## WASABI ACADEMY

**Product Documentation** 



## Veritas Backup Exec With Wasabi

Wasabi has been certified for use with Veritas Backup Exec. Veritas Backup Exec is a fast, cost-effective, unified backup and recovery solution for cloud-ready organizations.

For more information regarding Backup Exec-Wasabi support, please refer to Backup Exec HCL.

To use this product with Wasabi, please follow the instructions below.

**Please Note:** The data restoration process is handled by your specific backup software application. As there are many potential variables that will affect your unique environment, it is strongly recommended that you seek the guidance of your backup software's technical support team in the event that you encounter difficulty, or have application-specific inquiries.

#### 1. Prerequisites

- Operational Backup Exec v 22 and above
- An active Wasabi account
- Abucket created in the Wasabi account

Note: To configure Wasabi for previous Backup Exec versions (v20.4 and above) please click here.

#### 2. Configure Wasabi as Cloud Storage Server

2.1. Log in to Backup Exec.

🔊 Veritas Backu	up Exec™							-		Х
۵	A Home	Backup and Restore	Job Monitor	<b>E</b> Storage	Reports	Instant Cloud Rec	overy			
One Column	Narrow/Wide	Three Reset Columns Home Tab	Active Alerts Alert History Backup Status Backup Size	Storage Status Instant Cloud Reco Configuration Task Simplified Disaster Syster	overy Status s r Recovery n Health	Database Encryption Key Virtual Machine Backups Licensed Status	Support			
Virtual Ma	chine Backup	5							* 🗆	×
			Virtual ma	chine back	up status r	not available				
Storage St	atus								* 🗆	×
Disk-based S	storage			75	GB used of 199 G	B				
	<ul> <li>Total capaci</li> </ul>	ty: 199 GB								
Installation	n and Upgrade	25							* 🗆	×
View Ins	tallation Summar	ry Report								
Document	ation								* 🗆	×
View Re	adMe									
View Ad	ministrator's Guid	de (PDF)								
View Ad	ministrator's Guid	de Addendum (PDF)								
Licensing	nformation								* 🗆	×
Synchro	nize Entitlements	with Licensing Portal								
	CUPEXEC Alert	s 😣 0 🛕 4 😨 0 🕠	13 Jobs 🕸 0 🚦	zo 🏖 o 🎽	<i>.</i>				VE	ritasi

2.2. Navigate to the Storage tab. Click on "Configure Cloud storage".



2.3. In the Configure storage dialog box, provide a name for the cloud storage and click "Next".

- 15	Canfinger stands and	DACKUDEVEC
	Configure storage on	BACKUPELEC

\_

What na device?	me and description do you want to use for the cloud storage
Name:	Wasabi-backup
Description:	
Enable de	duplication to cloud storage
🔲 I want to i	import an existing Cloud Deduplication Storage
Select "	Enable deduplication to cloud storage" option to use Backup Exec Cloud Deduplication.
	Next > Cancel

2.4. Select "S3" for the cloud storage device provider and click "Next".

Configure storage on BACKUPEXEC	-		Х
Which provider for the cloud storage device do you want to	use?		
Azure			
53 S3			
Some cloud storage providers require encryption to be enabled when backup jobs or duplicate cloud storage. For details about why you should encrypt backup data when targeting jobs to c technote: 000095780	e jobs are t loud stora	argeted t ge, see th	o e
The Verify option is disabled by default for backups targeted to cloud devices as cloud storage for reading data from the cloud during verification. To enable the option, go to the Verify tab a appropriate option to verify data. If you retarget existing backup jobs to cloud storage, ensure is not enabled. Backup Exec complies with data integrity mechanisms for cloud transfer. For me to the technote: 000108140	e providers and select t that the vi ore inform	may char the erify optic ation refe	ge m r
To add a new S3 cloud instance using the Generic S3 Configurator tool, click here			
What do I need to configure to use cloud storage? < Back Nex	d >	Cancel	

2.5. Select "Wasabi" from the Cloud storage dropdown menu.

Configure stor	age on BACKUPEXEC	-		Х
What is th	e connection information for the cloud storage devi	ce?		
Cloud storage:				~
Logon account:	Amazon China Amazon Amazon Government Cloud FIPS(140-2) Amazon Government Cloud Google DOCKS by PingUs Wasabi			
	< Back Next >		Cance	

Note: If you do not have Wasabi listed as an option, please follow the steps in the Appendix - Adding support for Wasabi.

