



Anthos / Application Modernization Platform

Anthos / 应用现代化平台

+94%

Of CIOs indicated that business leaders depend on technology teams for improved agility and faster time to market

94% 以上的首席信息官指出，业务领导者依靠技术团队来提高敏捷性和缩短上市时间





80%

of CIOs admit they haven't attained the desired business agility with migration*

80% 的首席信息官承认他们无法通过迁移获得所需的业务敏捷性*

Technology teams fail at transformation due to lack of flexibility and agility

由于缺乏灵活性和敏捷性，技术团队在转型中经常失败



Multiple proprietary technology stacks
across on-premises and cloud
跨本地和云端的多个专有技术堆栈



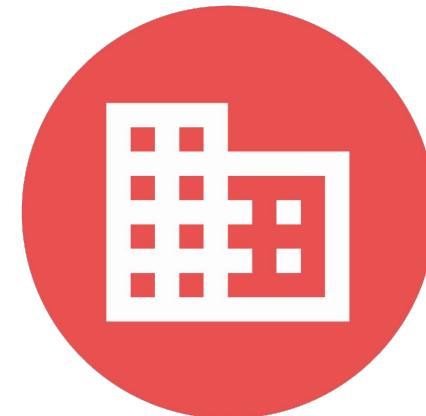
Downtime and under-utilized resources
停机时间和未能充分利用的资源



Long dev/update/refresh cycles
开发/更新/重定向周期过长



Need to retrain existing talent or hire new
talent for every stack
需要重新培训现有人才或为每个堆栈雇用新人
才



Google's POV Google的价值验证

The future of applications, and the infrastructure that they run on, is created with **containerized microservices**, managed through a **declarative system** with a **single control experience** that uses a **service mesh** to **spans all application locations**.

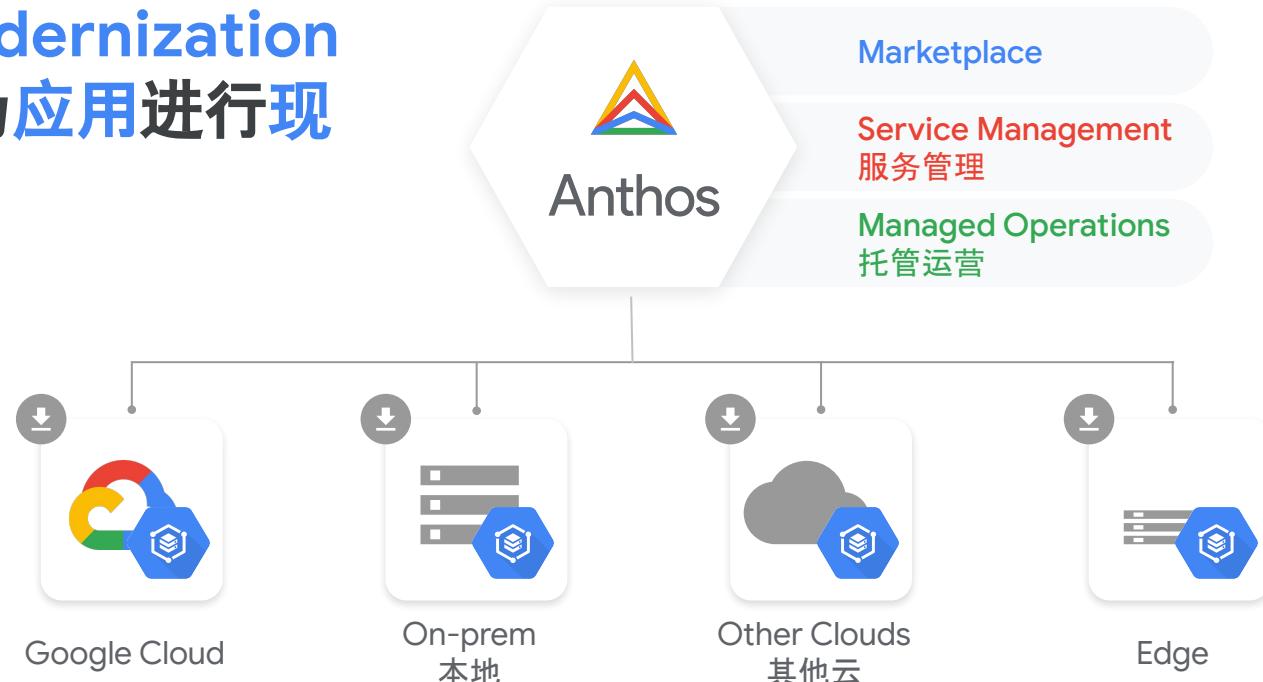
未来的应用及运行应用之基础架构是使用**容器化微服务**创建的，通过具有**单一控制体验**，並使用**服务网格跨越所有应用位置**的**陈述系统**进行管理。

