

WINDOWS 8 “XP MODE” – PART 1: HYPER-V

In this series, I’ll discuss how you can replace Windows XP Mode from Windows 7 with Client Hyper-V and RemoteApp in Windows 8.

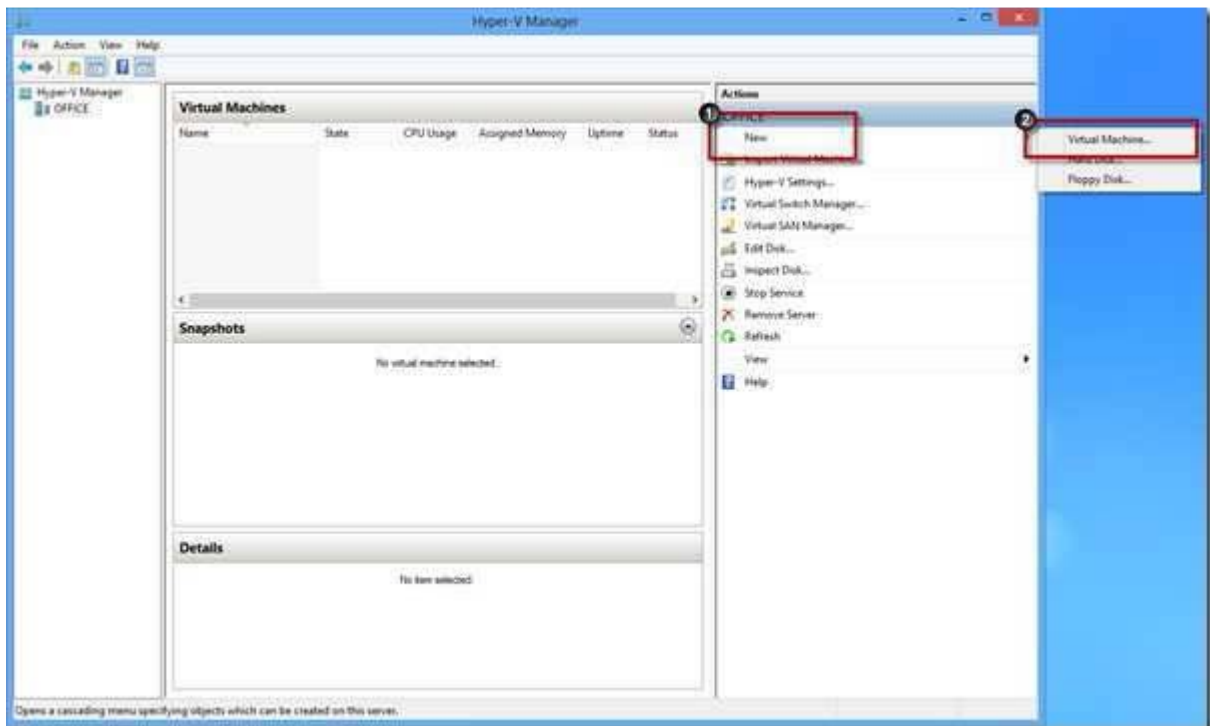
If you’re like me, you’ve still got those lingering applications that still don’t work on newer releases of Windows. With Windows 7, you could install XP Mode for those one-off instances of applications. If you had lots of users needing apps with compatibility issues on Windows 7, you could dip into [MED-V](#) or [VDI](#) to provide those applications to end users.

Microsoft has [announced](#) that they will not support MED-V past Windows 7. Microsoft hasn’t said much about XP Mode on Windows 8, but considering the phase out of MED-V along with the inclusion of Client Hyper-V in Windows 8, it is probably safe to assume that XP Mode is gone as well.

So where does that leave you when you still need to bring up an old application or an older version of Internet Explorer alongside Windows 8 seamlessly like in XP Mode in Windows 7? VDI is always an option, but may be overkill if you need occasional access to a legacy application or only have a handful of users needing the application. The good news is that if you liked XP Mode, doing the same thing in Windows 8 is actually pretty easy with Client Hyper-V.

