



# WHY MITEL? CUSTOMER HIGHLIGHT SERIES

ALM Holding Company

Roadworks firm achieves true disaster  
recovery with Virtualized Mitel Solution





For ALM Holding Company, having the best possible voice system has been all about evolution. A privately held company founded in 1945 with over 2000 employees engaged in road paving and several other diversified businesses. They started their journey in 1999 when they linked their classic PBXs, scattered across offices in five states, together using T1 lines.

Then, in 2005, ALM took another huge step forward when they rolled out a Mitel® IP phone system with improved productivity features for users, and as a result simplified administration tasks such as provisioning, moving, or changing blocks of extensions. Several months later, they added the Mitel Teleworker Solution, part of the Mitel Applications Suite (MAS), providing seamless access for remote employees, which dramatically enhanced access for their mobile workforce.

In 2009, through ALM's relationship with Five Star Telecom Inc., a Mitel Platinum Plus business partner serving the Midwest from offices throughout Wisconsin, they were given the opportunity to deploy the Virtual Mitel Communications Director (Virtual MCD) – the industry's only voice solution designed to run reliably as a virtual appliance in the VMware® vSphere™ 4 data center. James Strack, Chief Information Officer with ALM explains that their open approach to innovation has greatly improved their productivity and procedural efficiency over the years. So, naturally, they jumped at the opportunity.

### A Virtual safety net

Based on their ongoing experience with VMware in the data center, ALM understood the wide range of benefits virtualization offered, but for voice, none stood out more than disaster recovery. "Voice is the single most important application IT manages. Having the ability to incorporate telephony into our disaster recovery plan fills a big strategic hole for us," explains Strack. ALM can now back up their voice system as a single guest image, without having to concern themselves with conventional archiving tradeoffs such as incremental rotation schedules and choosing arbitrary directories and files to include or exclude. Since a VMware image retains 100 percent fidelity with the running system, backups and restores, simple, reliable, and fast.

Another aspect of VMware that adds to their assurance of voice service continuity is the ease with which they can now fail systems over to other hardware. In the event of a hardware outage on a live system, the running guest can be moved to a working system without service interruption. Strack points out that this ability to move servers between machines is also a great boon when performing scheduled upgrades or repairs.

Moving voice to the data center also means instant benefits for ALM from a unified business continuity plan standpoint. Voice is no longer an island unto itself requiring duplication of planning and resources, which spells simpler and more reliable continuity strategies at a lower cost. "Virtualization played a major role in simplifying and hardening our data center against service interruptions, however voice was still an issue. Now that we can virtualize telephony, we can extend all of the benefits of disaster recovery and cost savings to the phones." For ALM, going this last mile was probably the most critical part of their plan.

### Knowing their options

In addition to VMware, ALM evaluated Microsoft® Hyper-V™ and Citrix® XenServer™. Neither could match the feature set or consolidation ratios of VMware. Combined with a simple learning curve that allowed staff to be productive right away, these factors made VMware the obvious choice. "The overall refinement was obvious," states Strack, "the VMware vSphere 4 platform is clearly ahead of the competition." With Mitel's release of the industry's only practical and reliable solution for virtualized voice available for VMware, and the technical depth of Five Star on hand to assist with the Virtual MCD deployment, the choice of VMware vSphere 4 becomes even more compelling.

And the hardware cost of upgrading voice to Virtual MCD is trivial. Since the VMware infrastructure was available and ready to use in their data center, the expense of upgrading to Virtual MCD was practically nonexistent. With Mitel, ALM is able to realize the full potential of their investment in virtualization.

**Downsized data center**

In all, ALM has reduced their server count dramatically through virtualization, even before fully converting their Mitel environment. From over 70, they are now down to five servers, and have reduced cabinet space from six to less than two, which freed up 50 percent of their server room – floor space they plan to recoup for storage and other uses. Less hardware also means cooling requirements are lower, and ALM has seen the heat load produced by their data center reduced by over 60 percent, which, together with other power savings, translates into a 45 percent reduction in their electrical bill.

