

Quick Installation guide for the SVS Server series (RS9)



Version 1.0 (January 2017)

IMPORTANT STATEMENT

Please read and follow the installation instructions carefully **before connect the system to its power source**.

Unpacking

When you receive the system, visually inspect the exterior of the packaging for any signs of damage. If any damage is found, you should inform your distributor. Once the packaging is opened, the contents should be checked. If any items are missing or damaged you should contact your distributor immediately.

Contents

Remove all items from the box. Put all items from box on a flat surface. Make sure that all items are taken from box.

DO NOT INSERT DRIVES INTO THE SYSTEM BEFORE IT IS MOUNTED IN THE RACK!

Hardware installation

Installation in rack

When all items are taken out of the box – prepare for installation in a rack.
To install the system in a rack with the kits, please follow the procedure

1. Prepare the rails and the screws
2. Assemble the rail kits



by sliding them together



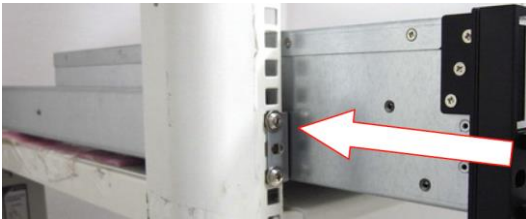
3. At the **FRONT** put the nuts on the appropriate place. Then use the screws to install the mounting brackets



4. Similarly, at the **REAR**, put the nuts on the appropriate place and the use the screws to install the mounting brackets.



5. Slide the system onto the rails.



CAUTION !!!!

The system is heavy. To avoid personal injury and damage to the system, it should be installed by two persons.

Installing disk drives in system

Warning: *Disconnect the power supply inlets before opening the storage enclosure for maintenance.*

Caution: *Do not place or drop objects onto the enclosure and do not force any foreign objects into it.*

When the system is mounted and secured in a rack then install the disk drives.

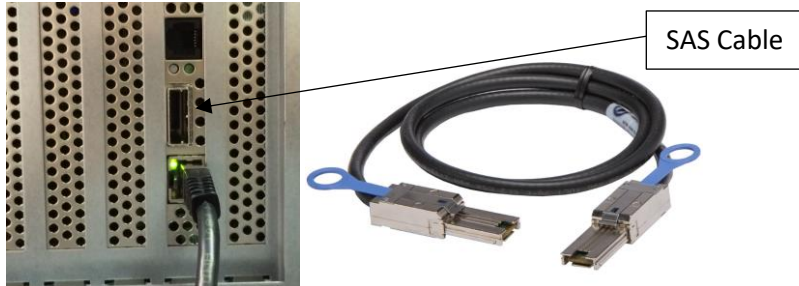
To install a Disk Drive caddy in the storage enclosure, follow the procedure below:

- Orient the caddy so that the LED indicator is at the left hand side.
- With the locking lever fully open, gently slide the caddy into the desired slot on the front of the enclosure.
- When the caddy is in all the way, slowly close the locking lever until it clicks into place.



Connecting RAID Controller's Ethernet and RS232 Port

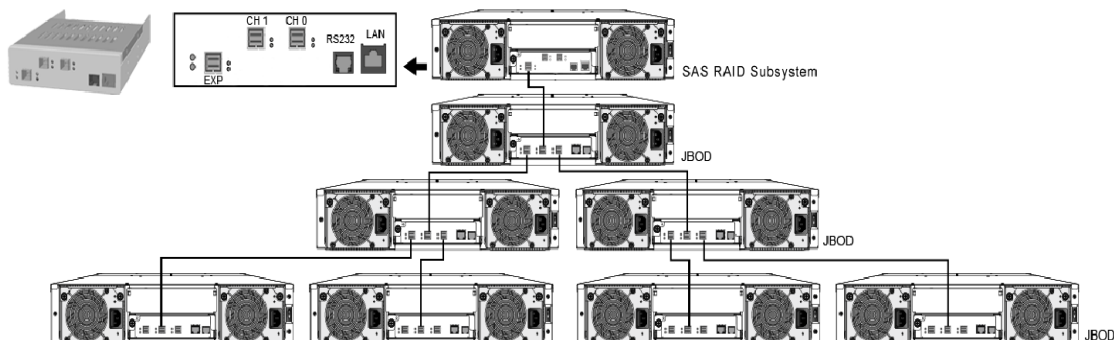
Connect the Ethernet port of the RAID controller using an Ethernet cable to a LAN port or LAN switch.



