



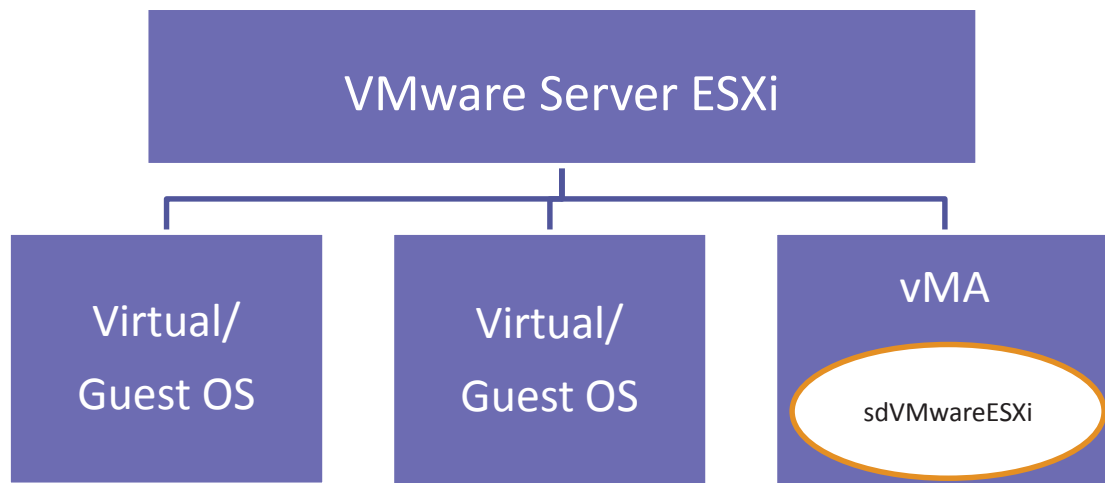
VMwareESXi Shutdown Wizard

User's Manual

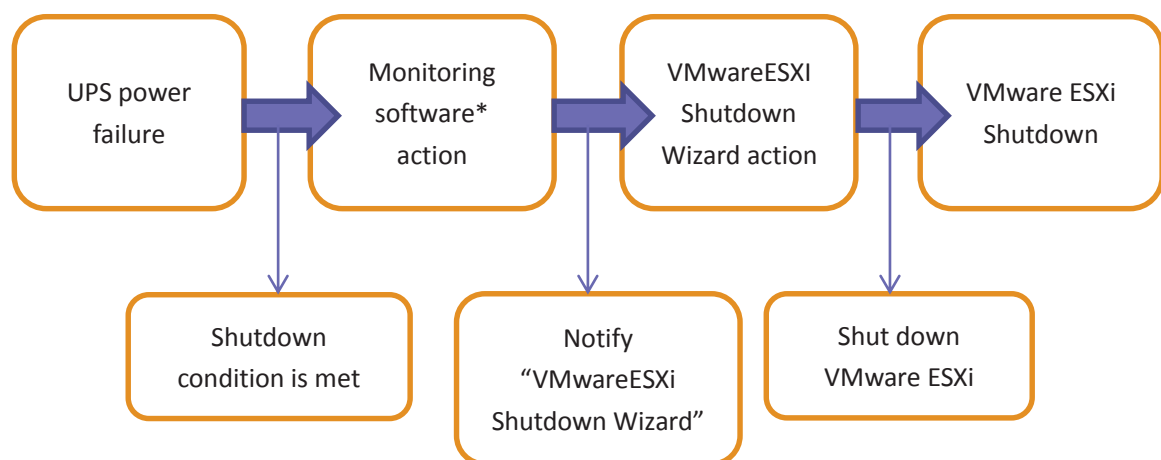
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1 Overview



1.1 Shutdown procedure



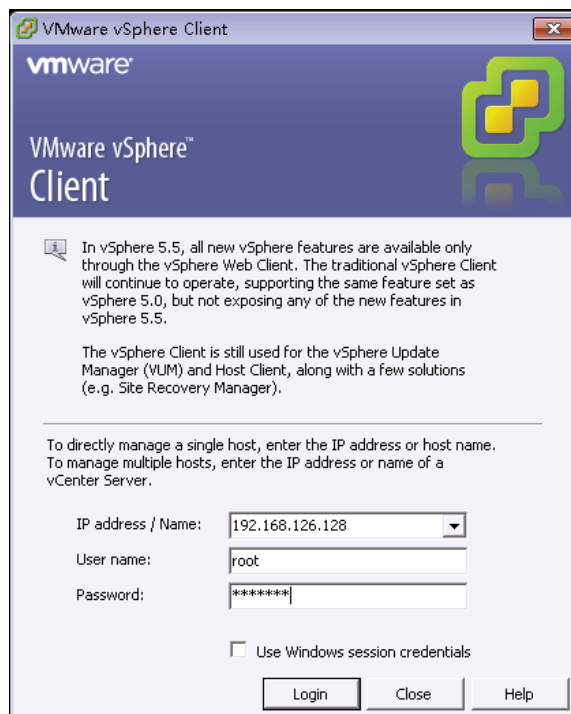
- The full name for the vMA is "vSphere Management Assistant". It is released by the VMware company to manage the vSphere.

*Monitoring software could be ViewPower or ViewPower Pro.

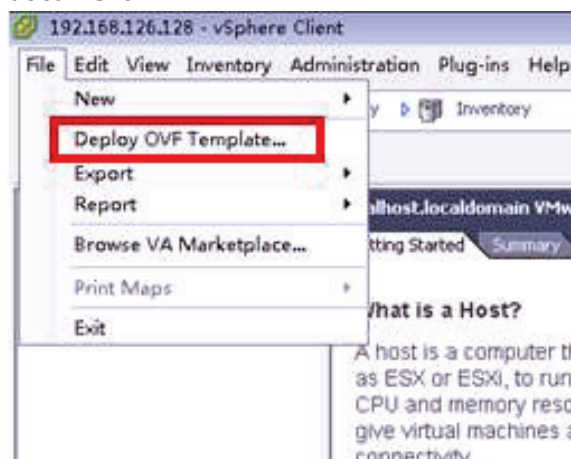
2 Configure VMware ESXi in VMware vSphere Client

2.1 Install vMA

1. Go to the website <http://www.vmware.com/support/developer/vima/>
2. Download the vMA file and extract it. The format for the VMA document is *.OVF.
3. Start the VMware vSphere Client.