2.6. To add your Wasabi logon account details, click on "Add/Edit".

Configure	sto	rage on BACKUPEXEC	_		Х
What is	th	ne connection information for the cloud storage device	ce?		
Cloud stora	ge:	Wasabi			*
Logon accou	int:	Administrator	¥	Add/Edit	
It is reaccou	nt s	nmended that you select or create a logon account that is used exclusively for the cloud hould not be used for any other purpose and should not contain credentials that are sub plicies.	device. 1 oject to p	The bassword	
		< Back Next >		Cancel	

2.7. In the Logon Account Selection window, click "Add".

📜 Logon Account Selection					-		Х
Select a logon account	t to use when connecting to	o this serve	er.				
Please select a logon account fro	om the list:						
Account Name 🔺	User name	Default	Туре	Owner		Add	
Administrator	Administrator		Restricted	BACKUPEXEC\Admi		Delete	
🔊 System Logon Account	BACKUPASSIST\Admin	Yes	Common	BACKUPEXEC\Admi		Edit	
					Se	t as Defau	lt
Help				OK		Canc	el

2.8. In the Add Logon Credentials dialog box, provide the following details and click "OK".

- User name Access Key of the Wasabi account
- Password Secret Access Key
- Account name provide a descriptive account name to identify the account

📜 Add Logon Credent	ials		Х
Account credentials			
User name:	5V5RQJTUGBPO3W7FGXXB		
Password:	••••••	•••••	
Confirm password:	••••••	•••••	
Account name:			
Wasabi-user1			
Notes:			
			^
			$\sim$
This i	s a restricted logon account.		
🍸 🗌 This i	s my default account.		
Help		ОК	Cancel

 $2.9.\ \mbox{In the Logon}\ \mbox{Account}\ \mbox{Selection}\ \mbox{dialog}\ \mbox{box}, \ \mbox{select}\ \mbox{the account}\ \mbox{from the list}\ \mbox{and click}\ \mbox{OK}.$ 

ccount Name 🔺	User name	Default	Туре	Owner	Add
Administrator	Administrator		Restricted	BACKUPEXEC\Admi	Delete
System Logon Account	BACKUPASSIST\Admin	Yes	Common	BACKUPEXEC\Admi	Edit
💡 Wasabi-user 1	5V5RQJTUGBPO3W7F		Restricted	BACKUPEXEC\Admi	Set as Defaul

2.10. Confirm the logon account and click "Next'.

儲 Configure sto	rage on BACKUPEXEC	-		Х
What is th	ne connection information for the cloud storage device	:e?		
Cloud storage:	Wasabi			*
Logon account:	Wasabi-user1	¥	Add/Edit	t
It is recor account s update p	nmended that you select or create a logon account that is used exclusively for the cloud should not be used for any other purpose and should not contain credentials that are sub olicies.	device. 1 ject to p	The bassword	
	< Back Next >		Cancel	

2.11. Select the required bucket from the list and click "Next".

Configure storage on BACKUPEXEC	_		Х
Which logical storage unit do you want to use?			
and the second se			^
and the second			
have were bi			
bexec-wasabi			
			$\sim$
< Back Next	> [	Cance	

2.12. Configure the desired number of concurrent operations and click "Next".

Configure storage on BACKUPEXEC	-		Х
How many concurrent operations do you want to let run at th on this cloud storage device?	e sam	ne tim	e
Concurrent operations: 4			
This setting determines how many jobs can run at the same time on this device. The number of j can handle varies depending on your hardware and environment, so you may need to adjust this recommended that you set it low enough to avoid overloading your system, but high enough to a timely manner.	obs that s setting process	this devic later. It is your jobs	in
< Back Next	> [	Cancel	

2.13. Review the configuration summary and click "Finish".

Configure storage on BACKUPEXEC		—	Х
Storage configuration summary			
Name and description for the cloud storage device			~
Name:	Wasabi-backup		
Description:			
Provider name			\$
Cloud provider name:	S3		
Connection information			\$
Cloud server name:	wasabi:wasabi.com		
Logon account:	Wasabi-user1		
Bucket / Storage container			\$
Storage location:	bexec-wasabi		
Number of concurrent operations allowed			\$
Comment constitute	4		

