DR4000 Setup Guide for Symantec Backup Exec 2010 R3

This Dell Whitepaper shows how to provision DR4000 v1.0 with Microsoft Windows Server 2008 R2 & Symantec Backup Exec 2010 R3

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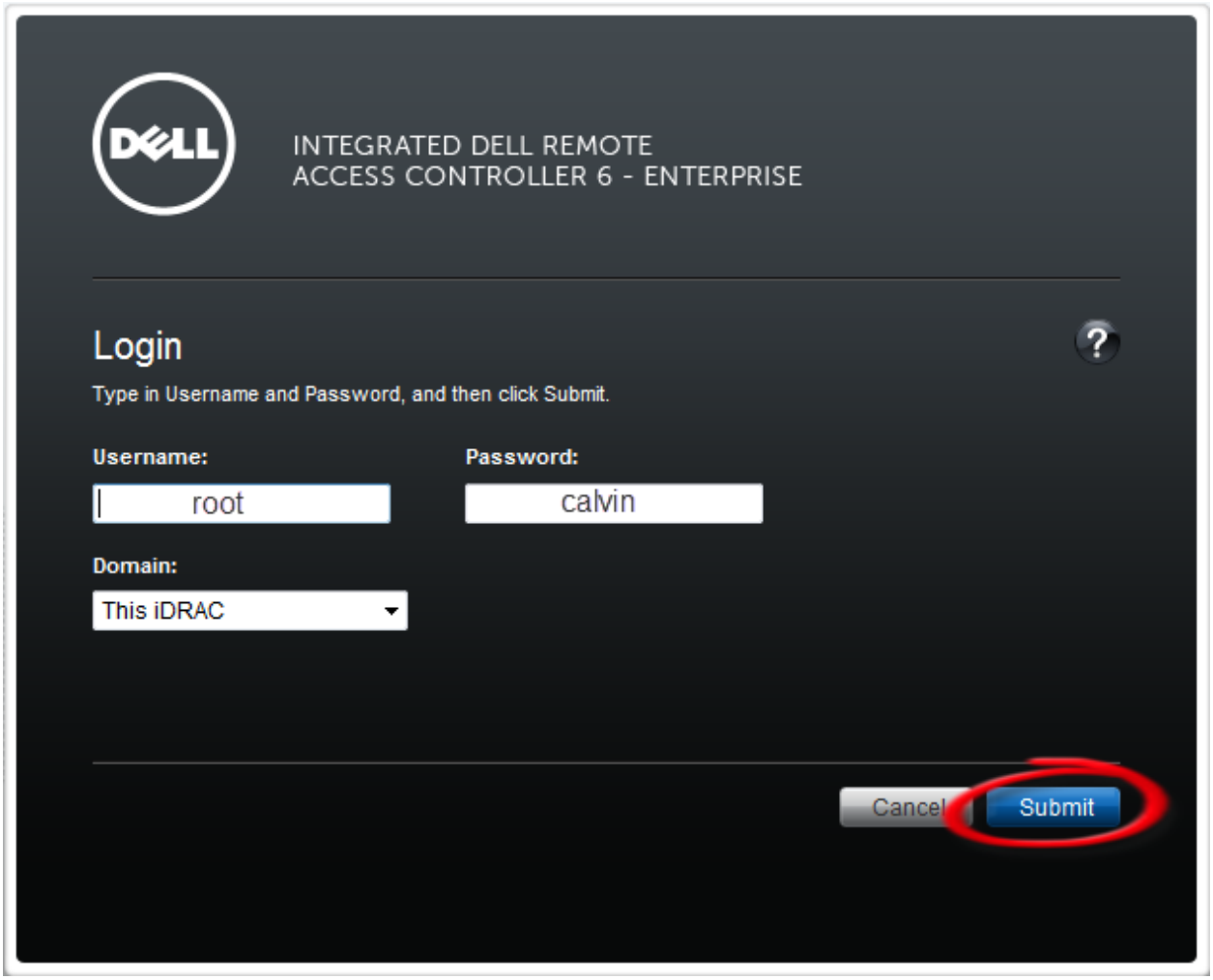
Executive summary

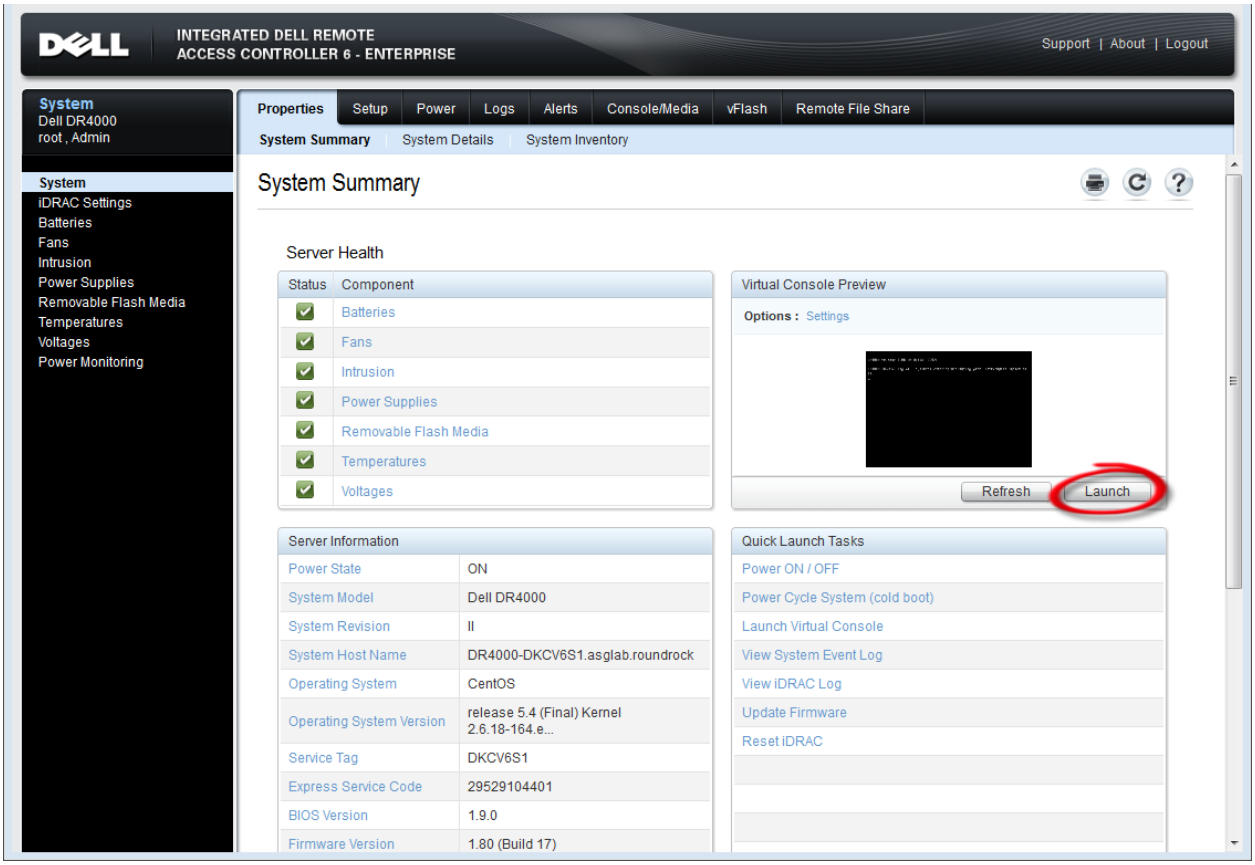
In this paper, we demonstrate how to setup a DR4000 with Backup Exec 2010 R3 provisioned as a backup to disk target. This paper is a quick reference guide and does not include all DR4000 deployment best practices. Reference the DR4000 owner's manual other DMA best practices whitepapers for additional information. Note that your DR4000 build version and other screen shots may vary slightly depending on the version of the DR4000 OS.

Getting Started

Once your DR4000 is cabled, racked & powered on log into the iDRAC address. The default address is 192.168.0.1. Once the console is open log in using user name: "root" and password: "calvin."

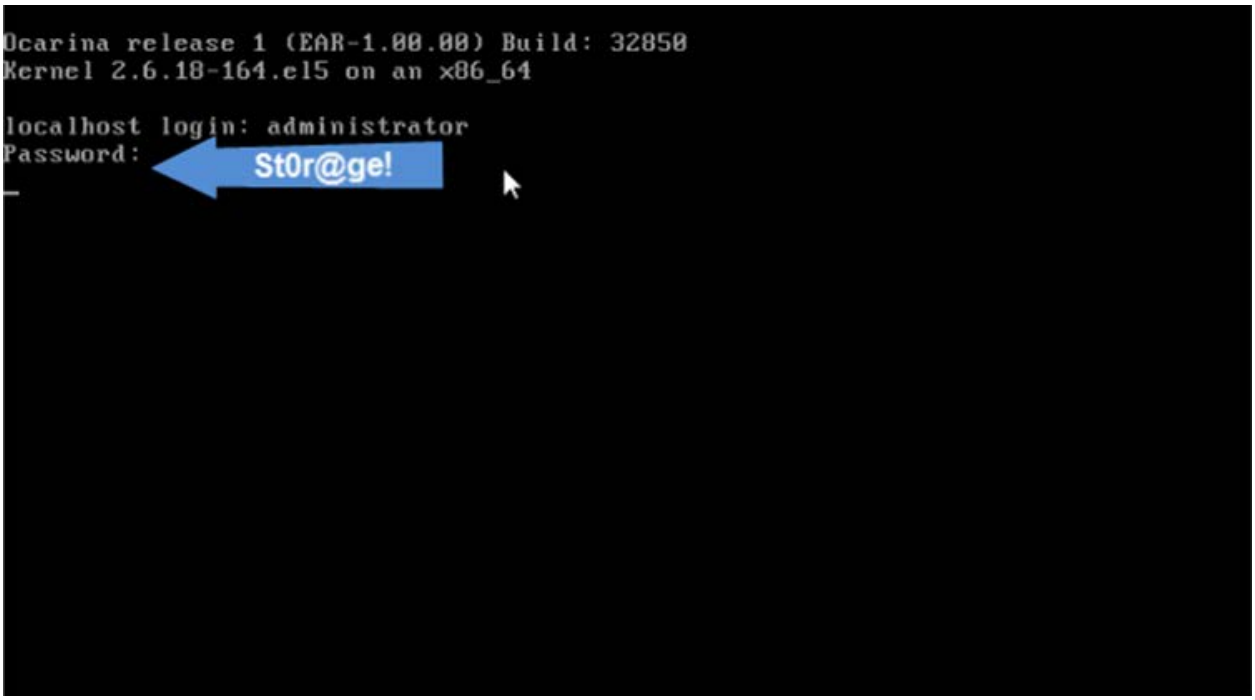


Next, launch the Virtual console.

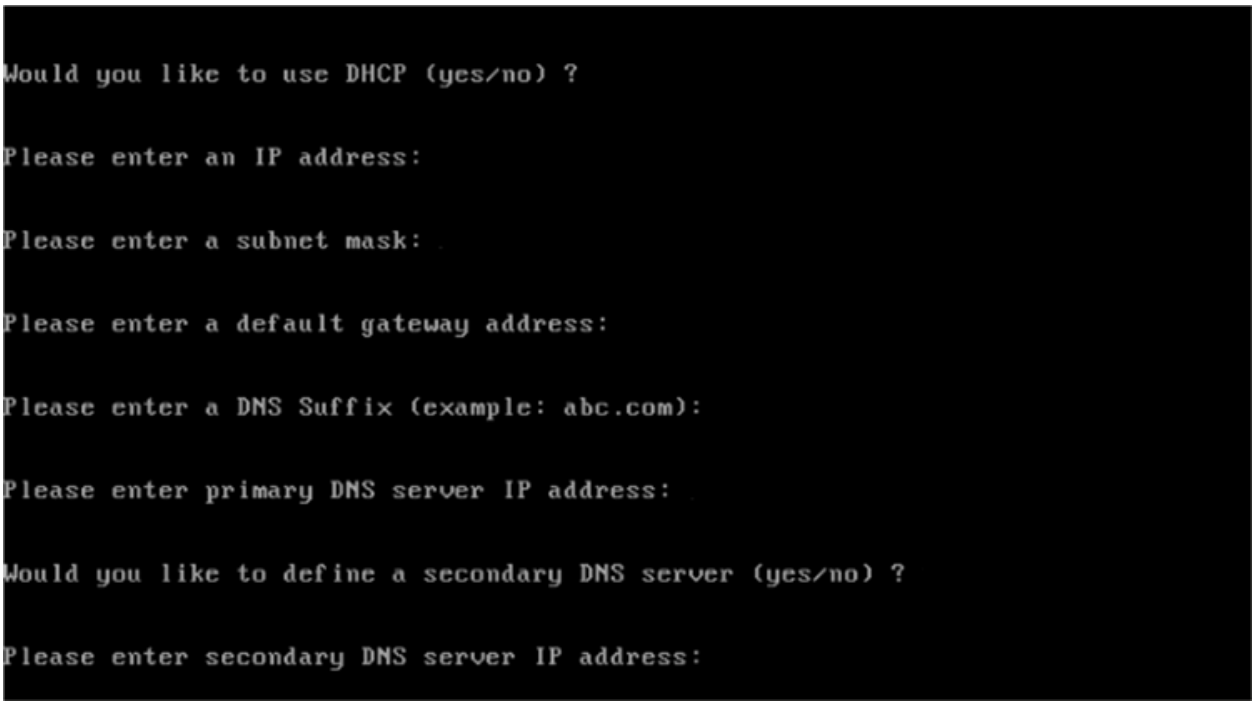


Initializing the DR4000

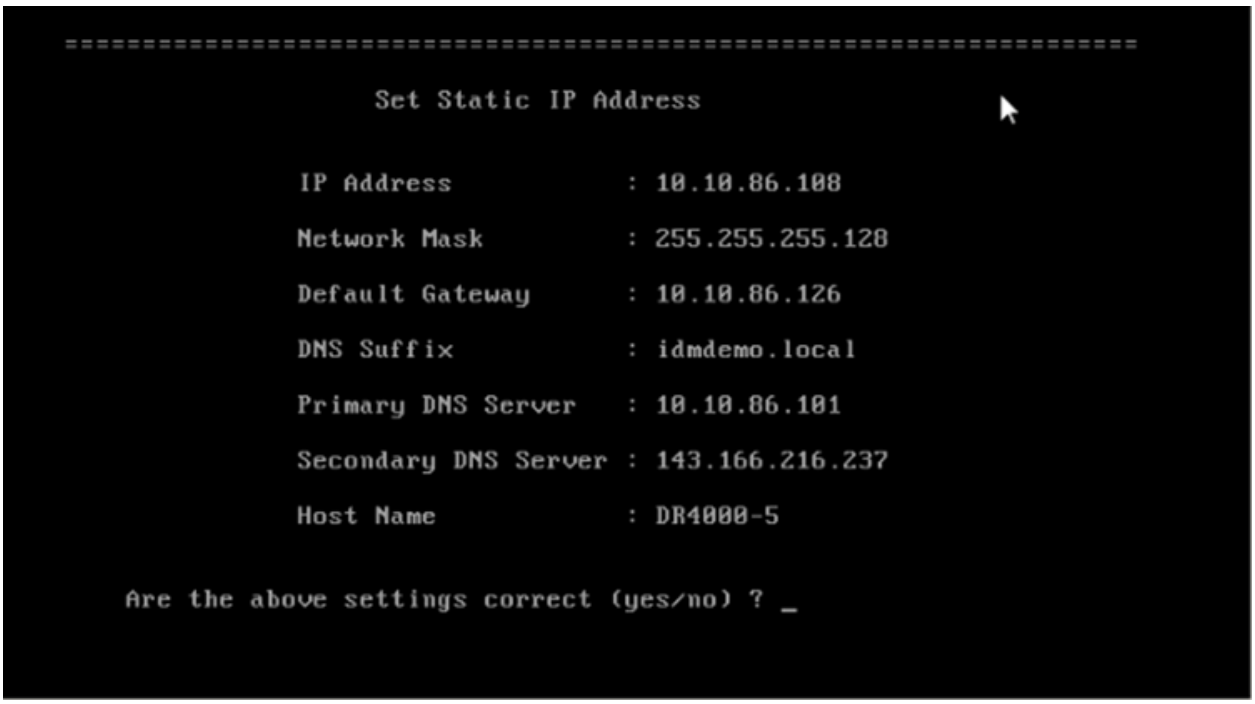
Once the virtual console is open login to the system as user: “administrator” and password “St0r@ge!”