Anthos is our platform for application modernization

Anthos是我们为应用进行现代化的平台

“ Anthos' multi-cloud capabilities are so far **unique** in the industry
Anthos 的多云功能在业内独树一帜

Forbes, April 2019
福布斯, 2019年4月



Anthos empowers organizations, saving bottom-line costs, and increasing top-line revenue¹

Anthos能够强化组织，节省成本，而且增加销售收入¹

New 全新

[Anthos ROI report](#) Anthos 投资回报率报告
by Forrester



Up to 多达:

4.8x

return in investment (ROI) deploying Anthos
部署Anthos后的投资回报 (ROI) 多达4.8倍

74%

increase in application migration and modernization
增加74%的应用迁移和现代化

75%

improvement in productivity for security tasks
在安全任务效率上提高了75%

13x

improvement in time to market*
上市时间加快13倍*

38%

reduction in non-coding activities
减少38%的非编码活动

55%

Increase in platform operations efficiency
平台运营效率提高了55%

Source: New Technology Projection: The Total Economic Impact™ Of Anthos, September 2019, a commissioned study conducted by Forrester Consulting on behalf of Google.

*Based on the customer interview

Anthos is a 100% software-based solution

Anthos 是一个 100% 基于软件的解决方案

Core components of Anthos

Anthos的核心部件





Anthos GKE

01

Turn-key, production-grade, conformant Kubernetes with best-practice configuration
一站式实时可用、生产级、符合 Kubernetes 要求，并附有最佳做法配置

02

Access to container services on GCP such as Cloud Build, Container Registry, Audit Logging, and more
在 GCP 上访问容器服务，如云端构建、Container Registry、审核日志记录等

03

Get Started Quickly: Use the Cloud Console to easily create a cluster and view your workloads
快速入门：使用控制台轻松创建集群并查看工作负载

04

Easy upgrade path to the latest Kubernetes releases that have been validated and tested by Google
轻松升级到已经过 Google 验证和测试的最新 Kubernetes 版本

05

Integration with Istio, Cloud Run, marketplace solutions
Istio、Cloud Run、marketplace 解决方案的集成

06

Reliable and Available: GKE automatically repairs, upgrades, and scales your cluster with a high-availability control plane
可靠且可用：GKE 使用高可用性控制层面进行自动修复、升级和扩展集群

Unified Management Hub

统一管理中心

Single pane of glass across Google Cloud & on-premises & other public cloud
单一窗格横跨 Google 云, 本地及其他公众云

01

Orchestrate and manage on-prem containers just like GKE in the cloud

编排和管理本地容器, 就如云中的 GKE一样

02

Consistent operating model with access to GCP services across hybrid environments

