RSA NETWITNESS® SUITE

Physical Host Installation Guide

for Version 11.1

Contact Information

RSA Link at https://community.rsa.com contains a knowledgebase that answers common questions and provides solutions to known problems, product documentation, community discussions, and case management.

Trademarks

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Distribution

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June 2019

Contents

Introduction

The instructions in this guide apply to physical hosts exclusively. See the RSA *NetWitness Suite Virtual Host Installation Guide* for instructions on how to set up virtual hosts in 11.1.

Supported Hardware

Series 4, Series 4S and Series 5.

Refer to the RSA *NetWitness Suite* Hardware Setup Guides for detailed information on each series type (https://community.rsa.com/community/products/netwitness/hardware-setup-guides).

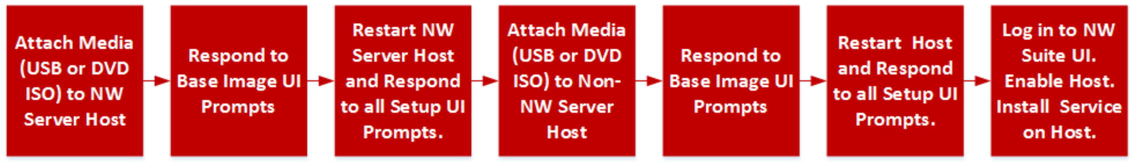
Note: You must install the new Endpoint Hybrid or Endpoint Log Hybrid on the S5 or Dell R730 appliance. See "(Optional) Task 2 - Install Endpoint Hybrid or Endpoint Log Hybrid" in Post Installation Tasks for instructions on how to install Endpoint Hybrid and Endpoint Log Hybrid.

External Attached Storage

If you have an external storage device or devices (for example, DACs or PowerVaults) attached to a physical host, refer to the Hardware Setup Guides for information on how to configure this storage on RSA Link (https://community.rsa.com/community/products/netwitness/hardware-setup-guides)."

Physical Host Installation Workflow

The following diagram illustrates the RSA NetWitness® Suite 11.1 Physical Host Installation workflow.


Attach Media (USB or DVD ISO) to NW Server Host
Respond to Base Image UI Prompts
Restart NW Server Host and Respond to all Setup UI Prompts.
Attach Media (USB or DVD ISO) to Non-NW Server Host
Respond to Base Image UI Prompts
Restart Host and Respond to all Setup UI Prompts.
Log in to NW Suite UI. Enable Host. Install Service on Host.

Contact Customer Support

Refer to the Contact RSA Customer Support page (https://community.rsa.com/docs/DOC-1294) in RSA Link for instructions on how to get help on RSA NetWitness Suite 11.1.

Installation Preparation - Open Firewall Ports

The"Network Architecture and Ports" topic in the *RSA NetWitness® Suite Deployment Guide* lists all the ports in a deployment. Go to the Master Table of Contents for NetWitness Logs & Packets 11.x to find all NetWitness Suite 11.x documents.

Caution: Do not proceed with the installation until the ports on your firewall are configured.

Installation Tasks

This topic contains the tasks you must complete to install NetWitness Suite 11.1 on physical hosts.

There are two main tasks that you must complete in the order shown.

Task 1 - Install 11.1 on the NetWitness Server (NW Server) Host

Task 2 - Install 11.1 on All Other Component Hosts

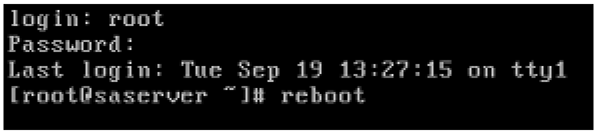
Task 1 - Install 11.1 on the NetWitness Server (NW Server) Host

For the NW Server, this task:

- Creates a base image.
- Sets up the 11.1 NW Server host.

Complete the following steps to install the 11.1 NW Server host.

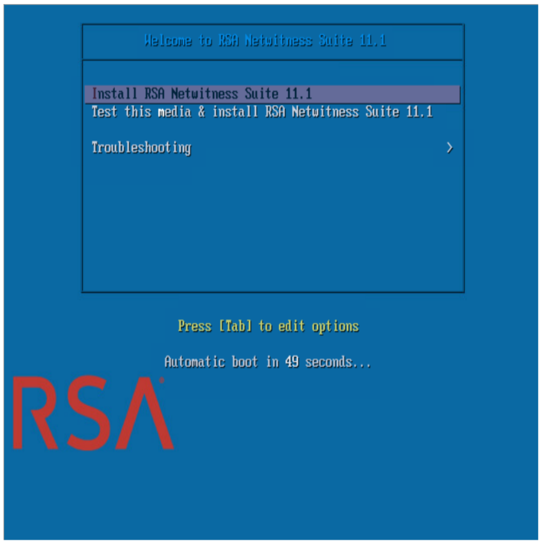
1. Create a base image on the host.
   a. Attach media (ISO) to the host.
      See the *RSA NetWitness Suite Build Stick Instructions* for more information.
      - Hypervisor installations - use the ISO image.
      - Physical media - use the ISO to create bootable flash drive media using the Universal Netboot Installer (UNetbootin) or another suitable imaging tool. See the *RSA NetWitness® Suite Build Stick Instructions* for information on how to create a build stick from the ISO. Go to the Master Table of Contents for NetWitness Logs & Packets 11.x to find all NetWitness Suite 11.x documents.
      - iDRAC installations - the virtual media type is:
        - **Virtual Floppy** for mapped flash drives.
        - **Virtual CD** for mapped optical media devices or ISO file.
   b. Log in to the host and reboot it.



```
login: root
Password:
Last login: Tue Sep 19 13:27:15 on tty1
[root@saserver ~]# reboot
```

   c. Select **F11** (boot menu) during reboot to select a boot device and boot to the connected media.
      After some system checks during booting, the following **Welcome to RSA NetWitness**

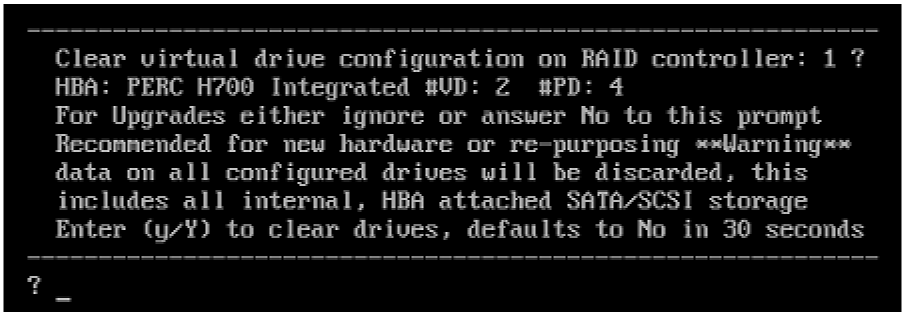
Suite 11.1 installation menu is displayed. The menu graphics will render differently if you use a physical USB flash media.



```
Welcome to RSA Netwitness Suite 11.1

Install RSA Netwitness Suite 11.1
Test this media & install RSA Netwitness Suite 11.1

Troubleshooting                                    >

Press [Tab] to edit options

Automatic boot in 49 seconds...
```

d. Select **Install RSA Netwitness Suite 11.1** (default selection) and press **Enter**.

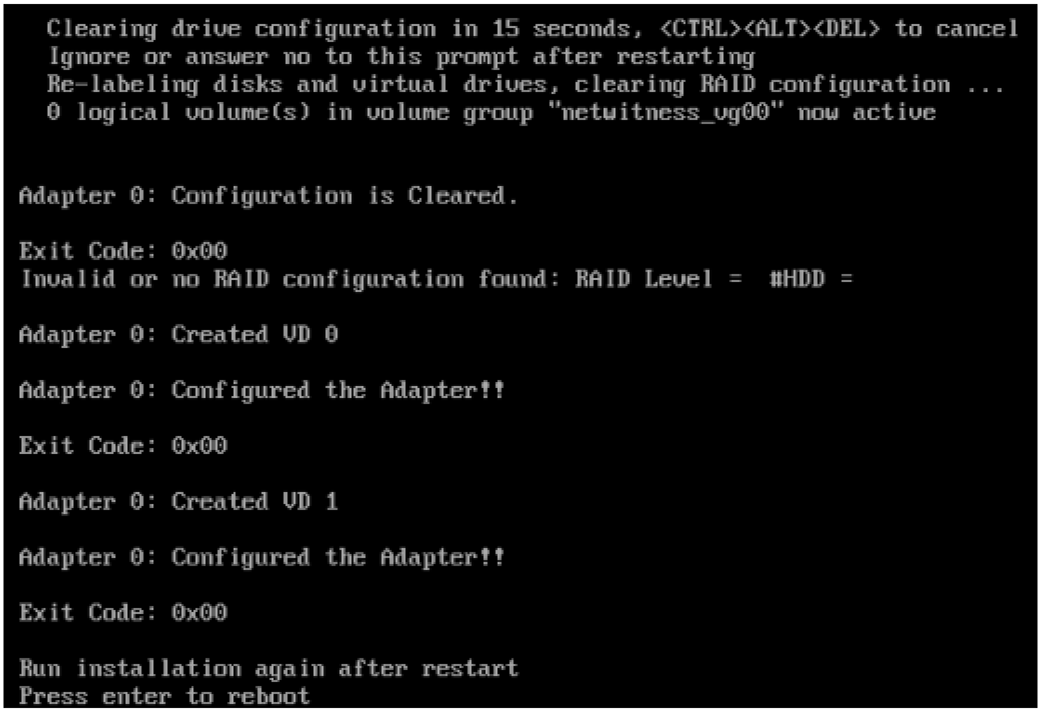
The Installation program runs and stops at the **Enter (y/Y) to clear drives** prompt that asks you to format the drives.



```
------------------------------------------------------------
  Clear virtual drive configuration on RAID controller: 1 ?
  HBA: PERC H700 Integrated #VD: 2  #PD: 4
  For Upgrades either ignore or answer No to this prompt
  Recommended for new hardware or re-purposing **Warning**
  data on all configured drives will be discarded, this
  includes all internal, HBA attached SATA/SCSI storage
  Enter (y/Y) to clear drives, defaults to No in 30 seconds
------------------------------------------------------------
? _
```

e. Type **Y** to continue.

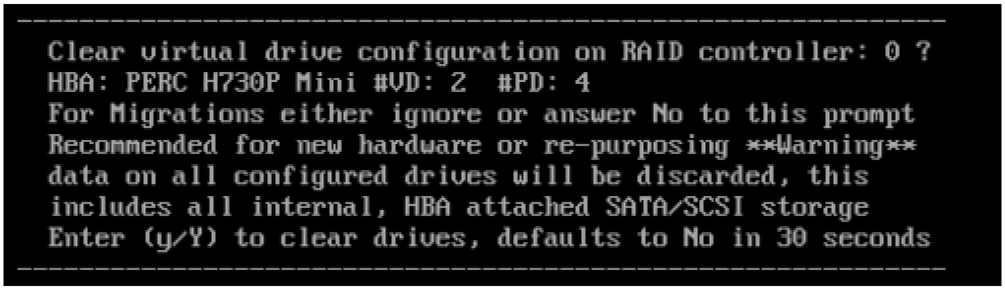
   The default action is No, so if you ignore the prompt and it will select No in 30 seconds and will not clear the drives. The **Press enter to reboot** prompt is displayed.



```
  Clearing drive configuration in 15 seconds, <CTRL><ALT><DEL> to cancel
  Ignore or answer no to this prompt after restarting
  Re-labeling disks and virtual drives, clearing RAID configuration ...
  0 logical volume(s) in volume group "netwitness_vg00" now active


Adapter 0: Configuration is Cleared.

Exit Code: 0x00
Invalid or no RAID configuration found: RAID Level =  #HDD =

Adapter 0: Created VD 0

Adapter 0: Configured the Adapter!!

Exit Code: 0x00

Adapter 0: Created VD 1

Adapter 0: Configured the Adapter!!

Exit Code: 0x00

Run installation again after restart
Press enter to reboot
```

f. Press **Enter** to reboot the host.

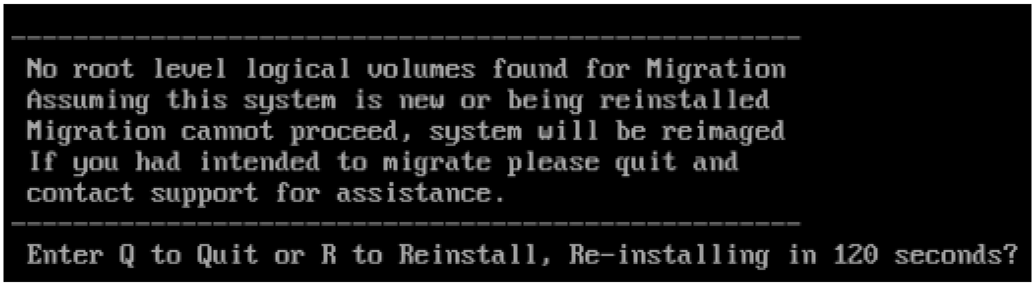
   The Installation program asks you to clear the drives again.



```
--------------------------------------------------------------
  Clear virtual drive configuration on RAID controller: 0 ?
  HBA: PERC H730P Mini #VD: 2  #PD: 4
  For Migrations either ignore or answer No to this prompt
  Recommended for new hardware or re-purposing **Warning**
  data on all configured drives will be discarded, this
  includes all internal, HBA attached SATA/SCSI storage
  Enter (y/Y) to clear drives, defaults to No in 30 seconds
--------------------------------------------------------------
```

g. Type **N** because you already cleared the drives.

