

NEO Series Tape Automation Integration for Veeam Backup and Replication

Data protection solution for virtual environments. Simplify data backup, restore, archiving and compliance.



This integration guide will explain how to install and configure NEO Series tape automation products and Veeam Backup and Replication software to create a highly efficient and comprehensive data protection solution for virtual environments.

Through our technology partnership Overland-Tandberg and Veeam have combined best in class hardware and software to provide small and medium businesses with a turnkey data protection solution for virtual environments.

NEO Series Tape Automation

Utilising industry-leading LTO tape technology, the NEO Series tape automation family combines high-capacity storage with high-performance data transfer for increased backup, restore and archive efficiency. Our high quality innovative products are backed up with more than 35 years of experience providing data protection solutions across a broad range of industries.

Veeam Backup & Replication

The industry leading data protection software for virtualised environments. Veeam Backup & Replication offers high performance, scalable and reliable data protection for VMware vSphere® and Microsoft® Hyper-V environments. The software works seamlessly with disk, tape and cloud technologies to create a heterogeneous data protection solution.

Solution Overview

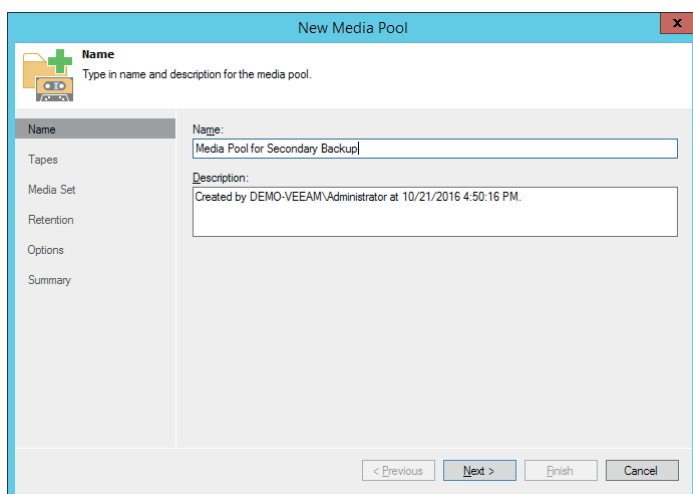
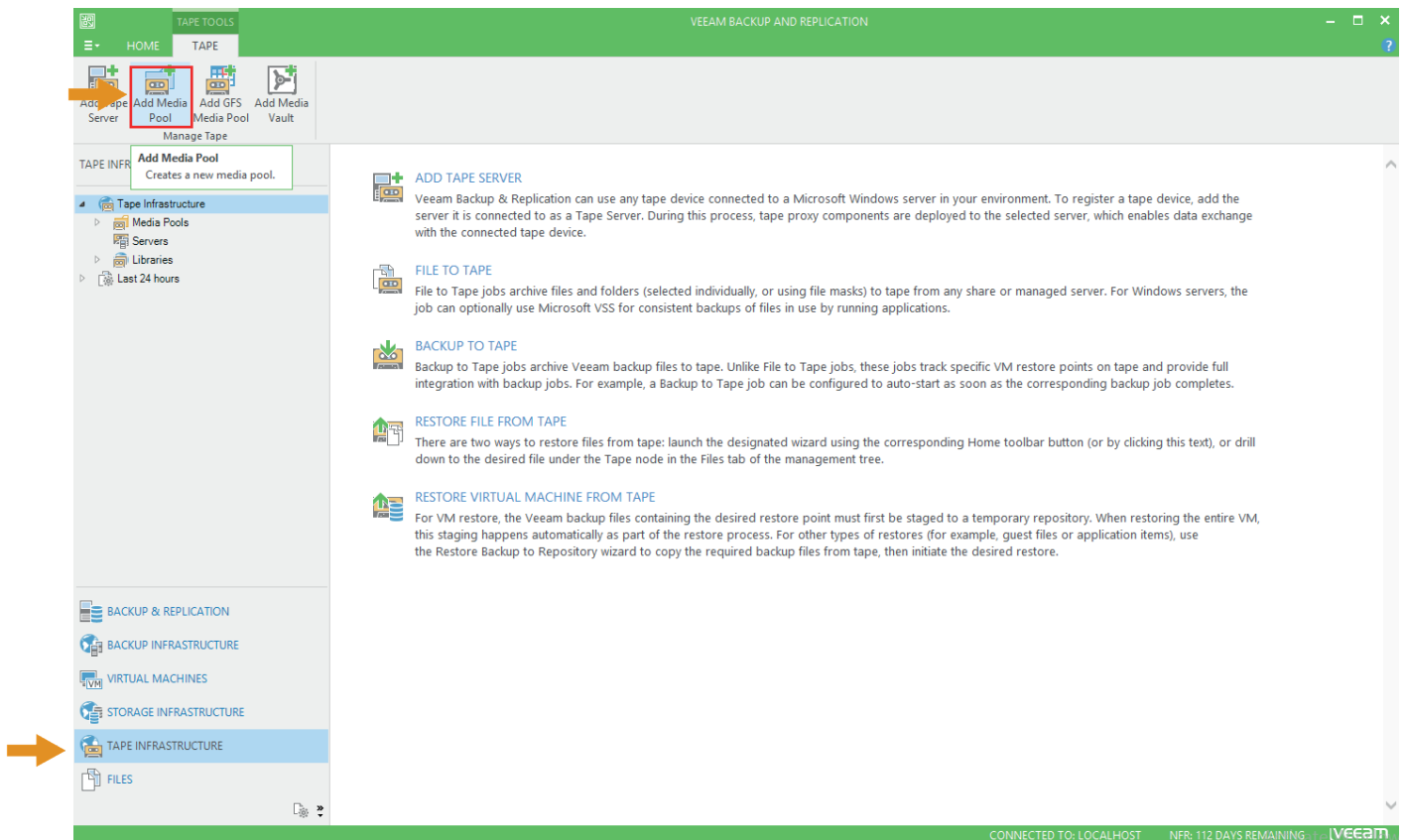
Within a virtual environment a disk-to-disk-to-tape backup process must be used. The data to be protected is first backed up to disk (primary backup) and then the newly created backup files are backed up again to tape (secondary backup). Additional backup copies may also be performed for offsite data storage or compliance requirements. This solution provides the following benefits:

- Complete data protection; fire, flood, hardware failure, virus, human error
- High performance; maximize efficiency and reduce downtime
- Simplify backup, restore and archiving tasks
- Reduce the risk of data loss and avoid possible mitigation
- Migrate obsolete data from to tape; the lowest cost medium
- Effectively manage data growth, reduce power and cooling costs
- Enable the business to meet its regulatory requirements

The primary backup to disk can be performed utilising the Overland-Tandberg SnapServer®, for more information please refer to our integration brief “Veeam Integration with SnapServer.”

Step 1: Create a Backup Media Pool

Veeam is fully compatible with all NEO Series tape automation products and will automatically detect and install all attached tape devices. Before data can be backed up to tape **Media Pools** must be created. Media pools are used to simplify the management of backups and avoid backups being accidentally deleted or over written.

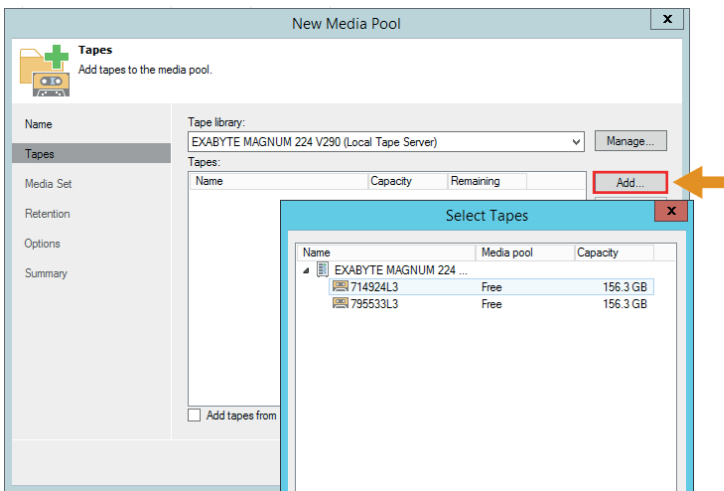


From your Veeam Backup and Replication homescreen select **Tape Infrastructure**.

From the menu select **Add Media Pool**.

The add media pool wizard starts up. First, type in a name for your new media pool.

Click **Next**.

