

Vmware ESXi NUT Client Installation and Configuration

Requirements

- You must have a NUT server connected to a UPS and configured in your environment.
- SSH must be enabled on your ESXi installation
- Community acceptance level must be enabled on your ESXi installation in order to install the client

Download

Download the latest **NutClient-ESXi-x.x.x-x.x.x-offline_bundle.zip** package from:

<https://github.com/rgc2000/NutClient-ESXi/releases>.

Install

- Secure copy the **NutClient-ESXi-x.x.x-x.x.x-offline_bundle.zip** to your ESXi server's /tmp directory by either using WinSCP/pscp in Windows or scp in Linux.
- Set ESXi Community Acceptance level:

```
esxcli software acceptance set --level=CommunitySupported
```

If you get the following error:

```
[AcceptanceConfigError]  
Secure Boot enabled: Cannot change acceptance level to community.  
Please refer to the log file for more details.
```

You must disable Secure Boot in your computer BIOS and re-try the installation again.

- Install bundle:

```
esxcli software vib install -d /tmp/NutClient-ESXi-x.x.x-x.x.x-offline_bundle.zip
```

- If installation was successful you should see the following output:

Installation Result

Message: Operation finished successfully.

Reboot Required: false

VIBs Installed: Margar_bootbank_upsmon_x.x.x-x.x.x

VIBs Removed:

VIBs Skipped:

- You can now delete the files in the /tmp directory and disable the SSH service if desired.

ESXi Configuration

- In the ESXi Web client, navigate to **Host** → **Manage** → **System** → **Advanced Settings**. In the **Search** box enter **UserVars.Nut** (Figure 1).

Figure 1

System	Hardware	Licensing	Packages	Services	Security & users
<div> <div>Advanced settings</div> <div> <div>Edit option</div> <div>Refresh</div> <div>Actions</div> </div> <div> <div>Q userVars.Nut</div> <div>x</div> </div> </div>					
<div> <div>Autostart</div> <div>Swap</div> <div>Time & date</div> </div>					
Key ▲	Name	Value	Default	Overr...	
UserVars.NutFinalDelay	NUT seconds to wait on low bat...	600	5	True	
UserVars.NutMailTo	NUT send mail notification to thi...	dino.edwards...	root@...	True	
UserVars.NutPassword	NUT password to connect to re...	apc	upspas...	True	
UserVars.NutSendMail	NUT send mail notification (1=y...	1	0	True	
UserVars.NutUpsName	NUT remote ups name (eg: ups...	ups@192.16...	upsna...	True	
UserVars.NutUser	NUT username to connect to re...	apc	upsuser	True	

- Configure the following variables:

NutUpsName: Name of the UPS on the NUT server (in the form of inverter_name@server_name or server_ip). Several inverters can be entered separated by a space. There will be no system shutdown until the last UPS still standing has given the shutdown command.

NutUser: Name of the NUT server login account

NutPassword: NUT Server Connection Account Password

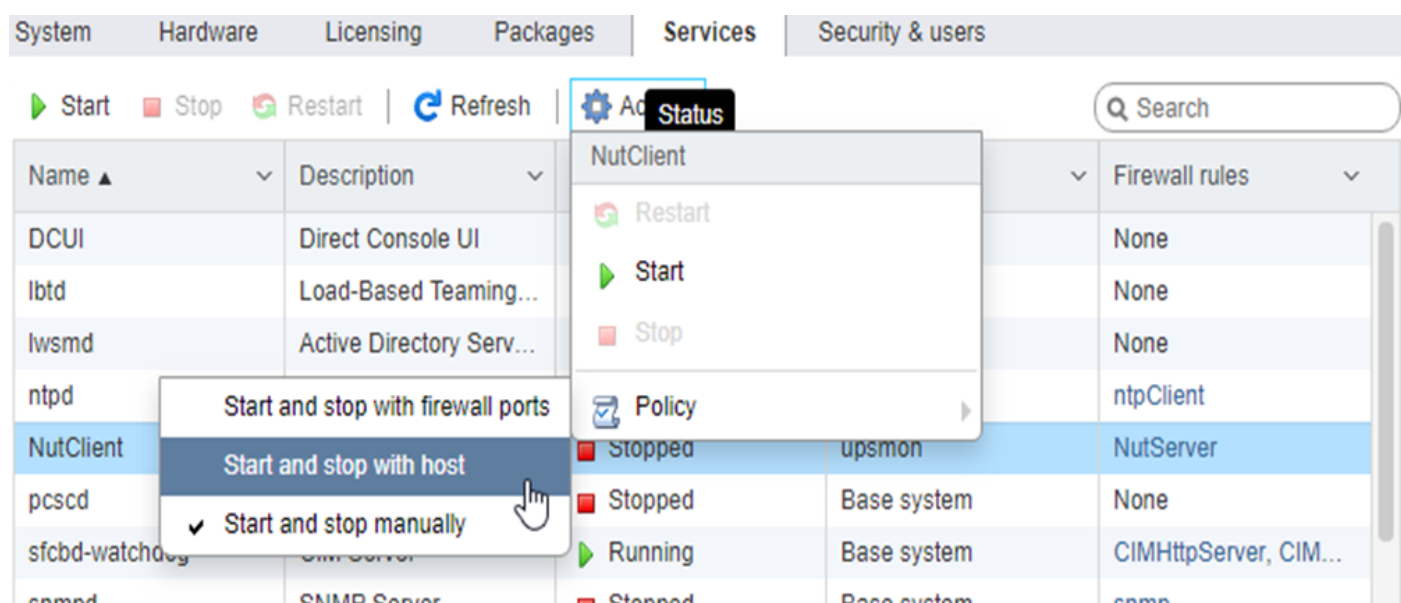
NutFinalDelay: Seconds to wait after receiving the low battery event to shut down the system

