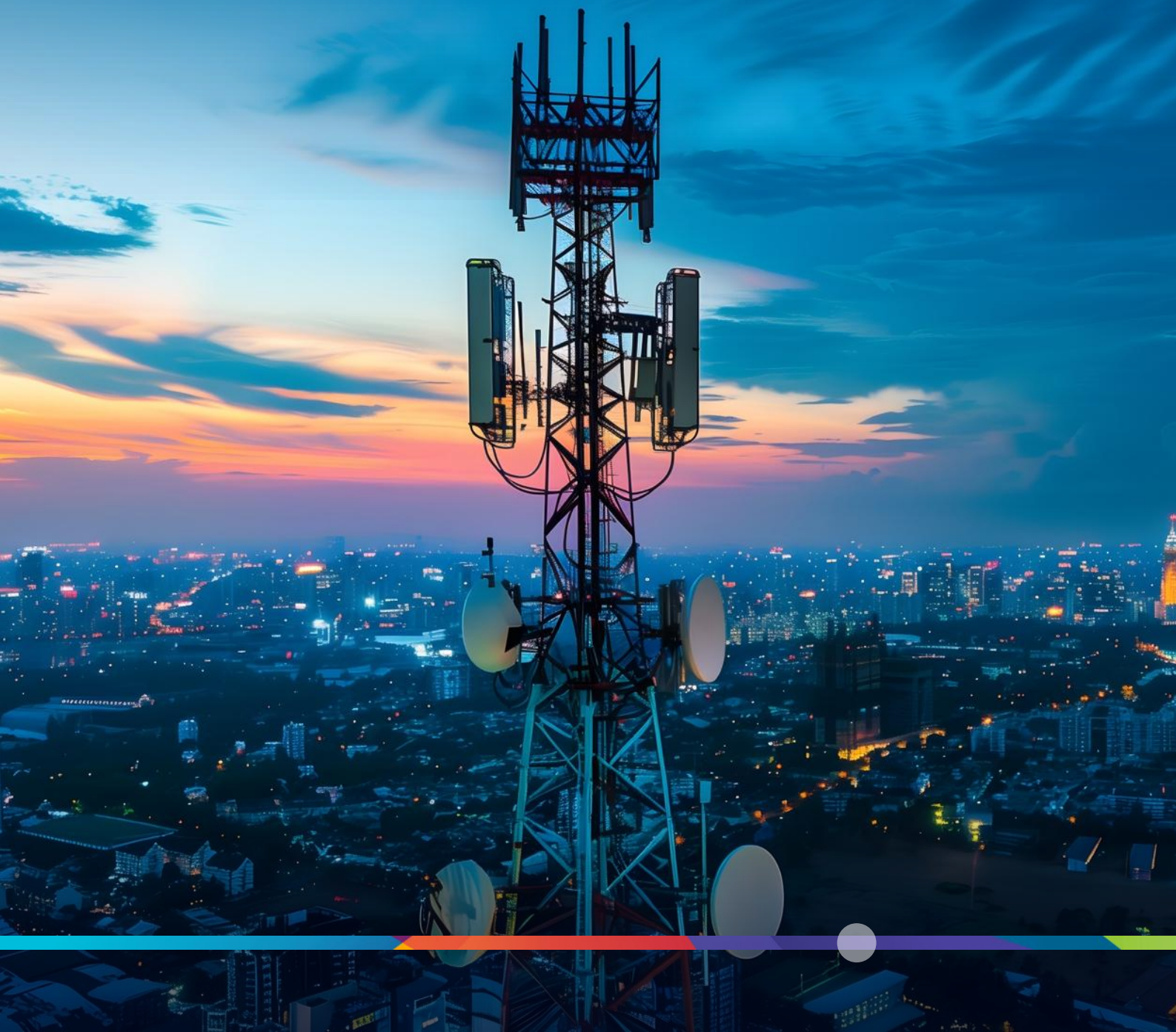


# DYNAMIC CM CONFIGURATOR rApp

Solution Description



## CYIENT Dynamic CM Configurator rApp (DCMC)

*The Dynamic CM Configurator rApp automates the creation, update, and deletion of network configuration parameters across multi-vendor RAN environments. It validates requests, enforces policies, and executes changes reliably through EIAP services. By orchestrating Configuration Management (CM) actions safely and consistently, it accelerates operations while reducing risk, human error, and configuration drift.*

Modern RAN environments are becoming increasingly dynamic, driven by continuous feature rollouts, software upgrades, parameter optimizations, and multi-vendor complexity. As networks evolve, the number of CM operations—ranging from creating new configurations to updating, deleting, or retrieving parameters—grows significantly. These actions are often distributed across different teams, systems, and automation layers, making consistent governance challenging. Manual execution or fragmented workflows introduce risks such as configuration drift, policy violations, and inconsistent data across vendors. Moreover, the lack of standardized validation and execution paths increases operational delays and raises the probability of service-impacting errors. Operators require a centralized, intelligent mechanism to manage CM requests reliably, verify compliance with network policies, and ensure safe execution.

