Avaya IP Office 9.1

Set Up Guide for
The IP Office Anywhere Demo Platform

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Table of Contents

1 Overview 1

2 Preparation 1

3 Hardware and Software Requirements 2

3.1 Hardware 2

3.2 **Software 2**

4 Getting Started in 4 Easy Steps 3

4.1 **Download the Latest Software 3**

4.1.1 VMware 3

4.1.2 IP Office Anywhere Platform 3

4.1.3 Avaya Communicator 3

4.1.4 one-X® Mobile Preferred 3

4.2 Hardware Set-up and Connect 4

4.2.1 Pre-configuration 4

4.3 Install and Start 5

4.3.1 VMware Player 5

4.3.2 Install IP Office Anywhere onto the Virtual Machine 9

4.3.3 IP Office Anywhere Ignition 12

4.3.4 Initial Configuration Utility 21

4.3.5 IP Office Video Softphone 22

4.3.6 Open IP Office 22

4.4 Basic Endpoint Configuration 23

4.4.1 Avaya Communicator 23

4.4.2 IP Office Video Softphone for Mac 23

4.4.3 IP Phones 23

5 Testing 24

5.1 Basics 24

5.2 Mobility 24

6 Passwords and System Access 26

6.1 System Manager: 26

7 Support 26

Appendix A – Alternative Installation using VirtualBox 27

1 Overview

IP Office Anywhere Demo is a software implementation of IP Office used for demonstrating IP Office; IP telephony, mobility and Unified Communications capabilities. It offers pre-configured licenses and users to facilitate using a laptop for delivering a demonstration to potential customers. The IP Office Anywhere Demo software runs on Windows using software that provides a virtual machine and can be co-resident with other independent applications.

This document provides instructions to perform the required one-time setup prior to using the IP Office Anywhere Demo software. Once installed utilize the administrative tools of IP Office to modify the demo configuration, preferred language, demo user names and extensions. The standard demo configuration using IP Office Anywhere Demo software requires little or no re- configuration. A working knowledge of IP Office configuration tools is encouraged prior to making modifications.

2 Preparation

Before starting:

- **Most Important** - Ensure you have met the minimum Hardware and Software requirement defined in Section 3 **AND** ensure the BIOS settings on your machine are enabled for virtualization.
- Review the IP Office Anywhere and Power Demo Resource Guide to ensure the order is complete
- (If a video enhancement kit was purchased) Review the Video Guide for clarity on the capabilities
- Review and outline the clients goals, system design and overall needs

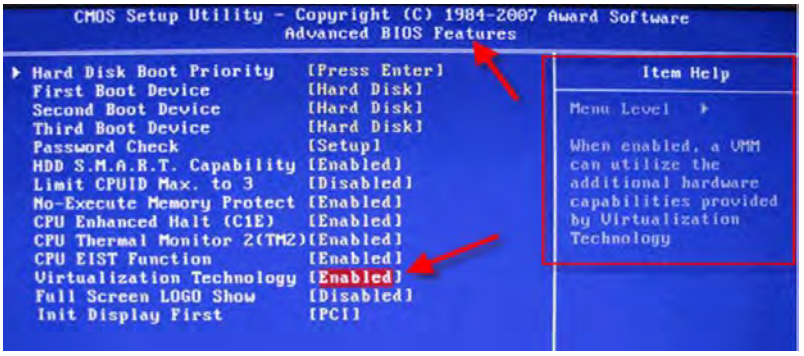
Personal note on the last bullet point above: To ensure successful, repeatable demonstration, an understanding of the business you are preparing to meet is vital. This very important so your demonstration can be tailored the expectations of the client. Businesses need solutions to overcome obstacles and make their employees more productive. In addition to demonstrating IP Office capabilities, be prepared to answer important questions for the client.

- How does the Avaya solution help my business?
- Why should I buy this and not a competitor's product?
- How does the Avaya solution expand to meet the needs in my company growth plan?

3 Hardware and Software Requirements

3.1 Hardware

- A Windows PC with minimum of:
  - 2GHz 64-bit dual core processor
  - 6 GB RAM (8 GB recommended)
  - 40 GB hard drive
  - Ethernet and WiFi connectivity
  - Virtualization enabled. Specific BIOS setting vary from machine to machine



***NOTE**: The Demo PC must be disconnected from any corporate network and a static IP address assigned.*

3.2 Software

- A web browser is required for downloading the software and for running the Web Control interface. The supported web browsers for Web Control are:
  - Microsoft Internet Explorer 8.0+ on Windows XP
  - Microsoft Internet Explorer 9.0+ on Window
  - FireFox 3.6+
- VMware Player 4.0.0 or higher.

***NOTE:** Since the software is delivered as an .iso theoretically the IP Office Anywhere platform can be installed on any virtual platform. This guide provides instruction for VMware.*

- IP Office Anywhere - Demo Platform
- Avaya one-X® Mobile Preferred Software - for Android or iPhone.
- Avaya Communicator software. Both Windows and iPad versions are supported

4 Getting Started in 4 Easy Steps

1. Download
2. Set-up & Connect
3. Install & Start
4. Configure

4.1 Download the Latest Software

4.1.1 VMware

- Navigate to the download page for VMware Player
- Download the software to the PC.

NOTE: *Registration with VMware is required before the file can be downloaded.*

4.1.2 IP Office Anywhere Platform

With 9.1 the IP Office Anywhere limited license demonstration platform is part of Server Edition. It uses the exact same .iso image and installs as a service at the end of the ignitions process.

- On the Laptop or PC where the software will be installed, create a destination folder for the installation file.
- Navigate to the Demo space on the Avaya Sales Portal - HERE
- Under Related Links, click 'Download the NEW IP Office Anywhere Demo…'

The Downloads & Documents section of the Support Site will open in a new window –

- Login and Download the IP Office Server Edition and Application Server .iso (not the Source Code image or Virtual .ova image)
- Save the installation .iso file to the destination folder

4.1.3 Avaya Communicator

- Download the Avaya Communicator for Windows - HERE
- For iPad, download the Avaya Communicator software from the iTunes store.

4.1.4 one-X® Mobile Preferred

To configure mobility on IP Office Anywhere, a smartphone and its application "Avaya one-X Mobile Preferred for IP Office" is required.

The Avaya one-X Mobile Preferred for IP Office is available for most Apple and Android mobile devices on the app store. The table below identifies the devices and telephone operating systems supported by each client. The tables also list the client download locations for each of the supported devices.

Table 1: one-X Mobile Preferred for IP Office

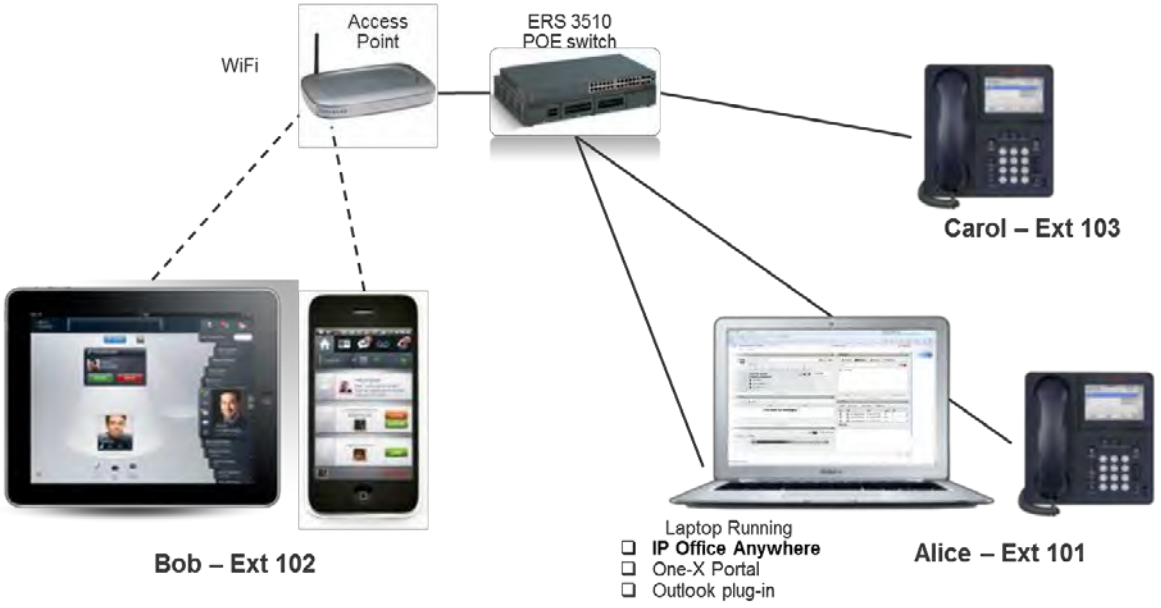
Platform	OS Version Support
iOS	5.0+
Android	4+

NOTE: *that the VoIP mode has been tested and certified to work with acceptable acoustic performance for the Samsung Galaxy S3/S4, HTC One-S and LG Optimus*

4.2 Hardware Set-up and Connect

The hardware modules need to be installed identically to the diagram below, failure to do so will mean the predefined configuration files downloaded will not match. This assumes you have an ERS 3510GT switch and that the 'run ipoffice' script has been executed from the switch cli interface or web manager. Please contact your SE or the ERS product guide for more information.

Connect IP Office Anywhere Laptop into Port 1 of the ERS 3510
Do not connect anything into port 2.



