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."

	GRATED DELL REMOTE ESS CONTROLLER 6 - ENTERPRISE	
Login		?
Type in Username and Pass	word, and then click Submit.	
Username:	Password:	
root	calvin	
Domain:		
This iDRAC	→	
	Ca	Incel Submit

Next, launch the Virtual console.

	TED DELL REMOTE CONTROLLER 6 - ENTERPRI:	SE	Support About Logout
System Dell DR4000 root , Admin System	Properties Setup Pov System Summary System System Summary	ver Logs Alerts Console/Media n Details System Inventory	vFlash Remote File Share
iDRAC Settings Batteries Fans Intrusion	Server Health		
Power Supplies Removable Flash Media Temperatures Voltages Power Monitoring	Status Component Image: Component Batteries Image: Component Fans Image: Component Intrusion Image: Component Power Supplies		Virtual Console Preview Options: Settings
	Removable Flas Temperatures Voltages	h Media	Refresh
	Server Information Power State System Model System Revision	ON Dell DR4000	Quick Launch Tasks Power ON / OFF Power Cycle System (cold boot) Launch Virtual Console
	System Host Name Operating System Operating System Version	DR4000-DKCV6S1.asglab.roundrock CentOS release 5.4 (Final) Kernel 2.6.18-164.e	View System Event Log View IDRAC Log Update Firmware
	Service Tag Express Service Code BIOS Version Firmware Version	DKCV6S1 29529104401 1.9.0 1.80 (Build 17)	TOUCHOUS

Initializing the DR4000

Once the virtual console is open login to the system as user: "administrator" and password "StOr@ge!"



Set user defined networking preferences



View Summary of preferences and confirm that it is correct.

Set Static IP A	Set Static IP Address		
IP Address	: 10.10.86.108		
Network Mask	: 255.255.255.1	28	
Default Gateway	: 10.10.86.126		
DNS Suffi×	: idmdemo.local		
Primary DNS Server	: 10.10.86.101		
Secondary DNS Server	: 143.166.216.2	37	
Host Name	: DR4000-5		
Are the above settings correct	(yes∕no) ? _		

Log into the DR4000 GUI

Enter the user defined IP address into your browser. Login as "administrator" and use password "StOr@ge!"

DELL DR4000 DR4000-DK0	CV6S1	Heip
Login		Reset Password
	Please enter your password:	
	Username: administrator Password: Stor@ge!	
	Log in	

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

CActive Directory - Windows Internet Explorer			_ 8 ×
🚱 🕞 🗢 http://10.10.86.107/ad_add.cgi		💌 😽 🗶 🚬 Bing	P -
👷 Pavortes 🛛 😥 🔸 🍘 EDRM Enron Email Data Set	Clogin Streetory X		
	1000 1000-5	Help Los	out
Dashboard Alerts Events	Active Directory Configuration		Jain
Health Usage Studistics: Containe Statistics: Replicab	Domain Name (FODN):	Enter Active Direc	ctory Credentials
 Storage Camiarrara Replication Campression Schedule Replication Oarbage Collection System Configurate Metworking Active Directory 	ntic.10.20.101994(kg)1	Cancel Juin Domain	
Crites Netris Date & Time Support Diagnostics Software Upgrade			

Create & Mount the Container

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

DELL DR4000 DR4000-D	KCV6S1				Help	Log out
Dashboard -Alerts Events Health	Containers Number of Containers: 3	Create a Container		create Edi	t Delete Displa Container Path:	ay Statistics /containers
Usage	Containers	Files	NFS	CIFS	Replication	Select
Statistics: Container Statistics: Replication	backup	10846	~	~	Disabled	0
- Storage	NFS-Backup-Folder	0	~		Disabled	0
Replication	Symantec Backups	12	~	~	Disabled	0
Compression Schedule Replication Cleaner System Configuration Networking Active Directory Email Alerts Date & Time Support Diagnostics Software Upgrade						

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."