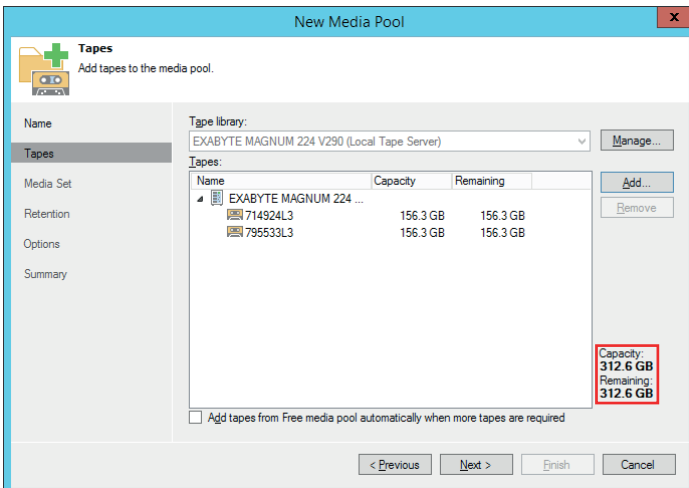


All media pools must be assigned to a tape automation device.

Click **Manage**
Select **Tape Device** from drop-down.

Click **Add**
Select **Tape Media** to be included in the media pool.

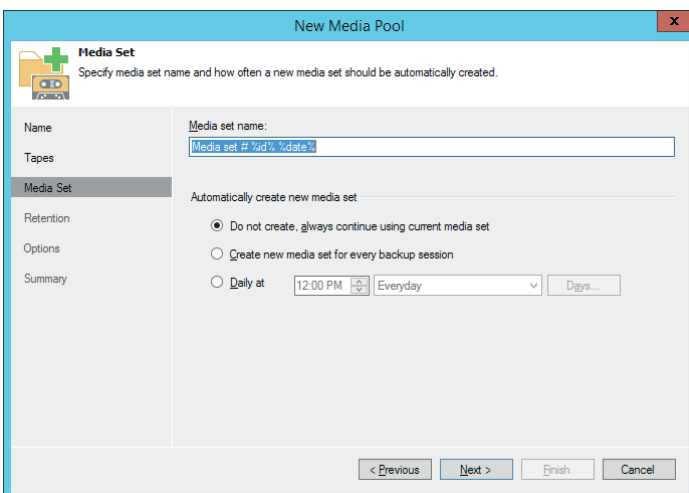
Click **OK** to confirm your choice.



The selected tapes are now displayed in the **Tapes** field.

Total available and remaining capacity of the media pool is calculated.

Click **Next**.



Create a **Media Set Name** and select a requirement for when the media set should be retired or replaced.

A media set is a subset of the media pool and is used to perform media rotation and off-site vaulting.

Click **Next**.

Retention
Specify the tape retention settings for this media pool.

Name
Tapes
Media Set
Retention
Options
Summary

Data retention policy

Do not protect data (cyclically overwrite tapes as required)

Protect data for 4 Weeks

Never overwrite data

Offline media tracking

Move all offline tapes from this media pool into the following media vault:

Vault: [Dropdown] Add New...

< Previous Next > Finish Cancel

Define a retention policy for your backups to keep multiple restore points if desired.

Click **Next**.

Options
Specify parallel processing and encryption settings.

Name
Tapes
Media Set
Retention
Options
Summary

Enable parallel processing for jobs using this media pool

Jobs pointed to this media pool can use up to 2 drives simultaneously

Enable parallel processing of backup chains within a single job

Backup to Tape job populated with multiple source backup jobs or with a job using per-VM backup file chains will process separate chains in parallel using one media set per drive.

Use encryption

Password: [Field] Add...

Loss protection disabled Manage passwords

Hardware encryption will be used if tape drive supports it. Otherwise, software encryption will be used, which may result in small performance penalty.

< Previous Create Finish Cancel

Define settings for parallel processing and choose if your backups should be encrypted.

Click **Create**.

(Note: Veeam is not able to perform hardware encryption).

Summary
Review the settings and click Finish to apply. You can copy these settings for the future reference.

