



Connection Broker

Where Virtual Desktops Meet Real Business

Release Notes

Version 6.x
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Connection Broker 6.5.35 – Release Notes

Connection Broker 6.5.35 is available as an update to any Connection Broker version 6.x.

 Due to database changes, if you are using a cluster of Connection Brokers older than version 6.5, you must update to version 6.4.58 via the **Check for updates** option on the **> System > Maintenance** page before proceeding to update to Connection Broker 6.5. After you have updated to Connection Broker 6.4.58, use the **Check for updates** option to update to 6.5. Any Connection Brokers not running in a clustered environment *can* be directly updated to version 6.5.

- See “Updating Connection Broker 6.0 through 6.4” in the [Connection Broker Administrator’s Guide](#) for instructions on updating any Connection Broker 6.x version.
- See “Updating Connection Broker 6.5” in the [Connection Broker Administrator’s Guide](#) for instructions on updating Connection Broker version 6.5.

To upgrade from Connection Broker 5.x, you must first install a new Connection Broker 6.3 virtual appliance then use the **Check for updates** option to update to version 6.5. See [from Version 5.3.x to Version 6.3](#) for detailed instructions.

Connection Broker 6.5.35

Features

- **Leostream Components:** The Connection Broker includes updated versions of the point releases for the following Leostream components:
 - Leostream Connect 2.6.118 – Microsoft Windows version: Improvements for USB device redirection and run-as-shell mode.
 - Leostream Connect 2.0.52 – Java version: The **Test** button now displays “Connection Broker unreachable” if an invalid Connection Broker address is entered in the **Options** dialog.
 - Leostream Agent 4.6.89 – Microsoft Windows version: Minor update, including improvements to the location-based printing feature.
 - Leostream Agent 1.2.12 – Java version: Minor update to resolve an issue when running with JDK 1.5.
- **Loading Users:** The **Load Users** feature for authentication servers has been expanded to include options for refining the search for users to load.
- **HP Blade Location:** The display for HP Blade locations has been simplified on the **> Resources > Desktops** page. Blade locations no longer require the administrator to hover over the desktop row to see the entire blade location. See the [Connection Broker Administrator’s Guide](#) for a description of the new blade location format.
- **Web Page Performance:** A number of performance improvements have been added to the Administrator Web interface, to speed up page rendering when the Connection Broker is managing a large number of users and the **Login name unique across domains** option is not selected on the **> System > Maintenance** page.
- **Work Queue Performance:** New work queue performance enhancements improve job prioritization during login storms, to improve the user experience during logins.

Resolved Issues


- When an end user logs into Leostream Connect or the Leostream Web client, the **Release** option no longer appears for desktops that are not currently assigned to that user.
- Location-based override of the Protocol Plans are now correctly applied. The **> System > Logs** page now

includes a log message when the protocol plan is overwritten based on the client location.

- The `REMAPPED_IP` dynamic tag is now correctly parsed and replaced.

Connection Broker 6.5.27 – Release Notes

Connection Broker 6.5.27 is available as an update to any Connection Broker version 6.x that is not running in a Connection Broker cluster. See “Updating Connection Broker 6.0 through 6.4” in the [Connection Broker Administrator’s Guide](#) for detailed instructions.

 Due to database changes, if you are using a cluster of Connection Brokers older than version 6.5, you must update to version 6.4.58 via the **Check for updates** option on the **> System > Maintenance** page before proceeding to update to Connection Broker 6.5. After you have updated to Connection Broker 6.4.58, use the **Check for updates** option to update to 6.5.

To upgrade from Connection Broker 5.x, you must first install a new Connection Broker 6.3 virtual appliance then use the **Check for updates** option. See [from Version 5.3.x to Version 6.3](#) for detailed instructions.

Connection Broker 6.5.27

Features

The following features were added to Connection Broker 6.5. See the referenced section in the [Connection Broker Administrator’s Guide](#) for more information.

- **Enhanced Web Client**
 - The look-and-feel of the Leostream Web client has been enhanced to improve the end-user experience and usability (see **Chapter 15: Accessing Resources via the Web Client**).
 - The Web client now honors settings for registry plans, printer plans, and user role settings for adding Local users and adding users to the Remote Desktop Users group.
- **Monitor Layouts/Display Plans:** When updating from a previous Connection Broker version, monitor layouts on the **> Clients > Monitor Layouts** page have moved to the **> Plans > Display** page.
 - You can now create display plans that automatically match the layout and resolution of the client displays, within the limits of the display protocol used to connect to the desktop (see **Display Plans to Match Client Displays**).
 - A **Default** display layout now applies to all clients that are not assigned a specific display layout (see **The Default Display Plan**).
- **Connection Broker Updates:** The workflow for updating the Connection Broker has changed. The Connection Broker now automatically indicates when an update file is available (see **Updating the Connection Broker**).
- **Citrix XenApp Support:** The Web client can now use the Citrix Client for Java when launching XenApp applications and desktops (see **Citrix XenApp ICA**).
- **Client Locations:** Client locations can now be defined using subnet maps specifying a network mask length and a target range for the source and destination (see **Using Subnet Masks to Create Locations**).
- **Active Directory Centers:**
 - New support the **Continuously apply auto-tags** option (see **Active Directory Centers**).