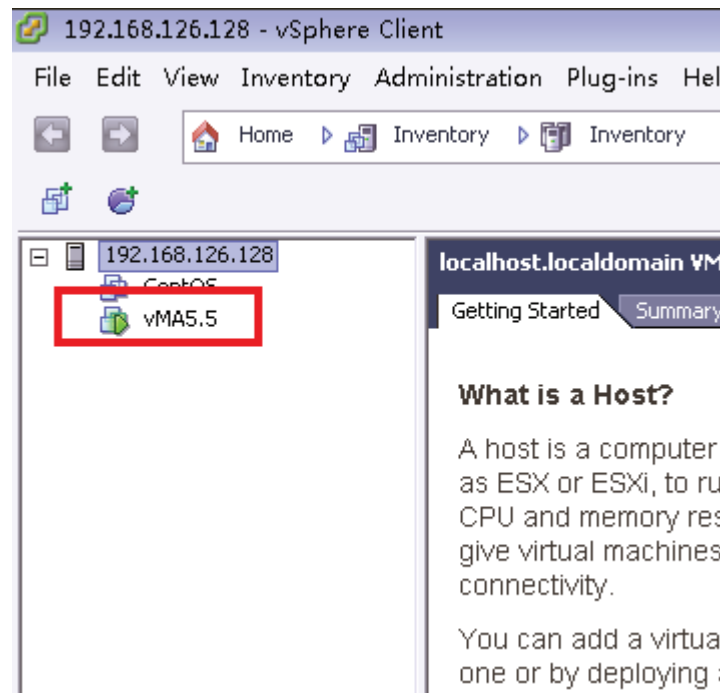


4. Select "File" > "Deploy OVF Template". Click the browse button and select the OVF document.



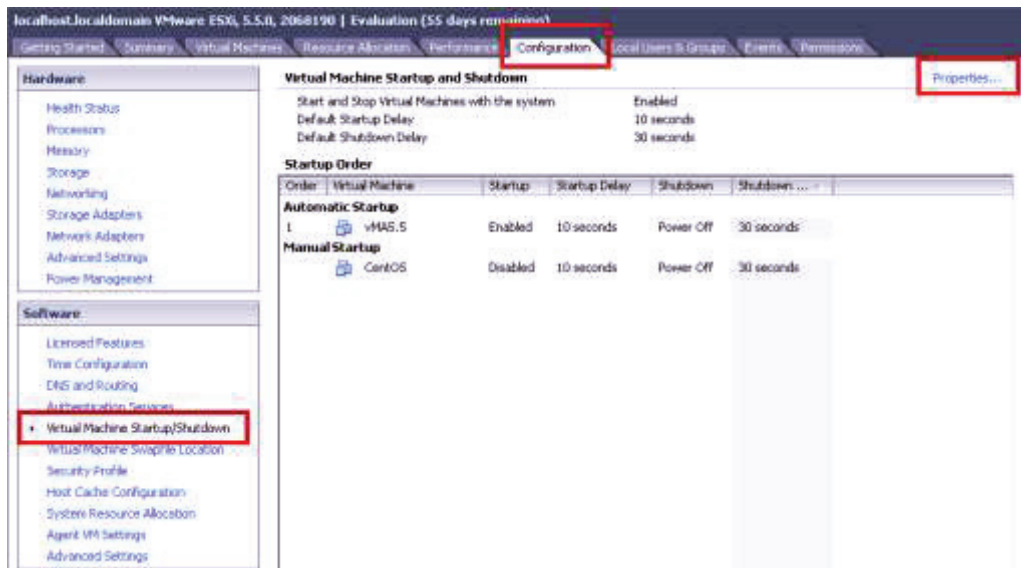


5. Execute vMA and the default user name is vi-admin. Set the password before first login

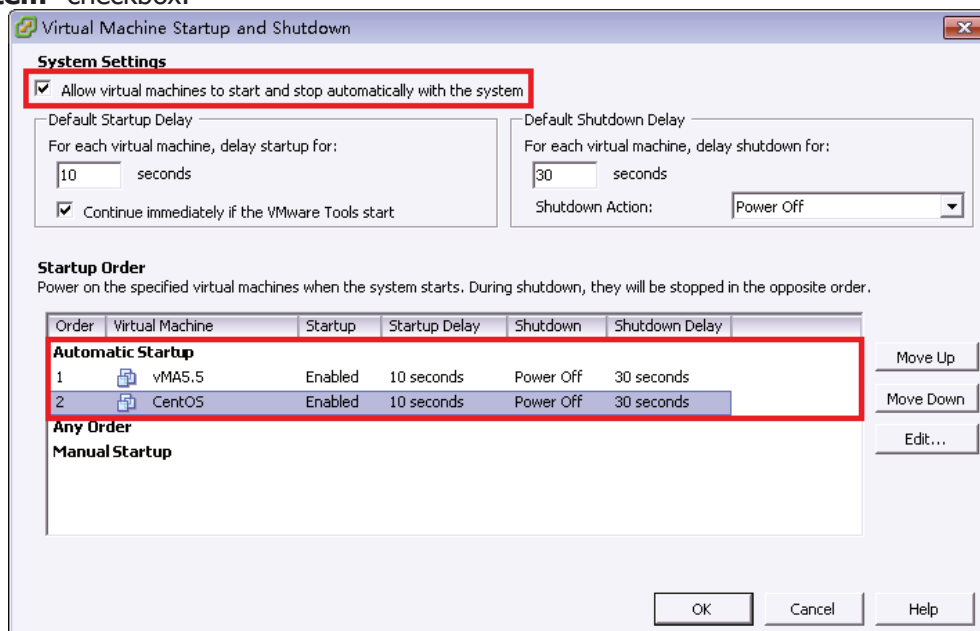


2.2 Configure startup/shutdown automatically with VMware ESXi

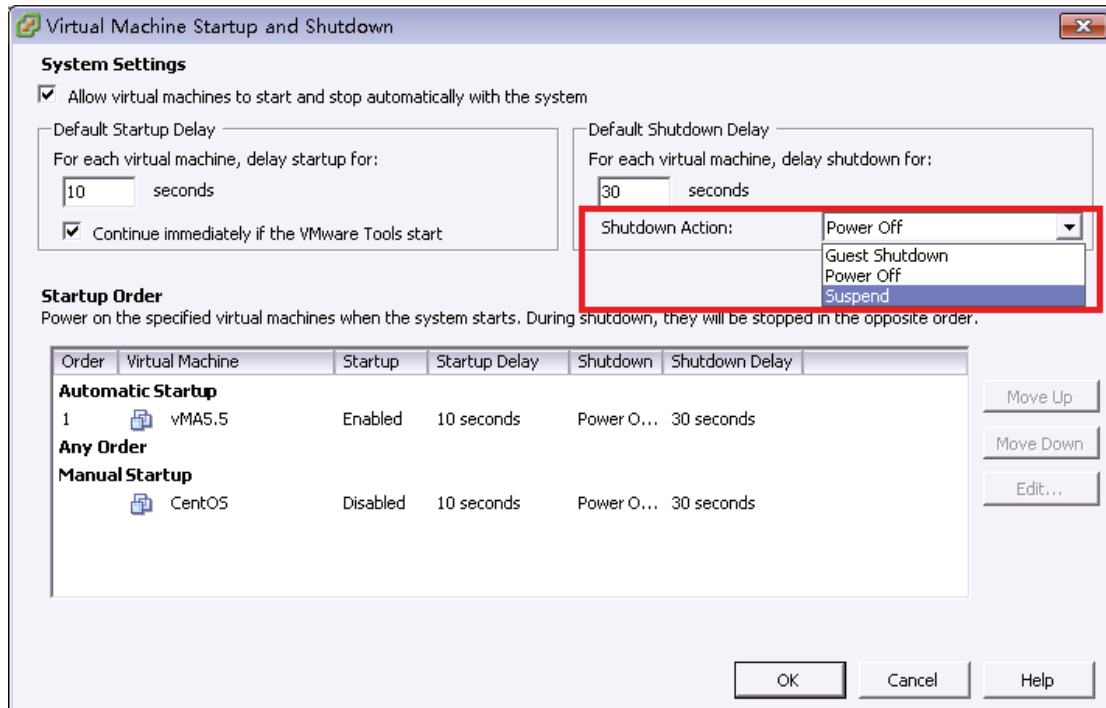
1. Start VMware vSphere Client
2. Click **Configuration -> Virtual Machine startup/shutdown->Properties**



3. Click "Allow virtual machines to start and stop automatically with the system" checkbox.



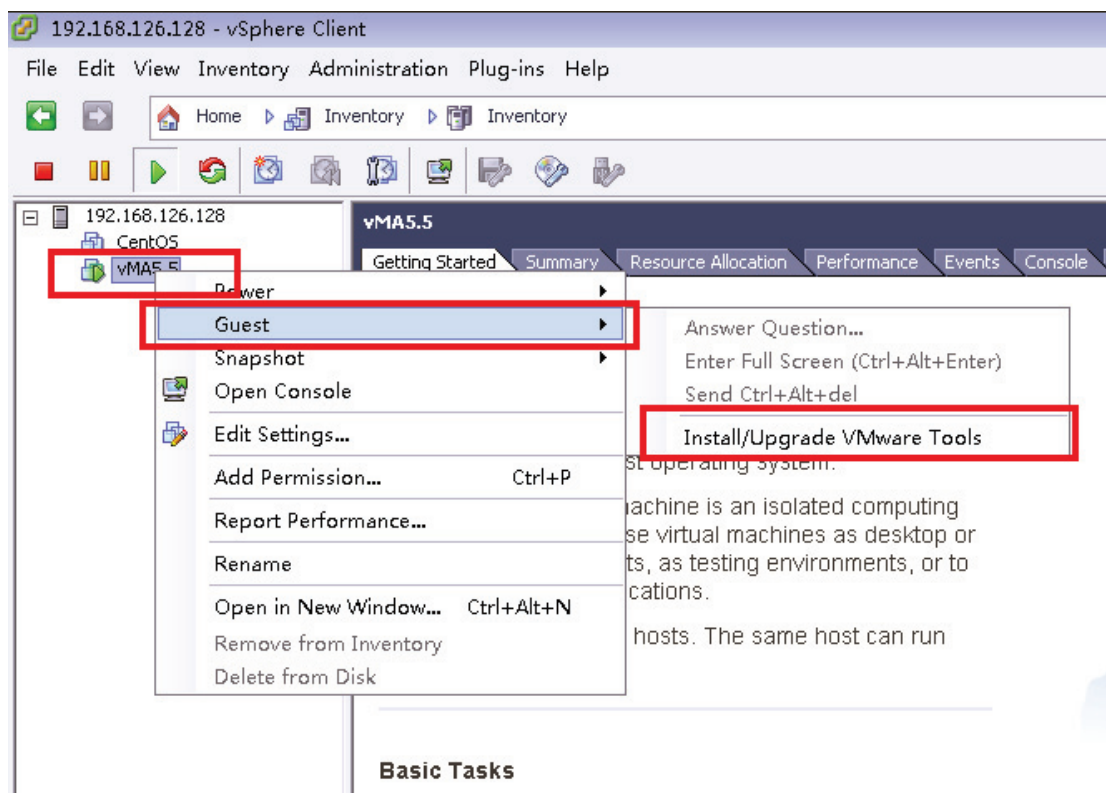
4. Move up the virtual machines to the "Automatic Startup" list
The virtual machines will start/stop when the host start/shutdown automatically



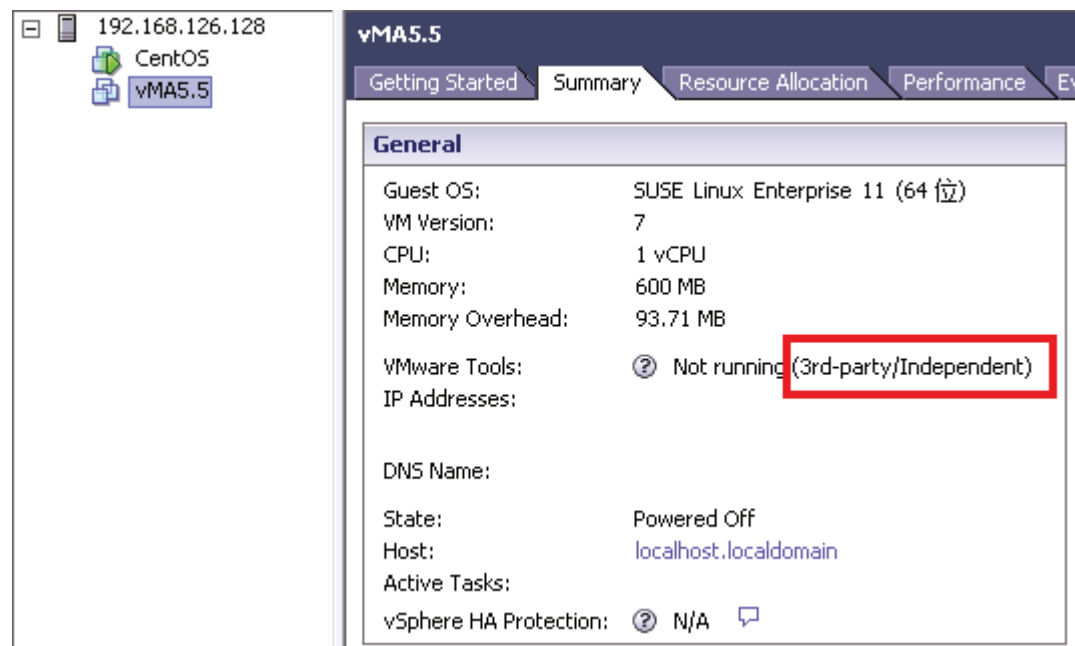
Note: If the Shutdown Action is set up, make sure the VMware tools are installed in each virtual machine.