   The **Enter Q (Quit) or R (Reinstall)** prompt is displayed.

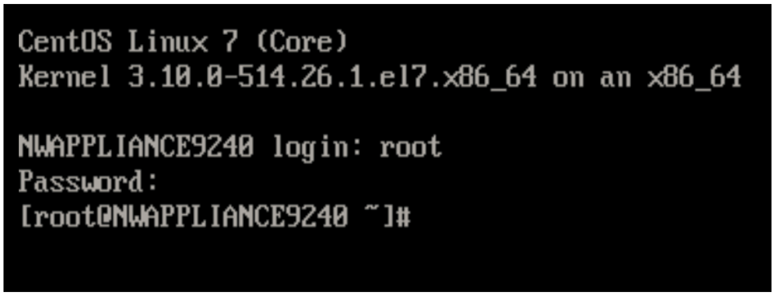


```
----------------------------------------------------
 No root level logical volumes found for Migration
 Assuming this system is new or being reinstalled
 Migration cannot proceed, system will be reimaged
 If you had intended to migrate please quit and
 contact support for assistance.
----------------------------------------------------
 Enter Q to Quit or R to Reinstall, Re-installing in 120 seconds?
```

h. Type **R** to install the base image.

The installation program displays the components as they are installed, which varies depending on the appliance, and reboots.

> **Caution:** Do not reboot the attached media (media that contains the ISO file, for example a build stick).



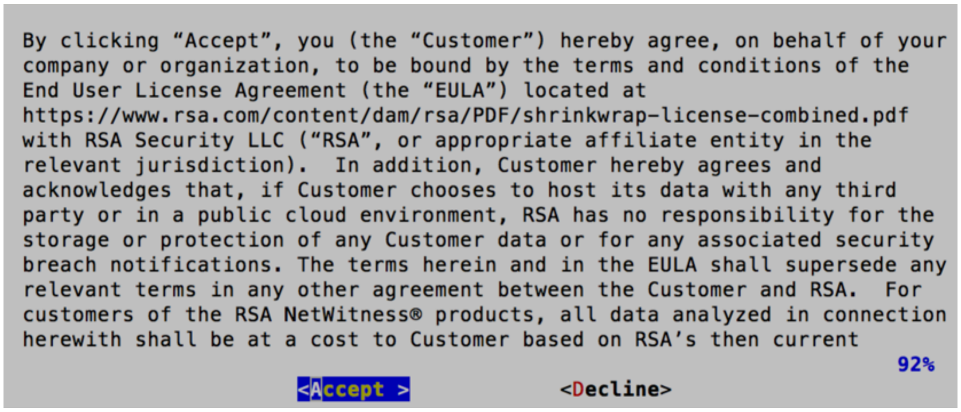
```
CentOS Linux 7 (Core)
Kernel 3.10.0-514.26.1.el7.x86_64 on an x86_64

NWAPPLIANCE9240 login: root
Password:
[root@NWAPPLIANCE9240 ~]#
```

i. Log in to the host with the `root` credentials.

2. Run the `nwsetup-tui` command to set up the host.

This initiates the `nwsetup-tui` (Setup program) and the EULA is displayed.

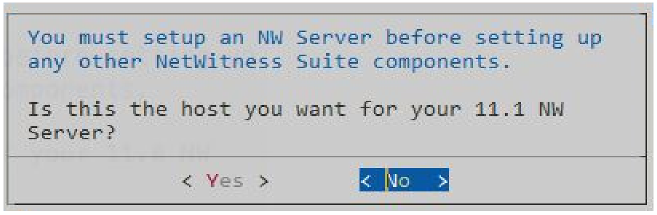
> **Note:** 1.) When you navigate through the Setup program prompts, use the down and up arrows to move among fields, use Tab key to move to and from commands (such as **<Yes>**, **<No>**, **<OK>**, and **<Cancel>**. Press **Enter** to register your command response and move to the next prompt.
> 2.) The Setup program adopts the color scheme of the desktop or console you use access the host.
> 3.) If you specify DNS servers during Setup program (`nwsetup-tui`) execution, they MUST be valid (valid in this context means valid during setup) and accessible for the `nwsetup-tui` to proceed. Any misconfigured DNS servers cause the Setup to fail. If you need to reach a DNS server after setup that is unreachable during setup, (for example, to relocate a host after setup that would have a different set of DNS Servers), see (Optional) Task 1 - Re-Configure DNS Servers Post 11.1 .
> If you do not specify DNS Servers during setup (`nwsetup-tui`), you must select **1 The Local Repo (on the NW Server)** in the **NetWitness Suite Update Repository** prompt in step 12 (the DNS servers are not defined so the system cannot access the external repo).



```
By clicking "Accept", you (the "Customer") hereby agree, on behalf of your
company or organization, to be bound by the terms and conditions of the
End User License Agreement (the "EULA") located at
https://www.rsa.com/content/dam/rsa/PDF/shrinkwrap-license-combined.pdf
with RSA Security LLC ("RSA", or appropriate affiliate entity in the
relevant jurisdiction).  In addition, Customer hereby agrees and
acknowledges that, if Customer chooses to host its data with any third
party or in a public cloud environment, RSA has no responsibility for the
storage or protection of any Customer data or for any associated security
breach notifications. The terms herein and in the EULA shall supersede any
relevant terms in any other agreement between the Customer and RSA.  For
customers of the RSA NetWitness® products, all data analyzed in connection
herewith shall be at a cost to Customer based on RSA's then current
```

3. Tab to **Accept** and press **Enter**.

   The **Is this the host you want for your 11.1 NW Server** prompt is displayed.



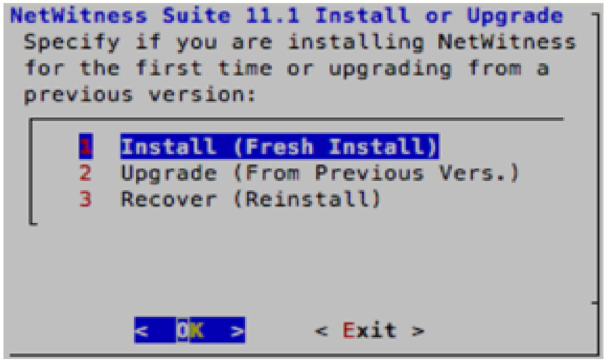
```
You must setup an NW Server before setting up
any other NetWitness Suite components.

Is this the host you want for your 11.1 NW
Server?
```

4. Tab to **Yes** and press **Enter**.

   Choose **No** if you already installed 11.1 on the NW Server.

   Caution: If you choose the wrong host for the NW Server and complete the Setup, you must restart the Setup Program and complete (steps 2 -14) to correct this error.

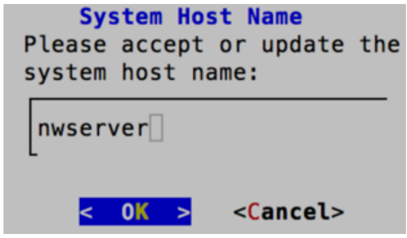
   The **Install or Upgrade** prompt is displayed (**Recover** does not apply to the installation. It is for 11.1 Disater Recovery.).



```
NetWitness Suite 11.1 Install or Upgrade
 Specify if you are installing NetWitness
 for the first time or upgrading from a
 previous version:
```

5. Press **Enter**. **Install (Fresh Install)** is selected by default.

   The **Host Name** prompt is displayed.

   ```
        System Host Name
    Please accept or update the
    system host name:

     nwserver

        <  OK  >     <Cancel>
   ```

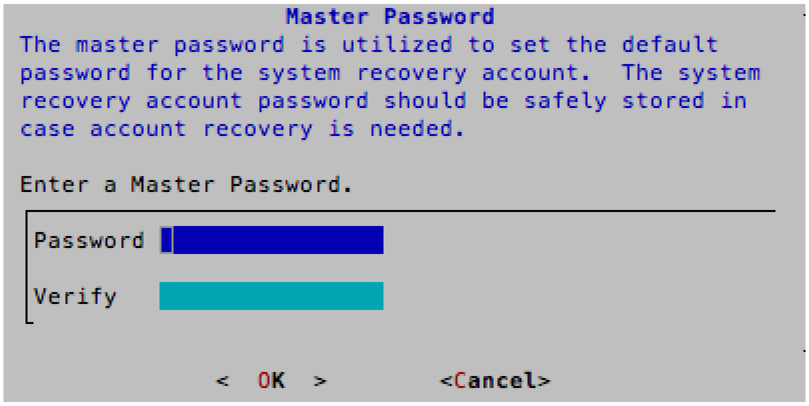
6. Press **Enter** if want to keep this name. If not edit the host name, tab to **OK**, and press **Enter** to change it.

   The **Master Password** prompt is displayed.

   The following list of characters are supported for Master Password and Deployment Password:

   - Symbols : ! @ # % ^ +
   - Numbers : 0-9
   - Lowercase Characters : a-z
   - Uppercase Characters : A-Z

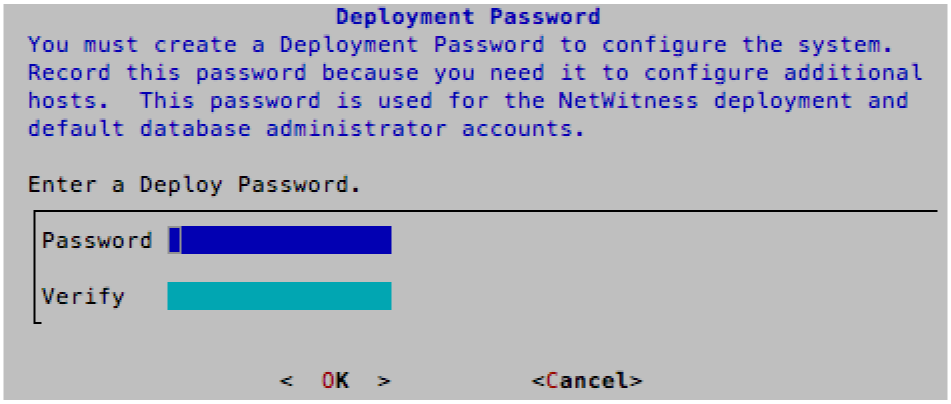
   No ambiguous characters are supported for Master Password and Deployment Password. For example:
   space { } [ ] ( ) / \ ' " ` ~ ; : .< > -

   ```
                          Master Password
    The master password is utilized to set the default
    password for the system recovery account.  The system
    recovery account password should be safely stored in
    case account recovery is needed.

    Enter a Master Password.

     Password

     Verify


                  <  OK  >        <Cancel>
   ```

7. Type in the **Password**, down arrow to **Verify**, retype the password, tab to **OK**, and press **Enter**.

The **Deployment Password** prompt is displayed.

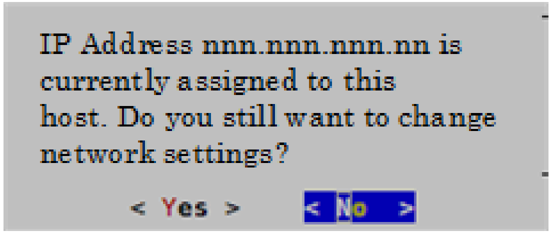


```
Deployment Password
You must create a Deployment Password to configure the system.
Record this password because you need it to configure additional
hosts.  This password is used for the NetWitness deployment and
default database administrator accounts.

Enter a Deploy Password.

Password

Verify
```

8. Type in the **Password**, down arrow to **Verify**, retype the password, tab to **OK**, and press **Enter**.

   One of the following conditional prompts is displayed.

   - If the Setup program finds a valid IP address for this host, the following prompt is displayed.

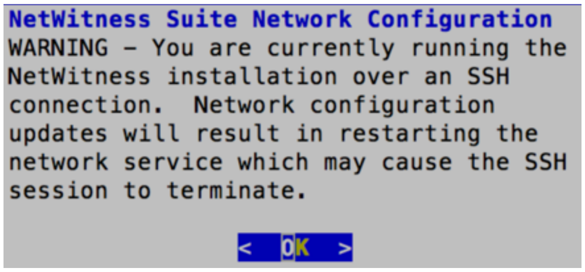
     

     IP Address nnn.nnn.nnn.nn is currently assigned to this host. Do you still want to change network settings?

     Press **Enter** if you want to use this IP and avoid changing your network settings. Tab to **Yes** and press **Enter** if you want to change the IP configuration found on the host.

   - If you are using an SSH connection, the following warning is displayed.

