

Accelerate Incident Response on EKS with the AWS DevOps Agent

A frontier agent that works with your team to resolve and proactively prevent incidents

Yuya Hirooka

Partner Solutions Architect



OUR VISION

To provide the best place to build
and scale the most useful AI agents



Frontier agents on AWS



Kiro autonomous agent

The frontier
development agent
that extends your flow



AWS Security Agent

Ship with confidence.
The frontier agent for more
secure apps.



AWS DevOps Agent

Fewer alerts, more sleep for
your team. The frontier agent
for operational excellence.

AWS DevOps Agent

Drive operational excellence with a frontier agent that resolves and proactively prevents incidents

Autonomous incident response

Proactive incident prevention

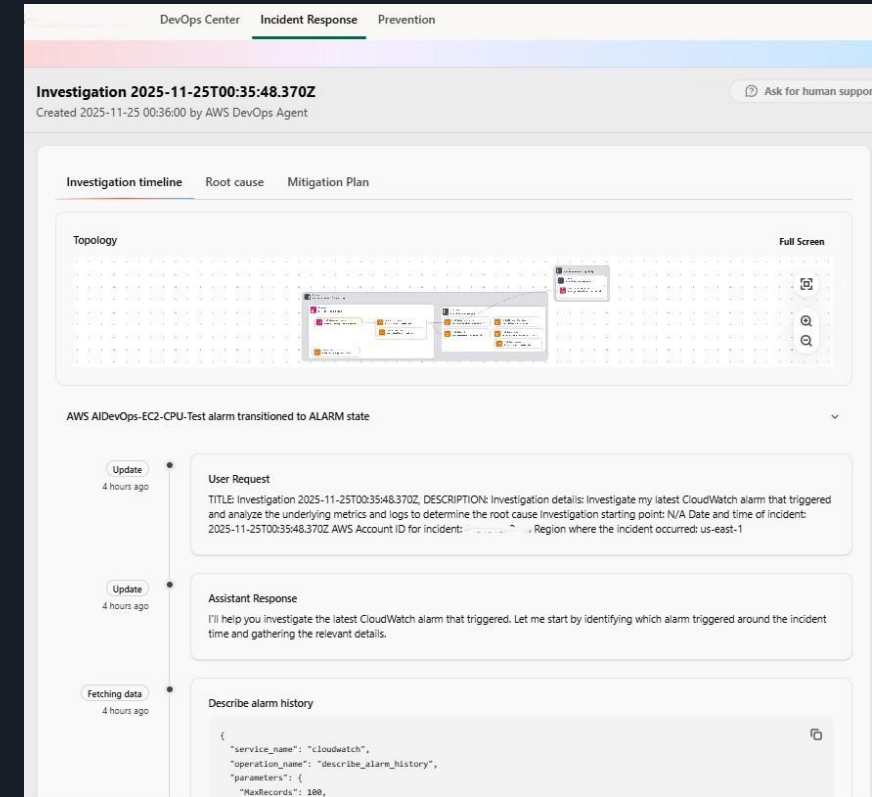
Integrates with your DevOps tools

Intelligently maps your resources

Always on incident response

- Auto responds to alarms and tickets
- Shares hypotheses, findings, and root cause
- Provides detailed mitigation plans

Systematic investigation of **system changes**, **input anomalies**, **resource limits**, **component failures**, and **dependency issues** across your entire stack, targeted mitigation steps, reduced MTTR.