Set user defined networking preferences

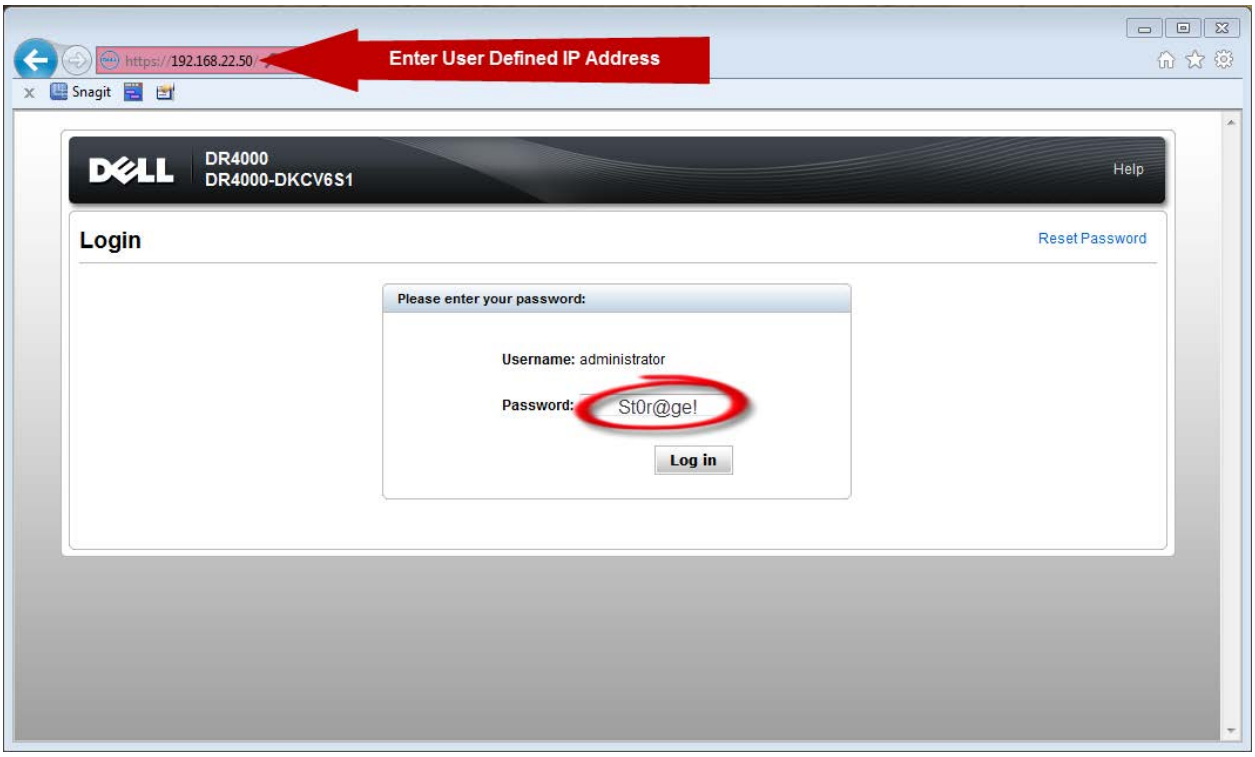


View Summary of preferences and confirm that it is correct.



Log into the DR4000 GUI

Enter the user defined IP address into your browser. Login as “administrator” and use password “St0r@ge!”

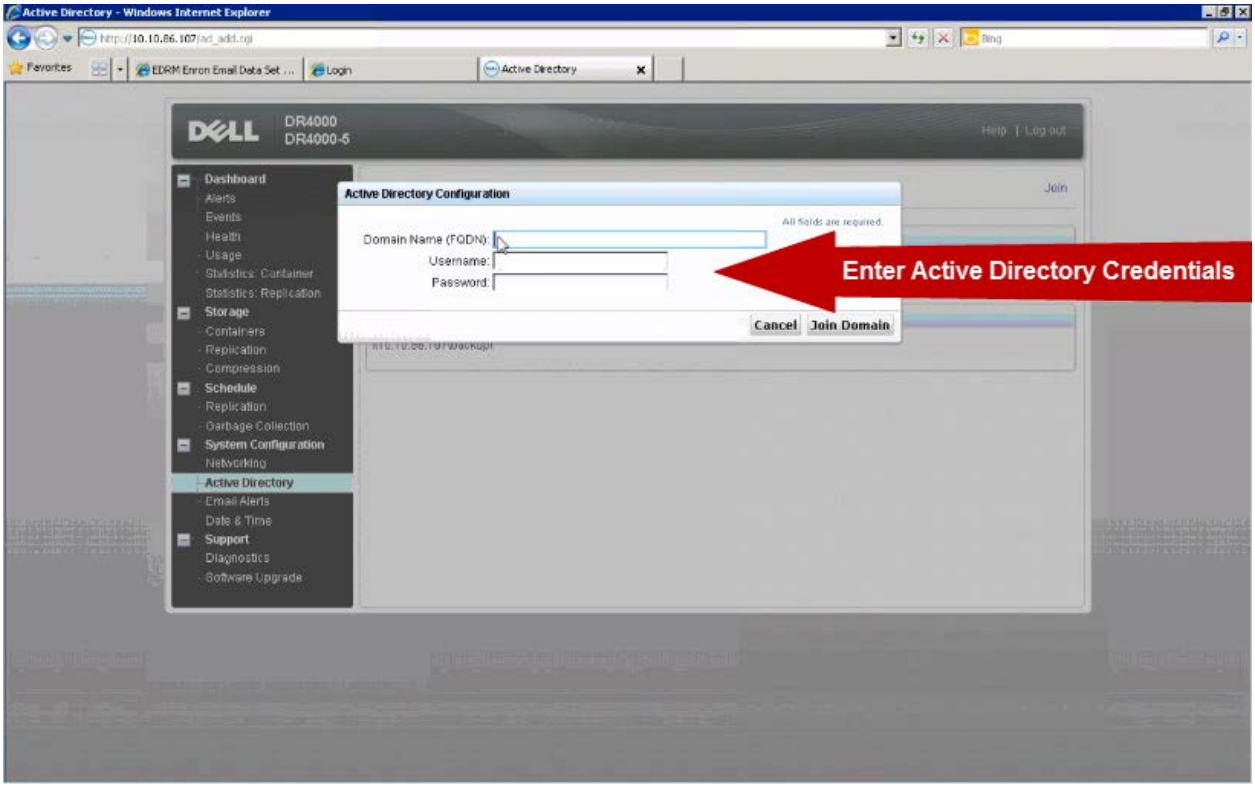


Join DR4000 to Active Directory

Select the “Active Directory” in the Dashboard tree of the left hand side.

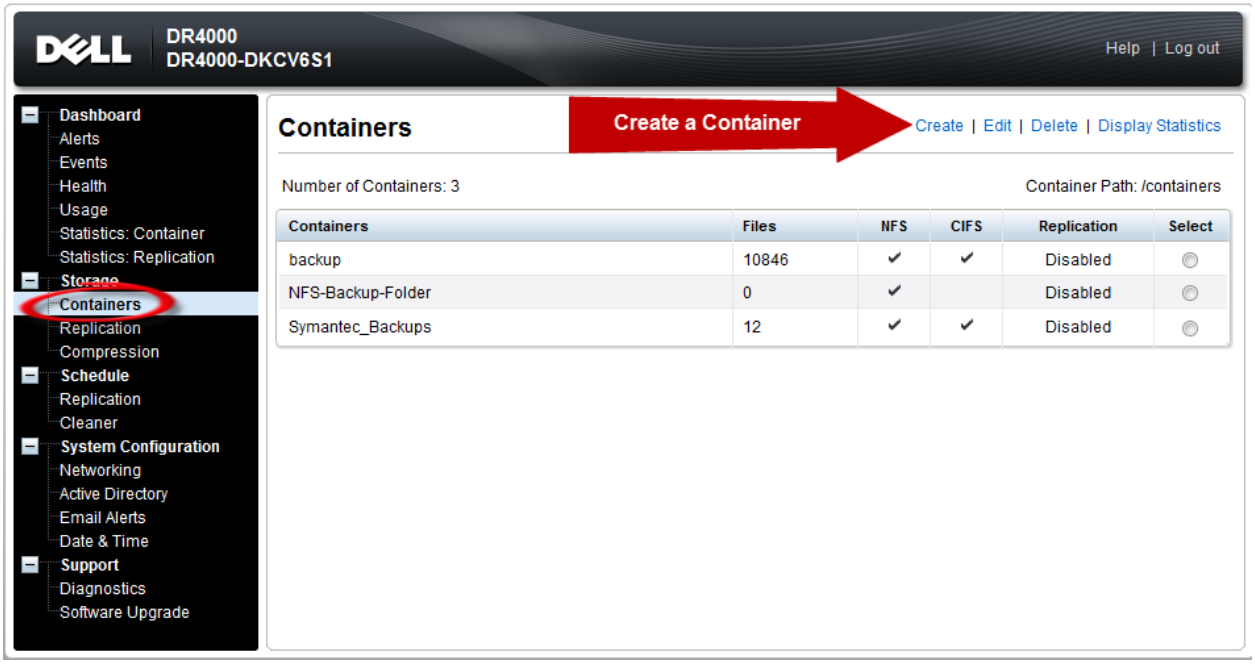
Note: if you do not want to add DR4000 to Active Directory reference the Owner’s manual for guest login instructions.

Enter your Active Directory Credentials



Create & Mount the Container

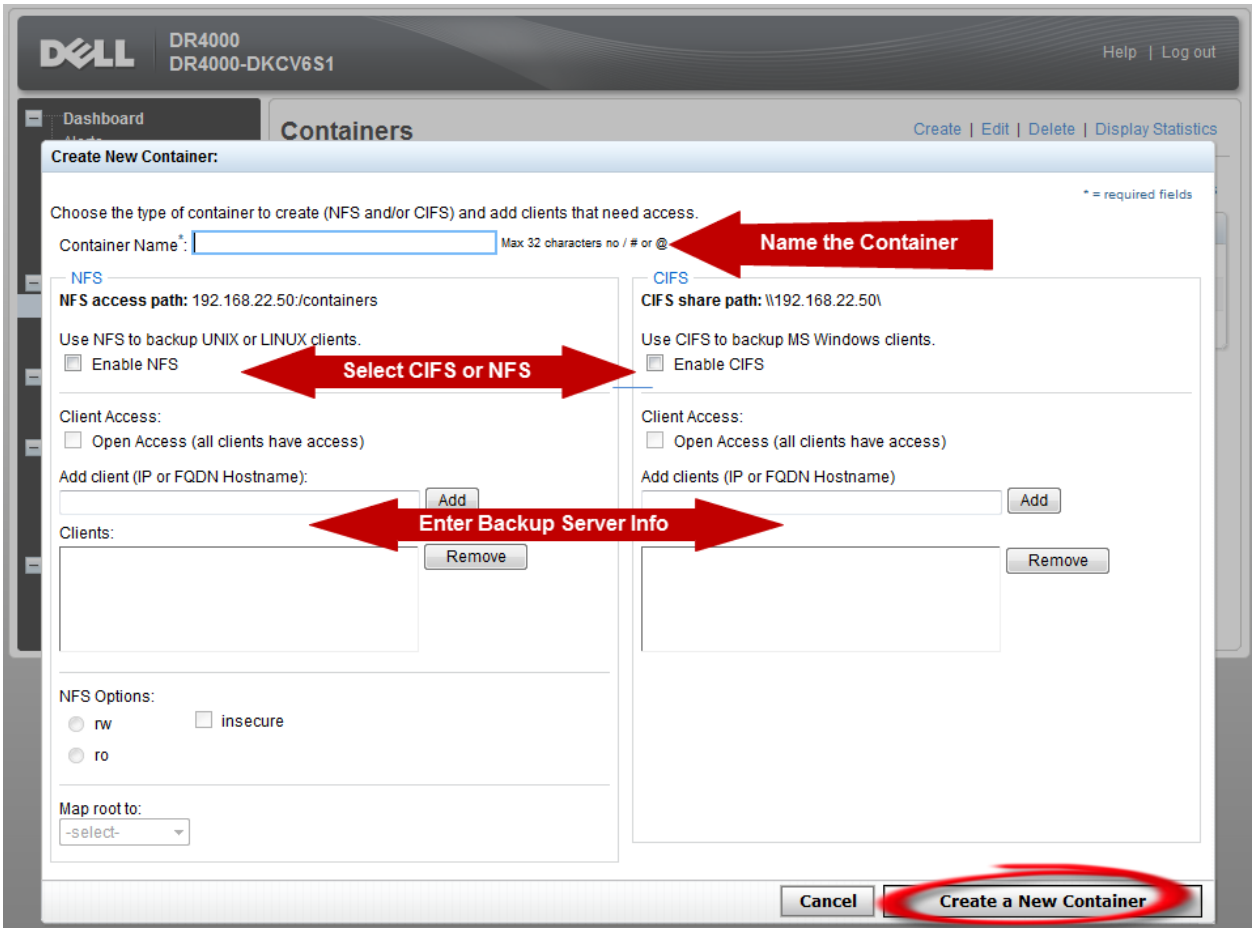
Select “Containers” in the Dashboard tree and click on “Create” container.