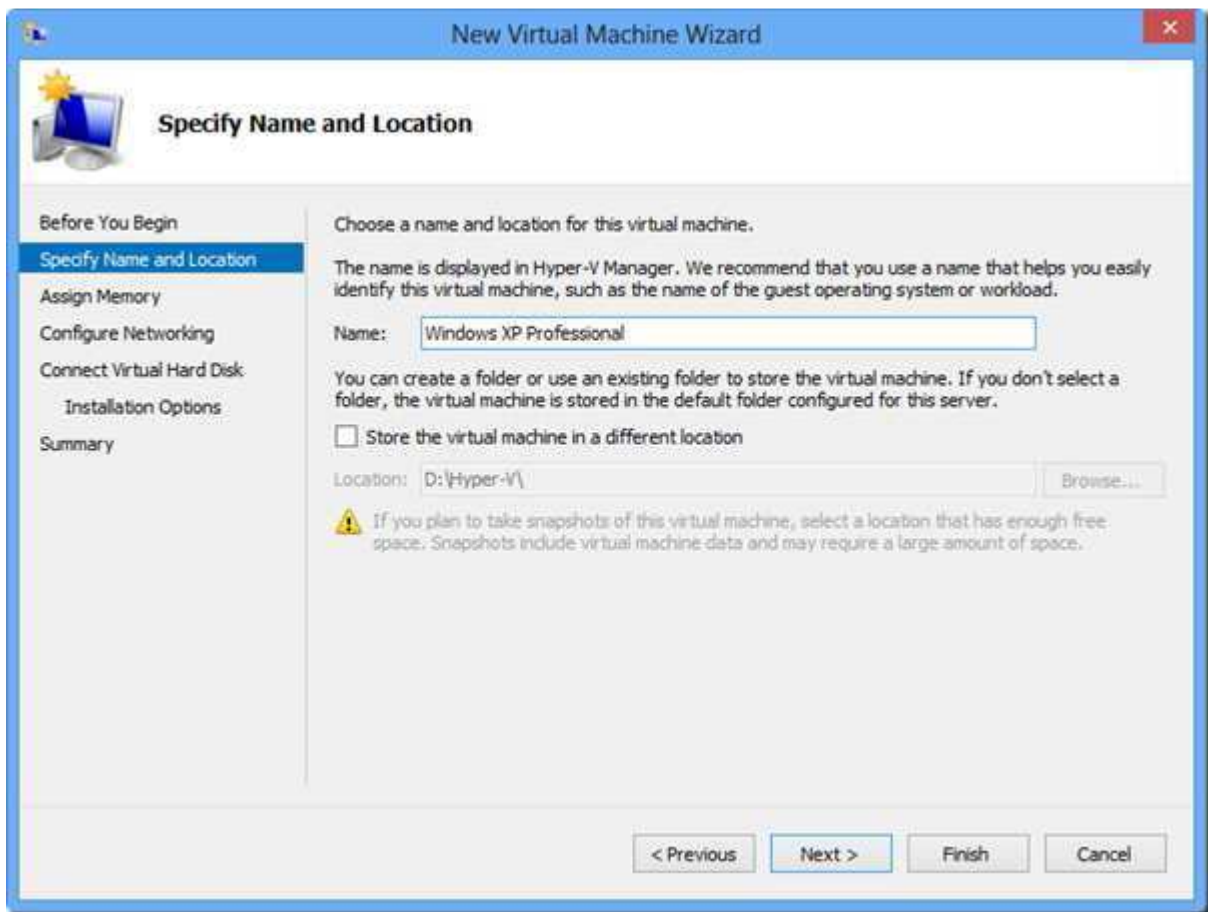
To begin, you’ll need a computer running Windows 8 (Professional or higher) with 4 GB of RAM and a 64-bit SLAT capable processor. [Install the Hyper-V role](#) and reboot.

Unlike XP Mode, there’s a little more work to set things up with client Hyper-V. Out of the box, Client Hyper-V won’t have any virtual machines configured. After bringing up the Hyper-V Manager, you’ll need to click on New > Virtual Machine to create a new VM.



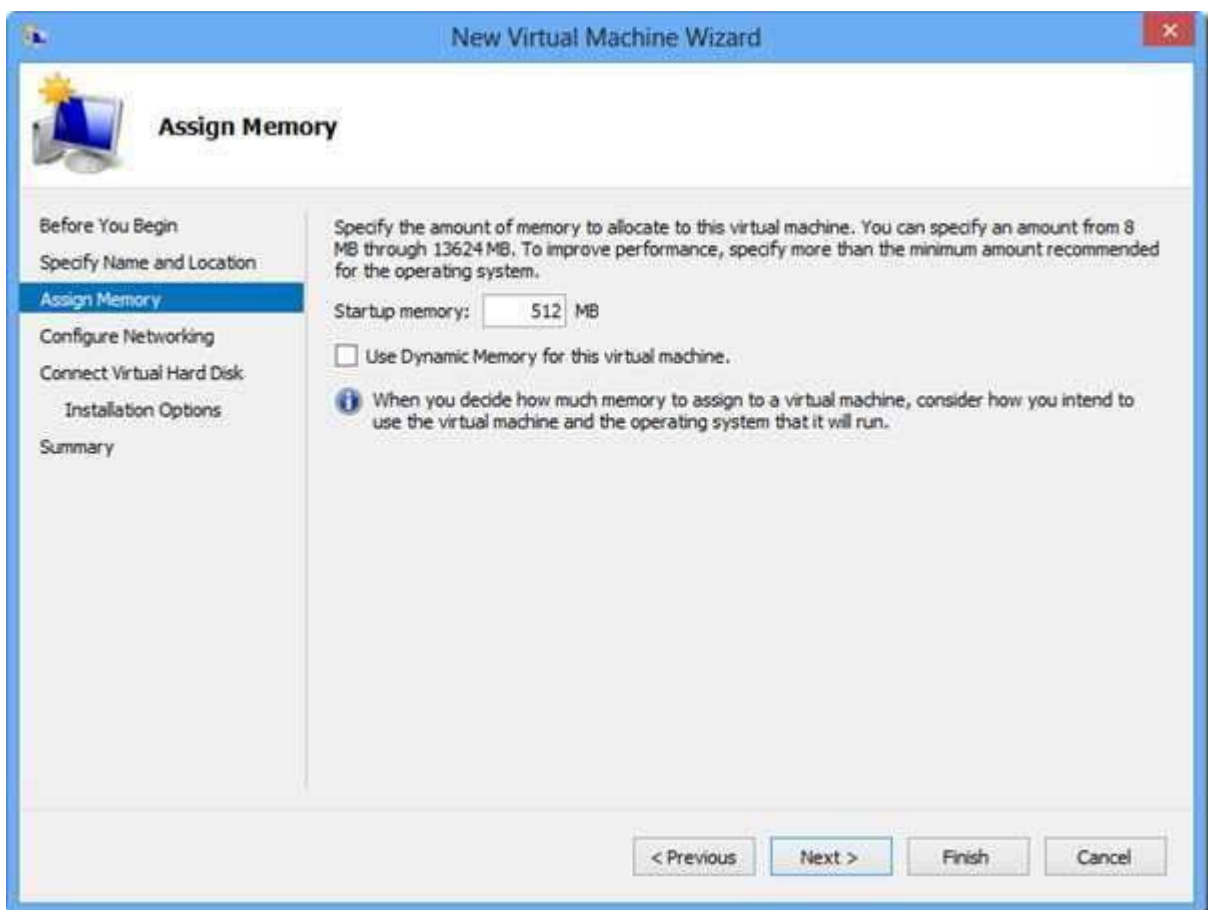
Windows 8 XP Mode – New Hyper-V Virtual Machine