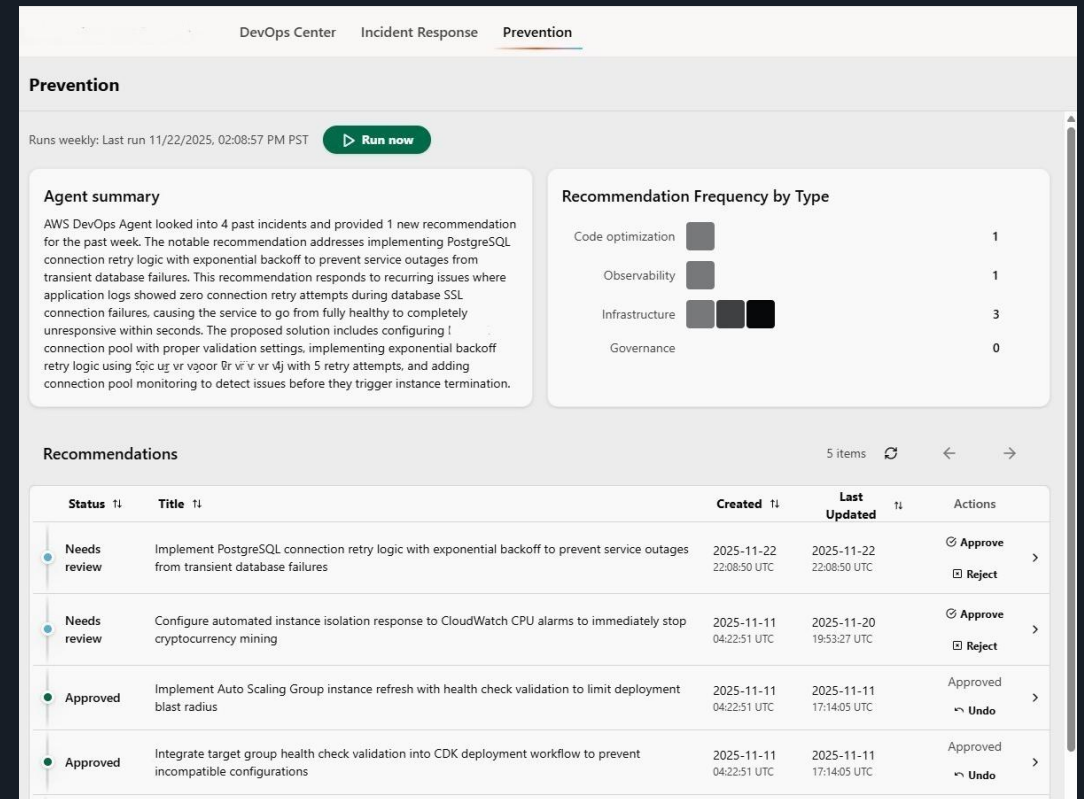
Proactive incident prevention

Reviews past incidents

Identifies underlying problems

Recommends fixes

Analyzes patterns across historical incidents to provide actionable recommendations in four key areas: **observability, infrastructure optimization, deployment pipeline enhancement, and application resilience.**



AWS DevOps Agent key capabilities

A team player

Responds to tickets and alarms, and shares findings in team collaboration channels.

A telemetry expert

Quickly introspects alarms, metrics, logs, and traces from any telemetry provider.

A pipeline pro

Finds changes that cause incidents, and recommends pipeline improvements

Knows your apps

Maps your app topology, learns from your runbooks, and understands your cloud

AWS DEVOPS AGENT

A team player



- Responds to tickets and alarms from your existing tools, like **ServiceNow** and **PagerDuty**
- Posts its findings in triggering tickets and team collaboration channels, like **Slack**
- Works together with other AI Agents, like **Dynatrace Davis**

AWS DEVOPS AGENT

A telemetry expert



dynatrace



DATADOG



new relic®

splunk>
a CISCO company

- Built-in connections to **AWS CloudWatch, Dynatrace, Datadog, New Relic, and Splunk**
- Extensible to any telemetry provider, including **Grafana and Prometheus** via MCP server
- **Quickly and efficiently queries** alarms, metrics, logs, and traces during incident investigations
- Recommends **observability posture improvements**

AWS DEVOPS AGENT

Is a pipeline pro

GitHub  GitLab

- Built-in integrations with **GitHub** and **GitLab**
- Identifies **incident-causing code deployments**
- Provides **roll-back guidance**
- Recommends **pipeline improvements** to prevent future incidents

AWS DEVOPS AGENT

Knows your company, cloud, and apps

- Learns your organizational practices and process from **steering files and runbooks** that you provide
- Has deep knowledge of your AWS cloud services and **1-click “ask an AWS expert”** support
- Builds and maintains a detailed **application topology** graph to inform and guide its tasks

Agent Space – Mental Model

An Agent Space defines the scope of what AWS DevOps Agent can access

The screenshot shows the AWS CloudSmith console for AgentSpaces. The top navigation bar includes the AWS logo, a search bar, a keyboard shortcut [Option+S], and icons for help, notifications, and settings. The region is set to United States (Oregon). The left sidebar shows the CloudSmith logo and the AgentSpaces section. The main content area is titled 'AgentSpaces' with an 'Info' link and a 'Create AgentSpace +' button. Below this, there are three AgentSpace entries: 'Application X_Prod', 'Team_Y', and 'Simbai'. Each entry has a description and an 'AgentSpace Details' button. The footer includes 'CloudShell', 'Feedback', and copyright information for Amazon Web Services, Inc. or its affiliates.

aws [Search] [Option+S] United States (Oregon) ▼

CloudSmith < AgentSpaces

AgentSpaces [Info](#) [Create AgentSpace +](#)

An AgentSpace represents a single CloudSmith installation.

