Install KernSafe Virtual iSCSI SAN into XenServer or ESX/ESXi

Friday, September 15, 2017

KernSafe Technologies, Inc.

www.kernsafe.com

Table of Contents

Overview

The Virtual SAN is native version of KernSafe iSCSI SAN cross-platform which can work in the VMWare vSphere (ESX, ESXi) and Citrix XenServer host machine. It quickly brings the benefits are:

Build Hyper-Converged Infrastructure or high availability visualization server with only two servers (two nodes high availability).

Convert VMWare vSphere and Citrix XenServer into hyper converged servers, allows it can provide both compute and storage service.

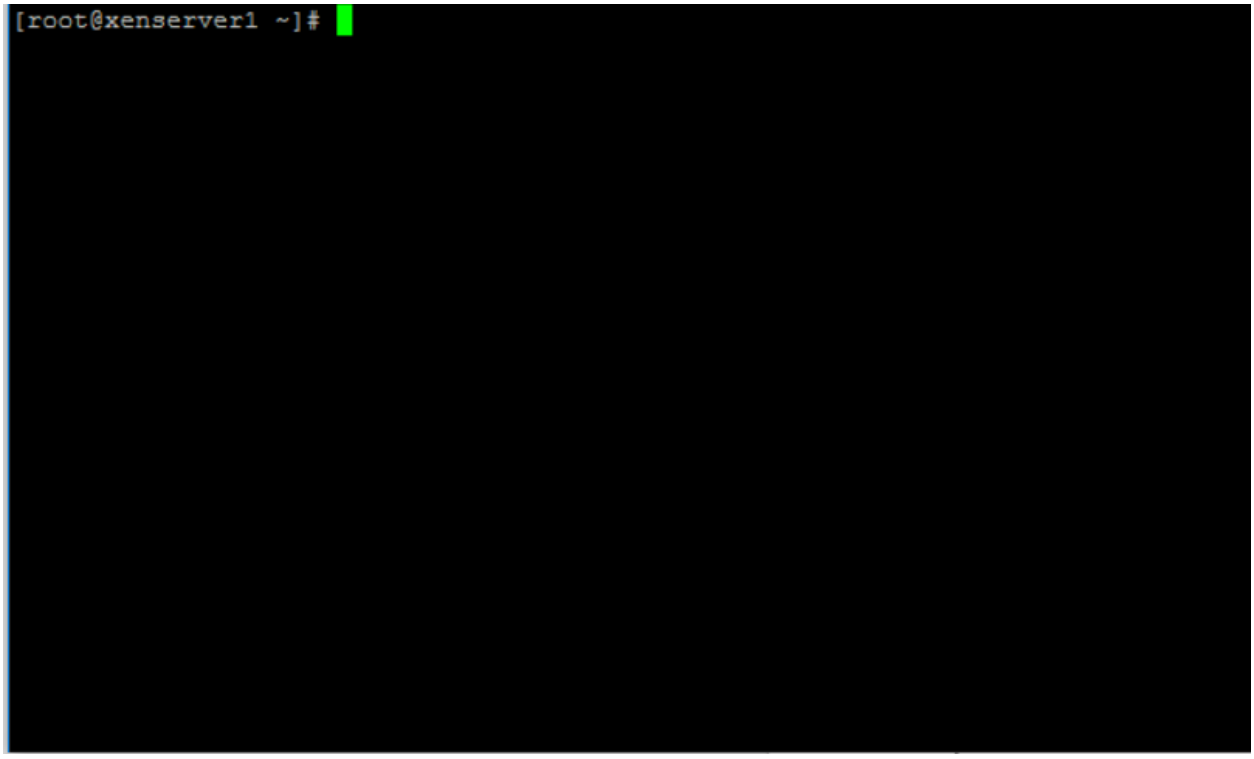
The document provides a step-by-step guide for installing KernSafe VirtualSAN into Citrix Xenserver or VMWare ESX / ESXi virtualization host machine.

Install KernSafe Virtual iSCSI SAN into XenServer

Install KernSafe Virtual iSCSI SAN Citrix XenServer means convert a XenServer machine into hyper-converged, one machine can offer both compute and storage services. install KernSafe Virtual iSCSI SAN software into XenServer is very easy.