- The **Monitor desktop power state** option has been replaced with the **Power state refresh interval** option. The new refresh interval allows you to specify how often the Connection Broker polls the remote viewer and Leostream Agent ports on the remote desktop to determine each desktop's power state (see **Active Directory Centers**).
- **Pools:**
 - Pools can now be created based on vCenter Server clusters (see **Defining Pools Using VMware vCenter Server Clusters**).
 - Additional information about the power status of the desktop and Leostream Agent is now shown on the **> Resources > Pools** page (see **Displaying Pools**).
- **Policy Filters:**
 - Per-pool and policy-wide desktop filters in a policy can now be created using the custom attributes defined in VMware vCenter Server. Up to four custom attributes can be used (see **Specifying VMware vCenter Server Clusters for Desktop Filters and Policy Filters**).
 - Dynamic tags can now be used when defining policy filters, including special dynamic tags that allow you to build filters based on user and client attributes (see **Using Dynamic Tags in Policy Filters**).
- **WebHook Support:** You can now specify custom WebHooks to call when the user logs into the Connection Broker, allowing you to perform custom actions for every user login (see **Using WebHooks in Policies**).
- **Authentication:**
 - A new setting on the **> System > General Configuration** page allows you to explicitly specify if the **Domain** field is a drop-down menu or edit field on the **Login** pages for Leostream Connect and the Leostream Web client (see **Enabling Authentication Server Features**).
 - You can now specify a default authentication server to display the first time Leostream Connect or the Leostream Web client runs on a particular client device (see **Populating the Domain Drop-Down and Setting Default Domain**). Previously, the client always displayed either **<Any>** or **<None>** depending on the setting for the **Login name unique across domains** field. Now, the default domain is displayed.
 - When the **Login name unique across domains** field is turned off on the **> System > General Configuration** page, user names are now listed with their domain, allowing you to distinguish different users when hard-assigning desktops or viewing users assigned to desktops on the **> Resources > Desktops** page.
- **Local User Support:**
 - The Connection Broker can now automatically add local users to remote Windows desktops, supporting, simplifying deployments for non-domain users (see **Session Permissions**).
 - The Connection Broker can now add users to the Remote Desktop Users group as either a domain or local user. Previously, the Connection Broker always added the user as a domain user (see **Session Permissions**).
- **Search**
 - The new **Search** page allows you to quickly locate particular objects in the Connection Broker (see **Global Search**).
 - Table-level searches for desktops, users, and clients allow you to quickly find an object in these pages (see **Per-Page Search**).
- **Roles:** A new **Load User** authentication server permission gives read-only access to the authentication servers while allowing a user with this role to load users from this authentication server (see **Setting Permission Levels**).

- **Power Monitoring:**
 - When manually importing desktops, if the Connection Broker cannot determine the desktop's power state, the state is now displayed as **Unavailable**. Previous Connection Broker versions reported these desktops as **Stopped**.
 - The Connection Broker now monitors the power state of physical desktops in an Active Directory center by running the `poll_power_state` job, separate from the regular center refresh job. When polling for the power state, the Connection Broker now checks the remote viewer ports and Leostream Agent port, to determine if the desktop is running. If no ports are open, the Connection Broker marks the desktop as `Stopped` (see **Determining Power State for Physical Desktops**).
- **Cisco VPN Client Support:** Leostream Connect can now automatically establish a VPN tunnel using a Cisco Systems VPN client (see **Using the Cisco VPN GUI with Leostream Connect**).
- **Logging and Auditing**
 - The **Log Settings** page no longer provides options to turn off logging for certain object types (see **Customizing Log Levels**).
 - New **Events** column on the **> System > Log** page allows logs to be sorted and searched for particular activity, such as user login, desktop assignment, and more (see **Available Log Characteristics**).
 - The Connection Broker now logs all changes made to the Connection Broker Administrator Web interface (see **Using Logs to Track Connection Broker Configuration Changes**).
 - Custom filters can now be created for the **> System > Log** page, allowing you to create customized reports (see **Filtering the Log List**).
- **Job Queue**
 - Pending work queue jobs can now be rescheduled to ensure that less critical jobs are not run during login storms (see **Rescheduling Pending Jobs**).
 - Work queue jobs associated with Connection Brokers that are no longer part of a Connection Broker cluster can now be removed from the job queue (see **Purging Pending and Running Jobs**).
- **Connection Broker Metrics:** Each Connection Broker now has an associated `heartbeat` job, which is used to determine if Connection Broker Metrics should be displayed for that Connection Broker. Connection Brokers that skip two heartbeats can be hidden in the Metrics report (see **Reporting Connection Broker Metrics**).
- **Bulk upload:** The new **Upload** column for users and clients allows you to distinguish users and clients that were bulk uploaded from the **> System > Maintenance** page (see **Uploading Users**).

Resolved Issues

- The Connection Broker now consistently syncs the networking information stored in the database and used by the Linux virtual appliance.
- When downloading the Leostream technical support logs, the postgres files are no longer included.
- A `system_check` job now exists for each Connection Broker in a cluster. This allows clustered Connection Broker to more efficiently clean out stale user-session state files, resulting in faster reboot times.

Database Changes



Due to database changes, when using a cluster of Connection Brokers, you must update Connection Broker 6.x to version 6.4.58 before proceeding to update to Connection Broker 6.5 or higher.

Version 6.5.27 adds fields to the following tables in the Connection Broker databases.

- broker
- client
- display_layout
- log
- plan_protocol
- pool
- user
- vm

Leostream Connect 2.6.109 – Microsoft Windows Version

Version 2.6 is the current version of Leostream Connect for Windows operating systems. This point release includes the following enhancements.

- Leostream Connect now provides the Connection Broker with information about the number and resolution of displays attached to the client, in support of the new Connection Broker display plan that automatically matches the remote desktop to the displays connected to the clients.
- New installations of Leostream Connect honor the default domain specified in Connection Broker 6.5.
- Performance enhancements for USB device management.
- Leostream Connect can now automatically establish a VPN tunnel when using a Cisco Systems VPN client.
- New `-login` and `-logout` command line parameters allow you to forcefully log out or switch users.
- Leostream Connect shell-mode enhancements:
 - New quick-key combination for opening the **Options** dialog, allowing you to modify the Connection Broker address and access USB options when working in shell mode.
 - New quick-key combination for exiting shell mode.
 - Leostream Connect shell mode now provides a popup menu that provides access to options previously available only in the Leostream Connect system tray menu.
 - When running in shell mode, Leostream Connect now waits for the network to be available before opening the **Login** dialog.
- Client-side credential passthrough is now available for Windows Vista and Windows 7 clients using the Leostream Credential Provide.
- Leostream Connect now stores logs in one of the following locations, in order:
 - The location specified in the **Log** tab on the **Options** dialog
 - The Leostream Connect installation directory
 - A directory named `temp` inside of the Leostream Connect installation directory
 - The `temp` directory inside the user folder for the currently logged in user
 - The system `root` directory
- The **About** window is now included in the **Options** dialog.

