Contents

1 Introduction

Hello and welcome to Windows. This document describes the process of configuring windows machines to run on Proxmox. If you would like to add something, please contribute in the github.

2 Getting the correct ISOs to Proxmox

The goal is to get both the Windows Server and the VirtIO driver iso files onto proxmox.

You should can either download the files to your computer and then to proxmox, or you can have proxmox download them from "download from url."

In either case, the Windows Server 2019 iso is here and the VirtIO iso is here.

The VirtIO is necessary because proxmox says so (update with better reasoning). Proxmox Wiki: Windows VirtIO Drivers

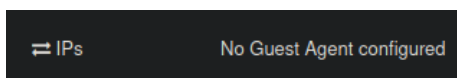VirtIO also enables the QEMU Guest Agent, which allows for many convenient things in proxmox.

Figure 1: The IP Address is not displayed if there is no guest agent

3 Getting the VM from the ISO

The goal is to take your .iso file and turn it into a VM. If it is helpful, here is some guy doing it with no words: video
If you don't want to watch that, click "create VM" and select the iso file you uploaded. The important settings to change are:

Category	Setting to Change
OS Type	Microsoft Windows, Version: 10/2016/2019
System	SCSI Controller: VirtIO SCSI Single
System	QEMU Agent checked
Disks	Bus/Device: SCSI

After creating this VM, click it and go to the "Hardware" menu in Proxmox. Click "add CD/DVD" and click the virtIO.iso file you uploaded. This will enable the QEMU Agent.

4 Installing / Logging Into the VM

Note: You can not use many of proxmox's features (i.e. shut it down without going through the console) without the guest agent installed. Just to save you from mashing the "shutdown" button and wondering why it doesn't work.
How to get into the VM:

1. Power on the VM

2. Log onto the VM via the Proxmox console

How to install Windows on the VM:

1. Select "next"

2. Select "2019 Standard Evaluation (Desktop Experience)"

3. Select "Advanced Installation"

4. Add the VirtIO driver you installed previously

Now you wait for it to install. Don't worry, you'll get used to waiting for windows!

5 Basic Configurations to Prepare for a Template

The goal is to never do that time consuming process again. We would like to create a template so we can clone it. Before you make a template you can add useful things like RDP, Firefox, setting DNS, etc. The world is your oyster.

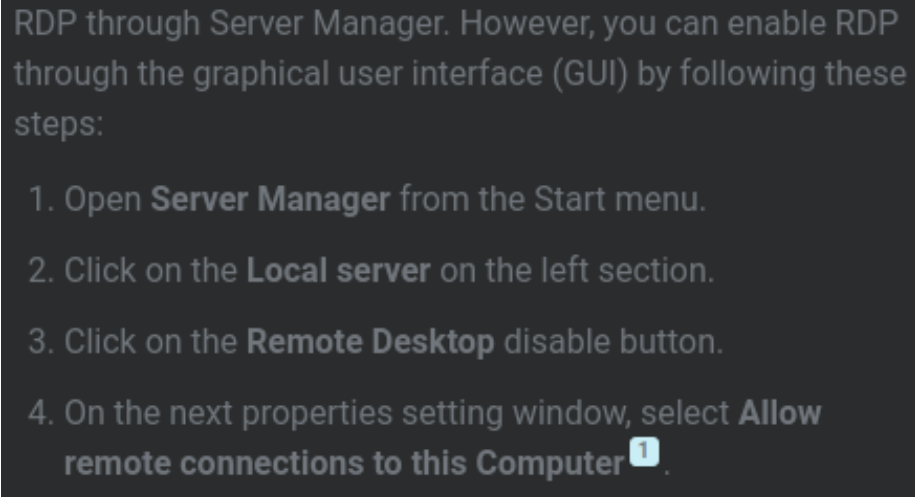## 5.1 Enabling RDP

Bing can handle this one.

