

Anthos under the hood: The technologies that will transform enterprise applications.  
[Download the free ebook.](https://inthecloud.withgoogle.com/content-anthos/dl-cd.html) (https://inthecloud.withgoogle.com/content-anthos/dl-cd.html)

[JUMP TO \(#\)](#)




# Anthos

Modernize existing applications and build cloud-native apps anywhere to promote agility and cost savings.

Get started (<https://console.cloud.google.com/marketplace/details/click-to-deploy-images/anthos-sample-deployment>)

- ✓ Build, deploy, and optimize applications anywhere—simply, flexibly, and securely
- ✓ Consistent development and operations experience for hybrid and multi-cloud environments
- ✓ Achieve up to 4.8x ROI within 3 years according to the [Forrester Total Economic Impact study](/anthos/forrester-tei-report) (/anthos/forrester-tei-report)



(<https://www.youtube.com/watch?v=xfwlb3QZrM>)

[VIDEO](#)

1:27

## Anthos: A modern application platform for your business

### BENEFITS

#### **Manage applications anywhere**

Anthos gives you a consistent platform for all your application deployments, both legacy as well as cloud native, while offering a service-centric view of all your environments.

#### **Deliver software faster**

Build enterprise-grade containerized applications faster with managed Kubernetes on cloud and on-premises environments. Create a fast, scalable software delivery pipeline with cloud-native tooling and guidance.

#### **Protect applications and software supply chain**

Leverage a programmatic, outcome-focused approach to managing policies for apps across environments, and enable greater awareness and control with a unified view of your services' health and performance.

### KEY FEATURES

## Key features

## Enterprise-grade container orchestration and management service

Anthos enables you to run [Kubernetes clusters](#) (/anthos/gke) anywhere, in both cloud and on-premises environments. You get consistent managed Kubernetes experience with simple installs as well as upgrades validated by Google.

## Automate policy and security at scale

Define, automate, and enforce policies across environments in order to meet your organization's unique security and compliance requirements. [Anthos Config Management](#) (/anthos/config-management) evaluates changes and rolls them out to all Kubernetes clusters so that your desired state is always reflected.

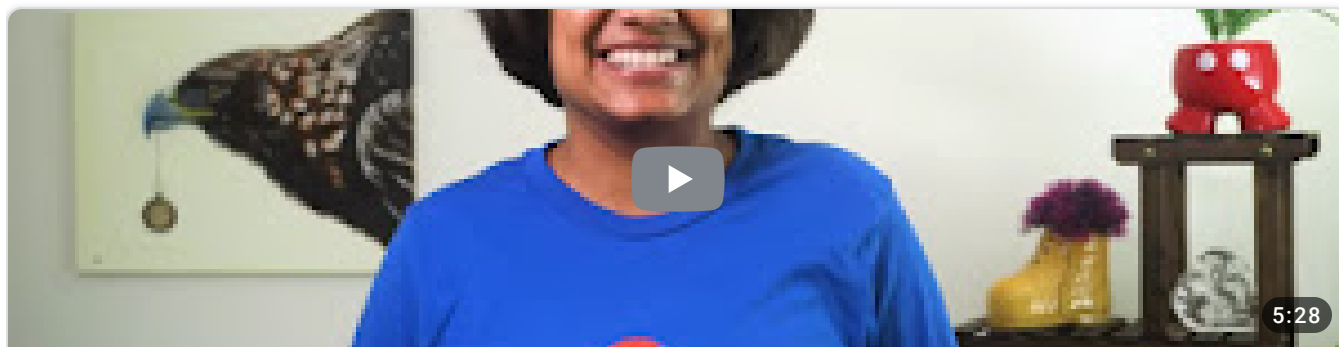
## Fully managed service mesh with built-in visibility

[Anthos Service Mesh](#) (/anthos/service-mesh) unburdens operations and development teams by empowering them to manage and secure traffic between services while monitoring, troubleshooting, and improving application performance.

## Modernizing your security for hybrid and multi-cloud deployments

Anthos integrates [security](#) (/anthos/security) into each stage of the application life cycle—from develop to build to run—while enabling a defense-in-depth security strategy with a comprehensive portfolio of security controls across all of these deployment models.

[View all features \(#\)](#)



(<https://www.youtube.com/watch?v=Qtw7QcW4J8>)

VIDEO

What is Anthos?

