

# 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



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



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#### Log on to the controller



#### Main menu of the RAID controller:



#### Creating a RAID set

Go to RAID functions in the left menu:

#### Select create RAID set

Select create R/	AID set	Ige Server MANAGER 4.01.160116 BA MD03ACA400V BA MD03ACA40V BA MD03ACA40V BA MD03ACA40V BA MD03ACA40V BA MD03ACA40V BA MD03ACA40V BA MA AA BA MA AA BA AA		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
		Controller Respo Raid Set Created Succ	nse essfully	

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

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#### Creating a Volume set

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



#### Configuring the Volume set

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



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

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	fibrenetix sto	prage Server		
	CONFIGURATIO	N MANAGER www.fibrenetry.com		
open all close all	1			
Raid System Console	System Configurations			
🗐 🗀 Quick Function	System Beeper Setting	Enabled V		
🖻 😋 RAID Set Functions	Background Task Priority	High(80%) •		Hot plugged disks must be
	JBOD/RAID Configuration	RAID V		not plugged disks must be
Delete RAID Set     Set	SATA NCQ Support	Enabled •		configured for rebuilding
Offline RAID Set	HDD Read Ahead Cache	Enabled		
- Rename RAID Set	Volume Data Read Abead	Normal		
Activate Incomplete	UDD Queue Deeth	22 -		ALWAYS. This options will
Create Hot Spare				
Delete Hot Spare	Empty HDD Slot LED	ON V		ensure that the RAID set will
Kescue Kald Set	CPU Fan Detection	Enabled		
Create Volume Set	SES2 Support	Enabled V		rebuild automatically when a
-0 Create Raid30/50/6	Max Command Length	4M •		,
Delete Volume Set	Auto Activate Incomplete Raid	Disabled v		I new disk is inserted as
- Modify Volume Set	Disk Write Cache Mode	Auto 🔻		
	Write Same For Initialization	SAS And SATA		I replacement for a faulty disk I
	Hot Pluggod Disk For Pobuilding	Always		replacement for a ladity disk
Download Volume k	DOLE Con2	Enchled -		
🖻 🧰 Physical Drives				
🖻 😑 System Controls	SES2 H/W Monitor			
	Disk Capacity Truncation Mode	Multiples Of 10G V		
	Smart Option For HDD	Failed The Drive		
- EtherNet Configural	Smart Polling Interval	On Demand 🔻		Confirm the Operation and
-D SNMP Configuration	Confirm The Operation			Submit
	Submit Reset			Submit
View Events/Mute E				
Generate Test Even				
Modify Password				
Upgrade Firmware				
⊡ Information				

#### Go to Advanced configuration and configure the buffer threshold.

#### Buffer Threshold Setting.

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	fibrenetix s	corage Server
	CONFIGURÁTIO	IN MANAGER unue fibranativ com
open anifciose ani		
Raid System Console	<ul> <li>Advanced Configurations</li> </ul>	
C Quick Function	TLER Setting	Default
RAID Set Functions	Timeout Setting	8 Seconds
Create RAID Set	Number Of Retries	2 🔹
Delete RAID Set	Buffer Threshold Setting	5% 🔹
Offline BAID Set	Amount Of Read Ahead	Auto
- Rename RAID Set	Number Of AV Streams	6
Activate Incomplete	Ontimize AV Recording	Dirablad •
	Opciffize AV Recording	
Delete Hot Spare     Descue Baid Set	Read Performance Margin	0%
Volume Set Functions	Write Performance Margin	0% •
Create Volume Set	Read And Discard Parity Data	Disabled •
	Fail Disk For Any Timeout	Disabled 🔻
Delete Volume Set	Hitachi SATA HDD Speed	Default 🔻
	WDC SATA HDD Speed	Default •
Check Volume Set	Seagate SATA HDD Speed	Default •
Stop Volume Check	BIOS Selection	Legacy INT13
Download Volume K	DCIE Link Down Pocot	Disabled •
Physical Drives	Heat Command Owner Made	Name
System Controls	Host Command Queue Mode	Normal
	Confirm The Onemation	
	Confirm The Operation	
EtherNet Configurat	Submit Reset	
- Alert By Mail Config		
NTP Configuration		
— View Events/Mute E		
Clear Event Buffer		
Modify Password		
Upgrade Firmware		

