



## Centralized Management Enables Deployment of 7000 PCoIP Zero Clients and Counting

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JORGE RODRIGUEZ  
MANAGER OF SYSTEMS SUPPORT AND DATACENTERS  
INTEGRIS HEALTH

### INTEGRIS

INTEGRIS Health is Oklahoma’s largest health system with eight nonprofit hospitals, 168 clinics, and multiple rehabilitation centers, mental health facilities, independent living centers, and home health agencies throughout the state. Its mission is to improve the health of the people and communities it serves.

#### AT A GLANCE

##### Situation

- Healthcare
- Oklahoma City, OK
- 9,000+ employees

##### Challenges

- Deliver consistent desktops to meet the requirements of a new EMR application
- Simplify desktop and image management
- Deploy 7,000+ Zero Clients by 2017

##### Solution

- Virtual desktop infrastructure (VMware® Horizon View™)
- Teradici® PCoIP® Management Console Enterprise Edition

##### Results

- **Fast deployment:** enabled INTEGRIS to deploy its first 2,500 PCoIP Zero Clients within two months and to easily scale with future acquisitions of healthcare clinics.
- **Enhanced user productivity:** users have a consistent interface across locations and devices, with their specific files and applications always available – ensuring higher uptime.
- **Multi-user management capabilities:** allow IT team members to manage and update their deployments from a single, web-based console.
- **Reduce operational costs:** centralized management capabilities save time and ensure rapid updates of all Tera2 PCoIP Zero Clients. By implementing PCoIP Zero Clients, technicians have reduced PC administration time from hours to just minutes.



“We expect our operating costs to be greatly reduced once we are fully deployed. Today, our field resources spend a lot of time administering PCs. With VDI, this need disappears. And with the PCoIP Management Console Enterprise Edition software, we expect to easily achieve our goal of 7,000 deployed Tera2 PCoIP Zero Clients. We could never do that with physical PCs.”

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**Throughout its history, INTEGRIS Health has continuously looked for ways to improve healthcare delivery.** Until recently, the system had 8,000 PCs deployed across its locations. INTEGRIS also was an early adopter of virtualization technology. Its data center has been 75 percent virtualized for many years, with continued support for specialized clinical and legacy applications on physical infrastructure.

In 2011, INTEGRIS evaluated Virtual Desktop Infrastructure (VDI) as a potential solution for centralizing desktop images and increasing predictability for users who move between workstations and locations. “We conducted a trial with thin clients in our Microsoft environment,” said Jorge Rodriguez, Manager of Systems Support and Datacenters at INTEGRIS Health. “However, the project required a lot of extra investment in additional licenses, Microsoft System Center Configuration Manager, patches, and intensive management. It just wasn’t a good fit at the time.”

Fast-forward to 2015, when the healthcare system’s new Epic Electronic Medical Record (EMR) initiative made VDI and central management much more practical for a broader range of users:

- The EMR application required desktop image consistency across the healthcare system.
- With facilities distributed over a large geographic area, installing and managing physical desktops for 9,000+ employees was already time consuming and difficult. The IT team wanted to centralize desktop images and management.
- Unlike PCs that had different applications installed for different uses and interfaces that varied across the healthcare system, IT wanted a consistent image for better control, tighter security, and enhanced user productivity.
- With clinical space at a premium, IT also wanted to reduce the amount of space needed for computing endpoints, with software that simplified management of them.

**INTEGRIS began its VDI journey in 2015 with a proof of concept and 100 client endpoints.** “We chose Samsung NC241 PCoIP® Zero Clients with Teradici TERA 2321 PCoIP chips for their high performance, strong security, and bandwidth efficiency,” said Rodriguez. “And the Teradici PCoIP Management Console lets us manage everything through a single interface. Without it, we could never achieve our aggressive deployment goals.”

The Samsung NC241 PCoIP Zero Clients offer a streamlined profile and ability to support multiple PCoIP displays. The Teradici PCoIP Management Console Enterprise Edition provides IT administrators with a single, web-based console for simplified management and configuration of any brand of Tera2 PCoIP Zero Client and scales with their deployment. IT can quickly provision new devices, review metrics, configure settings, update firmware, and view event logs and ensure increased IT agility.



#### Products used

Teradici PCoIP Management Console Enterprise Edition

Samsung NC241 PCoIP Zero Clients

#### Virtualization platform

VMware Horizon View

**After a successful proof of concept period, INTEGRIS deployed 2,500 Samsung PCoIP Zero Clients, with plans to have 7,000+ by 2017.** Rodriguez and his team no longer have to physically manage or support thousands of PCs distributed over multiple hospitals, clinics, and other facilities. “The ability to manage all of our clients from the PCoIP Management Console represents a huge time savings,” said Rodriguez. “We can manage VDI endpoints quickly – as opposed to managing PCs, which takes three to four times as long. If there is a failure, we can replace an endpoint in less than 10 minutes.”

Administrators and clinicians no longer have to figure out how to use different computers as they move from floor to floor or site to site. Now the icons are always in the same place and applications work the same way across INTEGRIS. The healthcare system deployed an Imprivata single sign-on solution, so users desktops and applications “follow” them across locations and devices. “Users can log in and use their applications, whether on a tablet, home computer, or phone,” said Rodriguez. Because their tools are always there, they can forget about the technology and just do their jobs. It’s much more efficient.”

The IT team has greater confidence in endpoint security as well. All data resides in the data center, storage is encrypted, and they no longer worry about device theft or loss with the associated risk of compromising sensitive patient data. Users cannot change desktop images, almost eliminating the risk of accidentally introduced malware.

The Teradici PCoIP Management Console also comes with Teradici Support and Maintenance for PCoIP Zero Client firmware, further reducing the administrative burden on IT. The multi-user PCoIP Management Console allows multiple IT users to view deployments and update as necessary. Auto discovery and auto configuration features enable remote policy and firmware updates through the console, making it fast and easy to deploy and manage new PCoIP Zero Clients. With a consistent configuration across the installed base, any required upgrades can occur in just minutes.

“We expect our operating costs to be greatly reduced once we are fully deployed,” said Rodriguez. “Today, our field resources spend a lot of time administering PCs. With VDI, this need disappears. And with the PCoIP Management Console Enterprise Edition, we expect to easily achieve our goal of 7,000+ deployed PCoIP Zero Clients by 2017. We could never do that with physical PCs.”

