

Business Purpose

- ✓ Observes the performance of cloud hosted applications
- ✓ Analyzes the uptime behavior of applications and virtual stack
- ✓ Notify and alerts about misbehavior
- ✓ Detect trends and predict future behavior
- ✓ Report and help fixing errors

Advantages

- ✓ Simple to set up
- ✓ Collects metrics from many common open source servers
- ✓ Integrates with different type of cloud or user clusters
- ✓ Offered to Beta users free-of-charge.

Introduction

A cloud is a distributed system. Hosting an application on a cloud means creating a virtual environment (stack) to simulate the one targeted by the application.

How to use it?

User application needs no overhead management tasks

SD Monitoring charting and alerting tools are out of the box. Use the smart defaults or define your own custom dashboards.

Navigation Tools:

- ✓ External console
- ✓ Alerts, notifications
- ✓ Uptime checks
- ✓ The Event Log

Add Library to Your Project

API built on HTTP and JSON. Client libraries available in most of languages (Java, JavaScript, .Net, Obj-C, Python...).

Other ways: APIs Explorer, Google Plugin for Eclipse

Metrics

The metric describes the kind of data that is being collected. (Count of interceptions performed to prevent DoS attacks, response count)

- ✓ CPU utilization
- ✓ Network traffic
- ✓ Disk traffic
- ✓ Uptime

When a metric is measured over time, it produces a **time series** of data

Labels are useful for querying the API (for example, to find monitoring data that is relevant to specific zone or virtual machine).

Dashboards and charts

Display the metrics collected by Stackdriver Monitoring in your own charts and dashboards (one or more charts)



- ✓ Custom visual representation of one or more metrics.
- ✓ View logs associated with charts. Gives statistics on a running application on the cloud

Monitored Resource – an object representing a resource that can be used for monitoring, logging, billing.

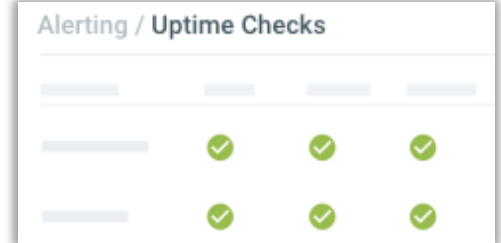
Examples:

- ✓ VM instances
- ✓ Google App Engine apps
- ✓ DB (Google Cloud SQL)
- ✓ Storage devices (disks)

*** Need more?** Use **monitoring agent** to access additional system resources and application services in VM instances

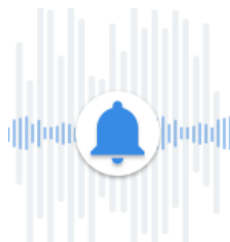
Improve Signal-to-Noise

- ❖ Uptime checks let you quickly verify the health of any web page, instance, or group of resources. Each configured check is regularly contacted from a variety of locations around the world



- ❖ Advanced alerting capabilities, including rate of change, cluster aggregation, and multi-condition policies

- ❖ Help user ensure that you he will be notified when critical issues occur while reducing the likelihood of false positives.



- ❖ Customize notifications policies (alerts can send email or SMS notifications to people or services).

Conclusion

The Stackdriver Monitoring is designed to monitor stack of application among different cloud environments. It provides the statistics on running stack of applications, set of debugging and alerting tools, which helps to improve them. With Stackdriver Monitoring the deployment and the maintenance of your cloud hosted application have never been that easy!

