
Cloudstack 2.2.7

Release Notes



Cloudstack Community

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Abstract

These Release Notes provide a brief description of new features and known issues for the 2.2.7 release of Cloudstack. Please read [Section 10, "Known Issues"](#) before installing. The Installation Guide provides step by step instructions for installation.

Upgrades from 2.2.0, 2.2.1, 2.2.2, 2.2.3, 2.2.4 and 2.2.5 to 2.2.6 are supported. The procedure is in the [Section 11, "Upgrade"](#) section of this document

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1. Cloudstack 2.2.7

Cloudstack 2.2.7 was released on 28 June 2011

1.1. Issues fixed in Cloudstack 2.2.7

Table 1. Issues fixed in 2.2.7

Bug	Description
10456 ¹	Create template from volume will work correctly
10093 ²	The default security group is assigned to VMs correctly

1.2. New features in Cloudstack 2.2.7

Table 2. New features in 2.2.7

Bug	Description
10435 ³	The VPN feature has been removed from CloudStack. We expect to make the VPN feature available again in approximately one month.

¹ http://bugs.cloud.com/show_bug.cgi?id=10456

² http://bugs.cloud.com/show_bug.cgi?id=10093

³ http://bugs.cloud.com/show_bug.cgi?id=10435

2. Cloudstack 2.2.6

Cloudstack 2.2.6 was released on 16 June 2011

2.1. Issues fixed in Cloudstack 2.2.6

Table 3. Issues fixed in 2.2.6

Bug	Description
many	Several upgrade bugs from 2.1.x were fixed.
10091 ⁴	Volume deletion will correctly delete associated snapshots from primary storage.
10094 ⁵	XenServer: HA may fail to restart some VMs when multiple hosts fail simultaneously or primary storage fails (causing multiple hosts to reboot simultaneously).
9896 ⁶	KVM: Windows 2008 R2 can now attach data disks.

2.2. New features in Cloudstack 2.2.6

There are no new features in 2.2.6

3. Cloudstack 2.2.5

Cloudstack 2.2.5 was released on 01 June 2011

3.1. Issues fixed in Cloudstack 2.2.5

Table 4. Issues fixed in 2.2.5

Bug	Description
9873 ⁷	VMs are now assigned to the default security group
9891 ⁸	Upgrade from 2.2.3 no longer fails on usage_stats
Many	The upgrade from 2.2.1 to 2.2.2 followed by later version now works
9941 ⁹	After upgrade to 2.2.5, the UI will now show all available volumes
Many	The detection and use of cloud.version table now works correctly. This fixes many upgrade bugs
8990 ¹⁰	Upgrade when Augeas 0.8 is installed now works

foo

3.2. New features in Cloudstack 2.2.5

There are no new features in 2.2.5

⁴ http://bugs.cloud.com/show_bug.cgi?id=10091

⁵ http://bugs.cloud.com/show_bug.cgi?id=10094

⁶ http://bugs.cloud.com/show_bug.cgi?id=9896

⁷ http://bugs.cloud.com/show_bug.cgi?id=9873

⁸ http://bugs.cloud.com/show_bug.cgi?id=9891

⁹ http://bugs.cloud.com/show_bug.cgi?id=9941

¹⁰ http://bugs.cloud.com/show_bug.cgi?id=8990

4. Cloudstack 2.2.4

Cloudstack 2.2.4 was released on 16 May 2011



Important

The behavior of storage allocation is more conservative in 2.2.4 than in 2.1.7 and prior releases or 2.2.0-2.2.3. Cloudstack will no longer create volumes on primary storage resources that have a storage percentage used higher than that defined by global configuration. Previously Cloudstack would allocate a primary storage resource up to 100% full. This space reservation is required as a fix to cases where snapshots of VMs could not be taken when the storage had been allocated to 100% full. The use of a threshold setting allows the administrator to reserve space for snapshots in progress for existing volumes. Deployments with primary storage that is close to full should examine the value of this parameter before upgrading. If all primary storage resources are more full than no new volumes can be created after upgrade.