2.14. Click "Yes" to restart the Backup Exec services to provide the cloud storage online.



2.15. The new Wasabi cloud storage account is displayed in the Storage tab and is ready to use.

Veritas	Backup Exec™												-		Х
ړئ	C Home	Backup and	Restore	Job Monitor	Storag	je l	<b>III.</b> Reports	Inst	tant Cloud Re	covery					
Standa	rd act Sort and Filter •	Pause Disable Offline	Configure Storage	Configure Cloud Storage	Troubleshoot	Delete	Inventory	Catalog	Inventory and Catalog now	Restore	0	Respond OK			
	Views	State		Config	ure		Sto	rage Ope	erations	Media Opera	tions	Alerts			
						All Store	age				Dedupli	cation disk sto	rage 0	001 deta	nils 🜩
Name 🔺				State		Storage Type Active Alerts Storage Trending Ca			Capacity						
	Deduplication disk sto	rage 0001		Online		Deduplica.						368 MB	used of	199 GB	
	Wasabi-backup			Online		Cloud sto									

#### 3. Install Veritas backup exec agent and add server

3.1. Navigate to the "Backup and Restore" tab. Click "Servers and Virtual Hosts" and click "Add" to add a client to backup.

🔞 Verita	as Backup Exec™							-	ΟX
۵	Hon	ne Backup and	Restort Job M	onitor Stor	rage Repo	nts Instant Cloud	Recovery		
Com Stanc	dard 1 The first second	ree 🤤 🦉 🗳 ist Backup 🖷	)One-Time Backup • Edit Backups Backup Calendar <b>Backups</b>	E Restore Search Create Disas	ster Recovery Disk s <b>tores</b>	Convert to Virtual •	Servers and Virtual Hosts	ant Recovery Ready *	Credentials
					Servers		11	Group	All Servers Þ
Groups		Server 🔺	Act	ive Alerts	Status		Add Remove Update	Last Backup	
A	II Servers	backupexec.la	ab.wasabilab		Never backed up		Servers and Virtual Hosts Tu We In Fr Sa Su Mo		
R Se Of	etired Servers								>
		Details for backup	oexec.lab.wasabil	abs.io					×□ď
		Windows computer (virtual machine) Refresh	Backup Source A C: E: E: EFI System P Microsoft SC	artition 2L Server Instances	;		Backup Selection None None None None	Backup Status Never backed Never backed Never backed Never backed	up   up   up   up   up   ↓
0	BACKUPEXEC	Alerts 📀 0 🛕 5	🛛 0 🕤 14 🛛 Jobs	: 🍇 0 👿 0 🐉	0 🐉 🎜				VERITAS

3.2. Choose the type of server infrastructure that needs to be backed up and click "Next".

🐐 Add a	Server —	×
Whic	h type of server do you want to add to Backup Exec?	
N)	Microsoft Windows computers and servers Add a Windows computer or an Exchange, SQL, or SharePoint server to the list of servers. The Backup Exec Agent for Windows will be installed, if necessary.	^
-	VMware vCenter server or ESX host Add a VMware vCenter server or ESX host to the list of servers so you can back up the virtual machines that it hosts. The recommended way to back up a virtual machine is to select it from the virtual host view.	
2	Microsoft Hyper-V host Add a Microsoft Hyper-V host to the list of servers. The recommended way to back up a virtual machine is to select it from the virtual host view.	
1	File server, NDMP data server, Azure file share or AWS FSx for Windows File Server Add a file server, an NDMP data server, an Azure file share or an AWS FSx for Windows File Server to the list of	~
A	dding a server to the list of servers in Backup Exec lets you back up and monitor the data on that server.	
	Next > Cancel	

3.3. Check "Allow Backup Exec to establish a trust with the servers" check box and click "Next".

Do you want to establish a trust?							
Backup Exec must establish a trust with the servers that you want to add to ensure secure communication between the Backup Exec server and the remote computers. You must allow Backup Exec to establish the trust before you can continue to add the servers.							
Allow Backup Exec to establish a trust with the servers.							
What does it mean to establish a trust between the Backup Exec server and a remote computer?							

Х

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 $3.4.\,\mbox{Add}$  servers with an associated "Logon Account" and Click "Next".

Add a Server		_		Х
Which servers do you want to add	?			
Type the name of a server or the server's IP address or br	owse for any servers that you want to add:		Add	
			Brows	e
Server Name 🔺	Logon Account		Delete	:
192.168.197.43	admin	*	Apply to	AII
Always use IP address to connect to servers. Do not r names.	resolve IP addresses into fully qualified doma	in		
What are logon accounts?	C Pack Novi		Cance	
what are logon accounts:	S DACK Next		Cance	

3.5. Check both boxes to ensure that updated backup agent software has been installed and available to create backup and

click "Next".