Leostream Connect 2.0.51 – Java Version

Version 2.0 is the current version of Leostream Connect for Linux operating systems.



Version 2.0 obsoletes the tabbed dialog version of Leostream Connect. Existing installations that use the tabbed dialog will automatically switch to the standard dialog format. See the [Leostream Connect Administrator's Guide and End User's Manual](#) for complete information on these features.

This release includes the following enhancements.

- Leostream Connect no longer includes documentation in the `index.html` file. All documentation is included in this Administrator's guide.
- Enhanced **Options** dialog includes options to set the Connection Broker address, specify logging configuration, and enter paths to remote viewers.
- Support for installing on client devices running Apple Mac OS X.
- New installations of Leostream Connect honor the default domain specified in Connection Broker 6.5.
- Support for the **Allow unauthenticated logins (hides password field)** option on the Connection Broker > **System > General Configuration** page. By enabling this feature, end-users can authenticate using fingerprint logins on their remote desktops.
- Leostream Connect can now be automatically upgraded using the options on the Connection Broker > **System > General Configuration** page.
- The **Options** dialog can now be accessed from the **Login** dialog by pressing `Ctrl+Shift+O`.
- New option to display a warning if the `Caps Lock` key is on and the user is focused on the **Password** field in the **Login** dialog.
- New Leostream Connect sidebar for connecting and disconnecting from resources, as well as attaching USB devices to desktops launched using HP RGS.
- When specifying the path to a remote viewer on the **Options** dialog, pressing `Ctrl+O` opens a **Browse** dialog for the viewer with the cursor's focus.
- New option to include a customized link on the **Login** dialog.
- New graphical log viewer available for accessing logs in environments where command line access is not available.

Leostream Agent 4.6.76 – Microsoft Windows Version

Version 4.6 is the current version of Leostream Agent for Windows operating systems. This point release contains the following enhancements.

- The **Enable single sign-on for PCoIP and VNC** task now enables single sign-on for desktops running a Microsoft Vista and Windows 7 operating system when connecting using VNC or Teradici PC-over-IP protocols.
- The Leostream Agent can now create local user accounts on the remote desktop, and add these users to the Local Users group and Remote Desktop Users group.
- The Leostream Agent now stores logs in one of the following locations, in order:
 - The location specified in the Leostream Agent **Log Settings** dialog
 - The Leostream Agent installation directory
 - A directory named `temp` inside of the Leostream Agent installation directory
 - The `temp` directory inside the user folder for the currently logged in user
 - The system `root` directory

Leostream Agent 1.2.11 – Java Version

Version 1.2 is the current version of Leostream Agent for Linux. This point release contains the following enhancements.

- Support for installation on Novell SUSE Linux Enterprise remote desktops.
- The **Upgrade** option on the > **Resources** > **Desktops** page can now be used to upgrade the Leostream Agent on Linux desktops.
- The Sun Ray components are no longer included in the Leostream Agent installation package. Sun Ray components are now part of the Leostream Connect installation package (see the [Leostream Installation Guide](#) for more information).

Connection Broker 6.4.58 – Release Notes

Connection Broker 6.4.48 is a minor update to version 6.4.21.



Due to database changes, when using a cluster of Connection Brokers 6.4 or older, you must update to version 6.4.58 before proceeding to a higher Connection Broker version.

Connection Broker 6.4.58

Features

- **Leostream Components:** The Connection Broker includes updated versions of the point releases for the following Leostream components:
 - Leostream Connect 2.5.67 – Microsoft Windows version
 - Leostream Connect 1.5.116 – Java version
 - Leostream Agent 4.5.43 – Microsoft Windows version
 - Leostream Agent 1.1.47 – Java version
- **Authentication:**
 - A new setting on the > **System > General Configuration** page allows you to explicitly specify if the **Domain** field is a drop-down menu or edit field on the **Login** pages for Leostream Connect and the Leostream Web client (see **Enabling Authentication Server Features**).
 - You can now specify a default authentication server to display the first time Leostream Connect or the Leostream Web client runs on a particular client device (see **Populating the Domain Drop-Down and Setting Default Domain**). Previously, the client always displayed either **<Any>** or **<None>** depending on the setting for the **Login name unique across domains** field. Now, the default domain is displayed.
 - When the **Login name unique across domains** field is turned off on the > **System > General Configuration** page, user names are now listed with their domain, allowing you to distinguish different users when hard-assigning desktops or viewing users assigned to desktops on the > **Resources > Desktops** page.
- **Local User Support:**
 - The Connection Broker can now automatically add local users to remote Windows desktops, supporting, simplifying deployments for non-domain users (see **Session Permissions**).
 - The Connection Broker can now add users to the Remote Desktop Users group as either a domain or local user. Previously, the Connection Broker always added the user as a domain user (see **Session Permissions**).
- **Loading Users:** The **Load Users** feature for authentication servers has been expanded to include options for refining the search for users to load.
- **Roles:** A new **Load User** authentication server permission gives read-only access to the authentication servers while allowing a user with this role to load users from this authentication server (see **Setting Permission Levels**).