4.1. Issues fixed in Cloudstack 2.2.4

Table 5. Issues fixed in 2.2.4

Bug	Description
9702 ¹¹	KVM: VM live migration will work reliably
9152 ¹²	Space is reserved on each primary storage volume for snapshots.
8103 ¹³	Attempts to remove a host with running VMs will correctly fail.
8816 ¹⁴	Listing system VM IP addresses will distinguish from .
8898 ¹⁵	The service offering upgrade option is now always shown to users. Attempts to upgrade the service offering for a running VM will fail with a clear error message.
9079 ¹⁶	Login problems with Safari have been fixed.
9087 ¹⁷	Attach/detach of a data disk in a multi-cluster deployment will work correctly. Previously the data disk could be deleted.
9140 ¹⁸	ISOs that are not bootable may now be uploaded
8955 ¹⁹	KVM: Userdata and instance metadata now work correctly.
8666 ²⁰	The guest network CIDR must be a RFC1918 address.

¹¹ http://bugs.cloud.com/show_bug.cgi?id=9702

¹² http://bugs.cloud.com/show_bug.cgi?id=9152

¹³ http://bugs.cloud.com/show_bug.cgi?id=8103

¹⁴ http://bugs.cloud.com/show_bug.cgi?id=8816

¹⁵ http://bugs.cloud.com/show_bug.cgi?id=8898

¹⁶ http://bugs.cloud.com/show_bug.cgi?id=9079

¹⁷ http://bugs.cloud.com/show_bug.cgi?id=9087

¹⁸ http://bugs.cloud.com/show_bug.cgi?id=9140

¹⁹ http://bugs.cloud.com/show_bug.cgi?id=8955

²⁰ http://bugs.cloud.com/show_bug.cgi?id=8666

Bug	Description
8959 ²¹	Port forwarding with the virtual router will now work with IP addresses from multiple VLANs
9106 ²²	The VM's metered running time is now correct
9369 ²³	IP address releases will not intermittently fail
9370 ²⁴	XenServer: the network throttling values are now correctly applied
8802 ²⁵	Windows password management scripts work correctly in the presence of external network elements
8911 ²⁶	A security vulnerability that allowed download of some files from the console proxy VM has been fixed
8954 ²⁷	End users are no longer allowed access to the console of their virtual router
9130 ²⁸	Security groups are no longer present in the UI in Advanced Networking zones
9192 ²⁹	Performance of the listVirtualMachines API call in the presence of many VMs has been significantly improved.
9663 ³⁰	A security issue that could allow end users to snapshot another user's volume has been fixed
9243 ³¹	XenServer: a stop VM request will forcefully stop the VM even if qemu has crashed on the XenServer host
7723 ³²	Host tagging now works correctly
7935 ³³	Usage clients have a path to determining the OS type of a guest booted from a blank VM.
8532 ³⁴	KVM: HA failover works correctly with OCFS2.
8714 ³⁵	Users may again create four parallel snapshot schedules
9180 ³⁶	XenServer: local storage now works correctly
9539 ³⁷	CPU over-provisioning now works correctly
8897 ³⁸	Zone delete now works correctly
8902 ³⁹	Cluster delete now works correctly.

²¹ http://bugs.cloud.com/show_bug.cgi?id=8959

²² http://bugs.cloud.com/show_bug.cgi?id=9106

²³ http://bugs.cloud.com/show_bug.cgi?id=9369

²⁴ http://bugs.cloud.com/show_bug.cgi?id=9370

²⁵ http://bugs.cloud.com/show_bug.cgi?id=8802

²⁶ http://bugs.cloud.com/show_bug.cgi?id=8911

²⁷ http://bugs.cloud.com/show_bug.cgi?id=8954

²⁸ http://bugs.cloud.com/show_bug.cgi?id=9130

²⁹ http://bugs.cloud.com/show_bug.cgi?id=9192

³⁰ http://bugs.cloud.com/show_bug.cgi?id=9663

³¹ http://bugs.cloud.com/show_bug.cgi?id=9243

³² http://bugs.cloud.com/show_bug.cgi?id=7723

³³ http://bugs.cloud.com/show_bug.cgi?id=7935

³⁴ http://bugs.cloud.com/show_bug.cgi?id=8532

³⁵ http://bugs.cloud.com/show_bug.cgi?id=8714

³⁶ http://bugs.cloud.com/show_bug.cgi?id=9180

³⁷ http://bugs.cloud.com/show_bug.cgi?id=9539

³⁸ http://bugs.cloud.com/show_bug.cgi?id=8897

³⁹ http://bugs.cloud.com/show_bug.cgi?id=8902

Bug	Description
Many	Several bugs around resource limit tracking have been fixed.
9093 ⁴⁰	Firefox 4 and IE 9 are supported browsers