Application X_Prod [AgentSpace Details](#)

Description
This AgentSpace contains the production environment of Application X, including its AWS native cloud resources, CloudWatch observability signals, SIMT CTIs, , Pipelines, Gitfarm code repos, and development team from Bindles.

Team_Y [AgentSpace Details](#)

Description
You can also create agent spaces that map to your team structure.

Simbai [AgentSpace Details](#)

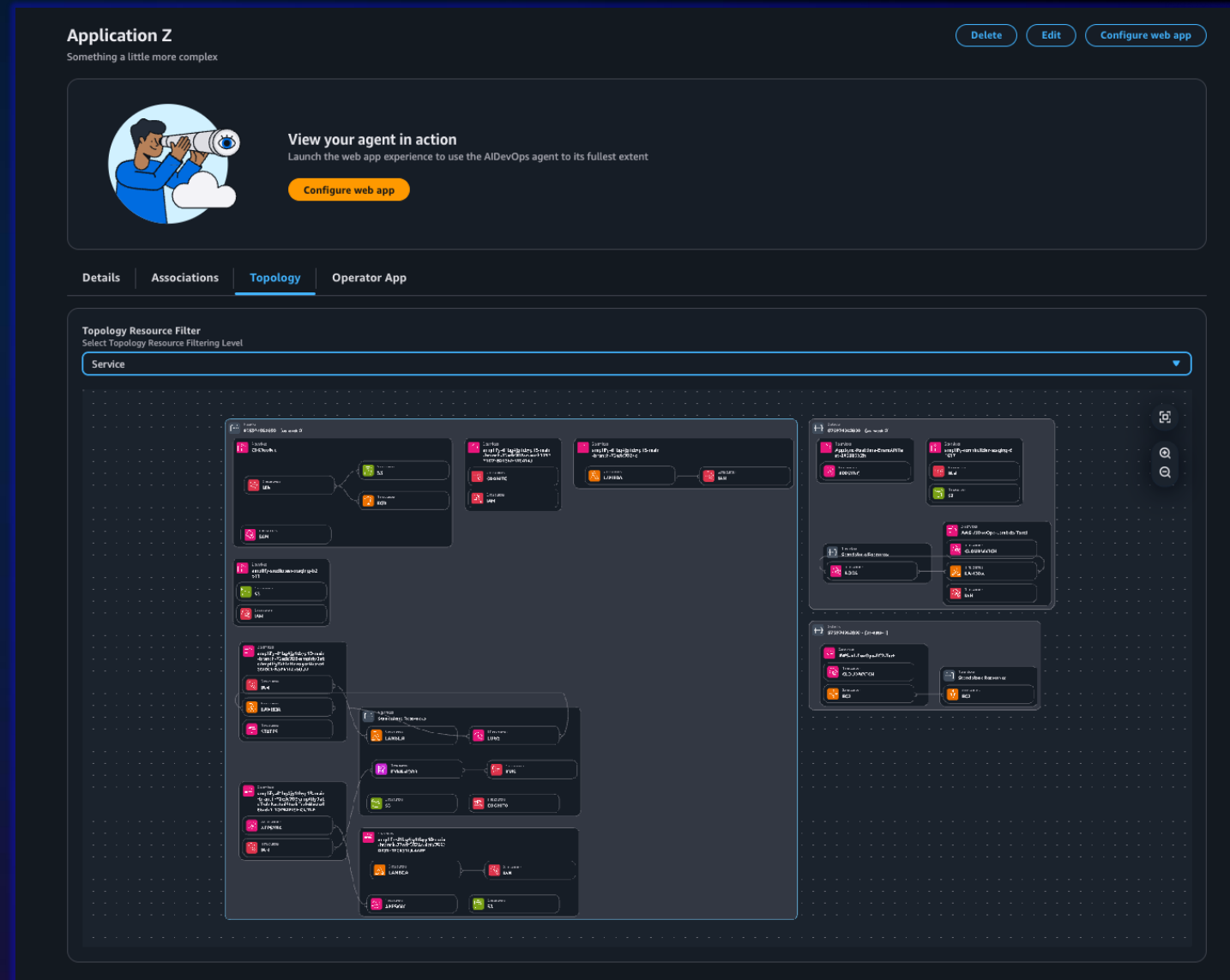
Description
An example

CloudShell Feedback © 2025, Amazon Web Services, Inc. or its affiliates. Privacy Terms Cookie preferences

Intelligent Application Topology

The agent builds a comprehensive map of your system:

- **System components** and their interactions
- **Deployment history** tracking
- **Dependency relationships**
- **Resource discovery** that grows over time





EXAMPLE CUSTOMER

Commonwealth Bank of Australia

"AWS DevOps Agent's seamless integration with our existing enterprise tools including ServiceNow, Splunk, and our custom MCP servers makes it even more valuable for our operations."