一致的运营模型, 同时能够跨混合环境访问GCP服务

03

Single-pane-of-glass for multiple Kubernetes clusters, no matter where

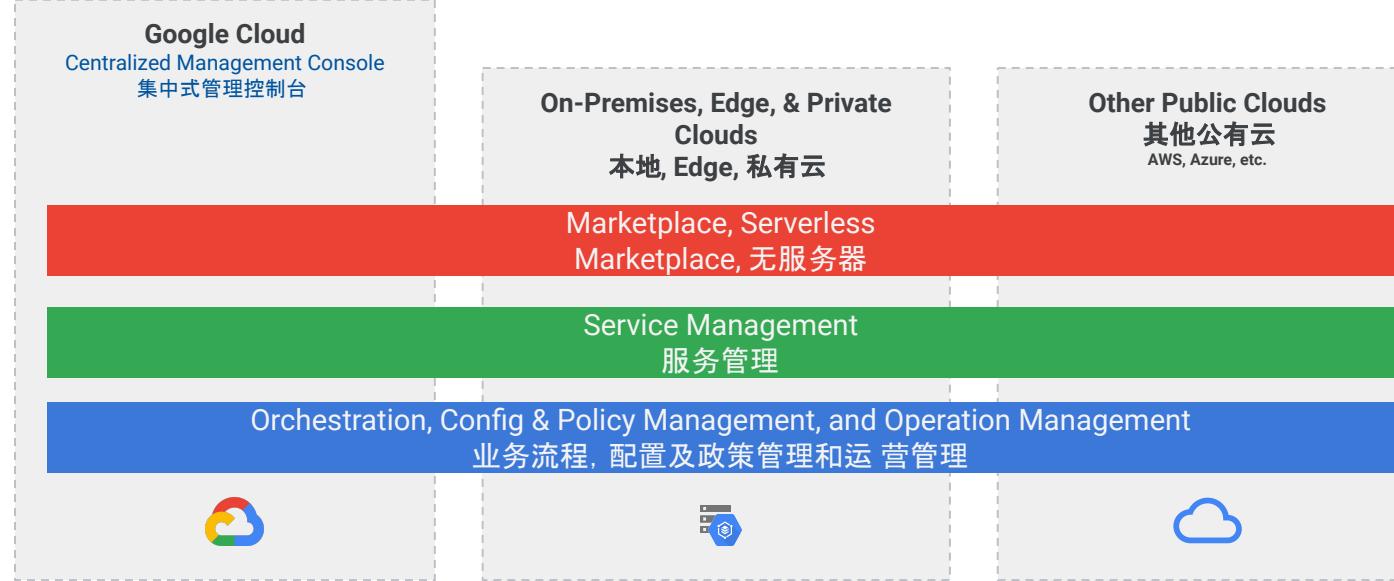
多个Kubernetes集群均在单一窗格, 不论地点



Name	Provider	Location	Total memory	Notifications	Registry	Labels
jumping-squirrel	acme-co	atlanta-dc	7.50 GB	⚠️ Upgrade available	Yes	cluster-registry:cluster-registry-1
messier-13-cluster	GKE	europe-east1-a	15.00 GB		Yes	monitoring.enabled: true
macs-0416-cluster	GKE	us-west1-c	7.50 GB		Yes	
example-123-cluster	GCP	us-west1-b	11.25 GB	⚠️ Node version unsupported	Yes	k8s-label: example
example-124-cluster	GCP	us-west1-c	11.25 GB	ⓘ Node upgrade available	Add	
pending	-	-	-	ⓘ Pending	-	
swimming-panda	on-prem	atlanta-dc	???	⚠️ No login credentials	Yes	cluster-registry:cluster-registry-1

Unified Management with Anthos

以Anthos作统一管理



Anthos Config Management

A single pane of glass for managing configurations and policies both on-prem and in the cloud

