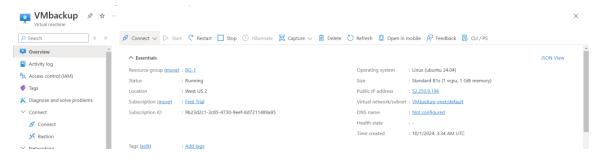
## Task 1: Create a Linux VM and Install Apache 2

## 1. Log in to the Azure Portal:

o Go to Azure Portal.

#### 2. Create a Virtual Machine:

- o Click on "Create a resource" > "Compute" > "Virtual Machine."
- o Fill in the necessary details:
  - **Subscription:** Choose your subscription.
  - **Resource Group:** Select an existing resource group or create a new one.
  - **Virtual Machine Name:** Provide a name for the VM.
  - **Region:** Select the desired region.
  - **Image:** Choose a Linux distribution (e.g., Ubuntu 22.04 LTS).
  - **Size:** Select the appropriate VM size based on your needs.
  - Administrator Account: Provide a username and SSH public key or password for access.
- Configure any additional settings as needed, then click "Review + Create" and then "Create."



#### 3. Connect to the VM:

- Once the VM is deployed, go to the VM's overview page and click "Connect."
- Use SSH to connect (for Linux) with the following command:

ssh <username>@<public-ip-address>

```
* Support:
                   https://ubuntu.com/pro
 System information as of Tue Oct 1 03:38:58 UTC 2024
  System load:
                                   Processes:
                                                           110
  Usage of /: 5.0% of 28.02GB Users logged in:
                                                           0
  Memory usage: 30%
                                   IPv4 address for eth0: 10.0.0.4
  Swap usage:
Expanded Security Maintenance for Applications is not enabled.
O updates can be applied immediately.
Enable ESM Apps to receive additional future security updates.
See https://ubuntu.com/esm or run: sudo pro status
The programs included with the Ubuntu system are free software;
the exact distribution terms for each program are described in the
individual files in /usr/share/doc/*/copyright.
Ubuntu comes with ABSOLUTELY NO WARRANTY, to the extent permitted by
applicable law.
To run a command as administrator (user "root"), use "sudo <command>".
See "man sudo_root" for details.
azureuser@VMbackup:~$ sudo su
root@VMbackup:/home/azureuser#
```

## 4. Install Apache 2:

Update the package index:

#### sudo apt update

Install Apache 2:

#### sudo apt install apache2 -y

Enable and start the Apache service:

#### sudo systemctl enable apache2

#### sudo systemctl start apache2

```
root@VMbackup:/home/azureuser# sudo systemctl enable apache2
sudo systemctl start apache2
Synchronizing state of apache2.service with SysV service script with /usr/lib/systemd/systemd-sysv-install.
Executing: /usr/lib/systemd/systemd-sysv-install enable apache2
root@VMbackup:/home/azureuser# systemctl status apache2
apache2.service - The Apache HTTP Server
Loaded: loaded (/usr/lib/systemd/system/apache2.service; enabled; preset: enabled)
Active: active (running) since Tue 2024-10-01 03:41:08 UTC; lmin 2s ago
Docs: https://httpd.apache.org/docs/2.4/
Main PID: 2702 (apache2)
Tasks: 55 (limit: 1004)
Memory: 5.4M (peak: 5.7M)
CPU: 46ms
CGroup: /system.slice/apache2.service
-2702 /usr/sbin/apache2 -k start
-2705 /usr/sbin/apache2 -k start
-2706 /usr/sbin/apache2 -k start
-2707 -k start
-2708 /usr/sbin/apache2 -k start
-2709 /usr/sbin/apache2 -k start
```

## **Task 2: Create Recovery Services Vault**

## 1. Create Recovery Services Vault:

- o In the Azure Portal, click on "Create a resource."
- Search for "Recovery Services vault" and select it.
- o Click "Create."
- Fill in the details:
  - **Subscription:** Choose your subscription.
  - **Resource Group:** Select the same or a different resource group.
  - **Vault Name:** Provide a unique name.
  - **Region:** Choose the same region as your VM.
- o Click "Review + Create" and then "Create."

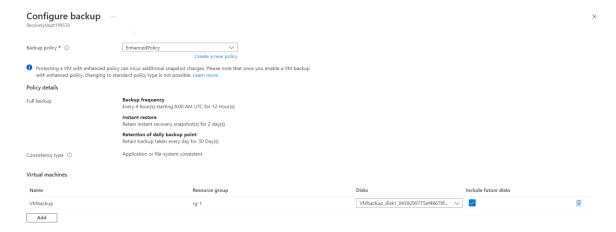
# Create Recovery Services vault

* Basics	Redundancy	Encryption	Vault properties	Networking	Tags	Review + create
Summary						
Basics						
Subscription			Free Trial			
Resource group			RG-1			
Vault name			RecoveryVault199578			
Region			West US 2			
Redundancy						
Backup Storage Redundancy			Geo-redundant			
Cross Region Restore			Disable			
Vault pro	operties					
Immutability			Disabled			
	,					
Network	ring					
Connectivity method			Allow public access from all networks			
Connecti	vity inctilod		Allow public access in	om an networks		

## Task 3: Take Backup of the VM Deployed

## 1. Configure Backup for the VM:

- Go to the Recovery Services vault you just created.
- In the vault, click on "Backup."
- Choose the following settings:
  - Where is your workload running? Select "Azure."
  - What do you want to back up? Choose "Virtual machine."
- o Click "Backup" to create a backup policy.



#### 2. Enable Backup:

- In the Backup item configuration, select the virtual machine you want to back up.
- Choose the backup policy you just created or select the default one.
- o Click "Enable Backup."

## 3. Trigger a Backup:

- o Go to the "Backup Items" under the Recovery Services vault.
- o Click on "Azure Virtual Machine" and select your VM.
- o Click on "Backup now" to initiate an immediate backup.