4.2. New features in Cloudstack 2.2.4

Table 6. New features in 2.2.4

Bug	Description
7424 ⁴¹	Network throttling may be disabled altogether.
8932 ⁴²	The listTemplates API call will return an md5sum of the template.
3316 ⁴³	Virtual machines may be manually live-migrated by the administrator. The administrator may pick a VM and the host that the VM should be placed on.
8831 ⁴⁴	A network may be dedicated to a domain. Only users in that domain and its children will have access to the network.
8945 ⁴⁵	The global configuration parameter default.page.limit has been added. This sets the maximum number of results that will be returned by list* API calls. Default is 500.
9098 ⁴⁶	The UI has been changed to provide clearer monitoring of snapshot progress.
9635 ⁴⁷	The Java process's has been increased from 28 MB to 1024 MB

5. Cloudstack 2.2.3

Cloudstack 2.2.3 was released on 16 June 2011

5.1. Issues fixed in Cloudstack 2.2.3

Table 7. Issues fixed in 2.2.3

Bug	Description
8977 ⁴⁸	The default route for the secondary storage VM will correctly use the public network gateway.

foo

5.2. New features in Cloudstack 2.2.3

There are no new features in 2.2.3

⁴⁰ http://bugs.cloud.com/show_bug.cgi?id=9093

⁴¹ http://bugs.cloud.com/show_bug.cgi?id=7424

⁴² http://bugs.cloud.com/show_bug.cgi?id=8932

⁴³ http://bugs.cloud.com/show_bug.cgi?id=3316

⁴⁴ http://bugs.cloud.com/show_bug.cgi?id=8831

⁴⁵ http://bugs.cloud.com/show_bug.cgi?id=8945

⁴⁶ http://bugs.cloud.com/show_bug.cgi?id=9098

⁴⁷ http://bugs.cloud.com/show_bug.cgi?id=9635

⁴⁸ http://bugs.cloud.com/show_bug.cgi?id=8977

6. Cloudstack 222

Cloudstack 222 was released on 15 March 2011

6.1. Issues fixed in Cloudstack 2.2.2

Table 8. Issues fixed in 2.2.2

Bug	Description
8614 ⁴⁹	The storage allocator now functions correctly.
8865 ⁵⁰	It is now possible to start VMs whose networks were shutdown when using 2.2.0.
8635 ⁵¹	Direct network VM creation will work correctly in the CloudStack UI wizard.
8514 ⁵²	The OS type dropdown is correctly populated when creating a template from a volume.
8892 ⁵³	The DNS server for guests in direct tagged networks is now set properly.
8912 ⁵⁴	Password management scripts now work correctly with multiple NIC guests in all cases as well as external firewall configurations.
8604 ⁵⁵	Adding a second management server works reliably.
7935 ⁵⁶	There is a mechanism to bill differently for guests of different hypervisor type when the guests are started from ISO images.
7762 ⁵⁷	The snapshot and volume copy logic for vSphere hosts has been moved into the Secondary Storage VM.
8806 ⁵⁸	The set of hypervisors present in the cloud is now represented correctly by the API and UI.
Many	Several bugs in HA functionality across hypervisors and storage types have been fixed.
Many	Several bugs in internationalization and localization have been fixed.
8632 ⁵⁹	The dashboard view of domain administrators is now correct.
8104 ⁶⁰	If the secondary storage VM is down, booting a guest off ISO will work.
Many	Several logging improvements have been made. Logging is less verbose in some cases and more descriptive in others.

⁴⁹ http://bugs.cloud.com/show_bug.cgi?id=8614

⁵⁰ http://bugs.cloud.com/show_bug.cgi?id=8865

⁵¹ http://bugs.cloud.com/show_bug.cgi?id=8635

⁵² http://bugs.cloud.com/show_bug.cgi?id=8514

⁵³ http://bugs.cloud.com/show_bug.cgi?id=8892

⁵⁴ http://bugs.cloud.com/show_bug.cgi?id=8912

⁵⁵ http://bugs.cloud.com/show_bug.cgi?id=8604

⁵⁶ http://bugs.cloud.com/show_bug.cgi?id=7935

⁵⁷ http://bugs.cloud.com/show_bug.cgi?id=7762

⁵⁸ http://bugs.cloud.com/show_bug.cgi?id=8806

⁵⁹ http://bugs.cloud.com/show_bug.cgi?id=8632

⁶⁰ http://bugs.cloud.com/show_bug.cgi?id=8104

6.2. New features in Cloudstack 2.2.2

Table 9. New features in 2.2.2

Bug	Description
8349 ⁶¹	Routers may be listed by network ID.
8250 ⁶²	KVM: Security groups will work with direct tagged networks.
8664 ⁶³	A maximum page size is enforced. This limits server memory impact from large queries.
8263 ⁶⁴	A domain specific zone may have its scope adjusted to be public.

