Alibaba Cloud
Cloud Monitor

FAQ

Issue: 20190701

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Generic conventions

Table -1: Style conventions

Style	Description	Example
	This warning information indicates a situation that will cause major system changes, faults, physical injuries, and other adverse results.	 Danger: Resetting will result in the loss of user configuration data.
	This warning information indicates a situation that may cause major system changes, faults, physical injuries, and other adverse results.	 Warning: Restarting will cause business interruption. About 10 minutes are required to restore business.
	This indicates warning information, supplementary instructions, and other content that the user must understand.	 Notice: Take the necessary precautions to save exported data containing sensitive information.
	This indicates supplemental instructions, best practices, tips, and other content that is good to know for the user.	 Note: You can use Ctrl + A to select all files.
>	Multi-level menu cascade.	Settings > Network > Set network type
Bold	It is used for buttons, menus , page names, and other UI elements.	Click OK.
`Courier font`	It is used for commands.	Run the `cd /d C:/windows` command to enter the Windows system folder.
Italics	It is used for parameters and variables.	`bae log list --instanceid` *Instance_ID*
[] or [a|b]	It indicates that it is a optional value, and only one item can be selected.	`ipconfig` *[-all|-t]*

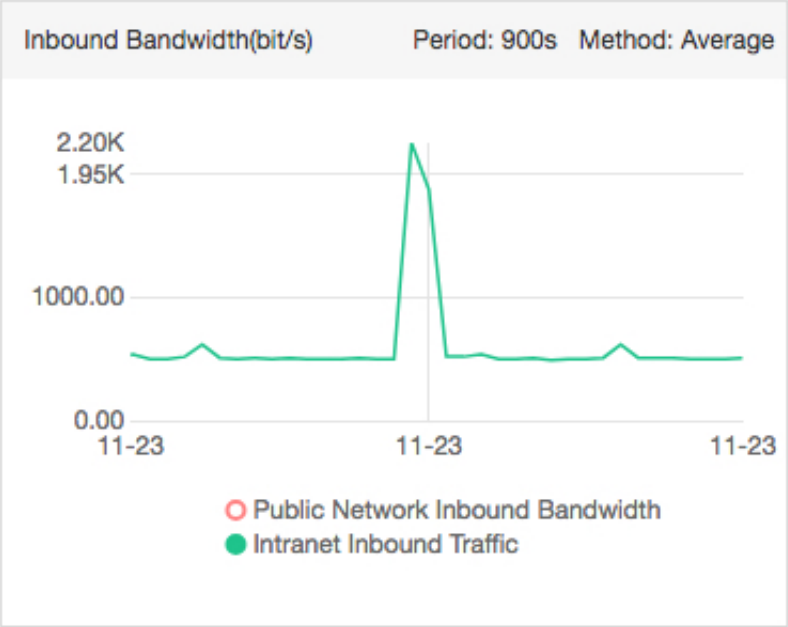
Style	Description	Example
{} or {a|b}	It indicates that it is a required value, and only one item can be selected.	`swich {stand | slave}`

Contents

1 Monitoring

1.1 Why does my inbound traffic on the intranet unexpectedly spike?

In the CloudMonitor console, you may see a sudden spike in inbound traffic on the intranet, as shown in the following figure.



Generally, inbound traffic on the intranet tends to be relatively low, except for when SLB instances are used because SLB instances communicate with ECS instances on the intranet. Therefore, unexpected spikes in intranet traffic are usually caused by ECS instances copying data on the intranet. However, another common cause of intranet traffic spikes are virus attacks, which result in a spike of packet forwarding on the intranet. If a spike is caused by this particular issue, we recommend that you further monitor the specific processes occupying intranet traffic to revolve this problem.

