Sentara Healthcare (Norfolk, Va.) operates more than 100 care giving sites – including eight acute care hospitals, nine outpatient care facilities, seven nursing centers, three assisted living centers, nine advanced imaging centers, and approximately 380 primary care and multi-specialty physicians. The organization employs 19,000 people and also offers a full range of award-winning health coverage plans, home health and hospice services, and physical therapy and rehabilitation services.

In Fall 2006, Sentara was struggling to control its software application deployment processes. “We were failing miserably with our current deployment technologies,” said Dale Smith, Director of Technical Services for Sentara. “The products lacked the flexibility needed for us to be agile in our deployments and we found ourselves reverting back to manual scripting too often.”

With a planned move to a Microsoft® infrastructure, Sentara knew it was time to switch and formed a desktop configuration management committee to evaluate new solutions. The committee also identified a critical need within the organization for stronger IT asset management, streamlined IT policy control/workstation lockdown and advanced enterprise PC power management.

Profile: Progressive operator of more than 100 care giving sites and award-winning provider of health coverage plans.

Situation: Current solutions were too inefficient for application deployment; solutions needed for enterprise IT asset management, policy control and PC power management.

Solution: Sentara uses the full Prism Suite® as its desktop and server management solution, primarily utilizing the Suite’s Prism Deploy® and Prism Asset Manager® modules. Sentara recently implemented Prism Patch Manager® and is using New Boundary Technologies’® Policy Commander® and PwrSmart™ solutions as well.

ROI: Sentara has experienced significant savings to date and is realizing a rapid return using New Boundary Technologies’ products.

Describing New Boundary Technologies: Control, Ease-of-Mind, Efficiency
After reviewing solutions from five companies, including Microsoft System Center Configuration Manager, Sentara selected New Boundary Technologies’ Prism Suite (including Prism Deploy and Prism Asset Manager), Policy Commander and PwrSmart products. All New Boundary Technologies’ products use a single agent with a small IT footprint – a big selling point for Sentara.

“After an intense evaluation period, New Boundary’s products proved to be superior compared to competitive offerings,” said Joseph Rowell, Technical Manager for Sentara. “The ease-of-use and automation of New Boundary’s application packaging tool blew us away. The flexibility of New Boundary’s unique configuration groups made it simple to move beyond standard Active Directory mechanisms to target groups of devices for application deployment, remediation and/or policy control.”

Experiencing Control
Prism Suite: Prism Deploy
Today, Sentara has the capability to deploy applications to any of its 10,000-plus PCs/workstations/devices using Prism Deploy. The organization has used Prism Deploy to implement Microsoft Office across its organization and upgrade its Citrix® servers. Sentara’s crowning achievement to date using Prism Deploy is the rollout of electronic medical records (EMR) software from Epic – Sentara eCare® – across numerous facilities.

“The first Sentara eCare implementation at one of our hospitals in June 2006 proved to be exceedingly difficult without Prism Deploy,” said Rowell. “There was a lot of extra work to manually identify which devices were configured correctly and a lot of back-end support required once we finally did go live. It worked, but we expected better.”

By the end of the first EMR implementation, Sentara had Prism Deploy installed and ready to deliver Sentara eCare to two more locations. The value add for Sentara was being able to pre-deploy Citrix ICA files along with ensuring the PCs were setup for appropriate NIC settings.

In March 2009, Sentara’s flagship hospital – Sentara Norfolk General Hospital – and its 3,500 applicable devices were next on the EMR implementation list. “Given the promise and visible costs of EMR systems, the whole community was watching,” said Fred Fowler Manager of Information Technology for Sentara. The smooth Sentara eCare EMR transition at the previous two hospitals allowed Sentara to prepare for the flagship hospital well in advance and when it was time to turn everything on, “it went without a hitch.”

