Increase in storage size using SnapDrive for UNIX

Snapdrive for Unix

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Increase in storage size using SnapDrive for UNIX

SnapDrive for UNIX lets you increase the size of the storage system volume group or disk group. You use the `snapdrive storage resize` command to do this.

> This command does not let you resize host volumes or file systems. For example, you cannot use the resize command to change the size of a file system on a LUN. You need to use the LVM commands to resize host volumes and file systems after you have resized the underlying disk group.

You can put the storage resize operations into the following general categories:

- Setting a target size in bytes to which you want to increase the storage
- Specifying a number of bytes by which you want to increase the storage

SnapDrive for UNIX adds a system-generated LUN. If you specify an amount by which you want to increase the storage, such as 50 MB, it makes the LUN 50 MB. If you specify a target size for the storage, it calculates the difference between the current size and the target size. The difference becomes the size of the LUN it then creates.

Guidelines for the storage resize command

You need to follow few guidelines when you use the `snapdrive storage resize` command.

- The storage resize operation can only increase the size of storage. You cannot use it to decrease the size of an entity.
- All LUNs must reside in the same storage system volume.
- The resize operation does not support directly on logical host volumes, or on file systems that reside on logical host volumes or on LUNs. In those cases, you must use the LVM commands to resize the storage.
- You cannot resize a LUN; you must use the `-addlun` option to add a new LUN.

Information required for using the snapdrive storage resize command

There is some information that you need to supply before you can use the `snapdrive storage resize` command. This information helps you in using the command correctly.

Requirement	Argument
Decide whether you want to increase the size of a disk or volume group and enter that entity's name with the appropriate argument.	

Requirement	Argument
Disk group (-dg file_spec) or volume group (-vg file_spec)	*name of the disk or volume group*
Decide how you want to increase the storage size. Remember the following when you use this command: • Use the `-growby` option to increase the entity size by the bytes specified in the size argument. • Use the `-growto` option to increase the entity size so that the new total size is the number of bytes specified in the *`size`* argument. • Use the `-addlun` option to increase the entity size by adding a new, internally-generated LUN to the underlying disk group. If you do not use this argument, SnapDrive for UNIX increases the size of the last LUN in the disk group to meet the byte size specified in either the `-growby` option or the `-growto` option.	
Specify the number of bytes by which you want to increase the storage (`-growby` *`size`*)	*`number_of_bytes`*
Specify the size in bytes that you want the storage to reach (`-growto` *`size`*)	*`number_of_bytes`*
Tell SnapDrive for UNIX to increase the size by adding a new LUN to the disk group (`-addlun`)	
Tell SnapDrive for UNIX to increase the size with or without creating a space reservation `-reserve | -noreserve`	
Optional: It is recommended that you use the default igroup for your host instead of supplying an igroup name.	
Igroup name (`-igroup`)	*`ig_name`*
`-fstype`	*`type`*
`-vmtype`	*`type`*
Optional: Specifies the type of file system and volume manager to be used for SnapDrive for UNIX operations.	

Command syntax to increase the size of the storage

To increase the size of the storage, you should know the correct syntax to be used.

`snapdrive storage resize -dg file_spec { -growby | -growto } size [-addlun [-igroup ig_name [ig_name …]]] [{ -reserve | - noreserve}]] [-fstype type] [-vmtype`

type]

You cannot use the `snapdrive storage resize` command to reduce the size of an entity. You can only increase the size using this command.

The `snapdrive storage resize` command does not support directly on logical volumes or file systems. For example, you cannot use the `snapdrive storage resize` command to resize a file system on a LUN.

Result: This command increases the size of the storage entity (logical volume or disk group) by either of the following:

- Adding bytes to storage (`-growby`).
- Increasing the size to the byte size you specify (`-growto`).

Host volumes and file system resize operation

The `snapdrive storage resize` command applies only to storage system disk groups and volume groups. If you want to increase the size of your host volume or file system, you must use LVM commands.

The following table summarizes the LVM commands you can use on the different platforms. For more information about these commands, see their man pages.

Host	Volume manager	Host volume	File systems
AIX	LVM	`extendlv`	`chfs`
	VxVM	`vxassist`	`fsadm`

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