用于管理本地和云中的配置和政策的 单一窗格



01

Multi-cluster management
多群集管理

02

Declarative and continuous
声明性和持续性

03

Hybrid support
支持混合云

04

Simple migration
简单迁移

NEW 全新

Anthos Service Mesh

Out-of-the-box telemetry for services
為服务开箱即用进行遥测



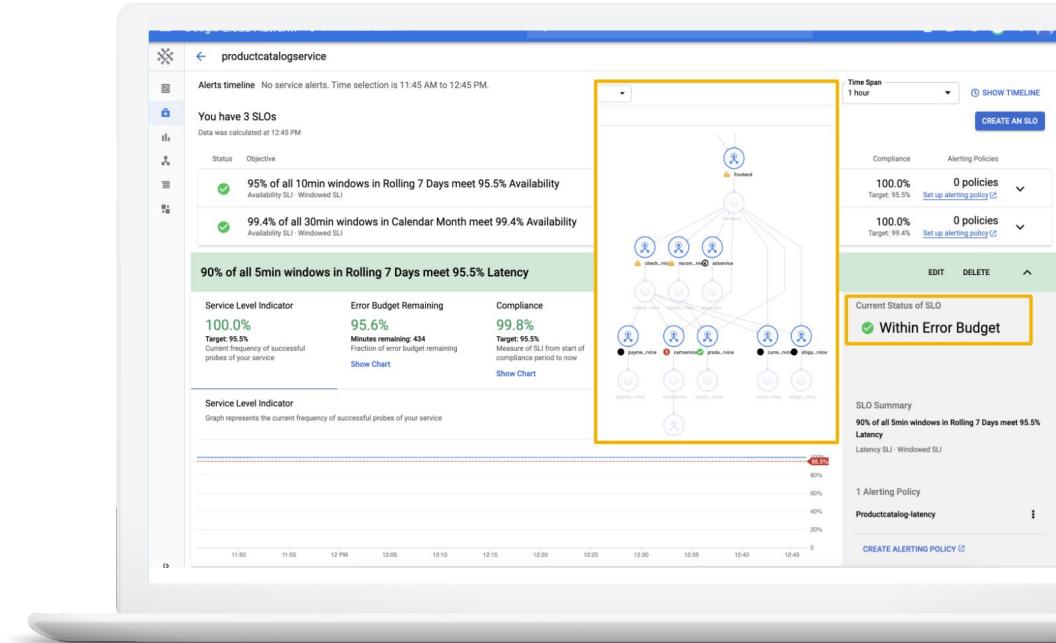
Enforce policies across VMs and containers
跨 VM 和容器强制实施政策

No more hardcoding configurations & policies
无需再写死配置和政策



What gets measured gets improved 能够被衡量的内容 可以被改进

Deep visibility into your application
with service topology graph
使用服务拓扑图深入了解您的应用



Marketplace for application development 应用开发用的Marketplace



Find 搜寻

VMs, Kubernetes applications, APIs, container images, and datasets for GCP's AI, ML, Big Data, and Cloud Services Platform.

针对 GCP 的 AI、ML、大数据和云服务平台的 VM、Kubernetes 应用、API、容器映像和数据集。



Deploy 部署

Vetted solutions with customizable deployment templates, optimized to run on GCP, CSP, or anywhere Kubernetes clusters are deployed.

具有可自定义部署模板，经过优化可在 GCP、CSP 或部署 Kubernetes 集群的任何地方运行的已审核解决方案。



Use 使用

Aggregated with the rest of your GCP spend, transparent usage data, and access to support from commercial solution providers.

与其他的GCP支出合计，使用数据透明并可访问由商业解决方案提供商的支持。

Example Partners 合作伙伴示例



Security, Database, Developer Tools, Machine Learning, Monitoring, Analytics, and more
安全性、数据库、开发人员工具、机器学习、监视、分析等

Monitoring and Management with Stackdriver

使用Stackdriver进行监控和管理



Logging 日志

Collect Logs from Platforms, Apps and Services
从平台、应用和服务收集日志

- Log search/view/filter
日志搜索/查看/筛选
- Error reporting & Dashboard
错误报告及信息中心
- Log Metrics
日志指标
- Log Router for easy export
方便导出的日志路由器



Monitoring 监控

Monitor metrics from Platforms, App, Services and Microservices
监控来自平台、应用、服务和微服务的指标

- Dashboards
信息中心
- Metrics Explorer/Custom Metrics
Metrics Explorer/自定义指标
- Uptime Checks
正常运行时间检查
- Service Monitoring
服务监控
- Alert Management
提醒管理