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 Hierachy

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		fibrene		age Server				
		CONFIGU	RATION	MANAGER	www.fibronativ.com			
Expand RAID Set	•						<u> </u>	
Offline RAID Set	Stop /	Auto Refresh						
Activato Incomplete	- RaidSe	t Hierarchy						
Create Hot Spare	RAID Se	t Device	s Vo	lume Set(Ch/Id/Lun)	Volume State	Canacity		
Delete Hot Spare	Raid Set	# 000 E#2510	T 01 Fib	$reX-VOI \pm 000 (0/0/0)$	Initializing(1.9%)	28000.0GB		The progression of the
Rescue Raid Set	Itula occ	F#2SLC	DT 02	10/ 102# 000 (0/0/0/	Inconcing(1.576)	<b>V</b>		
🖻 😋 Volume Set Functions		E#2SLC	DT 03					buildup of the volume will be
Create Volume Set		E#2SLC	DT 04					·
Create Raid30/50/6		E#2SLC	DT 05					l shown in % in this window l
Delete Volume Set		E#2SLC	DT 06					
Chock Volume Set		E#2SLC	DT 07					
Schedule Volume C		E#2SLC	DT 08					When done the Valume state
Stop Volume Check								when done the volume state
Download Volume k								
🗄 🛅 Physical Drives	- Enclosi	ure#1 · SAS R		er V1.0				will be 'Good'
🖻 😋 System Controls	Device	Usage	Canacity	Model				
System Configuratio	Slot#1	N A	ΝΔ	ΝΔ				
Advanced Configura	Slot#2	N.A.	N.A.	N.A.				
Hdd Power Managel	Slot#3	N.A.	N.A.	N.A.				
Alert By Mail Config	Slot#4	N.A.	N.A.	N.A.				
SNMP Configuration	Slot#5	N.A.	N.A.	N.A.				
NTP Configuration	Slot#6	N.A.	N.A.	N.A.				
View Events/Mute E	Slot#7	N.A.	N.A.	N.A.				
- Generate Test Even	Slot#8	N.A.	N.A.	N.A.				
	- Enclosu	ure#2 : Areca	ARC-8018	-4.01.160116(D)[5001	B4D51C3D703F]			
Modify Password	Device	Usage	Capacity	Model				
Grade Firmware     Grade Firmware	SLOT 01(E)	Raid Set # 00	0 4000.8GE	TOSHIBA MD03ACA40	0V			
SAS Chip Information	<u>SLOT</u> 02(10)	Raid Set # 00	0 4000.8GE	TOSHIBA MD03ACA40	0V			
System Informatior     Hardware Monitor	<u>SLOT</u> 03(11)	Raid Set # 00	0 4000.8GE	TOSHIBA MD03ACA40	0V			
	<u>SLOT</u> 04(12)	Raid Set # 00	0 4000.8GE	TOSHIBA MD03ACA40	0V			
< >	SLOT	Raid Set # 00	0 4000.8GE	TOSHIBA MD03ACA40	0V		-	

#### **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







New Simple Volume Wizard				×
Assign Drive Letter or Path For easier access, you can a	assign a drive let	ter or drive path	to your partition.	
C Assign the following drive C Mount in the following en	pletter: npty NTFS folde er or drive path	r. D	<b>y</b>	
		< <u>B</u> ack	<u>N</u> ext >	Cancel
New Simple Volume Wizard				×
Format Partition To store data on this partitio	m, you must for	natitfirst.		_
Choose whether you want to	o format this vol	ume, and if so, 1	what settings you	want to use.
C Do not format this vo	lume			
Format this volume w	ith the following	settings:		
<u>File</u> system:	NTF:	5	-	
Allocation unit size	: Defa	ult	-	
<u>V</u> olume label:	Video	_Data		
I Perform a quicl Enable file and	k format I folder compres	sion		
		< <u>B</u> ack	<u>N</u> ext >	Cancel
New Simple Volume Wizard				×
	Completir /olume W	ig the Nev Vizard	w Simple	
Y	'ou have succe Vizard.	ssfully completed	the New Simple	Volume
Y	You selected the Volume type: Sir Disk selected: I Volume size: 57 Drive letter or pa File system: NTI Allocation unit si Volume label: Vi Duick format: Yi	following setting nole Volume lisk 1 220310 MB th: D: 'S ze: Default deo_Data	<u>15:</u>	
T	o close this wiz	ard, click Finish.		
		< <u>B</u> ack	Finish	Cancel

#### Superdoctor

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

🖉 Supermicro SuperDoctor 5 (SDS) - Log	n	🔂 • 🖾 · 🗠 🖮 • Bage • Safety •	Tgole • 😧
SuperDoctor 5		Select Language - English	
	User Name:	Logn	

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 af has trickered an alarm)



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

- 4. 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.
- 5. Intrusion Detection must NOT be selected in Configuration.



6. Save and Exit