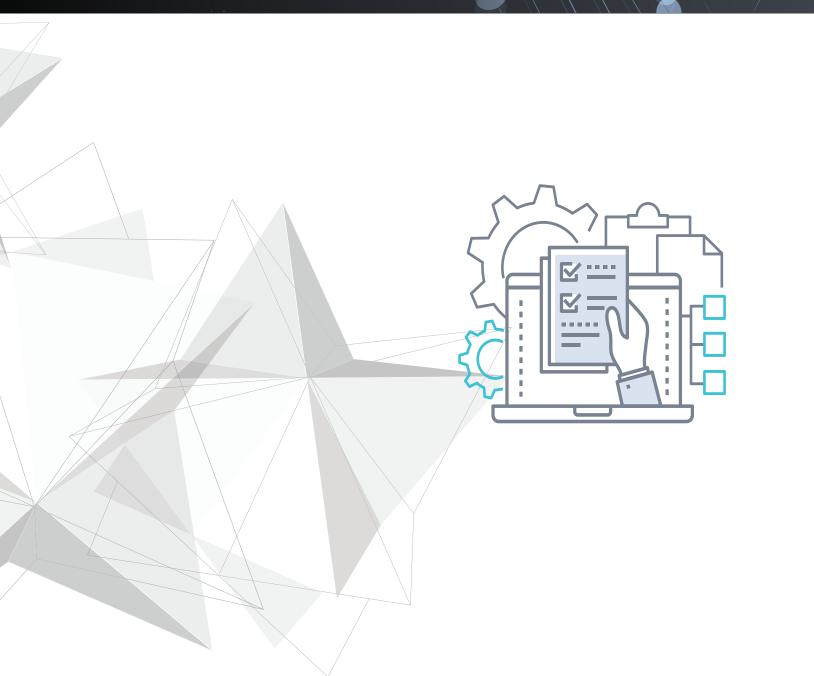
### UNITRENDS

## Deployment Guide for Unitrends Backup in Microsoft Azure

Release 10.8 | Document Date 08202024



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# **Chapter 1: Introduction**

Unitrends Backup in Azure leverages Unitrends Backup technology as a deployable virtual machine in the Microsoft Azure Marketplace. Our Azure-based Unitrends Backup VM can be used as either a backup appliance or a backup copy target.

As your data set grows, you can scale up by adding compute resources (CPU, RAM), or scale out by deploying additional Unitrends Backup appliances. Azure allows up to 64TB of storage on a single VM.

This deployment guide provides requirements, considerations, and instructions for deploying a Unitrends Backup appliance in Azure.

For requirements and considerations for particular features and instructions on using them, see the <u>Administrator</u> Guide for Recovery Series, Recovery MAX, ION/ION+, and Unitrends Backup.

See the following topics for details on deploying the Unitrends Backup appliance:

- "Requirements and Considerations" on page 7
- "Deploying the Unitrends Backup VM" on page 11

### **Key Terms**

Term	Definition
Appliance	The Unitrends Backup system that backs up and recovers data.
Data Disk	The standard unit of storage in Microsoft Azure.
Deployment	The process of creating a Unitrends Backup VM and configuring the appliance it contains.
Quick Setup Wizard	The Quick Setup Wizard automatically launches the first time you access the appliance UI from a web browser. Work your way through this wizard to configure additional appliance settings, such as date and time, hostname, and email.
Unitrends Backup VM	A virtual machine that contains a Unitrends Backup Appliance.



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# **Chapter 2: Requirements and Considerations**

Before deploying your Unitrends Backup appliance, review the following requirements:

- "Network and web access requirements"
- "Minimum resource requirements" on page 9
- "Backup storage" on page 9
- "Additional considerations" on page 9
- "Limitations" on page 9
- "Licensing" on page 10

### Network and web access requirements

There are several addresses you should permit for all deployments. All of these ports are outgoing connections from the Unitrends appliance. We do not require incoming NAT of ports or exposing the unit to a public IP, only outgoing communication from a local source Unitrends appliance is needed.

IMPORTANT!Never expose the appliance Web UI or SSH connections to open external ports. Doing so may void<br/>your support agreement until the appliance can be secured properly. Never deploy the Unitrends<br/>appliance on a public IP. All incoming ports to a Unitrends appliance must be firewall protected.<br/>Privately operated hot backup copy targets should be deployed in such a way as to secure the VPN<br/>connection to only trusted source external IPs.

Additional ports must be open for connectivity to the Internet and for connectivity to any hot backup copy target. See the following for details:

- Note: Unitrends does not officially support backup through firewalls. For details, see this KB article: <u>Backup fails</u> through Router, DMZ, or Firewall.
- "Connectivity between the appliance and the Internet"
- "Connectivity between the appliance and a hot backup copy target"

### Connectivity between the appliance and the Internet

Task	Port, Protocol, and Rule	Destination	Notes
Backup and backup copy operations	443/HTTPS Outbound from the Unitrends appliance	kaseyagroup-appliance- registry.jfrog.io	A secure docker container registry required to update backup and backup copy components.
Product	443/HTTPS	repo.unitrends.com	repo.unitrends.com is used



### Deployment Guide for Unitrends Backup in Microsoft Azure

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Task	Port, Protocol, and Rule	Destination	Notes
Updates	tes Outbound from the Unitrends appliance sftp.unitrends.com		by the Unitrends appliance to perform software updates.
	22/SFTP Outbound from the Unitrends appliance		sftp.unitrends.com is used to collect files related to active support tickets.
Remote Support	443/HTTPS Outbound from the Unitrends appliance	support-itivity.unitrends.com	Used for opening a remote tunnel to the Unitrends support team.
Proactive Monitoring	161/UDP Outbound from the Unitrends appliance 161/TCP Outbound from the Unitrends appliance 162/UDP Outbound from the Unitrends appliance 162/TCP Outbound from the Unitrends appliance	notifications.unitrends.com	Used for SNMP trap collection for all proactive monitoring.