RDP through Server Manager. However, you can enable RDP through the graphical user interface (GUI) by following these steps:

1. Open **Server Manager** from the Start menu.

2. Click on the **Local server** on the left section.

3. Click on the **Remote Desktop** disable button.

4. On the next properties setting window, select **Allow remote connections to this Computer**[1].

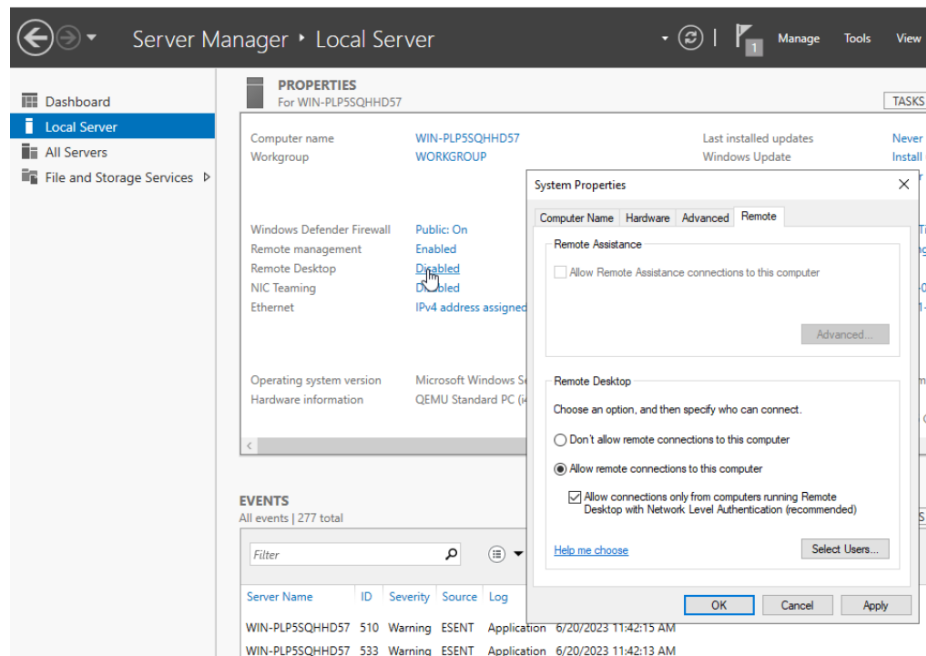Figure 2: Bing explaining how to enable RDP

Figure 3: Enabling RDP

5.2 Installing Firefox

By default, Internet Explorer is the only browser installed on the computer. What a terrible browser! You can avoid ever opening IE by installing Firefox from powershell.

```
Invoke - WebRequest  - Uri
" https :// download . mozilla . org /
? product = firefox - msi - latest - ssl
& os = win64 & lang = en - US "
- OutFile  " $HOME \ Desktop \ firefox . msi "
```

This command saves firefox.msi to your desktop. Remember that you can download stuff from powershell. (But pls no proprietary browsers ✐)

5.3 Setting up the QEMU Agent

There are two steps. First, run the QEMU Agent installer. Second, add the VirtIO driver in the Device Manager.

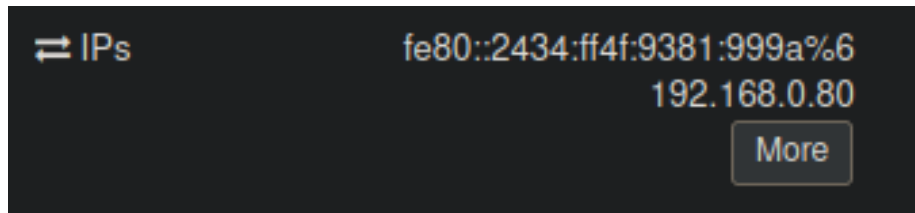Once you finish, the IP Address is visible from the "Summary" tab in proxmox. Very nice.

