



## 什么是ONTAP维护模式命令

[https://kb-cn-stage.netapp.com/on-prem/ontap/Ontap\\_OS/OS-KBs/What\\_are\\_the\\_ONTAP\\_maintenanc...](https://kb-cn-stage.netapp.com/on-prem/ontap/Ontap_OS/OS-KBs/What_are_the_ONTAP_maintenanc...)

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### 适用场景

- ONTAP 9
- 维护模式

### 问题解答

ONTAP维护模式用于仅加载基本内核且磁盘I/O未处于活动状态的低级命令。

有(2)种方法可启动至ONTAP维护模式。

- 首先、在启动时、您可以按Ctrl-C键序列：

```
All rights reserved. ***** * Press Ctrl-C for
Boot Menu. * ***** . . ^CBoot Menu will be
available.
```

然后从启动菜单中选择选项5

(5) Maintenance mode boot.

- 第二种方法是使用直接启动至维护模式

```
LOADER> boot_ontap maint
```

可用命令的完整列表(截至ONTAP 9.16 · 1的最新版):

```
You have selected the maintenance boot option: the system has booted in
maintenance mode allowing the following operations to be performed: ? acorn
acpadmin aggr batch_snap bootargs cdpd cna_flash coredump_save coredump_
show coredump_zero disk disk_list disk_shelf diskcopy disktest dumpblock
environment fctest fru_led ha-config halt help ifconfig iftp led_off led_on
lldp nicadmin nv8 psmadmin raid_config sasadmin sasstat scsi sldiag storage
stsb sysconfig systemshell ucadmin version vlist vmdisk_object_store
vmsservices vol vol_db Type "help <command>" for more details. *>
```

对于一些较常用的命令、其详细信息如下所示:

```
*> aggr
The following commands are available; for more information
type "aggr help <command>"
clear_rpbits      options          rename          snaprestore_cancel
destroy          quota_off       restrict        status
offline         read_fsid       rewrite_fsid    undestroy
online          rebuildtree

*> disk
usage: disk <options>
Options are:
    assign {<disk_name> | all | [-T <storage type> | -shelf <shelf name>]
[-n <count>] | auto} [-p <pool>] {[<-o <ownername>] [<-s <sysid>] | [<-copy-
ownership-from <disk-name>]} [<-c block|advanced_zoned>] [<-P storage-pod-uuid>] [<-
f>] - assign a disk to a filer or all unowned disks by specifying "all" or
<count> number of unowned disks
    ddr_label {repair | print | delete | dumpraw | rm_qualtable | modify
[-c] -o <offset> -v <value> | start_scan | pause_scan | resume_scan |
error_scan | rediscover | reinit } [-f] [-d all | <disk_list>]
    dumpevents { sanown | config_checker | raid } - Dumps the
sanown/config-checker/raid event queue since boot
    encrypt { destroy | display | lock | rekey | rekey_fips |
revert_original | sanitize | show | show_fips | show_standards } - perform
tasks specific to self-encrypting disks
```

```

        partition { { -n { 2 | 3 } [-u <pool_uuid>] } | { -n
<num_parts> -u <pool_uuid> } } [-i <part_idx> -b <raw_blks>].. <disk_name> -
partition a disk
        power_cycle [ -f ] { [-d <disk_list>] | [ -c <channel_name> [
-s <shelf_number> ] ] } - power-cycle one or more disks
        reassign {-s <old_sysid>} [-d <new_sysid>] [-p <partner_sysid>]
[-r <dr-partner-sysid> ] - reassign disks from old filer
        remove_ownership [<disk_name> | all | -s <sysid>] [-f] -
revert/remove disk ownership
        sanitize { start | abort | status | release } - sanitize one or more
disks (9.5+)
        sanown_stats {start| stop| show }- collect sanown event stats
        show [-o <ownername> | -s <sysid> | -n | -v | -a | -m | -p | -w | -S
<disk_serialno> | -c <cluster_disk_name> ] - lists disks and owners
        unfail [-s] <disk_name> - unfail a disk (-s not valid in
maintenance mode)
        unpartition {<disk_name> | all} - unpartition a partitioned disk or
unpartition all the partitioned disks
        visible_all - Make disks visible for assimilation

```

\*> diskcopy

usage:

```
diskcopy -s <source-disk-name> -d <destination-disk-name>
```

```
diskcopy -i -s <source-disk-name> -d <destination-disk-name> to invoke skip
mode immediately
```

use -n <sectors> option to use a default size different than 4096 sectors

use -o to do no retries of I/O's at the SCSI layer (USE WITH CAUTION!)

use -r <MB>, greater than 2MB to tune report size instead of using default
progress report for every 100MB

use -e <sector> specifies the ending sector for the copy. Defaults to the last
sector of the drive.

use -b <sector> specifies the starting sector for the copy. Defaults to sector
0.

\*> ha-config

Usage:

```
ha-config modify { controller | chassis } { ha | non-ha | mcc | mcc-2n |mcc-
ip| default }
```

```
ha-config show
```

```

*> storage
usage: storage <subcommand>
subcommands are:
    disable adapter <name>
    enable adapter <name>
    help <sub_command>
    nvmeof discovery add [ -s <source address> ] [ -p <target port> ] [ -z
<scope_id> ] <subsystem address>
    trace info { adapter [<adapter_name>] | device [<device_name>] |
ses_drv | disk_shelf [<disk_shelf_name>] | ses_proc | all }
    trace dump { adapter [<adapter_name>] | device [<device_name>] |
ses_drv | disk_shelf [<disk_shelf_name>] | ses_proc | all } -f <out_file>

    rename switch <oldname><newname>
    release disks [ -f ]
    release { mc | tape } <name>
    shelf identify <shelf-name> { on | off }
    show adapter [ -a ] [ <name> ]
    show disk [ -a | -x | -p | -T ] [ <name> ]
    show expander [ -a ] [ <expander-name> ]
    show bridge [ -v ] [ <bridge-name> ]
    show fabric
    show fault [ -a ] [ -v ] [ <shelf-name> ]
    show hub [ -a ] [ -e ] [ <hub-name> ]
    show initiators [-a]
    show mc [ <name> ]
    show port [ <name> ]
    show shelf [ -a ] [ -e ] [ <shelf-name> ]
    show switch [ <name> ]
    show tape [ <name> ]
    show tape supported [ -v ]
    show acp [ -a ]
    show psm [ -a ] [ <psm-name> ]
    stats tape <name>
    stats tape zero <name>

    power_cycle shelf -h
    power_cycle shelf start [-f] -c <channel_name> [-s <shelf_id>]
    power_cycle shelf complete

    bridge log

```

```
storage port { show | modify -p <target port> -m { storage | network }  
[ -f ] }
```

\*>ucadmin modify -m <fc | cna> -t <initiator | target> -f <adapter\_name> Note that the -t parameter is only required for fc mode.

## 追加信息

- 只要启动介质未出现故障或损坏、系统就可以启动至维护模式。
- [可从Loader提示符处使用哪些命令](#)