### Connectivity between the appliance and a hot backup copy target

Task	Port, Protocol, and Rule	Destination	Notes
Backup copy to the Unitrends Cloud or your Unitrends target appliance.	The OpenVPN port provided by Unitrends <b>Or</b> The port number you have configured for the secure tunnel connection to the backup copy target appliance must be open Outbound for the TCP and UDP protocols. Port 443 must also be open Outbond for the UCP protocol.	For Unitrends Cloud, the public-facing IP address provided by Unitrends. Target appliance hostname and	Used for copying data to the Unitrends Cloud or your Unitrends target appliance.



Task	Port, Protocol, and Rule	Destination	Notes
		IP	

### Minimum resource requirements

To meet the minimum criteria for successful deployment, the Unitrends Backup VM requires the following:

- **Note:** These are the minimum resources required to deploy and begin using the Unitrends Backup appliance. As you add jobs and storage, be sure to monitor the system and add resources as needed over the lifetime of the appliance.
- A minimum of two virtual processors (vCPUs).
- A minimum of 8GB of RAM.
- 38.47GB of space for the VM's initial disk.
- At least 200GB of additional backup storage.

Azure VMs that meet the above requirements include: D2as\_v4, D2ds\_v4, D2s\_v3, and D2s\_v4.

### **Backup storage**

After you create the Unitrends Backup VM, you will attach disks to use for backup storage. An Azure disk has a maximum capacity of 4095GB, but you can attach multiple disks for additional storage. The total number of disks is limited by the Azure VM size. You then expand storage in the Unitrends Backup UI to create a single logical volume.

### Additional considerations

- A Unitrends Backup appliance can be used as either a backup appliance or a backup copy target. For details, see the Administrator Guide for Recovery Series, Recovery MAX, ION/ION+, and Unitrends Backup.
- After deploying your Unitrends Backup appliance, you should perform all operations, including updates, from the UI, unless you are following a specific procedure described in Unitrends documentation. Running unsupported commands from the terminal can have undesirable results.
- By default, the password for the web UI root user of the Unitrends appliance is *unitrends1*. You will change this password during appliance setup, as described in "Set up the appliance using the Quick Setup Wizard" on page 27. (Changing this password has no impact on the OS root user password.)
- By default, appliance deduplication level is set to 1. For further information, see <u>Managing Appliances</u> in the Unitrends Backup and Recovery Series Administrator's Guide.

### Limitations

The following Unitrends Backup features are not currently supported within the Azure environment:



- Backups that are not agent-based application or file-level. (Host-level and image-level backups are not supported.) For details on installing the Unitrends agent, see <u>Unitrends agents</u> in the <u>Administrator Guide for</u> Recovery Series, Recovery MAX, ION/ION+, and Unitrends Backup.
- The Windows agent push installation feature is not supported. Instead, install the Windows agent manually. For details, see <u>Installing the Windows agent</u> in the <u>Administrator Guide for Recovery Series</u>, <u>Recovery MAX</u>, ION/ION+, and Unitrends Backup.
- The virtual machines you protect with Unitrends backups must be configured with private IPs only. Public IPs are not supported. (For the Unitrends Backup appliance VM, a public IP is used.)
- Bare metal recovery.
- Instant Recovery.
- Using a physical seed device to move data into or out of the Azure environment.
- Exporting a Unitrends Backup appliance to a host outside of the Azure environment.

### Licensing

You must register and license the appliance after deploying your Unitrends Backup appliance. You can use the software for free with a 30-day trial license, but after this period, you must purchase a license.



# Chapter 3: Deploying the Unitrends Backup VM

Once you have verified that all "Requirements and Considerations" on page 7 have been met, complete the following steps to deploy the Unitrends Backup appliance:

- Step 1: "Download the Unitrends Backup VHD"
- Step 2: "Create a storage account"
- Step 3: "Create a storage container"
- Step 4: "Create an image from the Unitrends VHD"
- Step 5: "Create the Unitrends Backup virtual machine"
- Step 6: "Set up the appliance using the Quick Setup Wizard"
- Step 7: "Register and license the appliance"
- Step 8: "Start protecting your environment"

## Step 1: Download the Unitrends Backup VHD

Download the Unitrends Backup VHD from the Unitrends Downloads page:

- **1** Go to https://helpdesk.kaseya.com/hc/en-gb/articles/4407526882193-Unitrends-Downloads.
- 2 Scroll down to Unitrends Backup Virtual Appliance Deployments.
- 3 Click the .VHD link in the Microsoft Azure row.



Environment	Applies To	Format	
VMware vSphere	VMware 5.x - 8.0	AVO.	
Microsoft Hyper-V	Windows Server 2012-2022 (Wizard Deployment)	.EXE	
	Windows Server 2008 R2-2022	.VHD	
Citrix XenServer	XenServer 6.5-7.x	AVX.	
Nutanix AHV	Nutanix AHV 5.1-6.5	.VMDK	
Amazon AWS	Deployments are available within the Amazon cloud		
Microsoft Azure	Microsoft Azure	.VHD ———	Click

## Step 2: Create a storage account

To create a storage account:

- 1 Open the Azure dashboard.
- 2 Click Storage accounts and select + Create.