This will bring up the New Virtual Machine Wizard. If you’ve used Hyper-V in Windows Server, this will likely look very familiar. If not, it is very similar to other virtualization products on the market that you may be familiar with. In the first screen of the wizard, you’ll want to pick a name for your VM.



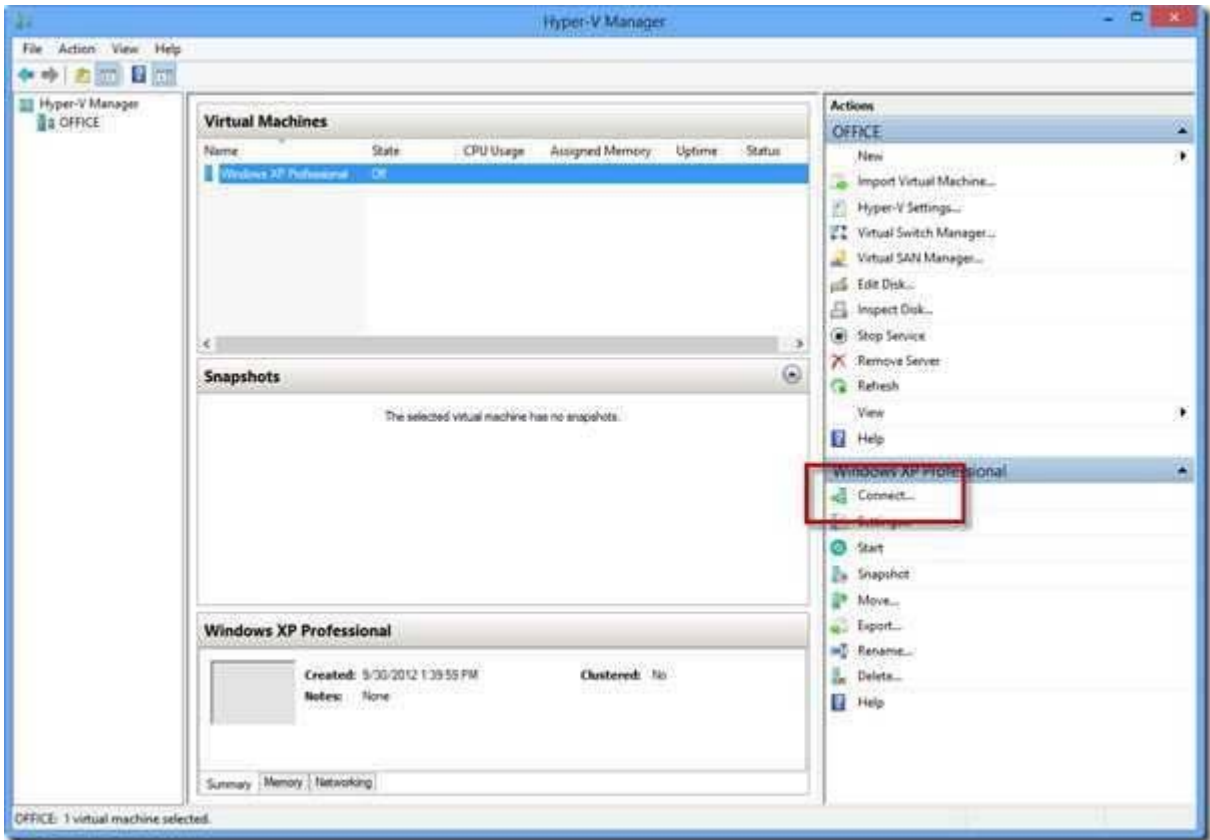
Windows 8 XP Mode – Virtual Machine name

In the following screens, decide how much memory to assign, select which virtual switch you want to connect to, configure the virtual hard disk, and point Hyper-V to installation media for Windows XP Professional. Click Finish on the last screen.



