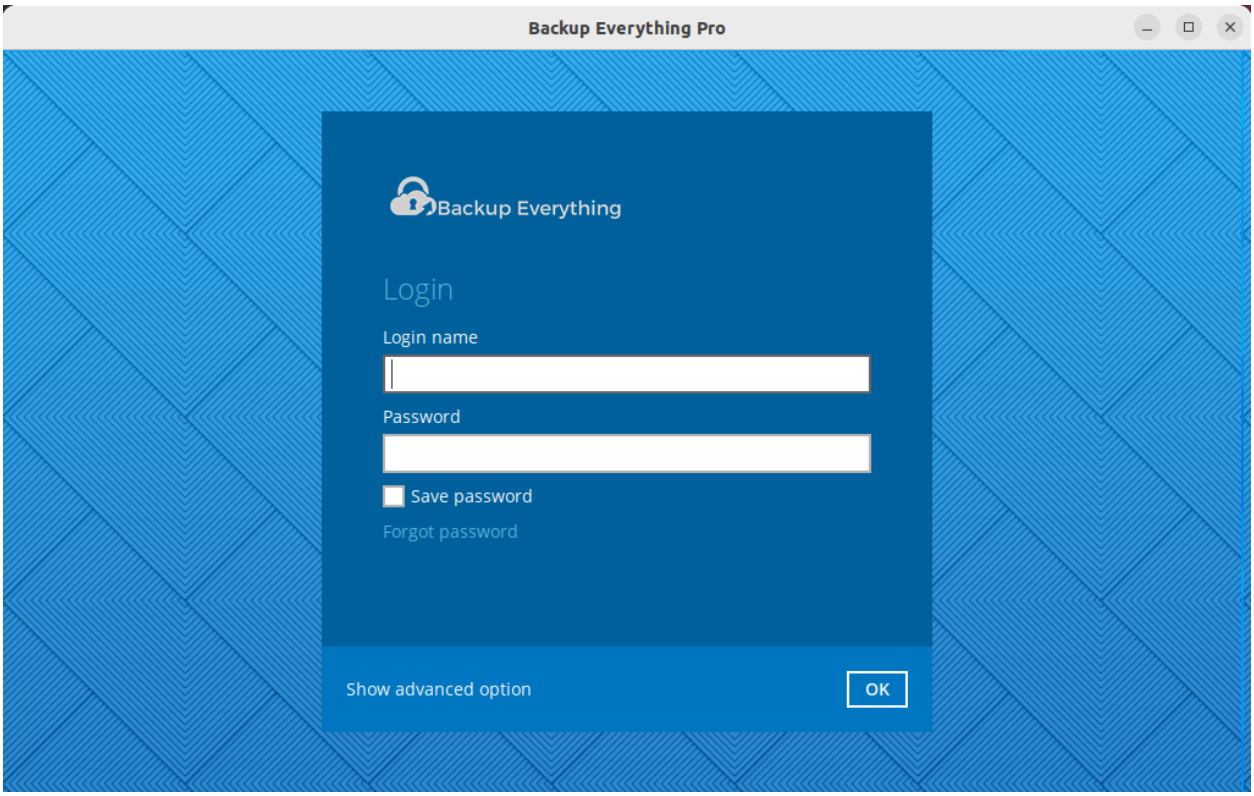
Microsoft Hyper-V Backup and Restore Guide

Backup Process

This guide provides step-by-step instructions to **back up and restore your Microsoft Hyper-V virtual machines** . Follow each section carefully to ensure your data is fully protected and recoverable.