Please refer to the official website for more information about VMware tools.

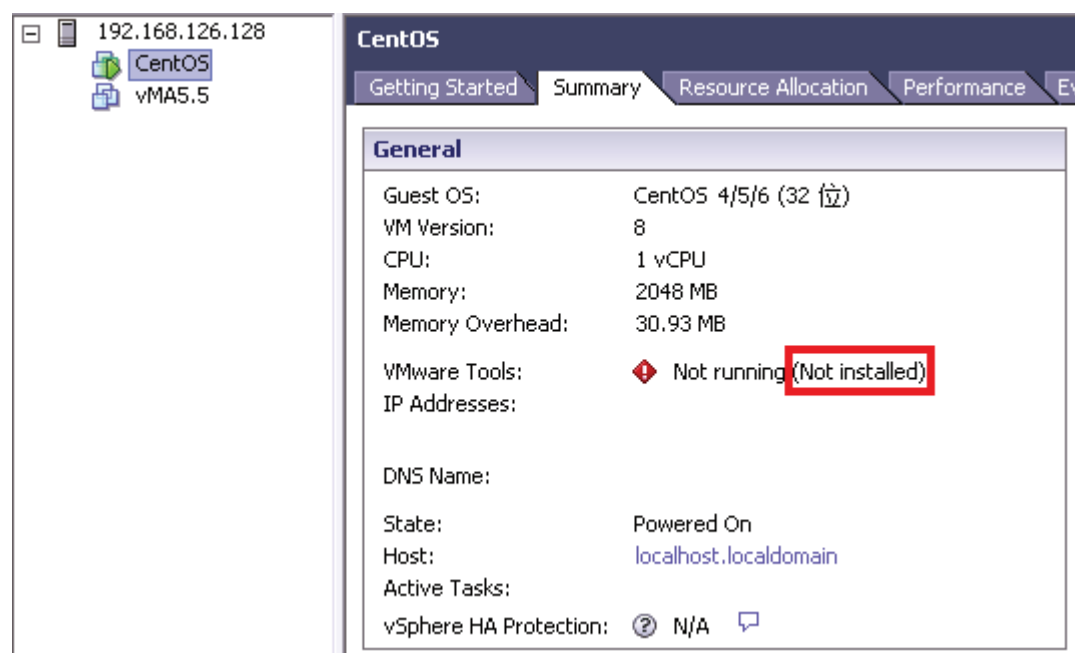
Right click one of the VMs and click Guest -> Install/Upgrade VMware Tools.
The vMA will install the VMware Tools as default.



If VMware Tools are installed, it will show below screen:



If VMware Tools are not installed, it will show below screen:



2.3 Configure sdVMwareESXi port

The sdVMwareESXi uses udp port 31234 and this port is opened as default.

Open the UDP ports by the following command if the port is disabled:

```
iptables -I INPUT -p udp --dport 31234 -j ACCEPT
```

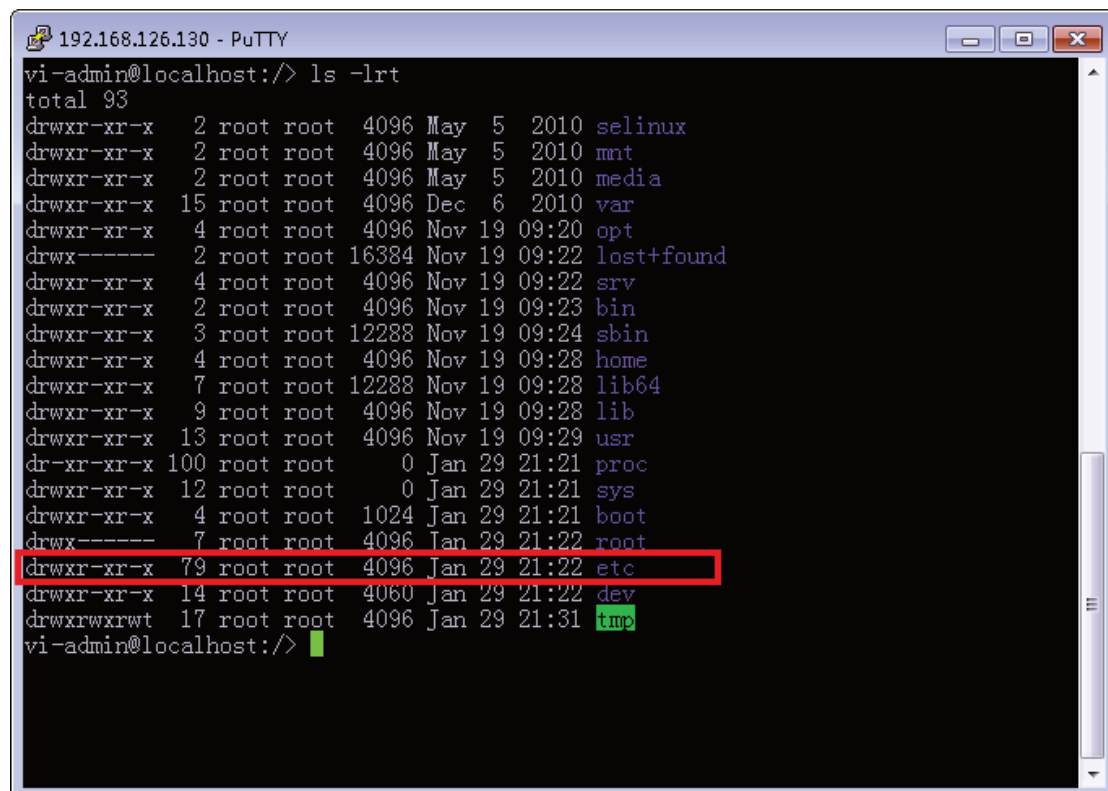
```
iptables -I OUTPUT -p udp --dport 31234 -j ACCEPT
```


3 About VMwareESXi Shutdown Wizard and configuration

3.1 About VMwareESXi Shutdown Wizard

VMwareESXi shutdown wizard will accept shutdown commands to remotely shut down VMware ESXi from ViewPower or ViewPower Pro. This shutdown wizard is a background process under the vMA. Simply extract vMA. Then, VMwareESXi shutdown wizard is embedded.

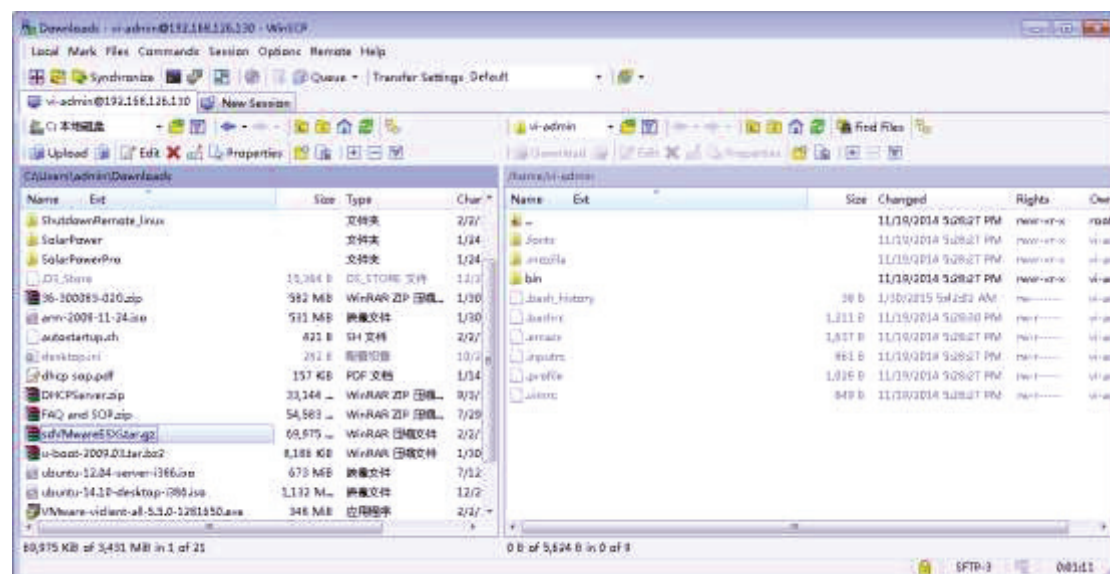
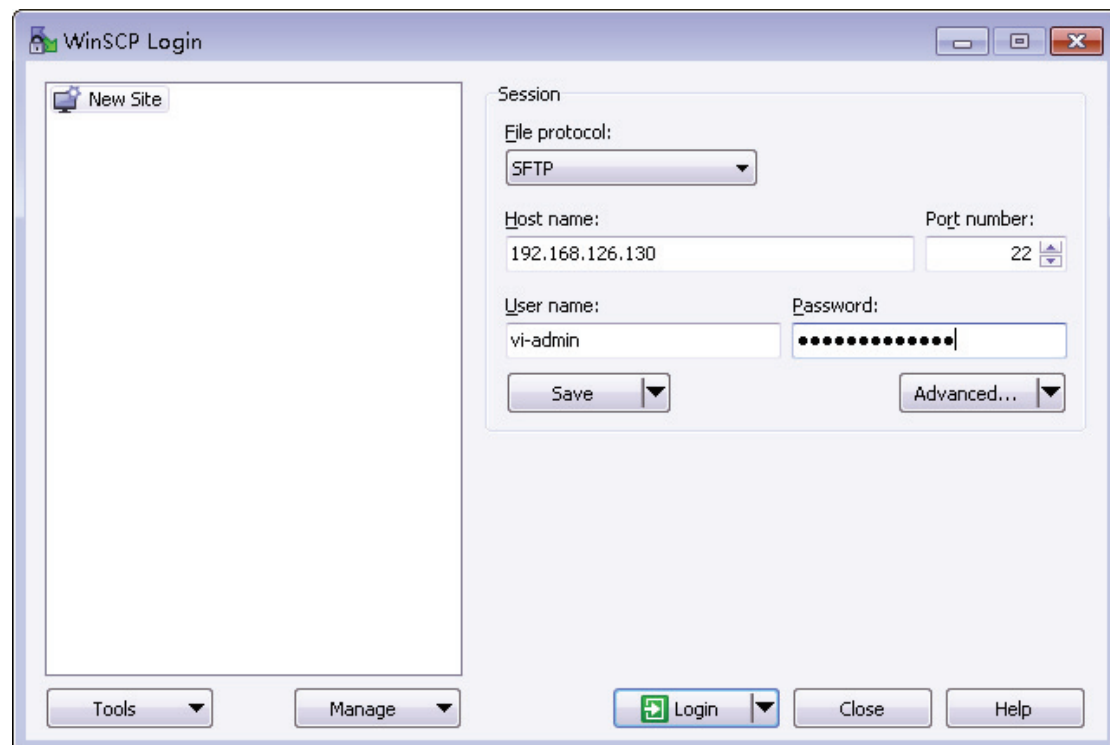
NOTE: It's requested to configure VMwareESXi shutdown wizard with ID of root user. Because it's required to add some shell scripts in "/etc" directory and this modification is only authorized to root user only. If it's not followed with root user, it may not automatically trigger VMwareESXi shutdown wizard when vMA is activated.



