

Lab - Prepare a Windows OVA File for Your Virtual Lab Environment

Overview

In this short lab, you will learn how to prepare a Windows OVA file for your virtual lab environment. You will also learn to quickly remove all installed Microsoft updates in one shot using a batch file. Windows updates are not without their issues. Aside from preventing an exploit from working, these updates can be problematic if the hardware or software is not compatible.

In this example, we will download a 32-bit version of the OVA file for Windows 7 from the [Microsoft Edge Developer's site](#). This OVA file comes with over 211 updates, making this machine challenging to use as a pentesting target.

This batch file works for removing Microsoft updates on all versions of Microsoft Windows.

Lab Requirements

- One installation of VirtualBox with the extension pack
- One virtual install of Windows 7 downloaded as an OVA file from the [Microsoft Edge Developers site](#).

<https://developer.microsoft.com/en-us/microsoft-edge/tools/vms/>

Using the provided link for the Windows 7 download, use the following image to help you choose the right download:

Virtual Machines

Test IE11 and Microsoft Edge Legacy using free Windows 10 virtual machines you download and manage locally

Select a download

Virtual Machines

IE11 on Win7 (x86)



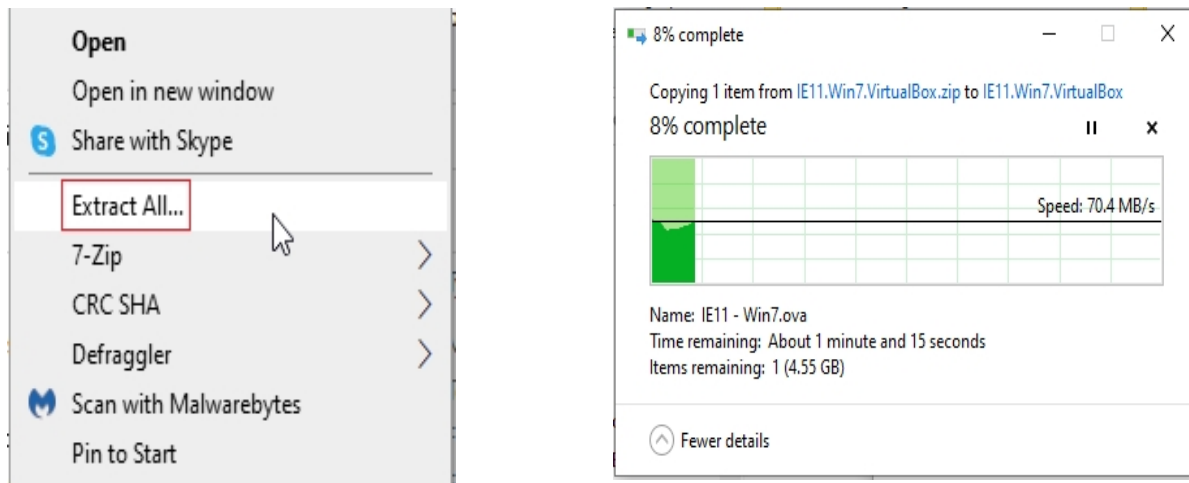
Choose a VM platform:

VirtualBox

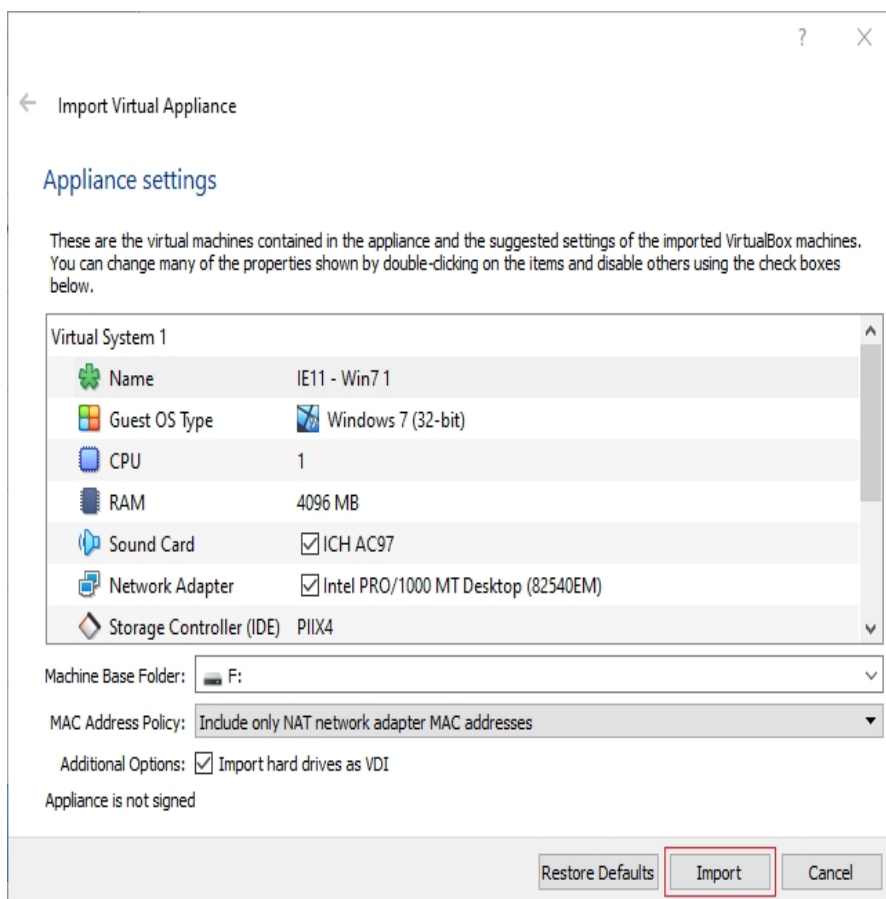
▼

Download .zip >

Once you have the OVA file downloaded, find the downloaded archive and either x2 click to open for extraction or right click on the archive and from the context menu, select Extract all:

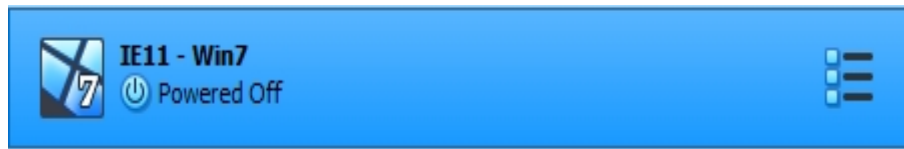


Find the extracted OVA file and x2 click to start the importation process into windows. Accept the defaults and press the import button to begin the importation of Windows into VirtualBox.

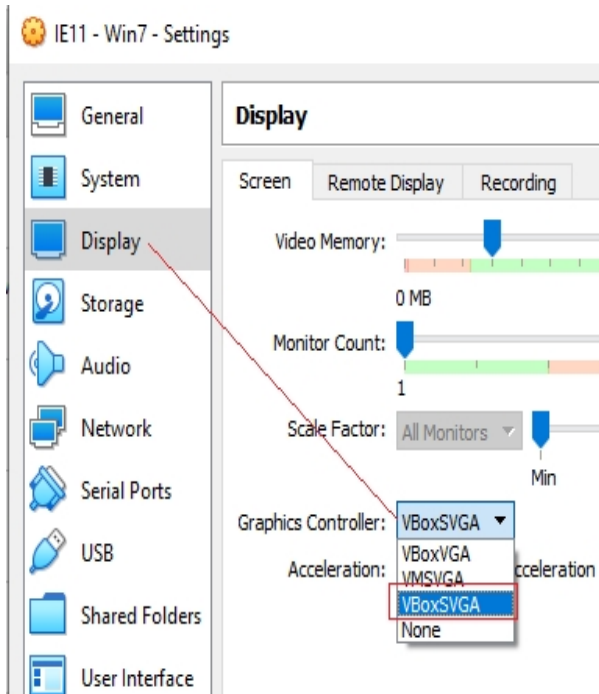


Once the importation process has been completed, find the virtual disk for your freshly installed Windows 7 machine in the left windowpane of your VirtualBox

