

Case Study

Leostream Empowers The Hammers Company to Modernize VDI for the US Geological Survey's NASA Mission Control

Customer Profile



In 2008, The Hammers Company, Inc. sought to develop a highly secure and always-on mission control room for the US Geological Survey (USGS) at NASA Goddard Space Flight Center. This initiative involved providing engineers with PCoIP zero clients connected to individual Dell R5400 rack-mount workstations hosted in the data center. These workstations ran both Red Hat Enterprise Linux and Microsoft Windows operating systems, ensuring the mission control room's seamless operation.

As the years went by, the government sought to modernize hardware and lower the total cost of ownership. The request was straightforward: transition from physical workstations to a virtual desktop infrastructure (VDI). This transition aimed to maintain the security and usability features the client enjoyed with the existing physical infrastructure.

Greg Greer, a representative of The Hammers Company, recalls, "We always knew that we needed a connection broker, but our initial environment was very homogeneous." The existing setup featured uniform PCoIP zero clients connecting to physical desktops. However, the new VDI environment, incorporating Windows and Linux virtual machines, called for a more versatile brokering solution. Leostream emerged as the perfect fit due to its compatibility with diverse operating systems and NoMachine NX support.





Modernizing with Security in Mind

To uphold the security and usability standards of the USGS mission control room, The Hammers Company opted for VMware vSphere to host virtual machines. This choice was based on VMware's stability, performance, and previous successful deployments at Goddard and USGS. The VDI environment comprised 44 Windows virtual machines and 60 Linux virtual machines.

They integrated two display protocols to cater to the diverse Windows and Linux environments. For Windows desktops running graphics-intensive applications, they chose the high-performance PCoIP protocol. For Linux desktops, they employed NoMachine NX.

Client devices, primarily Dell Wyse thin clients, were selected based on the number of monitors required by each application. These thin clients ran either Windows or Linux operating systems and included the Leostream Connect client, VMware Horizon View client, and NoMachine client, offering flexibility to connect to either Windows or Linux desktops.

Seamless User Management and Integration

Leostream was crucial in managing Linux desktops effectively, aligning with The Hammers Company's goals. The platform's interconnectivity with Microsoft Active Directory simplified administration by allowing policy assignment based on AD group membership.

Additionally, Leostream accommodated a unique business requirement where users logged into Leostream using their Active Directory credentials and connected to a desktop logged in by a common service account. Leostream not only supported this use case but also provided essential audit tracking to monitor user access to the common desktop.

Key Outcomes and Benefits

The successful deployment of the new VDI solution provided numerous benefits to The Hammers Company and the US Geological Survey:

- High-Performance Display Protocol Support: Users experienced reliable access to high-performance graphical components through Leostream's integration with VMware Horizon View, delivering exceptional performance for applications running in the data center.
- Management of Heterogeneous Environments: Leostream's unique ability to handle both Windows and Linux desktops, various thin client models, and different display protocols proved invaluable, providing a unified solution for diverse needs.
- Granular Policy Assignment: Leostream seamlessly integrated with Active Directory, allowing the organization to fine-tune resource access and display protocols based on user attributes, enhancing resource allocation control.
- ✓ Audit-Level Tracking: The Leostream logs offered detailed records of user activities, facilitating resource usage tracking and meeting security requirements.
- Customer Support and Satisfaction: Throughout the deployment, The Hammers Company received responsive support from Leostream, ensuring a smooth transition and effective use of the platform.





Looking Ahead

The Hammers Company's adoption of Leostream has not only streamlined VDI management but also positioned the organization for future growth and technology advancements. As they continue to evolve, Leostream stands ready to support their ongoing initiatives, ensuring mission-critical success for years to come.

Are you ready to experience all the benefits of what the world's leading Remote Desktop Access Platform offers?

Our expert team is waiting to show you a whole new way to connect your people and your business.



