



University of New Mexico Hospital

Founded in 1889, The University of New Mexico, with a student body numbering more than 26,000, occupies 600 acres and more than 200 buildings along old Route 66 in the heart of Albuquerque. The campus is home to The University of New Mexico Hospital which underwent a major expansion with the opening of the Barbara and Bill Richardson Pavilion in 2007.

CUSTOMER

- University of New Mexico Hospital

INDUSTRY

- Healthcare

CHALLENGES

- Total cost of ownership (TCO)
- Movement of 900 telephone lines in one weekend
- Movement of patients and staff in real time
- Healthcare delivery continuity during move
- Telephone line provisioning costs
- Shortcomings of MAT as provisioning tool

SOLUTION

- Centralized management: UNIVERGE® MA4000
- IP telephony servers: UNIVERGE SV7000 and NEAX® 2400 IPX
- Provisioning: MA4000 provisioning system
- Connectivity: Fusion Call Control Signaling (FCCS)

RESULTS

- Reduced TCO
- Cost reductions due to specialists using MA4000
- Streamlined provisioning with templates
- Improved data consistency
- More efficient troubleshooting
- Flawless, safe move for patients and staff
- Project within budget
- MA4000 “paid for itself in one night”

CHALLENGES

NEC Unified Solutions has been UNM’s telecommunications provider for more than 25 years. The university currently has an SV7000 and eight NEAX 2400 IPXs networked over Fusion Call Control Signaling (FCCS), giving the system “single-image” functionality and resiliency for business continuity. Over the years, the university has distinguished itself as an NEC customer-leader by adopting new NEC solutions as they become available. “We’ve agreed to be a beta site for the MA4000 and other NEC products because their engineering is always responsive to our needs,” says Mark Reynolds, UNM associate director of Information Technology Services (ITS) Communications.

NEC installed UNM’s first MA4000 beta version in 2005. In so doing, it brought secure, centralized, browser-based management to UNM’s telecom infrastructure. Reynolds says, “We no longer had to pay engineers to look up data for moves, adds and changes so it started saving us money right away.”

Little did Reynolds know then that the MA4000’s ability to lower TCO would be dramatically demonstrated two years later, during one weekend in June 2007. That was when staff and patients moved into the Barbara and Bill Richardson Pavilion, a 476,555 square-foot expansion containing the entire UNM Children’s Hospital and an expanded emergency care unit.

The challenge was moving telephone service from areas in the original hospital to the new pavilion in real time. “Telephone service for about 900 people had to be turned off in the old areas and turned on in the new areas as staff and patients traveled to their new locations. When they arrived in the pavilion, their phones had to operate correctly,” says Reynolds.

CHALLENGES (CONT.)

A number of issues made the move more complex: employees migrating to different work groups, areas receiving enhanced services and digital telephones for the first time requiring new telephone numbers to be issued, and changes in line appearances. “Staying within budget was also critical,” adds Reynolds.

“The MA4000 saved us a tremendous amount of time, effort and expense by allowing us to download current configuration information, alter it as needed, build the new lines, alter groups and line appearances, and then upload all the new data to the MA4000. The preparatory work was performed by our technical support analysts over a nine-month period instead of paying much more expensive technicians, which ultimately enabled us to bring it in on budget,” says Reynolds.

SOLUTION

Everyone within the ITS group agreed this move was a job for the MA4000’s provisioning system. Miranda Harrison-Marmaras and Ellen Phillips, technical support analysts handling telephone moves, adds and changes, began planning for it in October 2006.

“We used the MA4000 Management System to access complete configuration information on those 900 lines to create the line equipment number (LENS) assignments, build the new numbers and make sure that cards were where they should be. Then we coordinated with the cable vendors and the NEC engineers to get the cables pre-punched,” says Harrison-Marmaras.

In order to ensure a successful move, the technical support analysts also coordinated with individual users, medical departments, UNM techs, the architectural firm and an outside firm in charge of managing the move.

“We streamlined the process by using the MA4000 to create templates for the patient rooms and nursing stations in the new pavilion. We not only created templates for various classes of service but for various phone types, for example, digital vs. analog and eight- vs. 16-button phones,” says Phillips.

“The MA4000 is all about efficient and centralized information management,” says Reynolds. “In preparing for this move, we took advantage of that fact.”

RESULTS

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He continues, “Ordinarily, technicians make the LENS assignments. Major savings came from Harrison-Marmaras and Phillips doing that. If UNM had not had the MA4000, technicians would have had to use the MAT to access the line configuration information. It would have taken them about one hour per line, 900 hours in all. Then engineers would have had to program everything by hand. With our tight schedule, there would have been plenty of weekend and overtime work, pushing the total cost of the project far beyond our budget.”

“The data consistency was much better than it would have been with the MAT. The MA4000 lets us see groups of LENS and blocks of cards,” says Harrison-Marmaras.

“Because we were involving the technicians later on in the process, we were able to deal with issues such as LP mismatches without involving them. We did everything we could to minimize confusion during the move,” says Phillips.

Andrew Phillip Chavez, telecom analyst, says, “The MA4000 also assists NEC engineers in troubleshooting. The MAT doesn’t give line dependencies, but the MA4000 does. It does backups and error reporting, and helps everyone get more done in less time.”

“The MA4000’s Range Programming Tool enabled us to streamline the process of adding new devices and users to many new stations at once,” says Harrison-Marmaras.

“Proof positive of the quality of our preparations is the fact that the move came off without a hitch. All patients and staff moved to their new locations safely, and all telephones operated as expected,” says Reynolds. “Nine months of preparatory work culminated in the two-day move, and I have no doubt that our MA4000 more than paid for itself in just the first night.”