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Azure services						
Create a Storage account	nts 🌣	Tenant properties	Resource groups	Subscriptions	Marketplace	More services
Resources						

- 3 Enter the **Basics**:
  - In the Project details, select a Subscription type and Resource group (or create a new one).



- In the Instance details, enter a name for the storage account and select a Region, Performance type, and Redundancy.
- Click Next: Advanced.

Home > Storage accounts > Create a storage account Basics Advanced Networking D								DEFAULT DIRECTORY (QAUNITRE
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Basics Advanced Networking D	the ended the Free Market Devices							
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Project details								
Select the subscription in which to create the manage your storage account together with	new storage account. Choose a new or existing resource group to organize and other resources.							
Subscription *	Pay-As-You-Go		•					
		>		Selec	t Subs	criptio	n & Re	source group
Resource group *	AzureRG							
Instance details If you need to create a legacy storage accourd Storage account name ① *	nt type, please click here. unitrendsvhd							
Region ① *	(US) East US 🗸							
Performance ① *	• Standard: Recommended for most scenarios (general-purpose v2 account)			>2				d select Region, e, & Redundancy
	Premium: Recommended for scenarios that require low latency.	/						
Redundancy ③ *	Locally-redundant storage (LRS)							
	Make read access to data available in the event of regional unavailability.							
Review < Prev	ious Next : Advanced > 3							
< Prev	Next: Advanced > 0							

4 On the Advanced page, keep the default settings and click Next: Networking:



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Create a storage accou	int …				
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Security					
Configure security settings that impact yo	bur storage account.				
Require secure transfer for REST API operations ①					
Allow enabling public access on containers ①					
Enable storage account key access					
Default to Azure Active Directory authorization in the Azure portal ①					
Minimum TLS version (i)	Version 1.2				
Permitted scope for copy operations (preview) ①	From any storage account				
Data Lake Storage Gen2					
The Data Lake Storage Gen2 hierarchical control lists (ACLs). Learn more	namespace accelerates big data analytics workloads and enables file-level access				
Enable hierarchical namespace					

5 On the Networking page, keep the default settings and click **Next: Data Protection**:



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ome > Storage accounts >					
Create a storage ac	count				
asics Advanced Networki	ng Data protection Encryption Tags Review				
Network connectivity					
/ou can connect to your storage act private endpoint.	count either publicly, via public IP addresses or service endpoints, or privately, using a				
Network access *	Enable public access from all networks				
	C Enable public access from selected virtual networks and IP addresses				
	O Disable public access and use private access				
	Enabling public access from all networks might make this resource available publicly. Unless public access is required, we recommend using a more restricted access type. Learn more				
Network routing					
Determine how to route your traffic recommended for most customers.	as it travels from the source to its Azure endpoint. Microsoft network routing is				
Routing preference ① *	Microsoft network routing				
	O Internet routing				

6 On the Data Protection page, keep the default settings and click **Review**:



ome > Storage accounts >				
Create a storage account				
asics Advanced Networking Data protect	ion Encryption Tags Review			
lecovery				
Protect your data from accidental or erroneous deletion o	r modification.			
Enable point-in-time restore for containers Use point-in-time restore to restore one or more contain change feed, and blob soft delete must also be enabled.	ers to an earlier state. If point-in-time restore is enabled, then versioning Learn more			
<ul> <li>Enable soft delete for blobs</li> <li>Soft delete enables you to recover blobs that were previor more</li> </ul>	ously marked for deletion, including blobs that were overwritten. Learn			
Days to retain deleted blobs ①	7			
<ul> <li>Enable soft delete for containers</li> <li>Soft delete enables you to recover containers that were provided to the soft delete enables of t</li></ul>	reviously marked for deletion. Learn more			
Days to retain deleted containers ①	7			
Enable soft delete for file shares Soft delete enables you to recover file shares that were p	reviously marked for deletion. Learn more			
Days to retain deleted file shares ①	7			
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Nanage versions and keep track of changes made to your	blob data.			
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7 On the Review page, click **Create** to create the storage account:



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Create a storage acco	unt			
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nable network file system v3	Disabled			
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letwork connectivity	Public endpoint (all networks)			
efault routing tier	Microsoft network routing			
ndpoint type	Standard			
Data protection				
Point-in-time restore	Disabled			
lob soft delete	Enabled			
Blob retainment period in days	7			
Container soft delete	Enabled			
Container retainment period in days	7			
ile share soft delete	Enabled			
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/ersioning	Disabled			

The storage account is created:

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<ul> <li>Overview</li> <li>Inputs</li> <li>Outputs</li> <li>Template</li> </ul>	Deployment is in progress     Deployment ame: uniterate     Pay-As-You-Go     Resource group: AzureRG     Deployment details	Start time: 12/8/2022, 8:39:28 AM Correlation ID: df3546cf-33	Microsoft Defender for Cloud     Secure your apps and infrastructure
	Resource Type No results. Give feedback	Status Operation details	Go to Microsoft Defender for Cloud > Free Microsoft tutorials Start learning today > Work with an expert Azure experts are service provider partners
	${\cal R}$ Tell us about your experience with deployment		Azure experts are service provider partners who can help manage your assets on Azure

## **Step 3:** Create a storage container

To create a storage container:

**1** Go to **Home > Storage Accounts** and select the storage account you created above.



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Home >							
Storage accounts 🖈 … Default Directory (qaunitrends.onmicrosoft.com)							×
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□ Name ↑↓	Type ↑↓	Kind ↑↓	Resource group $\uparrow\downarrow$	Location ↑.	ŀ	Subscription $\uparrow\downarrow$	
🔲 🚍 unitrendsynd	Storage account	StorageV2	AzureRG	East US		Pay-As-You-Go	
Click here							

- 2 Click Containers.
- Click +.
- 4 Enter a container Name.
- 5 Click Create.