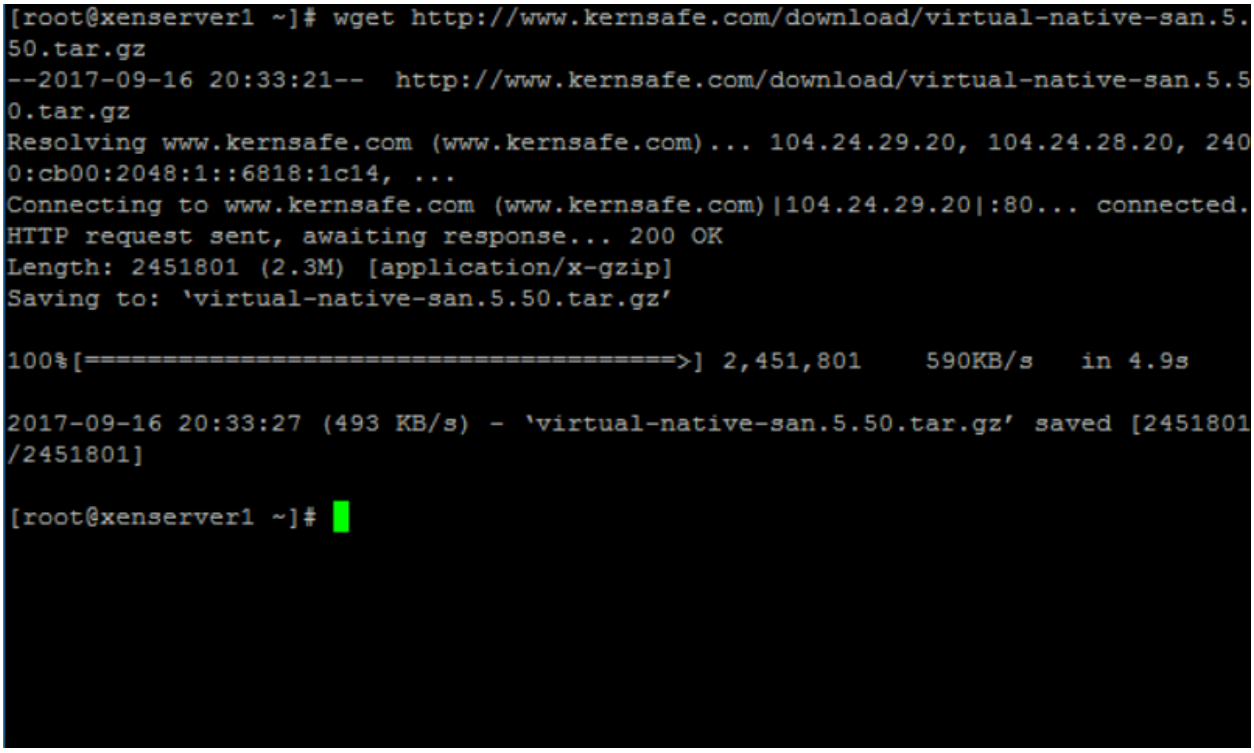
Download VirtualSAN

Before we install it into XenServer, log on into XenServer via ssh with root account:



Type the following command to download KernSafe Virtual iSCSI SAN for XenServer:

wget http://www.kernsafe.com/download/virtual-native-san.5.50.tar.gz



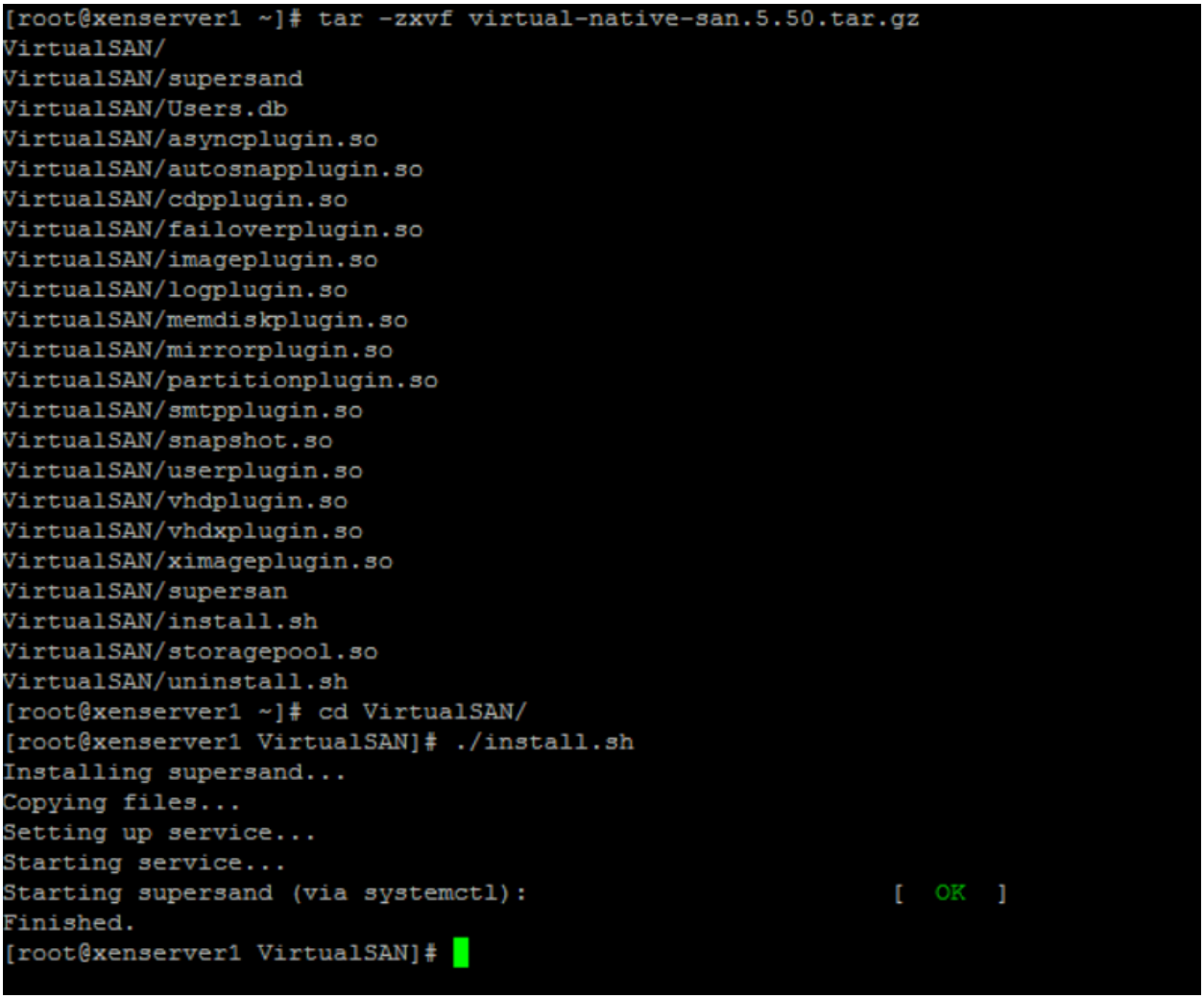
Please note that the file name of the url may be changed, please concern our website to learn the newest versions, the url was named by file name and version.

Unzip and Install

tar –zxvf virtual-native-san.5.50.tar.gz

cd VirtualSAN

./install.sh



Configure firewall

If you are running a test machine, you can simply stop XenServer firewall settings by the command:
systemctl stop iptables

Otherwise, you can use the following commands to configure the iptables:
iptables -A INPUT -p tcp -m tcp --dport 3260 -j ACCEPT
iptables -A INPUT -p tcp -m tcp --dport 3261 -j ACCEPT