Before

5+ hours

Unassisted RCA

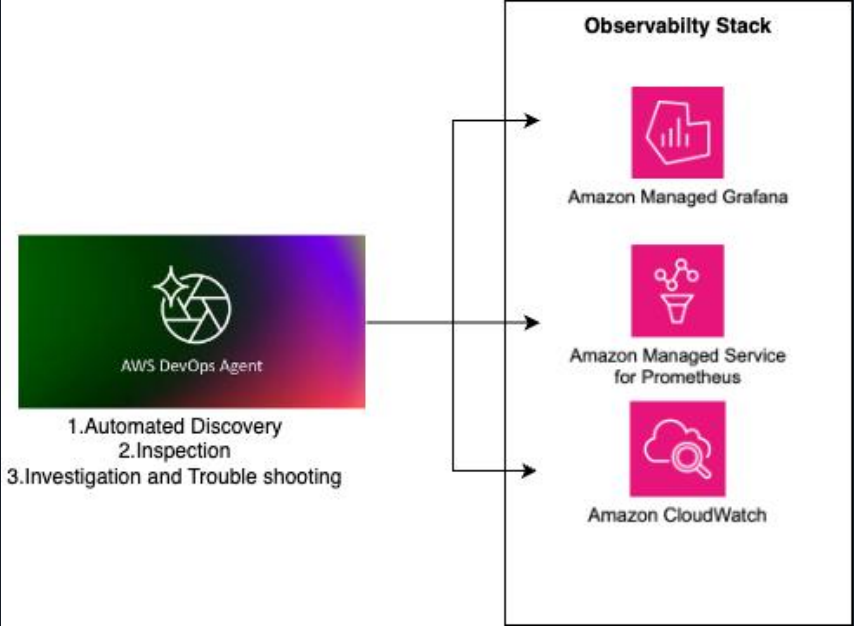
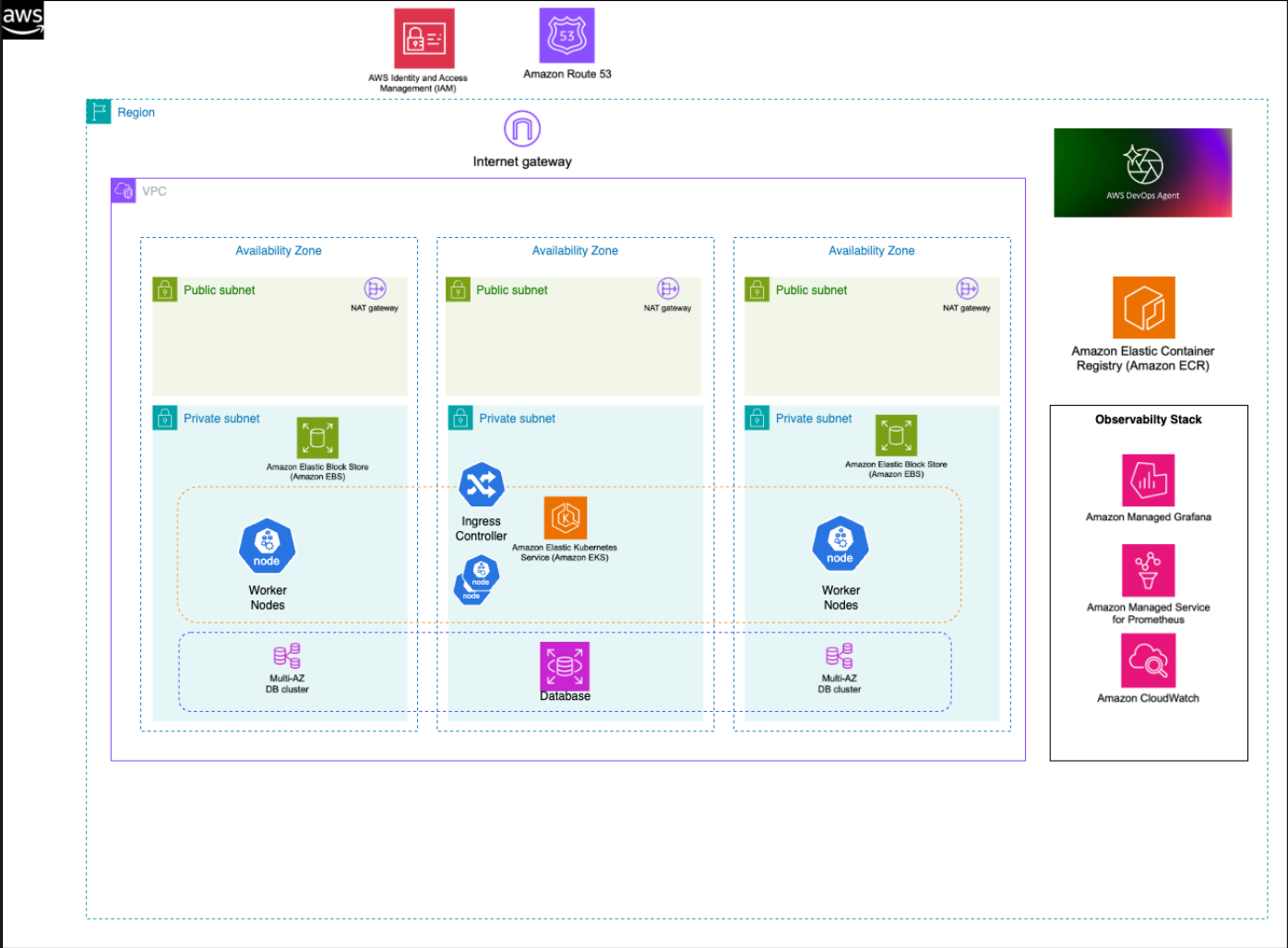


