# Install KernSafe iSCSI SAN on Linux

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KernSafe Technologies, Inc.

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#### **Overview**

KernSafe SuperSAN is an advanced and powerful iSCSI Target software for Linux, which can quickly convert any workstation, server, and even embedded device into powerful iSCSI SAN. Being a fullfeatured iSCSI SAN software which supports many features and powerful authorization methods include CHAP, Mutual CHAP and IP Address authorization, SuperSAN not only supports a variety of media types such as Standard Image File, VHD, volumes, and physical disks, but also support many features for enterprise such as SCSI-3 for clustering, Synchronous / Asynchronous Replication, High Availability, Snapshot and CDP. The product is an ideal choice for storage solution in enterprise and home user.

## Install KernSafe iSCSI on CentOS

The CentOS is the recommended OS to install KernSafe Linux version iSCSI SAN, install KernSafe iSCSI SAN software on CentOS is very easy.

#### **Download SuperSAN**

Before we install it on Linux, we need run it under root privilege, use the sudo to archive: #su root



Type the following command to download KernSafe iSCSI SAN, the SuperSAN software: #wget <u>http://www.kernsafe.com/download/supersan.4.3.tar.gz</u>

kernsafe@localhost:/home/kernsafe _ 🗉 🗙
File Edit View Search Terminal Help
[kernsafe@localhost ~]\$ su root Password:
[root@localhost kernsafe]# wget http://www.kernsafe.com/download/supersan.4.3.ta
2015-02-08 06:34:11 http://www.kernsafe.com/download/supersan.4.3.tar.gz
Connecting to www.kernsafe.com (www.kernsafe.com) 166.78.23.34 Connecting to www.kernsafe.com (www.kernsafe.com) 166.78.23.34 :80 connected. HTTP request sent, awaiting response 200 OK Length: 2575641 (2.5M) [application/x-gzip] Saving to: 'supersan.4.3.tar.gz'
100%[===================================
2015-02-08 06:35:21 (36.2 KB/s) - 'supersan.4.3.tar.gz' saved [2575641/2575641]
[root@localhost kernsafe]#

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

## **Unzip and Install**

#tar -zxvf supersan.4.3.tar.gz
#cd SuperSAN
./install.sh

kernsafe@localhost:/home/kernsafe/SuperSAN File Edit View Search Terminal Help 2015-02-08 06:35:21 (36.2 KB/s) - 'supersan.4.3.tar.gz' saved [2575641/2575641] [root@localhost kernsafe]# tar -zxvf supersan.4.3.tar.gz SuperSAN/ SuperSAN/Users.db SuperSAN/install.sh SuperSAN/supersand SuperSAN/supersan SuperSAN/asyncplugin.so SuperSAN/autosnapplugin.so SuperSAN/cdpplugin.so SuperSAN/failoverplugin.so SuperSAN/imageplugin.so SuperSAN/logplugin.so SuperSAN/memdiskplugin.so SuperSAN/mirrorplugin.so SuperSAN/partitionplugin.so SuperSAN/smtpplugin.so SuperSAN/snapshot.so SuperSAN/userplugin.so SuperSAN/vhdplugin.so SuperSAN/ximageplugin.so [root@localhost kernsafe]# cd SuperSAN/ [root@localhost SuperSAN]#

## **Configure firewall**

If you are running a test machine, you can simply stop CentOS firewall settings by the command: #systemctl stop firewalld.service

Otherwise, you can use the following commands to configure the firewall: #firewall-cmd --add-port=3260/tcp #firewall-cmd --add-port=3261/tcp

Now the KernSafe iSCSI SAN software was installed on the Linux Server, 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/iscsi-san-linux.aspx

#### Install KernSafe iSCSI on Ubuntu

The Ubuntu is very popular Linux based OS so KernSafe iSCSI SAN is also fully support this OS as while, install KernSafe iSCSI SAN software on Ubuntu is very easy.

#### **Download SuperSAN**

Before we install it on Linux, we need run it under root privilege, use the sudo to archive:

#su root



Type the following command to download KernSafe iSCSI SAN, the SuperSAN software:

#wget http://www.kernsafe.com/download/supersan.4.3.tar.gz



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

#### **Unzip and Install**

#tar -zxvf supersan.4.3.tar.gz

3		) re	oot(	@ub	unt	u: ~
	_					

root@ubuntu:~# tar -zxvf supersan.4.3.tar.gz SuperSAN/ SuperSAN/Users.db SuperSAN/install.sh SuperSAN/supersand SuperSAN/supersan SuperSAN/asyncplugin.so SuperSAN/autosnapplugin.so SuperSAN/cdpplugin.so SuperSAN/failoverplugin.so SuperSAN/imageplugin.so SuperSAN/logplugin.so SuperSAN/memdiskplugin.so SuperSAN/mirrorplugin.so SuperSAN/partitionplugin.so SuperSAN/smtpplugin.so SuperSAN/snapshot.so SuperSAN/userplugin.so SuperSAN/vhdplugin.so SuperSAN/ximageplugin.so SuperSAN/install-ubuntu.sh SuperSAN/uninstall.sh SuperSAN/supersand-ubuntu root@ubuntu:~#