- **HP Blade Location:** The display for HP Blade locations has been simplified on the > **Resources > Desktops** page. Blade locations no longer require the administrator to hover over the desktop row to see the entire blade location. See the [Connection Broker Administrator's Guide](#) for a description of the new blade location format.
- **Web Page Performance:** A number of performance improvements have been added to the Administrator Web interface, to speed up page rendering when the Connection Broker is managing a large number of users and the **Login name unique across domains** option is not selected on the > **System > Maintenance** page.
- **Work Queue Performance:** New work queue performance enhancements improve job prioritization during login storms, to improve the user experience during logins.

Resolved Issues

- **Critical:** Resolves issues stemming from changes in the Connection Broker database. When running Connection Brokers in a cluster, you must update to version 6.4.58 before continuing to update to higher Connection Broker versions.
- When an end user logs into Leostream Connect or the Leostream Web client, the **Release** option no longer appears for desktops that are not currently assigned to that user.
- Location-based override of the Protocol Plans are now correctly applied. The > **System > Logs** page now includes a log message when the protocol plan is overwritten based on the client location.
- The `REMAPPED_IP` dynamic tag is now correctly parsed and replaced.
- The Leostream Web client now waits for a stopped or suspended desktop to power up before attempting to establish a connection.

Database Changes

The `ad_attribute` table now stores each attribute in a separate row, instead of combining all attributes into a multi-valued attribute in one field. This change improves the performance of policy filters that use the **is equal to** option.

Connection Broker 6.4.21 – Release Notes

Connection Broker 6.4.21 is a minor update to version 6.4.17.

Connection Broker 6.4.21

Features

- **Leostream Components:** The Connection Broker includes updated versions of the point releases for the following Leostream components:
 - Leostream Connect 1.5.116 – Java version: See [Connect 1.5.116 – Java Version](#)
 - Leostream Agent 1.1.47 – Java version: All files are properly formatted for Linux operating systems; `^m` no longer appears in any files.
 - Leostream Agent 4.5.43 – Windows version: Addresses an issue with the firewall dependency on Windows operating systems.
- **Release Plans:** New option to indicate how the Connection Broker should handle a disconnect action when the Leostream Agent is not present or reachable on the remote desktop to verify the user's state. Previously, unverified disconnect actions were always treated as a logout. Release plans now allow you to indicate if an unverified disconnect should be treated as a logout or disconnect.

- **USB Devices and HP RGS:** When using the Java version of Leostream Connect, a new dynamic tag allows you to select which remote desktop has access to USB devices attached to the client device (see “USB Passthrough with HP RGS” in the [Leostream Connect Administrator’s Guide and End User’s Manual](#)).

Resolved Issues

- In Sun Ray environments, the Connection Broker correctly switches to the appropriate Sun Ray Server when a list of hosts is provided in the **Sun Ray Details** section of the VMware vCenter Server center. See the [Leostream Thin Clients Guide](#) for more information on configuring the Connection Broker for use in Sun Ray environments.
- In cases where the default **All Printers** printer plan is empty, i.e., no Printer Repository center is defined, the Connection Broker no longer removes the network printers that were manually added to the remote desktops.
- When using 1E WakeUp to power up physical desktops, the Connection Broker no longer performs a NetBIOS name lookup. To obtain the NetBIOS name, the Connection Broker queries the Active Directory center that registers this desktop. If the desktop’s Active Directory record does not contain an accurate NetBIOS name, the wake-up command will fail.
- In cases where the Connection Broker does not accurately know the power state of a physical desktop, for example, if the physical desktop does not have a running Leostream Agent, the Connection Broker now always sends a call to the 1E WakeUp server to power up the machine when the user is assigned to that desktop.

Database Changes

Version 6.4.21 adds a field to the `plan_release` table in the Connection Broker database. In addition, version 6.4.21 makes a type change to a field in the `skin` table.

Leostream Connect 1.5.116 – Java Version

- New `lc.conf` file parameter `read_username_from_smartcard` allows Leostream Connect to automatically populate the **User name** field on the login dialog with the username on a Sun Ray DTU Java smartcard.
- The Leostream Connect sidebar now contains options for attaching all USB devices to the remote session when connecting to remote desktops using HP RGS (see “USB Passthrough with HP RGS” in the [Leostream Connect Administrator’s Guide and End User’s Manual](#))

Connection Broker 6.4.17 – Release Notes

Connection Broker 6.4.17 is a point release update to version 6.3.61.

Connection Broker 6.4.17 – General Availability

Features

- **Leostream Components:** The Connection Broker includes updated versions of the point releases for the following Leostream components. In addition, the Connection Broker contains a new point release of the Windows version of the Leostream Agent (see [Agent 4.5.42 – Microsoft Windows Version](#))
 - Leostream Connect 2.5.67 – Windows version: This update release contains improvements that prevent duplicate clients from appearing in the Connection Broker > **Clients** > **Clients** page.

- Leostream Connect 1.5.107 – Java version: This update release provides enhancements for HP RGS connections and the new Leostream Connect sidebar for launching and disconnecting from remote sessions. See the [Leostream Connect Administrator's Guide and End User's Manual](#) for complete details.
- Leostream Agent 1.1.44 – Java version: This update release includes minor bug fixes.
- **Microsoft SQL Server 2008 Support:** The Connection Broker now fully supports external databases stored in a Microsoft SQL Server 2008 database
- **Web Browser Look-and-Feel:**
 - Connection Broker skins provide additional controls to specify the colors used on Connection Broker forms, including setting the color used for all text and links (see [Color Schemes \(Skins\)](#))
 - You can now specify a custom logo and favicon on the Leostream Web Client and Administrator Web interface (see [a Custom Logo and Favicon](#))
- **Policies:** Desktop **Filters** can now be applied on a pool-by-pool basis, in addition to across all pools in a policy
- **Authentication:**
 - For authentication servers created without the **Query for group information** option selected, you can assign roles and policies using LDAP filter expressions (see [Roles and Policies Based on Multiple Attributes](#))
 - You can now toggle the value for the **Query for group information** option after the authentication server is created, allowing you to turn off the group query to improve performance after configuring your authentication server
- **Logging Events:** The following new logging events allow you to use SNMP traps and syslog to track pool thresholds and Connection Broker metrics:
 - Log information, warnings, or errors when any of the metrics on the **Connection Broker Metrics** report exceed a lower or upper threshold
 - Log information, warnings, or errors when desktop pool levels reach a lower bound
- **Performance:** Work queue enhancements significantly improve performance for large-scale deployments
- **HP Blade Location:** The Connection Broker can now display rack, enclosure, and location information for HP ProLiant blades in an HP BladeSystem enclosure equipped with HP Onboard Administrator, simplifying the process of locating blades in need of maintenance
- **SSL Communications:** The **Use SSL** drop-down menus have been removed from the **Edit Desktops** and **Edit Centers** pages; when communicating with the Leostream Agent, the Connection Broker defers to the SSL setting in the Leostream Agent Control Panel dialog

