

Setting Up the Supermicro® General Purpose Storage Series on Veeam

SUPERMICRO

Supermicro is a global leader in high performance, green computing server technology and innovation. We provide our global customers with application-optimized servers and workstations customized with blade, storage, and GPU solutions. Our products offer proven reliability, superior design, and one of the industry's broadest array of product configurations, to fit all computational need.

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Executive Summary

The following guide provides users who seek information on setting up and configuring Supermicro, SuperStorage General Purpose Server model, 'SSG-6049P-E1CR36H' as a backup target server with Veeam[®] Backup and Replication[™] software.

For additional information, please reference the Supermicro Superstorage Series documentation and whitepapers. For full product reference, please visit:

https://www.supermicro.com/en/products/storage/

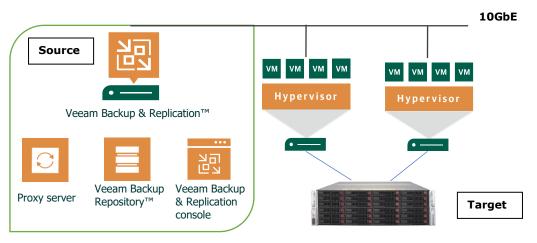
1 Server-Based Repository

Supemicro Storage Servers with Veeam in a Direct-Attach Storage (DAS) configuration offers a fast and low-cost approach to storage backup and restores, providing backups from a one cluster system or a scale-out backup repository. For RAID 6 & 60 or 10, HDDs are the supported configurations where per the design requirements, a RAID controller with an onboard battery cache is mandatory. For SuperStorage Supersevers utilizing NVMe, or SSDs RAID 1 is the preferred configuration.

One of the many benefits of having a DAS repository is its capability to be fully dedicated to a backup operation by offering good performance for lower cost and excellent read and write performance. Also, random I/O performance will be optimal when using I/O intensive backup modes.

2 Key Consideration when planning your Server-Based Repository

- Capacity Data to be stored
- Scalability Data growth over the next 5 years
- Reliability How critical is your data? Can you survive downtime?
- Backup and Recovery What is the schedule of your file backups
- Performance Data you will be backup up and restoring
- Budget How much to spend?
- IT staff Is a dedicated staff person managing backups



3 Supermicro Direct-Attach-Storage Configuration

Target software ESXi version 7.0

Source software Microsoft Window Enterprise Server version 2019+ Veeam version 10



4 System Hardware Requirements

4.1 Storage Server

- Server SSG 6049P-E1CRR36H Storage Server 4U, 36-bay (1)
- CPU's P4x-CLX5218R-SRG27 CLX-SP 5218R 20C/40T 2.1G (2)
- Memory MEM-DR432L-HL01-ER29 32FB DDR4 1.2V 2933 ECC REG (12)
- HDS-I2T0-SSDSC2KB240GB Intel D3-S4510 240GB, SATA 6gb/s (2)
- HDD-A14T-ST14000NM0048 Seagate 3.5", 14TB 7.2K RPM SAS3, 12GB/s (36)
- AOC-STGN-I2S 2-port SFP+ 10GbE Standard LP with SFP+ Connectors (2)
- CBL-NTWK-0456 2M 10GbE SFP+ to SFP+ Passive, Push Type (4)
- CBL-PWCD-0579 6FT Power Cord Type IEC (C14 to C13) (14AWG) 15A, 250V (2)
- Firmware Version = 01.71.11

5 Total Solution Offerings

Supermicro Storage Server & Veeam Solution Offerings All-Flash NVMe EDSFF E1.s EDSFF E1.L U2 Top Loading Storage Top Loading

- Simply-Double
- High Density Storage Servers
- General Purpose Storage
 - Double Sided SuperStorage
 - Storage Bridge Bay
 - Front Loading

To view all Supermicro Storage Server Solutions visit:

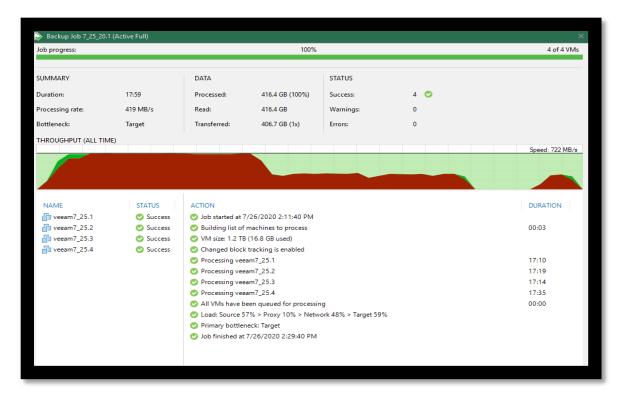
https://www.supermicro.com/en/products/storage/

6 Veeam Ready Backup and Restore Data

Storage Family = SuperStorage Storage Model = SSG-6049P-E1CR36H Firmware Version = 01.71.11 Category = RAID Storage Array Drive Type = 2xSSD Model INTEL SSDSC2KB480GB 480 GB – 24xHD Model SEAGATE ST16000NM002G SCSI Disk Device, 14TB, Total Available space for Veeam repository 119TB Drive Configuration = 2xSSD for RAID 1 for OS, 24xHD for RAID 60 with Windows ReFS Network Speed = 10GB Jumbo Frames Used = 9000 Array Deduplciation = No Array Compression = No Stripe Size = 256K Windows File System = ReFS



6.1 Veeam Full VM backup time (Avg. Performance Summary)



Created b		kup Job 7_2 5 16720KST\Admin							Success 4 of 4 VMs processed
Sunday,	July 26, 2	020 2:11:40 PI	м						
Success	4	Start time	2:11:40 PM	Total size	1.2 TB	Backup size	426.6 GB		
Warning	0	End time	2:29:40 PM	Data read	416.4 GB	Dedupe	2.8x		
Error	0	Duration	0:17:59	Transferred	406.7 GB	Compression	1.0x		
Details									
Name	Status	Start time	End time	Size	Read	Transferred	Duration	Details	
veeam7_25.1	Success	2:11:58 PM	2:29:03 PM	300 GB	103.9 GB	101.6 GB	0:17:05		
veeam7_25.2		2:11:58 PM	2:29:17 PM	300 GB	104 GB	101.6 GB	0:17:19		
veeam7_25.4	Success	2:11:58 PM	2:29:33 PM	300 GB	104.2 GB	101.7 GB	0:17:35		
veeam7_25.3	Success	2:11:58 PM	2:29:12 PM	300 GB	104.2 GB	101.7 GB	0:17:14		



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6.2 Veeam Full VM Restore time (Avg. Performance Summary)

Ackup Replication Job - Job - Primary Jobs	estore Failover Restore Actions					
HOME	Q. Type in an object name to sear	:h for	×			
 Success Success 	JOB NAME > veeam7, 25.4 > veeam7, 25.3 > veeam7, 25.1 >> Backup Job 7, 25, 20.1 (Incre >> Backup Job 7, 25, 20.1 (Incre >>>>>>>>>>>>>>>>>>>>>>>>>>>>>>	SESSION TYPE Full VM Restore Full VM Restore Full VM Restore Backup Backup Backup Backup Backup Rescan	STATUS Success Success Success Success Success Success Success Success Success	7/26/2020 3:01 PM 7/26/2020 3:01 PM 7/26/2020 3:01 PM 7/26/2020 2:57 PM 7/26/2020 2:55 PM 7/26/2020 2:43 PM 7/26/2020 2:37 PM 7/26/2020 2:31 PM	END TIME 7/26/2020 3:22 PM 7/26/2020 3:23 PM 7/26/2020 3:23 PM 7/26/2020 2:53 PM 7/26/2020 2:54 PM 7/26/2020 2:54 PM 7/26/2020 2:39 PM 7/26/2020 2:29 PM 7/25/2020 9:00 PM	

DME	Q Type in an object name to sear	ch for		×			
sta						-	
is Jobs	JOB NAME	SESSION TYPE	STATUS		T TIME 🕹	END	
纪 Backup	veeam7_25.4	Full VM Restore	Success		/2020 3:01 PM		/2020 3:22 PM
Backups	veeam7_25.3	Full VM Restore	Success		/2020 3:01 PM		/2020 3:26 PM
Disk	veeam7_25.2	Full VM Restore	Success		/2020 3:01 PM		/2020 3:23 PM
Last 24 Hours	Veeam7_25.1	Full VM Restore	Success		/2020 3:01 PM		/2020 3:23 PM
Success	Backup Job 7_25_20.1 (Incre	Backup	Success		/2020 2:57 PM		/2020 2:59 PM
	Backup Job 7_25_20.1 (Incre	Backup	Success		/2020 2:51 PM		/2020 2:54 PM
	Backup Job 7_25_20.1 (Incre	Backup	Success		/2020 2:43 PM		
	Backup Job 7_25_20.1 (Incre	Backup	Success		/2020 2:37 PM		
	Backup Job 7_25_20.1 (Active	Backup	Success	//20,	/2020 2:11 PM		2020 2:29 PM
	Restoring VM					\times	2020 9:00 PM
	Name: veeam7 25.3		Status:	Success			
	Restore type: Full VM Restore			7/26/2020 3:01:18			
	21	ST\Administrator		7/26/2020 3:26:42			
	Initiated by: WIN-G3O0672OK	STAdministrator	End time:	7/20/2020 5:20:42	PIVI		
	Statistics Reason Parameters	Log					
	Message				Duration	<u>^</u>	
					Duration		
	Restoring from Backup Repo Ocking required backup file					-	
	Queued for processing at 7/2						
	Processing veeam7_25.3	LOT LOZO 310 1120 PIVI			0:25:16		
	Required backup infrastructu	ire resources have b	een assigned		0.20.10		
	S files to restore (300 GB)						
	Restoring [datastore2] veeam	n7_25.3/veeam7_25.3	3.vmx		0:00:01		
HOME	Restoring file veeam7_25.3.m	vram (8.5 KB)					
-	Preparing for virtual disks res	tore			0:00:07		
INVENTORY	Subsing proxy VMware Backup	Proxy for restoring	disk Hard disk	:1			
	Restoring Hard disk 1 (300 Gl	B) : 144.2 GB restored	d at 100 MB/s	[nbd]	0:24:42		
BACKUP INFRASTRUCTURE	Restore completed successful	illy				~	
K.					Clos		
STORAGE INFRASTRUCTURE							

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7 Installation and Configuration of SuperStorage General Purpose

7.1 Step One

- 1. Rack the Supermicro SuperStorage Unit.
- 2. Cable the SuperStorage Unit to the Server and Console.
- 3. Power on the Unit.
- 4. The SuperStorage Unit will begin its Initialization Process.



5. Firmware Initialization of Devices will begin.





6. Hit "Ctrl-R" to get into the BIOS Setup which will bring you to the Virtual Drive Group.



7. Hit the "Arrow UP" key 3 times which will bring you to the "Avago 3018 MegaRAID" card setup and then press the Enter Key to proceed.

Urtual Drive Managem -1 AVAGO 3108 MegaRAID(Bus 0x65, Dev 0x80) -[-] Drive Group: 0, RAID 1 -[-] Urtual Drives -[-] Urtual Drives -[+] Available size: 0.000 KD - Hot spare drives -[-] Unconfigured Drives -[-] Unconfigured Drives -[-] Unconfigured 27.276 TB - P0:01:16: Ready: 7.276 TB - P0:01:16: Ready: 7.276 TB - P0:01:16: Ready: 7.276 TB - P0:01:12: Ready: 7.276 TB - P0:01:22: Ready: 7.276 TB - P0:01:22: Ready: 7.276 TB - P0:01:22: Ready: 7.276 TB - P0:01:22: Ready: 7.276 TB	Uirtual Drive 0: State: Optimal RAID Level: 1 Hidden: No Drive Group 0: Virtual Drives: 1 Drives: 2 Free Cap.: 0.000 KJ Free Areas: 0



8. You will now be brought to the VD Mgmt menu where you will select the appropriate RAID level. Press the Enter Key to access to the RAID menu.

