
Tech Note 8 How to Install SixView Manager® 3.0



Abstract:

This document is a step by step guide on how to install SixView Manager 3.0 onto a Linux Server. The chosen server can be either a dedicated server or hosted in a virtual machine. SixView Manager 3.0 requires 64 bit CentOS 6.6 or Red Hat Enterprise Linux 6.6. Please ensure to install ONLY one of those two versions of Linux before proceeding with installing SixView Manager.

Product:

SixView Manager 3.0

Required Software:

CentOS 6.6 ISO
SVM 3.0 RPM
Web Browser: Chrome, Firefox or IE10

Optional Software:

VirtualBox or VMware Player
Windows 7

Part 1 – Installing/Upgrading CentOS

This guide will be using 64 bit CentOS 6.6 and VMware Player as our virtual machine software.

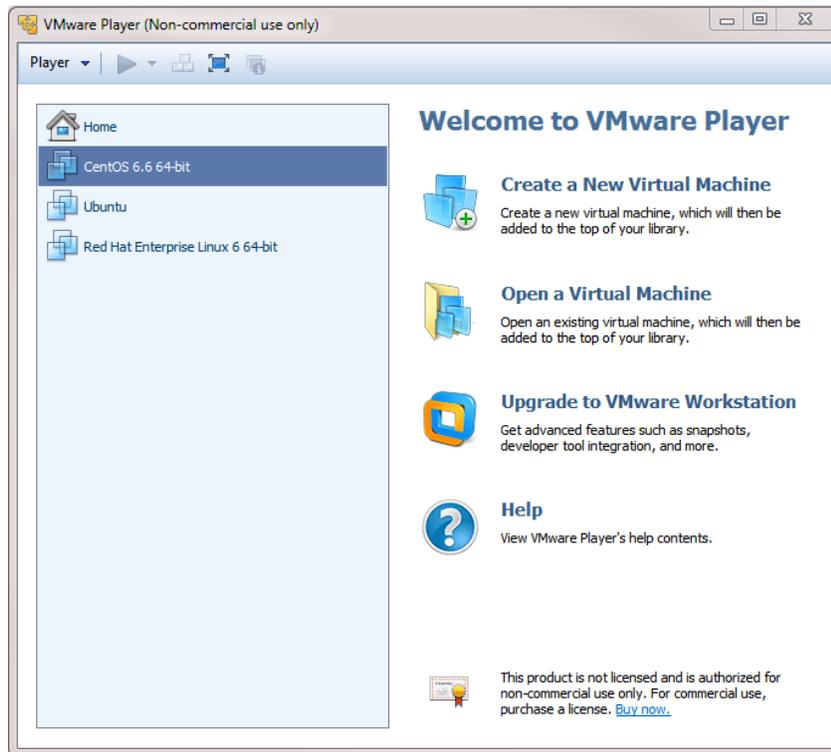
NOTE: If CentOS is already installed or using a dedicated server, skip to Part 1 Section 1.2, Upgrading CentOS on page 5.

Section 1.1 - Installing CentOS in VMware Player:

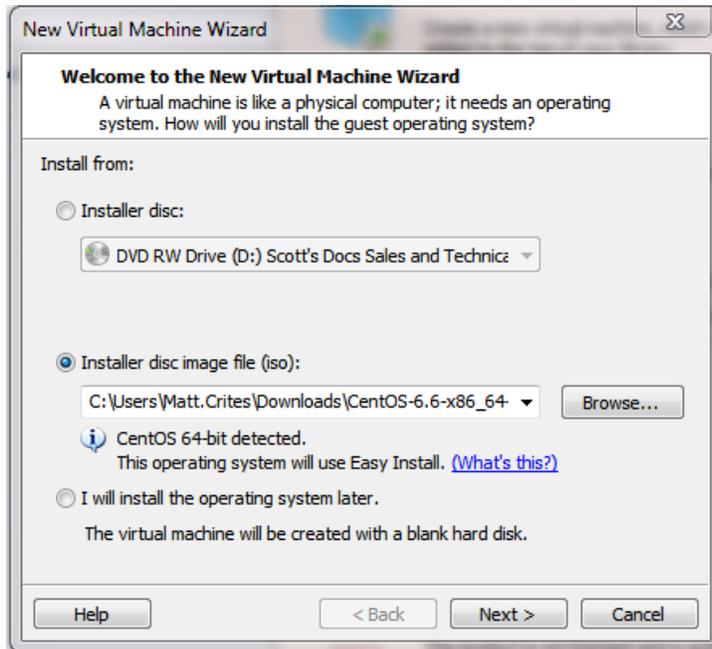
1. Download the 64 bit CentOS 6.6 ISO from a mirror site and save to host PC. Mirror sites can be found from the following location:
http://isoredirect.centos.org/centos/6/isos/x86_64/
2. Click any of the available mirror site links. The CentOS ISO can be downloaded directly or using a torrent software. If downloading the ISO directly, choose the below two files:
 - a. CentOS-6.6-x86_64-bin-DVD1.iso
 - b. CentOS-6.6-x86_64-bin-DVD2.iso

NOTE: The torrent will download both of the above files at the same time so there is only one link to click if choosing that option.

- c. Download and install VMware Player onto host machine to your IT dept's desired specifications.
- d. Once the installation is complete, double-click the VMware Player icon to start the software.
- e. When the software window opens, click the link to the right labeled "Create a New Virtual Machine".

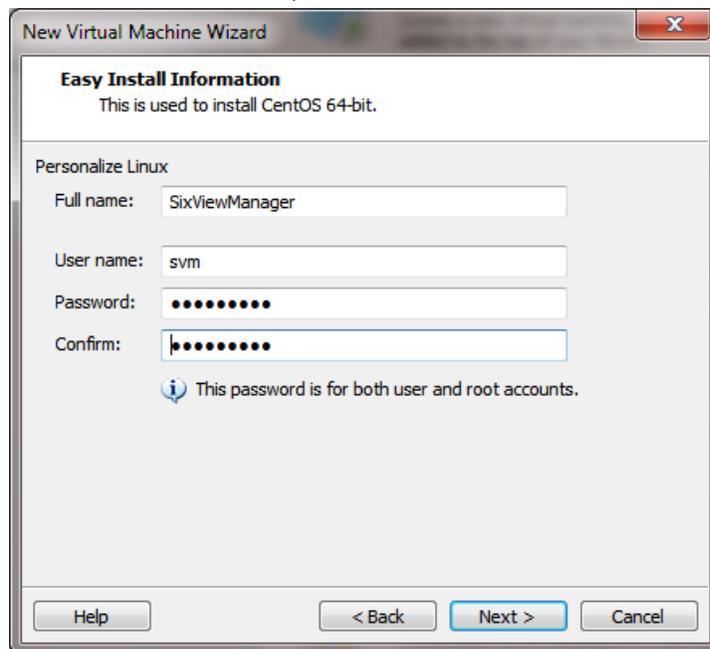


- f. In the next window, click the radio button labeled "Installer disc image file (iso)" then click Browse.
 - 1) Locate the **CentOS-6.6-x86_64-bin-DVD1.iso** image file downloaded previously and click Open then click Next.