Resolved Issues

- The Connection Broker now updates stale IP addresses for desktops that were shutdown or suspended when their DHCP lease expired. Requires Leostream Agent 4.5 be running on the remote desktop.

Database Changes

Version 6.4.17 adds fields to the following tables in the Connection Broker database.

- `client`
- `skin`
- `general_config`

- vm
- health_attribute
- policy_assignment
- pool

In addition, version 6.4.17 makes a type change to a field in the `remote_authentication_assign` table.

Points of Interest When Updating from Connection Broker 6.2 to 6.4 or Higher

- **SSL:** The Connection Broker no longer contains any **Use SSL** drop-down menus for desktops and centers. When upgrading existing Connection Brokers, the Connection Broker tries the last known setting for SSL communications. For example, if a particular desktop had the **Use SSL** drop-down menu set to **Yes**, the Connection Broker first tries to communicate with the Leostream Agent using SSL. If SSL fails, the Connection Broker switches to non-SSL, and continues to use non-SSL until the Leostream Agent is reconfigured to require SSL. Alternatively, if a desktop had the **Use SSL** drop-down menu set to **No**, the Connection Broker first tries non-SSL communications with the Leostream Agent and, if this Leostream Agent is configured to require SSL, switches to SSL.
- **Roles:** When upgrading your Connection Broker, the new session permissions **Allow user to manually release desktops** and **Allow user to power desktops on and off** will be turned on and off based on the setting of the **Desktops and Applications** drop-down menu in your existing role, as follows.
 - If the previous role was set to **Power control only access**, the new role has the **Allow user to power desktops on and off** option checked.
 - If the previous role was set to **Release control only access**, the new role has the **Allow user to manually release desktops** option checked.
 - If the previous role was set to **Power and release control access**, the new role has the **Allow user to power desktops on and off** and **Allow user to manually release desktops** options checked.



If a user that logs in using Leostream Connect is assigned a policy that allows them to restart their desktops, that user must now have a role that provides the restart permission. If the user's updated role does not have the **Allow user to power desktops on and off** option selected, the user no longer sees the **Restart** menu in the Leostream Connect System Tray.

- **Roles:** Connection Broker 6.2 always displayed the **> Status > Downloads** page when the end-user logged into the Connection Broker Web interface. In 6.4, the Leostream Web client *never* displays this page. If an end-user requires access to the **> Status > Downloads** page, you must modify the user's role to provide access to the Administrator Web interface, and select the **Full** permission for the **> Status > Downloads** page.
- **Roles:** In Connection Broker 6.2, roles that provided **Full** access to the **> Users > Users** or **> Users > Roles** page allowed the user to edit the Administrator user or role, respectively. In 6.4, **Full** access *does not* allow the user to edit the Administrator user or role. If the user requires access to the Administrator user or role, modify their role permission to provide **Administrator** access for the **> Users > Users** or **> Users > Roles** page, as necessary.
- **Bulk Upload:** If you use the **Upload users** option on the **> System > Maintenance** page to load users into your Connection Broker, the default value for the `authentication_method` column has changed. Previously, if you did not specify a value for the `authentication_method` column, the Connection Broker configured the user as authenticated locally by the Connection Broker. In 6.4, if the `authentication_method` column is blank, the Connection Broker assumes the user is authenticated remotely.

When you load a user without specifying the authentication method, the **Authentication Server** column on the **> Users > Users** page displays **(Uploaded User)** for these users. The first time this user logs into the Connection Broker, the **Authentication Server** column updates with the name of the remote authentication server used to authenticate the user and assign a policy.

- **Sun Ray:** Leostream Connect 1.5 and Leostream Agent 1.1 are configured to work together on Sun Ray servers. Older versions of Leostream Connect are not compatible with Leostream Agent 1.1 when used in a

Sun Ray session. If you must use an older version of Leostream Connect, contact support@leostream.com for the previous version of the Leostream Sun Ray Session scripts.

If you upgrade an existing SRSS to use Leostream Connect 1.5, you do not need to replace your Leostream Sun Ray Session scripts with the Leostream Agent. Leostream Connect 1.5 first tries to communicate with the Leostream Agent. If version 1.1 of the Leostream Agent is not installed, Leostream Connect uses the deprecated Leostream Sun Ray Session scripts.

- **Leostream Agent:** The end-user experience and single sign-on installation tasks can now be run when installing Leostream Agent 4.5 on a desktop with other single sign-on solutions already installed, such as those from Novell or HP.

Leostream Agent 4.5.42 – Microsoft Windows Version

Version 4.5 is the current version of Leostream Agent for Windows operating systems. The point release contains the following enhancements.

- Provides the Connection Broker with location information for HP blades
- WoW64 support added to the multi-display feature, allowing the Leostream Agent installed on a 64-bit platform to correctly position windows associated with a 32-bit application
- Additional improvements to multi-display support for cases where the Windows taskbar is minimized
- Now report IP address changes to the Connection Broker, to resolve issues with stale IP addresses for virtual machines that were suspended or off and subsequently had their DHCP lease expire
- Resolved issues around installing new versions of Leostream Agent over existing Leostream Agents
- Resolved issues pertaining to Microsoft Hyper-V installations

Connection Broker 6.3.61– Release Notes

Connection Broker 6.3.61 is a minor update to version 6.3.52.

Connection Broker 6.3.61 is also available as a full Virtual Appliance for new Connection Broker installations. Visit the Leostream [Broker Downloads](#) page to download the appropriate virtual appliance for your virtualization layer. A list of support virtualization layers is available in the [Leostream Installation Guide](#).



If you are installing the Connection Broker virtual appliance for VMware Server or VMware Workstation, the version number is 6.3.62. This updated version addresses an issue reloading Connection Broker databases, which does not affect the other appliances. You can optionally update the other appliances to this release using the **Check for updates** option, available as soon as you install the appliances.

Connection Broker 6.3.61

Features

- New virtual appliance installations now automatically prompt you to check for the latest Connection Broker update as soon as you enter your license key.
- Leostream Connect clients and Leostream Agents have been updated to the following versions:
 - Leostream Connect for Windows 2.5.64 – Prevents duplicate client entries from appearing in the **> Clients > Clients** page.


- Leostream Agent for Windows 4.4.66 – Improvements for Hyper-V centers, multi-display support, and the Connection Broker feature to automatically add and remove users from the remote desktop users group.
- Leostream Connect for Linux 1.5.88 – Addresses `uttscc` connection failures

Resolved Issues

- The Connection Broker no longer loses its network settings when rebooting after an update. The subsequent reboot recommended in the 6.3.52 release notes is no longer required.
- Stopped and suspended desktops are now correctly offered to users logging in through a Wyse thin client.
- Clients that are hard-assigned to desktops no longer lose their hard-assignments after a user logs into the client device.
- When hard-assigning a desktop to a client device, the **Assigned desktop** drop-down menu no longer contains desktops that are marked as *duplicates* on the **> Resources > Desktops** page. Only the master, available desktop can be hard-assigned to the client.
- The option to display hard-assigned desktops by their pool name has been removed from the policy page. Hard-assigned desktops are not considered to be part of any pool.
- When a user logs into the Connection Broker Web Sign In form, the **Password** field is now cleared out if the credentials were invalid.
- The **Add and remove the user from the remote desktop group** Role permission now correctly adds and removes the user from this group. Requires Leostream Agent 4.4.66 be installed on the remote desktop.

Connection Broker 6.3.52 - Release Notes

The Connection Broker 6.3.52 is a minor update to 6.3.45.

 After upgrading and rebooting your Connection Broker, it may appear to have lost its previous network settings. If you cannot connect to your Connection Broker Administrator Web interface using your previous network settings, please reboot your Connection Broker and try reconnecting. If you still experience difficulties, please contact support@leostream.com.

Connection Broker 6.3.52

Resolved Issues

- The Windows version of Leostream Connect has been incremented to 2.5.62. This client version addresses a potential upgrade issue when uninstalling previous versions of Leostream Connect, in cases where the Leostream GINA included in the original installation.
- The Windows version of the Leostream Agent has been incremented to 4.4.59. This agent version addresses upgrade issues when the agent or another process places a lock on the Leostream Agent application. This version also provides an improvement to the Leostream Agent multi-display management feature; the Leostream Agent now maximizes windows over the area previously occupied by the Taskbar, when the Taskbar is removed.
- Resolved issues with SSL VPN logins.

- Resolved issues with performing Web queries using the Connection Broker Administrator credentials.
- Upgrade issues pertaining to desktop pools have been resolved.
- Upgrade issues pertaining to location-based protocol over-ride have been resolved.

- Improvements to `check_logoff` function, to avoid cases where users that disconnected from their desktops were being logged off due to, for example, a loss in network connection.
- Leostream Connect and the Leostream Agent now download with the correct extensions when using the **> Status > Downloads** page from Microsoft Internet Explorer.

Connection Broker 6.3.45 - Release Notes

Connection Broker 6.3.45

Connection Broker 6.3.45 is a point release update to version 6.2.47. For a complete description of 6.3 features, see the referenced section in the [Connection Broker Administrator's Guide](#).

Features

- **Web Client:**
 - End user now login through the Connection Broker Web client (see "Chapter 15: Accessing Resources via the Web Client"). This client is similar to the Administrator Web interface in appearance, but provides access *only* to the user's desktops and applications. To access the pages allowed by their role, user's then open the Administrator Web interface.
 - The Connection Broker Administrator Web interface can be directly accessed using the following link


```
http://cb_address/admin
```

Where *cb_address* is your Connection Broker address.
- **Roles and Permissions:**
 - New **Session Permissions** control which functionality an end user is allowed to access when logging into the Connection Broker Web client or Leostream Connect. Current session permissions determine if the user is allowed to restart and release their desktops, and include an option to enable the user to manage another user's session (see "Session Permissions").
 - New role option to automatically add and remove a user from the desktop's Remote Desktop Users group, allowing you to restrict desktop access only to Connection Broker logins (see "Session Permissions").
 - **Connection Broker Web Interface Permissions** provide additional granularity for allowing and restricting access to individual tabs in the Administrator Web interface (see "Administrator Web Interface Permissions").
 - Permissions can be set on a per-desktop-pool basis, allowing different users to administer different groups of desktops (see "Customizing Access to Desktops").
 - Custom permissions for desktops provide granular access to the **Edit Desktop** page and other desktop actions (see "Customizing Access to Desktops").
 - Custom permissions for the **> Users** page and **> Roles** page allows you to permit or deny access to the Administrator account and role (see "Providing Administrator Access to Users, Roles, and Desktops").
- **Teradici PC-over-IP Client Devices:**
 - Two dual-monitor client devices can now be bonded together to provide quad-monitor support for clients, workstations, and blades equipped with the Teradici PC-over-IP chipset (see "Quad-Monitor Support for PCoIP").