AID RAI		ta Dis	sable	
PD per Span - Drives	: NZA			
ID	Туре	Size	# Capable	
[]P0:01:04		7.276 TB	512e	
		7.276 TB		
[]P0:01:16 []P0:01:17		7.276 IB 7.276 IB		
[]P0:01:22		7.276 TB 7.276 TB		
		7.276 TB		
- Basic Set	tings —			
Size: 📃				1
Name:			Advanced	CANCE

9. Hit the "Down Arrow" key until you scroll to the "RAID-60" option where you will then hit the Enter Key.

AID RAID-1 A	Data Protection:	isal	ole		
RAID-6	rotection				
PD pe RAID-00					
- Dri RAID-50 ID RAID-60v	Size	SPN		Capable	
	7.276		*	512e	
[]P0:01:10 SAS	7.276				
[]P0:01:16 SAS					
				512e	
- Basic Setting		-			
Size:			-		
			Ĥ	duanced	CANCE
Name:					



10. Hit the "Arrow Down" key to Select ID and Type Drive. Hit the Enter Key which will select with an "X" in the ID Field for each drive that you'd like to bring into your RAID group.

evel: Protection:	
D was Same to State	
'D per Span : 3 - Drives	
ID Type Size SPN # Capable	
IP0:01:04 SAS 7.276 TB 512e IP0:01:10 SAS 7.276 TB 512e	
IP0:01:16 SAS 7.276 TB 512e	
JP0:01:17 SAS 7.276 TB 512e	
IP0:01:22 SAS 7.276 TB 512e	
IPO:01:23 SAS 7.276 TB 512e	
- Basic Settings	
Size: Advanced OK	
	CANCE

11. Hit the "Down Arrow" key which takes you to the Basic Settings Size selection. Hit the "Down Arrow" key to the size setting where you can select RAID output for KB, MB, GB or TB. Hit the Enter Key to make your selection.

AID RAID-		a tection:			ble			
PD per Span — Drives —	: 3							
ID	Tupe	Size		SPN	#			
LXJP0:01:04		7.276	TB					
[X]P0:01:10 [X]P0:01:16		7.276				512e 512e		
[X]P0:01:17		7.276		00	02	512e		
EX1P0:01:27		7.276		81	81			
[X]P0:01:23	SAS	7.276				512e		
					34			
— Basic Sett Size: 14			-		-	_	_	
5126.	333	and the second second	TB		A	dvanced	ОК	CANC
Name:								



12. Hit the "Arrow Down" key to move to the Name Field. Enter the chosen name you've selected. Then hit "Arrow Down" to move to the "Advanced" button. Hit the Enter Key to move to the next field.

AID RAID-		ection:		isal	ble			
	Truc	cccion.						
PD per Span	: 3							
- Drives ID	Туре	Size		SPN		Capable		
[X]P0:01:04	SAS	7.276		00	00	512e		
[X]P0:01:10								
EX3P0:01:16								
[X]P0:01:17								
[X]P0:01:22								
	SAS		TB					
- Basic Sett	ings	A MARIENT	1111	_				
	553		-					
		T. STATE	в		A	dvanced	OK	CANCI
Name: Uee	am _							Chilles

13. Hit the Enter Key to select the strip size. Use the "Arrow Down" key and select 512KB and then hit the Enter Key. Hit the "Arrow Down" key until you have selected the "Initialize" menu option, then hit the Enter Key.

AID R		Create Virtua	1 Drive-Advanced
evel:	Strip Size:	512KB	[X] Initialize
PD per S			[] Configure HotSpare
- Drives ID	Read Policy:	Ahead	[] Disable BGI
[X]P0:01 [X]P0:01 [X]P0:01	Write Policy:		
[X]P0:01 [X]P0:01 [X]P0:01	I∕O Policy:	Direct	ОК
- Basic Size:	Disk cache Policy	Unchanged	CANCEL
Name:	Emulation		



14. Hit the "Arrow Up" key to bring you to the OK button then select the Enter Key to create your new VD.

RAID	Create Virtual Drive-Advanced
Level:	Strip Size: 512KB [X] Initialize
PD per S Drives ID	the virtual drive.
[X]P0:01 [X]P0:01 [X]P0:01 [X]P0:01 [X]P0:01	Are you sure you want to continue? Write Po
[]P0:01 []P0:01	I/O Poli
Basic Size:	Disk cac Policy
Name:	Emulation Default

