VMWare - Using Command Line to Resolve Snapshots

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With Commvault taking snapshots of each VM, it's possible that at some point snapshots will be left behind and there will be an inconsistent snapshot chain. This article will describe how to check for valid snapshot chain and how to resolve/recomplile the base VMDK disks.

Upload SnapVMX script to ESXi Host where VM is running.

- upload the "SnapVMX.source.code.ESXi_version.txt" file to the OS datastore where your VM OS disk is located.
  The script is located here: \\storage02a\software\VMware\scripts\Snapshot Script .
- Move it to the /tmp folder of the host where your VM is running.

```
/ # cd /vmfs/volumes/datastore
/vmfs/volumes/datastore/ # mv SnapVMX.source.code.ESXi_version.txt /tmp
```

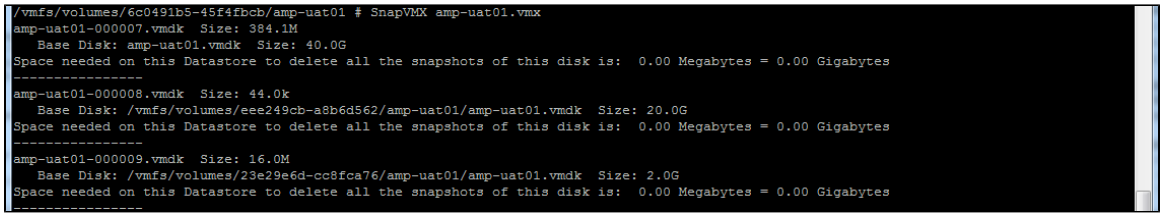
> **Important**
> It is important you are SSH into the ESXi host where your troubled VM is assigned to!

- Copy and paste these two lines in the ESXi console and hit Enter after each one:

```
/vmfs/volumes/datastore/ # SnapVMX ()  { sh /tmp/SnapVMX.source.code.ESXi_version.txt "SnapVMX
\"$1\""; };
/vmfs/volumes/datastore/ # SnapTree () { sh /tmp/SnapVMX.source.code.ESXi_version.txt "SnapTree
\"$1\""; };
```

Check the snapshot path and determine if it is valid.

- Run the SnapVMX command to determine if the snapshot path is valid. The syntax is "SnapVMX vmname.vmx" You should see something like this if it is:



- If you see any warnings about the snapshot chain being inconsistent or broken, look into the disk and delta disk CIDs to see if the parent/delta chain is consistent. Contact VMWare for assistance as needed.

Determine if the host can read the snapshot path

- Get the VM ID by issuing the following command: "vim-cmd vmsvc/getallvms |grep yourvmname" and hit Enter

```
/vmfs/volumes/datastore/ # vim-cmd vmsvc/getallvms |grep yourvmname
123     yourvmname             [datastore] yourvmname/yourvmname.vmx
winNetStandardGuest     vmx-07    04/21/2008 : Updated SAV to 6.6010, Windows Updates, R2, etc.
```

- Your VM's ID is the first number before your VM name....in this example, 123.
- type "vim-cmd vmsvc/get.snapshotinfo id#" and hit Enter to get the snapshot information

```
/vmfs/volumes/datastore/ # vim-cmd vmsvc/get.snapshotinfo 123
 (vim.vm.SnapshotInfo) {
   dynamicType = <unset>,
   currentSnapshot = 'vim.vm.Snapshot:96-snapshot-35',
   rootSnapshotList = (vim.vm.SnapshotTree) [
      (vim.vm.SnapshotTree) {
         dynamicType = <unset>,
         snapshot = 'vim.vm.Snapshot:96-snapshot-35',
         vm = 'vim.VirtualMachine:96',
         name = "Consolidate Helper- 0",
         description = "Helper snapshot for online consolidate.",
         id = 35,
         createTime = "2012-10-05T15:09:45.8972Z",
         state = "poweredOff",
         quiesced = false,
         backupManifest = <unset>,
         replaySupported = false,
      }
   ],
}
```

- Go into the directory for your VM configuration
- Now we'll resolve the snapshot chain using the command "vim-cmd vmsvc/snapshot.removeall id#" and hit Enter

```
/vmfs/volumes/datastore/yourvmname # vim-cmd vmsvc/snapshot.removeall 123
Remove All Snapshots:
```

Ensure all snapshots removed and disks are recompiled to their base disks.

- Do and ls on the os disk directory and ensure your delta vmdks are removed and you're left only with your base OS disk.

```
/vmfs/volumes/datastore/yourvmname # ls
yourvmname -177c5e47.hlog   yourvmname-ctk.vmdk         yourvmname.vmdk
yourvmname.vmxf             vmware-27.log             vmware-30.log
yourvmname-flat.vmdk        yourvmname.vmsd           vmware-25.log
vmware-28.log               vmware.log
yourvmname-aux.xml          yourvmname.nvram          yourvmname.vmx
vmware-26.log               vmware-29.log
```

- Check the vSphere client and see that all disks assigned to the VMs are pointing to their appropriate base disks.