

Case Study: A Customer-First Arista Network Refresh for a Telecommunications Provider

A regional telecommunications provider needed to refresh aging network infrastructure across four operating environments: its primary data center and network operations center, a secondary disaster-recovery facility, and two regional aggregation locations.

The existing network had been expanded incrementally over several years. It included older switching platforms from multiple generations, a mixture of 10GbE and 40GbE connectivity, inconsistent support coverage, and limited capacity for future traffic growth. Several devices were approaching the end of their supported lifecycle, while the network team was also preparing for higher-bandwidth customer services, additional inter-site traffic, and increased monitoring requirements.

The provider initially approached a large national technology reseller for assistance. However, the project moved through a highly standardized sales process involving automated intake systems, separate quoting teams, multiple account contacts, and long intervals between technical responses.

After more than three weeks, the customer still did not have a fully validated bill of materials. Important questions involving optics, airflow direction, licensing, support coverage, port requirements, and deployment responsibilities remained unresolved. With a scheduled maintenance window approaching, the organization faced the possibility of postponing the refresh or extending support on infrastructure it intended to replace.

The customer did not need another basic equipment quote. It needed a partner prepared to understand the network, take ownership of the project, coordinate with the manufacturer and channel, and remain accessible when decisions had to be made.

Catalyst's Approach

After connecting with the customer, Catalyst Data Solutions assigned a dedicated infrastructure specialist and project coordinator to the engagement.

A technical discovery session was scheduled within one business day. Catalyst worked directly with the customer's network team to document:

- Current switch models and support status.
- Port utilization and projected bandwidth growth.
- Existing 10GbE and 40GbE connections.
- Required 25GbE, 100GbE, and future 400GbE capacity.
- Fiber types, optics, cabling, and inter-site distances.
- Routing, redundancy, timing, and failover requirements.

- Rack space, power, cooling, and airflow orientation.
- Maintenance windows and allowable service interruption.
- Internal deployment responsibilities and areas requiring outside support.

Rather than immediately recommending a preferred manufacturer, Catalyst reviewed multiple technical paths. The comparison considered compatibility, available port densities, routing scale, buffering, support terms, lead times, lifecycle position, operational complexity, and long-term cost.

Catalyst's vendor-agnostic role was important. The objective was not to force the customer into a specific platform. The team presented the practical benefits and limitations of the available options, and the customer made the final technology decision.

After reviewing the alternatives, the telecommunications provider selected an Arista-based architecture.

Arista Platform Selection

For this demonstration scenario, the proposed architecture included 12 new Arista switch routers across the four locations.

Core and Inter-Site Connectivity

Catalyst proposed four **Arista DCS-7280CR3-32P4-F** switch routers, deployed as redundant pairs at the primary and disaster-recovery locations.

Each DCS-7280CR3-32P4-F provides:

- 32 × 100GbE QSFP ports.
- 4 × 400GbE OSFP ports.
- Up to 4.8 Tbps of wire-speed performance.
- 8 GB of packet buffer.
- Redundant power and cooling components.

This platform provided the customer with dense 100GbE connectivity for core and inter-site traffic while preserving a path to 400GbE as bandwidth requirements increased.

Regional Aggregation and Service Connectivity

Catalyst also proposed eight **Arista DCS-7280SR3-48YC8-F** switch routers, with a redundant pair installed at each of the four network environments.

Each DCS-7280SR3-48YC8-F provides:

- 48 × 1/10/25GbE SFP interfaces.
- 8 × 100GbE QSFP interfaces.

- Up to 2 Tbps of wire-speed performance.
- 4 GB of packet buffer.
- Front-to-rear airflow and redundant AC power supplies.

This configuration gave the provider flexible 10GbE and 25GbE service-facing connectivity with multiple 100GbE uplinks for aggregation, redundancy, and future expansion.

The 7280R3 family was technically relevant because Arista positions it for service-provider networks, data-center interconnect, IP peering, metro aggregation, 5G infrastructure, and other high-scale routing environments. The platform family also supports capabilities such as EVPN, MPLS, Segment Routing, Precision Time Protocol, Synchronous Ethernet, deep buffering, and high-scale routing, depending on the selected hardware, software licenses, and final configuration.

The exact switch models, power configurations, optics, licenses, software features, and support subscriptions would still require final validation by Catalyst, the customer, Arista, and the authorized channel before purchase.

Working Through the Authorized Arista Channel

Once the customer selected Arista, Catalyst worked through its Arista relationship and the appropriate authorized channel to turn the proposed architecture into a complete and orderable solution.

