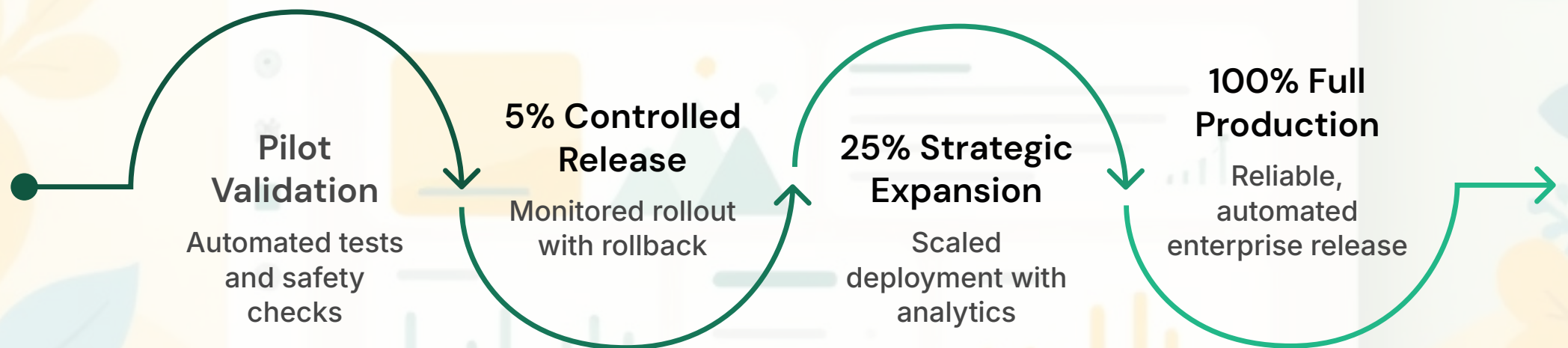


SafeRoll

Unleashing Enterprise Agility. Eliminating Deployment Risk.

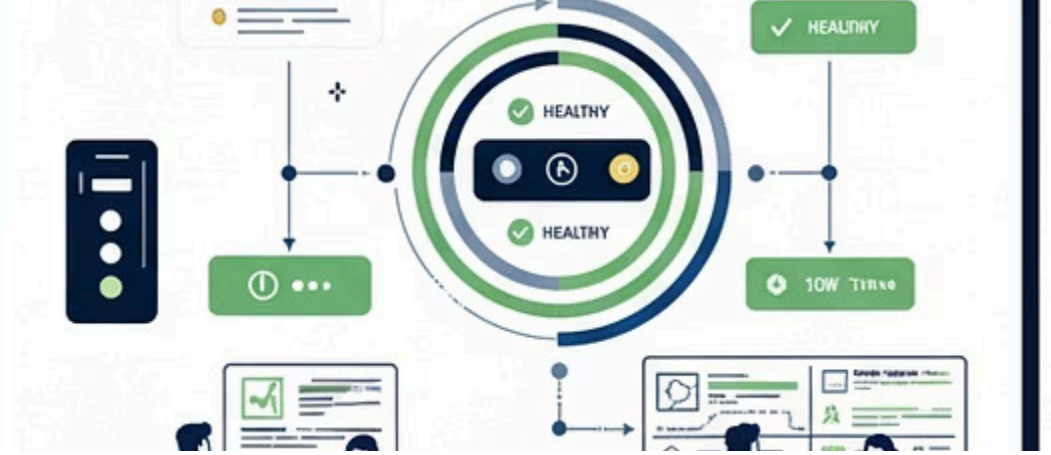
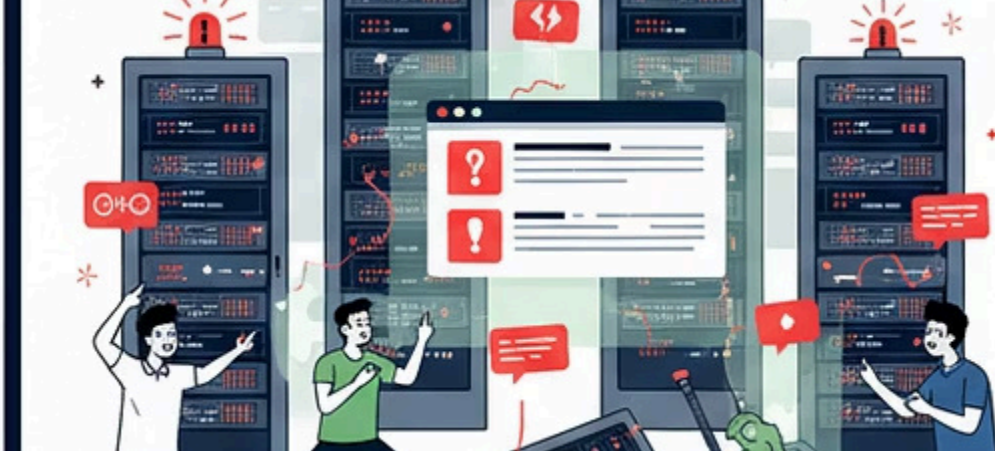