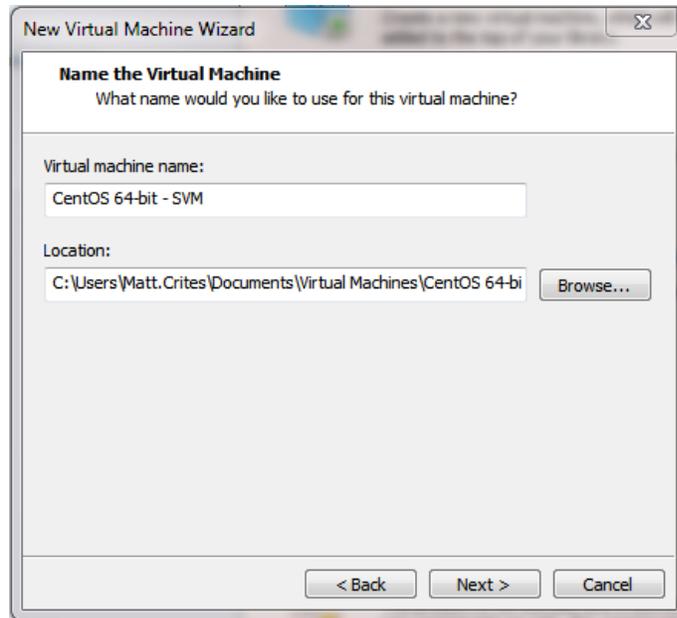


g. VMware Player makes OS installation easy and automated. In the next window, enter *Full Name*, *User name*, and *Password* for accessing the CentOS web UI then click **Next**.

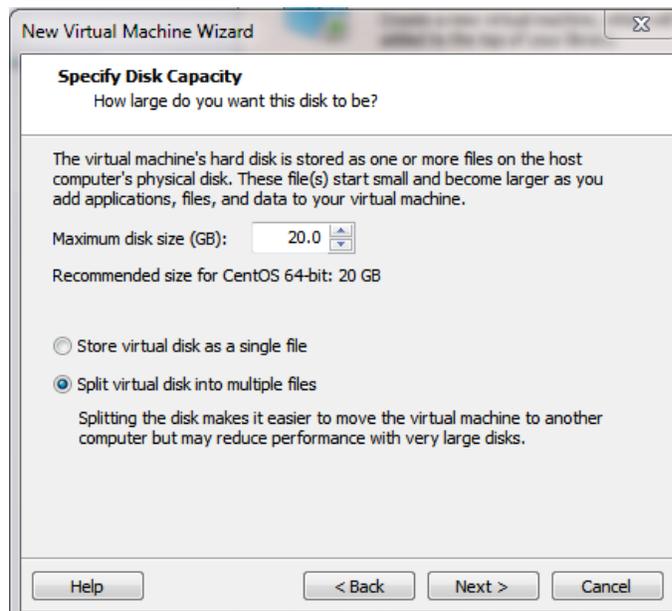
NOTE: The password entered here will be for both user and root accounts so be sure to use strong password conventions.



h. Next window, name your virtual machine and select the location to store the virtual machine. This will be the name that appears on VMware Player's virtual machine selection screen when the software opens. After setting name and location, click **Next**.



- i. In the next window, choose your Maximum disk space (GB). The default is 20. Increase or decrease the default to your desired disk space. This size is dependent on how many devices SixView Manager will be managing in its database. Suggested minimum is 120 GB. This number can be adjusted later if found to be set too low. Once the disk space is set, click **Next**.



- j. On the final screen, VMware Player gives the ability to customize desired hardware settings for the virtual machine. By default, each virtual machine uses one core of the CPU, one GB of RAM, and NAT. These settings can be adjusted here or after installation is complete. We will be adjusting these settings

now. Click the *Customize Hardware...* button.

k. Make the following changes:

1) Memory

Default is set at 1 GB. Suggested minimum for SixView Manager is 4 GB.

2) Processors

Default is 1. Suggested minimum is Quad-Core. One should be sufficient, however this can be adjusted later, if needed.

3) Network Adapter

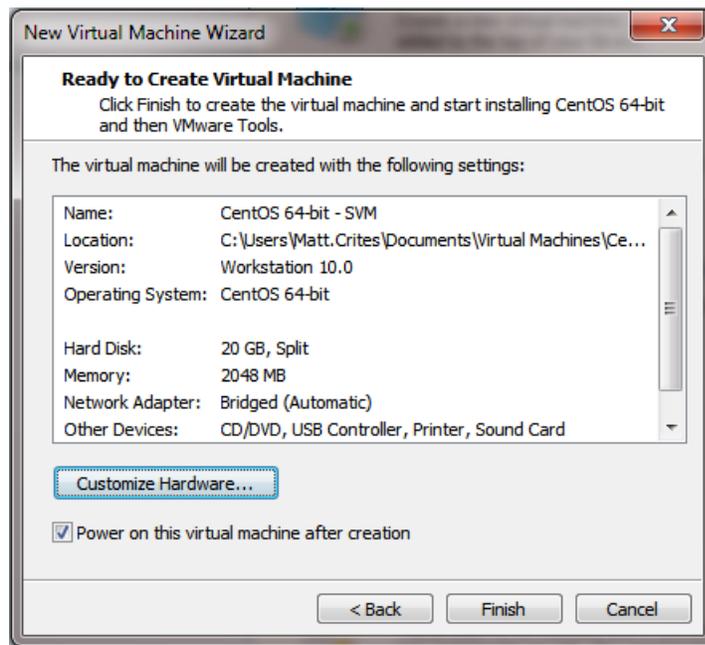
a) Default is NAT. Suggested is to use Bridged. This will cause the virtual machine to either request a network address via DHCP or can be set statically once the OS is installed.

b) Put a check in “Replicate physical network connection state” then click Configure Adapters.

c) Choose the network adapter that is connected to the network then click **OK**.

l. When finished with changes, click **Close** to return to the New Virtual Machine Wizard.

m. The new settings will be displayed in the Window. Click Finish to complete the Wizard.



n. The virtual machine will now begin the installation process of CentOS. This process may take several minutes to complete.

o. When the installation is complete, log into the virtual machine and proceed to Part 2 – Installing/Upgrading SixView Manager 3.0

Section 1.2 - Upgrading CentOS (if required):

1. Open a terminal window under **Applications – System Tools – Terminal**

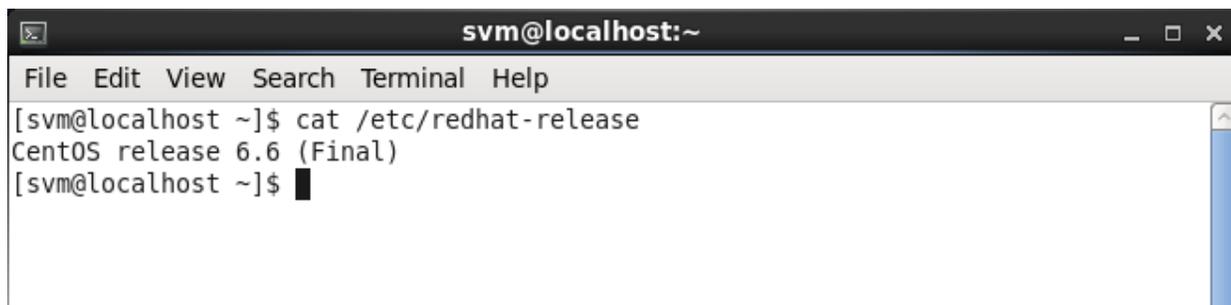


2. You can view which version of CentOS is currently on your system by using the below command in a terminal window:

```
cat /etc/redhat-release <Enter>
```

```
CentOS release 6.6 (Final)
```

The returned information should say “CentOS release 6.6 (Final)”. If the command returns anything other than that, upgrade your Linux server with the correct version before proceeding further.



3. Root access will be required for the remainder of the installation. To get root access, enter the following at the command prompt:
 - a. `su -`
 - b. `password <the password set at install>`

NOTE: The password will not be displayed as you type so please type carefully. This is a Linux security feature.

4. The user on the command prompt will change from the current user to `root@localhost` upon successful login.
5. Update the CentOS 6.6 from the command line to ensure all the latest packages and patches are installed.

a. **yum update** <Enter>

This could take some time to upgrade. Once complete, proceed to Part 2 of this guide.

Part 2 – Installing/Upgrading SixView Manager 3.0

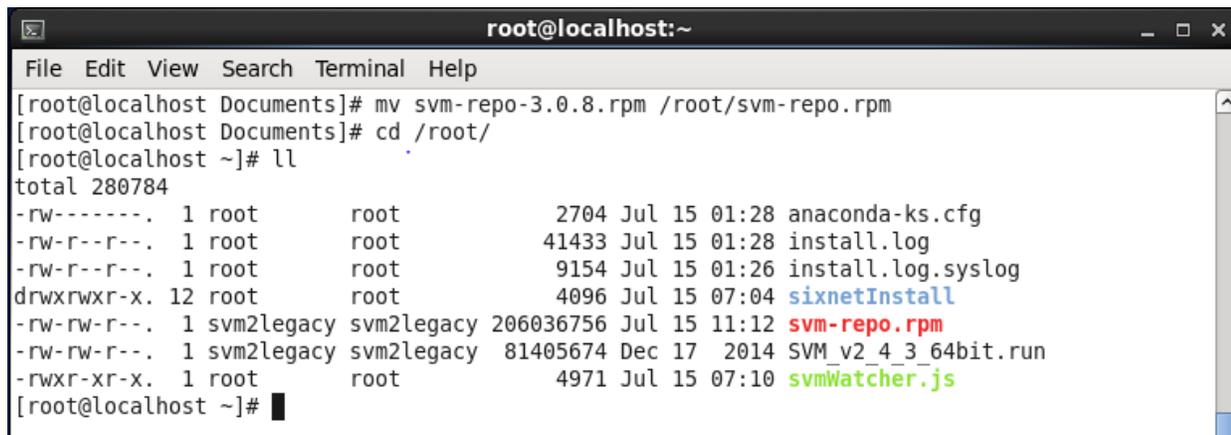
Section 2.1: Installing fresh SixView Manager (not an Upgrade):

This section will cover installing SixView Manager onto a fresh server. If you are upgrading SixView Manager to a later version, proceed to Section 2.2 – Upgrading SixView Manager 3.0: on page 10.

1. Download the RPM file provided by Red Lion to Linux CentOS 6.6 server. SixView Manager 3.0 only comes in 64 bit versions.
2. Change into the directory where the SVM 3.0 RPM is located
 - a. **cd /<name of directory>**
3. Once the download is complete, move the RPM file from its current directory to the /root directory and rename the SVM 3.0 rpm to **svm-repo.rpm**.
 - a. **mv svm-repo-<version>.rpm /root/svm-repo.rpm** <Enter>

NOTE: Where the above says <version>, replace with version downloaded. Ex **svm-repo-3.0.8.rpm**

4. Change into the /root directory
 - a. **cd /root**



```

root@localhost:~
File Edit View Search Terminal Help
[root@localhost Documents]# mv svm-repo-3.0.8.rpm /root/svm-repo.rpm
[root@localhost Documents]# cd /root/
[root@localhost ~]# ll
total 280784
-rw-----. 1 root      root          2704 Jul 15 01:28 anaconda-ks.cfg
-rw-r--r--. 1 root      root        41433 Jul 15 01:28 install.log
-rw-r--r--. 1 root      root        9154 Jul 15 01:26 install.log.syslog
drwxrwxr-x. 12 root      root         4096 Jul 15 07:04 sixnetInstall
-rw-rw-r--. 1 svm2legacy svm2legacy 206036756 Jul 15 11:12 svm-repo.rpm
-rw-rw-r--. 1 svm2legacy svm2legacy 81405674 Dec 17 2014 SVM_v2_4_3_64bit.run
-rwxr-xr-x. 1 root      root         4971 Jul 15 07:10 svmWatcher.js
[root@localhost ~]#
  
```

5. Run the following command from inside the /root directory:
 - a. **yum install -y --disablerepo=* svm-repo.rpm** <Enter>

```

root@localhost:~
File Edit View Search Terminal Help
[root@localhost ~]# yum install -y --disablerepo=* svm-repo.rpm
Loaded plugins: fastestmirror, refresh-packagekit, security
Setting up Install Process
Examining svm-repo.rpm: svm-repo-3.0.8-1435877935752.x86_64
Marking svm-repo.rpm to be installed
Loading mirror speeds from cached hostfile
Resolving Dependencies
--> Running transaction check
---> Package svm-repo.x86_64 0:3.0.8-1435877935752 will be installed
--> Finished Dependency Resolution

Dependencies Resolved

```

6. The correct dependencies will start to install.

```

root@localhost:~
File Edit View Search Terminal Help
=====
Package      Arch      Version      Repository      Size
=====
Installing:
svm-repo     x86_64    3.0.8-1435877935752  /svm-repo      201 M
=====
Transaction Summary
=====
Install      1 Package(s)

Total size: 201 M
Installed size: 201 M
Downloading Packages:
Running rpm_check_debug
Running Transaction Test
Transaction Test Succeeded
Running Transaction
  Installing : svm-repo-3.0.8-1435877935752.x86_64      1/1
  Verifying  : svm-repo-3.0.8-1435877935752.x86_64      1/1

Installed:
svm-repo.x86_64 0:3.0.8-1435877935752

Complete!
[root@localhost ~]#