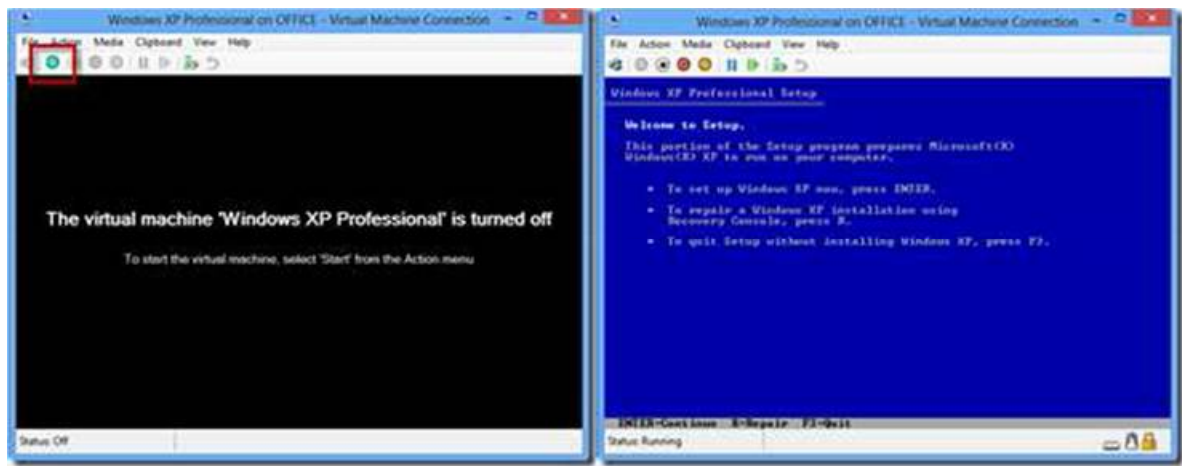
XP Mode on Windows 8 – Startup memory

Back in the Hyper-V Manager, highlight your new virtual machine and click the Connect button.



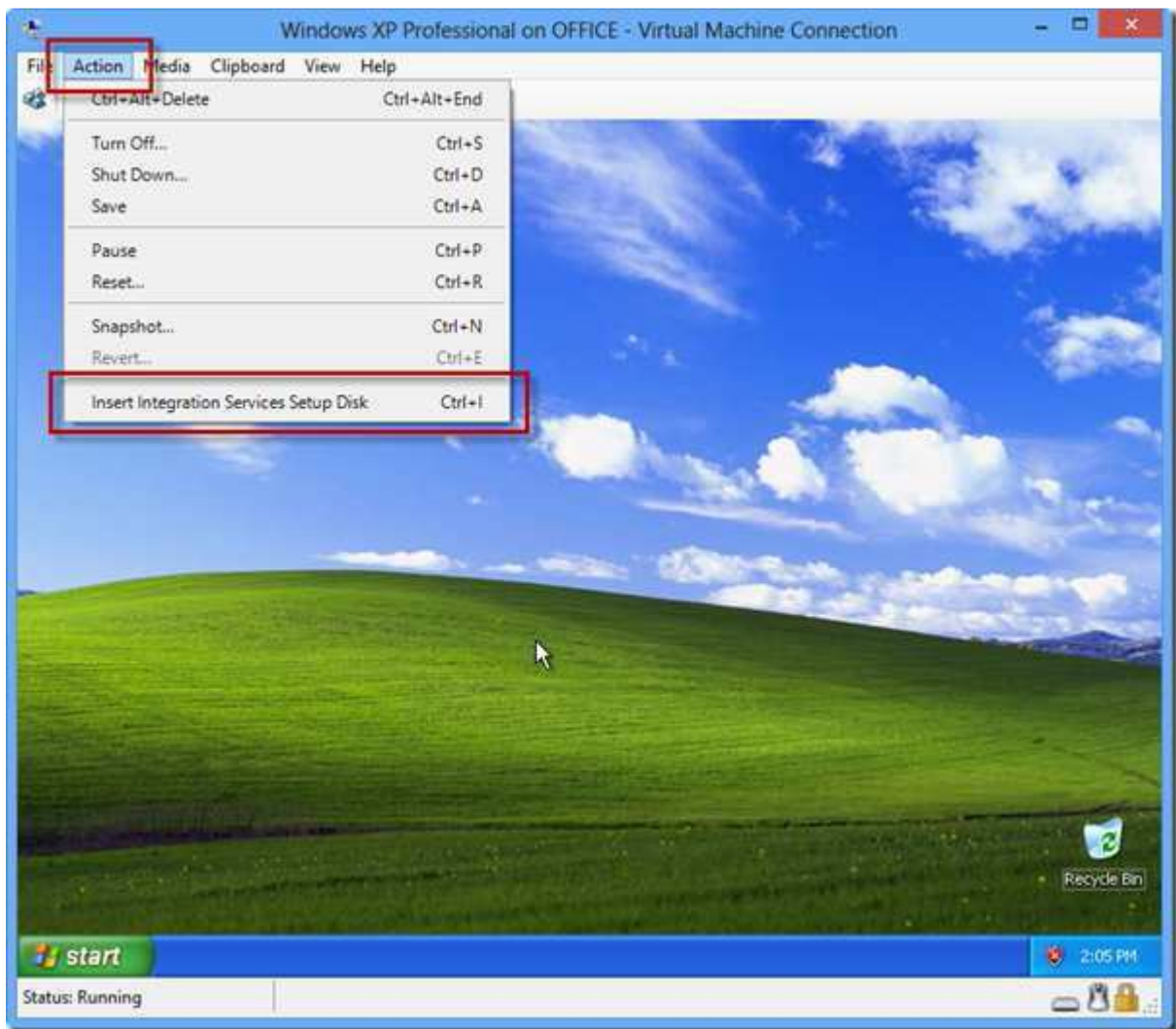
XP Mode on Windows 8 – Connect to Virtual Machine

When your VM opens, click the green Start button to turn on your new VM and install Windows XP.



