



## PCoIP Hardware Accelerator in the Data Center Optimizes Performance on Marshall County Desktops

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JONATHAN BAILEY  
SYSTEMS ADMINISTRATOR  
MARSHALL COUNTY

Located in the state of Iowa, Marshall County is home to a population of more than 40,000 people. At the county seat in Marshalltown, the Marshall County Information Services team has responsibility for supporting the infrastructure that serves all County offices, including the Courthouse, 911 Communications Center, and County Sheriff’s office.

### AT A GLANCE

#### Situation

- County government
- Central data center; 6 remote sites

#### Challenge

- Desktop replacements did not meet every employee’s needs
- Video streaming performance was unacceptable in many use cases
- Limited IT resources called for a standard solution to avoid complexity

#### Solution

- Add a Teradici® PCoIP® Hardware Accelerator in the data center

#### Results

- **Low cost:** Affordable, dynamically shared add-on cards
- **Standardization:** A single standard solution and configuration for all desktops
- **Employee satisfaction:** Excellent video performance; transparent acceleration
- **IT efficiency:** No touch support (set it and forget it)

## Products used

Teradici PCoIP Hardware Accelerator

PCoIP Zero Clients

PCoIP Management Console

## Virtualization platform

Approximately 60 virtual desktops, with plans to increase to 100

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SCOTT WILLIAMS  
IT DIRECTOR  
MARSHALL COUNTY

**Marshall County Information Services (MCIS) thought they had found a cost-effective desktop system replacement.** The extremely busy, self-reliant IT team chose Teradici PCoIP Zero Clients, which were easy to deploy and configure, and could be managed as no-touch solutions. The reliability of the new endpoints was also a benefit since the County’s infrastructure supported emergency response teams, such as the Sheriff’s office, 911 dispatchers, and the County’s 911 Communications Center for management of life-critical services and tornado warnings. However, the VDI deployment leveraging zero client endpoints did not initially satisfy all of the County employees:

- Video performance. Attorneys accessing video evidence and training teams taking online video courses were demanding better video viewing on their virtual desktops.
- Consistent performance from any location. Some of the more mobile County employees needed desktop sessions that could move with them, without sacrificing performance or data security.

**During the pilot test of the zero clients, MCIS investigated alternatives to address the performance issues.** The pilot included zero clients for about 40 users, including the IT department. When users attempted to stream video from their virtual desktops, the performance was unacceptable. The MCIS team looked for a solution that could match the video and multi-media experiences of traditional PC desktops.

Teradici offered an easy-to-deploy solution. After adding a hardware accelerator to their virtual desktop environment in the data center, they again tested video playback. The result was exactly what they had hoped for.

“The Teradici PCoIP Hardware Accelerator looked good when we first tried it, so we started downloading video trailers on desktops,” said Bailey. “On the old thin clients, watching the video was like watching a slide presentation. On the new desktops, with the Teradici PCoIP Hardware Accelerator in the data center, the video was crisp and the frame rate kept up with the live feed.”

**Having passed the pilot tests, the Hardware Accelerator became an essential part of the standard desktop solution for Marshall County.** Today, the majority of the County’s users benefit from the Hardware Accelerator. “Teradici PCoIP Hardware Accelerator just works and is available when we need it,” said Bailey. “End users don’t know it’s there – it’s seamless. I just set it up and forget it. And our tests showed a 30% CPU reduction for video. I was surprised!”

“The thin client replacements and accelerator are being deployed just in time,” said Scott Williams, IT director for Marshall County. “Pairing the Teradici PCoIP Hardware Accelerator with our virtual desktops really saved us. We’re now able to meet the demanding video needs of our users and can purchase much less expensive zero clients to replace thin clients. We save money, and provide a PC-like experience. I also have confidence that Teradici will be around a long time. The Hardware Accelerator will let us maximize the value we get from our VDI deployment and keep the new desktops in place as long as possible.”