15. To create the New VD press the Enter Key.

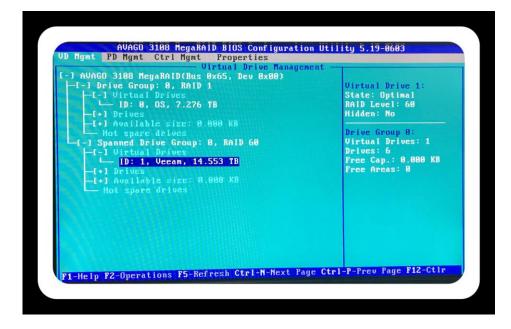
AID RAID-		ta stection:		isal	ble			
:001.	rr	itection:						
PD per Span	: 3							
- Drives	Туре	Size		SPN		Capable		
[X]P0:01:04	SAS	7.276			80	512e		
[X]P0:01:10				00	81	512e		
[X]P0:01:16				00		512e		
[X]P0:01:17			TB	01				
[X]P0:01:22			TB					
[X]P0:01:23			TB					
- Basic Sett	ings							
	.553		-					
		The second s	B		A	dvanced	OK	CANCEI
Name: Uee	am							



16. RAID creation will need to complete its RAID 60 initialization. When you receive confirmation of VD completion hit the Enter to bring you to the next menu.

-[-] Drive Group: -[-] Virtual D -[-] [D: 0, 0 -[+] Drives		Virtual Drive 0: State: Optimal RAID Level: 1
-[+] Availab Hot spare [-] Spanned Dr -[-] Uirtual D: 1, -[+] Drives -[+] Availab Hot spare	Initialization complete on VD 1	Toup 0: 1 Drives: 1 : 2 ap:: 0.000 KB reas: 0

17. Select the "Arrow Down" key until you get to the Virtual Drives RAID configuration. Select the Enter Key.





18. Here you will be able to confirm your RAID-60 configuration. Hit "Arrow Down" key to bring you back to the Advanced button.

- General		tal Drive 1 - P		
RAID Leve	1: RAID-60			
Name:	Veeam			
Size:	14.553 TB			
Strip Size	e: 512 KB			
VD State	: Optimal	N/Alexan		
- Operatio				
	: No Operation			
Progress	: N/A			_
Time Left	: N/A	Advanced	0.R	CANCEL

19. If you decide to make a property change hit the Enter Key and make your selection. Hit the "Arrow Down" until you come to the OK prompt, then hit the Enter Key. If no property change is selected use the "Arrow Down" key to take you to the Cancel button then hit the Enter key.

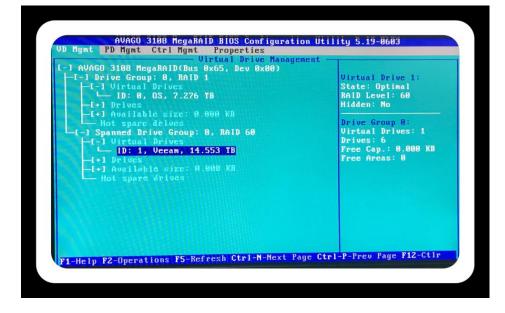
	Mgnt Ctrl Mgnt Properties Virtual Drive Management
— General RAID Leve Name:	-Uirtual Drive 8 - Properties Advanced Properties Read Policy: Ahead Emulation: Default
Size:	Default Write: Write Back [] Disable BGI
Strip Siz	Current Write: Write Through
VD State	I/O Policy: Cached
— Operati Operation	Disk cache Policy : Unchanged
Progress	Access Policy: RW
Time Left	Reason for difference in Write Policy: BBU Not Installed



20. Use the "Arrow Down" key to the Cancel button and then press the Enter key.

— General RAID Level: RAID-60	tual Drive 1 - Properties
Name: Veean	
Size: 14.553 TB	
Strip Size: 512 KB	
VD State : Optimal	
- Operations	
Progress : N/A	
Time Left : N/A	Advanced BK CANCEL