Do you want Backup Exec to upgrade the Backup Exec Agent for Windows if a version of it is installed on the remote computer?
Upgrade the Backup Exec Agent for Windows to the current version automatically
Restart the remote computer automatically after installing the Backup Exec Agent for Windows when a restart is required
< Back Next > Cancel

Х

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3.6. Review the configurations and click "Install".

镧 Add a Server		-		Х
Summary				
Type of server to add Microsoft Windows computers and servers				\$
Establish trust Yes				*
Servers to add				\$
Server Name L	ogon Account			
192.168.197.43 a	dmin			
Always use IP address to connect to servers	Yes			
Install features				\$
Upgrade the Backup Exec Agent for Windows to the current version automatically:	Yes			
Restart the remote computer automatically after installin the Backup Exec Agent for Windows when a restart is required:	g Yes			
	< Back In	stall	Cance	el

3.7. Veritas Backup Exec will verify appropriate packages have been configured and installed on your remote server and complete successfully.

Add a Server		-		
nstalling the Backu	p Exec Agent for Windows.			
Server Name	Progress			
192.168.197.43	🐼 Successful			
		(	Finish	1

3.8. Once the agent software is successfully installed - the server will be available to be backed up.

🔞 Ve	ritas Backup Exec™							-	D X
۲	<b>∦</b> ⊿ Hom	e Backup and	Restore Job M	onitor Sto	rage Repo	nts Instant Cloud	Recovery		
Co Sco Sco	andard Tro ompact Lis ort and Filter • & G Views	ee 💦 🖉 🌢 st roups • Backup	One-Time Backup <b>*</b> Edit Backups Backup Calendar <b>Backups</b>	E Restore Search Create Disa	ster Recovery Disk <b>stores</b>	Convert to Virtual • Conversions	Q Add - Remove Update Servers and Virtual Hosts	Jobs Instant • Recovery •	Recovery Ready •
			_		Servers			Server 192.1	68.197.43 🔿
Group	IS	Server 🔺	Act	ive Alerts	Status		Last 7 Days of Backup Jobs	Last Backup	
8	All Servers	192.168.197.4	3		Never backed up		Tu We Th Fr Sa Su M	0	
•••	2 servers Retired Servers	backupexec.la	b.wasabilab	Tu We Th Fr Sa Su M	0				
		٢							>
		Details for 192.16	8.197.43						×□ď
		0	Backup Source A				Backup Selection	Backup Status	
		Windows computer	2 C:				None	Never backed	up
		(virtual machine)	6 EFI System F	artition			None	Never backed	up
		Refresh	System State	2			None	Never backed	up
			(						>
0	1 BACKUPEXEC	Alerts 😣 2 🛕 5	🝸 0 😚 16 🛛 Job:	: 🅸 0 👿 0 🎖	0 💣 👼				VERITAS

### 4. Create a backup job

4.1. Right-click on the server that needs to be backed up and choose "Back Up to Cloud".

Veritas Backup Exec <sup>™</sup>						-		Х	loads	Licensing	NetInsig
) ال	me Backup and	Restore Job Monitor	Storage Rep	norts Instant Cloud	I Recovery						
Standard Compact Sort and Filter • & Views	Tree List Groups •	)One-Time Backup • 🛛 🐌 Resto Edit Backups 🍐 Searc Backup Calendar 🖗 Creat Backups	re h e Disaster Recovery Disk <b>Restores</b>	Convert to Virtual *	ବିଲ୍ଲ Add • ିଆ Remove କ୍ଲିଆ Update Servers and Virtual Hosts	Jobs Provide the second secon	Recover Ready	ÿ			
			Servers			Server 19	2.168.197.4	(3 ♥			
Groups	Server *	Active Alerts	Status		Last 7 Days of Backup Jobs	Last Backup					
All Servers	192.168.197	Backup	Back Up to Cloud	*							
All servers and applic 2 servers	-	Edit Backups			Back Up to Deduplication Disk Storage						
Retired Server	s tackupexec.	Hold Job Queue			Back Up to Dedupl	ication Disk Storage	and then Du	uplicate	to Cloud		
Servers in this group. 0 servers	-	Run Next Backup Now			Back Up to Dedup!	onvert to	virtual M	achine			
		Restore			Back Up to Dedup!	ication Disk Storage	and Simulta	ineously	Convert to	o Virtual Machine	
		Search			Back Up to Disk						
	Landard Descent 104						Cloud				
		Instantly Recover a VM			Back Up to Disk an	d then Convert to Vi	rtual Machir	ne			
		Kemove a Recovered VM			Back Up to Disk an	d Simultaneously Co	nvert to Virt	tual Mac	:hine		
		Validate VM for Recovery			Create a Forever In	cremental Backup fo	r Virtual Ma	chines			