Windows 8 XP Mode – Install Windows XP

Install Windows XP as you normally would. Once it is installed, the first thing you'll want to do is install the Integration Services. To do this, click Action > Insert Integration Services Setup Disk. In a typical install of Windows XP, autorun will run the installer automatically and prompt you to reboot.



Windows 8 XP Mode – Integration Services

In the second part of my “[Windows 8 XP Mode](#)” series I will show you how to set up the Windows XP virtual machine in Windows Client Hyper-V.

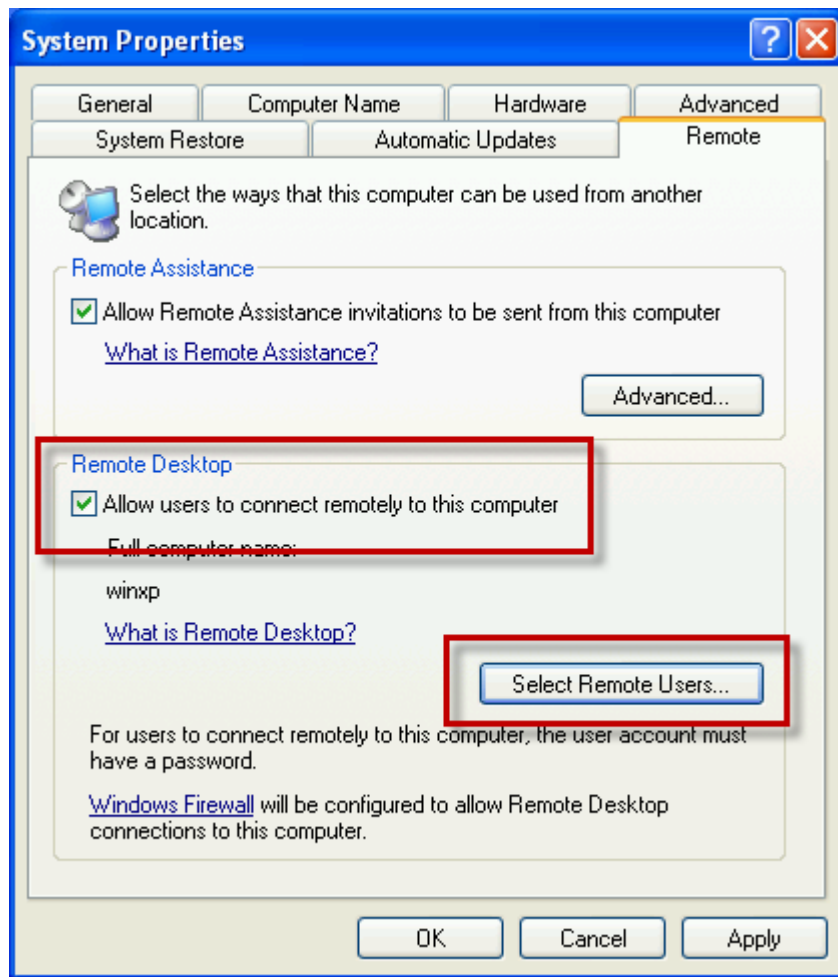


By [Kyle Beckman](#) | Wed, October 17, 2012 - 4 comments

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Now that you have a virtual machine running Windows XP Professional with the Hyper-V Integration Components, you’ll want to do all the things you normally would do to a computer: install all the latest Windows Updates, install antivirus, activate Windows (if necessary), and install your applications that you’ll want to run inside of Windows XP.

Once you’ve done that, you’ll need to enable Remote Desktop in Windows XP. To do that, go to the computer properties (Right-click on My Computer > Properties or the System applet in the Control Panel) and then go to the Remote tab. Check the ‘Allow users to connect remotely to this computer’ checkbox, click ‘Select Remote Users’ if you need to add user accounts, and then click OK.