21. Hit the "Arrow Up" until you get to the Avago 3018 controller and hit the Enter Key.

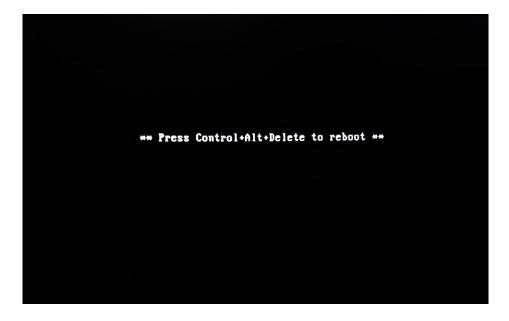




22. Hit the Enter key at the OK prompt to exit BIOS.

L-1 Spanned Dr	Uirtual Drive Managemen gaRAID(Bus 0x65, Dev 0x00) ive Group: 0, RAID 60	Foreign Config Presen Controller:
-[-] Virtual - ID: 0, -[+] Drives	Vecam, 14.553 TB	Drive Groups: 1
	OK Cance 1	

23. CTRL + ALT + DEL to reboot the Storage Server.





8 Microsoft Installation on Supermicro Superstorage

Installation instructions can be found at the following location:

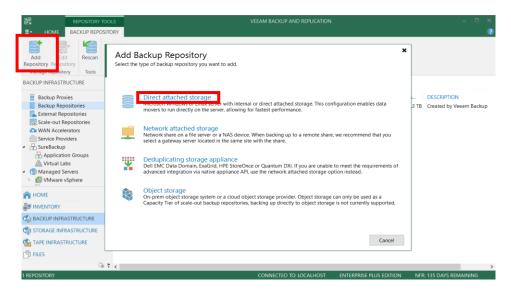
https://www.microsoft.com/en-us/windows-server

9 Veeam Installation and Setup

- 1. This step requires you to open your Veeam Backup and Replication Console.
- 2. You will then be in the **Backup Infrastructure** section where you will right-click the **Backup Repositories** and select **Add Backup Repository** in the upper left corner of your screen.

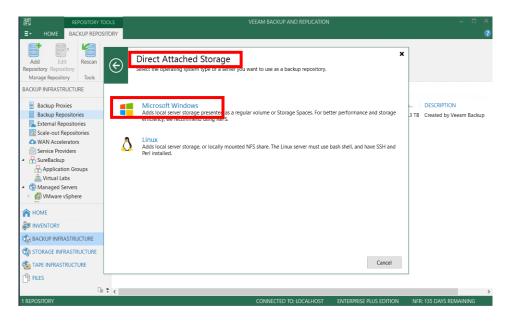
REPOSITORY TOO	DLS	١	EEAM BACKUP AND R	EPLICATION		- 🗆 ×
■ HOME BACKUP REPOSIT	ORY					2
Add Edit Rescan Repository R pository Tools						
BACKUP INFRASTRUCTURE	Q Type in an object name	to search for	×			
🖳 - Rastaup Bravias	NAME TYPE	HOST	PATH	CAPACITY FREE	USED SPA	DESCRIPTION
Backup Repositories	📑 Default Backu Wind	ows WIN-2	k19-1 E:\Backup	4 TB	1.4 TB 2.3 TB	Created by Veeam Backup
Scale-out Repositories WAN Accelerators Service Providers SureBackup Application Groups Wirtual Labs Managed Servers Image: Managed Servers Image: Managed Servers						
A HOME						
INVENTORY						
BACKUP INFRASTRUCTURE						
Can STORAGE INFRASTRUCTURE						
TAPE INFRASTRUCTURE						
FILES						
D. •	• .					

3. After clicking **Add Backup Repository** you will then be taken to the menu where you will click **Direct Attach Storage.**





4. You will then be directed to the **Direct Attach Storage** Menu where you will select the operating system **Microsoft Windows.**



5. You will then be directed to the **New Backup Repository** Menu where you provide a name of the Backup Repository in this case we've named it **Backup Job 2**. You can choose the name that best fits your backup naming convention.

	B TOOLS	VEEAM BACKUP AND REPLICATION	- 🗆 ×	
* *	ов 🐴 🛕 🛃	د	?	
Backup Replication Backup C Job × Job × Copy × J Primary Jobs Auxiliary J HOME		description for this backup job.		×
Jobs	Name	Backup Job 2		
🚛 Backup 🔺 📑 Backups	Virtual Machines	Description:		
Disk	Storage	Created by WIN-2K19-1\Administrator at 11/19/2020 10:07 AM.		
Liss Last 24 Hours	Guest Processing			
	Schedule			
П НОМЕ	Summary			
STORAGE INFRASTRUCTURE	E			
FILES				
		< Previous Next >	Finish	Cancel



6. Veeam Backup and Restore will ask you to enter a Virtual Machine or part of the name to search field for possible matches. If the VM is not listed, click **Show more** to browse.