Name
Tapes
Media Set
Retention
Options
Summary

Summary:

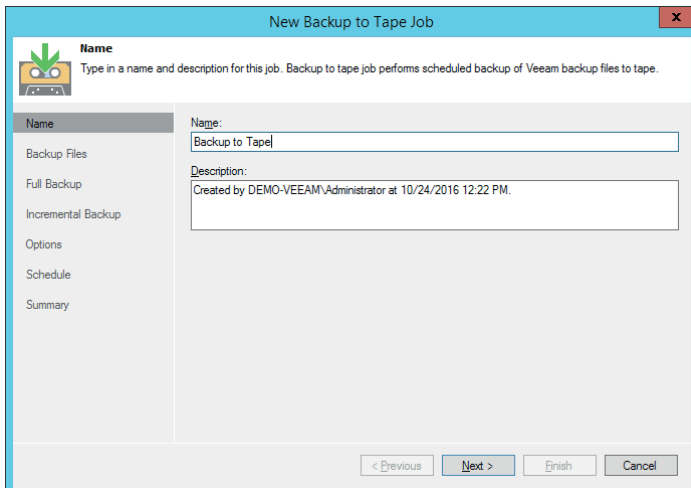
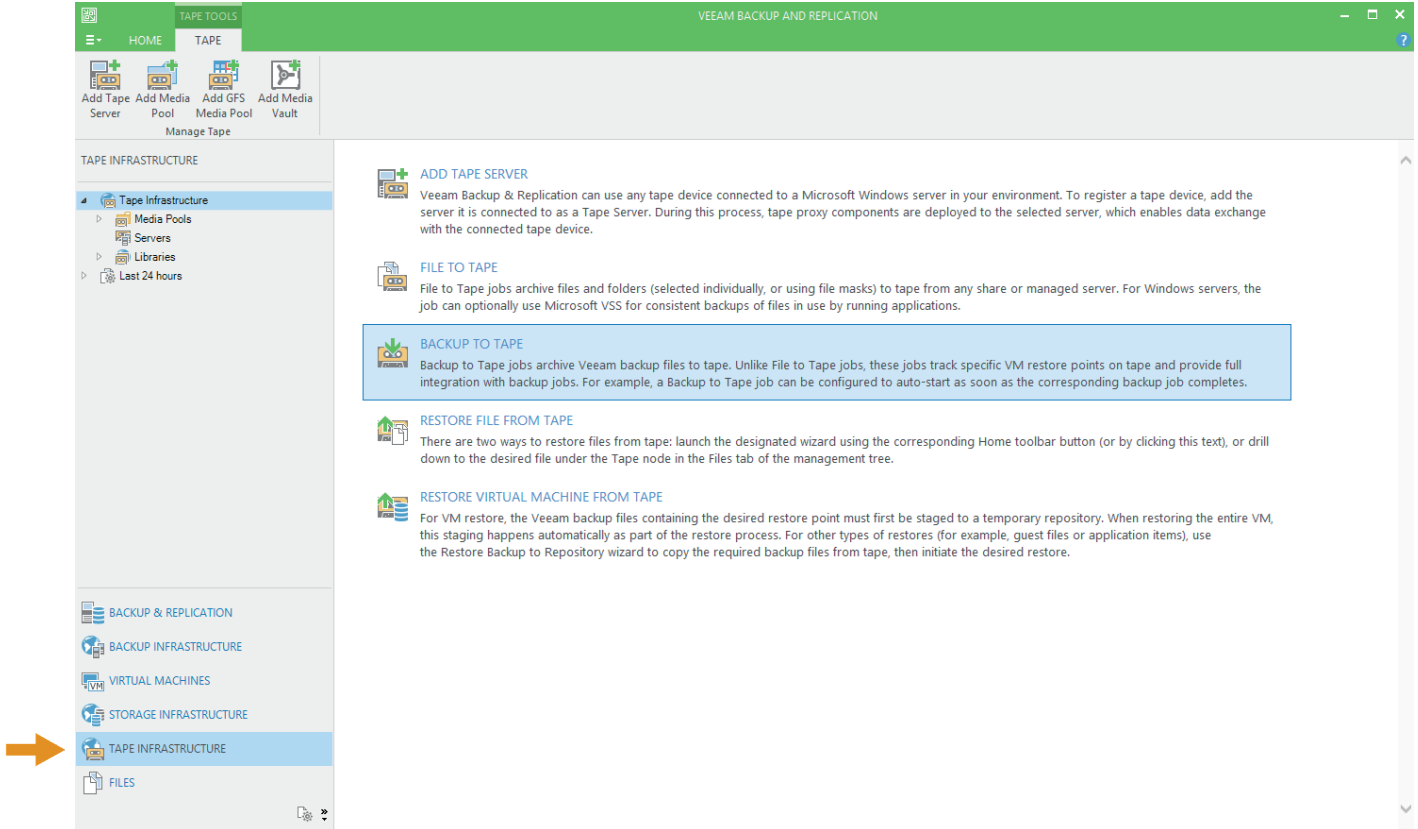
Media pool name: Media Pool for Secondary Backup
Media pool description: Created by DEMO-VEEAM\Administrator at 10/21/2016 5:21:45 PM.
Tapes count: 2
Capacity: 312.6 GB
Remaining: 312.6 GB

< Previous Next > Finish Cancel

Click **Finish** to exit this menu.