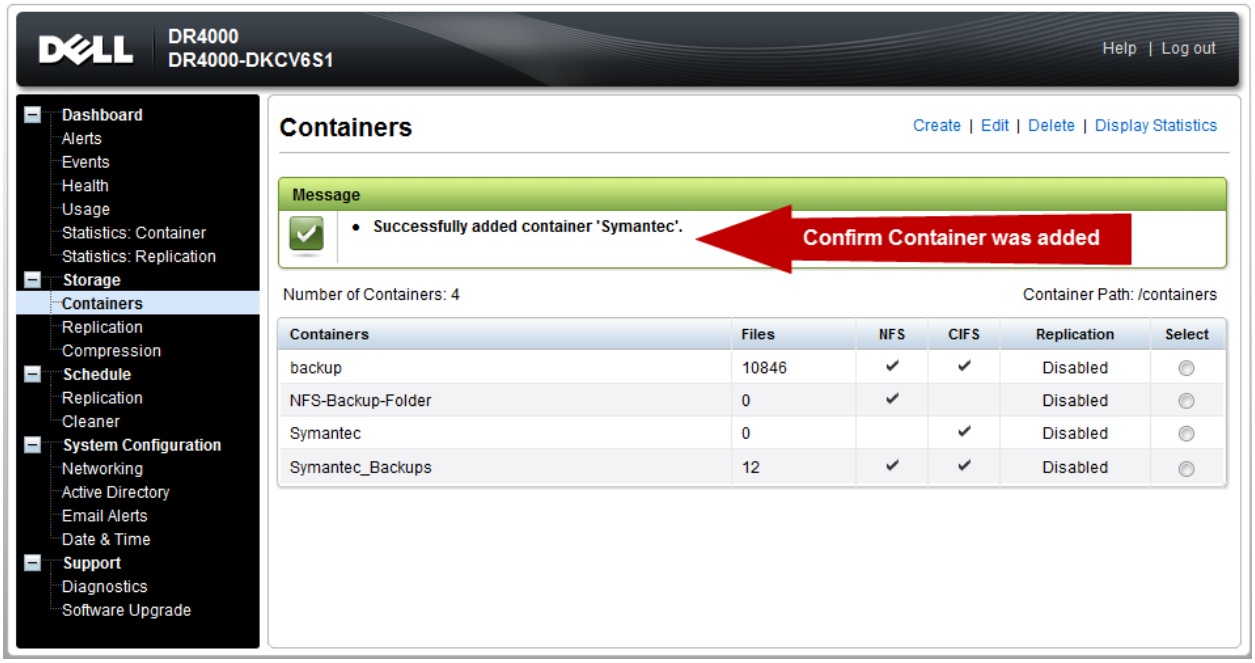
Next, name the container and click the “Enable CIFS” check box. Select the client access credentials preferred. Dell recommends adding your backup server’s IP address for improved security.

In our instance we named the container “Symantec”

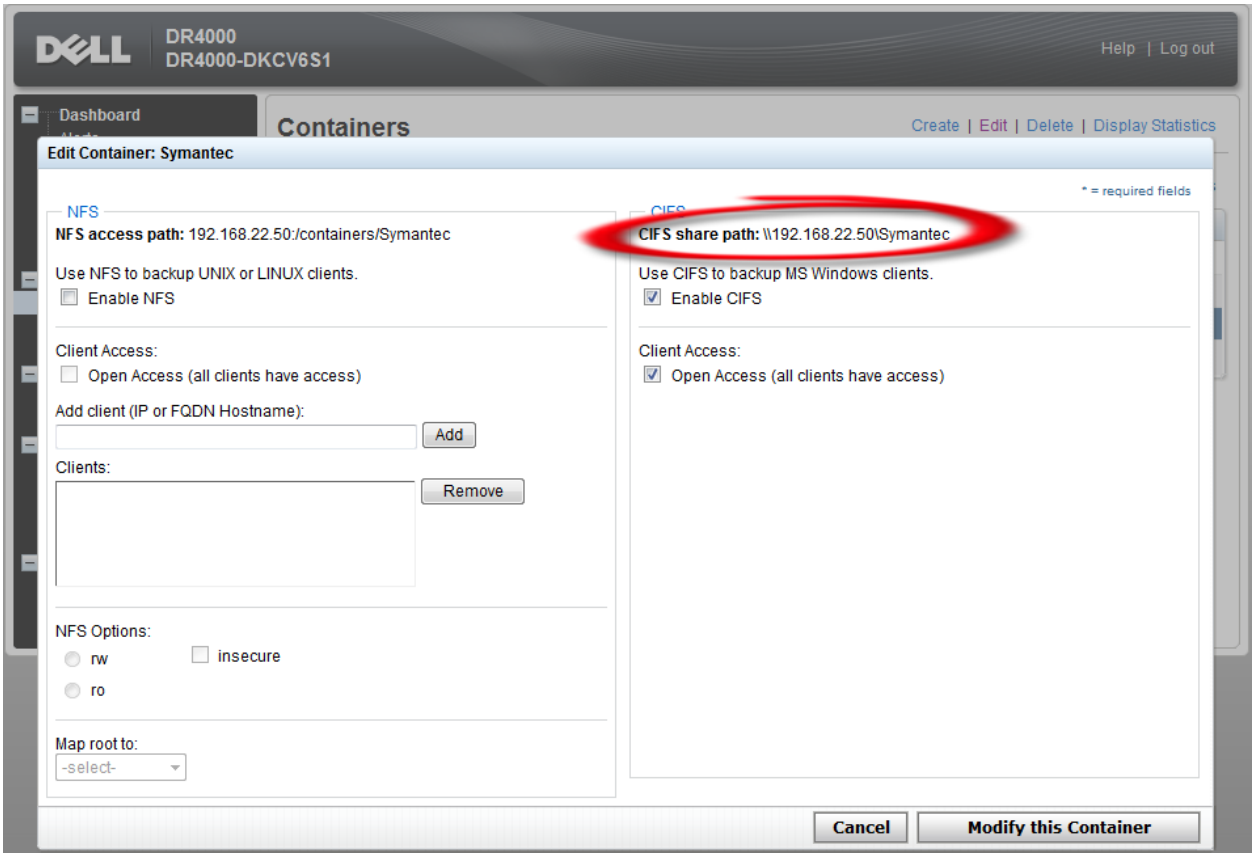
Finally click on “Create a New Container.”



Confirm the container was added

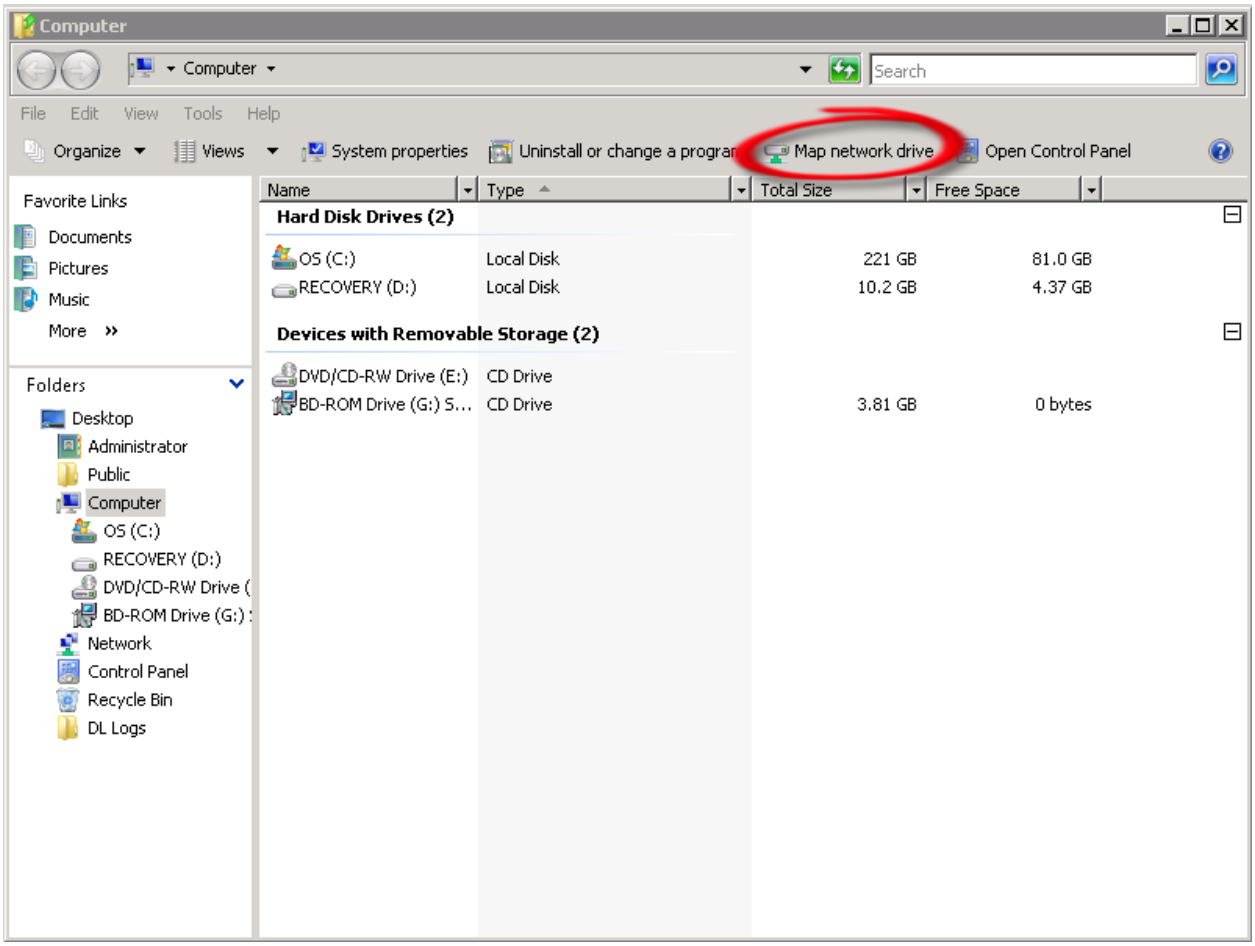


Document your Container path. Select “Edit” in the container screen to show the path to the container.

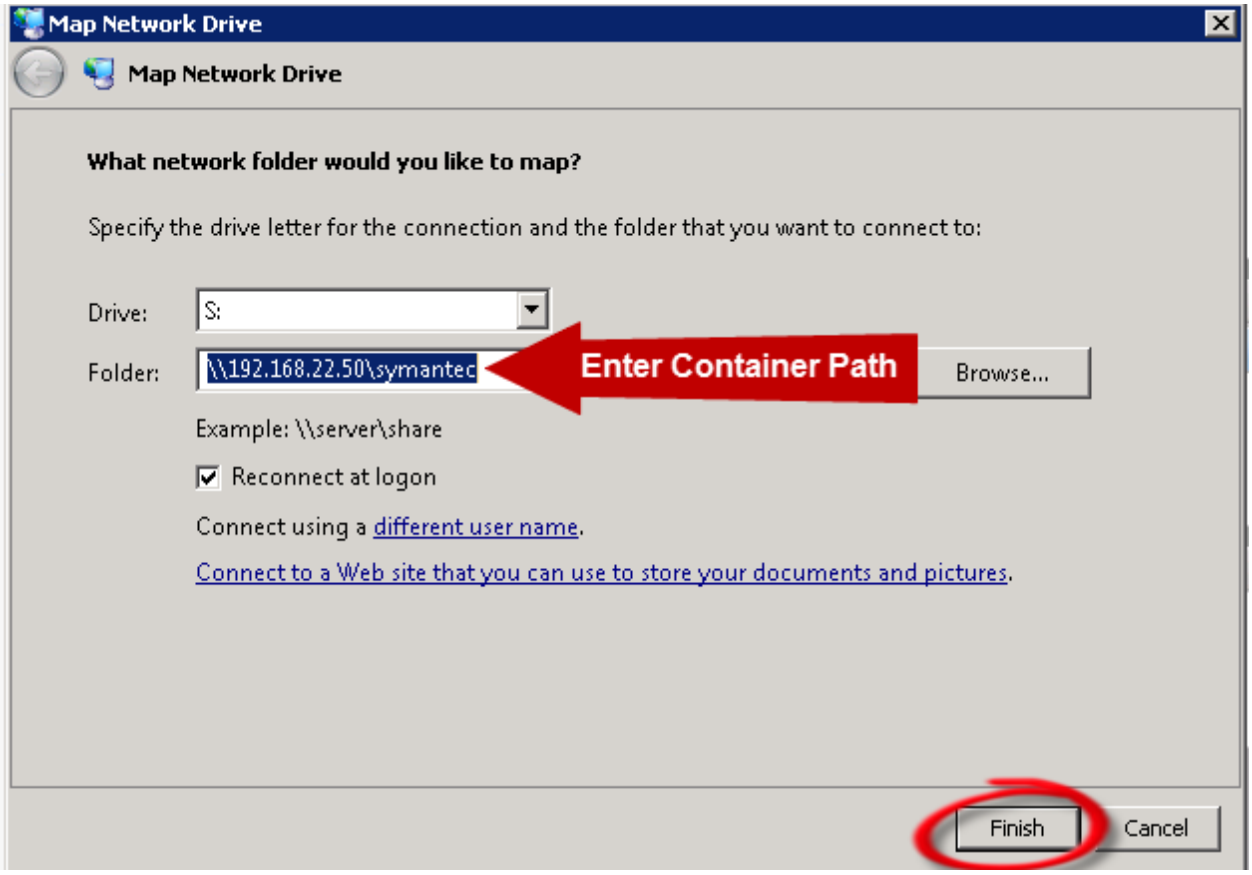


Log into your media server and click on “Start” -> “My Computer”

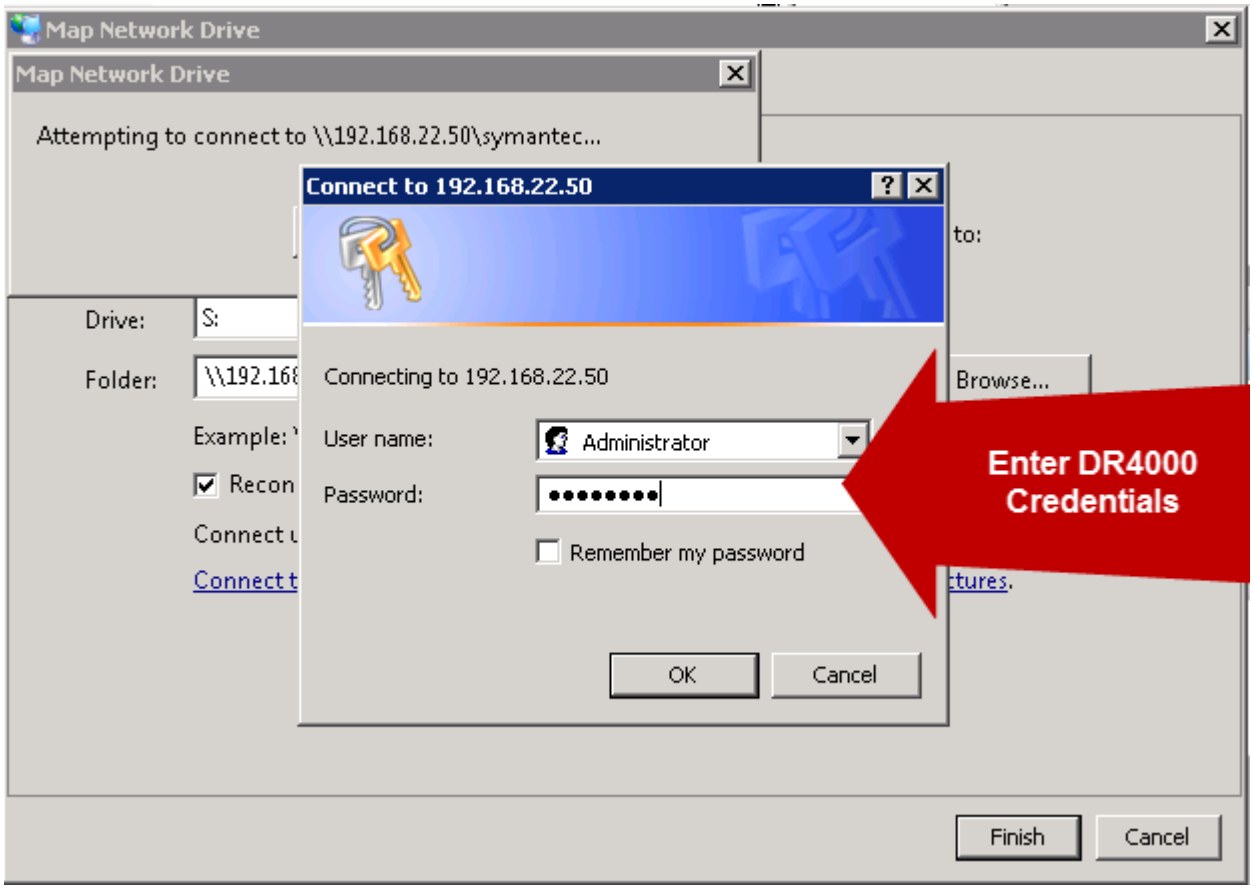
Click on the “Map network drive” icon



Enter the container path to the DR4000. Make sure to check the “Reconnect at logon” box.