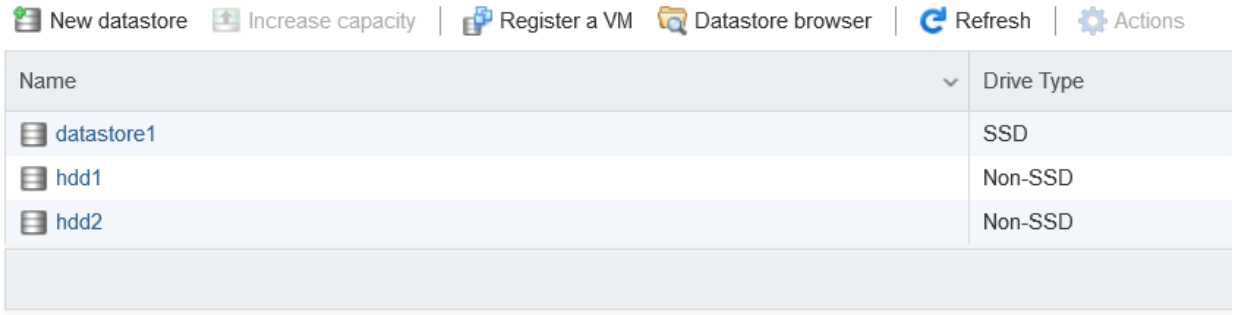
Now the KernSafe Virtual iSCSI SAN software was installed into the XenServer, now need to download KernSafe iSCSI SAN management console to manage it from Windows desktop as described by the following chapter.

Install KernSafe Virtual iSCSI SAN into ESX / ESXi Host

Install KernSafe Virtual iSCSI SAN into ESX / ESXi means convert a ESX / ESXi machine into hyper-converged, one machine can offer both compute and storage services. install KernSafe Virtual iSCSI SAN software on ESX / ESXi is very easy.

Prepare Datastore for VirtualSAN Installation

KernSafe VirtualSAN need to run in a datastore folder as ESX/ESXi is running in readonly mode. Therefor user need at least one local Datastore to install it, and can use the same datastore or separated datastore to store iSCSI images.
Now we use “datastore1” as an example.

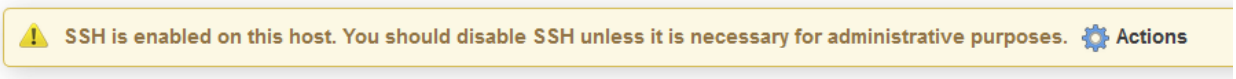


Enable SSH

In VMWare ESX/ESXi web management interface, select host, and click on the Action link in the right content panel.

Select Service->Enable Secure Shell (SSH).

Now it shows ssh was enabled.



Download VritualSAN

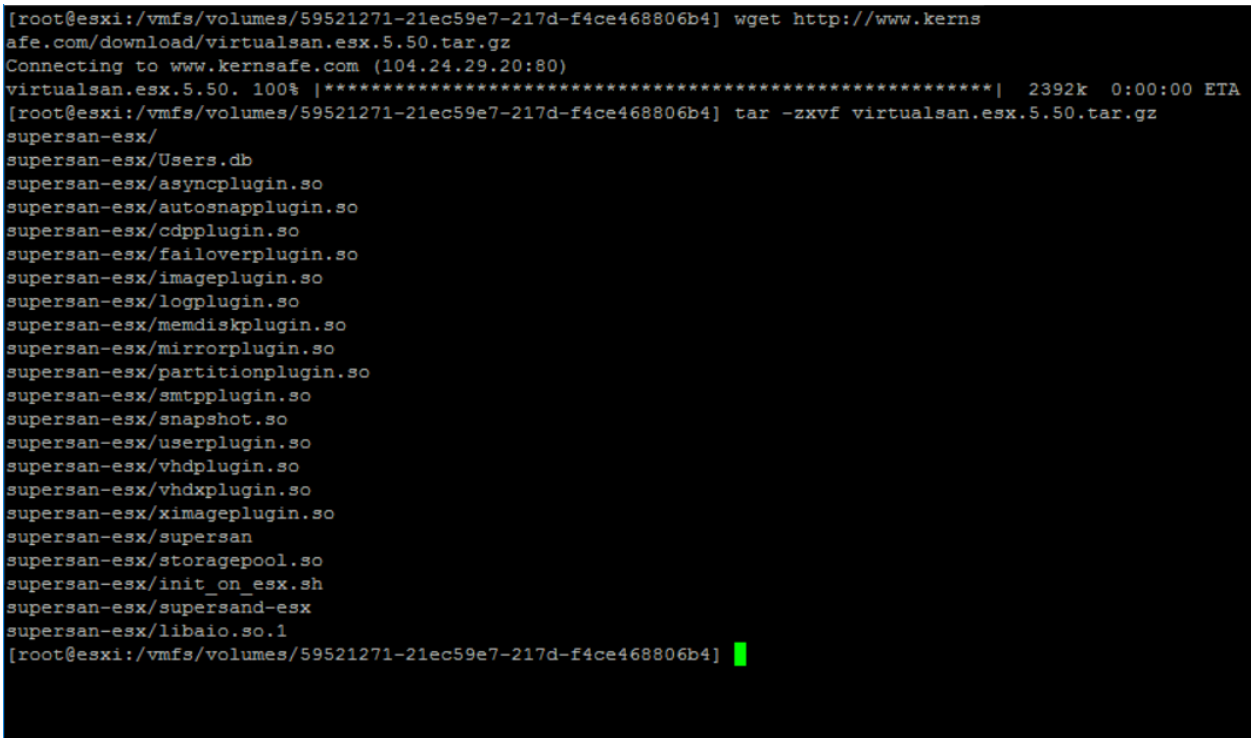
Log on to ESX/ESXi host machine via ssh, enter into the path of datastore1 by:

cd /vmfs/volumes/datastore1

then enter these commands:

wget http://www.kernsafe.com/download/virtualsan.esx.5.50.tar.gz

tar -zxvf virtualsan.esx.5.50.tar.gz

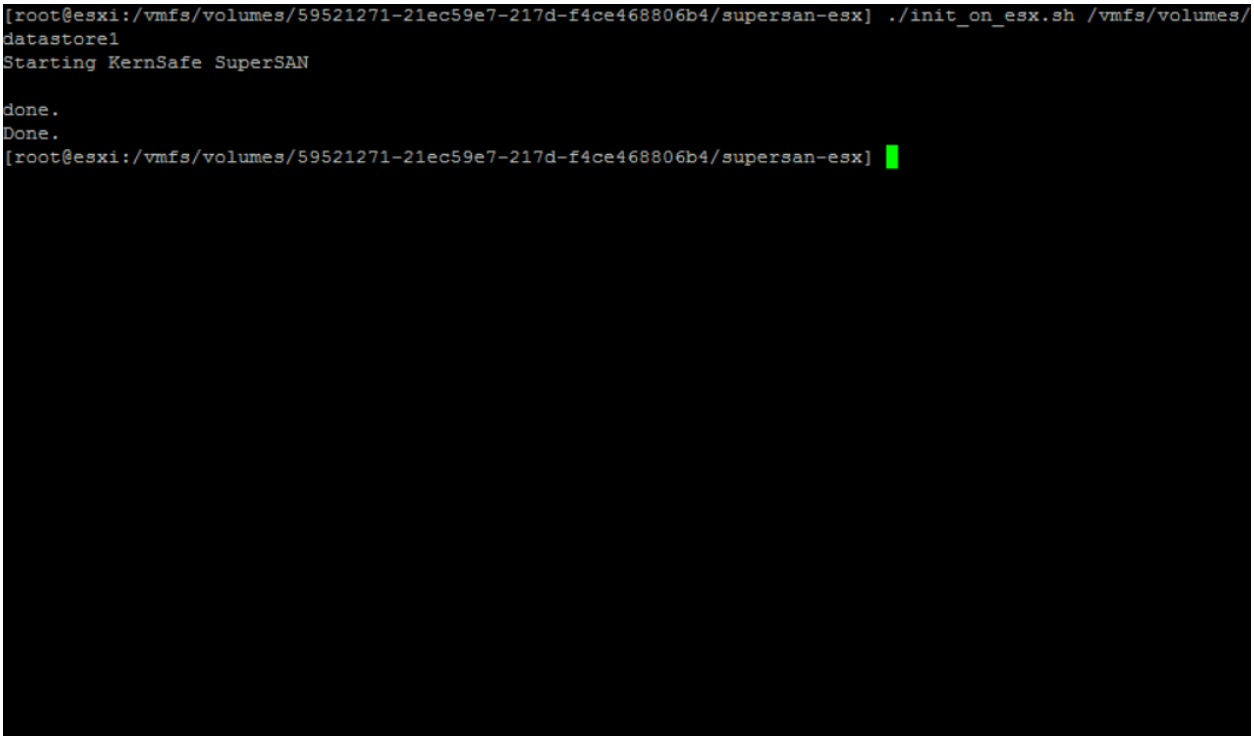


Please note that the file name of the url may be changed, please concern our website to learn the newest versions, the url was named by file name and version.
Enter supersan-esx folder

cd supersan-esx

and type the command:

./init_on_esx.sh /vmfs/volumes/datastore1



Now the KernSafe Virtual SAN has been initialized in ESX/ESXi host machine.
Please note supersan-esx folder must exist and can't be removed.