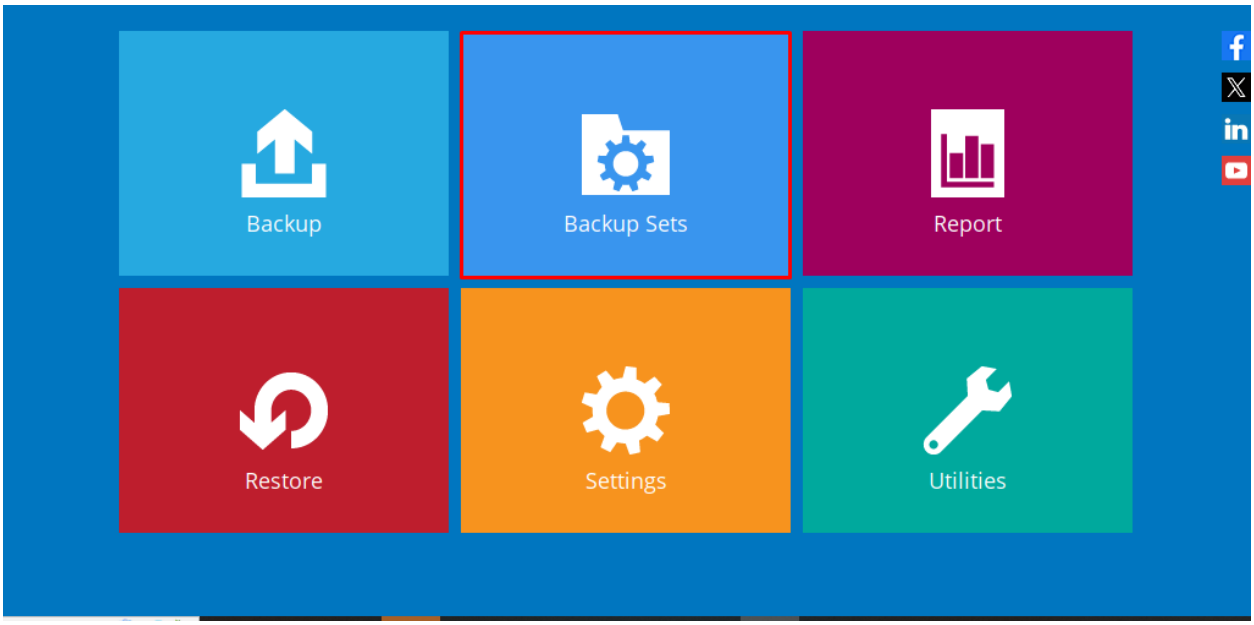
Step 1: Log In

1. Open the application.
2. Enter your **username** and **password** to log in.

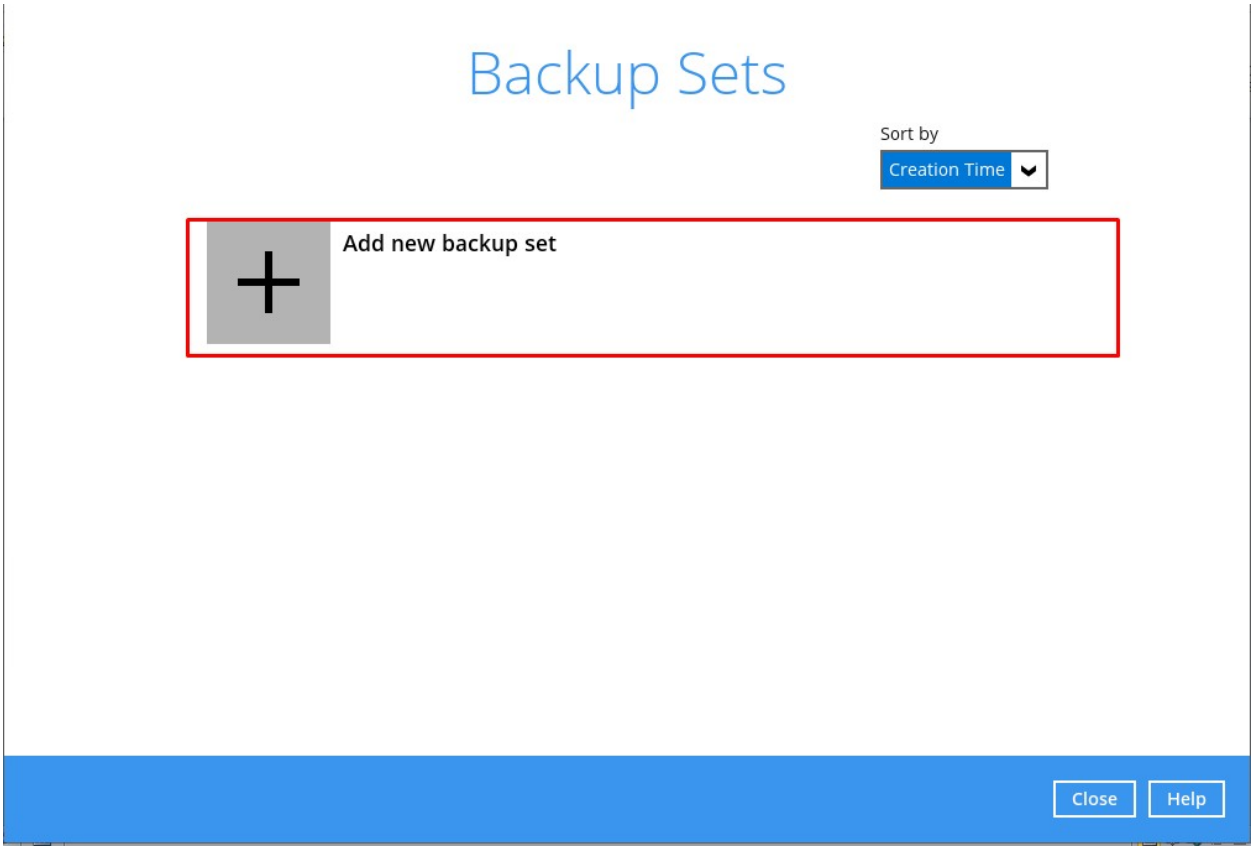


Step 2: Create a New Backup Set

1. Navigate to the **"Backup Sets"** menu.

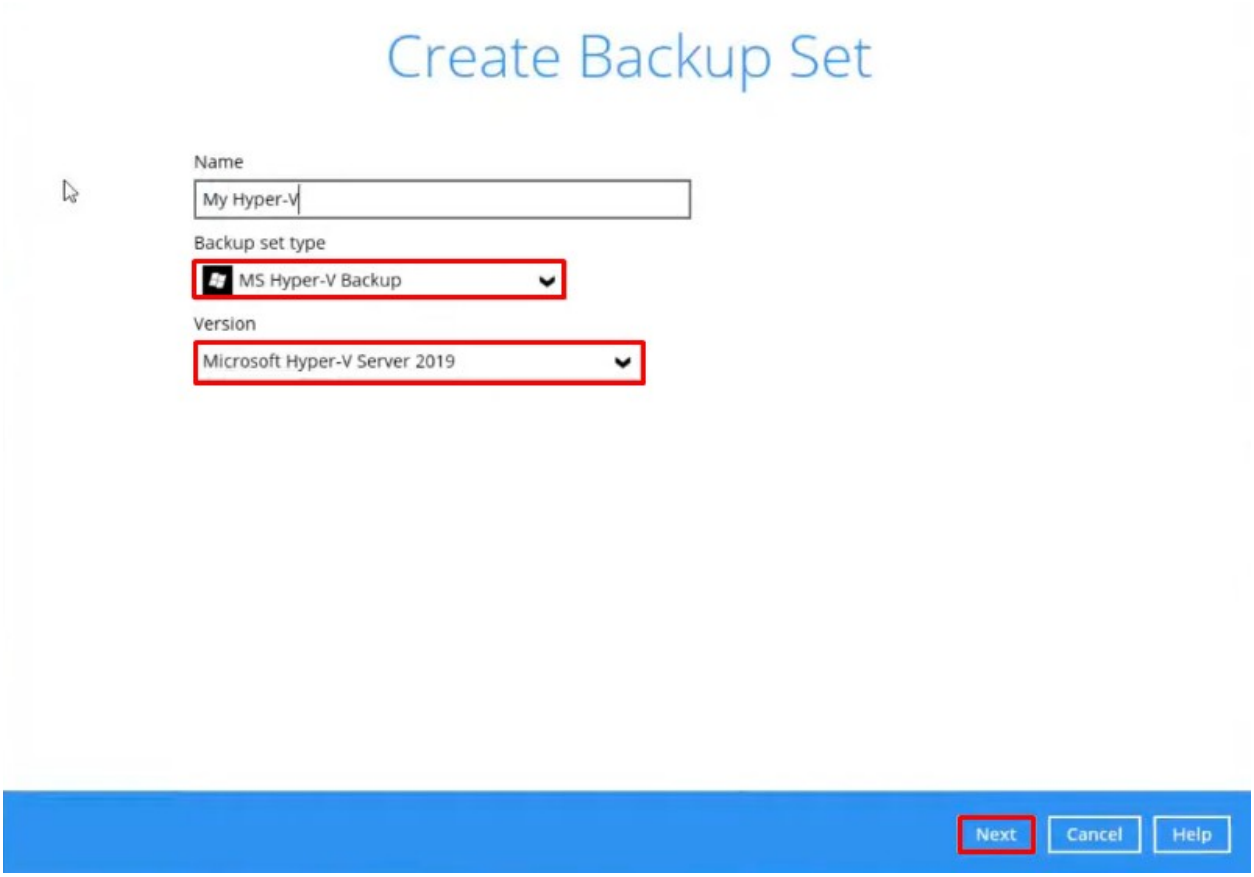


2. Click **"Create New Backup Set"** to begin configuration.



Step 3: Name & Select Backup Type

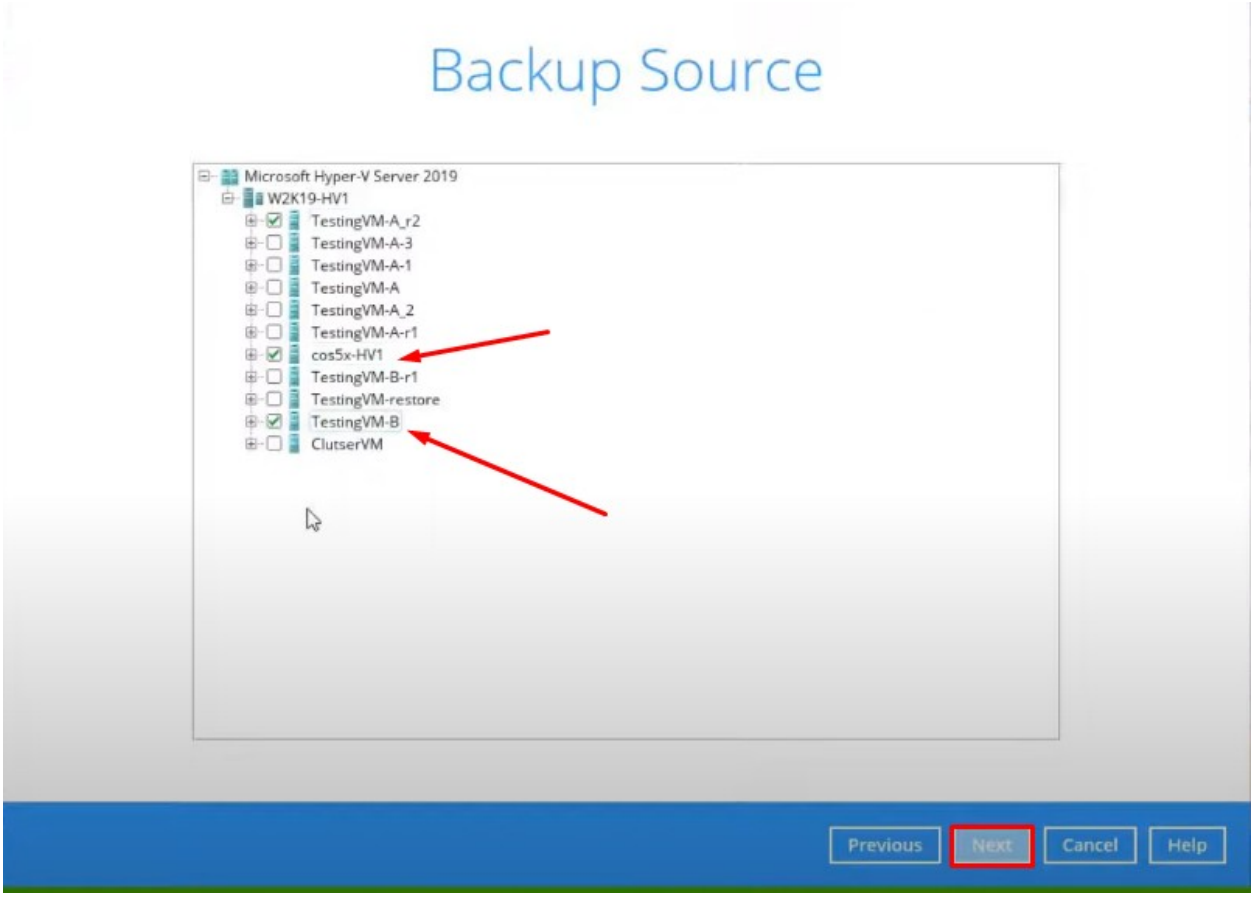
1. **Rename** the backup set for easy identification (e.g., *"HyperV-DailyBackup-Prod"*).
