THINK SERVICES
A DIVISION OF UNITED BUSINESS MEDIA

CUSTOMER MANAGEMENT insight

> EVENTS   > TRAINING   > CONSULTING   NEWSLETTERS   > WEBCASTS   > BLOGS

Magazine
New Customer Management Insight Digital Publication
Call Center Magazine Archives
FREE Webcasts
Podcasts
Vendor Guide
Multimedia Content
Online Advice
eNewsletter Alerts
ICMI Forum
ICMI Jobs
Training
Consulting
Newsletters
Publications/Tools
Industry Research
QUEUETIPS
Conferences
ICMI Global Report
Call Center Knowledge Online
Join ICMI
Members Only
Vendor Guide
Industry Information
About ICMI
Download the ICMI Catalog
-

TechEncyclopedia

Define It

Voice over IP, Veal over Linguini

Spend $150 more per restaurant per month to go from 56K to T1. Save $250 eliminating analog POTS lines, route intrasite LD over WAN.

By **Ellen Muraskin**

08/03/2001, 9:46 AM ET

The Premise:
Buca Di Beppo, growing chain of Italian family restaurants

The Potential:

- Expanding all sites' phone hours with an all-day, local-appearing, centralized reservations center.
- Trading ten analog trunks for one converged T1 at each site.

The Pieces:
At headquarters:

- Nortel Meridian with ITG IP trunk card, Passport 6400 Multiservice WAN switch,
- Call Pilot Unified Messaging
- Symposium Call Center/TAPI server
- Business Policy Switch and BayStack 350 router
- ATM inverse mux switch

At branches:

- Nortel Networks' Business Communication Managers In network:
- Global Crossing's combined Frame-and-PRI T1 service

The Plot: Buca Di Beppo (Italian: "Joe's Garage") describes itself as a chain of "full-service, dinner-only restaurants ... offering high-quality, immigrant Southern Italian cuisine served family-style in an atmosphere that parodies the decor of post-War Italian/American restaurants." Begun in 1993 in Minneapolis, the outfit's cheeky

Free CallCenter Insider Newsletter

Your Email Address

Optional Areas of Interest

- ☐ International News
- ☐ Advice/Tips
- ☐ Technology
- ☐ Agent Development
- ☐ IVR

> UTILITIES

🖨 print this article
✉ e-mail this article

> RELATED LINKS

The Rules of (Agent) Engagement

Avaya Enhances IP Telephony Portfolio

Contact Centres and Customer Interactions - a Colonial Perspective

New Methods to Measure Performance

Nortel Vendor Portal

Develop Your Entire Team

Virginia Mason Medical Center

Nortel, Microsoft Team UC Phone

IP Call Routing: The Amcat Interview

Nortel Releases SMB Comm/Networking

marketing pitch seems to strike a great balance between the twin (and usually conflicting) promises of theme and cuisine. They've gone from 17 to 62 locations in the past two years.

Systems

Because "it takes us all day to cook, and because that's the meal of indulgence," Buca di Beppo is only open for dinner. And therein lay one of the CT opportunities: By setting up a small, intelligently routed, nine-agent call center to handle calls rerouted from individual restaurants before 3 p.m., Buca could take reservation calls all morning and early afternoon, for all 62 (and counting) locations, with a local sound and feel for each. Actual branch employees could stay busy making sauce and setting tables.

Buca thought they could justify this staffing and capital expenditure with just one additional reservation per day per restaurant, for a four-person table making $80. The center averages six reservations per store per day, and gets up to 15 or more. The call center is also stimulating a new take-out business; take-out orders are routed to the appropriate store in the form of orders at various stations, reports John Motschenbacher, Buca's vice president of finance and purchasing.

The call center is the easier part of the story for laymen to grasp. The truth is, it was only part of a larger convergence proposal set forth by system integrator High Wire Networks (Minneapolis, MN - 612-256-5000); a proposal that would justify a ramp-up from 56K frame-relay service at each site to full T1.

This part of the plan set the table for Nortel Networks (Brampton, Ontario, Canada - 905-863-000): Voice and data traffic now flows between all branches of Buca di Beppo and headquarters over the company's frame relay and ATM WAN, provisioned through Global Crossing (Beverly Hills, CA - 310-385-5200) and routed through Nortel components. A renegotiated, corporate-wide bandwidth agreement with Global Crossing eliminates ten analog POTS lines at each site, averaging $50 each per month, and replaces them with ten PRI lines on the T1, at $25 per month. Four other channels on the T1 are frame relay.

The gateway/IP-PBX at each location is Nortel's dual PSTN/IP Business Communication Manager. A Nortel Meridian 1 with ITG IP trunk card is at corporate headquarters, along with a Passport 6400 Multiservice WAN switch, Call Pilot Unified Messaging system (serving the entire U.S. network), Nortel Symposium Call Center/TAPI server for location and reservation screen pop, Nortel's Business Policy Switch, and BayStack 350 router.

