

# RADOS – RADOS OBJECT STORAGE UTILITY

## SYNOPSIS

**rados** [ -m *monaddr* ] [ *mkpool* | *rmpool foo* ] [ -p | -pool *pool* ] [ -s | -snap *snap* ] [ -i *infile* ] [ -o *outfile* ] *command* ...

## DESCRIPTION

**rados** is a utility for interacting with a Ceph object storage cluster (RADOS), part of the Ceph distributed file system.

## OPTIONS

- p** *pool*, **--pool** *pool*  
Interact with the given pool. Required by most commands.
- s** *snap*, **--snap** *snap*  
Read from the given pool snapshot. Valid for all pool-specific read operations.
- i** *infile*  
will specify an input file to be passed along as a payload with the command to the monitor cluster. This is only used for specific monitor commands.
- o** *outfile*  
will write any payload returned by the monitor cluster with its reply to outfile. Only specific monitor commands (e.g. *osd getmap*) return a payload.
- c** *ceph.conf*, **--conf**=*ceph.conf*  
Use *ceph.conf* configuration file instead of the default */etc/ceph/ceph.conf* to determine monitor addresses during startup.
- m** *monaddress[:port]*  
Connect to specified monitor (instead of looking through *ceph.conf*).

## GLOBAL COMMANDS

### **ls***pools*

List object pools

### **df**

Show utilization statistics, including disk usage (bytes) and object counts, over the entire system and broken down by pool.

### **mkpool** *foo*

Create a pool with name *foo*.

### **rmpool** *foo* [ *foo* -yes-i-really-really-mean-it ]

Delete the pool *foo* (and all its data)

## POOL SPECIFIC COMMANDS

### **get** *name outfile*

Read object name from the cluster and write it to outfile.

### **put** *name infile*

Write object name to the cluster with contents from infile.

### **rm** *name*

Remove object name.

### **ls** *outfile*

List objects in given pool and write to outfile.

## lssnap

List snapshots for given pool.

## clonedata *srcname dstname* -object-locator *key*

Clone object byte data from *srcname* to *dstname*. Both objects must be stored with the locator key *key* (usually either *srcname* or *dstname*). Object attributes and omap keys are not copied or cloned.

## mksnap *foo*

Create pool snapshot named *foo*.

## rmsnap *foo*

Remove pool snapshot named *foo*.

## bench *seconds mode* [ -b *objsize* ] [ -t *threads* ]

Benchmark for seconds. The mode can be write or read. The default object size is 4 MB, and the default number of simulated threads (parallel writes) is 16.

## listomapkeys *name*

List all the keys stored in the object map of object name.

## listomapvals *name*

List all key/value pairs stored in the object map of object name. The values are dumped in hexadecimal.

## getomapval *name key*

Dump the hexadecimal value of key in the object map of object name.

## setomapval *name key value*

Set the value of key in the object map of object name.

## rmomapkey *name key*

Remove key from the object map of object name.

## getomapheader *name*

Dump the hexadecimal value of the object map header of object name.

## setomapheader *name value*

Set the value of the object map header of object name.

## EXAMPLES

To view cluster utilization:

```
rados df
```

To get a list object in pool foo sent to stdout:

```
rados -p foo ls -
```

To write an object:

```
rados -p foo put myobject blah.txt
```

To create a snapshot:

```
rados -p foo mksnap mysnap
```

To delete the object:

```
rados -p foo rm myobject
```

To read a previously snapshotted version of an object:

```
rados -p foo -s mysnap get myobject blah.txt.old
```

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## AVAILABILITY

**rados** is part of the Ceph distributed file system. Please refer to the Ceph documentation at <http://ceph.com/docs> for more information.

## SEE ALSO

[ceph\(8\)](#)