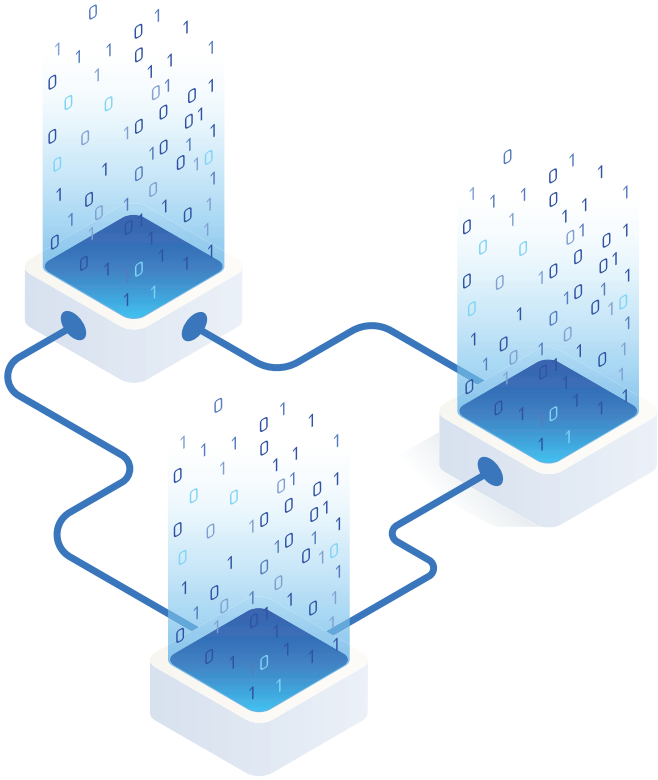
TORQUE | SOLUTION BRIEF

Quali

Transform Infrastructure Change Management from Reactive to Proactive with Torque

Automate drift detection in IaC and Terraform defined environments



As software moves through DevOps pipelines, the infrastructure stack needed is constantly changing, especially as software architectures become distributed with hybrid cloud and leverage containers and cloud services.

Torque delivers proactive change management for complex IaC defined infrastructure

Commensurate with those changes is a critical infrastructure management challenge: identifying and dealing with drift in Terraform manifests and other IaC configurations. Developers and operators need immediate visibility into what changes occur (and when) to mitigate risk and help eliminate mismatches that cause deployed environments to fail.

A simple misconfiguration of a cloud resource could impede performance and productivity or worse, expose sensitive data and systems to the public internet. If unaware of environment changes, development teams may experience application failure or find their pipeline derailed. The time spent manually decoding IaC definitions to fix broken environments slows down velocity and the team's release cadence.

INFRASTRUCTURE PROVISIONING

Manual > Scripts > Config Mgmt > Domain Stacks > Cloud Provisioning Services > Full Stack (defined) > Scripts & Cloud Services

INFRASTRUCTURE AUTOMATION

Infra. Mgmt. Platforms > Infra. as Code (IaC)

CONTINUOUS ENVIRONMENTS

Infra. Lifecycle Platforms > Intelligent Env. Lifecyle Platforms > Intelligent App. Env. Lifecyle Infra. Platforms

INFRASTRUCTURE CONTROL PLANE AUTOMATES DRIFT DETECTION

The Torque platform implements a unified control plane for all IaC-defined infrastructure. A core function of this control plane is to monitor and automatically detect drift as it occurs.

When drift is detected, Torque posts an alert notification in the Torque UI that details which resource has changed (S3 bucket, database, EC2 instance, etc.) and the impacted infrastructure blueprints. The notification allows those with the appropriate permissions to quickly assess the change/drift and to take appropriate steps to remediate the change.