2. Select **"Microsoft Hyper-V Backup"** as the backup type.
3. Choose the **Hyper-V version** you are using (e.g., *Hyper-V 2016, 2019, 2022*).



Step 4: Select Backup Source

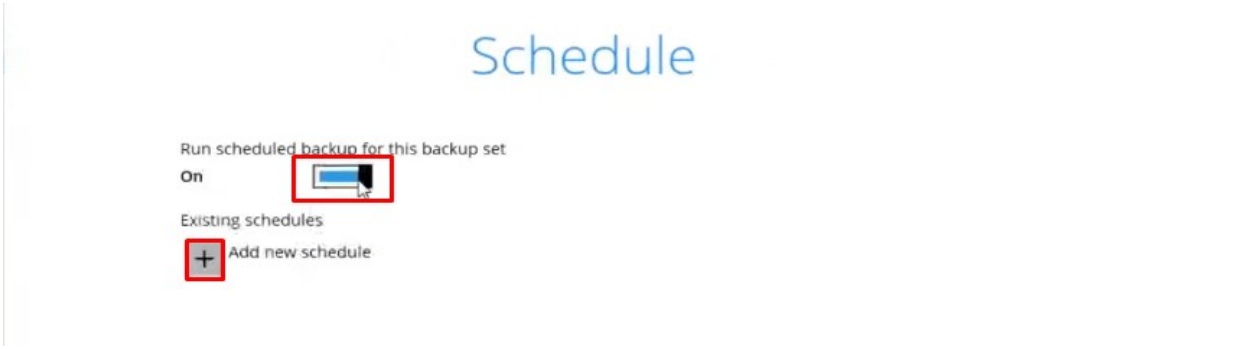
You can back up:

- **Entire Hyper-V Host (All VMs)** – Select the **top node** to back up everything.
- **Individual VMs** – Manually pick specific VMs for backup.

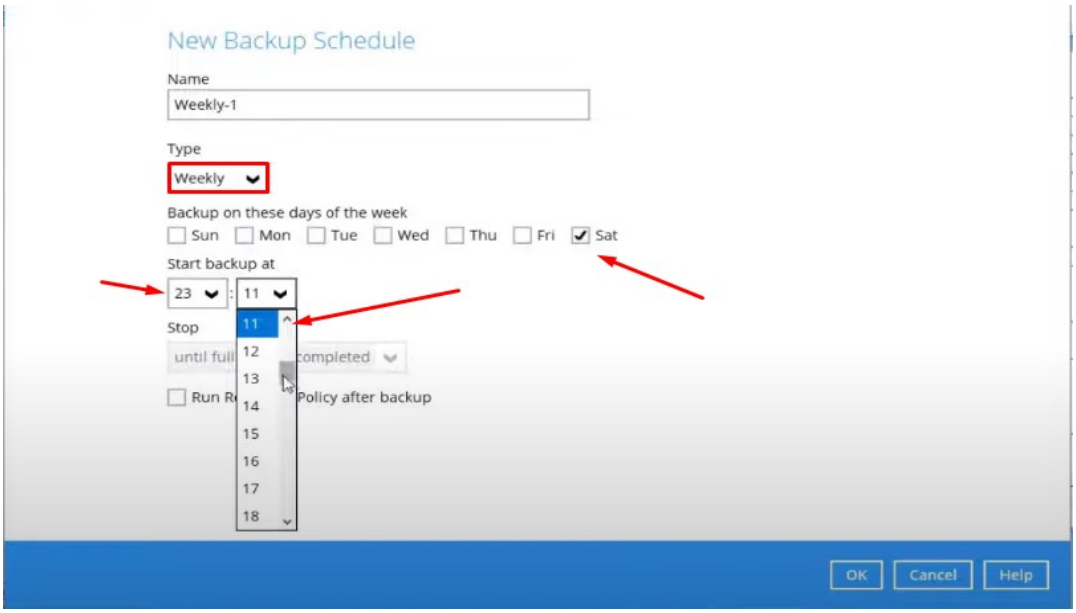


Step 5: Set Backup Schedule

Configure when the backup should run:

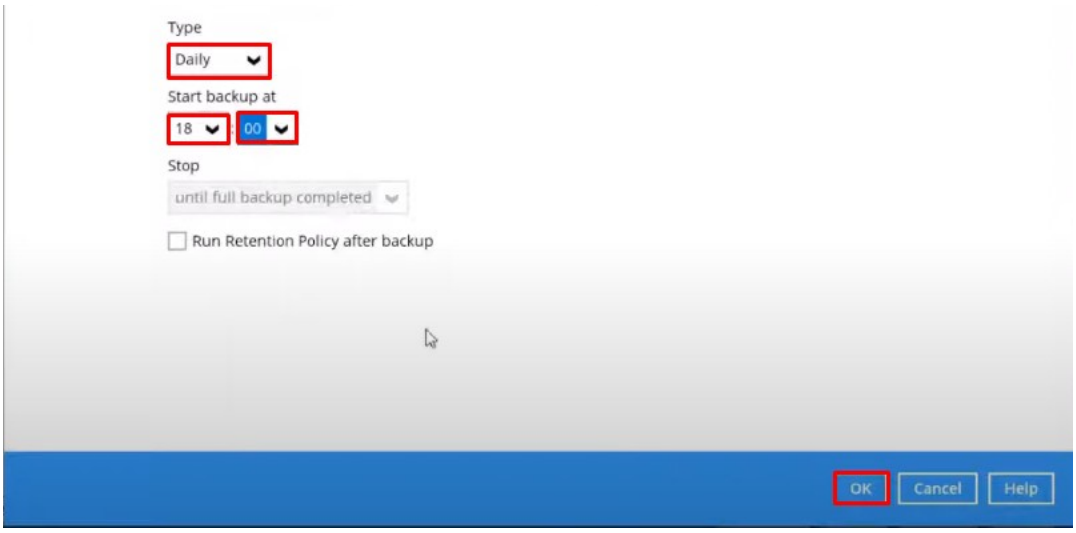


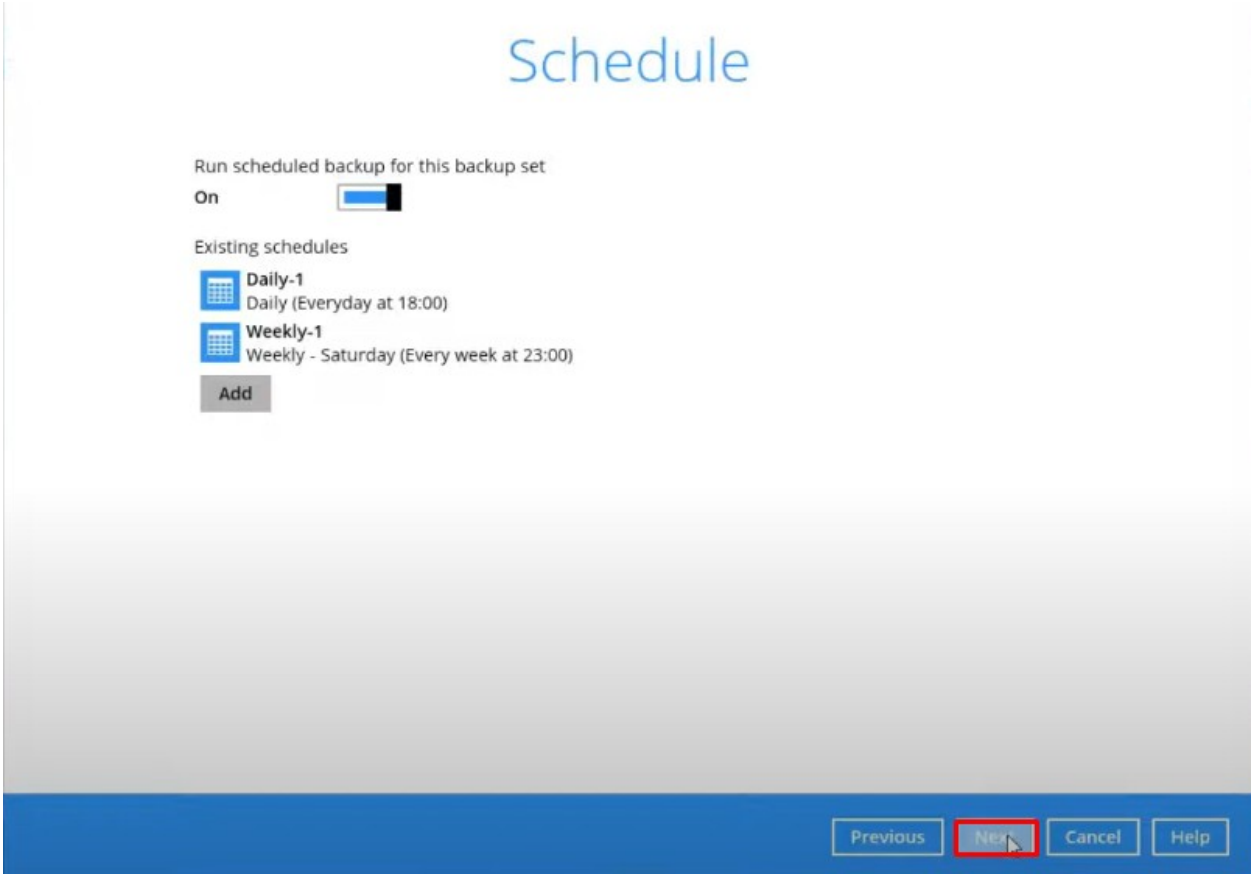
- **Daily / Weekly / Monthly** – Choose your preferred frequency.



- **Set Exact Time** – Define a time (e.g., *2:00 AM*) to minimize disruption.

