

Practical 5B –Backups and Restore

Lab Requirements:

- a) Ensure that the **NYP-DC1** and **NYP-CL1** virtual machines are running.
- b) On the server **NYP-DC1**, set up one additional virtual disk (20 GB). Create 3 volumes, each volume about 2 GB. Name one volume as **mydata**, another volume as **myrestore**, and the third volume as **mybackup** (see Fig 1).
- c) Create a fourth volume of 5 GB and name it as **SysVolume**.
- d) Create a fifth volume of 5 GB and name it as **ShadowCopy**.
- e) Copy the contents of **C:\Windows\fonts** to the **mydata** drive.

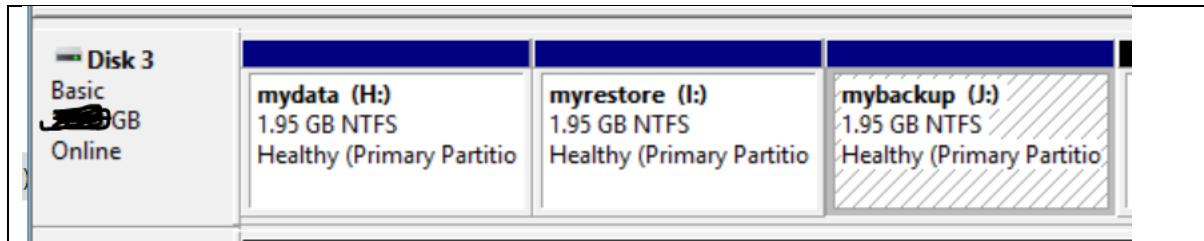


Fig 1

Practice 1

Objectives:

1. Install Windows Server Backup as it is not installed by default.

Tasks:

1. On NYP-DC1, log in as administrator and open **Server Manager** → **Tools** → **Windows Server Backup**. Although the option is available, the tool is not installed yet by default.
2. Open **Server Manager** → **Manage** → **Add Roles and Features**.
3. In “Before you begin” window, click **Next**.
4. In “Select installation type” window, select **Role-based or feature-based installation** and click **Next**.
5. In “Select destination server” window, select **NYP-DC1** and click **Next**.
6. In “Select server roles” window, click **Next**.
7. In “**Select features**” window, select **Windows Server Backup** → **Next** → **Install**.
8. At the end of installation, click **Close**.
9. Open **Server Manager** → **Tools** → **Windows Server Backup** to test if the installation is successful.

Practice 2

Objectives:

1. Perform a one-time backup.

Tasks:

1. On NYP-DC1, log in as administrator. You must have completed the preparation steps in practice 1. We will back up the **mydata** volume to the **mybackup** volume; and then restore it back to the **myrestore** volume.
2. Copy **C:\Windows\fonts** data into the **mydata** volume.
3. Open **Windows Server Backup** (*note: if it does not work, refer to practice 1*).
4. Click **Backup Once** in the right pane to start the Backup Once Wizard.
5. In the Backup options screen, select **different options** and click **Next**.
6. In “Select Backup Configuration” screen, select **Custom** and click **Next**.
7. In “Select Items for Backup” screen, click **Add Items**.
8. In “Select Items”, click on the **mydata**. Click **OK** → **Next**.
9. In “Specify Destination Type” screen, select **Local drives** and click **Next**.
10. In “Select Backup Destination” screen, click on **Backup destination** and select the **mybackup** volume/drive → **Next**.
11. In “Confirmation” screen, click **Backup** to start the backup process.
12. Click **Close** when it is completed.
13. Examine the **mybackup** folder in File Explorer and note the backup file.
14. Close all open windows.