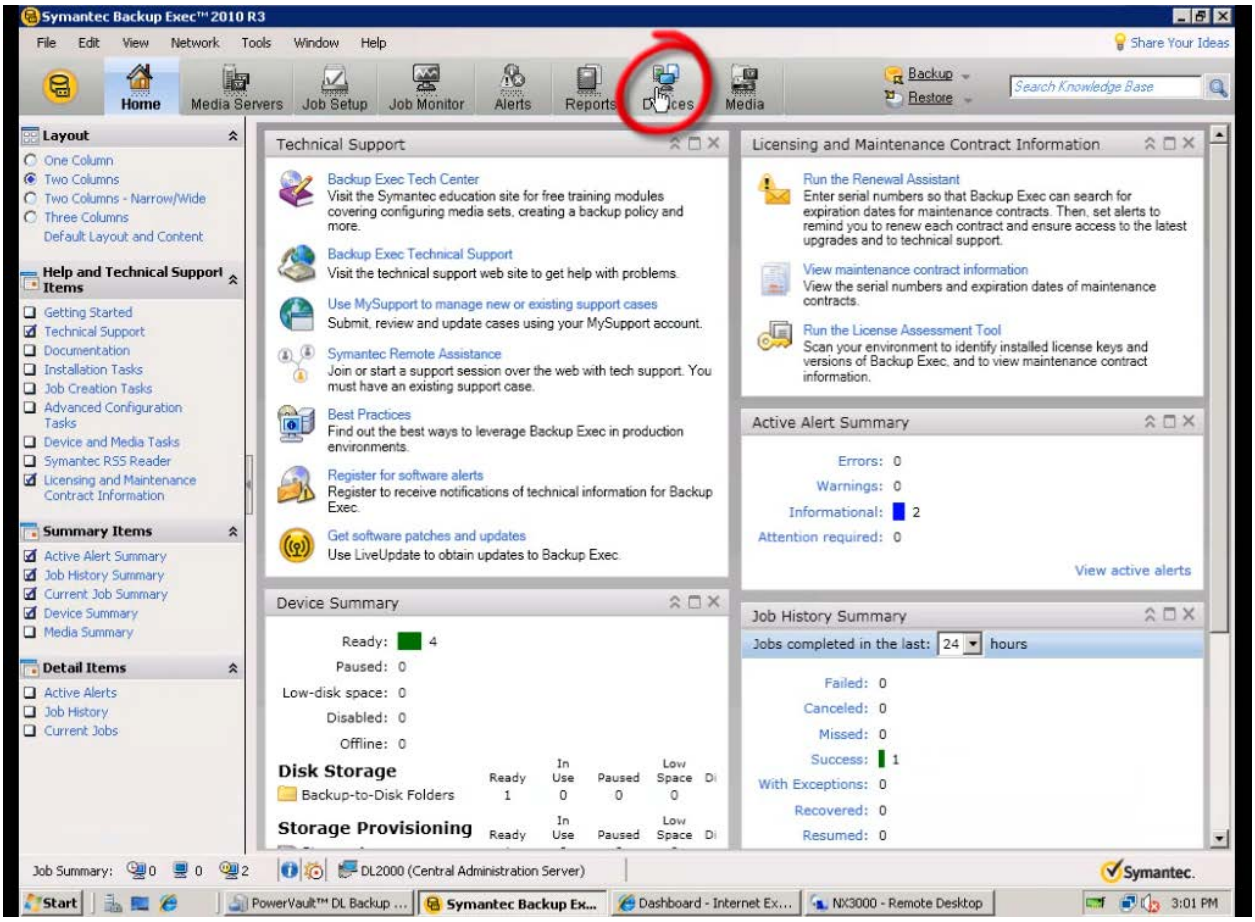


Enter the DR4000 login credentials. The DR4000 container is now mounted to your backup server.

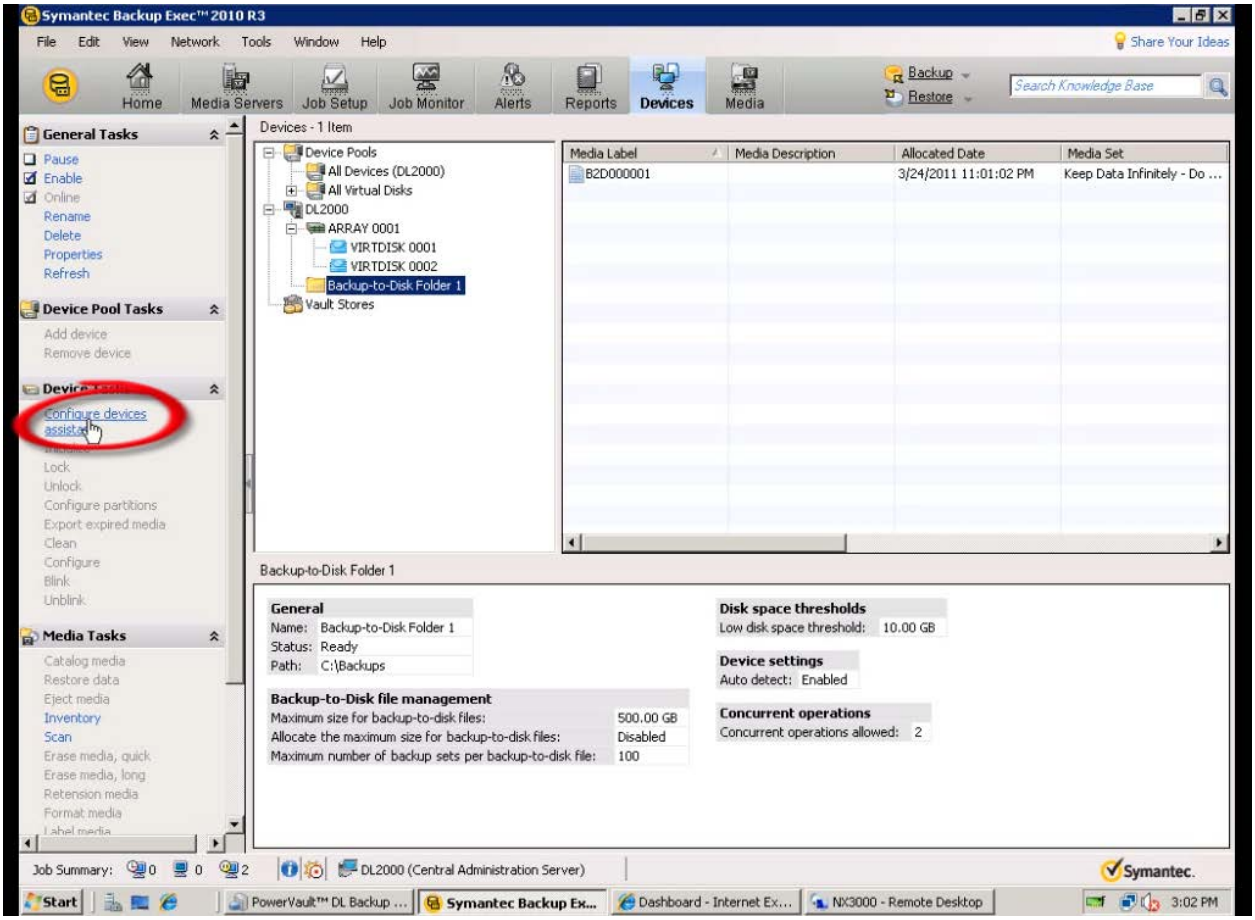


Backup Exec setup

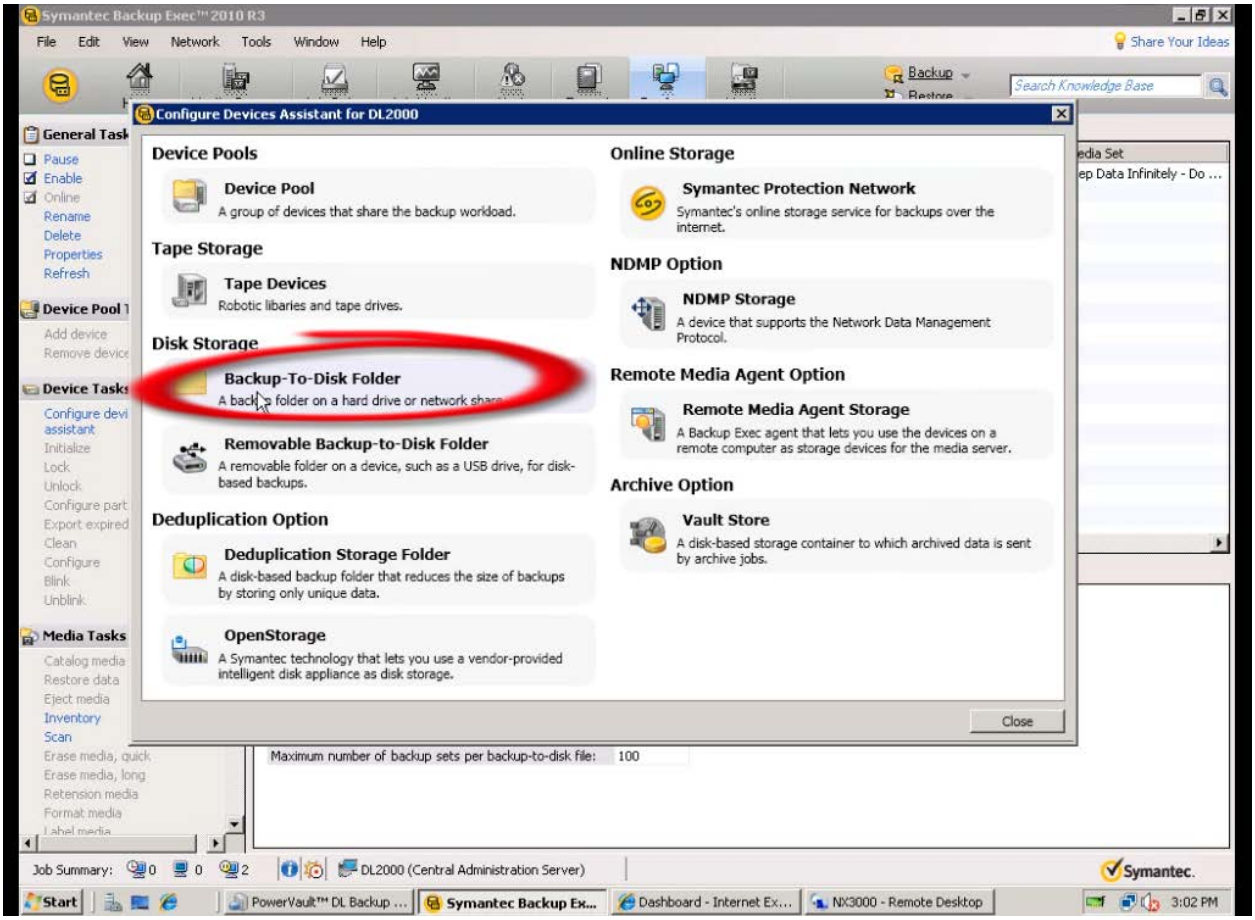
Open your Backup Exec console and click on the “Devices” tab



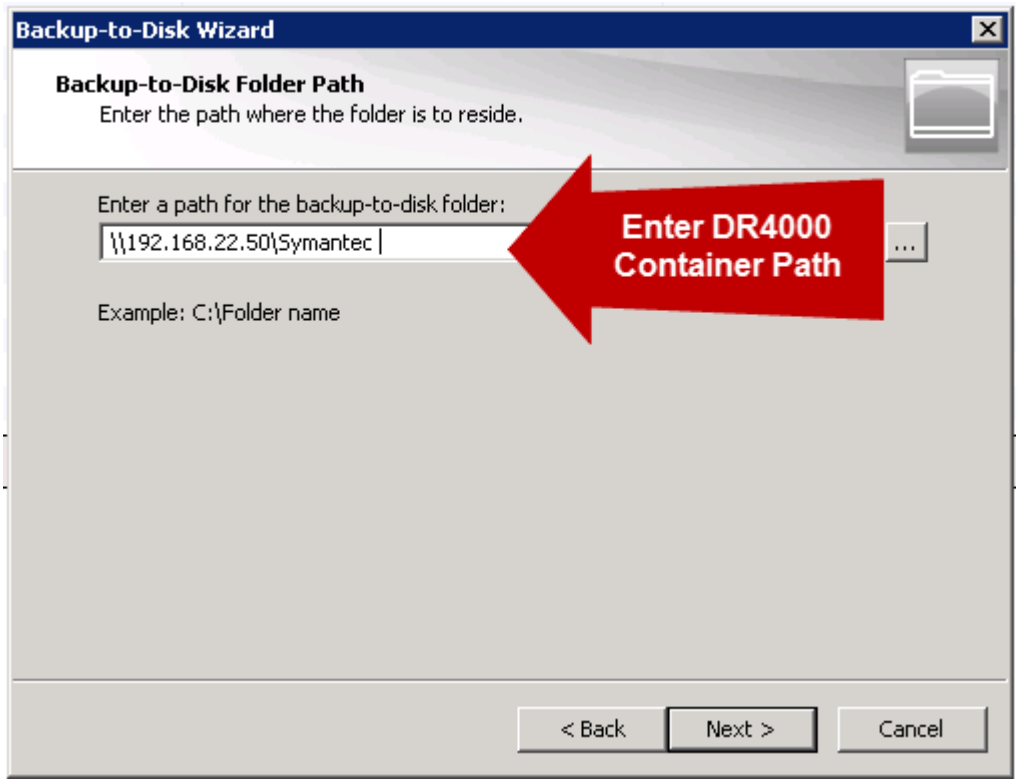
Next, click on “Configure device assistant”