The new equipment replaced a leased Lucent PBX at headquarters, and Cleartrac frame-relay access devices and Lucent Partner key systems at restaurant locations. These had supported voice-over frame, but not successfully; users often were opting for the ten PSTN lines on the key systems instead. The new BCMs at each location convert packetized voice back to TDM on the station side; the desktop phones, not IP, are a mixture of "Norstar-like" new digital station sets, old Norstar series, and analog.

"The main driver for this system was a cost-benefit analysis that found that a majority of the savings would come from changing the trunking of local access from an analog switch to a dedicated T1," says Keven Marier, president and CEO of High Wire Technologies, which designed and installed the converged network solution for Buca.

"We were able to reduce the POTS lines by integrating PRI voice with the frame relay that already existed at every site. We looked at a provider for Buca [Global Crossing] who could put local voice and data on the same T1." A good part of this saving was made possible simply by the combined purchasing power of local, long-distance, and Internet service across 60+ locations. "We typically see companies cut costs 40 to 50% across the board by consolidating their communication networks," says Marier.

"You get an integrated T1 at Layer 2 and provide two types of services," says Marier. Further, voice traffic between Buca locations bypasses tolls, travelling on the frame relay channels. This includes not only internal calls dialed through four-digit extensions (IP-to-extension routing tables are maintained in each BCM and centrally updated), but also customer calls received on the PRI channels, gatewayed onto the WAN and delivered to the Minneapolis call center. The BCMs also capture and consolidate CDRs, used to cross-reference a customer database with call center activity.

The Business Policy Switch manages QoS on the corporate LAN; the PassPort fulfills that role across the WAN, and the BCM's built-in QoS router prioritizes traffic on the branch LANs.

According to Marier, Buca's WAN is one of only three in Minnesota to use an intra-networking ATM-FR service. Selected for superior QoS features, ATM is Buca's choice for long-haul transport. When Global Crossing receives Buca's IP packets on its colocated frame relay switch, it strips the IP packets out of the frame, repacketizes into ATM cells, and routes to Buca's corporate network. At headquarters, eight T1s are bonded to appear as one fault-tolerant 12-Meg ATM port. A 12-meg inverse multiplexing ATM switch converts it straight into IP/Ethernet, routed to the Meridian's trunk gateway card.

The BCM at each location also determines the least-cost route - if network QoS does not merit voice traffic, it accesses a PRI trunk and dials out. No user intervention is necessary. "During the first rollout, with voice-over FR and Lucent/Avaya, we learned that when the user could intervene and chose which route by selecting lines, they often selected the one they were most familiar with." (With one-fifth the bandwidth they have now, they also experienced more latency on packetized voice calls.) "Buco lost an opportunity there to reduce cost," notes Marier.

CUSTOMER MANAGEMENT insight

THINK SERVICES
A DIVISION OF UNITED BUSINESS MEDIA

- SHOPPING CART
- LOG IN
- MEDIA CENTER
- MAILING LIST
- CONTACT US
- HOME

Magazine
New Customer Management Insight
Digital Publication
Call Center Magazine
Archives
FREE Webcasts
Podcasts
Vendor Guide
Multimedia Content
Online Advice
eNewsletter Alerts
ICMI Forum
ICMI Jobs
Training
Consulting
Newsletters
Publications/Tools
Industry Research
QUEUETIPS
Conferences
ICMI Global Report
Call Center Knowledge Online
Join ICMI
Members Only
Vendor Guide
Industry Information
About ICMI
Download the ICMI Catalog

TechEncyclopedia

Define It

Voice over IP, Veal over Linguini

Spend $150 more per restaurant per month to go from 56K to T1. Save $250 eliminating analog POTS lines, route intrasite LD over WAN.

By **Ellen Muraskin**

08/03/2001, 9:46 AM ET

The Premise:
Buca Di Beppo, growing chain of Italian family restaurants

The Potential:

- Expanding all sites' phone hours with an all-day, local-appearing, centralized reservations center.
- Trading ten analog trunks for one converged T1 at each site.

The Pieces:
At headquarters:

- Nortel Meridian with ITG IP trunk card, Passport 6400 Multiservice WAN switch,
- Call Pilot Unified Messaging
- Symposium Call Center/TAPI server
- Business Policy Switch and BayStack 350 router
- ATM inverse mux switch

At branches:

- Nortel Networks' Business Communication Managers In network:
- Global Crossing's combined Frame-and-PRI T1 service

The Plot: Buca Di Beppo (Italian: "Joe's Garage") describes itself as a chain of "full-service, dinner-only restaurants ... offering high-

Free CallCenter Insider Newsletter

Your Email Address

Optional Areas of Interest

- ☐ International News
- ☐ Advice/Tips
- ☐ Technology
- ☐ Agent Development
- ☐ IVR

▸ UTILITIES

🖶 print this article
✉ e-mail this article

▸ RELATED LINKS

The Rules of (Agent) Engagement

Avaya Enhances IP Telephony Portfolio

Contact Centres and Customer Interactions - a Colonial Perspective

New Methods to Measure Performance

Nortel Vendor Portal

Develop Your Entire Team

Virginia Mason Medical Center

Nortel, Microsoft Team UC Phone

IP Call Routing: The Amcat Interview

quality, immigrant Southern Italian cuisine served family-style in an atmosphere that parodies the decor of post-War Italian/American restaurants." Begun in 1993 in Minneapolis, the outfit's cheeky marketing pitch seems to strike a great balance between the twin (and usually conflicting) promises of theme and cuisine. They've gone from 17 to 62 locations in the past two years.