治		VEEAM BACKUP AND	REPLICATION		
E- HOME VIEW					
Backup Replication Backup Copy Restore Failover In	Artions New Backup Job Virtual Machines Select virtual machines Select virtual machines Virtual Machines	st to process via container, or granularly. Con to container.	tainer provides dynami	ic selection that autor	× matically changes
程 Backup					
▲ Backups Lisk	Name	Virtual machines to backup: Name	Туре	Size	Add
Last 24 Hours Success Failed	Virtual Machines Storage	Name	туре	Size	Remove
	Guest Processing				Exclusions
	Schedule				
	Summary				✿ Up
	Summery				Down Recalculate Total size:
A HOME					0 B
		<	Previous Next >	> Finish	Cancel

7. This step requires you to **create** the name of the **backup job in the Name Field**. Once again, you choose the name that best fits your backup naming convention.

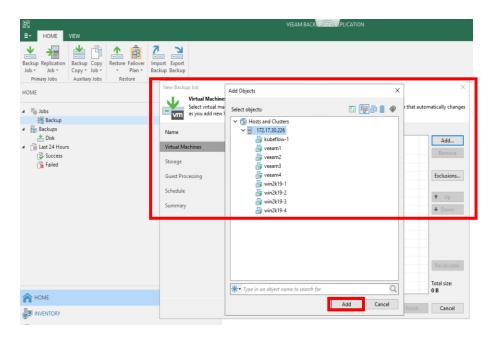
海 四 一	VEEAM BACK UP AND REPLICATION
E → HOME VIEW	
	of Eport up Backup Attens
HOME 4 행동 Jobs 문문 Backup	New Backup Job × New Type in a name and description for this backup job.
 	Name Name: Backup Job 3 Perciption: Storage Created by WIN-2X19-1\Administrator at 10/19/2020 3:59 PM. Guest Processing Created by WIN-2X19-1\Administrator at 10/19/2020 3:59 PM. Schedule Summary
пре номе	
	< Previous Next > Finish Cancel



8. Select a VM in the list and click **Host** where to apply changes in bulk, select several VMs' in the list and **click Host**.

岂 ∃▼ HOME VIEW			VEEAM B	ACKUP AND REPLICATION		
Ackup Replication Job - Job - Primary Jobs	+ Plan +	Import Export Backup Backup Actions				
IOME 参 Jobs 程 Backup 論 Backups		as you add r	hines I machines to process via container, or gran new VM into container. Virtual machines to backup:	nularly. Container provides dynam	ic selection that aut	comatically chang
Le Disk		Name	Name	Туре	Size	Add
i ∰ Last 24 Hours ⊉ Success ∭ Failed	Virtual Machines	kubeflow-1	Virtual Machine	55.6 GB		
	Storage	veeam1	Virtual Machine	278 GB	Remove	
	Storage	weeam2	Virtual Machine	243 GB		
	Guest Processing	weeam3	Virtual Machine	278 GB	Exclusions.	
			🔓 veeam4	Virtual Machine	280 GB	
		Schedule	🕞 win2k19-1	Virtual Machine	20.0 GB	↑ Up
		Summary	👘 win2k19-2	Virtual Machine	14.5 GB	
		Summary	in2k19-3	Virtual Machine	13.7 GB	✤ Down
			🔐 win2k19-4	Virtual Machine	8.62 GB	
						Recalculate
A HOME						Total size: 1.16 TB
				< Previous Next	> Finish	Cancel

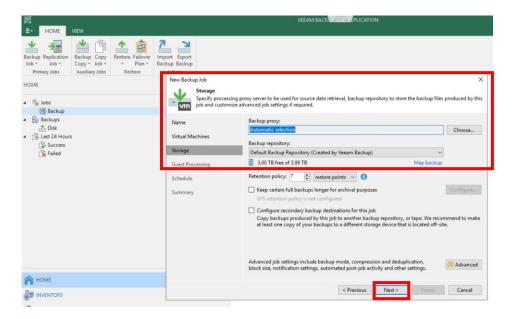
9. Select a VM in the list and click **Host** where to apply changes in bulk, select one or several VMs' in the list and **click Host**.