- The two PCoIP cards in an Amulet Hotkey devices are automatically bound together, providing instant quad-monitor support for these client devices (see the Leostream [Thin Client Guide](#)).
- All PCoIP client devices support the session permission to manage another user's resource (see "Managing Another User's Resources via PCoIP").
- PCoIP clients now support follow-me mode. If a user is currently logged into a desktop from one client device, when they log into a different client device, their desktop automatically disconnects from the first client device and reconnects at the new device, with no disruption in the user's session.
- **Management:**
 - New session permissions to enable a user to manage and log into another user's resources (see "Managing another User's Resources").
 - New dynamic tags allow you to redirect CD and DVD drives to remote desktops connected to using Microsoft RDP (see "Drive Redirection" in the [Leostream Connect Administrator's Guide and end User's Manual](#)).
- **Pools:**
 - New support for creating pools that contain desktops from multiple VMware vCenter Server Resource Pools (see "Defining Pools Using VMware vCenter Server Resource Pools").
 - New installations include two new default pools for desktops running either a Microsoft Windows or Linux operating system (see "Chapter 7: Creating Desktop and Application Pools").
- **Xen.org:**
 - New **Open Source Xen** center allows the Connection Broker to manage and assigns VMs hosted in a Xen hypervisor (see "Open Source Xen® Centers").
 - The Java™ version of the Leostream Agent can now be installed on a server hosting a Xen hypervisor, to inventory and power control the VMs (see the [Leostream Installation Guide](#)).
- **Policies and Plans:**
 - New protocol plans allow you to define common sets of remote viewer protocols to apply to individual pools across multiple policies (see "Protocol Plans").
 - New registry plans allow you to create and modify registry keys on the remote desktop based on the location of the user's client device (see "Manipulating Registry Keys").
 - The **Adjust time zone to match client** option is now in the **When User is Assigned to Desktop** section. This checkbox applies when users log into the Connection Broker from Leostream Connect and HP SAM clients. The associated **Revert time zone** checkbox is no longer available. The Connection Broker modifies the time zone only when the user logs in; it no longer reverts the time zone when the user logs out of the desktop.
 - Support for the Sun Secure Global Desktop access solution, allowing users to log into the Connection Broker and access their assigned resources from the Sun Secure Global Desktop login Web page (see "Sun Secure Global Desktop Setup").
 - Support for Ericom Blaze RDP acceleration and compression (see "Ericom Blaze" in the [Leostream Connect Administrator's Guide and end User's Manual](#)).
 - Support for setting HP RGS Receiver parameters in the protocol plans.
 - The **Application Assignment from Pools** section now allows you specify application-specific display options and protocol plans (see "Configuring Application Policy Options").

- The **Mark desktops as Unreachable if remote viewer service is unavailable** policy option has been removed. The Connection Broker no longer performs a port check to mark a desktop as *unreachable*.
- **Usability:**
 - All Connection Broker tables now provide a default sort order for tables.
 - Users launching an RDP connection from the Connection Broker Web client are no longer prompted to save or run the RDP-file. Instead, the RDP connection is automatically launched without a prompt.
 - New option for centers associated with VMware vCenter Server to display a countdown timer while the desktop is restarting. This option applies only when the user logs in using the Java version of Leostream Connect (see “Defining Pools Using VMware vCenter Server Resource Pools”).
- **General Configuration Settings:**
 - The **Leostream Connect Configuration** section contains a global setting to exit the Leostream Connect client after the user establishes connections to their resources
 - The **Leostream Connect Configuration** section contains a new global option to toggle on and off an **Advanced Login** or **Restart** button on the Java version of Leostream Connect (see the [Leostream Connect Administrators Guide and End User’s Manual](#))
 - The **Global Variables** section no longer provides the **Enable Sun Ray** option. The sections of the Connection Broker Administrator Web interfaces are now always shown.

Points of Interest when Updating Existing Connection Broker

- **Roles:** When upgrading your Connection Broker, the new session permissions **Allow user to manually release desktops** and **Allow user to power desktops on and off** will be turned on and off based on the setting of the **Desktops and Applications** drop-down menu in your existing role, as follows.
 - If the previous role was set to **Power control only access**, the new role has the **Allow user to power desktops on and off** option checked.
 - If the previous role was set to **Release control only access**, the new role has the **Allow user to manually release desktops** option checked.
 - If the previous role was set to **Power and release control access**, the new role has the **Allow user to power desktops on and off** and **Allow user to manually release desktops** options checked.
- ⚠ If a user that logs in using Leostream Connect is assigned a policy that allows them to restart their desktops, that user must now have a role that provides the restart permission. If the user’s updated role does not have the **Allow user to power desktops on and off** option selected, the user no longer sees the **Restart** menu in the Leostream Connect System Tray.
- **Roles:** Connection Broker 6.2 always displayed the **> Status > Downloads** page when the end-user logged into the Connection Broker Web interface. In 6.3, the Leostream Web client *never* displays this page. If an end-user requires access to the **> Status > Downloads** page, you must modify the user’s role to provide access to the Administrator Web interface, and select the **Full** permission for the **> Status > Downloads** page.
- **Roles:** In Connection Broker 6.2, roles that provided **Full** access to the **> Users > Users** or **> Users > Roles** page allowed the user to edit the Administrator user or role, respectively. In 6.3, **Full** access *does not* allow the user to edit the Administrator user or role. If the user requires access to the Administrator user or role, modify their role permission to provide **Administrator** access for the **> Users > Users** or **> Users > Roles** page, as necessary.
- **Bulk Upload:** If you use the **Upload users** option on the **> System > Maintenance** page to load users into your Connection Broker, the default value for the `authentication_method` column has changed. Previously, if you did not specify a value for the `authentication_method` column, the Connection Broker configured the user as authenticated locally by the Connection Broker. In 6.3, if the `authentication_method` column is blank, the Connection Broker assumes the user is authenticated remotely.