DELL DR4000 DR4000-DKCV6S1	Help Log out
Create New Container:	Create Edit Delete Display Statistics
Choose the type of container to create (NFS and/or CIFS) and add clients that Container Name [*] : Max 32 characters	need access. s no / # or @ Name the Container
NFS NFS access path: 192.168.22.50:/containers Use NFS to backup UNIX or LINUX clients. Enable NFS Select CIFS or NFS	CIFS CIFS share path: \\192.168.22.50\ Use CIFS to backup MS Windows clients.
Client Access: Open Access (all clients have access) Add client (IP or FQDN Hostname): Add	Client Access: Open Access (all clients have access) Add clients (IP or FQDN Hostname) Add
Clients: Remove	Remove
NFS Options: rw insecure ro	
Map root to: -select-	
	Cancel Create a New Container

Confirm the container was added

	KCV6S1				Help	Log out
Dashboard Alerts Events Health	Containers		С	reate Edi	t Delete Displa	y Statistics
Usage Statistics: Container Statistics: Replication	Successfully added container 'Symantec'	Co	nfirm Cor	ntainer w	vas added	
Containers	Number of Containers: 4				Container Path:	/containers
Replication	Containers	Files	NFS	CIFS	Replication	Select
Compression	backup	10846	~	~	Disabled	0
Replication	NES Backup Folder	0			Disabled	
Cleaner	Oursester	0	·		Disabled	
System Configuration	Symantec	0		•	Disabled	0
Networking	Symantec_Backups	12	~	~	Disabled	\odot
Active Directory Email Alerts Date & Time Support Diagnostics Software Upgrade						

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

DER4000 DR4000-DKCV6S1	
Dashboard Containers Edit Container: Symantec	Create Edit Delete Display Statistics
NFS NFS access path: 192.168.22.50:/containers/Symantec Use NFS to backup UNIX or LINUX clients. Enable NFS Client Access: Open Access (all clients have access) Add client (IP or FQDN Hostname): Add Clients: Remove	 CIES CIFS share path: \\192.168.22.50\Symantec Use CIFS to backup MS Windows clients. ☑ Enable CIFS Client Access: ☑ Open Access (all clients have access)
NFS Options: rw insecure ro Map root to: -select-	
	Cancel Modify this 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.

🍕 Map	Network Drive
What ne	twork folder would you like to map?
Specify t	he drive letter for the connection and the folder that you want to connect to:
Drive:	S:
Folder:	Light L
	Example: \\server\share
	🔽 Reconnect at logon
	Connect using a <u>different user name</u> .
	Connect to a Web site that you can use to store your documents and pictures.
	Finish Cano

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

🥞 Map Networ	'k Drive					×
Map Network [Drive		×			
Attempting to	o connect to) \\192.168.22.50\sym	antec			
Drive:	Si	Connect to 192.168	.22.50	? 🗙	to:	
Folder:	\\192.168	Connecting to 192.16	68.22.50		Browse	
	Example: ' Recon Connect i	User name: Password:	Administrator Administrator Remember my pass	sword	Enter D Crede	R4000 ntials
	<u>Connect t</u>		ОК	Cancel	<u>ttures</u> .	
					Finish	Cancel

Backup Exec setup

ntec Backup Exec™2010 R3 - 6 × File Edit View Network Tools Window Help 💡 Share Your Idea 1 8 D^Cce a Backup -胸 1 e Q Search Knowledge Base Bestore -Media Servers Job Setup Job Monitor Home Alerts Reports Media ADX -Layout \$ Technical Support Licensing and Maintenance Contract Information C One Column Run the Renewal Assistant Two Columns Backup Exec Tech Center X Visit the Symantec education site for free training modules covering configuring media sets, creating a backup policy and more. Enter serial numbers so that Backup Exec can search for expiration dates for maintenance contracts. Then, set alerts to remind you to renew each contract and ensure access to the latest upgrades and to technical support. O Two Columns -O Three Columns Two Columns - Narrow/Wide Default Layout and Content Backup Exec Technical Support Backup Exec Technical Support Visit the technical support web site to get help with problems. Help and Technical Support & intenance contract infi View the serial numbers and expiration dates of maintenance Use MySupport to manage new or existing support ca contracts Use MySupport to manage new or existing support success Submit, review and update cases using your MySupport account. Getting Started d Technical Support 0 Run the License Assessment Tool Scan your environment to identify installed license keys and versions of Backup Exec, and to view maintenance contract Documentation
Installation Tasks (1) Symantec Remote Assistance Join or start a support session over the web with tech support. You must have an existing support case. information. Job Creation Tasks
 Advanced Configuration Tasks **Best Practices O** Active Alert Summary $\approx \Box \times$ Find out the best ways to leverage Backup Exec in production Device and Media Tasks environments. Symantec RSS Reader
 Licensing and Maintenance Contract Information Errors: 0 Register for software alerts Warnings: 0 2h Register to receive notifications of technical information for Backup Exec. Informational: Summary Items \$ Get software patches and updates Attention required: 0 (m) Active Alert Summary Use LiveUpdate to obtain updates to Backup Exec View active alerts Job History Summary Current Job Summary × D × Device Summary Device Summary 2 D X Job History Summary Media Summary Ready: 4 Jobs completed in the last: 24 - hours Detail Items * Paused: 0 Failed: 0 Active Alerts Low-disk space: 0 Canceled: 0 Job History Current Jobs Disabled: 0 Missed: 0 Offline: 0 Success: 1 Low In Disk Storage Paused Space Di Ready Use With Exceptions: 0 🦲 Backup-to-Disk Folders 0 0 0 Recovered: 0 Storage Provisioning Ready In Use Low Paused Space Di Resumed: 0 Job Summary: 🧐 0 👮 0 🥮 2 0 0 DL2000 (Central Administration Server) Symantec. 🞝 Start 🛛 🚠 📰 🏉 🔄 🔄 PowerVault[™] DL Backup ... 😼 Symantec Backup Ex... 🧭 Dashboard - Internet Ex... 🔩 NX3000 - Remote Desktop 📼 🗊 🍙 3:01 PM