If you are running Linux on your instance, you can install NetHogs on the system to view the specific processes occupying traffic.

```
# yum   install   nethogs   Install   NetHogs .
```

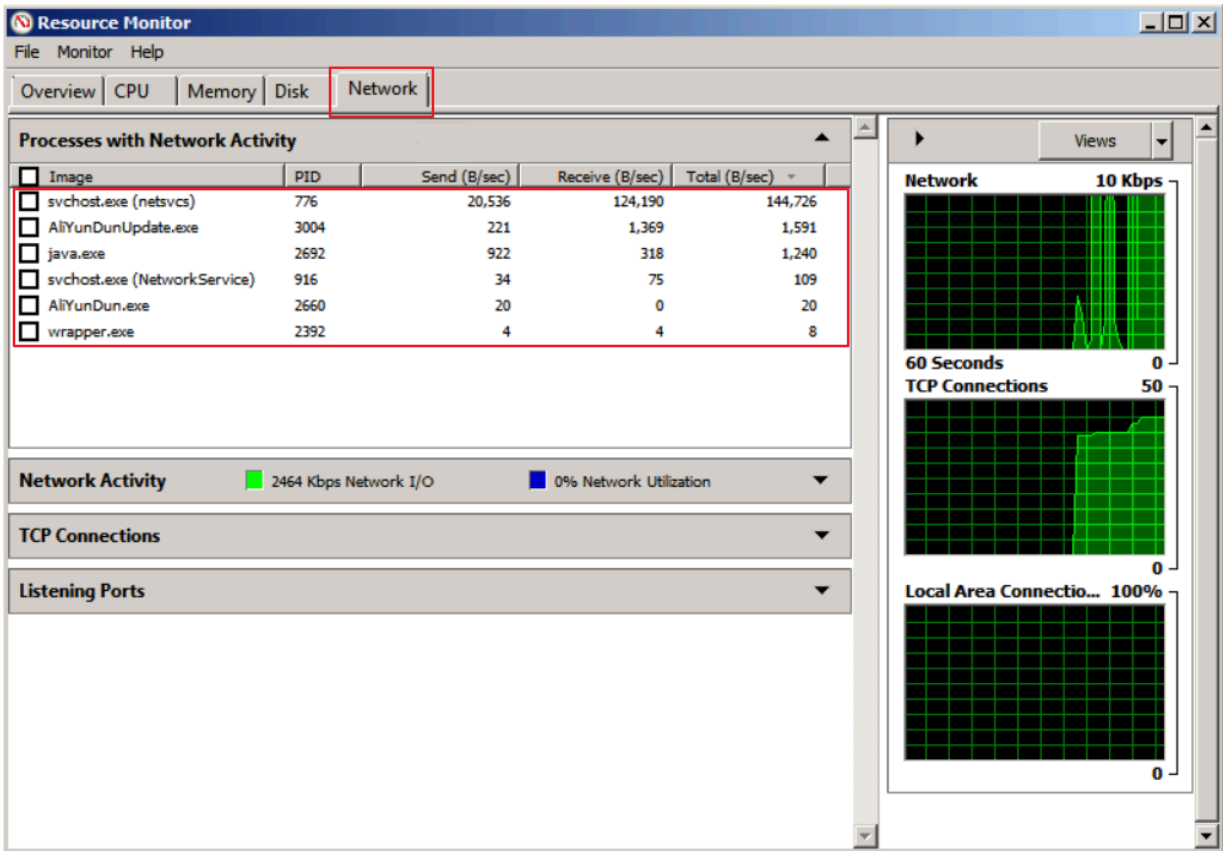
```
# nethogs   eth0   View   the   specific   traffic   usage   of   the
   intranet   NIC .
```

```
NetHogs version 0.8.0

  PID USER     PROGRAM
23701 root     /usr/sbin/sshd
23696 sshd     sshd: [net]
?     root     unknown TCP
```

By using NetHogs, you can view intranet bandwidth usage by program and pinpoint which process or processes are occupying the intranet bandwidth.

If you are running Windows Server 2008 or later on your instance, you can go to the Resource Monitor to see the process or processes that occupy the bandwidth. Right-click on the instance's taskbar and select Start Task Manager > Resource Monitor > Network. Then, you can see the specific processes that are occupying network traffic.



