Cisco IT@Work Case Study:

# Migrating the Linksys Call Center to Cisco IP Contact Center (IPCC)

**Cisco Information Technology**

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# Overview



- **Challenge:**

  **Integrate a contact center serving more calls per day than all other Cisco call centers combined**

- **Solution:**

  **Migrate from legacy PBX switch to Cisco IPCC**

- **Results**

  **Linksys contact center now processes 40,000 calls per day—with more flexibility and greater availability than before**

- **Next Steps**

  **Extend functionality and reach**

# Challenge: Integrate High-Volume Call Center



- **Integrate a consumer-oriented contact center serving >16,000 callers per day**
  - **Volume surpassed that of all other Cisco call centers combined**
  - **In 2005 would serve 40,000 callers per day**
- **Route 99 percent of calls to outsourcers in India and Philipines**
- **Ensure business continuity despite environmental conditions**
  - **California was experiencing rolling blackouts**
- **Deploy rapidly**
  - **Back-to-school season would drive 10,000 more calls per day**

# Solution: Migrate to Cisco IPCC



- All Cisco contact centers adopted Cisco IPCC in 2000
- Using same support infrastructure would cut costs, improve operational efficiencies
- Decisions
  - Pre-routing or post-routing
  - Where to terminate calls
  - Design and sizing

# Solution: Decision - Pre-Routing or Post-Routing?



- **Pre-routing**
  - Carrier hosts menu of options, sending caller's selection to Cisco Intelligent Contact Manager (ICM)
  - Cisco ICM returns routing instructions to the carrier
  - Call never touches Cisco WAN unless that's its destination
- **Post-routing**
  - Cisco infrastructure receives and routes all calls
- **Decision: post-routing**
  - Linksys had contract with carrier without pre-routing capability
  - Cisco embarked on building an infrastructure that could receive and route 40,000+ calls per day