Open your Backup Exec console and click on the "Devices" tab

Next, click on "Configure device assistant"

leading Symantec Backup Exec™20	110 R3				_ # ×
File Edit View Network	Tools Window Help				🗑 Share Your Ideas
Home Media	a Servers Job Setup Job Monitor Alerts	Reports Devices	Media	Restore	ih Knowledge Base 🔍 🔍
🗍 General Tasks 🛛 🛠	Devices - 1 Item				_
Pause	E Device Pools	Media Label	A Media Description	Allocated Date	Media Set
Chable C	All Virtual Disks All Virtual Disks	B2D00001		3/24/2011 11:01:02 PM	Keep Data Infinitely - Do
Lock Unlock Configure parbitions Export expired media Clean Configure Blink Unblink	Backup-to-Disk Folder 1	<[Disk space thresholds		2
🔐 Media Tasks 🔗	Name: Backup-to-Disk Folder 1		Low disk space threshold:	10.00 GB	
Catalog media Restore data	Status: Ready Path: C:\Backups		Device settings Auto detect: Enabled		
Eject media Inventory Scan Erase media, quick Erase media, long Retension media Formát media	Backup-to-Disk file management Maximum size for backup-to-disk files: Allocate the maximum size for backup-to-disk file Maximum number of backup sets per backup-to-	500.00 GB is: Disabled disk file: 100	Concurrent operations Concurrent operations allo	s wwed: 2	
I abel meria	2 DI 2000 (Central Administration S	erver)			Sumpeter
Sousannary, go go y			I.		Symantec.
🌠 Start 🛛 🚠 🧱 🏉	PowerVault [™] DL Backup G Symantec Back	up Ex Cashboard	d - Internet Ex 🔁 NX300	0 - Remote Desktop	🖼 💽 🖓 3:02 PM

Add DR4000 as "Backup-to-disk" folder



Enter the DR4000 container address

Backup-to-Disk Wizard		×
Backup-to-Disk Folder Path Enter the path where the folder is to reside.		
Enter a path for the backup-to-disk folder: \\192.168.22.50\Symantec	Enter DR4000 Container Path	
Example: C:\Folder name		
<	Back Next >	Cancel

Select "No" when asked "Do you want to allocate the maximum backup size when creating backup-todisk files?"

Backup-to-Disk Wizard 🗙
Allocate the Maximum Size for Backup-to-Disk Files Enable Backup Exec to allocate the maximum size for backup-to-disk files.
When a backup-to-disk file is created, it can either grow as backup data is stored in it, or it can be allocated at the maximum file size.
When backup-to-disk files are allocated at the maximum file size, disk fragmentation is reduced. However, if the file becomes overwrite protected, any remaining space in the file is unusable until the file becomes overwritable again.
Do you want to allocate the maximum size when creating backup-to-disk files?
⊙ No
< Back Next > Cancel

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.

