



Cisco IT Case Study

Cisco Unity Connection on Cisco UCS

Overview

- Challenge

Migrate to a new voicemail system on a new, virtual computing platform at the same time

- Solution

Cisco Unity Connection® 8.0 running on Cisco Unified Computing System™ servers

- Results

80% fewer physical servers reduce costs, power requirements and operational demands while users enjoy new features

- Next Steps

Prepare to support 64-bit server platforms, the Cisco SpeechView application, and integrated voicemail/e-mail messages

Challenge

New voicemail system, new servers

- Migrate to a new voicemail system on a new, virtual computing platform at the same time
 - Support 87,000 mailboxes
 - Reduce number of voicemail servers
 - Lower total cost of ownership (TCO)
 - Simplify voicemail service deployment, management, and support
 - Offer new features to users

Solution

Cisco Unity Connection Running on Cisco UCS

- Cisco Unity Connection® 8.5
 - Migrated from Cisco Unity® 7.0(2)
 - Considered Cisco Unity® 8.0, but it required more nodes
- Cisco UCS
 - Replaced the Cisco® 7800 Series Media Convergence Servers with:
 - Cisco UCS B-Series Blade Servers for data centers
 - Cisco UCS C-Series Rack-Mount Servers for small sites
 - Significantly reduced the number of servers:
 - Before: 202 physical servers, 41 nodes
 - After: 34 virtual servers, 16 nodes
 - Eliminated the need for Exchange servers to store messages
 - Active-active design for server pairs to increase availability of voicemail service

Results

Reduced IT Costs and Operational Demands

- 80% fewer physical servers and eight-fold reduction in power use
- Simpler voicemail system design and management
- Lower capital and operational expense with virtual servers and simpler server installations, upgrades, and backups
- Ability to handle larger call volume and improved business continuity because both servers in a pair are always active
- Faster upgrades with fewer opportunities for service interruption

Results

More User Features

- New user options for accessing and managing messages
 - Web access to voicemail with choice of browsers and operating systems:
 - Browsers: Microsoft Internet Explorer, Firefox, Google Chrome
 - Operating systems: Microsoft Windows, Apple Mac OS X, Red Hat Enterprise Linux
 - Integrated voice recognition for retrieving and responding to messages
 - Receive Visual Voicemail messages as an RSS feed on mobile smartphones
 - Integration with Cisco Quad using a voicemail portlet

Next Steps

New Server Platforms, New User Features

- Prepare to support new, 64-bit servers
- Support Cisco SpeechView for voice transcriptions
- Integrated voicemail and e-mail boxes for users

Fewer Servers, Less Power

Cisco Voicemail Solution	Before: Cisco Unity 7.0 on MCS servers	Today: Cisco Unity Connection 8.0 on Virtual Servers on Cisco UCS
Number of physical servers	<p><u>174 Production hosts</u></p> <ul style="list-style-type: none"> •79 Production Cisco Unity Servers •41 nodes •63 Exchange servers for Cisco Unity •32 Active Directory controllers 	<p><u>30 Production UCS hosts</u></p> <ul style="list-style-type: none"> •16 nodes
Number of voicemail boxes	87,000	87,000
Power required for Production Servers	<p>58.8 KW</p> <p>For 174 MCS 7845 i2s Power draw 338 W under 50% load (measured in data center tests)</p>	<p>6.9 KW</p> <p>For 13 UCS B 200 M1-series blades - 247 W under 50% load For 17 UCS C-210 M1 servers – 206 W for full chassis under 50% load</p>

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