LEOSTREAM™

Free full-function trial
leostream.com/trial
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Connection Broker
Detailed Product Features

Direct Access to Hosted Desktops
Direct access via Web Browsers, Fat Clients, or Thin Clients to remote Microsoft® Windows® (2000, XP, or Vista®) or Linux® desktops running on physical or virtual hosts – removing the possibility of any single point of failure.

Single Sign-On
Automatic log in to the remote Windows session when using RDP, VNC, or Teradici™ PC-over-IP™ remote viewer protocols. Eliminates the need to re-enter passwords, ensuring a smooth end-user experience.

Remote Desktop Web Connection
Use Microsoft Internet Explorer® to access a Hosted Desktop once authentication has occurred (either directly or via an SSL VPN). An ActiveX® RDP viewer is then loaded and the user is directly signed into the remote Windows session without installing software.

Thin Client Support
Tight integration with CompuMaster, Cranberry, Devon IT, IBM® CP20 (RDP and PC-over-IP support), IGEL®, Neoware™, and Wyse® Thin Clients enables a secure and seamless end-user experience.

Windows Client Support
Enables direct sign-on to the Hosted Desktop when running a Leostream Connect client on a Linux or Windows desktop. Supported Windows operating systems include 32- and 64-bit XP and Vista, as well as Windows 2000 and 2003.

Sun Ray™ Support
Support for the Sun™ Sun Ray system of desktop units (DTUs) and Sun Ray Server Software (SRSS), providing for the integration of Sun's system of stateless, smart card-enabled thin clients.

Teradici™ PC-over-IP™ Support
Management of Teradici powered PC-over-IP: full remote workstation management without the support, power, security, moves, and changes required by the use of hot and noisy Fat Clients.

Hardware-Based SSL VPN Support
Tight integration with Cisco®, F5®, and Juniper Networks® SSL VPNs, providing Single Sign On access to the Hosted Desktop from the Internet with three-factor authentication (RSA® token). Provides excellent scalability, allowing the addition of access policies to the SSL VPN while keeping the existing security model.

Hosted Desktop Provisioning
Provides automated virtual machine creation from templates and integration with 3rd-party provisioning tools. Features include threshold-based Hosted Desktop creation and deletion based on configurable upper and lower limits, reducing required storage resources.

Hosted Desktop Pooling
Built around the concept of cascading resource pools, groups of similar Hosted Desktops can be assigned to users for a pre-determined period of time. The Connection Broker can nest resource pools, making it simple to use pool characteristics, such as operating system or Hosted Desktop name, for segmentation. Enables three Hosted Desktop allocation models: many users sharing a limited pool of Desktops; an individual user receiving access to one Desktop; or an individual user being presented with access multiple Desktops.

Session Stickiness
Provides the ability to associate a particular Hosted Desktop with a particular user until an event, such as log out or session time-out, causes the Hosted Desktop to be returned to the Pool. Enables users to return to their Hosted Desktop even when they are disconnected for some period of time, while still ensuring that unused Hosted Desktops are returned to the Pool.

Location Based Policies
Assigns Hosted Desktops based on User ID, location, and type of client, so several different Hosted Desktops can be assigned to the same user. Allows different remote viewer protocols to be offered depending on the user location or client type.

Dynamic Management of VM State
Provides the Hosted Desktop power state (start, stop, suspend, and reboot) according to User Policies, enabling the reduction of both hardware and license costs.

Multi-Protocol Support
Supports Microsoft RDP v5.0 and v6.0, Citrix™ ICA™, HP® RGS, VNC (UltraVNC, TightVNC, and RealVNC®), Radmin®, and VMware® Remote Viewers. Native viewers enable the use of Linux and Windows 2000, XP, and Vista Hosted Desktops.