SAS RAID controller expander port supports daisy chain expansion to a JBOD.

The SAS RAID controller can support daisy chain of up to 8 enclosures. The maximum drive no. is 256 devices through 8 enclosures. The following figure shows how to connect the external Mini SAS cable from the iSCSI RAID controller to additional JBODS.

Daisy Chain



If expanding to a 16 Bay JBOD connect the SAS expansion cable from the top RAID Controller to the top JBOD Module

If expanding to a 60 Bay JBOD connect the SAS expansion cable from the top RAID

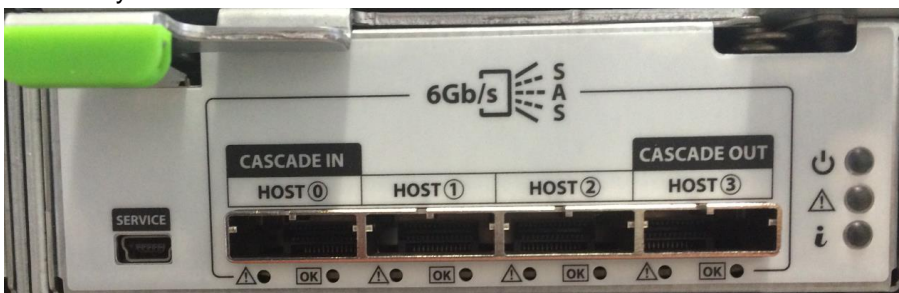
Attaching the SAS Channel Cables to a JBOD enclosure

The SAS JBOD cable is supplied with the JBOD expansion enclosure and connects from a SAS expansion port of the E8 - the (EXT0) to a port on the JBOD. The E8 connector type is mini-SAS.

SVS Server Raid-controller

Connect the Raid controller to Host (0). If expanding further connect Host (3) to Host (0) on the next JBOD

E8-60 Bay JBOD



On the JBOD connect the SAS cable to Host 0

If expanding to further JBOD Systems connect the SAS cable to SAS Host3

60 Bay JBOD



Rear of 60 Bay JBOD



E8-12-BAY-JBOD



E8-16-BAY JBOD



E8-12/E8-16 BAY JBOD-controller



On the JBOD connect the SAS cable to SAS CH1 (IN)

If expanding to further JBOD Systems connect the SAS cable to SAS CH0

Mini-to-mini-SAS cable



Log on to the controller

Godkendelse påkrævet

Serveren http://192.168.1.250 kræver et brugernavn og en adgangskode. Serveren siger: Raid Console.

Brugernavn:

Adgangskode:

Enter username: admin
 enter password: 0000 (4 zeros)

Main menu of the RAID controller:

RAID Set	Devices	Volume Set(Ch/Id/Lun)	Volume State	Capacity
Enclosure#1 : SAS RAID Adapter V1.0				
Device	Usage	Capacity	Model	
Slot#1	N.A.	N.A.	N.A.	
Slot#2	N.A.	N.A.	N.A.	
Slot#3	N.A.	N.A.	N.A.	
Slot#4	N.A.	N.A.	N.A.	
Slot#5	N.A.	N.A.	N.A.	
Slot#6	N.A.	N.A.	N.A.	
Slot#7	N.A.	N.A.	N.A.	
Slot#8	N.A.	N.A.	N.A.	
Enclosure#2 : Areca ARC-8018-4.01.160116(D)[5001B4D51C3D703F]				
Device	Usage	Capacity	Model	
SLOT 01(F)	Free	4000.8GB	TOSHIBA MD03ACA400V	
SLOT 02(I0)	Free	4000.8GB	TOSHIBA MD03ACA400V	
SLOT 02(I1)	Free	4000.8GB	TOSHIBA MD03ACA400V	
SLOT 04(I2)	Free	4000.8GB	TOSHIBA MD03ACA400V	
SLOT 05(A)	Free	4000.8GB	TOSHIBA MD03ACA400V	
SLOT 06(B)	Free	4000.8GB	TOSHIBA MD03ACA400V	
SLOT 07(C)	Free	4000.8GB	TOSHIBA MD03ACA400V	
SLOT 08(E)	Free	4000.8GB	TOSHIBA MD03ACA400V	