(<https://www.youtube.com/watch?v=Qtw7QcW4J8>)

CUSTOMERS

## Customers

**KeyBank** 



KeyBank uses Anthos to develop personalized banking solutions for its customers.

([https://www.youtube.com/watch?v=\\_MGQtKGkezW&autoplay=1](https://www.youtube.com/watch?v=_MGQtKGkezW&autoplay=1))

### Story highlights

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- Seamless Anthos and HyperFlex setup

- Ability to release on a daily basis
- Single pane of glass monitoring and control

### Partner

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#### Cisco

(/cisco)



#### Anthos brings a hybrid and multi-cloud solution to NTT Communications.

(/blog/topics/hybrid-cloud/bringing-hybrid-and-multi-cloud-to-our-apac-customers-with-anthos)



#### HSBC used the Anthos-managed hybrid-cloud environment to reduce big data analytics complexity and cost.

(/blog/topics/hybrid-cloud/new-platform-for-managing-applications-in-todays-multi-cloud-world)



## KOMPRESSOREN

[Kaeser Kompressoren accelerates app modernization with Anthos.](#)

(/blog/topics/hybrid-cloud/move-and-modernize-your-apps-with-anthos)

See all customers (<https://cloud.google.com/customers>)

### WHAT'S NEW

## What's new

[Sign up](https://cloud.google.com/newsletter) (<https://cloud.google.com/newsletter>) for Google Cloud newsletters to receive product updates, event information, special offers, and more.

### REPORT

[Learn how CIOs can effectively approach application modernization](#)

[Read report](#)

(<https://inthecloud.withgoogle.com/cio-guide-app-mod/dl-cd.html>).



### DOCUMENTATION

## Documentation

### ARCHITECTURE

#### Anthos technical overview

An overview of Anthos components and how you can leverage its functionality across your deployments, from infrastructure management to application development.

[Learn more \(/anthos/docs/concepts/overview\)](/anthos/docs/concepts/overview)

#### GOOGLE CLOUD BASICS

### Kubernetes service documentation

Explore installation guides, how-to's, concepts, and other resources for hybrid and multi-cloud Kubernetes service.

[Learn more \(/anthos/gke/docs/on-prem\)](/anthos/gke/docs/on-prem)

#### GOOGLE CLOUD BASICS

### Anthos Config Management documentation

Explore quickstarts, how-to's, concepts, and other resources for Anthos Config Management.

[Learn more \(/anthos-config-management/docs\)](/anthos-config-management/docs)

#### QUICKSTART

### Anthos Service Mesh documentation

See how to get started and dive into other resources for Anthos Service Mesh.

[Learn more \(/service-mesh/docs\)](/service-mesh/docs)

#### TUTORIAL

### Deploying Kubernetes applications

Deploy a commercial Kubernetes app from Google Cloud Marketplace. Kubernetes apps include container images, kubectl configs, and Helm chart.

[Learn more \(/marketplace/docs/kubernetes-apps\)](/marketplace/docs/kubernetes-apps)

#### QUICKSTART

### Getting started with Migrate for Anthos

Explore quickstarts, how-to's, concepts, and other resources for Migrate for Anthos.

[Learn more \(/migrate/anthos/docs/getting-started\)](/migrate/anthos/docs/getting-started)

#### QUICKSTART

### Deploy to Cloud Run for Anthos on Google Cloud

Learn how to create a cluster enabled for Cloud Run for Anthos on Google Cloud and then deploy a prebuilt sample container to the cluster.

[Learn more \(/run/docs/quickstarts/prebuilt-deploy-gke\)](/run/docs/quickstarts/prebuilt-deploy-gke)

#### GOOGLE CLOUD BASICS

### Traffic Director documentation

Deploy global load balancing across clusters and VM instances in multiple regions with Google Cloud's fully managed traffic control plane for service mesh.

[Learn more \(/traffic-director/docs\)](/traffic-director/docs)



**QUICKSTART****Configure and test a simple policy in Binary Authorization**

View and test the default policy, then configure it to deny the deployment of all container images from Container Registry to Anthos clusters.