APM 应用性能管理

Monitor and troubleshoot Application performance
应用性能监控和问题排查

- Trace - Latency analysis across distributed apps
跟踪 - 跨分布式应用的延迟分析
- Profiler - CPU and memory profiling
Profiler 剖析器 - CPU 和内存分析
- Debugger - In production debug and conditional snapshots
Debugger 调试器 - 在生产环境中调试和条件快照

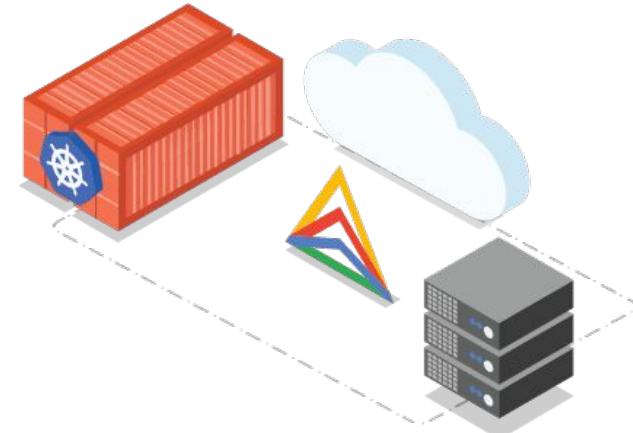


Anthos

Move VMs directly into containers in GKE with Migrate for Anthos

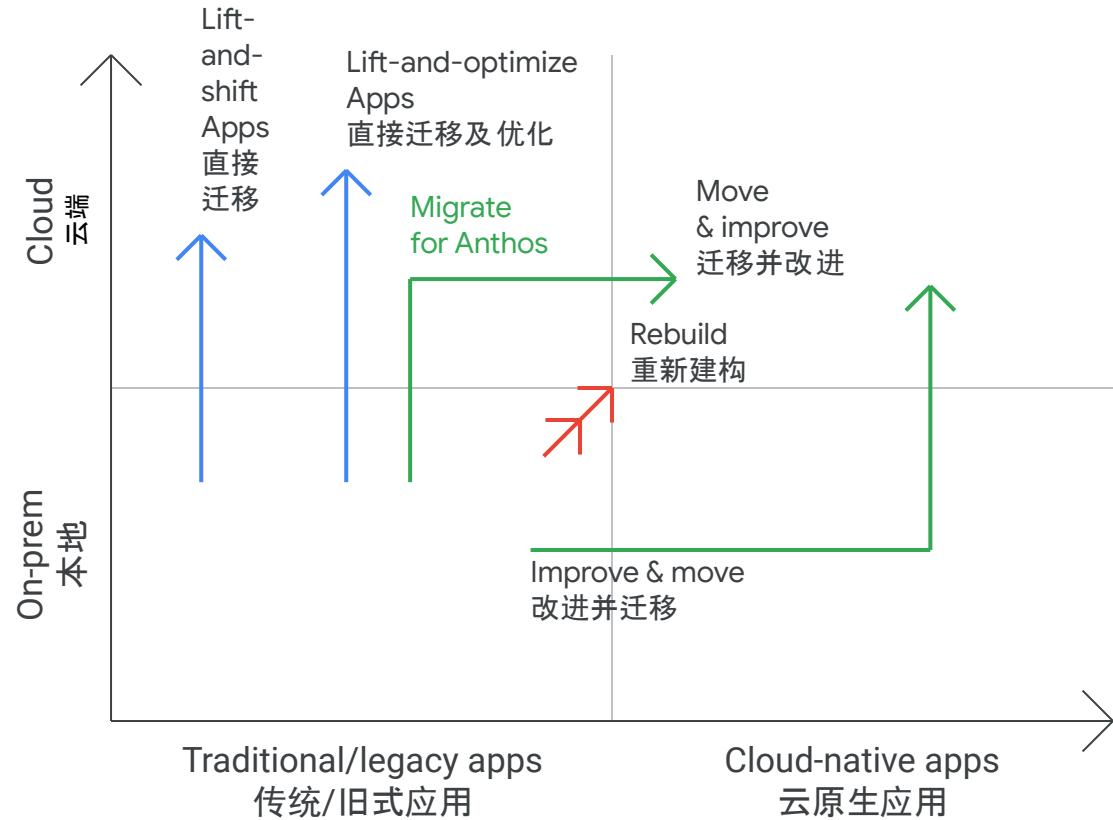
以Migrate for Anthos将 VM 直接迁移到GKE的容器

- **Low friction path for existing workloads to GKE**
将现有工作负载移到 GKE 的低摩擦路径
 - Improve security and manageability without code change
在不更改代码的情况下提高安全性和可管理性
- **Accelerated migration, integration into modern infra**
