

Absolute Beginner's Guide to R80.x

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Introduction

This document is intended for people who wish to get some hands-on experience with Check Point R80.x even if they have never touched it before. We will start by downloading the GAIA ISO and creating a Virtual Machine using either VMware Workstation or VirtualBox on your PC. Use your Windows PC as the host for the Virtual Machine and as the client for running SmartConsole.

Note: This lab has a Check Point device with a single interface. There is no “passing of traffic” through the security gateway in this lab. This is intended to keep it simple. The following exercises are simply a way to get hands-on experience with the basics of R80 (ISO installation, SmartConsole basics, object creation, rule creation, etc). You will see some traffic & logs based on the traffic between your host computer and the interface on the Check Point virtual machine. This is enough to get the basics.

You can share this document with colleagues and friends, who has never installed GAIA before, and they should be able to follow these instructions to get started on their path to Check Point greatness.

Some knowledge of Windows networking and software installation is assumed. While I have included the steps for installing SmartConsole, it is up to the reader to provide a copy of VMware Workstation or Oracle’s VirtualBox software. VirtualBox is a free download, and is a great alternative to expensive commercial software. *Be sure to check with your IT Department before you install any software on a computer that you do not own!*

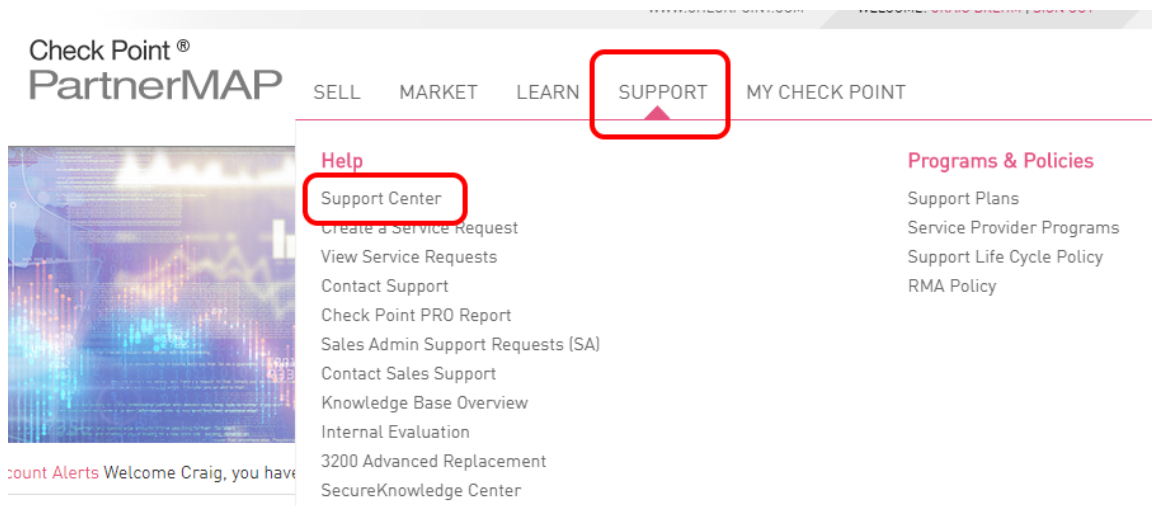
This is a very basic exercise that will lead you step-by-step through the process of locating and downloading the GAIA operating system, creating a Virtual Machine, completing the GAIA installation, and configuring a Standalone system you can use to get your introduction to R80.10¹.

¹ **Editor Note:** This guide is originally written for R80.10 version. However, it is also applicable to any newer version. At the moment of making this note, the latest Check Point GA version is R80.30. You can download R80.30 installation media instead of R80.10, and continue with the lab flow without any issue.

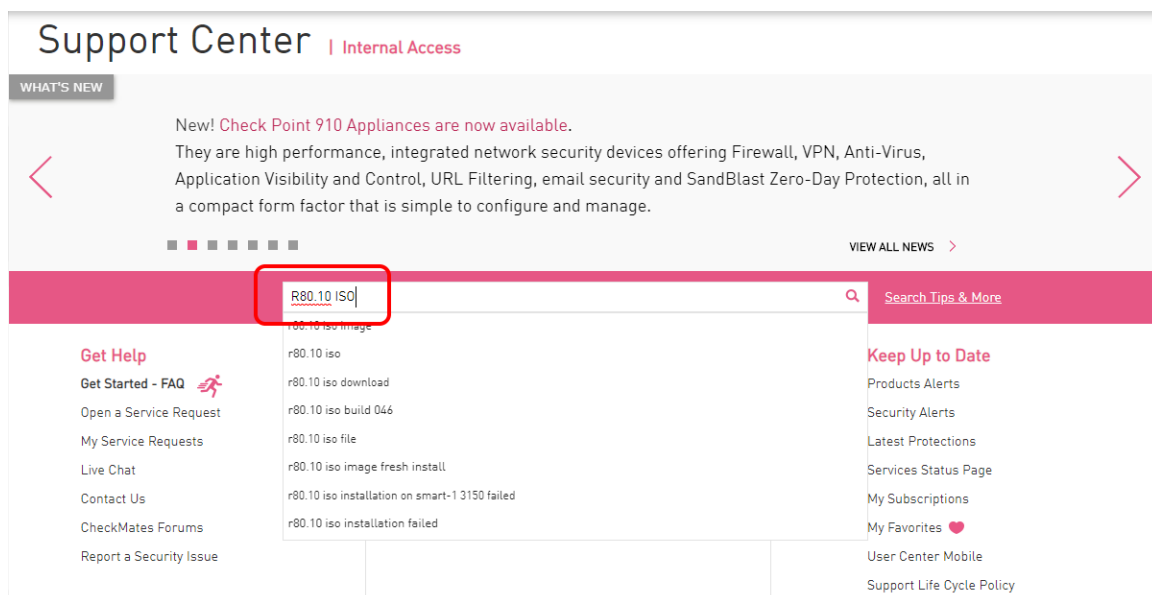
Downloading GAIA R80.10 Installation Media and Documentation Package

Before you begin, you will need a copy of the latest R80.x Installation Media (aka the latest take of the Check Point GAIA “Fresh Install” ISO). Point your web browser of choice to Check Point’s PartnerMAP (also known as UserCenter.CheckPoint.com). You must have a User Center account with the proper permissions to download software from Support Center. Talk to your Check Point Partner or Account Team if you don’t already have a User Center account.

Hover your mouse over the **SUPPORT** menu and select **Support Center** in the “Help” section. Your browser will load SupportCenter.CheckPoint.com. In the search bar, type in “R80.10 ISO” and hit ENTER.



In the search bar, type in “R80.10 ISO” and hit ENTER (or click on the Magnifying glass).



You will see a page of search results.

Click on the **Downloads** tab to see the list of available software downloads. Look for the **R80.10 Gaia Fresh Install** link, and click it.

The screenshot shows a search results page with the search term "R80.10 ISO". The "Downloads" tab is highlighted with a red box. Below the tabs, a filter icon and the text "Filter: Click to refine your results" are visible. The first search result is "1. R80.10 Gaia Fresh Install | G", which is also highlighted with a red box. Below the result title, the text "Product: Threat Extraction and 22 more" is visible.

Click on the pink **Download** button to start the download.

The screenshot shows the "Download Details" page for "R80.10 Gaia Fresh Install". A pink "Download" button is highlighted with a red box. Below the button, there is a "Brief Description" section with the text "New image released on Oct 16, 2018." and "For more information, see R80.10 Home Page." Below this is a "Details" table with the following data:

File Name	Check_Point_R80.10_T479_Gaia.iso
Product	vSEC Controller, Security Gateway, Threat Extraction, Compliance, Threat Emulation, Threat Prevention, Anti-Bot, Anti-Virus, Identity Awareness, Application Control, DLP, IPS, Smart-1, Endpoint Security Server, Security Management, VSX, SecureXL, Multi-Domain Management / Provider-1, SmartReporter / Eventia Reporter, SmartEvent / Eventia Analyzer, Mobile Access / SSL VPN, ClusterXL, Anti-Spam
Model	Smart-1 410, Smart-1 405, Smart-1 3150, Smart-1 3050, Smart-1 225, Smart-1 210, Smart-1 205, Smart-1 150, Smart-1 25B, 23800, 23500, 21800, 21700, 21600, 21400, 15600, 15400, 13800, 13500, 12600, 12400, 12200, 5900, 5800, 5600, 5400, 5200, 5100, 4800, 4600, 4400, 4200, 3200, 3100, 2200
Version	R80
Minor Version	R80.10
OS	Gaia
Build Number	
MD5	1b97cce21dbee78fec505b44e637cc9a
SHA1	9cde3212ebf744890b1ed5e4091c25f80e906af
Size	3148.28 MB
Date Published	2018-10-16



For the Documentation package, SmartConsole download, and other information, let's look at the R80.10 Gaia Product page. Click on the **SecureKnowledge** tab. Look for the **R80.10 Gaia** link, and click it.

Search Results

R80.10 ISO


SecureKnowledge (64)	Downloads (11)	Documentation (18)	CheckMates (17)	E-mails (36)	SRs (2,050)	Tasks (135)
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Filter: [Click to refine your results](#) Order by:




- sk111841: Check Point R80.10 |  Last Updated: 16-Oct-2018
Product: All Version: R80.10 OS: Gaia ★★★★★
- sk134132: "Upgrade to R80.10 with Compliance(GRC) prior to R77 is not supported" Pre-Upgrade Verifier error even though a Complia... |  Last Updated: 20-Aug-2018
Product: Compliance Version: R77.30 OS: Gaia Platform: All

You will see many different links on the R80.10 page. You can download documentation, installation media, the SmartConsole installation package, and other product information. The primary links for this guide are highlighted below. The GAIA Clean Install ISO is in the lower right. Documentation is in the middle (go ahead and grab it for reference). SmartConsole is in the lower left. Click the SmartConsole link to go to the download page.





What's New in R80.10 | [Documentation](#) | [Downloads](#) | [Released Hotfixes](#) | [Additional Downloads and Products](#) | [Revision History](#)






What's New in R80.10

-  Security Policy New Architecture [More](#)
-  Significant Improvements and New Features [More](#)
-  Management Enhancements [More](#)

Documentation

-  R80.10 Release Notes
-  R80.10 Documentation Package [More](#)
-  R80.10 Quick Start Guide
-  R80.10 Known Limitations

Downloads

-  SmartConsole [SmartConsole](#)
-  R80.10 CPUSE Upgrade [from R7XX](#) [from R80](#)
-  Clean Install [ISO Image](#)

Click on the pink **Download** button to start the download. Take note of the md5sum & SHA1 sum. You can verify the ISO after the download completes.

Support Center > Search Results > Download Details

Search Support Center

Download Details

R80.10 SmartConsole Build 073

[My Favorites](#) Download

Brief Description

Notes:

This **SmartConsole** is the R80.10 SmartConsole for **Jumbo Hotfix Accumulator**. It can be used to connect to these versions of the Security Management Server:

- R80.10 with R80.10 Jumbo Hotfix Accumulator.
- R80.10 GA Take 421 / 462 / 479

Note that R80.10 GA SmartConsole can also be used to connect to the same versions of the Security Management Server

Details

File Name	Check_Point_SmartConsole_R80_10_jumbo_HF_B073_Win.exe
Product	SmartConsole / SmartDashboard
Version	R80
Minor Version	R80.10
OS	Windows
Build Number	
MD5	04712eba4d3b1527653a46b77bc98154
SHA1	3c655a311306260e0d937e868829c9a45dd706
Size	394.88 MB
Date Published	2018-09-12

It may take a few minutes for the ISO to download, depending on your internet connection speed. After the download completes, you are ready to install Check Point's Gaia operating system. But first, you will need to start by creating a Virtual Machine. Let's walk through two very common, but different options, VMware Workstation and Oracle VirtualBox.

I do not recommend using both methods, as running them simultaneously on the same host computer could cause serious resource conflicts. If you have access to VMware, and that is what you use for your virtualization, go that route. If you do not have VMware, VirtualBox is a good alternative choice (especially if you're on a tight budget!). VirtualBox is also available for Mac OS X and Linux. If you decide to host the VMs on a Mac or Linux host, keep in mind you will still need to have a Windows computer for SmartConsole (you're on your own if you want to install Windows in a VM as it is outside of the scope of this guide, but it's not difficult).

We are not going to walk through the installation of VMware Workstation/Oracle VirtualBox in this document. If you require that much hand-holding, you might as reconsider if you wish to continue with this exercise...

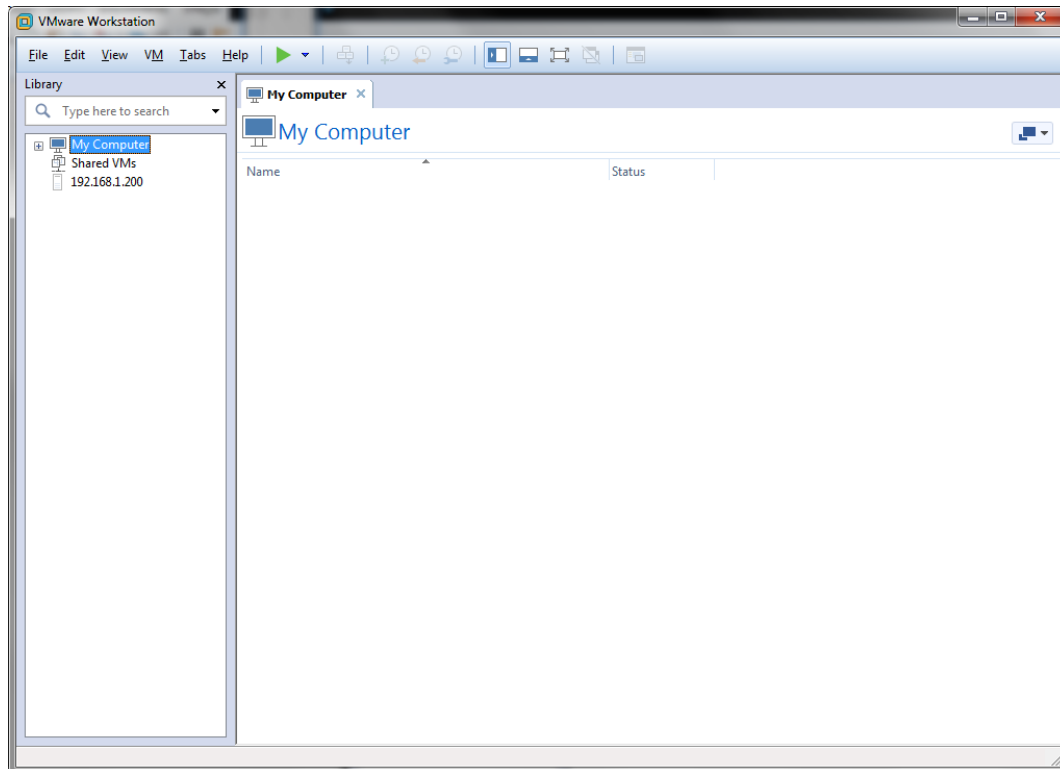
If you have never created Virtual Machines before, the steps are included in the next two sections. When creating a VM, you have to choose the resources that will be available to the "guest" operating system (aka GAIA). I have detailed the number of CPU cores, RAM, hard drive, etc. This is enough for a basic standalone installation. In the real world, I would recommend a much more powerful pool of resources. This is just enough to get a demo environment for you to play with.

You may notice some slowdown of your host computer, do not be alarmed. When you give resources to a second operating system, this is expected. If you “pause” or “power off” the guest VM, your computer will have those resources restored.

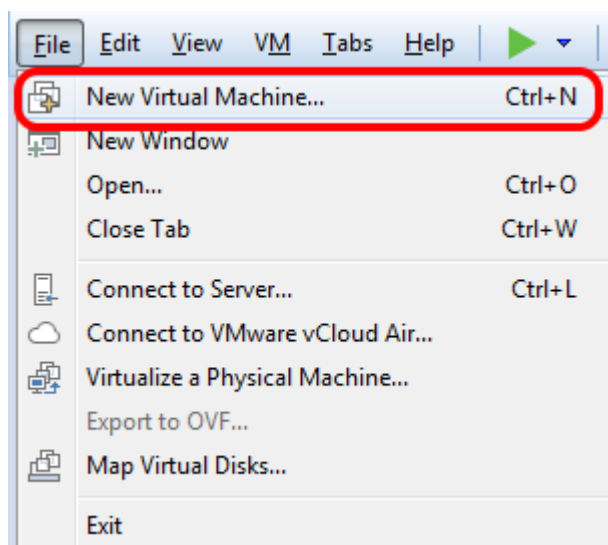
VMware Workstation – Virtual Machine Creation

NOTE: The following screenshots are from VMware Workstation 12 Pro
The steps for Workstation versions 8-10-12-etc should be very similar.

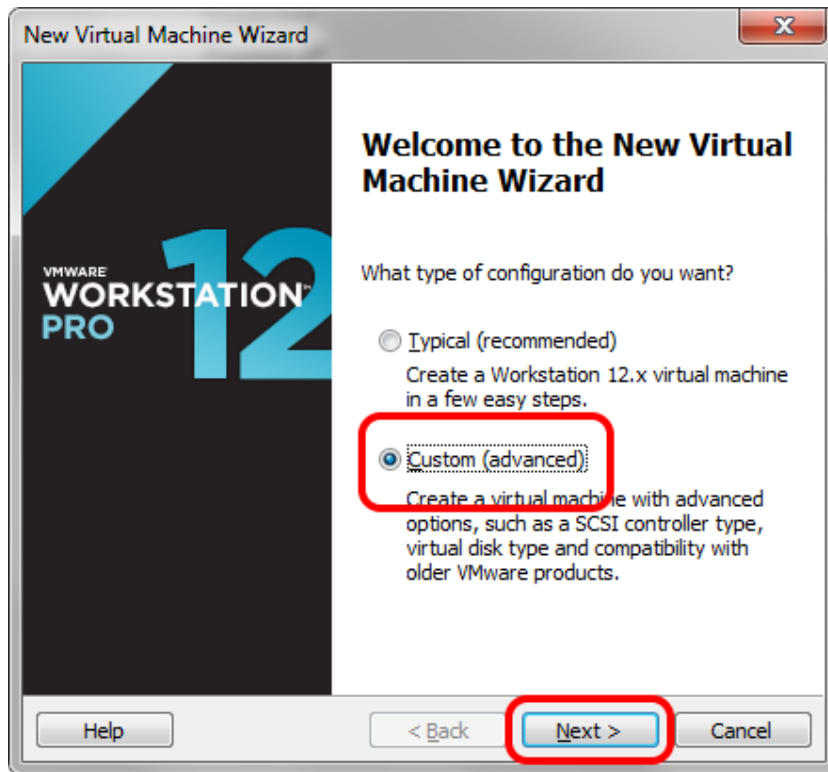
The VMWare Workstation GUI



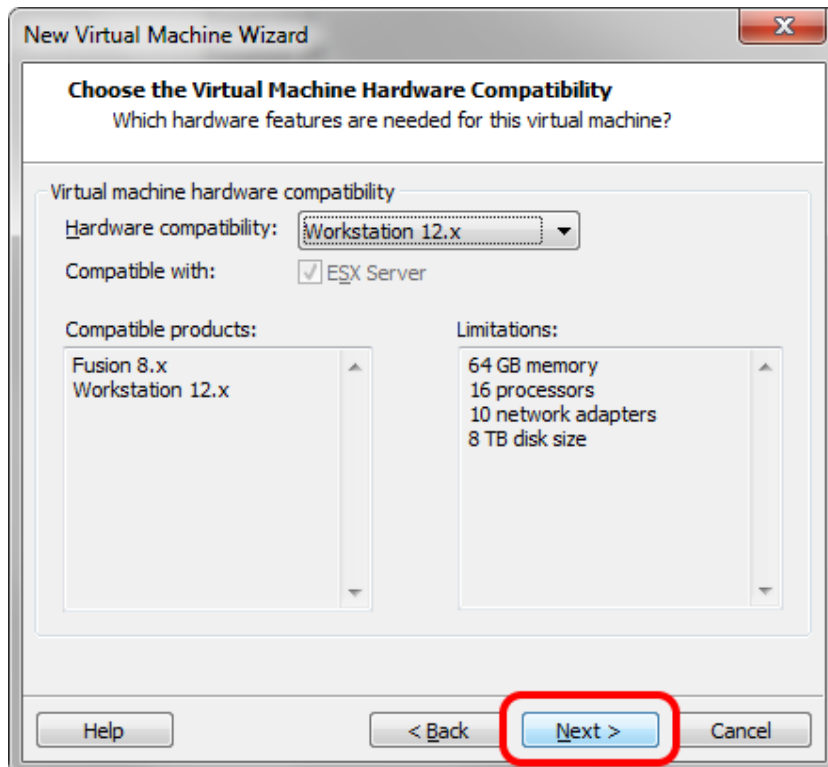
In the File menu, choose **New Virtual Machine**.



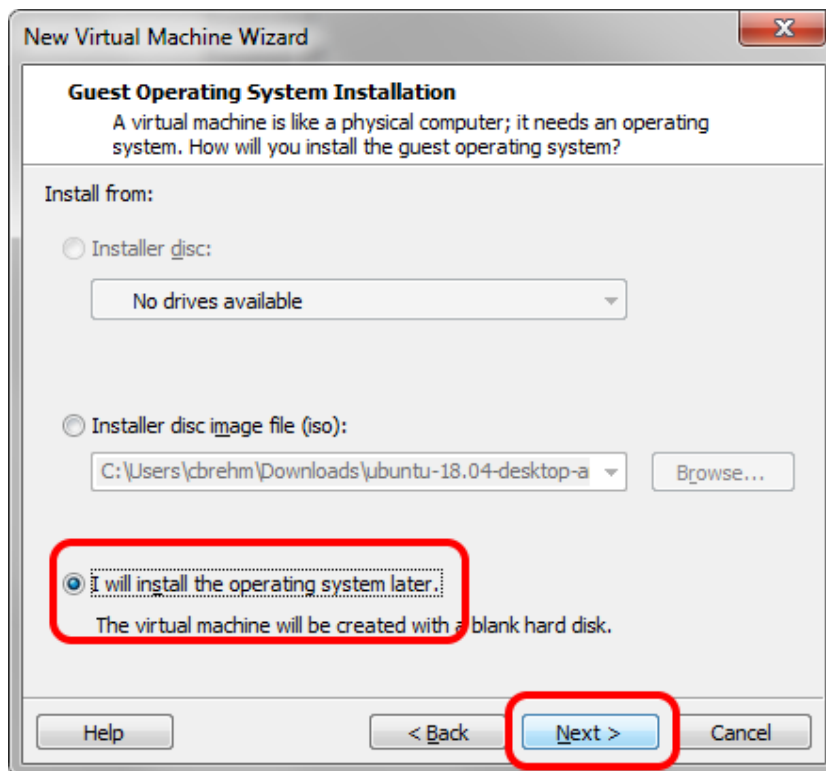
The **New Virtual Machine Wizard** will walk through the process to create a VM for running the Gaia OS. Choose “Custom” and click **NEXT**.



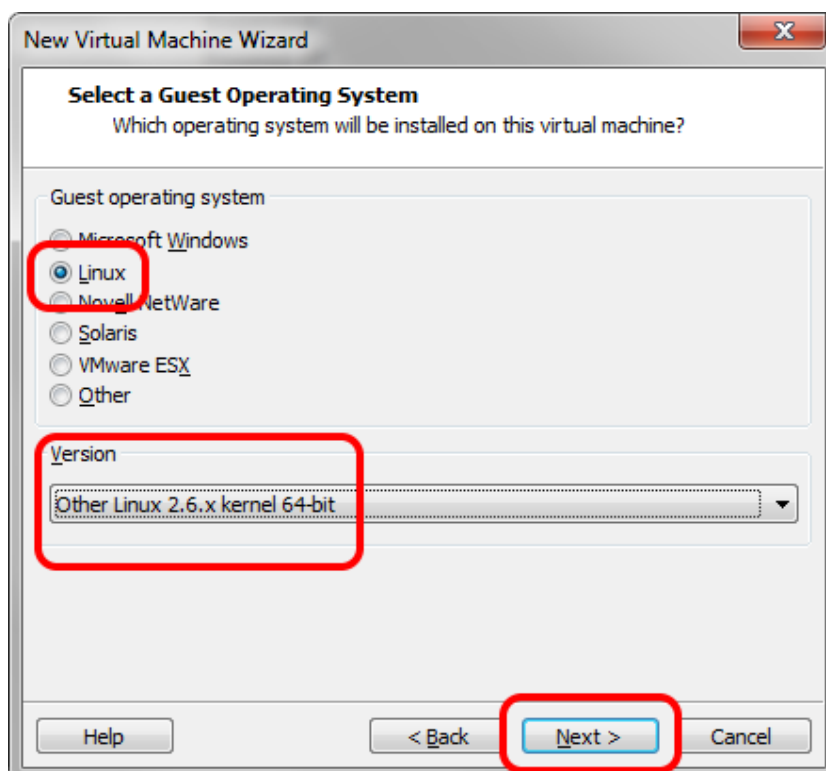
Leave the default options on the Hardware Compatibility step, and click **NEXT** to continue.



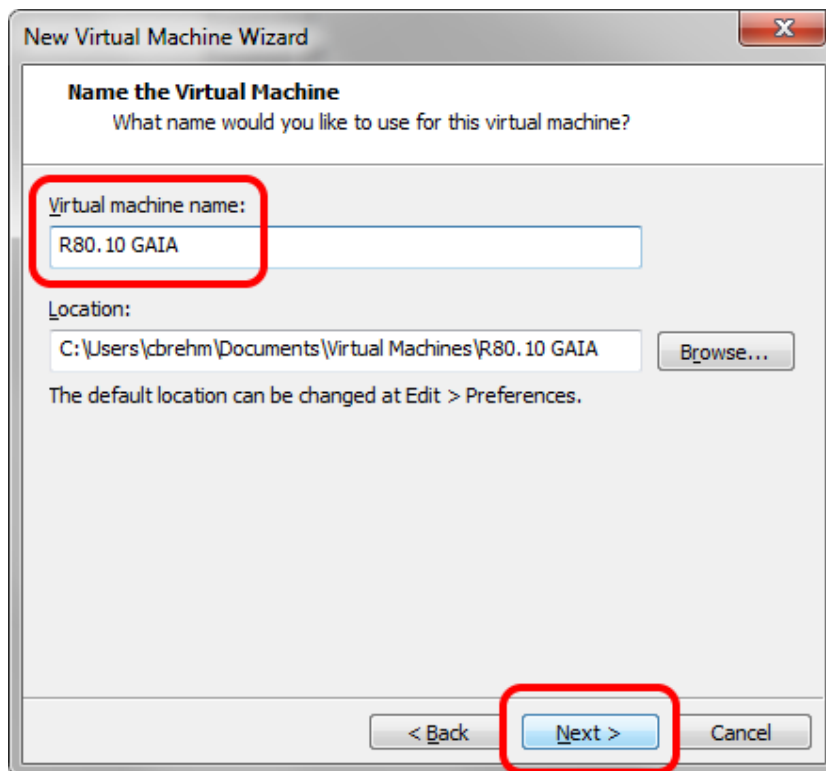
Choose “I will install the operating system later” and click **NEXT**.



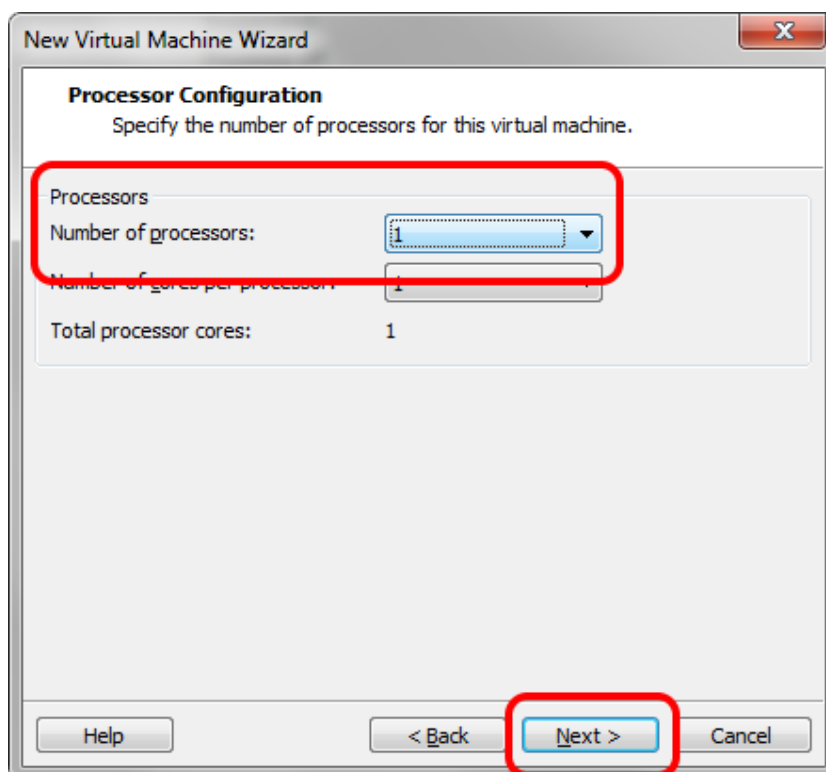
Choose “Linux”. Choose “Other Linux 2.6.x kernel 64-bit” from the Version drop-down list. Click **NEXT**.



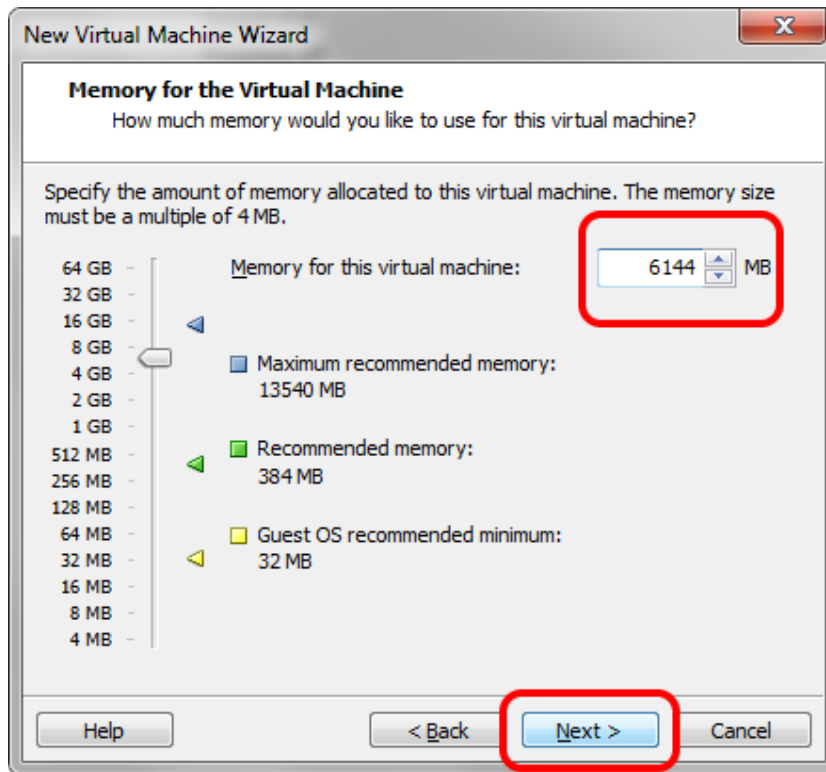
Name your Virtual Machine and click **NEXT**.



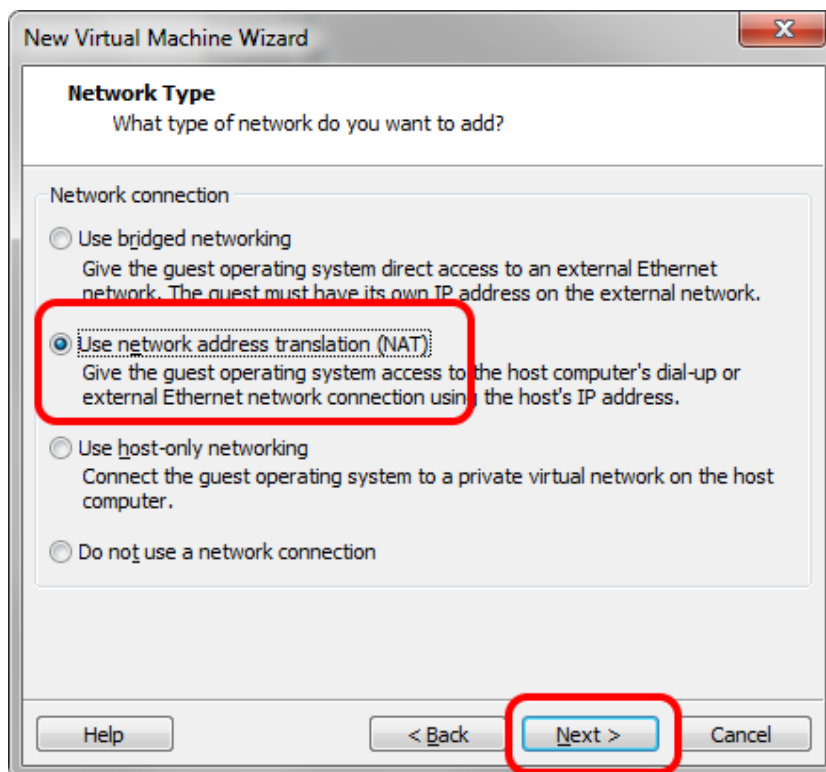
Select "2" in "Number of Processors" and click **NEXT**.