[Learn more \(/binary-authorization/docs/quickstart\)](/binary-authorization/docs/quickstart)

**Not seeing what you're looking for?**

[View all product documentation \(/anthos/docs\)](/anthos/docs)

**Explore more docs**

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**Quickstarts**

[Get a quick intro to using this product.](#)

[\(/anthos/docs/setup/overview\)](/anthos/docs/setup/overview)

**How-to guides**

[Learn to complete specific tasks with this product.](#)

[\(/anthos/docs/setup/overview\)](/anthos/docs/setup/overview)

**Tutorials**

[Browse walkthroughs of common uses and scenarios for this product.](#)

[\(/anthos/docs/tutorials/explore-anthos\)](/anthos/docs/tutorials/explore-anthos)

**APIs & references**

[View APIs, references, and other resources for this product.](#)

(/anthos/docs/setup/cloud)

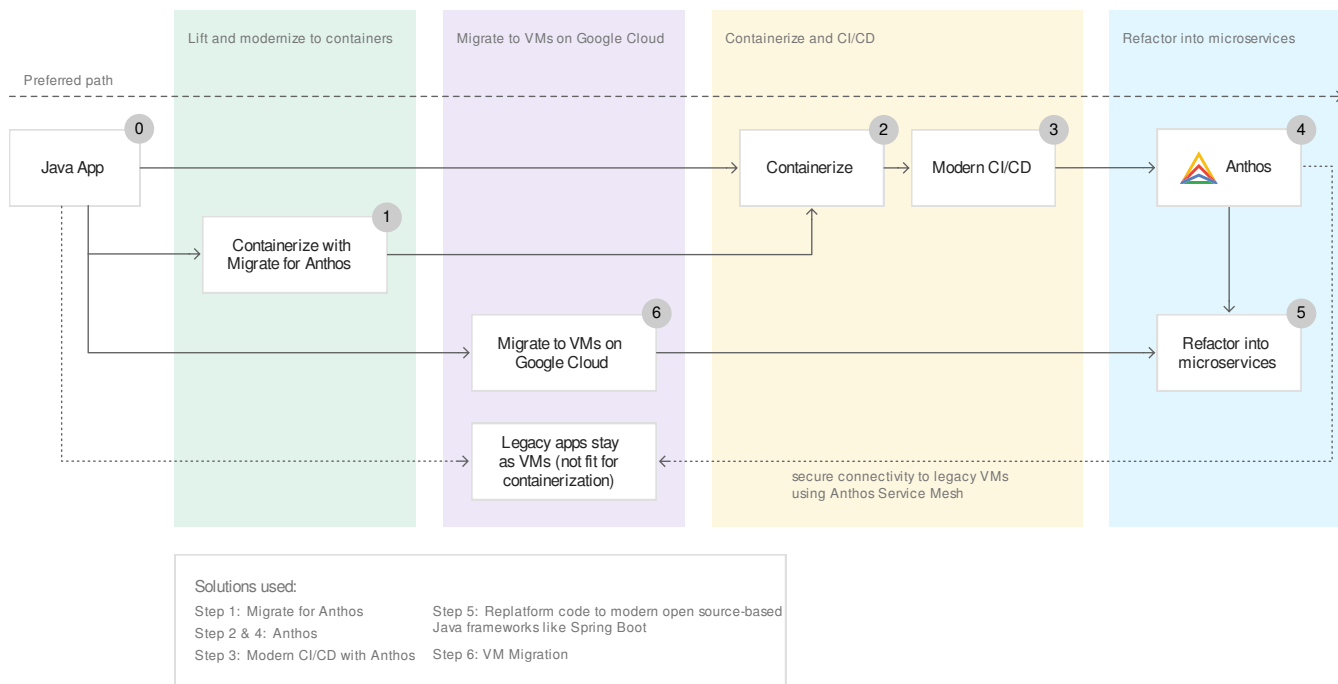
USE CASES

# Use cases

USE CASE

## Modernize existing Java applications with Anthos

Java application modernization consists of three stages: lifting and modernizing suitable applications from running in VMs to running in containers without rewriting any code; deploying containerized applications to Anthos by using modern continuous integration/continuous deployment (CI/CD) practices; and refactoring applications to OSS application stacks, modern frameworks, and microservices over time. [Learn more](#) (/solutions/modernize-apps-with-anthos).



**GOOGLE CLOUD BASICS****Modernize existing Java applications with Anthos**

Modernize and transform apps to realize operational cost savings, reduce dependencies on high-cost proprietary software, and increase software delivery speed.

**Learn more** (</solutions/modernize-apps-with-anthos>)

**BEST PRACTICE****Transforming your legacy Java applications**

Prescriptive guidelines to help modernize your Java applications for agility and cost savings.