4.2. Click "Edit" and choose the type of backup, backup certain folders, application data or entire VM.

Backup Definition Pr	roperties			- 0	Х
Name: 192.1 Description:	168.197.43 Backup 00	006			
. 🖣 192.16	68.197.43		🤶 Bad	ckup	
Fully selected		٢	😕 Full		٢
C:			Job name:	192.168.197.43 Backup 00006-Full	
🧐 EFI System Pai	rtition		Schedule:	Every 1 week on (Friday) at 11:00 Pi	N
Not selected		$\bigcirc$	Storage:	Wasabi-backup	
			Keep for:	2 Weeks	
			🧐 Increme	ntal	٢
			Job name:	192.168.197.43 Backup 00006- Incremental	
			Schedule:	At 11:00 PM, then every 1 day	
				This backup will not run until the first full backup is completed.	
			Storage:	Wasabi-backup	
			Keep for:	1 Week	
Test/Ed	lit Credentials	Edit		Add Stage 🔻 Edit	R
Help				ОК С	ancel

4.3. Under the "Backup" section and choose when the backup needs to run, either run it once or create a schedule based on

the requirement.

Backup Options	-		Х
Schedule			
Storage Add a Backup Job 🔻			
Network			
Notification	gs as need	Jed.	
Test Run			
Verify Job template name: FUII			
Type a name that describes this job template. The name is used to create the default job name.			
Advanced Disk-based Backup Job name: 192.168.197.43 Backup 00006-Full			
Pre/Post Commands Schedule:   Recurrence: Every 1 week on (Friday) at 11:00 PM		•	
Files and Folders O Run now with no recurring schedule			
Exclusions Create without a schedule			
Submit job on hold			
			-
		X	1
Type a name that describes this job template. The name is used to create the default job name.			
Job name: 192.168.197.43 Backup 00006-Incremental			
Schedule:   Recurrence: At 11:00 PM, then every 1 day		•	J.
Create without a schedule			
Submit job on hold			
Help	Ж	Cance	el

4.4. Click on "Storage", choose the Wasabi cloud storage account to store your backup and click "OK" in the Full and Incremental backup sections.

Backup Options		— 🗆 X
Schedule		
Storage	Full	
Network	Storage:	🕲 Wasabi-backup 👻
Notification Test Run		Some cloud storage providers require encryption to be enabled when backup jobs or duplicate jobs are targeted to cloud storage. For details about why you should encrypt backup data when targeting jobs to cloud storage, see the technote: 000095780
Verify Advanced Open File Advanced Disk-based Backup Pre/Post Commands		The Verify option is disabled by default for backups targeted to cloud devices as cloud storage providers may charge for reading data from the cloud during verification. To enable the option, go to the Verify tab and select the appropriate option to verify data. If you retarget existing backup jobs to cloud storage, ensure that the verify option is not enabled. Backup Exec complies with data integrity mechanisms for cloud transfer. For more information refer to the technote: 000108140
Files and Folders	Keep for:	2 🐳 Weeks 🗸
Exclusions	Compression: Encryption type:	None v
	Incremental	
	Storage:	🕲 Wasabi-backup 👻
		Some cloud storage providers require encryption to be enabled when backup jobs or duplicate jobs are targeted to cloud storage. For details about why you should encrypt backup data when targeting jobs to cloud storage, see the technote: 000095780
		The Verify option is disabled by default for backups targeted to cloud devices as cloud storage providers may charge for reading data from the cloud during verification. To enable the option, go
Help		OK Cancel