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Home > Storage accounts > unitrendsvhd					New container	×
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🚍 unitrendsvhd 🚥	🗳 Tags	Name	Last modified	Public access level	Lease state	
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	Access Control (IAM)	test — Container is added	12/8/2022, 8:40:18 AM	Private	Available	
	💕 Data migration	vhd	12/6/2022, 1:07:20 PM	Private	Available	
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	Data storage					
	Containers					
	🛋 File shares					
	III Queues					
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- 6 Use these steps to upload the Unitrends VHD to the new container:
  - Click the new container.

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unitrendsvhd ····	Diagnose and solve problems	\$logs	11/2/2022, 7:23:26 AM	Private	Available	
	Access Control (IAM)	Click the container	12/8/2022, 8:40:18 AM	Private	Available	
	💕 Data migration	vhd	12/6/2022, 1:07:20 PM	Private	Available	

- Click Upload.
- Browse to and select the VHD you downloaded in "Step 1: Download the Unitrends Backup VHD".
- Click **Upload**. The VHD is uploaded to the container. (The upload can take some time, depending on your network throughput.) Wait for the upload to complete before continuing with this procedure.

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Home > Storage accounts > unitrendsvi	nd   Containers >		Upload blob ×
test			test/ (2)
Container			Files ①
	👎 Upload 🔒 Change access level 🕐 Refresh 🕴 🔟 Delete 🔁 Change tier 🔗 Acquire lease 🔗 Break lease 👁 View snapshots 🚍 (	Create sn	"Azure-UB-10.6.9-2.vhd"
Overview	Authentication method: Access key (Switch to Azure AD User Account) Location: test		Overwrite if files already exist
Diagnose and solve problems	Search blobs by prefix (case-sensitive)	) Sho	∼ Advanced Jm
Access Control (IAM)	Search blobs by preix (case-sensitive)		
Settings	⁺⊊ Add filter		Upload 3



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Container ····		test/
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Overview	Authentication method: Access key (Switch to Azure AD User Account)	Overwrite if files already exist
Diagnose and solve problems	Location: test	✓ Advanced
Access Control (IAM)	Search blobs by prefix (case-sensitive)	
Settings	⁺çr Add filter	Upload
<ul> <li>Shared access tokens</li> </ul>	Name Modified Access tier Archive status Blob type	
Access policy	No results	Current uploads
Properties		Dismiss: Completed All
🕕 Metadata	Upload progress	Azure-UB-10.6.9-2.vhd C 16 MiB / 100 GiB ····

## **Step 4:** Create an image from the Unitrends VHD

To create an image from the Unitrends VHD:

**1** Search for *image* and select **Images**.

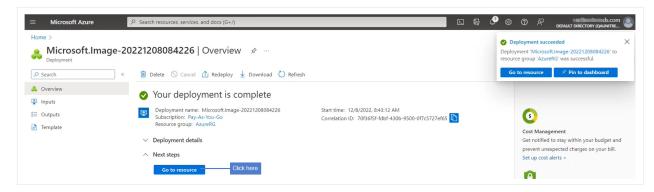
■ Microsoft Azure		>	× D G	ୁ 🖗 🕲 ନ	itrends.co DEFAULT DIRECTORY (QAUNITE	COM IRE
Home > Storage accounts > unitrend the container	All Services (9) Marketplace (20) Azure Active Directory (0)	Documentation (9) Resources (0) Resource Groups (0)				×
	Services		See all	Create snapshot		
Overview	👺 Images — 2	VM image versions				
Diagnose and solve problems	👰 Image templates	OS images (classic)				
Access Control (IAM)	Storage accounts	VM images (classic)		Show deleted blobs		
ettings	VM image definitions	ling Resources				
Shared access tokens	Marketplace		See all	Size	Lease state	
Access policy	Documentation	***	See all	100 GiB	Available	
Properties				100 GIB	Available	
Metadata	Searching all subscriptions.		R Give feedback			

- 2 Enter a name for the image.
- 3 Select a region, Linux for OS type, VM Gen 1, Standard HDD, read/write host caching, and Platform-managed key.
- 4 For storage blob, browse to and select the Unitrends VHD.
- 5 Click Review and Create.



	𝒫 Search resources, services, and docs (G+/)	D & & @ @ &	C rends.com
Home > Images >			
Create an image			×
5			
Name *	azure-10.6.9-2 Enter a name		•
Region * ①	(US) East US 🗸		
Zone resiliency ①			
OS disk	2 Select image settings and the Unitrends VHD		
OS type * 🔅	Vindows  Linux		
VM generation * ①	Gen 1     Gen 2		I
Storage blob * 🛈	https://unitrendsvhd.blob.core.windows.net/vhd/kzure-UB-10.6.9-2.vhd         ✓           Browse         Click to browse to and select the Unitrends VHD		
Account type * ①	Standard HDD 🗸		
Host caching * 🕕	Read/write V		
Encryption			
You can encrypt the OS and data disks	with a platform-managed or customer-managed key. Learn more		
Key management 🛈	Platform-managed key		
Data disk			
+ Add data disk			_
3			-
Review + create	Previous Next : Taos >		