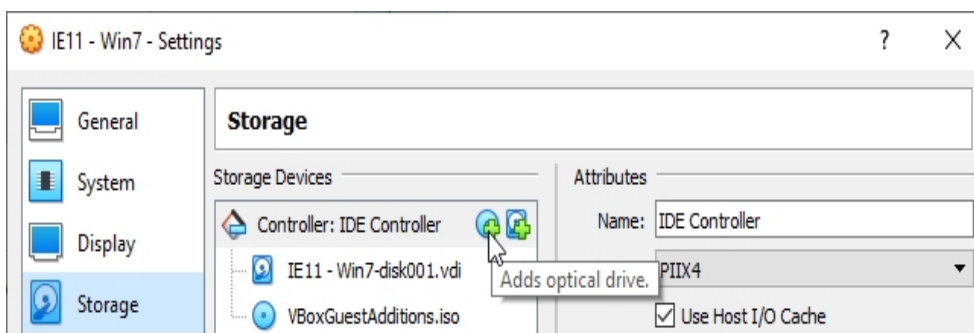
freshly installed Windows 7 machine in the left windowpane of your VirtualBox management console.



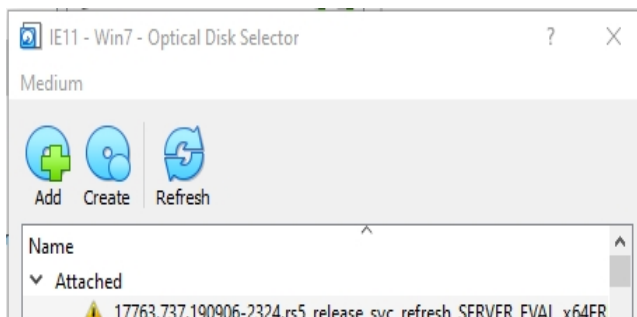
Right-click on the machine, and from the context menu, select Settings. From the Settings properties page, in the left windowpane, click on Display:



From the left windowpane, select Storage. Add an optical drive.



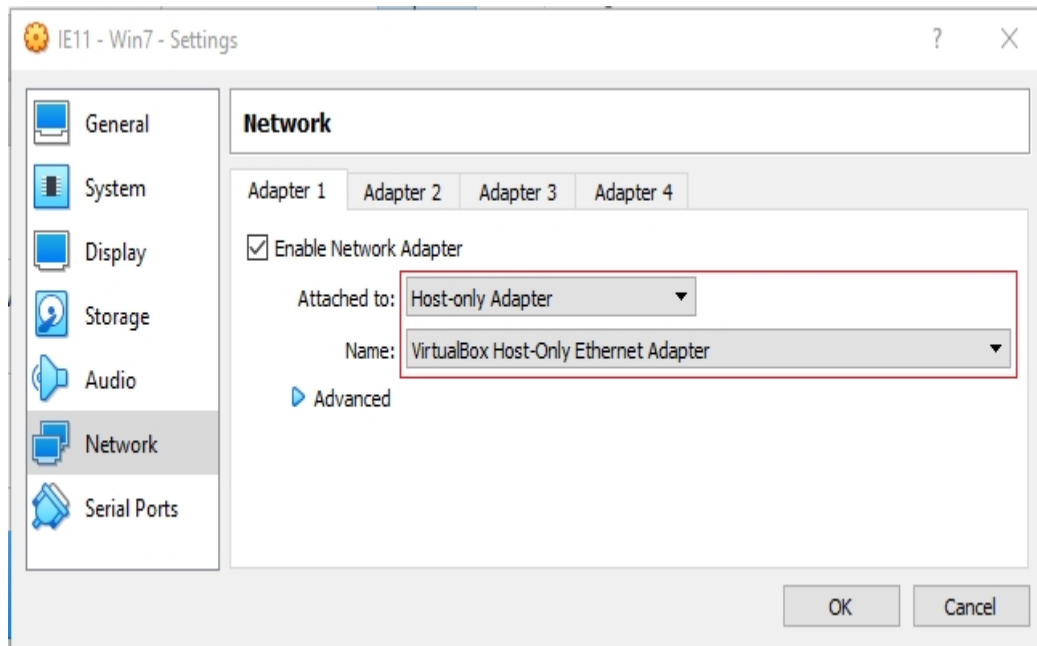
On the next screen, press the button labeled Leave Empty. This will be needed to install the VirtualBox guest additions.



