



Leostream Use Cases

1. Connecting users to graphics-intensive applications

Who needs it?

Engineers, architects, designers, video editors. Generally, highly educated users doing complex tasks.

What industries are they in?

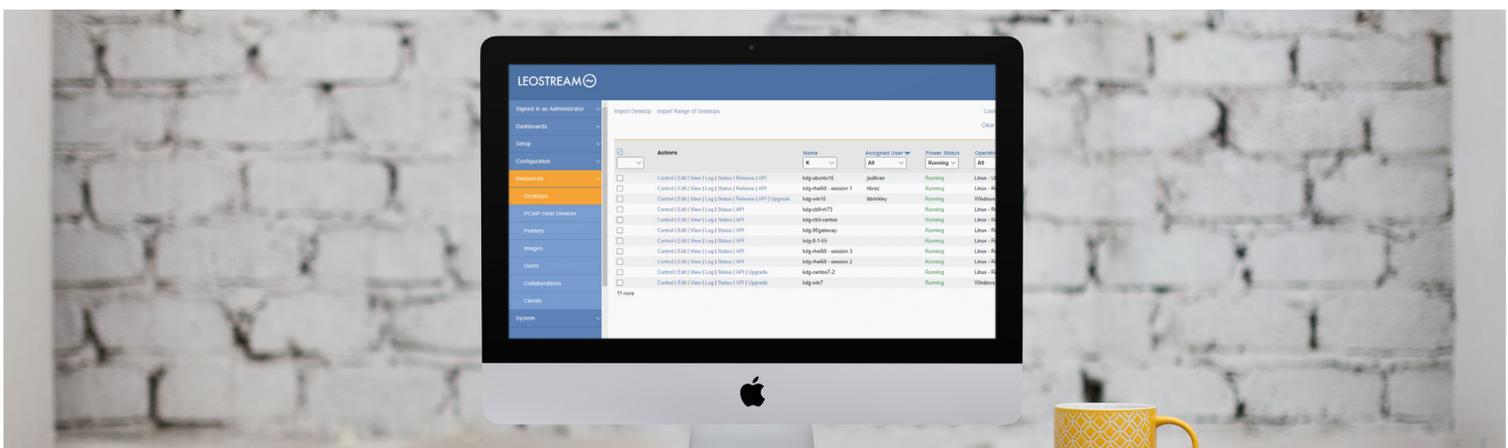
Oil and Gas, Semiconductor design, Media and Entertainment, Automotive, Aerospace, Defense, Healthcare, Education

What technologies do they use?

High-performance display protocols such as HP RGS, Mechdyne TGX, or Teradici PCoIP. Applications often run on Linux. The operating system hosting the application is often installed directly on powerful workstations, racks or towers. If virtualization exists, it's used to improve density by hosting virtual machines on workstations that have a graphics card that supports vGPU, such as those provided by NVIDIA.

How does Leostream help in these environments?

Leostream is the only Connection Broker that supports HP RGS and Mechdyne TGX, and it supports collaboration for each of those protocols as well as connections through the Leostream Gateway. Leostream is well-suited for environments that do not include virtualization, as it can manage connections to any desktop joined to an Active Directory domain or with an installed Leostream Agent. In VMware environments utilizing GPU passthrough, Leostream can automatically vMotion stopped machines to a host with an available GPU, allowing virtual machines to be over-allocated on each host (For example, if the host has 4 GPUs so supports only 4 running VMs, two additional stopped VMs may be located on the host. Leostream will vMotion the stopped VM to a host with an available GPU before powering on the VM.)



2. Connecting users to high-compute environments

Who needs it?

Engineers, architects, designers, video editors. Generally, highly educated users doing complex tasks.

What industries are they in?

Oil and Gas, Semiconductor design, Media and Entertainment, Automotive, Aerospace, Defense, Finance

What technologies do they use?

Very powerful workstations or servers, or virtual machines with a large CPU. Probably working with large data sets hosted on another server. Engineers submit jobs that run on the compute servers. These users don't necessarily need a high-performance display protocol and may use VNC or SSH to connect to the desktop. Almost always, they are connecting to a Linux machine.

How does Leostream help in these environments?

Leostream can treat a Linux server as a multi-user server (similar to a Microsoft Remote Desktop Server / Terminal Server) and can manage VNC sessions for multiple users simultaneously connected to the server. Organizations can purchase a single, powerful workstation and connect multiple users to unique sessions, instead of managing individual desktops.

3. Application Sharing

Who needs it?

Enterprises that use applications with expensive licensing fees. Often, people doing either use case 1 or use case 2.

What industries are they in?

Oil and Gas, Semiconductor design, Media and Entertainment, Automotive, Aerospace, Defense, Education – Think Avid MediaComposer, Simulink/MATLAB, CAD, Schlumberger applications, etc.

What technologies do they use?

Usually a mix of backend operating systems, as well as a mixture of display protocols and client devices. Applications may be cloud hosted or in their data center.

How does Leostream help in these environments?

Leostream pools allow organizations to create groups of desktops running shared applications. For example, release plans can be designed to control how long a user maintains ownership of the application based on if the user disconnects from the workstation, if the user's session is idle, or if a certain amount of time has elapsed. Leostream reports and alerts on pool usage, so IT knows if their resources are under or over utilized, allowing them to either repurpose or purchase equipment, accordingly. In cloud environments, Leostream power control plans can automatically control the power state of the cloud instances, stopping instance when not in use in order to save on cloud compute costs.