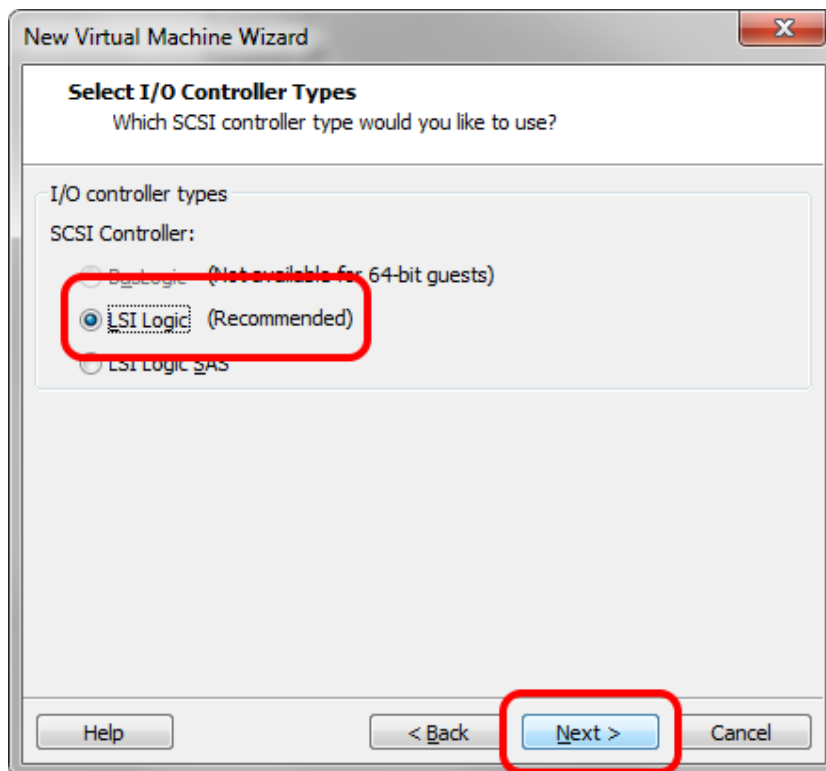
Choose 6GB of RAM if your host computer has enough (you can also use 4GB of RAM if you have limited resources) and click **NEXT**.



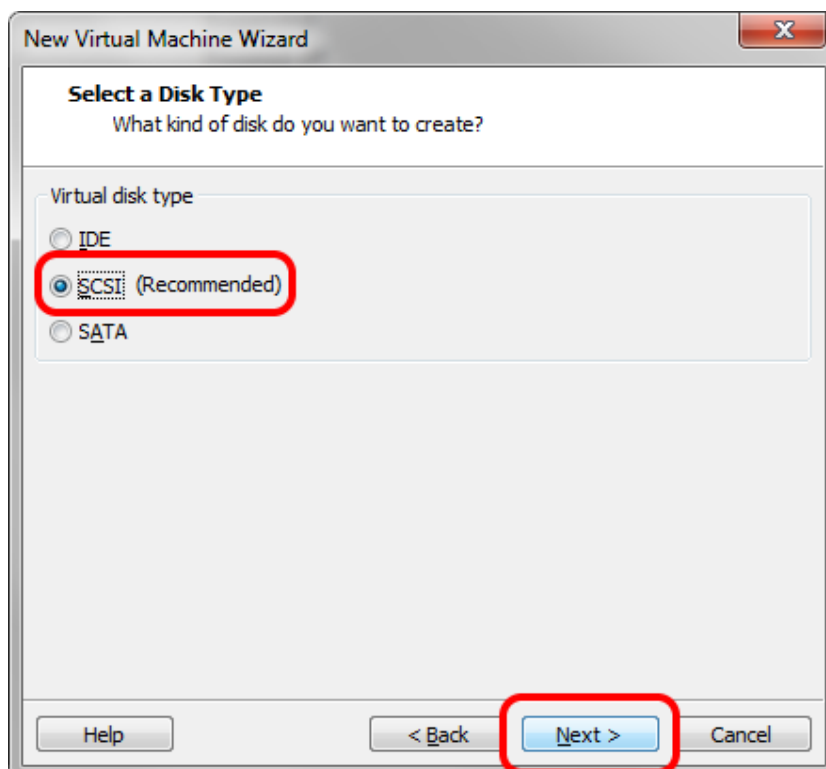
Select “Use Network Address Translation (NAT)” and click **NEXT**.



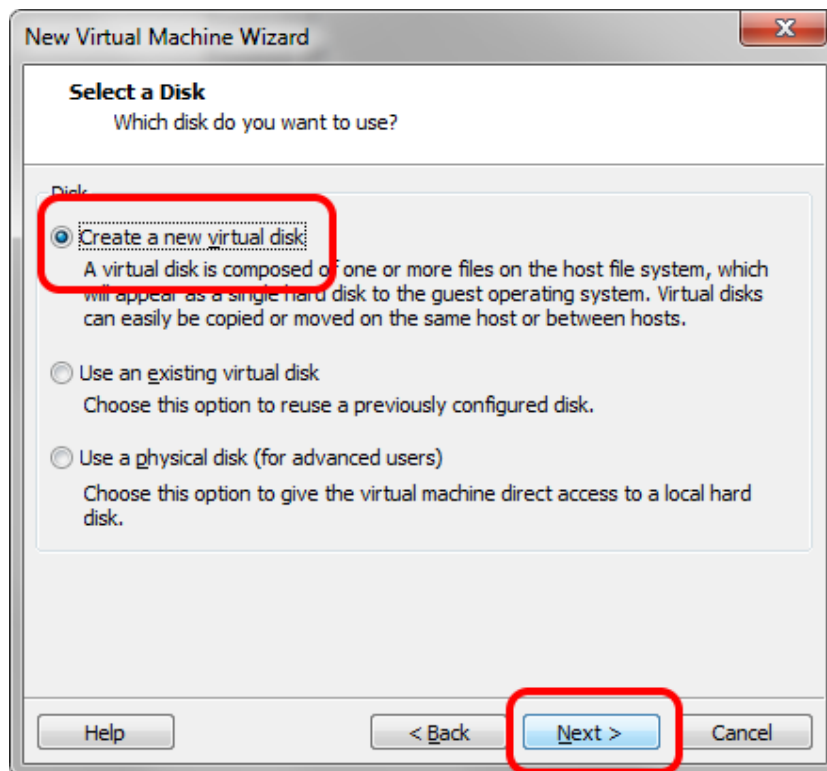
Select “LSI Logic” and click **NEXT**.



Select “SCSI” and click **NEXT**.

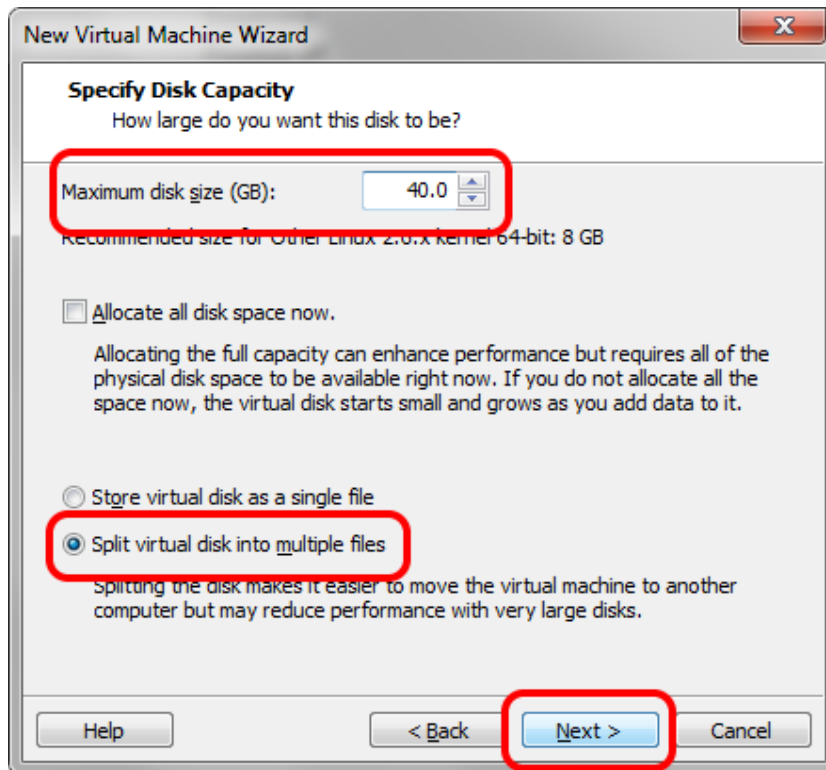


Select “Create a new virtual disk” and click **NEXT**.

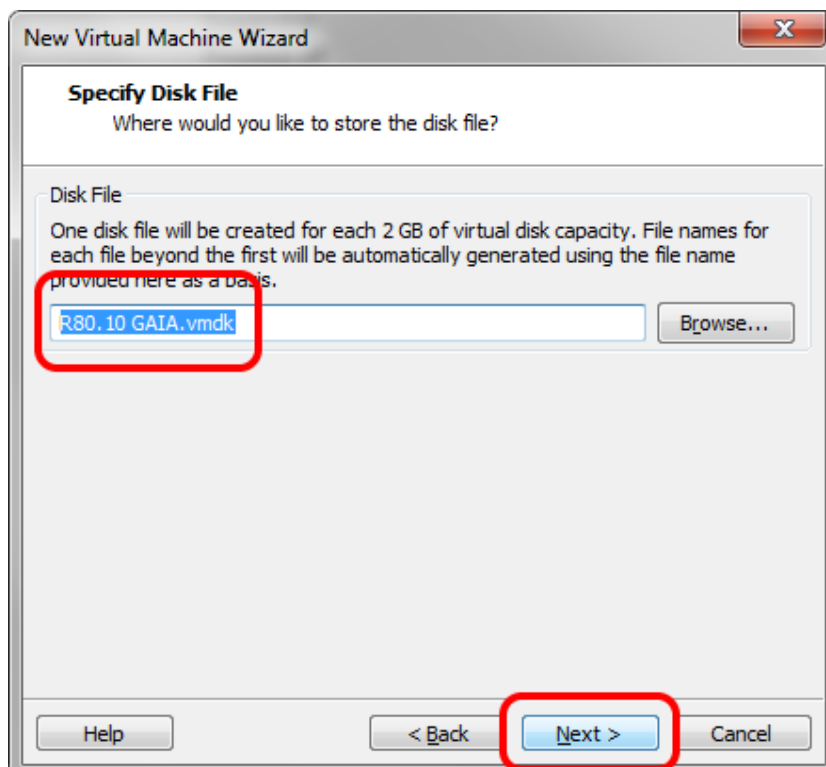


Configure “Maximum disk size” at 40GB (if your host computer has limited space, you can get by with 30GB). NOTE: If you leave “Allocate all disk space now”, the VM will only use as much drive space as needed, expanding up to the maximum size you have configured.

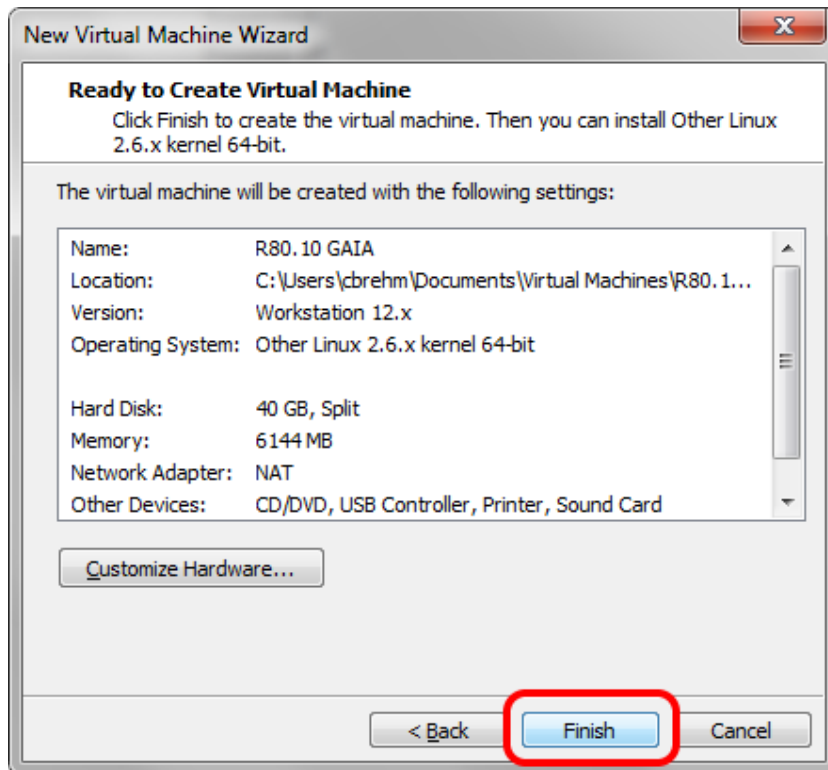
Select “Split virtual disk into multiple files” and click **NEXT**.



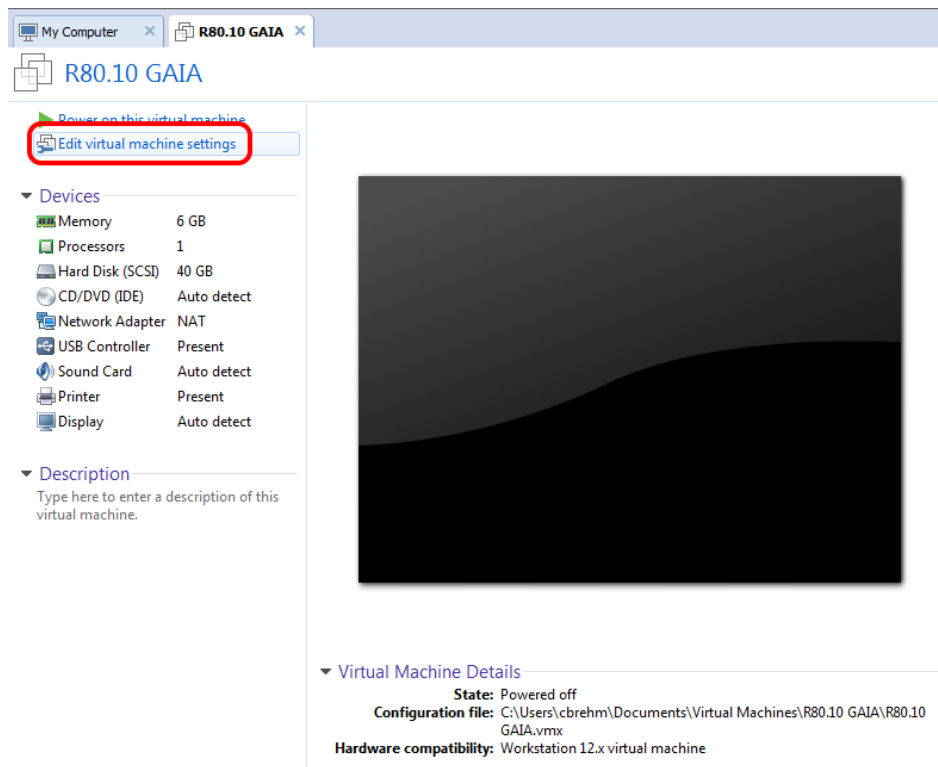
Leave the default Disk File name and click **NEXT**.



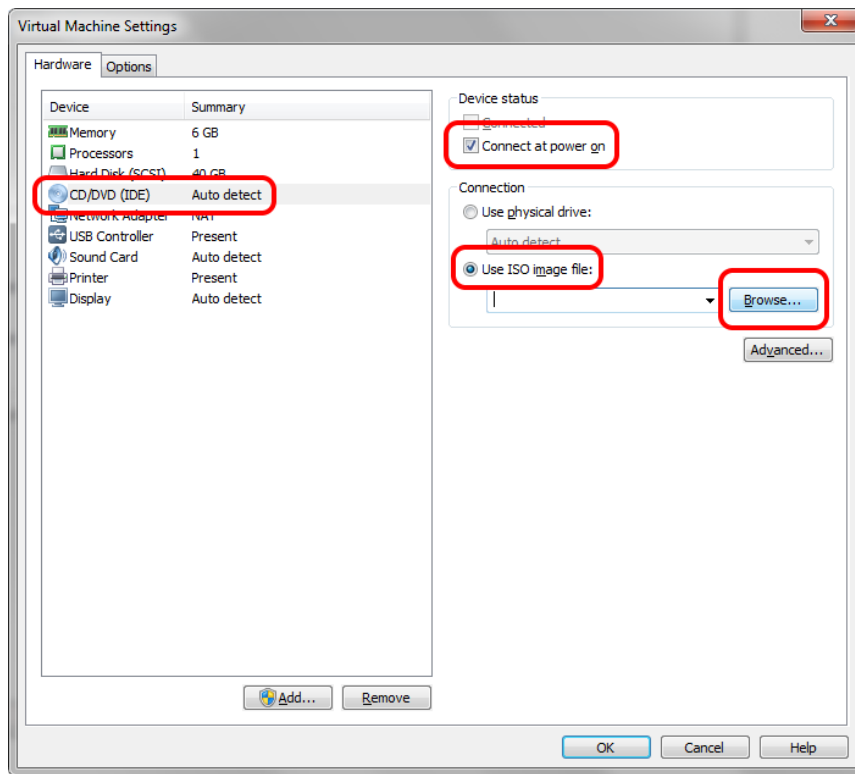
Click **FINISH**.



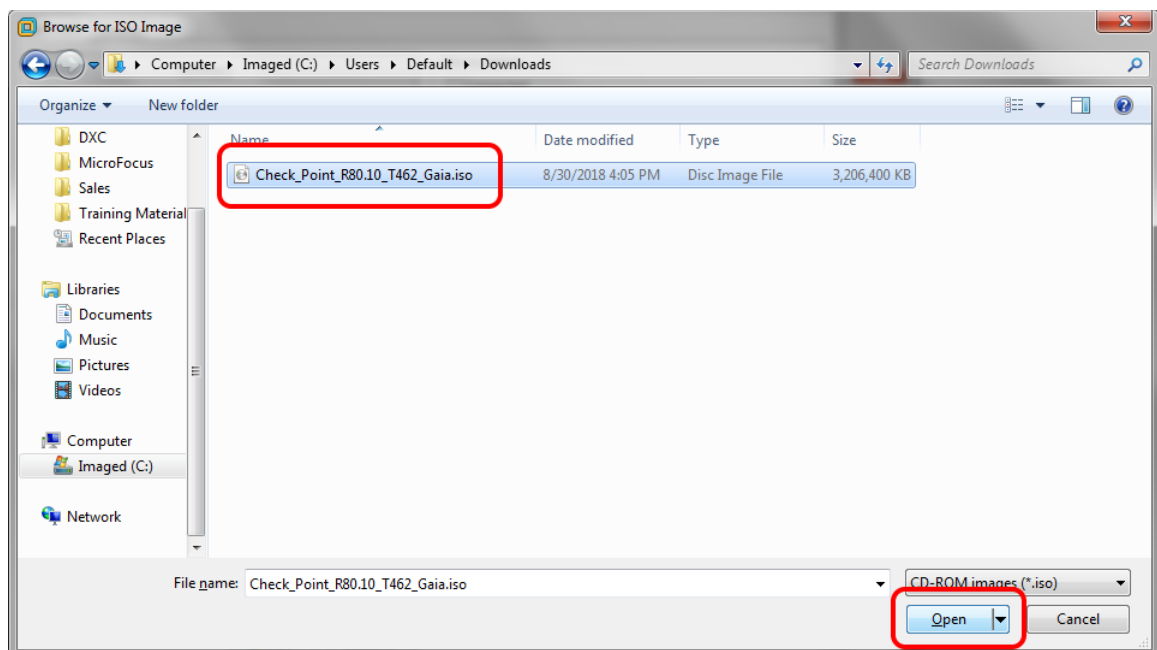
VMware will not create your VM and open a new tab in your Workstation GUI. Click the Edit virtual machine settings link.



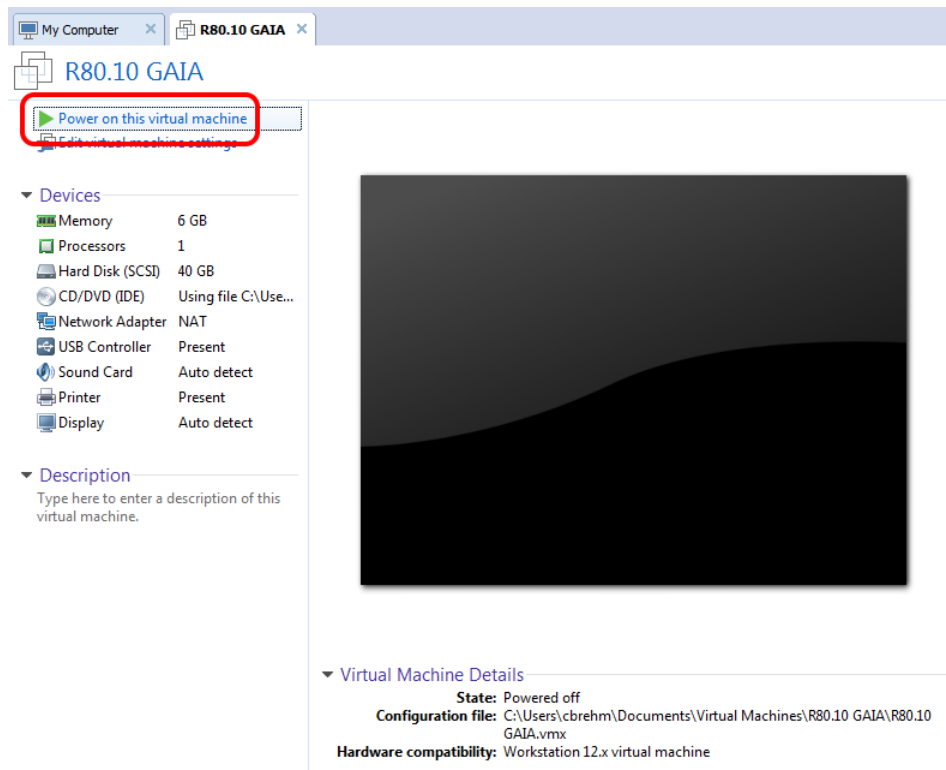
Click “CD/DVD (IDE)” and check “Connect at power on”. Click **Use ISO image file**: and click **Browse** to launch the file browser.



Navigate to the location where you downloaded the Gaia ISO. Select the `Check_Point_R80.10_T462.ISO` file and click **OPEN**.



Click **Power on the virtual machine**.

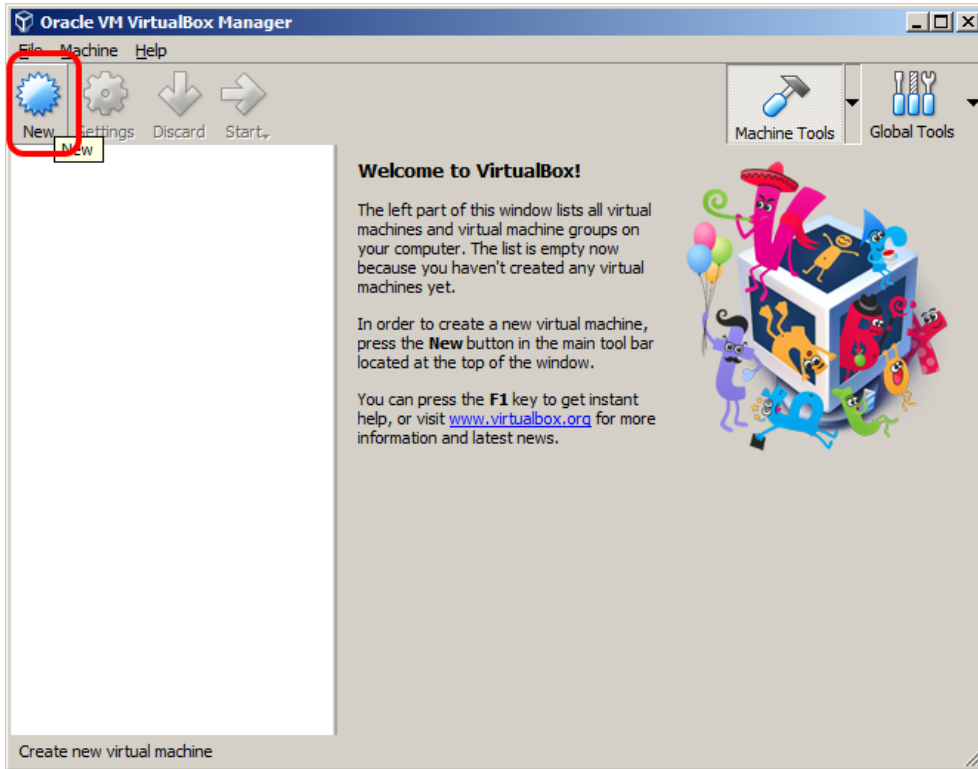


You should now see the Virtual Machine begin to boot. You can skip the VirtualBox section and move on to the GAIA Installation section.

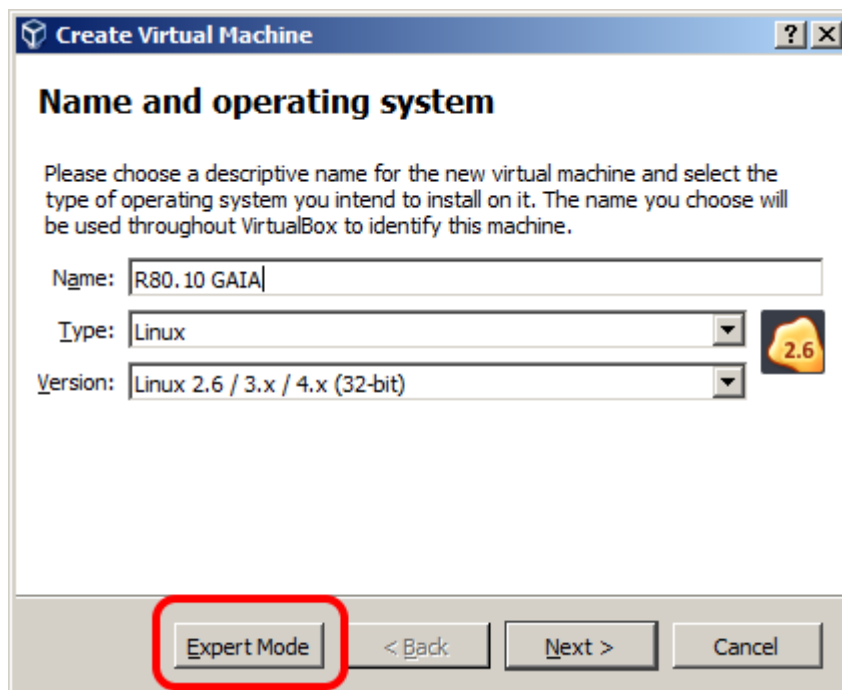
VirtualBox – VM Creation

Note: The following screenshots are from Oracle VirtualBox 5.2.2
<https://www.virtualbox.org/wiki/Downloads>

The VirtualBox GUI. Click the **New** button to start the “Create Virtual Machine” wizard.



Click the **Expert Mode** button.

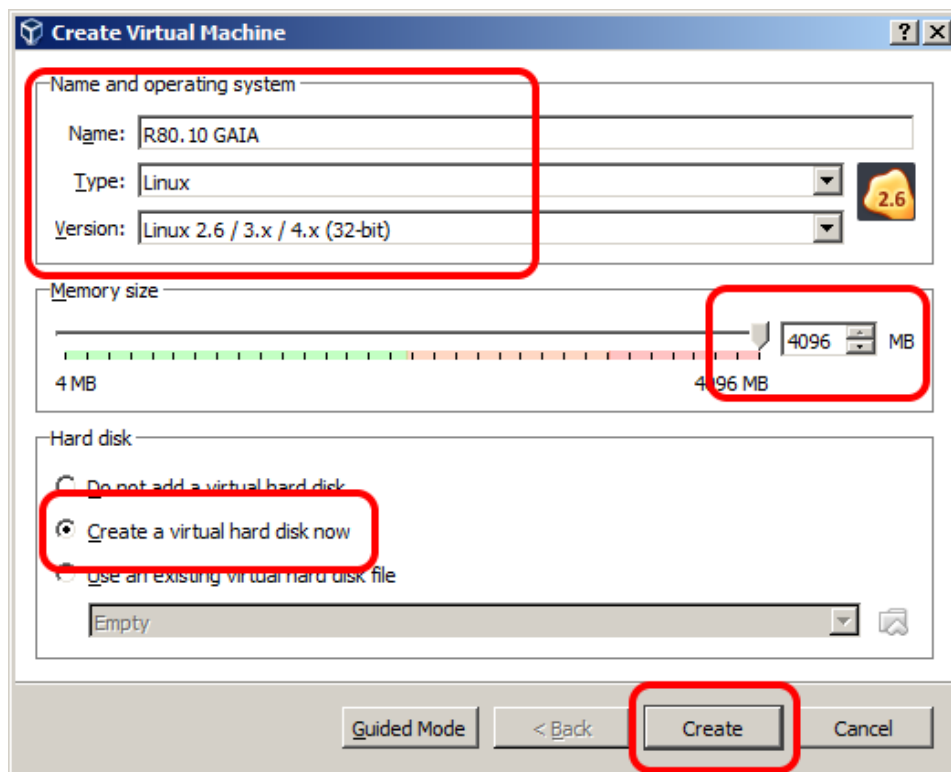


Type in a Name for your VM. Choose “Linux” for the “Type”. Choose “Linux 2.6 / 3.x / 4.x (32-bit)” for the “Version”.

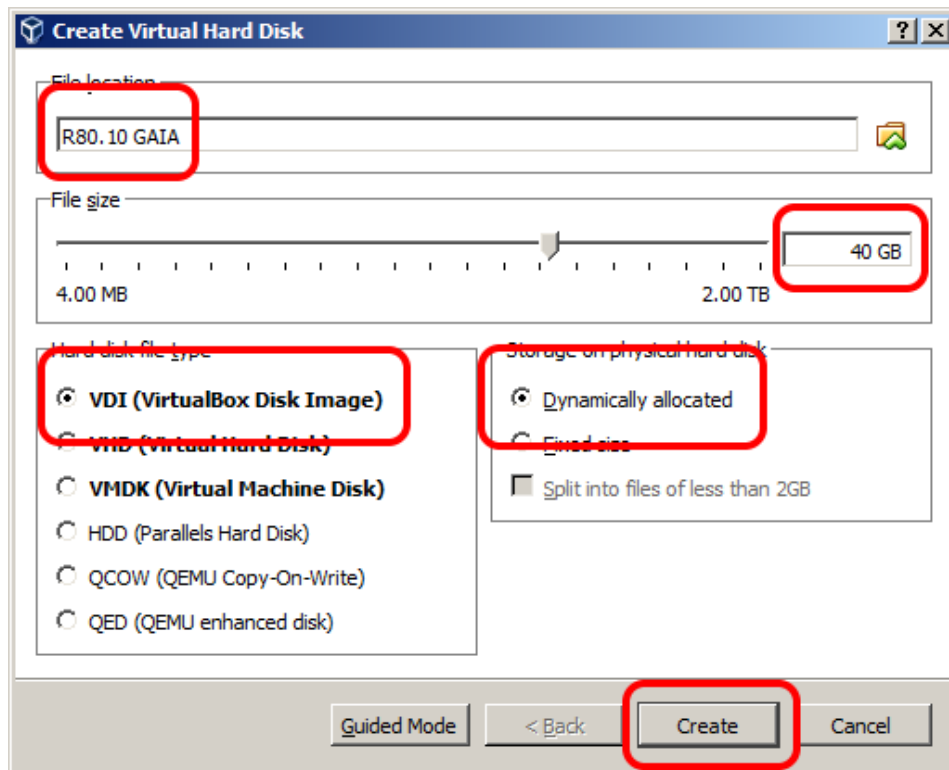
Choose 6GB of RAM. [NOTE: In the screenshot below, I was working on system with limited resources, and 4GB is sufficient to get a working GAIA installation for this basic exercise.]

Select “Create a virtual hard disk now”.

Click **CREATE**.



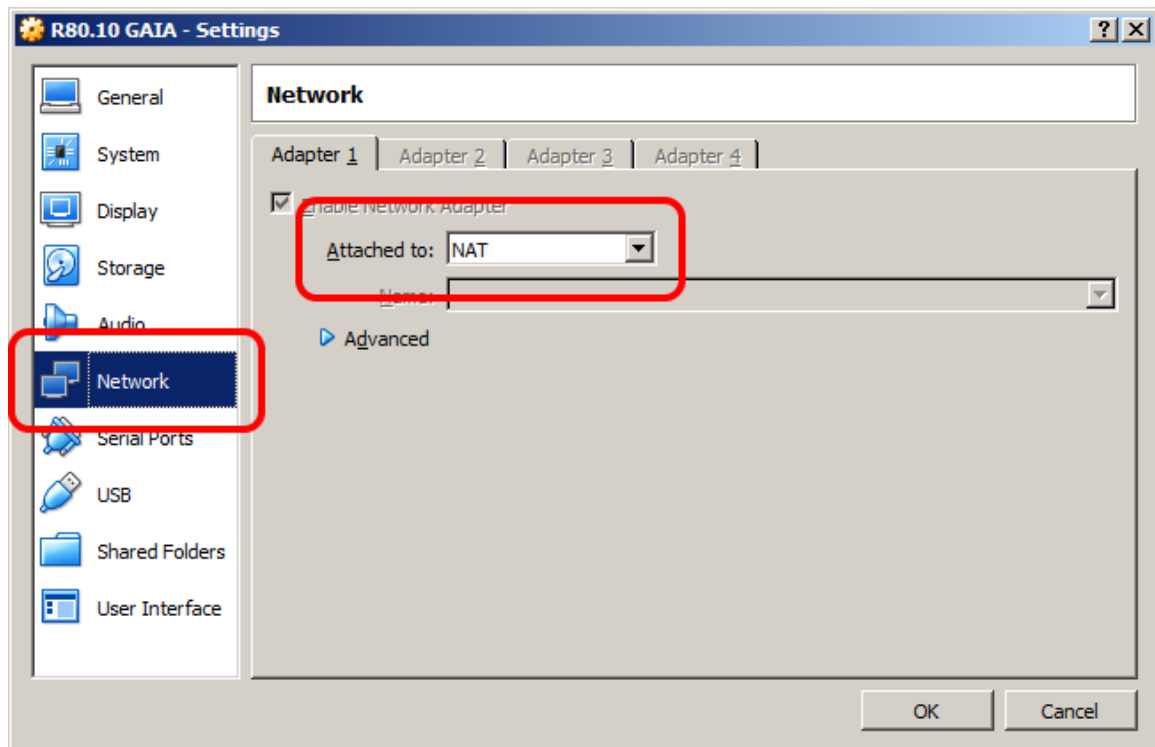
Leave the default “File location” settings. Choose 40GB (30GB minimum if you have limited resources). Leave the default settings of “VDI” and “Dynamically Allocated” and Click **CREATE**.



