



A S e r i e s
F a i l u r e s

HOME ABOUT VCAP-DCA INDEX THINAPP VCDX STUFF OTHER PAGES VCAP-DCD INDEX

« VCAP-DCA Objective 1.2 – Manage Storage Capacity in a vSphere Environment

VCAP-DCA Objective 3.1 – Tune and Optimize vSphere Performance »

Search

GO

VCAP-DCA Objective 3.1 – Tune and Optimize vSphere Performance

Knowledge

- Explain the Pluggable Storage Architecture (PSA) layout

Skills and Abilities

- Install and Configure PSA plug-ins
- Understand different multipathing policy functionalities
- Perform command line configuration of multipathing options
- Change a multipath policy
- Configure Software iSCSI port binding

Tools

- vSphere Command-Line Interface Installation and Scripting Guide
- ESX Configuration Guide
- ESXi Configuration Guide
- Fibre Channel SAN Configuration Guide
- iSCSI SAN Configuration Guide
- Product Documentation
- vSphere Client
- vSphere CLI
- esxcli

Notes

Explain the Pluggable Storage Architecture (PSA) layout

[What is Pluggable Storage Architecture \(PSA\) and Native Multipathing\(NMP\)?](#)

[Understanding VMware vSphere 4.1 PSA](#)

Know the acronyms and understand the PSA. From [Duncan Epping's blog](#) the acronyms below and a lot more in depth information on each.

- PSA = Pluggable Storage Architecture
- NMP = Native Multipathing
- MPP = Multipathing Plugin (associates physical path with logical device)
- PSP = Path Selection Plugin (load-balancing)
- SATP = Storage Array Type Plugin (for failover)i.e. powerpath
- NMP "associates" a SATP with the set of paths from a given type of array.



> SRM (3)
> ThinApp (16)
> VCAP-DCA (38)
> VMware (57)



MY LATEST TWEETS



followers



about 0 seconds ago



about 0 seconds ago

Virtualization

Quote of the Day



Configuration
Maximums for
VMware

vSphere is my favorite VMware document. It answers many of the "How many", "How much" type questions about VI capabilities. This is one of the documents that will most often be updated as new releases of VMware VI are released so it's a good one to keep tabs on.

Web2PDF

converted by Web2PDFConvert.com

CATEGORIES

- » [SRM](#) (3)
- » [ThinApp](#) (16)
- » [VCAP-DCA](#) (38)
- » [VMware](#) (57)

- NMP “associates” a PSP with a logical device.
- NMP specifies a default PSP for every logical device based on the SATP associated with the physical paths for that device.
- NMP allows the default PSP for a device to be overridden.

Install and Configure PSA plug-ins

Understand different multipathing policy functionalities

Check out [vStorage Multi Paths Options in vSphere](#)

- Fixed will use the designate preferred path if configured and otherwise will use the first path discovered that works at system boot. A path is randomly selected when a failure occurs and the original path is selected when it comes back.
- Most recently uses the first working path at system boot. If this is unavailable, an alternative path is switched to and is used until the new path fails.
- Round Robin uses an automatic path selection that rotates and uses all available paths. It includes the ability to load balance across paths using active paths and is of most use on active/active array. In Active/passive arrays it will load between ports to the same storage processor. Not supported in MSCS environments.
- Fixed with array preference extends to fixed functionality to active/passive and ALUA mode arrays. VMW_PSP_FIXED_AP will select the preferred path according to array path preference and current path state.

Perform command line configuration of multipathing options

See the [Appendix](#) for full syntax and usage of the [vicfg-mpath](#) command.

Change a multipath policy

See the [Appendix](#) for full syntax and usage of the [vicfg-mpath](#) and [esxcli](#) commands.

Reminder, you must add `-server <servername>` as a connection option, otherwise the `esxcli` command will assume localhost, which will not work when running inside the vMA.

You use the `esxcli` command to set path policy like below, where VMW_PSP_xxx will either be Fixed, Fixed_AP, MRU, or RR

```
· esxcli <connection options> nmp device setpolicy -device naa.xxx -psp VMW_PSP_xxx
```

For more usage of this command check out [Objective 6.4](#)

Configure Software iSCSI port binding(also referred to as multipathing)

See the [Appendix](#) for full syntax and usage of the [esxcli](#) command.

List available uplinks for use with iSCSI adapters

```
· esxcli swiscsi vmnic list -d <vmhba>
```

Connect iSCSI initiator to the VMkernel ports

```
· esxcli swiscsi nic add -n <port_name> -d <vmhba>
```

To disconnect iSCSI initiator from VMkernel ports

```
· esxcli swiscsi nic remove -n <port_name> -d <vmhba>
```

To list all sw iSCSI sessions at the adapter level or target level

```
· esxcli swisci session list -d <iscsi_adapter>
```

```
· esxcli swiscsi session list -d vmhba36
```

Remove iSCSI sw sessions

```
· esxcli swiscsi session remove -d
```

- [Objective 9.3 – Configure vCenter Server Linked Mode](#)
- [Objective 9.2 – Plan and Execute Scripted Installations](#)
- [Objective 8.2 – Administer vCenter Orchestrator](#)
- [VCAP-DCA Brownbag Session #1](#)
- [VCAP-DCA Objective 7.1 : Secure ESX\(i\) Hosts](#)
- [VCAP-DCA Objective 9.1 : Install ESX Server with Custom Settings](#)
- [VCAP-DCA Objective 3.5 – Utilize Advanced vSphere Performance Monitoring Tools](#)
- [VCAP-DCA Objective 3.4 – Perform Capacity Planning in a vSphere Environment](#)
- [VCAP-DCA Objective 3.3 – Implement and Maintain Complex DRS Solutions](#)
- [VCAP-DCA Objective 3.2 – Optimize Virtual Machine Resources](#)

 [VCAP-DCA](#), [VMware](#), [vsphere](#)

Share
this
post!

Print
article

This entry was posted by [Sean Crookston](#) on September 12, 2010 at 6:11 pm, and is filed under [VCAP-DCA](#), [VMware](#). Follow any responses to this post through [RSS 2.0](#). You can [leave a response](#) or [trackback](#) from your own site.

COMMENTS (0)

RELATED POSTS

NO COMMENTS YET.

Name (required)

E-mail (required, will not be published)

Website

Submit Comment

Mystique theme by [digitalnature](#) | Powered by [WordPress](#)



RSS FEEDS

XHTML 1.1

TOP

PR 0

