Below are the steps on how to do the software RAID continuing from the hard disk partitioning section:

ω	elcome to Cent(30						
			Par	rtitioni	ing 📃			
	Device	e Sta	art Er	nd S	Size	Туре	Mount Point	
	VG VolGroup00	3		1	16224M	VolGroup		•
	LV LogVol00			1	15200M	ext3	/	
	LV LogVol01				1024M	swap		
	∕dev∕sda							
	sda1		1	13	101M	ext3	∕boot	
	sda2		14 1	1044	8087M	physical v		
	∕dev∕sdb							
	sdb1		1 1	1044	8189M	physical v		
	New	Edit	Delete		RAID	OK	Back	•
	F1-Help	F2-New I	3-Edit	F4-Del	lete	F5-Reset	F12-0K	

1) Upon entering the partitioning review, it should looks like this:

2) Next is to delete every partition and left with only free space for both hard disk. It should looks like this:

W	elcome to Cent	:0\$						
			P	artiti	oning 🔶			
	Devid	e S	tart	End	Size	Туре	Mount Point	
	Free space	;	1	1045	8192M	Free space		
	/dev/sdb Free space	:	1	1045	8192M	Free space		
	New	Edit	Dele	te	RAID	OX	Back	
	F1-Help	F2-New	F3-Edit	: F4-:	Delete	F5-Reset	F12-0K	

3) So click the New button (or the F2 button) to start creating new partition. Straight away change the File System Type into Software RAID. In the Allowable Drives, please select SDA first, somehow CentOS won't work if we select both hard disk at the same time. Put **100** for the Size as we want to create the space for boot first. Click the Ok button after finished:

We	lcome to	CentOS							
			Add	Partition -				_	
	/dev/sd <mark>Free</mark> /dev/sd Free	Mount Point: <not applicable=""> File System type: Software RAID Swap Swap Software Callowable Drives: [*] sda [] sdb</not>						-	
		Size (MB): 100(*) Fixed Size: () Fill maximum size of (MB): () Fill all available space: [] Force to be a primary partition							
	ļ				Cance l				
	F1-Help	F2-New	F3-Edit	F4-Delete	F5-Reset	F12-0K			

4) Just do exactly the same like Step 3, but this time choose the SDB instead. Press Ok when done:



5) Next is the swap partition for the RAID. Click the New button and choose the File System Type to Software RAID. Choose SDA first for the Allowable Drives. Then please enter the Size for your swap. Remember, the swap size is always double from your total psychical RAM. Since mine was running under 512MB, then I'll put **1024**MB as my swap size. Click the Ok button to proceed:



6) Do follow Step 5 but select SDB for the Allowable Drives. Click Ok to continue:



7) Next is to create the partition for root. Select the Software RAID from the File System Type. Then select SDA first for the Allowable Drives. But this time, choose the Fill All Available Space option and click the Ok button:



8) Just follow the same step just like Step 7, but this time choose the SDB instead. Click the Ok button to complete the partitioning:



9) Upon finishing the last partitioning, the hard disk layout should looks like below. Click on the RAID button to proceed:

We	elcome to C	entOS						
]	Partiti	oning —			
	De	vice	Start	End	Size	Туре	Mount Po	int
	∕dev∕sda							
	sda1		1	131	1027M	software I	3	
	sda2		132	144	101M	software I	3	
	sda3		145	1044	7059M	software l	3	
	∕dev⁄sdb							
	sdb1		1	131	1027M	software I	3	
	sdb2		132	144	101M	software I	3	
	sdb3		145	1044	7059M	software I	3	
							-	
								- 1
	No	LI FAIt	Del	ata 📘	RAID	א ח	Back	
	ne	w Luit	Der			0.0	Dack	
	_							
		70.1				NE N (
	F1-Help	FZ-New	F3-Edi	t F4-	Velete	F5-Reset	F1Z-UK	

10) Now we will start creating the RAID device. Type **/boot** in the Mount Point. Select RAID1 for the RAID Level. Inside the RAID Members, please make sure you selected the right partition for the boot. From the list, just select the SDA1 and SDB1. Click Ok to create the boot partition:



11) Next is to create the RAID device for swap. Select the File System Type to Swap. Then the RAID Level is set to RAID1. Don't forget to select the right RAID Members for the swap, which are SDA2 and SBD2. Click Ok button to save:



12) After that, now to set up the RAID device for root. Type *I* inside the Mount Point to indicate the root. Make sure to select the RAID Level to RAID1. By this time, the RAID Members should only left with SDA3 and SDB3, so just select both. Click Ok to complete the partitioning:



13) Below is the final screen of the partitions should looks like. If everything is correct, then press the Ok button to proceed with the installation:

W	elcome to Cent	.0S						
			I	Partiti	oning —			
	Devic	e S	Start	End	Size	Туре	Mount Point	
	RAID Device	0			1027M	swap		•
	RAID Device	1			7059M	ext3	1	
	RAID Device	2			101M	ext3	∕boot	
	∕dev∕sda							
	sda1		1	13	101M	software R		
	sda2		14	144	1027M	software R		
	sda3		145	1044	7059M	software R		
	/dev/sdh							
	sdb1		1	13	101M	software R		
	sdb2		14	144	1027M	software R		
	SubL				IOLIII	Sor tware h		-
					_			
	Nou	R4:4	Dele	at a	PAID	02	Paak	
	new	Lait	Dere	ere	NHID	0 0 1	DACK	
	F1-Help	F2-New	F3-Edit	t F4-	Delete	F5-Reset	F12-OK	

14) When the CentOS installation has been completed and the server is rebooting for the first time, log into the server using the root. You can check the RAID status and progress by typing cat /proc/mdstat [root@raid ~]# cat /proc/mdstat Personalities : [raid1] md2 : active raid1 sdb1[1] sda1[0] 104320 blocks [2/2] [UU] md0 : active raid1 sdb2[1] sda2[0] 1052160 blocks [2/2] [UU] md1 : active raid1 sdb3[1] sda3[0] 7229184 blocks [2/2] [UU] unused devices: <none> [root@raid ~]# _

15) By default, the GRUB boot loader only were installed in one of the hard disk only. If you forgot this step, your second hard disk can't boot by itself. You need to copy the GRUB from the SDA to SDB. Just type **grub** and follow like below, line by line:

device (hd0) /dev/sda root (hd0,0) setup (hd0) device (hd1) /dev/sdb root (hd1,0) setup (hd1)

16) Please take note that the software RAID will be running under MDADM. This is a software that being developed to handle the RAID procedure inside the server. You can type mdadm – help for further information

By the time you finished the Step 15, your software RAID is ready to go. Happy trying \bigcirc