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Thurs February 13th 2025

Lab 10.1.6 Creating Hyper-V Virtual Machines
From TestOut CompTIA Security+ Course

In this lab I will be creating 2 VMs on a Hyper-V Server.

The scenario for this lab is as follows:

"**You have installed Hyper-V on ITAdmin. You're experimenting with creating virtual machines.**
In this lab, your task is to create two virtual machines named VM1 and VM2. Use the following settings as specified for each machine:

VM1:

- **Virtual machine name: VM1**
- **Virtual machine location: D: \ HYPERV**
- **Generation: Generation 1**
- **Startup memory: 1024 MB (do not use dynamic memory)**
- **Networking connection: External**
- **Virtual hard disk name: VM1.vhdx**
- **Virtual hard disk location: D: \ HYPERV \ Virtual Hard Disks**
- **Virtual hard disk size: 50 GB**
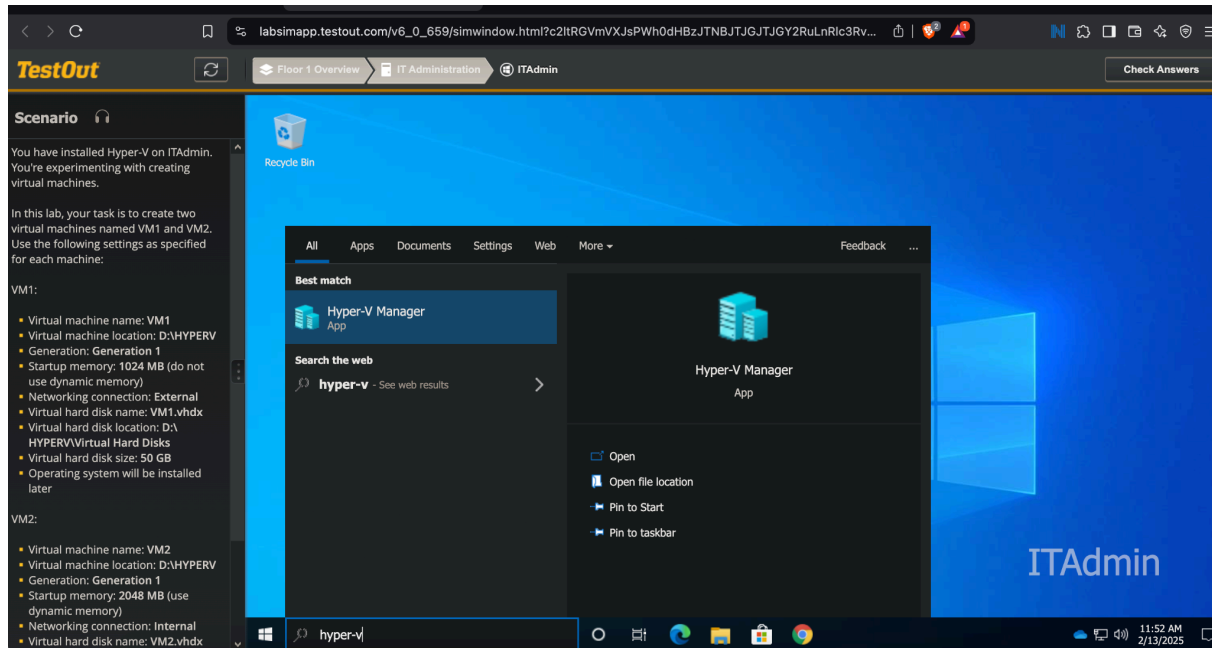- **Operating system will be installed later**

VM2:

- **Virtual machine name: VM2**
- **Virtual machine location: D: \ HYPERV**
- **Generation: Generation 1**
- **Startup memory: 2048 MB (use dynamic memory)**
- **Networking connection: Internal**
- **Virtual hard disk name: VM2.vhdx**
- **Virtual hard disk location: D: \ HYPERV \ Virtual Hard Disks**
- **Virtual hard disk size: 250 GB**
- **Operating system will be installed later**
- **Minimum RAM: 512 MB**
- **Maximum RAM: 4096 MB"**

