

Alibaba Cloud

CloudMonitor Product Introduction

Document Version: 20220507

Legal disclaimer

Alibaba Cloud reminds you to carefully read and fully understand the terms and conditions of this legal disclaimer before you read or use this document. If you have read or used this document, it shall be deemed as your total acceptance of this legal disclaimer.

1. You shall download and obtain this document from the Alibaba Cloud website or other Alibaba Cloud-authorized channels, and use this document for your own legal business activities only. The content of this document is considered confidential information of Alibaba Cloud. You shall strictly abide by the confidentiality obligations. No part of this document shall be disclosed or provided to any third party for use without the prior written consent of Alibaba Cloud.
2. No part of this document shall be excerpted, translated, reproduced, transmitted, or disseminated by any organization, company or individual in any form or by any means without the prior written consent of Alibaba Cloud.
3. The content of this document may be changed because of product version upgrade, adjustment, or other reasons. Alibaba Cloud reserves the right to modify the content of this document without notice and an updated version of this document will be released through Alibaba Cloud-authorized channels from time to time. You should pay attention to the version changes of this document as they occur and download and obtain the most up-to-date version of this document from Alibaba Cloud-authorized channels.
4. This document serves only as a reference guide for your use of Alibaba Cloud products and services. Alibaba Cloud provides this document based on the "status quo", "being defective", and "existing functions" of its products and services. Alibaba Cloud makes every effort to provide relevant operational guidance based on existing technologies. However, Alibaba Cloud hereby makes a clear statement that it in no way guarantees the accuracy, integrity, applicability, and reliability of the content of this document, either explicitly or implicitly. Alibaba Cloud shall not take legal responsibility for any errors or lost profits incurred by any organization, company, or individual arising from download, use, or trust in this document. Alibaba Cloud shall not, under any circumstances, take responsibility for any indirect, consequential, punitive, contingent, special, or punitive damages, including lost profits arising from the use or trust in this document (even if Alibaba Cloud has been notified of the possibility of such a loss).
5. By law, all the contents in Alibaba Cloud documents, including but not limited to pictures, architecture design, page layout, and text description, are intellectual property of Alibaba Cloud and/or its affiliates. This intellectual property includes, but is not limited to, trademark rights, patent rights, copyrights, and trade secrets. No part of this document shall be used, modified, reproduced, publicly transmitted, changed, disseminated, distributed, or published without the prior written consent of Alibaba Cloud and/or its affiliates. The names owned by Alibaba Cloud shall not be used, published, or reproduced for marketing, advertising, promotion, or other purposes without the prior written consent of Alibaba Cloud. The names owned by Alibaba Cloud include, but are not limited to, "Alibaba Cloud", "Aliyun", "HiChina", and other brands of Alibaba Cloud and/or its affiliates, which appear separately or in combination, as well as the auxiliary signs and patterns of the preceding brands, or anything similar to the company names, trade names, trademarks, product or service names, domain names, patterns, logos, marks, signs, or special descriptions that third parties identify as Alibaba Cloud and/or its affiliates.
6. Please directly contact Alibaba Cloud for any errors of this document.

Document conventions

Style	Description	Example
 Danger	A danger notice 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.
 Warning	A warning notice 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 restart an instance.
 Notice	A caution notice indicates warning information, supplementary instructions, and other content that the user must understand.	 Notice: If the weight is set to 0, the server no longer receives new requests.
 Note	A note indicates supplemental instructions, best practices, tips, and other content.	 Note: You can use Ctrl + A to select all files.
>	Closing angle brackets are used to indicate a multi-level menu cascade.	Click Settings> Network> Set network type .
Bold	Bold formatting is used for buttons, menus, page names, and other UI elements.	Click OK .
Courier font	Courier font is used for commands	Run the <code>cd /d C:/window</code> command to enter the Windows system folder.
<i>Italic</i>	Italic formatting is used for parameters and variables.	<code>bae log list --instanceid</code> <i>Instance_ID</i>
[] or [a b]	This format is used for an optional value, where only one item can be selected.	<code>ipconfig [-all -t]</code>
{ } or {a b}	This format is used for a required value, where only one item can be selected.	<code>switch {active stand}</code>