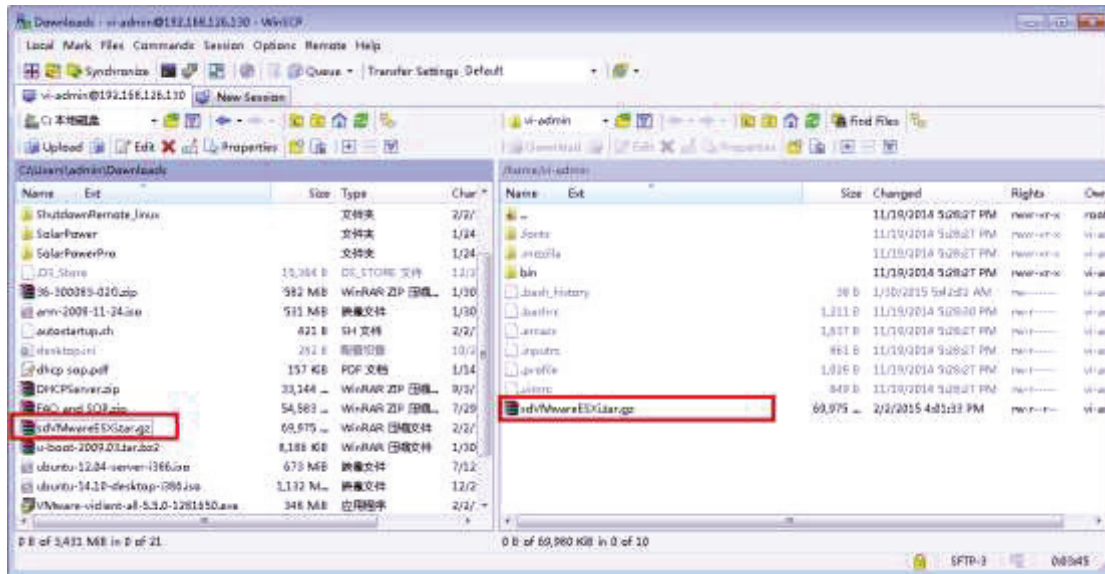
```
192.168.126.130 - PuTTY
vi-admin@localhost:~/> ls -lrt
total 93
drwxr-xr-x 2 root root 4096 May 5 2010 selinux
drwxr-xr-x 2 root root 4096 May 5 2010 mnt
drwxr-xr-x 2 root root 4096 May 5 2010 media
drwxr-xr-x 15 root root 4096 Dec 6 2010 var
drwxr-xr-x 4 root root 4096 Nov 19 09:20 opt
drwx----- 2 root root 16384 Nov 19 09:22 lost+found
drwxr-xr-x 4 root root 4096 Nov 19 09:22 srv
drwxr-xr-x 2 root root 4096 Nov 19 09:23 bin
drwxr-xr-x 3 root root 12288 Nov 19 09:24 sbin
drwxr-xr-x 4 root root 4096 Nov 19 09:28 home
drwxr-xr-x 7 root root 12288 Nov 19 09:28 lib64
drwxr-xr-x 9 root root 4096 Nov 19 09:28 lib
drwxr-xr-x 13 root root 4096 Nov 19 09:29 usr
dr-xr-xr-x 100 root root 0 Jan 29 21:21 proc
drwxr-xr-x 12 root root 0 Jan 29 21:21 sys
drwxr-xr-x 4 root root 1024 Jan 29 21:21 boot
drwx----- 7 root root 4096 Jan 29 21:22 root
drwxr-xr-x 79 root root 4096 Jan 29 21:22 etc
drwxr-xr-x 14 root root 4060 Jan 29 21:22 dev
drwxrwxrwt 17 root root 4096 Jan 29 21:31 tmp
vi-admin@localhost:~/>
```

3.2 Upload sdVMwareESXi.tar.gz to vMA by WinSCP

- Loing vMA by WinSCP

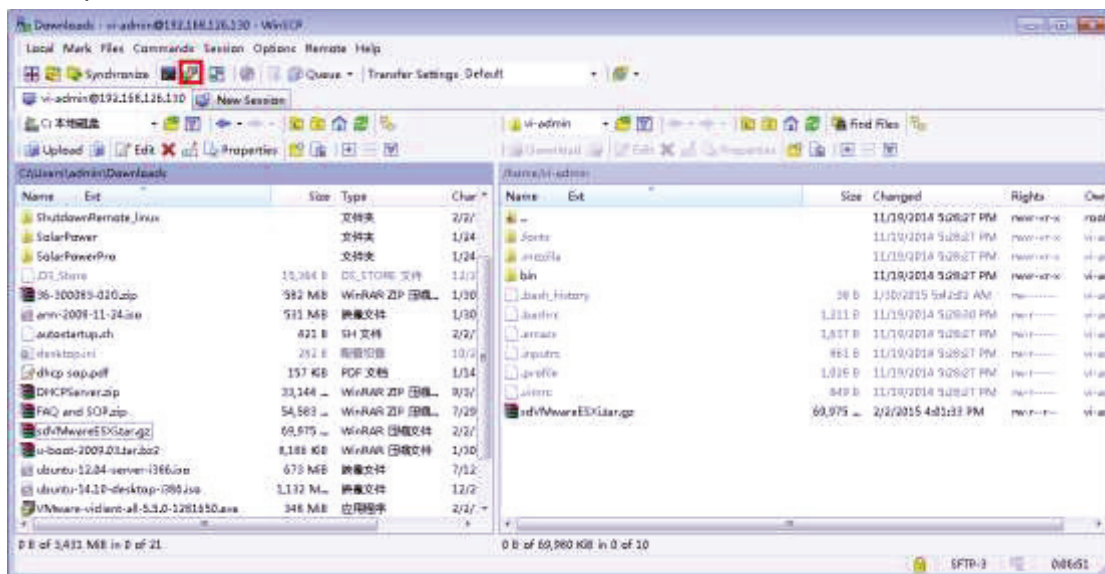


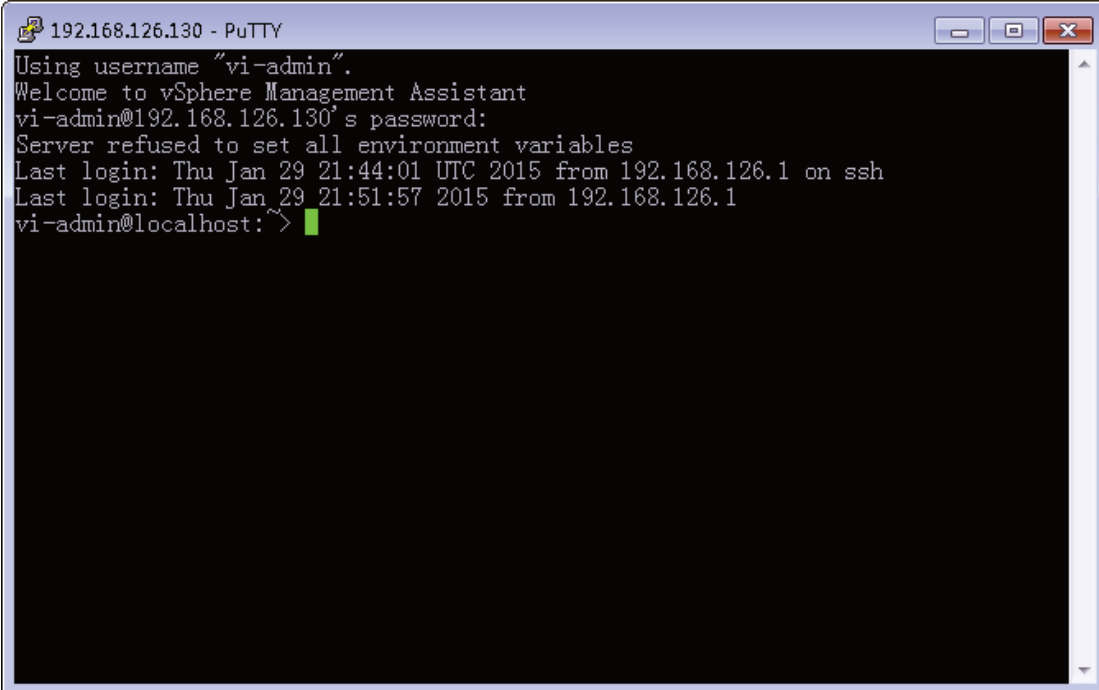
- Find the sdVMwareESXi from left window. Drag and release it to the right window.