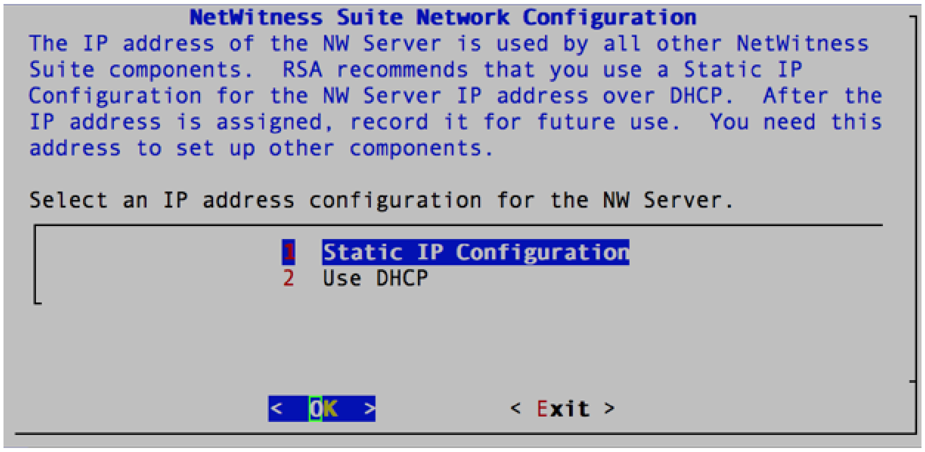
     Note: If you connect directly from the host console, the following warning will not be displayed.

     ```
     NetWitness Suite Network Configuration
     WARNING - You are currently running the
     NetWitness installation over an SSH
     connection.  Network configuration
     updates will result in restarting the
     network service which may cause the SSH
     session to terminate.
     ```

     Press **Enter** to close warning prompt.

- If the Setup Program found an IP configuration and you chose to use it, the **Update Repository** prompt is displayed. Go to step 12 to and complete the installation.
- If the Setup Program did not find an IP configuration or if you chose to change the existing IP configuration, the **Network Configuration** prompt is displayed.

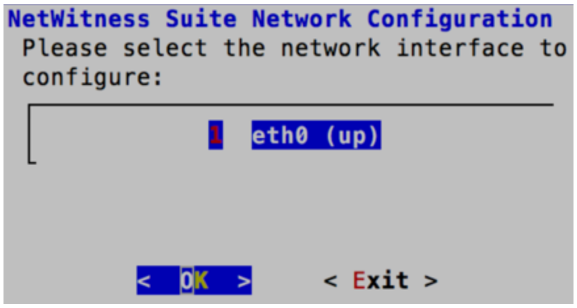


```
                NetWitness Suite Network Configuration
 The IP address of the NW Server is used by all other NetWitness
 Suite components.  RSA recommends that you use a Static IP
 Configuration for the NW Server IP address over DHCP.  After the
 IP address is assigned, record it for future use.  You need this
 address to set up other components.

 Select an IP address configuration for the NW Server.

                     1  Static IP Configuration
                     2  Use DHCP
```

9. Tab to **OK** and press **Enter** to use **Static IP**.

   If you want to use **DHCP**, down arrow to 2 Use DHCP and press **Enter**.

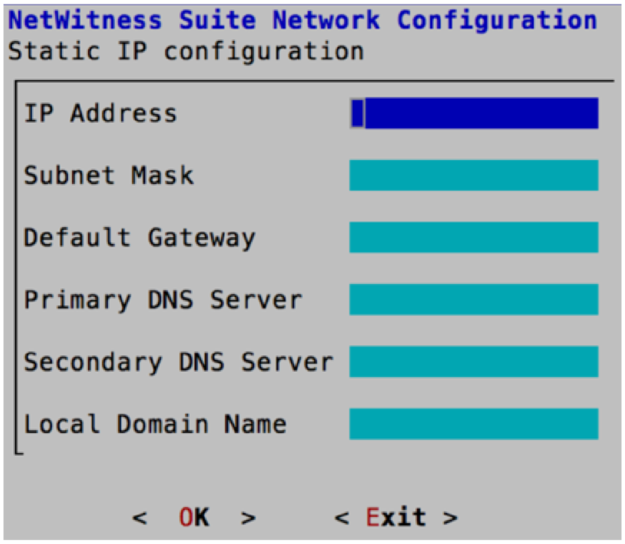
   The **Network Configuration** prompt is displayed.



```
NetWitness Suite Network Configuration
 Please select the network interface to
 configure:

              1  eth0 (up)
```

10. Down arrow to the network interface you want, tab to **OK**, and press **Enter**. If you do not want to continue, tab to **Exit**

The **Static IP Configuration** prompt is displayed.

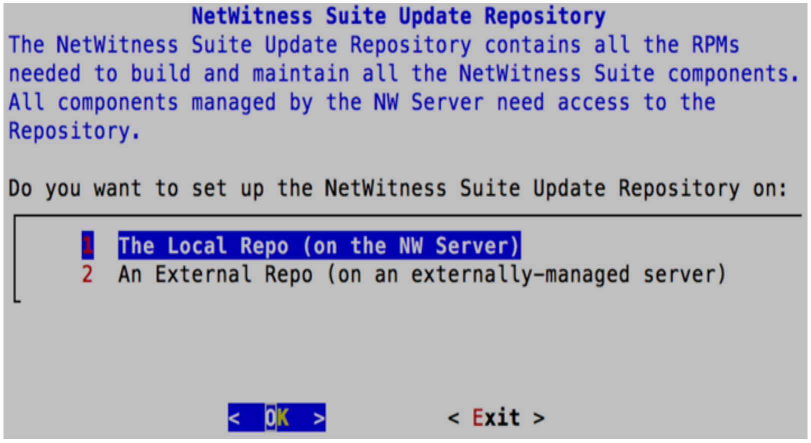


```
NetWitness Suite Network Configuration
Static IP configuration

IP Address

Subnet Mask

Default Gateway

Primary DNS Server

Secondary DNS Server

Local Domain Name


        <  OK  >      < Exit >
```

11. Type the configuration values (using the down arrow to move from field to field), tab to **OK**, and press **Enter**. If you do not complete all the required fields, an `All fields are required` error message is displayed (**Secondary DNS Server** and **Local Domain Name** fields are not required). If you use the wrong syntax or character length for any of the fields, an `Invalid <field-name>` error message is displayed.

> **Caution:** If you select **DNS Server**, make sure that the DNS Server is correct and the host can access it before proceeding with the installation.

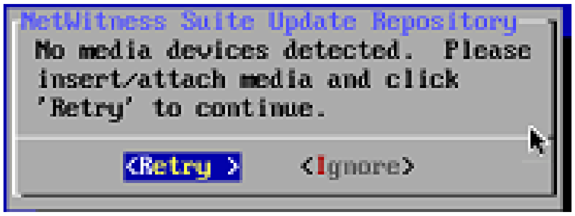
The **Update Repository** prompt is displayed.



```
                 NetWitness Suite Update Repository
The NetWitness Suite Update Repository contains all the RPMs
needed to build and maintain all the NetWitness Suite components.
All components managed by the NW Server need access to the
Repository.

Do you want to set up the NetWitness Suite Update Repository on:

     1  The Local Repo (on the NW Server)
     2  An External Repo (on an externally-managed server)



                  < OK >          < Exit >
```

12. Press **Enter** to choose the **Local Repo** on the NW Server.
    If you want to use an external repo, down arrow to **External Repo**, tab to **OK**, and press **Enter**.

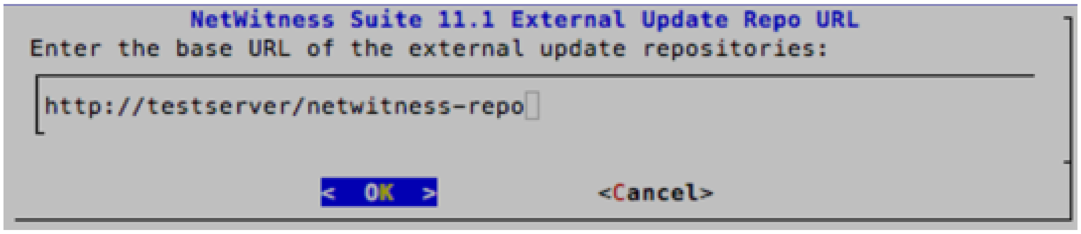
- If you select **1 The Local Repo (on the NW Server)** in the Setup program, make sure that you have the appropriate media attached to the host (media that contains the ISO file, for example a build stick) from which it can install NetWitness Suite 11.1.0.0. If the program cannot find the attached media, you receive the following prompt.



NetWitness Suite Update Repository

No media devices detected. Please insert/attach media and click 'Retry' to continue.

- If you select **2 An External Repo (on an externally-managed server)**, the UI prompts you for a URL. The repositories give you access to RSA updates and CentOS updates. Refer to Appendix B. Create an External Repository for instructions on how to create this repo and its external repo URL so you can enter it in the following prompt.



NetWitness Suite 11.1 External Update Repo URL

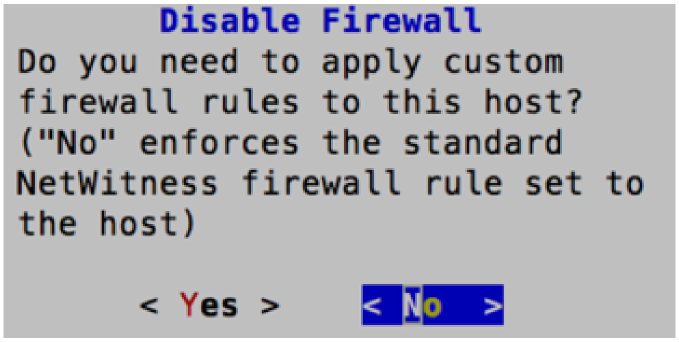
Enter the base URL of the external update repositories:

```
http://testserver/netwitness-repo
```

Enter the base URL of the NetWitness Suite external repo and click **OK.** The **Start Install** prompt is displayed.

See "Set Up an External Repository with RSA and OS Updates" under "Hosts and Services Procedures" in the *RSA NetWitness Suite Hosts and Services Getting Started Guide* for instructions. Go to the Master Table of Contents for NetWitness Logs & Packets 11.x to find all NetWitness Suite 11.x documents.

The Disable firewall prompt is displayed.

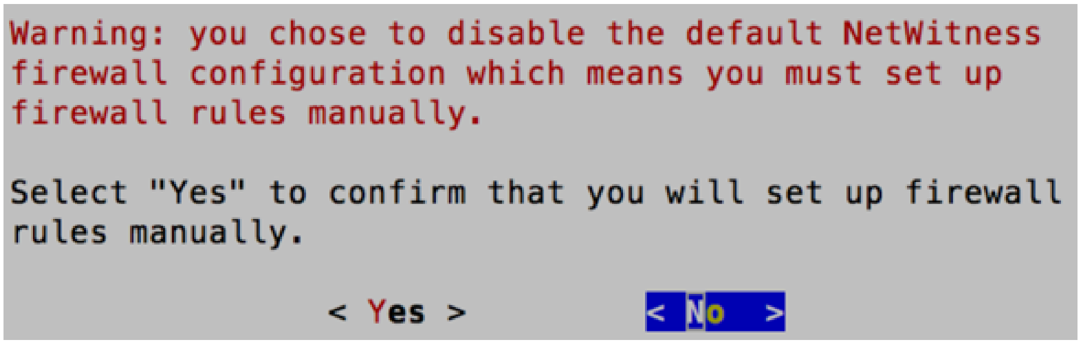


Disable Firewall

Do you need to apply custom firewall rules to this host? ("No" enforces the standard NetWitness firewall rule set to the host)

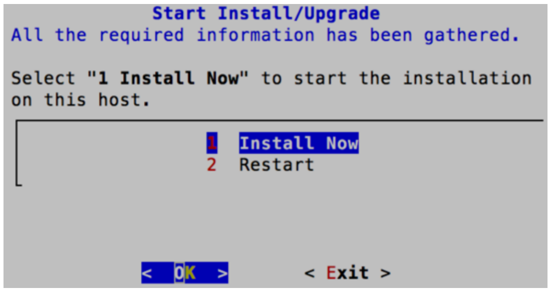
13. Tab to **No** (default), and press **Enter** to use the standard firewall configuration. Tab to **Yes**, and press **Enter** to disable the standard firewall configuration.

- If you select **Yes**, confirm your selection or **No** to use the standard firewall configuration.



```
Warning: you chose to disable the default NetWitness
firewall configuration which means you must set up
firewall rules manually.

Select "Yes" to confirm that you will set up firewall
rules manually.

                 < Yes >           < No  >
```

The **Start Install/Upgrade** prompt is displayed.

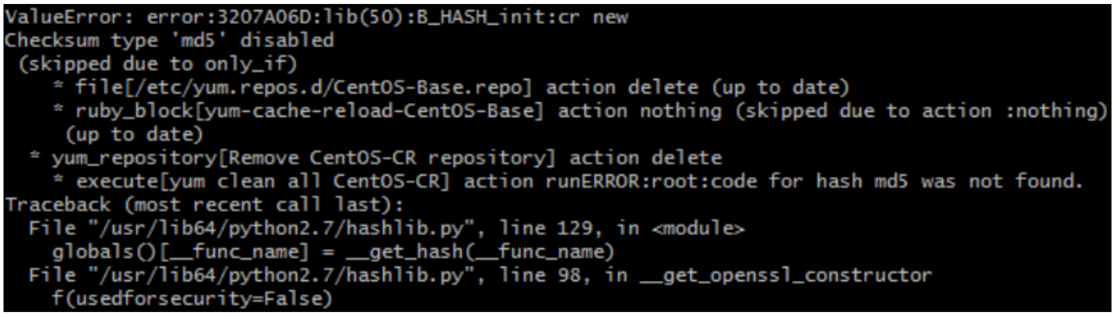


```
              Start Install/Upgrade
All the required information has been gathered.

Select "1 Install Now" to start the installation
on this host.

                  1  Install Now
                  2  Restart



         <  OK  >       < Exit >
```

14. Press **Enter** to install 11.1 on the NW Server.

    When **Installation complete** is displayed, you have installed the 11.1 NW Server on this host.