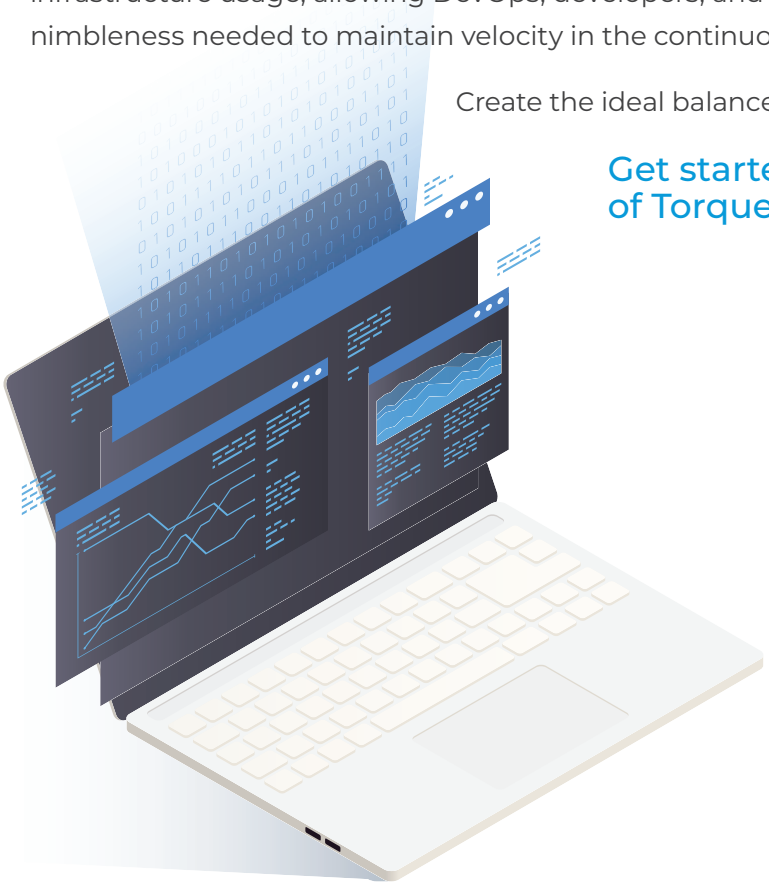
Drift detection in Torque is tightly aligned with its control plane capabilities for auto discovery and auto identification of infrastructure assets. The identification step de-constructs IaC configurations and identifies and models the infrastructure elements into standardized views of the entire infrastructure stack. This allows Torque to detect drift and changes at a granular level and provide fine-grained observability into changes.

For IT, DevOps, Operations, and Infrastructure Managers, drift and change detection provides:

- Automatic change detection and alerting for infrastructure defined in Terraform, and IaC configurations
- An effective tool for managing change to live environments and infrastructure configurations through the entire software delivery lifecycle and pipelines
- Continuous synchronization of QA/Test environments with IaC definitions
- Proactive management of changes to environments
- Auto-detection, alerting and remediation of changes to live environments and environment configurations stored in GitHub, GitLab, and Bitbucket repos
- Mechanisms to help reduce risk by proactively ensuring alignment of infrastructure with security best practices and compliance protocols
- Policy-based secure access controls for users and roles: define and enforce who has access to blueprints and who can edit blueprint configurations

Drift notifications can be passed into team collaboration tools including Slack, Microsoft Teams and tools that support web hooks.

With Torque and its drift detection capability, DevOps and Operations teams can transform change management to be more proactive and less reactive. Additionally, they gain real-time visibility into infrastructure usage, allowing DevOps, developers, and operations to respond to change with the nimbleness needed to maintain velocity in the continuous delivery of software.



Create the ideal balance of speed, governance, and change management.

Get started today with a free trial account of Torque >

About Quali

Headquartered in Austin, Texas, Quali provides the leading platform for Environments-as-a-Service infrastructure automation solutions, helping companies achieve freedom from infrastructure complexity, so they can operate with velocity. Global 2000 enterprises and innovators everywhere rely on Quali's award-winning CloudShell and Torque platforms to create self-service, on-demand automation solutions that increase engineering productivity, cut cloud costs, and optimize infrastructure utilization. For more information, please visit quali.com and follow Quali on Twitter and LinkedIn.