1.2 What are the custom monitoring SDKs?

Currently, two versions of the custom monitoring SDK are available.

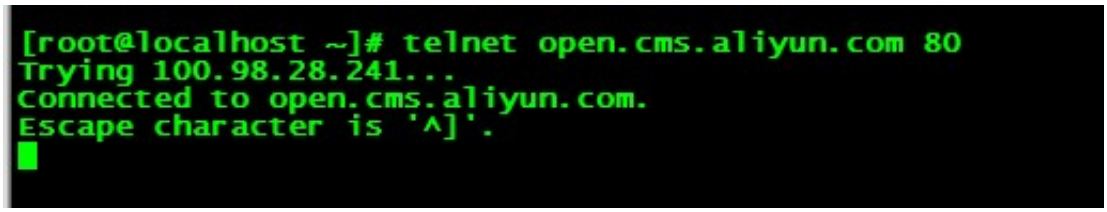
- Custom monitoring SDK (Python): *cms_post.py*
- Custom monitoring SDK (Bash): *cms_post.sh*

1.3 What does status code 610 mean in CloudMonitor?

Status code 610 indicates an HTTP connection timeout. These connection timeouts occur when no response packet is returned within five seconds after CloudMonitor sends an HTTP request. If connection timeouts are frequent, we recommend that you increase the value of retry times and enable combined alarms for your corresponding alarm rules.

1.4 Why is CloudMonitor unavailable after the ECS intranet is disabled?

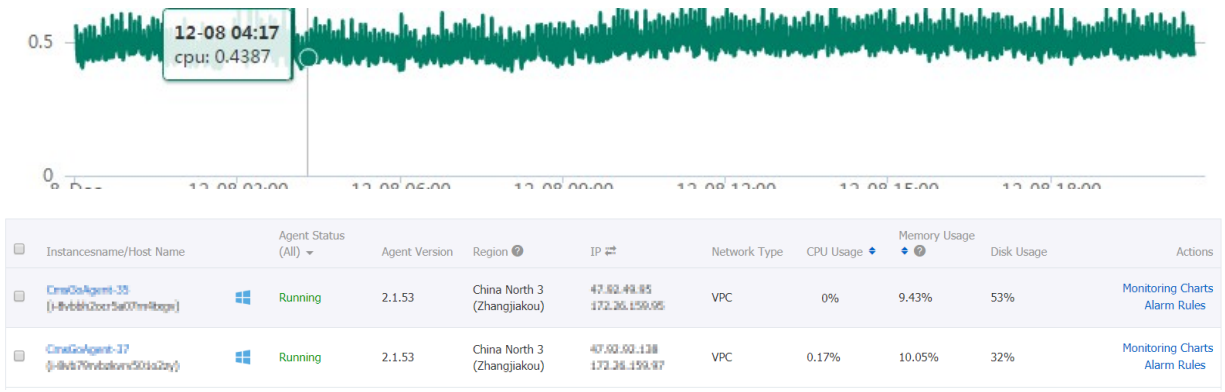
When the ECS intranet is disabled, the CloudMonitor service becomes unavailable because CloudMonitor resolves the communication address (open.cms.aliyun.com) on the intranet, and obtains data through the intranet. To use CloudMonitor properly, make sure that ECS can telnet port 80 of open.cms.aliyun.com, as shown in the following figure.



1.5 Why is my CPU usage in the CloudMonitor console displayed as 0%?

The reason that your CPU usage in the CloudMonitor console is displayed as 0% relates to how CPU usage is calculated in the CloudMonitor console. While ECS reports data to CloudMonitor once a minute, data shown in the console is the average of the previous five minutes of reported data. Therefore, if the average of every minute in the five minutes is less than 0.5%, then 0% will be displayed in the

CloudMonitor console. As such, even if your CPU usage may be displayed as 0% in the CloudMonitor console, this does not necessarily mean that your actual CPU usage is at 0%, as it is more likely the case that your CPU usage is relatively low. As shown in the following monitoring chart, actual CPU usage for this user is around 0.5%, despite 0% being displayed on the console.