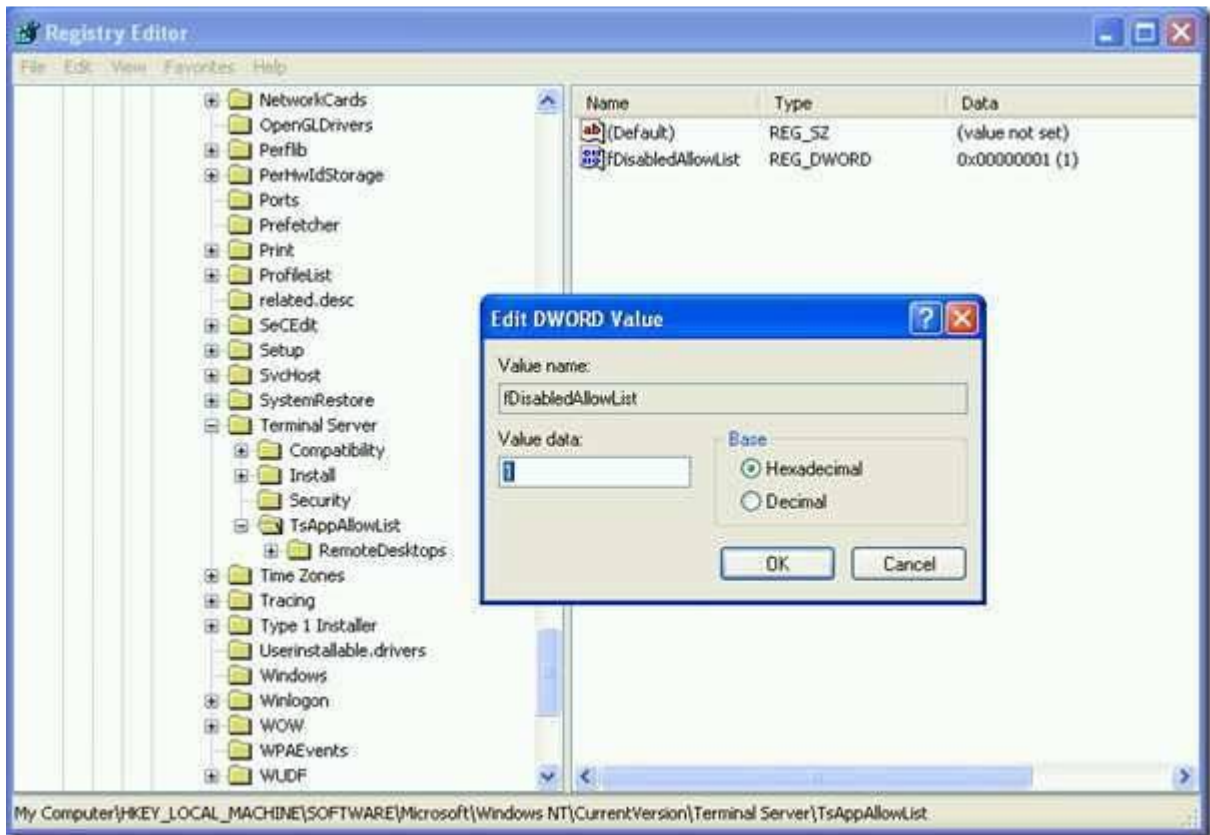
Windows 8 XP Mode – Allow user to connect remotely to this computer

Next, you'll need to install [Update 961742](#). This update will enable the RemoteApp functionality in Windows XP that is available on Windows Server as part of Remote Desktop Services (formerly Terminal Services). After installing the update, reboot your VM.



Windows 8 XP Mode – RemoteApp for Windows XP SP3

After rebooting, you'll need to tweak one setting in the Registry. Fire up the Registry Editor (regedit.exe) and go to HKLM\SOFTWARE\Microsoft\Windows NT\CurrentVersion\Terminal Server\TsAppAllowList. Change the DWORD value fDisabledAllowList to 1.



Windows 8 XP Mode - fDisabledAllowList

Next, open the Remote Desktop Connection client on your Windows 8 computer. In the Computer field, enter the network name of your VM. Connect to the VM to ensure that your Remote Desktop configuration is working. When you're done testing the Remote Desktop connection, make sure you log completely out of your XP session.

Now that your RDP connection to the VM is working, open Notepad and create a text file with the following:

```
full address:s:winxp
remoteapplicationmode:i:1
disableremoteappcapscheck:i:1
alternate shell:s:rdpinit.exe
prompt for credentials on client:i:1
remoteapplicationname:s:Internet Explorer 6
remoteapplicationprogram:s:C:\Program Files\Internet Explorer\iexplore.exe
remoteapplicationcmdline:s:about:blank
redirectclipboard:i:1
redirectposdevices:i:0
redirectprinters:i:1
redirectcomports:i:1
redirectsmartcards:i:1
devicestoredirect:s:*
drivestoredirect:s:*
redirectdrives:i:1
session bpp:i:32
span monitors:i:1
use multimon:i:1
allow font smoothing:i:1
```

You will probably want to customize the following settings in the file:

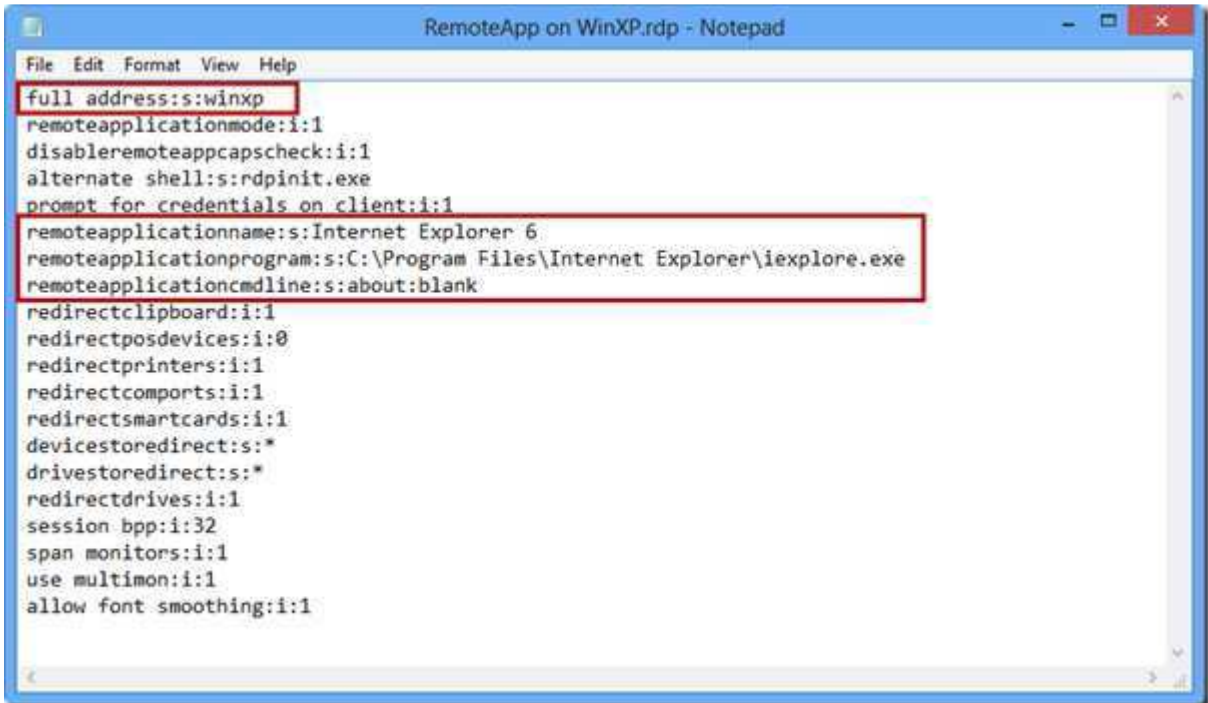
full address – The network name of your VM.

