



Collaborative Teamwork Brings Modern Technology to Sky Ute Casino Resort

Introduction

The Southern Ute Indian Reservation is located in southwestern Colorado, with its capital at Ignacio. Today, the Southern Ute claim great financial assets in the gaming, tourism, oil-gas and real estate industries.

In early 2007, the Southern Ute Tribe began the design and construction of the new Sky Ute Casino Resort. While the old casino had operated successfully for many years, it was time for a larger, more modern facility. The 350,000 sq ft resort would boast a 45,000 sq ft gaming floor, elegantly-appointed luxury hotel rooms and suites, a family pool with lazy river, miniature golf, unique restaurants, RV parking with hookups, a convention center with meeting rooms and a full-sized bowling alley. In addition to these features, they intended to build a destination resort with the latest and best technology available, and this is where the MSN and Sky Ute Casino Resort partnership began.

The Design Phase

MSN's pre-sales engineer, Ron Guernsey, was brought onsite in early 2007, when the shell of a structure was beginning to rise. While he was there to begin the planning of the data and voice design, he used his years of industry experience to assist in more areas than his assignment.

At the start, I didn't realize how much would be networked and ride on the backbone. It was overwhelming when I realized what had to be done. Having Ron involved from the start was huge. When we went to turn it on, it just worked!

Cathy Gothard, Sky Ute Casino Assistant Director IT

With Ron intimately involved, MSN began the tedious process of ensuring each room had appropriate power and network jacks, that every floor had at least 2 IDFs, and that standards were followed with all voice and data cabling.

Ron's vision was the right way to do things – a real head start for us. Any questions we had, we went to him. Ron did much more in the design of the casino than just phones, down to the plugs on the wall.

Jessie Herrera, Sky Ute Casino Network Administrator

Working closely with Ron and the casino team, MSN engineers began to build out the full turn-key solution for data/security, voice and wireless into the casino.

Challenges

- New casino behind schedule while meeting IT implementation timeline.
- Establish connectivity between new facility and old facility without impact.
- Extra security that is required by the gaming industry.
- Keeping the casino and the hotel networks separate.
- Integration with existing CallManager

Solutions

- Installed a Cisco converged IP network infrastructure to support new services.
- Deployed Cisco Unified Communications solution to improve contact between casino staff and resort guests.
- Implemented a new mobility solution to provide full coverage between the suites and anywhere in the resort.

Results

- New phone system supports improved communications, increased connectivity and expanded mobility.
- Cut costs and dramatically streamline provisioning and maintenance.
- Increased productivity for hotel staff communications in a large-scale infrastructure.
- Business continuity and improved collaboration with high availability that provides a foundation for multiple levels of server redundancy and survivability.

The Installation Phase

The MSN implementation team (Mike Keemle, Nir Wittenberg, Dennis Gray, Terry Benson, Steve Roth and Nick Santilli) arrived onsite in early June 2008 to find the construction behind schedule. They worked side-by-side with the Sky Ute Casino Resort's IT team to get the server rooms (MDFs) and IDF's ready for installation.

MSN sent their Dream Team, said Mr. Herrera. They rolled with whatever we threw at them and weren't above anything. MSN set the tone with all of our other vendors during that chaotic phase.

When the MDFs and IDF's were ready for install, the teams began to place and wire multiple servers, routers and switches. The routers and switches used were Cisco Catalyst 6500 Series Switches, Cisco Catalyst 3750 Series Switches and Cisco Catalyst 2950 Series Switches. They also placed over 550 Cisco IP Phones and assorted wireless access points (APs) throughout the building.

The Solution

Cisco Unified Communications Manager & Unity Voicemail

The MSN/Sky Ute Casino Resort team utilized Cisco Unified Communications Manager, an enterprise-class IP telephony call-processing system, to provide traditional telephony features as well as advanced capabilities, such as mobility, preference and rich conferencing services. In addition to installing UCM at the new hotel, they integrated the hotel phone system with an existing CallManager in the S. Utes organization, adding the hotel as its own cluster.

Utilizing Cisco UCM created a unified workspace that supports a fully-scalable solution, and up to 30,000 users. Also distributable, UCM is scalable, redundant, and has built in load balancing.