7. Cloudstack 2.2.1

Cloudstack 2.2.1 was released on 16 June 2011

7.1. Issues fixed in Cloudstack 2.2.1

Table 10. Issues fixed in 2.2.1

Bug	Description
8574 ⁶⁵	Account deletion could fail leaving resources orphaned.
8631 ⁶⁶	The DHCP server would not start in the case of external firewall integration.

7.2. New features in Cloudstack 2.2.1

There are no new features in Cloudstack 2.2.1

8. Cloudstack 2.2.0

Cloudstack 2.2.0 was not publicly released

8.1. New features in Cloudstack 2.2.0

Table 11. New features in 2.2.0

Bug	Description
591 ⁶⁷	Virtual Machines may have multiple NICs.
6802 ⁶⁸	Service offerings and disk offerings may be made private to a domain.
1974 ⁶⁹	The Virtual Router memory may be changed.

⁶¹ http://bugs.cloud.com/show_bug.cgi?id=8349

⁶² http://bugs.cloud.com/show_bug.cgi?id=8250

⁶³ http://bugs.cloud.com/show_bug.cgi?id=8664

⁶⁴ http://bugs.cloud.com/show_bug.cgi?id=8263

⁶⁵ http://bugs.cloud.com/show_bug.cgi?id=8574

⁶⁶ http://bugs.cloud.com/show_bug.cgi?id=8631

⁶⁷ http://bugs.cloud.com/show_bug.cgi?id=591

⁶⁸ http://bugs.cloud.com/show_bug.cgi?id=6802

⁶⁹ http://bugs.cloud.com/show_bug.cgi?id=1974

Bug	Description
2461 ⁷⁰	A user may VPN into their virtual network using IPSec/L2TP.
3120 ⁷¹	1:1 NAT of public IPs is possible.
3346 ⁷²	There is a command line interface (CLI) tool for the CloudStack. It is called cloudadm. This tool is in a beta state and its syntax may change substantially in future releases.
3386 ⁷³	Zones may be dedicated to domains. This allows for hardware dedication and a higher level of isolation.
3676 ⁷⁴	Multiple hypervisor types may exist in the same CloudStack cloud. An individual cluster consists of nodes of the same hypervisor type.
4286 ⁷⁵	Templates may be extracted via HTTP download or HTTP POST.
4774 ⁷⁶	ISOs may be public.
4836 ⁷⁷	Limits may be set on a domain basis. This allows an administrator to prescribe aggregate limits that apply to a set of accounts.
5060 ⁷⁸	Disk offerings can have arbitrary sizes.
5147 ⁷⁹	Primary storage devices may be placed into a maintenance mode. Then they may be taken offline and later returned to service.
5190 ⁸⁰ , 5191 ⁸¹	The URL used by the Console Proxy code and its associated SSL certificate may be configured and changed.
5559 ⁸²	Snapshots are supported for local disk storage.
5592 ⁸³	The DNS domain for guests may be configured.
5688 ⁸⁴	KVM CloudStack nodes now support VLANs for isolation.
5784 ⁸⁵	KVM CloudStack now supports snapshots.
5800 ⁸⁶	KVM CloudStack supports cluster functionality, analogous to vSphere and XenServer.
6103 ⁸⁷	The "look back period" for which the system considers a stopped VM to still be consuming resources is configurable.