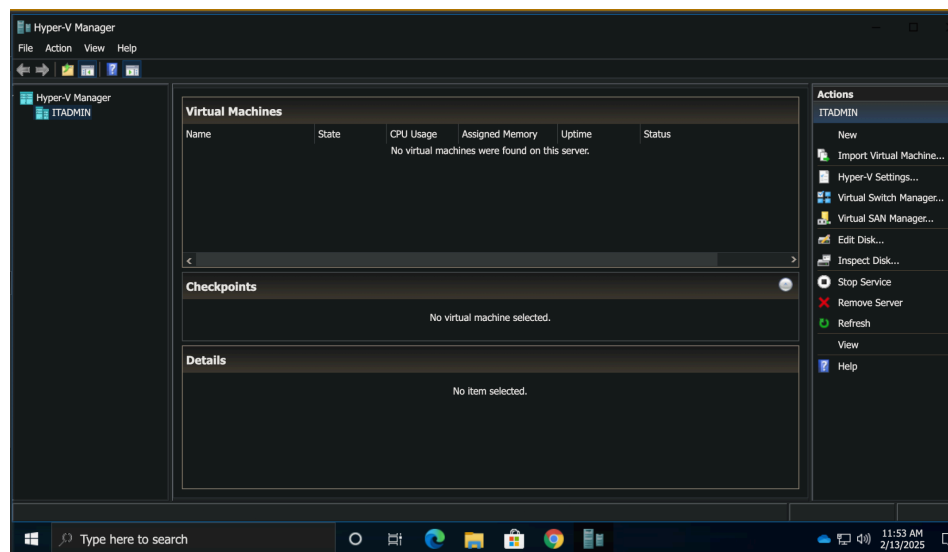To start I will Open the Hyper-V manager on my Windows Workstation.

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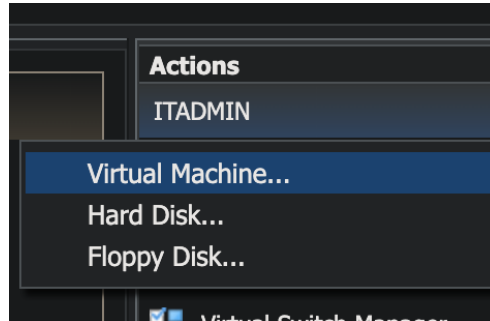github.com/robertmcarpenter
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Once it's open, I'll navigate to the right-menu pane and hit the **"New"** button to create a new VM on this **ITAdmin** Hyper-V server.

Once the drop down menu opens from clicking **New** I am presented with 3 options. I can create the following within the Hyper-V Manager:

1. Virtual Machine
2. Floppy Disk (virtual)

3. Hard Disk (virtual, .vhdx file)

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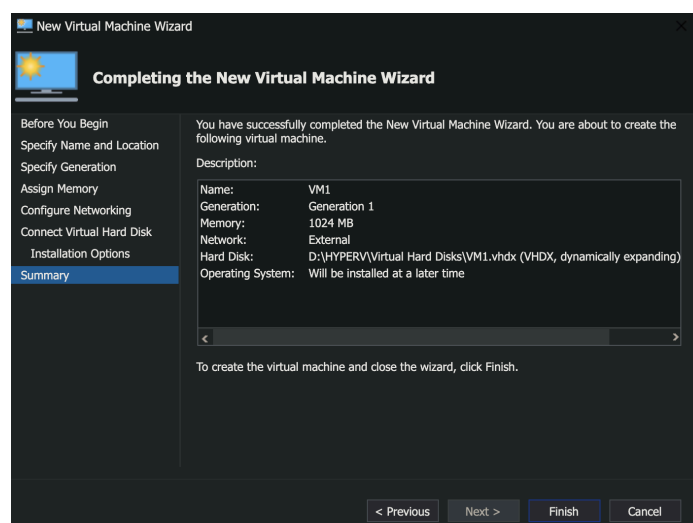Thurs February 13th 2025

For this specific scenario , I will click **Virtual Machine** since my task is to create 2 VMs for this lab.