Configure firewall

If you are running a test machine, you can simply stop ESX / ESXi firewall settings by the command:

esxcli network firewall unload

Otherwise, user can use ESX / ESXi management to open the following TCP port or allow access from specified client.:

esxcli network firewall ruleset allowedip add

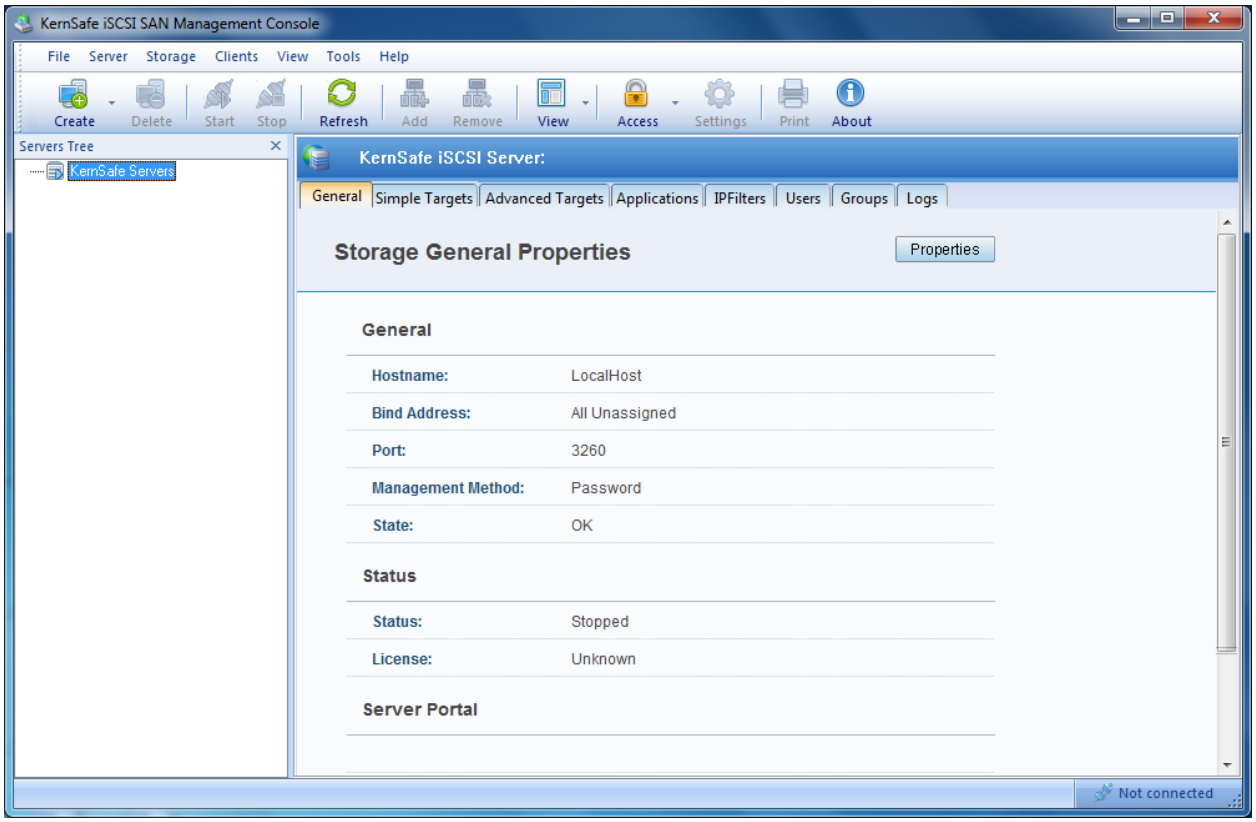
TCP ports are: 3260 and 3261.

