Road to simplified and improved communications



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Challenges

- Aging analog PBX/telephone infrastructure
 - End-of-life circuit boards and messaging for voice mail
 - High annual maintenance costs
 - Prohibitive costs to upgrade PBX software
- Solutions entering market with advanced functionality and features associated with Unified Messaging (UM) and Voice over Internet Protocol (VoIP)

Opportunity

- PBX maintenance contract ending
 December 2009
- Existing Microsoft-based foundation
 - Active Directory (identity management)
 - Microsoft Exchange (email and calendaring)
- Highly skilled local campus expertise
- Gartner's MagicQuadrant for UC

Gartner's "Magic Quadrant for Unified Communications"





Objectives



Cost Savings

- Downsize dedicated voice system to reduce capital and operational costs
- Leverage directory services (MS Active Directory) for centralized and standardized user management)
- Provide a consistent user interface and experience across multiple devices (computer, phone, etc.)
- "Unify" voice, email, voicemail, conferencing (audio/video)

- Eliminated all pay phones on campus (replaced with courtesy phones in key locations)
- Cancelled a budgeted PBX upgrade
- Discontinued PBX upgrade protection plan (UPPC)
- Eliminated voice mail and TDM ports to reduce monthly maintenance costs

Implementation

Phase I

- Deploy Microsoft Exchange Unified Messaging (EUM)
 - Storage Array
 - VoIP Media Gateway



- Deploy VoIP
 - o Upgrade core Ethernet switches to support PoE and Qos
 - Purchase Shoretel for call management
- Integrate Exchange Unified Messaging (EUM) and Office Communications
 Server (OCS) with Shortel VoIP System for full Unified Communications (UC)

Phase III

- Replace analog phones with Shoretel handsets
- Complete Communicator (OCS) client installation



Outcomes

- Infrastructure
 - Power Issues
 - Reboots
- Not the Same Phone System
 - Reliability, Uptime (Not 5 9's)
 - Voice Quality
 - o 911 Location Determination
 - VoIP Full-Featured Phone or OCS w/voice functionality



- Significant reduction in communication costs (primarily annual maintenance fees)
- Central management and support (voice, video, data)
- Efficient and productive communications network (reduced response times, eliminated device dependencies)
- Active directory integration (single login and password across all communications)
- Opportunity to federate applications across organizations (i.e., Exchange, OCS)
- Standards based (no need for separate voice and data trunks; not locked into proprietary hardware)
- Device options (computer only, basic phone, cell phone)