Call Flow Scenarios

Utilizing the Cisco VG224 Analog Voice Gateway, the team installed high-density 24-port gateways for analog phones, fax machines and modems. While most phones throughout the casino and hotel are IP Telephony based, they also installed an analog phone line in every hotel room. PSTN resilience is provided via inter-cluster trunks between the two systems.

Emergency Notification

As part of the UCM implementation, the team installed Cisco Emergency Responder to enhance the existing emergency 9-1-1 functionality in UCM. It assures that Cisco UCM will send emergency calls to the appropriate Public Safety Answering Point (PSAP) for the caller's location, and that the PSAP can identify the caller's location and return the call if necessary. The CER also notifies hotel security personnel that a 9-1-1 call has been placed. Deploying this capability helps ensure more effective compliance with legal or regulatory obligations, reducing the risk of liability related to emergency calls as a result.



I worked with a lot of contractors on this building, but in working with various organizations, MSN has been among the most organized and most accomplished in terms of deliverables. I'm not aware of any significant issues, which is highly unlikely in technology.

- Matt Olin, Resort COO, GM



Attendant Console

Also implemented at the casino, the Cisco Unified Business Attendant Console is a full-featured operator attendant console designed for the growing UCM customer with a maximum of 500 Cisco Unified IP Phones. Associated with a Cisco Unified IP Phone, this application allows an attendant console operator to quickly accept incoming calls and dispatch them to enterprise users. This gives the resort a call-queuing engine and provides this primary answering point directory search capabilities.

Wireless Solutions

The design of the wireless coverage at the casino had to be extense, covering the whole structure, and every access point (AP) had to be installed out of sight (above the ceiling). The team used a combination of Cisco 1131 Lightweight Access Points (LAPs) and Cisco 1242 LAPs.

Since the 1242 LAPs use external antennas, they were used on the casino floors where the ceilings are high, allowing better-suited antennas for those areas. In addition, 1242 LAPs were used in the elevator shafts where they were perfect for the harsh environment and the need to propagate the RF signal in a directional pattern down the shaft. The rest of the areas utilize the 1131 LAPs.

In the MDF, the team installed two Cisco 4402-50 Wireless LAN Controllers (WLCs) and a Cisco Wireless Control System (WCS) as the management platform. This wireless architecture simplifies operational management by collapsing large numbers of managed endpoints and autonomous APs into a single managed system of wireless LAN controller(s), giving the Sky Ute Casino Resort IT team the necessary management tools to control what otherwise would be near impossible in a casino environment.

Cisco Unified MeetingPlace Express

The need for integration of voice and Web conferencing required Cisco Unified MeetingPlace Express. This solution integrates rich-media conferencing functions that enable users to simply extend point-to-point voice to multiparty voice and Web conferences. This allows the casino staff, as well as hotel guests, to more effectively interact with virtual teams as interactions warrant by simply transitioning across and between applications, IP telephony, unified messaging and rich-media conferencing.

Cisco Unified Operations Manager

The team installed this easy-to-use tool to provide comprehensive monitoring and diagnostics for the entire UC system at the casino. Part of the Cisco UCM Suite, Cisco Unified Operations Manager features out-of-the-box, real-time, service-level monitoring of all system elements. It performs automatic discovery for the entire system and provides contextual diagnostics for rapid troubleshooting. With Cisco Unified Operations Manager there are no rules to write, no thresholds to define, and no extensive, time-consuming initial setup.

Approved 3rd-Party Integration

The integration did not end with conferencing; the Property Management System (PMS) is integrated to the Cisco UCM via Percipia Parallax. The integration provides the PMS information to set calling permissions to the guest rooms, interface to the restaurant guides, local weather and resort activities, and, via a Cisco 7975 VOIP phone, the phone displays a welcome with the guest name and the resort logo. The system is so flexible that even groups of rooms can be grouped in a directory, allowing related guests to search by name for their fellow residents. For additional service, IPCelerate provides paging to the room phones for emergencies as well as the back of the house is zoned for group paging.



Some issues that confronted IT were contractor related – not MSN. We got what we asked for, which was not the case with some other organizations. MSN's work was clear and clean. In relative terms, MSN's work was responsive, seamless and fully met our expectations.