Table of Contents

1.What is CloudMonitor?	05
2.Benefits	07
3.Common scenarios	08
4.Terms	09

1. What is CloudMonitor?

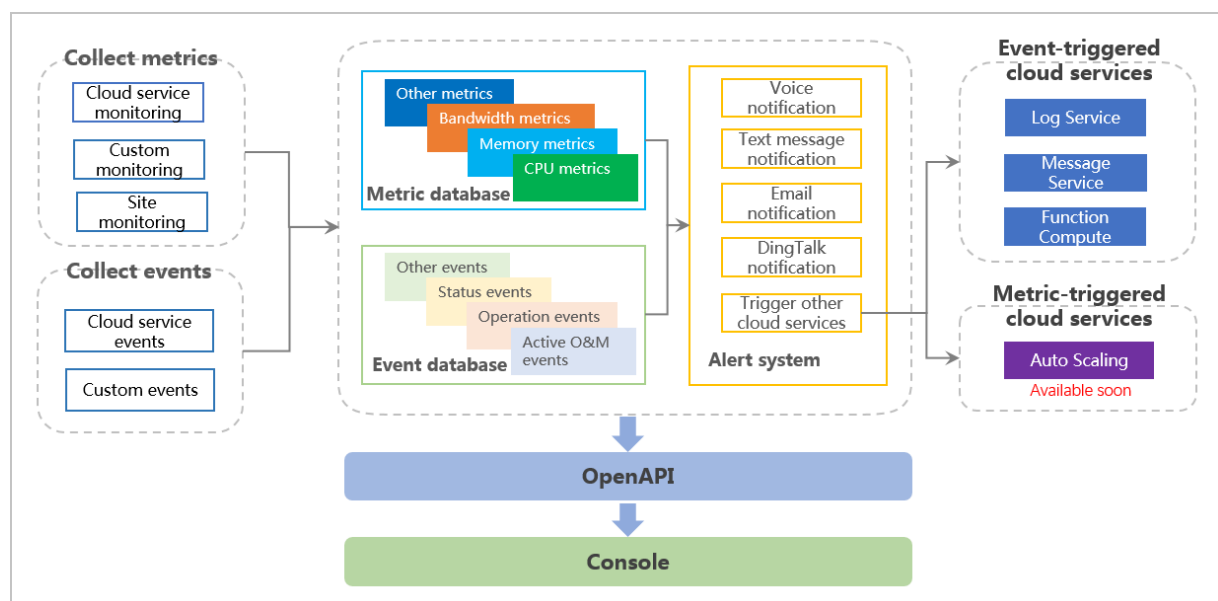
CloudMonitor is a service that monitors Alibaba Cloud resources and Internet applications.

CloudMonitor provides a one-stop, out-of-the-box, and enterprise-class monitoring solution. CloudMonitor supports IT infrastructure monitoring and dial testing-based Internet quality monitoring by using events and custom metrics. The monitoring services provided by CloudMonitor are efficient, comprehensive, and cost-effective. CloudMonitor helps you improve system service availability and reduce the operations and maintenance (O&M) costs of IT infrastructure.

CloudMonitor provides application groups and alert templates to monitor tens of thousands of instances from dozens of services. You can add resources from different services and regions to the same application group to simplify resource management.

CloudMonitor allows you to monitor the metrics of Alibaba Cloud services, detect the availability of websites hosted on Elastic Compute Service (ECS) instances or carrier servers, and configure alert rules for specified metrics. This way, you can monitor the usage of your Alibaba Cloud services and the status of your applications. You can also resolve alerts as early as possible to ensure the availability of your applications.

Service architecture



Functions and features

The following table describes the features that are supported by CloudMonitor.

Feature	Description
Dashboard	Allows you to view monitoring data as needed. You can view monitoring data of different instances from different services by using a dashboard.
Application group	Allows you to manage resources from different services and regions by group. You can use application groups to manage resources, such as servers, databases, load balancers, and storage resources, of your business in a centralized manner. For example, you can manage alert rules and view monitoring data by application group. This improves O&M efficiency.

Feature	Description
Host monitoring	Allows you to install CloudMonitor agents on servers to collect monitoring data of metrics such as CPU, memory, disk, and network usage. Host monitoring allows you to configure alert rules for all metrics.
Event monitoring	Allows you to report events, query events, and receive alerts about events. Event monitoring allows you to report exceptions or important changes in your business to CloudMonitor and receive alerts when exceptions occur.
Custom monitoring	Allows you to report business metrics about which you are concerned to CloudMonitor. CloudMonitor processes the collected monitoring data and generates alerts based on the processing result.
Site monitoring	Allows you to test network connectivity. Site monitoring sends detection requests that simulate real user access from Alibaba Cloud data centers to your site.
Cloud service monitoring	Allows you to monitor the metrics of the Alibaba Cloud services that are activated for your Alibaba Cloud account. You can view the monitoring data about resources of each Alibaba Cloud service in monitoring charts. You can also configure alert rules to monitor resources. If an alert is triggered based on the alert rules, CloudMonitor sends an alert notification to you. This way, you are notified of the status of your cloud resources as early as possible.
Alert service	Allows you to configure alert rules based on monitoring data. You can configure alert rules to specify how CloudMonitor checks the monitoring data and when CloudMonitor sends alert notifications. After you configure alert rules for important metrics, you can receive alert notifications when exceptions occur and handle the exceptions as early as possible.
Container monitoring	Allows you to monitor Container Service for Kubernetes (ACK) clusters across regions in a centralized and global way.

2. Benefits

CloudMonitor is an achievement of Alibaba Group after multiple years of research on server monitoring technologies. CloudMonitor is integrated with the strong data analysis capabilities of the Alibaba Cloud computing platform. It provides cloud service monitoring, site monitoring, and custom monitoring to safeguard your products and business.