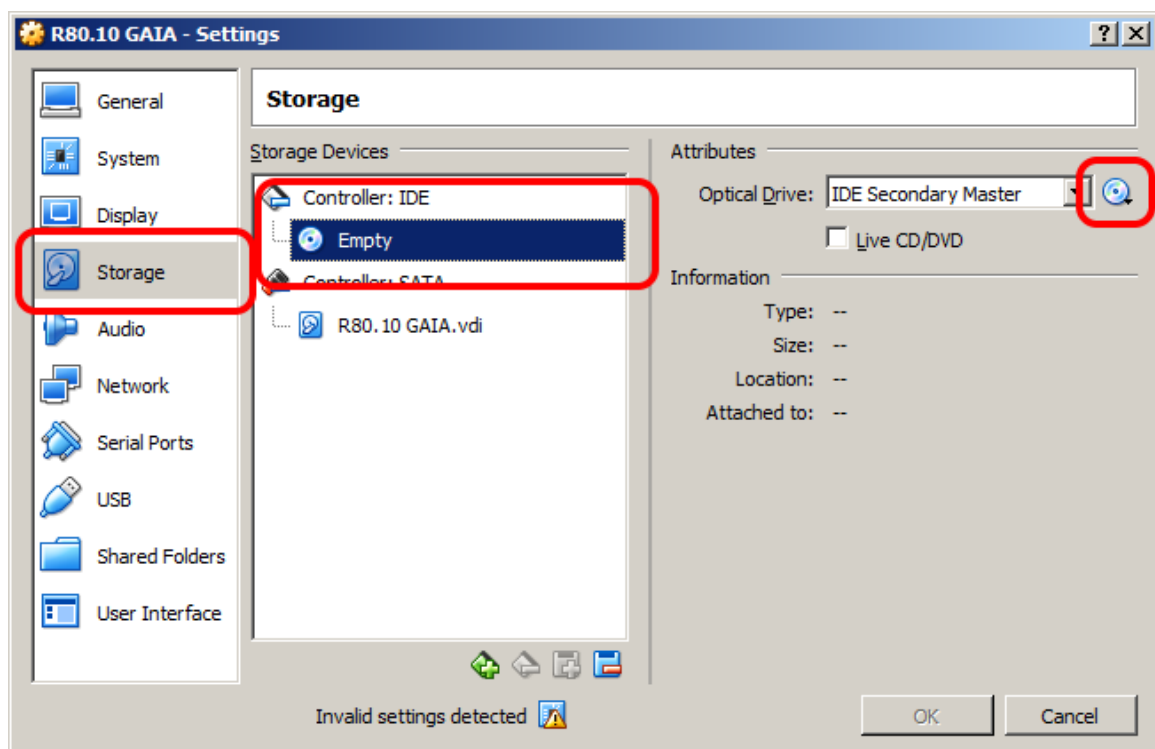
Click the **Settings** button in the main VirtualBox GUI window to modify the settings of our new VM.



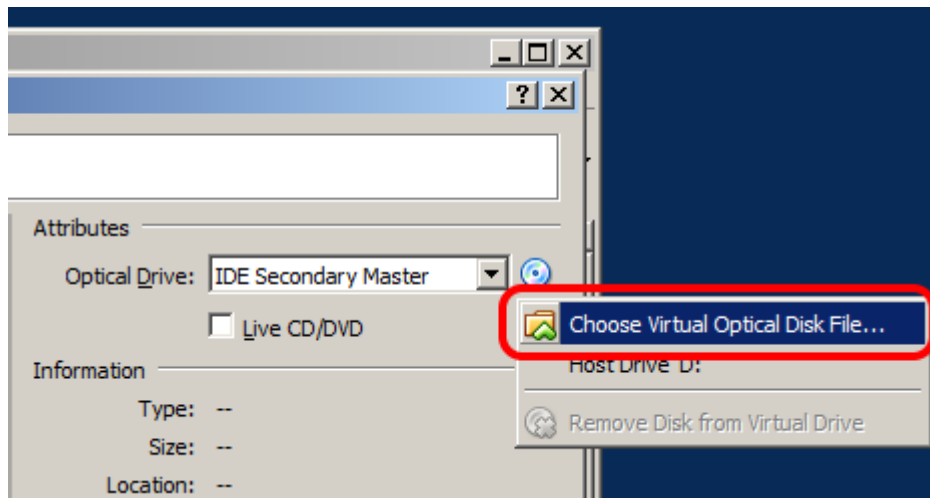
Click **Network** and verify that “NAT” is selected for “Attached to”.



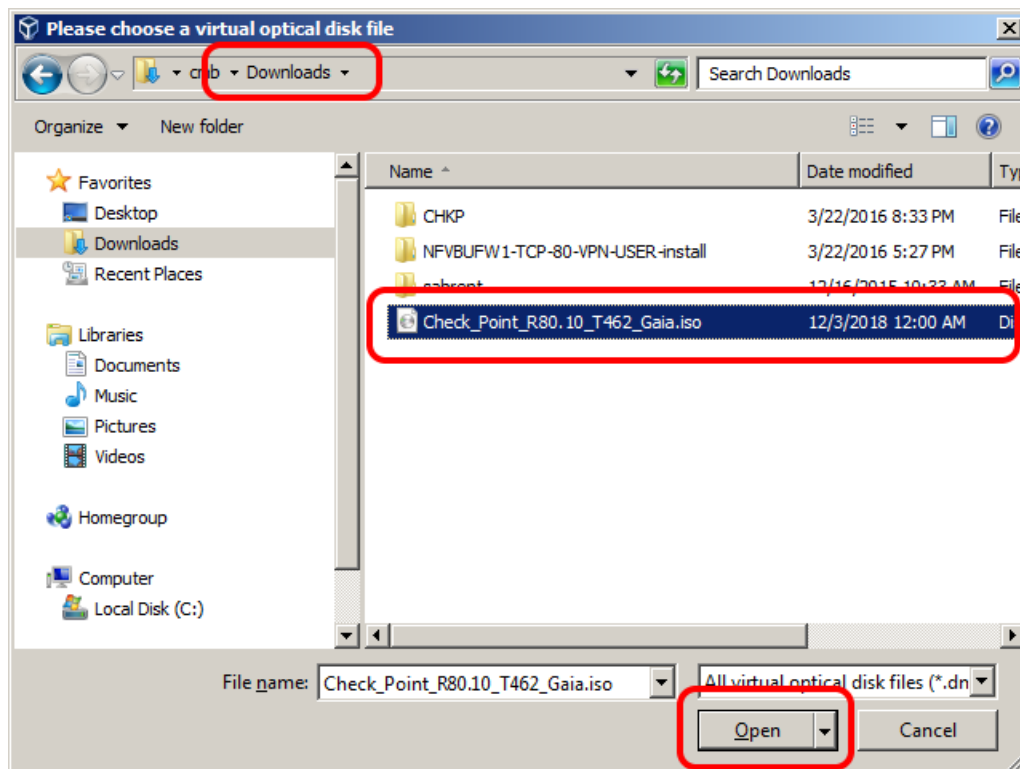
Click **Storage** and click on the “Empty” CD/DVD icon. Click the “disk icon” on the left.



Click **Choose Virtual Optical Disk File...**



Navigate to the location where you downloaded the Gaia ISO. Select the **Check_Point_R80.10_T462.ISO** file and click **OPEN**.



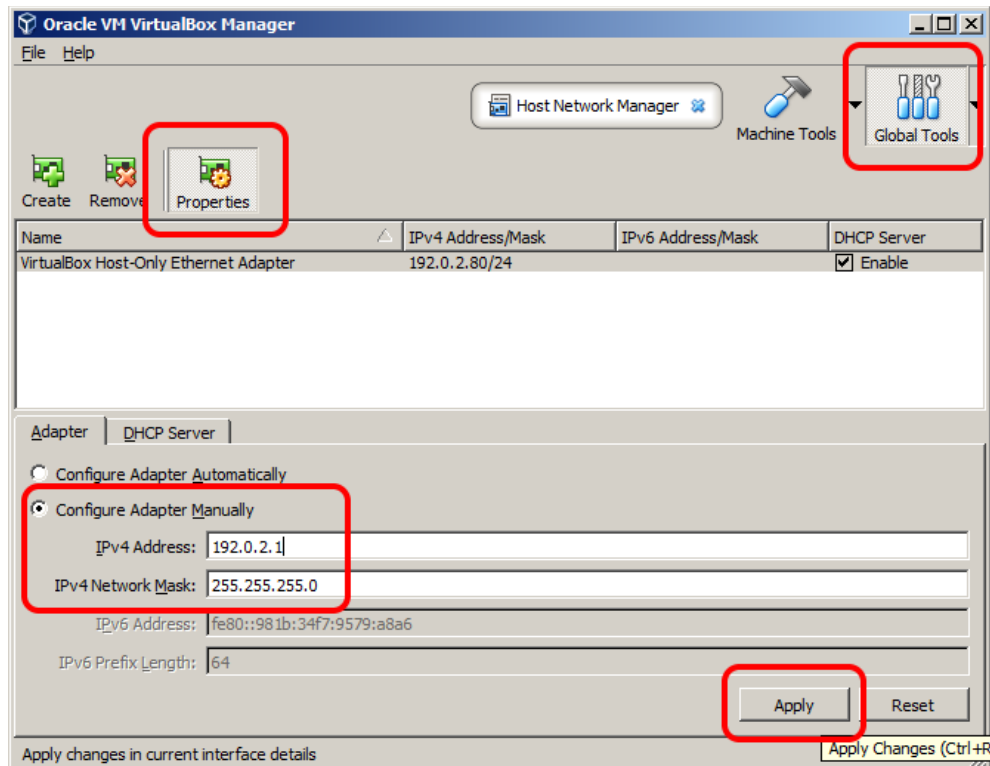
in the main VirtualBox GUI, click on the **Global Tools** button in the upper right. Click on the **Properties** button to view the global VirtualBox network configuration settings.

For this exercise, we are going to configure the following network adaptor settings:

IPv4 Address: 192.0.2.1

IPv4 Network Mask: 255.255.255.0

Click **APPLY**.



To verify that you can see the VirtualBox Host-Only network Adaptor, open the "Command Prompt" (aka cmd.exe) on your Windows computer. There are multiple ways to open this utility in Windows 7 and 10. My personal favorite is to hold down the "Windows" key (aka "Start" key) and type "R" to open the run dialog. Type "cmd.exe" and hit the **ENTER** key. You can also click the Start button and type "cmd.exe" and click on the appropriate search result.

Once the Command Prompt is running, type "ipconfig" and hit **ENTER**. Look for "Ethernet adapter VirtualBox Host-Only Network". It should match the settings entered in the previous step.


```
Administrator: Command Prompt
C:\Users\cmb>ipconfig

Windows IP Configuration

Ethernet adapter Local Area Connection 2:

    Media State . . . . . : Media disconnected
    Connection-specific DNS Suffix . :

Ethernet adapter Local Area Connection* 12:

    Media State . . . . . : Media disconnected
    Connection-specific DNS Suffix . :

Wireless LAN adapter Wireless Network Connection 2:

    Media State . . . . . : Media disconnected
    Connection-specific DNS Suffix . : attlocal.net

Ethernet adapter Local Area Connection* 11:

    Media State . . . . . : Media disconnected
    Connection-specific DNS Suffix . :

Ethernet adapter Local Area Connection:

    Connection-specific DNS Suffix . :
    IPv4 Address. . . . . : 10.1.1.96
    Subnet Mask . . . . . : 255.255.255.0
    Default Gateway . . . . . : 10.1.1.254

Ethernet adapter VirtualBox Host-Only Network:

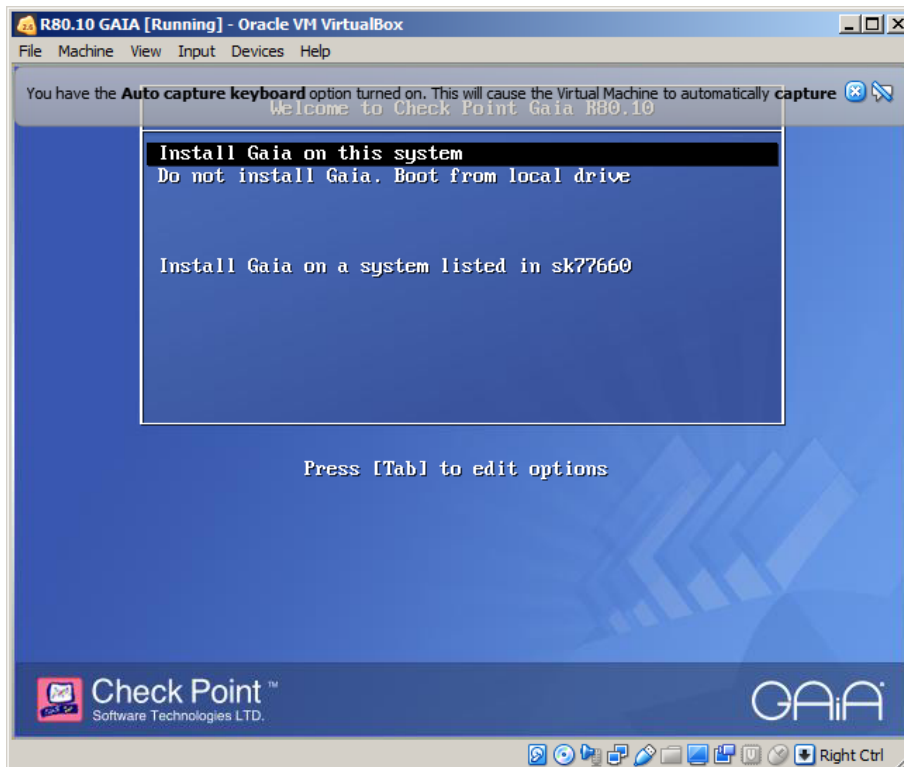
    Connection-specific DNS Suffix . :
    Link-local IPv6 Address . . . . . : fe80::981b:34f7:9579:a8a6%26
    IPv4 Address. . . . . : 192.0.2.1
    Subnet Mask . . . . . : 255.255.255.0
    Default Gateway . . . . . :

Tunnel adapter isatap.{D761DA01-2B37-467B-A132-20050D06EE33}:

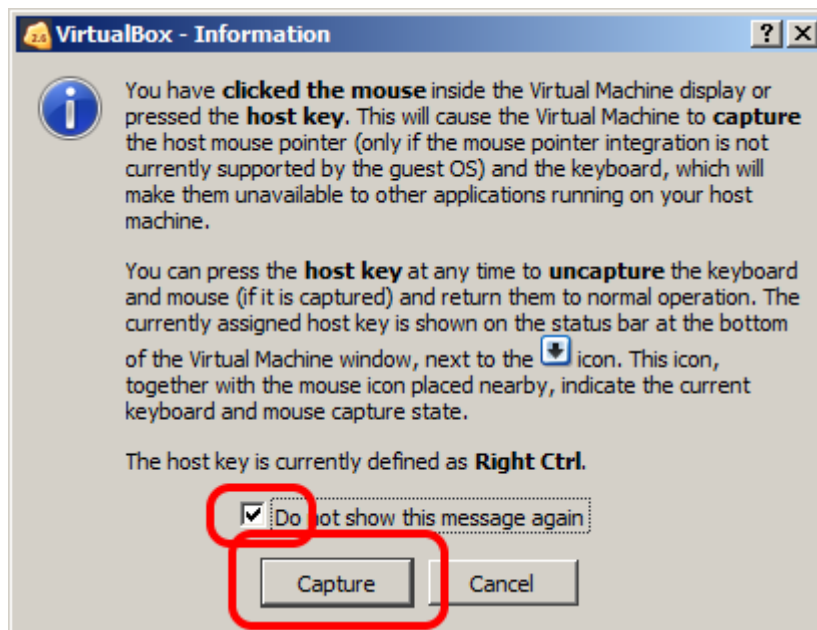
    Media State . . . . . : Media disconnected
    Connection-specific DNS Suffix . :
```

Type “exit” to quit the **Command Prompt**.

From the main VirtualBox GUI, select the new GAIA VM and click the **Start** button. The R80.10 GAIA VM window will appear. Point your mouse cursor into the window and left-click the mouse to “capture” the Keyboard & Mouse controls (this means any typing you do will be done inside the VM).



You will see a pop-up with an explanation of mouse/keyboard capture and release.

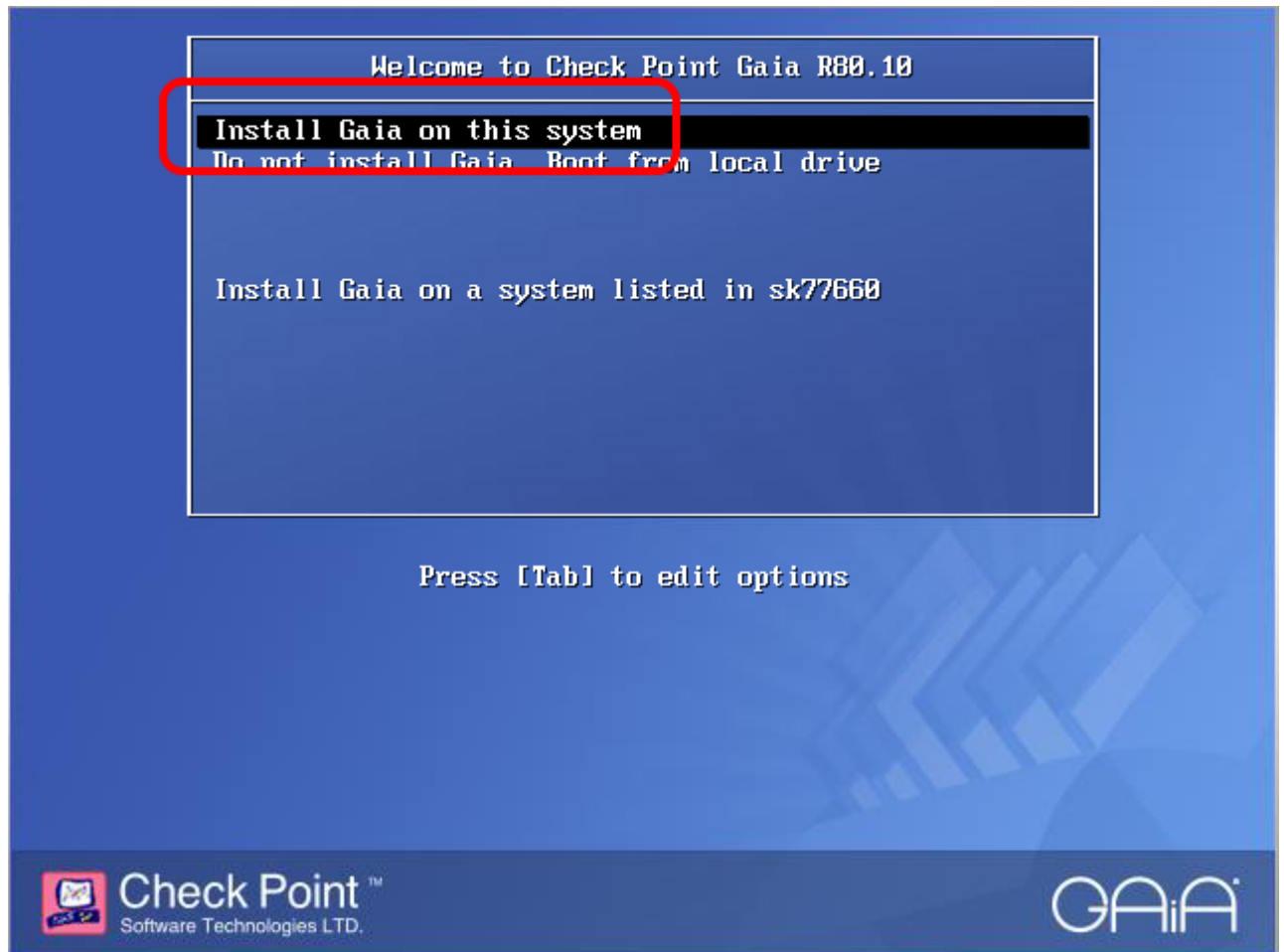


You are now ready to move on to the **GAIA Installation** section...

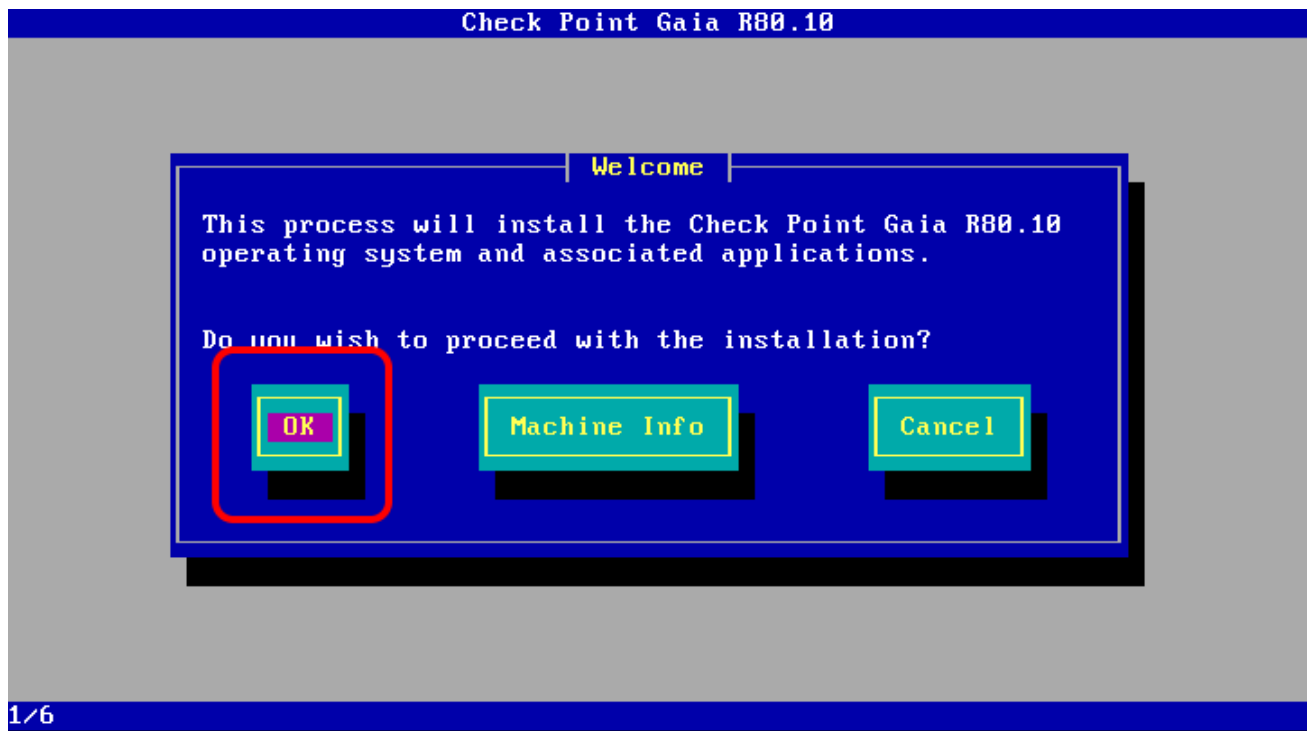
GAIA Installation

Note: During installation, you must use your ARROW KEYS & the TAB button to navigate, and the ENTER key to “click”. Your mouse will not work during installation.

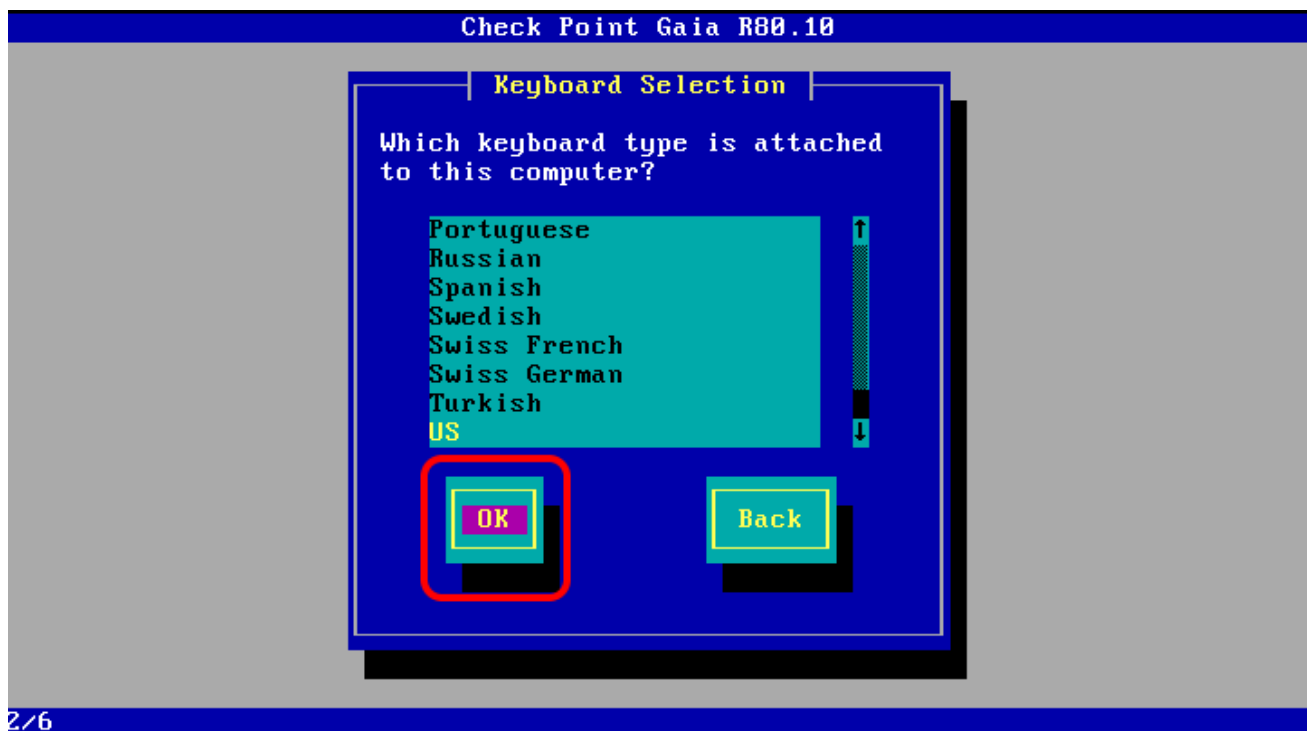
Power on the Virtual Machine, wait for the ISO to boot. Use your UP ARROW key to highlight “INSTALL GAIA ON THIS SYSTEM”. Press the **ENTER** key.



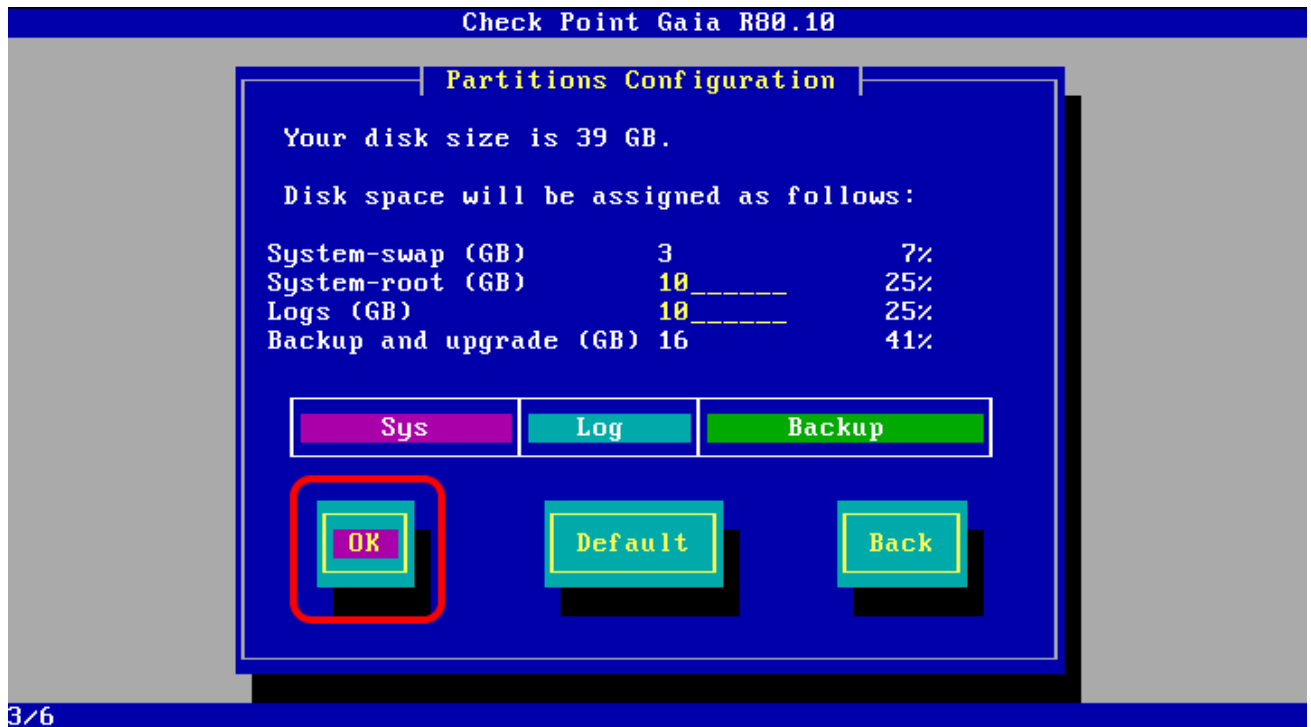
Use the **ENTER** key to select **OK**



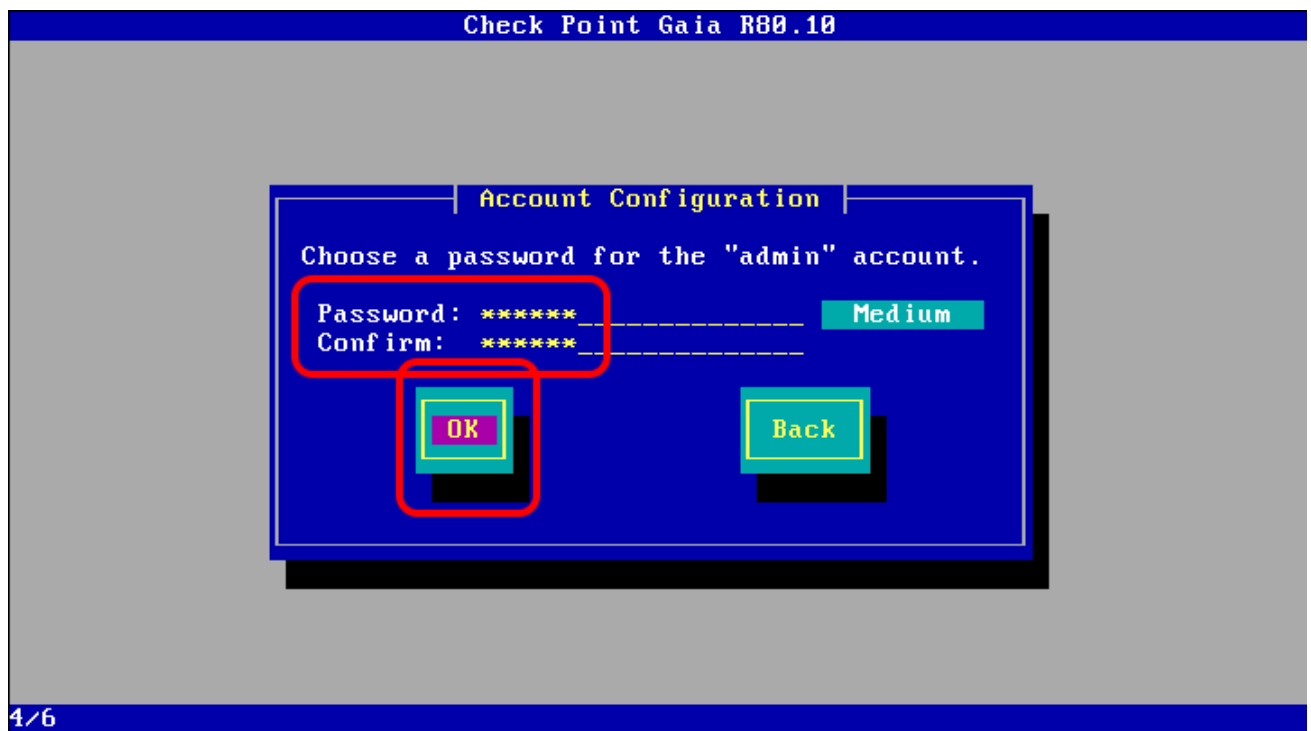
Select your Keyboard Layout (Default is US). Press **TAB** to highlight **OK** and press **ENTER**.



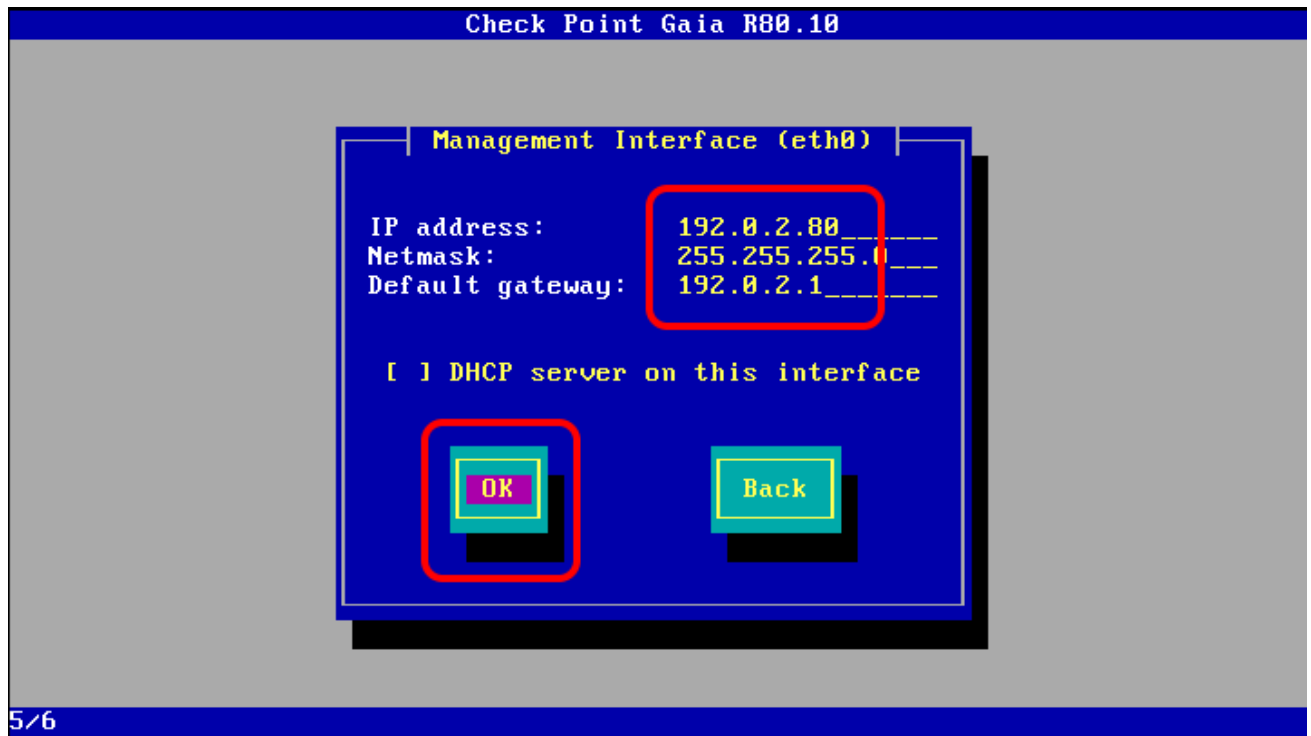
Leave the default options and navigate to **OK**. Press **ENTER** to continue.