> **Note:** Ignore the hash code errors similar to the errors shown in the following screen shot that are displayed when you initiate the `nwsetup-tui` command. Yum does not use MD5 for any security operations so they do not affect the system security.



```
ValueError: error:3207A06D:lib(50):B_HASH_init:cr new
Checksum type 'md5' disabled
 (skipped due to only_if)
    * file[/etc/yum.repos.d/CentOS-Base.repo] action delete (up to date)
    * ruby_block[yum-cache-reload-CentOS-Base] action nothing (skipped due to action :nothing)
     (up to date)
  * yum_repository[Remove CentOS-CR repository] action delete
    * execute[yum clean all CentOS-CR] action runERROR:root:code for hash md5 was not found.
Traceback (most recent call last):
  File "/usr/lib64/python2.7/hashlib.py", line 129, in <module>
    globals()[__func_name] = __get_hash(__func_name)
  File "/usr/lib64/python2.7/hashlib.py", line 98, in __get_openssl_constructor
    f(usedforsecurity=False)
```

Task 2 - Install 11.1 on Other Component Hosts

For a non-NW Server host this task:

- Creates a base image.
- Sets up the 11.1 non-NW Server host.

For ESA hosts:

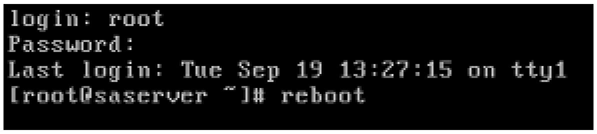
- Install your primary ESA Host and install the **ESA Primary** service on it after you finish the Set Up program in the UI on the **ADMIN** > **Hosts** view.
- (Conditional) If you have a secondary ESA host, install it and install the **ESA Secondary** service on it after you finish the Set Up program in the UI on the **ADMIN** > **Hosts** view.

Complete the following steps to install NetWitness Suite 11.1 on a non-NW Server host.

1. Create a base image on the host.
   a. Attach media (media that contains the ISO file, for example a build stick) to the host. See the *RSA NetWitness Suite Build Stick Instructions* for more information.
      - Hypervisor installs - use the ISO image.
      - Physical media - use the ISO file to create bootable flash drive media using the Universal Netboot Installer (UNetbootin) or another suitable imaging tool. See the *RSA NetWitness® Suite Build Stick Instructions* for information on how to create a build stick from the ISO file. Go to the Master Table of Contents for NetWitness Logs & Packets 11.x to find all NetWitness Suite 11.x documents.
      - iDRAC installations - the virtual media type is:
        - **Virtual Floppy** for mapped flash drives.
        - **Virtual CD** for mapped optical media devices or ISO file.

        See the *RSA NetWitness Suite Build Stick Instructions* for more information.

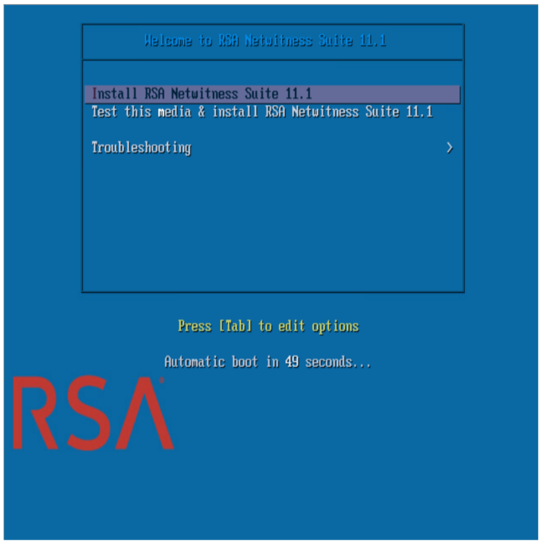
   b. Log in to the host and reboot it.



```
login: root
Password:
Last login: Tue Sep 19 13:27:15 on tty1
[root@saserver ~]# reboot
```

c. Select **F11** (boot menu) during reboot to select a boot device and boot to the connected media.

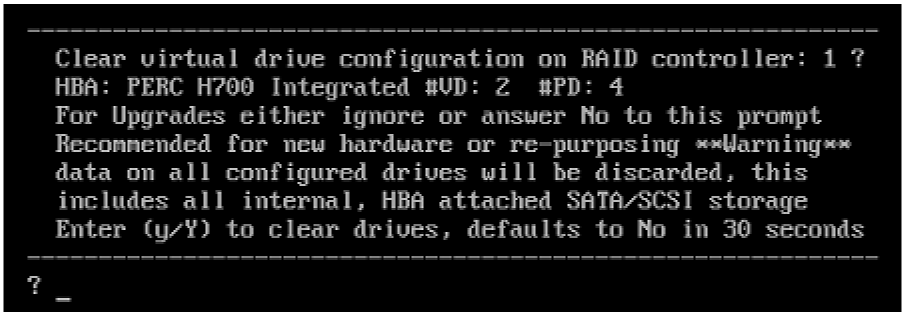
After some system checks during booting, the following **Welcome to RSA NetWitness Suite 11.1** installation menu is displayed. The menu graphics will render differently if you use a physical USB flash media.


Welcome to RSA Netwitness Suite 11.1
Install RSA Netwitness Suite 11.1
Test this media & install RSA Netwitness Suite 11.1
Troubleshooting ›
RSA

```
Press [Tab] to edit options

Automatic boot in 49 seconds...
```

d. Select **Install RSA Netwitness Suite 11.1** (default selection) and press **Enter**.

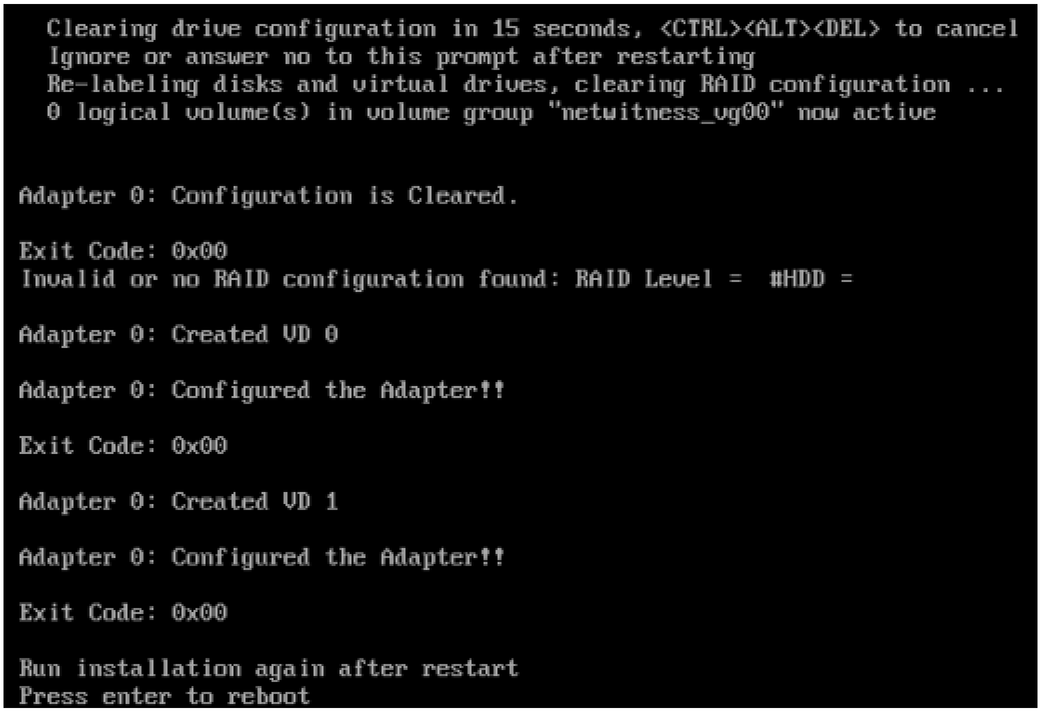
The Installation program runs and stops at the **Enter (y/Y) to clear drives** prompt that asks you to format the drives.



```
------------------------------------------------------------
  Clear virtual drive configuration on RAID controller: 1 ?
  HBA: PERC H700 Integrated #VD: 2  #PD: 4
  For Upgrades either ignore or answer No to this prompt
  Recommended for new hardware or re-purposing **Warning**
  data on all configured drives will be discarded, this
  includes all internal, HBA attached SATA/SCSI storage
  Enter (y/Y) to clear drives, defaults to No in 30 seconds
------------------------------------------------------------
? _
```

e. Type **Y** to continue.

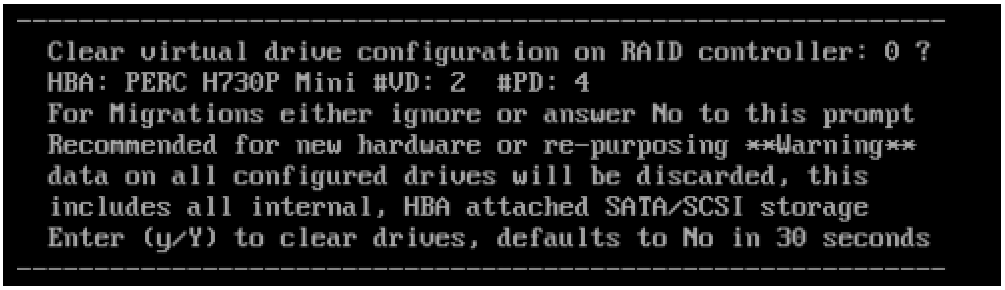
The default action is No, so if you ignore the prompt and it will select No in 30 seconds and will not clear the drives. The **Press enter to reboot** prompt is displayed.



```
  Clearing drive configuration in 15 seconds, <CTRL><ALT><DEL> to cancel
  Ignore or answer no to this prompt after restarting
  Re-labeling disks and virtual drives, clearing RAID configuration ...
  0 logical volume(s) in volume group "netwitness_vg00" now active


Adapter 0: Configuration is Cleared.

Exit Code: 0x00
Invalid or no RAID configuration found: RAID Level =  #HDD =

Adapter 0: Created VD 0

Adapter 0: Configured the Adapter!!

Exit Code: 0x00

Adapter 0: Created VD 1

Adapter 0: Configured the Adapter!!

Exit Code: 0x00

Run installation again after restart
Press enter to reboot
```

f. Press **Enter** to reboot the host.

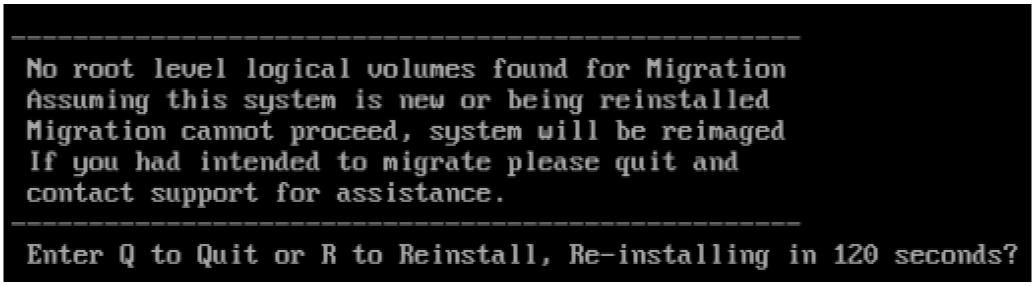
The Installation program asks you to clear the drives again.



```
----------------------------------------------------------------
  Clear virtual drive configuration on RAID controller: 0 ?
  HBA: PERC H730P Mini #VD: 2  #PD: 4
  For Migrations either ignore or answer No to this prompt
  Recommended for new hardware or re-purposing **Warning**
  data on all configured drives will be discarded, this
  includes all internal, HBA attached SATA/SCSI storage
  Enter (y/Y) to clear drives, defaults to No in 30 seconds
----------------------------------------------------------------
```

g. Type **N** because you already cleared the drives.

The **Enter Q (Quit) or R (Reinstall)** prompt is displayed.

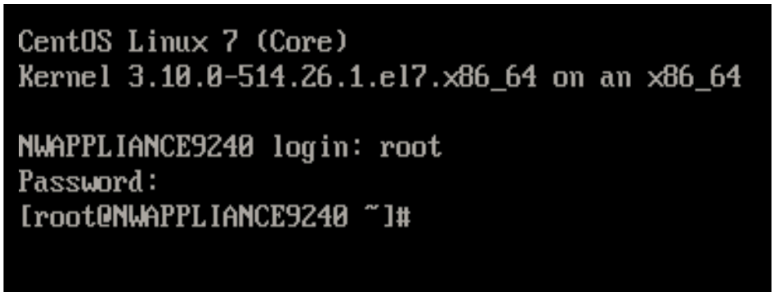


```
--------------------------------------------------------
 No root level logical volumes found for Migration
 Assuming this system is new or being reinstalled
 Migration cannot proceed, system will be reimaged
 If you had intended to migrate please quit and
 contact support for assistance.
--------------------------------------------------------
 Enter Q to Quit or R to Reinstall, Re-installing in 120 seconds?
```

h. Type **R** to install the base image.

