

**WYSE**

# Amerisure Mutual Insurance Company Case Study

## Company-wide benefits from a desktop virtualization strategy featuring Wyse thin clients

### Challenge: Virtualization as a solution to our technology challenges

There are few CIOs as enthusiastic as Jack Wilson, Enterprise Architect at Amerisure Mutual Insurance Company. But even Jack was more excited than usual in the first quarter of 2009 for something that didn't happen.

Every three years Amerisure faced the disruptive and expensive task of a PC refresh, requiring the writing of a \$2 million check as part of its standard PC replacement policy. In 2009, Amerisure didn't write that check. The reason was because of Wilson's decision to virtualize the technology infrastructure at Amerisure. It was a critical point in the company's history; one that took a great deal of foresight and strategic decision-making in the years leading up to this moment.

Headquartered in Farmington Hills, Michigan, Amerisure provides businesses with workers-compensation insurance through a network of independent agencies in very close partnership with approximately 800 employees in nine regional offices throughout the Midwest and Southern United States.

"I've learned the difference between being a technology pioneer and being an early settler, and my preference is to not be the pioneer," according to Wilson. "When it came to virtualization technologies, however, enough progress had been made by 2006 that we felt the time was right to look at virtualization as a solution to our technology challenges."

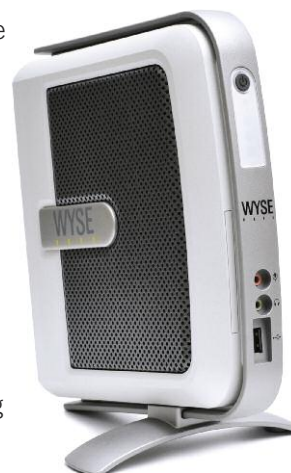
By then, Amerisure's existing infrastructure was not unlike many organizations. The technology had grown organically without a comprehensive plan; a mixture of legacy and vendor applications that had evolved in a complex, fragile, multi-layered environment that was becoming increasingly difficult to maintain and enhance.

"We were your typical IT shop," said Wilson. "We had one of everything. As a result, we were frozen from making any changes for fear of breaking something. We were even apprehensive about updating versions of our

### Viewpoint

“We were your typical IT shop. We had one of everything. As a result, we were frozen from making any changes for fear of breaking something. We were even apprehensive about updating versions of our existing infrastructure software. We realized we needed a dramatic change and all signs pointed to the efficacy of a complete, strategic virtual transformation. Not simply to virtualize our IT infrastructure, but to virtualize our very business.”

JACK WILSON,  
ENTERPRISE ARCHITECT,  
AMERISURE MUTUAL  
INSURANCE COMPANY





## Better than imagined

“In more than thirty years in IT, this is the first time the actual solution was better than I originally imagined. Our implementation of software from Wyse has made us a flexible, efficient, reliable and secure organization.”

**JACK WILSON,**  
ENTERPRISE ARCHITECT,  
AMERISURE MUTUAL INSURANCE  
COMPANY



existing infrastructure software. We realized we needed a dramatic change and all signs pointed to the efficacy of a complete, strategic virtual transformation. Not simply to virtualize our IT infrastructure, but to virtualize our very business.”

Just a few short years later, Amerisure is benefitting throughout the company from their virtualization strategy.

“In more than thirty years in IT, this is the first time the actual solution was better than I originally imagined,” said Wilson. “Our implementation of Citrix XenApp and virtualization hardware and software from Wyse Technology has made us a flexible, efficient, reliable and secure organization.”

To get to this point, Wilson and his team made some critical decisions early-on about how to approach their virtualization initiative:

### Think strategically

The undertaking was as much about business strategy as it was about technology. The end goal was an agile infrastructure, ubiquitous access to systems and data from anywhere, at any time and on any device. This was in line with business goals to reduce cost while increasing functionality.

“We realized this project would impact every department, every employee in the company, so it was vital that we get as much of the company on board as quickly as possible,” added Wilson. “In order to promote a seamless transition, our executives needed to understand the financial implications of the decision, end users needed to know the implications to their personal computing systems. Finally, everyone needed to understand the strategic importance of an agile infrastructure with respect to Amerisure’s ability to compete in the market.”

### No half measures

Wilson and his team realized early on that while data center virtualization received the lion’s share of industry attention, desktop virtualization was an equally important part of the process. “Over the years, I’ve come to think of the PC as the bane of my existence,” added Wilson. “They are expensive, unreliable, prone to breakdown, and require constant upkeep. Virtualizing the data center presented us with the ideal opportunity to make the switch to virtual clients. In my opinion, if you are going to take the engine and move it into the cloud, it doesn’t make any sense to leave an engine on the PC.”

Wilson’s team also decided to hold nothing back in their implementation, opting to update the entire company in a series of sweeping moves. “I realize that many companies try to be cautious about massive IT projects such as this one, but many of the benefits we envisioned with a completely virtualized environment would be undermined if we didn’t virtualize the entire organization,” said Wilson. “Keeping one location or one department on PCs, for example, would just isolate the existing problems we had with PCs, it wouldn’t solve them. Supporting a heterogeneous environment is the problem we were looking to get away from, not continue. In our opinion it was absolutely critical that this initiative was deployed across the entire organization.”

Amerisure deployed Citrix XenApp to centralize applications. Once the applications were virtualized, the company moved to deploy virtual clients to replace PCs. After reviewing a number of potential vendors, Amerisure adopted a variety of virtual clients from Wyse Technology.





## Quantify, quantify, quantify

“I like to compare large IT projects to a Space Shuttle launch,” added Wilson. “Ninety percent of the shuttle’s energy is expended in simply getting off the launch pad and traveling those first few miles. To overcome that amount of inertia requires a clear, measurable goal. Because of the strategic importance of this virtualization initiative, we identified a number of quantifiable objectives that spanned different groups within the company.”

The simplest ROI was the hardware. On the desktop front, Amerisure saved \$1.9 million in 2009 alone having Wyse virtual clients installed instead of PCs. This is not including the hours required to swap out old PCs with new ones, which was an ongoing process at Amerisure prior to this initiative. Amerisure also saved \$750,000 in 2009 alone because of server consolidation.

Energy savings were also factored into the deployment and quantified when possible. Amerisure expects to save \$391,500 over five years in electricity savings. More difficult to quantify but just as important were the green benefits because fewer PCs were being disposed of every year, and also because the new infrastructure made telecommuting that much more convenient.

Help desk calls dropped significantly because of improvements in security and sign-on procedures, resulting in the reduction of the help desk team from six individuals down to one.

“We simply don’t get viruses anymore,” added Wilson. “And there are no more compatibility challenges because everyone in the organization is on the same version of the same software. Furthermore, it can take as little as 10 minutes to update a piece of software across the entire organization because we only have to do so once.”

One unexpected benefit had to do with application reliability. Because Wilson and his team were centrally managing application availability for every Amerisure employee, they only had to support a single instance of that application. In the case of older applications, Wilson found that virtualization applications made these applications more reliable because an update or small fix could be done in minutes to a single application, rather than to every affected desktop.

### Following is an overview of some of the immediate and more long-term benefits from the virtualization deployment at Amerisure:

ROI factor	2009 Savings	Five Year Savings
Wyse virtual clients vs. PC lifecycle	\$1,900,000.	\$3,800,000
Wyse mobile devices vs. notebook computers	\$60,000	\$860,000
Network re-design	\$144,000	\$720,000
Virtualizing, consolidating and streamlining server infrastructure	\$750,000	Savings over five-year period depends on growth
Eliminated third-party IT support	\$25,000	\$125,000
Workstation group downsizing	\$480,000	\$2,400,000
Software elimination via server computing	\$60,000	\$300,000
Electricity savings	\$78,300	\$391,500
<b>Total Savings</b>	<b>\$3,497,300</b>	<b>\$8,596,500</b>

## No viruses

“We simply don’t get viruses anymore. And there are no more compatibility challenges because everyone in the organization is on the same version of the same software. Furthermore, it can take as little as 10 minutes to update a piece of software across the entire organization because we only have to do so once.”