Step 2: Create a Backup Job

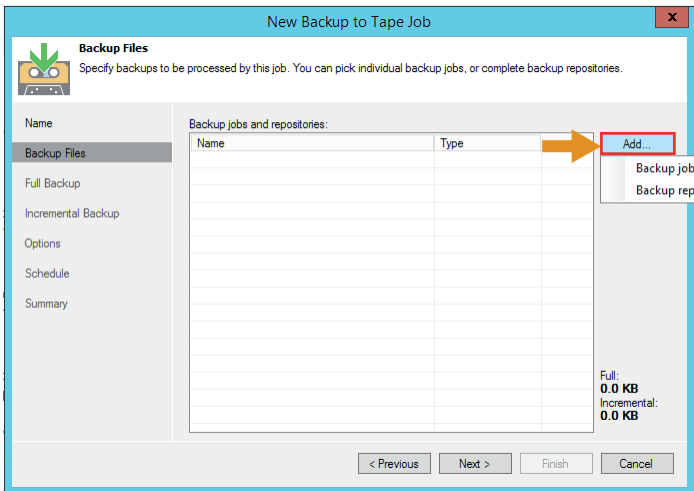
Now we are ready to create a backup to tape job.



From your homescreen select **Tape Infrastructure**. Select **Backup To Tape**.

The new backup to tape job wizard starts, create a name for your new job.

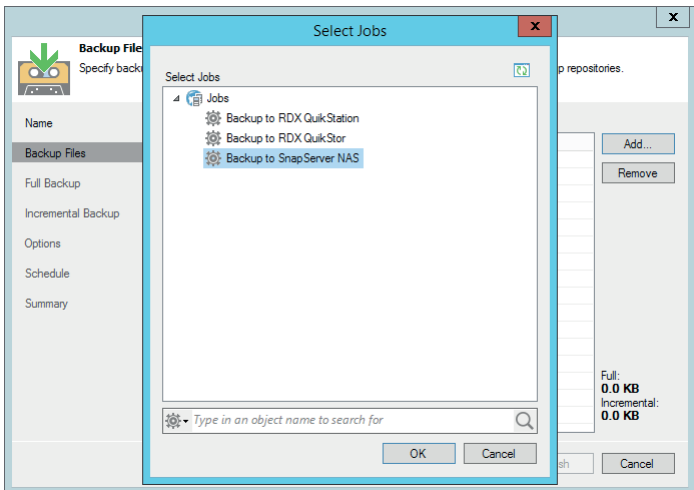
Click **Next**.



Choose the backup source.
Click **Add**
Select **Backup Jobs**
(To perform a D2D2T backup)

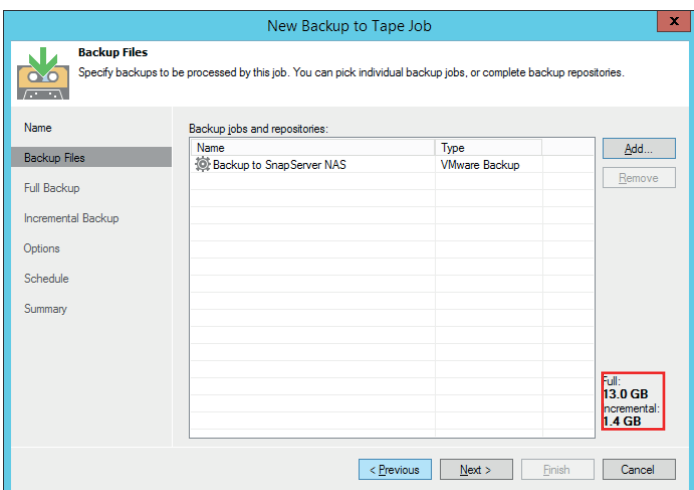
The selected backups are displayed
and the total storage size is calculated.

Click **Next**.



