



## EnergySolutions' Forecast: Complete Replacement of 2000 Physical Desktops with V3 Virtual Desktop Infrastructure (VDI) Solution by 2013

### CHALLENGES

- Small IT staff supporting ever – changing landscape of more than 2000 employee desktops in offices across the US and internationally.
- Consumer devices infiltrating corporate environment.
- Previous VDI implementations were expensive, slow, and ultimately unsatisfactory.

### SOLUTION

- V3 appliances, installed in EnergySolutions data hosting centers and remote offices, will serve 2000 virtual desktops.
- V3 appliances integrate well in a VMware environment, with almost no learning curve for administrators.

### The challenge

Carol Fineagan, CIO for EnergySolutions—a global provider of integrated services and solutions to the nuclear industry—needed to find a way to streamline desktop administration, support rapid deployment of centralized applications, speed up the new hire process and keep data secure for more than 2000 employees while meeting the demand for “bring your own device to work.” Add in a limited IT staff and a focus on reducing capital and support costs, and all roads pointed to a virtual desktop solution. The budget and IT support staff were stretched thin supporting a dispersed workforce between multiple physical offices with 30% of the computers entirely mobile across the United States and internationally. In addition, each of these offices had widely varying sizes, with some offices having 200-300 employees and others only 2-5 employees.

With a small staff and dispersed workforce in multiple time zones and countries, the EnergySolutions IT staff faced many challenges in providing regular desktop maintenance, let alone software upgrades, while trying to minimize downtime.

Having heard about the benefits of VDI, including distributed deployment, centralized desktop management, and reduced operational costs, EnergySolutions began a pilot program. On track, EnergySolutions tried several virtual desktop implementations, but they all failed at providing an acceptable user experience, would not work with the existing infrastructure, and did not reduce system administration time and cost. According to Carol, “With the previous systems, across the board, our test users complained of slow response times, and desktops with such poor performance they were not even usable.” It was obvious these traditional VDI solutions were not a good substitute for traditional desktops, and were definitely not “replacement grade desktops,” which by definition must perform as fast as or faster than physical desktops.

In addition, many other VDI products' proof of concepts were very expensive—requiring a centralized core infrastructure which was complex to install and difficult to maintain. The cost of other VDI solutions was very high due to the amount of hardware and infrastructure retooling required in order to provide employees a minimal usable level.

### The solution

Carol approached V3 Systems for a consultation. Following initial discussions, V3 Systems provided EnergySolutions with a paid proof-of-concept installation that included a single entry-level V3 appliance (virtual desktop server). V3 Systems sized the solution and provided a recommended set of configuration options and optimizations based on user load, programs, the number of employees, and the types of desktops being replaced. V3 then configured the solution for 50 users at their current usage level, and provided two days of professional services.

*“We look forward to being out of the IT Desktop Management Business!... The simple elegance of the V3 solution is the way it should be, with IT making your life easier and helping you to do your work”*

— Carol Finegan, CIO  
EnergySolutions

In February 2011, EnergySolutions deployed the V3 appliance in their Salt Lake City data hosting center in a test load capacity scenario. Continuing to use it since February 2011, they have reported very good evaluations, including ease of installation and configuration and fast performance.

According to Carol Finegan, “During the installation, our IT staff experienced almost no learning curve. The V3 appliance integrates with VMware so well, if your staff is familiar with vSphere or vCenter, the V3 appliance becomes just another VMware ESX Host.” Carol continues, “Once the V3 appliance is configured and networked, you just point vSphere to the V3 appliance. The only thing left to do is to configure and deploy the new pools of desktops. It couldn’t be easier, and we couldn’t be happier!”

### The projected benefits

According to Carol, EnergySolutions is so pleased with their V3 Virtual Desktop solution that they plan to replace all their standard physical desktops, corporatewide, with V3 Virtual Desktops beginning in 2012 through 2013. The plan is to completely replace up to 2000 physical desktops in a series of virtual desktop deployments over the next two years. “We also hope to significantly reduce the number of laptops in our enterprise due to the wide accessibility of our virtual environments.”

*The plan is to completely replace up to 2000 of EnergySolutions’ current physical desktops with a series of virtual desktop deployments over the next two years.*

EnergySolutions expects to continue realizing the following benefits from the V3 Virtual Desktop solution, as already demonstrated in the proof-of-concept deployment:

#### Centralized management for desktop administration.

Typically, virtual desktop management is performed by a combination of SAN, networking, and core infrastructure administrators, which is unnecessarily complicated and expensive. “With the V3 appliance’s high density of desktops and reduced reliance on backend SAN storage, the V3 solution will reduce the IT footprint,” said Carol. In addition, “V3’s simplified VDI architecture enables a number of efficiencies. The simple distributed deployment combined with centralized desktop management will significantly reduce the workload for our small IT staff. Whether an employee is using a tablet, desktop or laptop at work or on travel, they will have a familiar and high response experience.” According to Carol, “We look forward to being out of the IT Desktop Management Business!”

#### Performance 2-8x faster than physical desktops.

Because the virtual desktops are served from a V3 appliance in a local hosting center, network latency is significantly reduced, resulting in faster performance and a better user experience. In addition, the V3 appliance uses V3-certified storage, which provides the fastest access time for working data on the market. This results in true desktop replacement grade virtualization, which actually exceeds the performance of the physical desktops by two to eight times, depending on the installation.

## PROJECTED RESULTS & BENEFITS

- Centralized desktop administration significantly reduces the workload and reduces support costs.
- Significant reduction in capital costs for desktops and laptops.
- Performance is 2-8x faster than physical desktops
- Increased employee productivity and job satisfaction
- Freedom to securely access desktops remotely from anywhere with an Internet-enabled device

## About EnergySolutions

Headquartered in Salt Lake City, Utah, EnergySolutions is a global provider of integrated services and solutions to the nuclear industry. EnergySolutions offers a full range of services for the decommissioning and remediation of nuclear sites and facilities, management of spent nuclear fuel, the transportation of nuclear material, and the environmental cleanup of nuclear legacy sites. EnergySolutions clients include the United States Government, the Government of the United Kingdom, power utilities, along with various medical and research facilities.

### **Increased productivity and employee satisfaction.**

Employees will be able to use Microsoft Office productivity tools with better performance than on physical desktops, resulting in increased productivity and employee satisfaction. "Our employees will actually enjoy using their virtual desktops because of the performance provided by V3 virtual desktops," offered Carol.

### **Freedom to access their desktop remotely on client devices from anywhere, without performance degradation.**

The simplicity of being able to access your desktop applications from anywhere, at any time, from any device, for any reason, strikes a chord with everyone. "The simple elegance of the V3 solution is the way it should be, with IT making your life easier and helping you to do your work," Carol said.