4.2.1 Pre-configuration

Extensions

Extension	Name	Group
x101	Alice	Main, Sales
x102	Bob	Main, Sales, Support
x103	Carol	Main, Support

Extension	Name	Group
TBD	TBD	Mobility User

Hunt Groups

Extension	Group	Members
x200	Main	Alice, Bob, Carol
x201	Sales	Alice, Bob
x202	Support	Bob, Carol

Demonstration Software License Changes	IP Office R9.1 Converged IPOA	Comment
VM Ports	2	Allow demonstration of resiliency when Primary is down.
IP endpoint licenses	5 -Avaya 2 -3rd Party	Focus on Avaya endpoints
Concurrent IP User registrations	7	Flexibility to show more Avaya endpoints
Power User Licenses	7	Consistent with concurrent IP endpoints
Server Edition Licenses	5	Expanded to align with offers
SIP trunk channels	5	No change
Receptionist	1	No change
CTI-Pro	1	3rd Party DevConnect

NOTE: *Server Edition Evaluation mode is restricted to 2 ports of VM Pro despite what's reported in Manager/SSA.*

4.3 Install and Start

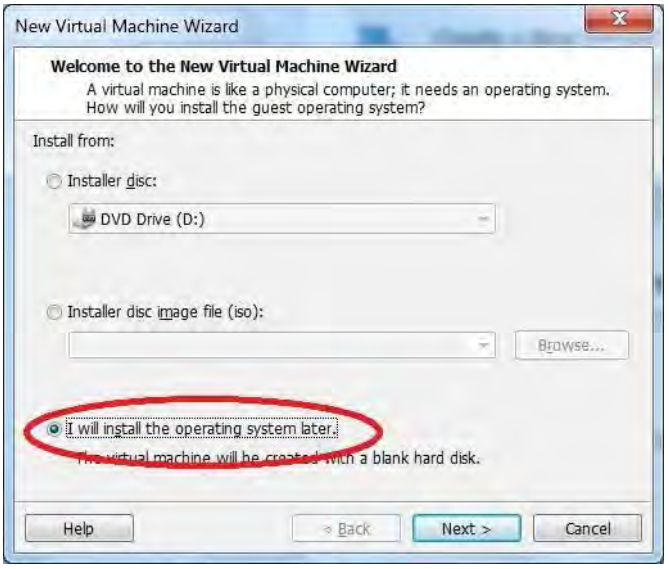
NOTE: *IP Office Anywhere for 9.1 can either be installed directly onto a server or, for ultimate portability, installed on a laptop as with 8.1. Installers choosing the server method can skip to section 4.3.2 if VMware Player is already running.*

FOR INSTALLATION ON VirtualBox, Please see Appendix A for VirtualBox configuration Details.

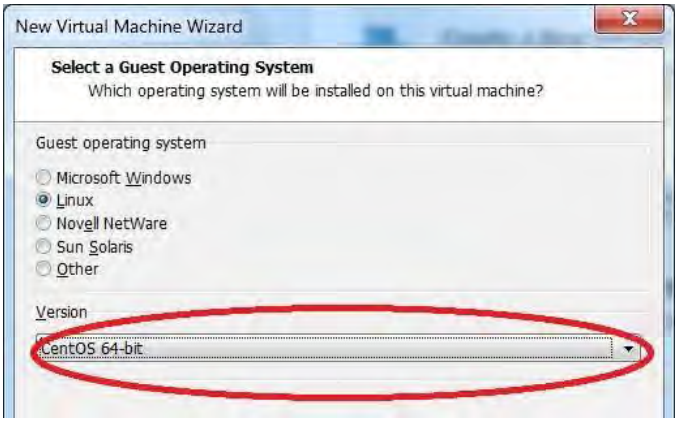
4.3.1 VMware Player

Start VMware player from the start menu and create a new virtual machine

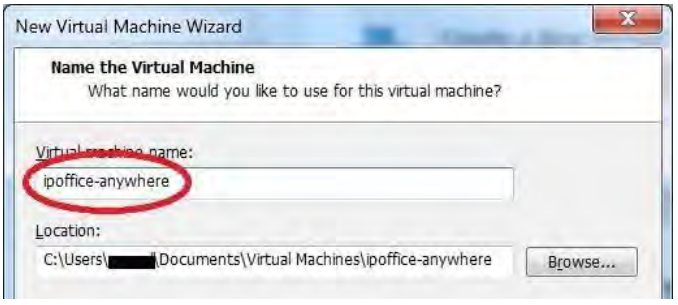
From the wizard choose to install OS later.



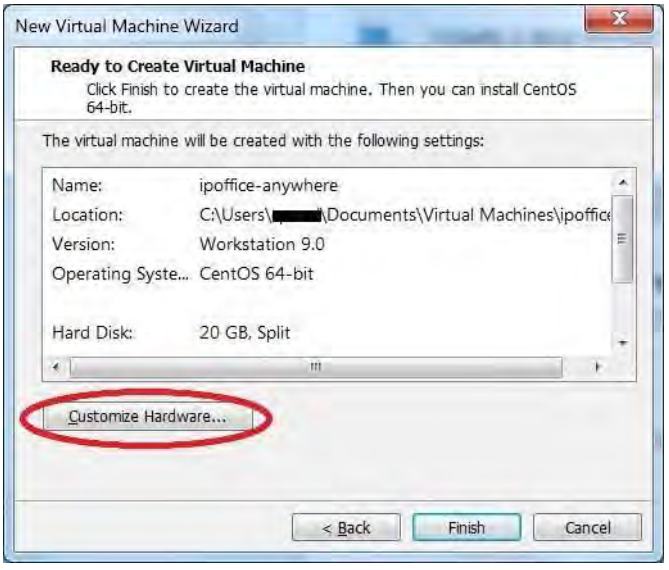
Select 'CentOS' as the Guest Operation System



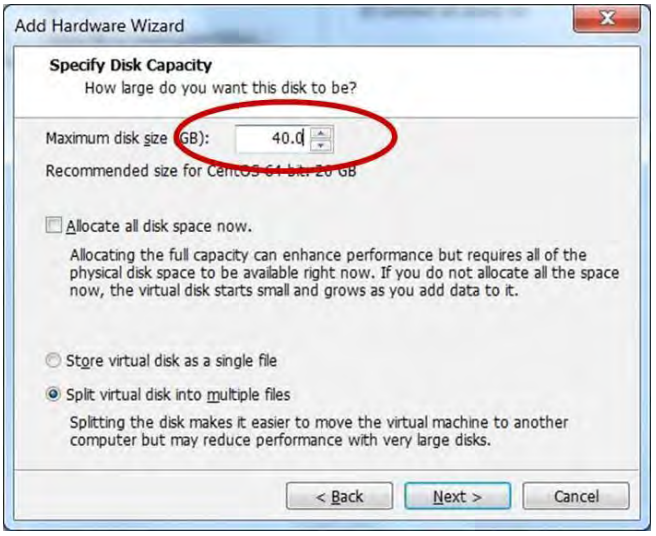
Name the new Virtual Machine 'IP Office Anywhere' and set the Browse location to the folder containing the .iso



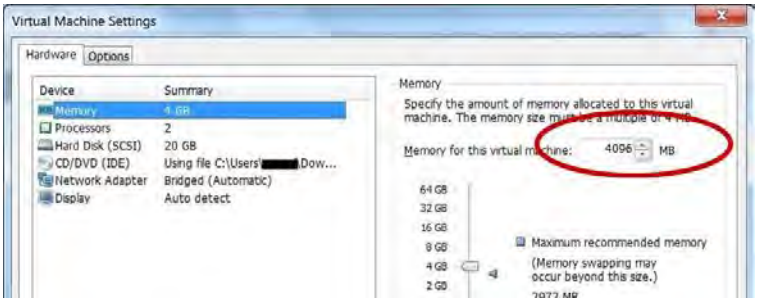
Choose to Customize the Virtual Hardware



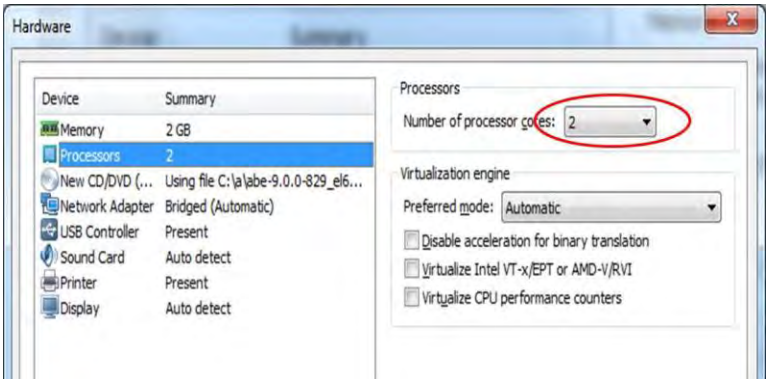
Increase the Virtual Hard Disk space to 40GB and choose to 'Split the disk into multiple files'.



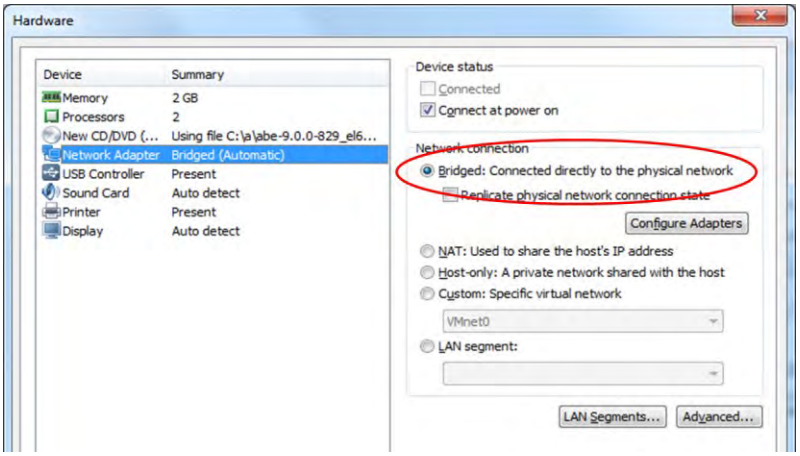
Increase the Virtual RAM to 4GB



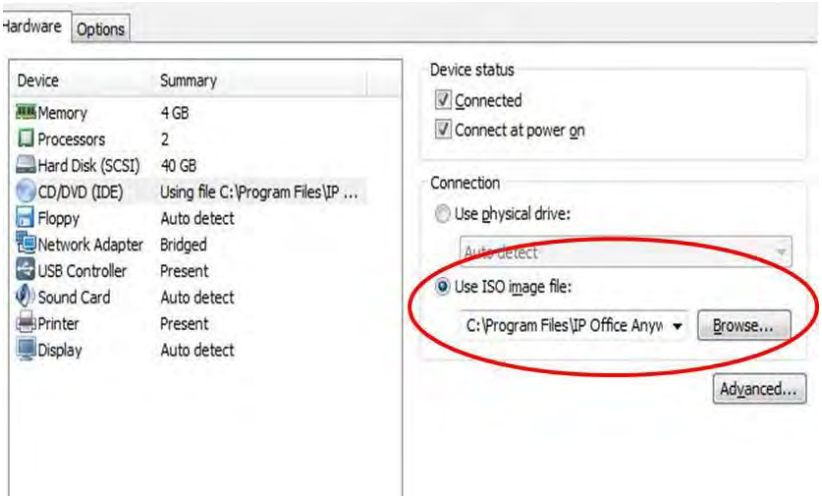
Allocate at least 2 Processors



Configure Bridged Networking to the network adaptor being used for the demonstration network.



Check ‘Use ISO Image File’ and browse to the .iso image location.



