Optimize your multi-cloud strategy with ServiceNow® ITOM Optimization

The IT challenge
Today, many IT organizations are embracing a multi-cloud strategy to unlock innovation and accelerate delivery. By leveraging and combining the unique capabilities of cloud providers such as Amazon, Microsoft, Google, and IBM, they are looking to unleash unprecedented speed, functionality, and scale.

However, this strategy creates an enormous challenge—one that threatens the very viability of multi-cloud environments. Since each cloud vendor has its own proprietary management tools, there is no consistent operating model across clouds. This creates overwhelming complexity, prevents effective governance, compromises service quality, slows service delivery, and dramatically increases cloud costs. In other words, it defeats the purpose of a multi-cloud strategy.

So, how do you create a unified management framework for cloud provisioning, configuration, optimization, and service assurance? And how do you implement this consistent governance without compromising the cloud’s agility—and without masking each cloud vendor’s differentiated capabilities behind a “least common denominator” solution?

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 multi-cloud strategy.

By provisioning and configuring on-demand cloud services across multiple cloud vendors, Cloud Management delivers uncompromised agility while providing consistent, non-intrusive governance guardrails. And, because it directly leverages native cloud provisioning capabilities—for example, AWS CloudFormation templates—you have unrestricted access to the full power of each cloud vendor.

Cloud Management also discovers your pre-existing cloud resources, creating a single system of record for your entire cloud infrastructure. It then manages the lifecycle of your cloud resources, including tracking costs, 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 Amazon, Microsoft, Google, IBM, and VMware clouds out of the box, and it can easily be extended to support other cloud vendors. 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 multi-cloud environment. Strengthen governance and reduce operational costs—without compromising speed, agility, or cloud vendor functionality. Leverage your existing ITSM processes, quickly creating a unified management framework across cloud and non-cloud resources.

Optimize cloud spend and usage
Get complete visibility of your cloud spend and usage, broken down by services, applications, cost centers, and other entities. Identify cost optimization opportunities, avoid budget overruns, and proactively reduce unnecessary cloud usage.

Deliver cloud services faster
Easily define new types of 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 multiple clouds.

Leverage out-of-the-box integrations
Take advantage of integrations with configuration providers including Ansible, Puppet, and Chef, as well as with other vendors such as Infoblox and CyberArk.

Consistent operating model on a single platform
Standardized multi-cloud Service Catalog

With Cloud Management, you can create a catalog of standardized cloud services using ServiceNow’s role-based Service Catalog. DevOps and other users simply select the cloud service they want from the catalog, enter configuration parameters—such as storage size—into a form, and submit their request. This provides a consistent, secure, and auditable way of ordering services across different clouds, 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 each cloud. This ensures you have access to the cloud’s unique capabilities, rather than restricting you to a common subset of functionality across cloud types. For example, you can import vendor configuration templates directly into the Service Catalog, creating services for different cloud types.

Out of the box, Cloud Management supports CloudFormation, ARM, Google Deployment Manager, and Terraform templates, and it also provides provisioning support for virtualized VMware environments.

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:

- Establish quotas for storage, CPUs, and other resources
- 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—for instance, when a quota is exceeded or when a developer requests a change to a production cloud resource.

Optimize cloud costs and usage

Cloud Management gives you complete visibility of your cloud costs, allowing you to pinpoint where you are spending your cloud dollars, and alerting you when you are exceeding your budget. It assigns your cloud resources to specific cost centers, services, applications, and other entities, and then tracks costs for each of these entities by automatically analyzing billing data from your cloud provider. It presents this cost information on an intuitive billing dashboard along with associated usage data. This lets you quickly identify areas where you can optimize costs, and where you need to take immediate action to rein in excessive cloud spend.

Cloud Management also provides specific capabilities that allow you to proactively reduce cloud spend. For instance, with Cloud Management, you can:

- Automatically turn cloud resources off and on based on a regular schedule. This lets you save money by disabling cloud resources when they are not needed—for instance, outside of normal business hours. Resource owners are also able to turn resources off and on on demand.
- Establish leases for non-production cloud resources, alerting resource owners when the lease is about to expire. Unless the owner renews the lease, Cloud Management automatically deprovisions the resource—reducing cloud sprawl and stranded cloud assets.

Empower your cloud users with intuitive self-service

Cloud Management makes it easy for cloud users to see and manage all their 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 cost, budget, and quota utilization information, creating situational awareness and encouraging users to release cloud resources they no longer require.

Cloud User Portal

Cloud Management also includes a dedicated Cloud Administration Portal, providing a single pane of glass where IT managers can govern their cloud resources and deployment policies across multiple cloud vendors.