Server 2016 Evaluation.ISO

Search By Name

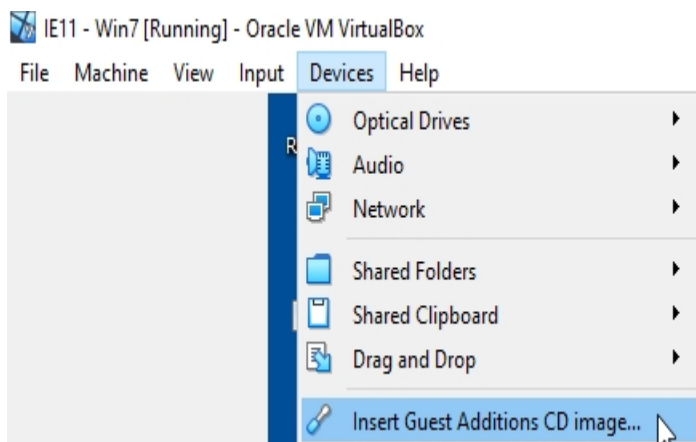
From the left windowpane, click Network. Next, pull down the window labeled Attached to and select Host-only Adapter. This will prevent the OS from updating before we can disable updates:



Click OK.

From the left windowpane of your VirtualBox manager, x2 your virtual disk for Win7 to launch.

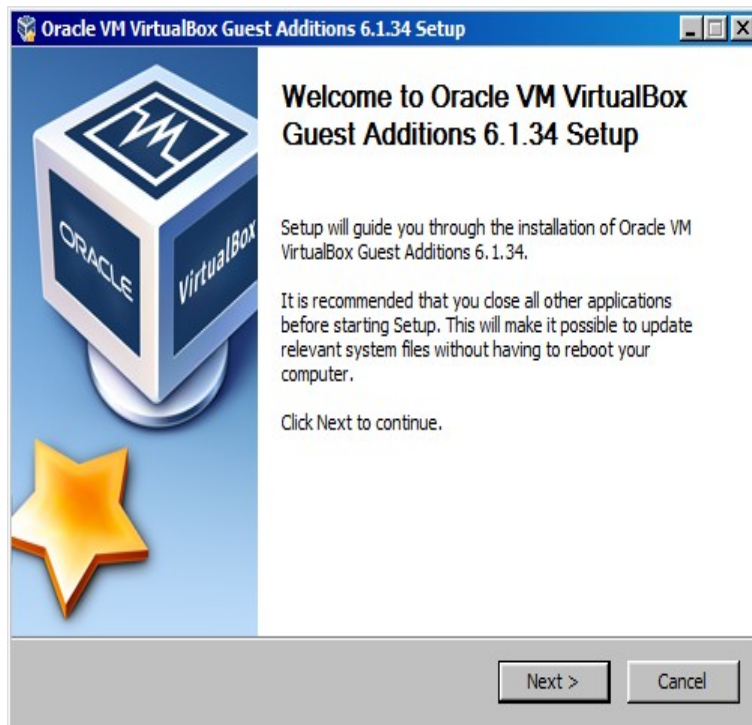
From the VirtualBox taskbar, click on Devices, and from the context menu, select Insert Guest Additions CD Image:



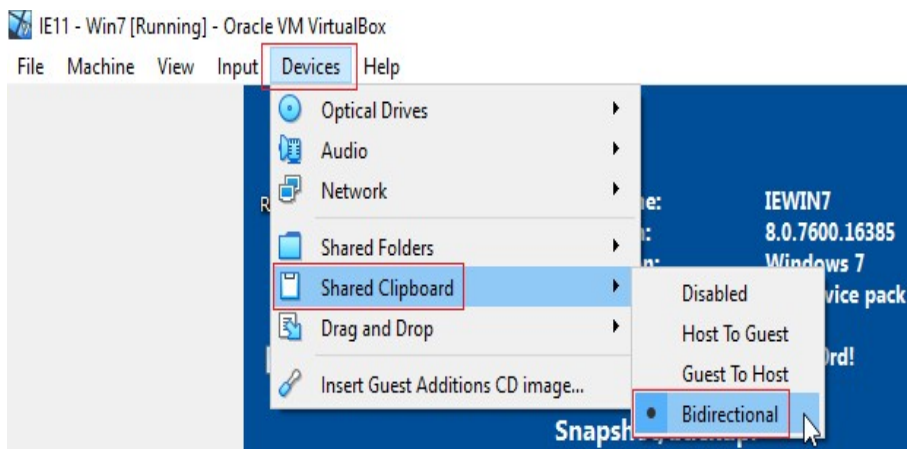
Open File Explorer, open My Computer, in the right windowpane, find your CD-ROM, and 2x click.

