Partioning and Resizing using GParted GUI

- Installing gparted tool in HostPC
 Resizing of Partition(P2)
- Partition-P3 Creation
 Partition-P4 Creation

Installing gparted tool in HostPC

(i) gparted tool Install and usage

sudo apt-get install gparted

https://gparted.org/display-doc.php%3Fname%3Dmoving-space-between-partitions

Resizing of Partition(P2)

Please resize the rootfs partition to 2098 MB or 2GB (/dev/sdb1) accordingly from below procedure as captured in various stages



1. Select gparted tool from menu

2. Select the rootfs partition of format ext3 for resize/move option

		•	d av (a al la st	C De sta d	•	1.1	1.4
CDasted Edit	View Device	Dactition He	aev/sab - (arted			- + ×
GParted Edit	view Device	Partition He	ιp				
K 🗎 🕂		(n				dev/sdb	(3.69 GiB) 💲
			ur 3.	allocated 41 GiB			
Partition	File System	Mount Point	Label	Size	Used	Unused	Flags
unallocated	unallocated			4.00 MiB	-	-	
/dev/sdb1 🔒	fat16	/media/d	raspberrypi	40.00 MiB	24.86 MiB	15.14 MiB	boot, lba
/dev/sdb2 🔒	ext3	/media/d		244.00 MiD	104 E4 MAID	59.46 MiB	
unallocated	unallocated			M New			
				Delete			
				>I <u>R</u> esize/Move			
				🗇 Сору			
				🗐 Paste			
				Format to		Þ	
				<u>U</u> nmount			
				Name Partitio			
				Manage Flags			
0				Check			
o operations pen	aing			Label File Syst	em		
				New UUID			
				i Information			

3. Resize the rootfs partition by giving new size image to 2098 MiB

GParted Edit View Device Partition Help	3	/dev/sdb - GParted		- + ×
Image: Second state of the second s	GParted Edit	View Device Partition Help		
unallocated 3.41 GiB Resize /dev/sdb2 Partition unallocated /dev/sdb1 /dev/sdb1 /dev/sdb2 unallocated /dev/sdb1 /dev/sdb2 unallocated New size: 244 MiB Minimum size: 244 MiB Maximum size: 3738 MiB IB New size (MiB): 2098 Free space following (MiB): 1640 Align to:	K 📾 🕂		🖳 /dev/sdb	(3.69 GiB) 💲
Partition unallocated /dev/sdb1 // /dev/sdb2 // unallocated Minimum size: 244 MiB Maximum size: 3738 MiB Free space preceding (MiB): 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0		unallocated 3.41 GIB Resize /dev/sdb2	- + x	
unallocated //dev/sdb1 // //dev/sdb2 // unallocated Minimum size: 244 MiB Maximum size: 3738 MiB Free space preceding (MiB): 0 0 0 0 0 New size (MiB): 2098 0 Free space following (MiB): 1640 0 Align to: MiB 0	Partition			Flags
/dev/sdb1 4 /dev/sdb2 4 unallocated Free space preceding (MiB): 0 0 0 New size (MiB): 2098 0 Free space following (MiB): 1640 0 Align to: MiB 0	unallocated			-
/dev/sdb2 4 unallocated Free space preceding (MiB): 0 0 0 New size (MiB): 2098 0 Free space following (MiB): 1640 0 Align to: MiB 0	/dev/sdb1 🕯	Minimum size: 244 MiP Maximum size: 2720 MiP		1iB boot, lba
unallocated Free space preceding (MiB): 0 0 New size (MiB): 2098 0 Free space following (MiB): 1640 0 Align to: MiB 0	/dev/sdb2	Minimum size: 244 MiB Maximum size: 3738 MiB		۱iВ
New size (MiB): 2098 Free space following (MiB): 1640 Align to: MiB	unallocated	Free space preceding (MiB): 0		
Free space following (MiB): 1640 Align to: MiB		New size (MiB): 2098 🗘		
Align to: MiB 🗘		Free space following (MiB): 1640		
		Align to:		
		Augirto.		
X Cancel X Resize		× Cancel	> Resize	
	l '			1
0 operations pending	0 operations per	ding		

4. After resize , position stands as below

2		/	dev/sdb - G	Parted			- + ×
GParted Edit	View Device	Partition He	lp				
+ 🛍 >	0 i	⟨¬ ✓			0	/dev/sdb	(3.69 GiB) 💲
	/d/ 2.0	ev/sdb2 05 GiB			una 1.60	llocated) GiB	
Partition	File System	Mount Point	Label	Size	Used	Unused	Flags
unallocated	unallocated			4.00 MiB			
/dev/sdb1 🔒	fat16	/media/d	raspberrypi	40.00 MiB	24.86 MiB	15.14 MiB	boot, lba
/dev/sdb2 🔒	ext3	/media/d		2.05 GiB	184.54 MiB	1.87 GiB	
unallocated							
>I Grow/dev/sd	b2 from 244.00	MiB to 2.05 Gi	В				
1 operation pend	ing						