remoteapplicationname – The name of the application on the VM

remoteapplicationprogram – The path to the application on the VM

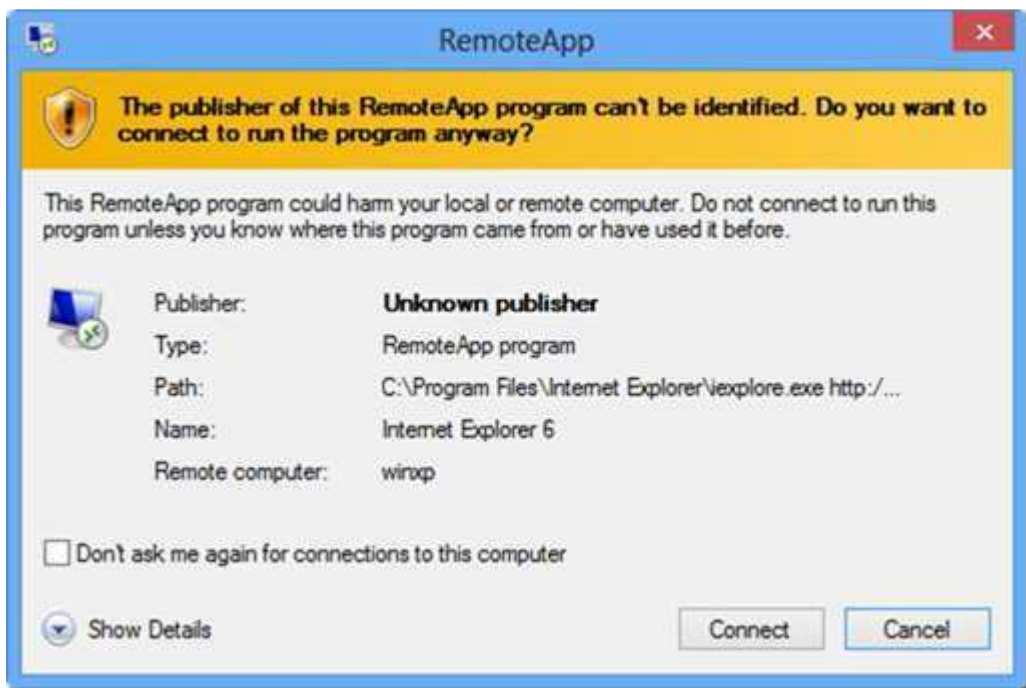
remoteapplicationcmdline – Command line options for the executable; this is optional

Save the file as a .rdp file. As you can see in my example, the name of my XP VM is winxp and I'm running Internet Explorer 6 and forcing the executable to open about:blank when it runs.



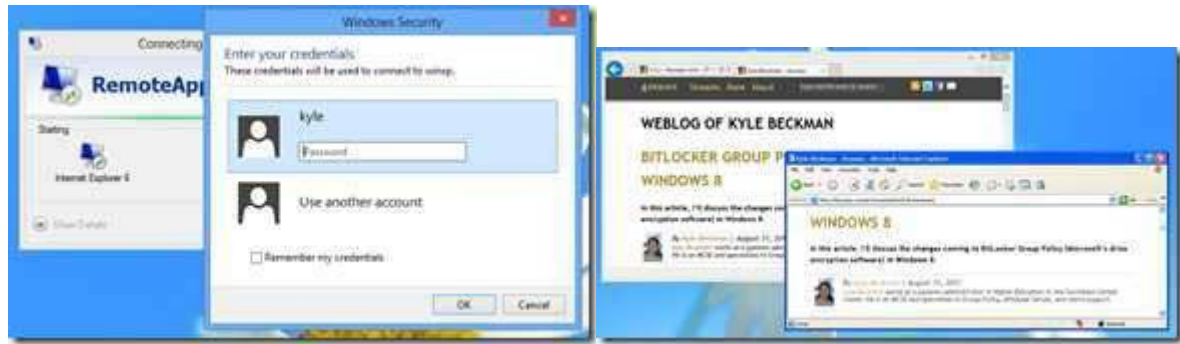
Windows 8 XP Mode – .rdp file

Because your .rdp file is not digitally signed, you may receive an unknown publisher warning. In the event you do, click the Connect button.