After unzip, use the following command to install:

#cd SuperSAN

./install-ubuntu.sh

```
root@ubuntu: ~/SuperSAN
EX _ 🔲
SuperSAN/mirrorplugin.so
SuperSAN/partitionplugin.so
SuperSAN/smtpplugin.so
SuperSAN/snapshot.so
SuperSAN/userplugin.so
SuperSAN/vhdplugin.so
SuperSAN/ximageplugin.so
SuperSAN/install-ubuntu.sh
SuperSAN/uninstall.sh
SuperSAN/supersand-ubuntu
root@ubuntu:~# cd SuperSAN/
root@ubuntu:~/SuperSAN# ./install-ubuntu.sh
update-rc.d: warning: /etc/init.d/supersand missing LSB information
update-rc.d: see <http://wiki.debian.org/LSBInitScripts>
Adding system startup for /etc/init.d/supersand ...
/etc/rc0.d/K20supersand -> ../init.d/supersand
   /etc/rc1.d/K20supersand -> ../init.d/supersand
   /etc/rc6.d/K20supersand -> ../init.d/supersand
   /etc/rc2.d/S20supersand -> ../init.d/supersand
   /etc/rc3.d/S20supersand -> ../init.d/supersand
   /etc/rc4.d/S20supersand -> ../init.d/supersand
   /etc/rc5.d/S20supersand -> ../init.d/supersand
Starting KernSafe SuperSAN OK
root@ubuntu:~/SuperSAN#
```

Now the SuperSAN for Linux has been installed on Ubuntu.

## **Configure firewall**

If you are running a test machine, you can simply stop Ubuntu firewall settings by the command: #sudo ufw disable

Otherwise, you can use the following commands to configure the firewall: #sudo ufw allow 3260/tcp #sudo ufw allow 3261/tcp

Now the KernSafe iSCSI SAN software was installed on the Linux Server, 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: <a href="http://www.kernsafe.com/download/iscsi-san-linux.aspx">http://www.kernsafe.com/download/iscsi-san-linux.aspx</a>

## Manage Linux 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).

KernSafe iSCSI SAN Management Cons	ole		
File Server Storage Clients Vie	w Tools Help		
Create Delete Start Stop	Refresh Add Remove V	ew Access Settings Print About	
Servers Tree X	KernSafe iSCSI Server:		
	General Simple Targets Advanced	Targets Applications IPFilters Users Groups L	ogs
	Storage General Pro	operties	Properties
	General		
	Hostname:	LocalHost	
	Bind Address:	All Unassigned	
	Port:	3260	E
	Management Method:	Password	
	State:	ок	
	Status		
	Status:	Stopped	
	License:	Unknown	_
	Server Portal		
			Streeted .::

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

Add Server	×
Enter the hose to add and y	st name or IP address and port of the server you want our user login credentials for that server.
Server:	192.168.0.207
Port:	3261 <u>B</u> rowse
User login	credentials
User name:	root
Password:	•••••
	OK Cancel

Type the address of the Linux machine, click the OK button to add.

& KernSafe iSCSI SAN Management Console			
<u>File Server Storage Clients View I</u>	ools <u>H</u> elp		
Create Delete Start Stop Re	C Add Remove Vi	ew Access Settings Print About	
Servers Tree ×	KernSafe iSCSI Server:	192.168.0.207	
in the second s	neral Simple Targets Advanced	Targets Applications IPFilters Users Groups L	ogs
Simple Targets     GAVanced Targets     Advanced Targets     Applications     Fifthers	Storage General Pro	operties	Properties
Users Groups 📄 Logs	General		
	Hostname:	192.168.0.207	
	Bind Address:	All Address	
	Port:	3260	
	Management Method:	Password	
	State:	ОК	
	Status		
	Status:	stopped	
	License:	Unregistered with 20-Days Trial, 17 days Left	
	Server Portal		
<	192.168.0.207	3260	
			Ø Connected: 192.168.0.207 (20-Days Trial)

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.

iSCSI Service Configuration
iSCSI Service       Remote Control       SMTP Notify         Remote control bind interface       IP Address:       Any       Port:       3261
User login credentials User name: root
Password: Confirm password:
Please note that the default password is "kemsafe".
OK Cancel Apply

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

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

#### Contact

Support:	<u>support@kernsafe.com</u>
Sales:	<u>sales@kernsafe.com</u>
Home Page:	http://www.kernsafe.com/
Product Page:	http://www.kernsafe.com/product/iscsi-san-linux.aspx
Licenses	http://www.kernsafe.com/product/iscsi-san-linux/license-
	<u>compares.aspx</u>
Forum:	http://www.kernsafe.com/forum/

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