Changelog

Version 2.0.3 (5-25-2011)

- Security release
- Fixes launchpad bugs:

#746101

- fixes include:
 - o defense against XML Signature Element Wrapping attacks
 - replay detection improvements in CLC

Version 2.0.2 (12-16-2010)

Fixes launchpad bugs:

#675372

- fixes include:
 - password recovery functionality
 - o enabling/confirming users by admin only
 - o various Web UI security enhancements

Version 2.0.1 (2010-10-20)

- Bug fix minor release.
- Fixes launchpad bugs:
- #661565 #644482 #658023 #658022 #595421 #637659 #632263 #622818 #628328 #664002 #639639

which include fixes to the following sub-systems:

- External dashboard registration.
- Meta-data service access.
- S3 Versioning.
- Walrus image decryption.
- Component registration.

Version 2.0.0 (2010-08-24)

- Version 2.0.0
- Stability/Performance point-release.
- Back-end (CC/NC) scale improvements.

- CLC fixes including backend database pooling and persistence improvements, SSL support.
- euca_conf fixes including the ability to list nodes (and VMs).
- Fixes to Walrus for specific use cases, bugs and stability, as well as beta support for the S3 server logging API, fixes to bittorrent support.
- Storage Controller scalability improvements.
- Updated packages for current versions of supported distributions.
- Closes many bugs, including:

#477776 #461156 #477776 #498379 #498379 #517769 #518601 #513842 #453416 #328146

Version 1.6.2 (2010-02-12)

- Version 1.6.2
- Stability/Performance point-release.
- Back-end (CC/NC) scale improvements.
- CLC fixes including backend database pooling and persistence improvements, SSL support.
- euca_conf fixes including the ability to list nodes (and VMs).
- Fixes to Walrus for specific use cases, bugs and stability, as well as beta support for the S3 server logging API, fixes to bittorrent support.
- Storage Controller scalability improvements.
- Updated packages for current versions of supported distributions.
- Closes many bugs, including:

#477776 #461156 #477776 #498379 #498379 #517769 #518601 #513842 #453416 #328146

Version 1.6.1 (2009-11-05)

- Version 1.6.1
- Added support for multiple clusters (availability zones)
- Allow components (cloud, walrus, sc, cc, nc) to be hosted on different machines
- Support for dynamic instance and bucket DNS
- Better startup (no need for ant anymore, much faster)
- Reworked part of the network provisioning code for multi-cluster and better handling public IP addressing
- Hypervisor improvements
 - switched default kvm ethernet interface to e1000
 - o serialized calls to the xen hypervisor
- Added helpers to integrate with nagios and/or ganglia
- The Web UI is now theme-able (at compile time)
- A lot of work toward long term stability: run the code thru different code/memory checker, re-engineer the java stack to be faster and more robust.
- V Closes bugs:

```
#426469 #426576 #428546 #428654 #428710 #430260 #430356 #430888 #430922 #431939 #430830 #431933 #431935 #426469 #431934 #431937 #431931 #426467 #430830 #426389 #426389 #430944 #432604 #432823 #436274 #436276 #436290 #436313 #436407 #436885 #436917 #437014 #437026 #436407 #430957 #430226 #388934 #440744 #440817 #440950 #441033 #441035 #441020 #441019 #443325 #443325 #443314 #444838 #445206 #444908 #445206 #444908 #445997 #447585 #447555 #444838 #449135 #438565 #449948 #430266 #398867 #449948 #401996 #449944 #450915 #451795 #454405 #456877 #456878 #461394 #461444 #460085 #404842 #462940 #456878 #406049
```

Version 1.5.2 (2009-07-17)

- A lot of bug fixes and improvements
- Eucalytpus now runs as user 'eucalyptus' by default
- added new UI tab 'Extras' that includes links to pre-packaged images and client tools
- Fixed support for client tools (including fixes to the REST interface).
- Closes bugs:

```
#368975 #375809 #375805 #376575 #354787 #382522 #357350 #375105
#359855 #384069 #359855 #357499 #384117 #384119 #375093 #384119
#356580 #384123 #359855 #356389 #384069 #384119 #357849 #359855
#384124 #384126 #384126 #384652 #385660 #386430 #357440
```

Version 1.5.1 (2009-05-08)

