

**Labs work exactly as written in the existing VM image. To use newer tools and explore more of PowerShell, you can add/update the image as follows:**

Update Windows 10 to a recent build, like 20H2 (aka 2009)

1. Log in to Echo as Speck
2. Visit <https://www.microsoft.com/en-us/software-download/windows10>
3. Click **Update now**
4. When the Upgrade Assistant has downloaded, run it, and start the update.
5. Go drink coffee. Grab lunch. Take a short vacation. (The lab may save itself if you're away.)
6. Restart as required.

(Optional) Turn off UAC

1. Note: Some Metro/Store Apps may not work right with this setting.  

```
Set-Itemproperty -path  
'HKLM:\Software\Microsoft\Windows\CurrentVersion\policies\system' -Name  
'EnableLUA' -value 0
```

Install Tools (the upgrade removes RSAT, and we need a few more)

1. RSAT (AD Admin Tools):  

```
Get-WindowsCapability -Name RSAT* -Online | Add-WindowsCapability -Online
```
2. I recommend a restart here.
3. (Optional) Download and install Git or GitHub Desktop or both.
4. To have full XML formatting, the RedHat Extension uses Java. by Install both by using the **Coding Pack for Java** from <https://code.visualstudio.com/docs/languages/java> or skip Java (and full XML support) by using just **Visual Studio Code** from <https://code.visualstudio.com/Download>
5. Run Visual Studio Code
  - a. Install the PowerShell Extension from Microsoft (or PowerShell Preview)
  - b. Update PackageManagement when prompted.
6. Install an XML format extension:
  - a. **XML** by Redhat (needs Java), and/or
  - b. **XML Tools** by Josh Johnson
7. (Optional) Install Office Viewer Extension

Warning: "Ending" the lab will reset this. Use SAVE not END.