TeleWorld Solutions

A leading U.S. telecommunications provider was managing thousands of small-cell nodes across its wireless network.

As part of an ongoing network modernization initiative, the provider needed an efficient way to upgrade these nodes to a new software release while minimizing operational impact and engineering effort.

AUTOMATING LARGE-SCALE SMALL CELL UPGRADES FOR A LEADING TELECOMMUNICATIONS PROVIDER

THE CHALLENGE

The customer planned to migrate more than 2,500 small-cell nodes to a new software version.

Under the existing process, each node required manual intervention to complete the upgrade workflow, including software updates, provisioning activities, and reintegration into the network.

Each migration consumed more than 30 minutes of engineering effort, resulting in an estimated 1,250+ engineering hours to complete the initiative.

At that scale, the process would place a significant burden on engineering teams, slow deployment timelines, and reduce the amount of time available for higher-value network operations and optimization activities.

>2,500
SMALL-CELL NODES TO MIGRATE

>30 MINUTES
ENGINEERING EFFORT PER NODE

1,250+ HOURS
TOTAL MANUAL ENGINEERING EFFORT

THE SOLUTION

TeleWorld Solutions (TWS) partnered with the customer to enhance its RAN management system platform with an automated reprovisioning capability.

The new functionality enables engineers to initiate upgrades for either individual nodes or large batches through a simple automated workflow.

Once initiated, platform automatically executes the migration process while providing real-time visibility into node status and progress.

The solution:
- *Automates software migration activities*
- *Eliminates repetitive manual provisioning tasks*
- *Handles node de-integration and reintegration processes*
- *Enables large-scale batch processing*
- *Provides real-time migration tracking and status monitoring*

By transforming a labor-intensive process into an automated workflow, **TWS** enabled the customer to modernize its network more quickly and efficiently.

THE RESULTS

The impact was immediate.

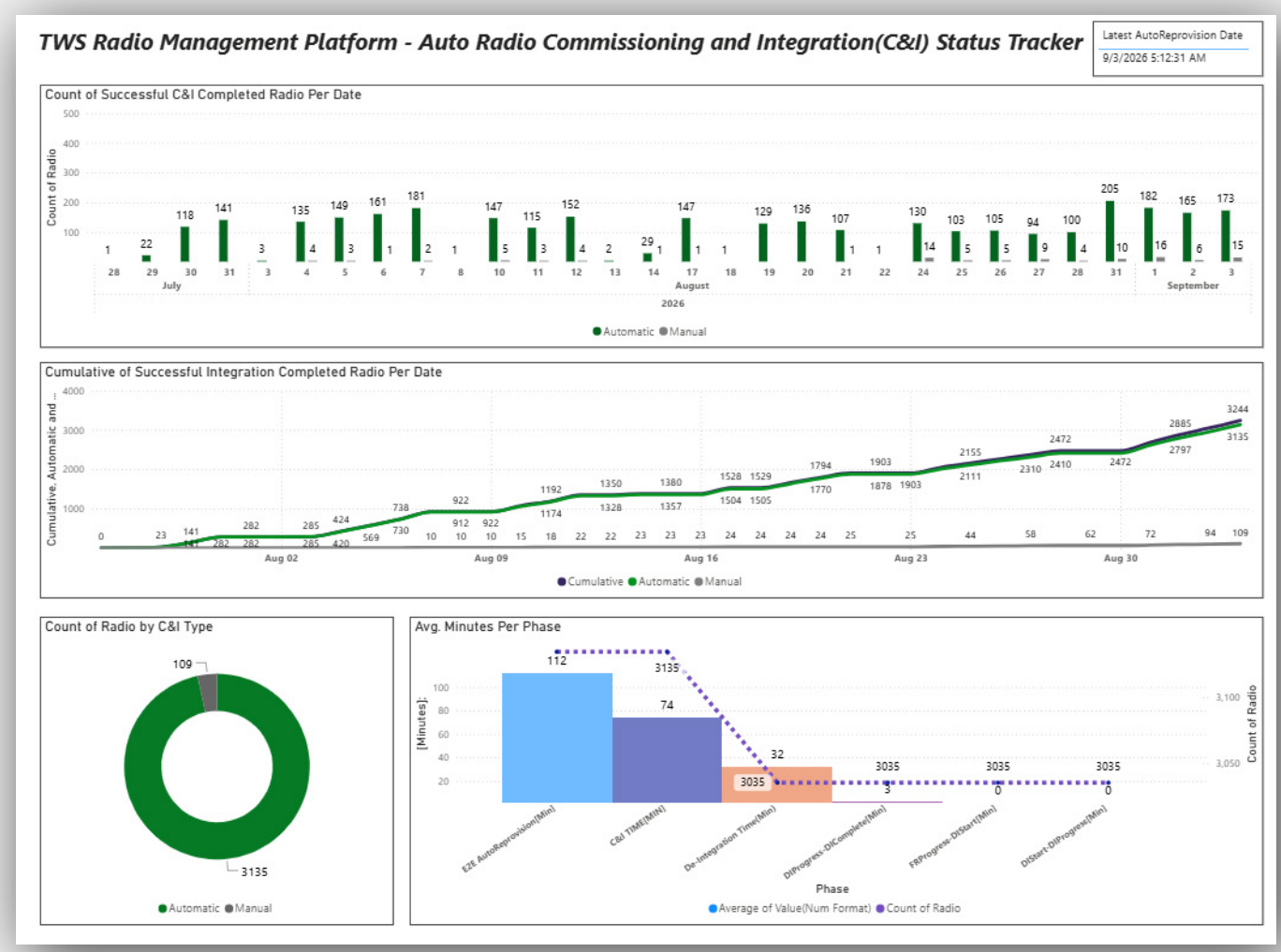
Within the first two weeks of deployment, the customer successfully upgraded more than 1,500 small-cell nodes using the automated workflow. Achieving the same result through manual processes would have required more than 750 hours of engineering effort.

The RAN management system platform enabled large-scale parallel processing across multiple markets, significantly accelerating migration timelines while reducing the operational burden on engineering teams.

Rather than manually managing each node upgrade, engineers were able to oversee migrations through a centralized dashboard while automated workflows performed the underlying tasks.

As a result, the customer was able to:
- *Dramatically reduce manual engineering effort*
- *Accelerate software deployment timelines*
- *Upgrade large volumes of network assets concurrently*
- *Improve operational visibility throughout the migration process*
- *Free engineering resources for higher-priority network initiatives*

The solution delivered such a positive user experience that the customer's operations team described the enhanced platform as ***"fantastic."***



RAN MS PLATFORM

Auto Reprovision Status Tracker

WHY IT MATTERS

As wireless networks grow in scale and complexity, operators must find ways to automate repetitive operational processes without sacrificing visibility or control.

This project demonstrates how **TWS** helps communications providers streamline network operations through software automation, enabling faster deployments, more efficient use of engineering resources, and improved scalability.

By replacing manual workflows with intelligent automation, **TWS** helps customers modernize networks faster while allowing technical teams to focus on activities that drive greater business value.