Backup-to-Disk Wizard 🗙
Maximum File Size Set the maximum file size for the backup-to-disk files.
Enter the maximum size for a backup-to-disk file:
When you back up to disk, Backup Exec places the data in backup-to-disk files in the backup-to-disk folder. Backup-to-disk files are treated like any other media, so you can inventory, catalog, erase, and restore them.
Before changing the maximum size of a backup-to-disk file, consider the following: - Performance may be slower if you create smaller but numerous backup-to-disk files. - File system limitations could cause memory allocation problems or network issues if you create larger backup-to-disk files, especially if they are stored across a network.
< Back Next > Cancel

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

Backup-to-Disk Wizard 🗙
Maximum Number of Backup Sets Per File Set the maximum number of backup sets per backup-to-disk file.
Enter the maximum number of backup sets per backup-to-disk file: 5
When a backup job is run, the data selected from a single resource is placed together on media in a backup set. Files selected from multiple resources create multiple backup sets.
Note: Fewer backup sets allows the backup-to-disk file overwrite protection period to expire sooner, which allows disk space to be reclaimed faster.
< Back Next > Cancel

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.

Backup-to-Disk Wizard	×
Maximum Number of Concurrent Jobs Set the number of jobs that can access the backup-to-disk folder at the same time.	
Enter the maximum number of concurrent jobs:	
Depending on the number of processors on the computer on which you have created the backup-to-disk folder, you can allow up to 16 concurrent jobs from one or more media servers to run to this backup-to-disk folder.	
< <u>B</u> ack <u>N</u> ext > Cancel	

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

Backup-to-Disk Wizard
Low Disk Space Threshold Set the low disk space threshold at which backup operations are suspended.
Enter the size for the low disk space threshold:
The low disk space threshold is the amount of free space on the drive at which backup operations to the backup-to-disk folder are suspended.
When the low disk space threshold is reached, the backup-to-disk folder goes to a 'low disk space' status. No more backup jobs are submitted and current backup jobs are queued until more free disk space becomes available.

Confirm Settings are correct.

Backup-to-Disk Wizard	×
Backup-to-Disk Folder Summ Verify the settings for the bac	ckup-to-disk folder.
You have selected the following	ng settings for the backup-to-disk folder:
Name: Type: Path: File allocation: Maximum file size: Maximum backup sets per file: Number of concurrent jobs: Low disk space threshold:	Backup-to-Disk Folder 0001 Non-removable \\192.168.22.50\symantec No 4 GB 5 5 5 100 GB
If these settings are correct,	click Next.To make changes, click Back.
	< <u>B</u> ack Next > Cancel

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

Symantec Backup Exec [™] 2010	R3								
File Edit View Network	Tools Window	Help							Share Your Ideas
Home Media S	ervers Job Se	Job Monitor	Alerts Reports	Devices	Media	(국 <u>B</u> 전 E	lackup 🚽 lestore 🚽	Search Knowled	ge Base 🔍 🔍
📋 General Tasks 🛛 🖈	Job List	Calendar							
Hold job queue	Current Jobs - 6	6 Items				-	Filter: All jobs		
Hold schedule	State	Name	Media Server	Device Name	Created On		Job Type	Current On	Job Status
Delete		DR4000 Test 4	Filodid Sci vol	DR4000	Central Administr	ation Server	Backup	Carrone op	Scheduled
Properties		Backup 00044 Incremen	ital	DR4000	Central Administr	ation Server	Backup		Scheduled
📮 Active Job Tasks 🛛 🛠		Backup 00045		DR4000	Central Administr	ation Server	Backup		Scheduled
Cancel	Active	DR4000 Test 3	DL2000	DR4000	Central Administr	ation Server	Backup	Backup	Running
Cancel all	💂 Active	DR4000 Test 2	DL2000	DR4000	Central Administr	ation Server	Backup	Verify	Running
Hold all schedules	🖳 Active	DR4000 Test Backup	DL2000	DR4000	Central Administr	ation Server	Backup	Verify	Running
Respond to alert									
Scheduled Job Tasks									
Run now									
lest run Hold all schodulas									
Increase priority	. •								F
Decrease priority	Job History - 16) Items				-	Filter: All jobs		T
₩ Custom Filter Tasks	Name	Media Server	Device Name	Created On	Job Type	Job Status		Percent Complet	e Start Time 🔺
Mapage custom filters	Backup 000	45 DL2000	DR4000	Central Admi	Backup	Completed	with exceptions	100	% 1/23/2012 11
Hanago cascom nicoro	🚮 DR4000 Tes	t 4 DL2000	DR4000	Central Admi	Backup	Completed	with exceptions	100	% 1/23/2012 11
	Restore 000	028 DL2000	Backup-to-Disk Folder 1	L Central Admi	Restore	Successful		100	% 1/17/2012 3:1
	Backup 000	39 DL2000	Backup-to-Disk Folder 1	L Central Admi	Backup	Successful		100	% 1/17/2012 3:1
	Restore 000	027 DL2000	Backup-to-Disk Folder 1	L Central Admi	Restore	Successful		100	% 1/11/2012 2:2
	Backup 000	37 DL2000	Backup-to-Disk Folder 1	L Central Admi	Backup	Successful		100	% 1/11/2012 2:1
	Restore 000	026 DL2000	VIRTDISK 0001	Central Admi	Restore	Successful		100	% 1/5/2012 11:2
	Backup 000	36 DL2000	VIRTDISK 0001	Central Admi	Backup	Successful		100	% 1/5/2012 11:2
	Restore UU	J25 DL2000	Backup-to-Disk Folder J Backup to Disk Folder J	L Central Admi	Restore	Successful		100	% 12/27/2011 1
	Pectore 000	124 DI 2000	Backup-to-Disk Folder 1	Central Admi	Daukup Restore	Successful		100	% 12/27/2011 0
	Backup 000	34 DI 2000	Backup-to-Disk Folder 1	Central Admi	Backun	Successful		100	% 12/27/2011 9
	12.5 + Adr	liti DL2000	DR4000	Central Admi	Backup	Completed	with exceptions	100	% 12/21/2011 3
	↓								
Job Summary: 🚇 3 💂 3 👰	• 🛛 😢 🌆 🕯	투 DL2000 (Central Admi	nistration Server)					0	Symantec;

