

Licensing and Commands

This appendix covers the following sections:

- [License Information for SANTap, page A-1](#)
- [CLI Command Reference, page A-2](#)

License Information for SANTap

The SANTap service can only be provisioned on the three hardware platforms listed in this section. Each model requires specific licenses for enabling the SANTap service. The appropriate licenses need to be purchased and be available during SANTap hardware upgrade.

The following are the SANTap-supported hardware with equivalent license filenames:

- DS-X9032-SSM (SSM) — STORAGE_SERVICES_ENABLER_PKG
- DS-X9304-18K9 (MSM-18/4) — STORAGE_SERVICES_184
- DS-X9222I-k9 (MDS-9222i) — STORAGE_SERVICES_9222I



Note

The license files are not transferable between different hardware.

For more information on the Storage Services Enabler (SSE) package, refer to the link below:

http://www.cisco.com/en/US/prod/collateral/ps4159/ps6409/ps4358/product_data_sheet0900aecd8017a6eb_ps6029_Products_Data_Sheet.html

CLI Command Reference

The Cisco MDS SANTap feature provides CLI commands that support scripting and advanced operations.

For more information about other commands that apply to the Cisco MDS 9000 Family of multilayer directors and fabric switches, refer to the *Cisco MDS 9000 Family Command Reference Guide*.

To assign interfaces to the appropriate VSAN, use the following commands:

```
switch# config terminal
switch(config)# vsan database
switch(config-vsan-db) # vsan <frontend vsan #>
switch(config-vsan-db) # vsan <frontend vsan #> interface fc x/y
switch(config-vsan-db) # vsan <backend vsan #> interface fc xx/yy
```

To verify that the VSANs are configured with the correct WWNs, use the following command:

```
switch# show santap module
```

To verify if any port is inactive or in a unknown state, use the following commands to restart the port:

```
switch# config terminal
switch(config)# interface fc slot#/port#
switch(config-if) # shutdown
switch(config-if) # no shutdown
```

To verify that all the ports are active, use the following command:

```
switch# show fcs database
```