

OS RECOMMENDATIONS

CEPH DEPENDENCIES

As a general rule, we recommend deploying Ceph on newer releases of Linux.

LINUX KERNEL

- **Ceph Kernel Client:** We currently recommend:
 - v3.6.6 or later in the v3.6 stable series
 - v3.4.20 or later in the v3.4 stable series
- **bt rfs:** If you use the bt rfs file system with Ceph, we recommend using a recent Linux kernel (v3.5 or later).

GLIBC

- **syncfs(2):** For non-bt rfs filesystems such as XFS and ext4 where more than one ceph-osd daemon is used on a single server, Ceph performs significantly better with the syncfs(2) system call (added in kernel 2.6.39 and glibc 2.14). New versions of Ceph (v0.55 and later) do not depend on glibc support.

PLATFORMS

The charts below show how Ceph’s requirements map onto various Linux platforms. Generally speaking, there is very little dependence on specific distributions aside from the kernel and system initialization package (i.e., sysvinit, upstart, systemd).

ARGONAUT (0.48)

Distro	Release	Code Name	Kernel	Notes	Testing
Ubuntu	11.04	Natty Narwhal	linux-2.6.38	1, 2, 3	B
Ubuntu	11.10	Oneric Ocelot	linux-3.0.0	1, 2, 3	B
Ubuntu	12.04	Precise Pangolin	linux-3.2.0	1, 2	B, I, C
Ubuntu	12.10	Quantal Quetzal	linux-3.5.4	2	B
Debian	6.0	Squeeze	linux-2.6.32	1, 2, 3	B
Debian	7.0	Wheezy	linux-3.2.0	1, 2, 3	B

BOBTAIL (0.56)

Distro	Release	Code Name	Kernel	Notes	Testing
Ubuntu	11.04	Natty Narwhal	linux-2.6.38	1, 2, 3	B
Ubuntu	11.10	Oneric Ocelot	linux-3.0.0	1, 2	B
Ubuntu	12.04	Precise Pangolin	linux-3.2.0	1, 2	B, I, C
Ubuntu	12.10	Quantal Quetzal	linux-3.5.4	2	B
Debian	6.0	Squeeze	linux-2.6.32	1, 2, 3	B
Debian	7.0	Wheezy	linux-3.2.0	1, 2	B
CentOS	6.3	N/A	linux-2.6.32	1, 2	B, I
Fedora	17.0	Beefy Miracle	linux-3.3.4	1, 2	B
Fedora	18.0	Spherical Cow	linux-3.6.0		B
OpenSuse	12.2	N/A	linux-3.4.0	2	B

NOTES

- **1:** The default kernel has an older version of bt rfs that we do not recommend for ceph-osd storage nodes. Upgrade to a recommended kernel or use XFS or ext4.
- **2:** The default kernel has an old Ceph client that we do not recommend for kernel client (kernel RBD or the Ceph file system). Upgrade to a recommended kernel.

- **3:** The default kernel or installed version of glibc does not support the syncfs(2) system call. Putting multiple ceph-osd daemons using XFS or ext4 on the same host will not perform as well as they could.

TESTING

- **B:** We continuously build all branches on this platform and exercise basic unit tests. We build release packages for this platform.
- **I:** We do basic installation and functionality tests of releases on this platform.
- **C:** We run a comprehensive functional, regression, and stress test suite on this platform on a continuous basis. This includes development branches, pre-release, and released code.