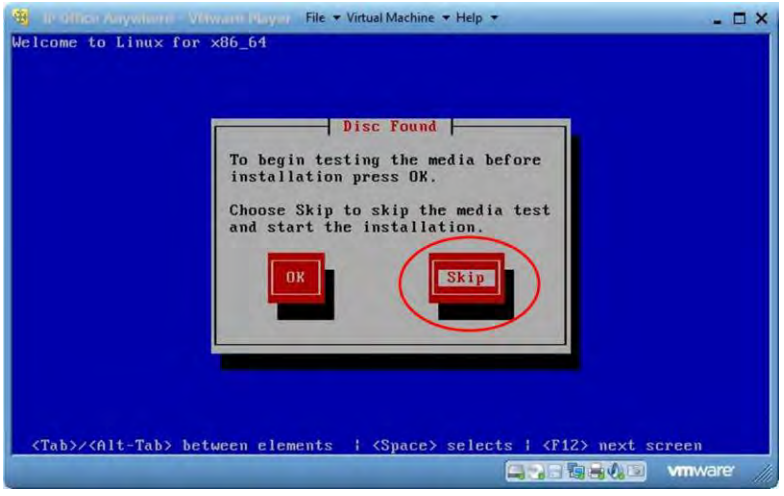
Click ‘OK’ then ‘Finish’

4.3.2 Install IP Office Anywhere onto the Virtual Machine

Select the IPOA virtual machine and click on “Play virtual machine”. If asked to download the VMware tools for Linux, select “Remind Me Later”.

A series of installation screens will appear and the detailed operation of these is covered in the Server Edition deployment guide. Any screens where IPOA/SEES specific options are needed are detailed below.

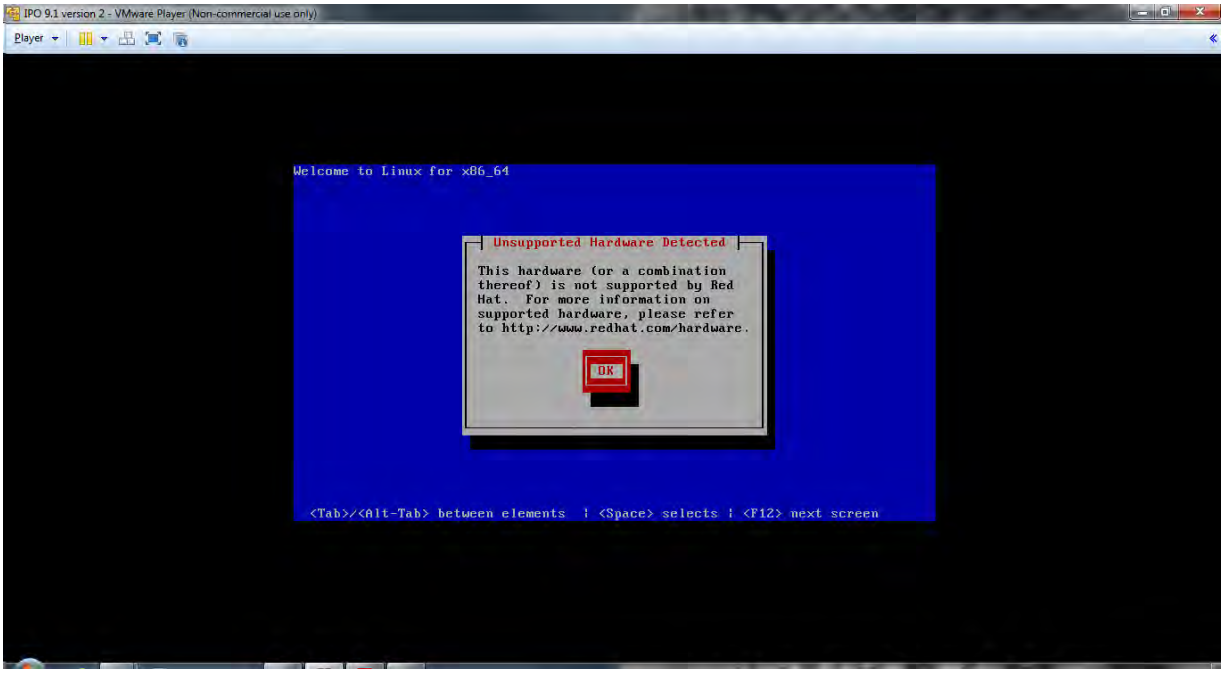
If asked to perform a Media Test, skip it



NOTE: *Installation on a virtual machine hosted on a low specification laptop can take a significant amount of time (> 1 hour). Please ensure to allow enough time to complete the process.*

The installation may appear to "hang up" when installing the Voicemail module. The VM module takes a significant amount of time to install.

A Warning may appear stating your hardware is incompatible on modern/new laptops. Select Acknowledge and continue.



If you get this warning then select "Yes, discard any data"

After the "Yes, discard any data" option is chosen the IP Office image installation screens appear in this order:

1. Language choice

2. Keyboard system
3. Accept EULA
4. Confirm install
5. Configure Network >>>

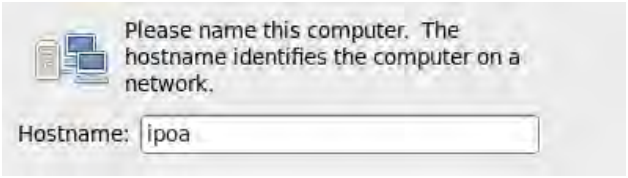
For standard installation IP Office Anywhere it is essential that the default networking IP Address 192.168.42.1 is changed to **192.168.42.230.**

For advanced SEES operation the IP Address should be configured to match the network deployment.

NOTE: *The remainder of this guide refers to the IP Office server IP address as 192.168.42.230.*

Once the IP Office Demo config is installed and complete this addressing scheme can be modified for any network.

From the "Name This Computer' screen select "Configure Network". This sets the address of the Virtual Host that will have IP Office running on it.

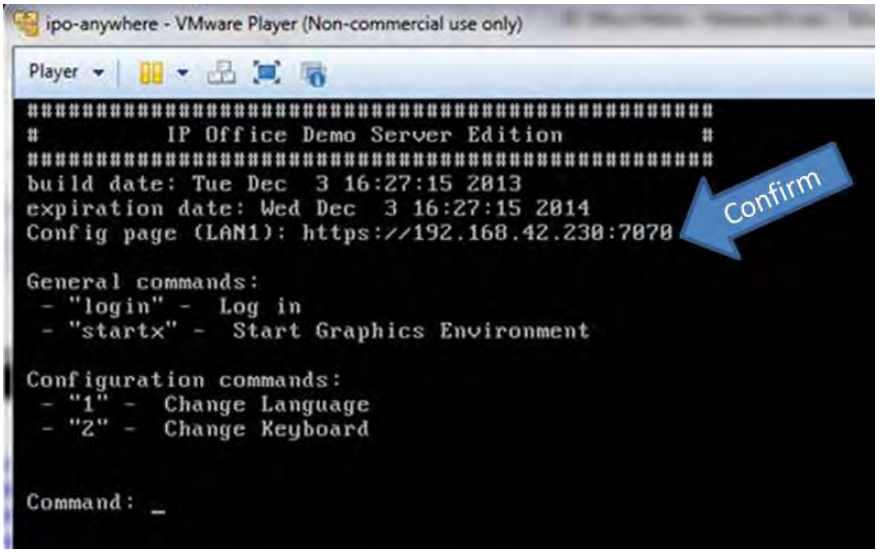


1. Set root password for Linux CLI
2. Clicking "Next" starts the Linux installation – This process takes about 15 minutes.
3. Decline Language Pack and it's done. Congratulations!
4. Click Reboot

You may again see an "unsupported hardware" warning upon reboot, ignore and allow the system to continue booting as normal.

After rebooting you can confirm the 192.168.42.230 IP Address setting, move to windows and assign a

static IP to your system. 192.168.42.10 will work fine. And then proceed to the IP Office Ignition process outlined in section 4.3.3.



4.3.3 IP Office Anywhere Ignition

Once the IP address of the host is set and before the installation can be converted to an IP Office Anywhere Demonstration system, the standard Server Edition Ignition process must be completed.

This is covered in detail in the Server Edition Deployment Guide but the following screenshots will help you get started

NOTE: *For SEES deployments this IP Address will match the one that was used in section 4.3.2*

For standard IP Office Anywhere systems, the Primary Server type must be selected. SEES deployments support Primary, Secondary and Expansion Server types.

Launch a browser and point to https://192.168.42.230:7071

NOTE: you MUST use HTTPS as the server only accepts a secure connection

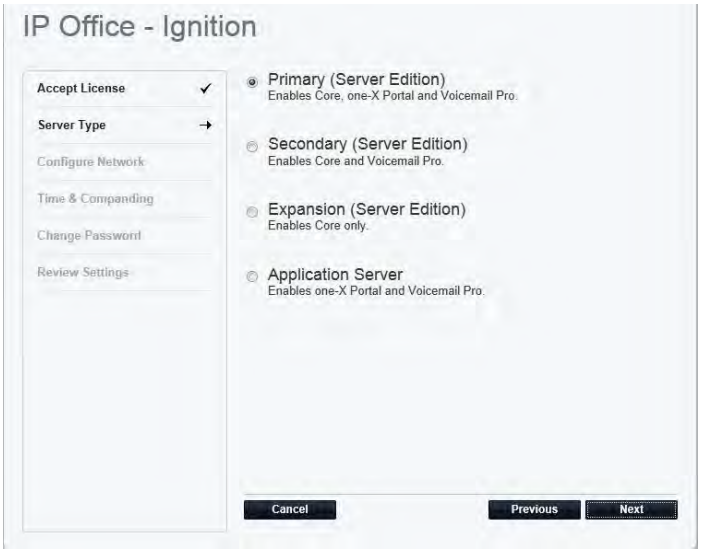
Also confirm the network on the host

1. Virtual Ethernet adaptors are enabled
2. Local Area Connection is enabled and physically plugged into the PoE switch that comes with kit
3. Wireless is disabled (Do this to minimize issues during install. WiFi can be re- enable if necessary post-config)

