Management server migration from R65 to R80.20

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Abstract

Customers with legacy versions of Check Point still exist and the reasons for this can be as varied as the customers themselves. Whatever the reason the security implications of not upgrading are too great to ignore. Below are the steps to migrate a R65 management server to R80.xx

Exporting Management Database

Described below are the steps necessary to stage everything in a VM so that we can produce an export to import into customer's environment.

1. Obtain a migrate export of customer's R65 environment(In the example below the export is named migrate2gaia.tgz)
2. In a lab VM Install R65 and run the First Time Wizard.
3. When asked during the FTW, Install as primary SmartCenter
4. **Reboot when the FTW completes**
5. Log into SmartCenter via console or SSH and change shell for admin to bash to use WinSCP to transfer migrate/upgrade export to SmartCenter
   a. *chsh -s /bin/bash admin*
   b. *Transfer export **migrate2gaia.tgz** t to /home/admin on SmartCenter*
6. Import export into smartcenter
   a. *# cd /opt/CPsuite-R65/fw1/bin/upgrade_tools/*
   b. *./upgrade_import /home/admin/migrate2gaia.tgz*
7. *Reboot*

Note The import process will change the admin user password to that of the customer's environment. In order for us to proceed with staging the upgrade we must change the admin password for our use. The import will also change the allowed GUI client list to that of the customer environment.

8. Change existing admin account password with the fwm –a admin command via CLI
   a. *Example: fwm -a admin*
      *Password: **(Enter New Password)***
      *Verify Password: **(Re-Enter New Password)***
   Configure GUI clients to log in with R65 version
[Expert@FWMANAGER]# *cpconfig*
This program will let you re-configure
your VPN-1 configuration.

Configuration Options:
----
(1) Licenses
(2) Administrator
(3) GUI Clients
(4) SNMP Extension

|

(5) Random Pool
(6) Certificate Authority
(7) Certificate's Fingerprint

(8) Exit

Enter your choice (1-8) :**3**

Configuring GUI Clients...
==========================
GUI Clients are trusted hosts from which
Administrators are allowed to log on to this SmartCenter Server
using Windows/X-Motif GUI.
you have selected the following hosts to be GUI Clients:

Do you want to modify this list (y/n) [y] ? **y**

Do you want to [C]reate a new list, [A]dd or [D]elete one?: **a**

You can add GUI Clients using any of the following formats:
1. IP address.
2. Machine name.
3. "Any" - Any IP without restriction.
4. IP/Netmask - A range of addresses, for example 192.168.10.0/255.255.255.0
5. A range of addresses - for example 192.168.10.8-192.168.10.16
6. Wild cards (IP only) - for example 192.168.10.*

When defining a GUI client IP It is important to note that, you should use a GUI client form the customer's environment and configure your PC to use this IP so that we are not allowing restricted IPs to the allowed GUI list when we export/import into their environment. In this document I use an RFC 1918 IP as examples throughout.

Enter GUI Client: *192.168.10.10*
192.168.10.10 will be added as a GUI Client. Are you sure? (y/n) [y] ? **y**

192.168.10.10 was added successfully!

Do you want to add another one? (y/n) [n] ? **n**

Configuration Options:
----
(1) Licenses
(2) Administrator
(3) GUI Clients
(4) SNMP Extension
(5) Random Pool
(6) Certificate Authority
(7) Certificate's Fingerprint