Clicking **Virtual Machine** results in a new pop-menu which says **New Virtual Machine Wizard.** As I go through this Wizard I need to keep in mind the following requirements for this First VM I'm creating:

- **Virtual machine name: VM1**
- **Virtual machine location: D:\HYPERV**
- **Generation: Generation 1**
- **Startup memory: 1024 MB (do not use dynamic memory)**
- **Networking connection: External**
- **Virtual hard disk name: VM1.vhdx**
- **Virtual hard disk location: D:\HYPERV\Virtual Hard Disks**
- **Virtual hard disk size: 50 GB**
- **Operating system will be installed later**

Once I've finished clicking through all the prompts I will verify all the details match the above:

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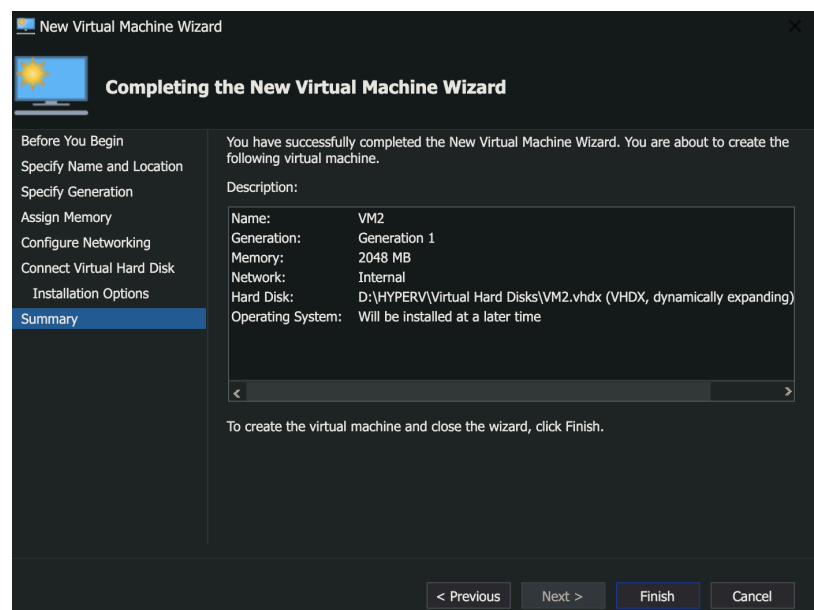Thurs February 13th 2025

Once I verify all the settings have been configured I will hit the **Finish** to finalize the install.

I will then Hit the **New** button again to create another VM. This time it should adhere to the following guidelines:
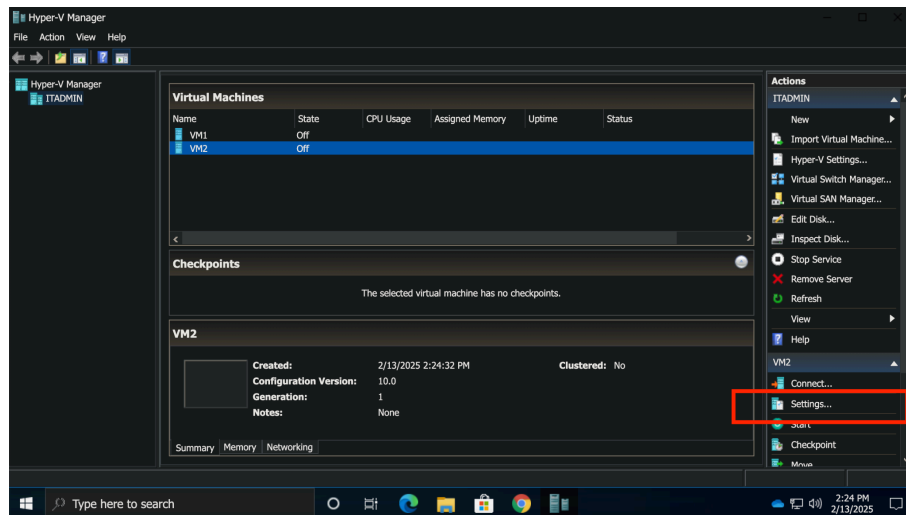
- Virtual machine name: **VM2**
- Virtual machine location: **D: \ HYPERV**
- Generation: **Generation 1**
- Startup memory: **2048 MB** (use dynamic memory)
- Networking connection: **Internal**
- Virtual hard disk name: **VM2.vhdx**
- Virtual hard disk location: **D: \ HYPERV \ Virtual Hard Disks**
- Virtual hard disk size: **250 GB**
- Operating system will be installed later
- Minimum RAM: **512 MB**
- Maximum RAM: **4096 MB**