⁷⁰ http://bugs.cloud.com/show_bug.cgi?id=2461

⁷¹ http://bugs.cloud.com/show_bug.cgi?id=3120

⁷² http://bugs.cloud.com/show_bug.cgi?id=3346

⁷³ http://bugs.cloud.com/show_bug.cgi?id=3386

⁷⁴ http://bugs.cloud.com/show_bug.cgi?id=3676

⁷⁵ http://bugs.cloud.com/show_bug.cgi?id=4286

⁷⁶ http://bugs.cloud.com/show_bug.cgi?id=4774

⁷⁷ http://bugs.cloud.com/show_bug.cgi?id=4836

⁷⁸ http://bugs.cloud.com/show_bug.cgi?id=5060

⁷⁹ http://bugs.cloud.com/show_bug.cgi?id=5147

⁸⁰ http://bugs.cloud.com/show_bug.cgi?id=5190

⁸¹ http://bugs.cloud.com/show_bug.cgi?id=5191

⁸² http://bugs.cloud.com/show_bug.cgi?id=5559

⁸³ http://bugs.cloud.com/show_bug.cgi?id=5592

⁸⁴ http://bugs.cloud.com/show_bug.cgi?id=5688

⁸⁵ http://bugs.cloud.com/show_bug.cgi?id=5784

⁸⁶ http://bugs.cloud.com/show_bug.cgi?id=5800

⁸⁷ http://bugs.cloud.com/show_bug.cgi?id=6103

Bug	Description
6994 ⁸⁸	XenServer: administrators may add pre-existing SRs as primary storage to CloudStack. This enables support for FiberChannel storage.
7871 ⁸⁹	KVM: Shared mountpoint storage is available. This enables the use of clustered filesystems like OCFS2 as primary storage.
Many	There have been many API enhancements, including the ability to show the lineage of a volume, show a volume's attachment time, determine a cloud's capabilities, find the OS type of a virtual machine, search for deleted templates, and more.

9. API Changes

The API has had several enhancements for 2.2. There are a large number of small changes to the API. The API was significantly improved and made more consistent. As a result most applications developed against the API will need to be adapted to be compatible with 2.2.

2.2 API documentation is available at:

Global Admin: http://download.cloud.com/releases/2.2.0/api/TOC_Global_Admin.html

Domain Admin: http://download.cloud.com/releases/2.2.0/api/TOC_Domain_Admin.html

User: http://download.cloud.com/releases/2.2.0/api/TOC_User.html

10. Known Issues

Table 12. Known issues

Bug	Description
8105 ⁹⁰	KVM: NFS v4 for primary storage may not work. Use v3.
8076 ⁹¹	KVM: Unable to process quoted strings in ifcfg-eth0 when setting up the Cloudstack Agent
8486 ⁹²	XenServer: putting a host into maintenance mode will fail if some guests do not have PV drivers.
5573 ⁹³	KVM: editing the name of a Pod will revert VMs from starting.
many	The internationalization feature of the CloudStack is immature. Some strings have not been extracted and will still render in English.

⁸⁸ http://bugs.cloud.com/show_bug.cgi?id=6994

⁸⁹ http://bugs.cloud.com/show_bug.cgi?id=7871

⁹⁰ http://bugs.cloud.com/show_bug.cgi?id=8105

⁹¹ http://bugs.cloud.com/show_bug.cgi?id=8076

⁹² http://bugs.cloud.com/show_bug.cgi?id=8486

⁹³ http://bugs.cloud.com/show_bug.cgi?id=5573

11. Upgrade



Warning

The CloudStack upgrade does not preserve UI customizations. Customers with customizations should save altered files before applying the upgrade. Then create a script that will re-apply the changes after the upgrade. Any customizations should be tested on a staging environment prior to upgrade to a new version.

11.1. Upgrade from 2.2.0, 2.2.1, 2.2.2, 2.2.3, 2.2.4 or 2.2.5 to 2.2.6

Perform the following to upgrade from 2.2.0, 2.2.1, 2.2.2, 2.2.3, 2.2.4 or 2.2.5 to 2.2.6.

1. Stop the Management Servers. Run this on all Management Server hosts.

```
# service cloud-management stop
```

2. Untar the tgz download and cd into the resulting directory. Then update the software on each Management Server

```
# ./install.sh
```

Choose "U" to update packages.

3. Start the management server



Important

If you have multiple management servers, start only one at this point.

```
# service cloud-management start
```

4. Wait until the UI is accessible



Note

If you have additional management servers you may start them after the UI is accessible on the first management server.

11.1.1. KVM Hosts

Additional steps are required for each KVM host. These steps should be performed after the after the Management server upgrade above. These steps will not impact running guests in the cloud. These steps are required only for clouds using KVM as the hypervisor and only on the KVM hosts.

On each KVM host:

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1. Copy the install tarball to each host, untar it, and cd into the resulting directory.
2. Stop the running agent.

```
# service cloud-agent stop
```

3. Update the agent software.

```
# ./install.sh
```

Choose "U" to update the packages.

4. Start the agent.

```
# service cloud-agent start
```

A. Revision History

Revision 0-0 Fri Jun 17 2011

Initial creation of book by publican

Dude McPants Dude.McPants@example.com