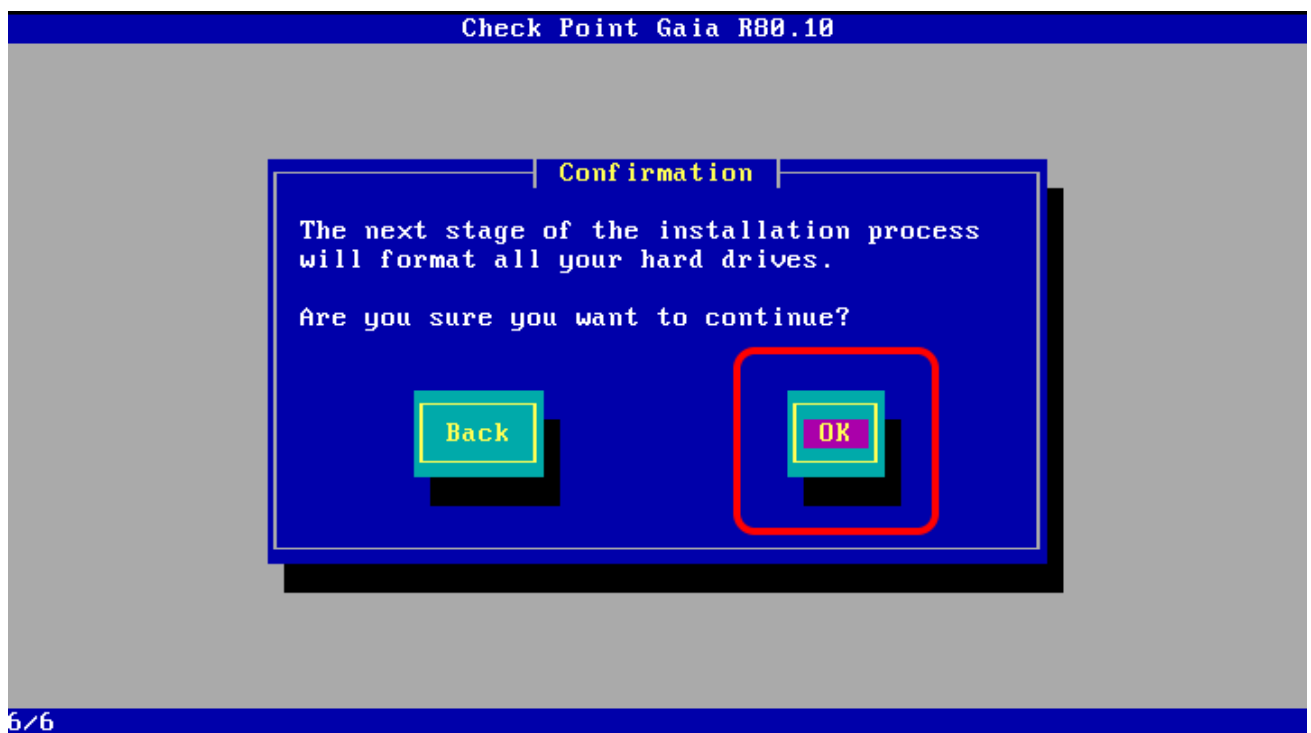
Enter a password, hit **TAB**, and enter the password a second time. Hit **TAB** to select **OK** and hit **ENTER**.



Type in the following settings for network connection eth0 settings. Hit **TAB** to move between fields. Hit **TAB** to highlight **OK**. Hit **ENTER** to continue.



Hit **TAB** to highlight **OK**. Hit **ENTER** to continue.



You will see the status screens as installation progresses...

Preparing Installation

Preparing installation activities...

68%



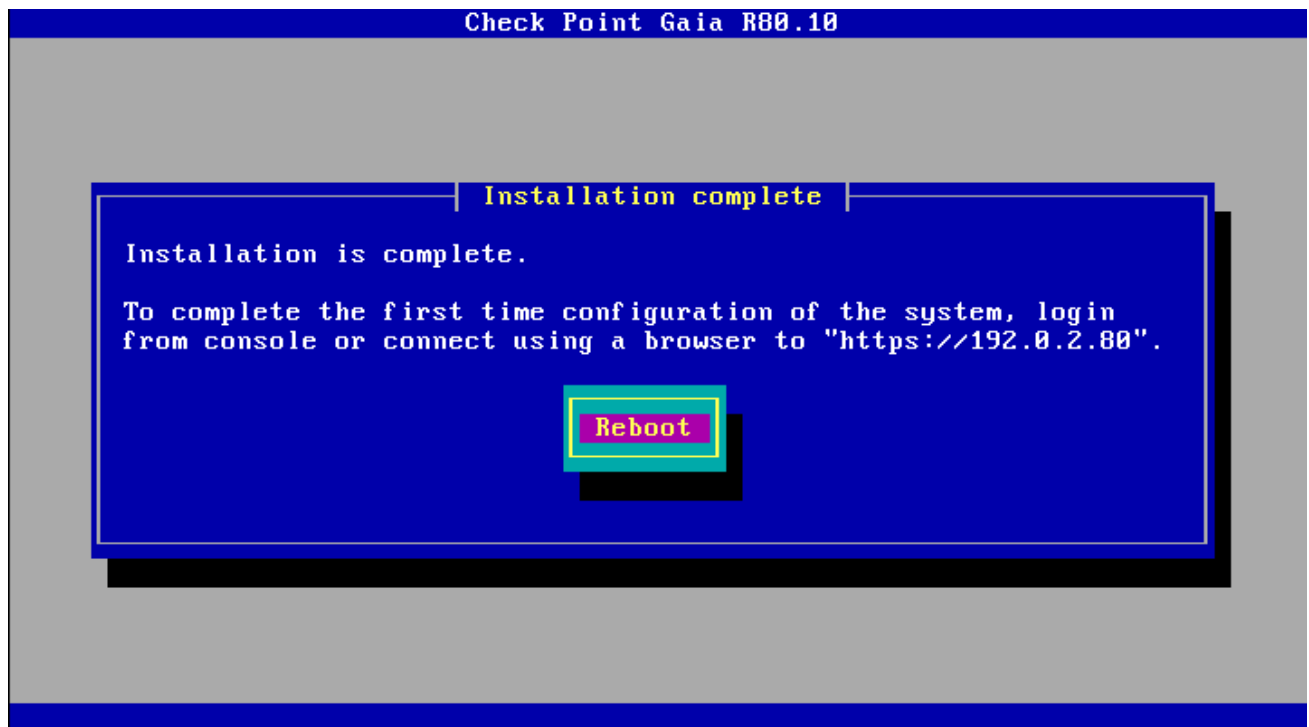
Copying Files

Check Point Software Blades...

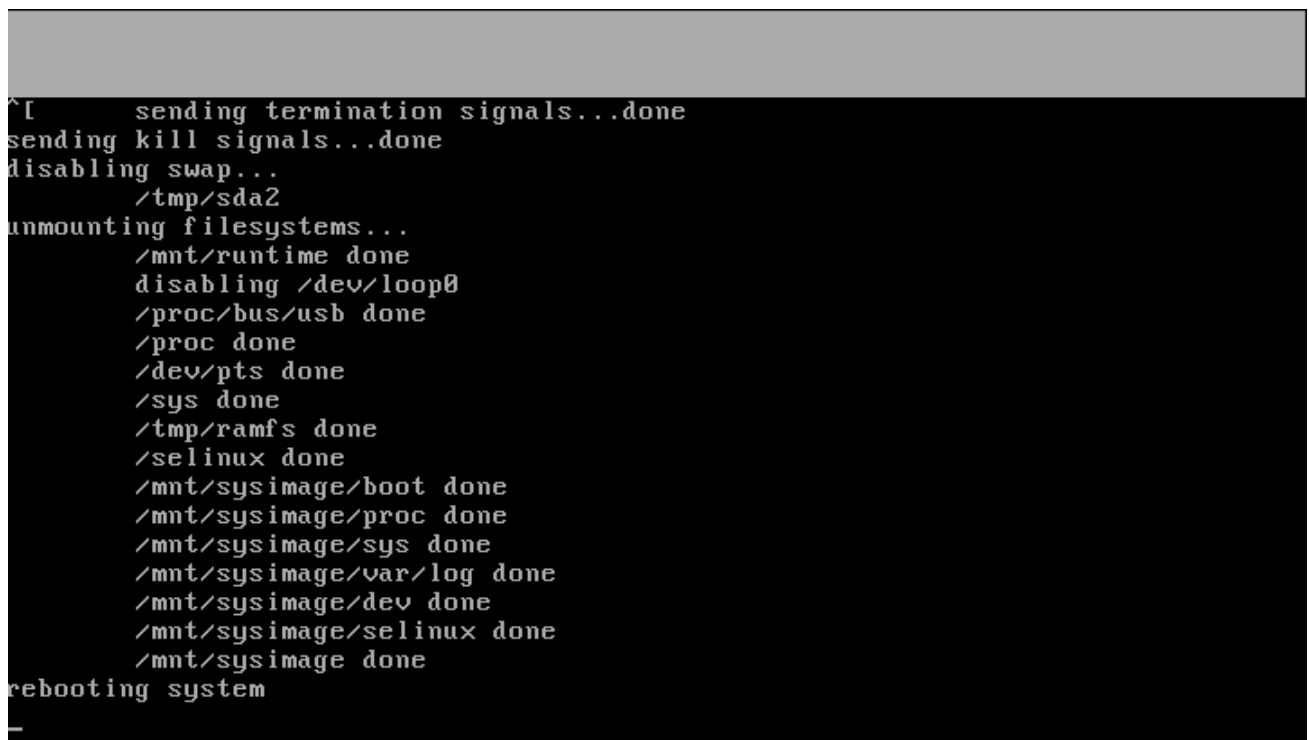
31%



Hit **ENTER** to reboot the system.



You will see some messages scroll by as Gaia shuts down...



You will see the progress bar as Gaia boots up...


```
Starting the system...
```



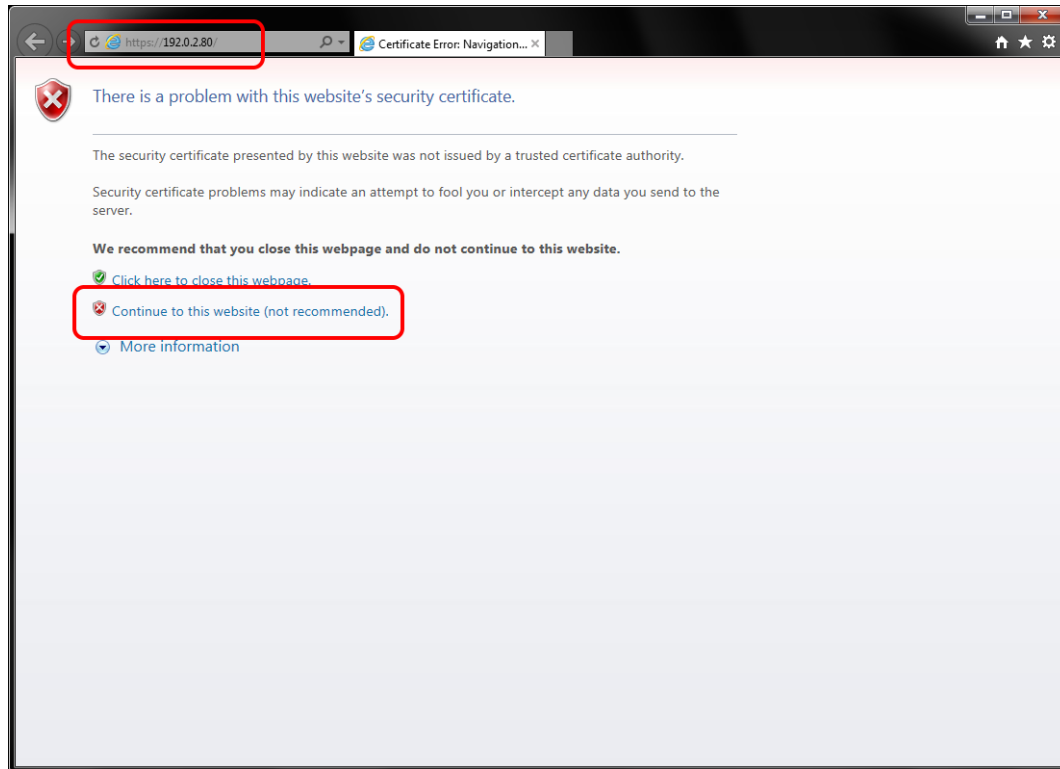
Hit **TAB** to highlight **OK**. Hit **ENTER** to continue.

```
This system is for authorized use only.  
login: _
```

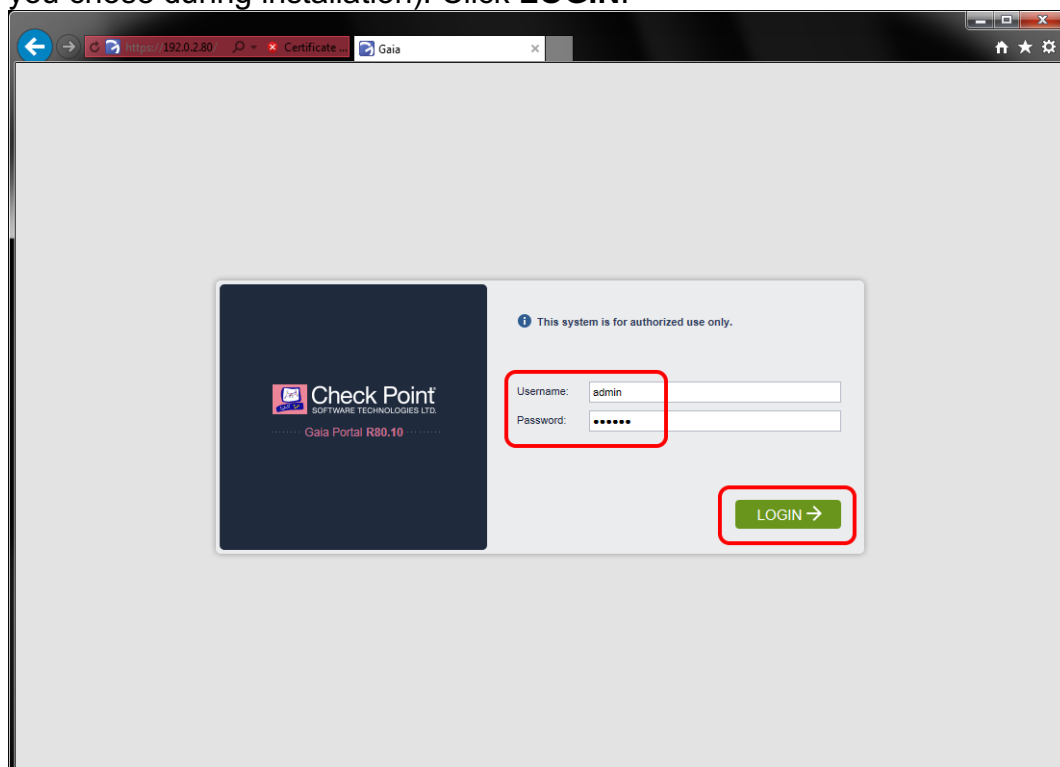
You are now ready to move on to the **First Time Wizard** section...

GAIA First Time Wizard

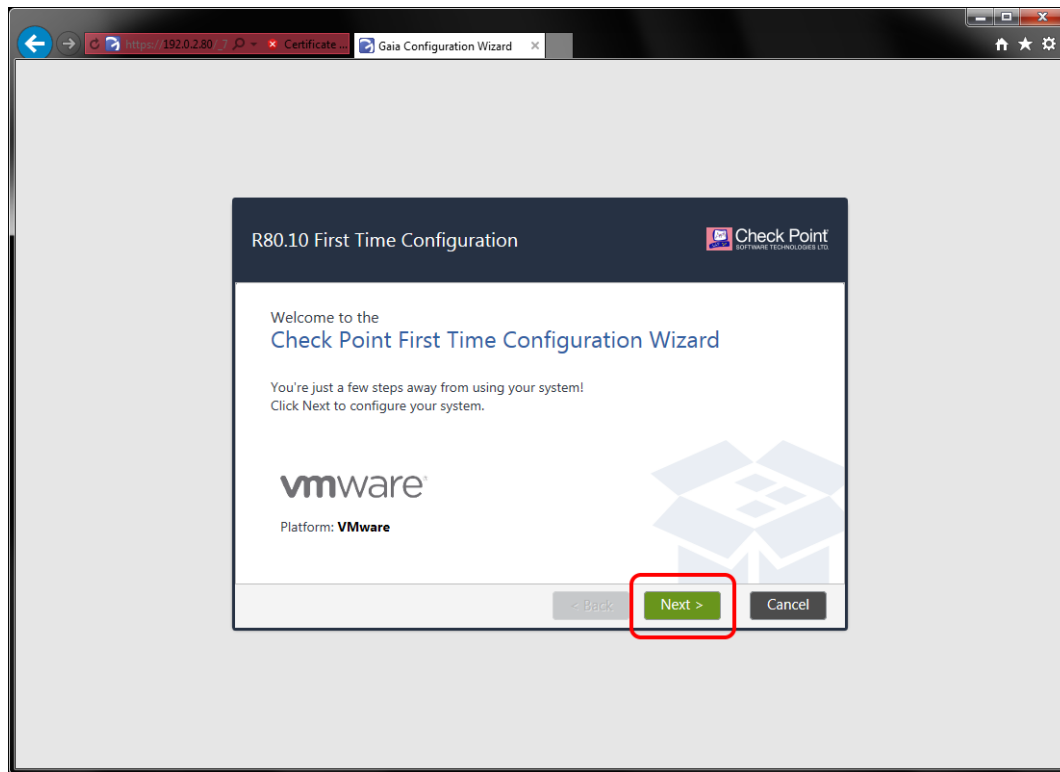
Point your web browser to <https://192.0.2.80>. You will receive a warning for the self-signed certificate used for the SSL connection. Click on “Continue to the...”



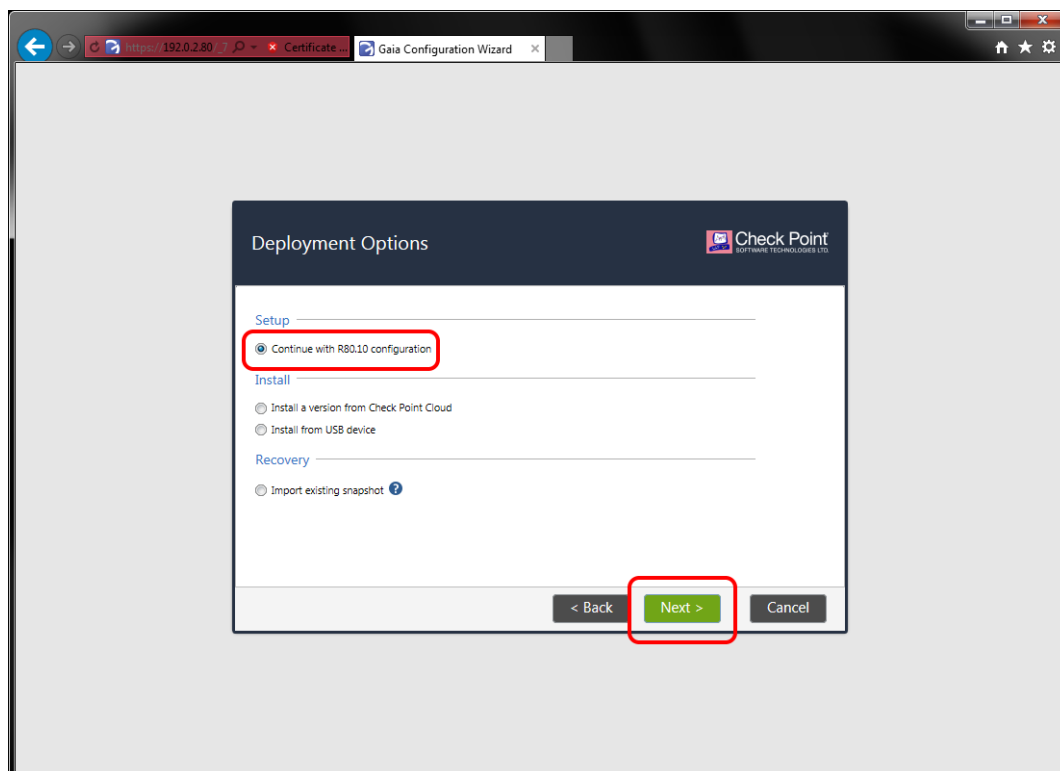
Enter “admin” for the username, and “vpn123” for the password (or the password you chose during installation). Click **LOGIN**.



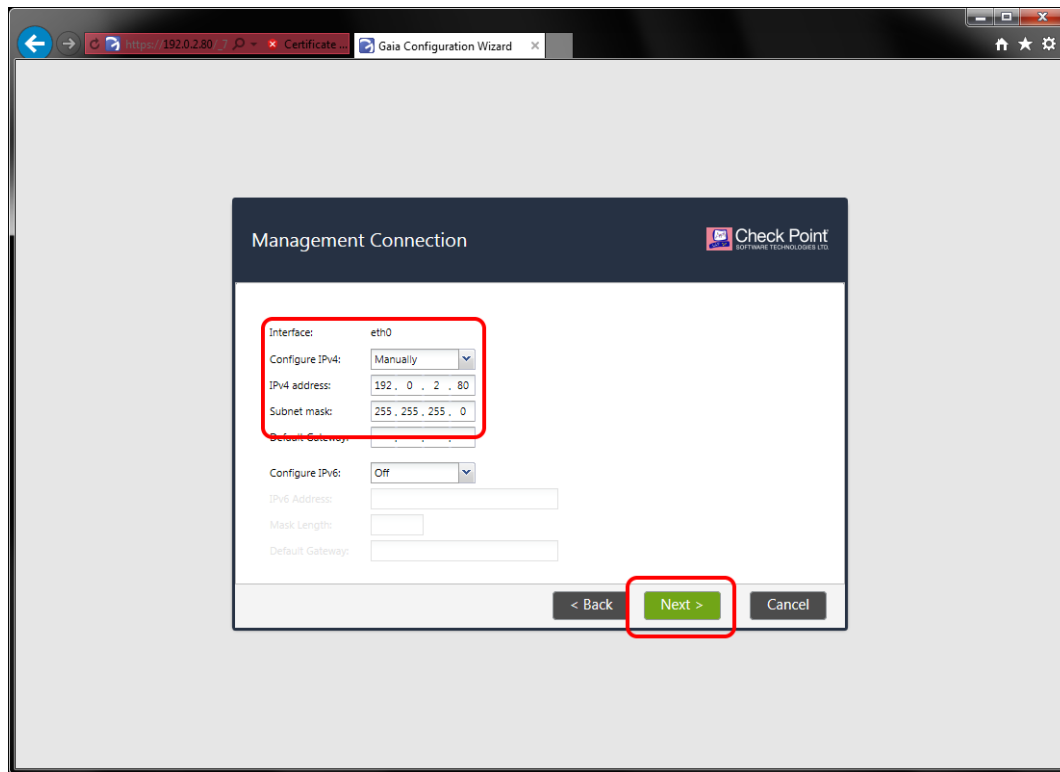
If this is the first time you have connected to the WebUI (aka Gaia Portal), the First Time Wizard will begin. Click **Next** to continue.



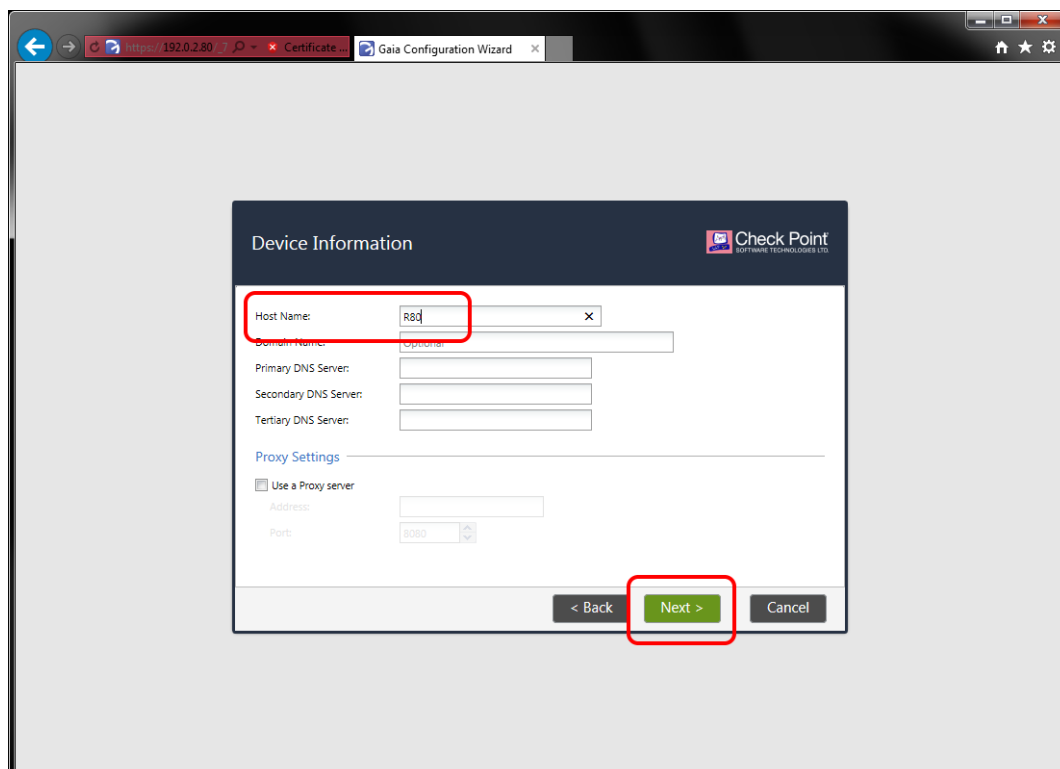
Select "Continue with R80.10 configuration" and click **Next**.



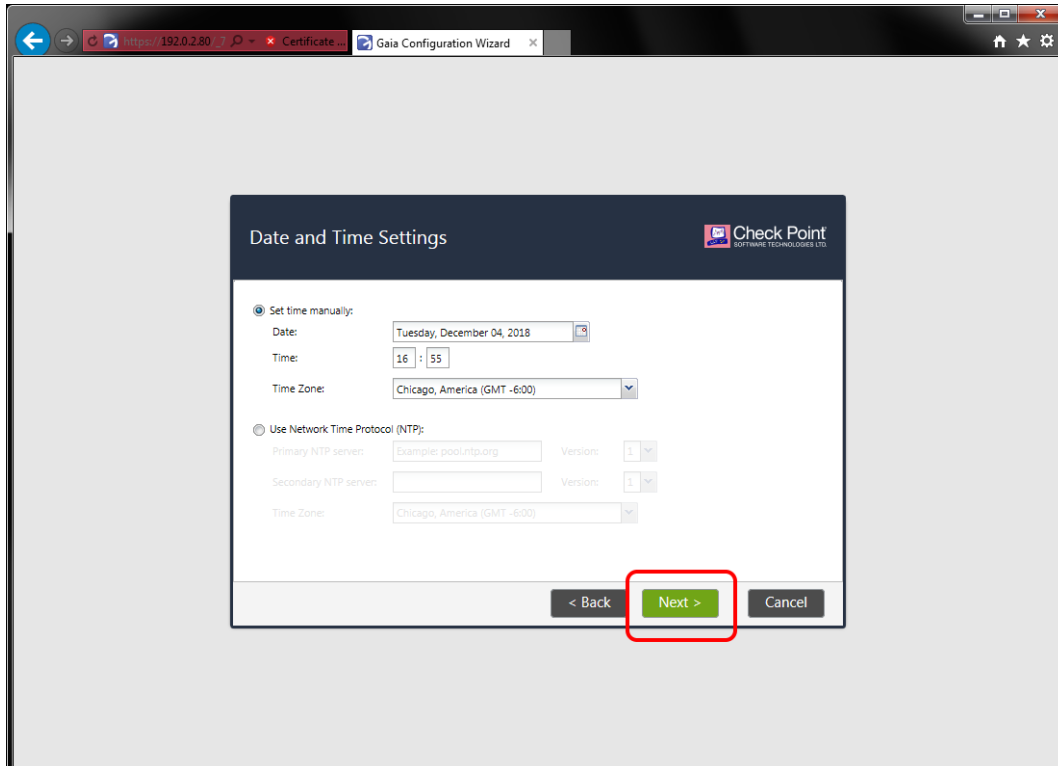
Leave the default IP address information and click **Next**.



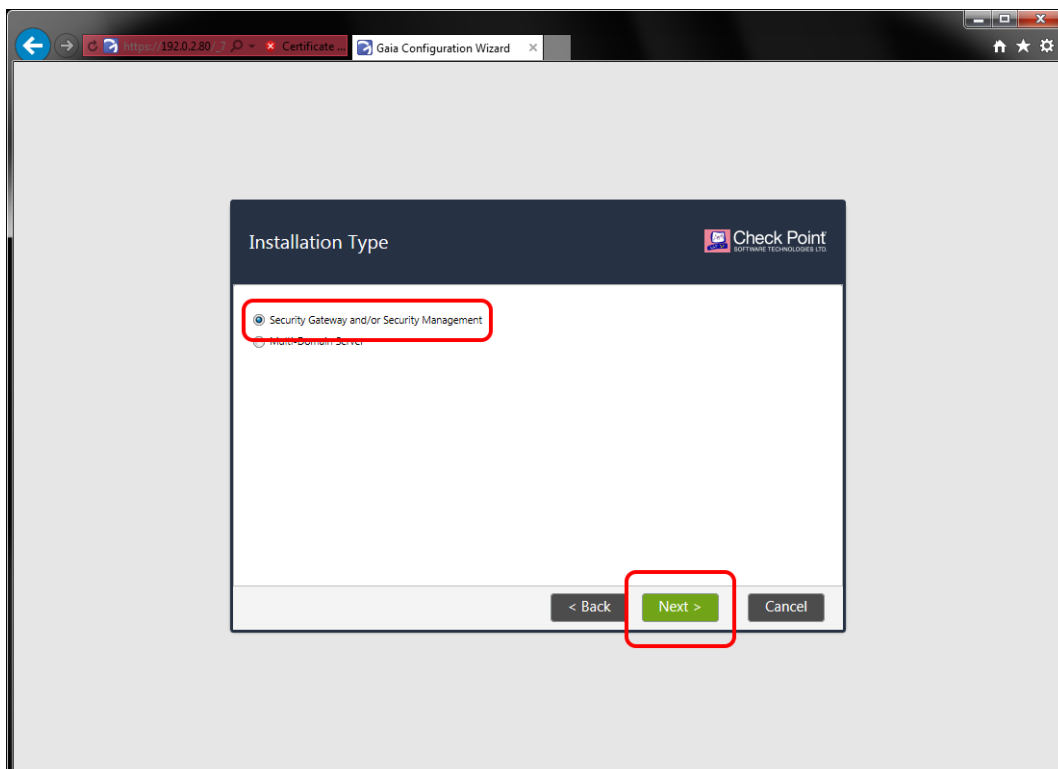
Type in "R80" for the Hostname and click **Next**.



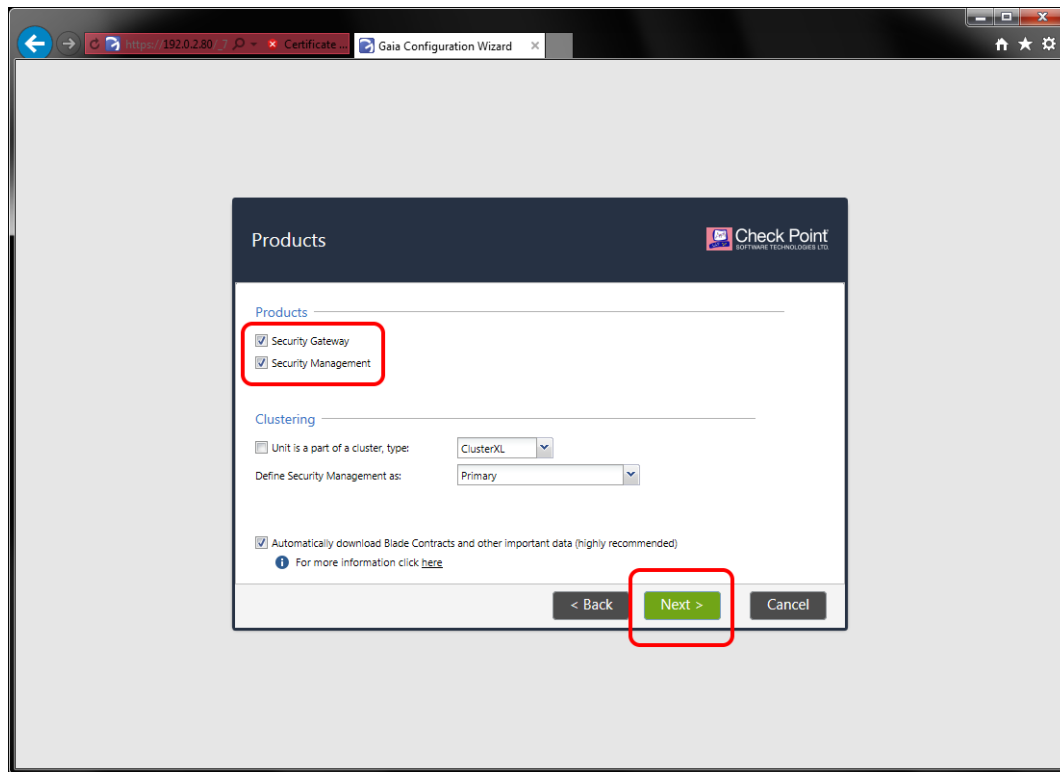
Leave the default Time and Date settings and click **Next**.