Now the KernSafe iSCSI SAN software was configured on the ESX / ESXi host machine, now need to download KernSafe iSCSI SAN management console to manage it from Windows desktop.
Here you can get the newest version of iSCSI SAN management console:

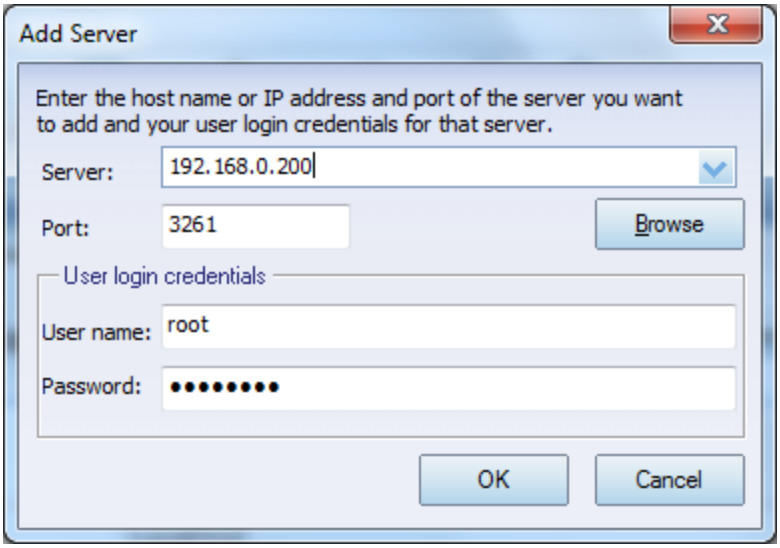
http://www.kernsafe.com/download/virtual-iscsi-san.aspx

Manage Virtual iSCSI SAN from Windows Desktop

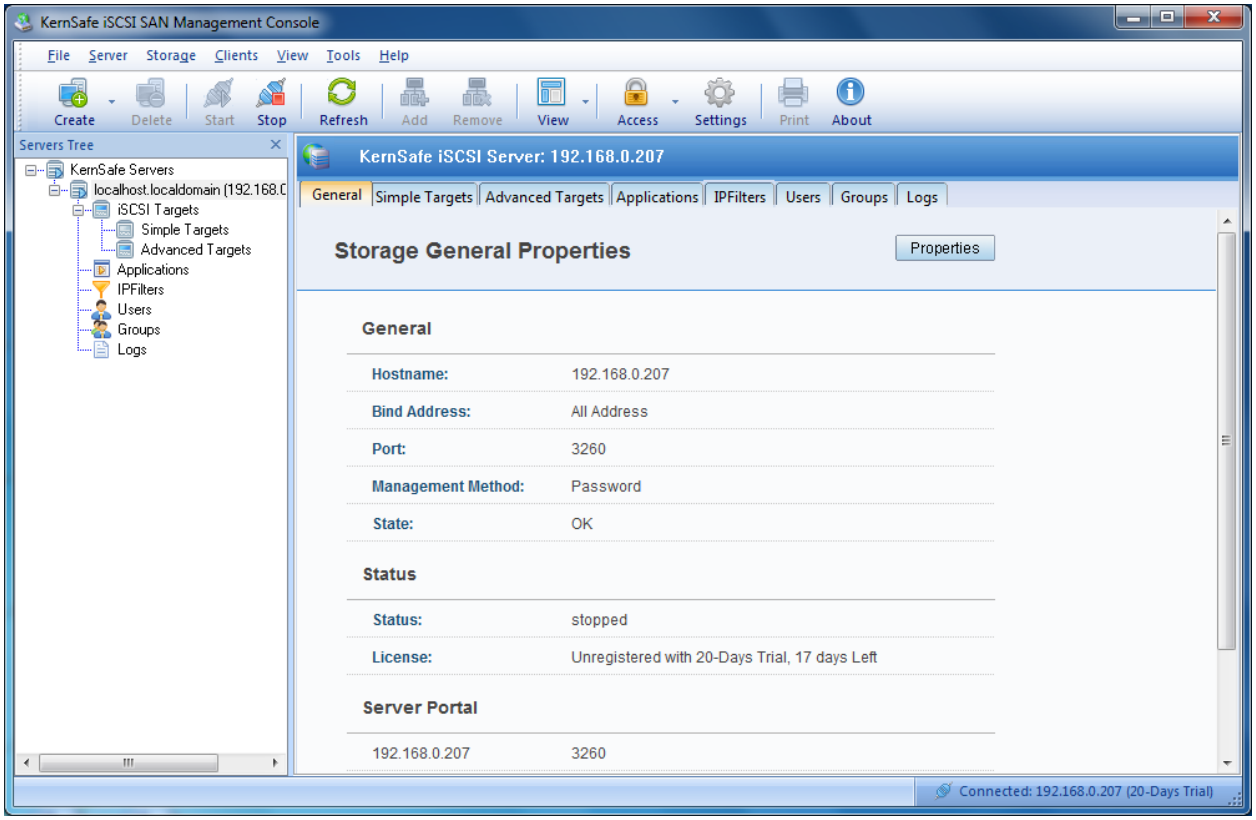
From Windows desktop, unzip the iSCSI SAN management console and execute iSCSI-Mangment.exe or iSCSI-Mangment-x64.exe (x64 bit machine).