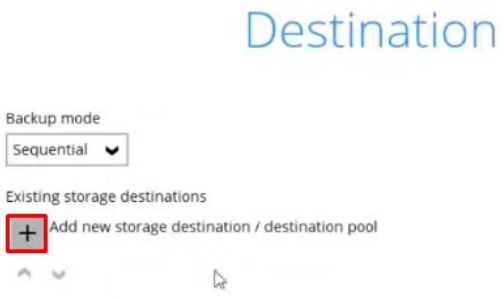
  Click **"OK"** Button after modifying the schedule



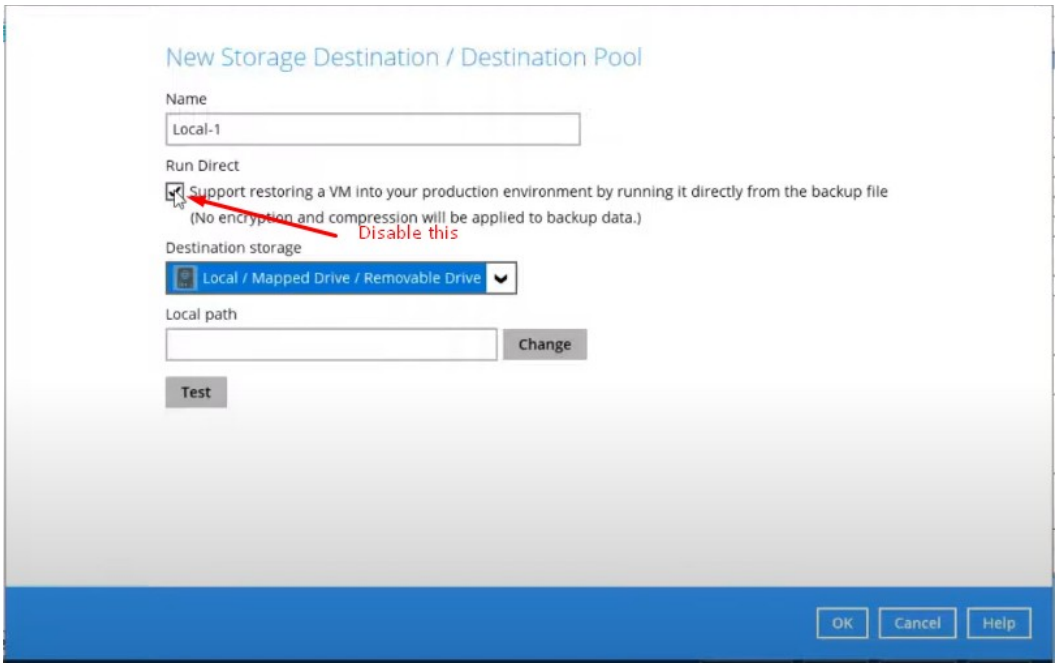


- Click **Next** To Proceed

Step 6: Choose Backup Destination

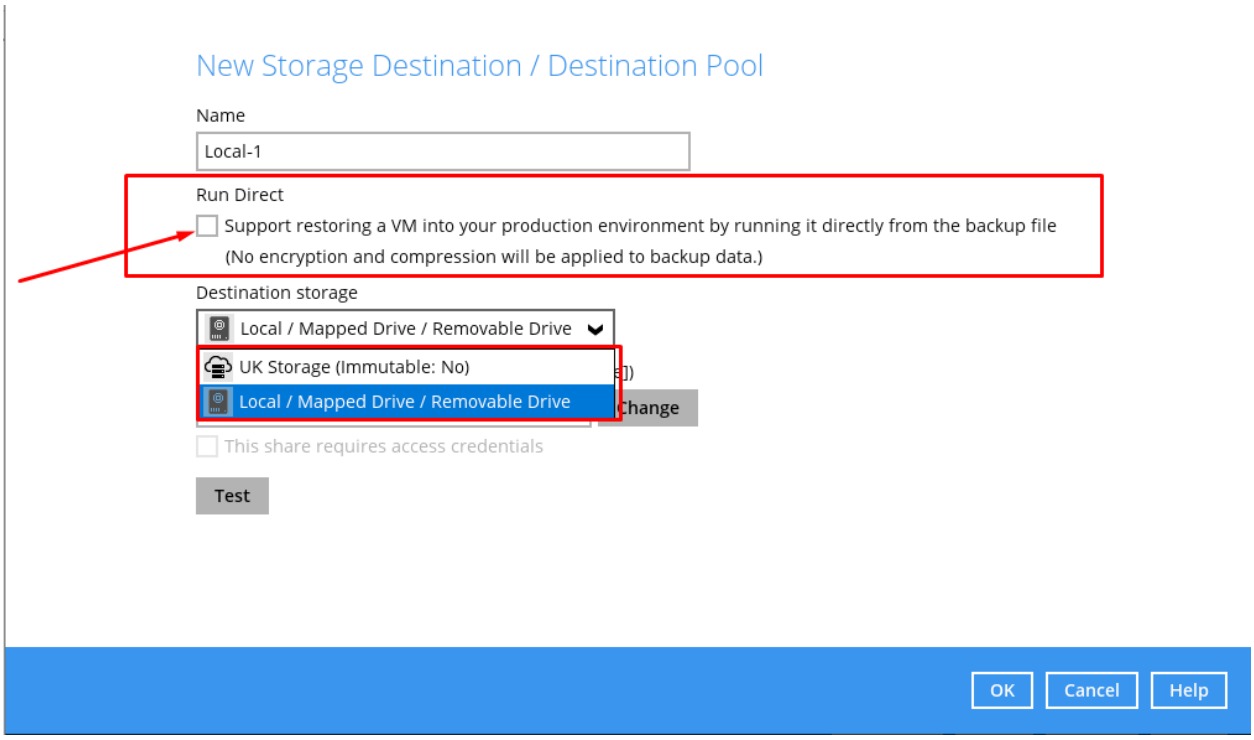


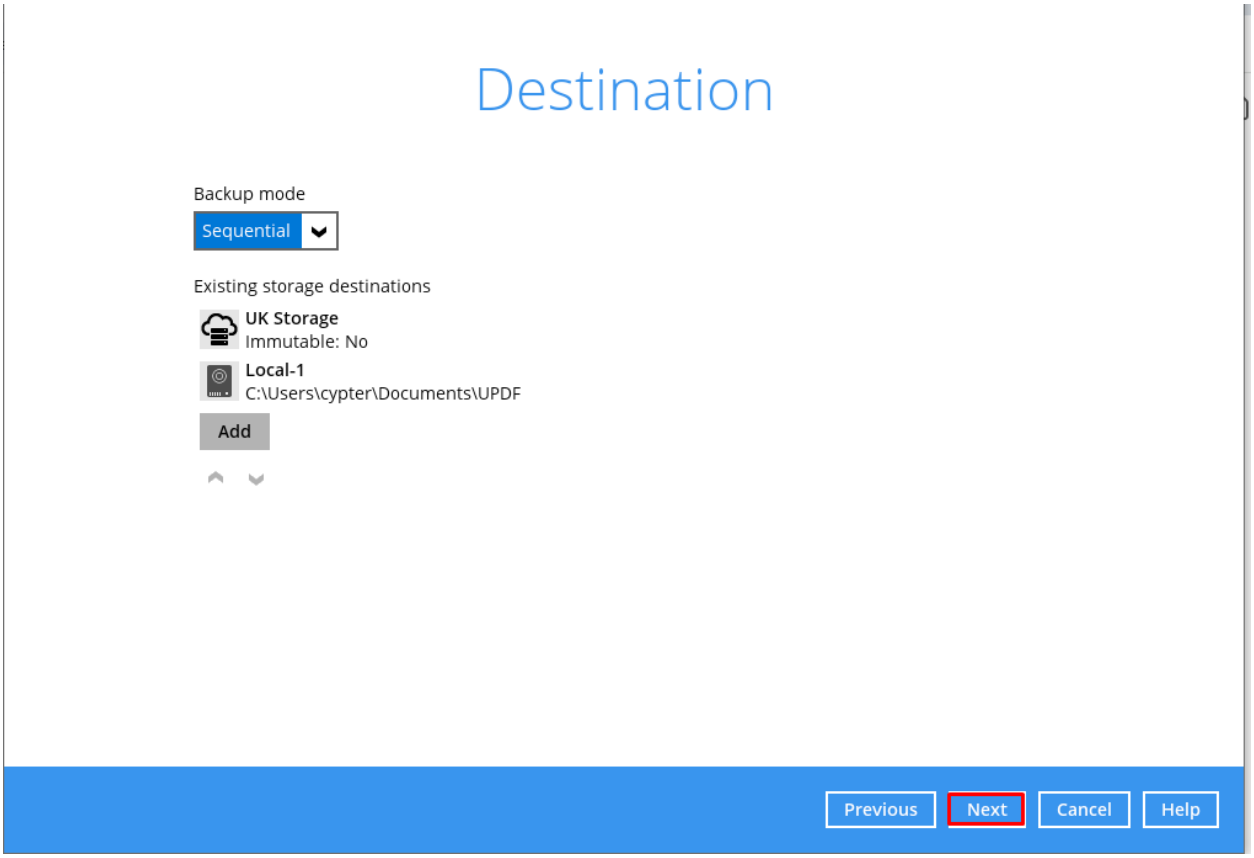