Partition-P3 Creation

1.To Create New P3 partition

GParted Edit	View Device	Partition Help					
🔒 🛇 🗐		♠ 🖌				/dev/sd	b (29.72 GiB) 🛟
			unallocated 27.68 GiB				
Partition	File System	Mount Point	Label	Size	Used	Unused	Flags
unallocated	unallocated			4.00 MiB	_	_	
/dev/sdb1 🔍	fat16	/media/amrita/raspberrypi	raspberrypi	40.00 MiB	24.85 MiB	15.15 MiB	boot, lba
/dev/sdb2 @	ext3	/media/amrita/91156beb-6926-421f-9587-6591c887d37c		2.00 GiB	187.26 MiB	1.82 GiB	
unallocated	unallocated			27.68 GiB	-	-	
Grow /dev/sd	b2 from 248 00 /	MiB to 2.00 GiB					
1 operation pend	ing						

2.Allocating space for New Partition.

😣 Create new Partition				
Minimum si	ize: 1 MiB 🛛 🕅	Maximum size: 28	3345 MiB	
Free space preceding (MiB):	0	Create as:	Primary Partition	-
New size (MiB):	2048	File system:	ovt4	
Free space following (MiB):	26297 ‡	File System.	ext4	•
Align to:	MiB ‡	Label:		
			Cancel Add	

Partition-P4 Creation

1.To Create New P4 partition.

GParted Edit V	iew Device Parti	ition Help					Í
🔋 🔘 🗐 🛛	h h 🖌	✓				/dev/sdb) (29.72 GiB) 🔅
			unallocated 25.68 GiB	i			
Partition	File System	Mount Point	Label	Size	Used	Unused	Flags
unallocated	unallocated			4.00 MiB			
/dev/sdb1	🔍 🗧 fat16	/media/amrita/raspberrypi	raspberrypi	40.00 MiB	24.85 MiB	15.15 MiB	boot, lba
/dev/sdb2	🔍 🔤 ext3	/media/amrita/91156beb-6926-421f-9587-6591c887d37c		2.00 GiB	187.26 MiB	1.82 GiB	
New Partition #1	ext4			2.00 GiB			
unallocated	unallocated			25.68 GiB	-		
> Grow /dev/sdb	2 from 248.00 MiB t	o 2.00 GiB					
Create Primary	Partition #1 (ext4,	2.00 GiB) on /dev/sdb					
2 operations pendi	ng						

2.Allocating Space for New Partition.

😣 Create new Partition				
Minimum s	ize: 1 MiB 🛛 🛚 🛚 🔊	1aximum size: 20	5297 MiB	
Free space preceding (MiB):	0	Create as:	Primary Partition ‡	
New size (MiB):	26297 🗘	File system:	ext4	ĺ
Free space following (MiB):	0	rite system.	₹ CALT	J
Align to:	MiB ‡	Label:]
			Cancel Add	

3.After Partition Space will allocated like below,

GParted Edit V	iew Device Part	ition Help					
🗋 🔘 🗐 🛙	Fi 👘 I 🌎	<				/dev/sdb	(29.72 GiB) 🛟
			New Partition 25.68 GiB	n #2			
Partition	File System	Mount Point	Label	Size	Used	Unused	Flags
unallocated	unallocated			4.00 MiB	-	-	
/dev/sdb1	🔍 🗧 fat16	/media/amrita/raspberrypi	raspberrypi	40.00 MiB	24.85 MiB	15.15 MiB	boot, lba
/dev/sdb2	🔍 🗖 ext3	/media/amrita/91156beb-6926-421f-9587-6591c887d37c		2.00 GiB	187.26 MiB	1.82 GiB	
New Partition #1	ext4			2.00 GiB			
New Partition #2	ext4			25.68 GiB			
SI contractor	· · · · · · · · · · · · · · · · · · ·						
Grow/dev/sdb2	2 from 248.00 MiB t	to 2.00 GIB					
Create Primary	Partition #1 (ext4,	2.00 GIB) on /dev/sdb					
Create Primary	Partition #2 (ext4,	25.68 GIB) on /dev/sdb					
3 operations pendi	ng						

4.To apply the changes "Press the green Tick" mark on top.

😣 Арр	ly operations to device
	Are you sure you want to apply the pending operations?
	Editing partitions has the potential to cause LOSS of DATA. You are advised to backup your data before proceeding.
	Cancel Apply

5. Press Apply for changes to be change.

😣 🗉 Applying pending operations
Depending on the number and type of operations this might take a long time.
Completed Operations:
All operations successfully completed
▶ Details
Save Details Close