

Case Study: Large Electric & Gas Utility (Midwest)

Accelerating Smart Grid Expansion through Configuration Automation



This utility, with **3.8 million customers**, moved to expand its smart grid across its service area, but the sheer complexity of its network infrastructure threatened to stall progress. With a massive rollout of more than 260 new MPLS routers, it faced a significant bottleneck: the manual configuration process was too slow, too expensive, and prone to human error.

Challenge: The Manual Configuration Bottleneck

Before implementing Komodo Eye®, the organization relied on traditional hardware manufacturer toolsets. This manual approach created significant operational hurdles:

- **Prohibitive Labor Costs:** A single router configuration required an average of three working days from a skilled network engineer. At \$100/hour, labor costs per device reach \$2,400.
- **High Error Rates:** Approximately 10% of manual configurations contained programming errors, leading to costly rework and downstream network instability.
- **"Adjacency" Problem:** Deploying a new router isn't an isolated task; it often requires manually reconfiguring all adjacent switches and routers to ensure connectivity.
- **Resource Stagnation:** Highly skilled engineers were trapped in repetitive data entry tasks rather than focusing on high-value architecture or security.

"Human error causes more data loss than malicious attacks. By automating the 'bitter edge' of the network, we eliminated the 10% error rate that typically plagues large-scale deployments."
-Project Manager

Solution: AIOps-Driven Network Modeling

Komodo Eye® was deployed to move beyond simple "mail-merge" templates and into intelligent, model-based automation.

- **Automated Variable Generation:** The platform's AIOps engine automatically generated variable values, slashing the need for manual data entry.
- **Context-Aware Templates:** Komodo Eye doesn't just configure the device in a vacuum. It identifies network adjacencies and automatically generates the necessary code for upstream devices to complete the implementation.
- **Standardized Security:** The system ensured that every configuration—regardless of location—was 100% consistent with corporate security standards and settings.

Results: Massive ROI and Rapid Deployment

The shift from manual engineering to Komodo Eye's automated modeling delivered immediate, measurable impact across the project's lifecycle.

Metric	Before Komodo Eye	With Komodo Eye	Improvement
Configuration Time	3 Days (24 Hours)	30 Minutes	98% Faster
Labor Cost per Unit	\$2,400	~\$50	\$2,350 Saved/Unit
Error Rate	10%	0%	Eliminated
Project Savings	N/A	\$625,000+	Significant ROI

Conclusion

Komodo Eye transformed a tedious, error-prone process into a streamlined, automated workflow. The project was completed ahead of schedule, allowing senior engineering staff to be reassigned to more pressing strategic needs while ensuring a more resilient and reliable smart grid for 3.8 million customers.

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