Seamless integration

You can use CloudMonitor immediately after you create an Alibaba Cloud account, without the need to activate CloudMonitor. You can view the status of your Alibaba Cloud services and configure alert rules for the services in the CloudMonitor console.

Data visualization

CloudMonitor uses dashboards to provide a rich array of monitoring charts. CloudMonitor allows you to view dashboards in full screen and can automatically refresh monitoring data. This meets the need of monitoring data visualization in various scenarios.

Monitoring data processing

CloudMonitor allows you to use dashboards to aggregate monitoring data by time or space.

Flexible alerting

CloudMonitor provides the alert service for metrics. You can configure alert rules and alert notification methods for metrics. CloudMonitor sends an alert notification immediately after an alert rule is triggered. This allows you to detect and fix resource exceptions at the earliest opportunity and improves service availability.

3.Common scenarios

After you purchase and use Alibaba Cloud services supported by CloudMonitor, CloudMonitor can help you monitor the resources of these services. CloudMonitor can monitor your resources in the following scenarios.

Cloud service monitoring

CloudMonitor monitors the resources of all cloud services within your Alibaba Cloud account. You can view the status of the specified resources and the usage of metrics in the cloud service. You can also configure alert rules for the metrics. If an alert is triggered based on the alert rules, CloudMonitor sends an alert notification.

Host monitoring

CloudMonitor can monitor the basic metrics of an Elastic Compute Service (ECS) instance to ensure that the instance runs as expected. The basic metrics include CPU usage, memory usage, and disk usage.

Timely troubleshooting

CloudMonitor sends an alert notification based on the alert rules if a metric exceeds the specified threshold. This allows you to know, query, and handle the exceptions at the earliest opportunity.

Timely scaling

After you configure alert rules for monitoring metrics such as bandwidth, connections, and disk usage, you can monitor the status of cloud services. If your business expands, you can receive alert notifications to scale out your cloud services at the earliest opportunity.

Site monitoring

CloudMonitor can monitor sites by using HTTP (HTTPS), ICMP, TCP, UDP, DNS, SMTP, POP3, and FTP. CloudMonitor monitors the availability, response time, and packet loss rate of your site. This allows you to monitor the overall site availability and handle exceptions at the earliest opportunity.

Custom monitoring

If the system metrics cannot meet your requirements, CloudMonitor allows you to create custom metrics. The monitoring data of custom metrics is collected and reported to CloudMonitor. CloudMonitor displays monitoring charts and provides the alert service for the custom metrics.

4. Terms

This topic describes the terms of CloudMonitor.

Term	Description
site monitoring	A CloudMonitor feature that allows you to monitor the availability of URLs and IP addresses. You can use detection points to send requests over HTTP, HTTPS, ICMP, TCP, UDP, DNS, POP3, SMTP, or FTP to the monitored URLs or IP addresses. Then, you can obtain the status codes and response time.
cloud service monitoring	A CloudMonitor feature that allows you to monitor Alibaba Cloud services. This feature allows you to monitor different cloud services for the metrics that you specify. For example, you can monitor ApsaraDB RDS, Server Load Balancer (SLB), or Object Storage Service (OSS) for the metrics that you specify.
Cloud service	The services that are provided by Alibaba Cloud, such as Elastic Compute Service (ECS), SLB, and CloudMonitor.
custom monitoring	A CloudMonitor feature that allows you to create custom metrics. You can add monitoring charts and configure alert rules for the custom metrics.
alert service	A service that allows you to configure alert rules for metrics in host monitoring, detection points in site monitoring, instances in cloud service monitoring, and metrics in custom monitoring. If a metric meets the conditions that are specified in an alert rule, CloudMonitor sends an alert notification.
metric	The type of the monitoring data. Metrics are categorized into system metrics and custom metrics. For example, the metrics of an ECS instance include the CPU utilization, memory usage, and disk usage.
dimension	The identifier that is used to identify the monitoring data of a metric. For example, if you want to monitor the CPU utilization of an ECS instance, you can use the ID of the Alibaba Cloud account and the ID of the instance to identify the monitoring data.
alert rule	The conditions that trigger an alert. If a metric meets the conditions specified in an alert rule, CloudMonitor sends an alert notification.
mute period	The interval during which alert notifications are not sent for a metric. If a metric continuously exceeds the threshold within the specified mute period after an alert notification is sent, no more alert notifications are sent for the metric within the mute period.
alert contact	A contact that receives alert notifications.
alert group	A group of alert contacts that receive alert notifications. An alert group can consist of one or more alert contacts. When you create an alert rule or an application group, you must specify an alert group. When the alert threshold is reached, the system sends alert notifications to the alert contacts of the alert group based on the notification method that you specify.
notification method	The method that is used to send alert notifications. The following notification methods are supported: emails and DingTalk chatbots.

Term	Description
carrier detection point	The endpoints of China Unicom, China Mobile, and China Telecom. CloudMonitor uses carrier detection points to simulate user access behaviors and test the network quality of carriers in different regions.
alert blacklist	A blacklist that includes the name of a cloud service whose alert notifications you want to block. CloudMonitor blocks alert notifications based on the specified blacklist policy.