**Learn more** (<https://cloud.google.com/solutions/java-app-modernization>)

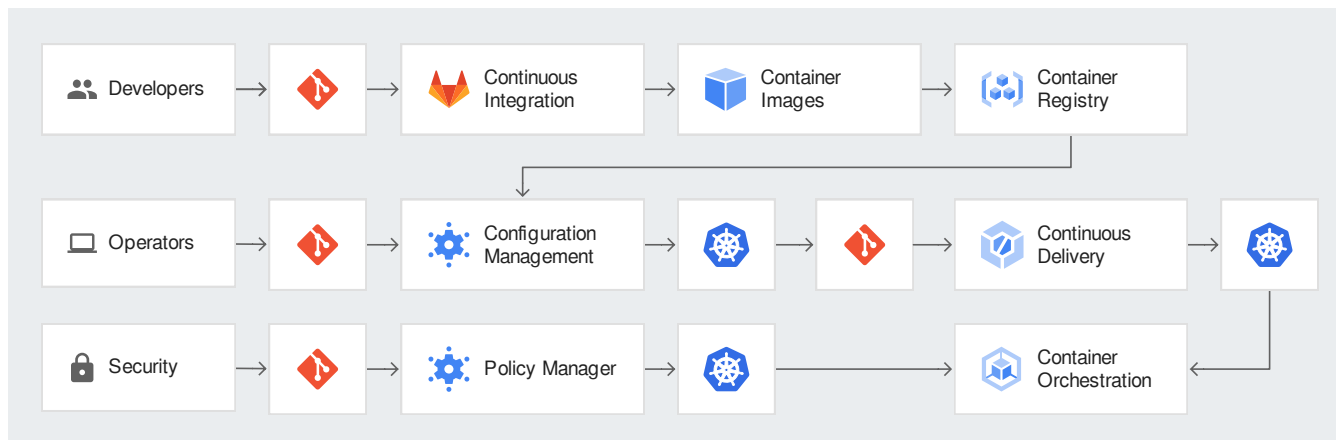
**TUTORIAL****How Migrate for Anthos streamlines Java app modernization**

Migrate for Anthos takes your existing VM-based legacy Java applications and intelligently converts them to run in containers on Anthos clusters.

**Learn more** (</blog/products/containers-kubernetes/migrate-for-anthos-streamlines-legacy-java-app-modernization>)

**USE CASE****Modern CI/CD with Anthos**

Modernize your approaches to application configuration, continuous integration, policy management, and deployment automation with expert guidance from experienced Kubernetes and Google Cloud engineers. Traditional software development and delivery often meant expensive and immobile proprietary tools. Google Cloud's approach uses open source, making it portable and vendor neutral. [Learn more \(/solutions/modern-ci-cd-with-anthos\)](/solutions/modern-ci-cd-with-anthos).



#### GOOGLE CLOUD BASICS

### Modern application development and delivery

Create a fast, secure, and scalable software delivery and development pipeline that spans on-premises and the cloud with tools and expert guidance from Google Cloud.

[Learn more \(/blog/topics/anthos/how-anthos-helps-modernize-application-development\)](/blog/topics/anthos/how-anthos-helps-modernize-application-development)

#### BEST PRACTICE

### Modern CI/CD with Anthos

Tools and expert guidance to help you build a secure, scalable, and automated CI/CD pipeline for your development team on-premises and in the cloud.

[Learn more \(/solutions/modern-ci-cd-with-anthos\)](/solutions/modern-ci-cd-with-anthos)

**TUTORIAL****Build a software delivery platform with Anthos**

Explain how with Anthos you can build a multi-team platform for streamlining CI/CD, policy management, and developer onboarding across your organization and teams.

Learn more (<https://www.youtube.com/watch?v=MOALilVoeg>)

**USE CASE****Anthos at the Edge**

Run applications closer to your end users, beyond your data centers and public cloud environments, wherever you need it—whether it's a retail store, branch office, remote site, or telco edge. [Learn more \(/solutions/anthos-edge\)](/solutions/anthos-edge).

[View all technical guides \(/tutorials#anthos\)](/tutorials#anthos)

## ALL FEATURES

**All features****Modernizing your security for hybrid and multi-cloud deployments**

Anthos integrates [security \(/anthos/security\)](/anthos/security) into each stage of the application life cycle—from develop, to build, to run. Anthos enables a defense-in-depth security strategy with a comprehensive portfolio of security controls, across all of these deployment models.

