Sangfor aCloud
Version Release Notes
Version 6.0.0

Change Log

Date	Change Description
Nov 18, 2019	aCloud 6.0.0 Version release notes.

CONTENT

Chapter 1 What is New?

[New] Memory Overcommitment

- Support memory overcommitment.
- Support separating computational memory and memory for system services.

[New] System Disk Replacement

- Support obtaining system disk lifetime.
- Support auto backing up system disk configuration file.
- Support replacing host system disk in cluster.
- Support replacing host system disk in single-node environment.

[New] Auto vmTools Installation

- Support auto installing vmTools on VMware virtual machine which is migrated to aCloud platform.
- Support auto installing vmTools on VMware virtual machine which is recovered to aCloud platform.

[New] UPS-Powered VM Shut down

- Supporting adding, attaching UPS to node, and configuring UPS-powered VM shutdown.
- Support UPS to provide power to virtual machines in case of power outage to protect VMs and auto shutting down them when UPS runs lows on battery.

[New] Self adaptive optimization

- Improve database performance based on performance optimization model.

[Enhanced] Scheduled Backup Policy

- Backup Retention Settings: Support cleaning up backups on a daily, weekly, or monthly basis. Retention period can be customized.
- Periodic full backup: Support enabling periodic full backup in backup policy so that the system will take full backup automatically according to related settings.
- Archive backups to other datastores: Support archiving backups preserved for specified period to another datastore and compressing archives. Each archive can be recovered.

[Enhanced] Interface Reuse

- Support managing physical interfaces centrally.
- Support reusing an interface as management interface, overlay network interface and edge-connected interface.
- Support active/standby mode for aggregate interface.
- Optimize interface aggregation.

Chapter 2 Resolved Issues

[Fixed] Snapshot issue (Severity: High)

When virtual machine having high IO pressure, snapshot operation may cause the virtual machine stuck in a black screen.

[Fixed] VS initialization (Severity: High)

When creating a virtual storage volume, if the number of disks is too large (more than 8 disks), it may result in failure to obtain information.

[Fixed] Huge page memory (Severity: High)

The redhat type guest VM may restart during the page defragment process when huge page memory enabled.

[Fixed] Task daemon issue (Severity: High)

aCloud task daemon show waiting, while aCMP daemon show failed.

[Fixed] System time (Severity: High)

Only can adjust system time from 2000-2020 years.

[Fixed] VM profile configuration (Severity: High)

When editing VM profile, it takes long time to load the interface.

[Fixed] VS speed test (Severity: High)

Virtual storage IO speed testing slow, there will be cases where the underlying IO does not match.

[Fixed] LUN connection issue (Severity: High)

When connecting to high number of LUN storage (15 above), It might have IO error and unable to found LUN when scanning the disk.

Chapter 3 Upgrade Instruction

2.1 Confirmation Before Upgrade

- Support upgrade from the following earlier versions:

5.3.00_EN_B
5.3.01_EN
5.3.11_EN_R1
5.4.2_EN_B
5.4.3_EN_B
5.8.2_EN_B
5.8.2_EN
5.8.3_EN_B
5.8.3_EN
5.8.5_EN_B
5.8.5_EN
5.8.6_EN_B
5.8.6_EN
5.8.7_R1_EN_B

5.8.7_R1_EN
5.8.8_EN_B
5.8.8_EN
5.8.8_R1_EN
6.0.0_EN

Notes:

1. Support upgrade from versions installed with any service pack but not support upgrade from custom version.
2. To upgrade the version earlier than 5.8.3_EN to this version, it should be upgraded to the version 5.8.3_EN or a later version first.
3. It is required to install the package for pre-upgrade check for the versions earlier than the version 6.0.0_EN.

2.2 Upgrade Limitations

1. Before upgrade to this version, the version earlier than 5.8.3._EN should be upgraded to a later version first.
2. As a cluster scales out, converting configuration files takes longer, so does the upgrade process. For reference: upgrading a 11-node cluster running 1000 virtual machines may take 30 minutes while upgrading a 2-node cluster running 1000+ virtual machines (virtual storage: 6.4 TB) may just take 14 minutes.
3. After upgrade, it is required to reboot the device which has graphics card inserted but has not have IOMMU enabled.

Immediate Upgrade of Configurations, Logs and Data
Yes

Reboot Required After Upgrade
Reboot is required after upgrading from the version 5.8.5_EN and all R versions and earlier versions while it is not required after upgrading from the following versions: 5.8.6_EN, 5.8.7R1_EN, 5.8.8_EN, 5.8.8R1_EN

Time Taken
40 minutes

Upgrade Recommendations
Install the package for pre-upgrade check before upgrade. Make sure there are no hardware issues and then perform upgrade.

2.3 Upgrade Recommendations

- Install the package for pre-upgrade check before upgrade. Make sure there are no hardware issues and then perform upgrade.
- Upgrade aCloud to latest version first before upgrade aCMP. Make sure aCloud and aCMP version is compatible.

2.4 Upgrade Procedure

1. Install the package for pre-upgrade check.
2. Solve the detected issues.
3. Check the version to be upgraded. If it is earlier than 5.8.6_EN, shut down network devices and virtual machines, which is not required after upgrading from the versions 5.8.6_EN and 5.8.7R1_EN.
4. Make sure version of the update package to be installed is aCloud6.0.0_EN official version.
5. Check the environment for upgrade.
6. Load the update package of aCloud6.0.0_EN version.
7. For hot upgrade, exit upgrade after upgrade finishes. For cold upgrade, restarting device is required to finish the upgrade.

2.5 Handling of Upgrade Failure

Scenario 1: There is virtual machine or virtual network device which has not been shut down.

Solution: Shut down virtual machines and virtual network devices manually.

Scenario 2: Network is not stable due to reboot or unstable cluster.

Solution: Wait for the cluster or network to become stable and then perform upgrade again.

Chapter 4 Precautions

1. Recommend perform database perform testing with hosts with RAM **greater than 256GB**.
2. Memory over-commitment

- It's not recommended unless necessary, because memory over-commitment could have negative impact on performance.
- When the actual consumed memory of VMs is nearing the physical memory of the host, memory swap will happen and the performance of VMs will be degraded. When SWAP is used up, low priority VMs will be killed off.

3. When migrating/restoring VMware VMs to aCloud, IP addresses of the VMs can be automatically obtained as long as the source VMs are installed with VMware Tools.
4. Live upgrade is supported by 5.8.6 and later versions.