Executive Summary: Driving Strategic Outcomes

SafeRoll empowers enterprises to achieve unparalleled agility and market leadership. Our platform delivers:

- **90% Faster Deployments:** Accelerate innovation and time-to-market.
- **80% Reduction in Rollback Costs:** Eliminate financial exposure and downtime.
- **Near 100% Uptime:** Guarantee continuous availability for critical applications.
- **Amplified Competitive Advantage:** Transform operational excellence into strategic dominance.

Minimize risk. Maximize value. Own the future of enterprise software delivery.



The Cost of Big-Bang Updates

Traditional all-at-once deployments introduce significant risk and slow recovery.



Massive Blast Radius

Entire fleet affected



Manual Gates

Inconsistent decisions



Delayed Rollbacks

Slow recovery (MTTR)



Weak Audit Trail

Limited visibility

80%

Device Exposure Reduction

50–70%

MTTR Improvement

20–30%

Success Rate Gain

Progressive Rollout Dashboard

Target version 1.0.0 · Last known good 0.9.0

Rollout id: r-34022113Active ring: Five Percent **Active**

All SLO gates green

Dashboard

Docs

PILOT (0.1%)

Pilot ring

Completed

Deployment finished

FIVE PERCENT

Five ring

Active

● Boot 100.00%

● Crash 100.00%

● Latency 0 ms

Boot success
100.00%

Crash free
100.00%

Median ms
0 ms

TWENTY FIVE PERCENT

Twentyfive ring

Upcoming

Awaiting promotion

ALL DEVICES

All ring

Upcoming

Awaiting promotion

The SafeRoll Promise

Objective SLO gates with automated decisions

Data-Driven Promotions

Rings advance only when health metrics meet defined thresholds - no guesswork, no manual overrides without audit trails.

Auto-Pause & Rollback

Breaches trigger immediate holds or rollbacks to last known good version, minimizing fleet exposure and recovery time.