Practice 3

Objectives:

1. Restore a backup.

Tasks:

1. On NYP-DC1, log in as administrator and open **Windows Server Backup**.
2. In the Windows Server Backup screen, select **Recovery** in the right pane.
3. In the “Getting Started” screen, select **This server** and click **Next**.
4. In “Select Backup Date” screen, select the available backup and click **Next**.
5. In “Select Recovery Type” screen, you can either choose **Files and folders** or **Volumes**. Select the **Volumes** option → **Next**.
6. In the “Select Volumes” screen, select the **mydata** (Source Volume) and **myrestore** as the Destination Volume, and click **Next**.
7. In the confirmation screen, click **Yes**.
8. In the Confirmation screen, click **Recover**.
9. After the recover progress has completed, click **Close**.
10. Compare the files in the **myrestore** volume with the **mydata** volume. Are they the same? What happened to the volume named “**myrestore**”?

Practice 4

Objectives:

1. Back up the System State data of a Window Server Domain Controller using command line.

Tasks:

1. Determine the drive letter of the **SysVolume** drive created in lab requirements. Assume it is **K:** (your drive letter may be different).
2. On **NYP-DC1**, login as **administrator** and open a **Command Prompt (Admin)** window.
3. Type **wbadmin start systemstatebackup -backuptarget:K:** and press **Enter**
(note: K: refers to **SysVolume**. Your alphabet may be different).
4. You're prompted to start the backup from Local Disk (C:) to K. Type **y** and press **Enter**.
5. You can minimize the windows and continue with the next practice as this backup may take some time.
6. After the backup is completed, open file explorer to view the backup files in the K: drive. How much space did the system state backup required?
7. Close all open windows.

Practice 5

Objectives:

1. Enable and configure the Shadow copy of a Shared Folder feature for a selected volume.

Tasks:

1. On **NYP-DC1**, log in as administrator.
2. In the **ShadowCopy** volume (refer to lab requirements), create a new folder and name it as **shadow**.
3. Share the **shadow** folder with the following settings:
 - a) Remove **Everyone** group
 - b) Add **Authenticated Users** group with **Full Control** permissions.
4. Double-click on **shadow** folder to open it. Use notepad editor and create a text file named **test.txt**. Inside this file, type the sentence "**Line 1 – you should only see one line of text**" and save it. Close the notepad.
5. Open file explorer and right-click on **ShadowCopy** volume and then click **Properties**.
6. Click the **Shadow Copies** tab. In the Select a volume section, click on the **ShadowCopy** alphabet volume , and then click **Enable**.

7. When the “Enable Shadow Copies” dialog box appears, read the message and then click **Yes**. Note that enabling shadow copies for the volume may take a minute or more. Once complete, notice that a new shadow copy is listed in the “**Shadow copies of selected volume**” section.
8. Click the **Settings** button. This opens the Settings window. This screen allows you to change the amount of disk space allocated to shadow copy storage, and so forth.
9. Click **Cancel** to close the Settings window, and then click **OK** to close the properties windows of drive.
10. Open **test.txt** file in Notepad. Delete the text “**Line 1 -**”. Add a new line “**New text added to shadow copy test**”. Save the file and close it.
11. Close all open windows.

Practice 6

Objectives:

1. Use the Previous Versions, view and restore a previous copy of a file.

Tasks:

1. On **NYP-DC1**, log in as administrator.
2. Double-click on the **shadow** folder created above to view its contents. Double-click on the **test.txt** file to open it, confirming that it contains the text “**New text added to shadow copy test**”. This is the most recent version of the file. Close Notepad without making or saving any changes.
3. Right-click on the **test.txt** file and click **Properties**. Notice the properties of this file has a tab named **Previous Versions**.
4. Click the **Previous Versions** tab.
5. In the “**File versions**” list, review the Time information next to the **test.txt** file, and click **Open**. This opens the previous version of the test.txt file. You should see “**Line 1 – you should only see one line of text**”. Close Notepad.
6. With the test.txt file still selected, click **Copy**. This allows you to save this copy of the file to an alternate location, if necessary. Click **Cancel**.
7. With the test.txt file still selected, click **Restore**. This restores the previous version of the test.txt file to the folder. When the Previous Versions dialog box appears, click **Restore**. Close the dialog boxes.
8. Open **test.txt** and verify it is the old copy.
9. Close all open windows.

[THE END]