

Veeam Integration with Data Domain using DDBoost

1. Creating a user on data domain for DDBoost:

```
sysadmin@DDVE-01# user add boostveeam role admin
Enter new password:
Re-enter new password:
Passwords matched.
User "boostveeam" added.
sysadmin@DDVE-01#
```

2. Enable DDBoost on the data domain system:

```
sysadmin@DDVE-01# ddboost enable
DD Boost enabled.
sysadmin@DDVE-01#
```

3. Create a storage unit for Veeam Backups on the data domain system and assign the DDBoost user created in previous step:

```
sysadmin@DDVE-01# ddboost storage-unit create veeam-bkp user boostveeam
Created storage-unit "veeam-bkp" for "boostveeam".
sysadmin@DDVE-01#
```

4. Start the new backup repository wizard on Veeam and click Next:

New Backup Repository

Name
Type in a name and description for this backup repository.

Name

Type

Server

Repository

Mount Server

Review

Apply

Name:

DataDomainBkp


Description:

Created by VLAB\Administrator at 10/26/2017 5:53 PM.

< Previous Next > Finish Cancel

5. Select the Repository Type as “Deduplicating storage appliance” and click Next:

New Backup Repository


 **Type**
Choose type of backup repository you want to create.

Name	<input type="radio"/> Microsoft Windows server Microsoft Windows server with internal or directly attached storage. Data mover process running directly on the server allows for improved backup efficiency, especially over slow links.
Type	<input type="radio"/> Linux server Linux server with internal, directly attached, or mounted NFS storage. Data mover process running directly on the server allows for more efficient backups, especially over slow links.
Server	<input type="radio"/> Shared folder CIFS (SMB) share. When backing up over slow links, we recommend that you specify a gateway server located in the same site with the shared folder.
Repository	<input checked="" type="radio"/> Deduplicating storage appliance Advanced integration with DELL EMC Data Domain, ExaGrid and HPE StoreOnce. For basic integration, use the Shared folder option above.
Mount Server	
Review	
Apply	

< Previous Next > Finish Cancel

6. Select the Storage as “Dell EMC Data Domain” and click Next:

New Backup Repository

 **Deduplicating Storage**
Specify the deduplication storage appliance you want to add.

Name	<input checked="" type="radio"/> DELL EMC Data Domain DD Boost license, and DD OS 5.5 or later are required. If your Data Domain storage does not meet these requirements, go back and choose the Shared Folder option instead.
Type	<input type="radio"/> ExaGrid ExaGrid firmware version 4.7 or later is required. If your ExaGrid storage does not meet these requirements, go back and choose the Shared Folder option instead.
Deduplicating Storage	<input type="radio"/> HPE StoreOnce StoreOnce Catalyst license and StoreOnce firmware version 3.13.1 or later. If your StoreOnce appliance does not meet these requirements, go back and choose the Shared Folder option instead.
Server	
Repository	
Mount Server	
Review	
Apply	

< Previous Next > Finish Cancel

7. Enter the data domain FQDN and add the DDBoost username/password under Credentials:

The screenshot shows the 'New Backup Repository' dialog box with the 'DELL EMC Data Domain' tab selected. The left sidebar contains a list of tabs: Name, Type, Deduplicating Storage, DELL EMC Data Domain (selected), Repository, Mount Server, Review, and Apply. The main area is titled 'DELL EMC Data Domain' with the instruction 'Specify DELL EMC Data Domain storage name and credentials.' The 'Type' section has a text field for 'Type in Data Domain server name:' containing 'ddve-01.vlab.local'. Below it is an unchecked checkbox for 'Use Fibre Channel (FC) connectivity' with a note: 'DDBoost-over-FC server name can be found on Data Management > DDBoost > Fibre Channel tab'. The 'Credentials' section shows a key icon, the text 'boostveeam (boostveeam, last edited: 1', and an 'Add...' button. A link 'Manage accounts' is below. The 'Enable DDBoost encryption:' checkbox is unchecked, with a 'Medium' dropdown menu. The 'Gateway server:' section has two radio buttons: 'Automatic selection' (selected) and 'The following server:'. Below the second radio button is a dropdown menu showing 'LP01.vlab.local (Backup server)'. At the bottom are buttons for '< Previous', 'Next >', 'Finish', and 'Cancel'.

