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Joson Zhou

Joined Jul 2008

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# How do I change the default location where Active Directory snapshots are stored?

[Windows Server](#) > [Directory Services](#)

## Question

I am currently planning a Microsoft Windows Server 2008 Active Directory Domain Services deployment. There will be a single forest with a single domain serviced by 3 domain controllers running on Windows Server 2008 Standard Edition and as a CORE installation.

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The Active Directory database will be placed on a logical D:\ drive. The path to the database will be D:\Windows\NTDS.

The Active Directory logs will be placed on a logical L:\ drive. The path the logs will be L:\Windows\NTDS.

The SYSVOL share will be placed on a logical S:\ drive. The path to the SYSVOL share will be S:\Windows\SYSVOL.

A full system backup will be performed weekly using wbadmin. System state backup will be performed daily.

We will schedule Active Directory snapshots to be created every 4 hours using ntdsutil.exe and Task Scheduler.

I noticed that when I create a snapshot manually using ntdsutil.exe, the snapshot is created on the root of the volume.

Is the default location for the snapshot always the root of the volume containing the ntds.dit file? Can I change the default location where the snapshots are stored? I want ntdsutil.exe to create the snapshot in a location other than the root of the volume.

My concern is that the logical D:\ drive that holds ntds.dit will fill up over time, so I know I will need a way to automate the deletion of old snapshots that will not be used.

I want to segregate the Active Directory snapshots from the production ntds.dit.

In other words, i would prefer to store the snapshot on a separate logical drive letter other than the D:\ drive. Is this possible?

Saturday, November 01, 2008 7:21 PM

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## Answers

Hi,

I am afraid that we cannot change the location since it is volume based.

0

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Instead of using ntdsutil->snapshot, you may consider to create a full IFM, which basically takes a snapshot. When creating IFM, you can specify the target folder. The extracted DIT can be mounted using dsamain and is after offline defrag.

For more information about IFM, please visit the following websites:

Create Installation Media by Using Ntdsutil

<http://technet.microsoft.com/en-us/library/cc816574.aspx>

ifm

<http://technet.microsoft.com/en-us/library/cc732530.aspx>

Hope the information is helpful.

Marked as answer by [Laura Zhang](#) Microsoft employee, Moderator Wednesday, November 12, 2008 11:14 AM

Wednesday, November 05, 2008 9:10 AM

Moderator



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[Joson Zhou](#) 13,065 Points

Joson,

Thanks for your reply. I rolled up my sleeves and tried what you suggested. There is one caveat to using ntdsutil->IFM. The utility produces an error if you try to create an IFM snapshot (full or RODC) in a non-empty directory. This is problematic when trying to schedule ntdsutil->IFM to run every 4 hours. You would have to build logic into your script to copy the IFM snapshot to a different directory (so you could retain it), delete the IFM snapshot, and then create a new IFM snapshot. It's doable, but awkward.

If you use ntdsutil->snapshot, the snapshots accumulate on the root of each volume over time (in my configuration, the DIT file is on the D:\ volume, the SYSVOL share is on the E:\ volume, and the transaction logs are on the L:\ volume). The advantage is that you don't have to manage the snapshots other than making sure you delete the snapshots you do not need after a certain period of time.

I started thinking about this more, and came up with what I think is a good strategy and set of scripts. One script handles **backup** of the Active Directory database to a disk using ntdsutil->IFM. Another script handles **snapshot** of the Active Directory database using ntdsutil->snapshot. A third script handles deletion of the snapshots. My rationale is if you have a backup created by ntdsutil->IFM, then you no longer need the snapshots. Really what I want the snapshots for is the window between each backup, so I can restore objects that were accidentally deleted or incorrectly modified since the last known good backup.

Here is a summary of the approach, scripts, and task schedules I am using. My approach is based on AD DS running on a Core installation, although it could be used for a Full installation as well. You just wouldn't need the last netsh command I listed, which opens the advanced firewall so you can remotely manage the Core server using MMC on a desktop or server with a GUI.

Another cool thing I decided to do was redirect the output of ntdsutil.exe to an activity log. That way I could schedule a task to run each day to e-mail me the activity log from each domain controller as an attachment if I wanted to.

I would appreciate any feedback, and thanks again for your reply.

#### [Configure Domain Controller for Backups using NTDSUTIL.EXE:](#)

1. Md s:\backups\ifm\full
2. Md s:\logs\backups\activity.log
2. Md c:\windows\scripts
3. Copy ifm-backup.cmd to c:\windows\scripts
4. Schedule ifm-backup.cmd to run daily at 6:00 pm

ifm-backup.cmd contents:

```
rd /s /q s:\backups\ifm\full
md s:\backups\ifm\full
ntdsutil "act inst ntds" "ifm" "create full s:\backups\ifm\full" q q >> s:\logs\backups\activity.log
```

#### [Configure Domain Controller for Snapshot Create using NTDSUTIL.EXE:](#)

1. Copy snapshot-create.cmd to c:\windows\scripts
2. Schedule snapshot-create.cmd with a trigger at 6:00 AM every day – after triggered, repeat every 04:00:00 for a duration of 12 hours

snapshot-create.cmd contents:

```
ntdsutil "act inst ntds" "snapshot" create q q >> s:\logs\snapshots\activity.log
```

#### [Configure Domain Controller for Snapshot Delete using NTDSUTIL.EXE](#)

1. Copy snapshot-delete.cmd to c:\windows\scripts
2. Schedule snapshot-delete.cmd with a trigger at 5:55 AM every day

snapshot-delete.cmd contents:

```
ntdsutil "act inst ntds" "snapshot" "delete *" q q >> s:\logs\snapshots\activity.log
```

#### [Configure Backup and Snapshot Activity Log Cleanup using Task Scheduler](#)

1. Copy log-cleanup.cmd to c:\windows\scripts
2. Schedule log-cleanup.cmd with a trigger at 11:55 PM on Last Day of every month

log-cleanup.cmd contents:

```
rd I:\logs\backups\activity.log
rd I:\logs\snapshots\activity.log
```

#### [Open Advanced Firewall for Remote Management](#) (so tasks can be scheduled)

```
netsh advfirewall firewall set rule group="Remote Administration" new enable=yes
```

Thanks,

Mike Goddard  
MCTS, Microsoft Windows Server 2008 Active Directory Configuration

Marked as answer by [Laura Zhang](#) Microsoft employee, Moderator Wednesday, November 12, 2008 11:14 AM

Thursday, November 06, 2008 7:22 PM

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105 Points



#### All replies

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Moderator



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