3.3 Authorize sdVMwareESXi.tar.gz to root user

- Open PuTTY

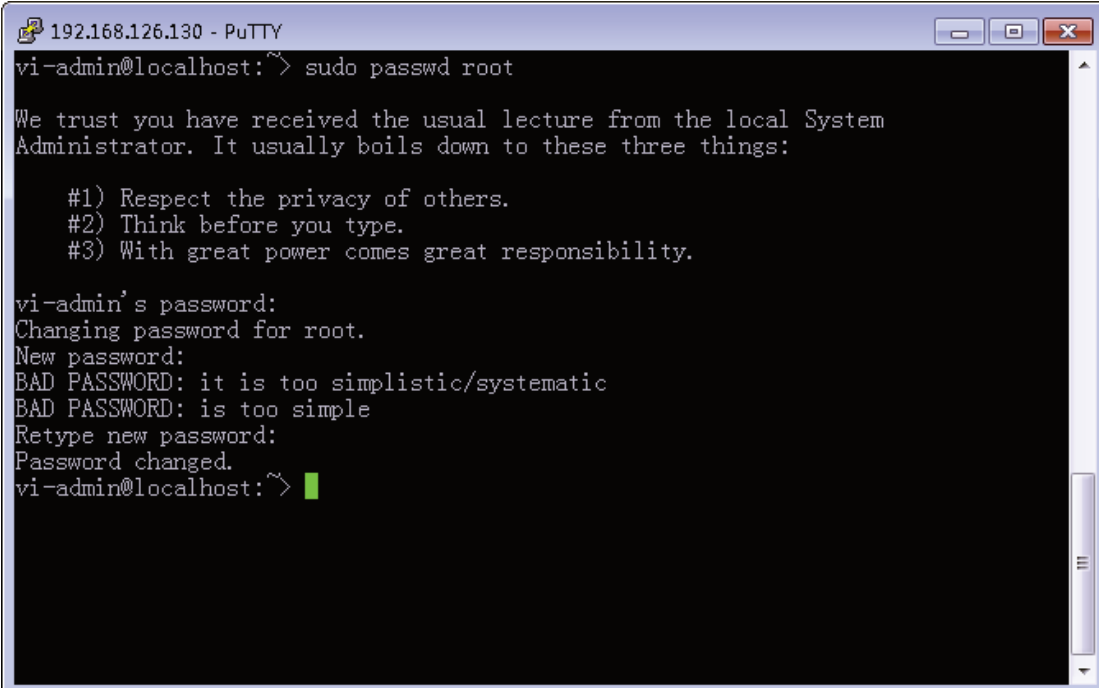




```
192.168.126.130 - PuTTY
Using username "vi-admin".
Welcome to vSphere Management Assistant
vi-admin@192.168.126.130's password:
Server refused to set all environment variables
Last login: Thu Jan 29 21:44:01 UTC 2015 from 192.168.126.1 on ssh
Last login: Thu Jan 29 21:51:57 2015 from 192.168.126.1
vi-admin@localhost:~>
```

- Change the password of root user

When first using vMA, it's necessary to change the password of root user. Please key in **"sudo passwd root"** to change password.



```
192.168.126.130 - PuTTY
vi-admin@localhost:~> sudo passwd root

We trust you have received the usual lecture from the local System
Administrator. It usually boils down to these three things:

    #1) Respect the privacy of others.
    #2) Think before you type.
    #3) With great power comes great responsibility.

vi-admin's password:
Changing password for root.
New password:
BAD PASSWORD: it is too simplistic/systematic
BAD PASSWORD: is too simple
Retype new password:
Password changed.
vi-admin@localhost:~>
```

- Switch to root user

Key in **"su -"** to switch to root user

```
192.168.126.130 - PuTTY
vi-admin@localhost:~> sudo passwd root

We trust you have received the usual lecture from the local System
Administrator. It usually boils down to these three things:

    #1) Respect the privacy of others.
    #2) Think before you type.
    #3) With great power comes great responsibility.

vi-admin's password:
Changing password for root.
New password:
BAD PASSWORD: it is too simplistic/systematic
BAD PASSWORD: is too simple
Retype new password:
Password changed.
vi-admin@localhost:~> su -
Password:
localhost:~ #
```

- Copy sdVMwareESXi.tar.gz from /home/vi-admin to /root
Key in **"mv /home/vi-admin/sdVMwareESXi.tar.gz /root"**

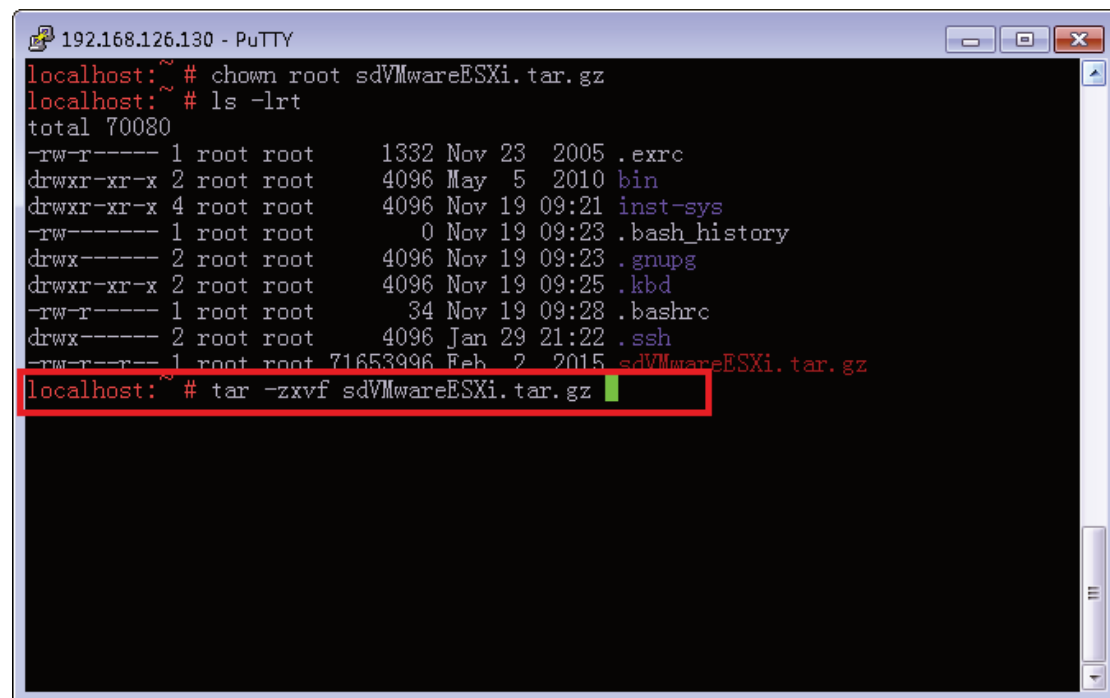
```
localhost:~ # mv /home/vi-admin/sdVMwareESXi.tar.gz /root
localhost:~ # cd /root
localhost:~ # ls
.bash_history .exrc .kbd bin sdVMwareESXi.tar.gz
.bashrc .gnupg .ssh inst-sys
localhost:~ #
```

- Authorize sdVMwareESXi.tar.gz to be root user.
Key in **"chown root sdVMwareESXi.tar.gz"**