## Bringing the power of containers to your existing workloads

Migrate for Anthos minimizes the manual effort required to move and convert existing applications into containers. With [Migrate for Anthos](/migrate/anthos), (/migrate/anthos) you can easily migrate and modernize your existing workloads to containers on a secure and managed Kubernetes service.

## Accelerate adoption of day 2 operations

For day 2 operations, save on labor and costs associated with maintaining, patching, and updating VMs and physical servers by switching to modern CI/CD pipelines, image-based management, and desired-state configuration with Anthos.

## Bringing serverless everywhere

[Cloud Run for Anthos](/anthos/run) (/anthos/run) provides a flexible serverless development platform and allows you to deploy your workloads to Anthos clusters running on-premises or on Google Cloud, all with the same consistent experience. Cloud Run for Anthos is powered by Knative, an open source project that supports serverless workloads on Kubernetes.

## Deploy containerized apps from Google Cloud Marketplace

[Kubernetes applications from Google Cloud Marketplace](/kubernetes-applications) (/kubernetes-applications) are enterprise-ready containerized solutions with

prebuilt deployment templates, featuring portability, simplified licensing, and consolidated billing.

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### Toil-free traffic management for your service mesh

#### Traffic Director

(<https://cloud.google.com/traffic-director>) is a fully managed traffic control plane for service mesh. With Traffic Director, you can easily deploy global load balancing across clusters and VM instances in multiple regions, offload health checking from service proxies, and configure sophisticated traffic control policies.

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### Monitor, troubleshoot, and improve application performance

Operations (/products/operations) (formerly Stackdriver) provides visibility into the performance, uptime, and overall health of cloud-powered applications. Collect metrics, logs, and traces across Google Cloud and your applications. Use built-in out-of-the-box dashboards and views to monitor the platform and applications.

#### PRICING

## Pricing

For more information on pricing, please visit our [pricing page](https://cloud.google.com/anthos/pricing) (<https://cloud.google.com/anthos/pricing>).


PARTNERS


## Partners

We're expanding our integrations with these partners, adding to our partner list, and continuing to invest in open source to make building on Google Cloud more flexible and open.


[Expand all](#) 


### Technology partners

 [aqua](https://cloud.withgoogle.com/partners/detail/?id=aqua-security) (https://cloud.withgoogle.com/partners/detail/?id=aqua-security)

 [circleci](https://cloud.withgoogle.com/partners/detail/?id=circleci) (https://cloud.withgoogle.com/partners/detail/?id=circleci)

 [Cisco](/cisco) (/cisco)

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(<https://cloud.withgoogle.com/partners/detail/?id=dynatrace&hl=en-US>)



(<https://cloud.withgoogle.com/partners/detail/?id=elastic&hl=en-US>)



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(<https://cloud.withgoogle.com/partners/detail/?id=gitlab-inc&hl=en-US>)



(/hpe)

(<https://console.cloud.google.com/marketplace/details/influxdata-public/telegraf-influxdb-grafana>)

0 items



(<https://console.cloud.google.com/marketplace/details/instana-public/instana-agent?q=instana>)



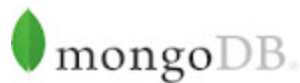
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(<https://cloud.withgoogle.com/partners/detail/?id=splunk>)



(<https://www.sumologic.com/>)



(<https://console.cloud.google.com/marketplace/browse?q=sysdig&filter=solution-type:k8s&filter=deployment-env:anthos>)

(<https://www.tigera.io/>)



## Platform partners



(<https://atos.net/>)



(/cisco)



(/dell)



(/hpe)



(/intel)



(https://www.lenovo.com/)



(/netapp)



### Service partners



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(<https://cloud.withgoogle.com/partners/detail/?id=epam-systems-inc&hl=en-US>)



(<https://www.hcltech.com/cloud/google-cloud/>)



(<https://www.ignw.io/google-cloud/>)



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(<https://cloud.withgoogle.com/partners/detail/?id=softserve&hl=en-US>)



(<https://cloud.withgoogle.com/partners/detail/?id=wipro-limited&hl=en-US>)



(<https://www.wwt.com/>)

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Start building on Google Cloud with \$300 in free credits and 20+ always free products.

**Try Anthos** (<https://console.cloud.google.com/freetrial>)

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