加速迁移, 融入现代基础架构
 - Significant reduction in cost, time, labor, complexity compared with upgrading manually, as is current norm.
与现时普遍的做法 - 手动升级相比, 成本、时间、人工和复杂性都显着降低
 - Low touch migration to GKE, w/ minimal downtime
低接触迁移到 GKE, 可最少化停机时间
 - Migrate without deep knowledge of apps moved
迁移时, 对要移动的应用无需有深入了解
- **Modernization paths to add'l cloud services**
其他云服务的现代化路径
 - Enable multiple options: image extraction/generalization, monolith breakdown, persistent data migration to 2nd hop managed storage/databases
提供多个选项: 图像提取/通用化、单体细分、将持久数据迁移到第二跃点托管存储/数据库



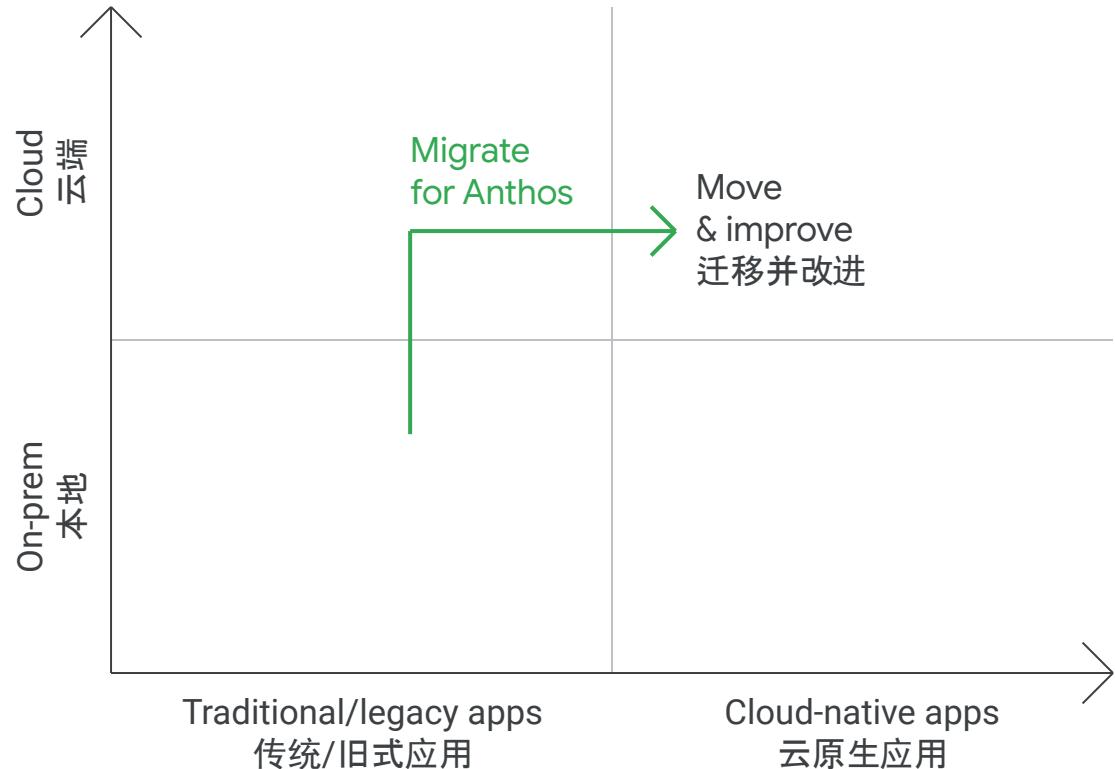
There are **multiple paths** to modernization