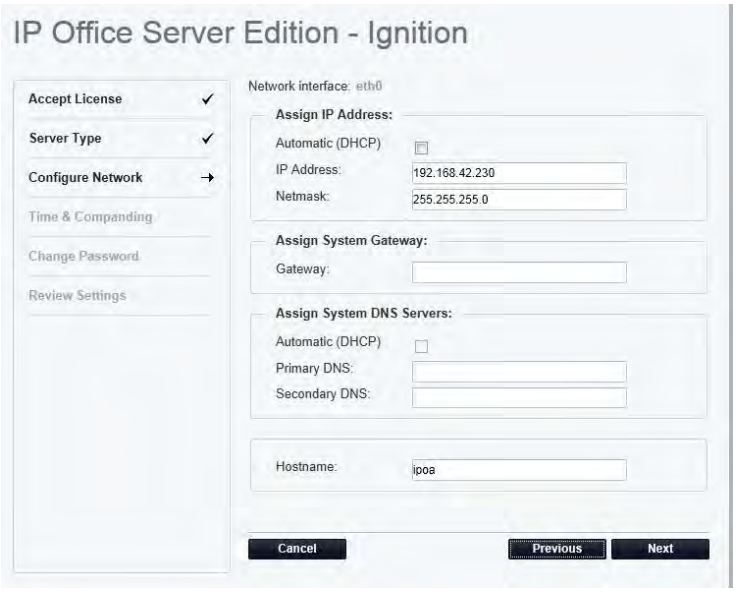
Login with root/(Password set during Linux install)

Accept the End User License Agreement

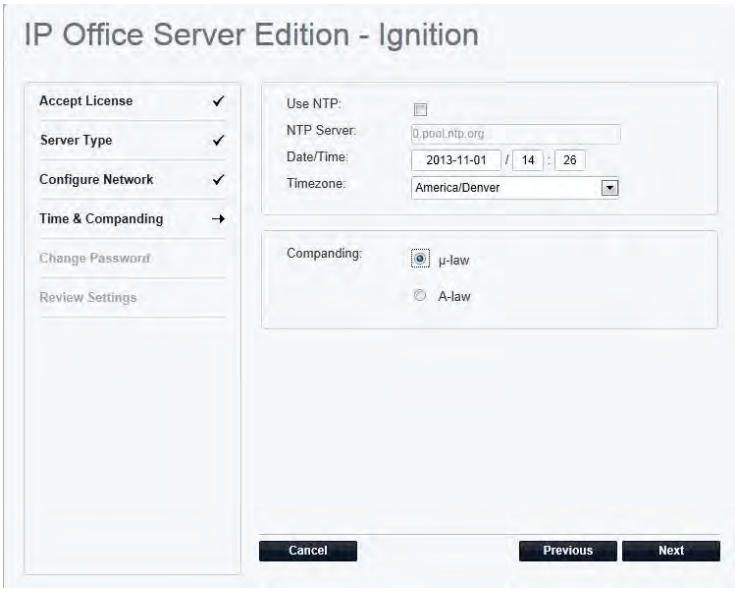
Make the 'Server Type' Primary



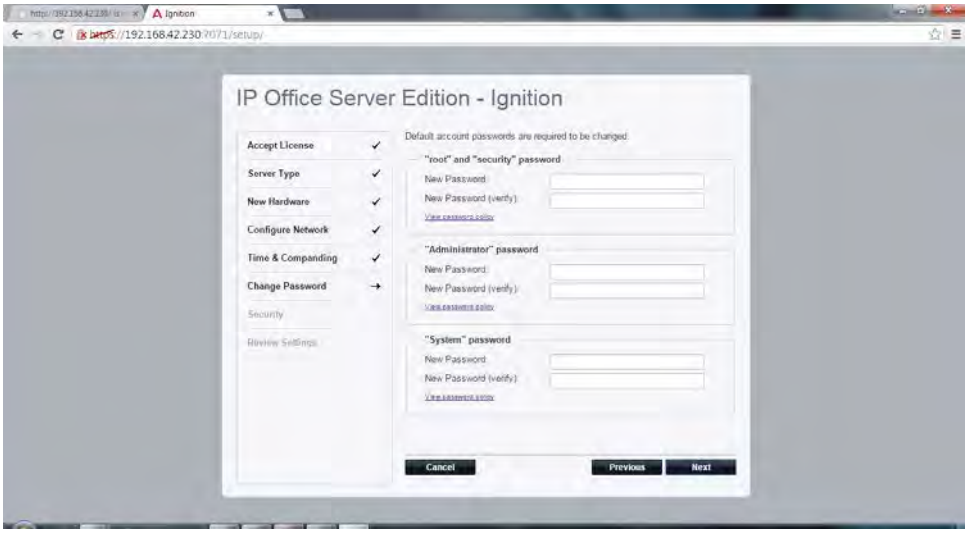
The IP Address should already be 192.168.42.230 with a 255.255.255.0 subnet mask, if it is not, change it now. This connects the IP Office application to the virtual host. Leave gateway and DNS blank and ensure that the hostname is “ipoa”. Click Next.



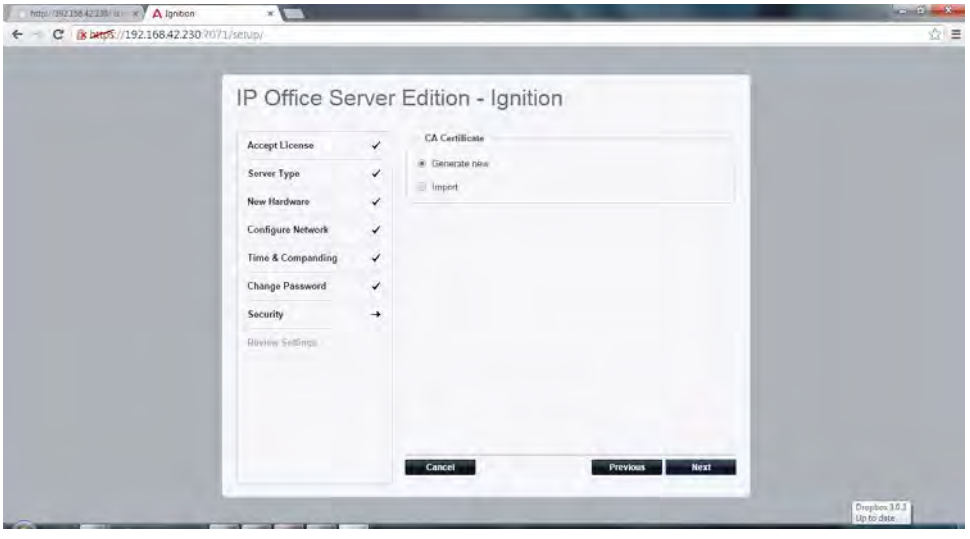
Uncheck NTP as It’s not required for the Kit. Set time and zone and choose µ-Law in the Companding box. Click Next.

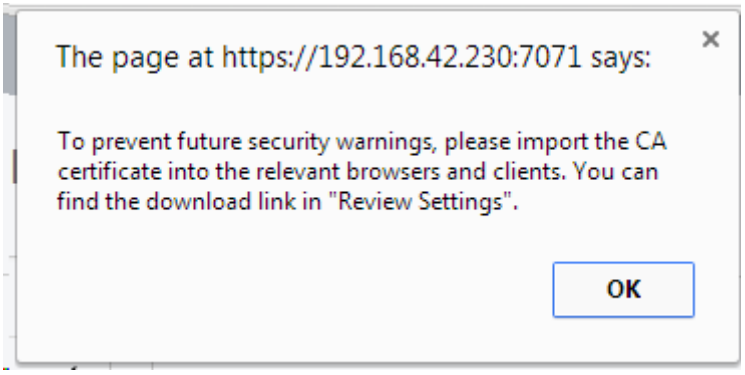


You MUST enter a new root, Administrator and System password. Each password must be different.
New passwords must follow the following policy –
Minimum length of 8 characters
Max length of 31
Two of the following special characters: lower, uppercase, numeric or special
3 or more consecutive identical characters are not allowed
Well-known default system passwords cannot be used (i.e. Password, administrator, etc.)
Click Next once changed.

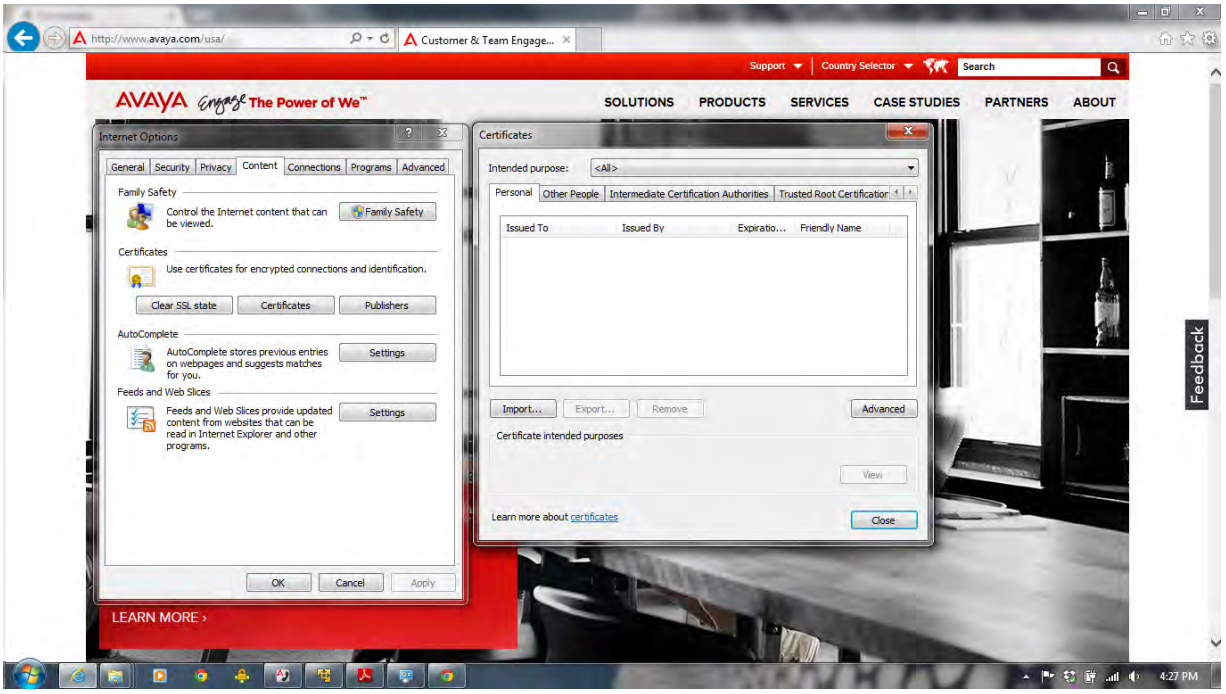


Under CA Certificate, select “Generate New” and click next. Then, import the certificate into the web browser to prevent Security Certificate warnings in the future. Certificate link is in the “review settings tab” Click next once certificate has been generated and saved.