- Elastic Block Store (EBS) support (volumes & snapshots)
- Walrus improvements:
 - Support for groups in ACLS
 - Fixed issues with meta data support
 - Web browser form-based uploads via HTTP POST
 - Object copying
 - Query string authentication
 - Support for arbitrary key names
 - Compressed image downloads and fixes to image caching
 - Reduced memory requirement
- Network improvement: new MANAGED-NOVLAN mode
- Node-side improvements:
 - Support for the KVM hypervisor
 - Compression & retries on Walrus downloads
 - Reworked caching (now with configurable limit)
- Web UI improvements:
 - Cloud registration with Rightscale (from admin's 'Credentials' tab)
 - New configuration options for Walrus
 - Better screening of usernames
 - Fixed account confirmation glitches
- Building and installation improvements

- Better Java installation checking
- New command-line administration: euca conf -addcluster ... -addnode ...
- Non-root user deployment of Eucalyptus
- Binary packages for more distributions (Ubuntu et al)

Version 1.4 (2009-01-05)

- Added new networking subsystem that no longer depends on VDE
- Added support for elastic IP assignment and security using the 'MANAGED' networking mode
- Cluster controller scheduling policy can now be configured in eucalyptus.conf (ROUNDROBIN and GREEDY currently supported)
- Cluster controller now handles concurrent requests (no longer have to restrict apache to allow only one connection at a time)
- Added Walrus: an Amazon S3 interface compatible storage manager. Walrus handles storage of user data as well as filesystem images, kernels, and ramdisks.
- Node Controller improvements:
 - o Retrieval of images from Walrus instead of NFS-mounted file system
 - New caching and cleanup code, including start-time integrity checks
 - o On-the-fly script-based generation of libvirt XML configuration
 - Script-based discovery of node resources (no assumptions about stat)
 - MAX CORES overrides actual number of cores both down and up
 - Moved libvirt errors to nc.log and suppressed harmless ones
 - Serialized some Xen invocations to guard against non-determinism
 - o Added proper swap creation, also "ephemeral" disk support
 - More robust instance state reporting to Cluster Controller
- Web interface improvements:
 - o Added cloud/Walrus configuration, including clusters and VM types
 - Revamped 'credentials' tab with new options to edit user information and hide/show "secret" strings
 - Editing of user information for the administrator, including confirmation dialog for deletion of users
 - User-initiated password recovery mechanism
 - Fixed a couple of bugs: '' in username, spurious double additions
- Cloud Controller:
 - User, Cluster, and System keys are now stored in PKCS12 keystores and have moved to var/eucalyptus/keys
 - o Configuration is handled entirely through the Web interface
 - Clusters dynamically added/started/stopped
 - Webservices operations complete up to EC2 2008-05-05 (w/o EBS):
 - "Elastic IP" address support
 - o Image registration and attribute manipulation
 - GetConsole and RebootInstances support
 - Working Security Groups support for clusters in MANAGED network mode

- See website for additional details, extensions, and caveats: http://eucalyptus.cs.ucsb.edu/wiki/API_v1.4
- Instance Metadata service (including userData)
- Workaround to use Amazon's tools for registering kernels & ramdisks
- Revamped logging throughout, with five levels a la log4j
- More standard build procedure: configure; make; make install
- More robust start-time checking

Version 1.3 (2008-08-27)

Added support for the new ec2 tools (1.3-24159 and newer)

Version 1.2 (2008-07-29)

- Added stand-alone RPM packages for non-rocks installation
- Added image caching to reduce instance creation time
- Added instance networking configuration options to eucalyptus.conf
- Bug Fixes
 - o Improved installation-time error checking
 - Removed possibility of instance ID collision
 - Improved VDE runtime management
 - Improved VDE cleanup
 - Resolved occasional NC instance loss problem
 - o Resolved EC2 client timing issue that resulted in parsing errors on client

Version 1.1 (2008-07-01)

- Added WS-security for internal communication
- Added URL Query Interface for interacting with Eucalyptus
- Cluster Controller improvements:
 - Instance caching added to improve performance under certain conditions
 - o Thread locks removed to improve performance
 - NC resource information gathered asynchronously to improve scheduler performance
- Network control improvements:
 - Added ability to configure 'public' instance interface network parameters (instead of hardcoded 10. network)
 - Lots of reliability changes
- Cloud Controller improvements:
 - o Pure in-memory database
 - Image registration over WS interface
 - Improved build procedure
- Web interface improvements:
 - o For all users (query interface credentials, listing of available images)

- For the administrator (addition, approval, disabling, and deletion of users; disabling of images)
- Numerous bug fixes, improving stability and performance. In particular, but not limited to:
 - Recovering Cloud Controller system state
 - Timeout-related error reporting
 - Slimmer log files, with timestamps

Version 1.0 (2008-05-29)

• First public version (limited-feature binary-only beta)