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Title: Open Source and Automation Fast-Track Business Pivot to Cloud

Most businesses are blending emerging cloud services, existing on-premises clouds and traditional IT applications to rapidly launch new ways to work together, serve customers and dig deep into leveraging analytics. IT teams have been working overtime to stand up new capabilities and refresh existing applications, while staring down IT budget constraints and headcount limits.

Almost overnight, traditional IT Ops organizations have had to step up to become CloudOps teams. Instead of taking months to plan, procure, configure, test, secure and deploy datacenter systems, these modern CloudOps teams are embracing open source and automation to move fast and increase efficiency.

Evolving Traditional IT Management Strategies for Cloud Scale Operations

We know this has been hard. The learning curve for IT has been steep as organizations have struggled to adapt to new ways of working remotely and collaborating online. Taking digital concepts from ideation to operations in weeks rather than months or years has strained every traditional IT process, particularly when IT operations has needed to work closely with business and developer teams that have been widely disrupted while forced to work from home.

For many it has been difficult to maintain consistent infrastructure and application configurations, security, and change control programs as workloads are quickly migrated, scaled, and updated across mixed on-premises and public cloud resources.

Traditional command line and GUI-based configuration and provisioning tools are optimized for single vendor environments and don't scale well across multiple clouds. With the rapid pivot to digital business in the cloud, it is clear that IT needs modern, open, hybrid and multicloud management tools and automation to keep up with rising levels of complexity and change.

Taking Advantage of Open Source GitOps Automation Innovation

Open source communities are powerful sources of cloud-native technology innovation, including infrastructure-as-code automation, sometimes referred to as GitOps. Unlike traditional proprietary automation tools, infrastructure as code allows IT Ops and CloudOps teams to transform the way they work. Open source GitOps automation frameworks rely on code to define configurations and operational workflows once, then apply them consistently across many platforms and services.

Using open APIs, automation-as-code can be deployed to integration software development tool chains and to link complex infrastructure configuration and deployment workflows.

Vendor-Supported Open Source Automation to Get Started Faster

Getting started with open source-based automation can be challenging if staff does not have a lot of experience with coding and doesn't have a lot of time to master new tools. Our research shows that vendor-supported open source technologies can often deliver value faster than DIY open source implementations. Why? While individuals can get started quickly using unsupported, free open source technology, the process of scaling up use and sharing best practices across teams can be difficult when there is not a guarantee of software security or interoperability. IT Ops teams need to curate and manage automation code just like the rest of their cloud management toolkit.

Supported open source automation is hardened, tested, and updated continuously and comes with training and support. Strong vendor ecosystems help to ensure that new product releases are enabled quickly.

Benefits Multiply Across Teams and Open Hybrid Clouds

The real benefits of automation-as-code are delivered when multiple teams can make use of the same, standard configurations, workflows and security policies without having to constantly reinvent the wheel. Validated, reusable,

automation code helps reduce human error and ensures that applications are built, deployed, and run on consistently configured and secure infrastructure.

We've seen organizations experience 40% improvements in IT staff efficiency by implementing this type of automation for configuration management, patching, provisioning and security across complex, open, hybrid cloud resources. It is not unusual for customers to tell us that tasks that once took hours or days now take minutes.

Open, hybrid cloud infrastructure will continue to provide critical and flexible platforms for digital business going forward. Open source and automation will help IT Ops teams to gradually transform into CloudOps teams and keep the business moving forward.

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