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Streamline Your Cloud Operations with Slack and AWS Chatbot

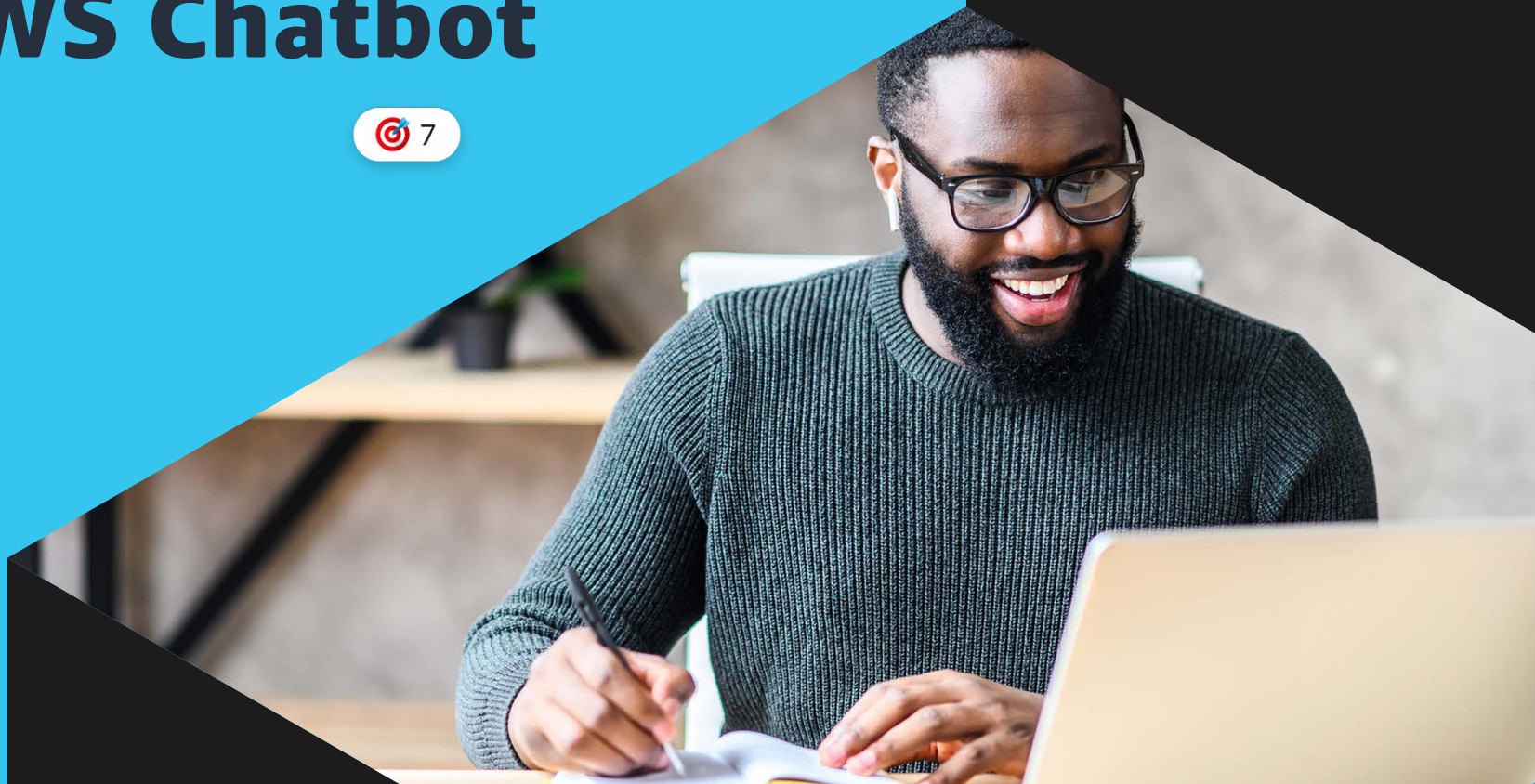


Table of contents

Increase CloudOps efficiency with centralized workflows

CloudOps professionals—from DevOps engineers to site reliability engineering (SRE) teams—pursue paths to streamlined processes and product development. They care about transforming complicated procedures into simplified ones, whether it's through system automation, workflow improvement, or continuous integration (CI) and continuous delivery (CD). And since technology is always evolving, CloudOps teams also value collaboration that facilitates knowledge sharing.

It's no surprise, then, that 81% of developers believe adopting new tools is critical to an organization's success. But this preference for constantly adding to their toolbox can also complicate cloud operation workflows because it requires context switching, which increases the time it takes to execute tasks, resolve incidents, and communicate. As engineering and IT departments onboard new technology, they need automation to optimize these efforts.

As they modernize, more cloud professionals are discovering that some of their most efficient tools are ones they're already employing—users just need to tie them together. Amazon Web Services (AWS), the most comprehensive and broadly adopted cloud platform, and Slack, the productivity platform that connects your people, tools, customers and partners, have joined together to provide developers and IT professionals with an option for more effective collaboration and automation. With access to more than 200 fully featured AWS cloud services through Slack, users can easily improve their cloud operations from end to end.

Improve speed, agility, and collaboration across the development lifecycle

This guide will demonstrate just a few ways developers and IT professionals can improve their cloud-centric workflows by monitoring and managing their AWS environments from Slack.

An AWS and Slack integrated ChatOps environment centralizes teams, tools, and collaboration into a single place that enables teams to ship code faster, reduce incident response times, and increase visibility and collective learning.

Taking full advantage of the AWS and Slack integration means cloud professionals can:

Shorten development lifecycles by getting back the time lost to context switching among platforms

Speed up incident resolution times by invoking runbooks for consistent and repeatable responses

Create cross-department collaboration and increase knowledge sharing by removing barriers that siloed tools create

At the foundation of this partnership is AWS Chatbot for Slack, an interactive agent that can facilitate monitoring, diagnostic, and operations activities. In Slack, this powerful integration is designed to streamline ChatOps, making it easier for teams to manage their operational activities—whether it's system management or CI/CD workflows.

Bringing engineering and operations platforms together can[1]:

Reduce build time by **18%** and shorten go-to-market time by **16%**

Shorten mean time to resolution by **19%**

Improve developer productivity by **16%** and team satisfaction by **37%**

"AWS Chatbot has enabled us to run CLI commands safely from Slack to manage AWS resources from Slack. This saves us time, provides visibility to the team, and our customers benefit from the lower total cost of ownership (TCO)."

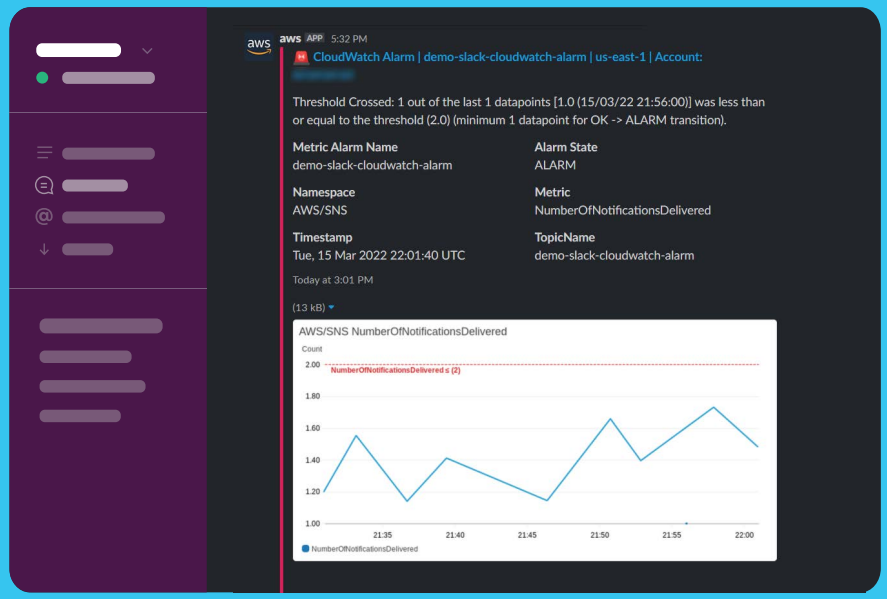
Nedim Dedic
CTO, Glide Publishing Platform

1. Source: "The Total Economic Impact" of Slack for Technical Teams," a commissioned study conducted by Forrester Consulting on behalf of Slack, July 2020

AWS & Slack for incident management

Without Slack: Jason is a member of the Site Reliability Engineering team at a company focused on delivering payment solutions for small businesses. He receives an application metric alert in Slack indicating payment processing failure rates are abnormal. He starts reviewing application logs and other application related metrics in Amazon CloudWatch to identify a reason for the failures. As he continues to gather and parse the data, status updates are sought by stakeholders and teammates over email, the incident bridge call and Slack. Folks joining the conference call late need to be brought up to speed and the constant stream of interruptions increases the time to resolve the incident. The company also requires an incident review to be completed for root cause analysis when a service interruption occurs in production. This requires a detailed record of actions during the incident, metrics, and log data adding to his workload.

With Slack: The Site Reliability Engineering team decided to use AWS Incident Manager, AWS Chatbot and Slack to reduce the workload on engineers during incidents, improve incident response, streamline incident reviews and minimize the need to repeat status information across multiple communication channels. Since Jason and his team worked on an Incident Manager Response Plan he is able to acknowledge the alert, engage the right people, begin mitigation of the issue by pulling metrics data from CloudWatch and execute actions detailed in a runbook. Status changes on each step in the runbook will be sent to the incident channel in Slack, keeping interested parties informed without the need for manual updates by Jason. This allows Jason to focus on resolving the incident and getting the business back to processing payments. Post-recovery, the remediation actions, metrics and log data can be analyzed to drive process improvements. He also has a timestamped audit trail, and can easily review events, actions, and decisions during the team's incident review meeting.



VIEW THE WEBINAR →

To learn more on the Slack and AWS Incident Manager integration.

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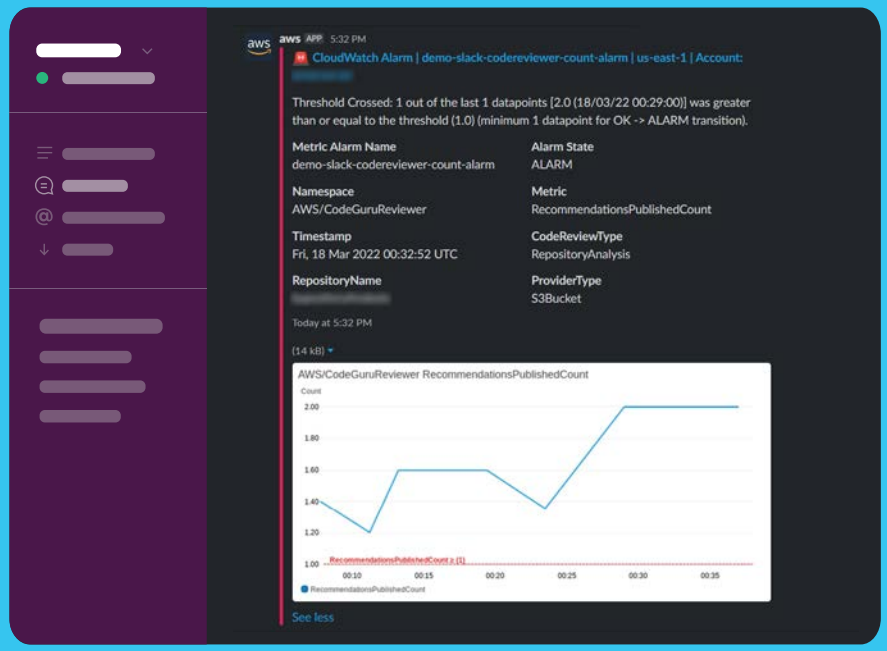
AWS & Slack for software development pipelines and DevOps

Without Slack: Fatima works for a healthcare technology company as a DevOps engineer and has a tight deadline for a new feature launch scheduled for next week. A teammate pushed a code update to the repository a few minutes ago initiating the build action of the pipeline. While reviewing results of integration testing for the new code, she notices spikes in failure rates for some API calls. Since different team members are working on different, interrelated aspects of the project, she needs to collaborate with them to determine the best path forward. She starts pulling logs and metrics to share with them while also trying to find time on their calendars to address the issue. However, it's hard to find a time when they are all available before next week. She spends the next hour chatting back and forth with her distributed team to lock down a time to address the issue.

With Slack: Since Fatima's team uses Slack to improve collaboration between teams and break down silos, she can reach out to teammates and have them join a Slack huddle based troubleshooting session. To ease access to CloudWatch metrics and logs, the team has integrated Slack with AWS Chatbot and they can use @aws commands to retrieve them during the troubleshooting session. Fatima and her teammates review the metrics and log data as well as code changes. They are then able to identify the cause, agree on the changes needed to resolve the issue and assign tasks. The rest of the team can continue working on other deliverables while task owners implement the changes required and the development work on the new feature keeps moving forward.



Go a step further: Fatima's team would like to do more from Slack to increase collaboration and knowledge sharing. Since they run workloads on AWS and already monitor, operate and troubleshoot them from Slack, they would like to add the ability to manage them as well.

