



















Activity 2.6

In this activity, we learned how to clone virtual machines; Windows 2019, Ubuntu and Rocky. This <u>technique</u> creates a virtual machine that is a copy of the original VM. The new virtual machine is configured with the same virtual hardware, installed software, and other properties that were configured for the original virtual machine. We also created templates from the existing virtual machines. A <u>template</u> is a master copy of a VM that can be used to create many clones. Clone VM's can be powered on and off.

Once the template is provided, we created a linked clone to the VM. A <u>linked clone</u> is a copy of a VM that shares virtual disks with its parent VM in an on-going manner. This <u>conserves</u> disk space and allows multiple VMs to use the same software installation. It's easier to create unique VMs for individual tasks. <u>Full clones</u> are complete and independent copies of a virtual machine and operate separately from the original parent VM. The <u>key advantage</u> of cloning VMs is the reduction of time required to create multiple copies of a VM. VM cloning is most useful for deploying multiple identical VM's to a group of users.

We also created backups and restored a virtual machine. <u>Backup and Recovery</u> is the process of duplicating data and storing it in a secure place in case of loss or damage, and then restoring that data to a location – the original one or a safe alternative – so it can be again used in operations. There are four primary types of backups are: *full backup, differential backup, incremental backup and mirror backup.* Here are the types of data recovery: *Granular recovery of files, folders and objects, Instant mass restore, Volume recovery, Virtual Machine Disk recovery, Bare machine recovery, Instant volume mounts and Instant restores of VMs.*