



# **The storage connect command**

## **Snapdrive for Unix**

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# The storage connect command

The `snapdrive storage connect` command connects storage entities to the host. Using this command you can connect LUNs and storage entities to the host

Use the `snapdrive storage connect` command to connect to:

- LUNs
- A file system created directly on a LUN
- Disk groups, host volumes, and file systems created on LUNs

When you enter the `snapdrive storage connect` command to connect LUNs to the host, SnapDrive for UNIX performs the necessary discovery and mapping. It does not modify LUN contents.

## Guidelines for the storage connect command


You need to follow few guidelines to use the `snapdrive storage connect` command.

Storage that includes LVM entities has special requirements. To use the `snapdrive storage connect` command to connect LVM entities, you must create the storage so that each entity in the storage hierarchy has exactly one instance of the next entity. For example, you can use the `snapdrive storage connect` command to connect a storage hierarchy that has one disk group (dg1) with one host volume (hostvol1) and one file system (fs1). However, you cannot use the `snapdrive storage connect` command to connect a hierarchy that has one disk group (dg1) with two host volumes (hostvol1 and hostvol2) and two file systems (fs1 and fs2).

## Information required for using the snapdrive storage connect command

There is some information that you need to supply when you use the `snapdrive storage connect` command. This information helps you to use the command correctly.

Requirement	Argument
<p>Specify the LUNs, the file system created directly on a LUN, or the LVM entity that you want to connect to the host.</p> <ul style="list-style-type: none"> <li>If you connect 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.</li> </ul> <p>To specify additional LUNs, you can use the LUN 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"> <li>If you connect a file system created directly on a LUN, you must include the long form of the LUN name, and also the <code>-nolvm</code> option.</li> <li>If you connect a LUN with a disk group, host volume, and file system, you must use the <code>-fs</code> and <code>-hostvol</code> options to specify the file system and host volume. The host volume must include the name of the disk group.</li> </ul>	
A LUN ( <code>-lun</code> )	<i>long_lun_name</i>
<p>The first value you supply with the <code>-lun</code> option must include the storage system name, volume, and LUN name. To connect multiple LUNs on the same volume, you can use relative path names for the <code>-lun</code> option after you supply the complete information in the first path name. When SnapDrive for UNIX encounters a relative path name, it looks for the LUN on the same volume as the previous LUN. To connect additional LUNs that are not on the same volume, enter the full path name to each LUN.</p>	
Additional LUNs	<i>lun_name</i> (long or short form)
<p>The <i>file_spec</i> given to <code>-fs</code> is the name of the file system mountpoint when connecting a file system created directly on a LUN.</p>	
A file system ( <code>-fs file-spec</code> )	<i>filesystem_name</i>
<p>To connect a file system that is created on a LUN without activating the host LVM.</p>	
<code>-nolvm</code>	
<p>To connect a file system on a host volume:</p> <p>The <code>-fs file_spec</code> and <code>-hostvol file_spec</code> you supply identify the LVM file system, disk group, and host volumes that you want to connect to a new host.</p> <p>The storage hierarchy that you connect must contain a disk group, host volume, and file system. You must specify a value for <code>-fs</code> and <code>-hostvol</code>. The <code>-hostvol</code> value must include the name of the disk group.</p>	
Host volume ( <code>-hostvol file-spec</code> )	<i>disk_group_name</i> and <i>host_volume_name</i>

Requirement	Argument
Optional: Use the <code>-nopersist</code> option to connect the storage to a new location without creating an entry in the host file system table. By default the storage connect command creates persistent mounts. This means that when you create an LVM storage entity on a AIX 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.	
<code>-nopersist</code>	~
<b>Optional:</b> It is recommended that you use the default igroup for your host instead of supplying an igroup name.	
Igroup name ( <code>-igroup</code> )	<i>ig_name</i>
<code>-fstype</code>	<i>type</i>
<code>vmtype</code>	<i>type</i>
<b>Optional:</b> Specifies the type of file system and volume manager to be used for SnapDrive for UNIX operations.	
<code>-mntopts</code>	~
<b>Optional:</b> If you are creating a file system, you can specify the following options: <ul style="list-style-type: none"> <li>• 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.</li> <li>• 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.</li> </ul> <div>  <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>	

## Connecting LUNs with disk groups, host volumes, and file systems

To use the `snapdrive storage connect` command to connect LUNs that have disk groups, host volumes and file systems, you need to follow the syntax.

Enter the following command:

```
snapdrive storage connect -fs file_spec -hostvol file_spec -lun long_lun_name
[lun_name...] [-igroup ig_name [ig_name...]] [-nopersist] [-mntopts options] [-fstype
```

**type] [-vmtype type]**

## Example: Connecting a file system created on a LUN

```
# snapdrive storage connect -fs /mnt/fs -lun f270-221-189:/vol/vol0/lun111
-nolvms
mapping lun(s) ... done
discovering lun(s) ... done
LUN f270-221-189:/vol/vol0/lun111 connected
- device filename(s): /dev/vx/dmp/fas2700_939
```

## Connecting existing LUNs with shared resources

If a new node is added to the host cluster configuration that uses a shared disk group or file system, you need to follow a different syntax.

```
snapdrive storage connect -fs file_spec -lun long_lun_name [lun_name...] [-mntopts options]
```

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