1. Overview

Converging mobile and IP technologies pose huge challenges for network operations. Existing management tools and processes are not designed to deal with the dynamic nature of IP. Yet IP is here, and the risks are inefficiencies, slow rollouts, and churn.

Enter the Alcatel-Lucent Converged Wireless IP Management solution. It's purpose-built to manage networks from end-to-end with simplicity, speed and flexibility. Configuration and provisioning are simplified because advanced GUIs hide complexity, while automation and templates reduce errors, time and cost. Assurance is now proactive, so operators can identify and respond to issues ahead of subscriber complaints.

Multi-technology RANs are a reality in today's wireless networks, often requiring multiple tools and experts for optimization tasks. Any-G Optimization maximizes value by precisely balancing capacity, cost and subscriber satisfaction.

Integration with existing OSS/BSS is faster and costs far less because certified interoperability cuts development and test cycles. As your network grows, scale your management system and ensure operational security and availability.

Simplicity, speed and flexibility. That's why over 350 Service Providers rely on Alcatel-Lucent's Converged Management solution for unified, efficient and effective operations.

2. Provisioning

To get revenue rolling in sooner, don't be held back by manual provisioning processes and the limitations of traditional configuration tools. With the Alcatel-Lucent 5620 Service Aware Manager, or SAM, operators introduce new network elements, technologies and services rapidly... and right the first time.

Here's an example, commissioning a large number of 7705 Service Aggregation Routers in the backhaul network. Instead of time-consuming command line configuration, the 5620 SAM's powerful script management tool automates the process. It copies base configuration data from an existing router, autogenerates and populates scripts, then distributes them to new network elements.

For tasks that can't be fully automated, streamlined GUI workflows, service templates and bulk provisioning accelerate the process. Single-click validation assures successful activation. Now service delivery productivity is maximized through streamlined, efficient, error-free provisioning.

The 5620 SAM brings simplicity, speed and accuracy to configuration and provisioning. Now services get to market faster, ahead of your competition.

3. Assurance

Reactive problem detection and slow resolution directly impacts subscriber experience. With the Alcatel-Lucent 5620 Service Aware Manager, or SAM, operators can proactively assure the network and resolve problems faster, end-to-end, from cell tower to packet core.

Together with the 5620 SAM, the Alcatel-Lucent 5650 Control Plane Assurance Manager, or CPAM, provides unprecedented real-time visibility of multiple network layers. This improves visualization to pinpoint emerging issues and makes proactive resolution possible.

For example, layer correlation identifies whether the root-cause is in wireless or IP transport, streamlining the troubleshooting process. Path testing and IP reachability monitoring validate service performance.

Integrated topology views speed troubleshooting by showing both the resources traversed by a service and the actual route it takes across the network. Enhanced multilayer alarm correlation reduces the number of alerts to quickly find the problem's root cause.

Now assurance is simpler, faster and more efficient. So your network is more available. Your services perform better. And your subscribers are more satisfied.

4. Optimization

An optimized network is one that balances cost and customer satisfaction. Over-engineer and lose money. Underdeliver and lose subscribers. This is a major challenge with today's highly dynamic mobile broadband services. And in multi-technology RANs, optimization gets even more complicated.

Now there's a single AnyG software that helps operators perform all optimization tasks, across all RAN technologies. The Alcatel-Lucent 9959 NPO helps operators deal with complex optimization tasks faster and with less cost, across all RAN technologies.

With complete visibility from detailed radio processing events to subscriber mobility attachment procedures, operators can instantly understand what's happening in their network, and where they need to act first.

For LTE, per-call measurement data offers unmatched analysis capabilities and essentially turns every user device into a drive test. Diagnosis is simplified, and remediation is optimal.

With a single, fast AnyG application, the RAN gets optimized faster. And so does the subscriber experience.

5. Operational Fit & Flexibility

As new technologies or vendors are rolled out in the mobile network, there can be more than a few bumps in the road. Existing back office and operations processes are too rigid, and not well suited to new technologies and services. Creating interfaces to OSS/BSS is cumbersome. So is updating them every time something changes. This can dramatically increase the cost and timeline for addressing subscriber demands.

The Alcatel-Lucent Converged Wireless IP Management solution fits into any operations environment.

Open interfaces speed integration. Now it's easy to connect with existing operations and business support systems. And interoperability with market-leading independent software vendors is certified through the Alcatel-Lucent OSS Connected Partner program, to save money and time during integration.

Do administrators need to assign operator privileges based on geography, organization, job function or responsibility? The flexibility is there to deploy the configuration that fits. Even in event of catastrophic failure, operations remains in control of network and services thanks to high availability & georedundancy.

The best fit. The most flexibility. It adds up to the least cost. Smooth operational integration speeds the rollout of advanced technologies and services.

6. Summary

Alcatel-Lucent's Converged Wireless IP Management Solution plays a key role in your competitive strength. It fast-tracks network deployment and simplifies the delivery of dynamic mobile broadband services. Now mobile operators can move faster on new service opportunities.

The Converged Wireless IP Management Solution gives mobile network managers a unified view of the network. More than a mash-up of element Management systems, the solution spans all network domains and technology layers.

Now Provisioning is faster and proactive Assurance is possible. Optimization more precise. And Integration simpler and more flexible than ever before. Network management with a unified view. It saves time and money today, and provides a foundation to support tomorrow's mobile and converged service offerings.