4.5. Click "OK" in the Backup Definition Properties.

🔞 Backup Defin	ition Properties			- C	X
Name: Description:	192.168.197.43 Backup 00	0006			]
• 📲 19	92.168.197.43		🧖 Bad	ckup	
Fully selected	ed	٢	😑 Full		۲
C:	tem Partition		Job name:	192.168.197.43 Backup 00006-Full	
System	State		Schedule:	Every 1 week on (Friday) at 11:00 P	M
Not selecte	d	$\checkmark$	Storage:	Wasabi-backup	
			Keep for:	2 Weeks	
			🧓 Increme	ntal	٨
			Job name:	192.168.197.43 Backup 00006- Incremental	
			Schedule:	At 11:00 PM, then every 1 day	
				This backup will not run until the first full backup is completed.	
			Storage:	Wasabi-backup	
			Keep for:	1 Week	
	Test/Edit Credentials	Edit		Add Stage 🔻 Edi	t
Help				ОК	Cancel

4.6. To run a manual backup, select the required server. Click on "Jobs --> Run Next Backup Now".

Ø Veritas Backup Exec™						- 🗆 X
⊛_ A	e Backup and Res	store Job Monitor	Storage I	Reports Instant Cloud	I Recovery	
Standard Compact Sort and Filter • & G Views	ee On st Backup H Edit roups • • • • • • • • • • • • • • • • • • •	e-Time Backup • Line Backup • Line Backup Alexandre Backup Alexandre Alexandre Backup Calendar Alexandre Backup Search Alexand	ore ch te Disaster Recovery D <b>Restores</b>	Sconvert to Virtual • isk Conversions	ିସ୍ଲା Add ▼ ୩୩ Remove ୩୩ Update Servers and Virtual Hosts	Jobs Instant * Recovery * Ready *
6			Server	rs		🕕 🕑 🜆
Groups	Server A	Active Alerts	Status		Last 7 Days of Backup Jobs	Hold Job Run Next
All Servers	192.168.197.43		First backup so	cheduled	Tu We Th Fr Sa Su N	Jobs
All servers and applic 2 servers	backupexec.lab.w	asabilab	Never backed	up	Tu We Th Fr Sa Su M	-
	¢					)
	Details for 192.168.1	97.43				× 🗆 🖒
	Ba	ickup Source 🔺			Backup Selection	Backup Status
	ų	🖼 C:			None	Never backed up
	Windows computer	E L			None	Never backed up
	(virtual machine)	EFI System Partition			None	Never backed up
	Refresh	gi system state			None	ivever backed up
🔅 📲 BACKUPEXEC	Alerts 😣 2 🛕 5 😨 (	) 🕡 16   Jobs 🎕 2 🜉	0 🎎 0 🛔 🕹	n		VERITAS

4.7. The Backup process starts displaying the progress.

🔞 Ve	eritas Backup Exec™							-	ΟX
۹	A Hom	e Backup and	Restore Job M	onitor Sto	rage Repo	ts Instant Cloud	) I Recovery		
St C	andard Tr ompact Lie ort and Filter • 🖓 G Views	ee st roups • Backup • Backup	One-Time Backup <b>*</b> Edit Backups Backup Calendar B <b>ackups</b>	E Restore Search Create Disas	ster Recovery Disk <b>stores</b>	Convert to Virtual •	Servers and Virtual Hosts • Jobs • Rece	stant overy • Recovery Ready •	Credentials
					Servers			Server 192	.168.197.43 Þ
Grou	ps	Server 🔺	Act	ive Alerts	Status		Last 7 Days of Backup Jobs	Last Backup	
8	All Servers All servers and applic	192.168.197.43	3		Backing up	00:01:08	Tu We Th Fr Sa Su M	0	
	2 servers Retired Servers	backupexec.lal	b.wasabilab		Never backed up		Tu We Th Fr Sa Su M	0	
									>
		Details for 192.168	3.197.45						<u>ی</u> ت «
			Backup Source A				Backup Selection	Backup Statu	s l
		Windows computer	🖾 L:				None	Never backe	d up
		(virtual machine)	🌀 EFI System P	artition			None	Never backe	d up
		Refresh	System State	2			None	Never backe	d up
0	1 BACKUPEXEC	Alerts 🛞 2 🛕 5 🚦	🖥 0 🕤 16 Jobs	: 🍇 1 😹 1 🏖	0 🐉 🎜				VERITAS

4.8. The backup job will create a number of folders in your bucket on Wasabi, for example, you might see a structure as

shown below.

