Cloud Infrastructure Management Challenges

Public cloud infrastructure has become an essential component of IT. ESG research confirms that 94% of respondents currently use public cloud services; in addition, infrastructure-as-a-service (IaaS) usage has skyrocketed from 27% in 2012 to 67% in 2020. The ease of change—spinning up VMs, containers, and serverless processes as needed and then spinning them down again—is a positive feature for business activities, but creates challenges for security, threat detection, incident management, and event management. Complex systems are often managed by silos of teams, delaying critical responses. IT complexity is increasing: 64% of ESG research respondents say IT is more complex than two years ago, and 31% call out the increasing/changing cybersecurity landscape as a top driver of IT complexity.¹

Cloud-based applications must safely ingest events to drive workflows, but this can require complex, manual configuration. Also, monitoring security and compliance across a diverse set of applications and processes in the cloud is a monumental task. Organizations are bombarded with notifications and alerts of differing severity, and it is difficult to know how to address them efficiently. IT must identify threats and assign them to the right teams for remediation. How can organizations address these needs in real-time? How can they improve visibility across their cloud deployments, automate responses, and intelligently distribute tasks to the right teams? Equally important, how can businesses best justify their investments in tools that improve visibility and enable real-time action for security and compliance?


PagerDuty is a cloud-native, intelligent, digital operations management platform. It correlates machine data with human response data to collect event and incident details and orchestrate real-time actions by either automating tasks/workflows or intelligently distributing on-call tasks. From PagerDuty’s desktop or mobile app, PagerDuty customers gain better visibility across Amazon Web Services (AWS) deployments for Dev, Ops, and Security teams; faster, more accurate incident response and event ingestion; and reduced operational disruption. Features include:

- Integration with Amazon CloudWatch, AWS CloudTrail, AWS Security Hub, Amazon GuardDuty, Amazon EventBridge, and AWS Personal Health Dashboard as a 100% AWS-built solution.
- Scalable, secure, reliable AWS architecture, which the solution was designed for and runs on.
- API support and more than 350 native PagerDuty integrations for full extensibility.
- Event ingestion from any source, extracting signal from noise and automatically triggering workflows.
- Automated, real-time threat response and compliance monitoring via AWS Security Hub, pulling data from AWS and from tools available from independent software vendors (ISVs).
- Due to Amazon EventBridge integration, event-driven workflows can be triggered by PagerDuty events without complex webhooks or manual configuration.

Why AWS Marketplace?

Choose from thousands of solutions.

Pay only for what you use.

Real-time security and compliance insight and action with PagerDuty.

AWS Marketplace is a digital catalog with thousands of software listings from independent software vendors that make it easy to test, buy, and deploy software that runs on AWS. Solutions are available through a wide variety of delivery methods.

Other benefits include:

- Ready-to-run software.
- Searchable catalog.
- Detailed usage tracking.
- Free trials.
- Simple procurement, no provisioning required.

ESG Business Justification

- AWS Marketplace brings streamlined deployment to enterprise-class IT. Dev, Ops, and Security pros immediately gain increased visibility into incidents and events across the AWS deployment to take real-time action.

- ESG observed how easy it is to configure PagerDuty integrations with Amazon Web Services such as Amazon CloudWatch, Amazon GuardDuty, and AWS Personal Health Dashboard, and to quickly create topics, subscriptions, alarms, notifications, and rules.

- PagerDuty helps speed cloud migrations and reduces the impact of issues throughout the migration lifecycle.

- During times of crisis, PagerDuty helps to automatically remediate incidents and alert the right teams for fast action to prevent application disruption.

Why PagerDuty?

Real-time digital operations.


Find and fix problems faster with a real-time view, automation, and intelligent task distribution.

Reduce business risk and maintain high application availability.

The Bigger Truth

Reliance on public cloud infrastructure continues to grow. According to ESG research, 87% of survey respondents reported that they currently run production applications/workloads in public cloud IaaS, and the remaining 13% plan to do so in the next year. It is essential that applications and processes running on AWS remain secure and compliant, and that organizations are not overwhelmed by an avalanche of notifications that prevent real-time action.

ESG believes that there is ample business justification for an AWS Marketplace PagerDuty investment. AWS Marketplace gets you to the cloud quickly and cost-efficiently with preconfigured solutions that expand your capabilities without adding effort or risk. PagerDuty simplifies incident and event management with automated action and intelligent distribution of on-call tasks, enabling real-time responses and improving workflows. PagerDuty is also integrated with AWS and Amazon security, serverless processing, and event ingest services for greater optimization.

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