When the Guest Editions Setup Wizard opens, click Next, accept all the defaults,

and when finished, reboot.

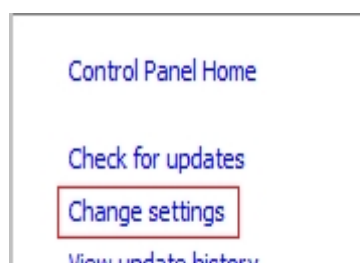


Back at your Windows 7 desktop, from the VirtualBox taskbar, expand Devices and from the context menu, select Shared Clipboard, and from the following content menu, select Bidirectional:



Click on Start, and in the search bar, type updates. From the search results, click on Windows Updates.

From the left, click on Change Settings:

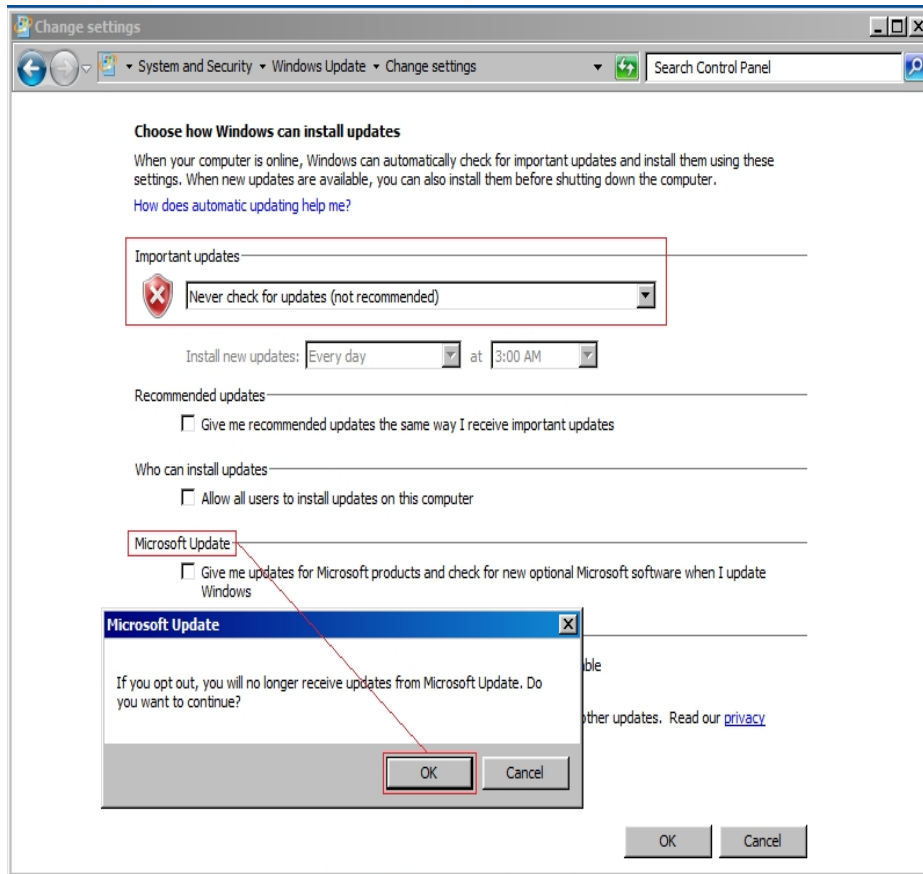


[view update history](#)

[Restore hidden updates](#)

[Updates: frequently asked questions](#)

On the next screen, configure Windows 7 to not check for updates. Finally, uncheck all the boxes and press OK:



Begin the Lab!