现代化可以有
多种路徑

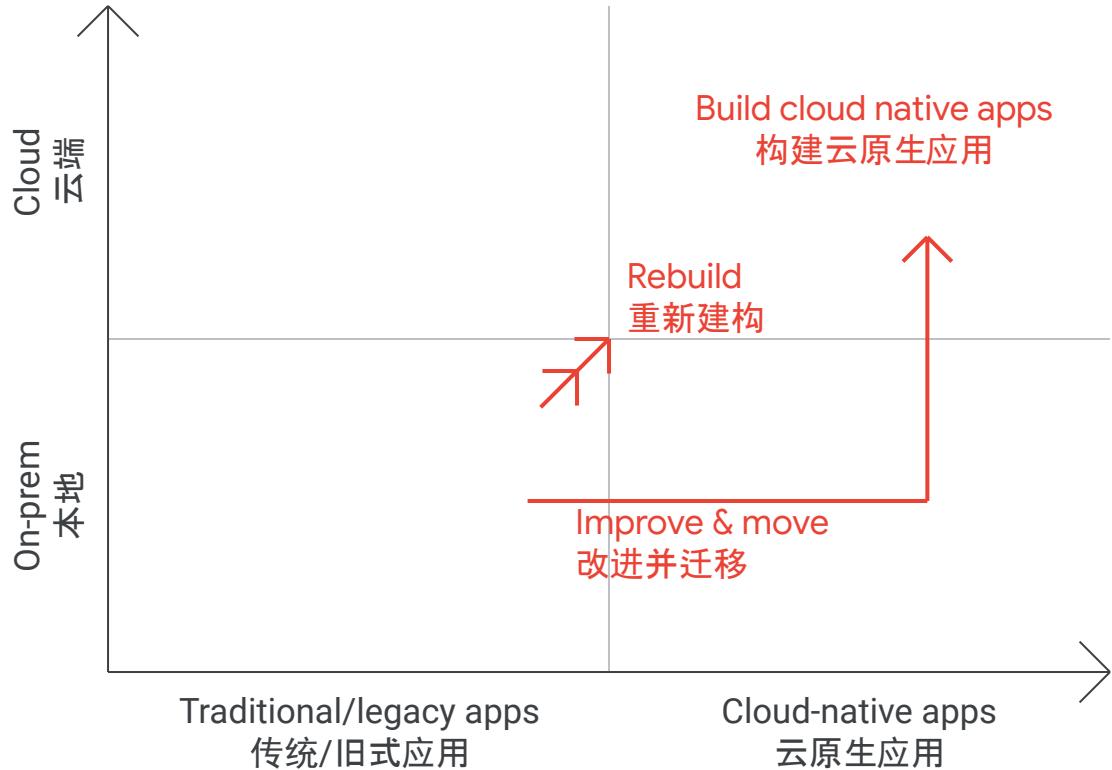


Move and
improve with
Migrate for
Anthos

以**Migrate for**
Anthos进行
迁移并改进



Build cloud native apps on Anthos on Google Cloud or on prem 在 Google Cloud 的 Anthos 上或在本地构建云原生应用



Growing ecosystem of Anthos Partners

Anthos合作伙伴的成长生态系统

Technology partners 技术合作伙伴



Platform partners 平台合作伙伴



Service partners 服务合作伙伴



..and more
还有更多

Compatible third-party solutions on GCP marketplace 在GCP marketplace上兼容的第三方解决方案

Database/Big Data 数据库/大数据	Security 安全	Dev Tools 开发工具	Storage 存储系统	Monitoring 监控	Networking 网络	Other 其他	
  AEROSPIKE				 kasten	 DATADOG		 CONSUL
			 codefresh	 ROBIN			
				 SELDON	 INSTANA		
					 ManagedKube	 RabbitMQ	
			 Gospel Technology			 USAN	
					 Prometheus		
 HOME OF REDIS					 StackRox		
							



Thank you
谢谢