Accelerate digital transformation with a cloud-first strategy

The cloud is powering innovation across industries and organizations. By **2025, 85%** of enterprises will embrace a cloud-first strategy, adopting cloud-native architectures and technologies to drive their digital roadmap. This means that the cloud is increasingly becoming the mission-critical foundation that underpins customer experience, productivity, and competitive advantage.

For businesses to thrive, cloud-native services must perform seamlessly 24x7. Outages and degradations are a direct threat to top-line revenues, bottom-line profitability, and brand reputation. Unless organizations can deliver **reliable** cloud applications at scale, they’ll fall behind the innovation curve. Poor service quality puts their customers and business in peril, diminishing their appetite for additional innovation. And the sheer effort of keeping services up and running consumes critical technical resources, reducing their bandwidth for innovation.

**Delivering reliable cloud-native applications is hard**

Cloud-native applications are massively distributed, highly complex, and constantly changing. Microservices spin up and down in real-time in response to shifting workloads, and parallel DevOps teams deliver constant streams of updates. Because of this, traditional monitoring approaches can’t keep up. They also don’t provide the fine-grained visibility needed to diagnose the myriad things that can go wrong as millions of diverse transactions flow across hundreds—or thousands—of connected microservices.

Even when DevOps and SRE teams do have real-time access to the dynamic metric, log, and trace data they need to quickly detect, diagnose, and fix cloud-native service issues, the data typically exists in silos. Teams are left wading through a flood of disconnected raw data, to identify issues and pinpoint root causes. They spend hours trying to get to the bottom of problems when they happen—and predicting and preventing issues is often an unattainable dream. Meanwhile, MTTR and customer experience suffer, error budgets evaporate, and innovation grinds to a halt.

And the problems don’t stop there. Without structured, unified visibility, there’s no way to build consistent best-practice workflows to guide developers and SREs through the diagnostic process. In fact, cloud services are often provided and maintained by a Cloud Center of Excellence or IT Operations teams. While this is an emerging best practice to ensure consistency, manageability, and effective governance, it also creates further organizational and technology silos that complicate issue diagnosis and resolution.

So, full stack visibility remains a major concern. Without the visibility of the underlying cloud services that support cloud-native applications—containers, Kubernetes clusters, and so on—it’s incredibly hard to determine whether the issue lies in the cloud-native service or the underlying infrastructure. ServiceNow Cloud Observability lets you deliver reliable cloud-native applications at scale.
Cloud Observability gives you the real-time, unified visibility you need to drive cloud-native software innovation. It breaks down data silos, delivers actionable insights into cloud-native application performance, and lets you predict and prevent service outages and degradations and quickly resolve them when they occur. With Cloud Observability, you can:

**Fix cloud-native services faster and improve customer experiences** by equipping DevOps and SRE teams with granular real-time visibility of service performance, unifying metric, log, and trace data to instantly identify performance issues and identify the root cause.

**Improve service quality** by identifying areas that are currently affecting the customer experience—or have the potential to do so in future. Armed with these insights, you can proactively optimize and prioritize your development roadmap.

**Accelerate innovation** by reducing deployment risk, increasing velocity, and freeing up high-value development resources and error budgets rather than spending time keeping the lights on.

**Break down barriers between DevOps, SRE, and IT Ops teams** by combining the power of Cloud Observability and ServiceNow Service Operations. Create shared, full-stack visibility across cloud-native applications and underlying cloud services and infrastructure, to see— in one place— how interactions between cloud-native and existing traditional applications affect service performance.

**Manage cloud-native applications at global scale** by leveraging Cloud Observability’s purpose-built architecture. Deliver real-time observability across thousands of microservices at a fraction of the cost of traditional monitoring tools.