NutSendMail: Set to 1 for the NUT client to send an e-mail to each important event of the UPS

NutMailTo: E-mail address to send UPS events to

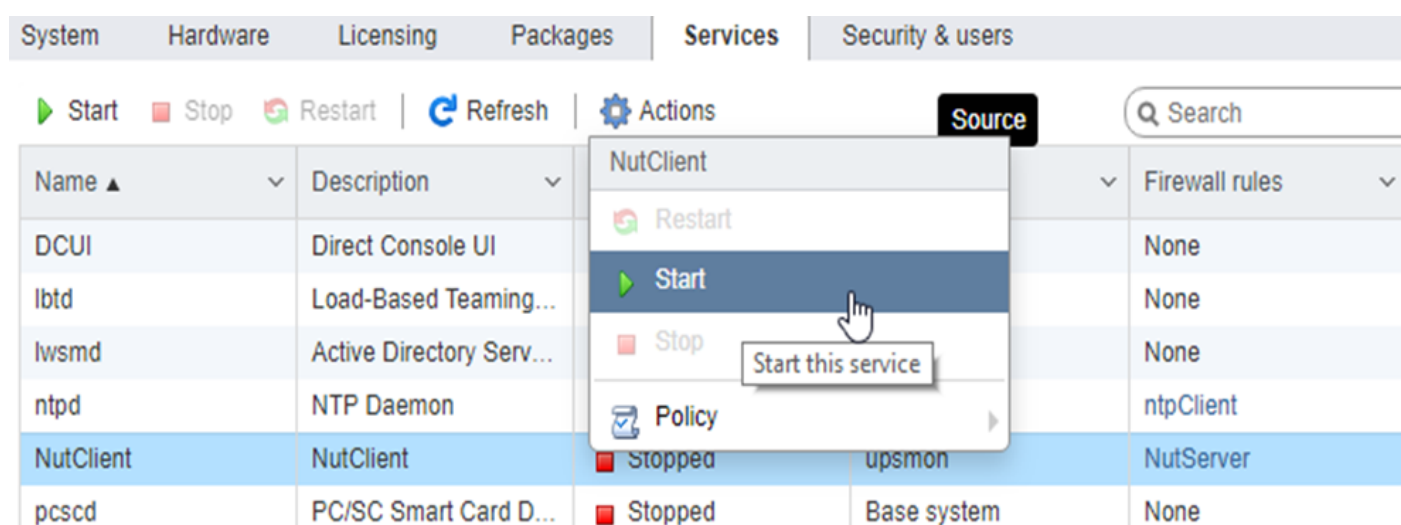
- In the ESXi Web client, navigate to **Host** → **Manage** → **Services** → **NutClient** → **Actions** → **Policy** → **Start and Stop with Host** (Figure 2).

Figure 2



- In the ESXi Web client, navigate to **Host** → **Manage** → **Services** → **NutClient** → **Actions** → **Start** (Figure 3).

Figure 3



Tips

- Use the ESXi host configuration tab in the vSphere Client to decide how to start and stop (or suspend) virtual machines. This order will be respected by the UPS shutdown procedure.
- The clean shutdown of the OS in the virtual machines is only possible if the vmware tools are installed.
- To uninstall the NUT client, use the following command:

```
esxcli software vib remove -n upsmon
```

- To update the NUT client, use the following command:

```
esxcli software vib update -d /tmp/NutClient-ESXi-x.x.x-x.x.x-offline_bundle.zip
```

- To estimate the time needed for the server to shut down on UPS alert, type the command below on the host ESXi (by ssh or on the console). The shutdown procedure is immediately started:

```
/opt/nut/sbin/upsmon -c fsd
```

- If the NUT Client is configured correctly, the ESXi /var/log/syslog.log should have a message similar to below where ups@UPSHOST is the ups name and the UPS host you setup earlier :

```
2019-09-22T13:28:07Z upsmon[2111424]: Communications with UPS ups@UPSHOST established
```

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