

## 1. Objective – configure VM backup

1. Select **Home > Resource groups**, then choose your resource group, such as *oreilly-az104*
2. Choose your Windows VM from the previous labs, such as *winvm*
3. Under **Operations** from the menu on the left-hand side, select **Backup**, then choose **Create new** Recovery Services vault.  
Enter a name, such as *vault-az104*. You can then choose from the backup policy drop-down list how often you want to back up the VM and what retention options you want for those backup snapshots.
4. In most production environments, you wouldn't create the Recovery Services vault during the VM configuration, rather than Recovery Services vault would already exist in a region. You can manage policies (as in the next exercise) from the Recovery Services vault, and then apply them to VMs.

## 2. Objective – Define backup policies

1. From the menu to enable the VM backup, select **Create (or edit) a new policy**
2. You can define custom policies that fit the business or compliance needs of your applications. For this exercise, create a policy with the following backup frequency and retention settings. If not noted below, use the defaults:

Policy name: *az104-training*

Frequency: *Daily backup at 10pm UTC*

Retention of weekly backup point: *On Sunday for 4 weeks*

Retention of monthly backup point: *Week based on first Sunday for 12 months*

Retention of yearly backup point: *January, first Sunday for 7 years*

3. These retention options are an example of a common approach to rotating weekly backup points to monthly backup points, then yearly backup points for long-term data compliance needs.  
When ready, select **OK**

## 3. Objective – Implement backup policies

1. From the menu to enable VM backup, verify your new *az104-training* backup policy is selected. An overview of the policies defined are shown below the drop-down menu.
2. If needed, you can select a different policy from the drop-down menu, then choose **Create (or edit) a new policy** to change any of the settings.
3. When ready, select **Enable Backup**  
The first backup can take 15-20 minutes or more to complete. Continue with the next exercise and remaining labs while the backup process continues.

## 4. Objective – Azure Site Recovery

1. From your VM, under **Operations** from the menu on the left-hand side, select **Disaster recovery**
2. To keep it simple, choose a **Target region** from the drop-down menu of *East US*.  
Any region within the same geography (North America, Europe, India, etc.) can be used to replicate VMs from the primary region. You can't replicate across geographies.
3. Select **Advanced settings** and review the resources that are automatically to be created in the destination region, *East US*. A new resource group, virtual network, cached storage, and any availability options are automatically replicated. There's nothing to change here unless you want to change for naming conventions used.
4. When ready, select **Review + Start replication**, then **Start replication**  
The first replication can take 15-20 minutes or more to complete. Leave this process to continue as you move on in the course.