4. Cloud migrations and/or expansions

Who needs it?

Large enterprises with existing data center deployments who want to burst or migrate into the cloud for certain workloads.

What industries are they in?

Oil and Gas, Semiconductor design, Media and Entertainment, Automotive, Aerospace, Defense, Education, Healthcare

What technologies do they use?

Azure, AWS, and Google Cloud Platform

How does Leostream help in these environments?

Leostream's hybrid-cloud support allows organizations to manage their existing on-premises deployment in the same console as their cloud resources. Leostream's integrated support for Azure and AWS and our general support for any cloud enables the organization to choose the best cloud for their workload, based on corporate standards or available compute in the cloud. By using the Leostream Gateway, the customer can place the cloud-hosted desktops in a private network, and connect users via the Gateway using either a high-performance client-based protocol or using the built-in HTML5 client.

5. Application Hosting in the Cloud

Who needs it?

Service providers who provide access to applications for their customers or organizations that need to host legacy or single-use applications for their users

What industries are they in?

Hosting providers, MSPs, Education

What technologies do they use?

Azure or AWS. Maybe PCoIP/Teradici Cloud Access Software

How does Leostream help in these environments?

Leostream's support for a wide range of hosting platforms, back-end operating systems, client types, and display protocols allows the organization to build the application hosting environment that best suits their needs. Leostream pools and plans help the organization control, monitor, and manage the user's connection, ensuring that only authorized users have access and that the appropriate actions are taken when the user finishes with the application, such as deleting the desktop and spinning up a clean desktop for the next user.

6. Hosted Linux, macOS, or mixed OS environments

Who needs it?

Enterprises with applications that run on a range of operating systems. For example, engineering applications run on Linux, while Media & Entertainment applications may require Windows or macOS.

What industries are they in?

Oil and Gas, Semiconductor design, Media and Entertainment, Automotive, Aerospace, Defense

What technologies do they use?

Usually a mix of back-end operating systems, as well as a mixture of display protocols and client devices. The remote resources may be physical desktops (such as a Mac mini or a laptop), virtual or physical workstations, virtual machines, or a mixture of all of the above.

How does Leostream help in these environments?

Leostream can manage and monitor connections to Windows, Linux, and macOS desktop, as well as multi-user Windows and Linux sessions. We support a wide range of display protocols and client devices. Organizations can design the environment that best suits their users' needs while managing and accessing everything from a single portal. Leostream is uniquely suited for hosted macOS environments, supporting VNC and PCoIP connections.

7. Managing Connections to Hosted Hardware

Who needs it?

Enterprises moving away from VDI or with no VDI, who are performing a data center refresh and adding new lower-cost hardware form factors such as HPE Moonshot, or who are running workloads that require high-power workstations.

What industries are they in?

Oil and Gas, Semiconductor design, Media and Entertainment, Automotive, Aerospace, Defense, Finance

What technologies do they use?

Little to no virtualization. HPE Moonshot. Dell Workstations. Amulet Hotkey devices. Typically, a high-performance protocol such as RGS, TGX, or PCoIP

How does Leostream help in these environments?

Leostream can manage connections to any machine with an installed Leostream Agent and has integrated support for HPE Moonshot Systems. Leostream also integrates with Active Directory to automatically discover new desktops as they join the domain (and can even perform the domain join). Install desktops on any hardware type, and Leostream can manage the connection using a wide range of display protocols. Desktops can be persistently assigned or shared via a pool. If power consumption is a concern, desktops can be shut down and restarted using Wake-on-LAN.



*"If you're not familiar with Leostream, think of their primary product this way:
It's a connection broker to end all connection brokers."*

Gabe Knuth, Industry Analyst
BrianMadden.com

Customer Testimonials

"Leostream makes it easy to scale up our environment by providing policy assignment based on the user's Active Directory group membership. In addition, Leostream's role-based administration allows us to provide support staff with access to the Administrator tools they need."

Matt Birkner
EC Infrastructure Architect
Freescale Semiconductor

"Without Leostream, it would have been too cumbersome for personnel to launch their workstations — we couldn't expect them to remember IP addresses or hostnames. We couldn't risk employees giving up because they failed to get passed a complicated login. Using the connection broker couldn't be easier and it really made it a no-brainer for rolling out the entire solution."

Dick Green
System Analyst
Ballinger

About Leostream

Leostream, a vendor-independent software company, is a driver in the evolving virtualization and hosted resources space. Our flagship product, The Leostream Connection Broker, provides a comprehensive and scalable solution for organizations to deliver and manage Microsoft Windows and Linux desktops, remote sessions, and applications hosted in a private cloud, public cloud, or hybrid cloud environment through a single-pane-of-glass management interface. Leostream supports a wide range of high-performance display protocols and client devices to seamlessly integrate into virtually any IT environment. Leostream works closely with industry leaders such as: AWS, Microsoft, Microsoft Azure, OpenStack, Hypergrid, HP, HPE, VMware, Citrix, Dell, Cisco, Red Hat, SUSE, Canonical, Mechdyne, Teradici, and NICE to help deliver best-in-class hosted resources management.

Founded in 2002, Leostream Corporation is based in Waltham, Massachusetts. Leostream has hundreds of customers