A Dynamic CM Configurator rApp addresses this challenge by orchestrating end-to-end CM workflows, providing structured validation, enforcing governance rules, and delivering auditable, high-quality configuration changes across complex, large-scale RAN deployments.

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.



## DCMS rApp Solution Description

*The DCMC rApp centralizes and automates CM operations across multi-vendor RAN environments. It validates and executes create, update, delete, and retrieve through EIAF services, ensuring accuracy, compliance, and consistency. By orchestrating CM workflows intelligently, it streamlines operations, reduces errors, and maintains reliable network configurations.*

The DCMC rApp provides an automated, policy driven framework for executing CM operations across multi vendor RAN environments. Acting as a central orchestration layer, it receives CM requests, such as create, update, delete, and retrieve, from external systems, workflows, or service orchestration functions. Each request passes through a structured validation process to ensure alignment with vendor capabilities, operator policies, and dependency rules.

Leveraging EIAF services, the DCMC rApp executes CM transactions safely and consistently. It serves as a reusable enabler for other rApps, simplifying the modification of CM data across the network. The rApp autonomously orchestrates validations, resolves dependencies, and applies updates in a controlled manner, ensuring consistent, conflict free changes.

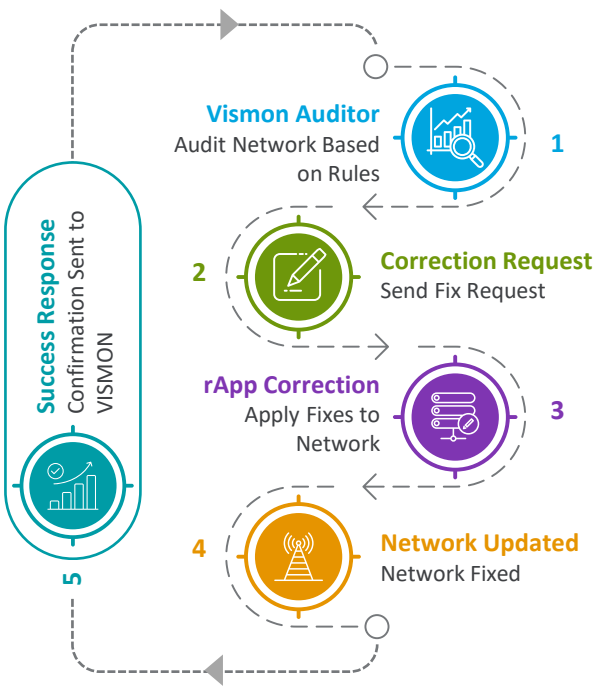
Its execution pipeline includes pre checks, conflict detection, batching, and ordering logic designed to minimize service impact. The DCMC rApp supports both synchronous and

asynchronous modes, enabling scalable handling of high volume requests or complex, multi element modifications. All actions are fully traceable, with logs capturing timestamps, parameters, requester identity, and execution outcomes. This ensures strong auditability and allows the rApp to participate in closed loop automation workflows by triggering corrective actions if monitoring detects unexpected effects.

By standardizing and automating CM workflows, the DCMC rApp delivers safer, faster, and more reliable configuration changes across evolving RAN deployments. It supports a wide range of automation driven use cases, including automated configuration updates, policy compliance enforcement, network optimization routines, fault resolution workflows, and dynamic parameter tuning. By abstracting complexity and enabling safe, conflict free updates, the DCMC rApp enhances operational efficiency, consistency, and reliability across diverse network management scenarios.



## Functional Workflow – VISMON Use Case



## Workflow Architecture for VISMON Use Case

The workflow architecture enables continuous network impact assessment through an automated closed-loop process. VISMON initiates the cycle by auditing network conditions against predefined rules to detect inconsistencies. When an issue is identified, VISMON generates a structured correction request and forwards it to the DCMC rApp. The rApp processes the request, applies targeted configuration changes and updates the network accordingly. Once the network state is corrected, the DCMC rApp returns a success confirmation to VISMON. This feedback loop ensures ongoing validation, automated remediation, and high-confidence operational integrity across the network environment, supporting proactive and resilient network management.

## DCMS rApp Characteristics

Vendor	Ericsson
RAN Technology	4G / 5G
RAN Infrastructure	Cloud RAN / O-RAN
Category	Automation & AI Foundation

## Key Features

- **Automated Network Remediation** based on inconsistencies received from third-party tools.
- **Rule-Driven Configuration Management** with predefined network policies and operational rules.
- **Real-Time Processing** of configuration requests as they are received.
- **Network State Validation** of all changes performed across the environment.
- **Closed-Loop Automation Support** for continuous, self-correcting network operations.

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