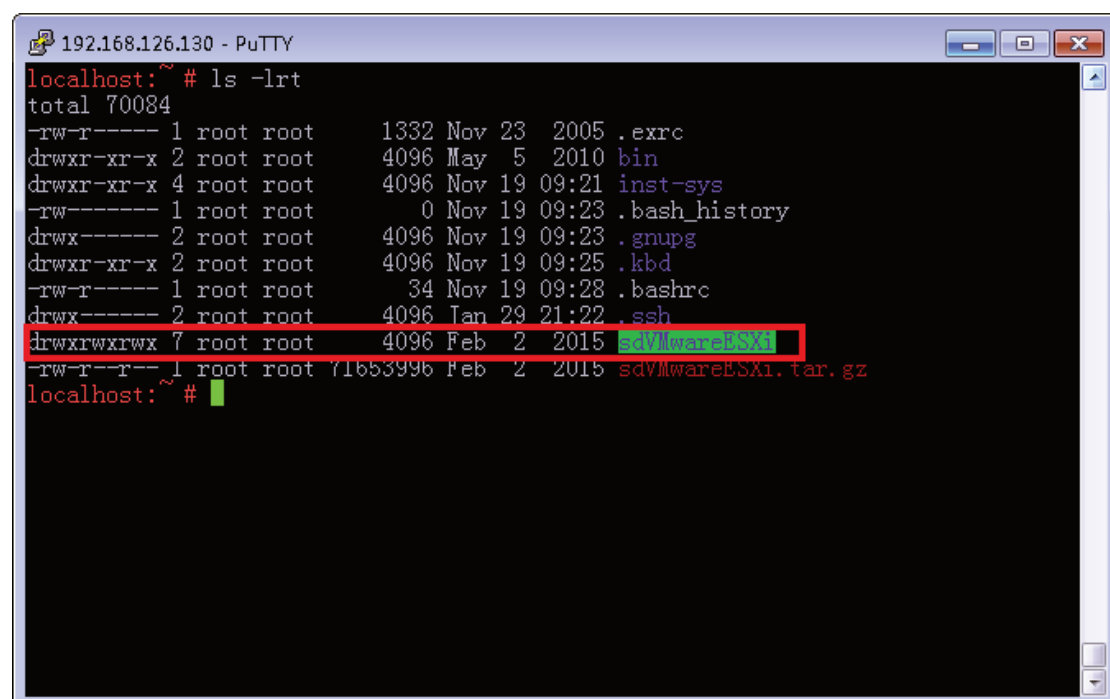
```
192.168.126.130 - PuTTY
localhost:~ # chown root sdVMwareESXi.tar.gz
localhost:~ # ls -lrt
total 70080
-rw-r----- 1 root root 1332 Nov 23 2005 .exrc
drwxr-xr-x 2 root root 4096 May 5 2010 bin
drwxr-xr-x 4 root root 4096 Nov 19 09:21 inst-sys
-rw----- 1 root root 0 Nov 19 09:23 .bash_history
drwx----- 2 root root 4096 Nov 19 09:23 .gnupg
drwxr-xr-x 2 root root 4096 Nov 19 09:25 .kbd
-rw-r----- 1 root root 34 Nov 19 09:28 .bashrc
drwx----- 2 root root 4096 Jan 29 21:22 .ssh
-rw-r--r-- 1 root root 71653996 Feb 2 2015 sdVMwareESXi.tar.gz
localhost:~ #
```

3.4 Extract sdVMwareESXi.tar.gz

Key in “**tar -zxvf sdVMwareESXi.tar.gz**” to extract sdVMwareESXi.tar.gz and the default folder name is sdVMwareESXi.



```
192.168.126.130 - PuTTY
localhost:~ # chown root sdVMwareESXi.tar.gz
localhost:~ # ls -lrt
total 70080
-rw-r----- 1 root root      1332 Nov 23  2005 .exrc
drwxr-xr-x  2 root root      4096 May  5  2010 bin
drwxr-xr-x  4 root root      4096 Nov 19 09:21 inst-sys
-rw-----  1 root root          0 Nov 19 09:23 .bash_history
drwx-----  2 root root      4096 Nov 19 09:23 .gnupg
drwxr-xr-x  2 root root      4096 Nov 19 09:25 .kbd
-rw-r-----  1 root root        34 Nov 19 09:28 .bashrc
drwx-----  2 root root      4096 Jan 29 21:22 .ssh
-rw-r--r--  1 root root 71653996 Feb  2  2015 sdVMwareESXi.tar.gz
localhost:~ # tar -zxvf sdVMwareESXi.tar.gz
```



```
192.168.126.130 - PuTTY
localhost:~ # ls -lrt
total 70084
-rw-r----- 1 root root      1332 Nov 23  2005 .exrc
drwxr-xr-x  2 root root      4096 May  5  2010 bin
drwxr-xr-x  4 root root      4096 Nov 19 09:21 inst-sys
-rw-----  1 root root          0 Nov 19 09:23 .bash_history
drwx-----  2 root root      4096 Nov 19 09:23 .gnupg
drwxr-xr-x  2 root root      4096 Nov 19 09:25 .kbd
-rw-r-----  1 root root        34 Nov 19 09:28 .bashrc
drwx-----  2 root root      4096 Jan 29 21:22 .ssh
drwxrwxrwx  7 root root      4096 Feb  2  2015 sdVMwareESXi
-rw-r--r--  1 root root 71653996 Feb  2  2015 sdVMwareESXi.tar.gz
localhost:~ #
```

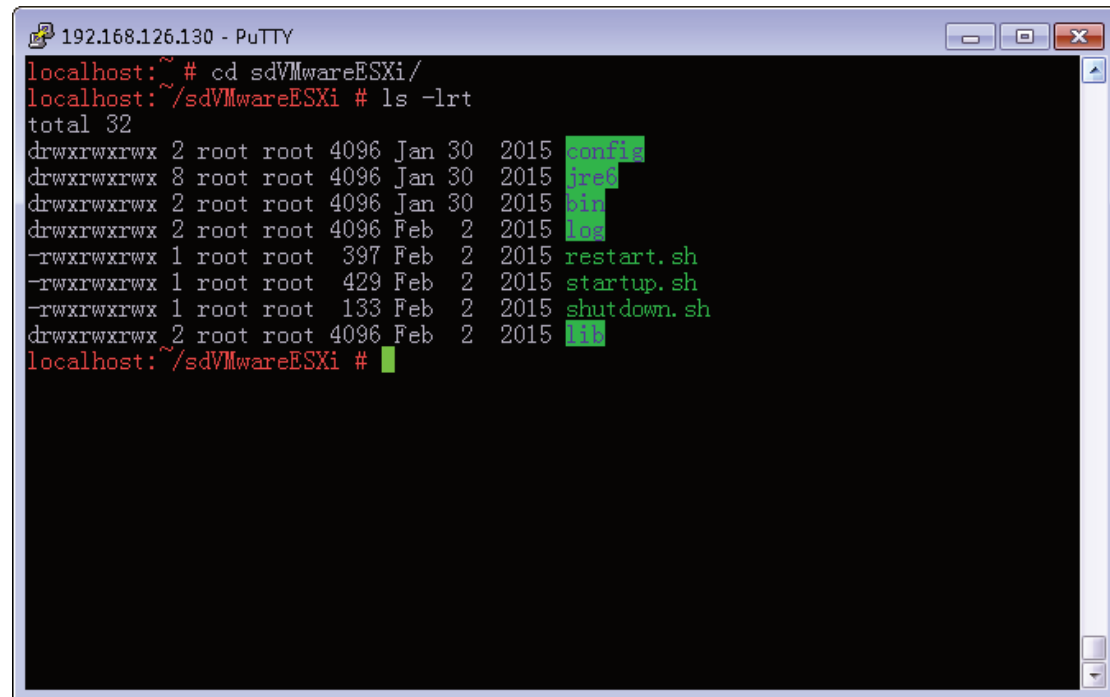
3.5 sdVMESXi introduction

Config: It's to configure the host name (IP), username and password of vMWare server ESXi.

Startup.sh: It's to start sdVMwareESXi.

Shutdown.sh: It's to shut down sdVMwareESXi.

Restart.sh: It's to restart sdVMwareESXi.

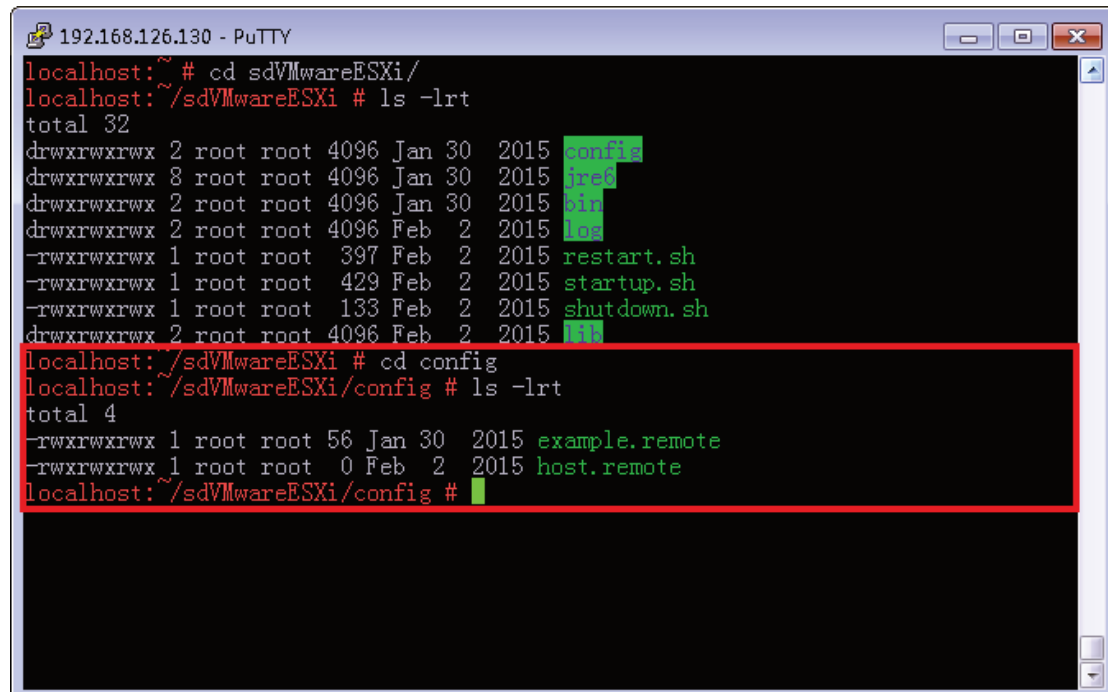


```
192.168.126.130 - PuTTY
localhost:~ # cd sdVMwareESXi/
localhost:~/sdVMwareESXi # ls -lrt
total 32
drwxrwxrwx 2 root root 4096 Jan 30 2015 config
drwxrwxrwx 8 root root 4096 Jan 30 2015 jref
drwxrwxrwx 2 root root 4096 Jan 30 2015 bin
drwxrwxrwx 2 root root 4096 Feb 2 2015 log
-rwxrwxrwx 1 root root 397 Feb 2 2015 restart.sh
-rwxrwxrwx 1 root root 429 Feb 2 2015 startup.sh
-rwxrwxrwx 1 root root 133 Feb 2 2015 shutdown.sh
drwxrwxrwx 2 root root 4096 Feb 2 2015 lib
localhost:~/sdVMwareESXi #
```

3.6 VMware ESXi shutdown configuration

Key in "**cd config**" to enter "config" folder. You will find two files here.