```

7. Once complete, enter the following command from the prompt:

a. `sh /usr/local/redlion/svm/scripts/install.sh`

The installation will begin.

```

root@localhost:~
File Edit View Search Terminal Help
[root@localhost ~]# sh /usr/local/redlion/svm/scripts/install.sh
Loaded plugins: fastestmirror, refresh-packagekit, security
Setting up Install Process
Loading mirror speeds from cached hostfile
svm-repo | 2.9 kB 00:00 ...
Resolving Dependencies
--> Running transaction check
--> Package svm.x86_64 0:3.0.8-1435877935752 will be installed
--> Processing Dependency: nodejs for package: svm-3.0.8-1435877935752.x86_64
--> Processing Dependency: mongodb-org for package: svm-3.0.8-1435877935752.x86_64
--> Running transaction check
--> Package mongodb-org.x86_64 0:2.6.10-1 will be installed
--> Processing Dependency: mongodb-org-tools = 2.6.10 for package: mongodb-org-2.6.10-1.x86_64
--> Processing Dependency: mongodb-org-shell = 2.6.10 for package: mongodb-org-2.6.10-1.x86_64
--> Processing Dependency: mongodb-org-server = 2.6.10 for package: mongodb-org-2.6.10-1.x86_64
--> Processing Dependency: mongodb-org-mongos = 2.6.10 for package: mongodb-org-2.6.10-1.x86_64
--> Package nodejs.x86_64 0:0.10.39-1nodesource.el6 will be installed
--> Running transaction check
--> Package mongodb-org-mongos.x86_64 0:2.6.10-1 will be installed
--> Package mongodb-org-server.x86_64 0:2.6.10-1 will be installed
--> Package mongodb-org-shell.x86_64 0:2.6.10-1 will be installed
--> Package mongodb-org-tools.x86_64 0:2.6.10-1 will be installed
--> Finished Dependency Resolution

Dependencies Resolved

```

8. When complete, the installer will provide the IP's that SixView Manager is now accessible from using your web browser.

```

root@localhost:~
File Edit View Search Terminal Help
Installing : nodejs-0.10.39-1nodesource.el6.x86_64 6/7
Installing : svm-3.0.8-1435877935752.x86_64 7/7
Verifying : nodejs-0.10.39-1nodesource.el6.x86_64 1/7
Verifying : mongodb-org-tools-2.6.10-1.x86_64 2/7
Verifying : mongodb-org-shell-2.6.10-1.x86_64 3/7
Verifying : svm-3.0.8-1435877935752.x86_64 4/7
Verifying : mongodb-org-server-2.6.10-1.x86_64 5/7
Verifying : mongodb-org-mongos-2.6.10-1.x86_64 6/7
Verifying : mongodb-org-2.6.10-1.x86_64 7/7

Installed:
svm.x86_64 0:3.0.8-1435877935752

Dependency Installed:
mongodb-org.x86_64 0:2.6.10-1 mongodb-org-mongos.x86_64 0:2.6.10-1
mongodb-org-server.x86_64 0:2.6.10-1 mongodb-org-shell.x86_64 0:2.6.10-1
mongodb-org-tools.x86_64 0:2.6.10-1 nodejs.x86_64 0:0.10.39-1nodesource.el6

Complete!
Starting mongod: [ OK ]
info: Forever processing file: /usr/local/redlion/svm/index.js
SVM should be accessible from:
https://127.0.0.1:18081
https://192.168.31.196:18081
[root@localhost ~]#

```

9. Once complete, proceed to the Part 3 – Installation Pt2.

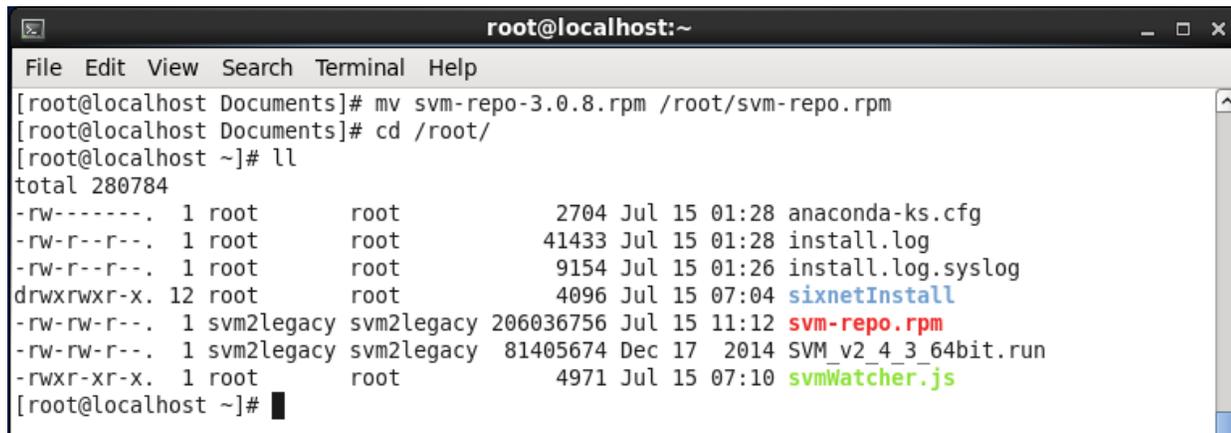
Section 2.2 – Upgrading SixView Manager 3.0:

This section will cover upgrading from an older version of SixView Manager to SixView Manager 3.0.

1. Download the RPM file provided by RLC to Linux CentOS 6.6 server. SixView Manager 3.0 only comes in 64 bit versions.
2. Change into the directory where the SVM 3.0 RPM is located
 - a. **cd /<name of directory>**
3. Once the download is complete, move the RPM file from its current directory to the /root directory and rename the SVM 3.0 rpm to **svm-repo.rpm**.
 - a. **mv svm-repo-<version>.rpm /root/svm-repo.rpm** <Enter>

NOTE: Where the above says <version>, replace with version downloaded. Ex **svm-repo-3.0.8.rpm**

4. Change into the /root directory
 - a. **cd /root**



```

root@localhost:~
File Edit View Search Terminal Help
[root@localhost Documents]# mv svm-repo-3.0.8.rpm /root/svm-repo.rpm
[root@localhost Documents]# cd /root/
[root@localhost ~]# ll
total 280784
-rw-----. 1 root    root          2704 Jul 15 01:28 anaconda-ks.cfg
-rw-r--r--. 1 root    root        41433 Jul 15 01:28 install.log
-rw-r--r--. 1 root    root        9154 Jul 15 01:26 install.log.syslog
drwxrwxr-x. 12 root    root        4096 Jul 15 07:04 sixnetInstall
-rw-rw-r--. 1 svm2legacy svm2legacy 206036756 Jul 15 11:12 svm-repo.rpm
-rw-rw-r--. 1 svm2legacy svm2legacy 81405674 Dec 17 2014 SVM_v2_4_3_64bit.run
-rwxr-xr-x. 1 root    root         4971 Jul 15 07:10 svmWatcher.js
[root@localhost ~]#

```

5. If the current SixView Manager is still running, turn off the process with the below command:
 - a. **service svm stop**
6. Run the following command from inside the /root directory:
 - a. **yum install -y --disablerepo=* svm-repo.rpm** <Enter>

```

root@localhost:~
File Edit View Search Terminal Help
[root@localhost ~]# yum install -y --disablerepo=* svm-repo.rpm
Loaded plugins: fastestmirror, refresh-packagekit, security
Setting up Install Process
Examining svm-repo.rpm: svm-repo-3.0.8-1435877935752.x86_64
Marking svm-repo.rpm to be installed
Loading mirror speeds from cached hostfile
Resolving Dependencies
--> Running transaction check
---> Package svm-repo.x86_64 0:3.0.8-1435877935752 will be installed
--> Finished Dependency Resolution

Dependencies Resolved