1. **Disable "RUN DIRECT"** (This option only supports local backups).



2. Select a destination:

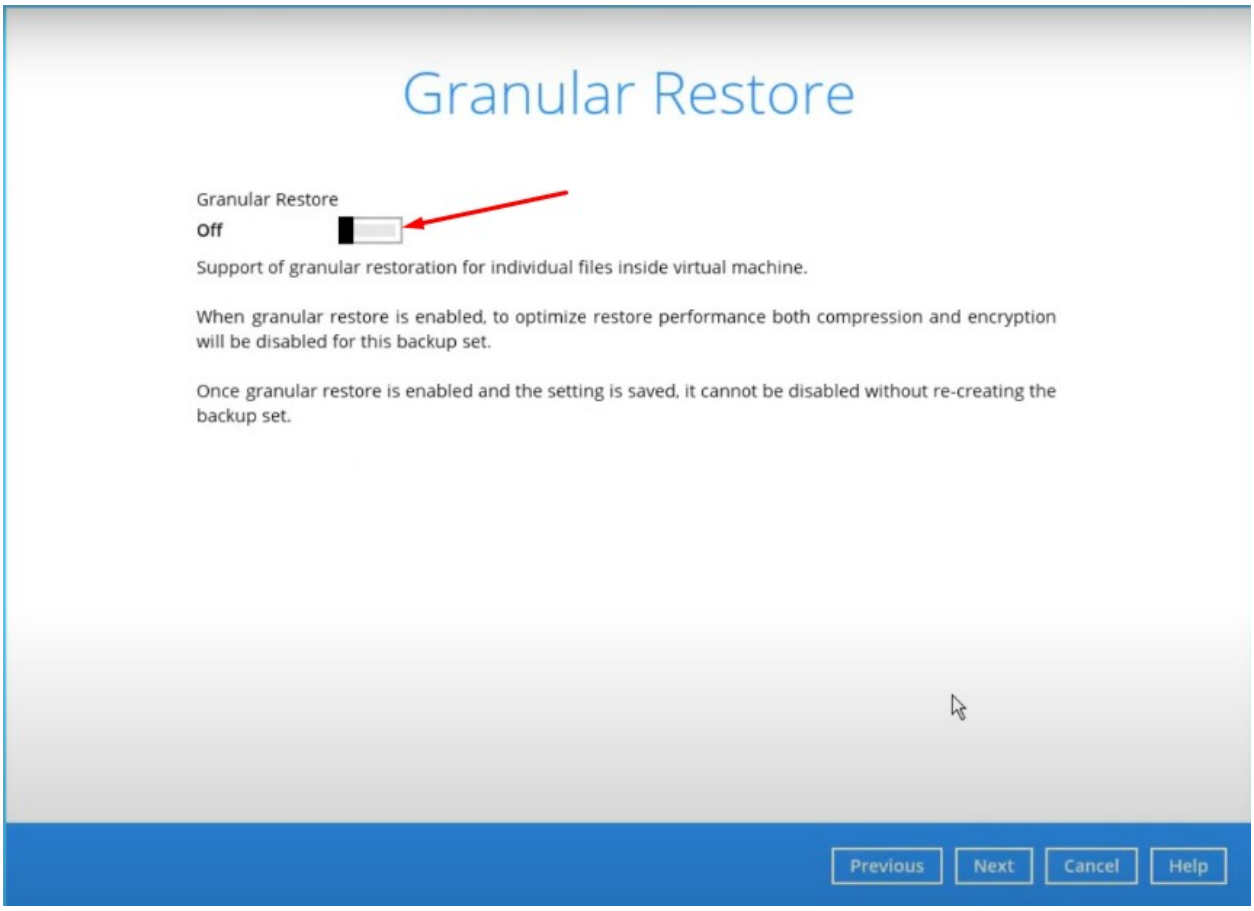
- **UK Storage (Cloud)** – For offsite backups.
- **Local Storage** – Provide a local path (e.g., *D:\HyperV_Backups*).


