

How Cisco IT Reduced Linksys Contact Center Outsourcing

Cisco Unified Intelligent Contact Management reduces outsourcing costs by improving contact center management and support.

Cisco IT Case Study / IP Contact Center / IP Contact Center Call Control: This case study describes how Cisco Systems has reduced costs and increased flexibility for certain calls outsourced to contact centers located around the world. This result was achieved by a newly designed implementation of a Cisco Customer Voice Portal, Cisco Pre-Routing features, and a Cisco ICM-to-ICM system link to handle inbound calls for Linksys, a division of Cisco. Customers can draw on Cisco IT's real-world experience in this area to help support similar enterprise needs.

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– Jim Robshaw, Cisco senior manager

CHALLENGE

Linksys®, a division of Cisco Systems®, targets the consumer and small business markets with numerous networking solutions. As of late 2005, the large Linksys customer base was generating an average of 20,000 calls per day for sales and support assistance, with volumes during peak periods of up to 50,000 calls per day.

Linksys routes nearly all of these calls to outsourced contact centers in India, the Philippines, and Argentina. Calls that require higher-level or specialized assistance are handled by a contact center at the company's headquarters in Irvine, California. Linksys had migrated to a Cisco® IP Contact Center (IPCC) solution that connects to the central Cisco Intelligent Contact Management (ICM) system to control call routing, and to a Cisco IP Interactive Voice Response (IVR) system to identify the right destination for each call.

However, this fundamental call routing design was both inefficient and costly for Linksys. Every call to a Linksys sales or support number in North America was sent by the carrier to the central Cisco ICM system, which coordinated with the Cisco IVR system to determine the correct routing. Of the calls received, only about one percent would be handled by the Linksys contact center in Irvine, California. The remaining 99 percent would be rerouted by the Cisco ICM system back to the carrier network for transport to one of the outsourcer sites. To support the large Linksys call volumes, Cisco incurred the high costs of six leased DS-3 circuits for connecting the central Cisco ICM system to the carrier and to certain outsourcing locations.

“We knew this type of call volume was more appropriate to handle with a routing capability in the carrier's network,” said Franklin King, Cisco IT lead engineer and application consultant. “We also wanted to reduce the infrastructure, circuit costs, and support burdens created by the internal call routing architecture.”

SOLUTION

Working with the primary carrier for Linksys, Cisco IT implemented a new solution for pre-routing calls. This solution was designed around two major elements:

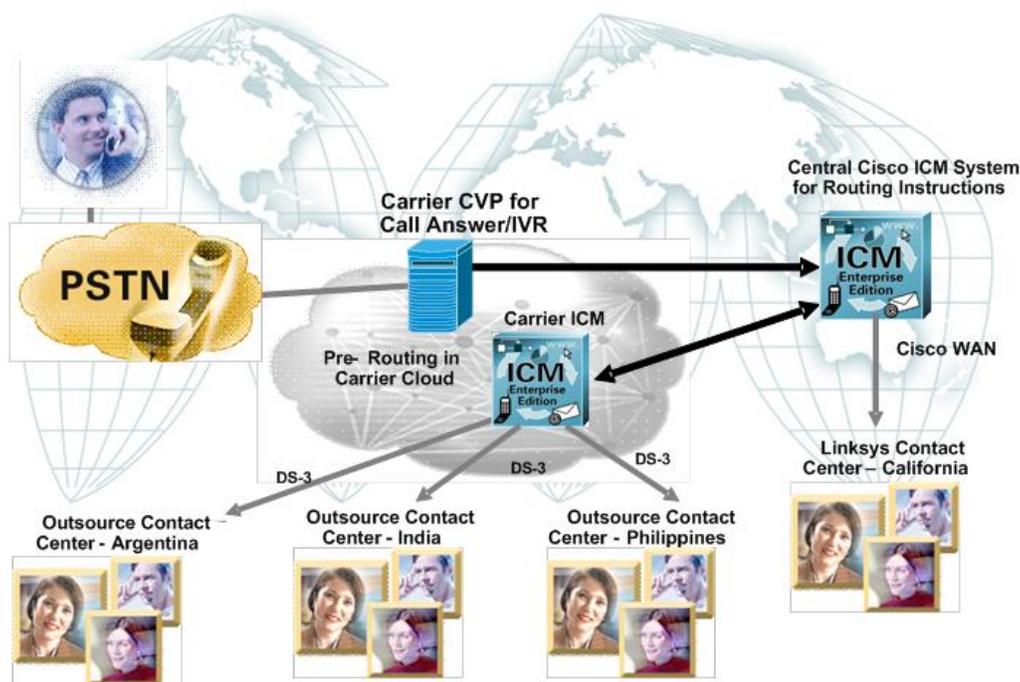
- A link between two Cisco ICM systems—one deployed by Cisco and one deployed by the carrier—to receive routing instructions for each call.

- A Cisco Customer Voice Portal (CVP), installed in the carrier's point-of-presence (POP) to support call queuing, IVR, and multi-site call switching capabilities.

This solution also integrated Cisco ICM Pre-Routing® technology with the carrier's Cisco ICM and CVP systems for call routing. When a call is received on a Linksys toll-free number for North America, it is answered by the Cisco CVP, which collects basic information that will determine whether the call is appropriate for sending to one of the outsourcer centers, or if it requires different handling.

For each call that will be sent to an outsourcer, the carrier holds the call in its own network cloud while it queries Cisco's ICM system. Based on time of day, real-time agent availability, and other factors, Cisco's ICM system responds with the destination for that call. The carrier then intelligently routes the call, using its own Cisco ICM system, from the cloud to an outsourcer location—without ever sending the call to the Cisco network.