Select Server menu and then choose Add Server menu item, now Add Server dialog shows.



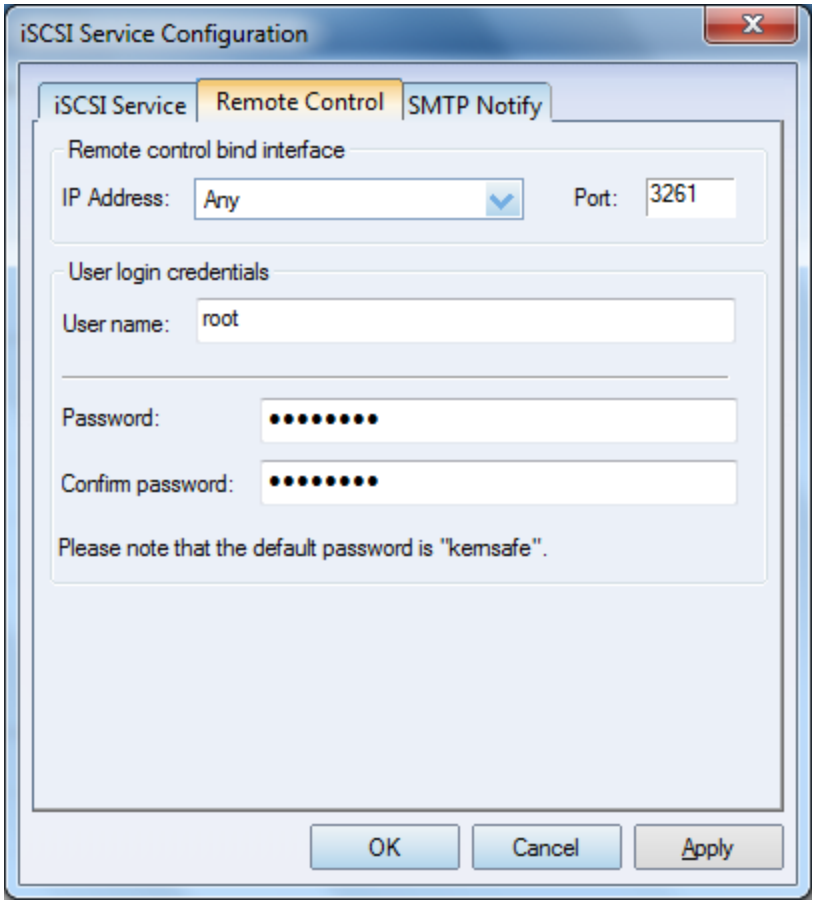
Type the address of the ESX / ESXi machine, click the OK button to add.



If successful, the Linux server will be added to the console for management, for considering security, you should modify remote management credentials.

Click the Settings button, then the iSCSI Settings dialog shows.

Change to Remote Control page.



Type a new Password and Confirm password, click the OK to save changes.

Now you can fully manage KernSafe iSCSI SAN on ESX / ESXi, for more information of the product using or put it into production, please see user's manual and solution white papers.

Contact

Support:	support@kernsafe.com
Sales:	sales@kernsafe.com
Home Page:	http://www.kernsafe.com/
Product Page:	http://www.kernsafe.com/product/free-virtual-native-san.aspx
Licenses	http://www.kernsafe.com/product/virtual-native-iscsi-san/license-compares.aspx
Forum:	http://www.kernsafe.com/forum/

KernSafe Technologies, Inc.

www.kernsafe.com