Instancesname/Host Name	Agent Status (All)	Agent Version	Region	IP	Network Type	CPU Usage	Memory Usage	Disk Usage	Actions
[redacted]	Running	2.1.53	China North 3 (Zhangjiakou)	[redacted]	VPC	0%	9.43%	53%	Monitoring Charts Alarm Rules
[redacted]	Running	2.1.53	China North 3 (Zhangjiakou)	[redacted]	VPC	0.17%	10.05%	32%	Monitoring Charts Alarm Rules

1.6 How to install a CloudMonitor agent on multiple instances using PSSH?

PSSH is a Python-based application that allows you to execute SSH commands on up to 30 instances all at once. As such, you will be able to install software, kill a process, or download a file on multiple instances at the same time.

Install CloudMonitor Agent on a single instance

```
bash -c "$(curl http://cloudmonitor-agent.oss-cn-hangzhou.aliyuncs.com/release/install.sh)"
```

Install CloudMonitor Agent on multiple instances using PSSH

- Install PSSH.

  1. Install Python v2.4 or later.
  2. Install PSSH.

```
wget https :// pypi . python . org / packages / source / p / pssh / pssh - 2 . 3 . 1 . tar . gz
tar zxf pssh - 2 . 3 . 1 . tar . gz
cd pssh - 2 . 3 . 1
```

```
python setup . py install
```

- Configure the IP list and prepare the instances on which CloudMonitor will be installed.
  1. Configure the ip.txt file.
  2. The format is user@ip:port, one per line. By default, Port 22 is used if you do not specify a different port.
  3. The sudo permission is required for running commands.
  4. The password used for multiple instances must be the same for each instance. Alternatively, you can establish password-less SSH trust between instances.
- Execute parallel commands on multiple instances.

```
pssh -h ip . txt -A -i bash -c "$( curl http ://
cloudmonit or - agent . oss - cn - hangzhou . aliyuncs . com /
release / install . sh )"
```

  -H: Enter the host list file.

  -A: Enter the password you have set for the corresponding instances. If you established password-less SSH trust between instances, you do not need to enter this parameter.

  -I: Enter your command.
- Check whether CloudMonitor is installed.

```
pssh -h ip . txt -A -i "/ usr / local / cloudmonit or /
wrapper / bin / cloudmonit or . sh status "
```

1.7 Why is an error reported when I add a process for monitoring in CloudMonitor?

If the message Add Task Error: add error is shown when you add a process for monitoring, this means that Server Guard, which is the Alibaba Cloud Security client, is not installed on the server.

1.8 How is memory usage calculated in CloudMonitor?

Memory usage is calculated using the following formula in CloudMonitor:

(mem_total - (mem_free + mem_buffer + mem_cache))/mem_total

You can run the `cat / proc / meminfo` command to check `mem_free`, `mem_buffer`, and `mem_cache`. Consider the following example:

```
[ root @ localhost ~]# cat / proc / meminfo MemTotal : 8011936
 kBMemFree : 227336 kBBuffers : 277872 kBCached : 1451828 kB
```

For this example, memory is calculated with the following formula:

(8011936 - (227336 + 277872 + 1451828))/8011936

The result of this calculation is that memory usage is about 75%.

1.9 Why is the CPU monitoring value for my ECS Windows instances abnormal?

Internal damage to the Windows performance counter may cause the CPU monitoring value for your ECS Windows instances in the CloudMonitor to display as zero or a negative value even though actual CPU usage is a positive value and not at zero. This problem will only affect your Windows instances.

You can run the command, `typeperf \ Processor ( _Total )\% Processor Time`, to check whether the counter works properly. If the result is Error: no valid counter, then the counter has failed. You can run the command `lodctr / r` to fix the counter.

