anuta networks

Customer Profile

Company

Tier-1 SP, North America

Industry

Telecommunications

Sectors

Wireless communications, cable television, telephony, and Internet, with significant additional telecommunications and mass media assets.

- *The SP is built to "scale massively" and "support the unprecedented growth of IoT devices in the years to come."*

- *With about 10 million wireless subscribers and 2.25 million retail internet subscribers, the client is one of the top providers in Canada.*
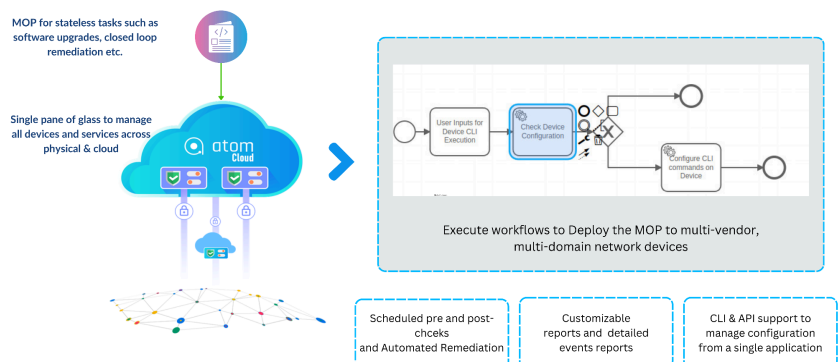
Technology Requirements

- **Fault Management:** A maintenance activity for network devices involves mandatory steps like pre-checks, post-checks, and sanity checks that are easy to miss if followed manually. The absence of prechecks and post-checks for each step adds complexity and increases the likelihood of errors.

Canada's Communication Leader Leverages ATOM's Proactive Automation for Network Stability

Reducing network outages is becoming an increasingly critical area of focus for organizations. Today, we live in a time that demands always-on network availability. Even a minute's downtime in mission-critical applications can cost an enterprise a fortune and ruin its brand reputation. This Tier-1 Service Provider of Canada realized network outages can be catastrophic for businesses and happen more often than ever. As a 'challenger,' the client had to adopt a proactive mindset that would minimize outages by eliminating manual processes and automating services to allow it to gain a competitive foothold.

Effects of an Outage- from slightly Disruptive to Disastrous

This Canada's Tier-1 SP in core network consisted of devices– Juniper, Nokia, and Harmonic, with a network spanning over 81,000 km of fiber backbone across the country and into key U.S. and global locations. With 12 data centers nationwide, the client had to provide reliable uptime, powerful performance, and scalable connectivity with speeds up to 100 Gbps. Maintaining uptime performance became increasingly challenging as the client's capacity needs expanded. Over the past 18 months, the company faced recurring outages, necessitating meticulous attention to details such as detecting link flaps, protocol flaps, monitoring SOD Pseudowire status, and ensuring Operating System version compliance across all major vendors. However, achieving this level of precision was daunting due to the limited workforce and susceptibility to errors. In preparation for its next wave of growth, the Tier-SP has partnered with Anuta ATOM to monitor their network, perform health checks, and maintain compliance for its vast network.

MOP for stateless tasks such as software upgrades, closed loop remediation etc.

Single pane of glass to manage all devices and services across physical & cloud

Execute workflows to Deploy the MOP to multi-vendor, multi-domain network devices

Scheduled pre and post-chceks and Automated Remediation

Customizable reports and detailed events reports

CLI & API support to manage configuration from a single application

- **Eliminate Manual MOPs:** Routinely following the MOP demands manual effort and risks errors due to circulating multiple versions. Training is crucial for operators to execute maintenance activities effectively and prevent resource wastage.

- **Backup for Router Config:** Router configurations require backups to prevent data loss during outages, ensuring business continuity. Without backups, organizations risk downtime, data loss, and communication issues.

- **Round-the-clock network monitoring:** Despite precautions, the internal IT team may find handling all checks and maintenance exhausting. A solution is delegating end-to-end management & monitoring to an automation platform, freeing enterprise IT teams for strategic work.

Scope

- *Expected a 10x boost in productivity with reduced human errors & improved reliability with MOP automation*
- *Consistent internal and customer operations through automated ZTP*
- *Automation & simplification of pre-checks and post-checks*
- *Eliminating network outages by monitoring device & circuit failures with daily report retrieval capabilities*
- *Tracking configuration discrepancies to allow for easy rollback to previous versions*
- *Ensuring Compliance & maintaining SLAs with various vendors*

The ATOM Effect- Preventing, Not Reacting to Outages

The outages highlighted the need for proactive processes to monitor the client's network, identify risks, and deploy preemptive measures. ATOM introduces pre-and-post checks at this crucial hour, providing intelligent and proactive continuous network monitoring and health checks. Automated ticket updates can be implemented by automating all the manual MOPs for the client's hybrid network. This facilitates periodic health checks and enables complete compliance verification, including performance and security requirements, with generated alerts when deviations are detected. ATOM empowers networking teams to prevent an outage by performing a few simple pre-change routing checks. If the pre-change verification doesn't catch the problem, then the post-change checks could detect the incorrect routing state, pinpoint the reason immediately, and revert to the prior configuration.

The ATOM Advantage

Configuration consistency — MOP Automation
Devices on a Map — Software Upgrades
Device discovery — ZTP
Dashboard View — Compliance Management
Device inventory & reporting — Firewall rule changes
Health Checks — Closed-Loop Automation

Supported with ATOM's Virtual AI

- Proactively enforces design and security rule checks automatically
- Can be customized based on network design and the critical path flows, not one-size-for-all
- Serves as a next-generation design compliance check solution – it is continuously running and can be exhaustive in its proactive diagnostics without any laborious setup.

ATOM optimizes operations with consolidated automation accessible to multiple users via RBAC. MOP modifications apply universally, enhancing efficiency, reducing errors, and optimizing resource utilization for effective network monitoring and risk mitigation.