

## Low-Cost Disaster Recovery: Government Contractor relies on Teradici Cloud Access Software for Back-up Desktops in Multiple Clouds

A government contractor has an exclusive contract with a large governmental department. Initially the contractor's employees used physical desktops to run productivity applications. To prevent data theft, employees had to be vigilant about locking office doors and removing or locking up their hard drives.

When planning a move to a new building, the contractor took the opportunity to both improve desktop security and implement a desktop disaster-recovery solution.

### AT A GLANCE

#### Challenges

- Secure access to confidential data and applications
- Build a secure disaster recovery solution
- Meet government requirements for diverse backup environments
- Minimize total cost of ownership for desktops

#### Solution

- Use ultra-secure PColP Zero Clients
- Build two disaster recovery (DR) sites—in a public cloud and an off-site data center
- Back up virtual desktops to disaster recovery sites
- In the event of disaster, engage desktops in DR site, then point PColP Zero Clients to the new site

#### Results

- Increased resilience by backing up desktops to multiple sites with different hypervisors
- Reduced risk of data theft by isolating DR sites in addition to primary desktops – only accessible via encrypted pixel streams
- Avoided the cost and complexity of setting up a VPN
- Achieved same results as comparable disaster recovery solutions at one-third the cost



## **Improved desktop security: Employees now access their virtual desktops from ultra-secure PCoIP Zero Clients.**

The desktops reside in an on-premises virtual desktop infrastructure (VDI) environment. Virtual desktops simplify desktop maintenance and eliminate the burden and risks of locking up hard drives. Employees receive one of three types of desktops depending on their role as either task worker, knowledge worker, or power user working with graphically intense applications.

### **Why Teradici Cloud Access Software for Desktop Disaster Recovery**

#### **Ease of implementation**

Restore Windows or Linux applications or desktops in any cloud, without concern for application-level compatibility.

#### **Low total cost of ownership**

Pay one-third as much as comparable solutions—a result of higher virtual desktop density in the data center, lower infrastructure or cloud costs, and use of PCoIP Zero Clients rather than more costly desktop computers.

#### **Compliance with security regulations**

With PCoIP technology, only AES-256 encrypted pixels travel between the virtual desktop and the zero client. Data stays secure because it never resides on the zero client.

#### **Resilience**

A choice of clouds and hypervisors for backup provides resilience through diversity. Teradici Cloud Access Software supports on-premises, private/public clouds, hybrid, and multicloud environments and is available for a variety of hypervisors, including VMware ESXi and KVM.

### **Teradici PCoIP technology meets government's security and cost requirements:**

- **Strong security:** No actual data travels over the network from the data center or cloud to the PCoIP Zero Clients—only encrypted pixels representing desktop display images. AES-256 encryption secures the pixels, an algorithm approved by the U.S. government National Institute of Standards and Technology (NIST).
- **Low bandwidth requirements:** The PCoIP protocol compresses pixels before encrypting and transporting them, minimizing network bandwidth demand. This means the contractor can lease a less expensive network connection if the VDI environment is later migrated to an offsite cloud.
- **Lower TCO.** PCoIP Zero Clients provide the same experience as a powerful PC, at a fraction of the cost and maintenance overhead. The contractor did not have to purchase compression appliances required by other remote display protocols because compression is built into PCoIP technology. And the contractor avoided the upfront and ongoing costs of a VPN solution.

**Disaster Recovery Solution: A low-cost, multicloud disaster recovery solution using Teradici Cloud Access Software.** One DR site is a public cloud; the other a remote data center with hyperconverged infrastructure and desktops are backed up to always-on servers at both sites. The two sites run different hypervisors so that the same vulnerability won't affect both sites—and Teradici Cloud Access Software works with both hypervisors, ensuring resilience through diversity.

**If disaster takes down the primary VDI, an administrator connects to one of the disaster recovery sites using Teradici Cloud Access Software.** The administrator then remotely engages the secondary DR infrastructure, restores the virtual machines, and uses DNS failover to point the PCoIP Zero Clients to corresponding virtual desktops at the DR location. Employees can resume working within a few hours—with an identical user experience. When the primary site is back online, the administrator points the PCoIP Zero Clients back to the primary VDI infrastructure.