8. Select the storage unit that was created earlier. Make sure the Advanced Settings are suitable for Data Domain storage:

The screenshot shows two overlapping dialog boxes. The background dialog is 'New Backup Repository' with the 'Repository' tab selected. The left sidebar shows tabs: Name, Type, Deduplicating Storage, DELL EMC Data Domain, Repository (selected), Mount Server, Review, and Apply. The main area is titled 'Repository' with the instruction 'Type in path to the folder where backup files should be stored, and set repository load control options.' The 'Location' section has a text field for 'Storage unit' containing 'ddboost://ddve-01.vlab.local:veeam-bkp@/' and a 'Browse...' button. Below it are 'Capacity: 530.5 GB' and 'Free space: 530.2 GB' with a 'Populate' button. The 'Load control' section has a note: 'Running too many concurrent tasks against the same repository may reduce overall performance, and cause I/O operations to timeout. Control storage device saturation with the following settings:'. It has two checkboxes: 'Limit maximum concurrent tasks to:' (checked) with a value of '45', and 'Limit read and write data rates to:' (unchecked) with a value of 'MB/s'. At the bottom is a link 'Click Advanced to customize repository settings' and an 'Advanced...' button. The foreground dialog is 'Storage Compatibility Settings'. It has three checkboxes: 'Align backup file data blocks' (unchecked), 'Decompress backup data blocks before storing' (checked), and 'This repository is backed by rotated hard drives' (unchecked). The 'Decompress backup data blocks before storing' checkbox has a detailed description. The 'Use per-VM backup files' checkbox is checked and has a detailed description. At the bottom are 'OK' and 'Cancel' buttons.

9. Select the mount server and enable vPower NFS service. Click Next:

The screenshot shows the 'New Backup Repository' wizard at the 'Mount Server' step. The left sidebar has a tree view with 'Mount Server' selected. The main area contains the following fields and options:

- Name:** LP01.vlab.local (Backup server)
- Type:** (empty)
- Deduplicating Storage:** (empty)
- DELL EMC Data Domain:** (empty)
- Repository:** (empty)
- Mount Server:** (selected)
- Review:** (empty)
- Apply:** (empty)

Below the sidebar, the 'Mount server:' dropdown is set to 'LP01.vlab.local (Backup server)'. The checkbox 'Enable vPower NFS service on the mount server (recommended)' is checked. Below it, a text box shows the folder 'C:\ProgramData\Veeam\Backup\NfsDatastore' with a 'Browse...' button. At the bottom right, there is a 'Ports...' button and navigation buttons: '< Previous', 'Next >', 'Finish', and 'Cancel'.

10. Review the summary screen and click on apply to create a backup repository:

The screenshot shows the 'New Backup Repository' wizard at the 'Review' step. The left sidebar has a tree view with 'Review' selected. The main area displays the backup repository properties and the components to be processed on the server LP01.vlab.local:

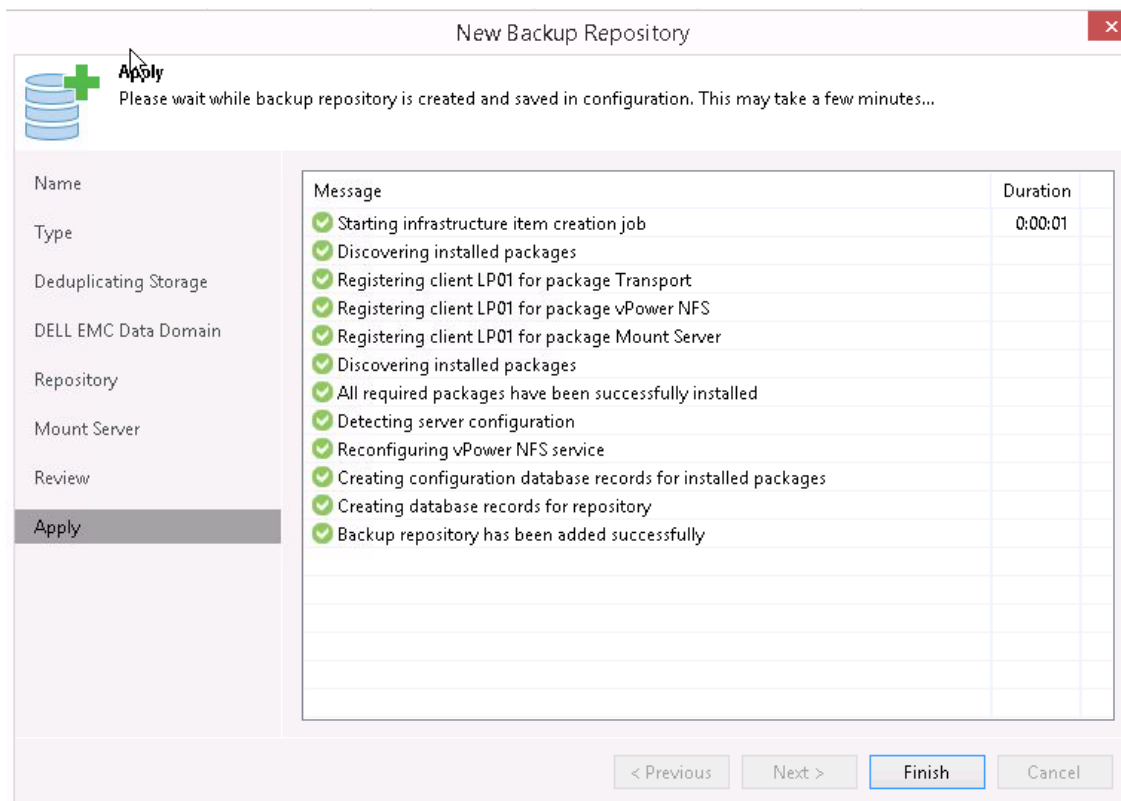
Backup repository properties:

Repository type:	DELL EMC DataDomain
Mount host:	LP01.vlab.local
Account:	boostveeam
Backup folder:	ddbost://ddve-01.vlab.local:veeam-bkp@/
Write throughput:	Not limited
Max parallel tasks:	45

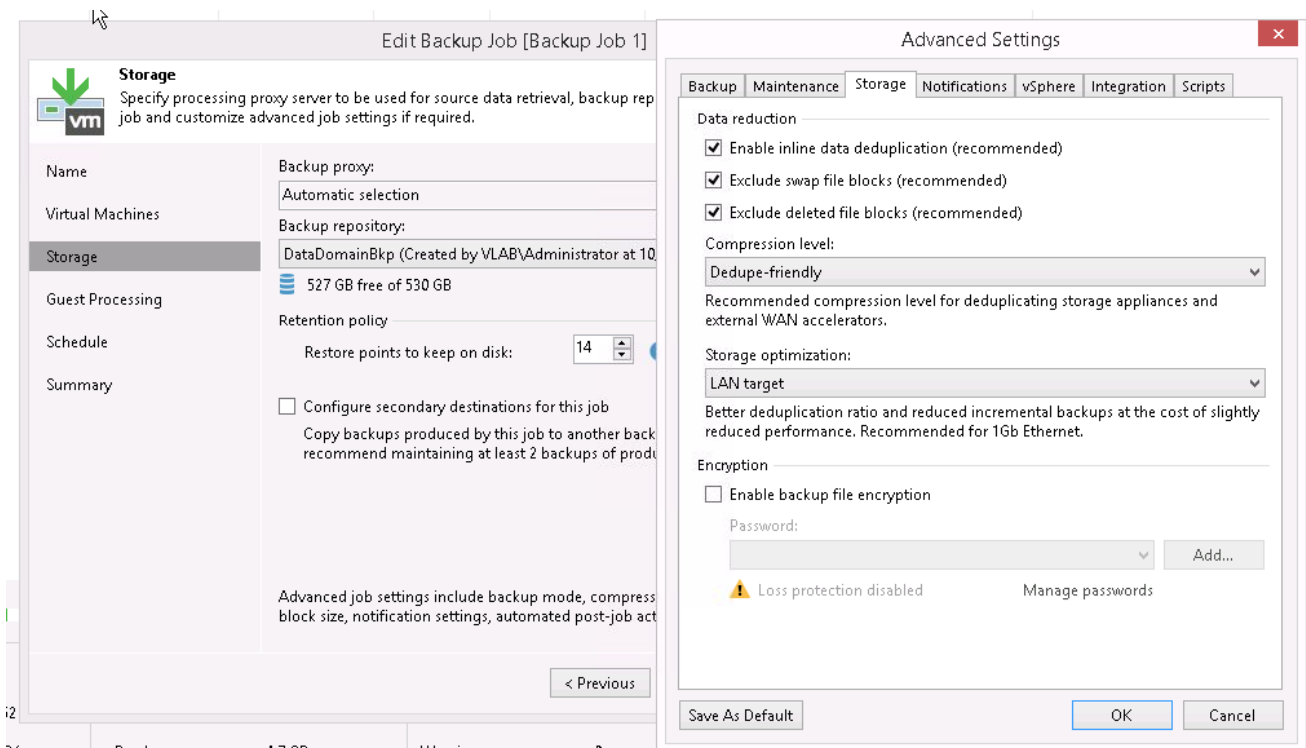
The following components will be processed on server LP01.vlab.local:

Transport	already exists
vPower NFS	already exists
Mount Server	already exists

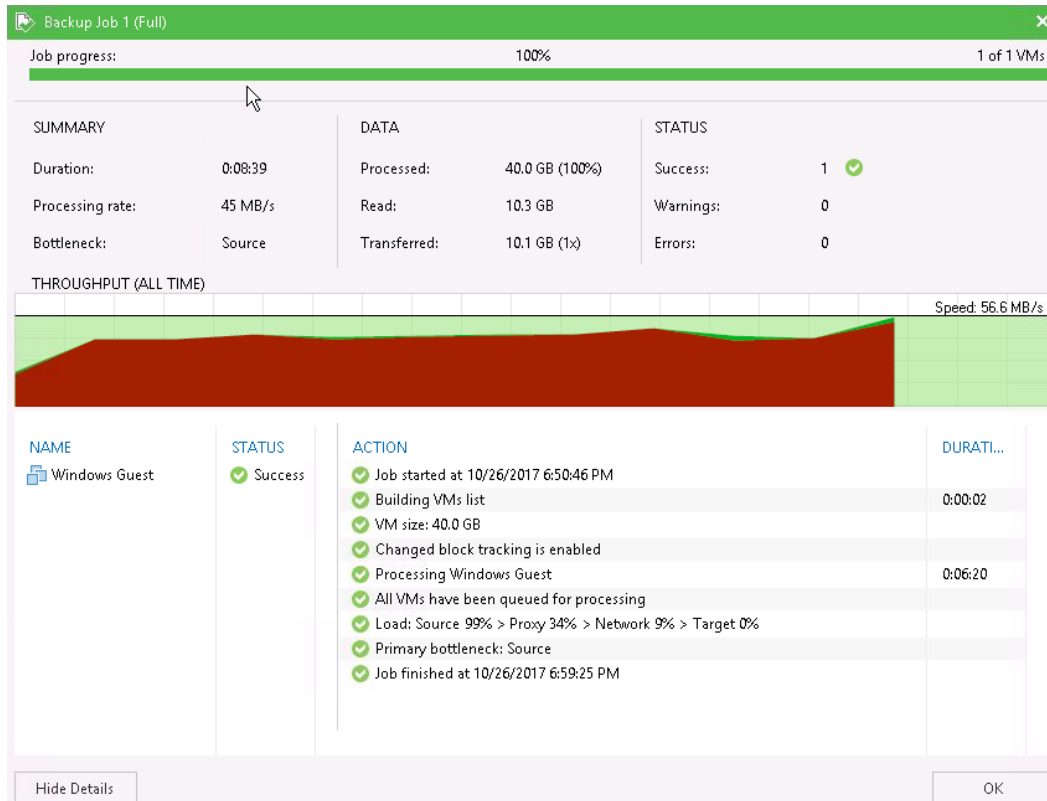
At the bottom, there are two unchecked checkboxes: 'Import existing backups automatically' and 'Import guest file system index'. The navigation buttons at the bottom are '< Previous', 'Apply', 'Finish', and 'Cancel'.