The installation program displays the components as they are installed, which varies depending on the appliance, and reboots.

> **Caution:** Do not reboot the attached media (media that contains the ISO file, for example a build stick).

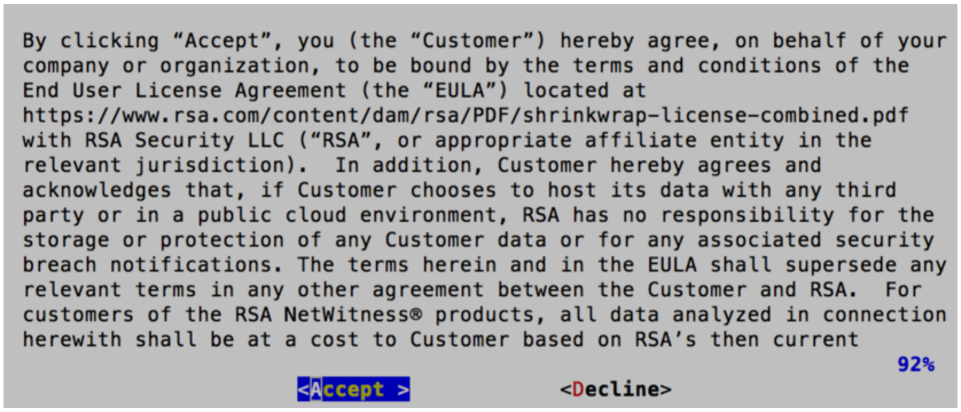


```
CentOS Linux 7 (Core)
Kernel 3.10.0-514.26.1.el7.x86_64 on an x86_64

NWAPPLIANCE9240 login: root
Password:
[root@NWAPPLIANCE9240 ~]#
```

i. Log in to the host with the `root` credentials.

2. Run the `nwsetup-tui` command to set up the host..
   This initiates the `nwsetup-tui` (Setup program) and the EULA is displayed.

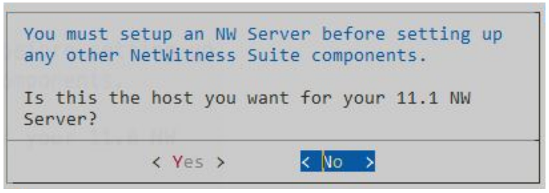
> **Note:** If you specify DNS servers during Setup program (`nwsetup-tui`) execution, they MUST be valid (valid in this context means valid during setup) and accessible for the `nwsetup-tui` to proceed. Any misconfigured DNS servers cause the Setup to fail. If you need to reach a DNS server after setup that is unreachable during setup, (for example, to relocate a host after setup that would have a different set of DNS Servers), see (Optional) Task 1 - Re-Configure DNS Servers Post 11.1 .
> If you do not specify DNS servers during `nwsetup-tui` , you must select **1 The Local Repo (on the NW Server)** in the **NetWitness Suite Update Repository** prompt in step 11 (the DNS servers are not defined so the system cannot access the external repo).



```
By clicking “Accept”, you (the “Customer”) hereby agree, on behalf of your
company or organization, to be bound by the terms and conditions of the
End User License Agreement (the “EULA”) located at
https://www.rsa.com/content/dam/rsa/PDF/shrinkwrap-license-combined.pdf
with RSA Security LLC (“RSA”, or appropriate affiliate entity in the
relevant jurisdiction).  In addition, Customer hereby agrees and
acknowledges that, if Customer chooses to host its data with any third
party or in a public cloud environment, RSA has no responsibility for the
storage or protection of any Customer data or for any associated security
breach notifications. The terms herein and in the EULA shall supersede any
relevant terms in any other agreement between the Customer and RSA.  For
customers of the RSA NetWitness® products, all data analyzed in connection
herewith shall be at a cost to Customer based on RSA’s then current
                                                                      92%
                    <Accept >           <Decline>
```

3. Tab to **Accept** and press **Enter**.

   The **Is this the host you want for your 11.1 NW Server** prompt is displayed.

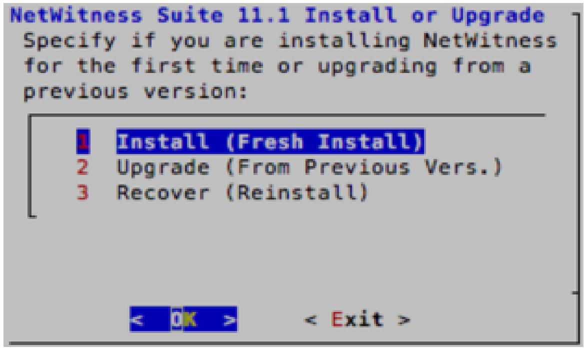


```
You must setup an NW Server before setting up
any other NetWitness Suite components.

Is this the host you want for your 11.1 NW
Server?
```

Caution: If you choose the wrong host for the NW Server and complete the installation, you must restart the step up program and complete (steps 2 - 14) of Task 1 - Install 11.1 on the NetWitness Server (NW Server) Host to correct this error.

4. Press **Enter** (No).

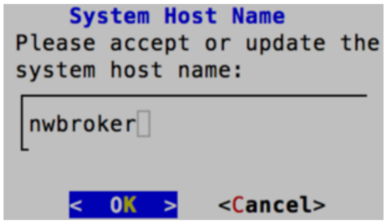
   The **Install** or **Upgrade** prompt is displayed (**Recover** does not apply to the installation. It is for 11.1 Disaster Recovery).



```
NetWitness Suite 11.1 Install or Upgrade
 Specify if you are installing NetWitness
 for the first time or upgrading from a
 previous version:
```

5. Press **Enter**. **Install (Fresh Install)** is selected by default.

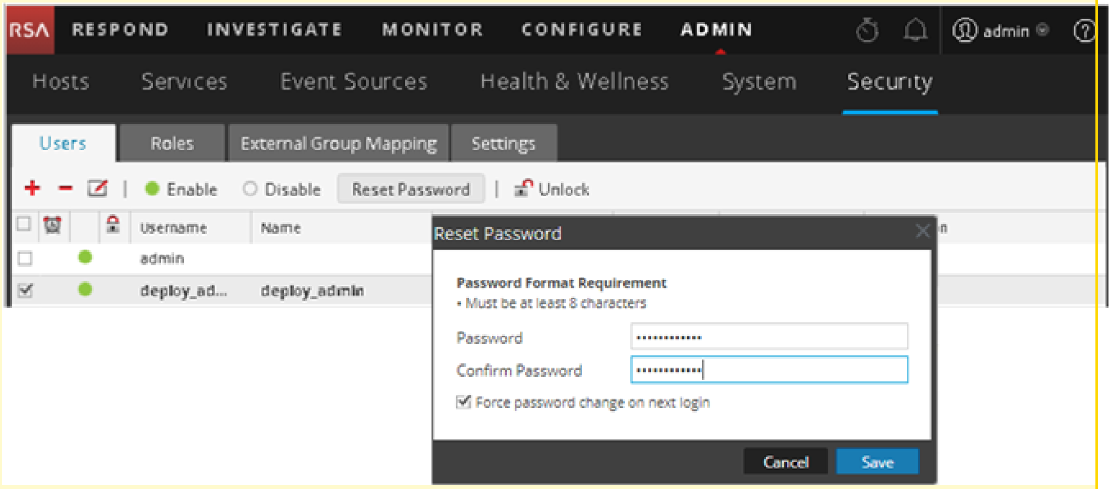
   The **Host Name** prompt is displayed.



```
     System Host Name
Please accept or update the
system host name:

 nwbroker
```

6. If want to keep this name, press **Enter**. If you want to change this name, edit it, tab to **OK**, and press **Enter**.

Caution: If you change the **deploy_admin** user password in the NetWitness Suite User Interface (**ADMIN**>**Security** >Select **deploy-admin - Reset password**),



Reset Password

Password Format Requirement
- Must be at least 8 characters

Password ••••••••••••

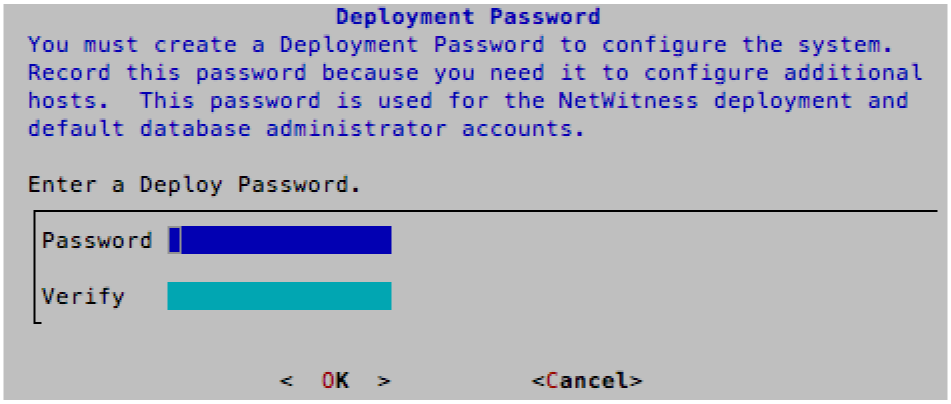
Confirm Password ••••••••••••

☑ Force password change on next login

Cancel Save

you must:
1. SSH to the NW Server host.
2. Run the `(/opt/rsa/saTools/bin/set-deploy-admin-password` script.
3. Use the new password when installing any new non-NW Server hosts.
4. Run `(/opt/rsa/saTools/bin/set-deploy-admin-password` script on all non-NW Server hosts in your deployment.
5. Write down the password because you may need to refer to it later in the installation.

The **Deployment Password** prompt is displayed.

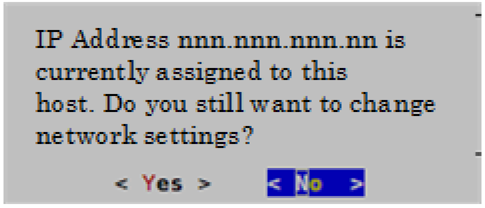


```
                     Deployment Password
 You must create a Deployment Password to configure the system.
 Record this password because you need it to configure additional
 hosts.  This password is used for the NetWitness deployment and
 default database administrator accounts.

 Enter a Deploy Password.
 ┌──────────────────────────────────────────────────────────────
 │Password
 │
 │Verify
 └

                 <  OK  >          <Cancel>
```

Note: You must use the same deployment password that you used when you installed the NW Server.

7. Type in the **Password**, down arrow to **Verify**, retype the password, tab to **OK**, and press **Enter**.

   - If the Setup program finds a valid IP address for this host, the following prompt is displayed.

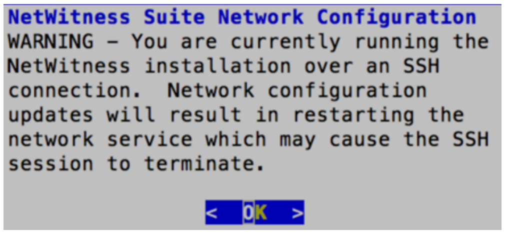


IP Address nnn.nnn.nnn.nn is currently assigned to this host. Do you still want to change network settings?

Press **Enter** if you want to use this IP and avoid changing your network settings. Tab to **Yes** and press **Enter** If you want to change the IP configuration found on the host.

- If you are using an SSH connection, the following warning is displayed.

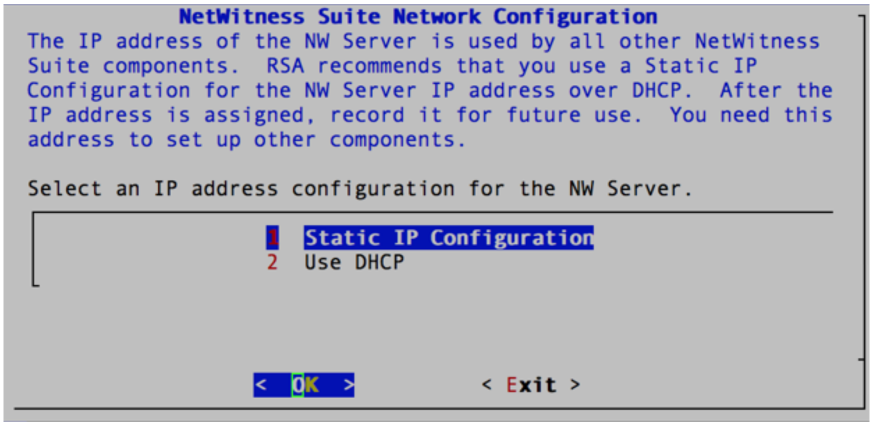
Note: If you connect directly from the host console, the following warning will not be displayed.



```
NetWitness Suite Network Configuration
WARNING - You are currently running the
NetWitness installation over an SSH
connection.  Network configuration
updates will result in restarting the
network service which may cause the SSH
session to terminate.
```

Press **Enter** to close warning prompt.

- If the Setup Program found an IP configuration and you chose to use it, the **Update Repository** prompt is displayed. Go to step 11 to and complete the installation.
- If the Setup Program could not find an IP configuration or if you chose to change the existing IP configuration, the **Network Configuration** prompt is displayed.