6 The image is created. Click **Go to Resource**.



## **Step 5:** Create the Unitrends Backup virtual machine

To create the Unitrends Backup virtual machine:

1 Click Create VM.



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Home > Microsoft.Image-20221208084	226   Overview >		
azure-10.6.9-2 ☆	<b>☆</b> …		×
	+ Create VM 🗈 Clone to a VM image 📋 Delete 💍 Refresh		
👰 Overview			JSON View
Activity log	Resource group (move) : AzureRG	Operating system : Linux	
Access control (IAM)	Location (move) : East US	Source virtual machine : -	
🗳 Tags	Subscription (move) : Pay-As-You-Go	VM generation : V1	
Settings	Subscription ID : 94771b73-2924-4054-b419-a81a534a6787	Zone resiliency : Disabled	
Properties	Provisioning state : Succeeded		
🔒 Locks	Tags (edit) : Click here to add tags		

2 Enter a name for the VM.

Microsoft Azure	𝒫 Search resources, services, and docs (G+/)		E & & & &	DEFAULT DIRECTORY (QAUNITRE
ome > Microsoft.Image-2022120	08084226   Overview > azure-10.6.9-2 >			
reate a virtual mad	chine			
Basics Disks Networking	Management Monitoring Advanced Tags Review + create			
	nux or Windows. Select an image from Azure marketplace or use your own customi n Review + create to provision a virtual machine with default parameters or review e ទី			
roject details				
elect the subscription to manage d our resources.	leployed resources and costs. Use resource groups like folders to organize and man	iage all		
ubscription * 🕕	Pay-As-You-Go	$\sim$		
Resource group * ①	AzureRG	$\sim$		
	Create new			
nstance details				
'irtual machine name * 🕕	testunitrends Enter VM name			
egion 🕕	(US) East US	$\sim$		
wailability options 🕕	No infrastructure redundancy required	$\checkmark$		
ecurity type ①	Standard	$\sim$		
mage * 🕕	🔯 azure-10.6.9-2 - Gen1	~		
	See all images   Configure VM generation			

3 Select the VM size (minimum 2 vCPU and 8GB RAM).

VM architecture ①	<ul> <li>Arm64</li> <li>x64</li> </ul>
	Arm64 is not supported with the selected image.
Run with Azure Spot discount ①	Select VM size, minimum 2 vCPU & 8GB RAM
Size * ①	Standard_D2s_v3 - 2 vcpus, 8 GiB memory (\$70.08/month)

- 4 Select **Password** as the authentication type. (SSH keys are not used.)
- 5 Enter a user name for the OS user account. (This account will not have superuser privileges.)
- 6 Enter and confirm a password for the OS user account.
- 7 Select Allow selected ports and these inbound ports: 80, 443, and 22.
- 8 Select **Other** for licensing type.



9 Click Next: Disks.

Authentication type ①	SSH public key	
1	Password	
Username * 🕕	svitta	
Password * 🕕	Enter username, password, 8 confirm password	
Confirm password * 🛈	······	
Inbound port rules		
Select which virtual machine net network access on the Networkir	work ports are accessible from the public internet. You can specify more limited or granular g tab.	
Public inbound ports * ①	○ None	
3	Allow selected ports	
Select inbound ports *	HTTP (80), HTTPS (443), SSH (22)	
	This will allow all IP addresses to access your virtual machine. This is only recommended for testing. Use the Advanced controls in the Networking tab to create rules to limit inbound traffic to known IP addresses.	
Licensing		
License type *	Other	
	5 image, you may be eligible forme Azure Hybrid Benefit and can save money on the license benefit and how to enable it using Azure CLI for custom images from snapshots and Azure	

- **10** Click Create and attach a new disk.
- **11** Add a disk to use for backup storage (minimum 200GB). Click **OK**.
- 12 Click Next: Networking.



Microsoft Azure	Search resources, services, and docs (G+/)			Ids.com Tory (QAUNITRE
-	84226   Overview > azure-10.6.9-2 >			
Create a virtual mach	ine …			×
Basics <b>Disks</b> Networking N	Anagement Monitoring Advanced Tags Review + create			
	disk and a temporary disk for short-term storage. You can attach additional data disks. of storage you can use and the number of data disks allowed. Learn more 🕫	Create a new d	isk …	
VM disk encryption				
Azure disk storage encryption automati default when persisting it to the cloud.	cally encrypts your data stored on Azure managed disks (OS and data disks) at rest by	Create a new disk to store app type, and number of transaction	lications and data on your VM. Disk pricing varies based on factors including ns. Learn more 🖻	g disk size, storage
Encryption at host ①		Name *	testunitrends_DataDisk_0	
		Source type * (i)	None (empty disk)	~
Encryption at host is not registered	for the selected subscription. Learn more about enabling this feature of	Size * 🛈	200 GiB	
OS disk		5126	200 GIB Premium SSD LRS Change size	
OS disk type * 🕕	Premium SSD (locally-redundant storage)			
Delete with VM 🕕		Key management ①	Platform-managed key	~
Key management 🕕	Platform-managed key	Enable shared disk	Ves 🖲 No	
Enable Ultra Disk compatibility ①		Delete disk with VM		
Enable Oltra Disk compatibility ()	Ultra disk is supported in Availability Zone(s) 1.2.3 for the selected VM size Standard_D2s_v3.	ок —3		
Data disks for testunitrends				
You can add and configure additional d temporary disk.	ata disks for your virtual machine or attach existing disks. This VM also comes with a			
LUN Name 👤	Size (GiB) Disk type Host caching Delete with VM 🕔			
Create and attach a new disk Attach	h an existing disk			

- **13** In the NIC network security group, select **Basic**.
- **14** For Public inbound ports, select **Allow selected ports**.
- **15** Select these inbound ports: **80**, **443**, and **22**.

