



Information required for the storage create operation

Snapdrive for Unix

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January 21, 2021


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You must supply some information when you complete the storage create operation.

The following table lists the information you need to supply when you use the `snapdrive storage create` command to create storage:

Requirement	Argument
<p>Decide the type of storage you want to provision. Based on the command you enter, you can create any of the following:</p> <ul style="list-style-type: none">• LUNs <p>If you create one or more LUNs, the first argument must use the long form of the LUN name, which specifies the storage system name, the volume name, and the name of the LUN within the volume.</p> <p>To specify additional LUNs, you can use the LUN name (short name) alone if the new LUN is on the same storage system and volume as the previous LUN. Otherwise, you can specify a new storage system name and volume name (or just a volume name) to replace the previous values.</p> <ul style="list-style-type: none">• A file system created directly on a LUN <p>If you create a file system on a LUN, the first argument must be the <code>-fs</code> mount point. To create the file system on a LUN in a storage system and volume, use the <code>-filervol</code> argument and specify the name of the storage system and volume. To create the file system on a specific LUN, use the <code>-lun</code> argument and specify the storage system name, volume name, and LUN name. You must also include the <code>-no1vm</code> option to create the file system on the LUN without activating the host LVM.</p> <p>By default, SnapDrive for UNIX automatically performs all of the tasks associated with host preparation and discovery for the LUN, as well as mapping and connecting to it.</p> <p>If you create a LUN on a Linux host, SnapDrive for UNIX performs the following actions:</p> <ul style="list-style-type: none">◦ Creates the LUN.◦ Configures the LUN into one partition. <p> If you are using SLES10 update 2, then raw device is used to create a file system.</p> <ul style="list-style-type: none">• LVM disk groups with host volumes and file systems <p>When you specify a disk or volume group, file system, or host or logical volume, SnapDrive for UNIX performs all the actions necessary to create the entity you specify. You can either explicitly specify the LUNs, or just supply the storage system and volume information and let SnapDrive for UNIX create the LUNs automatically.</p> <p>If you are creating an entity such as a file system, you do not need to supply a value for a disk or volume group. SnapDrive for UNIX automatically creates one.</p>	

Requirement	Argument
• A LUN (-lun)	long_lun_name
• Additional LUNs	lun_name (long or short form)
• Disk group (-dg dgname) or volume group (-vg vgname)	disk or volume group name
SnapDrive for UNIX creates a disk or volume group to hold the LUNs based on the value you enter with the -dg option. The name you supply for the group must not exist.	
• Host volume (-hostvol file_spec) or logical volume (-lvol file_spec)	Host or logical volume name
• File system (-fs file_spec)	filesystem_name
-nolvm	~
Required: If you are creating a file system that resides directly on a LUN, specify the -nolvm option.	
• Lun size (-lunsize)	size
• Disk group size (-dgsizе) • Volume group size (-vgsizе)	size
Specify the size in bytes or some other data unit for each entity being created. The size of the LVM entity depends on the aggregated size of the LUNs you request.	
To control the size of the host entity, use the -dgsizе option to specify the size in bytes of the underlying disk group.	
• Path to storage system volume (-filervol)	long_filer_path
• -lun	long_lun_path

Requirement	Argument
<p>Specify the storage system and its volume where you want SnapDrive for UNIX to create the LUNs automatically.</p> <ul style="list-style-type: none"> • Use the <code>-filervol</code> option to specify the storage system and volume where you want the LUNs created. <p>Do not specify the LUN. SnapDrive for UNIX creates the LUN automatically when you use this form of the <code>snapdrive storage create</code> command. It uses system defaults to determine the LUN IDs, and the size of each LUN. It bases the names of the associated disk/volume groups on the name of the host volume or file system.</p> <ul style="list-style-type: none"> • Use the <code>-lun</code> option to name the LUNs that you want to use. 	
File system type (<code>-fstype</code>)	type
<p>If you are creating a file system, supply the string representing the file system type.</p> <p>SnapDrive for UNIX accepts Linux: <code>ext4</code> or <code>ext3</code></p> <div data-bbox="167 831 224 884" style="border: 1px solid black; border-radius: 50%; width: 35px; height: 35px; display: flex; align-items: center; justify-content: center; margin-bottom: 10px;"> i </div> <p>By default, SnapDrive for UNIX supplies this value if there is only one file system type for your host platform. In that case, you do not need to enter it.</p>	
<code>-vmtype</code>	type
Optional: Specifies the type of volume manager to be used for SnapDrive for UNIX operations.	
<code>-fsopts</code>	option name and value
<code>-mntopts</code>	option name and value
<code>-nopersist</code>	~
<code>-reserve -nreserve</code>	~

Requirement	Argument
<p>Optional: If you are creating a file system, you can specify the following options:</p> <ul style="list-style-type: none"> • Use <code>-fsopts</code> to specify options you want to pass to the host command used to create the file systems. For example, you might supply options that the <code>mkfs</code> command would use. The value you supply usually needs to be a quoted string and must contain the exact text to be passed to the command. • Use <code>-mntopts</code> to specify options that you want to pass to the host mount command (for example, to specify host system logging behavior). The options you specify are stored in the host file system table file. Allowed options depend on the host file system type. <p>The <code>-mntopts</code> argument is a file system <code>-type</code> option that is specified using the <code>mount</code> command <code>-o</code> flag. Do not include the <code>-o</code> flag in the <code>-mntopts</code> argument. For example, the sequence <code>-mntopts tmplog</code> passes the string <code>-o tmplog</code> to the <code>mount</code> command, and inserts the text <code>tmplog</code> on a new command line.</p> <p>If the value of the <code>enable-mount-with-netdev</code> configuration parameter is set to <code>off</code> (default value), you must manually specify <code>-mntopts _netdev</code> in the <code>snapdrive storage create</code> command. However, if you change the value to <code>on</code>, the <code>-mntopts _netdev</code> is executed automatically when you run the <code>snapdrive storage create</code> command.</p> <div style="border-left: 1px solid #ccc; padding-left: 10px; margin-left: 20px;">  <p>If you pass any invalid <code>-mntopts</code> options for storage and snap operations, SnapDrive for UNIX does not validate those invalid mount options.</p> </div> <ul style="list-style-type: none"> • Use <code>-nopersist</code> to create the file system without adding an entry to the file system mount table file on the host (for example, <code>fstab</code> on Linux). By default, the <code>snapdrive storage create</code> command creates persistent mounts. When you create an LVM storage entity on a Linux host, SnapDrive for UNIX automatically creates the storage, mounts the file system, and then places an entry for the file system in the host file system table. On Linux systems, SnapDrive for UNIX adds a UUID in the host file system table. • Use <code>-reserve</code> <code>-noreserve</code> to create the storage with or without creating a space reservation. 	
<ul style="list-style-type: none"> • <code>igroup name(-igroup)</code> 	<p><code>ig_name</code></p>
<p>Optional: NetApp recommends that you use the default <code>igroup</code> for your host instead of supplying an <code>igroup</code> name.</p>	

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