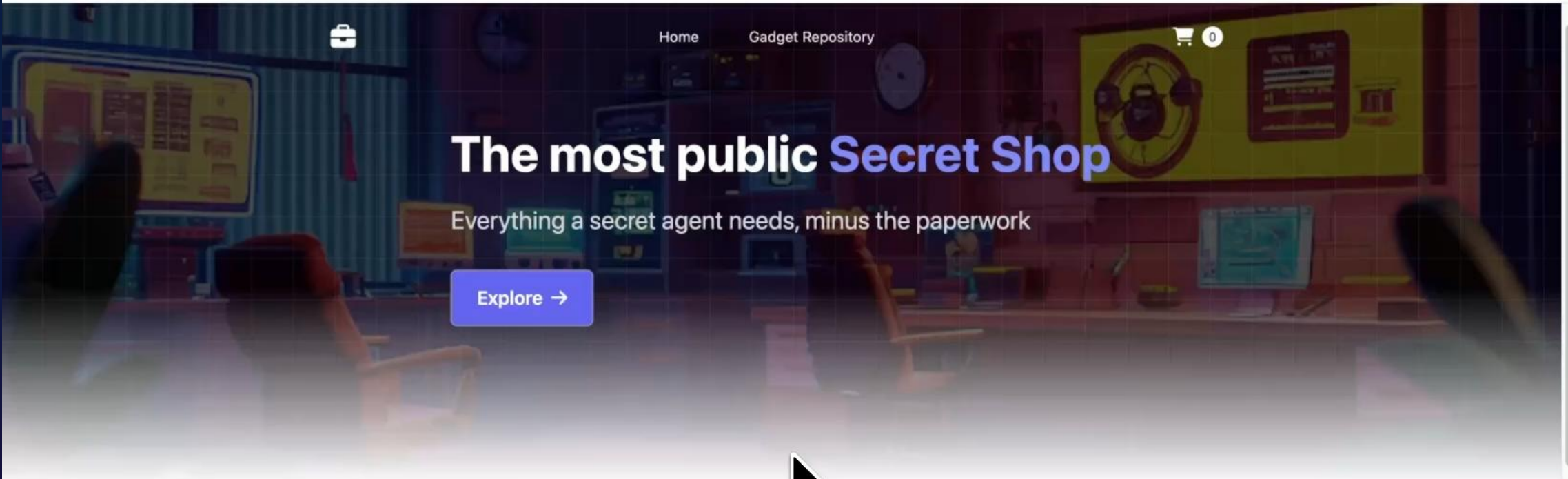
After

Under 1 hour

With AWS DevOps Agent

Demo: Retail Store Architecture + DevOps Agent





Mission Critical Gear

[View Gadget Repository →](#)

These products are for demonstration purposes only



Demo Learnings

- **Network policies can make services unreachable** - Pods appear healthy but can't receive traffic
- **Check NetworkPolicies early** - Often overlooked during troubleshooting
- **Pod health $\neq$ reachability** - A healthy pod may still be unreachable due to network blocks
- **DevOps Agent checks network configuration** - Not just application health

Thank you!