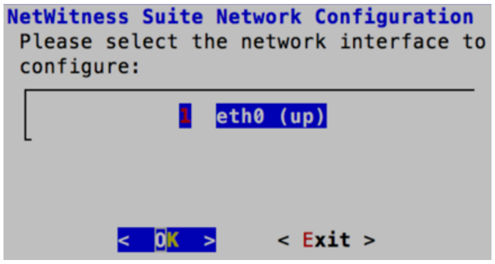


```
              NetWitness Suite Network Configuration
 The IP address of the NW Server is used by all other NetWitness
 Suite components.  RSA recommends that you use a Static IP
 Configuration for the NW Server IP address over DHCP.  After the
 IP address is assigned, record it for future use.  You need this
 address to set up other components.

 Select an IP address configuration for the NW Server.
```

8. Tab to **OK** and press **Enter** to use a **Static IP**.

   If you want to use **DHCP**, down arrow to **2 Use DHCP** and press **Enter**.

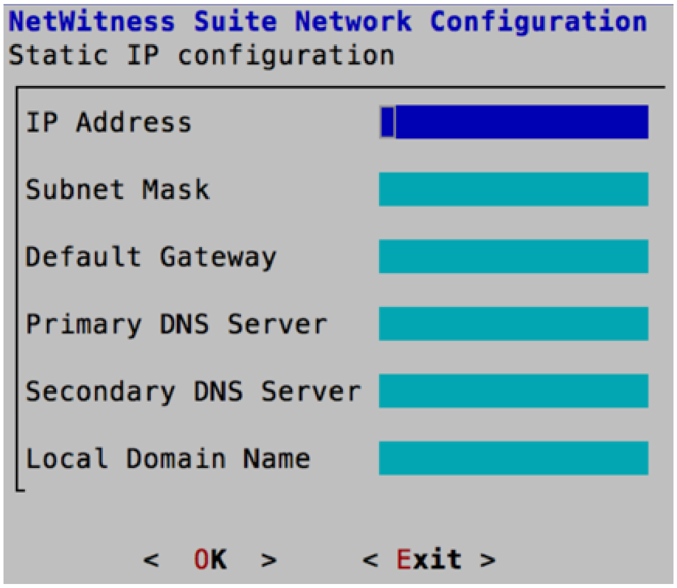
The **Network Configuration** prompt is displayed.



```
NetWitness Suite Network Configuration
 Please select the network interface to
 configure:
```

9. Down arrow to the network interface you want, tab to **OK**, and press **Enter**. If you do not want to continue, tab to **Exit**.

   The **Static IP Configuration** prompt is displayed.



```
NetWitness Suite Network Configuration
Static IP configuration
```

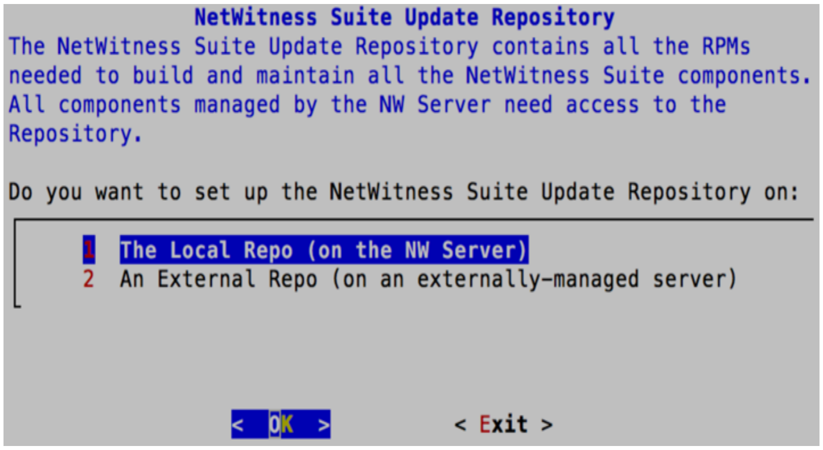
10. Type the configuration values (using the down arrow to move from field to field), tab to **OK**, and press **Enter**.

    If you do not complete all the required fields, an `All fields are required` error message is displayed (**Secondary DNS Server** and **Local Domain Name** fields are not required).

    If you use the wrong syntax or character length for any of the fields, an `Invalid <field-name>` error message is displayed.

> **Caution:** If you select **DNS Server**, make sure that the DNS Server is correct and the host can access it before proceeding with the installation.

The **Update Repository** prompt is displayed.
Select the same repo you selected when you installed the NW Server Host for all hosts.

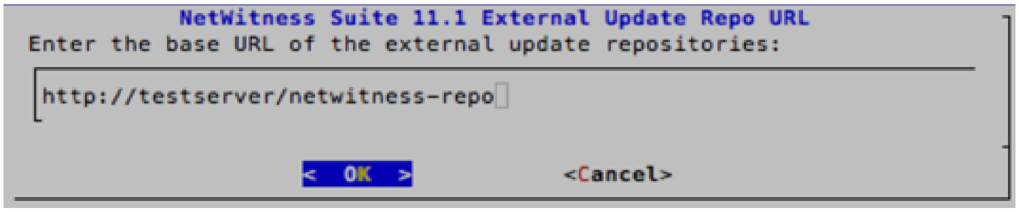


```
               NetWitness Suite Update Repository
The NetWitness Suite Update Repository contains all the RPMs
needed to build and maintain all the NetWitness Suite components.
All components managed by the NW Server need access to the
Repository.

Do you want to set up the NetWitness Suite Update Repository on:

     1  The Local Repo (on the NW Server)
     2  An External Repo (on an externally-managed server)
```

11. Press **Enter** to choose the **Local Repo** on the NW Server.

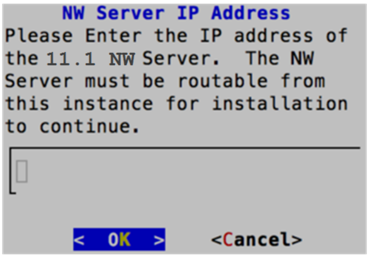
    If you want to use an external repo, down arrow to **External Repo**, tab to **OK**, and press **Enter**.

    - If you select **1 The Local Repo (on the NW Server)** in the setup program, make sure that you have the appropriate media attached to the host (media that contains the ISO file, for example a build stick) from which it can install NetWitness Suite 11.1.0.0.
    - If you select **2 An External Repo (a server managed externally - not on the NW Server)**, the UI prompts you for a URL. The repositories give you access to RSA updates and CentOS updates. Refer to Appendix B. Create an External Repository for instructions on how to create this repo and its external repo URL so you can enter it in the following prompt.



```
          NetWitness Suite 11.1 External Update Repo URL
 Enter the base URL of the external update repositories:

  http://testserver/netwitness-repo
```

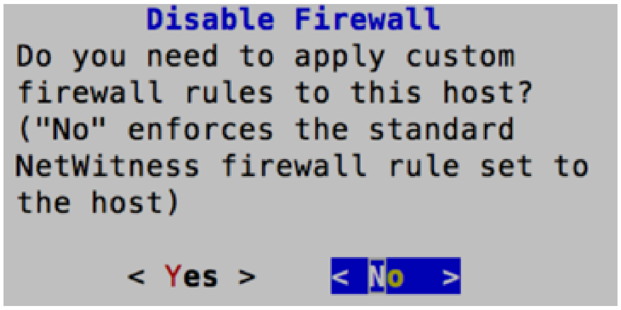
Enter the base URL of the NetWitness Suite external repo, tab to **OK** and press **Enter**.
The **NW Server IP Address** prompt is displayed.



```
     NW Server IP Address
Please Enter the IP address of
the 11.1 NW Server.  The NW
Server must be routable from
this instance for installation
to continue.
```

12. Type the NW Server IP address. Tab to **OK** and press **Enter**.

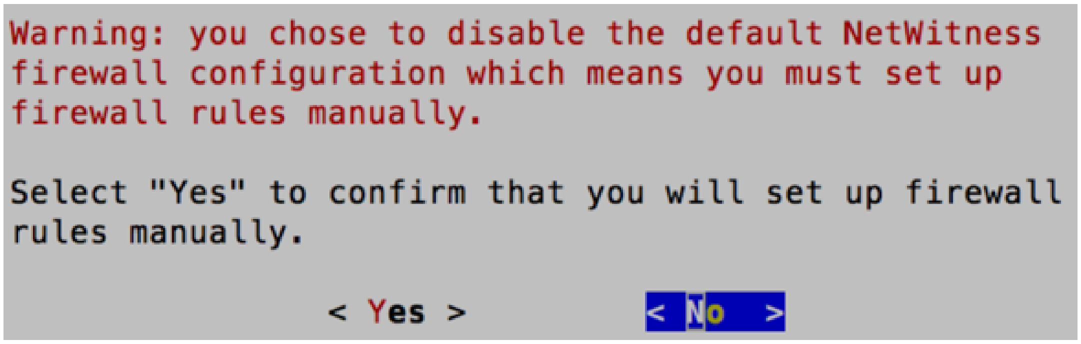
    The **Disable Firewall** prompt is displayed.



```
Disable Firewall
Do you need to apply custom
firewall rules to this host?
("No" enforces the standard
NetWitness firewall rule set to
the host)
```

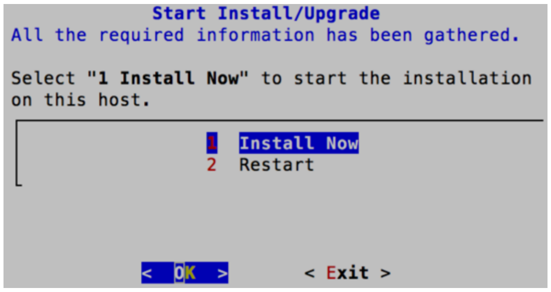
13. Tab to **No** (default), and press **Enter** to use the standard firewall configuration. Tab to **Yes**, and press **Enter** to disable the standard firewall configuration.

    - If you select **Yes**, confirm your selection or **No** to use the standard firewall configuration.



```
Warning: you chose to disable the default NetWitness
firewall configuration which means you must set up
firewall rules manually.

Select "Yes" to confirm that you will set up firewall
rules manually.
```

The **Start Install** prompt is displayed.



```
Start Install/Upgrade
All the required information has been gathered.

Select "1 Install Now" to start the installation
on this host.
```

14. Press **Enter** to install 11.1 on the non-NW Server.

    When **Installation complete** is displayed, you have a generic non-NW Server host with an operating system compatible with NetWitness Suite 11.1.

15. Install a component service on the host.

    a. Log into NetWitness Suite and click **ADMIN** > **Hosts**.

       The **New Hosts** dialog is displayed with the **Hosts** view grayed out in the background.

> **Note:** If the **New Hosts** dialog is not displayed, click **Discover** in the Hosts view toolbar.

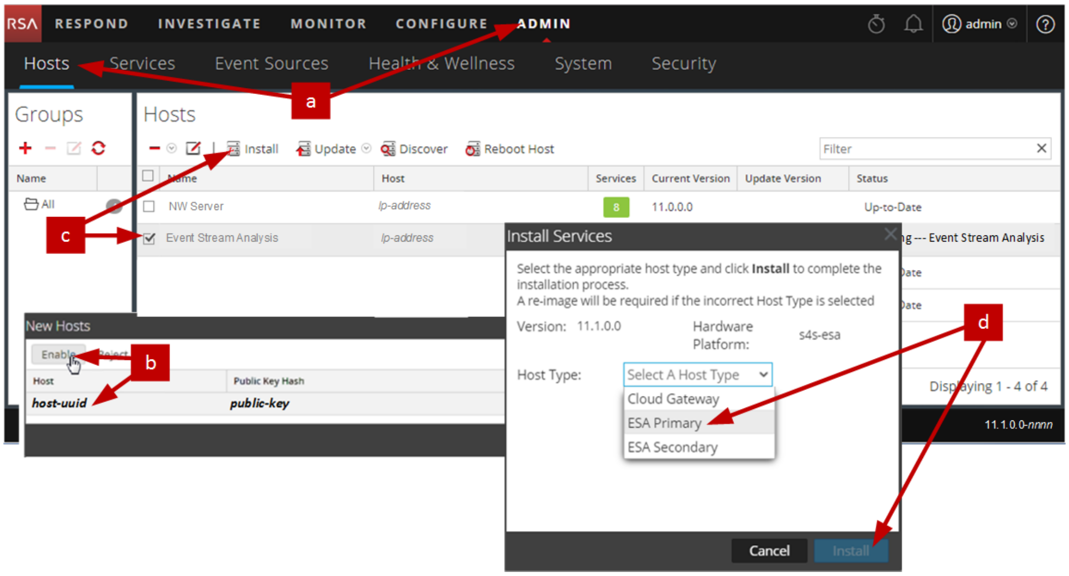
b. Select the host in the **New Hosts** dialog and click **Enable**.

The **New Hosts** dialog closes and the host is displayed in the **Hosts** view.

c. Select that host in the **Hosts** view (for example, **Event Stream Analysis**) and click Install.

The **Install Services** dialog is displayed.

d. Select the appropriate host type (for example, **ESA Primary**) in **Host Type** and click **Install**.