Once again a wizard pops up and prompts me for the configuration settings. I will configure them according to the above and verify the summary at the end:
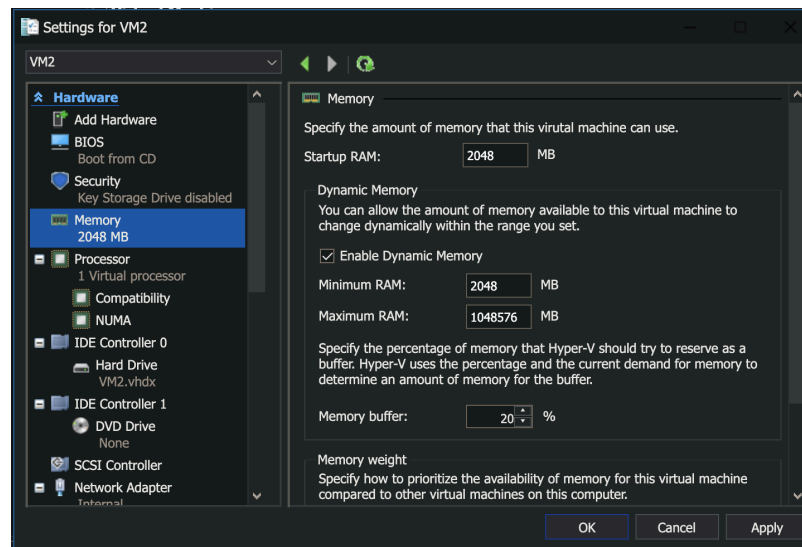

I did notice that at the end there was no way to set a minimum and maximum memory size for the dynamic memory I set. I'll head back to the list of VMs within the Hyper-V manager.

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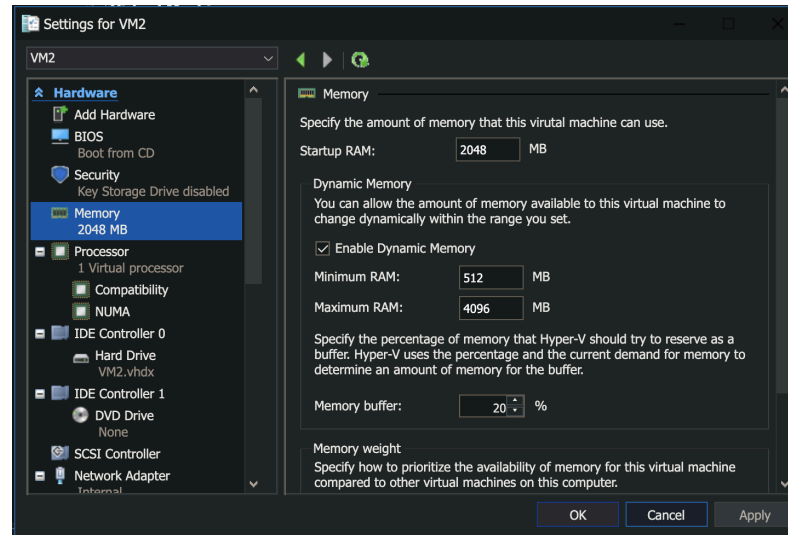github.com/robertmcarpenter
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I'll click the **VM2** so that it's highlighted and click the **Settings** button. This brings up a virtual Hardware configuration menu. I'll click the Memory button to bring up the configuration set. There it is! I can see the Dynamic memory min and max values.

I'll set the min and max values from 512MB to 4096MB as instructed.

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I will then hit the **Apply** then **OK** buttons.

That's it! Both VMs are created. This now concludes this lab.