



# Tech Info Library

## Network Server 500 or 700: Creating a Logical Volume (10/96)

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TOPIC -----

How do I create a Logical Volume on my Apple Network Server 500 or 700 running AIX?

DISCUSSION -----

There are four methods for adding a logical volume to the Network Server: command line, SMIT, visual Storage Manager, or the AppleTalk Disk Management Utility. Also, a logical volume will be created when a file system is created not using an existing logical volume. A logical volume is made up of a number of logical partitions. There are various options available when creating a logical volume, from as simple as just specifying size, to specifying mirror or stripe, to specifying the exact physical volume and physical partition mapping.

- Command line: Command line options are not recommended for novice users unfamiliar with Unix commands; for more information see `mklv` and `chlv`. Below is an example of how to create a logical volume on the root volume group with a name of `workvg` and having a size of 12 logical partitions:

```
mklv -y'workvg' rootvg 12
```

- SMIT: This is the recommended method for Unix novices, enter `'smit mklv'`, then enter or select the volume group where the logical volume will be created. The only required field is for the number of logical partitions that will be used to create the logical volume. Additional fields can be completed to customize the logical volume.

- Visual Storage Manager: Open the Volume Manager from the Application Manager - System\_Admin on the tool bar or execute the  `'/usr/bin/X11/xlvm'` command. Select the logical volume template type and drag the appropriate logical volume template using the middle mouse button to a volume group or in a logical volume pane expanded from a volume group.

- AppleTalk Disk Management Utility, AppleTalk and ppcd services must be configured on the server. Launch the Disk Management Utility on a Macintosh and connect to the server as root. Select a volume group and select the 'New File System...' command under the Configuration menu. Set the size and type of logical volume or file system.

#### Useful Commands

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The 'lsvg' command can be used to gather information about a volume group and the physical volumes in a volume group.

```
lsvg                               :lists all volume groups
lsvg -p <volume group>            :lists physical volumes in a volume group
lsvg -n <physical volume>        :lists information about the volume group, such
                                  as size, free space, and physical partition
                                  size
lsvg -M <volume group>            :lists allocation of each physical partition in
                                  a volume group
lsvg -l <volume group>            :lists each logical volume in a volume group
                                  and some of the logical volume characteristics
```

For more information see Info Explorer

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- Topics & Task Index, Managing Physical and Logical Storage, Logical Volumes
  - List of Books, System Management Guide: Operating System and Devices, Chapter 5. Logical Volumes

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