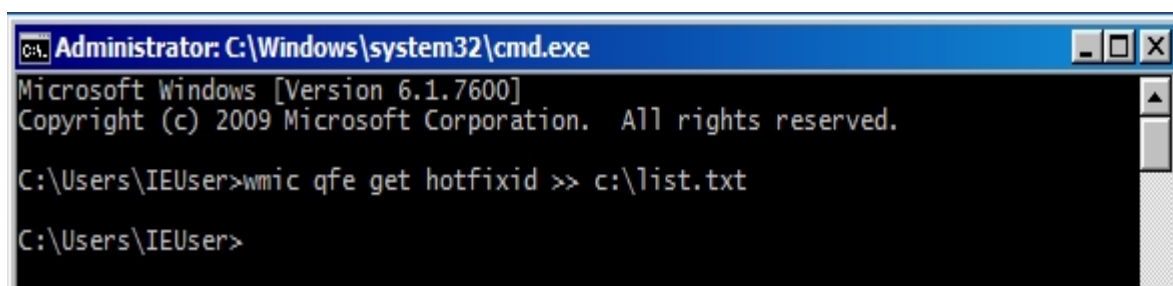
From the desktop of your Windows 7 target machine, open a command prompt.

Step 1: Generate a list of updates currently installed.

At the prompt, type or copy and paste the following:

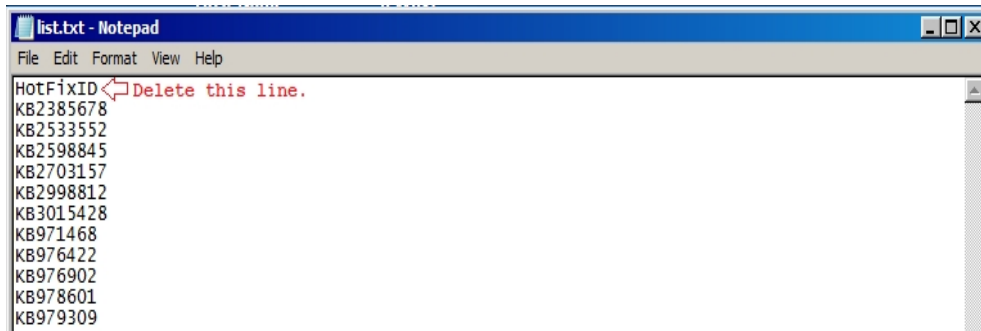
```
wmic qfe get hotfixid >> c:\list.txt
```

This will generate a list of updates and output the results to a text file saved to the root of the C Drive. Hit Enter.



Open file explorer, and from the left windowpane, click on Computer. Then, in the right windowpane, open the local disk labeled Windows 7 (C:).

Open the list.txt file and delete the first line, which is just the file's title. Save the changes.



Step 2: Generate the batch file.

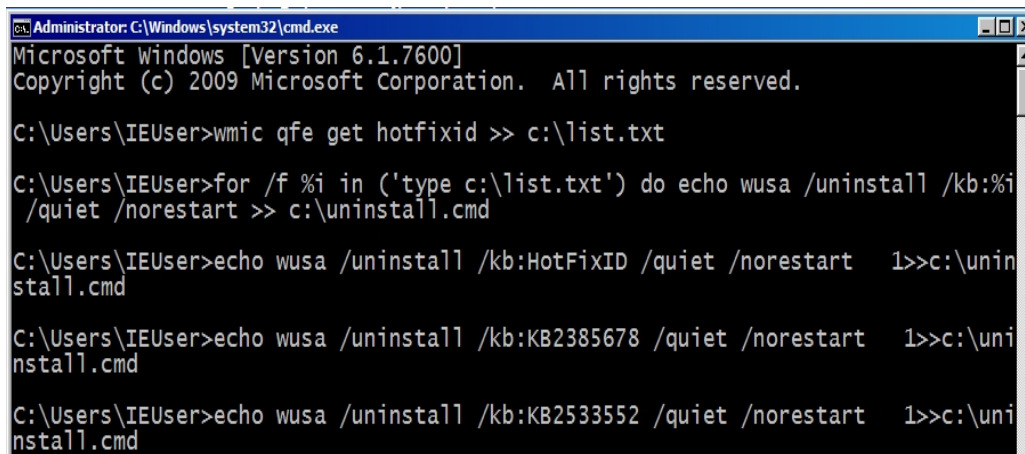
At the prompt, type or copy and paste the following:

```
for /f %i in ('type c:\list.txt') do echo wusa /uninstall /kb:%i  
/quiet /norestart >> c:\uninstall.cmd
```