Complements GENiO

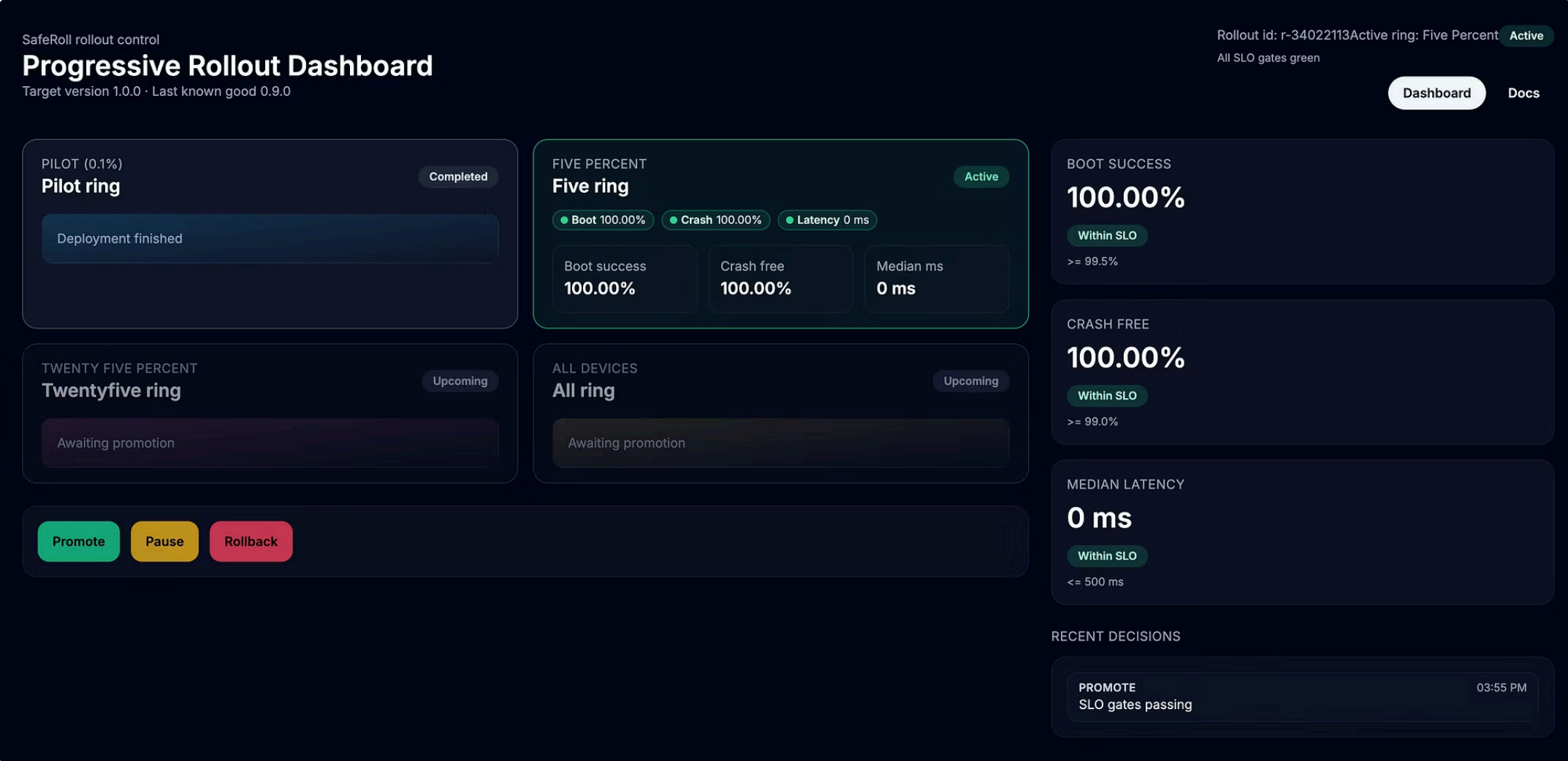
Acts as policy gate layer alongside existing infrastructure—no process rewrite, no disruption to current workflows.

5-minute rolling window for active ring health evaluation

120-second cooldown between ring promotions

Progressive Deployment with Automated Quality Gates

A strategic framework ensuring high-quality deployments through automated, objective Service Level Objective (SLO) gates at each progressive rollout stage.



Pilot Ring

Initial, controlled deployment to validate core functionality and stability.

Five Percent Ring

Gradual exposure to 5% of the fleet with continuous performance monitoring.

Quarter Fleet Ring

Expanded validation to 25% of the fleet, confirming scalability and resilience.

Full Production Ring

Complete deployment across the entire fleet, achieving broad availability.

Key Health Thresholds for Gate Promotion

99.5%

Boot Success Rate

Maintain an operational boot success rate of $\geq 99.5\%$.

