Extending IT Best Practices to Google Cloud

The IT challenge

Today, Google Cloud is helping organizations of all sizes with their digital transformation journey. By leveraging the unique capabilities of Google Cloud, they are unleashing unprecedented speed, functionality, and scale, without compromising security. Whether your business is early in its journey or well on its way to digital transformation, Google Cloud’s robust set of solutions and technologies offer you a path to success in the following ways:

Reduce risk with world-class security: The same security technology that supports Google’s private global network protects your data while meeting rigorous industry-specific compliance standards.

Improve choice with hybrid and multi-cloud: Google Cloud managed, cloud-native solution means your developers can write an application once, then run it on-premises, on Google Cloud, or on other clouds with no change in infrastructure.

Spark innovation with AI and data analytics: Google Cloud’s easy-to-use artificial intelligence and machine learning capabilities are embedded in our core solutions and infrastructure, making them accessible and easily deployed across the enterprise.

Stay nimble with our flexible platform: Simplify your operations and product deployment with Google Cloud’s fully managed, serverless offerings and hybrid and multi-cloud capabilities.

Benefiting from this seamless operation requires building a unified management framework for cloud provisioning, configuration, and service assurance while managing your cloud and on-premises infrastructure from a single pane of glass. But, how do you implement this consistent governance without compromising the agility of Google Cloud?

The ServiceNow solution

ServiceNow® ITOM Optimization lets you rise to this challenge. It includes a comprehensive Cloud Management feature that helps you optimize your cloud operations, reduce your cloud spend, and accelerate your cloud strategy.

By provisioning and configuring on-demand Google Cloud services, Cloud Management delivers uncompromised agility while providing consistent, non-intrusive governance guardrails. And, because it directly leverages native Google Cloud provisioning capabilities, you have unrestricted access to the full power of Google Cloud.

Cloud Management also discovers your pre-existing cloud resources, creating a single system of record for your entire Google Cloud infrastructure. It then manages the lifecycle of your Google Cloud resources, monitoring resources for status changes, automating change requests—for example, increasing resource compute capacity—and deprovisioning resources when they are no longer required.

Cloud Management supports Google Cloud out of the box and it also works seamlessly with ServiceNow IT Service Management—including the Service Catalog and Change Management—providing a single, consistent operating model across both your cloud and non-cloud IT estate.

Create a unified cloud operating model

Use consistent, efficient processes to manage your Google Cloud and on-premises environment. Strengthen governance and reduce operational costs—without compromising speed, agility, or Google Cloud functionality. Leverage your existing ITSM processes, quickly creating a unified management framework across cloud and non-cloud resources.

Deliver Google Cloud services better

Easily define new types of Google Cloud services and offer them through a unified Service Catalog. Automate provisioning of these cloud services, responding instantly to requests from DevOps and other cloud users.

Empower your users with self-service

Deliver a streamlined, responsive user experience by giving cloud users an intuitive self-service portal where they can create new cloud resources, manage existing resources, and see resource status and history across Google Cloud.

Create a unified cloud operating model

Take advantage of integrations with configuration providers including Ansible, Puppet, and Chef, as well as with other vendors such as Infoblox and CyberArk.
ServiceNow IT Operations Management Solutions

ServiceNow’s ITOM gives enterprises complete visibility and control of their entire IT environment—including virtualized and cloud infrastructure. It simplifies service mapping, delivery and assurance, consolidating IT service and infrastructure data into a single system of record. It also automates and streamlines key processes—including event, incident, problem, configuration and change management—creating a complete, consistent and integrated IT operational framework that drives efficiency and improves service quality.

Standardized Cloud Service Catalog

With Cloud Management, you can create a catalog of standardized Google Cloud services using ServiceNow’s role-based Service Catalog. DevOps and other users simply select the Google Cloud service they want from the catalog or using an API, enter configuration parameters—such as storage size—into a form, and submit their request. This provides a consistent, secure, and auditable way of ordering Google Cloud services, delivering effective governance while dramatically simplifying the cloud service provisioning process for users.

Once the request is submitted, Cloud Management automates the end-to-end provisioning process, creating the requested cloud resources in real-time—often in seconds when no approvals are required. This automation ensures the responsiveness that users expect when creating cloud services, rather than having to wait for manual back-end fulfillment processes.

You can define these standardized services using the native provisioning capabilities of Google Cloud. For example, you can import Deployment Manager templates directly into the Service Catalog to create new types of services.

Non-intrusive policy guardrails

While consistent and effective governance is critical for multi-cloud environments, it can’t get in the way of time-critical processes such as your DevOps CI/CD chain. That’s why Cloud Management has a flexible engine that allows you to define appropriate role-based permissions and policies for your users—whether they request resources directly from the Service Catalog or automate requests using the built-in REST API.

For example, you can:

- Define the types of cloud service each user can access based on their role
- Enforce naming conventions for provisioned resources
- Control workload placement
- Set limits on the sizing of individual resources
- Enforce resource tagging policies
- Trigger approval workflows for requests only when specific conditions are met

These mechanisms allow you to create non-intrusive policy guardrails, only requiring approvals for exception conditions.

Empower your cloud users with intuitive self-service

Cloud Management makes it easy for cloud users to see and manage all their Google Cloud services in one place. Its Cloud User Portal delivers a consumer-like, unified experience where users can create new cloud services, manage their existing cloud services, track approvals, and see associated changes and incidents for their cloud resources. The portal also provides budget, and quota utilization information, creating situational awareness and encouraging users to release cloud resources they no longer require.