**Cloud Monitoring**

Gain visibility into the performance, availability, and health of your applications and infrastructure.

* Get started now with: [dashboards](https://cloud.google.com/monitoring/dashboards), the [Ops Agent for VMs](https://cloud.google.com/monitoring/agent/ops-agent), and [Managed Service for Prometheus](https://cloud.google.com/stackdriver/docs/managed-prometheus/setup-managed)
* Built on the same backend used by Google that holds over [65 quadrillion points on disk](https://cloud.google.com/blog/products/operations/introducing-google-cloud-managed-service-for-prometheus)
* Learn how Cloud Monitoring helps [customers](https://cloud.google.com/monitoring#section-2) implement SRE principles to improve their businesses
* Stay up-to-date with the [latest blogs and resources](https://cloud.google.com/monitoring#section-3)
* Learn about [Managed Service for Prometheus](https://cloud.google.com/stackdriver/docs/managed-prometheus), our fully managed storage and query service

**Cloud Monitoring** collects metrics, events, and metadata from Google Cloud, Amazon Web Services (AWS), hosted uptime probes, and application instrumentation. Using the [BindPlane service](https://bluemedora.com/products/bindplane/bindplane-for-stackdriver/), you can also collect this data from over 150 common application components, on-premise systems, and hybrid cloud systems. Google Cloud's operations suite ingests that data and generates insights via dashboards, charts, and alerts. BindPlane is included with your Google Cloud project at no additional cost.  
  
To collect metrics data from your Compute Engine instances, [create an Agent Policy](https://cloud.google.com/stackdriver/docs/solutions/managing-agent-policies) that automatically installs and maintains the Google Cloud's operations suite agents across your fleet of VMs.

BENEFITS

### **For Google Cloud and other environments**

Cloud Monitoring offers automatic out-of-the-box metric collection dashboards for Google Cloud services. It also supports monitoring of hybrid and multicloud environments.

### **Identify trends, prevent issues**

Metrics, events, and metadata are displayed with rich query language that helps identify issues and uncover patterns. Service-level objectives measure user experience and improve collaboration with developers.

### **Reduce monitoring overhead**

One integrated service for metrics, uptime monitoring, dashboards, and alerts reduces time spent navigating between systems. Observability in context makes metrics available within Google Cloud resource pages.

## **Key features**

### **SLO monitoring**

Automatically infer or custom define [service-level objectives (SLOs)](https://cloud.google.com/stackdriver/docs/solutions/slo-monitoring) for applications and get alerted when SLO violations occur. Check out our [step-by-step guide](https://cloud.google.com/blog/products/management-tools/practical-guide-to-setting-slos) to learn how to set SLOs, following SRE best practices.

### **Managed metrics collection for Kubernetes and virtual machines**

Google Cloud’s operations suite offers [Managed Service for Prometheus](https://cloud.google.com/managed-prometheus) for use with Kubernetes, which features self-deployed and managed collection options to simplify metrics collection, storage, and querying. For VMs, you can use the [Ops Agent](https://cloud.google.com/stackdriver/docs/solutions/agents/ops-agent), which combines logging and metrics collection into a single agent that can be deployed at scale using popular configuration and management tools.

### **Google Cloud integration**

Discover and monitor all Google Cloud resources and services, with no additional instrumentation, integrated right into the Google Cloud console.

### **All features**

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| --- | --- |
| SLO monitoring | Automatically infer or custom define [service-level objectives (SLOs)](https://cloud.google.com/stackdriver/docs/solutions/slo-monitoring) for applications and get alerted when SLO violations occur. |
| Custom metrics | Instrument your application to monitor [application and business-level metrics](https://cloud.google.com/monitoring/custom-metrics) via Cloud Monitoring. |
| Google Cloud Console integration | [Discover and monitor](https://console.cloud.google.com/monitoring) all Google Cloud resources and services, with no additional configuration, integrated right into the Google Cloud console. |
| Managed Service for Prometheus | [Monitor and alert](https://cloud.google.com/stackdriver/docs/managed-prometheus) on your workloads, using Prometheus, without having to manually manage and operate Prometheus at scale. |
| Ops Agent | Deploy the [Ops Agent](https://cloud.google.com/monitoring/agent) on your Google Cloud VMs to collect detailed metrics and logs from your applications and system. Try the in-console, [step-by-step tutorial](https://console.cloud.google.com/?tutorial=cloud_ops_install_agent) to experience installing the agent on a live VM. |
| Logging integration | Drill down from dashboards and charts to logs. Create, visualize, and alert on [metrics based on log data](https://cloud.google.com/logging/docs/logs-based-metrics). |
| Dashboards | Get visibility into your cloud resources and services with no configuration. Define [custom dashboards](https://cloud.google.com/monitoring/dashboards) and take advantage of Google’s powerful data visualization tools. |
| Multiple project and group/cluster support | Create [metrics scopes](https://cloud.google.com/monitoring/settings#concept-scope) to monitor single or multiple projects together, and create [resource groups](https://cloud.google.com/monitoring/groups) to define relationships based on resource names, tags, security groups, projects, regions, accounts, and other criteria. Use those relationships to create targeted dashboards and topology-aware alerting policies. |
| Alerting | Configure [alerting policies](https://cloud.google.com/monitoring/alerts) to notify you when events occur or particular system or custom metrics violate rules that you define. Use multiple conditions to define complex alerting rules. Receive notifications via email, SMS, Slack, PagerDuty, and more. |
| Uptime monitoring | [Monitor the availability](https://cloud.google.com/monitoring/uptime-checks) of your internet-accessible URLs, VMs, APIs, and load balancers from probes around the globe with uptime checks. Create alerts to be notified proactively if there is an outage. |