

coRAN LABS



SATORI
SOLUTIONS

PCI Handover Failure Reduction rApp



Closed-Loop PCI Optimization

PCI Handover Failure Reduction rApp continuously detects PCI conflicts and mod-N collisions across LTE and 5G networks. The rApp autonomously computes optimized PCI assignments, applies updates, validates network performance, and safely rolls back changes when needed.

Key Capabilities

- Real-time PCI conflict detection
- Autonomous PCI reassignment
- Closed-loop optimization
- Handover-aware decision engine
- Rollback-based safety validation
- Multi-vendor RAN support

Continuous PCI Hygiene for Dense LTE & 5G Deployments



The Challenge

Modern LTE and 5G networks continuously evolve through:

- New site activations
- Topology expansion
- Configuration drift
- Manual RF planning updates

These changes often introduce:

- PCI reuse conflicts
- Mod-N confusion
- Handover instability
- Dropped calls



The Solution

PCI Handover Failure Reduction rApp introduces a fully autonomous closed-loop PCI management system.

Key Features

- Autonomous Optimization
- Continuously resolves PCI conflicts without manual intervention
- Stability & Rollback Protection
- Prevents unstable changes using intelligent validation windows
- Dynamic Network Awareness
- Adapts automatically to topology and configuration changes
- O-RAN & E1AP Ready
- Designed for modern multi-vendor RAN automation environments



How It Works

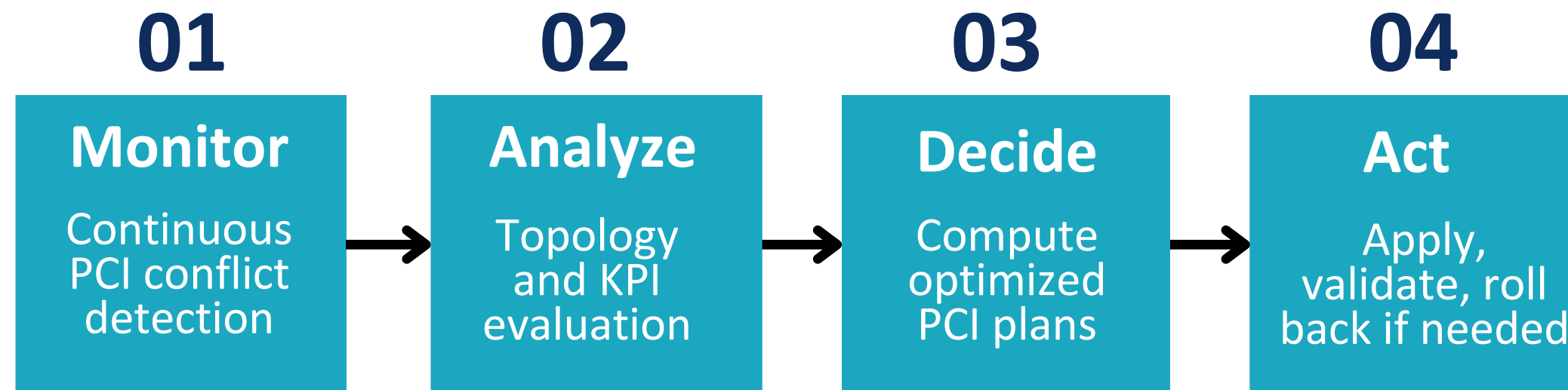
PCI Handover Failure Reduction rApp continuously monitors the RAN, decides on optimal PCI assignments, and applies them safely with full rollback protection.

The **Ericsson Intelligent Automation Platform (EIAP)** provides Service Management and Orchestration (SMO) for Open RAN and further enhances openness, network management, and automation by supporting multi-vendor and multi-technology RAN environments.

EIAP is supported by open interfaces and the industry's leading Software Development Kit (SDK) to enable an ecosystem of developers with all the capabilities needed to innovate, build, validate, share and operate rApps.

THE LOOP

Optimization in four moves.



Dashboard