New Storage Destination / Destination Pool
Name
Local-1
Run Direct
Support restoring a VM into your production environment by running it directly from the backup file
(No encryption and compression will be applied to backup data.)
Destination storage
Local / Mapped Drive / Removable Drive
UK Storage (Immutable: No)
Local / Mapped Drive / Removable Drive
Change
This share requires access credentials
Test
OK
Cancel
Help


Destination
Backup mode
Sequential
Existing storage destinations
UK Storage
Immutable: No
Local-1
C:\Users\cypter\Documents\UPDF
Add
Previous
Next
Cancel
Help

Step 7: Granular Restore Option

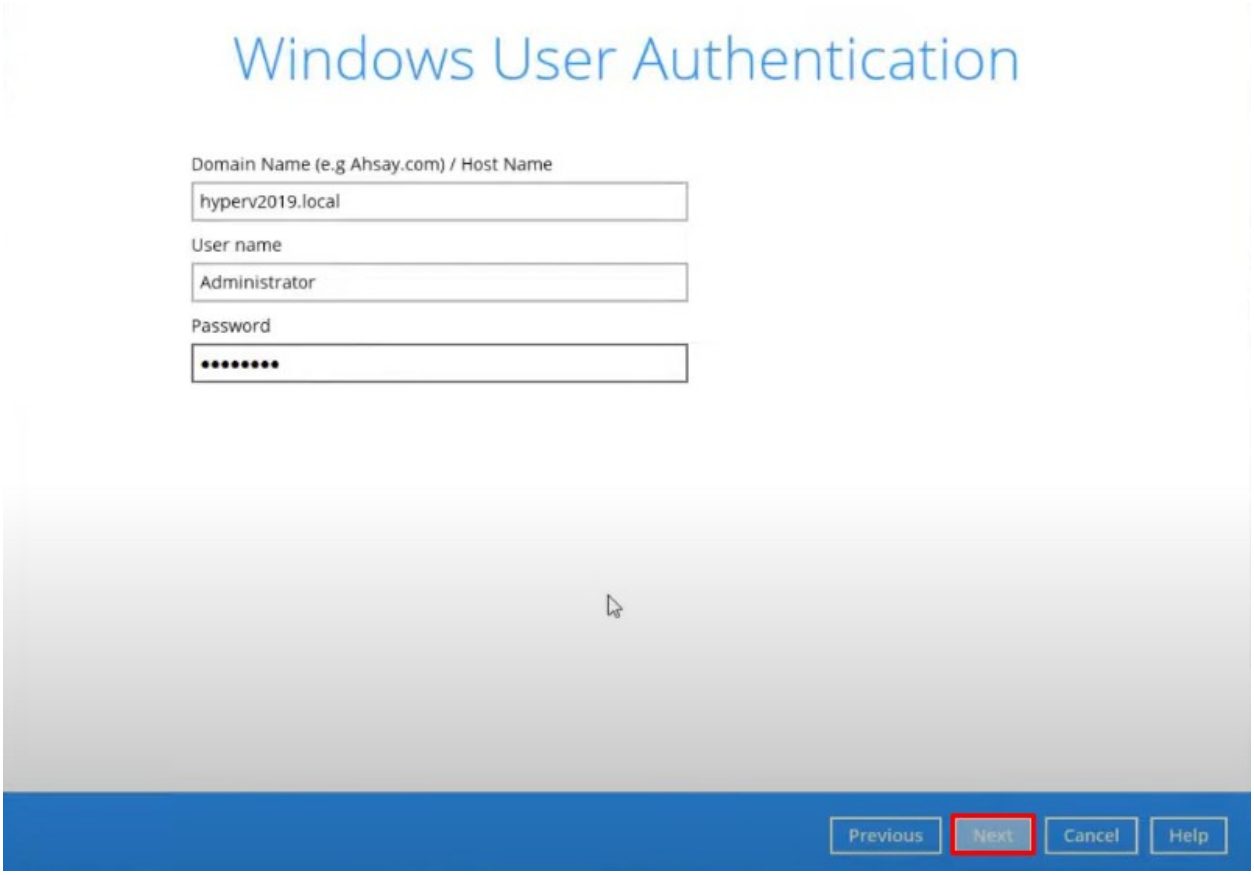
- **Disable** – skip this feature.



Step 8: Provide Windows Authentication

Enter credentials for Hyper-V host access:

- **Host/Domain Name** (e.g., *HYPERV-SERVER01* or *yourdomain.local*).
- **Username** (e.g., *admin@domain.com* or *HYPERV-SERVER01\Admin*).
- **Password** – Ensure proper permissions for backup access.



Step 9: Verify Temporary Directory

- Ensure the **temp directory** has enough free space
- Adjust the temp path if needed (e.g., *C:\Temp\Directory*).

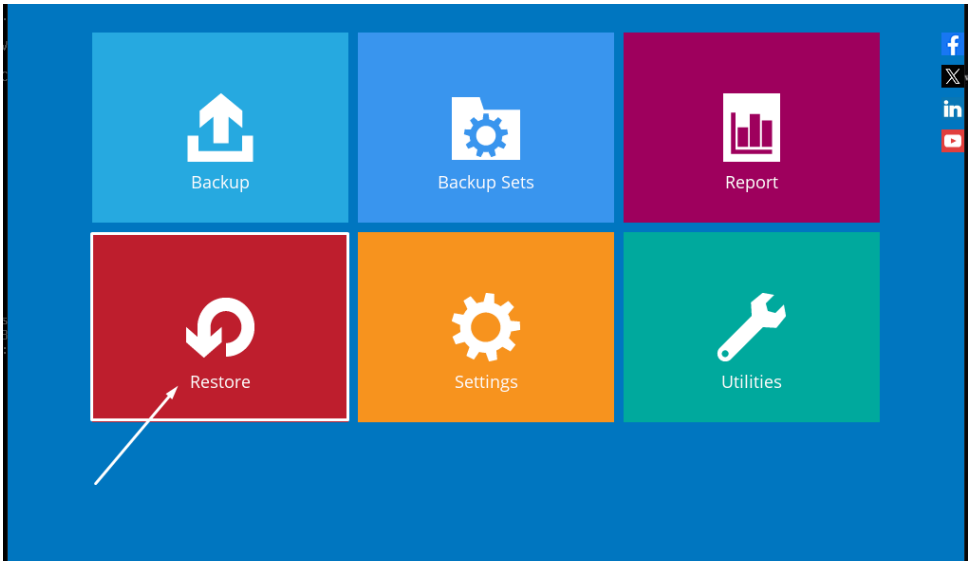
Step 10: Complete Backup Set Creation

- Click **"Save"** to finalize the backup set.
- **Optional:** Click **"Backup Now"** to run an immediate backup.

- Otherwise, backups will run at the scheduled time.