Note: If you are using custom rules, add the rules for outbound ports after you create the virtual machine.

16 Click Next: Management.



≡ Microsoft Azure	${\cal P}$ Search resources, services, and docs (G+/)	D 🕼 🗘 🏟 Ø R	DEFAULT DIRECTORY (QAUNITRE
Home > Microsoft.Image-2022120808	4226   Overview > azure-10.6.9-2 >		
Create a virtual machi	ne		×
Basics Disks <b>Networking</b> Ma	anagement Monitoring Advanced Tags Review + create		
	ual machine by configuring network interface card (NIC) settings. You can control ports, security group rules, or place behind an existing load balancing solution.		
Network interface			
When creating a virtual machine, a netwo	ork interface will be created for you.		
Virtual network * ①	AzureRG-vnet V Create new		
Subnet ①	default (10.0.0.0/24) V Manage subnet configuration		
Public IP 🛈	(new) testunitrends-ip V Create new		
NIC network security group ①	None		
	Advanced		
Public inbound ports * 🛈	O None		
9	<ul> <li>Allow selected ports</li> </ul>		
Select inbound ports *	HTTP (80), HTTPS (443), SSH (22)		
	▲ This will allow all IP addresses to access your virtual machine. This is only recommended for testing. Use the Advanced controls in the Networking tab to create rules to limit inbound traffic to known IP addresses.		
Delete public IP and NIC when VM is deleted ①			
Enable accelerated networking ①	The selected image does not support accelerated networking.		
Load balancing			
You can place this virtual machine in the	backend pool of an existing Azure load balancing solution. Learn more 🖻		
Place this virtual machine behind an existing load balancing solution?			
Review + create < Pro	evious Next : Management > 3		

- **17** On the Management page, keep the default settings and click **Next: Monitoring**.
- **18** On the Monitoring page:
  - For Boot diagnostics, select Enable with managed storage account (recommended).
  - For Enable OS guest diagnostics, leave the box unchecked (do NOT enable guest OS diagnostics).
- **19** Click **Review + Create**.



Microsoft Azure     P Search resources, services, and docs (G+/)	Þ.	₽	Q	۲	0	ন্স	en DEFAULT DIR
Home > Virtual machines >							
Create a virtual machine							
Basics Disks Networking Management Monitoring Advanced Tags Review + create							
Configure monitoring options for your VM.							
Alerts							
Enable recommended alert rules ①							
Diagnostics							
Boot diagnostics ① Enable with managed storage account (recommended)							
C Enable with custom storage account     Disable							
Enable OS quest diagnostics ()							
2 Leave unchecked							
3							
Review + create          Previous         Next : Advanced >							<u>R</u>

20 Click Create. The VM is deployed.

$\equiv$ Microsoft Azure		ĺ		
	)8084226   Overview > azure-10.6.9-2 >			
Create a virtual mac	hine …			
Validation passed				
Basics Disks Networking	Management Monitoring Advanced Tags Review + create			
A You have set SSH port(s) oper	to the internet. This is only recommended for testing. If you want to change this setting, go			
back to Basics tab.				
azure-10.6.9-2	Standard D2s v3			
Image	2 vcpus, 8 GiB memory			
Basics				
Subscription	Pay-As-You-Go			
Resource group	AzureRG			
Virtual machine name	testunitrends			
Region	East US			
Availability options	No infrastructure redundancy required			
Security type	Standard			
Image Size	azure-10.6.9-2 - Gen1			
Size Authentication type	Standard D2s v3 (2 vcpus, 8 GiB memory) Password			
Username	svitta			
Public inbound ports	SSH, HTTP, HTTPS			
Azure Spot	No			
Create Click here	< Previous Next			

- **21** After the VM is deployed:
  - If you are using custom firewall rules, ensure that the outbound rules (in VM Settings > Networking) for ports and addresses meet the "Network and web access requirements" on page 7.



- If you opt to use inbound firewall rules for 443 and SSH, secure them to trusted static IPs only.
- Restart the virtual machine.

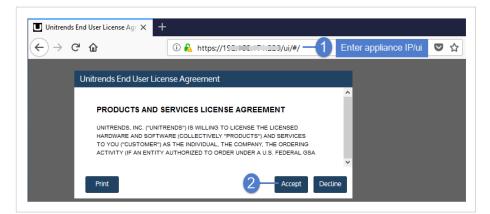
## Step 6: Set up the appliance using the Quick Setup Wizard

After Azure indicates the VM is running, you can access the appliance UI from any machine on the same network by opening a Chrome or Firefox browser and entering the appliance's IP address followed by /ui/. The Quick Setup Wizard launches when you access the UI for the first time.

#### To set up the appliance

Use this procedure to set up the appliance:

- 1 Open a browser and connect to your appliance by entering: *https://<appliancelP>/ui*. For example: *https://10.10.10.1/ui*.
- 2 Click Accept to accept the license agreement.



- 3 Set the appliance date and time by doing one of the following, then click Next:
  - Select a Timezone. If needed, modify the appliance Date and Time.

OR

• Check the **Use an NTP Server** box to sync to an NTP server. (Optional) Enter your preferred NTP server address.