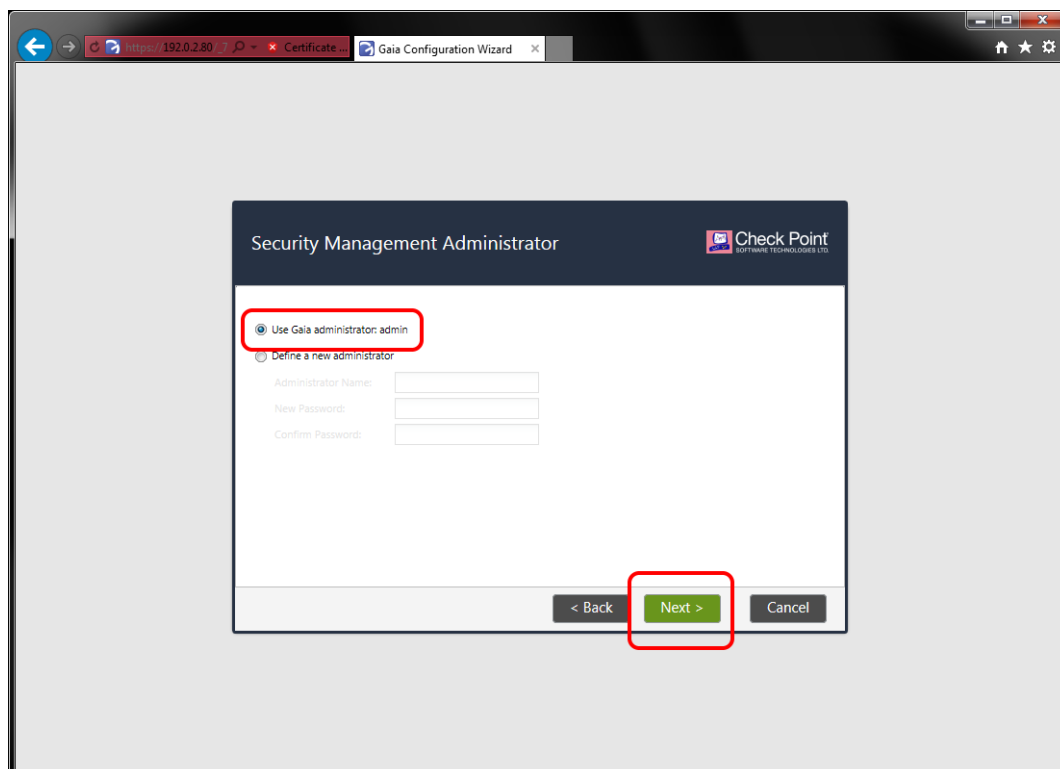
Make sure “Security Gateway and/or Security Management” is selected and click **Next**.



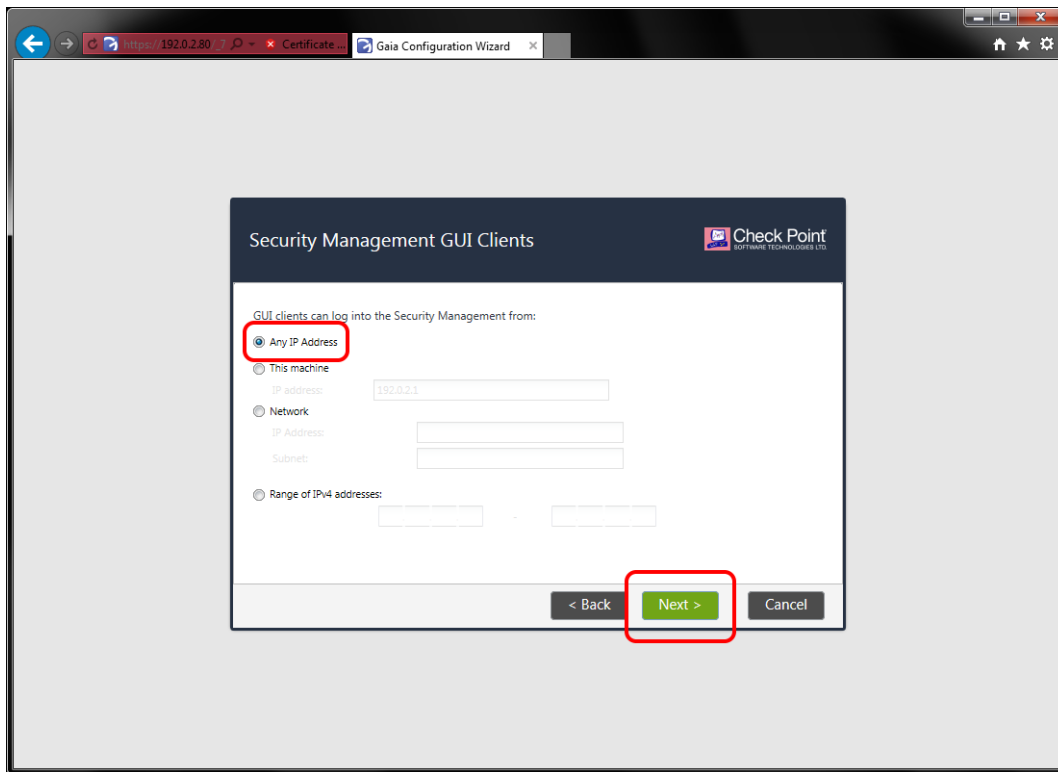
Make sure both “Security Gateway” and “Security Management” are selected and click **Next**.



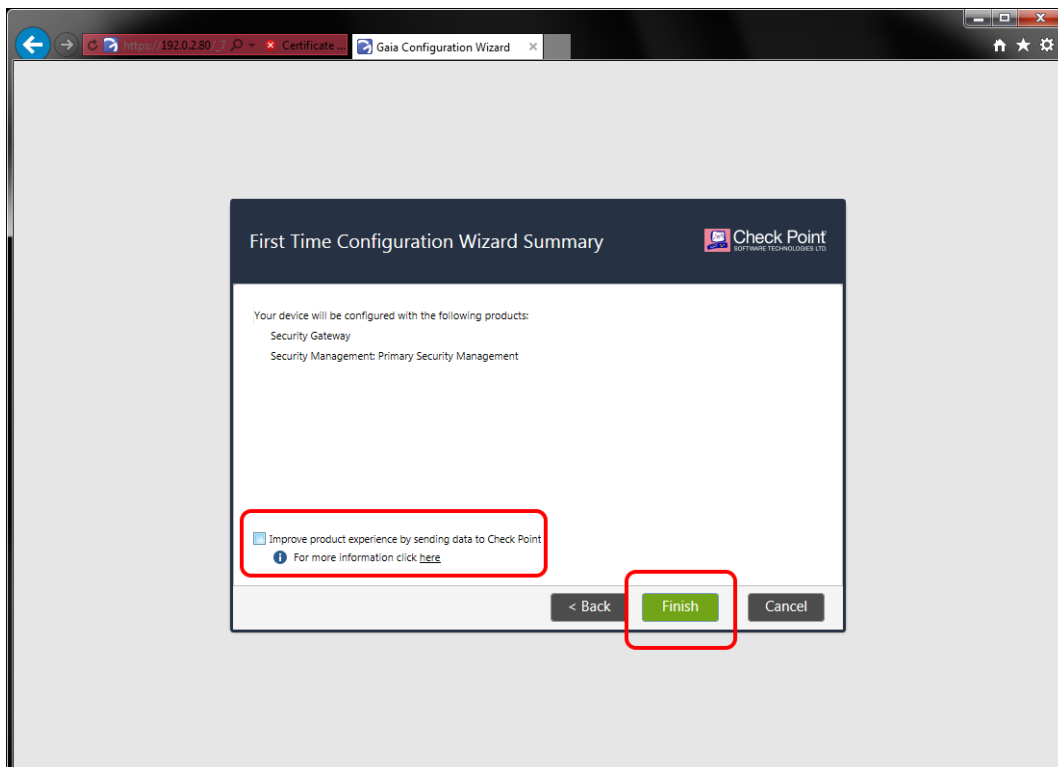
Leave “Use Gaia administrator” and click **Next**.



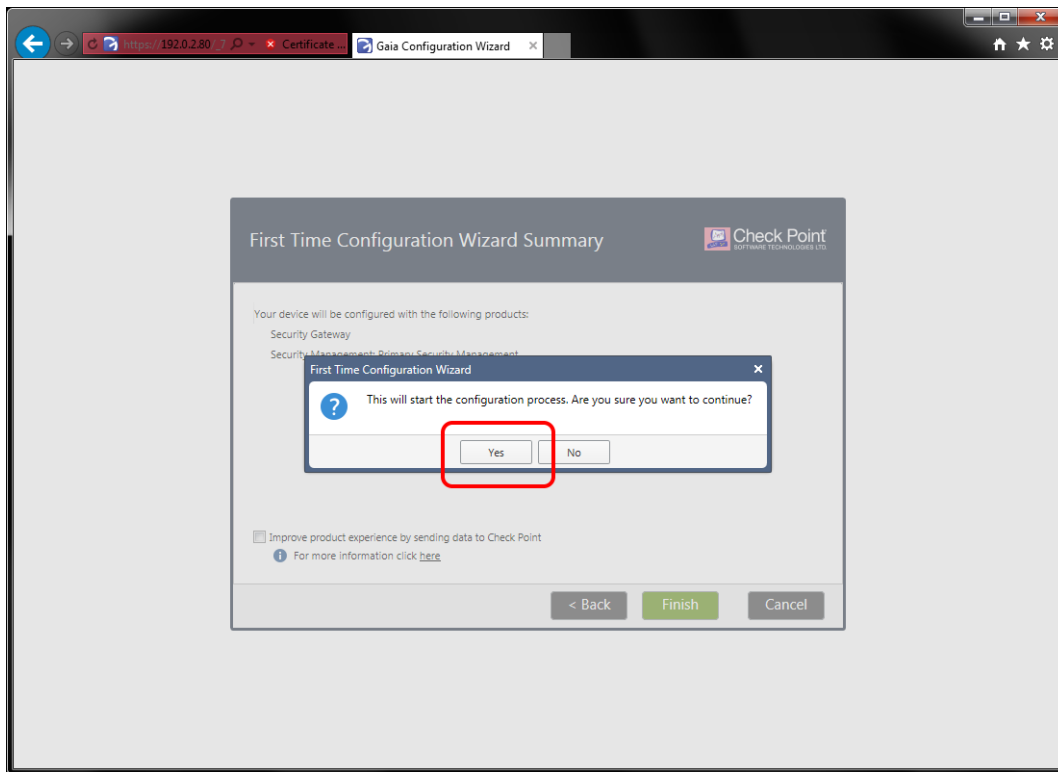
Choose “Any IP Address” and click **Next**.



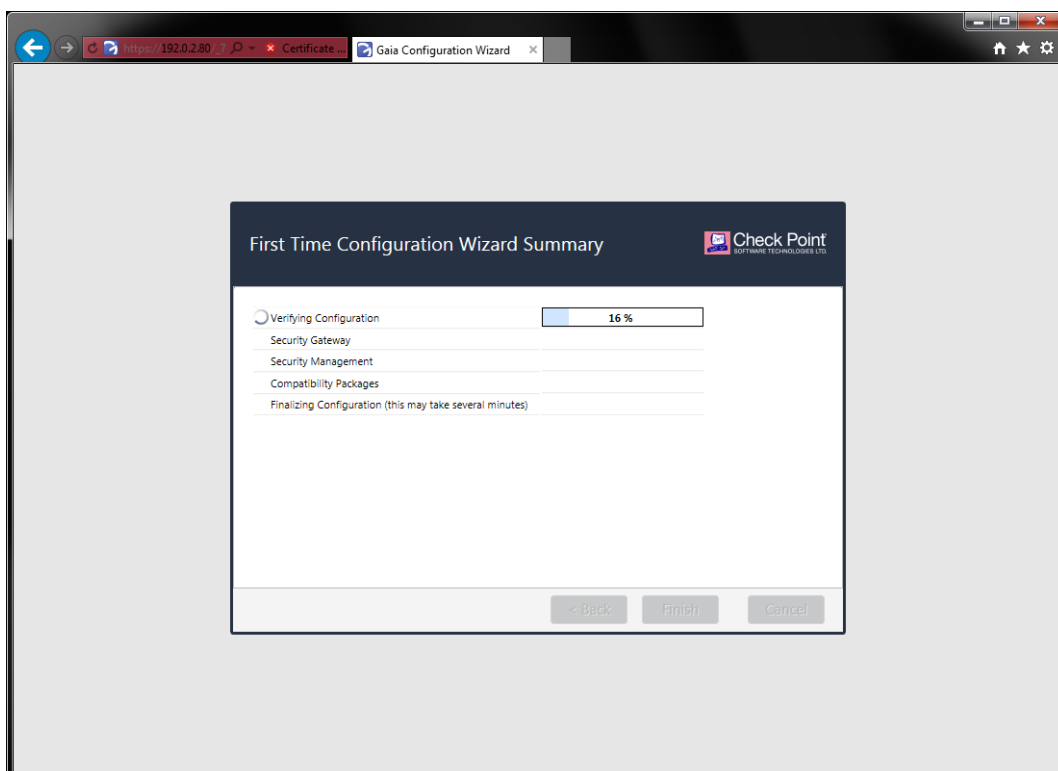
Un-check “Improve product experience by sending...” and click **Next**.



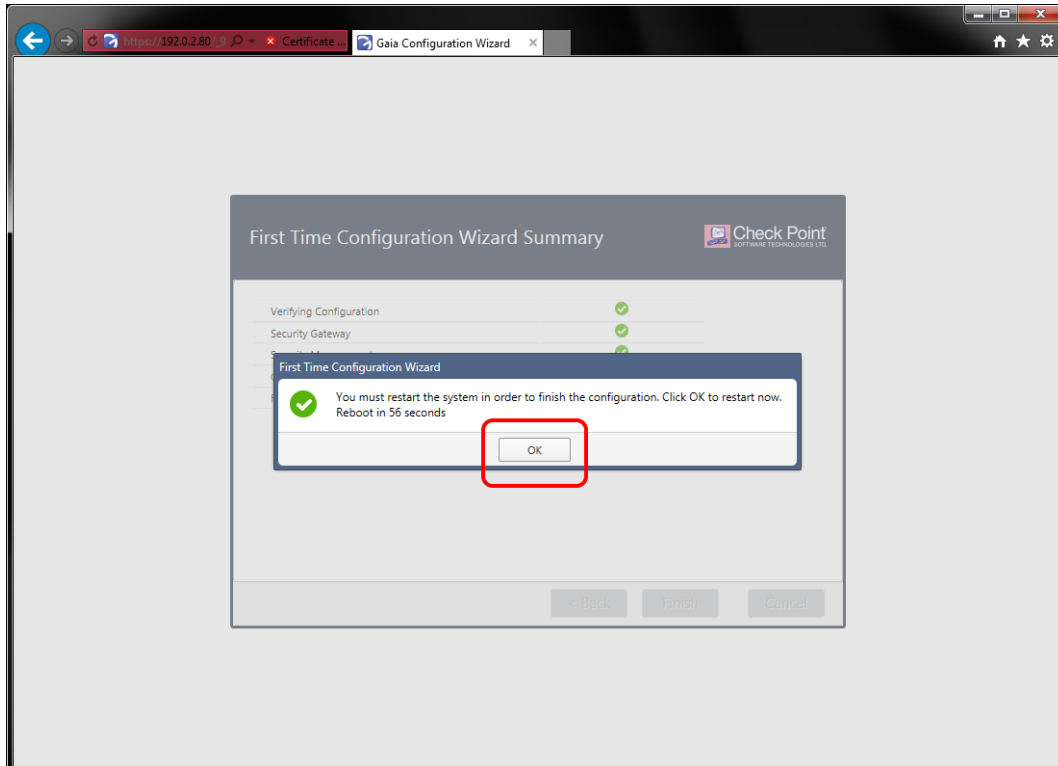
Click **Yes** to confirm configuration settings



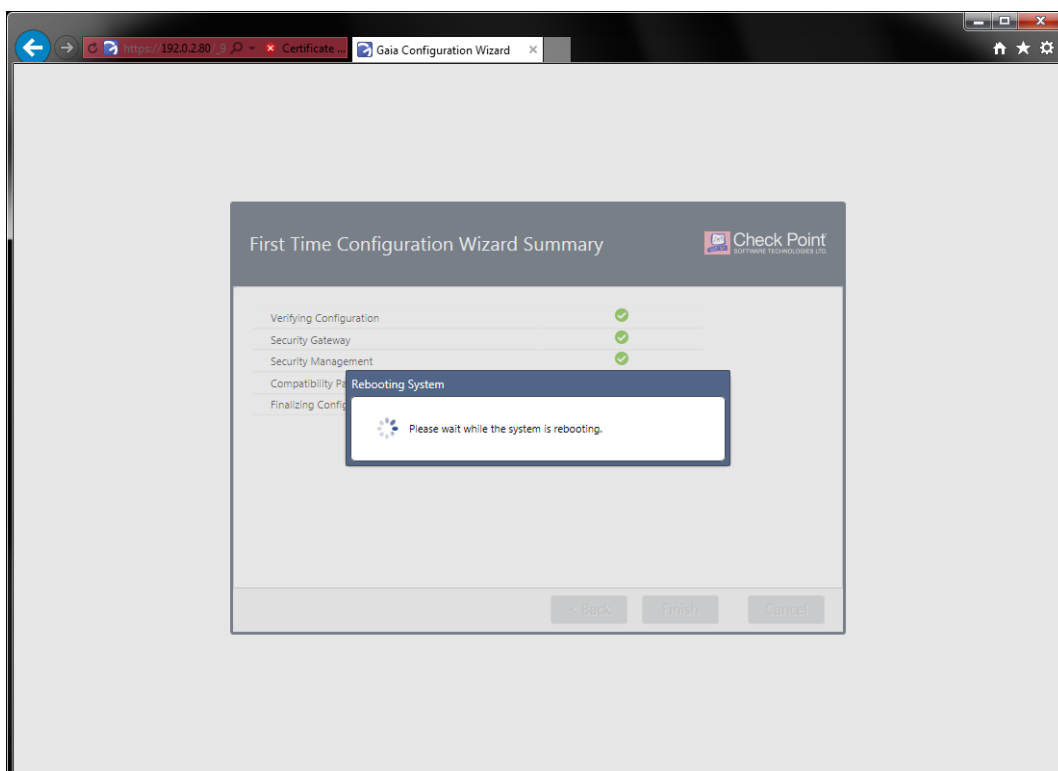
You will see the status of the different steps progress...



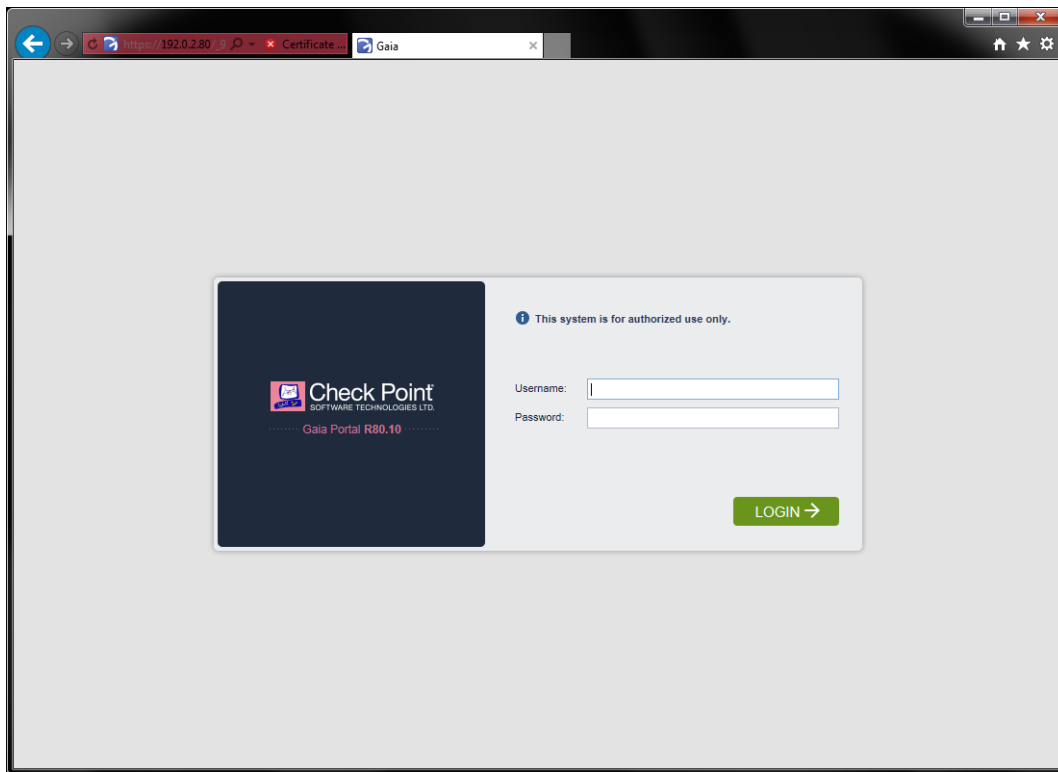
You will see a pop notification indicating that the wizard has completed. Click **OK** to reboot the system.



Status of the reboot appears...



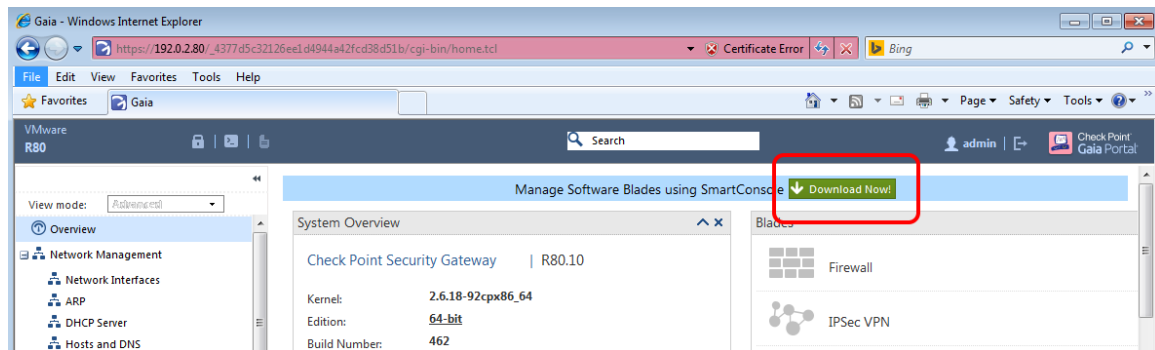
When you see the login page load, your Check Point has rebooted.



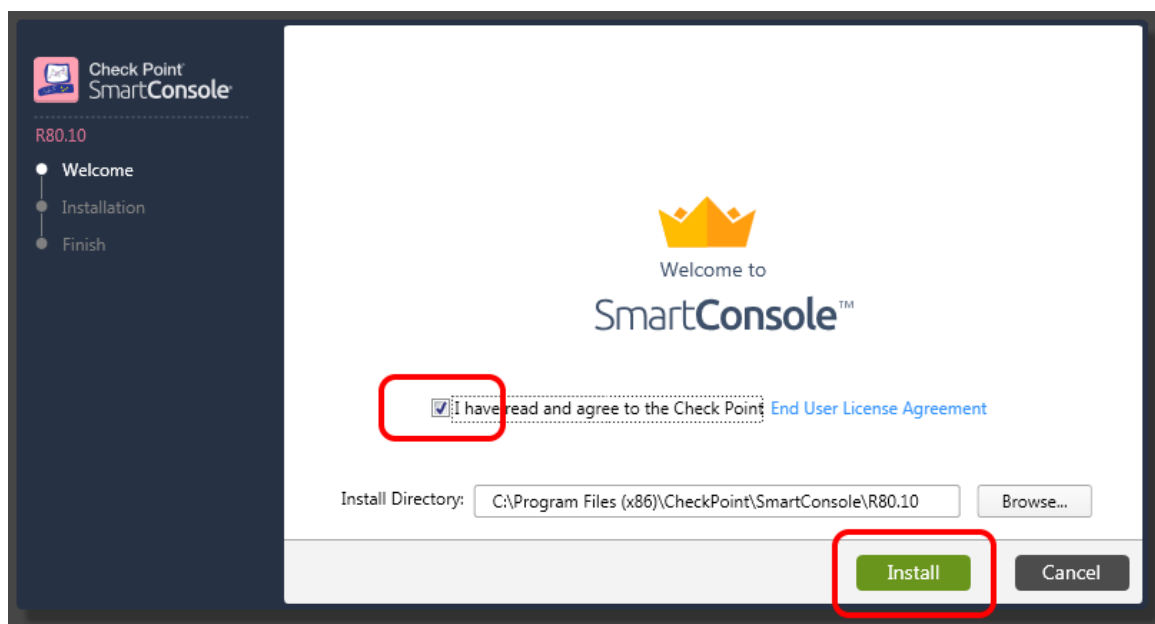
You can log into the WebUI again to look at the various configuration options. Remember, the settings are for the operating system only. The Security Policy configuration is only configured through SmartConsole.

R80.10 SmartConsole Installation

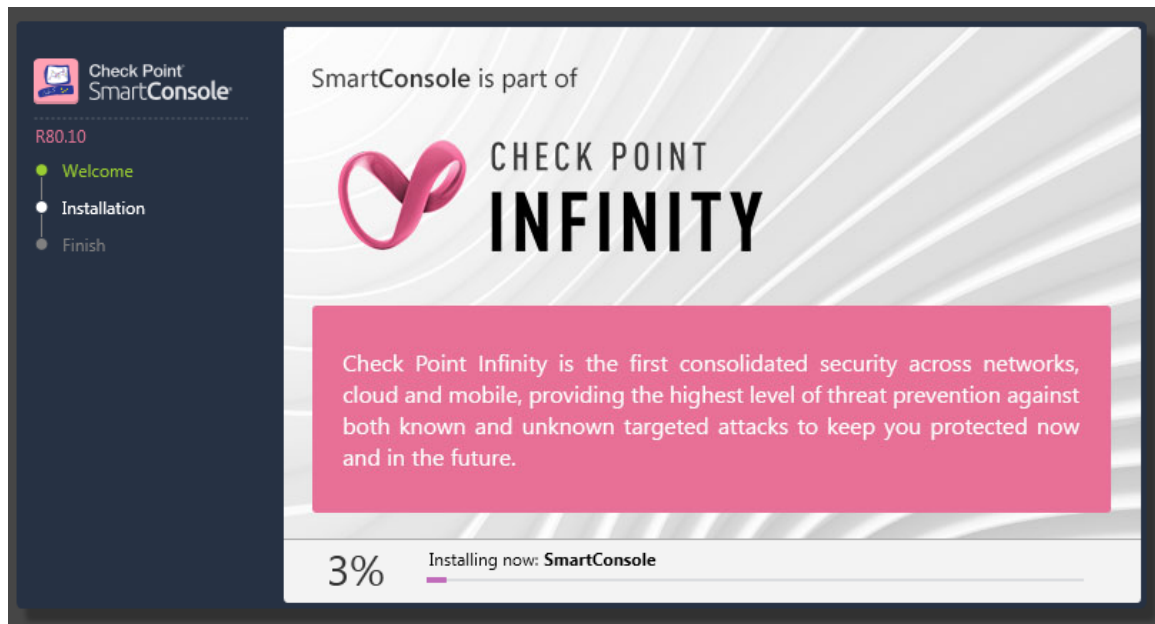
If you did not download SmartConsole from Support Center, you can download it directly from the WebUI. Go to the Overview section and look for the green **Download Now** link.



Double-click the installation package you downloaded. Check the box to indicate that you "...have read and agree to the Check Point..." EULA. Click **Install** to continue.



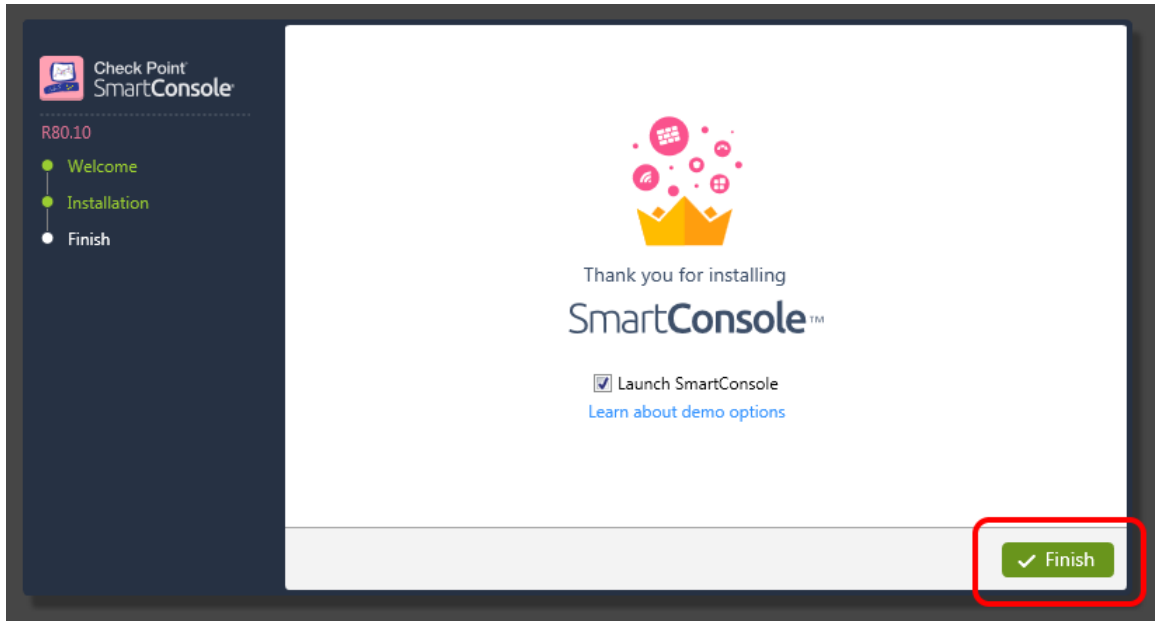
You will see the progress indicators as the software installs.



You will see the progress indicators as the software installs.



When the installation completes, you have an option to “Launch SmartConsole” when you click **Finish**.

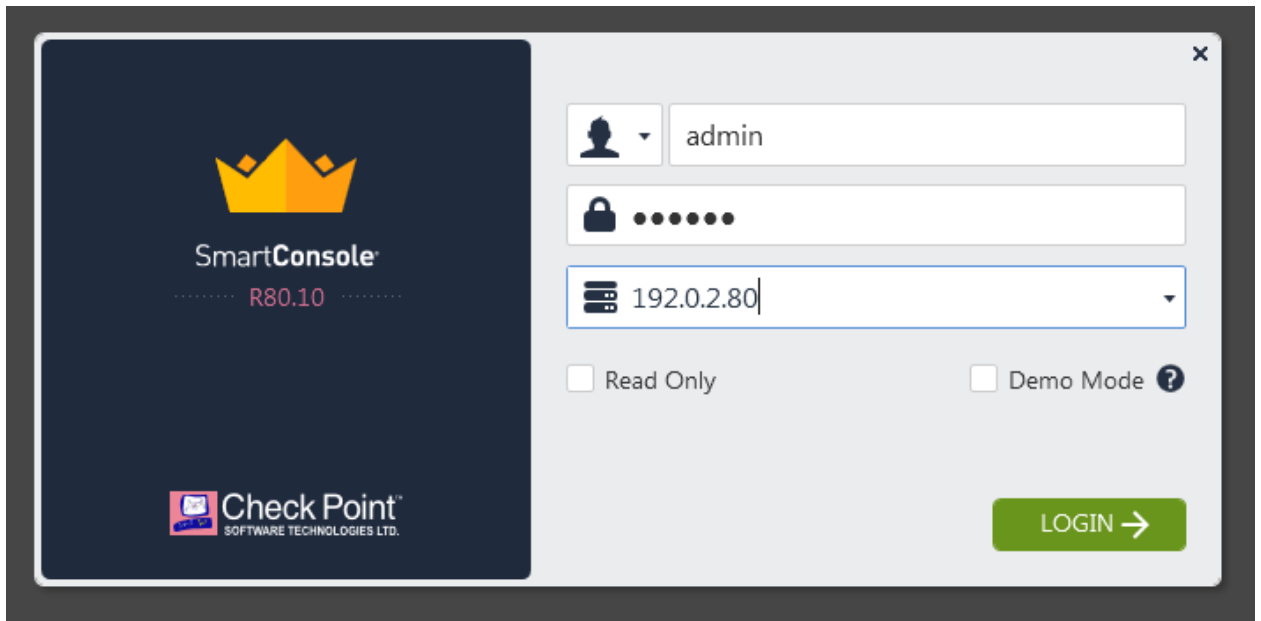


R80.10 Hands-on Demo

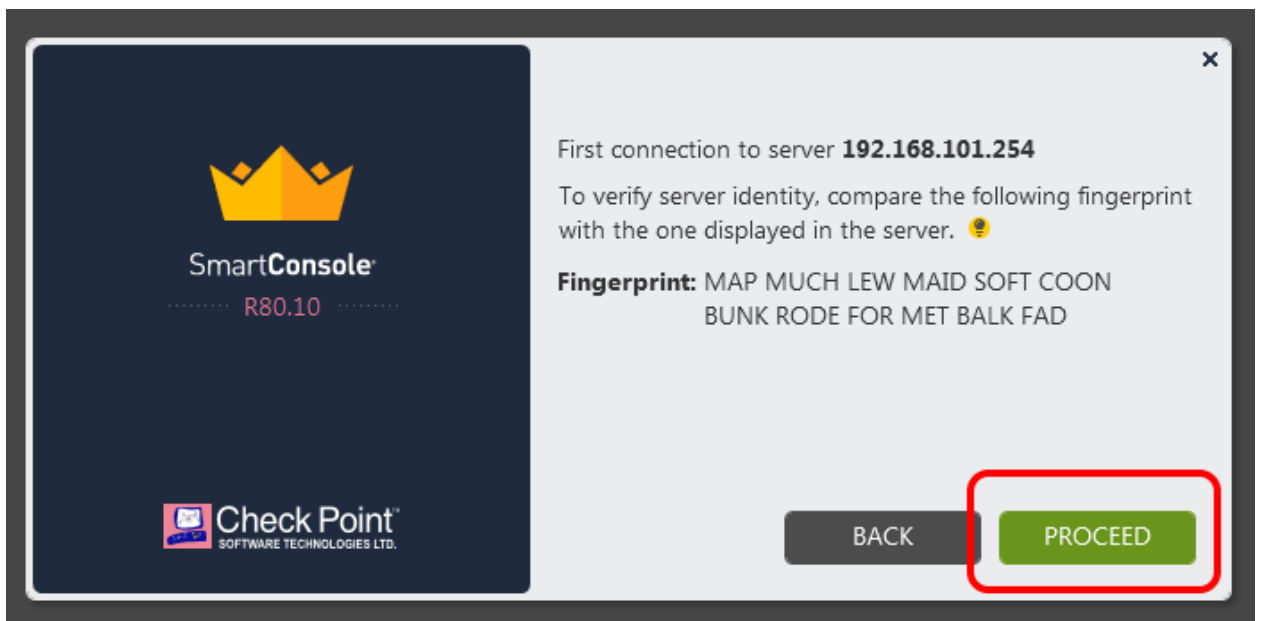
Launching SmartConsole

Double-Click the SmartConsole shortcut on the desktop (or in the Start menu > All Programs > Check Point SmartConsole R80.10 > Check Point SmartConsole R80.10).