99.0%

Crash-Free Median

Ensure a crash-free session median of $\geq 99.0\%$.

500ms

Check-In Latency

Achieve check-in latency of ≤ 500 milliseconds for optimal performance.

Critical Rollback Triggers: Deployment is **immediately paused** and a rollback initiated if Boot Success $< 97\%$ OR Crash-free rate $< 95\%$.

Architecture: Continuous Evaluation Loop

- 1

Telemetry Collection

Devices and simulator feed real-time health signals to central system
- 2

Policy Evaluation

API and policy engine assess SLOs against thresholds with cooldown logic
- 3

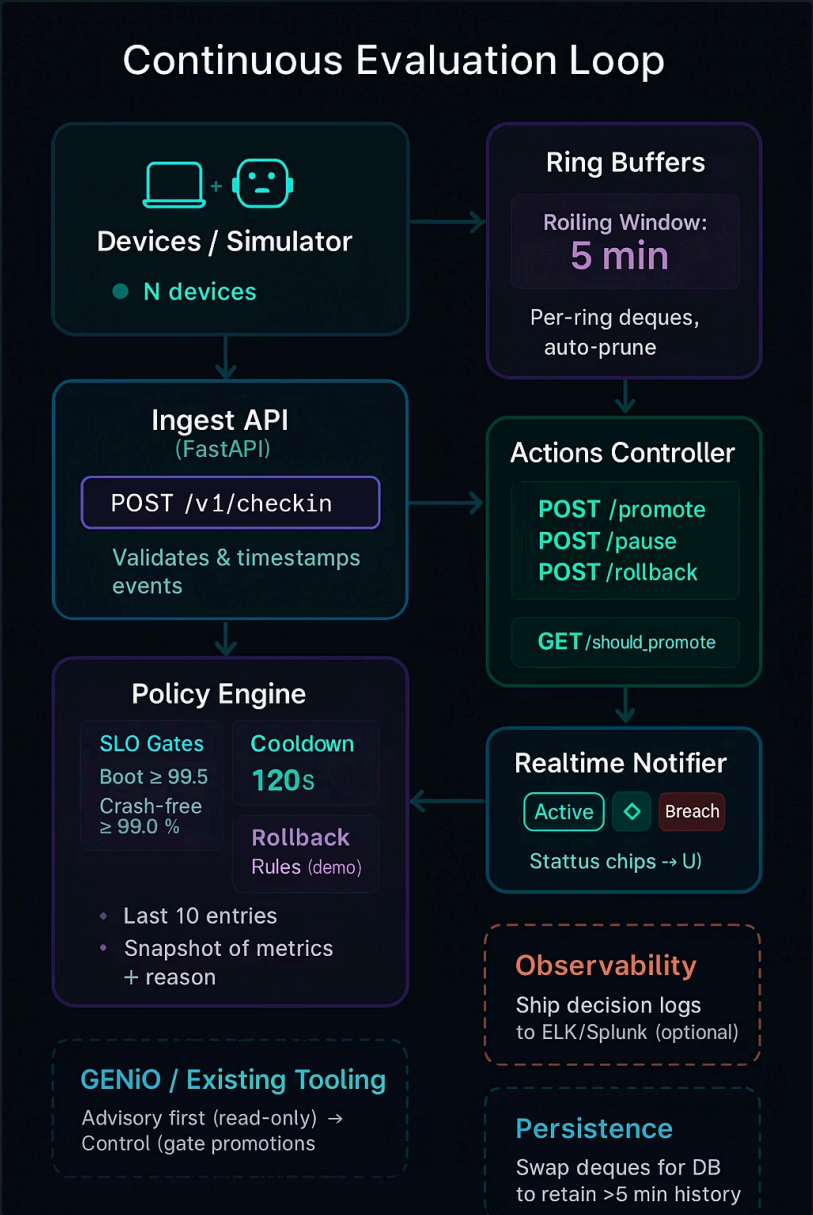
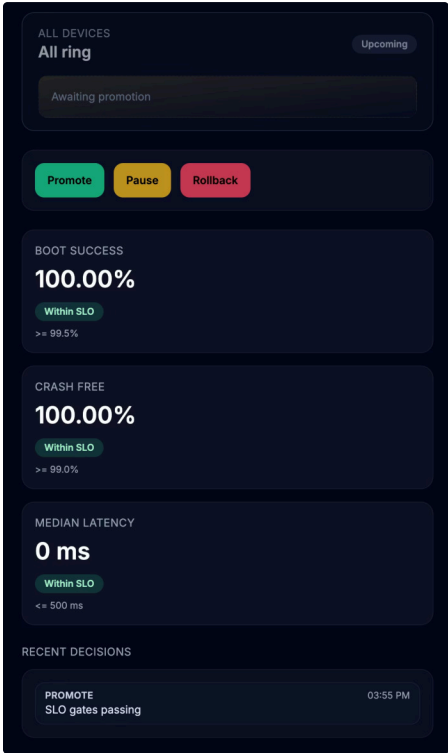
Action & Visibility