Creating a RAID set

Go to RAID functions in the left menu:

Select create RAID set

Select The Drives For RAID Set

Enclosure#2 : Areca ARC-8018-4.01.160116

<input checked="" type="checkbox"/>	SLOT 01	4000.8GB	TOSHIBA MD03ACA400V
<input checked="" type="checkbox"/>	SLOT 02	4000.8GB	TOSHIBA MD03ACA400V
<input checked="" type="checkbox"/>	SLOT 03	4000.8GB	TOSHIBA MD03ACA400V
<input checked="" type="checkbox"/>	SLOT 04	4000.8GB	TOSHIBA MD03ACA400V
<input checked="" type="checkbox"/>	SLOT 05	4000.8GB	TOSHIBA MD03ACA400V
<input checked="" type="checkbox"/>	SLOT 06	4000.8GB	TOSHIBA MD03ACA400V
<input checked="" type="checkbox"/>	SLOT 07	4000.8GB	TOSHIBA MD03ACA400V
<input checked="" type="checkbox"/>	SLOT 08	4000.8GB	TOSHIBA MD03ACA400V

Raid Set Name:

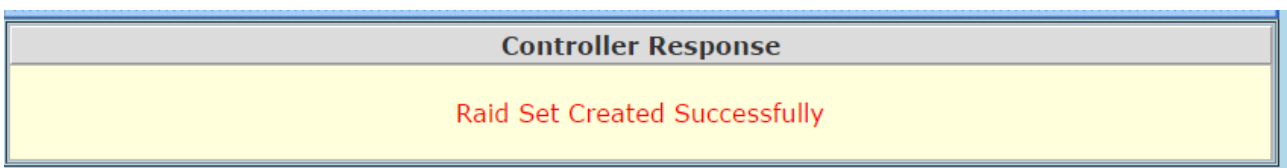
RaidSet Mode:

Confirm The Operation

Select all drives by clicking each one. There is no option 'SELECT ALL'.

Click the 'Confirm The Operation' and click Submit when done.

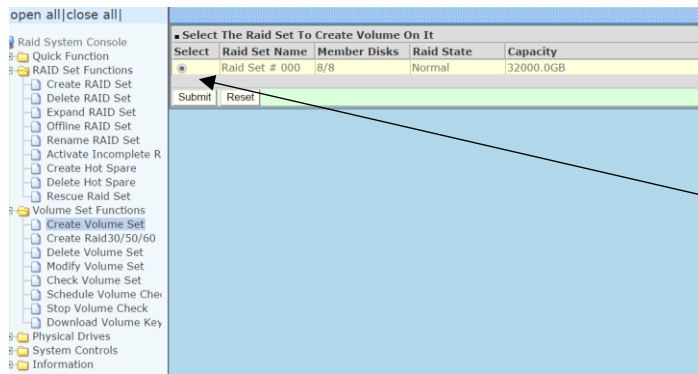
You have now created a RAID SET



Next step is to create a Volume of the RAID Set.

Creating a Volume set

To create a Volume based upon the newly created RAIDSET – go to the Volume menu on the left.

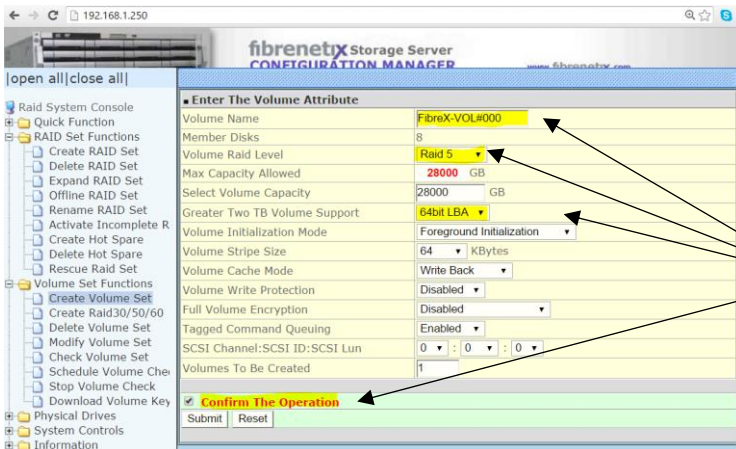


To create a Volume set click on the RAID set available in the window on the right. If more RAID sets were created, they would appear in this window.

Press Submit to continue the operation

Configuring the Volume set

The volume set must be configured as follows as FibrenetiX standard:



Volume Name: FibreX-VOL-#000

The Volume name must be 'FibreX'-VOL-#000

Volume Raid level: RAID 5

If nothing else is requested the RAID level must be RAID5

Greater than 2 TB Volume Support: 64Bit LBA

If this is not set you will not be able to use all the disk space.

