LTIMindtree

Brochure

Canvas Resilience

Hardening application resiliency

With the rise of Microservices and distributed cloud architectures, the tech industry has become increasingly complex. Although we fully rely on digital systems, at some point, they are bound to break and fail. Enterprises need to predict such failures and gaps, as they can cause a major revenue loss.

Few challenges that enterprises encounter.

- Service disruptions due to infrastructure bottlenecks and unexpected outages
- Huge turnaround time to debug infrastructure anomalies and provide incident resolution
- Reactive monitoring and alerting in case of key application SLO outliers and threshold breaches

So, what's the underlining question today?

Is your enterprise ready to be agile and resilient against the challenges and disruptions of tomorrow?

Canvas Resilience

Canvas Resilience is a chaos engineering and continuous observability platform that proactively uncovers application infrastructure bottlenecks and outage hotspots to design more resilient and scalable systems. The platform injects infrastructure failures from inside-out of the systems like spiking CPU utilization, inducing network latencies and ensures that applications are hardened to prevent service disruptions. This is powered by a real-time visualization engine that provides deep insights of the key performance metrics. It also enables root-cause analysis for the identified performance bottlenecks.

In addition, Canvas Resilience can integrate with various cloud providers such as AWS, Azure, to gather utilization metrics and auto-scale configurations.

How Canvas Resilience helps

Chaos Engineering

Ensures proactive identification of infrastructure bottlenecks and outage hotspots, which help in designing and hardening applications for resiliency.

Continuous Performance Monitoring

Provides full-stack real-time monitoring of various components such as network, infrastructure, application, business transactions and cloud auto scale configurations.

Predictive Analytics

Enables infrastructure utilization and capacity planning using built in ML algorithms and historical telemetry data from production systems.

Application SLO

Monitors key application Service Level Objectives (like Application availability, latency and response time) through unified SRE dashboards.

Intelligent Correlation

Correlates application logs and infrastructure metrics on a time-series scale. This can quickly triage and increase effectiveness of response to production issues.

Auto-Scale Configurations

Provides utilization metrics and cloud auto scale configurations, to ensure business continuity during increased user workloads.

Self-Service Workbench

Orchestrates and runs the chaos injections and performance validations as part of continuous integration pipelines.

Alerts and Reports

Triggers alerts and notifications for any key threshold breach. Also provides recommendations for immediate resolution.

Why Canvas Resilience

Uncover application faults before they cause system failure

Increase availability of services for customers

Reduce maintenance costs

Prevent revenue loss due to service disruption

Business Owners

- Monitor and benchmark CX
- Business performance SLAs
- Site usage analysis

Site Reliability Engineers

- Govern error budgets
- Manage service level objectives
- Predictive failure analysis

IT Ops Support Engineers

- Incident response effectiveness
- RTO and RPO monitoring
- Event correlation and log-analytic

Application Owners

- Continuous resiliency engineering
- Failure injection and failover simulation
- Configure self-healing procedures

Architects

- Resilient architecture by design
- Capacity planning and infrastructure hardening
- Failure assessment

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What we delivered

Canvas Resilience platform has been successfully implemented for clients across the globe. Some of our success stories are -

Resiliency engineering for a leading wealth management company

By leveraging Canvas Resilience platform, a global Fintech conglomerate achieved ~35% reduction in non-functional engineering efforts, and redefined their Wealth Management Technology.

Proactive identification of failure hotspots for a leading technology giant

A leading US-based technology company achieved ~25% improvement in the performance of their applications by automatic identification of infrastructure bottlenecks and outages.