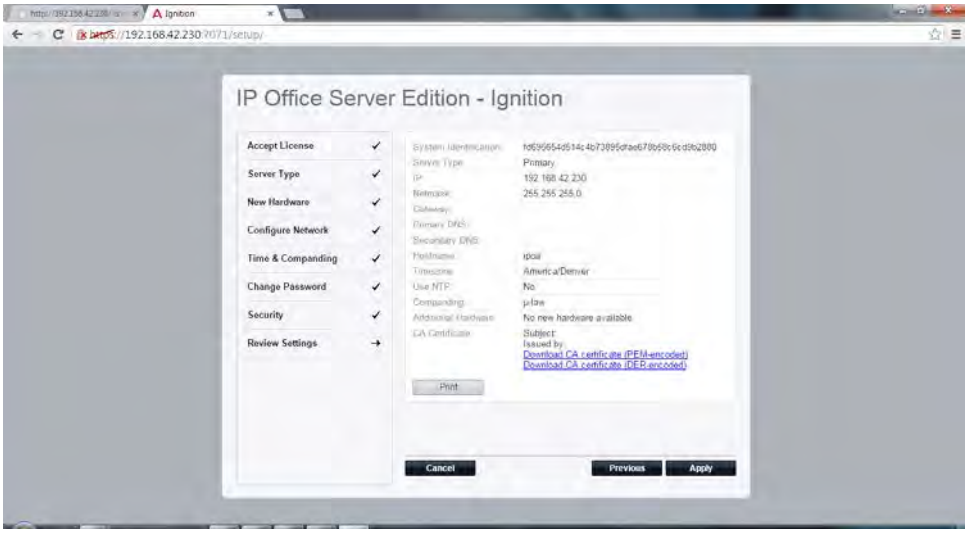




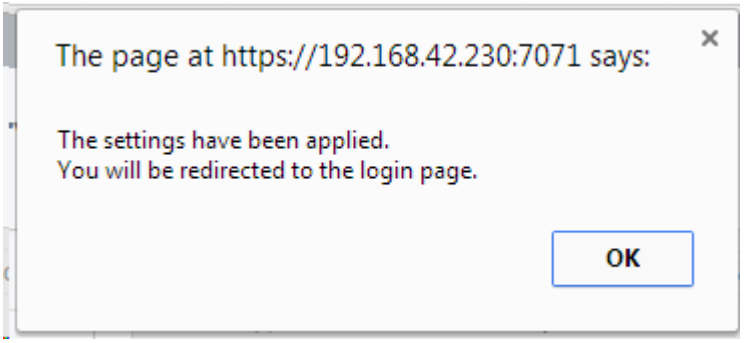
To install a security certificate, in Internet Explorer, go to “Internet Options”, “content” then click on the “Certificates” button. Select Import and then browse to the folder that you downloaded the certificate file from.



After Reviewing Setting Click Apply to complete the Ignition Process

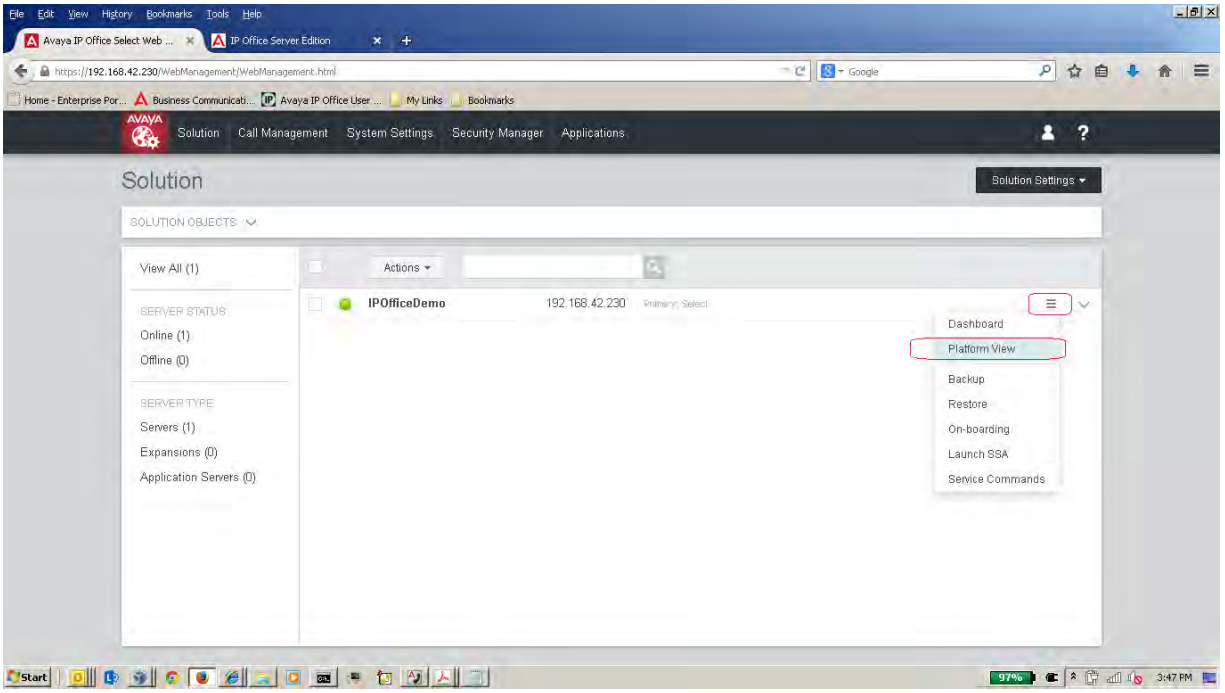


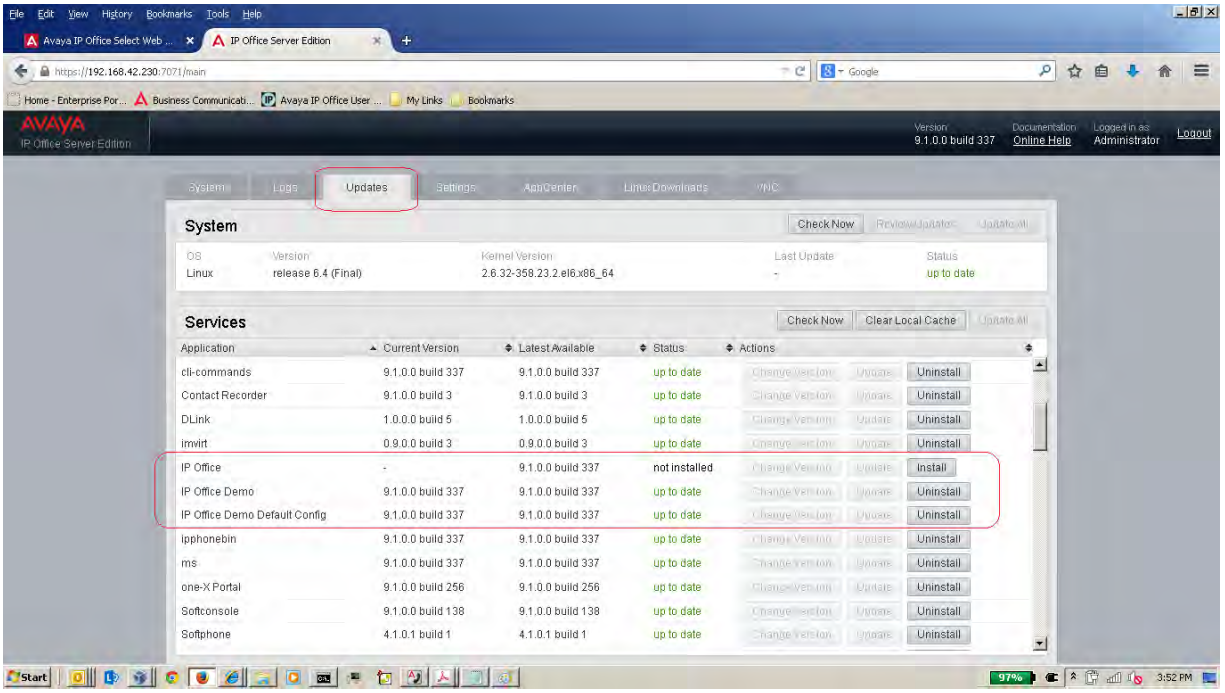
You will see the following confirmation screen:



Log back in to https://192.168.42.230:7070 to install the licensed IP Demo software and default Demo configuration.

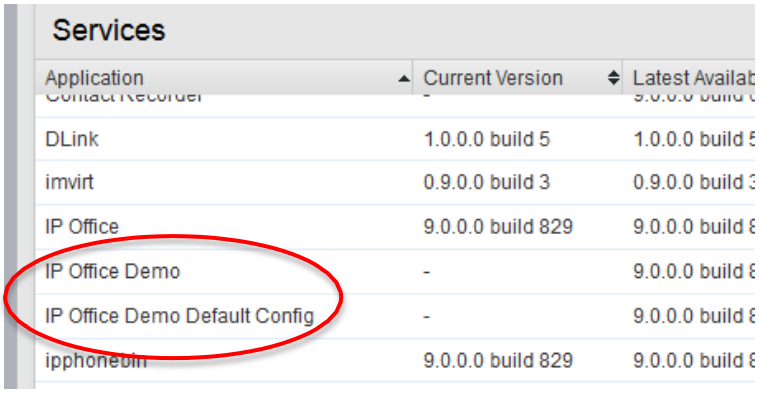
Click the 'Platform' link in the main window drop down in Web Manager to view the installed platform. Everything should be green.


Solution
Call Management
System Settings
Security Manager
Applications
Solution Settings
SOLUTION OBJECTS
View All (1)
SERVER STATUS
Online (1)
Offline (0)
SERVER TYPE
Servers (1)
Expansions (0)
Application Servers (0)
Actions
IPOfficeDemo
192.168.42.230
Dashboard
Platform View
Backup
Restore
On-boarding
Launch SSA
Service Commands

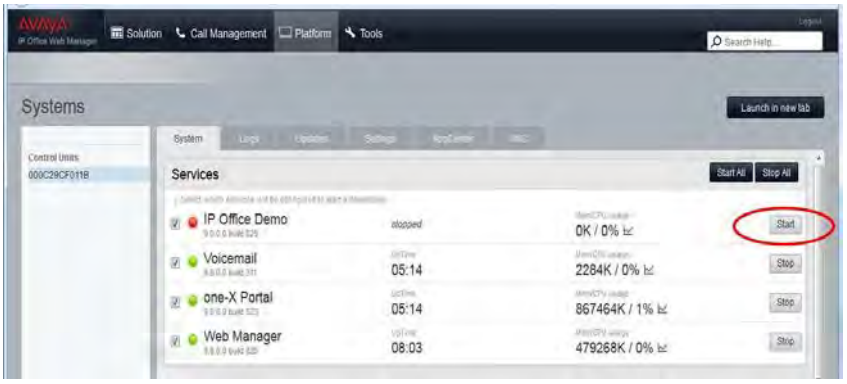

IP Office Server Edition
Updates
System
Check Now
Linux
release 6.4 (Final)
2.6.32-358.23.2.el6.x86_64
up to date
Services
Check Now
Clear Local Cache
Application
Current Version
Latest Available
Status
Actions
cli-commands
Contact Recorder
DLink
imwirt
IP Office
IP Office Demo
IP Office Demo Default Config
ipphonebin
ms
one-X Portal
Softconsole
Softphone
not installed
Install
Uninstall

Click the ‘Update’ and allow the available Services list to populate. “Uninstall” IP Office.