Dashboard provides controls, decision log access, and comprehensive documentation

Decision Log Transparency

Every promotion, pause, and rollback decision is recorded with full metric snapshots. The system maintains the **last 10 decision entries**, providing complete audit trail visibility for compliance and post-incident analysis.

All SLO evaluations run on a **5-minute sliding window** to balance responsiveness with statistical confidence.





SafeRoll Demo Flow

Intelligent Decisions: From Risk to Reliability in Minutes

Experience SafeRoll's precision: automated deployment, rapid failure detection, and instant recovery for unwavering operational continuity.

1. Healthy Deployment

Pilot ring stable: Boot Success **99.8%**, Latency **420ms**. Readiness confirmed.

1

2

2. Automated Promotion

Intelligent engine expands rollout to **5% fleet** with continuous monitoring.

3

3. Rapid Failure Detection

Boot failures injected, SafeRoll detects drop to **96.2%**, breaching 97% threshold.

4

4. Instant Recovery & Resolution

Rollout **instantly paused**, then automated rollback in **minutes**. Fleet returns to **99.7%** health.

SafeRoll Adoption & Integration

A Low-Risk Path to Enhanced Operational Reliability

Zero Infrastructure Disruption

SafeRoll integrates seamlessly as a policy gate **alongside** your existing systems, requiring no replacement of current processes.

1. Advisory Mode (Weeks 0-2)

Risk-free observation and data validation. We fine-tune SafeRoll to your unique environment without impacting live operations.

2. Control Mode (Weeks 2-4)

Full automated protection activated, ensuring immediate and continuous operational stability with ongoing optimization.



Key Pillars for Successful Adoption

- **Seamless System Integration:** Connect SafeRoll with your existing telemetry for comprehensive oversight.
- **Tailored Performance Benchmarks:** Customize thresholds based on your historical data and risk appetite.
- **Phased Rollout Strategy:** Start with a pilot group for controlled validation before broader deployment.
- **Transparent Progress Reporting:** Gain clear visibility into adoption milestones and operational impact.

Ready to Reduce Rollout Risk?

PROMOTE Data-driven advancement on SLO pass	PAUSE Automatic hold on threshold breach	ROLLBACK Instant revert to last known good version
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Proposed 2-Week Pilot Program

1

Week 1: Foundation

- Map device signals
- Tune thresholds
- Advisory-only mode validation

2

Week 2: Activation

- Enable gating on 5% cohort
- Measure MTTR & blast radius
- Validate decision log

Success Criteria
Zero Sev-1 incidents during pilot

MTTR Target
Under 15 minutes

Audit Trail
Complete decision log with metric snapshots

Contact: Sharath Chandra Odepalli · sharathodepalli@gmail.com

SafeRoll v1.0 demo · Dashboard status chips and comprehensive documentation included