10. Click next to **Backup proxy** where if you choose **Automatic selection**, Veeam Backup and Replication will detect backup proxies that have access to the source datastore and will automatically assign an optimal backup proxy to process VM's in the job.

If you choose **Use the selected backup proxy servers specified**, you can select backup proxies that the job must use. It is recommended that you select at least two backup proxies to ensure that the backup job starts if one of the proxies fails or loses its connectivity to the source datastore.



11. This step requires that you specify a user account that will be used to connect to the VM guest OS and deploy the runtime process. From the **Guest OS credentials** list, select a user account that has enough permissions. By default, Veeam Backup and Replication uses the **Log on as a batch job** policy to connect to guest OS. If the connection fails, Veeam Backup and Replication switches to **Interactive Logon**.

超 Ξ- HOME VIEW		VEEAM BACK
Backup Replication Backup Copy Job * Primary Jobs Auxiliary Jobs Restore Failover Primary Jobs Auxiliary Jobs Restore HOME	Attons New Backup Job Mew Backup Job Choose guest	ing D5 processing options available for running VMs.
Hing Backup → Bing Backups → Diak → Diak → Sourcess → Failed	Name Virtual Machines Storage Guest Processing Schedule Summary	Enable application-aware processing Detects and prepare applications for consistent backup, performs transaction logs processing, and configures the OS to perform required application restore steps upon first boot. Customize application handling options for individual machines and applications Finable guest file system indexing Greater catalog of system lines to enable browsing, startching and 1-slick restores of individual files. Indexing is optional, and is not required to perform instant file level recoveries. Customize applications advanced guest file system indexing options for individual machines mediate advanced guest file system indexing options for individual machines Guest interaction propsy.
		Guest OS credentials: Manage accounts Customize guest OS credentials for individual machines and operating systems Verify network connectivity and credentials for each machine included in the job Text Now
A HOME		
		< Previous Next > Finish Cancel



12. At the **Schedule** step of the wizard, select to run the backup job manually or schedule the job to run on a regular basis. Select the **Run the job automatically** check box. If the check box is not selected, you will have to start the job manually to create the VM backup.

To define schedule for jobs you'll want to define either **Daily at this time** or **Monthly at this time**. To run the job specific time daily, on defined weeks days or with specific periodicity, select **Daily at this time**. Use the fields on the right to configure the necessary schedule.

To run the job once a month on specific days, select **Monthly at this time.** Use the fields on the right to configure the necessary schedule.

분립 =- HOME VIEW		VEEAM BACK IP AND BEPLICATION
Backup Replication Job > Job > Primary Jobs HOME	Backup Backup Actions New Backup Job Schedule	X heduling options. If you do not set the schedule, the job will need to be controlled manually.
 ▲ Backups ▲ Dat ▲ Dat ▲ Lat 24 Hours ▲ Success ▲ Failed 	Name Virtual Machines Storage Guest Processing Schedule Summary	But the job automatically O Daily at this time: 1020 PM © Everyday Days Daily at this time: 1020 PM © Fourth Saturday Months Periodically every: 1 Hours Schedule. After this job: Backup Job 1 (Created by WH-2K19-1KAdministrator at B/28/2020 2: ********************************
A HOME		< Previous Apply Finally Cancel

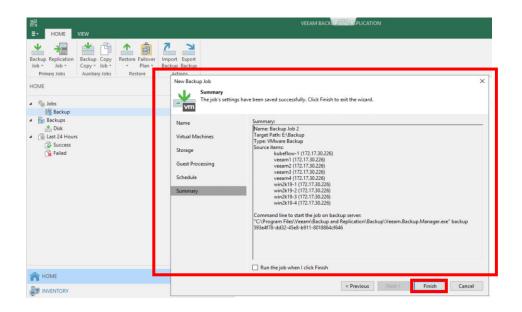


13. Finishing the working wizard at the **Summary** step of the wizard, complete the procedure of backup job configuration.

1. Review the details of the backup job.

2. Select the **Run the job when I click Finish** check box if you want to start the job right after you finish working with the wizard.

3. Click **Finish** to close the wizard.



14. The configuration steps for **Veeam Backup Restore** are now **Completed.**