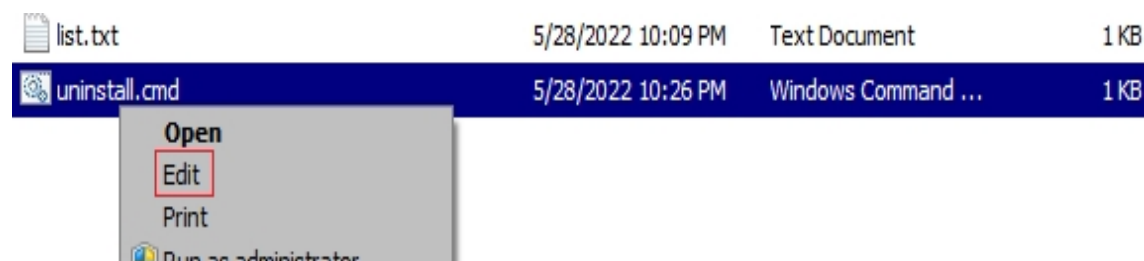
```
C:\Users\IEUser>for /f %i in ('type c:\list.txt') do echo wusa /uninstall /kb:%i  
/quiet /norestart >> c:\uninstall.cmd
```

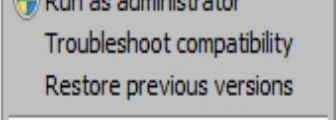
Press Enter.

Your batch file is completed.



Return to the root of your C:\. Right-click on the batch file, and from the context menu, select Edit:

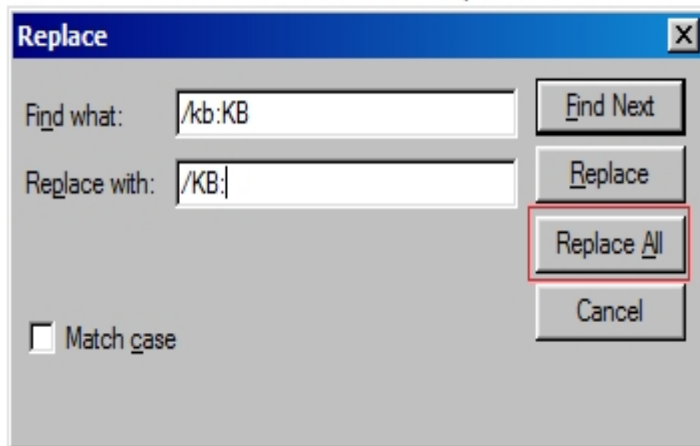




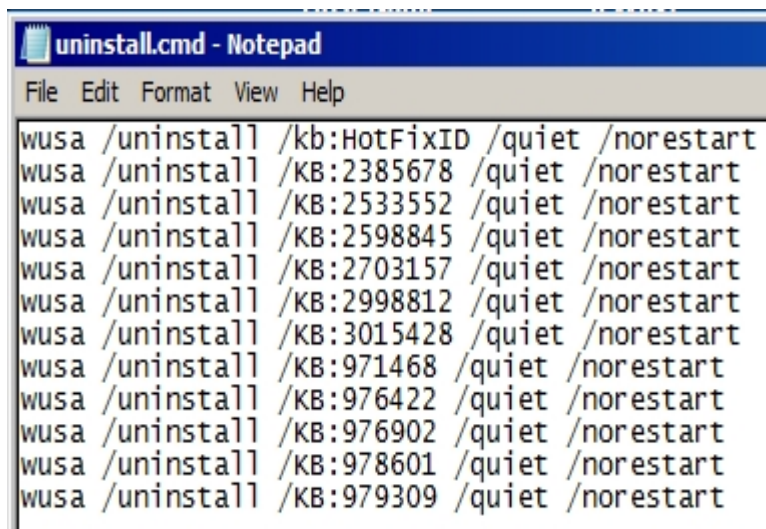
Click inside the batch file, and from your keyboard, press CTRL+H. We need to replace **“/kb:KB”** with **“/KB:”**

