



Managing Connections to Applications Hosted in Microsoft Azure using Microsoft RemoteApp and the Leostream Connection Broker

INTRODUCTION

[With the announcement that Microsoft Azure has deprecated Azure RemoteApp support](#), IT professionals are scrambling to find a replacement solution. Microsoft has pointed customers to a Citrix XenApp solution, but it was met with backlash from the user base as Citrix has proven itself too clunky and too expensive for the SMB.

The Leostream Connection Broker provides a comprehensive solution for RemoteApp in Microsoft Azure. Historically, Azure RemoteApp required setting up multiple components of the Microsoft RDS stack, and provided no HTML5 support.

With Leostream it's easy to set up a RemoteApp server in Microsoft Azure, and access remote applications securely with the Leostream Gateway – which also includes an option for HTML5 connections.

The Leostream Connection Broker manages it all and scales to meet the needs of the enterprise, as well as the SMB, for a fraction of the cost of Citrix.

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Why Host An Application?

As the public cloud matures into a viable computing platform for desktops and hosted resources, and enterprise adoption rates continue to rise, IT professionals are turning to cloud-hosted applications as a means to provide tools for collaboration and remote access. Additionally, cloud hosting provides a platform for legacy or EOL applications that are still in active use.

Benefits of cloud-hosted applications include –

- Anywhere access from most devices with connectivity – including repurposed hardware
- Scalability to meet variable demand
- Support for multiple sessions of the application

Why Host Applications in Microsoft Azure?

Microsoft Azure offers some unique advantages over AWS or Google Cloud Platform for application hosting, particularly in the case of graphics-intensive applications.

Azure NC-based instances are powered by NVIDIA Tesla® K80 GPUs and provide compute power. Administrators can use these instances to run high-performance computing jobs. Additionally, there is the option to utilize Remote Direct Memory Access over InfiniBand to scale jobs across multiple instances. InfiniBand provides nearly bare-metal performance even when scaling out across hundreds of machines.

On the flip side, Azure NV-based instances are powered by NVIDIA Tesla M60 GPUs and provide NVIDIA GRID capabilities. These instances are able to run hardware-accelerated workstation applications for graphics-intensive applications. These instances support applications that use both DirectX and OpenGL.

How to Enable RemoteApp on Azure

RemoteApp is a special mode of Microsoft RDS available in Windows Server 2008 R2 and later that enables applications hosted on a server (in this case, a Microsoft Azure instance) to look and feel as if they are running locally on a users' device. Additionally, RemoteApp enables multiple session of the same application for shared user access. This is particularly advantageous in the case of expensive and compute-intensive applications.

By enabling RDS services on a Windows Server instance, you can activate RemoteApp . Once RemoteApp is active, applications can be published on the RDS enabled desktop.

What is the Leostream Gateway?

The Leostream Gateway is a stand-alone appliance that provides two key features –

- Channels traffic between RemoteApp in a locked down network, such as a VPC within Azure, and the users' client device
- Provides an HTML5 client that can connect users to a RemoteApp application from any device with connectivity

The Leostream Gateway allows you to keep your resources off the internet until the appropriate user needs to connect, and then allows access to the resource only through a random port.



How Does the Leostream Gateway work with the Leostream Connection Broker to enable Remote App in Azure?

The Leostream Connection Broker establishes the user connections to RemoteApp in Azure and provisions new RemoteApp-enabled server instances from an image hosted in Azure. It is your single-pane-of-glass management interface for Azure compute instances, as well as any other computing resources across a range of hypervisors and cloud computing platform. The Leostream Connection Broker functionality in Azure includes –

- Create pools of available Azure VM resources
- Terminate cloud-hosted instances when users log out
- Manage the power state of Azure VMs and user access
- Maintain user access logs and monitor which Azure VMs are used by which users
- Maintain usage statistics for pools of machines
- Build pools of cloud-hosted desktops from templates or as linked clones from snapshots, or build pools of cloud-hosted machines from images available in the cloud platforms
- Manage user roles and session control levels

Additionally, the Leostream Gateway acts as a proxy to channel a secure connection from the client device to the RemoteApp server hosted on Azure. It also provides an HTML5 option for user connections from any device with connectivity. This is an improvement over Azure RemoteApp as it did not have an HTML5 option for in-browser application access.

The Leostream solution for Azure is scalable from the SMB to the enterprise and is much more cost-effective than the Citrix XenApp solution. Moreover, the Leostream Gateway includes the additional HTML5 functionality for application access from a wide range of client devices. Leostream will soon be available in the Azure marketplace and will include a simplified licensing scheme for easy billing alongside your Azure invoice.