Figure 1. Inbound calls from Linksys customers are routed to outsourced contact centers through Cisco Pre-Routing technology and a link between Cisco ICM systems.



Implementing this solution required the following steps:

- Creating the correct environment in the carrier's POP for the Cisco ICM and Cisco CVP systems, which encompass multiple servers and associated equipment.
- Installing, sizing, and configuring the circuits required for routing calls from the carrier POP to the outsourcer locations, as well as connecting the Cisco and carrier ICM systems with redundant T1 circuits.
- Establishing a co-located extranet connection from the carrier to the Cisco internal network to allow the ICM-to-ICM communication.
- Configuring Cisco's internal ICM system for communication with the carrier's Cisco CVP and ICM systems and enabling the Cisco Pre-Routing function.
- A Cisco Gold Certified Partner provided assistance for planning, implementation, configuration, and testing of

the Cisco ICM and Cisco CVP systems purchased by the carrier.

The change in how calls were processed—from post-routing in the Cisco network to pre-routing by the carrier—meant that existing IVR scripts needed modification to reflect the new systems and routing logic. This modification was a lengthy task because of the large number of IVR scripts required to track different promotions, call types, and other business factors in the Linksys environment.

“It was important to evaluate what made sense for the Linksys business in terms of which scripts should go to pre-routing and which should remain for post-routing handling within the Cisco network,” says King. “We also needed to verify that the call flows would transfer correctly between systems and that applications would work consistently so that this change would be transparent to our customers.”

RESULTS

The Cisco ICM-to-CVP and Cisco ICM-to-ICM integrations have yielded significant benefits for Linksys, for Cisco IT, and for the carrier.

Linksys: Lower Costs, Better Call Handling

The largest benefit to Linksys is lower cost for call handling. Previously, Linksys paid for all the time involved in receiving the inbound call, the interaction with the Cisco IVR system, and the call duration after it was transferred to an outsourcer. With the Cisco ICM-to-ICM integration, Linksys pays for fewer minutes of usage charges for the toll-free service, covering only the time the call spends in the carrier’s network cloud. Given an average call length of nearly 20 minutes, these per-minute savings will increase in value as the company continues to grow and receive more calls.

“For the current volume of Linksys calls, we estimate total cost savings of US\$1.1 million per year,” says Jim Robshaw, a Cisco senior manager responsible for the overall program delivery. “Of that total, approximately \$800,000 comes from reduced costs for fixed circuits and \$300,000 comes from the variable handling costs per call.”

For another business benefit, Linksys managers can now focus more on improving caller service and optimizing performance in all contact centers. This focus will allow Linksys to maximize the business benefits of outsourcing.

Cisco IT: Reduced Management Burden, Improved Applications

Because the carrier is responsible for the infrastructure and circuits that connect to the outsourcer locations, Cisco now uses only one DS-3 circuit to terminate Linksys calls—a substantial reduction from the previous six DS-3 circuits. Fewer circuits mean less network equipment, including the elimination of two Cisco Catalyst® 6500 Series switches, four Cisco CallManager systems, and two Cisco IVR system servers. Fewer circuits and equipment elements also reduce the burden on Cisco IT staff for support and maintenance.

Cisco IT also benefits from ease of administration when the carrier also has a Cisco ICM system. For example, it is easier to configure pre-routing on the carrier side to integrate with the call routing logic already defined in Cisco’s own ICM system. “I can see everything that the carrier sees, such as the telephone number dialed and the IVR choices made by the caller, to verify that the call routing is designed for correct and efficient handling,” says King. “This goes well beyond the basic information provided by dialed number identification in the traditional pre-routing service offered by some carriers.”

The Carrier: A New Service Offering

The Cisco ICM and Cisco CVP systems deployed by the carrier have the capacity and flexibility to support and segment inbound traffic for different enterprises. These systems, plus the Cisco Pre-Routing features, will enable the carrier to offer pre-routing services to other customers that operate multiple contact centers and have a compatible call processing infrastructure. “The pre-routing solution gives service providers another source of revenue that

complements their existing service offerings,” says Robshaw.

LESSONS LEARNED

Contingency routing was designed into the carrier’s application to assure a continuous ability to handle the Linksys calls. This contingency call routing addresses issues such as loss of connection between Cisco ICM systems or disruption in the outbound circuit to an outsourcer.

During the planning process, staff from the carrier, the implementation partner, and Cisco IT worked together to diagram call flows and determine how calls would traverse the carrier and Cisco networks. The group also verified that all systems would communicate correctly and that logistics were resolved for circuit provisioning, fault management, and other operational issues.

The dynamic nature of Linksys marketing and call types presented a challenge during the process of rewriting IVR scripts for the new environment. “We asked the Linksys business managers to accept a ‘freeze point,’ after which the IVR scripts could not be changed until we had migrated to call routing by the carrier,” says King. “That gave us the time to modify and verify the IVR scripts to ensure a smoother cutover.”

NEXT STEPS

The Cisco IT application team that supports the contact centers will continue to develop and enhance the scripts implemented in the Cisco CVP system, which are used by the carrier to determine initial call handling. The team will also make continual improvements in the call routing rules implemented in the central Cisco ICM system to control the allocation of calls to the individual outsourcers.

“Many of these changes must be implemented quickly because Linksys sells in the highly competitive retail market,” says King. “Even a seemingly small change in an IVR script can have a big impact on Linksys product sales and profitability because of the large call volumes.”

FOR MORE INFORMATION

To read the entire case study or for additional Cisco IT case studies on a variety of business solutions, visit Cisco on Cisco: Inside Cisco IT www.cisco.com/go/ciscoit

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