



## ROI Analysis

Intel® Core™2 Processor with vPro™ Technology

Erie Insurance Group

Insurance Industry

# Erie Insurance Projects ROI of 168% by Improving Patching and Reducing Power Costs via Intel® vPro™ Technology

Erie Insurance Group (Erie), founded in 1925 and headquartered in Erie, PA, is a multiline insurance company.<sup>1</sup> Currently, the company carries 3.9 million auto, home and commercial policies and 310,000 life, annuity and disability income policies.<sup>1</sup> Operating in 11 states, Erie has 2,450 employees at headquarters, and an additional 1,810 employees at 23 branch offices.<sup>1</sup>

Erie's information technology (IT) department manages almost 5,000 PCs and does an effective job with patch management to protect company assets and customer data.<sup>2</sup> However, the company wanted to improve the speed of patching to 95% saturation within hours of patch deployment. Erie also wanted to implement new power management policies that would allow the company to shift patch management off-hours, but still allow the company to power down PCs to save on energy costs. Currently, the company performs patch management during business hours, and powers down about 75% of its PCs each night.<sup>2</sup>

Recently, Erie deployed 2,825 PCs<sup>1</sup> with Intel® Core™2 processor with vPro™ technology in its distributed environment.<sup>3</sup> The company then began an investigation to find out the full potential savings of speeding up patching through the remote management and security capabilities built into PCs with Intel® vPro™ technology. The company also investigated the potential savings of improving power management by powering down their last 25% of PCs at night, and remotely powering the PCs up off-hours only when service is needed.

### TCO/ROI investigation

Erie's investigation was conducted in an environment of approximately 4,933 PCs, of which 2,825 were PCs with Intel vPro technology.<sup>4</sup> Data was analyzed for only the one IT service task of remote power up for off-hours patch management, and for power savings from powering down PCs when not in use. Data was then projected for 3 years, with the assumption that the number of PCs in the company would not grow.<sup>4</sup> User productivity savings from off-hours patch management were based on an hourly rate of \$19 per worker (a 50% discount)<sup>4</sup> User productivity savings were calculated conservatively, with an estimate of 5 minutes per month per user of interruptions due to patch management during business hours.<sup>4</sup> Power savings are based on powering down 25% of PCs with Intel vPro technology for 14 hours per day, with an average power consumption of 49 Watts per hour, at the cost of \$0.09/kWh in Pennsylvania.<sup>4,5</sup> ROI was calculated conservatively, for only power savings and patch management.<sup>4</sup>

### Positive results

During the investigation, IT administrators powered down PCs, remotely powered the systems back up, remotely patched the PCs, then remotely powered systems back down. IT was able to complete the patch cycles without leaving the service center, and without interrupting users. The company expects this single improvement in patch services to save Erie approximately \$161,250 over 3 years.<sup>4</sup>

### Key findings from ROI analysis

- **Positive ROI of 168% over 3 years**, after deploying PCs with Intel® vPro™ technology to support off-hours patching and improved power management.<sup>4</sup>
- **Break-even point achieved in 1 year.**<sup>4</sup>
- **Projected power savings of over \$45,000 over 3 years** by using the remote capabilities built into PCs with Intel vPro technology.<sup>4</sup>
- **User productivity projected savings of over \$160,000 over 3 years** through improved patch management.<sup>4</sup>

Erie also projected the potential savings in power consumption for the 25% of PCs that could now be powered down at night. Based on power costs of \$0.09 per kWh, the company expects to reduce power consumption by approximately 506,700 kWh over 3 years, with a projected savings of approximately \$45,600.<sup>5</sup> Overall, Erie expects to see a break-even point achieved in 12 months, and realize a positive ROI of 168% over 3 years.<sup>4</sup>

Erie hopes to use some of the savings to invest in IT projects that might otherwise have been canceled or delayed due to the current economic climate. Erie is also looking forward to reducing other service costs by implementing additional remote capabilities of Intel vPro technology. The company is excited about the potential savings and additional protection for assets and customer data that could be achieved via the Intel vPro technology System Defense capability. Erie is also planning to implement remote diagnostics, remote remediation, and remote reimaging. These capabilities could significantly reduce deskside visits and deliver additional savings.

**Table 1. Cost and ROI analysis for off-hours patch management and power savings**

PCs used for this Nighttime Data Update	Without Intel® vPro™ technology	PCs with Intel® vPro™ technology			Estimated savings with 100% PCs with Intel® vPro™ technology
	Year 0 <sup>a</sup>	Year 1 <sup>b</sup>	Year 2 <sup>b</sup>	Year 3 <sup>b</sup>	
Power consumption for 25% of PCs	174,312 kWh	5,413 kWh	5,413 kWh	5,413 kWh	Power consumption per PC: 97% lower Cumulative 3-year savings: over \$45,000
Annual power costs for 25% of PCs	\$15,688 costs	\$487 costs	\$487 costs	\$487 costs	
Annual savings from reduced power consumption	N/A	\$15,200 savings	\$15,200 savings	\$15,200 savings	
Annual cost of patch management	\$58,425 costs	\$4,674 costs	\$4,674 costs	\$4,674 costs	Cumulative 3-year savings: over \$161,000
Annual savings in patch management	N/A	\$53,751 savings	\$53,751 savings	\$53,751 savings	
ROI summary <sup>c</sup>					
Implementation cost	N/A	\$67,600 costs	\$0 costs	\$0 costs	Break-even point: year 1 <sup>c</sup>
Cumulative Net benefits	N/A	\$1,300 benefits	\$68,900 benefits	\$68,900 benefits	Positive ROI: 168% in year 3 <sup>c</sup> Cumulative 3-year savings: over \$206,000

<sup>a</sup> Data is the result of measurements.

<sup>b</sup> Data is the result of projections.

<sup>c</sup> ROI is calculated based solely on patch management and power savings, and includes a 15% cost of capital.

For more information about PCs with the Intel Core 2 processor with vPro technology, visit [www.intel.com/vpro](http://www.intel.com/vpro).

<sup>1</sup>All information about Erie Insurance Group was provided by Erie Insurance Group.

<sup>2</sup>Source: Erie Insurance Group knowledge base.

<sup>3</sup>PCs with Intel® Core™2 processor with vPro™ technology include Intel® Active Management Technology (Intel® AMT). Intel AMT requires the computer system to have an Intel AMT-enabled chipset, network hardware and software, as well as connection with a power source and a corporate network connection. Setup requires configuration by the purchaser and may require scripting with the management console or further integration into existing security frameworks to enable certain functionality. It may also require modifications of implementation of new business processes. With regard to notebooks, Intel AMT may not be available or certain capabilities may be limited over a host OS-based VPN or when connecting wirelessly, on battery power, sleeping, hibernating or powered off. For more information, see [www.intel.com/technology/platform-technology/intel-amt/](http://www.intel.com/technology/platform-technology/intel-amt/).

<sup>4</sup>Source: The Erie 2009 ROI Investigation of Intel® vPro™ technology, conducted at the company's distributed sites in 11 states, in 2009.

<sup>5</sup>Power cost was calculated using \$0.09 per kWh rate in Pennsylvania, available from <http://www.ppiny.org/reports/jtf/electricprices.html>.

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