The operating expense savings for ALM from consolidation and simplification of management tasks have been just as profound. IT staff can oversee the data center from a single workstation and perform virtually any task remotely, inside or outside the firewall. Activities that had been time consuming and burdensome, such as OS upgrades, now take a fraction of the time. And VMware snapshots, temporary guest images taken prior to making changes, provide elegant insurance against something going wrong. Strack explains, “If a patch or upgrade fails, we can revert to the latest snapshot in seconds and continue without missing a beat.” This ability will be particularly important as they begin to mix Virtual MCD onto VMware vSphere 4 hosts with other applications such as mail, file, print, and Exchange servers, virtually eliminating the risks of these increasingly complex environments while leveraging the full value proposition of virtualization.

Strack also appreciates that VMware provides them with detailed metrics on how virtual hosts interact and how they consume system resources such as CPU, memory, disk, and network. They can fine tune how these resources are allocated, and incorporate trends in long term provisioning plans. This not only makes budgeting simpler, it ensures that the performance of vital voice services can be maintained as other applications are added to the vSphere 4 hosts.

He also points out other, less tangible benefits from virtualizing the data center. “Our staff has seen a paradigm shift in their duties from putting out fires and working weekends to more strategic forward looking research on a 9-5 basis. Morale is greatly improved and the IT staff is able to do visionary line-of-business research that helps the company grow.”

**COMPANY**

A 2000 person, privately held road construction and resources company with offices in five states.

**CHALLENGE**

To improve the reliability and recoverability of their voice communications infrastructure.

**EVALUATION**

Selection based on the unique opportunity presented by Mitel and VMware to harmonize voice with their data center.

**CHOICE**

- Virtual Mitel Communications Director (Virtual MCD)
- VMware vSphere 4 virtualization platform
- VMware vMotion™ migration tool

**REASONS**

- Greatly enhanced reliability and cost-effective disaster recovery
- Market leading virtualization capabilities for voice
- Lower CapEx and OpEx costs

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– James Strack, CIO  
ALM Holding Company



### Feature rich communications

ALM also plans to virtualize the Mitel Applications Suite (MAS), which will give them advanced IP functionality including Mitel NuPoint Unified Messaging™ (UM), Mitel Speech Auto-Attendant, Mitel Unified Communicator® (UC) Mobile, and Mitel Audio & Web Conferencing (AWC). By also installing the Mitel Border Gateway (MBG) on VMware vSphere 4, they will achieve a secure, plug-and-play method of connecting remote workers, further enhancing their ability to better serve their customers, adhere to complex project timelines, and avoid costly budget overruns.

### Connecting on the road and at home

A case in point: as a road construction company, ALM continually has engineers, project managers and other employees in the field. To support the need to provide mobile presence to these employees, they utilize the Mitel Teleworker Solution. Teleworker Solution is a secure plug and play addition to any Mitel IP phone that enables employees to work remotely with full access to voice mail, conferencing, and other features of the office phone system. Using it, remote workers can interact with each other and workers in the company's offices transparently. They can be extension dialed and can reach other workers at their extensions regardless of location. These capabilities make a wide range of every day tasks, from ad hoc consultations to conference calls, virtually seamless, and it greatly facilitates faster and more productive communications. And Strack notes that it has had other, unforeseen, benefits too.

When administrative staff have had to remain at home for extended periods, for health or family reasons, Teleworker Solution has allowed them to continue in their jobs while dealing with personal matters. For example, when an employee recently had to work from home due to illness, she was able to continue working without missing a beat. "With Teleworker Solution, we just took her office and stretched the phone cord," recalls Strack.

### Vanishing point

ALM has rolled their Mitel Virtual Solutions out to about 300 users in one office so far. Virtualizing voice has been painless – a truly simple and seamless transition. In fact, the switch over has gone so well that their users are unaware of the change. "It's a great testament to the merits of a new technology when a major deployment is a non event," reflects Strack. Over the next two years, they plan to deploy Virtual MCD to the rest of their offices. When they are done, they expect their disaster recovery woes to virtually vanish.

### About Five Star Telecom, Inc.

Established in 1973, Five Star Telecom is one of the largest interconnect companies in the Upper Midwest, with multiple locations serving the tri-state area. A Mitel Platinum Plus business partner, Five Star Telecom continually meets the needs of their customers – and exceeds their expectations.

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