The Install ‘IP Office Demo’ followed by ‘IP Office Demo Default Config’

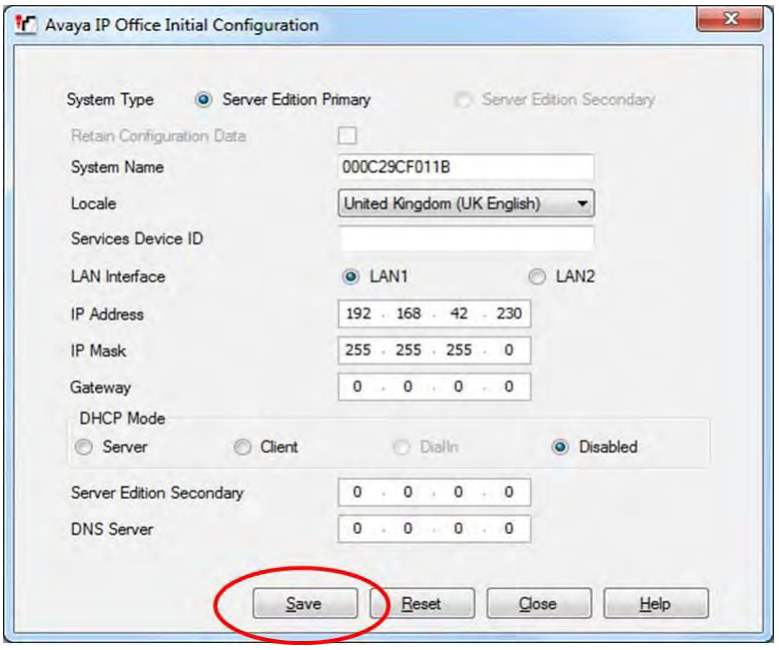


Once the install is complete, navigate to the Platform->System sub tab and start the ‘IP Office Demo’ Service.



4.3.4 Initial Configuration Utility

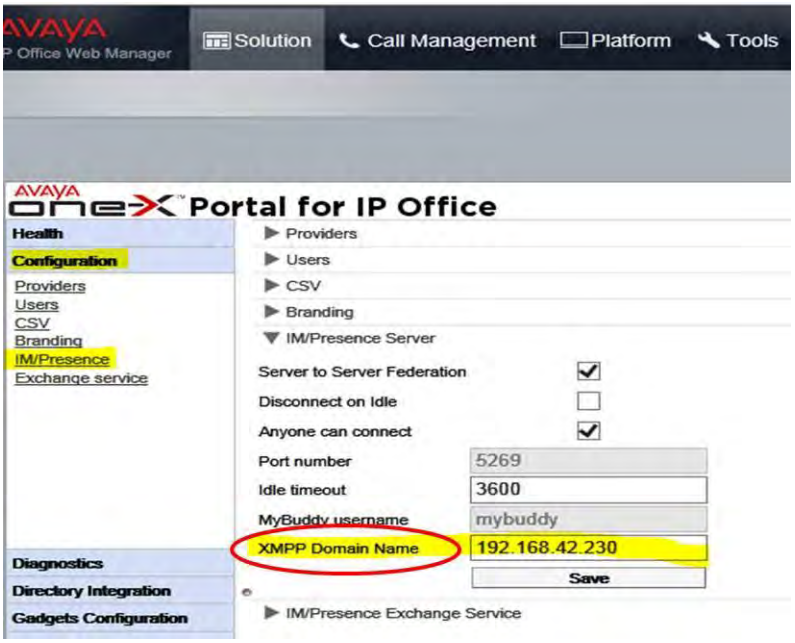
When IP Office Manager runs for the first time it will start the Initial Configuration Utility (ICU). For standard IP Office Anywhere, click 'Save' to save the settings and the process will complete.



Confirm the XMPP setting from Web Manager to ensure a clean connection to one-X® Portal.

Troubleshooting Note: If trouble arises when trying to register one-X Mobile Preferred mobile device:

1. Go to the XMPP setting on the one-X Portal page from Web Manager.
2. Change the address from 192.168.42.230 to something else (like 192.168.42.100…)
3. Stop and Start the one-X Portal service
4. Got the setting page again and change it the XMPP address back to 192.168.42.230
5. Stop and Start the one-X Portal serve a second time and try again



4.3.5 IP Office Video Softphone

- On the PC where IP Office Anywhere is installed, open a web browser and enter the address https://192.168.42.230:7070.
- On the IP Office Server Edition page, log in using the login ID Administrator and the password Administrator.
- Click on the AppCenter tab.
- Download the file IPOffice_Softphone_Win32_<release_#>.exe into the My Virtual Machines folder.
- Navigate to the My Virtual Machines folder and double click on the file IPOffice_Softphone_Win32_<release_#>.exe to start the installation.

4.3.6 Open IP Office

- On the PC where the software will be installed, navigate to the directory My Documents\My VirtualMachine\IPOfficeAnywhere.
- Double click on the file ipoffice-anywhere.vmx to open IP Office Anywhere on the virtual machine.
- If prompted with 'This virtual machine might have been moved or copied' Select I copied it.
- Confirm that Avaya IP Office Server Edition is running with the IP address 192.168.42.230.

***NOTE**: If the Avaya IP Office Server Edition screen displays an error message, restart the virtual machine by clicking Virtual Machine > Power > Power Off from the VMware Player menu bar. Double click the ipoffice-anywhere.vmxfile to restart.*

4.4 Basic Endpoint Configuration

NOTE: *For IP Office Anywhere 9.0 increase endpoint licensing to five (5). The can be customized to meet the needs of many different scenarios. Section 4.4 covers the basics.*

4.4.1 Avaya Communicator

- Connect the Avaya Communicator to the IP Office Anywhere through the WIFI access point using a static IP address 192.168.42.113.
- Set the Server address to 192.168.42.230.
- Set the Server port to 5060 and Transport type to TCP.
- Set the Domain to 192.168.42.230.
- Log in with an extension name and password.

4.4.2 IP Office Video Softphone for Mac

- Complete the installation outlined in in Section 4.3.5
- Launch and log with server at 192.168.42.230
- Enter user name Alice (x101) with password 101 or create a new user

4.4.3 IP Phones

Configure IP phones 1 & 2

- Set the IP address of IP Phone 1 to 192.168.42.102
- Set the IP address of IP Phone 2 to 192.168.42.103
- Set the call server address to 192.168.42.230.
- Set subnet mask to 255.255.255.0.
- Login to IP phone 1 using extension 102 and security code 102. The user name Bob displays when it is successfully logged in.
- Login to IP phone 2 using extension 103 and security code 103. The user name Carol displays when it is successfully logged in.

NOTE: *Bob and Carol are Power Users, any device can be substituted for IP Phones*

5 Testing

5.1 Basics

Use this procedure to confirm that the IP Office Anywhere Demo Platform is installed and functioning correctly.

- On the desktop, double click on the VMware Player icon.
- In the VMware Player window, in the left pane, double click ipoffice-anywhere.
- Test connectivity.
    - Ping 192.168.42.230 from host Windows PC to verify connectivity to the Virtual Machine.
    - Open Web Control. In a browser, enter the address https://192.168.42.230:7070.
    - Login with user ID Administrator and password Administrator
    - In the menu bar, click System.
    - Confirm that the Status for the three software components, IP Office Anywhere, Voicemail Pro and one-X Portal is Running. If not, click Start All to start them.
- Test endpoint connectivity.
    - From each extension, dial the other endpoints
    - Dial the hunt groups.
- Test Voicemail Pro.
    - From a softphone, call the IP phone at x103 and leave a message.
    - To access the message, dial *17 and follow the prompts.

  NOTE: *The password for all voice mail accounts is the same as the extension number.*
- Test Avaya one-X® Portal for IP Office.
    - On the Web Control home page, click one-X Portal Administration
    - On the Avaya one-X Portal for IP Office web page, click User Login.
    - Open a user home page by entering one of the following User Name / Password combinations:
        - Alice / 101
        - Bob / 102
        - Carol / 103

5.2 Mobility

- Connect the smartphone WIFI to the access point of the Ethernet. Set the smartphone with static IP address of 192.168.42.112.
- Connect the Avaya one-X® Mobile Preferred with the following settings for user Bob:
    - Server name: 192.168.42.230
    - Server Port: 8444
    - Username: Bob
    - Password: 102
    - DNS: 192.168.42.230
    - Gateway: 192.168.42.230

- Once configured, the connection indicator on its home page should turn from red to green.
- Configure the ring back as Work phone.
- Mobile phone (Bob's mobile) calls 101 (Alice).
- IP Office will ring Bob's desk phone (102) and also Alice's phone (101).

6 Passwords and System Access

6.1 System Manager:

User: Administrator
Password: Administrator (tip: copy and paste from user field)

System	Port and Path	Login	Password
Web Control	7070	Administrator	Administrator
Avaya one-X® Portal Admin	8080/onexportal-admin.html	Administrator	Administrator
Avaya one-X® Portal User	8080/inyama/ inyama.html	Alice/Bob/Carol	101/102/103

7 Support

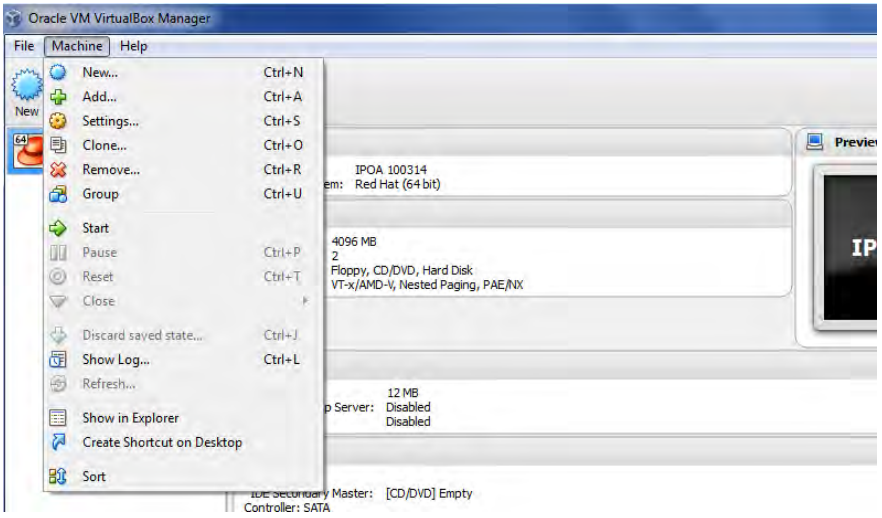
If support is required do not contact Avaya BBE/Tier 3 or CPE/Tier 4 support.