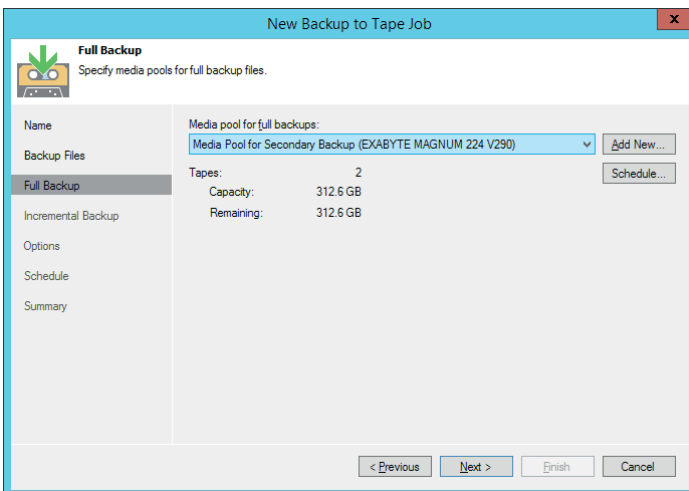
Select the primary backup job which
should be copied to tape (secondary
backup).

Click **OK**.



The selected primary backup is displayed.
In addition, Veeam calculates the required
space of a full backup as well as for an
incremental backup.

Click **Next**.

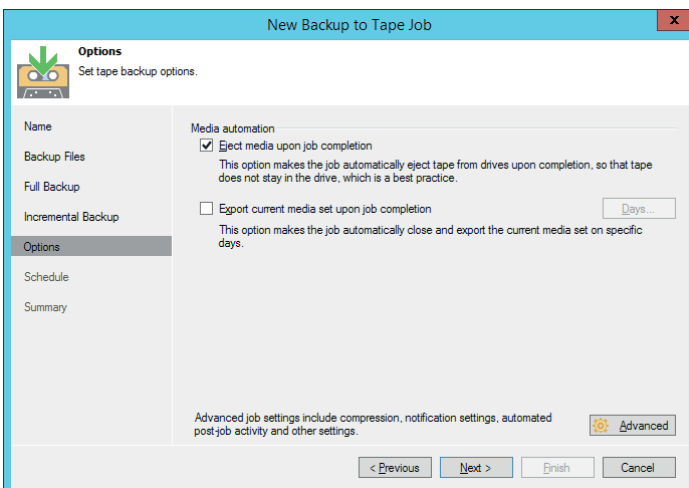


Select a media pool for this backup job.

Click **Next**.

If you perform incremental backups, you can optionally choose a media pool.

Click **Next**.

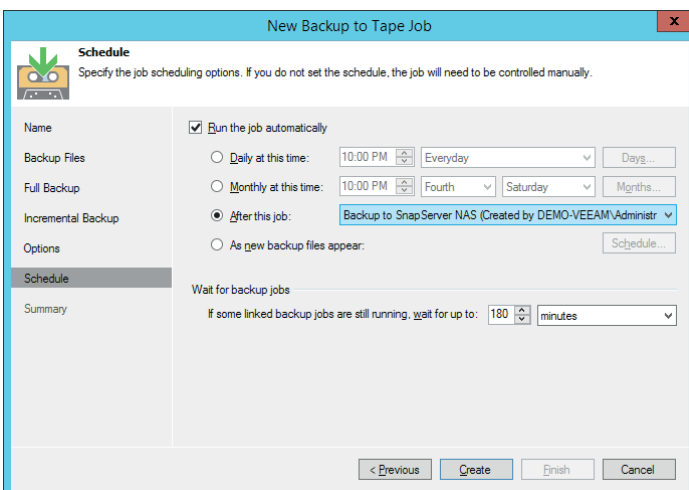


Select backup job options according to your requirements.

For more information please refer to the Veeam Backup & Replication manual.

We recommend the media is ejected upon job completion.

Click **Next**.



Select your desired schedule. We recommend to run this job upon completion of the primary backup job.

Click **Create**.

The backup to tape job is created.

Click **Finish**.

Step 3: Run your Backup Job

The backup job has been created successfully and will run according to the specified schedule. You can start the backup job at any time as follows:

Select **Backup & Replication**

Select the appropriate job

Click **Start**.