```

7. SixView Manager will start to update. When complete, yum will provide a Transaction Summary. The summary will show that SixView Manager packages were updated.

```

root@localhost:~
File Edit View Search Terminal Help
Transaction Summary
=====
Upgrade      1 Package(s)

Total size: 201 M
Downloading Packages:
Running rpm_check_debug
Running Transaction Test
Transaction Test Succeeded
Running Transaction
  Updating   : svm-repo-3.0.8-1435877935752.x86_64           1/2
  Cleanup    : svm-repo-3.0.7-1433209941458.x86_64         2/2
  Verifying  : svm-repo-3.0.8-1435877935752.x86_64         1/2
  Verifying  : svm-repo-3.0.7-1433209941458.x86_64         2/2

Updated:
  svm-repo.x86_64 0:3.0.8-1435877935752

Complete!
[root@localhost ~]#

```

8. Once complete, enter the following command from the prompt:
 a. **sh /usr/local/redlion/svm/scripts/install.sh**
9. The upgrade will begin. After the upgrade has completed, proceed to Part 3 – Installation Pt2.

```

root@localhost:~
File Edit View Search Terminal Help
[root@localhost ~]# sh /usr/local/redlion/svm/scripts/install.sh
Loaded plugins: fastestmirror, refresh-packagekit, security
Setting up Update Process
Loading mirror speeds from cached hostfile
svm-repo | 2.9 kB 00:00 ...
Resolving Dependencies
--> Running transaction check
--> Package svm.x86_64 0:3.0.7-1433209941458 will be updated
--> Package svm.x86_64 0:3.0.8-1435877935752 will be an update
--> Finished Dependency Resolution

Dependencies Resolved

=====
Package Arch Version Repository Size
=====
Updating:
svm x86_64 3.0.8-1435877935752 svm-repo 12 M
Transaction Summary
=====
Upgrade 1 Package(s)

Total download size: 12 M
Downloading Packages:
Running rpm_check_debug
Running Transaction Test
Transaction Test Succeeded
Running Transaction
  Updating : svm-3.0.8-1435877935752.x86_64 1/2
  Cleanup : svm-3.0.7-1433209941458.x86_64 2/2
  Verifying : svm-3.0.8-1435877935752.x86_64 1/2
  Verifying : svm-3.0.7-1433209941458.x86_64 2/2

Updated:
  svm.x86_64 0:3.0.8-1435877935752

Complete!

```

Part 3 – Installation Pt2

This section walks through the GUI portion of the installation/upgrade. The browsers that SixView Manager currently supports are Chrome, Firefox, and IE10 and up. The browser used in this guide will be Chrome.

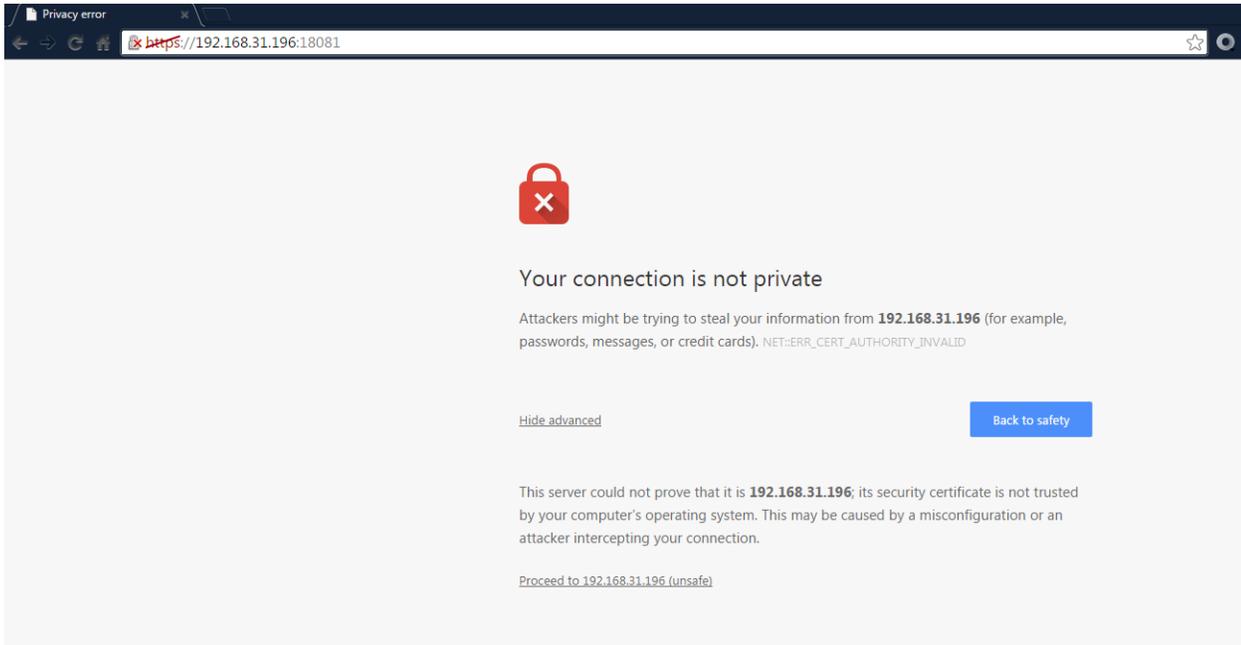
Before proceeding, you'll need to disable iptables in your SixView Manager Linux server, otherwise you will not be able to access the SixView Manager GUI screens. To disable iptables, enter the following commands below:

1. **service iptables stop**
2. **chkconfig iptables off**

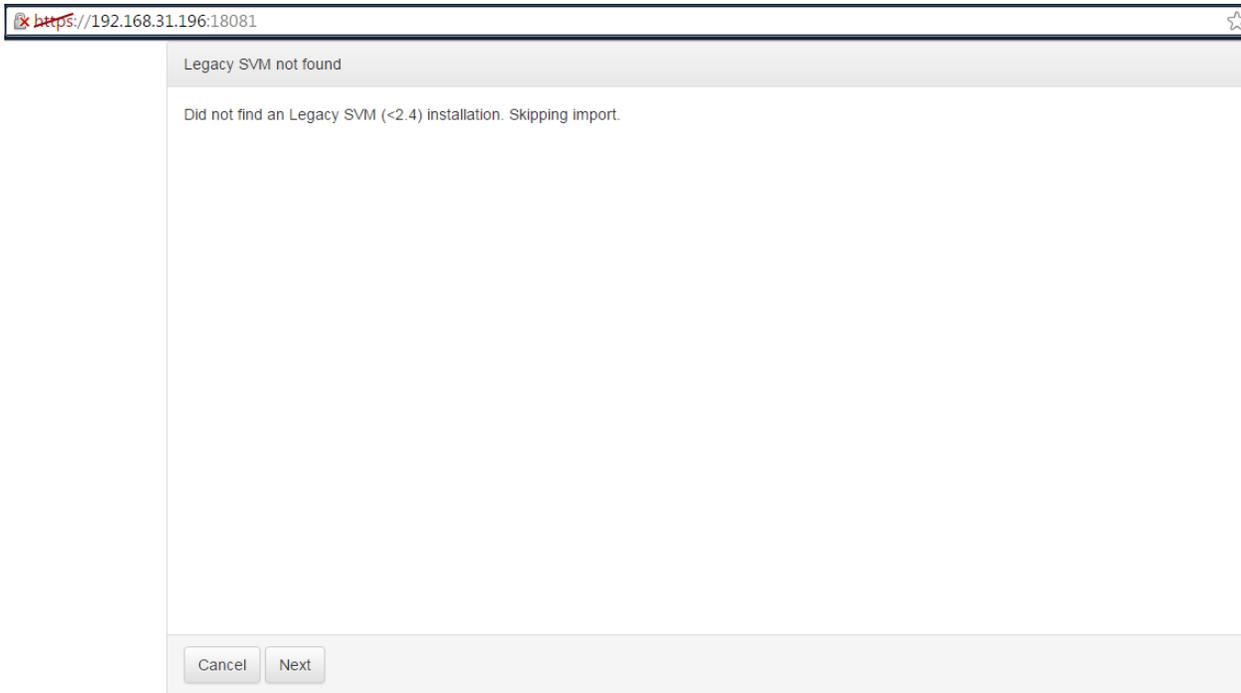
Section 3.1 – Fresh Install

1. Open your chosen web browser and navigate to the IP of your SixView Manager virtual machine using HTTPs and port 18081.
2. The Privacy error page will display. Click Advanced, then Proceed to...

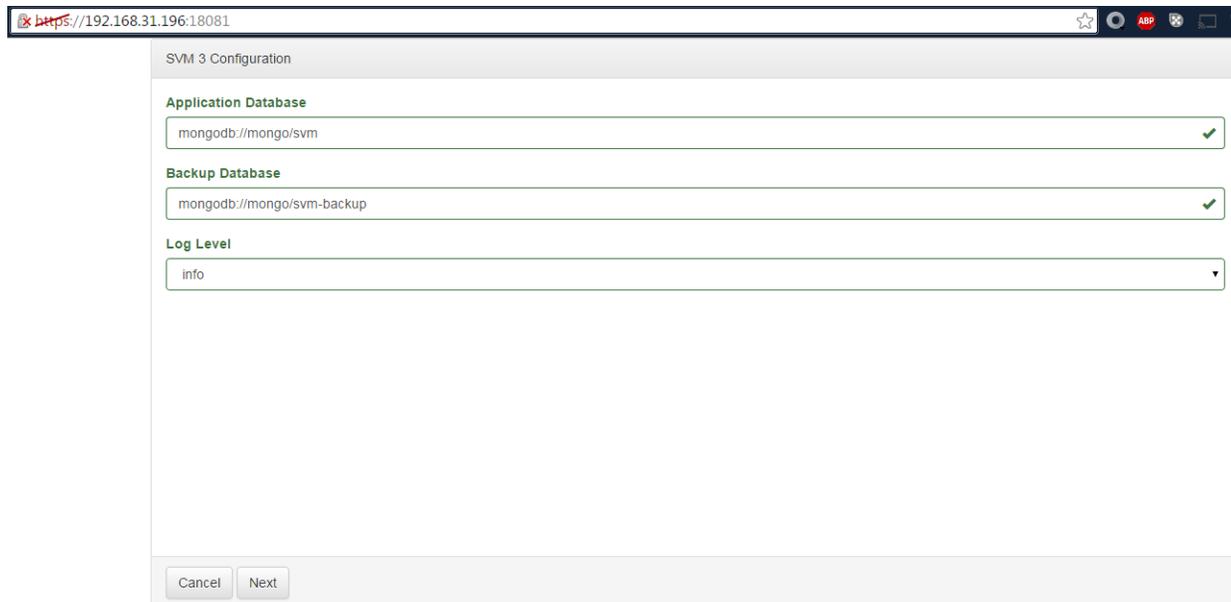
NOTE: Depending on the browser used, the below privacy error might look different. The error comes from using a self-signed certificate instead of one from a trusted source like VeriSign.



3. The “Welcome to the SixView Manager Setup Wizard” page will display.
4. Click **Next** to continue.
5. SixView Manager will check for Legacy SixView Manager installations. If a previous SixView Manager installation is not detected on the server, SixView Manager will skip the import process.
6. Click **Next** to proceed.



7. On the SixView Manager 3 Configuration Screen, you can change the Log Level from the drop down. **DO NOT** change the Application Database or Backup Database settings. Making changes to these settings will cause SixView Manager to not operate properly.
8. Click **Next**.



The screenshot shows a web browser window with the URL <https://192.168.31.196:18081>. The page title is "SVM 3 Configuration". It contains three input fields:

- Application Database:** A text box containing "mongodb://mongo/svm" with a green checkmark to its right.
- Backup Database:** A text box containing "mongodb://mongo/svm-backup" with a green checkmark to its right.
- Log Level:** A dropdown menu with "info" selected.

At the bottom of the form are two buttons: "Cancel" and "Next".

9. On the SixView Manager 3 SMTP Configuration Screen, if you plan to use the Alerting feature in SixView Manager, ensure the Allow check box is checked.

NOTE: With SixView Manager 3.0.8 and earlier, these settings can only be set during installation. If this step is skipped and found to be needed later, the installation process of SixView Manager must be done again.

10. Enter the following:

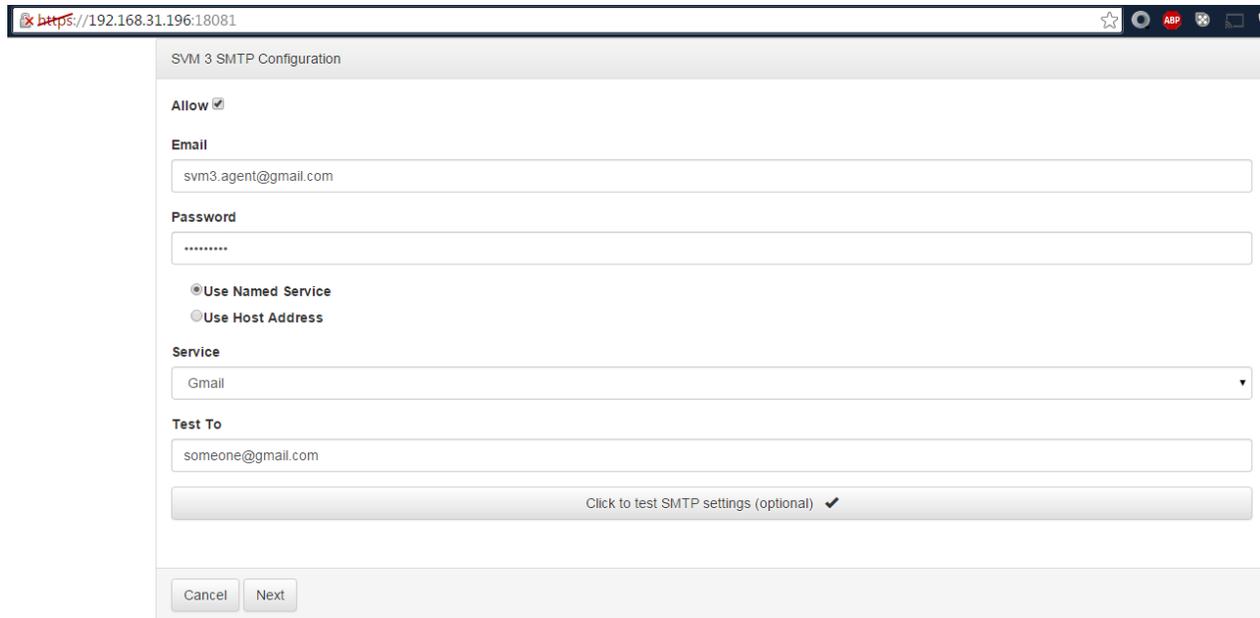
- a. Email – this is the email account that will be associated with this SixView Manager install by an SMTP server.
- b. Password – Enter the password for the associated email account
- c. Choose either “Use Named Service” or “Use Host Address”.

