



Analytics & Closed-Loop Automation for SD-WAN Services

TATA Communications Ltd (TCL) is one of the world's leading Managed Service Providers (MSP). In the pursuit of modernizing and transforming their operations, TCL recently rolled out their IZO™ SD-WAN cloud-based solution. IZO™ SD-WAN is aimed at providing enterprises with instant deployment and seamless management of multi-vendor branch networks while delivering a consistent experience across all branch offices through analytics-driven service assurance and service agility. TCL approached Anuta Networks to solve the challenges of accelerating the enterprise customer onboarding process and improving overall network management.

MSPs offering SD-WAN services typically share several common requirements:

- On-demand provisioning of SD-WAN capabilities for both new and existing networks;
- The need for an easy-to-manage platform that simplifies management and monitoring of SD-WAN services and existing branch office infrastructure;
- Multi-tenant support for secure and segregated environments that meet individual industry standards;
- Integration into existing OSS/BSS and ITSM tools;
- Service assurance delivered through rapid troubleshooting toolsets.



Key Considerations

- Software is expected to scale to accommodate the demands of massive onboarding.
- Provisioning should dramatically compress the historical CLI script driven process.
- Automation should deliver an analytics-driven service assurance for faster remediation of network issues.
- Tools should provide “self-service” support to expedite incident remediation.
- Automate configuration audits and reconciliation to detect out-of-band changes and raise alarms.

Customer Profile

- Leading MSP with \$2.4B revenue
- Operations across 130 countries and 2000 cities
- SD-WAN and Hybrid WAN solution delivery spanning multi-vendor networks

Business Requirements

- Reduce time-to-market
- Simplify branch infrastructure
- Multi-technology, Multi-vendor Orchestration
- Consistent network policies
- Improved TCO realized through lower OPEX and improved agility

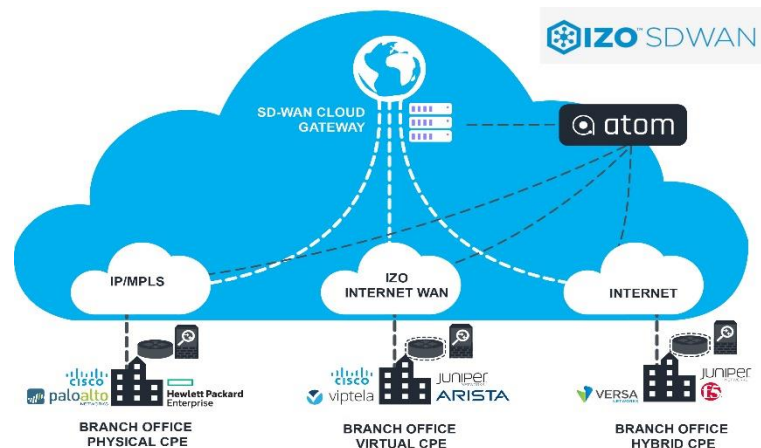
Technical Requirements

- Zero Touch Provisioning of SD-WAN and Hybrid WAN
- Automated, analytics-driven capacity management
- Proactive customer-centric policy updates and remediation
- Multi-tenancy

Why did TCL choose Anuta Networks ATOM?

ATOM is a microservices-based, web-scale networking architecture that can be deployed in Kubernetes clusters either in a local data center or a cloud-based deployment scaling horizontally to support an unrivaled one million+ devices.

- ATOM's Zero Touch Provisioning (ZTP) capabilities helped TCL onboard devices ranging from SD-WAN CPEs to traditional CPEs in less than 5 minutes. Consequently, TCL reduced time-to-market and enhanced customer onboarding.
- ATOM's capability to onboard both new/ greenfield and existing/ brownfield networks helped TCL deliver both SD-WAN and existing branch infrastructure enabling a wide range of customer services.
- ATOM's closed-loop automation capabilities helped TCL automate WAN policies based on the analytics derived from network device streaming telemetry data. TCL was therefore able to manage underlay and overlay networks more efficiently thus exceeding customer expectations.
- ATOM's open platform and rich set of APIs enabled TCL to improve their self-service capabilities through the integration of their incident management tools.



Results & Anuta Networks ATOM Value

The TATA Communications IZO™ SD-WAN solution realized the following benefits by deploying Anuta Networks ATOM:

- Reduction of CPE provisioning time by 89% through ZTP
- Automation of SD-WAN policy management using feedback loops
- Elimination of manual processes thereby dramatically reducing errors and achieving SLA compliance

Why TCL chose Anuta ATOM?

- Delivers zero touch provisioning analytics, reporting, remediation and assurance
- Support for 45+ vendors
- Microservices architecture scalable to 1 million+ devices
- Multi-Cloud Ready
- Compliant with open standards – IETF YANG, IETF NACM
- Flexible pay-as-you-grow pricing

Results Achieved

- CPE provisioning time < 5 mins
- Highly scalable, fully redundant platform
- Implemented analytics-driven closed loop automation
- Integration into self-service portals
- Initial Ready-For-Service achieved in 37 business days

Business Benefits

- 89% reduction in CPE provisioning time with ZTP
- 0% error rate during provisioning
- 100% network uptime driven by analytics and telemetry
- Elimination of manual operations
- Achieved SLA compliance