Enter your credentials (admin/vpn123) can click **LOGIN**.

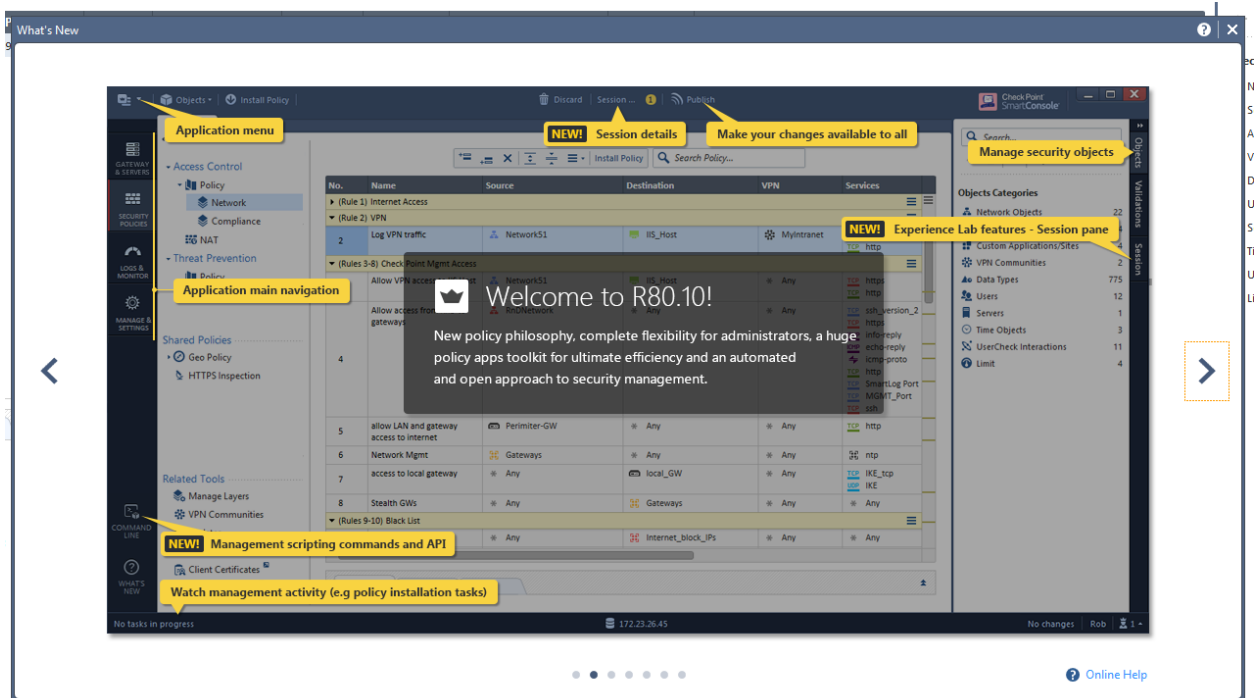
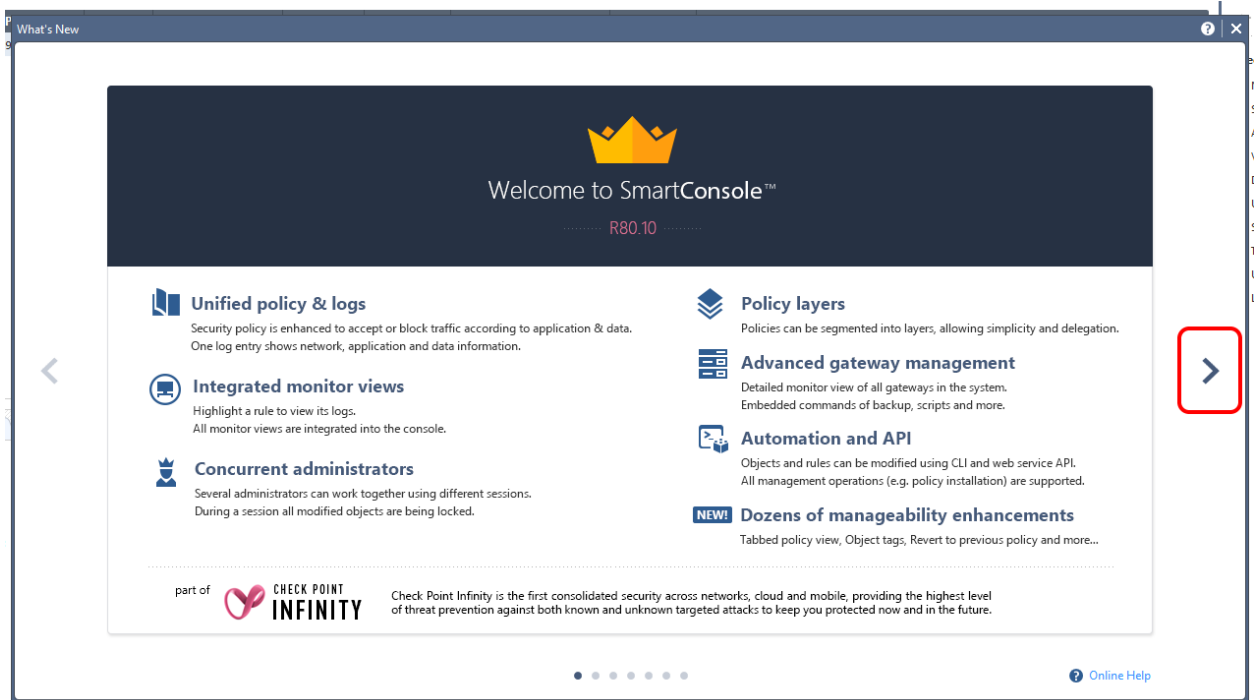


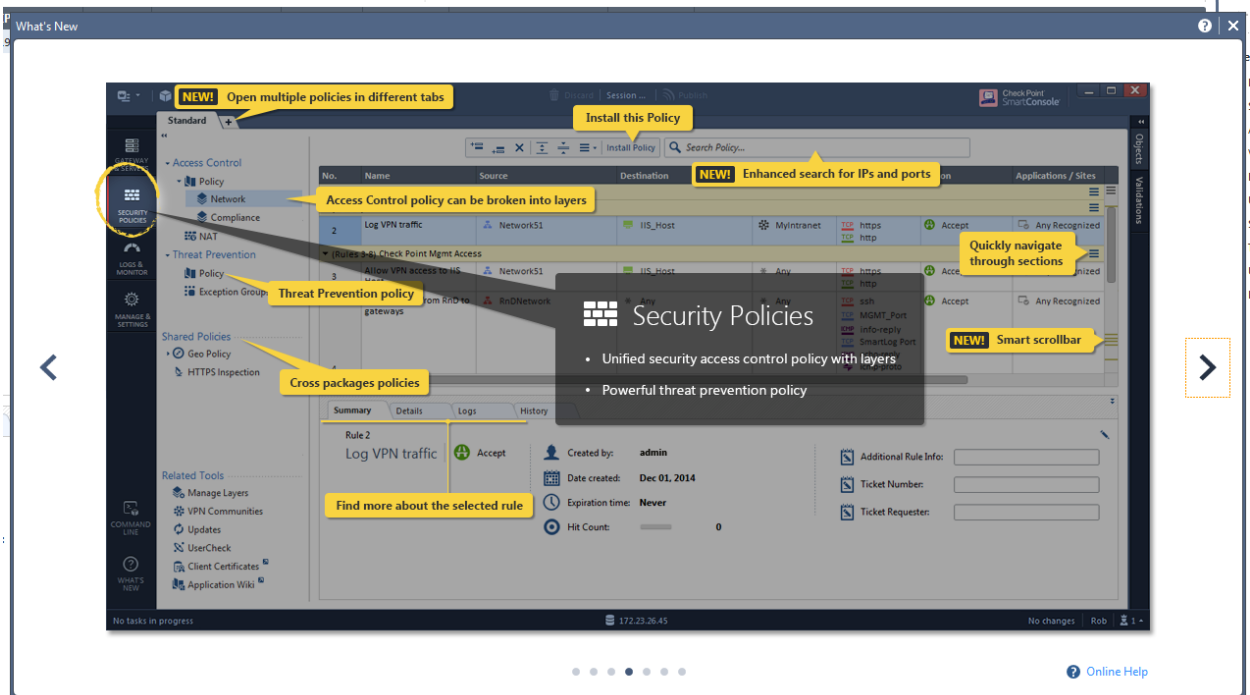
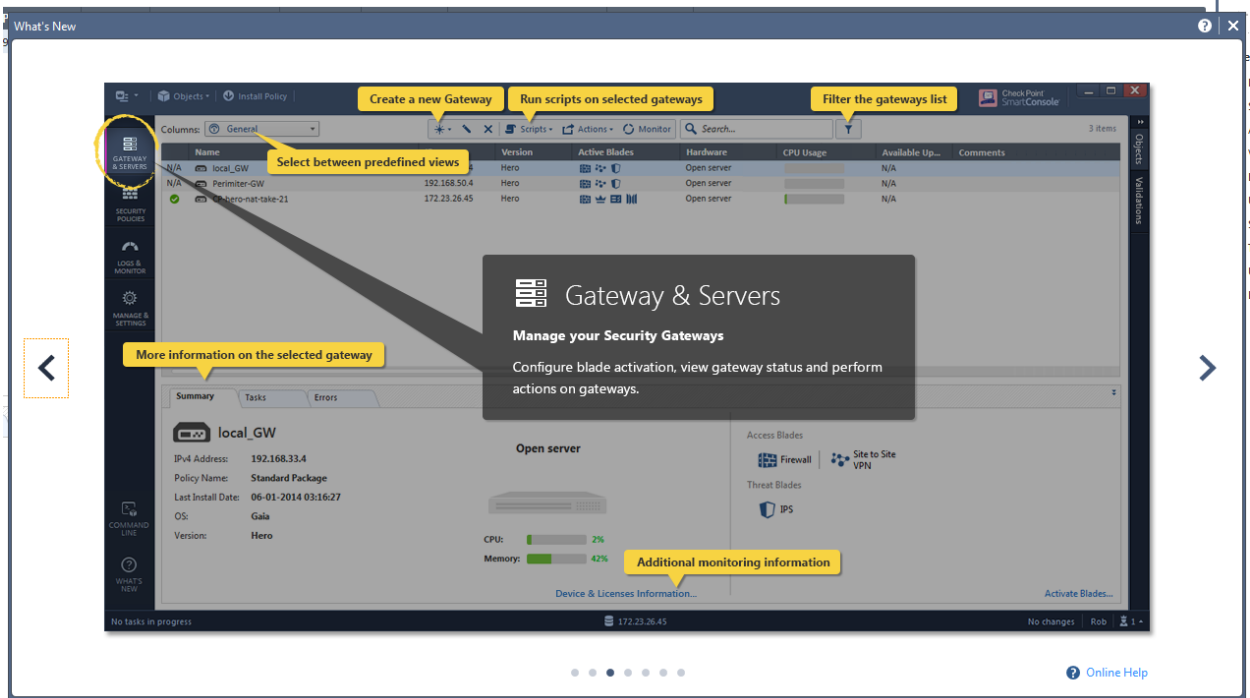
The first time you connect, you will see a pop with a Fingerprint verifying the identity of your Security Management Server. Click **Proceed**.

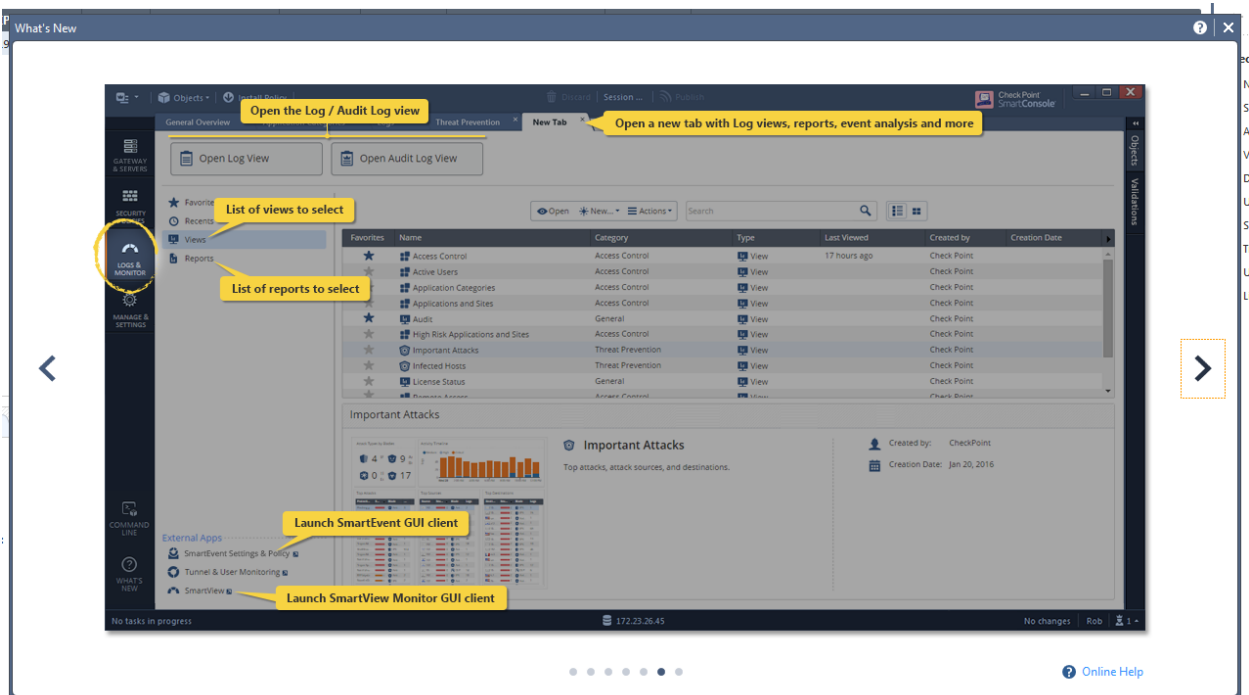
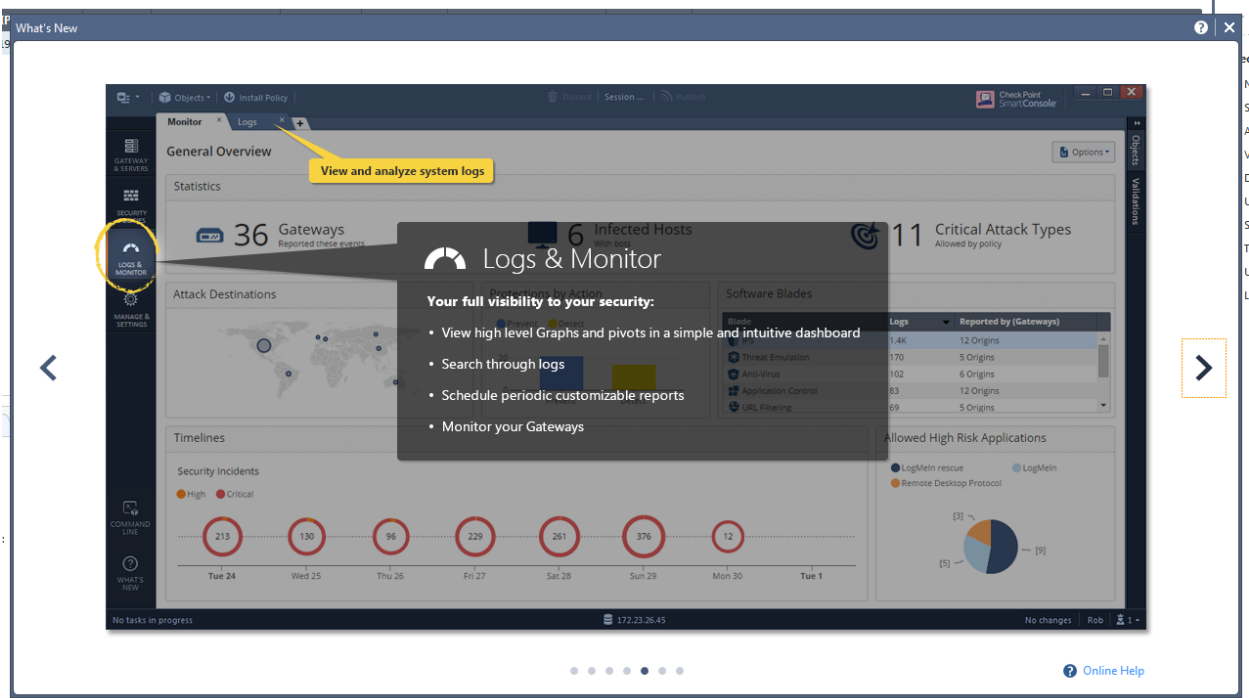


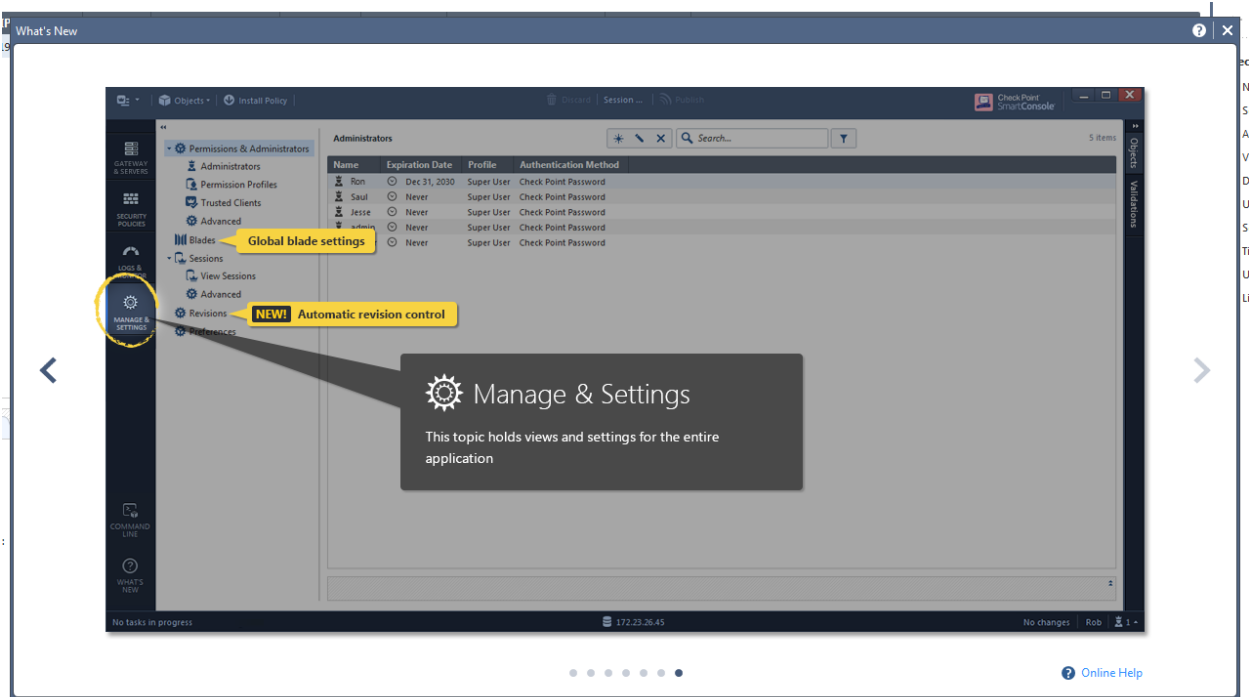
If this is the first time you have launched SmartConsole, the “Welcome to SmartConsole” screen will appear.

You can browse through the various pages to get a quick tour of the SmartConsole GUI’s layout using the arrows on the left and right of the pop-up screen. Close the pop-up to get into the main GUI when you are ready to continue.









Navigate the Four Main Tabs

The top tab is labeled “GATEWAYS & SERVERS”. You can view the status of your Check Point gateways and servers in this section.

Status	Name	IP	Version	Active Blades	Hardware	CPU Usage	Recommended Updates	Comments
✓	R80	192.168.101.254	R80.10	...	Open server	22%	N/A	

Summary Tasks Errors

R80

IPv4 Address: 192.168.101.254
Access Control Policy: Corporate_Policy
10/8/2018 3:14 PM
OS: Gaia
Version: R80.10
License Status: ✓ OK

Open server

CPU: 22%
Memory: 64%

[Device & License Information...](#)

Click on the **Device & License Information** link near the bottom of the GUI. You can view information about Traffic, System Counters, License status, Hardware Health and more.

Device & License Information - R80

- ✓ Device Status
- ✓ License Status
- System Counters
- Traffic

R80

IP Address: 192.168.101.254
Version: R80.10
OS: Gaia Kernel Version: 2.6
Up Time: 4 days and 11 hours
[System Information](#) | [Network Activity](#)

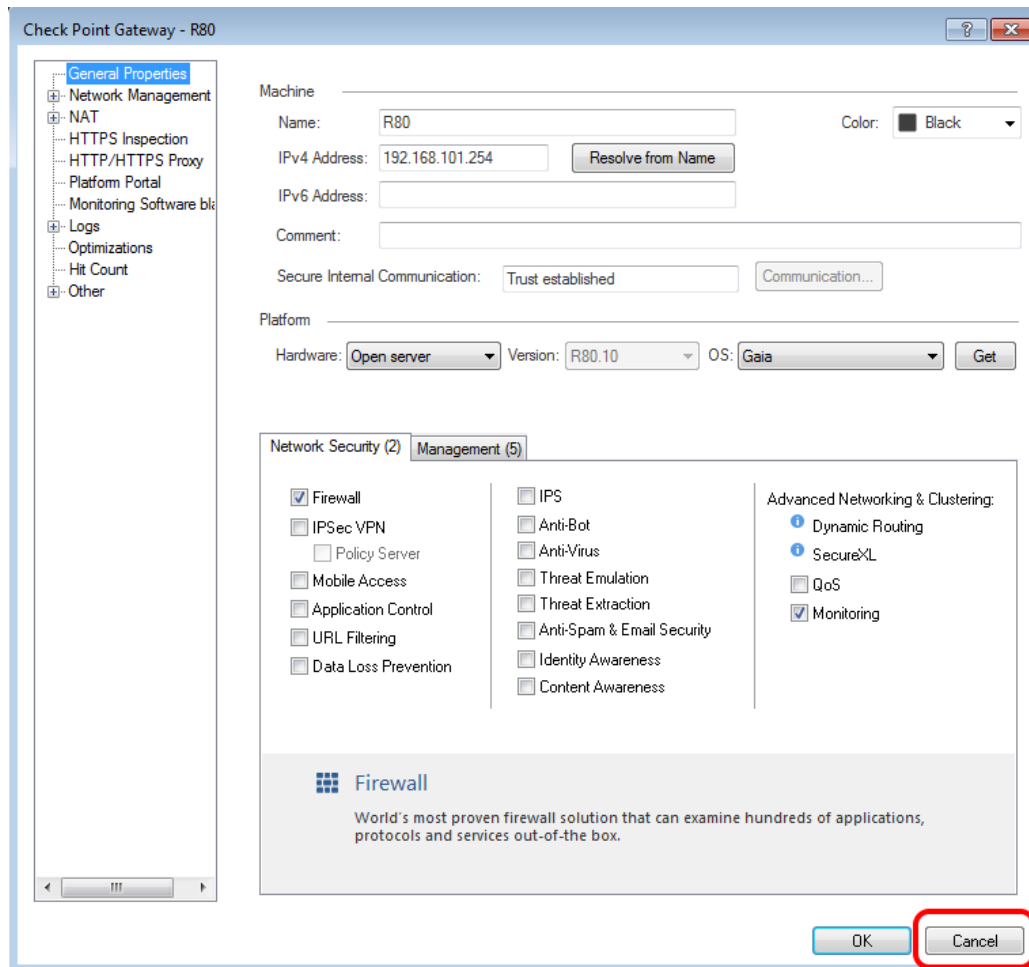
✓ Firewall Security Policy: Corporate_Policy
Installed On: Mon Oct 8 15:14:06 2018

✓ SmartEvent Correlation Unit

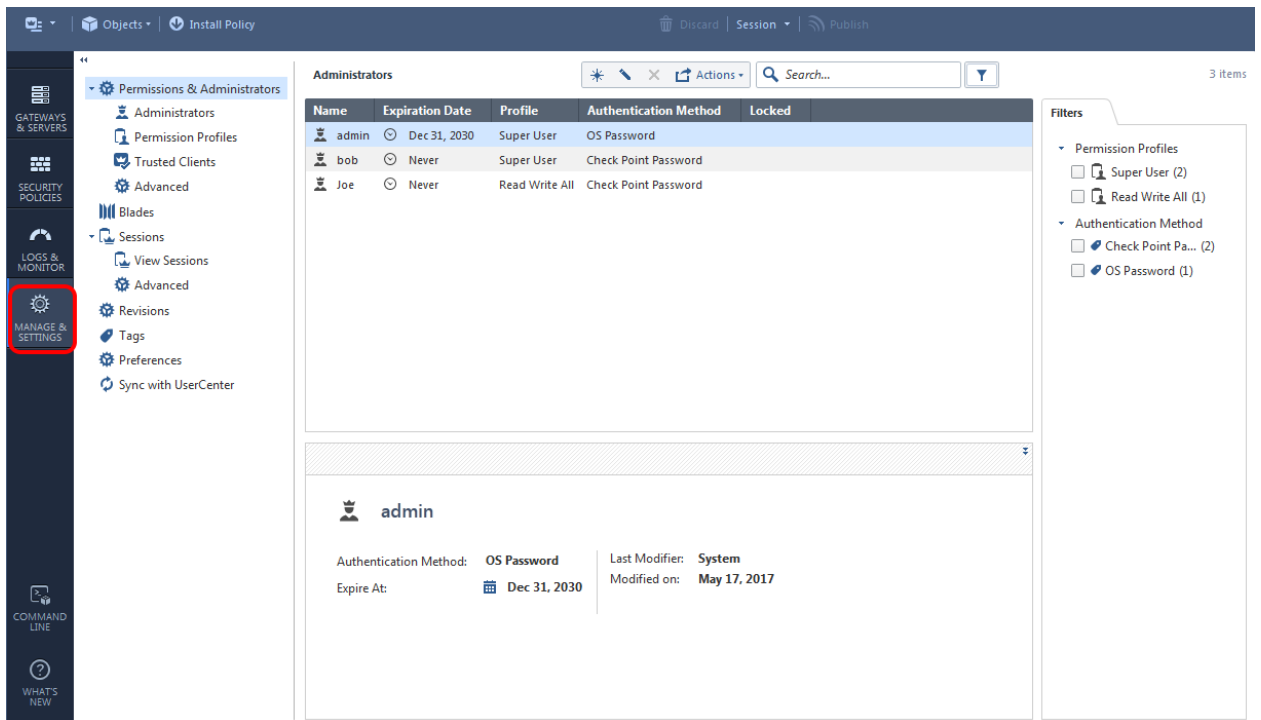
✓ Security Management Server Connected clients: 1
[Certificate Authority](#)

✓ SmartEvent

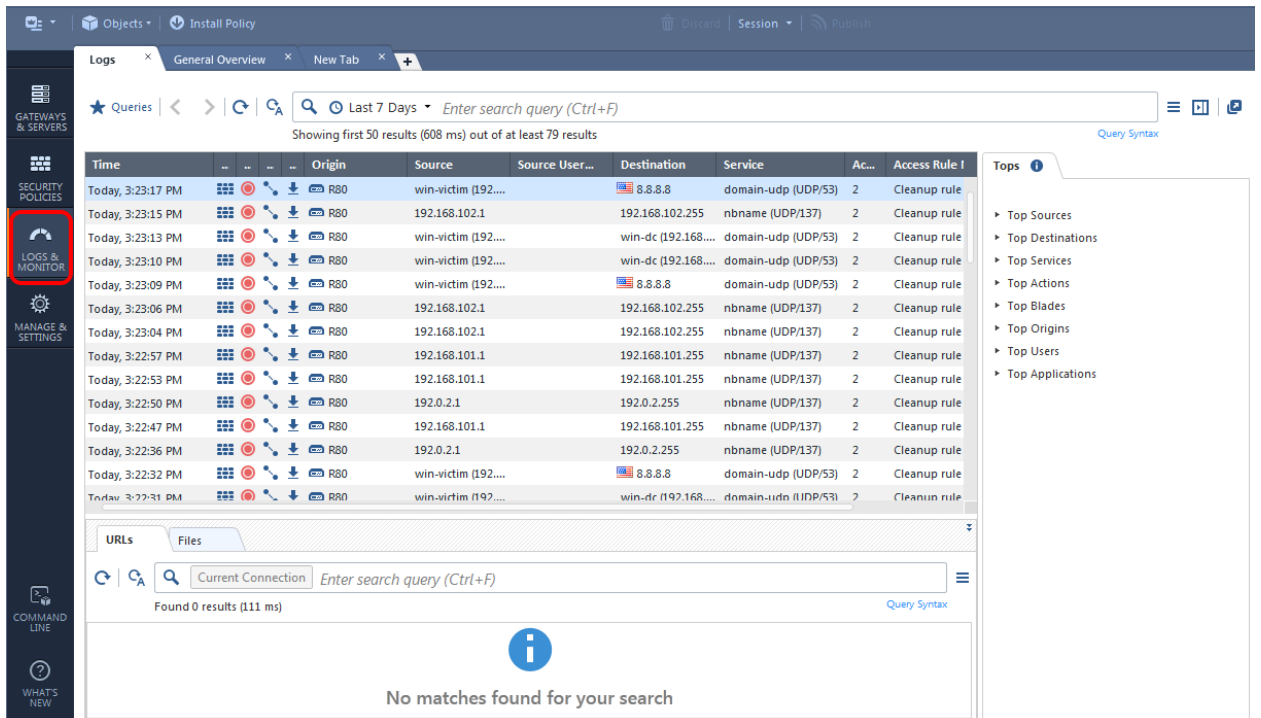
Double-click the Check Point entry in this list to see the Object Properties. Click **Cancel**.



Click on **MANAGE & SETTINGS** Tab. This is where you manage User Accounts, Sessions, Database Revisions, and more.



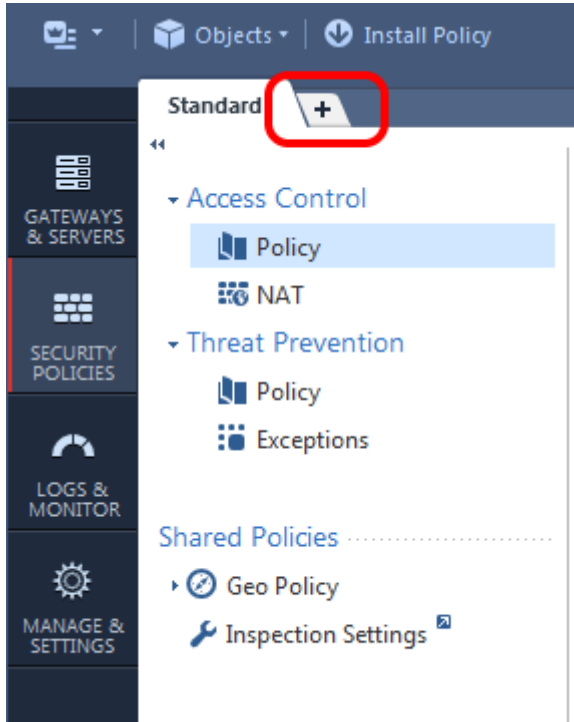
Click on **LOGS & MONITOR** Tab. This is where you can view Logs and a General Overview Status of the environment. You can perform Boolean searches (e.g. AND OR NOT) for specific IP addresses, User or Machine names, actions, services, Gateway names, Blades, etc.