🛞 wasabi	bexec-wasabi		English • 🕥 🙎 •
■ Menu Data Access	Buckets / bexec-wasabi Q Search Objects By Prefix		CREATE FOLDER 1 UPLOAD FILES
Buckets <ul> <li>Policies         </li> </ul> <ul> <li>Access Keys</li> </ul>	Objects		Show Versions D 🕸 目 :
Users & Groups , ଥିରୁ Croups	Name ↑           BEOST_00000001	Type	Last Modified Size
<ul> <li>Roles</li> <li>Users</li> <li>Your Account</li> </ul>	BEOST_0000002	•	
Settings     Setting     Billing	<ul> <li>BEOST_0000004</li> <li>BEOST_00000005</li> </ul>	•	
() Support	BEOST_00000006		
	BEOST_00000008	•	
	BEOST_0000009	•	

#### 5. Immutability

Starting in Version 22.2 or later the ability to backup to Object Lock enabled/Immutable bucket is now supported for Wasabi. For more detail please refer to the Hardware and Cloud Storage Compatibility List

To create an Object Lock Volume you will need to utilize the MSDP Cloud Admin command line tool.

5.1 Run and Open Command Prompt (CMD) as an Administrator

Administrator: Command Prompt



5.2 Navigate to the installation of Veritas Backup Exec folder.

Plaintext

cd "Program Files\Veritas\Backup Exec"

🔤 Administrator: Command Prompt

```
Microsoft Windows [Version 10.0.17763.737]
(c) 2018 Microsoft Corporation. All rights reserved.
C:\Users\Administrator>cd "c:\Program Files\Veritas\Backup Exec
c:\Program Files\Veritas\Backup Exec>_
```

5.3 Run the following commands:

Input your Wasabi Access Key and Secret key between in place of and



Copy

**Note**: This configuration example discusses the use of Wasabi's us-east-2 storage region. To use other Wasabi storage regions, please use the appropriate Wasabi service URL as described in our Wasabi Service URLs.

5.4 Run the following command to create your object lock bucket and volume:

--volume is used to specify the volume name (use the same name while configuring the storage in backup exec)

--mode is used to specify the retention mode: COMPLIANCE or GOVERNANCE (Backup Exec supports only the GOVERNANCE mode.)

--max is used to specify the max lock duration: number plus 'D' or 'Y', such as 12Y means 12 years

--min value, -N value min lock duration in days 'D'/years 'Y', such as 12D means 12 days

--live is used to specify the time frame for which the volume will be enabled for retention lock i.e. its live until date (example, 2021-08-18, format:'YYYY-MM-DD', clock is set:'00:00:00', timezone is set:'UTC'

Plaintext	Сору
msdpcldutil.exe createbucket veritasbackup-objectlockvolume objectlockmode COMPLIANCEmin 1Dmax 3Dlive 2023-06-30	

Successful Creation will result in the following:

c:\Program Files\Veritas\Backup Exec>set MSDPC_ACCESS_KEY=#144 #1999 File199
c:\Program Files\Veritas\Backup Exec>set MSDPC_SECRET_KEY=
c:\Program Files\Veritas\Backup Exec>set MSDPC_PROVIDER=wasabi
c:\Program Files\Veritas\Backup Exec>set MSDPC_ENDPOINT=s3.us-east-2.wasabisys.com
c:\Program Files\Veritas\Backup Exec>set MSDPC_REGION=us-east-2
c:\Program Files\Veritas\Backup Exec>msdpcldutil.exe createbucket jdb-veritasbackup-objectlockvolume wasabiolmode COMPLIANCEmir 1Dmax 2Dlive 2023-06-23 Volume: wasabiol in bucket: jdb-veritasbackup-objectlock is created successfully
c:\Program Files\Veritas\Backup Exec>

5.6 You can log into your Wasabi Console and verify that the Bucket and Volume were created as well.

	wasabi	asabi jdb-veritasbackup-objectlock						
Ξ	Menu	Buci	<b>kets</b> / jdł Searci	b-veritasbackup-objectlock				
Data Ac	cess							
J	Buckets							
Ê	Policies		Obje	cts				
©7	Access Keys			Name	Туре	La	st Modified	
Users &	Groups							
ŝ	Groups			wasabiol				
	Roles							
De	Users							
Your Ac	count							
ŝ	Settings							
\$	Billing							
0	Support							