**JACK WILSON,  
ENTERPRISE ARCHITECT,  
AMERISURE MUTUAL INSURANCE  
COMPANY**







## Wyse reliability

“In our environment today, the only distinction between the Wyse virtual clients we now have in place versus the PCs we have replaced is that the Wyse units are reliable, last significantly longer, are more secure, and enabled us to get out of a vicious cycle of PC replacement.”

**JACK WILSON,**  
ENTERPRISE ARCHITECT,  
AMERISURE MUTUAL INSURANCE  
COMPANY



## The PC nemesis

Amerisure wanted their computing device to be as simple and reliable as a telephone handset so the IT department can better manage the desktop experience. “The PC,” according to Wilson, “is the opposite of simple. Over the years, in fact, I’ve come to consider them my nemesis. Despite flying in the face of tradition, we decided to move away from PCs and toward virtual clients. Amerisure decided on Wyse virtual clients; simple devices that connect to the server to download their configuration and process applications.”

“The three main benefits,” continued Wilson, “are cost, reliability and security. The cost savings are astronomical and impact the entire organization. With respect to reliability, comparing a Wyse virtual client to the reliability of a PC is like comparing a Cadillac to an Edsel. On the security front, if you have a PC then you have a C-drive. No matter how many policies you set, people will store things on their C-drive and that’s simply not safe. With PCs in place at any organization, it’s inevitable that eventually no two PCs will look alike. It’s an administration nightmare.”

Amerisure’s IT infrastructure now runs like a utility. Power – in the form of information and communication – is centrally located and easily shared with distributed users on an as-needed basis from any location, on any device.

“It used to be traditional to build manufacturing facilities alongside rivers to take advantage of hydroelectric power until someone figured out that energy could be distributed across a grid,” continued Wilson. “The need to have power, in the form of a CPU, in proximity to a computer is something we will look back on as a relic of the pre-cloud computing era.”

Amerisure uses a combination of virtual clients from Wyse. The majority of desktops are using Wyse 5150SE and S50 devices. For users with specific dual-monitor requirements, the Wyse V10L is in place. Even mobile devices are deployed in the field, primarily the Wyse X90 and X90L.

“In our environment today, the only distinction between the Wyse virtual clients we now have in place versus the PCs we have replaced is that the Wyse units are reliable, last significantly longer, are more secure, and enabled us to get out of a vicious cycle of PC replacement,” added Wilson. “With respect to the end user experience, there’s virtually no difference between a PC and a virtual client.”





## Benefits

“The three main benefits,” continued Wilson, “are cost, reliability and security. The cost savings are astronomical and impact the entire organization. With respect to reliability, comparing a Wyse virtual client to the reliability of a PC is like comparing a Cadillac to an Edsel. On the security front, if you have a PC then you have a C-drive. No matter how many policies you set, people will store things on their C-drive and that’s simply not safe. With PCs in place at any organization, it’s inevitable that eventually no two PCs will look alike. It’s an administration nightmare.”

**JACK WILSON,**  
**ENTERPRISE ARCHITECT,**  
**AMERISURE MUTUAL INSURANCE**  
**COMPANY**

## Before & after

The virtualization implementation took place over a period of months in a staged manner. When it came time to roll out Wyse virtual clients, the back end virtualization infrastructure was waiting. At each remote CSC (Core Service Center), the Wyse devices were rolled out en masse on a Friday afternoon. When employees arrived at work on Monday morning, the virtual clients were fully operational. All the remote locations were transformed first, followed by company headquarters.