The screenshot shows the Veeam Backup and Replication console. The top navigation bar includes 'HOME', 'VIEW', and 'JOB'. Below it, a toolbar contains icons for 'Start', 'Stop', 'Retry', 'Statistics', 'Report', 'Edit', 'Clone', 'Disable', and 'Delete'. The 'Start' icon is highlighted with an orange arrow. The main area displays a table of backup jobs. The left sidebar shows a tree view with 'BACKUP & REPLICATION' selected, also indicated by an orange arrow.

NAME ↓	TYPE	OBJECTS	STATUS	LAST RESULT	NEXT RUN	TARGET
Backup to RDX QuikStation	VMware Back...	3	Stopped	Success	10/24/2016 8:00...	QuikStation Backup Reposi...
Backup to RDX QuikStor	VMware Back...	3	Stopped	Success	10/24/2016 8:00...	RDX Backup Repository
Backup to SnapServer NAS	VMware Back...	3	Stopped	Success	10/24/2016 8:00...	SnapServer Backup Repositor
Backup to Tape	Backup to Tape	1	Stopped		After [Backup to...	Media Pool for Secondary Ba

The backup job has started, the status and progress is displayed.

The screenshot shows the Veeam Backup and Replication console with the 'Backup to Tape' job selected. The job status is 'Running (1)'. A progress bar shows 2% completion. Summary statistics are displayed below the table.

NAME ↓	TYPE	OBJECTS	STATUS	LAST RESULT	NEXT RUN	TARGET
Backup to RDX QuikStation	VMware Back...	3	Stopped	Success	10/24/2016 8:00:00...	QuikStation Backup Repos
Backup to RDX QuikStor	VMware Back...	3	Stopped	Success	10/24/2016 8:00:00...	RDX Backup Repository
Backup to SnapServer NAS	VMware Back...	3	Stopped	Success	10/24/2016 8:00:00...	SnapServer Backup Reposit
Backup to Tape	Backup to Tape	1	2% completed at 46 MB/s		After [Backup to...	Media Pool for Secondary

Job progress: 2%

SUMMARY		DATA		STATUS		THROUGHPUT (LAST 5 MIN)	
Duration:	0:00:57	Processed:	476.0 MB (2%)	Success:	0		
Processing rate:	46 MB/s	Read:	476.0 MB	Warnings:	0		
Bottleneck:	Target	Transferred:	476.0 MB (1x)	Errors:	0		

BACKUP & REPLICATION

BACKUP STATUS

Backup to... 2%

ACTION ↓

Job started at 10/24/2016 3:32:42 PM

The backup job has finished successfully.

The screenshot displays the Veeam Backup and Replication console. The main window shows a list of backup jobs under the 'BACKUP & REPLICATION' section. The 'Backup to Tape' job is highlighted, indicating a successful completion. Below the job list, a detailed summary and action log are visible.

NAME	TYPE	OBJECTS	STATUS	LAST RESULT	NEXT RUN	TARGET
Backup to RDX QuikStation	VMware Back...	3	Stopped	Success	10/24/2016 8:00...	QuikStation Backup Repository 1
Backup to RDX QuikStor	VMware Back...	3	Stopped	Success	10/24/2016 8:00...	RDX Backup Repository
Backup to SnapServer NAS	VMware Back...	3	Stopped	Success	10/24/2016 8:00...	SnapServer Backup Repository
Backup to Tape	Backup to Tape	1	Stopped	Success	After (Backup to...	Media Pool for Secondary Backup

SUMMARY	DATA	STATUS	THROUGHPUT (ALL TIME)
Duration: 0:10:06	Processed: 23.2 GB (100%)	Success: 1	<p>Speed: 53.6 MB/s</p>
Processing rate: 45 MB/s	Read: 23.2 GB	Warnings: 0	
Bottleneck: Target	Transferred: 23.2 GB (1x)	Errors: 0	

BACKUP	STATUS	ACTION	DURATION
Backup to...	Success	Job started at 10/24/2016 3:32:42 PM	
		Processing tasks	0:10:03
		Processing full backup of Backup to SnapServer NAS	0:09:10
		Unloading tape 714924L3 from Drive 2 (Server: Local Tape Server, Library: EXABYTE MAGNUM 224 V290, Drive ID: Tape1) to Slot 2	0:00:08
		0 directories and 2 files backed up successfully	
		Load: Source 0% > Proxy 6% > Network 0% > Target 96%	
		Primary bottleneck: Target	

Recommendations

We highly recommend additional backup copies are stored off-site to provide complete data protection.