4

Figure 4: IP Address in Proxmox

5.3.1 Running the QEMU Agent Installer

"In the Windows VM, open the File Explorer and navigate to the VirtIO driver ISO. Open the "guest-agent" folder and double-click on the "qemu-ga-x86_64.msi" file to run the installer" -Bing
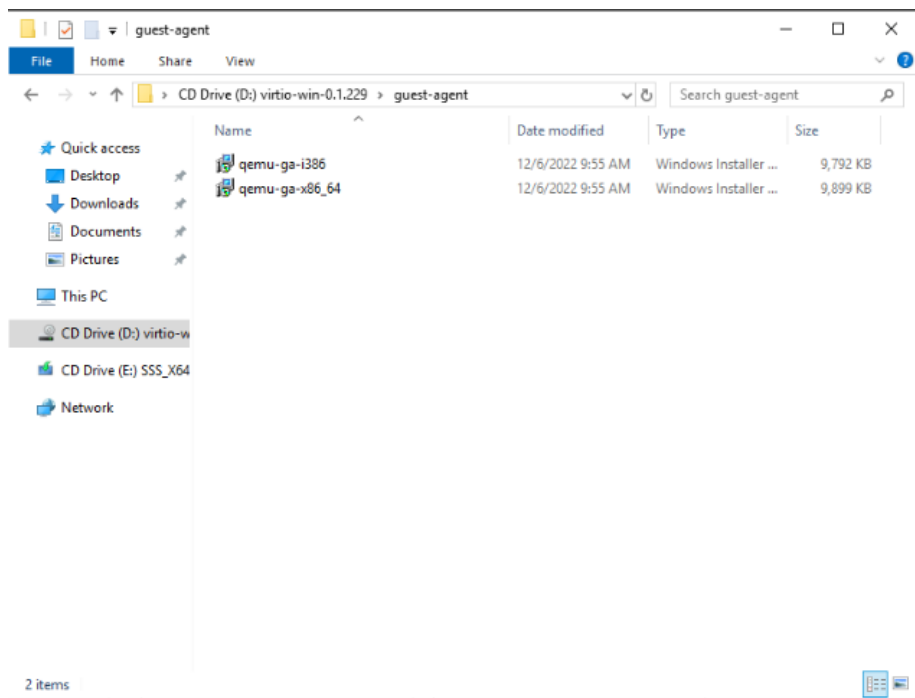

Figure 5: The MSI file to run
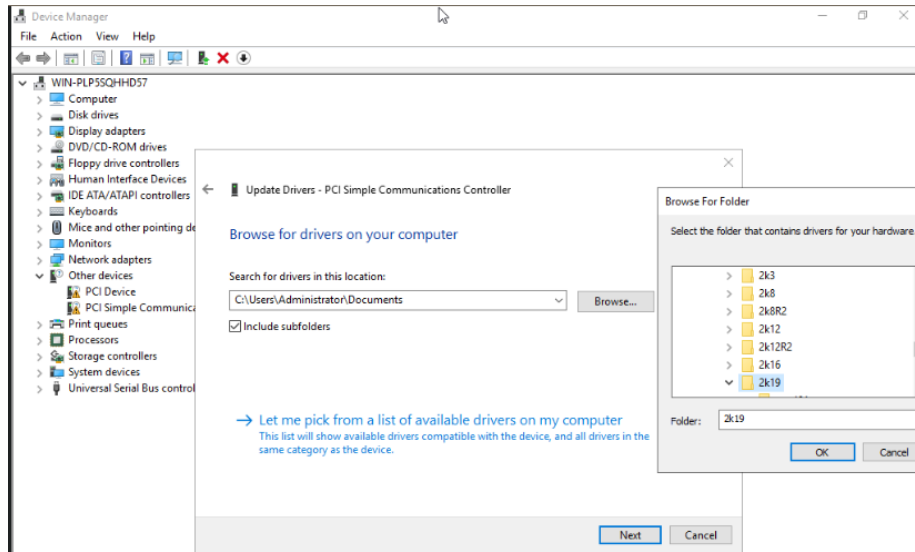
5.3.2   Adding VirtIO in Device Manager

Figure 6: Selecting the 2k19 driver in the vioserial folder in the virtio CD drive.