# Solution: Decision - Where to Terminate Calls

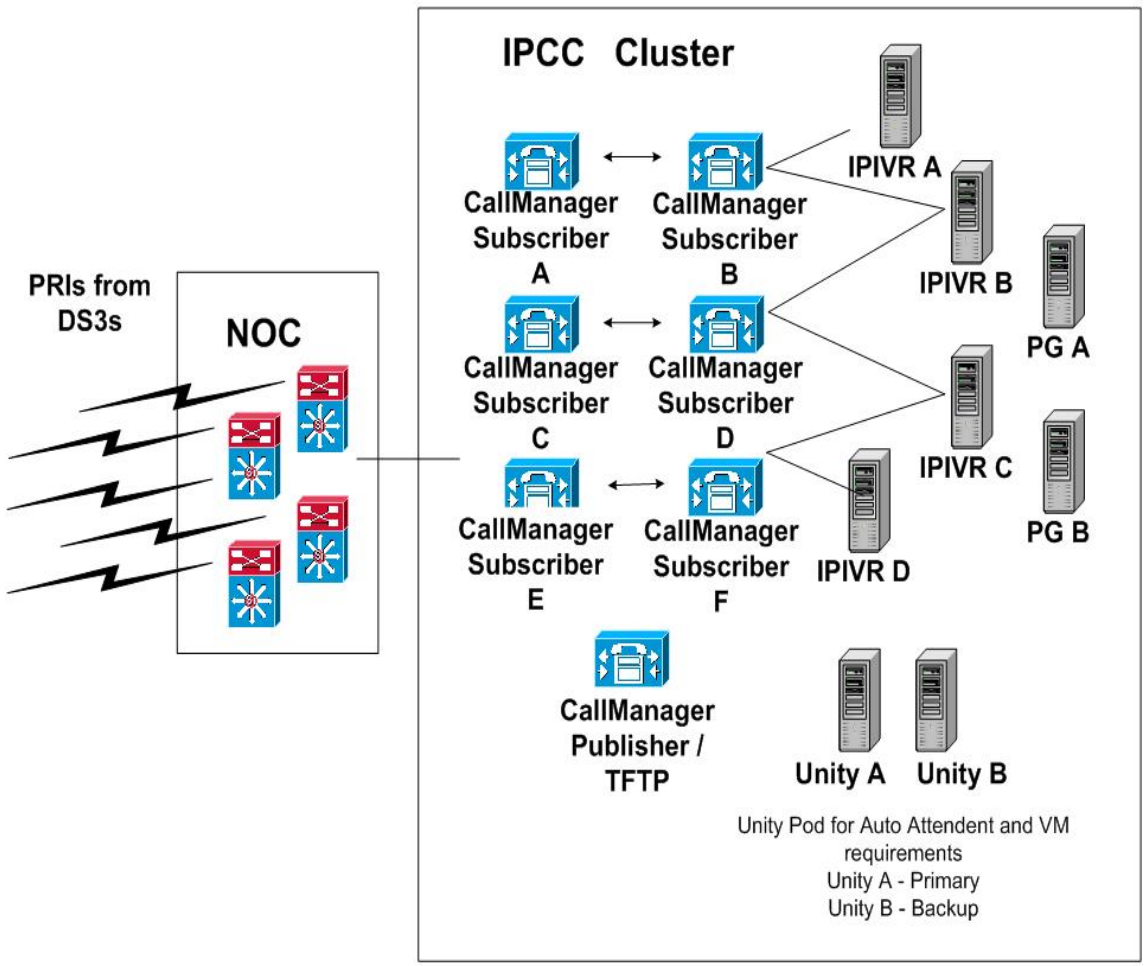


- **Linksys headquarters in Irvine, CA?**
  - **Not large enough to accommodate circuits and switches**
  - **No clear advantage: 99% of calls redirected to Manila and to Indian outsourcers' points of presence in NY and CA**
- **San Jose?**
  - **Linksys carrier has limited presence on west coast, making it difficult to provision circuits**
- **RTP, North Carolina!**
  - **Redundant data centers, each with its own circuits**
  - **Multiple routes to local exchange carriers**

# Solution: Decision - Design and Sizing



- 3 primary and 3 back-up Cisco CallManager servers, and 1 Publisher/TFTP server
- 4 Cisco IP Interactive Voice Response (IVR) servers
- 2 Cisco ICM Peripheral Gateway (PG) servers
- 2 Cisco Catalyst 6513 switches with Cisco 6608 T1 gateways
- 3 inbound and 3 outbound DS-3 circuits (to outsourcers)



# Solution: Discovery and Deployment



- **Record existing call-routing logic and re-create in Cisco ICM environment**
  - **62 800-numbers, each with its own script for call routing**
  - **85 IP IVR scripts that define menuing and queuing**
  - **English, French, and Spanish menu options**
  - **No new functionality before cut-over, to save time**
- **Deployment**
  - **Technical support in July 2004**
  - **Pre-sales and customer service in August 2004**
  - **Agent training on Cisco IP Phones, Computer Telephony Integration Object Server (CTIOS) agent desktop**
  - **Manager training on WebView reports**

# Results: 2.2 Million Calls Routed To-Date!



- **More flexible call routing**
  - **Contact centers adjust percentage of calls routed to different outsourcers minute-by-minute—e.g., if an outsourcer loses voice circuit**
  - **Compares to five days when the carrier adjusted the percentage**
- **Provisioning of new 800 numbers within hours**
  - **Used for marketing promotions**
  - **Cisco simply changes dialed number identification service (DNIS) and notifies carrier**

# Results: Improved Availability and Support

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- Redundant data centers, servers, and telco facilities
- Easier, faster problem resolution

  Linksys contact center is part of Cisco global contact center operations

- Simpler moves, adds, and changes

  Agents move to another desk in minutes by disconnecting and reconnecting Cisco IP Phones

# Next Steps: Extend Functionality and Reach



- **Enable dynamic routing at outsourcer locations**
  - **Cisco ICM Peripheral Gateways (PGs) monitor outsourcer PBX to determine capacity**
- **Provide pre-routing capability for Linksys' carrier**
- **Send screen pops with customer history to agents' screens**
- **Extend Linksys contact center to Latin America and Asia Pacific**
- **Evolve to become a Customer Interaction Network, handling contacts via e-mail and fax as well as phones**

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