Name	Host	Services	Current Version	Update Version	Status
NW Server	ip-address	8	11.0.0.0		Up-to-Date
Event Stream Analysis	ip-address				...ng --- Event Stream Analysis

Host	Public Key Hash
host-uuid	public-key

Select the appropriate host type and click **Install** to complete the installation process.
A re-image will be required if the incorrect Host Type is selected

Version: 11.1.0.0

Hardware Platform: s4s-esa

Host Type: Select A Host Type
- Cloud Gateway
- ESA Primary
- ESA Secondary

You have completed the installation of the non-NW Server host in NetWitness Suite.

16. Complete steps 1 through 15 for the rest of the NetWitness Suite non-NW Server components.

Update or Install Legacy Windows Collection

Refer to the *RSA NetWitness Legacy Windows Collection Guide*. Go to the Master Table of Contents for NetWitness Logs & Packets 11.x to find all NetWitness Suite 11.x documents.

Note: After you update or install Legacy Windows Collection, reboot the system to ensure that Log Collection functions correctly.

Post Installation Tasks

This topic contains the task you complete after you install 11.1.

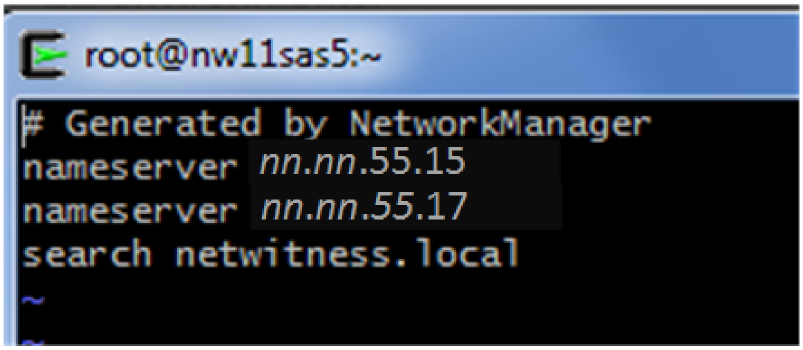
- General
- RSA NetWitness® Endpoint Insights

General

(Optional) Task 1 - Re-Configure DNS Servers Post 11.1

Complete the following steps to re-configure the DNS servers in NetWitness Suite 11.1.

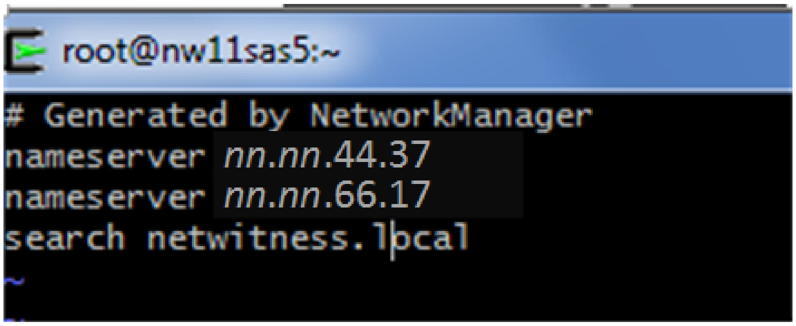
1. Login to the server host with your `root` credentials.
2. Edit the `/etc/resolv.conf` file:
   a. Replace the IP address corresponding to `nameserver`.
   If you need to replace both DNS servers , replace the IP entries for both the hosts with valid addresses.
   The following example shows both DNS entries.



root@nw11sas5:~

```
# Generated by NetworkManager
nameserver nn.nn.55.15
nameserver nn.nn.55.17
search netwitness.local
~
```

The following example shows the new DNS values.



root@nw11sas5:~

```
# Generated by NetworkManager
nameserver nn.nn.44.37
nameserver nn.nn.66.17
search netwitness.local
~
```

   b. Save the `/etc/resolv.conf` file.

RSA NetWitness® Endpoint Insights

(Optional) Task 2 - Install Endpoint Hybrid or Endpoint Log Hybrid

You must install one of the following services to install NetWitness Suite Endpoint Insights in your deployment:

> **Caution:** You can only install one instance of the following services in your deployment.

- Endpoint Hybrid
- Endpoint Log Hybrid

> **Note:** You must install the Endpoint Hybrid or Endpoint Log Hybrid on the S5 or Dell R730 appliance.

1. Complete steps 1 - 14 in Task 2 - Install 11.1 on Other Component Hosts.
2. Log into NetWitness Suite and click **ADMIN** > **Hosts**.

   The New Hosts dialog is displayed with the Hosts view grayed out in the background.

   > **Note:** If the New Hosts dialog is not displayed, click **Discover** in the **Hosts** view toolbar.

3. Select the host in the **New Hosts** dialog and click **Enable**.

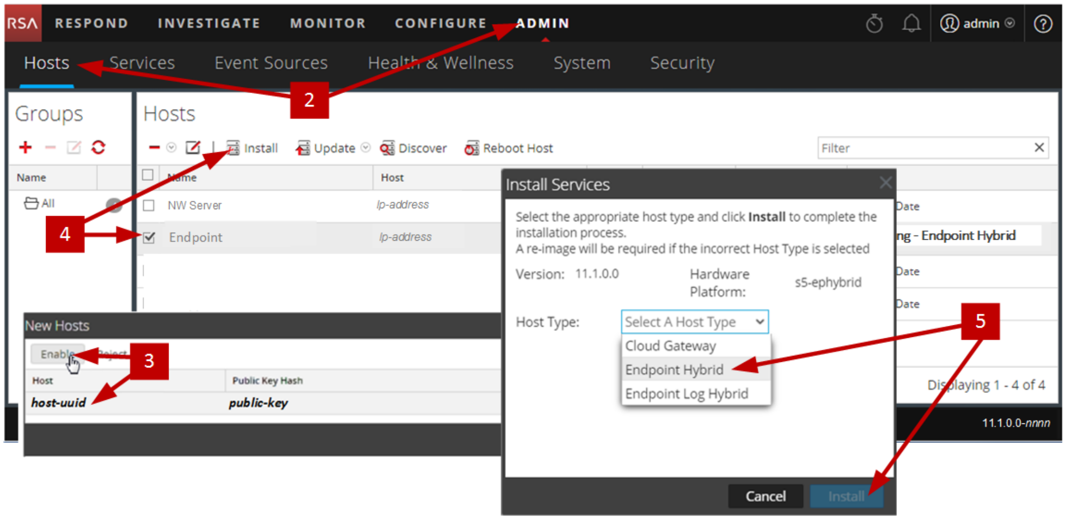
   The New Hosts dialog closes and the host is displayed in the Hosts view.

4. Select that host in the **Hosts** view (for example, **Endpoint**) and click Install.

   The Install Services dialog is displayed.

5. Select the appropriate service, either **Endpoint Hybrid** or **Endpoint Log Hybrid**, and click **Install**.

Endpoint Hybrid is used as an example in the following screen shot.



Install Services

Select the appropriate host type and click **Install** to complete the installation process.
A re-image will be required if the incorrect Host Type is selected

Version: 11.1.0.0
Hardware Platform: s5-ephybrid

Host Type: Select A Host Type
- Cloud Gateway
- Endpoint Hybrid
- Endpoint Log Hybrid

6. Make sure that all Endpoint Hybrid or Endpoint Log Hybrid services are running.

7. Register the Endpoint server host IP address with the NW Server.

   a. SSH to the NW Server.

   b. Go to the `/opt/rsa/saTools/bin` directory.

   ```
   cd /opt/rsa/saTools/bin
   ```

   c. Run the `register-endpoint` script specifying the Endpoint host IP address.

   ```
   ./register-endpoint-ip -v --host-addr <ip-address>
   ```

   > **Note:** The script takes a few minutes to update the Endpoint Server IP address.

8. Configure Endpoint Meta forwarding.
   See *Endpoint Insights Configuration Guide* for instructions on how to configure Endpoint Meta forwarding.Go to the Master Table of Contents for NetWitness Logs & Packets 11.x to find all NetWitness Suite 11.x documents.

9. Install the Endpoint Insights Agent.
   See *Endpoint Insights Agent Installation Guide* for detailed instructions on how to install the agent. Go to the Master Table of Contents for NetWitness Logs & Packets 11.x to find all NetWitness Suite 11.x documents.

Appendix A. Troubleshooting

This section describes solutions to problems that you may encounter during installations and upgrades. In most cases, NetWitness Suite creates log messages when it encounters these problems.

> **Note:** If you cannot resolve an upgrade issue using the following troubleshooting solutions, contact Customer Support (https://community.rsa.com/docs/DOC-1294).

This section has troubleshooting documentation for the following services, features, and processes.

- Command Line Interface (CLI)
- Backup Script
- Event Stream Analysis
- Log Collector Service (`nwlogcollector`)
- NW Server
- Reporting Engine

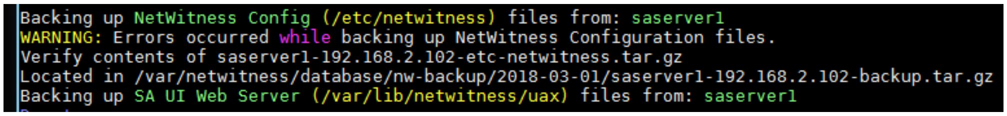
Command Line Interface (CLI)

Error Message	Command Line Interface (CLI) displays: "Orchestration failed." `Mixlib::ShellOut::ShellCommandFailed: Command execution failed. STDOUT/STDERR suppressed for sensitive resource in/var/log/netwitness/config-management/chef-solo.log`
Cause	Entered the wrong `deploy_admin` password in `nwsetup-tui`.
Solution	Retrieve your `deploy_admin` password password. 1. SSH to the NW Server host. `security-cli-client --get-config-prop --prop-hierarchy nw.security-client --prop-name deployment.password` SSH to the host that failed. 2. Run the `nwsetup-tui` again using correct `deploy_admin` password.

Error Message	`ERROR com.rsa.smc.sa.admin.web.controller.ajax.health.AlarmsController - Cannot connect to System Management Service`
Cause	NetWitness Suite sees the Service Management Service (SMS) as down after successful upgrade even though the service is running.
Solution	Restart SMS service. `systemctl restart rsa-sms`

Backup (`nw-backup` script)

Error Message	`WARNING: Incorrect ESA Mongo admin password for host <hostname>.`
Cause	ESA Mongo admin password contains special characters (for example, ‘!@#$%^qwerty’).
Solution	Change the ESA mongo admin password back to the original default of ‘netwitness’ before running backup. See "ESA Config: Change MongoDB Password for admin Account" the *Event Stream Analysis Configuration Guide. Go to the* Master Table of Contents *for NetWitness Logs & Packets 11.x to find all NetWitness Suite 11.x documents.*

Error	Backup errors caused by the `immutable` attribute setting. Here is an example of an error that can be displayed:
	
	`Backing up NetWitness Config (/etc/netwitness) files from: saserver1`
	`WARNING: Errors occurred while backing up NetWitness Configuration files.`
	`Verify contents of saserver1-192.168.2.102-etc-netwitness.tar.gz`
	`Located in /var/netwitness/database/nw-backup/2018-03-01/saserver1-192.168.2.102-backup.tar.gz`
	`Backing up SA UI Web Server (/var/lib/netwitness/uax) files from: saserver1`

Cause	If you have any files that have the immutable flag set (to keep the Puppet process from overwriting a customized file), the file will not be included in the backup process and an error will be generated.
Solution	On the host that contains the files with the immutable flag set, run the following command to remove the immutable setting from the files: `chattr -i <filename>`

Error	Error creating Network Configuration Information file due to duplicate or bad entries in primary network configuration file: `/etc/sysconfig/network-scripts/ifcfg-em1` Verify contents of `/var/netwitness/logdecoder/packetdb/nw-backup/2018-02-23/S5-BROK-36-10.25.53.36-network.info.txt`
Cause	There are incorrect or duplicate entries for any one of the following fields: DEVICE, BOOTPROTO, IPADDR, NETMASK or GATEWAY, that were found from reading the primary Ethernet interface configuration file from the host being backed up.

Solution	Manually create a file at the backup location on the external backup server, as well as the backup location local to the host where other backups have been staged. The file name should be of the format `<hostname>-<hostip>-network.info.txt`, and should contain the following entries:
	`DEVICE=<devicename> ; # from the host's primary ethernet interface config file`
	`BOOTPROTO=<bootprotocol> ; # from the host's primary ethernet interface config file`
	`IPADDR=<value> ; # from the host's primary ethernet interface config file`
	`NETMASK=<value> ; # from the host's primary ethernet interface config file`
	`GATEWAY=<value> ; # from the host's primary ethernet interface config file`
	`search <value> ; # from the host's /etc/resolv.conf file`
	`nameserver <value> ; # from the host's /etc/resolv.conf file`

Event Stream Analysis

Problem	ESA service crashes after you upgrade to 11.1.0.0 from a FIPS enabled setup.
Cause	ESA service is pointing to an invalid keystore.

Solution	1. SSH to the ESA Primary host and log in.
	2. In the `/opt/rsa/esa/conf/wrapper.conf` file, replace the following line:
	`wrapper.java.additional.5=-Djavax.net.ssl.keyStore=/opt/rsa/esa/../carlos/keystore`
	with:
	`wrapper.java.additional.5=-Djavax.net.ssl.keyStore=/opt/rsa/carlos/keystore`
	3. Submit the following command to restart ESA.
	`systemctl restart rsa-nw-esa-server`
	Note: If you have multiple ESA hosts and you encounter that same problem, repeat steps 1 through 3 inclusive on each secondary ESA host.