Create a new backup job using the Job Wizard

Symantec Backup Exec™2010) R3								
File Edit View Network	Tools Window	Help							Share Your Ideas
Home Madia S		tup Job Monitor	Alerts Report	s Devices	Media	<u>द</u> ्ध <u>Ba</u> थ् <u>छ</u> <u>Be</u>	ackup 🚽	Search Knowled	ge Base
New Backup John									
New Backup Job using Wizą	rdst	i Calendar							
New Policy	bs - 7	'Items				Fi	ilter: All jobs		<u> </u>
New Policy using Wizard		Name	Media Serv	er 🛛 Device Name	Created On		Job Type	Current Op	Job Status
	led	DR4000 Test 4		DR4000	Central Admin	istration Server B	Backup		Scheduled
New Restore Job	led	Backup 00044 Increme	ntal	DR4000	Central Admin	istration Server B	Backup		Scheduled
Rew Restore Job using Wiza	ard led	Backup 00045		DR4000	Central Admin	istration Server B	Backup		Scheduled
Cancel		DR4000 Backup	DL2000	DR4000	Central Admin	istration Server B	Backup	Backup	Running
Cancel all	Active	DR4000 Test 3	DL2000	DR4000	Central Admin	istration Server B	Backup	Backup	Running
Hold all schedules	🖳 Active	DR4000 Test 2	DL2000	DR4000	Central Admin	istration Server	Backup	Verify	Running
Respond to alert	💂 Active	DR4000 Test Backup	DL2000	DR4000	Central Admin	istration Server B	Backup	Verify	Running
Scheduled Job Tasks									
Run now									
Test run									
Hold all schedules									•
Decrease priority	Job History - 16	Items					ilter: All jobs		
🐺 Custom Filter Tasks 🛛 🖈	Name	Media Server	Device Name	Created On	Job Type	Job Status	<u> </u>	Percent Complet	e Start Time 🔺
Mapage custom filters	Backup 0004	15 DL2000	DR4000	Central Admi	i Backup	Completed w	ith exceptions	100	% 1/23/2012 11
Manage cascommers	🗖 DR4000 Tes	t 4 DL2000	DR4000	Central Admi	i Backup	Completed w	ith exceptions	100	% 1/23/2012 11
	Restore 000	28 DL2000	Backup-to-Disk Folde	er 1 - Central Admi	i Restore	Successful		100	% 1/17/2012 3:1
	Backup 0003	39 DL2000	Backup-to-Disk Folde	er 1 – Central Admi	i Backup	Successful		100	% 1/17/2012 3:1
	Restore 000	27 DL2000	Backup-to-Disk Folde	er 1 - Central Admi	i Restore	Successful		100	% 1/11/2012 2:2
	Backup 0003	37 DL2000	Backup-to-Disk Folde	er 1 – Central Admi	i Backup	Successful		100	% 1/11/2012 2:1
	Restore 000	26 DL2000	VIRTDISK 0001	Central Admi	i Restore	Successful		100	% 1/5/2012 11:2
	Backup 0003	36 DL2000	VIRTDISK 0001	Central Admi	i Backup	Successful		100	% 1/5/2012 11:2
	Restore 000	25 DL2000	Backup-to-Disk Folde	er 1 Central Admi	i Restore	Successful		100	% 12/27/2011 1
	Backup 0003	35 DL2000	Backup-to-Disk Folde	er 1 Central Admi	i Backup	Successful		100	% 12/27/2011 1
	Restore 000	24 DL2000	Backup-to-Disk Folde	er 1 Central Admi	i Restore	Successful		100	% 12/27/2011 9
	Backup 0003	34 DL2000	Backup-to-Disk Folde	er 1 Central Admi	i Backup	Successful		100	% 12/27/2011 9
	12.5 + Add	iti DL2000	DR4000	Central Admi	i Backup	Completed w	vith exceptions	100	% 12/21/2011 3
Job Summary: 🚇 3 💂 4 👰	o 😣 🍋 🐔	DL2000 (Central Adm	ninistration Server)					(Symantec.