UNITRENDS		
Date & Time	Host Name & Password	Email
	<ul> <li>Enter a date and t</li> </ul>	ime for your appliance
• <b>• •</b> • • • • • • • • • • • • • • •	Date	9/4/2019
	Time	16:05:03
Crazy-committed to helping you	Time Zone	America/New_York
play IT safe.	🔿 Use an NTP Serve	er
	NTP Server Addresses	Add NTP Server Address (Optional)
		0.centos.pool.ntp.org
		1.centos.pool.ntp.org
		Click to continue Next

4 Enter a Host Name, a Domain, and a new UI Password for the appliance. Confirm the UI password by entering it again in the field to the right. Click Next.

#### Notes:

- The hostname can contain only alphanumeric characters, dashes, and underscores.
- The appliance has a UI root user and an OS root user. These are separate accounts. Changing the password of one root user account does NOT change the password of the other root user account. The UI root user is used to log in to the appliance UI. The OS root user is used to log in to the appliance console or for command line access.
- Because you have already set the OS password, this field is disabled in the Quick Setup Wizard.
- Passwords cannot contain the word Unitrend (case insensitive).
- All appliances are deployed with these default UI credentials: user *root*, password *unitrends1*. For appliance security, you must change this password in the Quick Setup Wizard. For increased security, ensure that the UI password you enter is different than the OS user password.
- After you finish the deployment procedures in this guide, you can set up additional UI users for the appliance at any time. For details, see *Users and roles* in the <u>Administrator Guide for Recovery Series</u>, Recovery MAX, ION/ION+, and Unitrends Backup, Appliance settings topic.



28

UNITREN	NDS					
Date & Tin	ne	Host Name & Passwor	ď		Email	
Enter hostname,	Host Name	st	0			
domain (optional) and appliance UI password	Domain	k	0			
We're obsessed	UI Password	•••••	?	•••••	2 Con	firm UI password
with your	OS Password	Root Password	0	Confirm Password	d	
success.						
						3
						Previous Next
					_	

- 5 (Optional) To enable email from the appliance, check **Enable email reporting** and enter the following:
  - The fully qualified domain name of the SMTP server.
  - (If needed) If the SMTP server requires authentication, select **Authentication required** and enter a **Username** and **Password**.
  - Click + Add Recipients to add a an email recipient. Enter an email address in the Recipient field and select one or more of the System, Jobs, and Failures options to specify which reports the appliance will send to the recipient. Repeat as needed to add more recipients.
- 6 Click Finish.



UNITRENDS			
Date & Time	Host Name & Password	Email	
Ţ		the SMTP server	
Our award-winning support team has got your back.	Username Password	If the SMTP server uses authentication check the box and enter credentials	n,
	Confirm Password	enter credentials	
	Recipients	System Jobs Failures	ont
	jalvarez@unitrends.com djones@unitrends.com	For each recipient, an email address select reports to s	and
	4 Add Recipients	6	
		Previous Finish	

You are logged in to the Unitrends appliance and the Welcome to Unitrends dialog displays. Click **Start exploring** to view the interactive product tour. Leave the appliance UI open as you will use it later in this procedure.

UNITRENDS						r 🕸 🗘 🕅	😫 root 🔣
Bashboard       Protect       Recover       Jobs       Reports       Configure	08/07 08/08 08/09 08/10 08/11 08/12 0	16 Not Protected TOTAL SIZE 08	Not Protected Protected TOTAL SIZE 08 08/0 08/0			Register Q Suggest Ideas	
	Storage [2] Type Name Appliance		Hi there! ome to Unitrends elooking to familiarize themselves with Unitrends ed a new experience. Start exploring Click here to bee		0 0 Errors Protected Av		oli 2 (3) D.O B/s Vs
	Active Jobs Job Name	Appliance	Asset I There are no active Jobs	Progress		0 08/10 08/11 08/12 joal Physical Duration	00/13 <sup>1</sup>



- 7 (Optional) Attach one or more disks to your Unitrends Backup VM. The number of disks you can attach is limited by the size of the Azure VM you purchased.
  - **Note:** For further information on attaching disks in Azure, see Microsoft KB article <u>How to attach a data disk to</u> a Linux VM in the Azure portal.
- 8 Expand backup storage in the Unitrends Backup UI:

**Note:** Once a disk has been added, it cannot be removed.

- On the **Configure > Appliances** page, select your appliance.
- Click the **Storage** tab.
- Select the Internal storage and click Edit.
- In the Manage Attached Disks area:
  - To add an attached disk, select the desired disk from the list of available attached disks and click Add.
  - To remove an attached disk, select it from the list of available attached disks and click **Remove**.
  - Clicking **Reset** reverts all disk settings to the original settings.
  - To refresh the list of available disks, click **Refresh**.

STORAGE DETAILS	MANAGE ATTAC	HED DISKS			
Attached Disk(s)	NAME	POOL	PARTITIONED	FILESYSTEM	SIZE
Jsing 1 attached disk (275.0 GB)	/dev/sdb		true	true	275.0 GB
STORAGE ALLOCATION					
	Add 2	Remove	Reset		2 Refres
	NAME	POOL	PARTITIONED	FILESYSTEM	SIZE
	/dev/sdc		false	false	50.0 GB
			1		
Backups 98 % (269 GB)					
Instant Recovery 2 %					



ANAGE ATTACHED I	DISKS			
IAME	POOL	PARTITIONED	FILESYSTEM	SIZE
dev/sdb		true	true	275.0 GB
dev/sdc		false	false	50.0 GB
	Disk is ad	lded		
Add	ove 🔣 Re	eset		C Refresh
IAME POOI	L P/	ARTITIONED	FILESYSTEM	SIZE
	AME dev/sdb dev/sdc	dev/sdb Disk is ac Add Remove K Re	AME POOL PARTITIONED dev/sdb true dev/sdc false Disk is added	AME POOL PARTITIONED FILESYSTEM  dev/sdb true true  dev/sdc false  Disk is added  Add Remove Reset

- Adjust the storage allocation for Backups and IR as desired.
- Click Save.