- Example.remote: It will show examples to configure host.remote.
- Host.remote: It's to configure VMware Server ESXi.



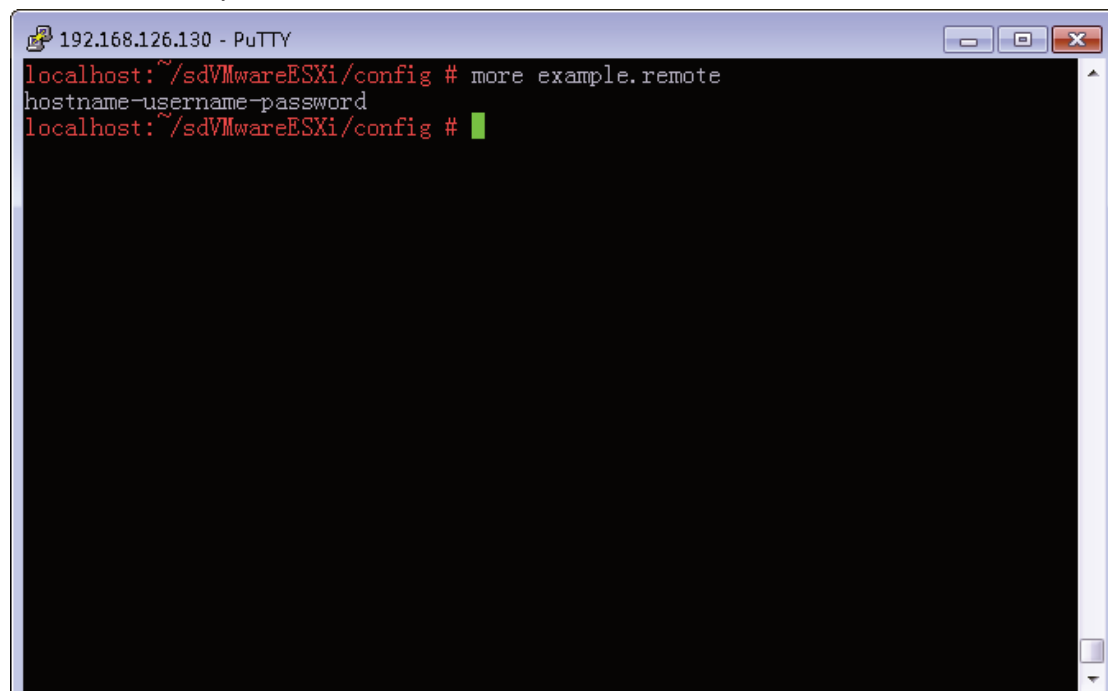
```
192.168.126.130 - PuTTY
localhost:~ # cd /sdVMwareESXi/
localhost:~/sdVMwareESXi # ls -lrt
total 32
drwxrwxrwx 2 root root 4096 Jan 30 2015 config
drwxrwxrwx 8 root root 4096 Jan 30 2015 jre6
drwxrwxrwx 2 root root 4096 Jan 30 2015 bin
drwxrwxrwx 2 root root 4096 Feb 2 2015 log
-rwxrwxrwx 1 root root 397 Feb 2 2015 restart.sh
-rwxrwxrwx 1 root root 429 Feb 2 2015 startup.sh
-rwxrwxrwx 1 root root 133 Feb 2 2015 shutdown.sh
drwxrwxrwx 2 root root 4096 Feb 2 2015 lib
localhost:~/sdVMwareESXi # cd config
localhost:~/sdVMwareESXi/config # ls -lrt
total 4
-rwxrwxrwx 1 root root 56 Jan 30 2015 example.remote
-rwxrwxrwx 1 root root 0 Feb 2 2015 host.remote
localhost:~/sdVMwareESXi/config #
```

Key in "**more example.remote**" to view the example.

Hostname: Please enter IP or hostname of vmware exsi.

Username: Login user name of vmware esxi.

Password: Enter password of user name.

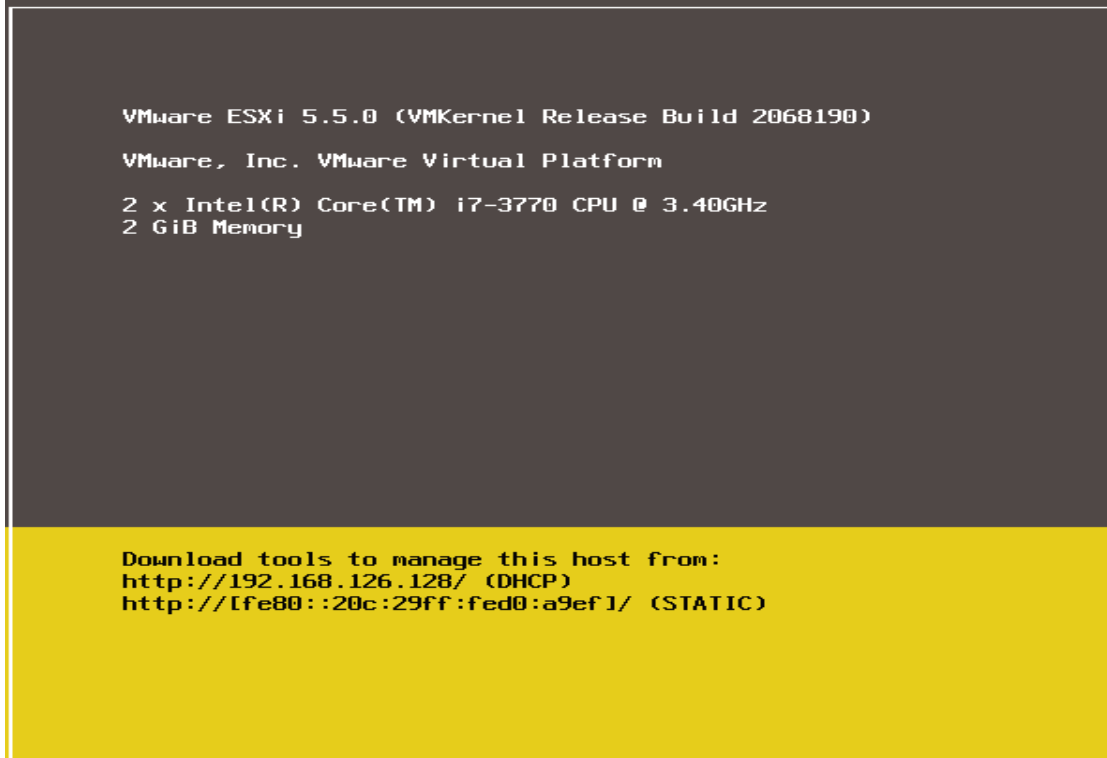


```
192.168.126.130 - PuTTY
localhost:~/sdVMwareESXi/config # more example.remote
hostname-username-password
localhost:~/sdVMwareESXi/config #
```


Configure host.remote

Key in "**echo hostname-username-password > host.remote**" to configure host.remote.

For example, The IP of vMWare server is 192.168.126.128, user name is root and password is 1234567.

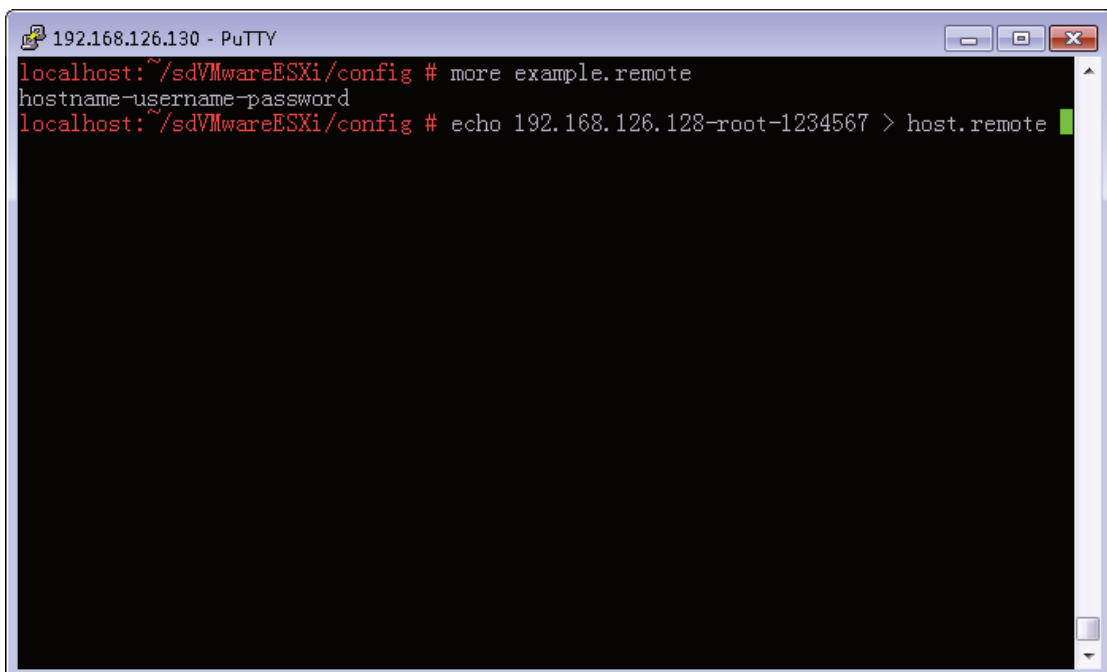


```
VMware ESXi 5.5.0 (VMKernel Release Build 2068190)
VMware, Inc. VMware Virtual Platform
2 x Intel(R) Core(TM) i7-3770 CPU @ 3.40GHz
2 GiB Memory

Download tools to manage this host from:
http://192.168.126.128/ (DHCP)
http://[fe80::20c:29ff:fed0:a9ef1]/ (STATIC)
```