Create a Security Policy Package

Create a new Policy Package. Click on the **SECURITY POLICIES** Tab in the left-hand navigation

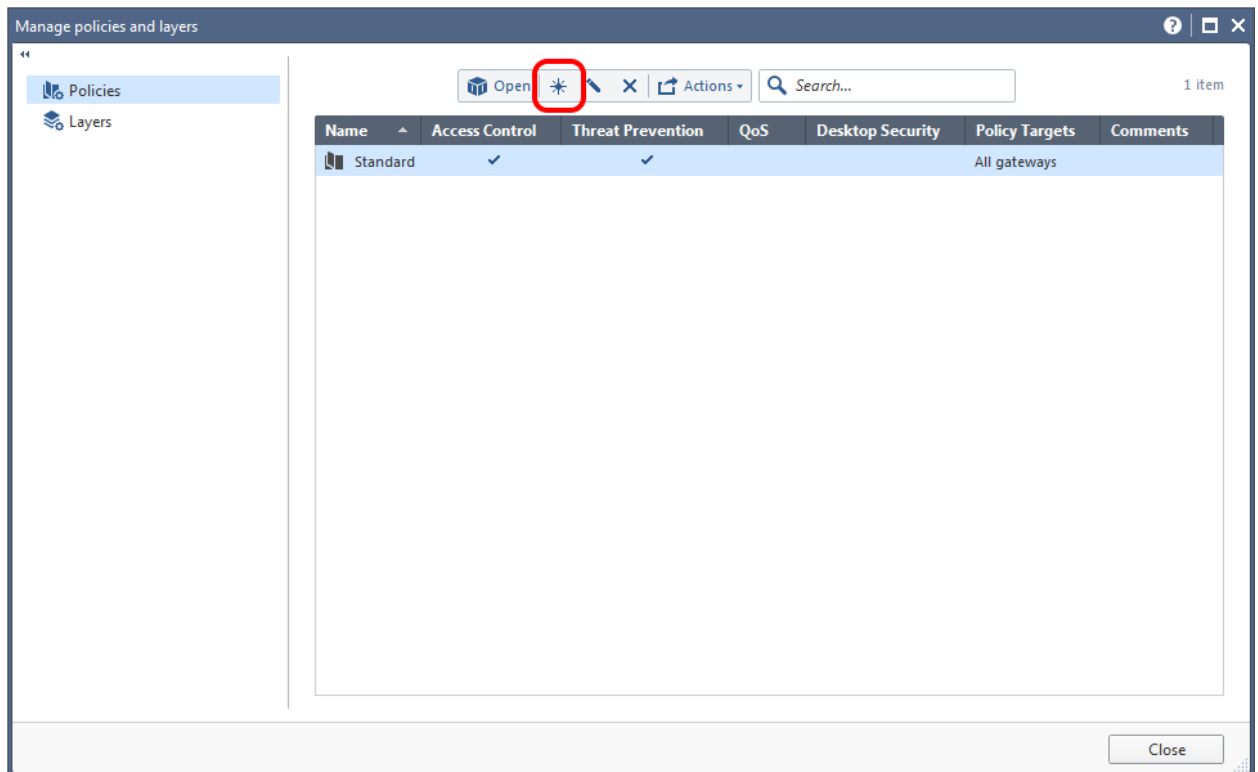
Click the + (Plus Sign) to open a New Tab. This shows the "Manage Policies" tab.



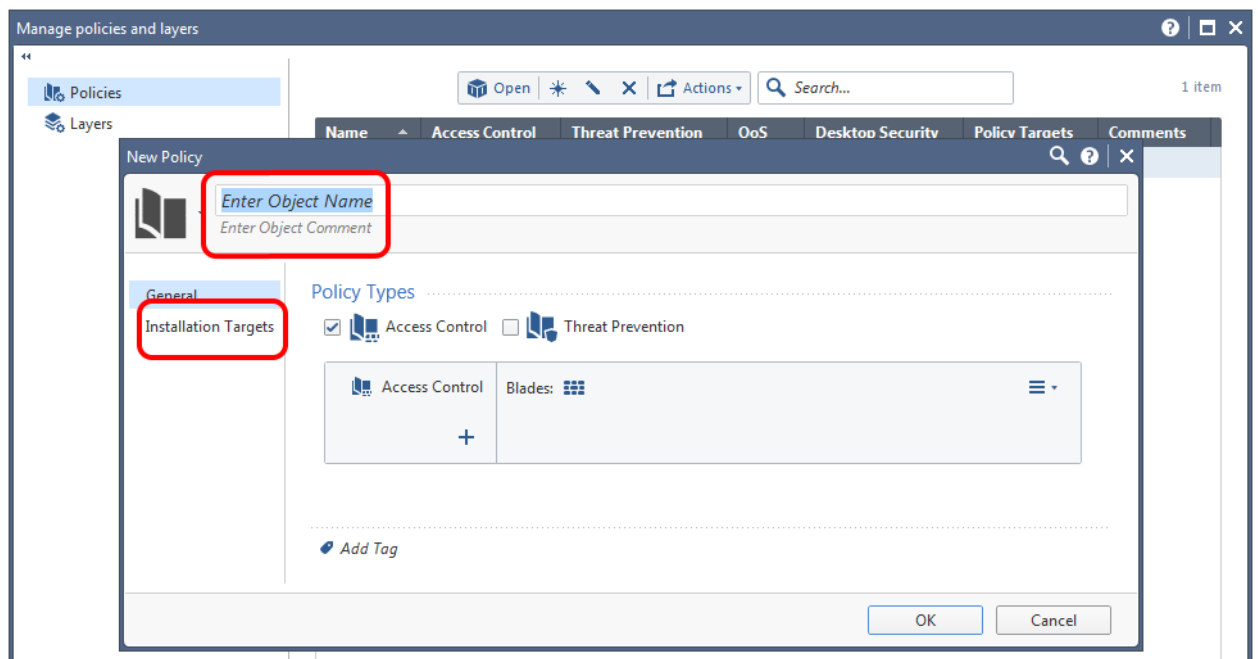
You can view and manage existing Security Policy packages. You can create a new Policy. Click the **Manage policies and layers...** link.



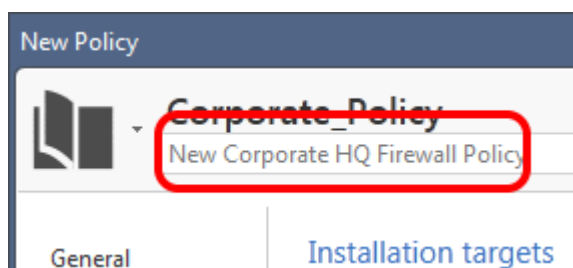
This opens the “Manage Policies and layers” Dialog Box. Click the * (aka Star) button to create a new Policy. The “New Policy” dialog box appears.



Type in a Name for the New Policy. No spaces are allowed in the Object Name field. The Object Name must begin with a letter. Notice you can select to have Access Control and/or Threat Prevention in your Policy. Access Control is selected by default.

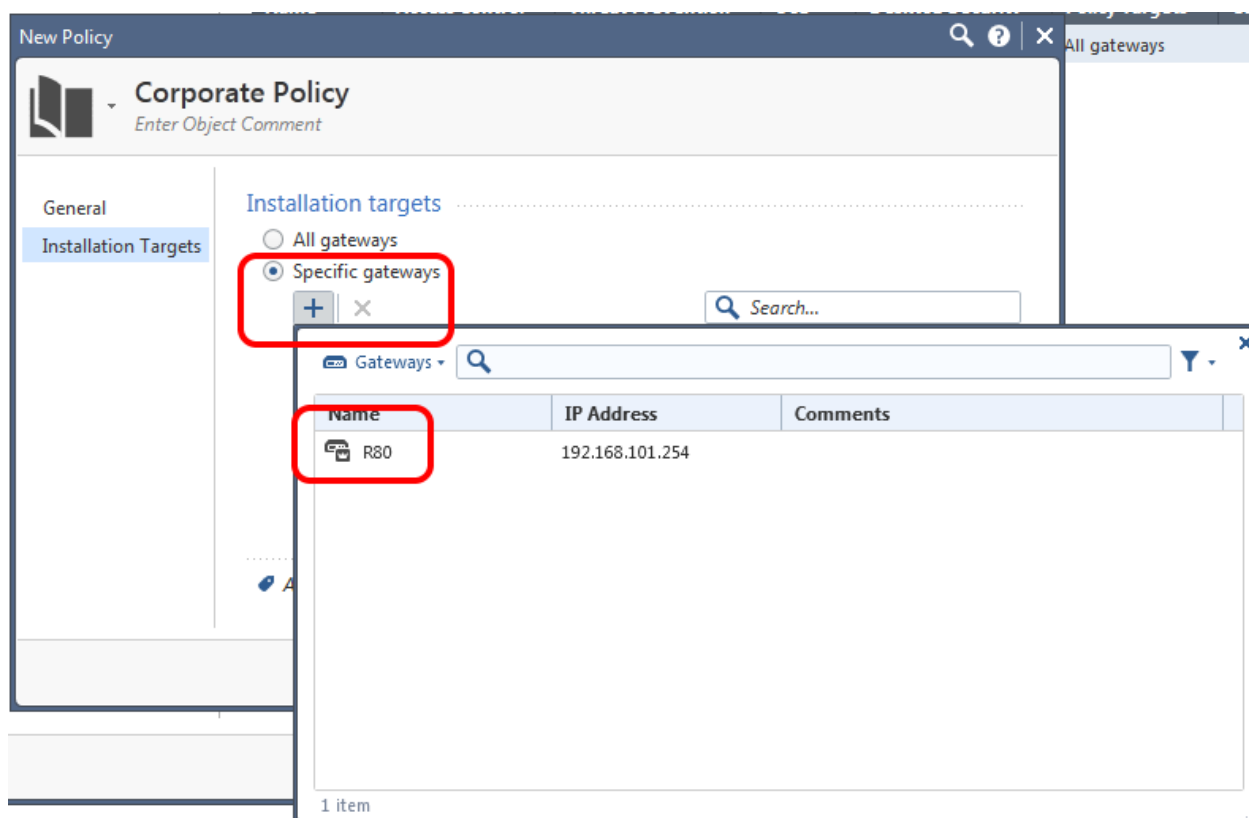


Notice you can click on the GUI to enter a COMMENT or a TAG.

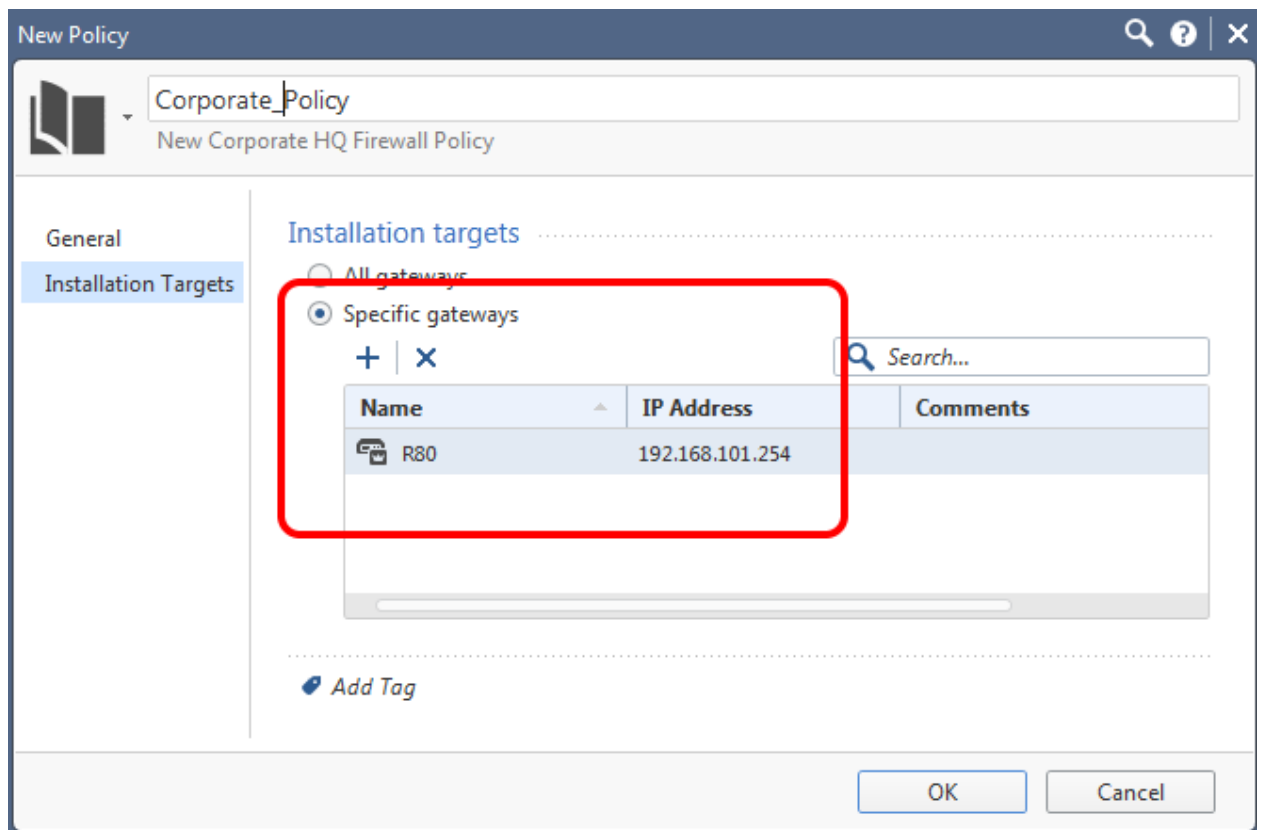


Click on the Installation Targets section. Here you can specify which Gateway(s) will available when you wish to Install the Policy later.

Click on Specific Gateways and click on the + (Plus Sign) to see available targets.

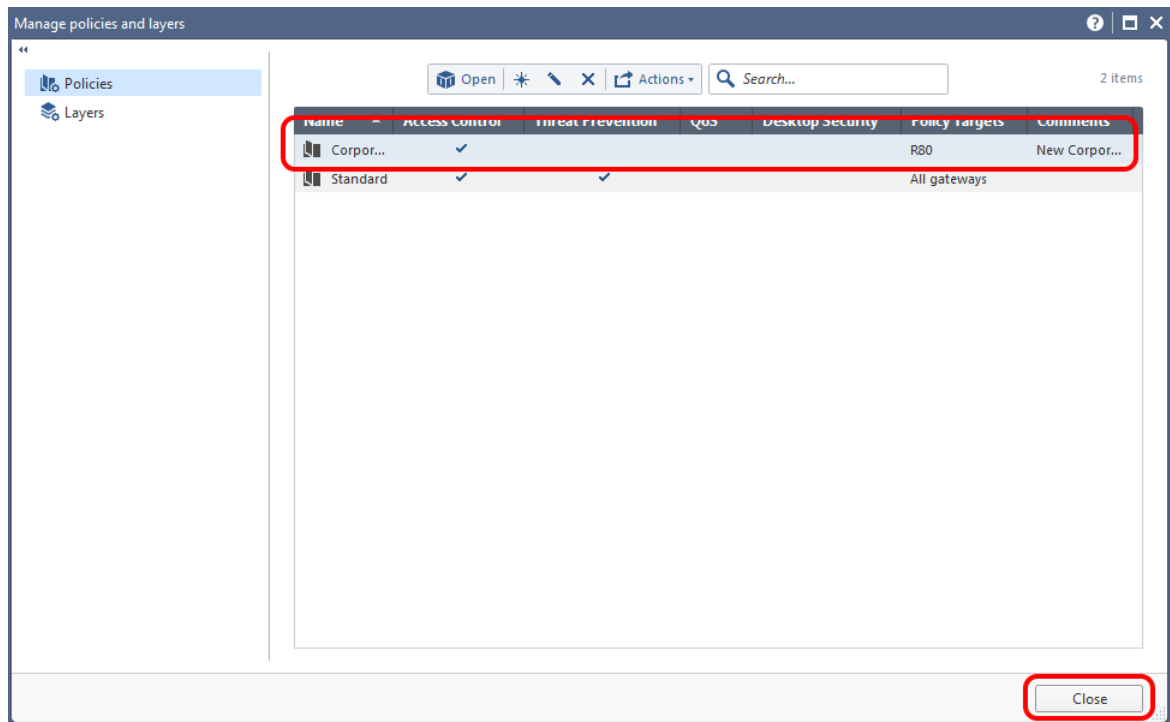


Select the Gateway you see (name may vary). Now you see the Gateway(s) for this Security Policy listed.

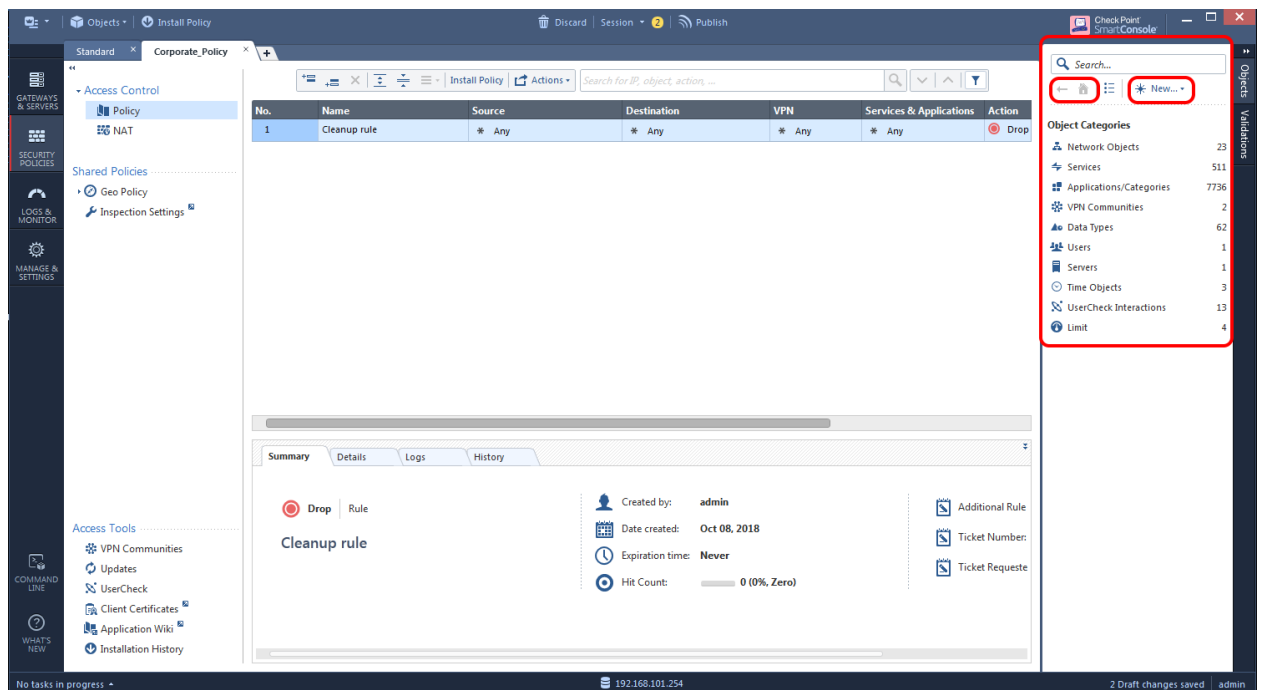


Click **OK**.

The new Policy appears in the Manage Policies list. Click the Close button.



You now have a Policy that contains just 1 Rule, the Cleanup Rule.



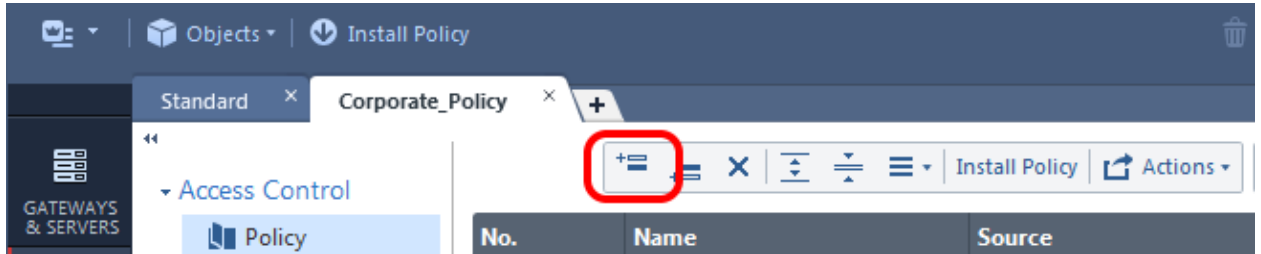
Notice that the Objects are now on the RIGHT HAND SIDE of the GUI.

You can click on each item in the list to "drill down" or use the search box. Click the **ARROW** button to return to the previous list of objects.

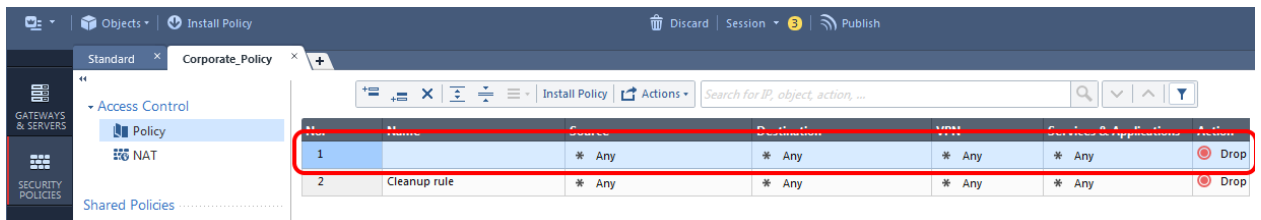
Click the **HOME** button (hint: looks like a house) to return to the top list again. The **STAR** button can be used to create new Objects.

Create a New Rule

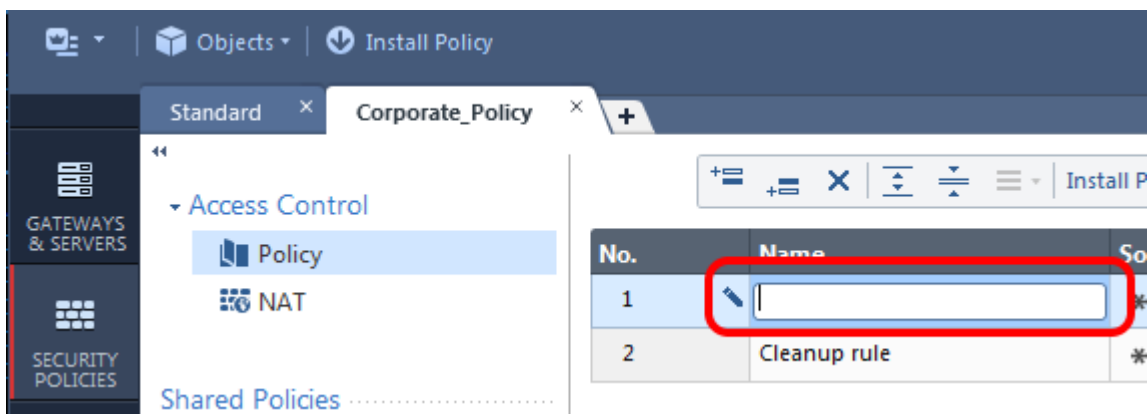
Use the button in the middle toolbar to create a new Rule at the TOP of the Rulebase. Hover over the other buttons to see what they do.



A new blank rule appears.



Double-Click the Name field to edit the Name of the Rule



Type a new for the new rule and hit ENTER

No.	Name
1	Allow ping from GUI
2	Cleanup rule

Create a Host Object and add it to a Rule

Add an object to the Source Column. Hover your mouse pointer in the Cell until the "Plus Sign" appears.

No.	Name	Source	Destination
1	Allow ping from GUI	* Any	* Any
2	Cleanup rule	* Any	

Add new items...

Click the + (Plus Sign) to select Objects from a list.

No.	Name	Source	Destination	VPN	Services & Applications	Action
1	Allow ping from GUI	* Any	+ * Any	* Any	* Any	Drop
2	Cleanup rule	* Any				

Search

Name	IP Address	Comment
+ All_Internet	0.0.0.0 - 255.255.255.255	All Internet
AuxiliaryNet		
CP_default_Office_Mode_addr...	172.16.10.0	Used as a c
CPDShield		DSHIELD IP
DMZNet		
DMZZone		
ExternalZone		

The Dialog appears to add an Object to the Source of the rule. Click on the + (STAR) button, and then choose **Host** from the Menu that appears to create a new Object.

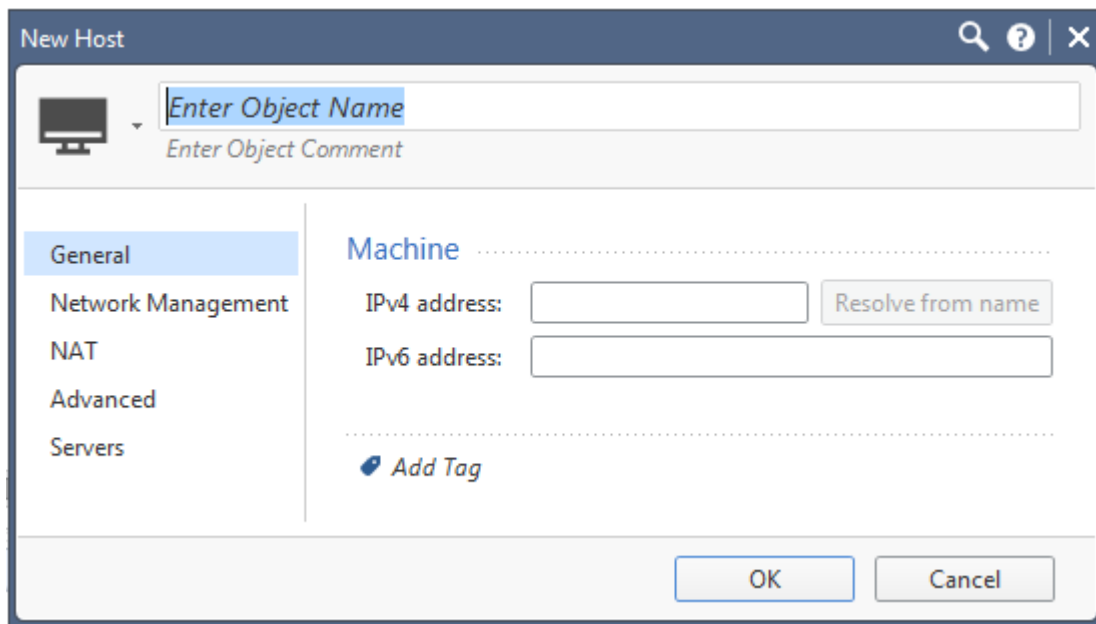
Search...

Name	IP Address	Comments
+ All_Internet	0.0.0.0 - 255.255.255.255	All Internet Adresse
AuxiliaryNet		
CP_default_Office_Mode_addr...	172.16.10.0	Used as a default for
CPDShield		DSHIELD IP blacklist
DMZNet		
DMZZone		
ExternalZone		
InternalNet		
InternalZone		
IPv6_Link_Local_Hosts		IPv6 link-local addresses
LabNetworks		
LocalMachine		Check Point Local Machine (Dynam...
LocalMachine_All_Interfaces		Check Point Local Machine (All Inte...
LocalMachine_Loopback	127.0.0.1 - 127.255.255.255	Local machine loopback address ra...
Net_192.168.101.0	192.168.101.0	

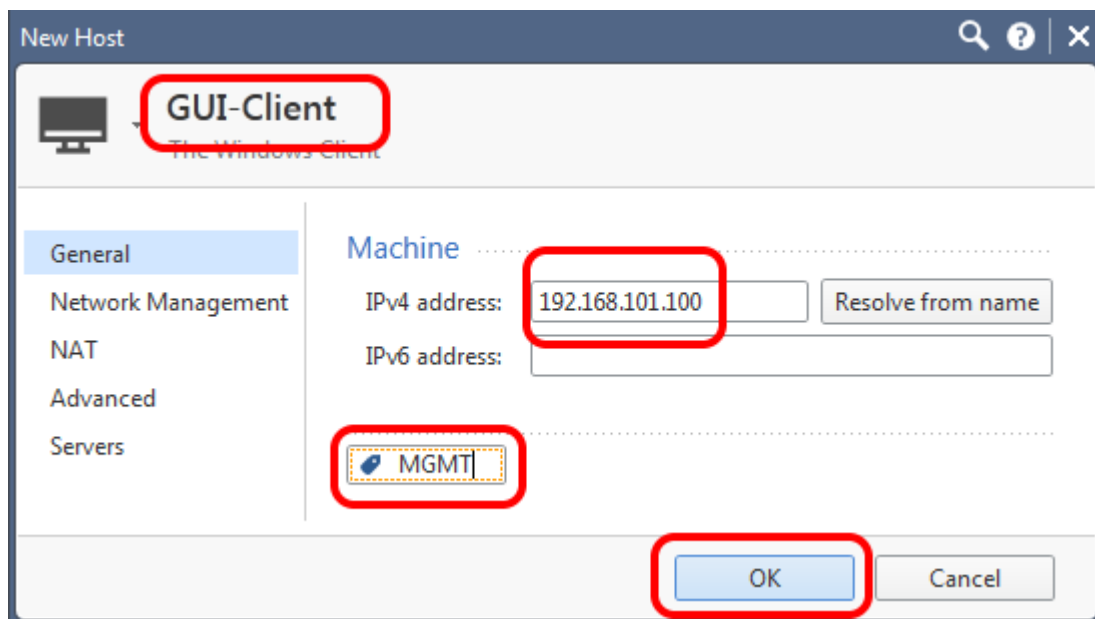
21 items

- Host...
- Network...
- Access Role...
- Groups
- Address Ranges
- Other

The "New Host" dialog box will appear.



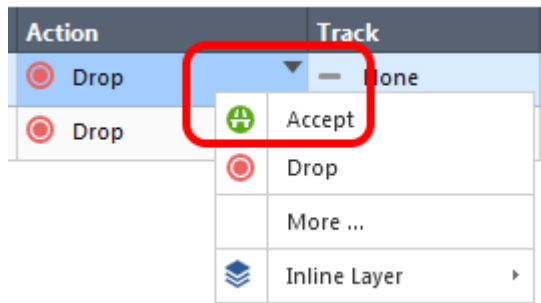
Fill in the Object Name, IPv4 address. Enter a Comment and a Tag if you prefer. Click **OK**.



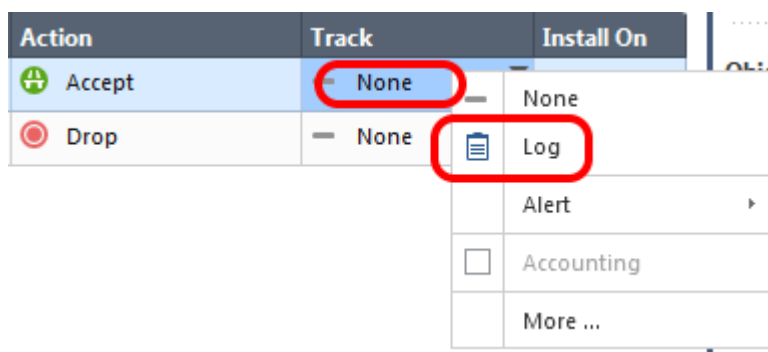
Now the new Object is shown in the Source field of the Rule.

No.	Name	Source	Destination
1	Allow ping from GUI	GUI-Client	* Any
2	Cleanup rule	* Any	* Any

Change the Action field from Drop to Accept. Click in the Action field to see the menu of choices. Click on **Accept**.

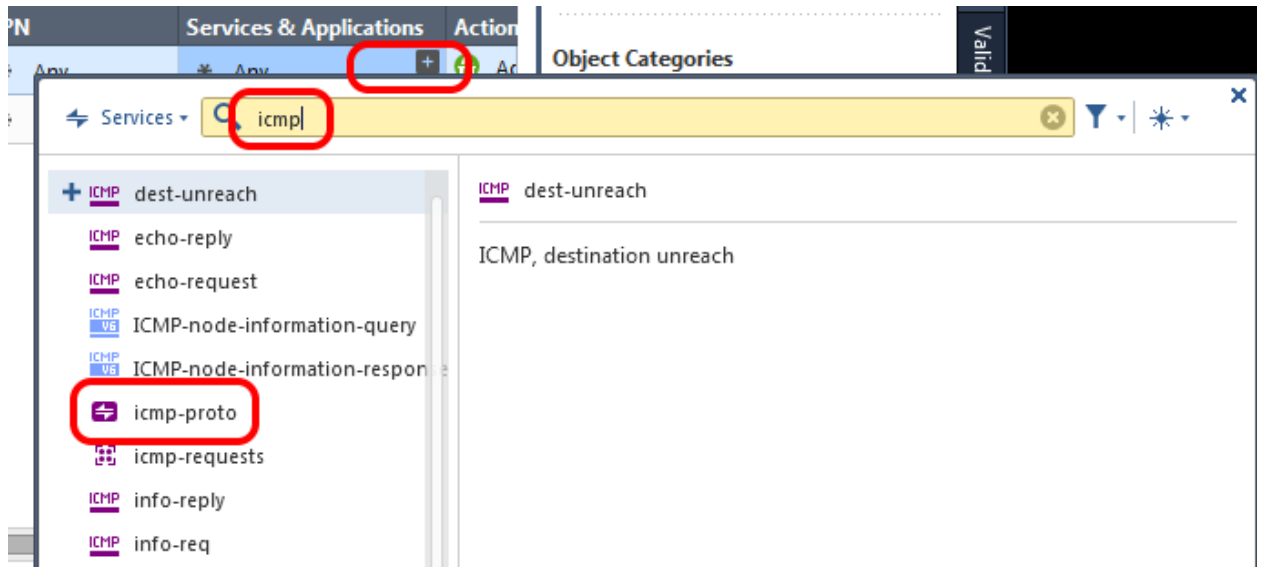


Now click in the Track field and Select **Log** from the menu that appears.



Search for Services and add them to a Rule

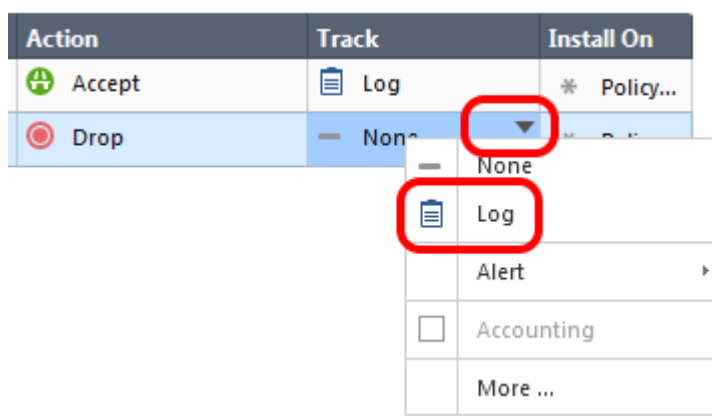
Add "icmp" and "ssh" to the Services & Applications field of Rule 1. Click on the + (Plus Sign) in the field to see the search list. Type "icmp" into the search field to narrow the results (or scroll to see your choices). Select icmp-proto to add it to the rule.



If you click the "Plus Sign" that appears next to icmp-proto, you can type in another search for ssh. Select ssh-version-2. Both services appear in the Services & Applications field.