Contact your local Avaya Sales Engineer.

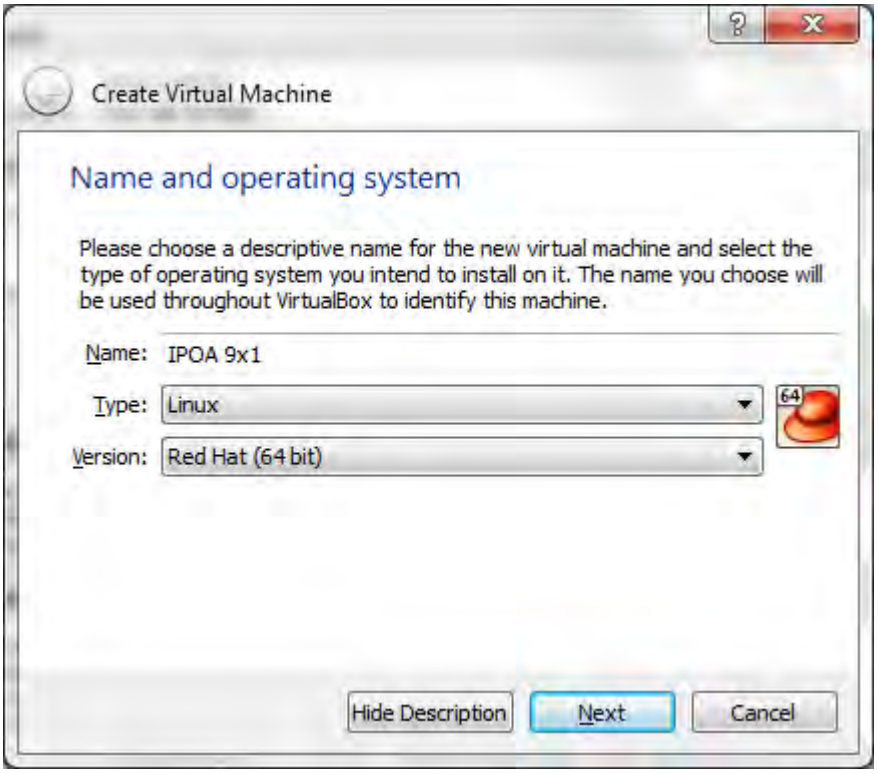
Appendix A – Alternative Installation using VirtualBox

Start ‘VM VirtualBox’

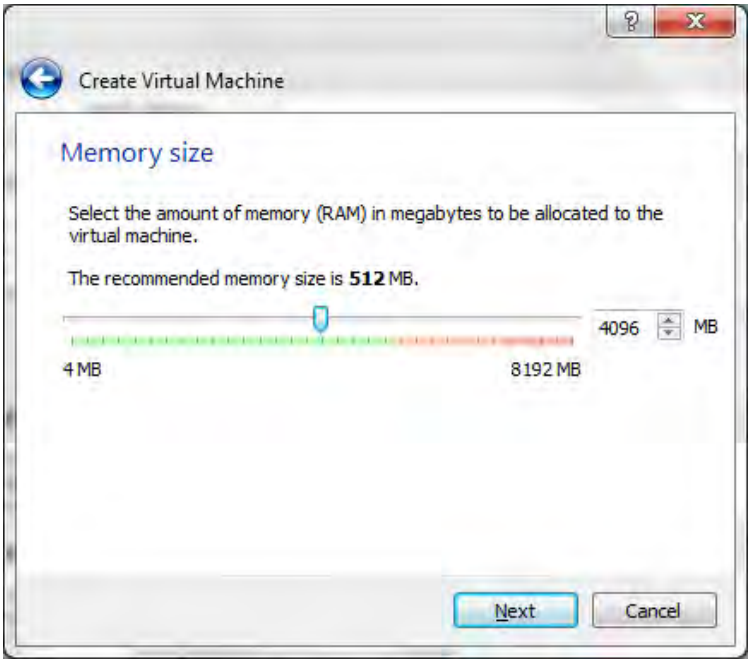
Go to ‘Machine menu’. Select ‘New’.



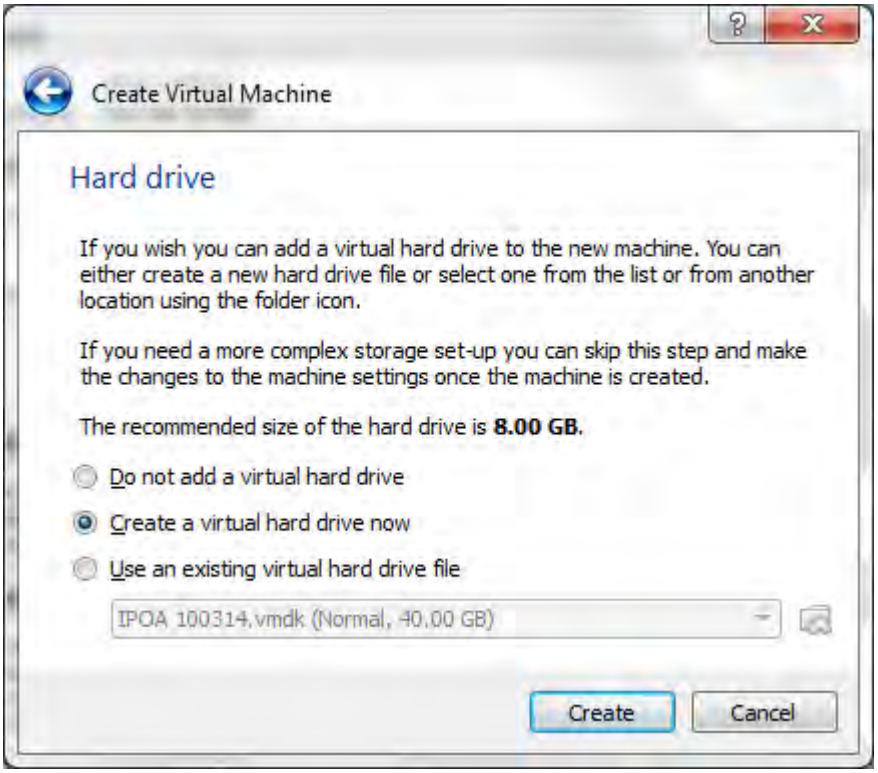
Name the new virtual machine and select the operating system you are going to use. Click ‘Next’.



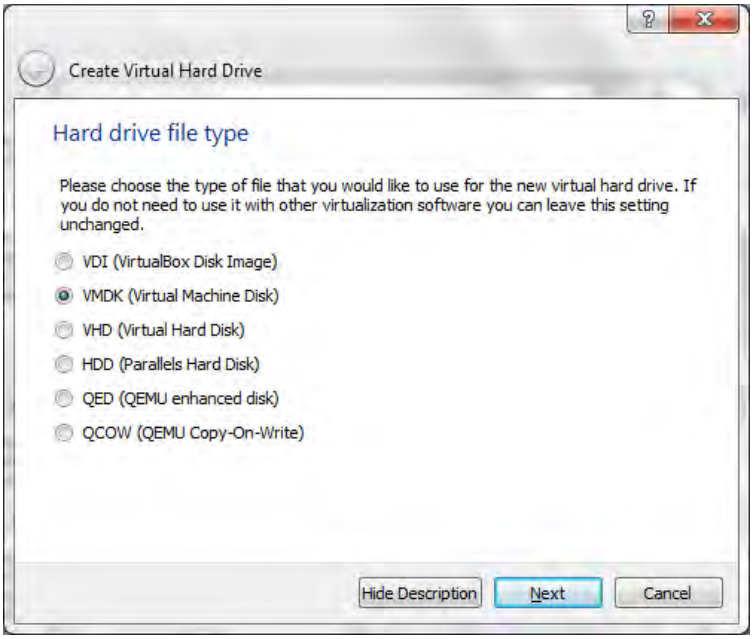
Increase memory size to 4GB. Click ‘Next’.



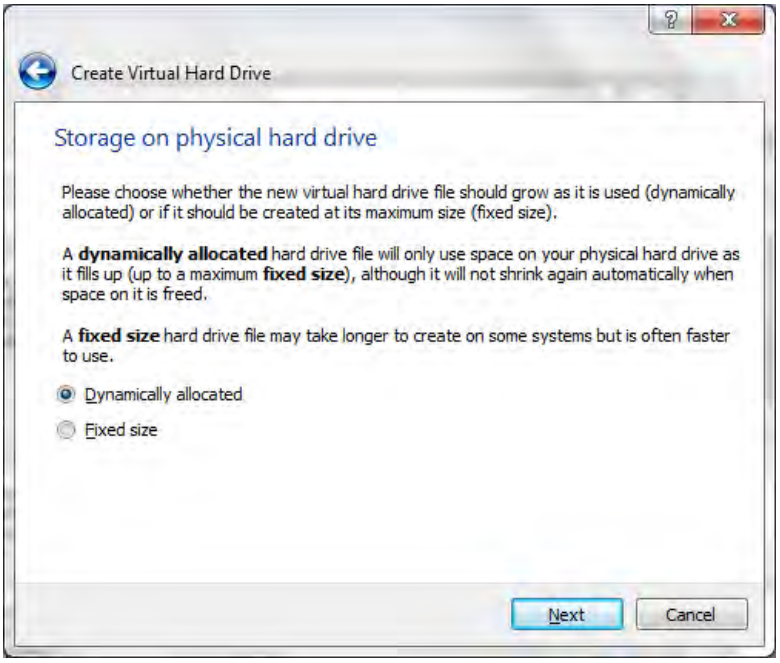
Select ‘Create a virtual hard drive now’. Click ‘Create’.



