

Affiliated Computer Services uses Unified Communications Management Suite (UCMS) to provide services for Walt Disney Company

EXECUTIVE SUMMARY

UNIFIED COMMUNICATIONS DEPLOYMENT INCLUDES

- 15,000 Cisco IP Phones, three U.S. cities, three Cisco Unified Communications Manager clusters
- Cisco UCM, Cisco Unity®, Cisco Unity Express, Cisco Emergency Responder, Cisco UPC, UCCX
- 303 voice gateways
- 900 trunks

CHALLENGES

- Detect and resolve UC fault and error conditions efficiently
- Manage phone status, location, and inventory
- Perform effective capacity planning and optimization of trunks
- Control costs and optimize server resources
- Identify overutilized and underutilized media resources
- Detect and resolve emerging call quality issues proactively

SOLUTION

- Operations Manager (OM)
- Service Monitor (SM)
- Service Statistics Manager (SSM)

RESULTS

- OM provides prepackaged alerts to monitor the UC network
- With the various IP Phones reports provided by OM, ACS is able to manage the IP phone inventory efficiently
- Visibility is available into utilization and loading through SSM trunk and route group utilization reports for effective capacity planning
- SSM reporting of media conferencing and MoH resource utilization helps enable decision making on server consolidation to reduce costs and increase efficiency
- SM and SSM service quality reports provide visibility into emerging call quality issues by device pool for effective call quality analysis at the site level

- Understand trunk and route group traffic patterns for better load balancing, capacity planning, and trunk bandwidth cost control

A FORTUNE 500 company, Affiliated Computer Services (ACS), is a premier provider of diversified business process outsourcing (BPO) and information technology (IT) services and solutions to commercial and government clients worldwide delivering a full range of services and end-to-end solutions to the public and private sectors. ACS supports a variety of industries including education, energy, financial, government, healthcare, retail, and transportation.

Business Needs and Challenges

ACS provides ongoing management of the Cisco® Unified Communications infrastructure for Walt Disney Company, supporting the rollout of 30,000 Cisco IP Phones over three cities in the United States. The voice team at ACS has one IT manager, four engineers, and 12 technicians to manage Walt Disney Company's distributed locations from the ACS network operations center (NOC) with a current deployment of ~15,000 Cisco IP Phones. During the planning stages of the deployment, ACS realized that a major part of the success of the service offering would come from efficient fault and performance management as well as fine-tuning and optimization of its client's Unified Communications (UC) deployment.

ACS had business needs and challenges to address:

- Detect and resolve UC fault and error conditions efficiently with a minimum of false alarms
- Manage phone status, location, and inventory for instant access to version, connection information, and other key phone operational details

- Detect and resolve call quality issues before a phone user is affected
- Identify overutilized and underutilized media resources in conferencing and music on hold (MoH) servers; this is important to determine which servers and resources can be consolidated for greater efficiency and to control server costs

Solution

ACS deployed Cisco Unified Operations Manager (OM), Unified Service Monitor (SM), and Unified Service Statistics Manager (SSM) to address these business challenges. The company began the UC rollout with the 2.x release and now has the latest 8.5 release, installed as part of the OM, SM, SSM beta program now managing the production network.

Fault Notification and Diagnostics

OM provides prepackaged alerts to monitor the UC network. At ACS, OM's real-time alerting is integrated with IBM Tivoli Netcool/OMNibus, which is tied into its trouble-ticketing system, the starting point for problem notification. The actionable alerts in OM eliminated several false alerts that ACS had previously seen coming from UC.

Phone Inventory Management

With the various IP Phones reports provided by OM, ACS is able to manage the IP phone inventory efficiently. Since Walt Disney Company is distributed across several remote locations, tracking phones is critical to help ensure that every phone is accounted for, providing a solid inventory report. An ACS engineer regularly checks the unregistered phones report to identify unused phones, which must match the list of phones at the client's warehouse.

Effective Capacity Planning

ACS is using SSM to generate trunk and route group utilization reports. These reports identify the top overutilized and underutilized trunks and route groups in the UC deployment. Armed with this information, ACS IT engineers can then reconfigure trunks and route groups to achieve better load balance. This can save money through more efficient usage of the bandwidth already available instead of adding more.

“Using Service Statistics Manager’s trunk utilization reports has helped us control our costs and plan for capacity on a ‘just in time’ basis.”

— Mark Meyers, ACS

Call Quality Trend Monitoring

Proactive voice quality monitoring reduces potential downtime and increases end-user satisfaction. Using SM for Mean Opinion Score (MOS) collection and notification to discover voice problems with SSM for long-term call quality trend reports, ACS gains valuable insight into the overall call quality trends on a cluster or device pool (site) basis and can determine if there are emerging call quality issues over time. With these quantifiable quality measurements, ACS personnel can focus their attention on the resolution of call quality issues before they affect service. OM is then used to test the network devices and circuits to isolate the identified quality problems quickly.

Optimize Server Resources

ACS has a number of conferencing and media resource servers in use, and it uses SSM to generate conferencing and media resource utilization reports. This data helps enable them to make more informed decisions regarding server loading and consolidation to control costs.

“Using SM we’ve dramatically reduced end-user trouble tickets from the customer. We’re able to proactively identify voice issues with objective reports from SM before the end user reports an issue.”

— Mark Meyers, ACS

Conclusion

Both the voice team at ACS and the IT personnel at the Walt Disney Company are able to see positive benefits from using the UCMS assurance applications. Some of the tangible business benefits derived by using the Cisco UCMS products include:

- Instant NOC notification with Tivoli integration and ticket creation of Walt Disney Company UC network and voice quality alerts
- Real-time phone connectivity and inventory reporting to support financial tracking and help with physical location for repairs
- Effective trunk/route group capacity planning by generating trunk/RG utilization reports and determining over- and underloaded trunks and route groups for fine-tuning and optimization
- Helping to ensure end-user satisfaction by detecting emerging call quality issues over time before they affect users and services
- Reduction of server costs and increased efficiency by using the USSM reports on media resource utilization to drive server consolidation for the conferencing and media resource servers

“Since we’ve been using the UCMS products we have greater visibility into the health of our customers’ UC deployment and the ability to address issues rapidly and proactively. UCMS has been critical to ACS providing exceptional service to our customers.”

— Mark Meyers, Voice Analyst, ACS

For More Information

To find out more about the Cisco Unified Communications Management Suite, go to <http://www.cisco.com/go/ucmanagement>.



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