

innovate build
dream invent

Lucent Technologies

Lucent Technologies makes the things that make communications work. Released from its AT&T roots, Lucent Technologies, with Bell Laboratories as its research arm, have emerged into the 21st century leading the multi-billion dollar markets that it serves.

InterNetworking Systems

The InterNetworking Systems (INS) group at Lucent Technologies develops and markets data networking solutions for service providers worldwide. INS has more than 5,500 employees, with the largest concentration of employees in the US in California, Massachusetts and New Jersey.

The INS group is on a growth trajectory, experiencing growth rates of 60 percent per year.

Edge Access Unit

The Edge Access Unit will re-define data networking into the next generation with a broad line of data network edge devices. The new, intelligent network edge facilitates key services like virtual private networks (VPN) and voice over IP (VoIP). The MultiVoice organization focuses on VoIP applications.

MultiVoice Organization

The MultiVoice organization is located in two sites in New Jersey: the Corporate Headquarters in

Murray Hill, and the Red Hill facility in Middletown. Formed from the synergies of three companies and their talented experts (Voxware, Ascend Communications and Lucent Technologies), the MultiVoice organization is the market leader in voice over IP solutions.

Who we are

The MultiVoice organization consists of 130 engineers, technicians, writers and managers. We are men and women, from many different places and backgrounds. We like to work hard, but we manage to find time to have fun as well. We have the attitude of a start-up, but with a 40 billion dollar company backing us.

MultiVoice Gateway and DSP

The MultiVoice Gateway and DSP teams develop VoIP software for the MAX 6000, MAX TNT, and APX gateways. MultiVoice is currently the number one VoIP market leader.

Engineers on the gateway software team design and develop feature rich, distributed architecture and high performance large scale internet telephony equipment using VoIP industrial standards (H323, H248, SS7, IPDC, MGCP SS7, etc.) for telephone carriers and ISPs. Gateway software engineers have a strong knowledge of TCP/IP and PSTN. The software is developed using C and C++.

The DSP team is working on projects that include voice stream processing compression (using

these codecs: G.711/G.729A/B, RT24, G.723.1, G.728, GSM), echo cancellation (G.168-2000 compliant with 64 ms tail), telephony functions, including DTMF detection/generation, fax/modem tone detection, silence suppression, voice activity detection, comfort noise generation, frame loss concealment, and voice stream packetization (RTP, jitter buffer management, redundancy mechanisms, QoS).

MultiVoice Back End Systems

The Back-End Systems team is responsible for MultiVoice applications, including the MultiVoice Access Manager (MVAM) gatekeeper, the MVAM API, speech technology software and terminal endpoint software.

MultiVoice Access Manager (MVAM) is a gatekeeper application designed to operate with the MultiVoice gateways. MVAM runs on PCs or UNIX workstations. It uses a web-based GUI. MVAM is written in C++.

Endpoint software includes the MultiVoice Web Client, Web Phone and the Client API.

The MultiVoice Web Client (and the Web Phone) is a PC-to-phone application that runs on our gatekeeper and gateways.

The Client API is a set of tools provided to ITSPs and webmasters to implement IP telephony from their web sites.

Endpoint software utilizes Java, C++, JavaScript and HTML.

We have a fully equipped recording studio for performing experiments in speech technology and audio quality testing.

MultiVoice Applications are additional software that runs with MVAM through a C++ API. These applications provide additional functions and services for the MultiVoice platform, such as billing, caller authentication or carrier settlements.

MultiVoice SQA and Support

The SQA and Support teams are responsible for software quality assurance testing, MIS support for the MultiVoice organization, Customer Support, and End-User documentation and training.

The support teams work across project boundaries and help the MultiVoice organization successfully release products to the world.

The SQA team, located in both Murray Hill and Red Hill, is responsible for testing all Lucent MultiVoice products and applications, as well as related products and applications from Lucent and third-party manufacturers. More than 5000 square feet of new lab space has been created with state-of-the-art test tools and techniques. SQA testing includes carrier class testing, focusing on end to end customer and system level testing, interoperability, applications, performance, voice quality and reliability.

The Customer Support team members work closely with both customers and NetworkCare professionals to provide advanced technical support for new product roll-out, and to support our customers as they deploy our products and solutions.

The MIS team is responsible for lab support, ordering equipment and facilities in addition to our

computer resources from the network to the desktop.

The Documentation and Training team is responsible for creating customer information for all of the projects developed by the MultiVoice organization. We also work closely with Product Management and Marketing to develop web sites for the corporate intranet and extranet.

Our tools

All our engineers are provided with state-of-the-art computers, workstations and development tools needed to do their jobs. Over 9000 square feet of lab space is available between both locations for development, demonstrations, training and testing.

Lucent Technologies and the MultiVoice organization offer many training opportunities to its associates, both inside the office and off site. There are also opportunities to attend relevant conferences, present papers and attend trade shows, depending on your specific position. Lucent Technologies offers several different corporate-wide meetings annually, for example, Web Tech internet technology conference.

Our Customers

Our customers include some of the best and brightest in the business throughout the world: MCI Worldcom, Comcast Corp., CNM Network, Embratel (Brazil), FreeOnline.com, Networks Telephony Corp., IFX Corp., Deutsche Telekom AG (Germany), Point-One Telecommunications, Web-Tel Wireless, Inc., PSINet, Internet Global Services, Inc., Centurion

Telecommunications Corp., Surf-free.com, Teracom, Cable & Wireless, LightNetworks, Inc., Hughes Tele.com, United Telesis, Gateway Networks, and Saudi Telecom Co.

Location

The MultiVoice group's offices are located in both Murray Hill and Middletown, New Jersey, about 45 minutes apart.

The Murray Hill facility is also the Lucent Corporate Headquarters, and the heart of Bell Labs. Projects in Murray Hill include:

- MultiVoice Gateway
- MultiVoice Applications

The Middletown facility, also known as Red Hill, is located on Red Hill road, just off Garden State Parkway exit 114. Projects in Red Hill include

- MultiVoice Access Manager
- MultiVoice Gateway
- Endpoint software
- DSP
- Speech Technology

Career paths

Your career is important to us. There are many opportunities here at Lucent. Management is only one advancement track. There is an equivalent career path available here for the lifetime engineer or scientist. Comparable salaries and perks exist for the higher strata of technical job grades.

Turn the page to read more about working at Lucent Technologies and living in New Jersey.

Co-worker quote:
"It's exciting to work with so many brilliant people!"

Co-worker quote:
"It's fun to be number one!"

Co-worker quote:
"The best thing about my job is the rest of my team."

listen learn see

think create make