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**Get unified, intelligent observability across cloud-native applications**

As a leader in **OpenTelemetry**, Cloud Observability collects traces, metrics, and logs into a single time-series database, intelligently baselining application performance and automatically highlighting anomalies. With multi-indicator visualization dashboards, you get immediate contextual insights into what’s happening so you can easily drill down into underlying data—including individual traces—to pinpoint the issue. And when multiple teams need to work together, Cloud Observability provides collaborative Notebooks so everyone can share charts, investigative paths, annotations, and other insights to drive resolution.

**Understand the root cause of service degradations and outages**

When a cloud-native application degrades or fails, the first two questions are “Where’s the problem?” and “What’s changed?” With Cloud Observability, you know. Cloud Observability automatically analyzes distributed traces to track the end-to-end topology of services in real time. It shows upstream and downstream dependencies for each microservice, along with associated telemetry data such as latency, errors, and throughput. These service maps simplify the diagnosis of issues across distributed microservices, helping you identify where the problem is. And with powerful Change Intelligence capabilities, Cloud Observability also automatically identifies significant changes in service performance and configuration, letting you go from service issue to root cause quickly and easily. You now have the clarity and confidence to resolve issues before customers even notice them.
Accelerate innovation and increase repeatability with observability-as-code

Cloud Observability makes it easy to integrate observability into your DevOps pipeline, accelerating innovation by ensuring that cloud-native applications are manageable from day one. With our powerful Unified Query Language (UQL), you can implement observability-as-code, by automatically setting up dashboards and alerts for your containers, clusters, applications, and more. Use the Cloud Observability Terraform provider and UQL-supported APIs to instantly deploy dashboards and alerts with a single command. This makes monitoring pervasive and scalable across your organization, improves reliability and repeatability, increases developer velocity and frees up SRE teams and your users can also use UQL to create their own dashboards and ad hoc queries.

Combine the power of Cloud Observability and Service Operations to create full-stack visibility

Cloud Observability natively integrates with the NOW platform to create unified full-stack visibility that breaks down barriers between DevOps, SRE, and IT Ops teams. Teams can now work together with consistent, shared visibility of service topologies and performance, while still using familiar tools—Cloud Observability for Dev and SRE and ServiceNow for IT Ops—to rapidly diagnose and resolve service issues. Cloud Observability automatically feeds real-time service topology data to ServiceNow to create comprehensive service maps spanning from cloud-native applications to underlying cloud services in the ServiceNow CMDB. And it also sends alerts to ServiceNow Predicative AIOps when there are performance anomalies in cloud-native applications, which ServiceNow automatically correlates with cloud service alerts to let IT Ops see when cloud service issues are impacting cloud-native applications. This also allows IT Ops to diagnose cascading symptoms across hybrid cloud/non-cloud environments—for example, when cloud-native applications communicate with on-premises systems.

Your users can also use UQL to create their own dashboards and ad hoc queries.
Let’s recap

The cloud has become the preferred platform for digital innovation. However, unless cloud-native applications perform seamlessly 24/7, organizations face direct threats to their revenues, profitability, and brand. That’s a huge challenge. Cloud-native applications are massively distributed, complex, and constantly changing. Traditional static monitoring approaches don’t work, and even when DevOps and SRE teams have access to dynamic monitoring data, teams struggle to manually correlate huge volumes of disconnected information. This problem is made worse by organizational silos across development, SRE, and IT Operations, resulting in high MTTR, poor customer experiences, high costs, and an inability to accelerate innovation.

Cloud Observability gives you the real-time, unified visibility you need to drive cloud-native software innovation at scale. With ServiceNow, you can:

- **Fix cloud-native services faster** by equipping DevOps and SRE teams with fine-grained, real-time visibility of service performance.
- **Improve customer experiences** by identifying issues that affect the experience and prioritizing these in your development roadmap.
- **Accelerate innovation** by reducing deployment risk and freeing up high-value resources to drive innovation.
- **Break down barriers** between DevOps, SRE, and IT Ops teams by combining the power of Cloud Observability and ServiceNow to create shared, full-stack visibility.
- **Manage cloud-native applications at global scale**, leveraging Cloud Observability’s purpose-built architecture to deliver real-time observability across thousands of microservices.