

# Create memory resident filesystems (RAM disk) on AIX

Article Number: 518 | Rating: Unrated | Last Updated: Thu, Feb 21, 2019 8:19 PM

AIX supports memory-resident file systems. It can be used to maximize disk performance. It's equivalent to Solaris tmpfs filesystem.

NOTE: RAM disk doesn't survive a reboot.

Steps to create a RAM disk on AIX:

- Get size of real (online) memory.
- Create the RAM disk
- Create the file system
- Mount the file system.

- Get size of real (online) memory.

```
1 [root@aix:/] lparstat -ilgrep Memory|grep
2 'Minimum|Online|Maximum'
3 Online Memory : 16384 MB
4 Maximum Memory : 24576 MB
Minimum Memory : 256 MB
```

Or,

---

```
1 [root@aix:/] bootinfo -r
2
16777216
```

- Create the RAM disk.

```
1 [root@aix:/] mkramdisk 1024M
2
/dev/ramdisk0
```

**NOTE: By default, RAM disk pages are pinned. if you want to create RAM disk pages that are not pinned use ‘-u’ flag.**

- Create the file system.

```
1 [root@aix:/] mkfs -V jfs2 /dev/ramdisk0
2
mkfs: destroy /dev/ramdisk0 (yes)? y
3
File system created successfully.
4
16176 kilobytes total disk space.
5
Device /dev/ramdisk0:
6
Standard empty filesystem
7
```

Size: 2096680 512-byte (DEVBLKSIZE)  
blocks

- Mount the file system.

```
1 [root@aix:/] mkdir /ramdiskfs
```

```
1 [root@aix:/] mount -V jfs2 -o log=NULL  
/dev/ramdisk0 /ramdiskfs
```

```
1 [root@aix:/] mount
2
3 node    mounted    mounted over  vfs
4 date    options
5 -----
6 /dev/hd4  /          jfs2  Dec 07 09:33
7 rw,log=/dev/hd8
8
9 /dev/hd2  /usr       jfs2  Dec 07 09:33
10 rw,log=/dev/hd8
```

8	/dev/hd9var	/var	jfs2	Dec 07
	09:33 rw,log=/dev/hd8			
9				
	/dev/hd3	/tmp	jfs2	Dec 07 09:33
10	rw,log=/dev/hd8			
11	/dev/hd1	/home	jfs2	Dec 07
	09:33 rw,log=/dev/hd8			
12				
	/dev/hd11admin	/admin	jfs2	Dec 07
13	09:33 rw,log=/dev/hd8			
14	/proc	/proc	procfs	Dec 07 09:33
	rw			
15				
	/dev/hd10opt	/opt	jfs2	Dec 07
16	09:33 rw,log=/dev/hd8			
17	/dev/livedump	/var/adm/ras/livedump	jfs2	
	Dec 07 09:33 rw,log=/dev/hd8			
18				
	/dev/syslog_lv	/var/syslog	jfs2	Dec 07
19	09:33 rw,log=/dev/hd8			
20	/dev/cores_lv	/CORES	jfs2	Dec 07
	09:33 rw,log=/dev/hd8			
21				
	/dev/fslv00	/REPOS/SVN1SYNC	jfs2	
	Dec 07 09:33 rw,log=/dev/hd8			
	/dev/db2inslv01	/db2inst1	jfs2	Dec 07
	09:33 rw,log=/dev/loglv00			
	/dev/adm_lv	/tsmadm	jfs2	Dec 07
	09:33 rw,log=/dev/loglv00			
	/dev/reportinlv	/reporting	jfs2	Dec 07
	09:33 rw,log=/dev/loglv00			

```

/dev/fslv02  /powervp    jfs2  Dec 07
09:33 rw,log=/dev/hd8

/dev/fslv03  /db2flash   jfs2  Dec 07
09:33 rw,log=/dev/loglv01

/dev/ramdisk0 /ramdiskfs  jfs2  Feb 08
10:26 rw,log=NULL
```

```

1
2
3
[root@aix:/] df -m /ramdiskfs

Filesystem  MB blocks   Free %Used   Iused
%Iused Mounted on

/dev/ramdisk0 1024.00 1023.52  1%      4
1% /ramdiskfs
```

- To umount, delete RAM disk follow these steps

```

1
[root@aix:/] umount /ramdiskfs/
```

```

1
[root@aix:/] rmdir ramdisk0
```

That's it!

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