Catalyst coordinated:

- Final switch and configuration selection.
- Bill-of-materials development and validation.
- Manufacturer and distribution communication.
- Pricing and lead-time confirmation.
- EOS software and feature requirements.
- Support subscription and warranty options.
- Compatible optics, cables, power supplies, and rack accessories.
- Airflow and power validation for each location.
- Purchase-order processing.
- Asset tagging and shipment scheduling.
- Staging and deployment preparation.
- Escalation of technical or availability questions.
- Coordination between the customer, Arista, distribution, and deployment resources.

This work occurred largely behind the scenes. Instead of asking the customer to manage separate conversations with the OEM, distributor, licensing team, logistics provider, and technical specialists, Catalyst served as the central point of coordination.

The customer received new, official Arista equipment through the established channel while maintaining direct access to a responsive Catalyst team that understood the project.

An Eight-Week Phased Deployment

The demonstration project was organized around an eight-week schedule:

Week 1: Discovery, inventory review, traffic assessment, and requirements documentation.

Week 2: Architecture comparison, Arista solution design, and preliminary bill of materials.

Weeks 3–4: Manufacturer and channel validation, final quoting, support selection, and order coordination.

Weeks 5–6: Equipment receipt, inspection, asset tagging, staging, configuration preparation, and deployment planning.

Weeks 7–8: Phased installation and cutover across the four locations.

The two regional aggregation locations were completed first, followed by the disaster-recovery environment. The primary data center was completed last, after the earlier deployments had validated the migration process.

Each location was assigned a defined maintenance window, rollback procedure, responsibility matrix, and post-installation validation checklist. The customer's network team controlled production changes and final acceptance, while Catalyst coordinated equipment, project communication, channel resources, and deployment dependencies.

Project Results

The telecommunications provider achieved the following outcomes:

- **12 aging switches were replaced across four locations.**
- **Four high-capacity core switches and eight regional aggregation switches deployed.**
- **Core connectivity transitioned from a predominantly 10/40GbE environment to a 100GbE architecture with a future path to 400GbE.**
- **25GbE service and infrastructure connectivity were introduced where higher access-layer capacity was required.**
- **Four separate network environments standardized on two closely related Arista platform configurations.**
- **All planned cutovers completed within the eight-week project schedule.**
- **No unplanned customer-facing outage during the phased migration.**
- **Support, hardware, optics, airflow, and licensing requirements documented before equipment was ordered.**

- **A lifecycle roadmap established for future expansion, spares, support renewals, and capacity upgrades.**
- **The planned maintenance window was preserved, avoiding a project postponement and the cost of extending support on equipment scheduled for retirement.**

The project also changed the customer's experience of working with an infrastructure provider. Instead of waiting several days for responses from rotating teams, the customer had direct access to people who understood the architecture, the open issues, and the next project milestone.

What Made the Catalyst Experience Different?

The difference was not that Catalyst ignored manufacturer, distributor, or authorization requirements. Those processes remained essential.

The difference was that Catalyst actively managed them.

A traditional hardware transaction might have ended after the customer received a quote for a list of switches. Catalyst's work extended across discovery, technical comparison, product selection, channel coordination, bill-of-materials validation, logistics, deployment sequencing, support planning, and lifecycle documentation.

The customer was not repeatedly transferred between an account representative, an automated response system, a quoting department, and a technical queue. A focused team remained accountable throughout the engagement.

Because Catalyst is smaller than the largest national VARs, it can apply more direct attention to individual infrastructure projects. Questions are less likely to become disconnected tickets. Changes can be reviewed by people who understand the full engagement. Technical, commercial, and logistical decisions can be coordinated without requiring the customer to restart the conversation at every stage.

At the same time, the customer does not have to sacrifice access to established manufacturers or official channel procurement. Through Catalyst's partnerships and channel relationships, customers can obtain enterprise-grade technology, manufacturer-backed products, support options, and specialist resources while receiving a more personal and responsive level of service.

More Than a Switch Reseller

This engagement resulted in the purchase of Arista switches, but the value was not limited to the equipment.

Catalyst helped the customer:

- Understand the limitations of its existing environment.
- Compare competing technical paths.
- Select an architecture aligned with current and future requirements.
- Navigate the authorized Arista channel.
- Validate the complete solution before ordering.
- Coordinate equipment, support, optics, logistics, and deployment.
- Complete the refresh within a defined operational window.
- Establish a plan for the next stage of the network lifecycle.

That is the practical difference between processing a hardware order and acting as an infrastructure partner.