Nortel Releases SMB Comm/Networking Systems

▶ TRAINING
▶ View seminar calendar

Because "it takes us all day to cook, and because that's the meal of indulgence," Buca di Beppo is only open for dinner. And therein lay one of the CT opportunities: By setting up a small, intelligently routed, nine-agent call center to handle calls rerouted from individual restaurants before 3 p.m., Buca could take reservation calls all morning and early afternoon, for all 62 (and counting) locations, with a local sound and feel for each. Actual branch employees could stay busy making sauce and setting tables.

Buca thought they could justify this staffing and capital expenditure with just one additional reservation per day per restaurant, for a four-person table making $80. The center averages six reservations per store per day, and gets up to 15 or more. The call center is also stimulating a new take-out business; take-out orders are routed to the appropriate store in the form of orders at various stations, reports John Motschenbacher, Buca's vice president of finance and purchasing.

The call center is the easier part of the story for laymen to grasp. The truth is, it was only part of a larger convergence proposal set forth by system integrator High Wire Networks (Minneapolis, MN - 612-256-5000); a proposal that would justify a ramp-up from 56K frame-relay service at each site to full T1.

This part of the plan set the table for Nortel Networks (Brampton, Ontario, Canada - 905-863-000): Voice and data traffic now flows between all branches of Buca di Beppo and headquarters over the company's frame relay and ATM WAN, provisioned through Global Crossing (Beverly Hills, CA - 310-385-5200) and routed through Nortel components. A renegotiated, corporate-wide bandwidth agreement with Global Crossing eliminates ten analog POTS lines at each site, averaging $50 each per month, and replaces them with ten PRI lines on the T1, at $25 per month. Four other channels on the T1 are frame relay.

The gateway/IP-PBX at each location is Nortel's dual PSTN/IP Business Communication Manager. A Nortel Meridian 1 with ITG IP trunk card is at corporate headquarters, along with a Passport 6400 Multiservice WAN switch, Call Pilot Unified Messaging system (serving the entire U.S. network), Nortel Symposium Call Center/TAPI server for location and reservation screen pop, Nortel's Business Policy Switch, and BayStack 350 router.

The new equipment replaced a leased Lucent PBX at headquarters, and Cleartrac frame-relay access devices and Lucent Partner key systems at restaurant locations. These had supported voice-over frame, but not successfully; users often were opting for the ten PSTN lines on the key

systems instead. The new BCMs at each location convert packetized voice back to TDM on the station side; the desktop phones, not IP, are a mixture of "Norstar-like" new digital station sets, old Norstar series, and analog.

"The main driver for this system was a cost-benefit analysis that found that a majority of the savings would come from changing the trunking of local access from an analog switch to a dedicated T1," says Keven Marier, president and CEO of High Wire Technologies, which designed and installed the converged network solution for Buca.

"We were able to reduce the POTS lines by integrating PRI voice with the frame relay that already existed at every site. We looked at a provider for Buca Global Crossing who could put local voice and data on the same T1." A good part of this saving was made possible simply by the combined purchasing power of local, long-distance, and Internet service across 60+ locations. "We typically see companies cut costs 40 to 50% across the board by consolidating their communication networks," says Marier.

"You get an integrated T1 at Layer 2 and provide two types of services," says Marier. Further, voice traffic between Buca locations bypasses tolls, travelling on the frame relay channels. This includes not only internal calls dialed through four-digit extensions (IP-to-extension routing tables are maintained in each BCM and centrally updated), but also customer calls received on the PRI channels, gatewayed onto the WAN and delivered to the Minneapolis call center. The BCMs also capture and consolidate CDRs, used to cross-reference a customer database with call center activity.

The Business Policy Switch manages QoS on the corporate LAN; the PassPort fulfills that role across the WAN, and the BCM's built-in QoS router prioritizes traffic on the branch LANs.

According to Marier, Buca's WAN is one of only three in Minnesota to use an intra-networking ATM-FR service. Selected for superior QoS features, ATM is Buca's choice for long-haul transport. When Global Crossing receives Buca's IP packets on its colocated frame relay switch, it strips the IP packets out of the frame, repacketizes into ATM cells, and routes to Buca's corporate network. At headquarters, eight T1s are bonded to appear as one fault-tolerant 12-Meg ATM port. A 12-meg inverse multiplexing ATM switch converts it straight into IP/Ethernet, routed to the Meridian's trunk gateway card.

The BCM at each location also determines the least-cost route - if network QoS does not merit voice traffic, it accesses a PRI trunk and dials out. No user intervention is necessary. "During the first rollout, with voice-over FR and Lucent/Avaya, we learned that when the user could intervene and chose which route by selecting lines, they often selected the one they were most familiar with." (With one-fifth the bandwidth they have now, they also experienced more latency on packetized voice calls.) "Buco lost an opportunity there to reduce cost," notes Marier.