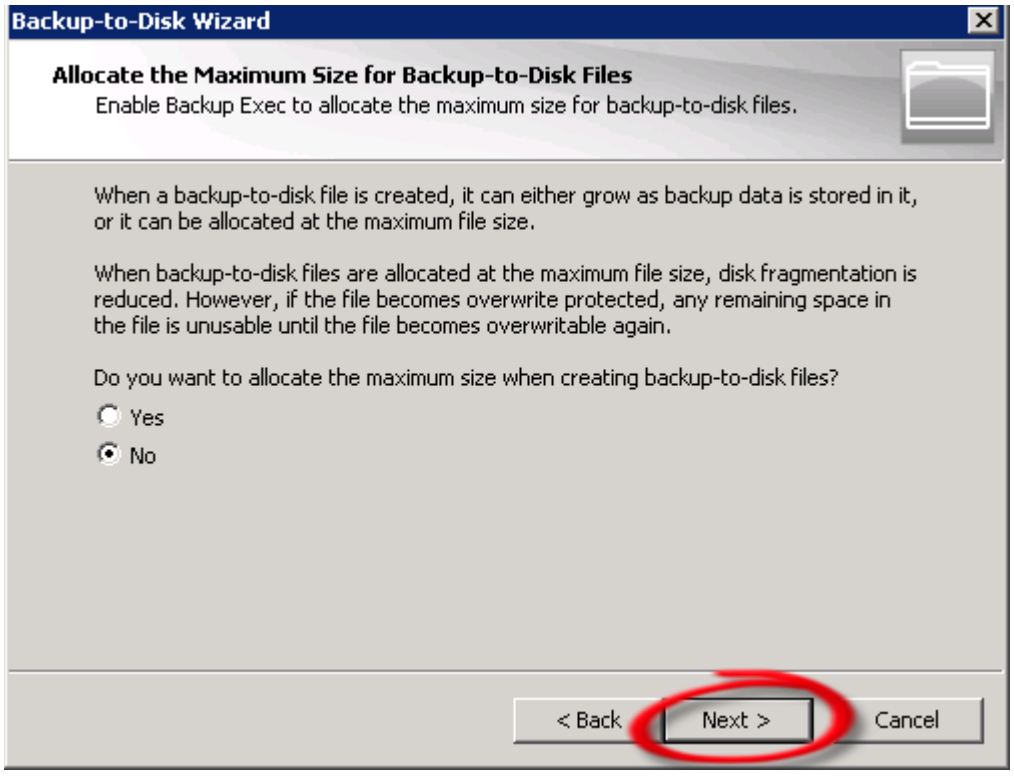
Add DR4000 as “Backup-to-disk” folder



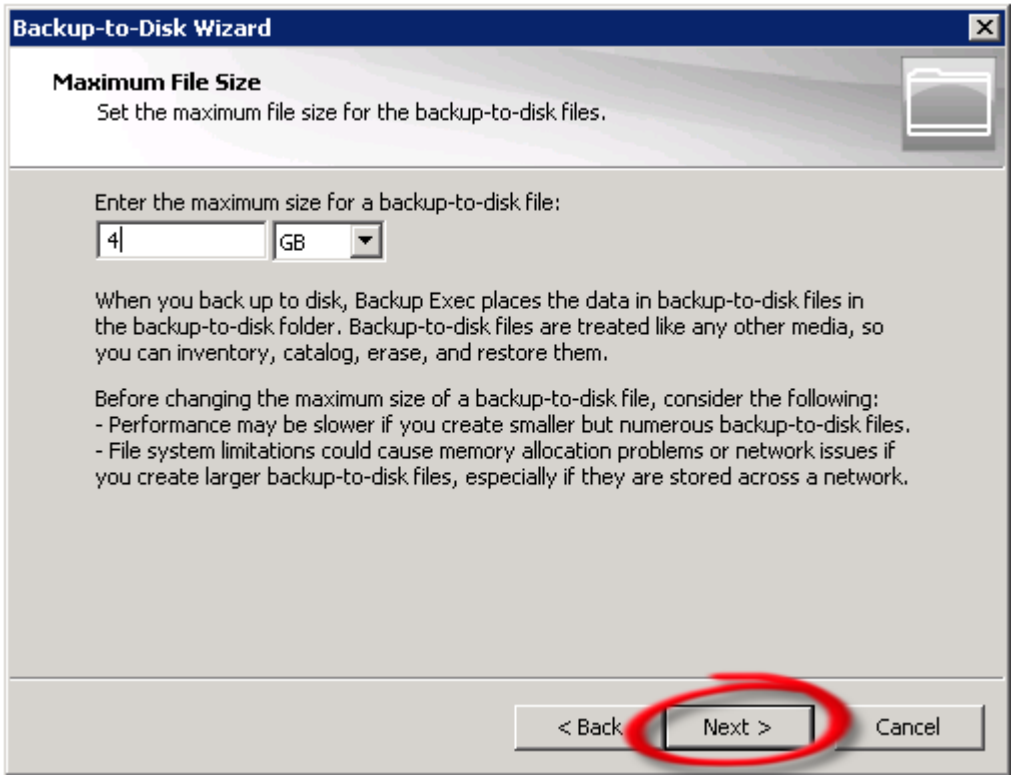
Enter the DR4000 container address



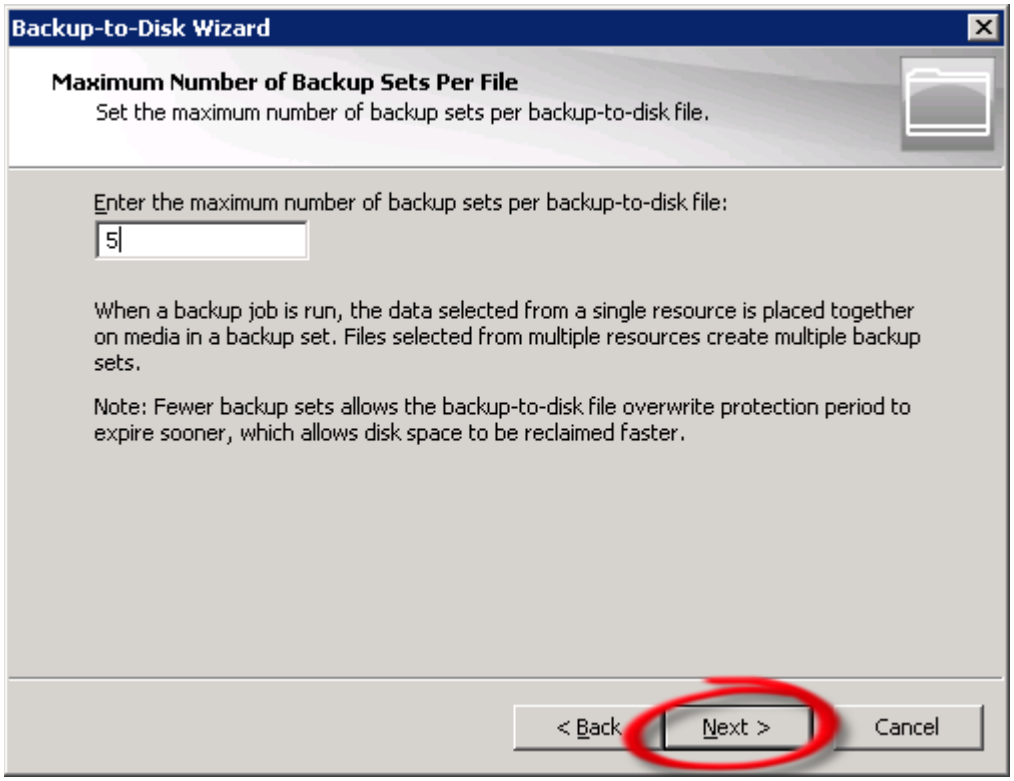
Select “No” when asked “Do you want to allocate the maximum backup size when creating backup-to-disk files?”



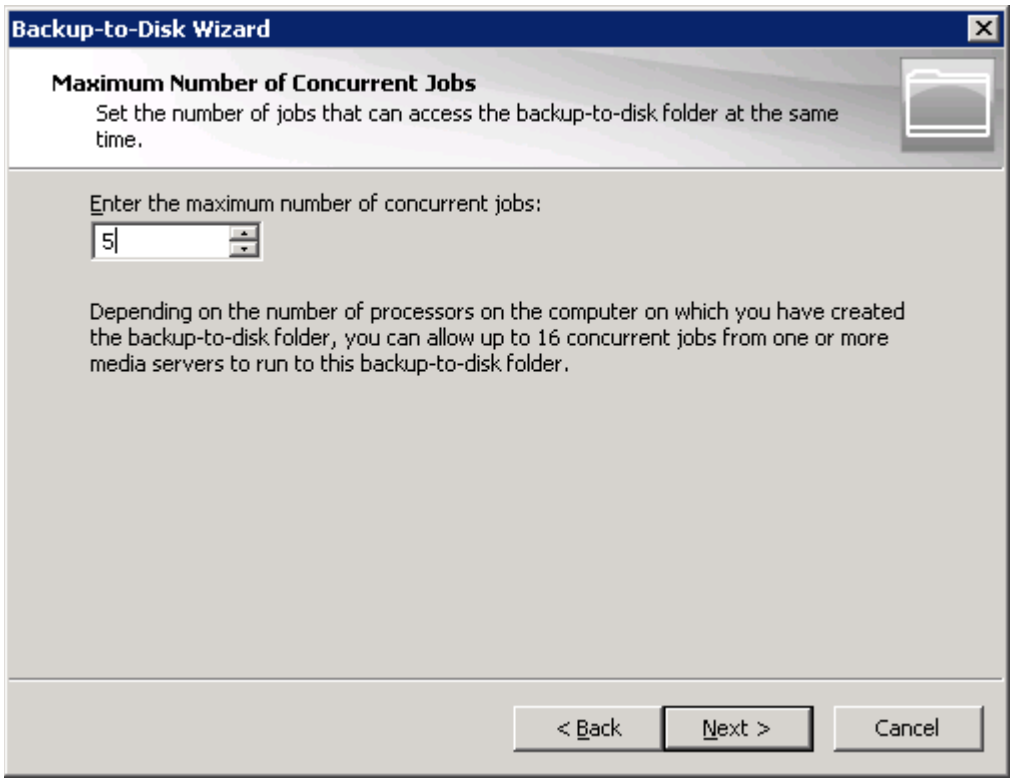
The backup-to-disk file size recommended is 4GB to 1TB depending on how big the average backup is. Consult the Symantec Backup Exec Users Guide for more details if necessary.



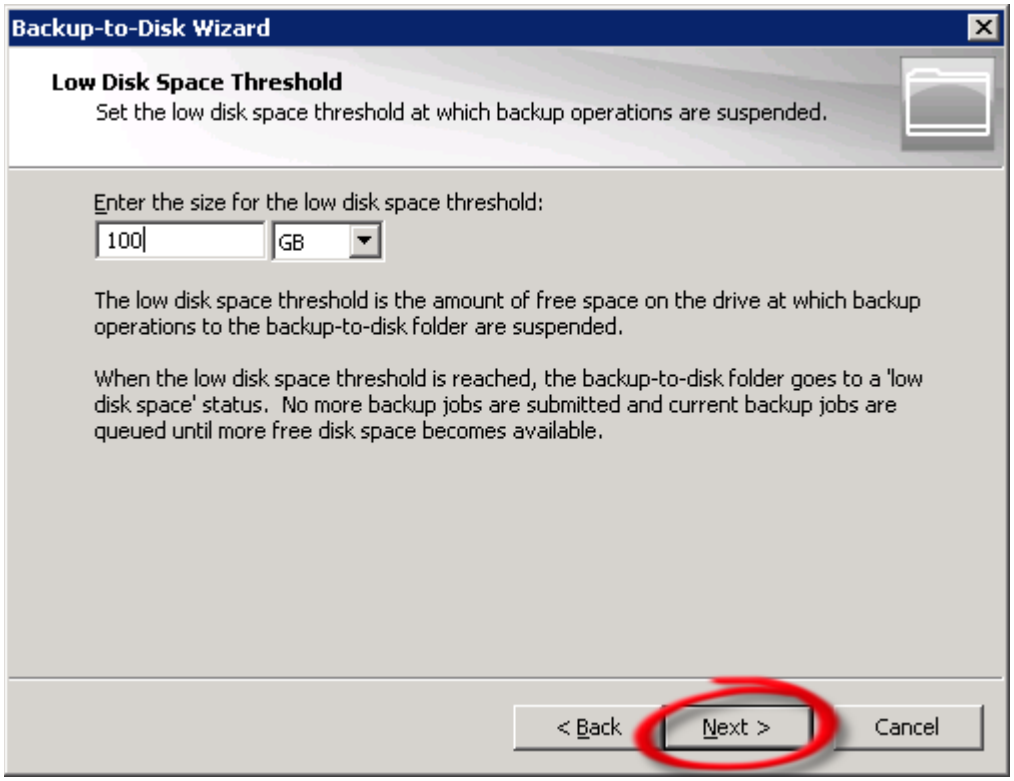
Enter “5” as the number of backup sets per backup-to-disk file.



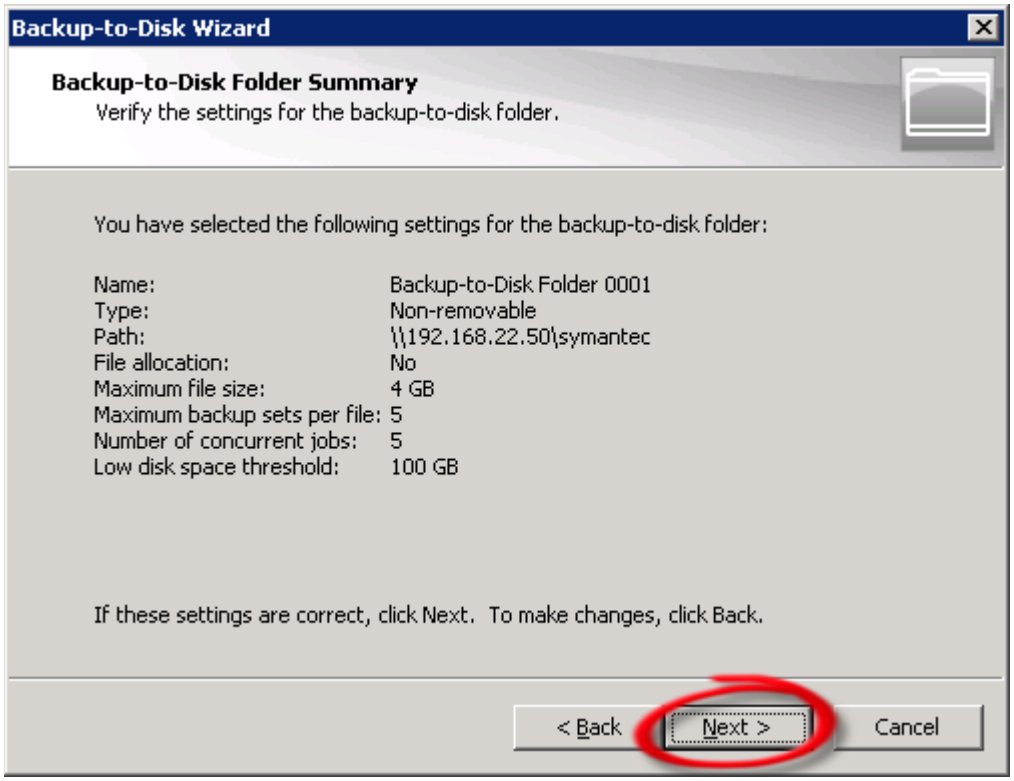
The maximum number of concurrent jobs depends if the DR4000 was deployed with CIFS or NFS protocol. In the example, we used CIFS so 5 concurrent jobs are recommended. If deployed with NFS then 8 concurrent jobs is recommended.



The Low Disk Space Threshold should be set at 100GB.

