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How To Do SAN STORAGE Stuff   <u>2 comments</u>

MIGRATE EMC SYMMETRIX THIN DEVICE FROM ONE POOL TO ANOTHER POOL

Virtually provisioned Thin device data can be migrated between high-performance drives and high-capacity drives. Data can be moved between storage pools configured on different drive technologies, and with different RAID protection types.

Virtual LUN VP migrations are session-based – each session may contain multiple devices to be migrated at the same time. There may also be multiple concurrent migration sessions. At the time of submission a migration session name is specified. This session name is subsequently used for the monitoring and management of the migration.

While an entire Thin device will be specified to be migrated, only Thin device extents that are allocated will be moved. Thin device extents that have been allocated, but not written to (for example, pre-allocated tracks), will be remapped to the target pool but will not cause any actual data to be copied.

New extent allocations that occur as a result of a host write to the thin device during the migration will come from the target pool.

During the migration, no changes occur to the front-end configuration of the thin device. The Symmetrix device number of the thin device remains the same, as does all mapping and masking information, and metadevice configuration. All local and remote replication relationships will also remain intact, and may actually be active during the migration.

For details and restrictions please refer to Feature document for "Symmetrix Virtual LUN VP Mobility".

Example of how to do the migration:

In order to migrate a group of thin devices contained in the VP_ProdApp1 storage group, currently bound to a RAID 6 14+2 on SATA thin pool, to a RAID 1 on FC thin pool, the following steps would be performed:

1. Validate the migration:
symmigrate –sid 1849 –sg VP_ProdApp1 –tgt_pool –pool FC_R1_VP –name VP_migration validate

2. Establish the migration:
symmigrate –sid 1849 –sg VP_ProdApp1 –tgt_pool –pool FC_R1_VP –name VP_migration establish

3. Monitor the migration progress:
symmigrate –sid 1849 –name VP_migration query

4. Verify the migration has completed:
symmigrate –name VP_migration verify –migrated

5. Terminate the migration:
symmigrate –name VP_migration terminate

HOW TO RELEASE THE LOCKS ON SYMMETRIX ARRAYS

The following command can be used to view the device locks:

symdev -lock list (Check for -L / P next to the lock)

L = Long lock, typically associated with SymReplicate and indicates that a long lock is normal. Before releasing lock the customer should check with replicate manager to see if they can stop the process holding the lock.

P = Persistent, cluster-type lock (ex: AIX)

To release the device external lock use:

symdev -lock # release

HOW TO RECOVER THE SRDF SESSIONS AFTER LINK FAILURE.

1. **symrdf -g dgname disable** (Disables consistency protection for SRDF/A pairs in device group)

2. **symrdf -g dgname set mode acp_disk** (This will turn on the adaptive copy write pending mode for the device group)

3. **symrdf -g dgname est** (This initiates an establish for all the SRDF pairs in the device group)

4. **symrdf -g dgname query** (To query a device Group)

Wait until the invalid track count is under 30,000 tracks

5. **symrdf -g dgname set mode async** (Change the Copy mode to Asyncronous)

6. **symrdf -g dgname enable** (Enables consistency protection for SRDF/A pairs in device group)

HOW TO COLLECT THE EMC CELERRA SUPPORT COLLECT DATA

san -> emc -> celerra – collect supoort data – – edit

description:
Run this for support and put in on the ftp server with nar files.
directions:
[nasadmin@seadcnsx1cs0 nar]$ /nas/tools/collect_support_materials
collect_support_materials[29843]: The collection script revision 2.8.4 has started.

Collecting /nas/log/*, /nas/log/webui/*, /nas/ConnectHome/*
and /nas/jserver/logs
Collecting output from server_log
Collecting output from internal commands
Collecting event log configuration files
Collecting files from .etc dir of each DM
Collecting Mirrorview DR logs

Collecting /var logs
Collecting upgrade logs
Collecting /etc files
Collecting /http/logs and /tomcat/logs
Collecting Celerra Manager tasks
Collecting cron files
Collecting Control Station process information and versions
Collecting /nas/jserver/debug_of_core* files
Now running material collection script for longer running commands.
Collecting complete nas dir listing
Collecting output from nas commands
Collecting RDF information
Collecting DHSM information
Collecting output from other CS commands
Collecting other files from /nas, /nas/site, /nas/sys,
/nas/rdf, and /nas/dos
Material Collection File:
/nas/var/log/support_materials_APM00070802955.091216_0908.zip has been generated.

****
Please include file /nas/var/log/support_materials_APM00070802955.091216_0908.zip
with materials submitted to EMC for problem investigation.
****

collect_support_materials[29843]: The collection script has finished successfully.
[nasadmin@seadcnsx1cs0 nar]$

HOW TO BACKUP THE SYMMETRIX VMAX CONFIGURATION TO ANY OF THE NETWORK DRIVES

VMAX doesn't have VCMDB for masking. Insted, its using Autoprovisioning Groups.

Autoprovisioning Groups allow storage administrators to create
groups of host initiators, front-end ports, and logical devices. These groups are then
associated to form a masking view, from which all controls are managed.

A new command, symaccess, provides all the storage provisioning requirements for
Symmetrix V-Max arrays running Enginuity 5874.

The masking views, including storage groups, port groups, and initiator groups can
be backed up to a file, and restored from the backup file.

Use the following syntax to backup the masking views for a Symmetrix array to a file:

symaccess -sid SymmID -f BackupFilename [-noprompt] backup

HOW TO CREATE MASKING VIEW ON EMC SYMMETRIX VMAX AUTOPROVISIONING

STEP1

Create Storage Group
symaccess -sid XXX create -name govind_SG -type storage devs A3A3:B3B3

or

symaccess -sid XXX create -name govind_SG -type storage devs A3B3,A3B4,A3B5

STEP2

Create Initiator Group

symaccess -sid XXX create -name govind_IG -type initiator -wwn xxxxxxxxxxxxxxx

STEP3

Create PortGroup

symaccess -sid XXX create -name govind_PG -type port -dirp 8h:0,9h:0,12h:0,5h:0

STEP5

Create Masking View

symaccess -sid XXX create view -name govind_MV -ig govind_IG -sg govind_SG -pg govind_PG

To Verify the View created run the below statement

symaccess -sid XXX show view govind_MV

Posted August 30, 2012 by g6237118

2 responses to "*How To Do SAN STORAGE Stuff*"

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He,
please adjust the syntax for the Create Storage Group with the create option.

symaccess -sid 1234 -type storage -name Host1 create devs AAA:AAB

thanks,
dave

Reply
dave
May 22, 2014 at 3:31 am

Hi Dave,

Thanks for your feedback and I have corrected.

Thanks for visiting and reading the Blog.

Reply
g6237118
May 22, 2014 at 7:36 am