Log Collector Service (`nwlogcollector`)

Log Collector logs are posted to `/var/log/install/nwlogcollector_install.log` on the host running the `nwlogcollector` service.

Error Message	`<timestamp>.NwLogCollector_PostInstall: Lockbox Status : Failed to open lockbox: The lockbox stable value threshold was not met because the system fingerprint has changed. To reset the system fingerprint, open the lockbox using the passphrase.`
Cause	The Log Collector Lockbox failed to open after the update.
Solution	Log in to NetWitness Suite and reset the system fingerprint by resetting the stable system value password for the Lockbox as described in the "Reset the Stable System Value" topic under "Configure Lockbox Security Settings" topic in the *Log Collection Configuration Guide*. Go to the Master Table of Contents for NetWitness Logs & Packets 11.x to find all NetWitness Suite 11.x documents.

Error Message	`<timestamp> NwLogCollector_PostInstall: Lockbox Status : Not Found`
Cause	The Log Collector Lockbox is not configured after the update.
Solution	(Conditional) If you use a Log Collector Lockbox, log in to NetWitness Suite and configure the Lockbox as described in the"Configure Lockbox Security Settings" topic in the *Log Collection Configuration Guide*. Go to the Master Table of Contents for NetWitness Logs & Packets 11.x to find all NetWitness Suite 11.x documents.

Error Message	`<timestamp>: NwLogCollector_PostInstall: Lockbox Status : Lockbox maintenance required: The lockbox stable value threshold requires resetting. To reset the system fingerprint, select Reset Stable System Value on the settings page of the Log Collector.`
Cause	You need to reset the stable value threshold field for the Log Collector Lockbox.
Solution	Log in to NetWitness Suite and reset the stable system value password for the Lockbox as described in "Reset the Stable System Value" topic under "Configure Lockbox Security Settings" topic in the *Log Collection Configuration Guide*. Go to the Master Table of Contents for NetWitness Logs & Packets 11.x to find all NetWitness Suite 11.x documents.

Problem	You have prepared a Log Collector for upgrade and no longer want to upgrade at this time.
Cause	Delay in upgrade.
Solution	Use the following command string to revert a Log Collector that has been prepared for upgrade back to resume normal operation. `# /opt/rsa/nwlogcollector/nwtools/prepare-for-migrate.sh --revert`

NW Server

These logs are posted to `/var/netwitness/uax/logs/sa.log` on the NW Server Host.

Problem	After upgrade, you notice that Audit logs are not getting forwarded to the configured Global Audit Setup; or, The following message seen in the `sa.log`. `Syslog Configuration migration failed. Restart jetty service to fix this issue`
Cause	NW Server Global Audit setup migration failed to migrate from 10.6.5.x to 11.1.0.0.
Solution	1. SSH to the NW Server. 2. Submit the following command. `orchestration-cli-client --update-admin-node`

Reporting Engine Service

Reporting Engine Update logs are posted to to`/var/log/re_install.log` file on the host running the Reporting Engine service.

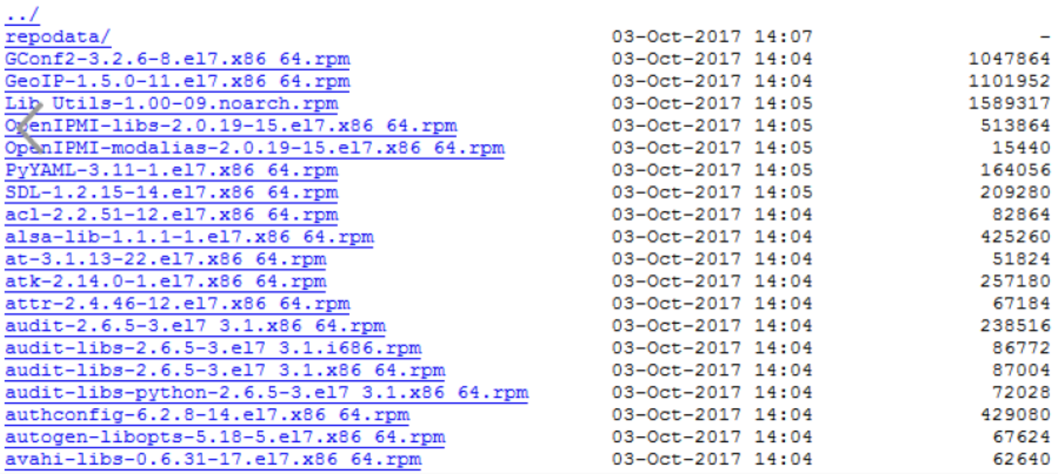
Error Message	`<timestamp> : Available free space in /var/netwitness/re-server/rsa/soc/reporting-engine [ ><existing-GB ] is less than the required space [ <required-GB> ]`
Cause	Update of the Reporting Engine failed because you do not have enough disk space.
Solution	Free up the disk space to accommodate the required space shown in the log message. See the "Add Additional Space for Large Reports" topic in the *Reporting Engine Configuration Guide* for instructions on how to free up disk space. Go to the Master Table of Contents for NetWitness Logs & Packets 11.x to find all NetWitness Suite 11.x documents.

Appendix B. Create an External Repository

Complete the following procedure to set up an external repository (Repo).

1. Log in to the web server host
2. Create the `ziprepo` directory to host the NW repository (`netwitness-11.0.0.0.zip`) under `web-root` of the web server. For example, /var/netwitness is the web-root, submit the following command string.
   ```
   mkdir /var/netwitness/ziprepo
   ```
3. Create the 11.0.0.0 directory under `/var/netwitness/ziprepo`.
   ```
   mkdir /var/netwitness/ziprepo/11.0.0.0
   ```
4. Create the `OS` and `RSA` directories under `/var/netwitness/ziprepo/11.0.0.0`.
   ```
   mkdir /var/netwitness/ziprepo/11.0.0.0/OS
   mkdir /var/netwitness/ziprepo/11.0.0.0/RSA
   ```
5. Unzip the `netwitness-11.0.0.0.zip` file into the `/var/netwitness/ziprepo/11.0.0.0`directory.
   ```
   unzip netwitness-11.0.0.0.zip -d /var/netwitness/ziprepo/11.0.0.0
   ```
   Unzipping `netwitness-11.0.0.0.zip` results in two zip files (`OS-11.0.0.0.zip` and `RSA-11.0.0.0.zip`)and some other files.
6. Unzip the:

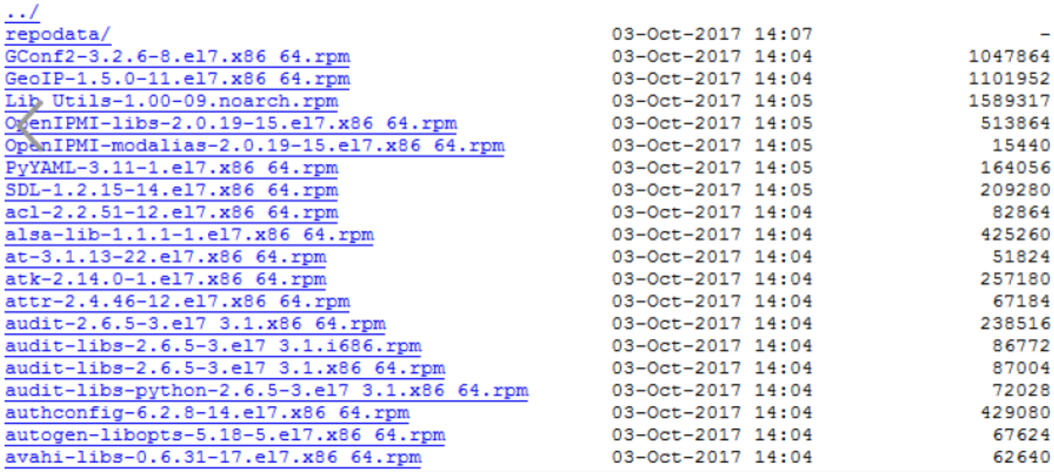
   a. `OS-11.0.0.0.zip` into the `/var/netwitness/ziprepo/11.0.0.0/OS` directory.
   ```
   unzip /var/netwitness/ziprepo/11.0.0.0/OS-11.0.0.0.zip -d
   /var/netwitness/ziprepo/11.0.0.0/OS
   ```



```
../
repodata/                                     03-Oct-2017 14:07            -
GConf2-3.2.6-8.el7.x86_64.rpm                 03-Oct-2017 14:04      1047864
GeoIP-1.5.0-11.el7.x86_64.rpm                 03-Oct-2017 14:04      1101952
Lib_Utils-1.00-09.noarch.rpm                  03-Oct-2017 14:05      1589317
OpenIPMI-libs-2.0.19-15.el7.x86_64.rpm        03-Oct-2017 14:05       513864
OpenIPMI-modalias-2.0.19-15.el7.x86_64.rpm    03-Oct-2017 14:05        15440
PyYAML-3.11-1.el7.x86_64.rpm                  03-Oct-2017 14:05       164056
SDL-1.2.15-14.el7.x86_64.rpm                  03-Oct-2017 14:05       209280
acl-2.2.51-12.el7.x86_64.rpm                  03-Oct-2017 14:04        82864
alsa-lib-1.1.1-1.el7.x86_64.rpm               03-Oct-2017 14:04       425260
at-3.1.13-22.el7.x86_64.rpm                   03-Oct-2017 14:04        51824
atk-2.14.0-1.el7.x86_64.rpm                   03-Oct-2017 14:04       257180
attr-2.4.46-12.el7.x86_64.rpm                 03-Oct-2017 14:04        67184
audit-2.6.5-3.el7_3.1.x86_64.rpm              03-Oct-2017 14:04       238516
audit-libs-2.6.5-3.el7_3.1.i686.rpm           03-Oct-2017 14:04        86772
audit-libs-2.6.5-3.el7_3.1.x86_64.rpm         03-Oct-2017 14:04        87004
audit-libs-python-2.6.5-3.el7_3.1.x86_64.rpm  03-Oct-2017 14:04        72028
authconfig-6.2.8-14.el7.x86_64.rpm            03-Oct-2017 14:04       429080
autogen-libopts-5.18-5.el7.x86_64.rpm         03-Oct-2017 14:04        67624
avahi-libs-0.6.31-17.el7.x86_64.rpm           03-Oct-2017 14:04        62640
```

b. `RSA-11.0.0.0.zip` into the `/var/netwitness/ziprepo/11.0.0.0/RSA` directory.

```
unzip /var/netwitness/ziprepo/11.0.0.0/RSA-11.0.0.0.zip -d
/var/netwitness/ziprepo/11.0.0.0/RSA
```



```
../
repodata/                                         03-Oct-2017 14:07                   -
GConf2-3.2.6-8.el7.x86_64.rpm                     03-Oct-2017 14:04             1047864
GeoIP-1.5.0-11.el7.x86_64.rpm                     03-Oct-2017 14:04             1101952
Lib_Utils-1.00-09.noarch.rpm                      03-Oct-2017 14:05             1589317
OpenIPMI-libs-2.0.19-15.el7.x86_64.rpm            03-Oct-2017 14:05              513864
OpenIPMI-modalias-2.0.19-15.el7.x86_64.rpm        03-Oct-2017 14:05               15440
PyYAML-3.11-1.el7.x86_64.rpm                      03-Oct-2017 14:05              164056
SDL-1.2.15-14.el7.x86_64.rpm                      03-Oct-2017 14:05              209280
acl-2.2.51-12.el7.x86_64.rpm                      03-Oct-2017 14:04               82864
alsa-lib-1.1.1-1.el7.x86_64.rpm                   03-Oct-2017 14:04              425260
at-3.1.13-22.el7.x86_64.rpm                       03-Oct-2017 14:04               51824
atk-2.14.0-1.el7.x86_64.rpm                       03-Oct-2017 14:04              257180
attr-2.4.46-12.el7.x86_64.rpm                     03-Oct-2017 14:04               67184
audit-2.6.5-3.el7_3.1.x86_64.rpm                  03-Oct-2017 14:04              238516
audit-libs-2.6.5-3.el7_3.1.i686.rpm               03-Oct-2017 14:04               86772
audit-libs-2.6.5-3.el7_3.1.x86_64.rpm             03-Oct-2017 14:04               87004
audit-libs-python-2.6.5-3.el7_3.1.x86_64.rpm      03-Oct-2017 14:04               72028
authconfig-6.2.8-14.el7.x86_64.rpm                03-Oct-2017 14:04              429080
autogen-libopts-5.18-5.el7.x86_64.rpm             03-Oct-2017 14:04               67624
avahi-libs-0.6.31-17.el7.x86_64.rpm               03-Oct-2017 14:04               62640
```

The external url for the repo is `http://<web server IP address>/ziprepo`.

7. Use the `http://<web server IP address>/ziprepo` in response to **Enter the base URL of the external update repositories** prompt from NW 11.0 Setup program (nwsetup-tui) prompt.

Revision History

Revision	Date	Description	Author
1.0	8-Mar-18	Release to Operations (RTO)	IDD
1.2	11-Oct-18	Added topic on External Attached Storage Configuration for SADOCS-1597 Enhancement	IDD