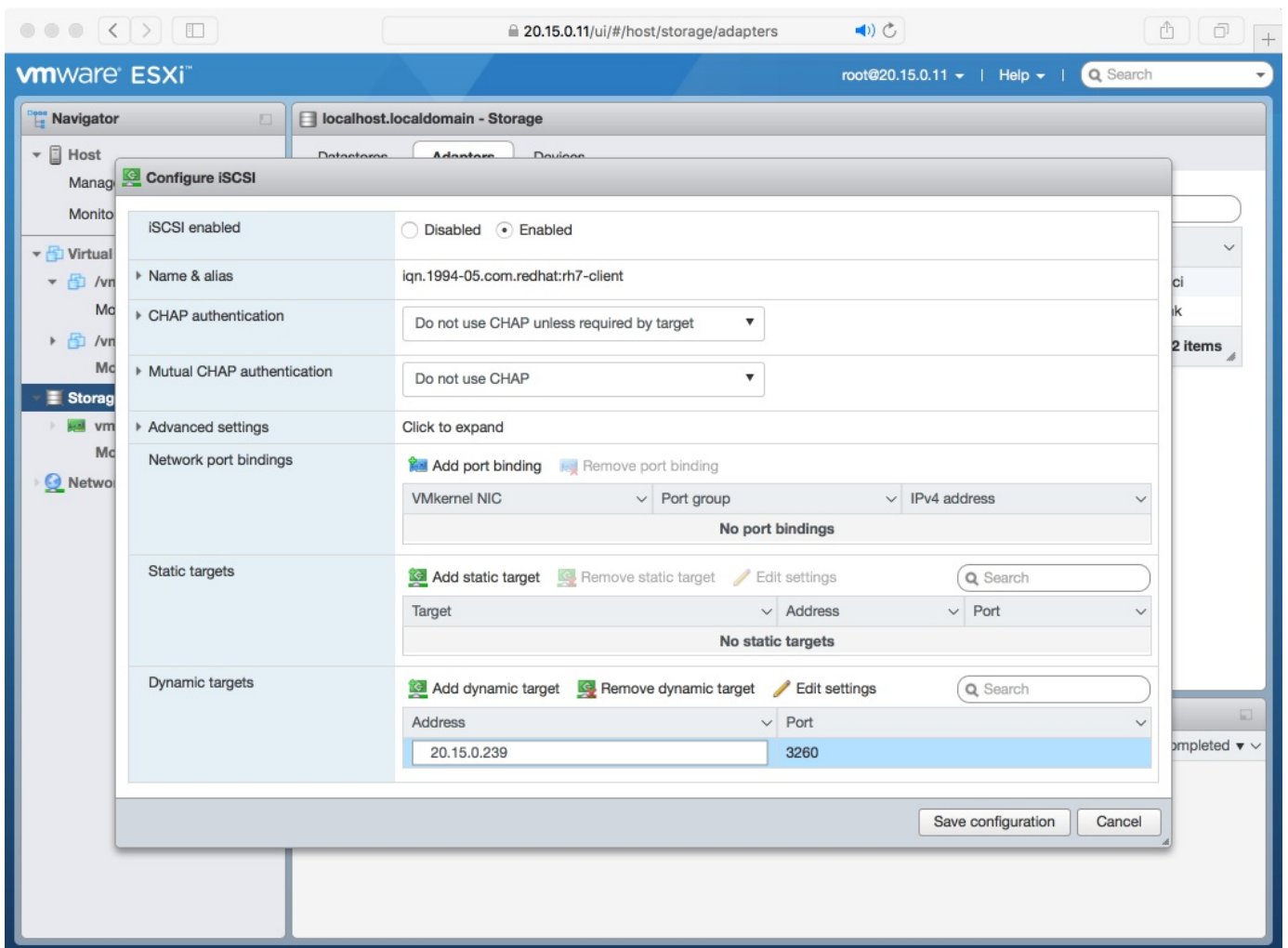
```
> esxcli iscsi adapter auth chap set --direction=uni --authname=myiscsiusername --secret=
```

4. Configure iSCSI Settings



Expand Advanced settings and set the “RecoveryTimeout” to 25.

- Set the discovery address



In the Dynamic targets section, click “Add dynamic target” and under Addresses add one of the gateway IP addresses added during the iSCSI gateway setup stage in the gwcli section or an IP set in the ansible gateway_ip_list variable. Only one address needs to be added as the gateways have been setup so all the iSCSI portals are returned during discovery.

Finally, click the “Save configuration” button. In the Devices tab, you should see the RBD image.

The LUN should be automatically configured and using the ALUA SATP and MRU PSP. Other SATPs and PSPs must not be used. This can be verified with the esxcli command:

```
> esxcli storage nmp path list -d eui.your_devices_id
```