Before

```
wusa /uninstall /kb:KB976422 /quiet /norestart  
wusa /uninstall /kb:KB976902 /quiet /norestart  
wusa /uninstall /kb:KB978601 /quiet /norestart  
wusa /uninstall /kb:KB979309 /quiet /norestart
```

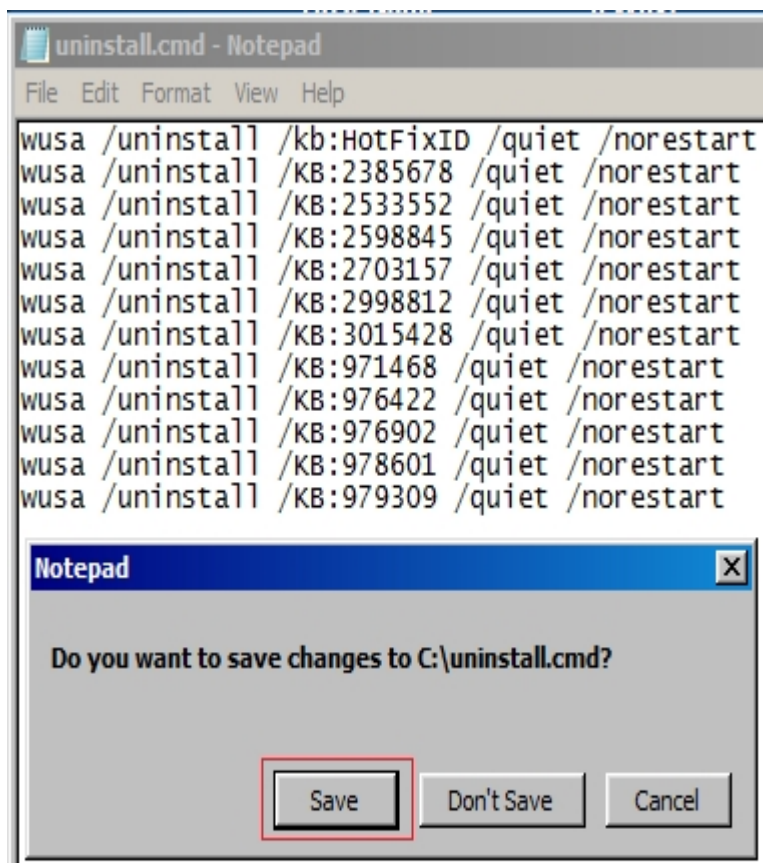


After

A screenshot of a Notepad window titled 'uninstall.cmd - Notepad'. The window shows the updated batch file content where all instances of '/kb:KB' have been replaced with '/KB:'. The text is as follows:

```
wusa /uninstall /kb:HotFixID /quiet /norestart  
wusa /uninstall /KB:2385678 /quiet /norestart  
wusa /uninstall /KB:2533552 /quiet /norestart  
wusa /uninstall /KB:2598845 /quiet /norestart  
wusa /uninstall /KB:2703157 /quiet /norestart  
wusa /uninstall /KB:2998812 /quiet /norestart  
wusa /uninstall /KB:3015428 /quiet /norestart  
wusa /uninstall /KB:971468 /quiet /norestart  
wusa /uninstall /KB:976422 /quiet /norestart  
wusa /uninstall /KB:976902 /quiet /norestart  
wusa /uninstall /KB:978601 /quiet /norestart  
wusa /uninstall /KB:979309 /quiet /norestart
```

Save the changes.



X2 click the batch file to run. Be patient! There are 211 or more updates to remove. When the batch file has completed, restart the machine. The Service Pack will want to reinstall, so let it happen.

Some updates may not uninstall. These can be ignored.

Summary

Your Windows 7 OVA install should now be ready for your virtual lab environment.

End of the lab!