- 1) For “Use Named Service”, there is a dropdown to choose a popular email service. The service list is auto-populated with ALL well known services.

- 2) For “Use Host Address”, enter the IP of your own SMTP server setup. Example, Microsoft Exchange.

11. Lastly, to test whether the above settings are correct, enter an email address into the “Test To” field then click “Click to test SMTP settings”. If the test email was sent successfully, a check mark will appear on the screen.

12. When done, click **Next**.



The screenshot shows a web browser window with the address bar displaying `https://192.168.31.196:18081`. The page title is "SVM 3 SMTP Configuration". The form includes the following fields and options:

- Allow**: A checked checkbox.
- Email**: A text input field containing `svm3.agent@gmail.com`.
- Password**: A text input field with masked characters (dots).
- Service Selection**: Two radio buttons:
• Use Named Service
• Use Host Address
- Service**: A dropdown menu currently showing "Gmail".
- Test To**: A text input field containing `someone@gmail.com`.
- Test Button**: A button labeled "Click to test SMTP settings (optional)" with a checkmark icon.
- Navigation**: "Cancel" and "Next" buttons at the bottom.

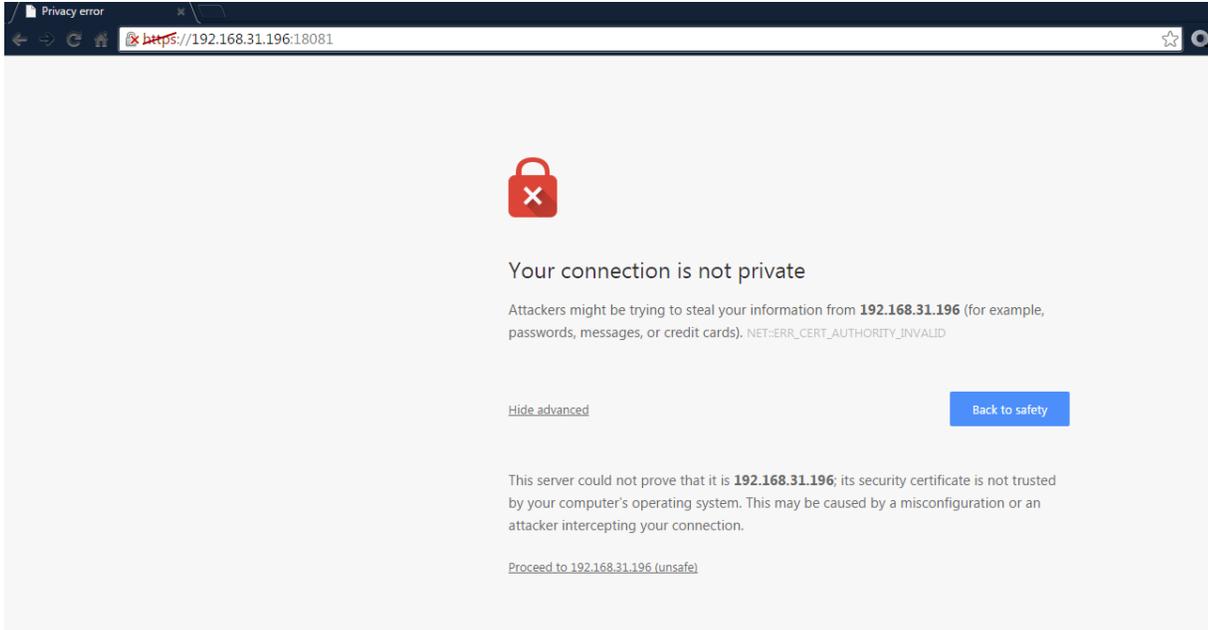
13. The installation is now complete. Click "Restart" to start SixView Manager. After 10 seconds, you'll be navigated to the SixView Manager login page.

NOTE: The default username and password for accessing SixView Manager should have been provided when you purchased SixView Manager. If not, please contact customer service or technical support.

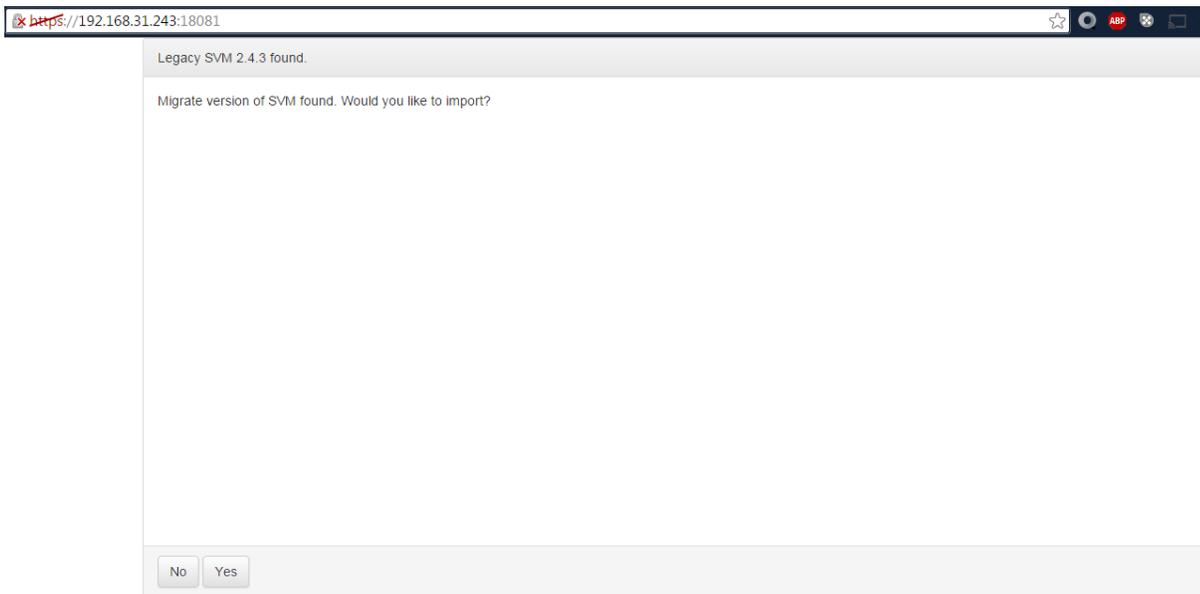
Section 3.2 – Upgrade:

1. Open your chosen web browser and navigate to the IP of your SixView Manager virtual machine using HTTPs and port 18081.
2. The Privacy error page will display. Click Advanced then Proceed to...