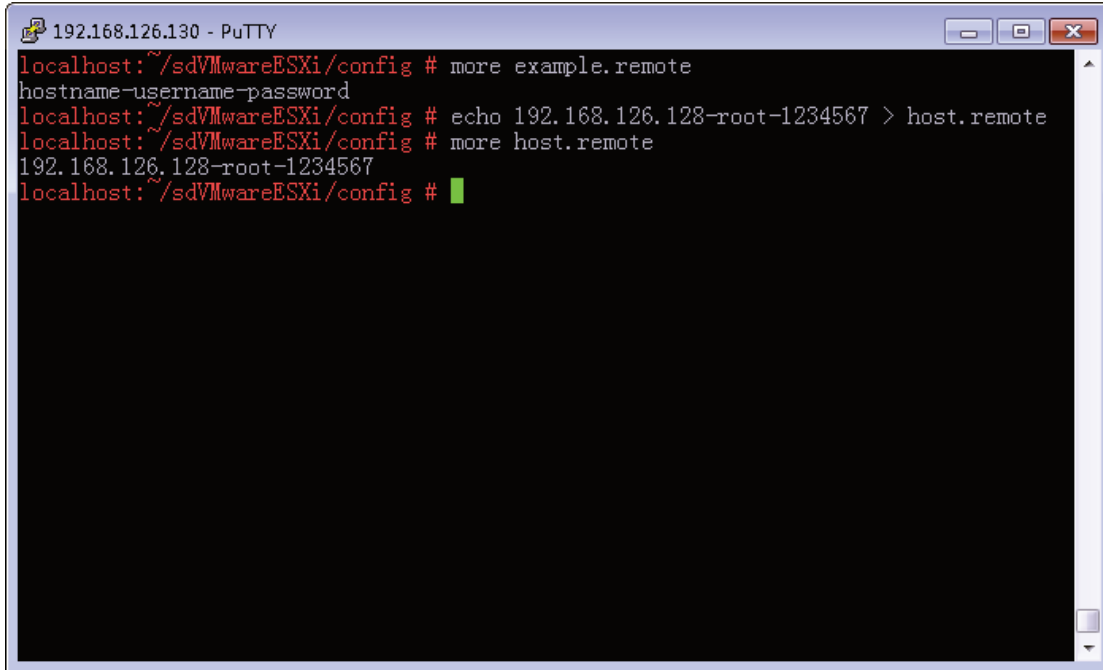
If it's requested to shut down this VMware ESXi, configure the host.remote as below.

Key in "**echo 192.168.126.128-root-1234567 > host.remote**"



```
192.168.126.130 - PuTTY
localhost:~/sdVMwareESXi/config # more example.remote
hostname-username-password
localhost:~/sdVMwareESXi/config # echo 192.168.126.128-root-1234567 > host.remote
```

Key in "**more host.remote**" to view host.remote

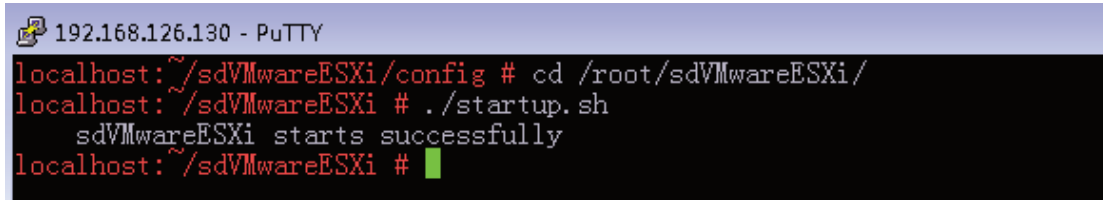


```
192.168.126.130 - PuTTY
localhost:~/sdVMwareESXi/config # more example.remote
hostname-username-password
localhost:~/sdVMwareESXi/config # echo 192.168.126.128-root-1234567 > host.remote
localhost:~/sdVMwareESXi/config # more host.remote
192.168.126.128-root-1234567
localhost:~/sdVMwareESXi/config #
```

3.7 Start up/shut down/restart VMware ESXi Shutdown Wizard

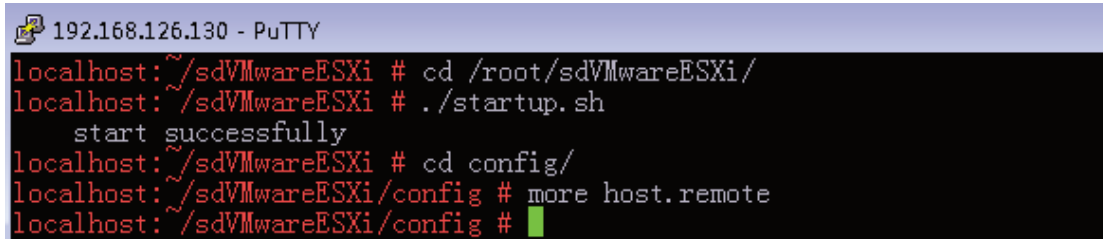
Start up sdVMwareESXi

Key in "**cd /root/sdVMwareESXi**" and then key in **./startup.sh** to start up sdVMwareESXi.



```
192.168.126.130 - PuTTY
localhost:~/sdVMwareESXi/config # cd /root/sdVMwareESXi/
localhost:~/sdVMwareESXi # ./startup.sh
sdVMwareESXi starts successfully
localhost:~/sdVMwareESXi #
```

- When the sdVMwareESXi is running and it will get the configuration from host.remote. sdVMwareESXi will empty this host.remote because all configuration of host.remote has been encrypted and saved somewhere. It's no need to configure the host.remote again when restarting sdVMwareESXi next time.
- When the configuration is incorrect, just Key in "echo hostname-username-password > host.remote" to correct configuration in host.remote again. The sdVMware will get the updated configuration from host.remote in few minutes.



```
192.168.126.130 - PuTTY
localhost:~/sdVMwareESXi # cd /root/sdVMwareESXi/
localhost:~/sdVMwareESXi # ./startup.sh
start successfully
localhost:~/sdVMwareESXi # cd config/
localhost:~/sdVMwareESXi/config # more host.remote
localhost:~/sdVMwareESXi/config #
```

Shut down sdVMwareESXi

Key in "**cd /root/sdVMwareESXi**" and then key in **./shutdown.sh** to shut down sdVMwareESXi.

```
192.168.126.130 - PuTTY
localhost:~/sdVMwareESXi # cd /root/sdVMwareESXi/
localhost:~/sdVMwareESXi # ./shutdown.sh
shut down successfully
localhost:~/sdVMwareESXi #
```

Restart sdVMwareESXi

Key in "**cd /root/sdVMwareESXi**" and then key in **./restart.sh** " to restart sdVMwareESXi.

```
192.168.126.130 - PuTTY
localhost:~/sdVMwareESXi # cd /root/sdVMwareESXi/
localhost:~/sdVMwareESXi # ./restart.sh
restart successfully
localhost:~/sdVMwareESXi #
```

4 Configuration to auto start up VMwareESXi

Shutdown Wizard with vMA

It's requested to have SUSE OS to run with vMA5.5. Configuration document of auto startup is default saved under "/etc/init.d/after.local".

key in "**cd /etc/init.d**" to enter directory of "/etc/init.d"

key in **"vi after.local"** to create after.local.

```
192.168.126.130 - PuTTY
localhost:/etc/init.d # cd /etc/init.d/
localhost:/etc/init.d # vi after.local
```

The content of after.local is listed below.

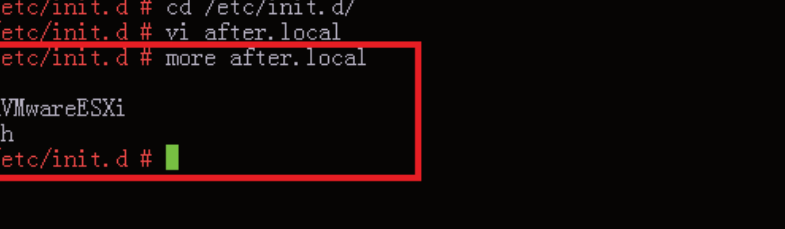


The screenshot shows a PuTTY terminal window titled "192.168.126.130 - PuTTY". The terminal displays a shell session with the following commands and output:

```
#!/bin/sh
cd /root/sdVMwareESXi
./restart.sh
```

Below the command prompt, there are several tilde (~) characters, likely representing a list of files or directories. At the bottom of the terminal, the text "-- INSERT --" is visible, along with the page number "3, 13" and the word "All".

"Esc → : → wq" to save and quit after.local.



The screenshot shows a PuTTY terminal window titled "192.168.126.130 - PuTTY". The terminal output is as follows:

```
localhost:/etc/init.d # cd /etc/init.d/  
localhost:/etc/init.d # vi after.local  
localhost:/etc/init.d # more after.local  
#!/bin/sh  
cd /root/sdVMwareESXi  
./restart.sh  
localhost:/etc/init.d #
```

The last four lines of the terminal output are enclosed in a red rectangular box, highlighting the contents of the `after.local` file.