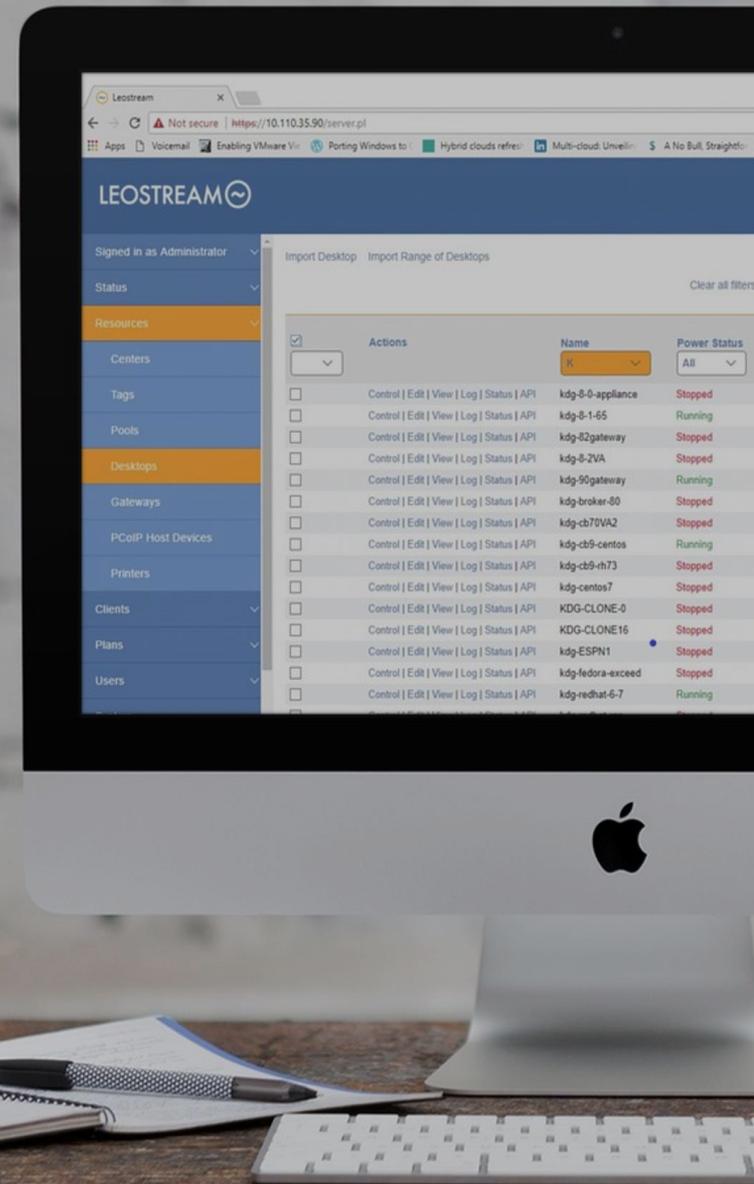
Whitepaper

Why and How to Deploy Graphics-Rich VDI on Microsoft Azure

Download

Next Steps

For more information on how Leostream pairs with Microsoft Azure to provide a RemoteApp access solution that is both scalable and cost-effective, please contact sales@leostream.com or request a free trial of the Leostream Connection Broker and the Leostream Gateway.

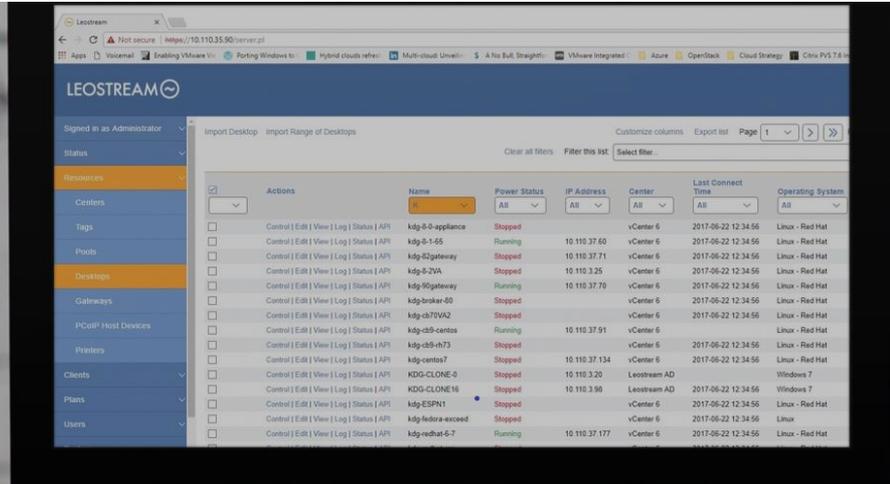




30 Day Free Trial

Discover how the Leostream Connection Broker and Leostream Gateway can help you make the most of RemoteApp in Microsoft Azure

[Learn More](#)



Suggested Resources



How a Connection Broker Simplifies Hosted Desktop Environments
[Download Now](#)



Leostream as a Remote Access Solution
[Download Now](#)

About Leostream

Leostream provides the critical connection-broker technology required for enterprises to achieve successful large-scale hosted desktop implementations. The Leostream Connection Broker is the industry's most widely deployed vendor-independent connection broker, enabling enterprises to integrate the complex array of clients, back-end systems and protocols required for successful hosted desktop and application deployments. Leostream is based in Waltham, Mass.

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