- Matt Olin, COO & GM

It was amazing to see an open rancher's field slowly transform into an amazing resort/hotel. Even more amazing was seeing the growth of the customer network staff as we partnered to build the network. The entire customer team has really stepped up and taken ownership of the network. I take great pride in being a part of such an amazing project.

- Mike Keemle, MSN Lead Engineer

Project Management Plays Key Role

Many years of project implementation has taught MSN the importance of project management involvement from the start of a project, especially one of this scale. The MSN PMP-certified project manager, Debra Howeth, employed the Cisco PPDIIO (Prepare, Plan, Design, Implement, Operate and Optimize) methodology when managing the Sky Ute Casino project, ensuring that each phase of the project went seamlessly.

The staff augmentation and project management was a tremendous help, says Cathy Gothard, Ute's Asst. Director of IT. It gave everyone enough time to get the building up on time, and having the MSN project management was key.

MSN not only helped manage the project timeline, but worked side-by-side with the Sky Ute Casino Resort IT team, ensuring that the new facility's network was up and running, 2 months before their soft opening in November 2008. Ms. Gothard continued with, *We were running the old casino for two months from the new location before the move, and having all of the pre-planning and engineering help from MSN is what saved us.*

The Results

What was accomplished during the few short months of this project by both the MSN team and the Sky Ute Casino Resort IT team was truly exciting. The scalability of the Cisco data/voice, security and wireless solution allows the Sky Ute Casino Resort to not only securely operate with the latest technology on a daily basis, but leaves the door open for new applications and growth in the future.

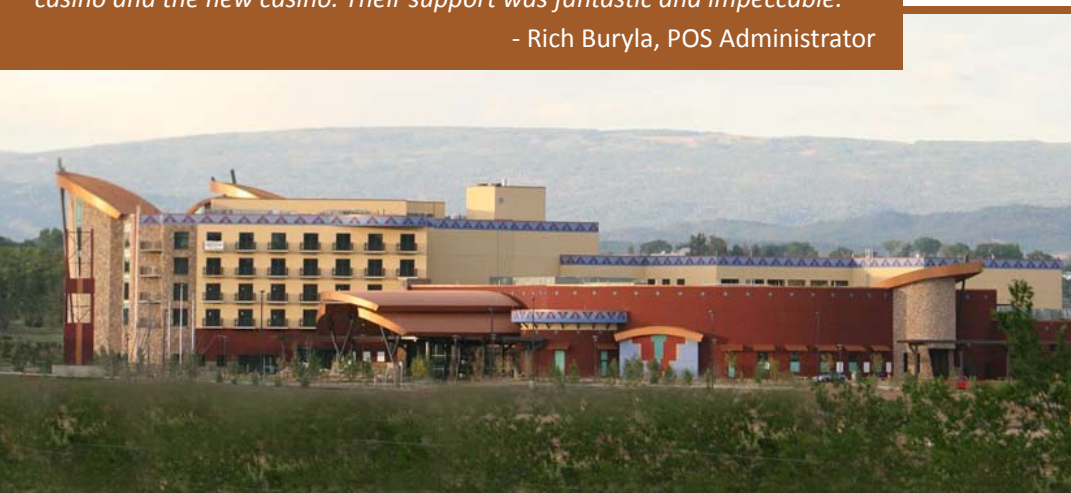
More Information

To learn more about the Sky Ute Casino, go to <http://www.skyutecasino.com>. For more information on the Southern Ute Indian Tribe, visit <http://www.southern-ute.nsn.us/>.

MSN Communications, Inc. is a privately held company with headquarters in Centennial, CO and sales offices in Phoenix and Los Angeles. MSN offers diverse and innovative professional services in communications and networking solutions. For more information, visit <http://www.msncomm.com> or send inquiries to communications@msncomm.com.

Working with MSN was great. There was no downtime between the old casino and the new casino. Their support was fantastic and impeccable.

- Rich Buryla, POS Administrator



MSN Communications, Inc.
8955 E Nichols Ave., Suite 200
Centennial, CO 80112
800.535.5409
www.msncomm.com