

New Network Improves Communications for Seattle’s Deaf Community

Executive Summary

Customer Name

Hearing, Speech and Deafness Center
1625 19th Avenue, Seattle, Washington,
United States

- 48 employees

Industry

Healthcare and Human Services
(nonprofit)

Business Challenge

- Existing network was unreliable and failure-prone, forcing clients to be rescheduled, which increased costs and lowered productivity.
- Outages and outmoded scheduling system delayed center’s ability to serve clients, further raising costs and hampering service.
- Network problems caused sales at center’s store to decline, resulting in loss of revenue.

Network Solution

- Installed new Cisco switches.
- Deployed 40–50 new PCs with Windows XP operating system.
- Installed new scheduling and billing systems, new hearing-aid software, and a Video Relay Services (VRS) application.

Business Value

- Annual operational cost savings of \$180,000–\$185,00 have been realized, plus additional savings due to fewer network outages, and fewer disruptions to management and operational systems.
- Audiologists able to serve 33 percent more clients and improve productivity by 20 percent.
- Application performance has been improved by 20–30 percent, saving hundreds of hours per week and boosting productivity.
- Existing client services have been enhanced and new services added, enabling center to serve hundreds of new clients and expand its reach geographically.

Nonprofit Hearing, Speech and Deafness Center enhances services to clients through Cisco® network technology.

Business Challenge

The Hearing, Speech and Deafness Center (HSDC), a nonprofit community organization, has been serving Seattle since 1937. “Our mission is communications, so we serve people with hearing loss, deafness, the deaf-blind, speech-challenged, and learning-disabled,” says Susie Burdick, the center’s chief executive officer. HSDC

provides a variety of services, including audiology (diagnosing and treating hearing problems), speech and language services, hearing aid fittings, and sign-language training.

The center makes extensive use of network technology to deliver these services, as well as to run basic business applications, such as scheduling, billing, payroll, and e-mail.

“Technology is the backbone of everything that we do, and we could not do business without it,” says Burdick.

A few years ago, HSDC was using an older, unreliable network to connect its 40–50 PCs. “As a small nonprofit, our resources were limited,” says Burdick. “We had one-and-a-half servers, and everything ran on them.” Among the programs on the network was a mission-critical application for adjusting client’s hearing aids. Unfortunately, whenever the center ran this application, the network would fail 35 percent of the time. “We would have crashes daily, sometimes four and five times a day, which had a huge impact on staff and client satisfaction,” says Burdick.

As a result of the network failures, clients often needed to be rescheduled, and audiologists were forced to spend extra time serving them, both of which increased operating costs. These disruptions also affected the operations of HSDC’s onsite store, causing both in-store and online sales to decline. “The network problems crippled our ability to do business and deliver on our mission,” says Burdick.



Network Solution

Frustrated with the failure-prone network, HSDC applied for a Cisco product grant through Techsoup, an organization that enables nonprofits to secure equipment donations. The center's application for three Cisco Catalyst® switches was approved, and the equipment was sent to Seattle.

The new Cisco switches were installed by the center's IT staff. At the same time, they deployed 40–50 new PCs running Windows XP, and updated the scheduling and billing systems. They also enhanced the hearing-aid application so that any outages would only affect a single user, instead of all users. Finally, they implemented Video Relay Services (VRS), which supports videoconferencing between staff and clients in different locations.

“Because we have the capacity to serve more people, and we are more sophisticated, we are actually being looked to as a statewide leader and as a resource for other agencies and government entities.”

– Susie Burdick, Chief Executive Officer, Hearing, Speech and Deafness Center

Business Results

The new Catalyst switches have given HSDC a high-performance IT infrastructure. “The Cisco gear provided increased reliability, speed, stability, and efficiency, and gave us the ability to expand,” says Burdick. Instead of struggling with network and server problems, audiologists can now focus on their clients' needs. As a result, the total amount of time that the audiologists spend with clients has been reduced. And the number of clients whom the center can serve has increased to 3000 per year (or 17,000 service units), up from 2000.

Additionally, HSDC has been able to improve the quality of its services. Before the upgrade, if the network crashed, clients were forced to wait longer for hearing-aid checks, and would often have to leave and be rescheduled, which affected their satisfaction as well as billable hours. Now, clients can get their hearing aids adjusted without waiting longer or making multiple trips to the center. Despite the high bandwidth requirements of the hearing-aid application, network failures are rare.

For staff, the improved network performance has led to quicker file searches, faster Internet access, and more rapid data transfers. It has also boosted software performance by 20–30 percent on mission-critical applications. Payroll software, e-mail, Internet applications, system administration functions, and patient scheduling software all run faster and save staff time. Moreover, turnaround time has improved substantially for scheduling, billing, and receivables.

The new network has enabled HSDC to provide new technology-based services, including a Deaf Services Program, an advocacy program, and a satellite office in a different city. It also implemented VRS, which allows a staff member at the center to videoconference with a client in a remote location. VRS eliminates the need to have a sign-language interpreter with the client at the remote site, which saves money. The center is now able to run a videophone that is free for the public to use. “We have a computer that has a video camera on top of the screen, then we use American Sign Language, our sign language, so the public can communicate with hearing people and other deaf people,” says Ariele Belo, director of deaf services for HSDC. Eventually, the center will be able to make sign-language interpretation available to anyone with a PC.

Has the new network helped HSDC achieve significant cost savings? “We have seen a substantial return on our investment, which has really helped our bottom line, because half the services that we provide are free,” says Burdick. Additionally, the center is no longer losing sales at its hearing-aid store due to network outages, maintaining an important source of revenue that supplements its free services.

Operational savings from the new network include:

- \$45,000 in audiologist productivity gains
- \$60,000 in other staff productivity gains
- \$50,000 in additional hearing-aid sales
- \$25,000 in reduced IT support

The new network has enabled HSDC to deliver on its mission of “strengthening community by providing effective communications.” “Our reputation and standing in both the nonprofit sector and the communication arena have improved substantially because our response time is so much better,” says Burdick. “Because we have the capacity to serve more people, and we are more sophisticated, we are actually being looked to as a statewide leader and as a resource for other agencies and government entities. It has made a big impact.”

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