### The differences between the pre-virtualization era and after Amerisure’s virtualization undertaking are profound:

Before	After
800 problematic PC workstations and laptops, requiring constant maintenance and upkeep	850 Wyse virtual clients requiring little to no upkeep and functional parity with PCs (virtual clients workstations were also placed in conference rooms) “desktops” now run on 10 centralized Citrix farm servers
18 remote servers in addition to PC workstations	Simplified remote locations now only have virtual clients and routers
145 physical server, multiple brands, many 5+ years ago and “single points of failure”	60 state-of-the art physical servers, running 250 virtual servers, eliminated all “single points of failure”
Arduous application update process	Simplified application maintenance; update once, deployed everywhere within minutes
Multiple technologies creating unnecessary complexity, difficult for staff to cover	Microsoft server, Wyse, Oracle, VMware, Citrix now fewer core competencies, mastered by staff
Nearly 400 applications dispersed throughout organization with little or no application ownership	Complete control of application software; refined down to 105 applications, now centralized in one location
Multiple sign-ons and passwords resulting in substantial Help Desk calls	Single sign-on; self-service password resets. Help desk calls reduced by 80%
Ongoing contracts with expensive third-party hardware support vendors	No third-party hardware support vendor relationship
Unwieldy application deployment and management	On-demand audit trail for business operations and software licensing

## DR and QoL

Amerisure’s new flexible infrastructure manifested itself in some predictable ways, but also in ways that Wilson and his team didn’t anticipate. With virtual clients, Amerisure has disaster recovery and business continuity built right into the enterprise architecture. Because all of the data and applications are centralized, they can be backed up and made available to systems at any location. If a hurricane or flood shuts down one office, for example, employees can work from remote sites with Internet access and a new location can be deployed quickly.

“We are able to consolidate some offices very simply with our new infrastructure that would have been a logistical nightmare in pre-virtual client days,” added Wilson. “In fact, our St. Petersburg, Florida office, which is located in a “hurricane alley”, was always a concern. Now, our virtual infrastructure is



flexible enough to deal with natural and man-made disasters. If there is a limited outage, we simply send our employees home and they can log in from there. If the problem is more extensive, work can be virtually spread to out other offices, while St. Petersburg staff take care of their families and homes.” This flexibility also manifested itself in Quality of Life terms. Not only could Amerisure employees more effectively work remotely or from home when necessary, they could do so on short notice (every employee has RSA FOBs two factor security for remote sign-in).

“When the H1N1 Virus was sweeping the country, we were able to keep our workforce engaged without exposing everyone to one potentially contagious employee,” added Wilson. “Every employee benefits from flexibility and our IT initiatives has provided the infrastructure for our employees to work on the terms that work better for them.”

## Conclusion

When Wilson and his team undertook this transformation in 2006, none of them foresaw the economic difficulties looming in 2009, but the forethought of their initiative continues to pay dividends even in an economy where belt-tightening is no longer a consideration, but now a mandate.

“Our virtualization implementation was critical for us to lower costs while improving service,” concluded Wilson. “Amerisure IT now runs like a utility, particularly in the way that our computing infrastructure is now part of the business fabric, like heat or electricity. I know I’ve done my job right when our people don’t think about the technical infrastructure. It’s just always there, and it always works. I had an idea our virtualization plans would be good, but I had no idea it would be this good.”

## Solution architecture

- Clients:** Wyse 5150SE and S50 virtual clients  
Wyse V10L virtual clients for users with dual monitors  
Wyse X90 and X90L mobile virtual clients
- Management Software:** Citrix XenApp Platinum Suite (now XenDesktop4)
- Applications:** Approximately 105 unique applications, the normal Microsoft office environment, a suite of insurance systems (policy/claims) as well as content management/imaging system.
- Servers:** 60 physical Dell 2950/R710 Quad Core servers; 250 virtual servers
- Network:** MPLS Network with each location has a T1 line with failover to a low-cost Internet connection (cable/DSL) with a third level failover to a lower cost aircard all on the same Cisco routers. "Tri-dundant failover" on three distinct technologies at half the cost of the old traditional two T1 line configuration (which was only redundant for the first mile).



**CALL WYSE TOLL FREE: 800-438-9973** [www.wyse.com](http://www.wyse.com)

**WYSE**  
| | | |