1.10 What should I do if a CloudMonitor agent is stopped?

A CloudMonitor agent is registered as stopped if the agent does not respond to a heartbeat for five times consecutively (or for 15 minutes, with each internal of its heartbeat mechanism lasting three minutes). The agent may have stopped due to one of the following reasons:

1. The agent fails to communicate with the CloudMonitor instance.
2. The CloudMonitor process has ended.

The agent fails to communicate with the CloudMonitor instance

If the agent ran normally before the exception occurred, you can reinstall it. To do so, follow these steps:

1. Log on to the *CloudMonitor Console*.
2. In the left-side navigation pane, select Host Monitoring.

3. Select the target host and click Install, or install the agent manually. For more information, see *Install CloudMonitor GoLang agent*.

The CloudMonitor process has ended

You can check CloudMonitor logs to verify whether the CloudMonitor process has ended, which is a problem that may be due to a bug. If you suspect a bug is the cause , we recommend that you open a ticket for consultation, but you should do so only after verifying that the CloudMonitor process has ended. Do so by following these steps:

1. Check CloudMonitor logs.
   - Linux: `/ usr / local / cloudmonit or / logs`
   - Windows: `C :/ Program Files / Alibaba / cloudmonit or / logs`
2. Check the agent running status.
   - Linux:

     ```
     sudo / usr / local / cloudmonit or / wrapper / bin /
     cloudmonit or . sh status
     ```

   - Windows:

     ```
     C :\" Program Files ( x86 )"\ Alibaba \ cloudmonit or \
     wrapper \ bin \ AppCommand . bat status
     ```

   In Linux, you can run the command `/ usr / local / cloudmonit or / wrapper / bin / cloudmonit or . sh` to view more details.

2 Operation

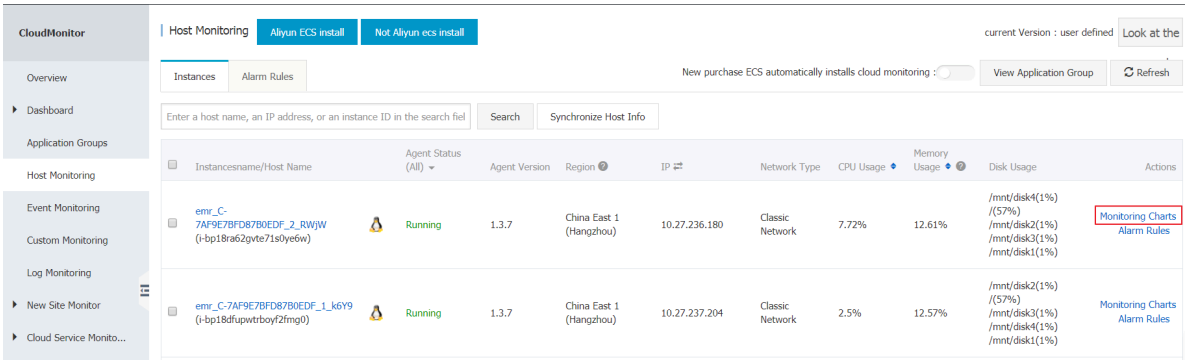
2.1 What is CloudMonitor and how do I use it?

CloudMonitor allows you to quickly learn the running status and performance figures for instances of the various Alibaba Cloud products and services you use. CloudMonitor supports site monitoring, cloud service monitoring, and custom monitoring. In the CloudMonitor console, you can view charts that show data taken from your current services so that you can gain a clearer picture of your service operations. At the same time, you can also set alarm rules and manage the metrics you use to monitor your instances and learn about faulty instances in a timely manner.

