Citrix Case Study

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citrix

Solution Category: Cloud Governance Deployment Model: SaaS outside AWS Using Cloudaware: Since 2018 Available On Marketplace: Yes

About Citrix

Citrix (NASDAQ: CTXS) aims to power a world where people, organizations, and things are securely connected and accessible to make the extraordinary possible. Citrix helps customers reimagine the future of work by providing the most comprehensive, secure digital workspace that unifies the apps, data and services people need to be productive, and simplifies IT's ability to adopt and manage complex cloud environments. With 2021 annual revenue of \$3.22 billion, Citrix solutions are in use by more than 400,000 organizations including 99 percent of the Fortune 100 and 98 percent of the Fortune 500.

Problem Statement

Citrix operates large-scale AWS deployment with over 250 AWS accounts and organizations. These accounts and subscriptions contain more than 1,500,000 configurable assets.

Citrix Cloud Security team relied on several open-source frameworks to perform AWS compliance verification. Namely, Cloud Custodian and Scout2. For AWS compliance, Citrix created their in-house tool. As the cloud compliance program was maturing, specific challenges began to emerge:

- → Each product division wanted to customize policies slightly to fit their risk profile
- → Lack of exception handling process
- → Some tools caused API throttling issues for production applications during scanning
- → Many compliance policies between AWS and other cloud providers were duplicated, especially those related to a tagging policy.

Cloudaware Modules Deployed

- → Cloudaware CMDB
- → Cloudaware Compliance Engine
- → Cloudaware Incident Management

Solution

Cloudaware is a modular SaaS-based cloud management platform. Our CMDB uses collectors, which leverage AWS Config, AWS CloudTrail, and service-specific API calls to build a complete inventory of all customer AWS infrastructure.

Citrix used automatically generated CloudFormation StackSets and AWS Organizations where possible to create a cross-account IAM role which allowed Cloudaware CMDB collectors to start harvesting information about the current state of Citrix AWS infrastructure and populate CMDB.

In addition to supporting AWS, Cloudaware CMDB also supports other cloud vendors and provides integrations for on-premises infrastructure. This allowed Citrix to create a single pane of glass for all their infrastructure regardless of where it was hosted.

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Tagging

The particular area of importance for Citrix was enforcing consistent tagging standards across their infrastructure. Using Cloudaware Tag Analyzer which is part of the CMDB, Citrix could better understand and correct deviations in their tagging coverage.

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arch_compliance		1578	92.61%	caTag_archcompliancec	KO Arch Compliance		+ CREATE CATA
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business_unit		1555	91.26%	caTag_businessunitc	KO Business Unit		+ CREATE CATA
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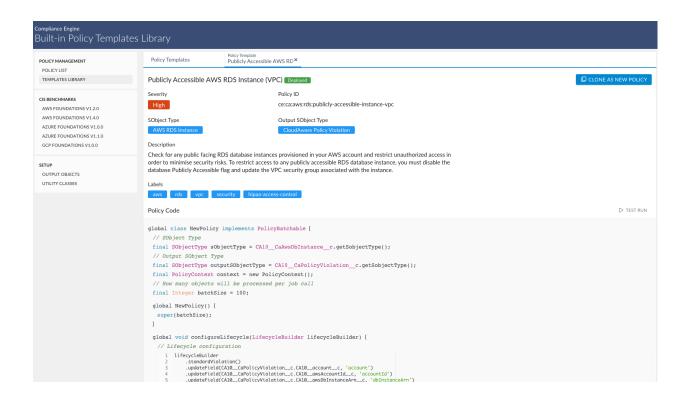
Compliance Engine

Cloudaware Compliance Engine is a collection of over 450 cloud configuration policies and industry benchmarks available from CIS and other frameworks such as Scout2, CloudCustodian, CloudConformity, etc.

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Cloudaware Compliance Engine has several key differentiators from other similar solutions available on the market:

- 1. Extremely rich library of policies
- 2. Multi-cloud policies
- 3. Ability to author new and clone existing policies using Java programming language
- 4. Customize policies for specific accounts, VPCs, etc.
- 5. Ability to create policies that evaluate non-cloud attributes available in CMDB
- 6. Reduce the number of API calls made to the cloud by collecting once and running evaluations against CMDB, not against cloud inventory
- 7. Integrate with third-party ticketing systems such as JIRA, ServiceNow, ServiceCloud, etc.
- 8. Automate exception handling processes

Sample policy interface:

