Quali | TORQUE

Optimizing the **Deploy-and-Run** Phase: Enhancing Efficiency, Security, and AI-Driven Automation with Quali Torque

In the rapidly evolving software landscape, getting code to production quickly and safely is critical to maintaining a competitive edge. The "deploy-and-run" phase is no longer just a technical step—it's a vital business function where value is realized. Torque by Quali ensures the way to production is optimized for speed, security, and efficiency, enabling seamless deployments while aligning with business objectives.

Torque empowers organizations to bridge the gap between development and production, streamlining the transition from code creation to live deployment. With built-in drift management, real-time cost optimization, and automated remediation, Torque makes sure that infrastructure is always optimized, compliant, and ready to run at scale.

1 Deploy and Run: Elevating Infrastructure to the Business Level

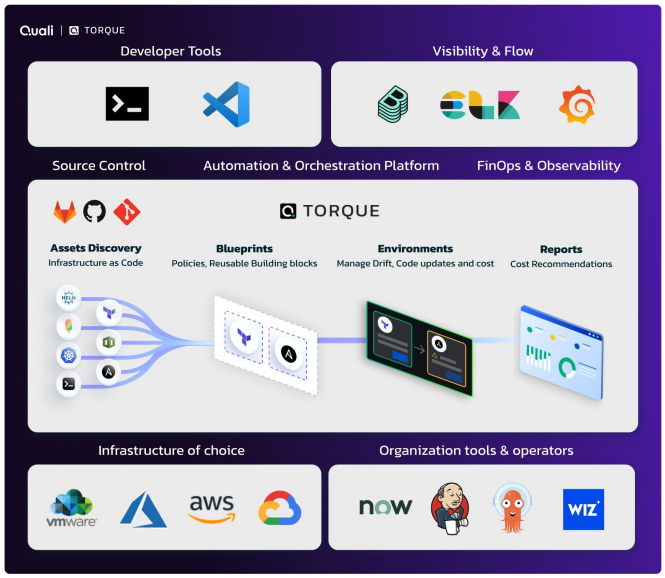
Simplified and Accountable Infrastructure Consumption

With Quali Torque, organizations empower stakeholders to manage environments aligned with their business goals. Torque's Environment-as-Code (EaC) approach simplifies infrastructure management by abstracting technical complexity while maintaining operational efficiency.

- **Self-Service Infrastructure**: Torque enables easy self-service deployment and management of environments, tailored to business needs without requiring deep technical skills. This speeds up deployment, accelerates development, and removes bottlenecks.
- **Full Accountability**: Torque ensures clear ownership and accountability for every environment, with real-time auditing and governance features that track changes and quickly resolve issues.

Automation Across the Full Lifecycle

- **Day-Two Automation**: Torque automates day-two operations, including troubleshooting, drift detection, updates, and reconciliation, ensuring environments stay optimized, secure, and compliant with business policies. Drift is automatically detected and remediated, maintaining ideal configurations.
- **Effortless Updates**: Torque automates infrastructure and application updates, minimizing risk and ensuring environments stay up-to-date and secure without disruption.
- **Seamless CI and Ecosystem Integration**: Torque integrates smoothly with CI/CD pipelines and tools like Jenkins, GitLab, and GitHub Actions, enhancing the deploy-and-run experience. It manages environments efficiently, reduces manual effort, and ensures synchronization with business objectives.
- **AI-Driven Management**: Torque's AI optimizes workloads, monitors system health, and dynamically adjusts infrastructure. Its natural language interface (NLP) simplifies management, allowing users to interact with environments intuitively.



Cost Awareness and Optimization

- **Integrated Cost Awareness**: Because Torque owns the entire deployment process, it has complete visibility into infrastructure costs. Torque provides real-time cost tracking, showing exactly how much each environment is consuming. This allows stakeholders to make informed decisions and optimize usage based on business intent.
- **Waste Elimination and Resource Optimization**: Torque continuously monitors environments to detect and eliminate infrastructure waste, such as idle or underutilized resources. By dynamically adjusting the resource allocation and decommissioning unnecessary infrastructure, Torque reduces costs and improves overall efficiency.
- **Proactive FinOps**: With Torque's built-in FinOps tools, business stakeholders can set budget thresholds, monitor usage in real-time, and receive proactive alerts when costs approach predefined limits. This ensures financial control and prevents budget overruns, making cloud expenditure predictable and manageable.

AI-Assisted Operations and Natural Language Interface

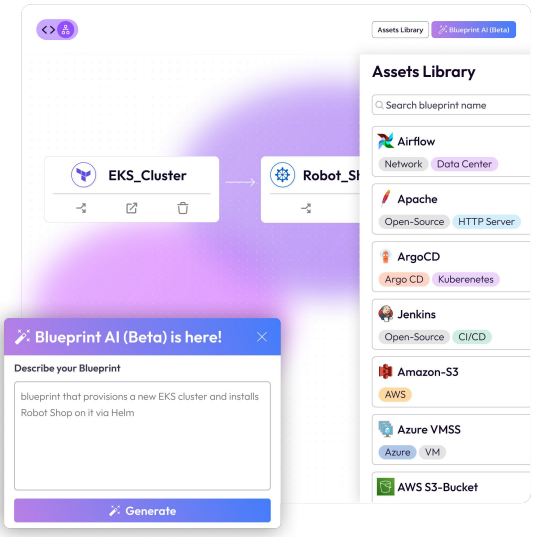
- **AI-Powered Automation**: Torque's AI automation is integral to its ability to manage environments efficiently. It proactively monitors workloads and resources, optimizing deployments and scaling based on current demands. This dynamic resource management minimizes over-provisioning and ensures that infrastructure is always running at peak performance.
- **Natural Language Interaction**: With Torque's natural language interface, interacting with the infrastructure is simplified. Business users can query the system using natural language to get updates, make changes, or troubleshoot issues without needing technical know-how. For example, users can simply ask Torque, "What is the current infrastructure cost for project X?" or instruct it to "Scale down the non-production environments to save costs." This feature empowers stakeholders to manage complex environments with ease.

Edge: Expanding Infrastructure Control to the Edge

Deploy and Run at the Edge: Extending the Same Capabilities

Just as with core cloud environments, the deployment and management of infrastructure at the Edge requires a high level of accountability, cost awareness, and AI-driven automation. Torque brings these capabilities to edge computing, ensuring organizations can manage edge environments with the same efficiency and control.

- **Unified Management for Distributed Edge Environments**: Torque provides centralized management of edge deployments, ensuring consistent policies and governance across distributed edge nodes. Organizations can deploy, manage, and monitor edge infrastructure just as easily as they would in the cloud, reducing complexity while increasing visibility and control.
- **AI-Driven Optimization for Resource-Constrained Edge Environments**: At the edge, where resources are often constrained, Torque's AI-driven automation ensures that workloads are intelligently distributed across available resources, minimizing resource waste and ensuring efficient operation. This is especially critical in edge environments where low-latency and real-time decision-making are essential.



Cost Awareness and Optimization at the Edge

- **Cost-Aware Edge Deployments**: Torque integrates real-time cost tracking into edge deployments, providing full visibility into the costs of running infrastructure at the edge. This visibility ensures that resources are used optimally and that any excess or unnecessary infrastructure is promptly decommissioned.
- **Automated Decommissioning of Idle Resources**: Edge deployments are particularly prone to unused or idle resources. Torque actively monitors idle infrastructure at the edge and decommissions it automatically to prevent resource wastage and reduce costs.

Enhanced Governance and Security for Edge Deployments

- **Consistent Security and Compliance**: Torque enforces security policies and compliance standards across all environments, including the edge. By centralizing control over security configurations and automating policy enforcement, organizations can ensure that all edge environments meet regulatory and business requirements.

Key Benefits

AI-Powered Efficiency

The use of AI for workload management, infrastructure optimization, and natural language interfaces increases efficiency and reduces manual overhead.

Seamless Edge Integration

Consistent governance, cost management, and AI-driven automation extend to the edge, ensuring that distributed environments remain as efficient and secure as centralized cloud deployments.

Cost Optimization

Real-time cost awareness and AI-driven resource management across both cloud and edge environments ensure optimized spend and zero waste.

Governance & Visibility

Know who is deploying what, at any given time. Track all activity & costs based on the users responsible so you can set policies & automate actions to prevent bugs, errors, and redundancies before they occur.