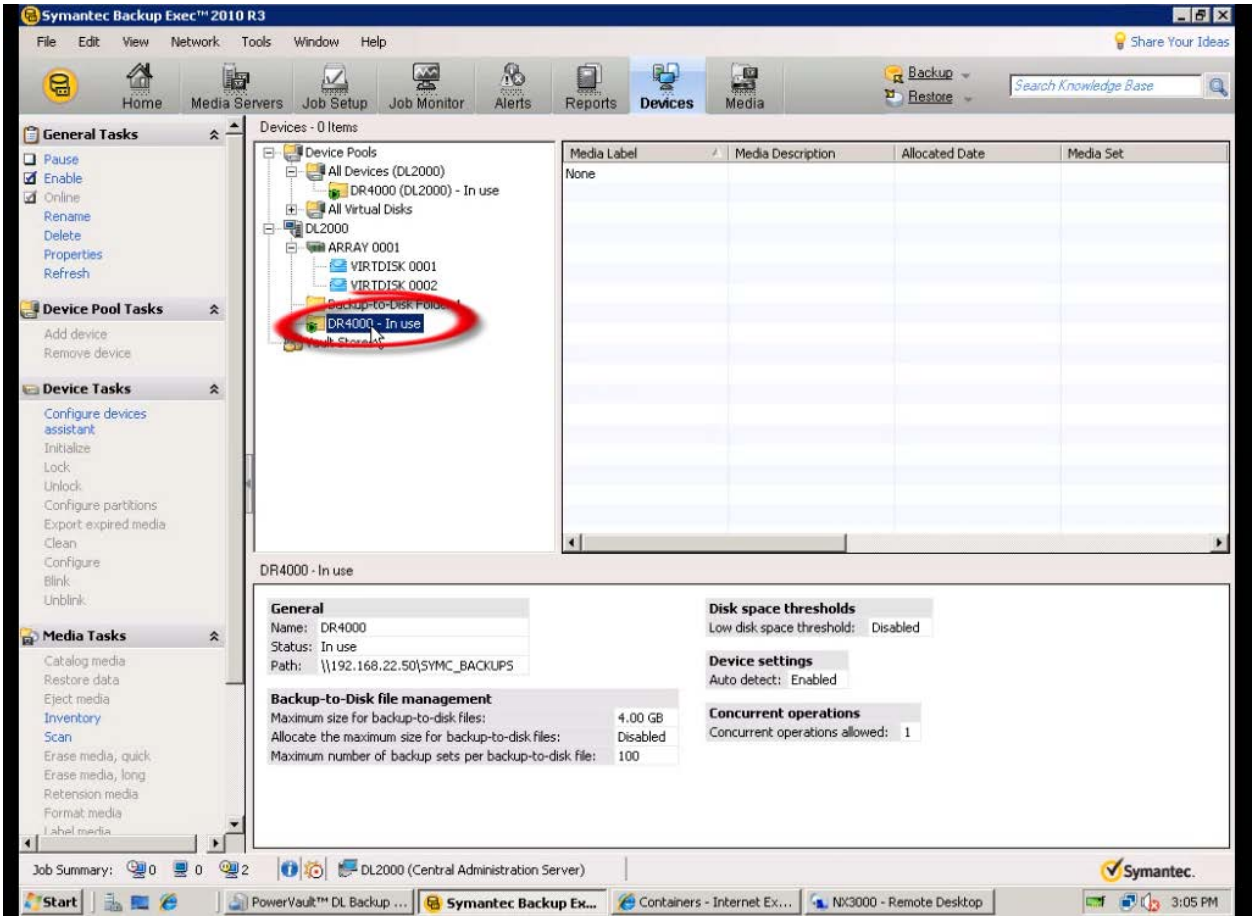


Confirm Settings are correct.



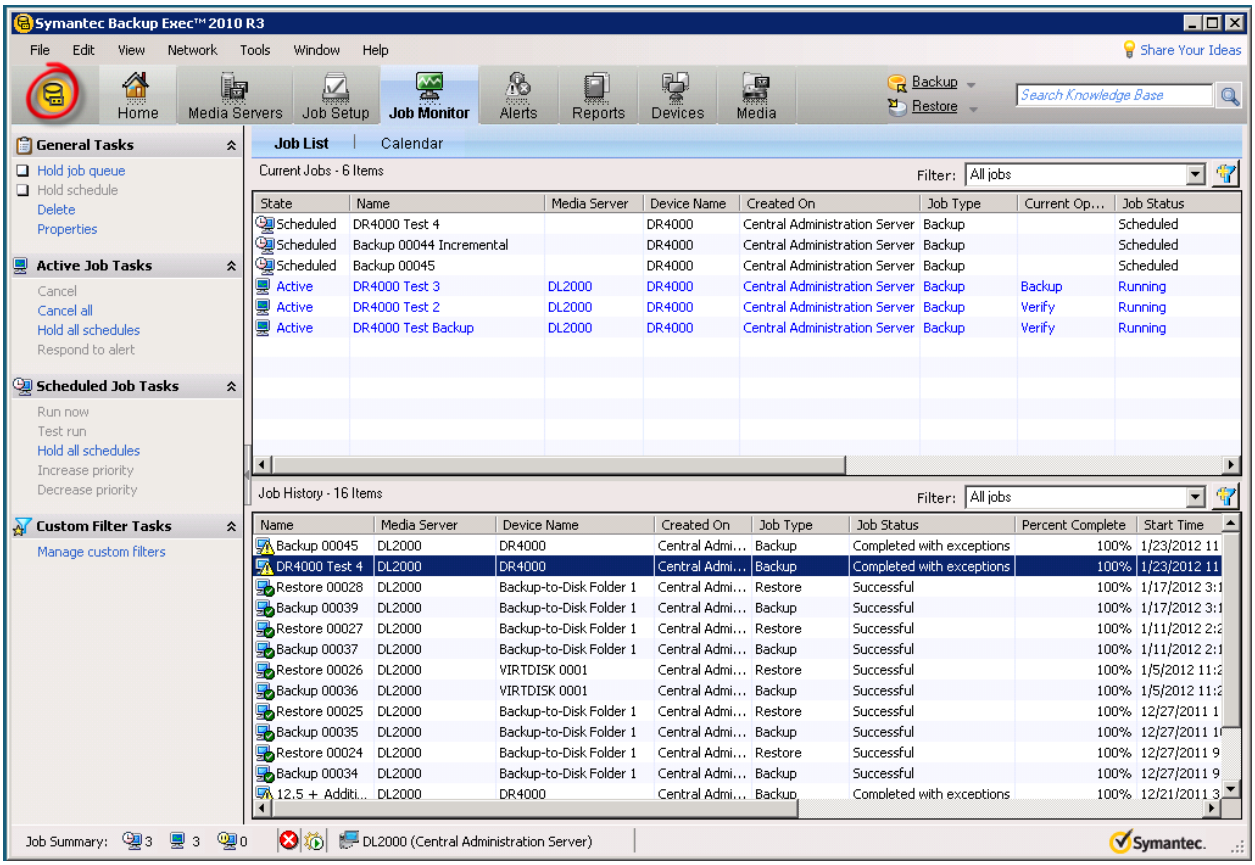
Click Finish.

Verify that DR4000 has shown up as a folder attached to your backup server.

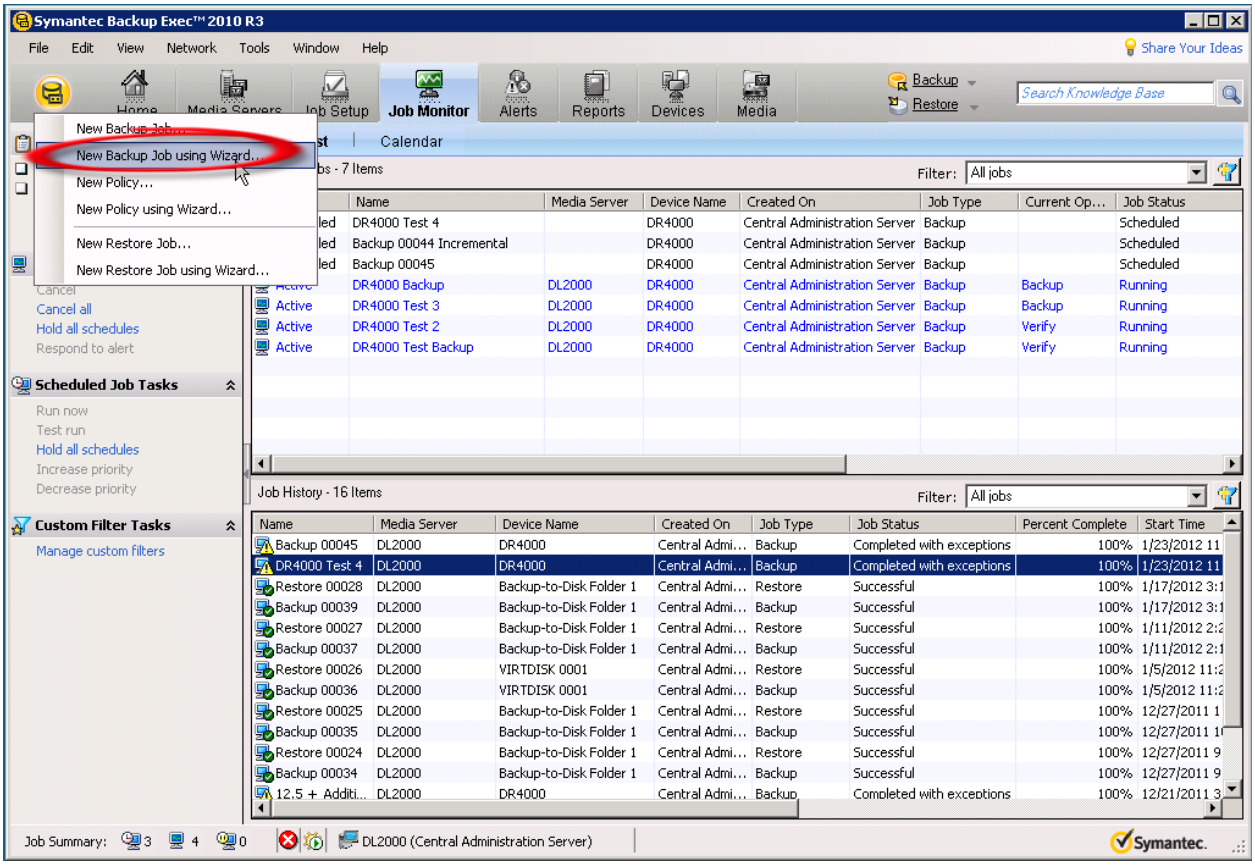


Create a new backup job with DR4000 as the target

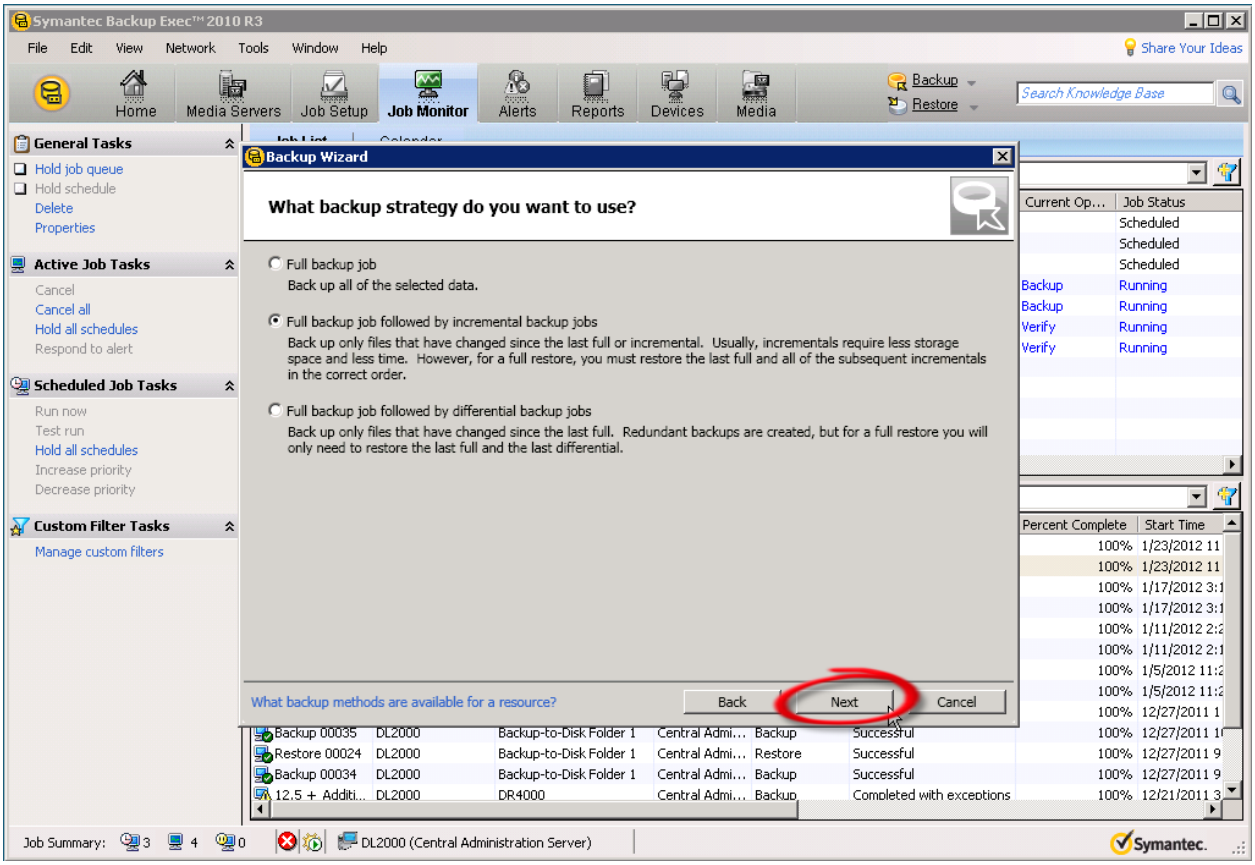
Select the yellow icon at the top left hand corner of the Backup Exec menu