Source	Destination	VPN	Services & Applications	Action	Track
GUI-Client	* Any	* Any	icmp-proto ssh_version_2	Accept	Log
* Any	* Any	* Any	* Any	Drop	Log

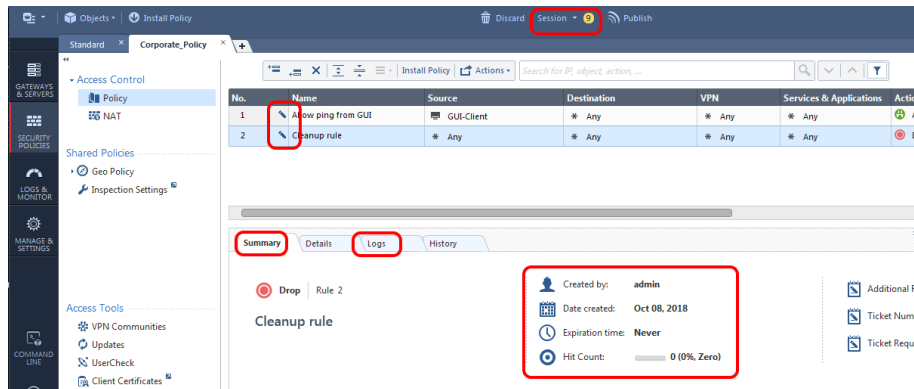
Enable Logging for the Cleanup Rule



Sessions, changes, and Publishing

Notice the small “Pencil” Icons next to each rule we have modified in the Policy. This signifies edits you have made to the policy. Notice the Summary Tab below the policy with the details of who created the Rule, when the rule was created, Hit Count and more. There are fields for entering details for the change being made (work orders, authorization codes, ticket requests, etc.). These fields can be customized to your liking. Click on each rule to see the available information. Also notice the in the top of the SmartConsole, there is a Yellow circle with a number in it. This is the number of Changes we have made to the Policy in our current Session. Before we can install the new Security Policy on the Gateway, we must Publish the changes to the database.

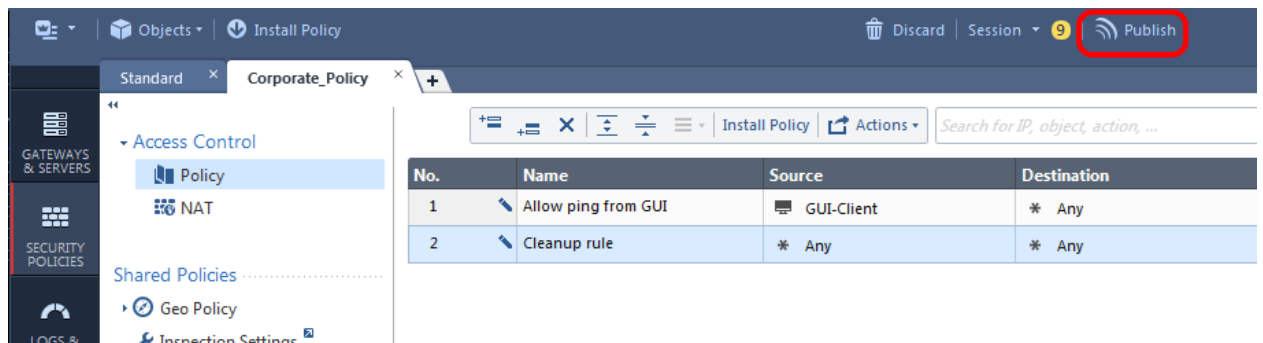
Note: The number of changes may vary in your lab



You will see a tab called "Logs" next to the Summary tab. We don't have any traffic yet, so we probably won't see any logs yet.

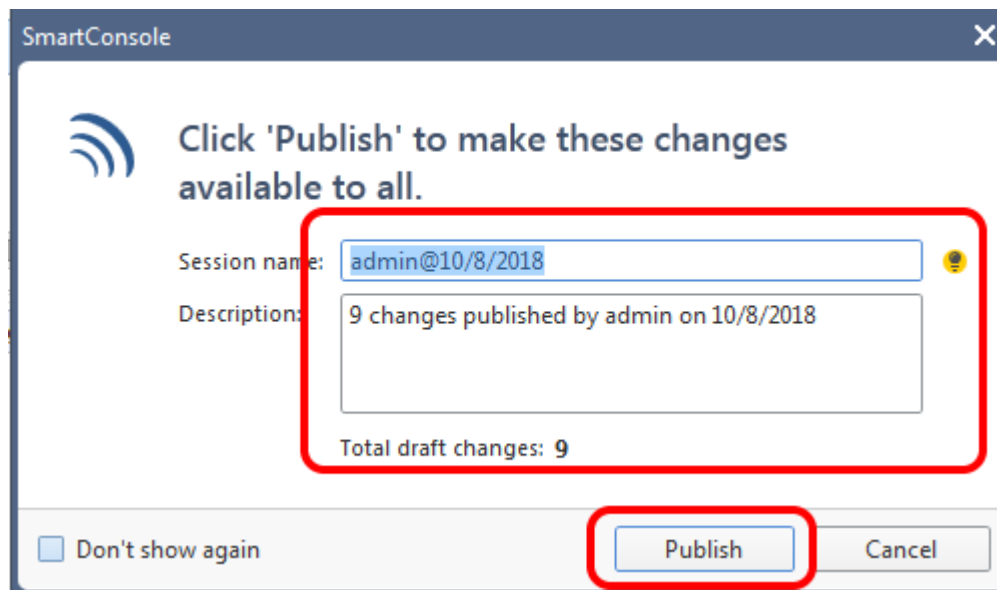
Publish Changes to the Security Policy

Click the **Publish** button.



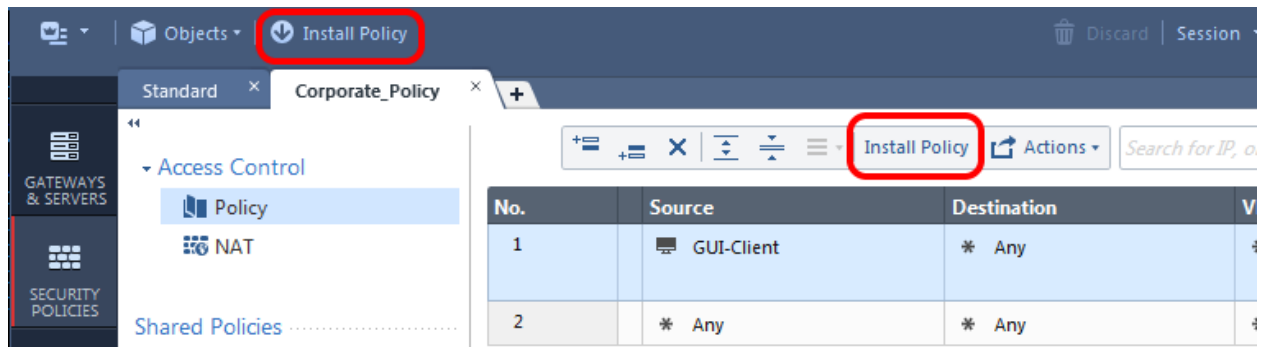
Enter the relevant details (or make no changes) and click the **Publish** button. You will see a progress indicator briefly while the changes are written to the database.

Once that completes, you will notice the little pencil icons and the Yellow Circle are gone.

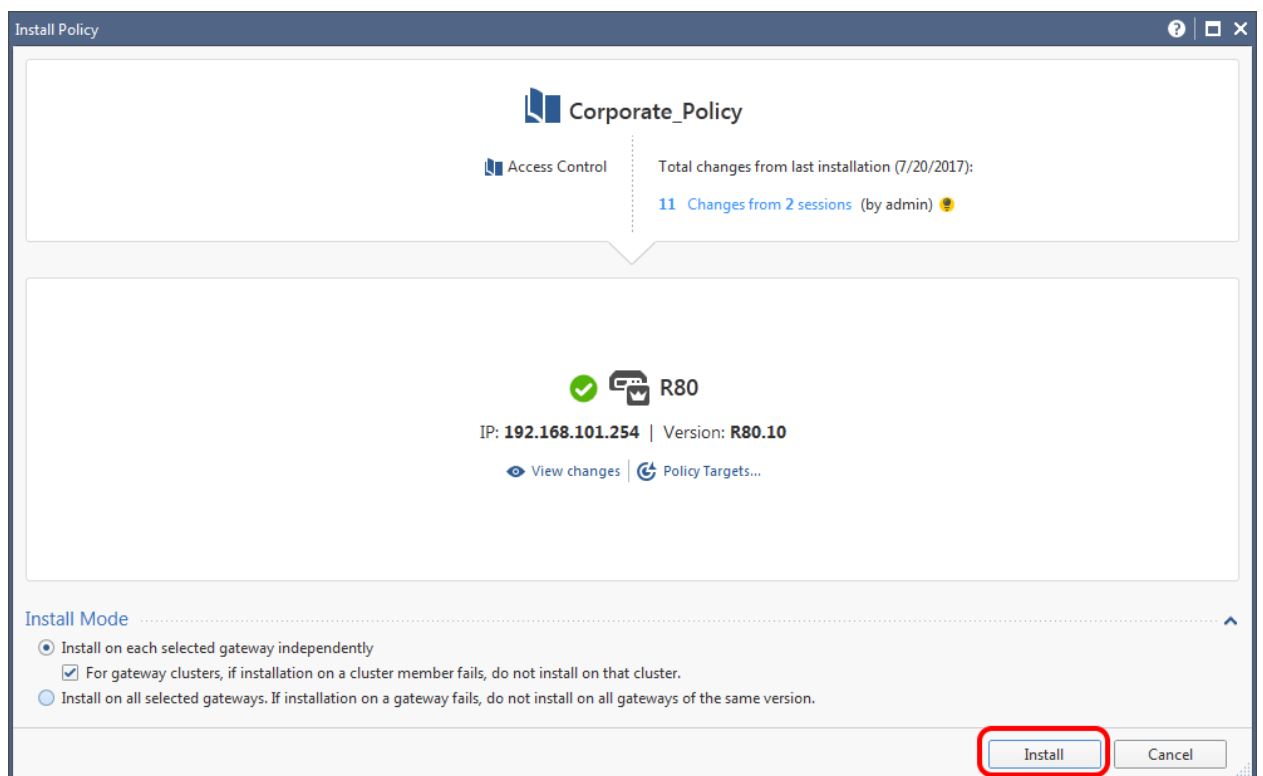


Install the Security Policy

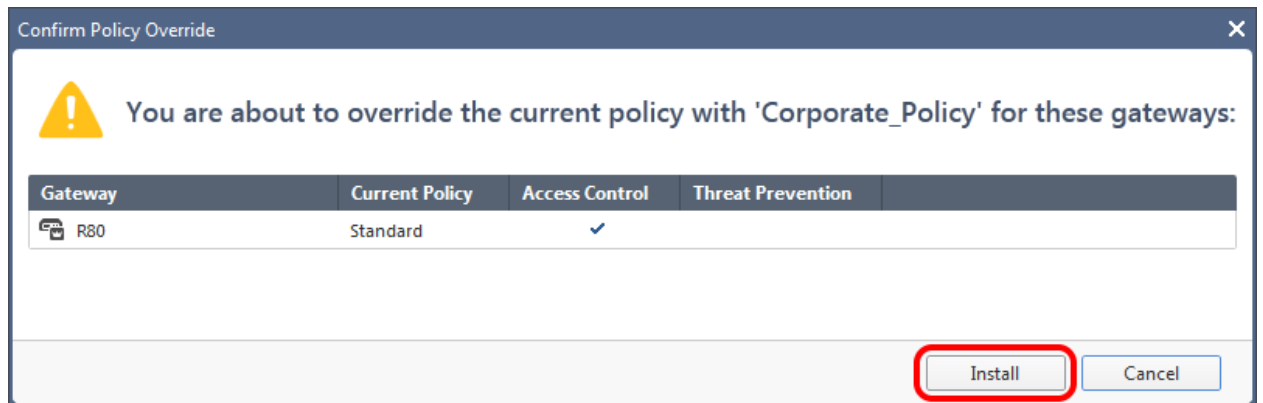
Click the **Install Policy** button. There are 2 **Install Policy** buttons in the GUI. One is in the middle tool ribbon, and the other in the upper left ribbon of buttons.



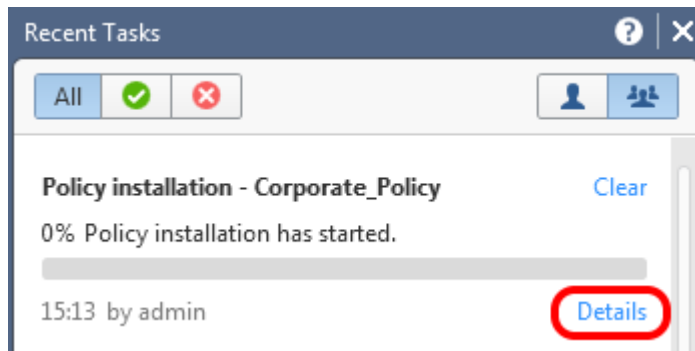
The "Install Policy" dialog appears. Click the **Install** button.



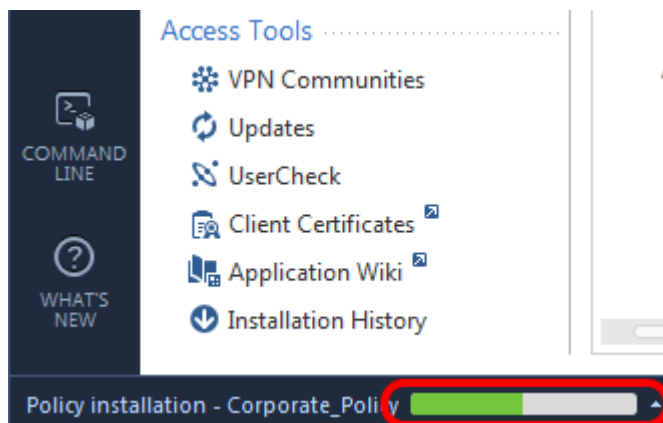
You will be asked to confirm that you wish to over-write the current Policy with the newly created "Corporate Policy". Click **Install** to continue.



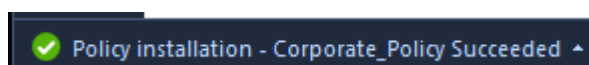
The "Recent Tasks" dialog will appear, showing status for the Policy validation, compilation and installation. You can click the **Details** link for more information.



After a short time, it will minimize itself to the bottom left notification area. You can click the **green progress bar** if you wish to view the larger version again.



Policy Installation will complete with a notification.



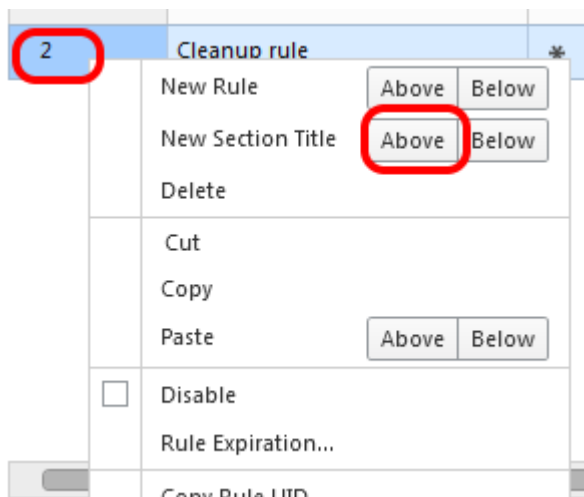
Add Section Titles to the Policy

Create a New Section Title to help keep your Policy organized.

Click on Rule 2 to highlight it.

No.	Source	Destination
1	GUI-Client	* Any
2	* Any	* Any

Right-click on Rule 2, and click **ABOVE** "New Section Title".



A new section title appears

New Section (2)	
2	Cleanup rule

Double click "New Section" to edit and type in "Best Practices".

Best Practices (2)	
2	Cleanup rule

Now add a Section Title above Rule 1 and name it "Management Access".

No.	Name
Management Access (1)	
1	Allow ping from GUI

Publish the changes and Install the Policy.

View the logs for a specific Rule without switching to the **LOGS & MONITOR** Tab. Highlight Rule 2 (aka The Cleanup Rule) in the Policy.

You will see the most recent logs for the selected rule appear below the security policy.

No.	Name	Source	Destination	VPN	Services & Applications	Action	Track
Management Access (1)							
1	Allow ping from GUI	GUI-Client	* Any	* Any	icmp-proto ssh_version_2	Accept	Log
Best Practices (2)							
2	Cleanup rule	* Any	* Any	* Any	* Any	Drop	Log

Summary Details **Logs** History

This rule is new - will show logs based on its content.

🔄 🔍 Last 7 Days Enter search query (Ctrl+F)

Showing first 50 results (236 ms) out of at least 91 results Query Syntax

Time	Origin	Source	Source User...	Destination	Service	Ac...	Access Rule N...	Policy...	Description
Today, 4:51:22 PM	R80	win-victim (192...		192.168.101.255	nbdatagram (UDP/138)	2	Cleanup rule	Corpora...	nbdatagram Traffic Dropped fr...
Today, 4:51:20 PM	R80	win-victim (192...		8.8.8.8	domain-udp (UDP/53)	2	Cleanup rule	Corpora...	domain-udp Traffic Dropped fr...
Today, 4:51:19 PM	R80	win-victim (192...		win-dc (192.168...	domain-udp (UDP/53)	2	Cleanup rule	Corpora...	domain-udp Traffic Dropped fr...
Today, 4:51:18 PM	R80	win-victim (192...		8.8.8.8	domain-udp (UDP/53)	2	Cleanup rule	Corpora...	domain-udp Traffic Dropped fr...
Today, 4:51:15 PM	R80	192.168.101.1		192.168.101.255	nbname (UDP/137)	2	Cleanup rule	Corpora...	nbname Traffic Dropped from 1...
Today, 4:51:08 PM	R80	192.0.2.1		192.0.2.255	nbname (UDP/137)	2	Cleanup rule	Corpora...	nbname Traffic Dropped from 1...
Today, 4:51:05 PM	R80	192.168.102.1		192.168.102.255	nbname (UDP/137)	2	Cleanup rule	Corpora...	nbname Traffic Dropped from 1...
Today, 4:51:01 PM	R80	192.0.2.1		192.0.2.255	nbname (UDP/137)	2	Cleanup rule	Corpora...	nbname Traffic Dropped from 1...
Today, 4:50:57 PM	R80	192.168.101.1		192.168.101.255	nbname (UDP/137)	2	Cleanup rule	Corpora...	nbname Traffic Dropped from 1...
Today, 4:50:52 PM	R80	192.0.2.1		192.0.2.255	nbname (UDP/137)	2	Cleanup rule	Corpora...	nbname Traffic Dropped from 1...
Today, 4:50:46 PM	R80	win-victim (192...		R80 (192.168.10...	https (TCP/443)	2	Cleanup rule	Corpora...	https Traffic Dropped from 192...
Today, 4:50:41 PM	R80	win-victim (192...		win-dc (192.168...	domain-udp (UDP/53)	2	Cleanup rule	Corpora...	domain-udp Traffic Dropped fr...

Revisions and Sessions

It is possible to view the Policy Changes made by an Administrator during a session.

Click on the **MANAGE & SETTINGS** Tab. Click on **Revisions**. Click on one of the available Sessions. Click on the **Audit Logs** Tab.

The screenshot shows the Check Point management console interface. On the left sidebar, the 'MANAGE & SETTINGS' tab is selected and highlighted with a red box. Under this tab, the 'Revisions' option is also highlighted with a red box. The main content area displays a table of revisions. Two rows at the top of the table are highlighted with a red box:

Publish Time	Name	Publisher	Changes	Description
10/8/2018 3:10 PM	admin@10/8/2018	admin	2	2 changes published by admin on 10/8/2018
10/8/2018 2:54 PM	admin@10/8/2018	admin	9	9 changes published by admin on 10/8/2018
7/5/2017 2:49 PM	admin@05-Jul-17	admin	2	2 changes published by admin on 05-Jul-17
6/16/2017 2:40 PM	admin@16-Jun-17	admin	1	1 change published by admin on 16-Jun-17
5/17/2017 2:32 PM	admin@17-May-17	admin	55	55 changes published by admin on 17-May-17
5/17/2017 1:16 PM	admin@17-May-17	admin	14	14 changes published by admin on 17-May-17

Below the revisions table, the 'Audit Logs' tab is selected. A search box is visible with the text 'Last 7 Days' and 'Current Revision'. Below the search box, it says 'Found 15 results (482 ms)'. A table of audit logs is displayed:

Time	A...	T...	Administrator	Operation	Object Type	Perfo
Today, 2:54:09 PM			admin	Publish		
Today, 2:54:09 PM			admin	* Create Rule	Access Control Rule	Clean
Today, 2:54:09 PM			admin	* Create Rule	Access Control Rule	Allow
Today, 2:54:09 PM			admin	* Create Object	Host	GUI-C
Today, 2:54:09 PM			admin	* Create Object	AccessPolicyContainer	Corpo
Today, 2:54:09 PM			admin	* Create Object	Policy	Corpo

You can see the changes made, the time stamps of the changes, and the details.

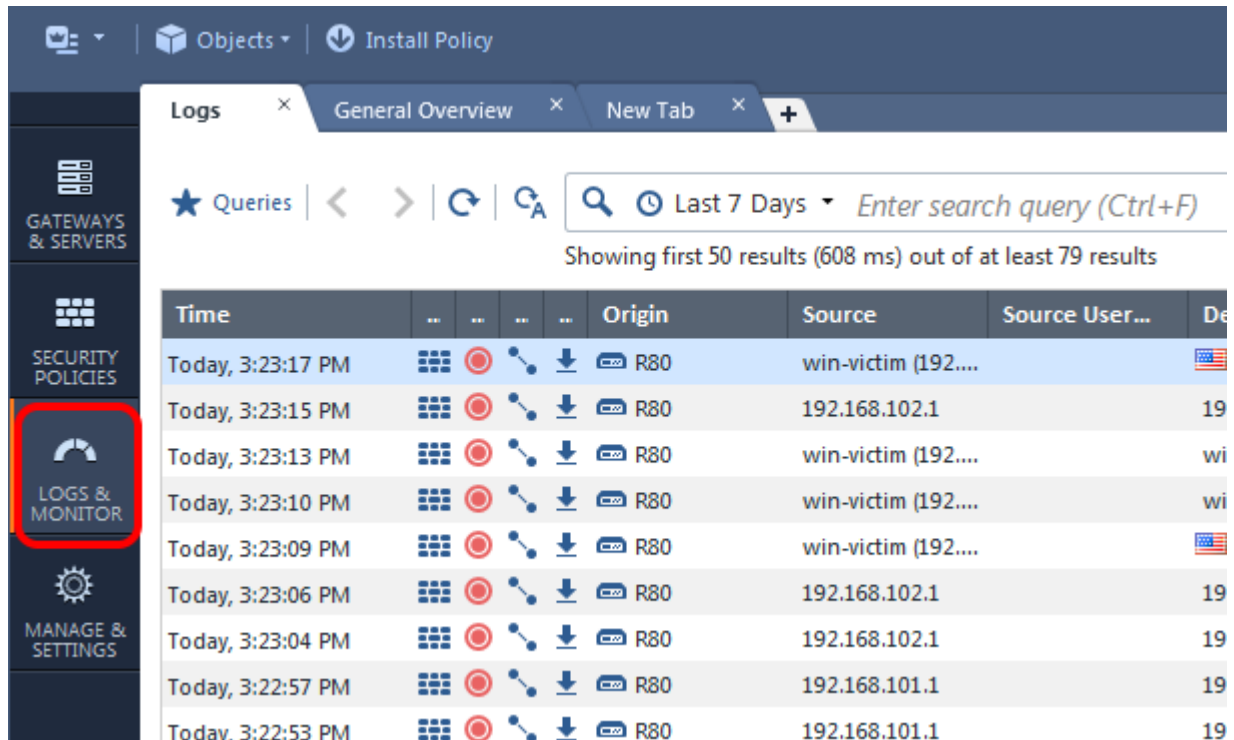
The screenshot shows the 'Audit Logs' section of the Check Point management console. A search box is visible with the text 'Last 7 Days' and 'Current Revision'. Below the search box, it says 'Found 15 results (482 ms)'. A table of audit logs is displayed, showing the results of a search for 'Cleanup':

Time	A...	T...	Administrator	Operation	Object Type	Performed On	Changes
Today, 2:54:09 PM			admin	* Create Object	AccessPolicyContainer	Corporate_Policy	Name: 'Corpor... AccessPolicy: '... NatPolicy;
Today, 2:54:09 PM			admin	* Create Object	Policy	Corporate_Policy	Com... Insta... Nam... Acce... Polic... Spec..
Today, 2:54:09 PM			admin	* Create Object	Nat Policy	Corporate_Policy	Name: 'Corporate_Policy'
Today, 2:54:09 PM			admin	* Create Object	Access Control Section		
Today, 2:54:09 PM			admin	* Create Object	Access Control Policy	Corporate_Policy	Name: 'Corporate_P... Layers: 'Corporate_P...
Today, 2:54:09 PM			admin	* Create Object	PoliciesCollection	Corporate_Policy	@all_inter... Icon: 'Appl... Name: 'Cor... Pol
Today, 2:54:09 PM			admin	* Create Object	Nat Section		
Today, 2:54:09 PM			admin	* Create Section	Nat Section	Manual Lower Rul...	Name: 'Manual Lower Rules'
Today, 2:54:09 PM			admin	* Create Layer	Nat Rulebase		
Today, 2:54:09 PM			admin	* Create Layer	Access Control Rulebase	Corporate_Policy...	Name: 'Corpor... Layer Name: 'C... Policy Nar
Today, 2:54:09 PM			admin	* Create Object	Tag	HQ	Name: 'HQ'

You can use the Query box to search for specific changes. Search for "Cleanup". Do you see a result? Did you have multiple Sessions? Was naming the Cleanup rule part of this Revision?

Looking at Logs

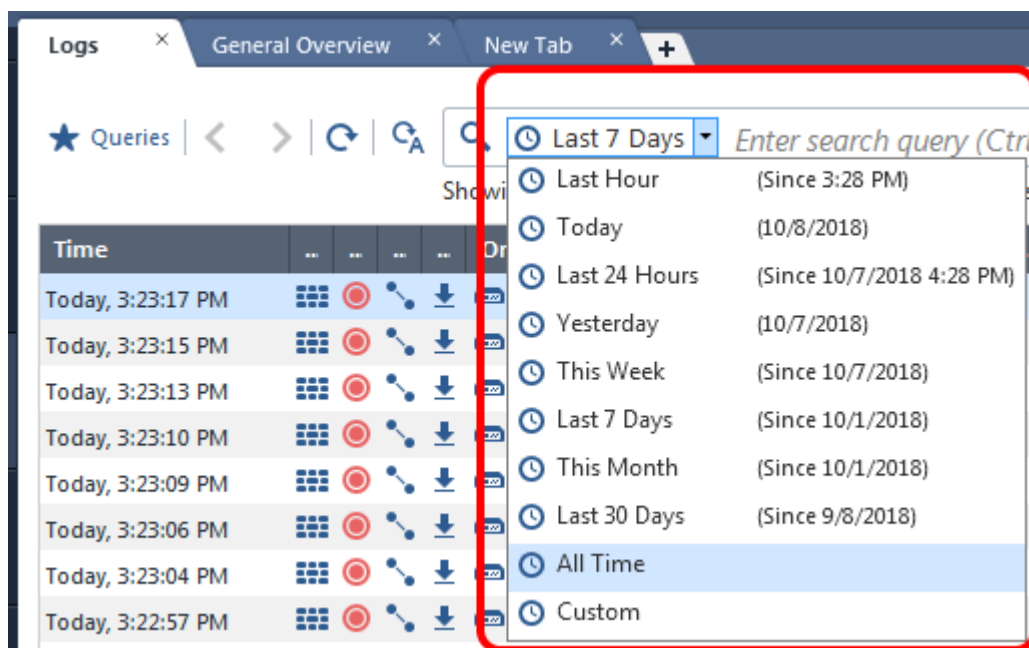
Browse to the **LOGS & MONITOR** Tab. Since we are not passing traffic through the gateway, we are probably just Dropping some traffic from the local network.



The screenshot shows the 'Logs' tab in the Check Point management console. The left sidebar has the 'LOGS & MONITOR' icon highlighted with a red box. The main area displays a search bar with 'Last 7 Days' selected and a search query input field. Below the search bar, it says 'Showing first 50 results (608 ms) out of at least 79 results'. A table of log entries is visible, with columns for Time, Origin, Source, and Source User. The entries show traffic from R80 to various IP addresses, including 192.168.102.1 and 192.168.101.1, with source users like 'win-victim'.

Time	Origin	Source	Source User...
Today, 3:23:17 PM	R80	win-victim (192....	
Today, 3:23:15 PM	R80	192.168.102.1	19
Today, 3:23:13 PM	R80	win-victim (192....	wi
Today, 3:23:10 PM	R80	win-victim (192....	wi
Today, 3:23:09 PM	R80	win-victim (192....	
Today, 3:23:06 PM	R80	192.168.102.1	19
Today, 3:23:04 PM	R80	192.168.102.1	19
Today, 3:22:57 PM	R80	192.168.101.1	19
Today, 3:22:53 PM	R80	192.168.101.1	19

The default search timeframe is 7 Days, but you can search for other options. Click **Last 7 Days** to see the options.



The screenshot shows the 'Logs' tab with the search timeframe dropdown menu open. The dropdown menu is highlighted with a red box and lists the following options: Last 7 Days (Selected), Last Hour (Since 3:28 PM), Today (10/8/2018), Last 24 Hours (Since 10/7/2018 4:28 PM), Yesterday (10/7/2018), This Week (Since 10/7/2018), Last 7 Days (Since 10/1/2018), This Month (Since 10/1/2018), Last 30 Days (Since 9/8/2018), All Time, and Custom.

Open cmd.exe on the Windows GUI and ping the IP address of your Check Point Gateway

```
C:\> Administrator: Command Prompt - ping 192.168.101.254 -t

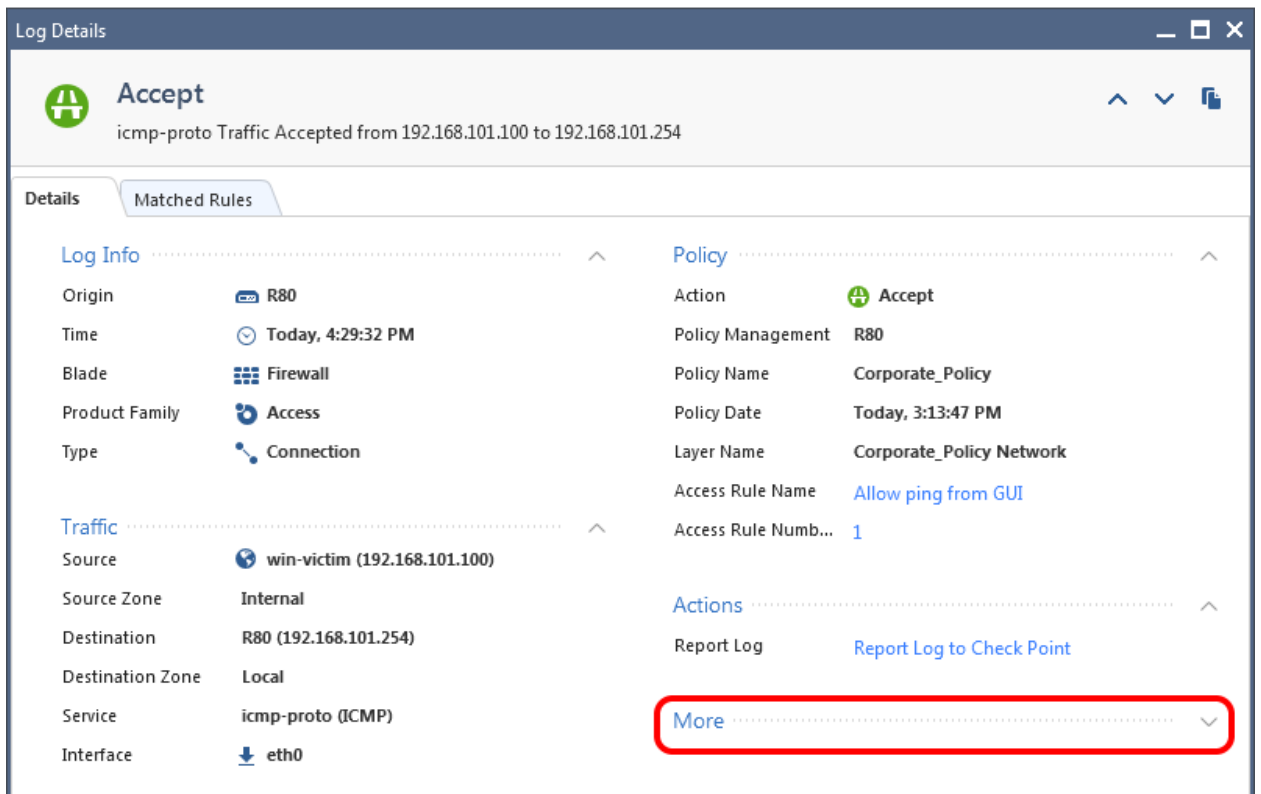
C:\Users\jroberts>ping 192.168.101.254 -t

Pinging 192.168.101.254 with 32 bytes of data:
Reply from 192.168.101.254: bytes=32 time<1ms TTL=64
Reply from 192.168.101.254: bytes=32 time<1ms TTL=64
Reply from 192.168.101.254: bytes=32 time<1ms TTL=64
Reply from 192.168.101.254: bytes=32 time=1ms TTL=64
```

Now Search for "Accept" in Logs.



Double-click the log entry to view the details.



Click on "More" to see more details about the Protocol/Service in use. In this case, we see ICMP Type 8 (aka Echo request)

[More](#)

ICMP	Echo Request
ICMP Type	8
ICMP Code	0
Context Num	0

Click on the **Matched Rules** tab. You can go to the Rule in the Policy by clicking the links shown on this Tab.

The screenshot shows a 'Log Details' window with a header bar. Below the header, there is a green icon and the text 'Accept' followed by 'icmp-proto Traffic Accepted from 192.168.101.100 to 192.168.101.254'. Below this, there are two tabs: 'Details' and 'Matched Rules'. The 'Matched Rules' tab is active, showing a table with the following data:

Rule	Layer	Rule Name	Action
1	Corporate_Policy N...	Allow ping from GUI	Accept

Below the table, there is a button labeled 'Go to Rule'.

Click the red X in the upper right to close the Log Details.

This screenshot is identical to the previous one, but with a red 'X' icon in the top right corner of the window's title bar, indicating the close button.