PowerShell: Scripting for Server Administration

with Scott Burrell



Preparing a Windows Server for the Challenge

Minimum System Requirements

- Windows 10 or newer (Professional or Enterprise edition) or Windows Server 2012 R2 or newer
- 20 GB available hard-drive space
- 8 GB available memory
- 2 available logical processors
- Hyper-V role installed

Creating a Virtual Server

- Download an evaluation copy of Windows Server 2016 ISO from the Microsoft Evaluation Center
- Create a new virtual machine in Hyper-V
 - Open Hyper-V Manager
 - o In the action pane at the top-right, select New → Virtual Machine
 - Name your virtual server PowerShell Test Lab
 - Specify Generation 2
 - Assign at least 8 GB of memory and check the box to use dynamic memory
 - Connect your server to any existing virtual switch
 - Create a new virtual hard disk that is at least 16 GB in size
 - Choose to install an operating system later
 - Finish

Configure the Virtual Server

- Right-click on your new virtual server in Hyper-V Manager and select Settings
- Select the processor and increase the number or logical processors to at least 2
- Apply the change
- Select the SCSI controller and add a DVD drive
 - Select the option to mount a disk image and browse to the previously downloaded ISO
- Apply the change
- Select the BIOS and change the boot sequence to boot first to the DVD drive
- Apply changes and close

Install Windows Server

• Open the newly created virtual server and power it on

- Click in the new window and press the space bar as soon as the prompt appears to boot to DVD
- When prompted for the operating system to install, select the standard edition with the desktop experience
- Select the advanced install (not the upgrade) and accept defaults on all remaining screens
- Provide a password with capital and lowercase letter, numbers, and special characters (e.g., Action1!)
- Once the server is installed and you have logged in, change the IP configuration to
 - o IP 10.10.10.10
 - o Mask 255.255.255.0
 - o Gateway 10.10.10.1
 - o Name Server 10.10.10.10
- Change the computer name to dc01 and reboot the virtual server

Installing Roles

- In the Server Manager, select to install roles and services
- Accept defaults until you reach the screen with a list of roles to install
- Check the box for DNS and accept the pop-up invitation to install administration tools
- Check the box for Active Directory Domain Services and accept this pop-up as well
- When the roles are installed, click the blue text to promote this server to domain controller
- Use the following settings when prompted
 - Create a new Active Directory forest
 - Domain name: landonhotel.com
 - Recovery password: [the same password used during installation is fine]
 - o Default options for everything else