NOTE: Depending on the browser used, the below privacy error might look different. The error comes from using a self-signed certificate instead of one from a trusted source like VeriSign.



1. The “Welcome to the SixView Manager Setup Wizard” page will display.
2. Click Next to continue.
3. SixView Manager will check for Legacy SixView Manager installations. If detected, SixView Manager will need to import the current database to the new database. Click **Yes** or **No** if you want the migration to take place.



NOTE: If SixView Manager does not detect a previous installation and it should have, contact support.



- On the SixView Manager 3 Configuration Screen, you can change the Log Level from the drop down. **DO NOT** change the Application Database or Backup Database settings. Making changes to these settings can cause SixView Manager to not operate properly.
- Click **Next**.

SVM 3 Configuration

Application Database
mongodb://mongo/svm ✓

Backup Database
mongodb://mongo/svm-backup ✓

Log Level
info ▼

Cancel Next

- The import will start to take place in the Progress screen. The import time will vary depending on the size of the database. Once complete, the import will Exit with code 0.
- Click **Next** to proceed.

Progress

```
info: Connecting to Mongo.  
Running UserAccountMapper  
Running AccountMapper  
Running UserMapper  
Running UserProcessor  
Running SubordinateMapper  
Running UnitMapper  
Running AccountGroupBuilder  
Running CopyUsers  
Added user supertestguy  
Added user testguy  
Added user mcredits  
Added user admin  
Running FirmwareMapper  
Done adding users.  
Exited with code 0.
```

Next

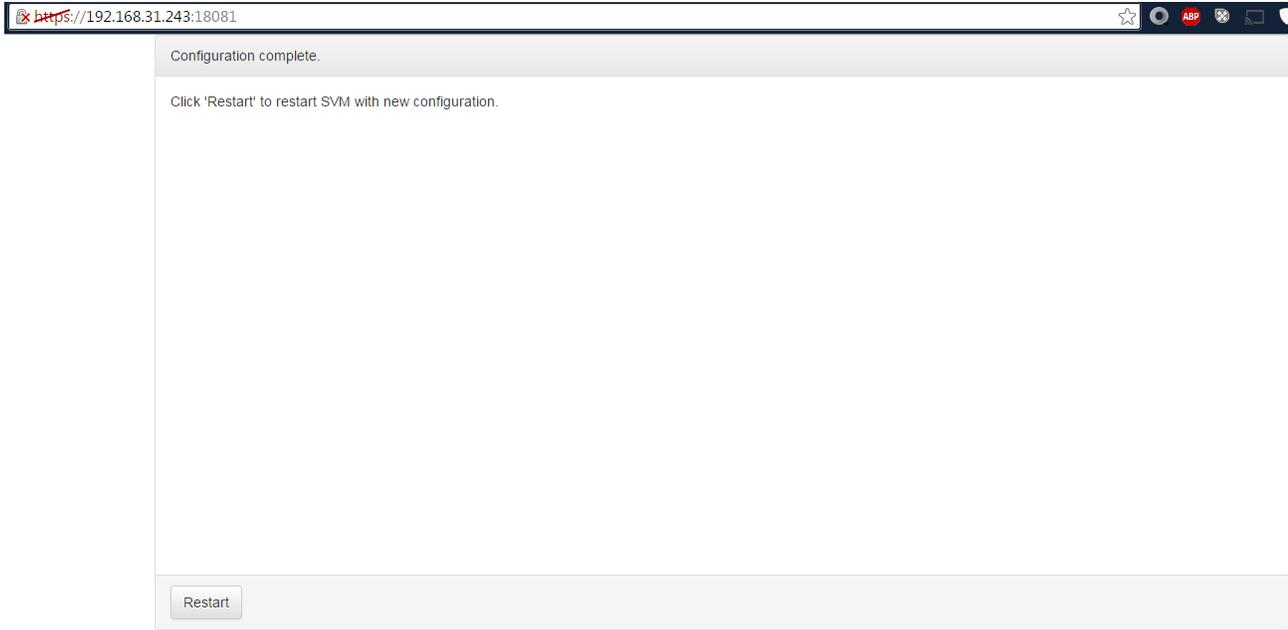
8. On the SixView Manager 3 SMTP Configuration Screen, if you plan to use the Alerting feature in SixView Manager, ensure the Allow check box is checked.

NOTE: With SixView Manager 3.0.8 and earlier, these settings can only be set during installation. If this step is skipped and found to be needed later, the installation process of SixView Manager must be done again.

9. Enter the following:
 - a. Email – this is the email account that will be associated with this SixView Manager install by an SMTP server.
 - b. Password – Enter the password for the associated email account.
 - c. Choose either “Use Named Service” or “Use Host Address”.
 - 1) For “Use Named Service”, there is a dropdown to choose a popular email service. The service list is auto-populated with ALL well known services.
 - 2) For “Use Host Address”, enter the IP of your own SMTP server setup. Example, Microsoft Exchange.
10. Lastly, to test whether the above settings are correct, enter an email address into the “Test To” field then click “Click to test SMTP settings”. If the test email was sent successfully, a check mark will appear on the screen.
11. When done, click **Next**

The screenshot shows the 'SVM 3 SMTP Configuration' window. The 'Allow' checkbox is checked. The 'Email' field contains 'svm3_agent@gmail.com'. The 'Password' field is masked with dots. The 'Service' dropdown is set to 'Gmail'. The 'Test To' field contains 'someone@test.com'. A button labeled 'Click to test SMTP settings (optional)' is visible. At the bottom, there are 'Cancel' and 'Next' buttons.

12. The installation is now complete.
13. Click **Restart** to start SixView Manager.



- 14. After 10 seconds, you'll be navigated to the SixView Manager login page.
- 15. Log in with your username and password. The Unit page will be displayed with all devices from the previous installation. If unit page is blank, remove cache from browser and reload the page. If still blank, please contact support at support@redlion.net



User Name

Password

[Forgot username/password?](#)

Disclaimer:

It is the customer's responsibility to review the advice provided herein and its applicability to the system. Red Lion Controls makes no representation about specific knowledge of the customer's system or the specific performance of the system. Red Lion is not responsible for any damage to equipment or connected systems. The use of this document is at your own risk. Red Lion standard product warranty applies.

For more information: <http://www.redlion.net/support/policies-statements/warranty-statement>

