

Sun and ThinIdentity

Transforming the Workflow of Healthcare with Virtual Desktop Management

Healthcare professionals need access to patient records and other compute resources on the spot, wherever they might be in their work environment. It's critical that this access be secure enough to protect patient data, reliable enough to prevent delays, and stable enough to avoid data loss or errors. ThinIdentity is an evolutionary desktop solution that enables doctors and nurses to go from one display device to another and instantly continue their vital work without having to close and reopen any programs. It improves the healthcare provider

with doctors and nurses often facing workflow issues regarding access to data and applications in different locations, such as nursing stations, patients' rooms, and so on. IT personnel also find it difficult and expensive to deploy and maintain standard desktop computing solutions, finding that they lack the flexibility and power to centrally manage access, content, and policy. Healthcare professionals are looking for solutions that enable the most efficient workplace in the most cost-effective manner.

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Highlights

- ThinIdentity improves provider workflow and efficiency, increasing staff satisfaction
- Dynamic smooth roaming facilitates near-instantaneous access to location-specific data and functions
- Sun Ray thin clients extend five 9s reliability to the desktop, reducing IT costs for deployment and maintenance, as well as saving energy
- ThinIdentity protects data and privacy and exceeds regulatory compliance requirements
- The ThinIdentity appliance — a hardened Sun SPARC Enterprise T5140 server — provides a secure virtual infrastructure

workflow with an economical architecture based on the stateless Sun Ray thin-client virtual display, while leveraging ThinIdentity software and Sun servers.

Healthcare computing challenges

In today's economy, hospitals and other healthcare organizations are under greater pressure than ever to reduce their operating expenses and capital costs. Regulatory compliance creates additional demands, as organizations must conform to increasingly complex state and federal regulations, as well as industry standards for security and privacy. Existing solutions to these problems have proven unsatisfactory, however,

An innovative solution

Healthcare organizations can take advantage of this innovative solution offered by ThinIdentity and Sun. It's a hardened, simplified, turnkey architecture that optimizes the virtual desktop and its support, streamlining workflow and reducing costs at the same time. Its core elements are ThinIdentity Synchronizer, Analyzer, and optional Workspace Manager software, deployed on Sun servers — the Sun SPARC Enterprise T5140 server and the Sun Fire T1000 server — and utilizing efficient Sun Ray virtual display clients, for maximal performance and compute density. With the solution in place, healthcare personnel can easily

Case study: Denver Health and Hospital Authority

Denver Health and Hospital Authority of Denver, Colorado, is a comprehensive, integrated healthcare organization with multiple components, including a 477-bed hospital and a network of family care clinics and school-based health centers, as well as other services including 911 medical response and correctional care. Its IT infrastructure had fallen behind in meeting the needs of the organization, so it looked to the ThinIdentity solution.

Among the goals of Denver Health were:

- Reducing its operating, support, and capital costs
- Increasing efficiency while improving staff satisfaction
- Decreasing the number of desktop refreshes per year, which were adding cost and complexity

The organization adopted the ThinIdentity solution entirely within its current “PC refresh” budget, and the results were significant:

- Annual cost reduction of \$2+ million, with energy savings alone of over \$240,000
- Outstanding staff acceptance and increased productivity in number of patients served
- Greatly simplified IT management, with rollouts of up to 30 workstations in under two hours, and only two help desk tickets in 12 months

access the computing resources they need, when and where they need them most — using cost-effective, easily manageable technology.

The leading-edge technology used in the solution includes:

- ThinIdentity Synchronizer — dynamically manages desktop sessions and provides secure, full-featured, smooth roaming via smart card architecture for up to 300 users per appliance, with a Web administration console that simplifies management through the proprietary Virtual Managing Protocol (VMP). It provides near-instant access to desktops and applications for the healthcare professional.
- ThinIdentity Analyzer — monitors the entire IT environment: operating system (OS), network state, appliance health, and virtual back-end components that include Citrix and terminal service. It dynamically manages and brokers Windows desktop sessions, and has special configuration settings that enable seamless Microsoft USB support. It also improves infrastructure reliability with error monitoring and self-healing down to the desktop, maintaining maximal reliability, availability, and continuity.
- ThinIdentity Workspace Manager — an option that ensures a consistent but heterogeneous workspace for users, enabling simple and easy access to their own desktop wherever they go. Regardless of how applications are provided — whether by virtualization, streaming technology, or on virtual desktops — this software makes it fast and secure to access, eliminating the frustration of wait times between locations. It creates even greater efficiencies by managing back-end optimization and dynamically updating user policy while roaming.

With a ThinIdentity solution, healthcare professionals can smoothly and easily leverage location-specific access to data, applications, and functions such as printing.

Sun and ThinIdentity technologies

Sun expertise provides the hardware foundation for the industry-leading ThinIdentity solution, with a robust thin-client architecture — Sun Ray clients — networked with scalable, powerful Sun servers. The partnership between Sun and ThinIdentity yields a number of advantages for healthcare computing, from customized scripts for a self-healing desktop architecture to root cause analysis that reduces the time needed to diagnose problems.

Cost is a vital consideration for IT management, and Sun offers significant reductions, with Sun Ray clients that require zero desktop management, have a 22-year mean time to failure, and consume very little energy. Sun servers also offer maximal compute density; proven reliability; and a very small space, cooling, and energy footprint. They provide data and privacy protection with centralized, secure data storage that utilizes 128-bit encryption and superior control over desktops and user privileges. A ThinIdentity solution on a Sun platform exceeds standard regulatory compliance requirements, including reduced risk of patient data loss.

ThinIdentity on Sun

The ThinIdentity solution combines and customizes technology into network components called “appliances.” There are two appliances in the architecture:

- The TIS-5000 Appliance — combining the Sun SPARC Enterprise T5140 server with a customized Solaris OS and Sun Ray Server Software, this specialized component requires almost no Solaris OS knowledge to administer, yet it delivers all the benefits of the integrated elements: The Solaris OS is the planet’s most advanced operating system, with superior virtualization, self-healing, and performance functions. Sun Ray Server Software offers a rich virtual desktop for the most demanding users. Partnered with the flexible, dense Sun SPARC Enterprise T5140 server, it ensures fast, efficient, effective application usage for healthcare professionals
- The TIS-1000C Controller Appliance — based on the Sun SPARC Enterprise T1000 server, this component arrives fully functional with all hardware and software, ready to configure and to manage up to 300 ThinIdentity Synchronizers per appliance. Its automatic failover capacities are designed for critical-care environments in which it is vital that technology never fail

The cloud-computing architecture of the ThinIdentity solution connects TIS-5000 Appliances and TIS-1000C Controller Appliances with Sun Ray virtual display clients throughout the organization’s facilities. Sun Ray clients support seamless roaming via smart card technology with cost-effective, zero-management desktops that demand minimal power.

Sun and ThinIdentity

The flexible, easy-to-install, simple-to-use ThinIdentity solution maximizes your organization’s IT investment while streamlining the healthcare workflow. Built on a solid bedrock of time-tested Sun technology combined with powerful, leading-edge ThinIdentity software, it reduces costs while enhancing the quality of healthcare and the patient experience.

Learn more

To learn more about the ThinIdentity solution, go to: sun.com and www.thinidentity.com, or contact your local Sun sales representative.