“The Sentara eCare deployment at Sentara Norfolk General Hospital was essentially flawless,” said David Hultgren, Technical Manager for Sentara. “Our biggest concern was actually finishing the deployment ahead of schedule by two weeks. We kept going through our disaster lists from the previous implementations, but nothing was amiss. We had a few ‘how to’ calls, but no technical issues. Successfully deploying Sentara eCare with Prism was a welcome relief for our team and organization.”
Sentara physicians and staff are effectively using Sentara eCare to improve patient care. In its hospital settings, physician order entry rates exceed the national average. And, the time it takes to order a drug and administer it to the patient has been reduced dramatically.

Sentara plans to use Prism Deploy to install Sentara eCare across the organization’s additional locations. **Prism Deploy’s ease-of-use, simplicity and track record has enabled Sentara to move up some of its EMR implementation timelines.** Sentara also is working on myriad other projects using Prism Deploy – including installing Microsoft Exchange/Outlook – and has re-allocated budgets to have Prism Deploy installed on every device throughout the organization.

**Prism Suite: Prism Asset Manager**

Sentara also uses New Boundary Technologies’ Prism Asset Manager to manage critical IT assets. Specifically, Sentara cycles out its PCs every three years and, previously, whenever a PC with various software was swapped out or replaced, IT staff had to physically track the device down and assign it a working ID number to manage the transition and re-configuration of software.

Today, Prism Asset Manager automatically assigns each workstation on the network a static ID and classification, making it easy to identify whether or not new software needs to be installed. Prism Asset Manager then automatically downloads and installs the required software onto the respective device. Sentara also uses Prism Asset Manager to track warranties for all its HP machines and servers.

**Policy Commander**

Over the years, administrative privileges on some of Sentara’s PCs had slowly fallen to end-users – primarily so users could deploy and leverage an “eclectic mix” of health care applications. However, this reality presented network security issues.

“We were aware of the problem, but lacked the tools to properly lock down and control these workstations, yet also meet staff requirements,” said Rowell. “Policy Commander allows us to create policies that identify specific applications that select users are permitted to control, while still allowing us to execute policies that surgically lock down our workstations to meet compliance and regulatory requirements.”

Sentara also uses Policy Commander to monitor and control basic settings for PCs and devices connected to the network. When individuals change user settings or download applications/software that do not adhere to corporate policies, Policy Commander automatically resets the settings back into compliance with corporate policies and/or removes offending applications and software.
A complementary product to New Boundary Technologies’ Prism Suite and Policy Commander products is the company’s PwrSmart PC power management solution.

“We realized we could help the organization run more efficiently and realize significant economic benefits by implementing PC power management,” said Rowell.

Sentara has created six power classifications across its 10,000-plus PCs, workstations and devices using PwrSmart. These classifications articulate which computers automatically power down at night, such as administrative PCs, and, equally important, which workstations must stay on 24/7 since they are critical to the delivery of health services/patient care.

**With PwrSmart’s “set it and forget it” functionality, any changes to the power management settings automatically revert into compliance.**

### Benefits of Control

“New Boundary has given us the power to succeed and the power to innovate,” said Rowell. “We went from an uncontrolled infrastructure to one of complete control.”

Since engaging with New Boundary Technologies, Sentara has experienced or anticipates:

- Tremendous savings using Prism Deploy to bring all software deployment packaging in-house instead of using external consultants, in addition to eliminating a service agreement from their previous provider.
- More than $200,000 in annual power savings using PwrSmart for PC power management.
- Dramatic productivity gains using Prism Deploy for software deployments. Updating 100-plus servers now takes two hours instead of 30; configuring a new PC or workstation now takes 30 minutes instead of 3-4 hours. During its initial Sentara eCare deployment, Prism Deploy’s simplicity and automation allowed Sentara to reduce its requirement for additional staff by an entire FTE.
- Accurate budgeting for new PCs/workstations and software deployments using Prism Asset Manager to identify what the organization has and what it needs, including various product versions.
- Seamless auditing and complete compliance with health care regulations that require PC/workstation lockdown.

“We are more efficient than ever with New Boundary,” said Smith. “We are staying on strategy and starting to see standards applied throughout the organization for the first time. We’ve evolved from a reactive IT group to one that is very proactive; we have moved from near chaos to complete control.”