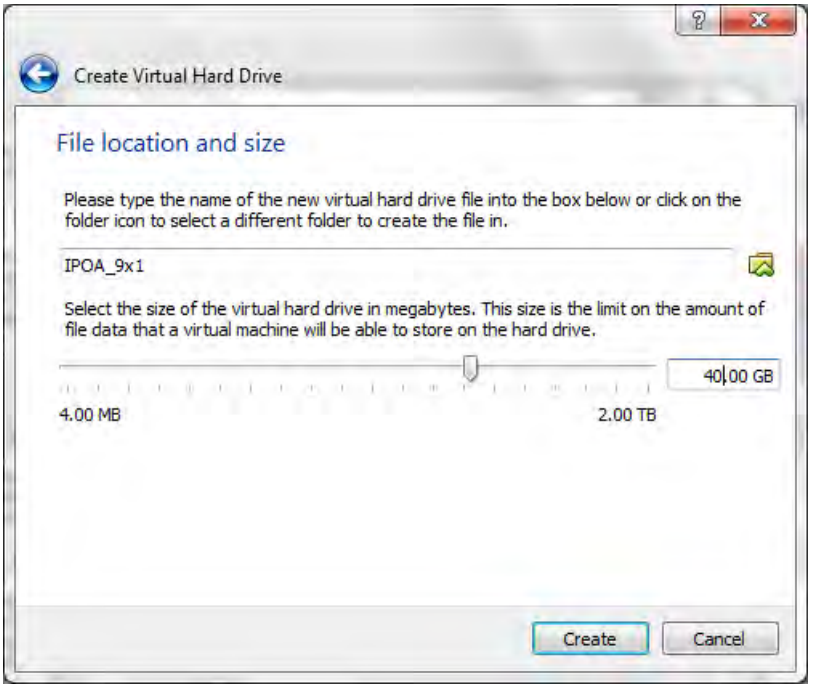
Select ‘VMDK (Virtual Machine Disk)’. Click ‘Next’.



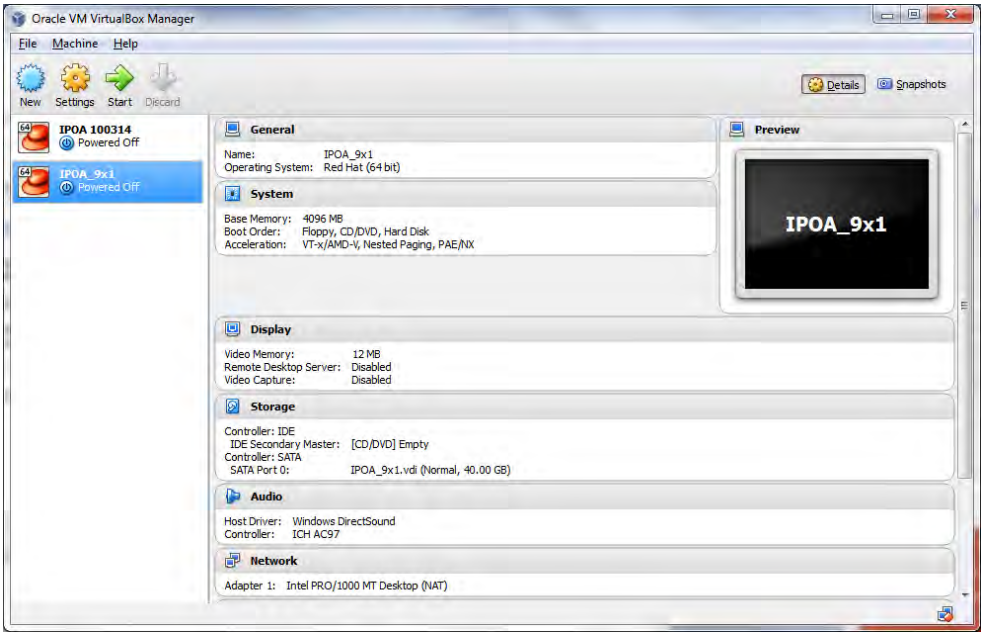
Select ‘Dynamically allocated’. Click ‘Next’.



Increase the virtual hard drive to 40GB. Click ‘Create’.



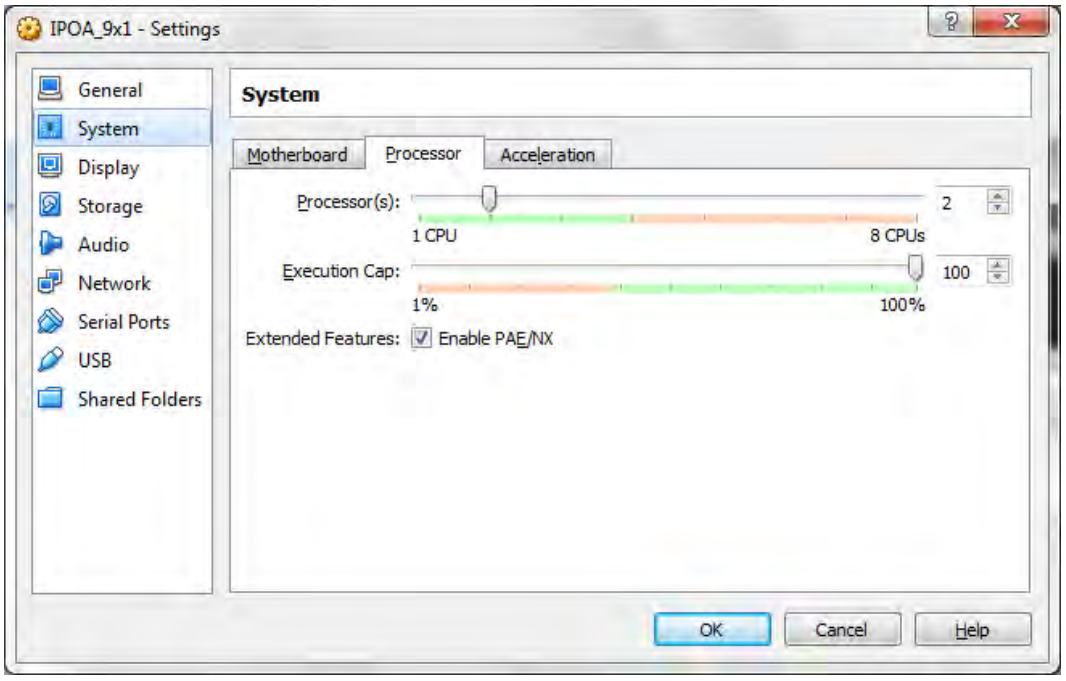
You will see your new virtual machine instance in the right hand pane



Go to Machine>Settings.

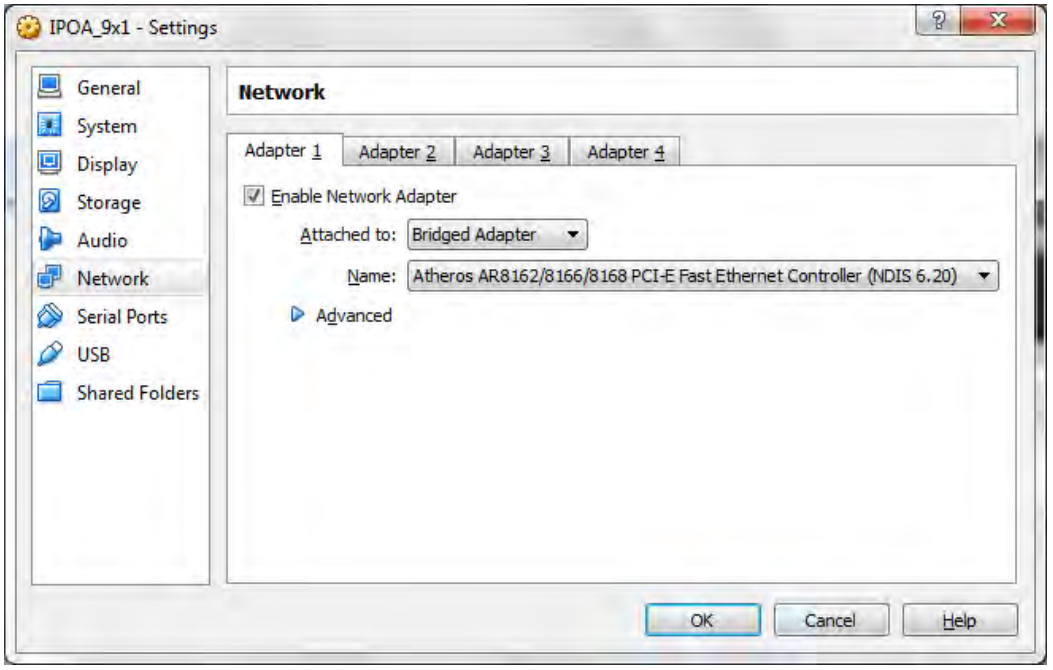
Select the ‘System’ menu.

Select the ‘Processor’ tab and increase the number of ‘Processors’ to 2.



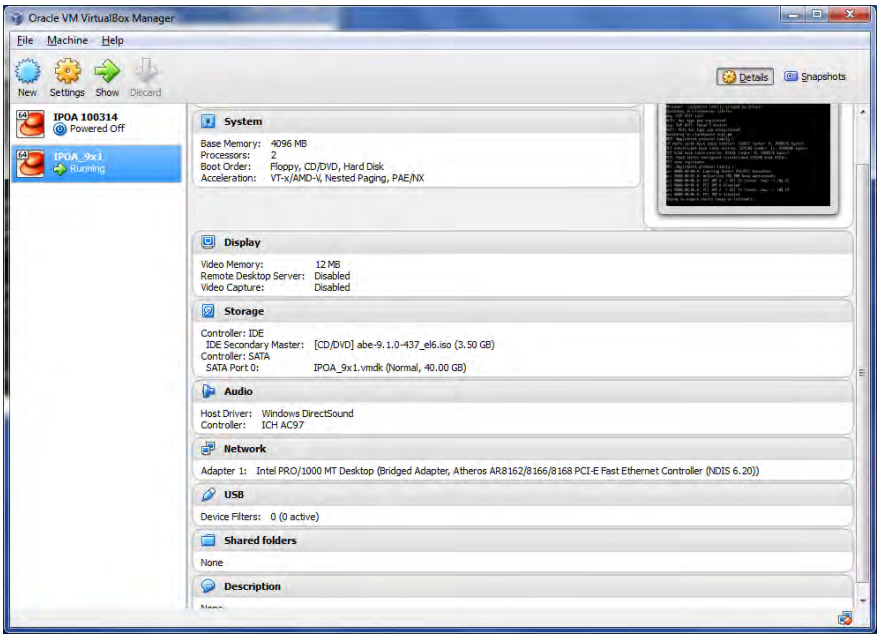
Select the ‘Network’ menu.

Change the ‘Attached to’ setting from ‘NAT’ to ‘Bridged Adapter’. Click ‘OK’.



Installing IP Office Anywhere onto the VM

Run the Virtual Machine you just created.



When prompted to test the media before the installation select ‘Skip’.