On the **Configure > Appliances** page, the status initially displays as *Pending*. When the disk is finished attaching, the status converts to *Active* and the storage can be used.

• If desired, repeat this procedure to add another disk.

Be sure to register your appliance within 30 days, as described below.

## **Step 7:** Register and license the appliance

Your appliance is now configured and you can begin using it to protect your environment. For details, see the Administrator Guide for Recovery Series, Recovery MAX, ION/ION+, and Unitrends Backup.

You must register and license the appliance within 30 days of deploying Unitrends Backup.

Each appliance requires an activation code and license key. Use the procedures below to register and license the appliance:

#### To register a Unitrends Backup appliance

1 On the **Configure > Appliances** page, select the appliance and click **Edit**.

UNITREN	ids	=			© 1	🐴 ? 💽 root 🔣
B Dashboard	Appliances 2	Protected Assets				
A Protect	Serview:Table	Add Appliance 🛛 🔀 Edit	A Remove			
Recover			Remove			
Jobs CT	APPLIANCE	STATUS	ADDRESS	VERSION	STORAGE	REGISTERED ASSETS
₩ Reports	pm-ueb-86	O Available (logged in)	192	1.		100
© Configure		3				



2 Select the License tab and click Update. The Registration Center displays.

Appliance						
General	Email	Users	Date Time	License	Backup Copy	Advanced
ICENSE DETAILS						
Asset Tag	030		157			
License						
Install Date						
Expires						
Feature Descrip	otion					
Feature String						
License Key						
Update Reso	ources					Add License Inf
						Save Cance

**3** Select one of the following:

Selection	Description
Start my free trial	Submit this form to start your free 30-day trial.
Activate my purchase	Enter your email address and activation code. You license key will be emailed to the address you enter here.
Activate with promo code	Enter your promotional code to register your product and receive your license key.
Request a quote	Request a license quote.



_	istration Center	
	How can we help you today?	
Select one of these	ACTIVATE MY PURCHASE	
	ACTIVATE WITH PROMO CODE	
© 2022 Unitrends		

4 Complete and submit the applicable form.

Once you have purchased a license, Unitrends sends an email containing license details. Use the next procedure to apply this license information to the appliance.

#### To license a Unitrends Backup appliance

Use these steps to enter license information you have received from Unitrends.

1 On the **Configure > Appliances** page, select the appliance and click **Edit**.

UNITREN	JDS				© .	🕂 🗇 💽 root 🛛 🔣
B Dashboard	Appliances 2	Protected Assets				
🛆 Protect 🧹			0 -			
Recover	Serview:Table	Add Appliance 🔀 Edit	4 Remove			
₫ Jobs CT	APPLIANCE	STATUS	ADDRESS	VERSION	STORAGE	REGISTERED ASSETS
A Reports	pm-ueb-86	O Available (logged in)	192	CONTRACTOR OF STREET, STRE	_	100
© Configure		3				

2 Select the License tab and click Add License Info.



Edit Appliance						9
General	Email	Users	Date Time	License	Backup Copy	Advanced
LICENSE DETAILS					-	
Asset Tag	038		- 10 10000002157			
License						
Install Date						
Expires						
Feature Descript	tion					
Feature String						
License Key						
Update Reso	urces					Add License Info
						Save Cancel

- 3 Enter the License Key, Expiration Date, and Feature String.
- 4 Click **Save**. The license is applied.

Edit Appliance							?
General	Email	Users	Date Time	License	Backup Copy	Advanced	
LICENSE DETAILS	5						
Asset Tag	03	02J7C0772172070	2 <del>-10-10000002</del> 157				
License							
Install Date							
Expires							
Feature Descr							
Feature String	)						
License Key							
License Key	f2a	3177541077714005744	นบราวออนอาสาว	0a			
Expiration Date	01/31/2	Clear D	Date		Enter licens expiration da	te, and	
Feature String	ENT	RB,MUX=10,VC=IN	IF,RC=INF,D2D=INF,EN	IC,ADX	feature st	ining	
				-		2 Save C	Cancel



in an all of
is applied ails display
Add License

### **Step 8:** Start protecting your environment

Deployment is complete and you can get started protecting your environment:

 Start by installing the Unitrends agent on the virtual machines you will protect with Unitrends backups (see <u>Unitrends agents</u> in the <u>Administrator Guide for Recovery Series</u>, <u>Recovery MAX</u>, <u>ION/ION+</u>, and <u>Unitrends</u> <u>Backup</u>).

Note: The virtual machines you protect with Unitrends backups must be configured with private IPs only. Public IPs are not supported.

- Next, create backup schedules (see <u>Creating backup jobs</u> in the <u>Administrator Guide for Recovery Series</u>, Recovery MAX, ION/ION+, and Unitrends Backup).
- For more on using your appliance, see the <u>Administrator Guide for Recovery Series</u>, <u>Recovery MAX</u>, <u>ION/ION+</u>, and <u>Unitrends Backup</u>.