Confirm the Operation and Submit

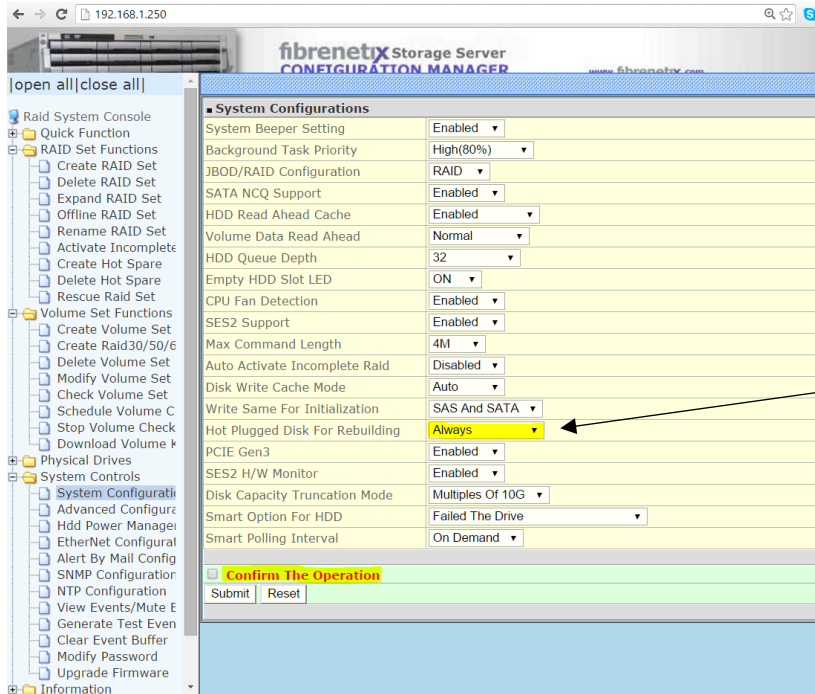
Controller Response

Volume Set Created Successfully

Additional settings

Go to the System Controls menu on the left and select System configuration

Configure Hot plugged disk for rebuilding

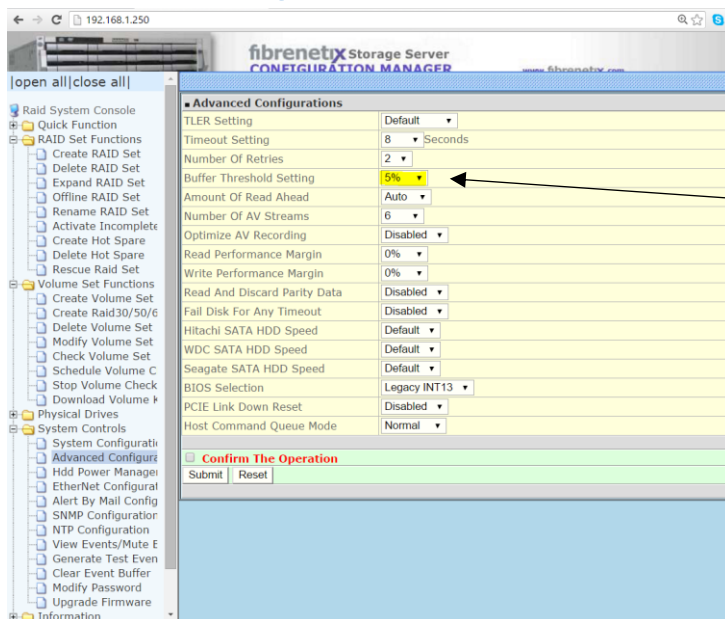


Hot plugged disks must be configured for rebuilding ALWAYS. This options will ensure that the RAID set will rebuild automatically when a new disk is inserted as replacement for a faulty disk

Confirm the Operation and Submit

Go to Advanced configuration and configure the buffer threshold.

Buffer Threshold Setting.



Buffer Threshold Setting must be set to 5%

Confirm the Operation and Submit

Progress of Volume initialization

To view the progress of the initialization of the Volume set – go to the information menu and select RAID set Hierarchy

The screenshot shows the 'RAID Set Hierarchy' window in the fibrenetix Storage Server Configuration Manager. The RAID Set # 000 is shown with a 'Volume State' of 'Initializing(1.9%)'. The table below shows the RAID set details and the physical drives in the enclosures.

RAID Set	Devices	Volume Set(Ch/Id/Lun)	Volume State	Capacity
Raid Set # 000	F#2SLOT 01	FibreX-VOL#000 (0/0/0)	Initializing(1.9%)	28000.0GB
	E#2SLOT 02			
	E#2SLOT 03			
	E#2SLOT 04			
	E#2SLOT 05			
	E#2SLOT 06			
	E#2SLOT 07			
	E#2SLOT 08			

Enclosure# 1 : SAS RAID Adapter V1.0			
Device	Usage	Capacity	Model
Slot#1	N.A.	N.A.	N.A.
Slot#2	N.A.	N.A.	N.A.
Slot#3	N.A.	N.A.	N.A.
Slot#4	N.A.	N.A.	N.A.
Slot#5	N.A.	N.A.	N.A.
Slot#6	N.A.	N.A.	N.A.
Slot#7	N.A.	N.A.	N.A.
Slot#8	N.A.	N.A.	N.A.

Enclosure# 2 : Areca ARC-8018-4.01.160116(D)[5001B4D51C3D703F]			
Device	Usage	Capacity	Model
SLOT 01(F)	Raid Set # 000	4000.8GB	TOSHIBA MD03ACA400V
SLOT 02(10)	Raid Set # 000	4000.8GB	TOSHIBA MD03ACA400V
SLOT 03(11)	Raid Set # 000	4000.8GB	TOSHIBA MD03ACA400V
SLOT 04(12)	Raid Set # 000	4000.8GB	TOSHIBA MD03ACA400V
SLOT 05(A)	Raid Set # 000	4000.8GB	TOSHIBA MD03ACA400V

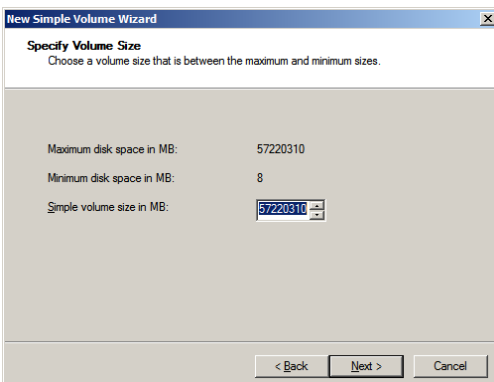
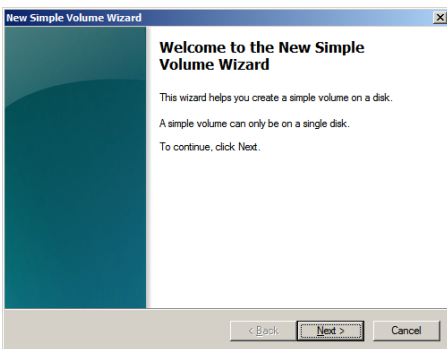
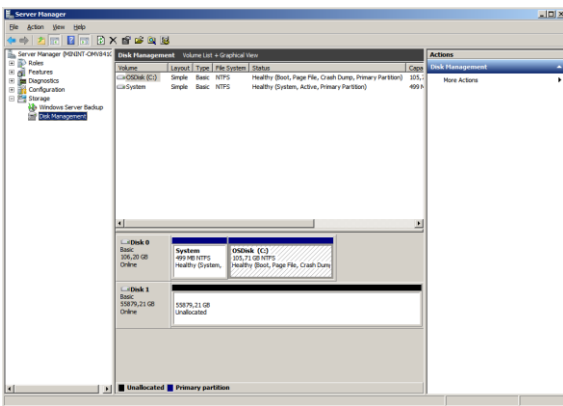
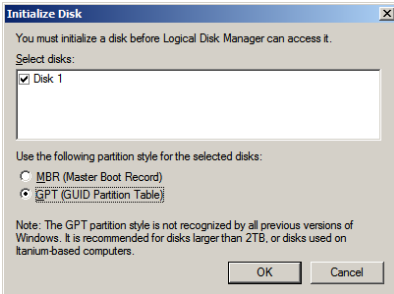
The progression of the buildup of the volume will be shown in % in this window

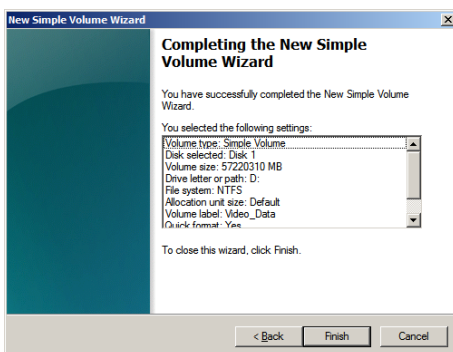
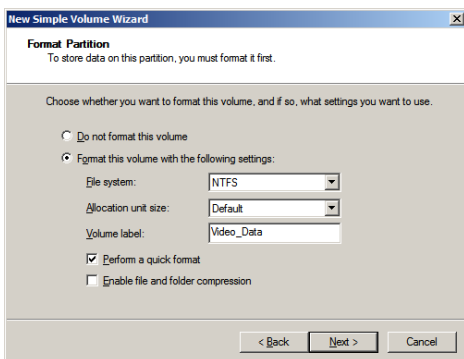
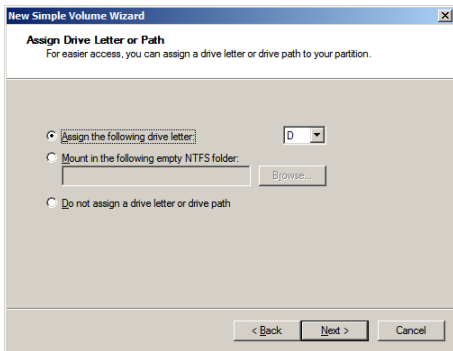
When done the Volume state will be 'Good'

Create Volume in Windows

When the controller has finished initializing the volume, it is possible to add the volume in Windows .

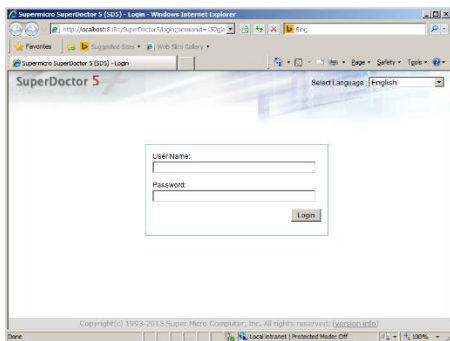
Go to Diskmanagement and follow these steps





Superdoctor

1. Logon to SuperMicroDoctor utility,
username: admin
password: admin

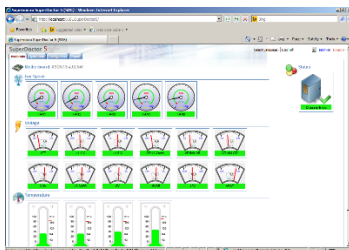


In an 8 bay server fans 4,5,6, A & B should not be selected. There should be no voltages selected for CPU2. V DIMM EFand GH should not be selected. The temperature for CPU2 should not be selected.

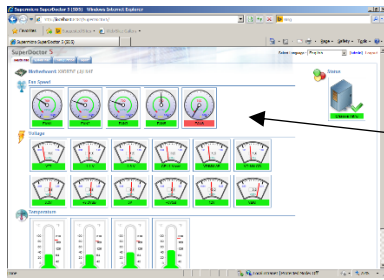
In a 16 bay server fans 4, A & B should not be selected. There should be no voltages selected for CPU2. V DIMM EF and GH should not be selected. The temperature for CPU2 should not be selected.

In a 2 CPU configuration the Voltage for CPU2, memory slots V DIMM EF and GH and temperature for CPU2 should all be selected.

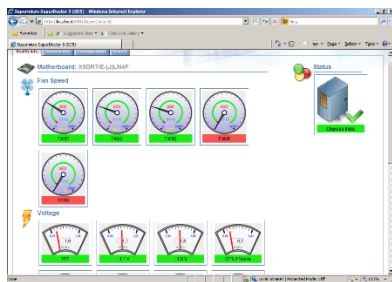
2. Test fan failure is detected. Remove one fan from the fan tray. Fan speed should increase on the remaining fans. An alarm should sound and a red indicator on the front of the server should indicate fan failure. Reinsert the fan to it's position. The fan should spin up and all fans should return to normal operating speed and the alarm should be silenced. The LED on the front should be turned off.
3. (all fans working properly)



(one fan removed and has triggered an alarm)

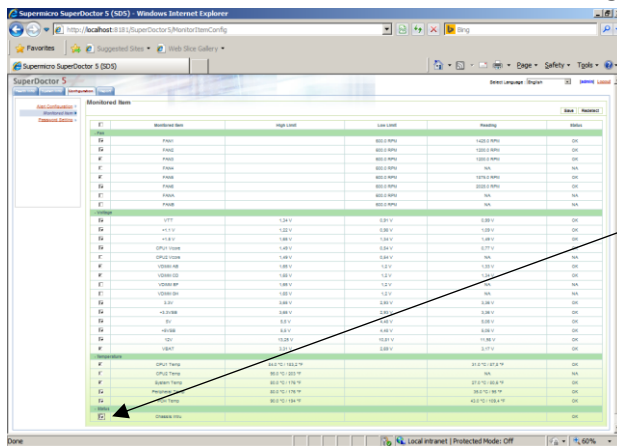


One fan removed and alarm is triggered. Remember to check LED at the front. Red light at FAN should turn on and turn off when fan is reinserted



- Remove one power cord from either of the PSU. This will sound the beeper alarm. Remember to check LED at the front. Red light at PSU should turn on and turn off when PSU is reinserted. Do this for both PSUs.

- Intrusion Detection must NOT be selected in Configuration.



Intrusion detection must be disabled

- Save and Exit