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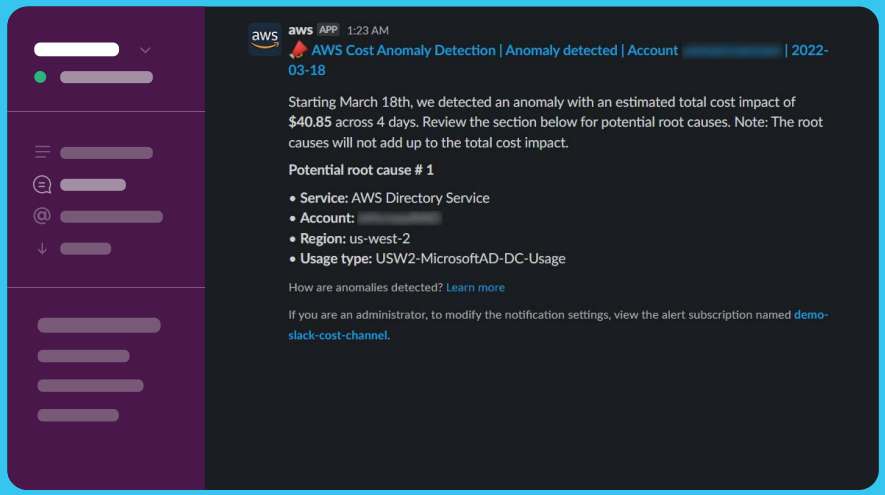
AWS & Slack for administration and cloud management financials

Without Slack: Things move fast in the cloud—that's why Paul has a weekly reminder to review AWS Cost Explorer for his company's cloud infrastructure on AWS. Sometimes he lets the reminder lapse when he gets busy with other requests and responsibilities. During planning and review sessions with the finance team, if infrastructure cost overruns are raised, he has to identify the resource and owner to determine the reason for the overage and possible remediation. It turns out he dismissed the reminder last week and sees a spike in costs from the previous week. He reaches out to his point person—but she's out of office and has to find the right backup contact as costs continue to mount. After sending emails to various developer and CloudOps teams, he learns that one of the teams deployed resources during a test and didn't clean up after themselves. He has a long day of damage control ahead of him—and in the long-term, he needs to figure out how to mitigate this kind of financial risk to the company.

With Slack: Paul set up alerts using AWS Cost Anomaly Detection to go to his financials channel in Slack. This sends him notices in real time whenever a cost anomaly is detected, instead of relying on a weekly calendar reminder. When the notification is received, he is able to see the service, AWS account and region. Using Slack, he reaches out to teams and shares the details to identify the owners and start a huddle with them. During the huddle session, the owners recall scaling up instances for stress testing that led to the cost anomaly alert firing. Paul doesn't have to rely on his weekly reminder and is able to optimize costs with less effort.



Next steps

Learn how to setup Cost Anomaly Detection using AWS Chatbot and integrate it with Slack here.

LEARN MORE →

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Other integrations from AWS and Slack with more to come

84% of developers say integrating operations and engineering platforms optimizes communications and experience. We're aiming for 100%.

By bringing a broad set of AWS tools into Slack, CloudOps and development teams can leverage a host of integrations to ship quality code faster, reduce incident response times, and innovate more rapidly—but that's not the end of the story.

AWS Chatbot supports a number of integrations with AWS services, with more to come. Customers can monitor their AWS resources and configure their resources and environments directly from Slack channels by issuing CLI commands. Some of the more popular integrations include using:

- **AWS CloudFormation** to easily model, provision, and manage AWS and third-party resources.
- **AWS CodeBuild** to compile source code, run tests, and produce software packages that are ready to deploy.
- **Amazon EventBridge** to build event-driven applications at scale using events generated from your applications, integrated Software-as-a-Service (SaaS) applications, and AWS services.
- **AWS Health** for ongoing visibility into your resource performance and the availability of your AWS services and accounts.
- **AWS CodeCommit** for a secure, highly scalable, managed source control service that hosts private Git repositories.

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Optimize your DevOps in more than 200 ways

Monitor, operate, and troubleshoot AWS workloads from Slack channels without switching context between Slack and AWS Management Tools.

Integrate AWS Chatbot today

View demos

Diagnose and Operate AWS Resources with Slack and AWS

Monitor AWS Resources with Slack and AWS

AWS Support App for Slack

Use the AWS Support App to collaborate with support agents on cases through Slack. You can use the AWS Support App to create, update, search for, and resolve support cases in Slack channels, and start a live chat session with support agents and members from your team.

Integrate the AWS Support App Today