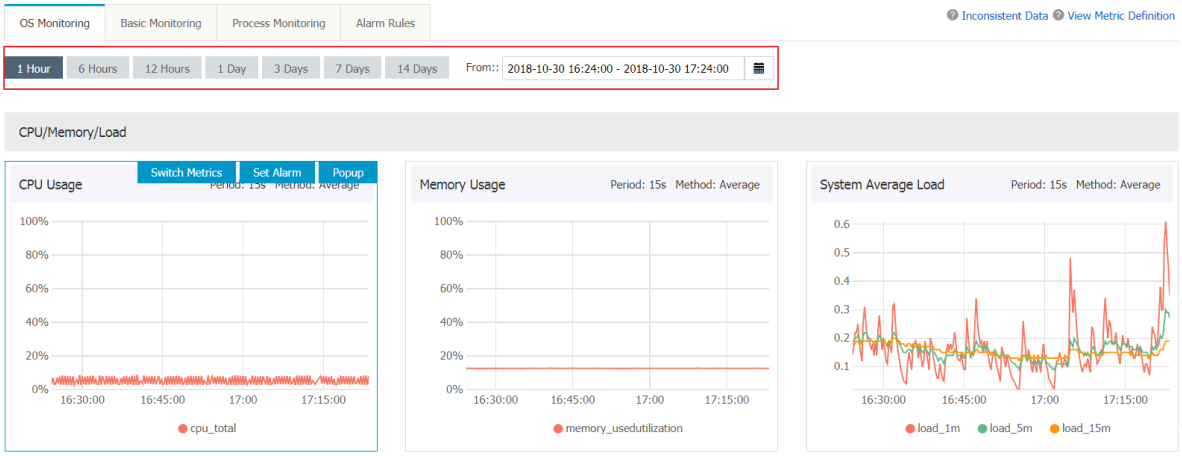
2.2 How do I view the monitoring data of a specified date in the CloudMonitor console?

To view the monitoring data of a specified date in the CloudMonitor console, follow these steps:

1. Log on to the *CloudMonitor Console*.
2. In the left-side navigation pane, click the type of monitoring data you want to view, for example, Host Monitoring.
3. Click Monitoring Charts.



4. Choose a duration and select a date to view monitoring data for the period you select.



Note:

CloudMonitor only supports querying the monitoring data of the last 30 days.

2.3 What is the inode usage metric in CloudMonitor for?

Linux and Unix systems use inode numbers, instead of file names, to identify files. In other words, files names are simply aliases of inode numbers used for the convenience of identification. When you open a file, the process involved in the system is as follows:

1. The system locates the inode number that corresponds to the file name.
2. The system retrieves inode information using this inode number.
3. The system locates the block where the file data is stored based on the inode information, and then reads the data.

Because every file must have an inode, a potential issue is that all of the inodes of a hard disk may be already used even before this disk is not completely full. In such case, it is not possible to create a new file on the hard disk. Therefore, the purpose of the inode usage metric is to monitor inode usage to manage and avoid issues like the preceding one.

To learn more about inode usage, you can use the following commands:

- To view the total number of inodes for each hard disk partition and the number already used, you can use `df -i`.

- To view the size of each inode node, you can use `sudo dumpe2fs -h /dev/hda | grep "Inode size"`.

2.4 How has event monitoring been upgraded?

Upgrades

Event monitoring has been upgraded to be fully integrated with event alarms, which were originally separate from event monitoring. This change allows for a unified area for both event queries and event alarms.

Upgrade details

1. Event alarms have now migrated to the Event Monitoring page of the console. Originally, event alarms were set on the Create Alarm Rule page. This change has the effect that you can no longer create the following event alarms by using alarm templates: CloudMonitor agent no heartbeat alarms; RDS, Redis, and Memcache faults; RDS, Redis, and Memcache master/slave switchover alarms; MongoDB and Container Service status and node exception alarms; RDS and Redis synchronization exception alarms for disaster recovery.
2. Application groups support event alarm subscription notifications. When you create an application group, you can enable this function. After you enable this feature, you will receive notifications for critical-level and warning-level events for the resources in your application group.
3. This upgrade does not affect any existing event alarm rules. However, you cannot modify these rules after upgrading. To make modifications, you need to create new alarm rules in the event monitoring console.

The preceding upgrade does not affect your online services and existing alarm configurations.

For more information about the event monitoring feature of CloudMonitor, see *Cloud product system event monitoring* and *Use system event alarms*.