5.7 Go to the Backup Exec Console and click on "Storage" and then click on "Configure Cloud Storage".

رھ	A Home	Rackup and	Restore	Job Monitor	Storage	F	<b>lil.</b> Reports	Instant (	Cloud Recov	very					
F Standar	t Sort and Filter •	<ul> <li>Pause</li> <li>Disable</li> <li>Offline</li> </ul>	Configure Storage	Configure Cloud Storage	Troubleshoot	X Delete	Inventory	Catalog Inv Catalog Inv	rentory and stalog now	Restore					
	views	State		Contigu	re		510	rage Operati	ions	wedia Operations					
											All Storage				
Name 🔺			State	Storage Type		Ac	ctive Alerts	Storage	Trending	Capacity		Active and	Average job rate	Compression	OST WORM
<b>(</b> )	loud storage 0001		Online	Cloud storage											
	eduplication disk sto	rage 0001	Online	Deduplication	disk storage					18.9 G	B used of 48.9 GB	🔒 🧣 1 backup		1:1	
<u>(</u>	vasabiobjectlock		Online	Cloud dedupli	cation storage					5	i00 MB used	🗟 1 backup		1:1	Immutable, Indelible

Ø Veritas Backup Exec™

5.8 On the configuration screen input the name of the Volume that you created in the steps above.

5.10 Click "Next"

# What name and description do you want to use for the cloud storage device?

Name:		wasabiol
Descrip	tion:	
🚺 Ena	able dedu	uplication to cloud storage
📃 Ena	able encr	yption
🗌 l w	ant to im	port an existing Cloud Deduplication Storage
F G	Refer to tl efer to th	he Backup Exec Administrator's Guide before you create the Cloud Deduplication Storage or you can also ne following technote
t	o create echnote	Write Once, Read Many (WORM) enabled backup sets on Amazon S3 cloud storage, refer to the following

Cancel

Next >

5.11 Click on "S3" and then click on "Next"

# Which provider for the cloud storage device do you want to use?

	Azure
	S3
0	Some cloud storage providers require encryption to be enabled when backup jobs or duplicate jobs are targeted to cloud storage. For details about why you should encrypt backup data when targeting jobs to cloud storage, see the technote: 000095780
0	The Verify option is disabled by default for backups targeted to cloud devices as cloud storage providers may charge for reading data from the cloud during verification. To enable the option, go to the Verify tab and select the appropriate option to verify data. If you retarget existing backup jobs to cloud storage, ensure that the verify option is not enabled. Backup Exec complies with data integrity mechanisms for cloud transfer. For more information refer to the technote: 000108140
0	To add a new S3 cloud instance using the Generic S3 Configurator tool, click here
What	do I need to configure to use cloud storage? 

5.12 Select "Wasabi" from the Cloud Storage Dropdown menu

5.13 Select your Wasabi Logon credentials that you made in Section 2 Steps 7-9.

5.14 Click on "Next"

What is the connection information for the cloud storage device?						
Cloud storage: Logon account: It is recor should no	Wasabi wasabi mmended that you select or create a logon account that is u t be used for any other purpose and should not contain cre	used exclusively for edentials that are s	<ul> <li>the cloud device ubject to passwo</li> </ul>	✓ Add/Edit e. The account rd update		
policies.						
		< Back	Next >	Cancel		

5.15 Choose the bucket in the list you created from the previous steps and click on "Next"

# Which logical storage unit do you want to use?

^
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V

5.16 Select how many concurrent operations you wish to have and click "Next"

How many concurrent operations do you want to let run at the same time on this cloud storage device?

Concurrent operations: 2

This setting determines how many jobs can run at the same time on this device. The number of jobs that this device can handle varies depending on your hardware and environment, so you may need to adjust this setting later. It is recommended that you set it low enough to avoid overloading your system, but high enough to process your jobs in a timely manner.

ancel

5.17 Review your settings and then click on "Finish"

## Storage configuration summary

Name and description for the cloud storage device		\$
Name:	wasabiol	
Description:		
Encryption details		\$
Encryption enabled:	No	
Provider name		\$
Cloud provider name:	S3	
Connection information		*
Cloud server name:	wasabi:wasabi.com	
Logon account:	wasabi	
Bucket / Storage container		\$
Storage location:	jdb-veritasbackup-objectlock	
Number of concurrent operations allowed		\$
Concurrent operations:	2	

	Et t L	
< Back	Finish	Cancel

5.18 Next you can follow the steps listed in Section 4 for Creating a backup job and select your Object lock Cloud Storage to backup to.

#### Appendix - Adding Support for Wasabi

In order to use Wasabi with Backup Exec v22, two files - CloudProvider.xml and CloudConnectorCfg.xml need to be downloaded and applied to the Backup Exec server. This configuration will provide Wasabi as a dropdown option.

Please follow the steps included in the Veritas technote to apply these xml files.