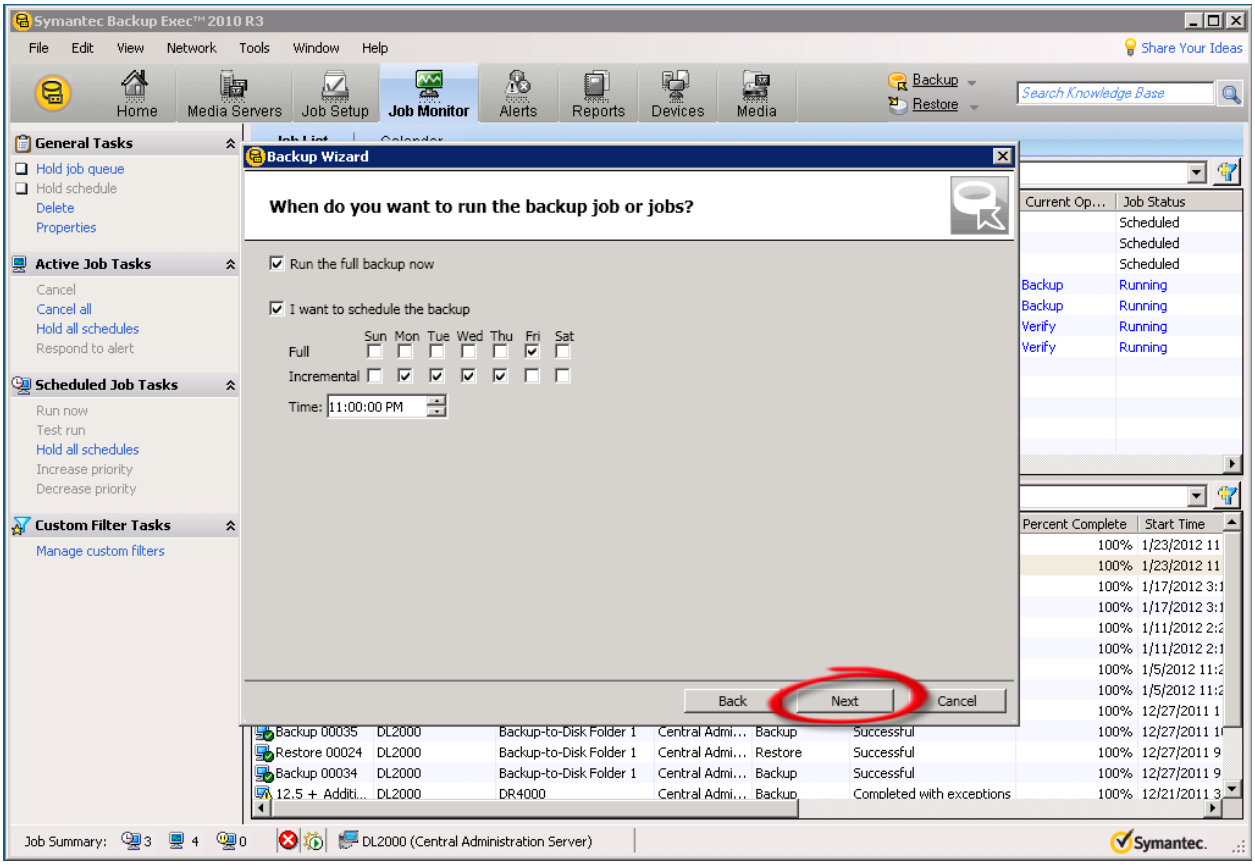
Create a new backup job using the Job Wizard



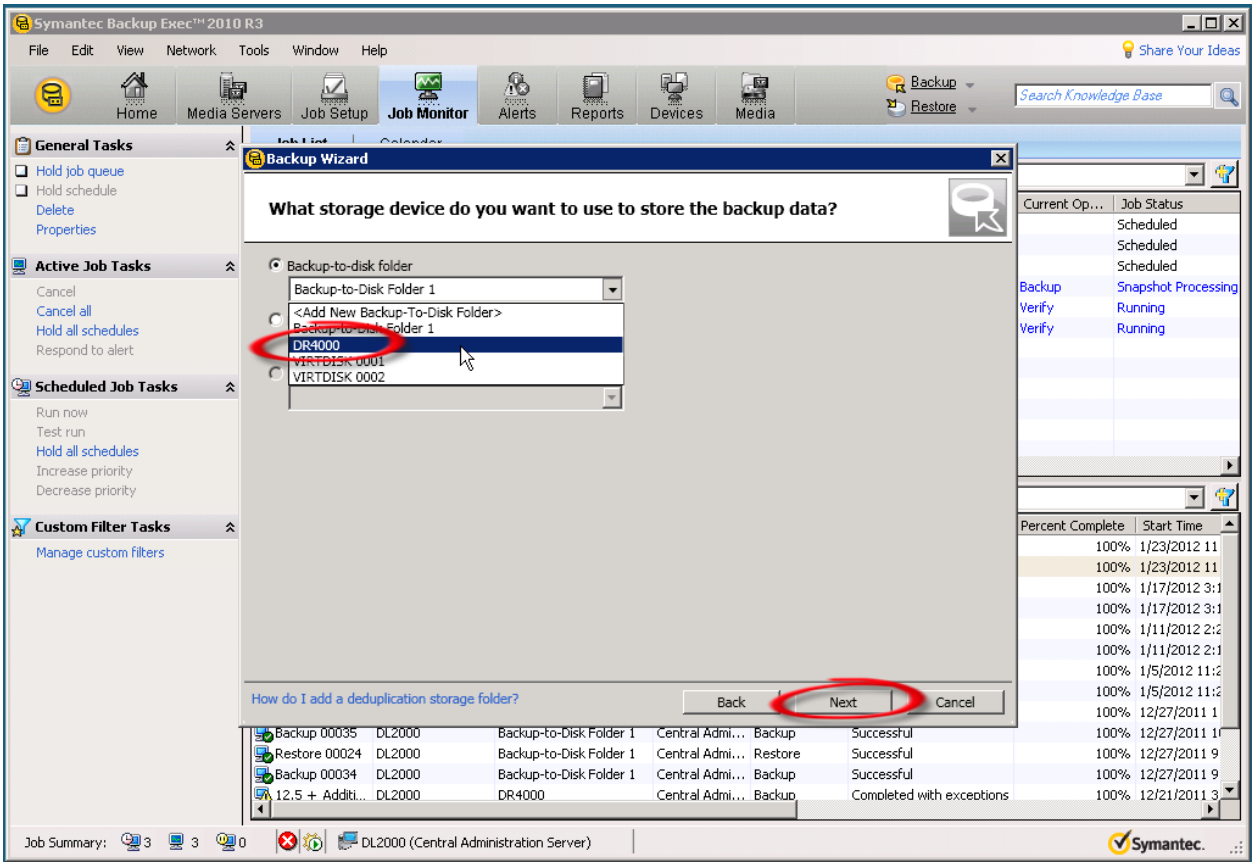
Define your backup strategy.



Define backup schedule.

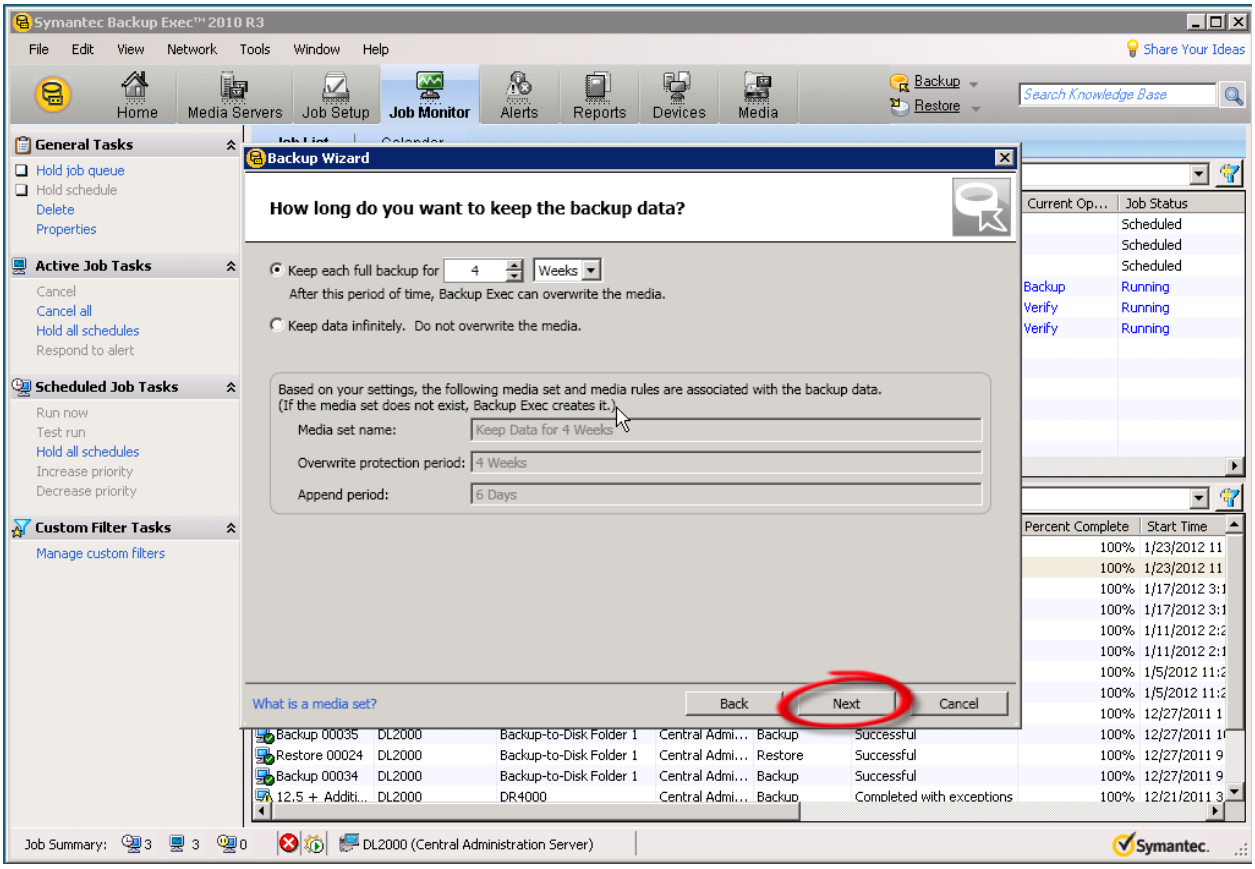


Select the DR4000 as your backup-to-disk folder.

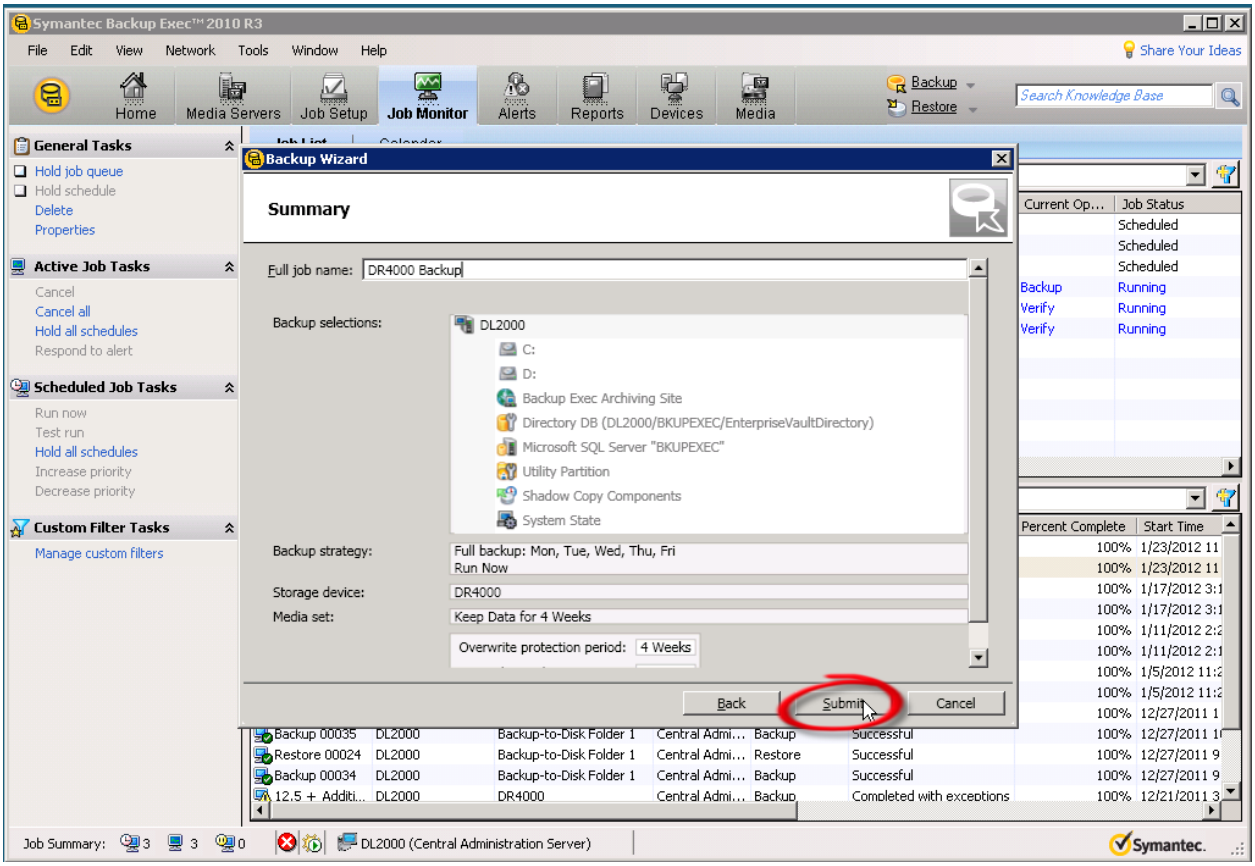


Define the retention period for the backup job.

Note: Dell's "15x" deduplication claim is for average 12 week retention with multiple data types. Ratios will vary depending on data type, frequency of backup and retention. Dedupe ratios will grow with longer retention periods.



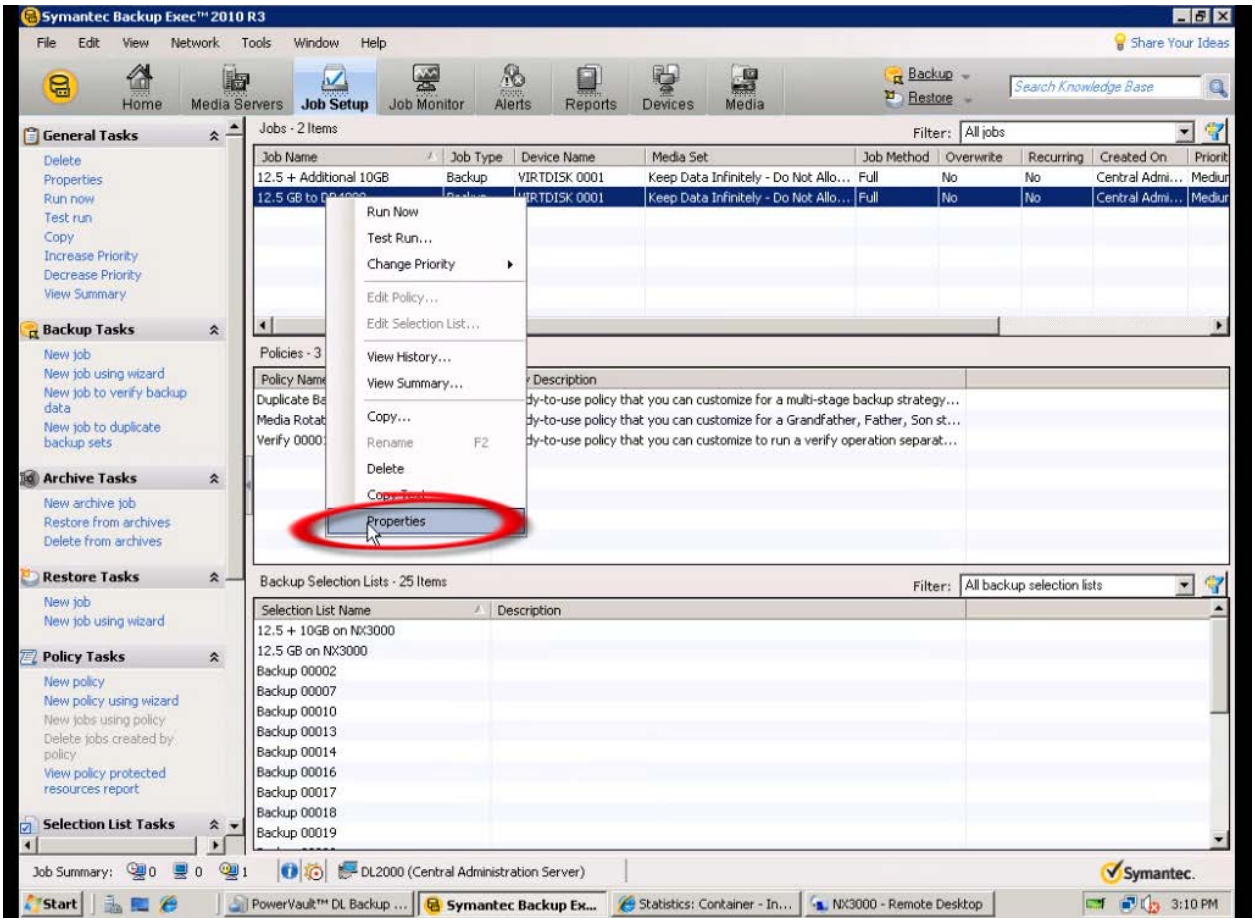
Confirm backup settings are correct and click “Submit”.



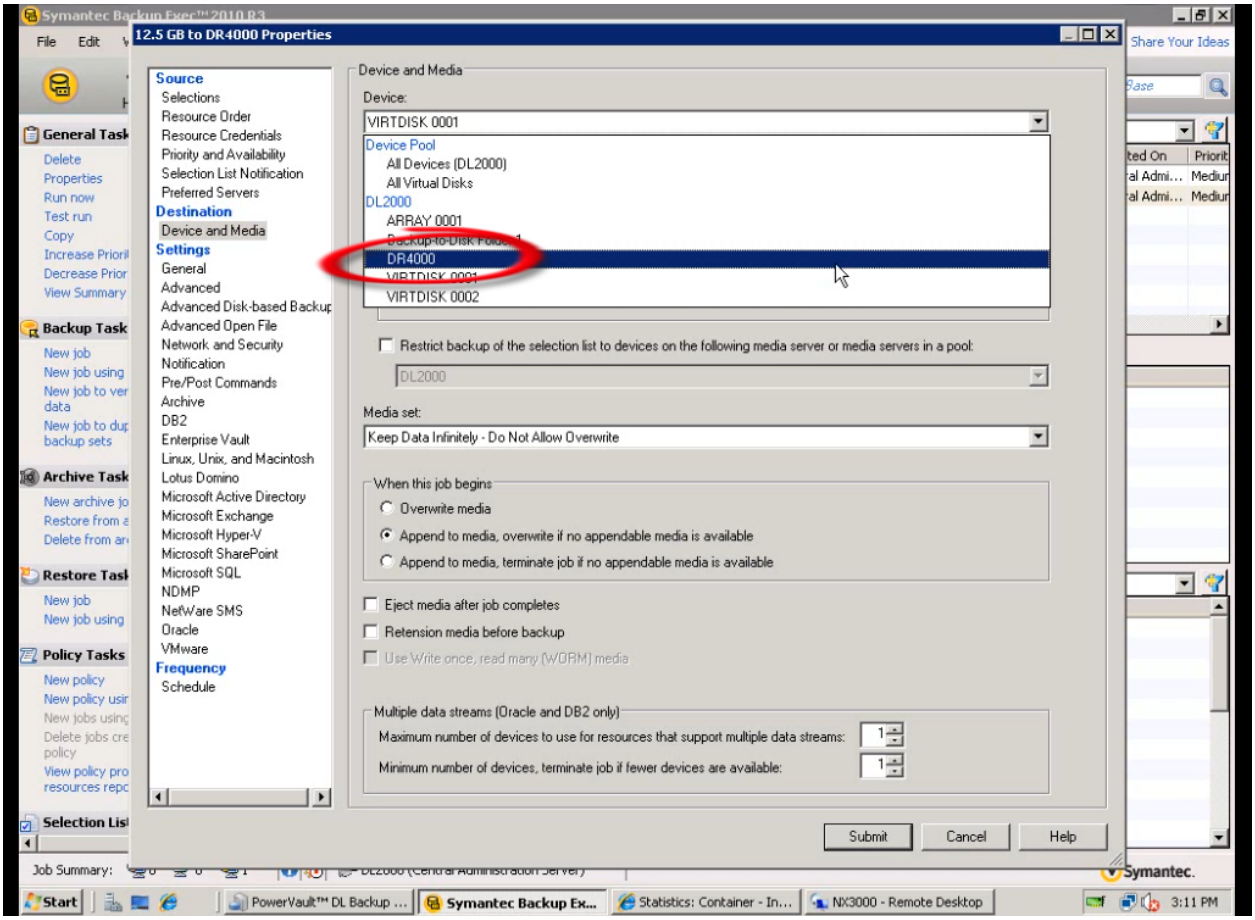
Edit a backup Job to DR4000 as the target

Click the “Job Setup” icon on the top toolbar.

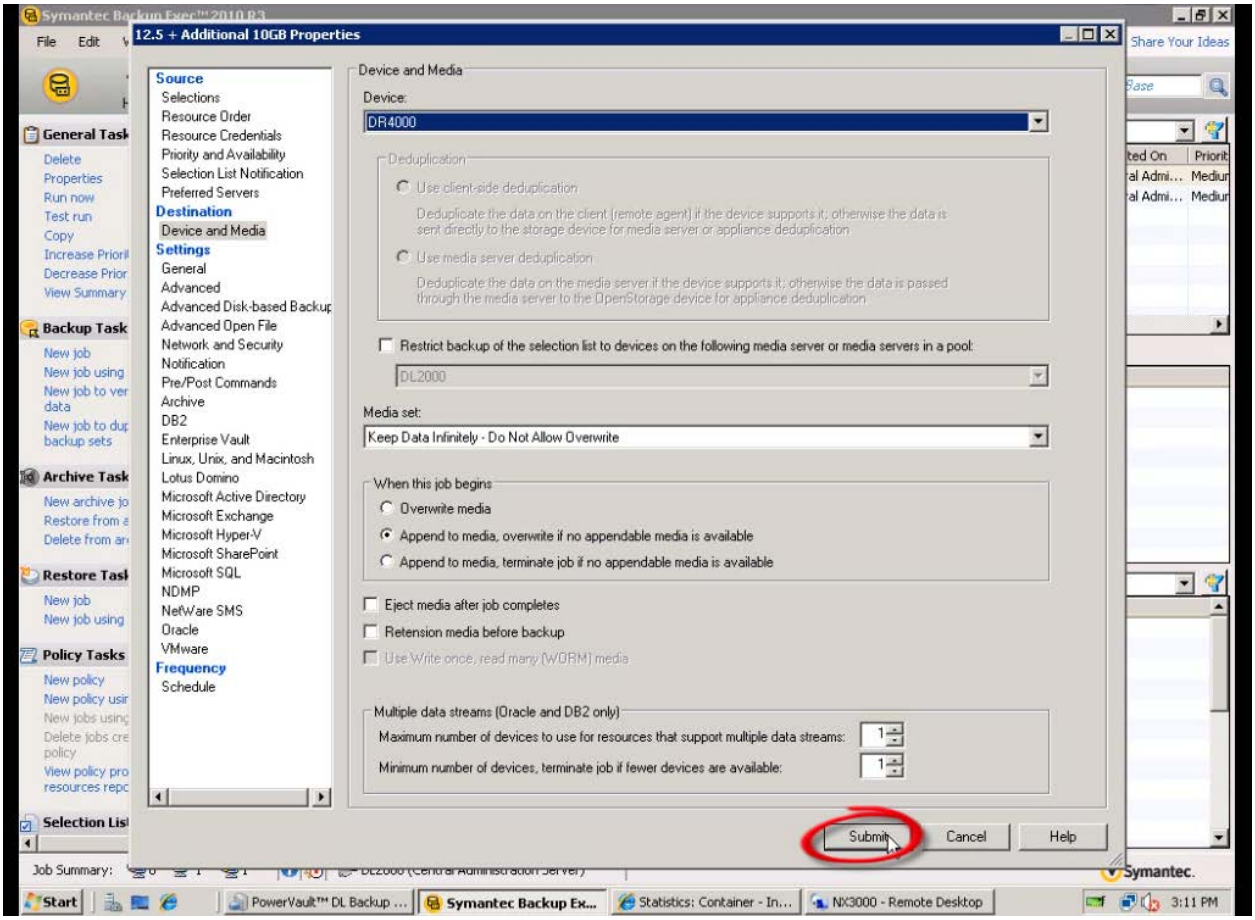
Next, right click on job and select “Properties”



Select the DR4000 as the Device



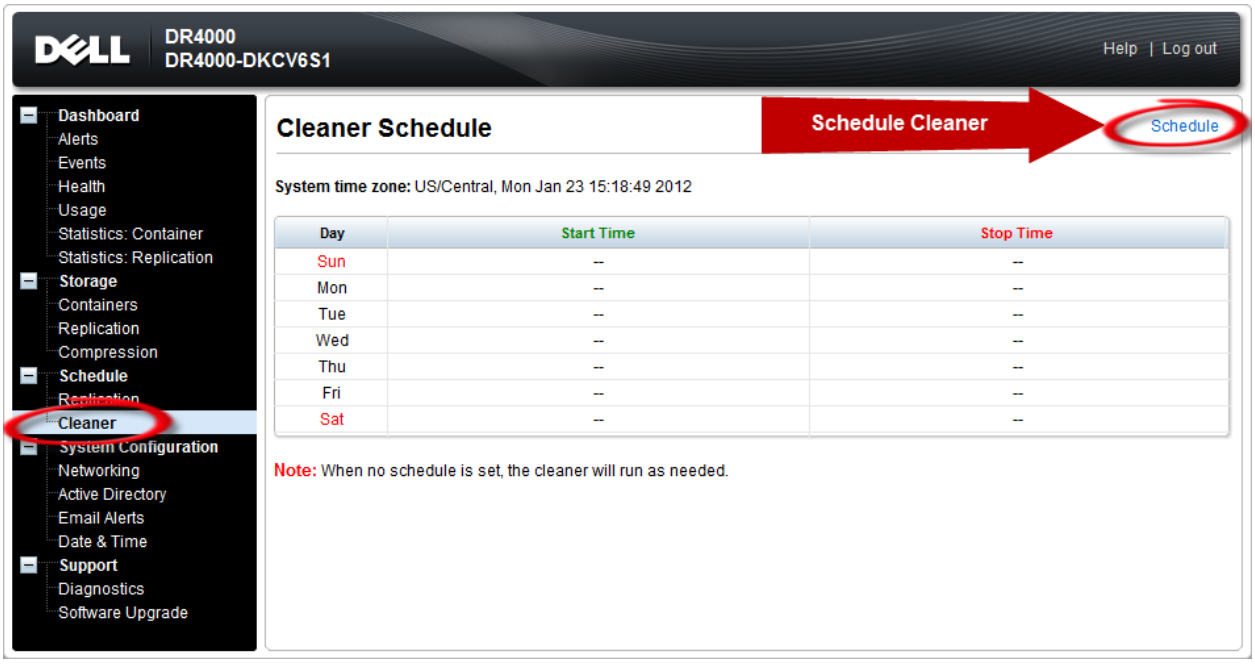
Click “Submit”



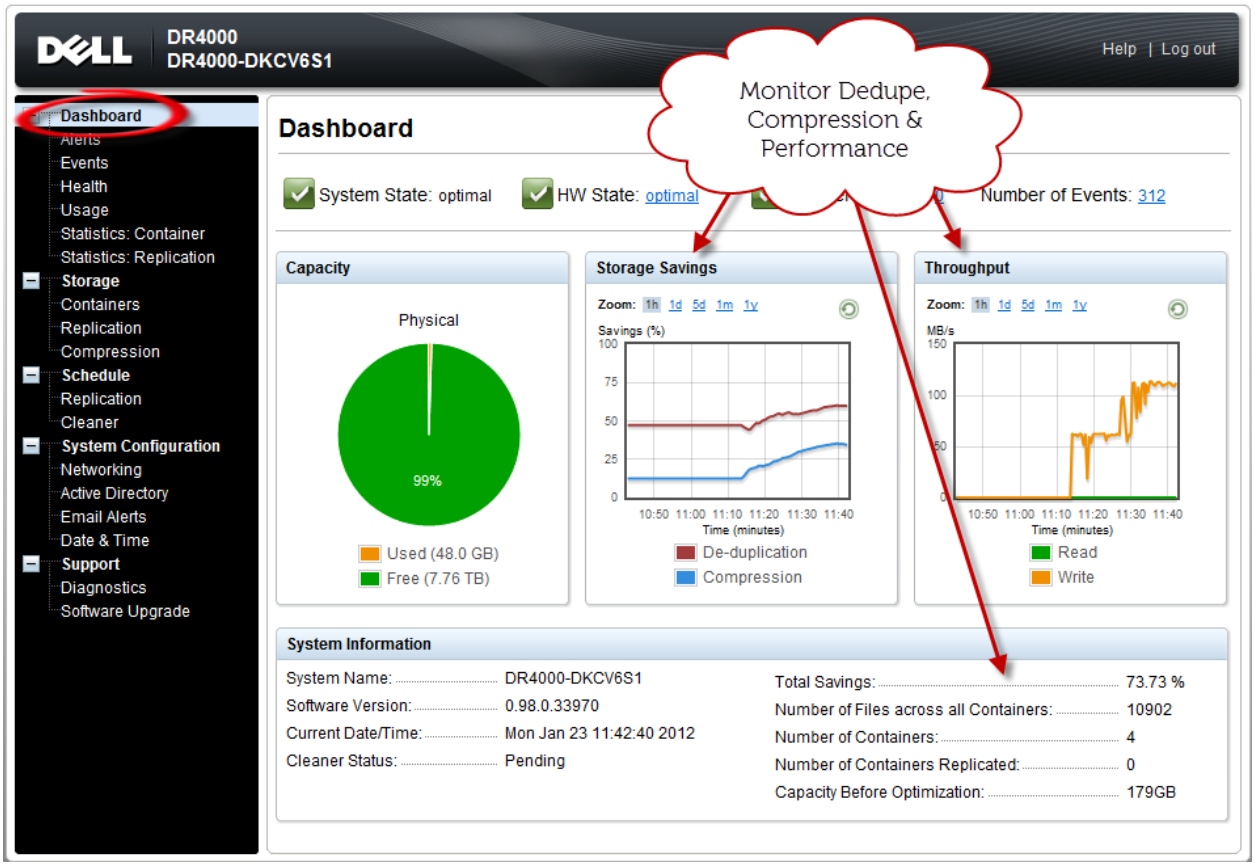
Setup DR4000 Cleaner

Once all the backup jobs are setup the DR4000 cleaner must be scheduled. The DR4000 cleaner should run at least 6 hours per week when backups are not taking place, generally after a backup job has completed.

Performing scheduled disk space reclamation operations are recommended as a method for recovering disk space from system containers in which files were deleted as a result of deduplication.



Monitoring Dedupe, Compression & Performance

After backup jobs have run the DR4000 will track Capacity, Storage Savings and Throughput on the DR4000 dashboard. This information is valuable in understanding the benefits the DR4000.

Note: Deduplication ratios increase over time, it is not uncommon to see a 2-4x reduction (25-50% total savings) on the initial backup. As additional full backup jobs complete the ratios will increase. As mentioned before backup jobs with 12 week retention will average a 15x ratio in most cases.