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.

Symantec Backup Exec™ 2010) R3				_ 🗆 ×
File Edit View Network	Tools Window Help			(Share Your Ideas
Home Media	Pervers Job Setup Job Monitor Alerts Reports	s Devices Media	<mark>€ Backup</mark> → <u>™ Restore</u> →	Search Knowledg	e Base 🔍 🔍
🛱 General Tasks 🛛 🛠	lablist Colondor				
Hold job queue	🝓 Backup Wizard		×		
Hold schedule				C	
Delete	How long do you want to keep the backu	p data?		Current Op	JOD Status
Properties				5	scheduled
Active Job Tasks	C Keep each full hadrup for			s	icheduled
Cancel	After this period of time. Packup Ever can even with the	modia		Backup R	tunning
Cancel all	Arter this period of time, backup Exec can overwrite the	meula.		Verify R	tunning
Hold all schedules	C Keep data infinitely. Do not overwrite the media.			Verify R	lunning
Respond to alert					
C Echadulad Jab Tacks	Providence with the full with a state of and state	Income and the description	44		
Scheduled Job Tasks X	(If the media set does not exist, Backup Exec creates it.).	a rules are associated with the backup	data.		
Run now Test rup	Media set name: Keen Data for 4 Weeks	2			
Hold all schedules					
Increase priority	Overwrite protection period: 4 Weeks				►
Decrease priority	Append period: 6 Days				- 🐨
📈 Custom Filter Tasks 🛛 🛠				Percent Complete	Start Time 🔺
Manage custom filters				100%	6 1/23/2012 11
				100%	6 1/23/2012 11
				100%	6 1/17/2012 3:1
				100%	6 1/17/2012 3:1
				100%	6 1/11/2012 2:2
				100%	6 1/11/2012 2:1 % 1/5/2012 11:2
				100%	6 1/5/2012 11:2
	What is a media set?	BackNe	ext Cancel	100%	/6 12/27/2011 1
	Backup 00035 DL2000 Backup-to-Disk Folde	r 1 Central Admi Backup	Successful	100%	6 12/27/2011 1
	Restore 00024 DL2000 Backup-to-Disk Folde	r 1 Central Admi Restore	Successful	100%	6 12/27/2011 9
	Backup 00034 DL2000 Backup-to-Disk Folde	r 1 Central Admi Backup	Successful	100%	6 12/27/2011 9
	12.5 + Additi DL2000 DR4000	Central Admi Backup	Completed with exceptions	100%	6 12/21/2011 3 ¥
Job Summary: 🚇 3 💂 3 🧕	0 😵 🐞 🐖 DL2000 (Central Administration Server)			Q	Symantec::

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.

		DKCV6S1			Help Log out
	Dashboard Alerts Events Health	Cleaner Sched	ule entral, Mon Jan 23 15:18:49 2012	Schedule Cleaner	Schedule
	Statistics: Container	Day	Start Time	Stop Time	,
	Statistics: Replication	Sun	-	-	
- "	Storage	Mon	-	-	
	Containers	Tue			
	Replication	Wed			
	Compression	Thu			
-	Schedule	Fri	_		
	Replication	Sat	_		
	System Configuration Networking Active Directory Email Alerts Date & Time Support Diagnostics Software Upgrade	Note: When no schedule	is set, the cleaner will run as needed		

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.