Remote USB Support
Enables policy-based control of USB devices such as PDAs, memory sticks, drives, and scanners attached to the local Windows desktop machine and used within the Hosted Desktop environment. USB traffic is sent across a separate network connection rather than through an RDP virtual channel, so it is available to all remote viewer protocols. Bursts of USB traffic do not directly take bandwidth from the RDP video, keyboard, and mouse channels, ensuring a seamless and uninterrupted end-user experience.

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Dynamic Client Configuration

Sets client configuration, including remote viewer settings and the Leostream Connect user interface, on a per Policy basis, enabling the client setup to be highly customized to the device, user, and location.

Native VMware® VirtualCenter Support

Simultaneously supports multiple instances of a wide variety of virtualization layers (Citrix XenServer™, VMware ESX 2.5 and 3.x, VMware Server, VMware VirtualCenter 1.4 and 2.0), enabling the deployment of hybrid systems. The Connection Broker is compatible with VMware's "DataCenter" functionality, High Availability (HA), and Distributed Resource Scheduler (DRS), enhancing the availability of virtual Hosted Desktops.

Physical Machine Support

Uses SLP (Service Location Protocol) or Microsoft Active Directory® service to discover computers and then adds them to the Connection Broker list of Hosted Desktops. Allows users to be dynamically assigned either to physical or virtual machines in an identical manner, enabling mixed deployments.

Microsoft Terminal Services

Provides the ability to assign users to Microsoft Terminal Services sessions alongside a Hosted Desktop session, enabling simultaneous access to both sessions.

Multi-factor User Authentication

Supports multi-factor user authentication, including smart cards (with Wyse WTOS thin clients), client-side browser certificates, NTLM, CAS, and biometric (fingerprint) authentication, enabling two- and three-factor user authentication.

External Authentication

Enables user authentication against one or more authentication servers including: Microsoft Active Directory (support for NTLM), Novell® eDirectory™ (support for ZenWorks®), or open LDAP servers. Different types of authentication can be combined and used in parallel, and no changes to authentication servers are required, simplifying deployment.

User Activity Monitoring and Logging

Provides administrators full system monitoring and logging, allowing desktop use and user activity to be monitored. Also shows current users logged into Hosted Desktops at any given moment, and if necessary, allows administrators to log out a particular user.

Scalability and Failover

Up to one million Hosted Desktops can be managed by clustering Connection Brokers (connected to a common external Microsoft SQL Server® 2005 database) and using a load balancer to spread the load. A configuration such as this would use up to 64 Connection Brokers spread across multiple virtualization hosts. A more common deployment uses "Pods" containing 3,000 to 6,000 Hosted Desktops, typically managed by three Connection Brokers and associated Hosted Desktop Infrastructure. Smaller "Pods" can be scaled out horizontally using Leostream Global User Redirection functionality. In the case of failure, a particular user session is simply reassigned to another Connection Broker. There is no service interruption. A single Connection Broker can handle 10 log ins per second when using the processing power of a single virtual 3GHz processor. Adding more Connection Brokers to the cluster, or assigning more processing power to an individual Connection Broker, linearly scales out the number of log ins per second, allowing hundreds of users to log in almost simultaneously.

Global DNS Integration

Integrates tightly with your Global DNS and local load balancers, providing system health information to Cisco, Citrix, and F5 load balancers, so users can be switched to the right Connection Broker in the right data center. Uses Service Location Records (SRVs) in DNS to implement true, dynamic, client-side load balancing, and system health data to implement server-side load balancing. Provides significant flexibility, reliability, and consistent end-user experience irrespective of the end-user device.

Global User Redirection

Automatically and transparently redirects travelling users to their home Connection Broker and Hosted Desktop. Users are normally assigned a Hosted Desktop located in the most geographically proximate data center. Global User Redirection ensures users outside their assigned geographic location can always access their Hosted Desktops. Redirection can detect data center availability and dynamically redistribute users among locations.

Virtual Appliance

The Connection Broker is distributed as a Virtual Appliance. It can be rapidly set up, duplicated, moved, and backed-up.