(8) Exit

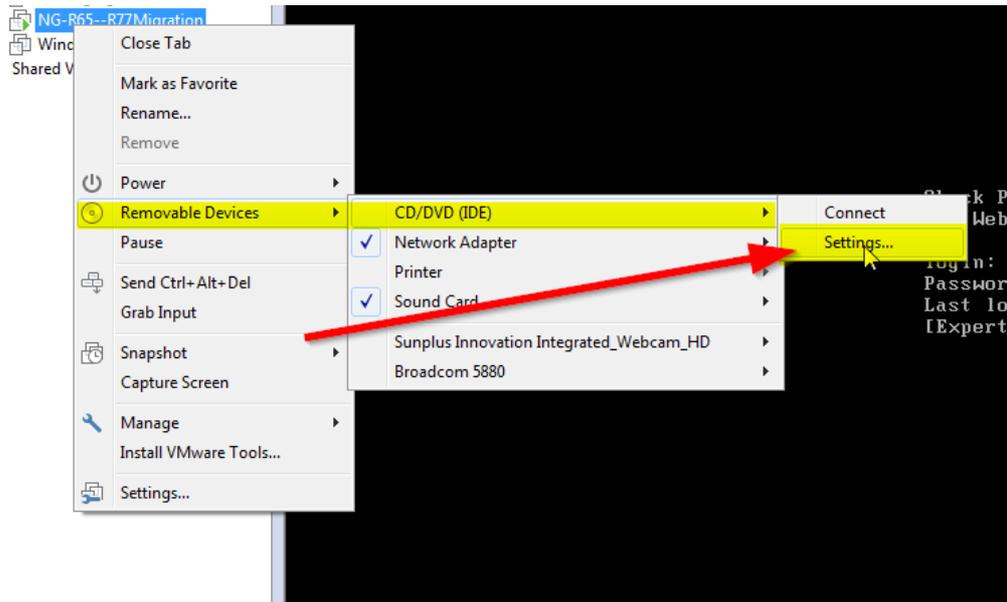Enter your choice (1-8) :**8**

Thank You...

After adding, a GUI client log into the SmartCenter with an R65 version of the SmartConsole to verify policies and objects match the customer environment.
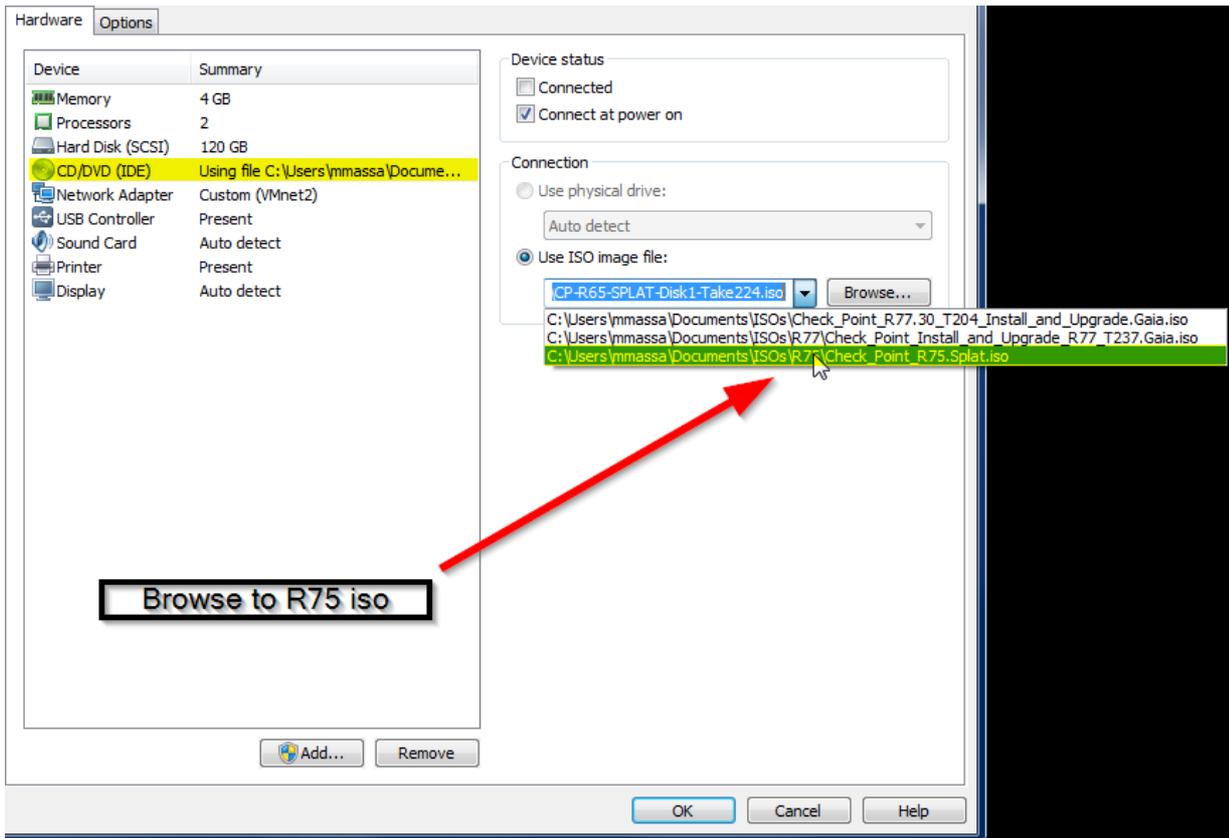
Upgrade R65 to R75:

Download and mount the R75 ISO.

From the VM console do the following.

1. **Mount R75 ISO**

2. Deploy a VM

Browse to R75 iso

3. **Reboot**
4. **Run patch add cd**

   [Expert@FWMANAGER]# *patch add cd*

   Choose a patch to install:

   1) SecurePlatform R75 Upgrade Package (CPspupgrade_R75.tgz)
   2) Exit

   Your choice: **1**

   The pre-upgrade verifier process may detect existing objects that conflict with RR75, beelow are two examples.

1. The pre-upgrade verifier found two objects whose name was the same but one had an uppercase letter N. This was allowed Pre-R75. To remedy this we can simpley delete one of the objects if it is not needed or rename the object to something else if the object is needed.

Delete net10 object

2. Another conflict in this example is that CP objects newbroffa01 and firewall-a are running CP software version that are not compatible with R75 or higher software versions. To continue with the upgrade we must upgrade the older gateways before proceeding or manage the older gateways with a separate manager until they are upgraded. If choosing the later option simply change the software levels of these objects to the minimum supported version of R65.

3.
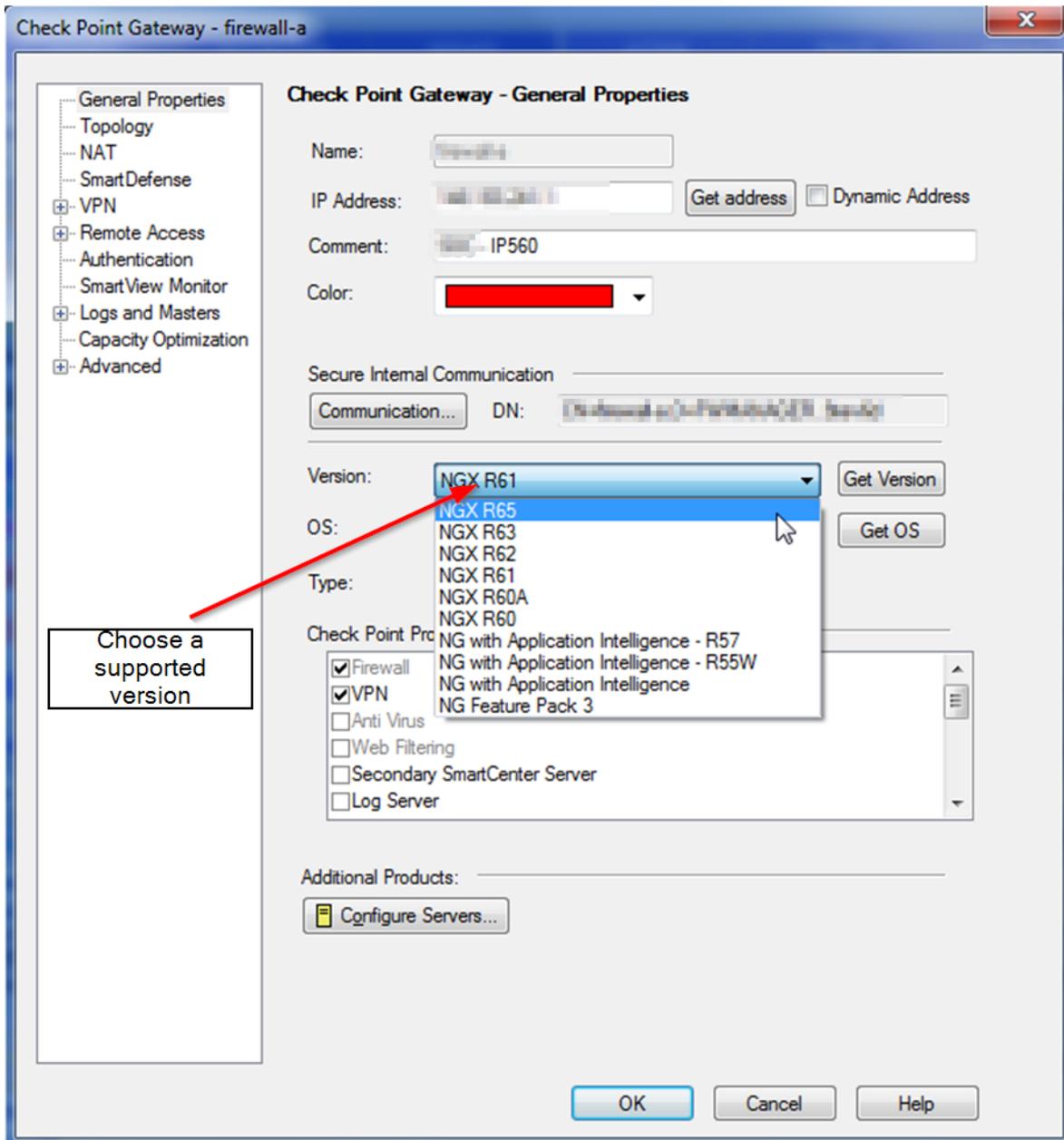
Upgrade from R75 to R77

Upgrade to R77 is required before we can upgrade to R77.30, and requires adding an eval all in one blade license.

After adding the eval licenses:

1. Download the R77 ISO from sk92965

2. Point the VM CDROM the Check Point R77 ISO as we did in the previous step
3. Select Patch add CD

Download R77 migrate tools found on SK 92965 and install it on the R77 to generate export:

- Copy tools to Legacy SmartCenter
  - *mkdir /var/log/tmp/03MigrationTools*
  - SCP migration tools to new directory
  - *tar -zxvf R77.30.03_migration_tools_Gaia.tgz*
- Backup Legacy Database
  - *./migrate export --include-uepm-msi-files /var/log/tmp/exportname.tgz*
  - Accept Defaults

Upgrade from R77 to R77.30

Build a new R77.30 vm and run the first time wizard using same name as original legacy management server. Once FTW completes

Change shell for admin to bash to use WinSCP to transfer migrate/upgrade export to smartcenter
- *a.* *chsh -s /bin/bash admin*
- b. Transfer R77 export to smartcenter
  [Expert@FWMANAGER:0]# *cd $FWDIR/bin/upgrade_tools*
  [Expert@FWMANAGER:0]# *./migrate import /home/admin/ng4R77.30.tgz*
- 3. **reboot**
- d. **Log in with SmartDashboard with R77.30 SmartConsole and verify migrated policies and objects exist.**

If everything looks complete, we can now use CPUSE to get the SmartCenter upgraded to R80.10 or R80.20

Upgrade from R77.30 to R80.20

Detailed instruction found in the Installation and Upgrade guide for R80.20 found at:

https://sc1.checkpoint.com/documents/R80.20_GA/WebAdminGuides/EN/CP_R80.20_Installation_and_Upgrade_Guide/html_frameset.htm