11. When creating a backup job, it is recommended to select the Compression Level to “Dedupe-friendly” to achieve better De-Duplication:



12. Run a test backup job.



13. Create MTREE replication between the source and destination data domains. The destination MTREE name in our case is /data/col1/veeam-repl.

Veeam Disaster Recovery Testing from DR Data Domain

14. Create MTREE for the fast copy on the DR data domain. We cannot create a storage unit on the destination MTREE on DR DD as it will be in read only mode (with the MTREE replication running):

```
sysadmin@DDVE-02: mtree create /data/col1/veeam-repl-fastcopy
MTTree "/data/col1/veeam-repl-fastcopy" created successfully.
Quota soft limit: none, hard limit: none(*)
(*) Quota Capacity is disabled. Capacity limits not enforced.
```

15. Start a fastcopy from the replicated MTREE to the new MTREE created in previous step:

```
sysadmin@DDVE-02: filesystem fastcopy source /data/coll/veeam-repl destination /data/coll/veeam-repl-fastcopy
Destination "/data/coll/veeam-repl-fastcopy" already exists.
Proceeding will overwrite its content with "/data/coll/veeam-repl".
Are you sure? (yes/no) [no]: yes
ok, proceeding.
Creating snapshot "FASTCOPY-2017-10-26-19-14-48" with one-hour retention period...done
Use this snapshot to recover in case of a mistake.
Fastcopy status: fastcopy /data/coll/veeam-repl to /data/coll/veeam-repl-fastcopy: copied 2 files, 1 directory in 0.01 seconds
sysadmin@DDVE-01#
```

16. Create a storage unit for the fastcopy MTREE:

```
sysadmin@DDVE-02: ddbost storage-unit modify veeam-repl-fastcopy user boostveeam
Storage-unit "veeam-repl-fastcopy" modified for user "boostveeam".
```

17. Create a repository on the DR datadomain:

New Backup Repository

Name
Type in a name and description for this backup repository.