Windows 8 XP Mode – The publisher of this RemoteApp can't be identified

Next, you'll get the RemoteApp connection window. Enter your username and password and your application will run. In the screenshot, you can see IE10 and IE6 running side-by-side.



Windows 8 XP Mode – RemoteApp connection

In my next post I will discuss some [Windows 8 XP Mode gotchas](#).

Now that you can run [Windows XP-based applications seamlessly in Windows 8 from a VM running on Client Hyper-V with RemoteApp enabled](#), here are a few of the gotchas and things I've learned to improve the overall experience.

Accessing files

The applications you're accessing in the Windows XP VM won't have any awareness of your Windows 8 computer. Because of this, you may want to consider mapping a drive back to the host system so you can access files if necessary. As another option, you can use [Folder Redirection](#) to access your files on a central file server or back on the host system.

Applications

One of the things I really like about accessing RemoteApps in a Windows XP session is that you can run as many applications as the VM is capable of running; you aren't limited to running just a single application. You can create as many .rdp files for different applications as you need. If you need two instances of an application, it is as simple as running the .rdp file a second time.

Where do I put the .rdp files?

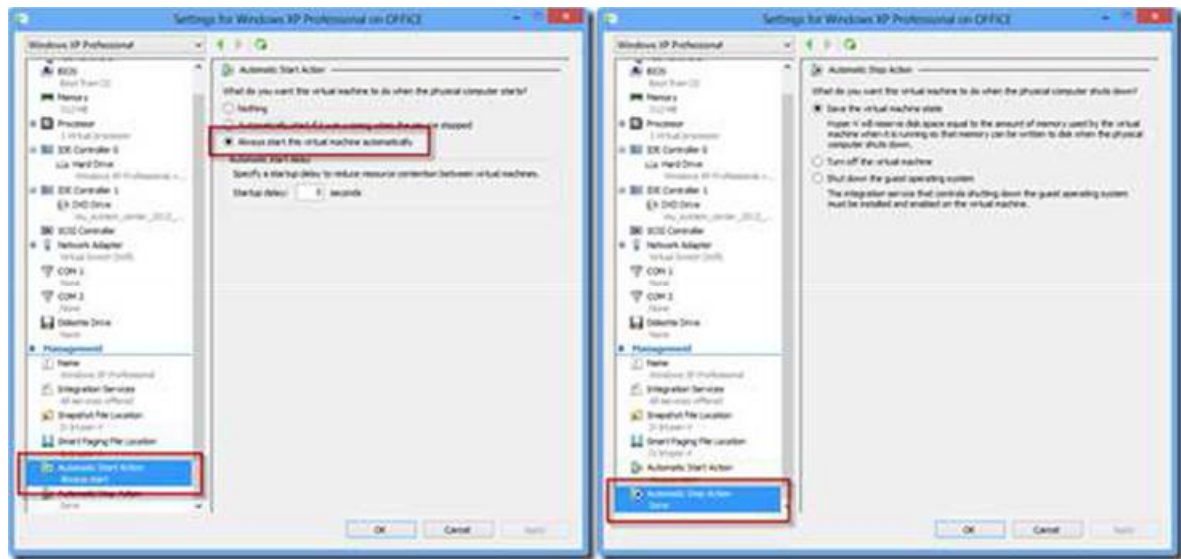
If the applications will be used by a single person, you could always put the .rdp files on the Desktop, but most users are going to expect them on the Start Screen. Your best bet is going to be to put them into a folder in Program Files and create shortcuts to them for the user's Start Menu so that the .rdp files can't be modified. The shortcuts can be put in C:\Users\username\AppData\Roaming\Microsoft\Windows\Start Menu\Programs for a single user or C:\ProgramData\Microsoft\Windows\Start Menu\Programs if more than one person on the system may access them.

Active Directory

If this VM will be on a corporate network, you definitely will want to add it to Active Directory. The added value here is that Group Policy should take over and handle things like mapping drives, Folder Redirection, etc. to make the experience seamless for the user. You'll also want to make sure that you're patching the Windows XP VM and applications just as you would any physical system.

VM startup/shutdown

Unlike XP Mode in Windows 7, starting and stopping the virtual machine is a little more difficult to deal with. With RemoteApp, the VM would start and stop as necessary. With Client Hyper-V on Windows 8, you'll either need to start/stop the VM manually or have it start and stop with the system automatically. Odds are, you're going to want to set the VM to start and stop automatically with Windows so that the end user doesn't have to deal with it. This can be configured in the Hyper-V Manager by going to the VM Settings. In Settings, go to Automatic Start Action and set it to "Always" start this virtual machine automatically. In Automatic Stop Action, you'll most likely want to set it to either "Save the virtual machine state" or "Shut down the guest operating system".



Windows 8 XP Mode – VM startup/shutdown

Session timeouts

Another setting you'll want to consider is the time limit for disconnected sessions. If you run gpedit.msc in your Windows XP VM, this setting can be found in:

Computer Configuration > Administrative Templates > Windows Components > Terminal Services > Sessions > Set time limit for disconnected sessions

In the event you're setting this in Group Policy and using a newer GPMC, the setting can be found in:

Computer Configuration > Administrative Templates > Windows Components > Remote Desktop Services > Remote Desktop Session Host > Session Time Limits > Set time limit for disconnect sessions