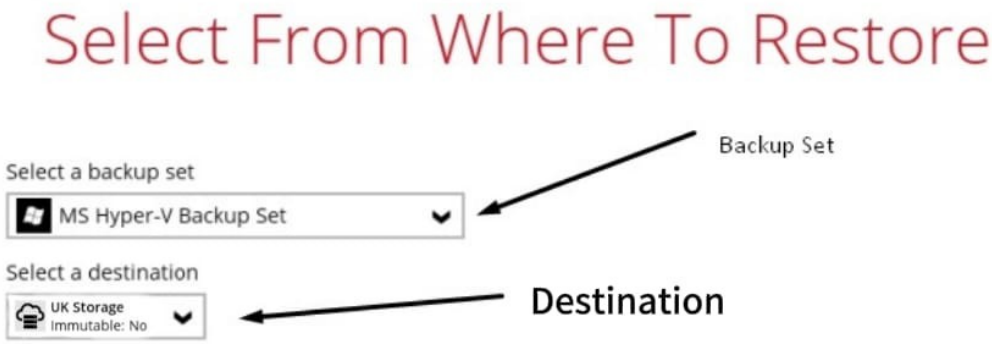
Restore Process

Step 1: Click the "Restore" icon in the main interface.



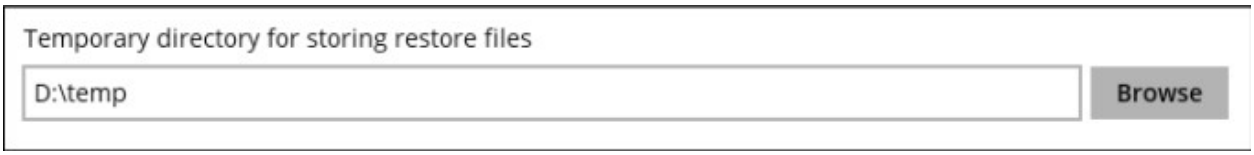
Step 2: Select the Backup Set

1. Choose the **backup set** containing the Hyper-V VM(s) you want to restore.
2. Select the **storage destination** (UK Storage, local drive, mapped drive, or removable drive) where the backup is stored.



- **Option 1: Restore Virtual Machine** – For full VM recovery.
- **Option 2: Restore Individual Files(Granular Restore)** – For granular file-level recovery (if enabled).

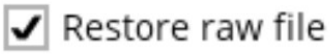
You may change the path under **"Temporary directory for storing restore files"** by clicking the Browse button. This will allow you to select the directory that will be used to store the temporary files.



Step 3: Select Backup Job & Files

1. Pick the **specific backup job** containing your VM.
2. Select the **files, folders, or VM(s)** you want to restore.

To do an Individual Virtual Disk Restore, tick the **Restore raw file** checkbox.



Click **"Next"** to proceed.

Step 4: Choose Restore Location

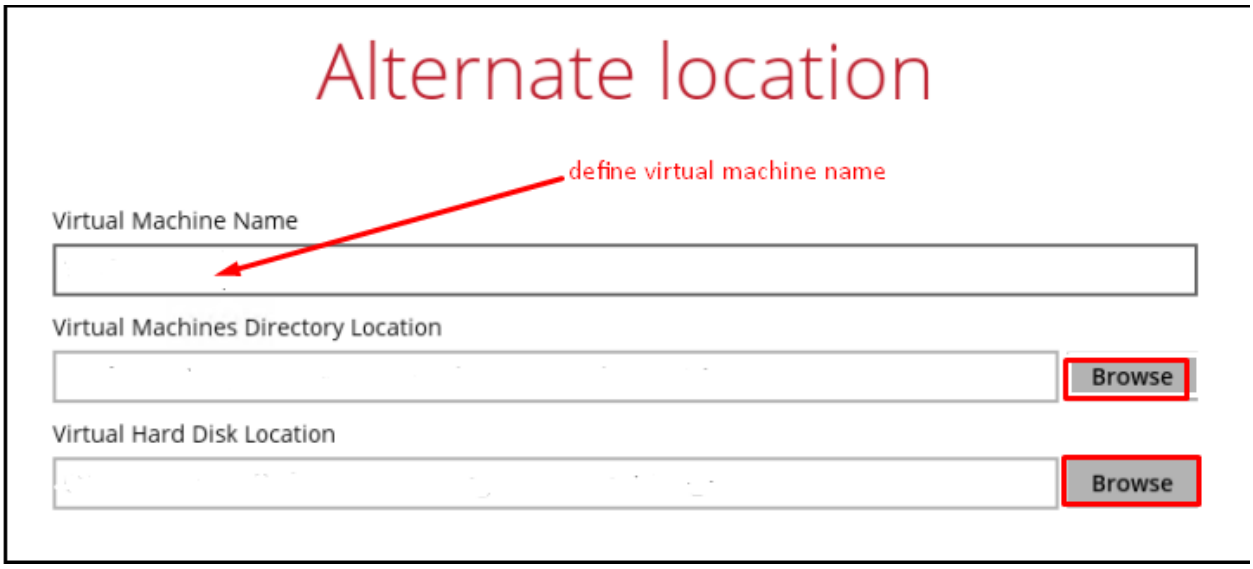
- **Original Location** – Restores the VM to its original path on the Hyper-V host.

- **Alternate Location** – Restores to a different directory (useful for testing or migration)

If Selecting Alternate Location:

You will need to specify:

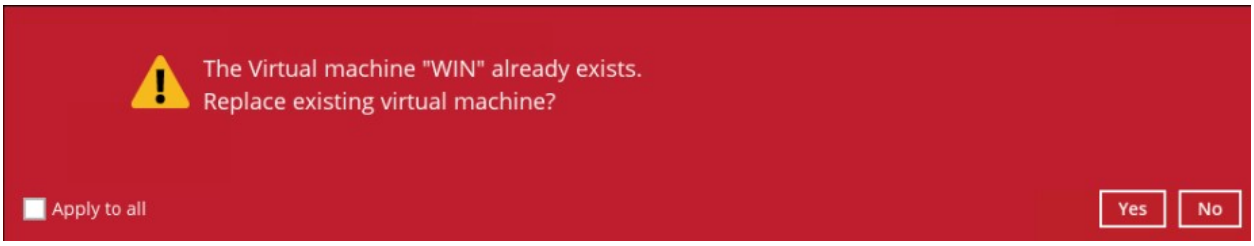
1. **New Virtual Machine Name**
2. **VM Configuration File Path** .
3. **Virtual Hard Disk (VHD) Location** (e.g., same as above or a different path).



- Click **"Restore"** to begin the process.

Step 5: Handle Existing VM Conflicts

- If the VM already exists, **It will ask** whether to:
  - **Yes** (deletes the existing VM before restoring).
  - **No**(cancels restore for this VM).



Step 6: Monitor & Complete Restore

- Wait for the process to finish.
- You will see a **"Restore Completed"** confirmation.

- Go to the Hyper-V server and open the Hyper-V Manager to verify the guest VM has been restored and is powered off.