Name
Name: DRDataDomainRepo

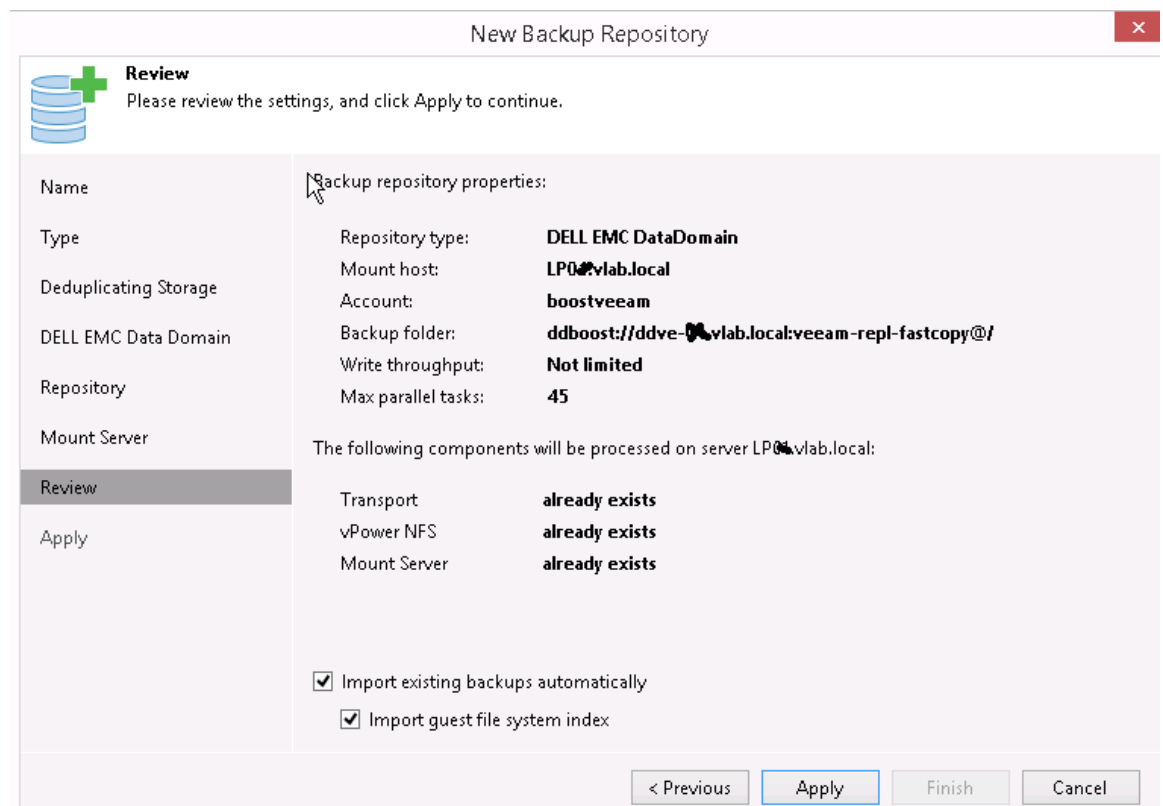
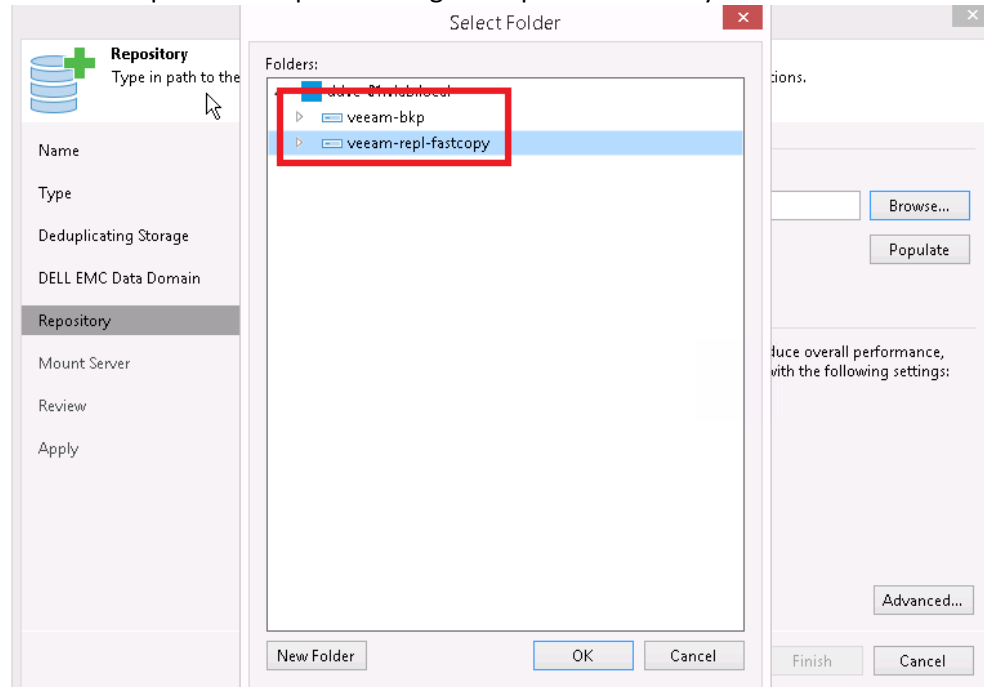
Description:
Created by VLAB\Administrator at 10/26/2017 7:18 PM.

Left sidebar tabs: Name, Type, Server, Repository, Mount Server, Review, Apply

Bottom buttons: < Previous, Next >, Finish, Cancel

18. The process of creating the repository on the DR Veeam is similar. Few things to keep in mind

- Select the fastcopy storage unit that was created.
- Select the option to “Import existing backups automatically”.



19. Now you should be able to perform a restore from the DR Veeam.

JOB NAME 	CREATION TIME	RESTORE POINTS	REPOSITORY	PLATFORM
 Backup Job 1  Windows Guest	10/26/2017 6:51 PM 10/26/2017 6:52 PM	1	DRDataDomainRepo	VMware