When you load a user without specifying the authentication method, the **Authentication Server** column on the **> Users > Users** page displays (**Uploaded User**) for these users. The first time this user logs into the Connection Broker, the **Authentication Server** column updates with the name of the remote authentication server used to authenticate the user and assign a policy.

- **Sun Ray:** Leostream Connect 1.5 and Leostream Agent 1.1 are configured to work together on Sun Ray servers. Older versions of Leostream Connect are not compatible with Leostream Agent 1.1 when used in a Sun Ray session. If you must use an older version of Leostream Connect, contact support@leostream.com for the previous version of the Leostream Sun Ray Session scripts.

If you upgrade an existing SRSS to use Leostream Connect 1.5, you do not need to replace your Leostream Sun Ray Session scripts with the Leostream Agent. Leostream Connect 1.5 first tries to communicate with the Leostream Agent. If version 1.1 of the Leostream Agent is not installed, Leostream Connect uses the deprecated Leostream Sun Ray Session scripts.

- **Leostream Agent:** The end-user experience and single sign-on installation tasks can now be run when installing Leostream Agent 4.4 on a desktop with other single sign-on solutions already installed, such as those from Novell or HP.

Leostream Connect 2.5.59 – Microsoft Windows Version

Version 2.5 is the current release of the Windows version of Leostream Connect. This point release includes the following enhancements. See the [Leostream Connect Administrators Guide and End User's Manual](#) for a complete description of these features.


- Support for all session permissions defined in Connection Broker roles, including:
 - Restarting desktops
 - Releasing desktops back to their pools
 - Managing another user's resources
- New progress window displays when sharing local USB devices with the remote desktop, to indicate when the device is available.
- Support for connections to remote desktops using Ericom® Blaze RDP acceleration and compression.
- Support for setting HP RGS Receiver parameters in the protocol plans
- New **Log Events** dialog for defining the type of information to store in the Leostream Connect logs.
- Support for new {DRIVE:CD} and {DRIVE:DVD} dynamic tags for redirecting CD and DVD drives when connecting using Microsoft RDP.
- When upgrading Leostream Connect from the Connection Broker, the client now always displays a progress bar, to provide feedback to the user. Previously, the progress bar did not appear if the **Upgrade client to latest version** option on the Connection Broker was set to **Always**.
- Support for PAM authentication when connecting to Linux remote desktops using HP RGS.
- Bug fix for Leostream Connect running in the guest account on 64-bit Vista operating systems.

Leostream Connect 1.5.85 – Java Version

Version 1.5 is the current release of the Java version of Leostream Connect. This point release includes the following enhancements. See the [Leostream Connect Administrators Guide and End User's Manual](#) for a complete description of these features.



The tabbed dialog version of Leostream Connect is being deprecated. The following features are available only when using the standard (non-tabbed) dialog. Leostream recommends converting your existing Leostream Connect clients to the new standard dialog. For more information, see the [Leostream Connect Administrator's Guide and End User's Manual](#).

- New installer simplifies deploying Leostream Connect. When installing the Java version of Leostream Connect on a Windows client, the installer creates an uninstaller for removing the client (see the [Leostream Installation Guide](#)).
-  Leostream is not providing a ZIP-file for the 1.5 release of the Java version of Leostream Connect. Contact support@leostream.com if your environment relies on the ZIP-file for distribution.
- Sun Secure Global Desktop integration (see [Secure Global Desktop Setup](#)).
- Installer option to automatically configure Leostream Connect for use with Sun Secure Global Desktop deployments.
- Support for automatically discovering the Connection Broker address using DNS records.
- Now default to SSL communications with the Connection Broker on the port specified in the lc.conf file. Leostream Connect automatically fails over to non-SSL communications if the Connection Broker is not accepting SSL communications.
- Usability and design improvements for all Leostream Connect dialogs associated with the standard (non-tabbed) layout, including:
 - Status messages now appear in separate message boxes, instead of embedded in the **Login** page
 - Controls enable and disable, as appropriate
 - Global Connection Broker setting to show/hide the **Domain** field is now honored
- Support for the following session permissions defined in Connection Broker roles:
 - Restarting desktops
 - Managing another user's resources
- Support for connections to remote desktops using Ericom® Blaze RDP acceleration and compression.
- Support for setting HP RGS Receiver parameters in the protocol plans.
- Support for PAM authentication when connecting to Linux remote desktops using HP RGS.
- New command line arguments support automatically logging a particular user in when the client is launched.
- Support for the global Connection Broker option for showing or hiding an **Advanced Login** or **Restart** button on the login page.
- Single sign-on is now supported when using Microsoft RDP from a Windows client.
- A countdown timer can now be displayed when restarting desktops hosted in a VMware vCenter Server center.
- If a Leostream Connect process is already running, relaunching the client uses the first process, instead of starting a second instance of Leostream Connect.
- Enhanced logging functionality



The following lc.conf file and command line parameters are being deprecated.

- `skin`: Replaced by `ui_mode`. Leostream Connect 1.5 continues to honor the setting in the lc.conf file. However, only the standard (non-tabbed) dialog will be supported in future releases.

- `LeostreamBaseDir`: Use the `LeostreamLogDir` parameter
- `check_port_timeout`: This value is now hard-coded to 8 seconds.
- `hide_advanced_login`: This value can now be set in the Connection Broker > **System** > **General Configuration** page.

Leostream Agent 4.4.51 – Microsoft Windows Version

Version 4.4 is the current version of Leostream Agent for Windows operating systems. The point release contains the following enhancements.

- Support for Connection Broker registry plans, to set registry keys on the remote desktop (see [Registry Keys](#)). Registry plans apply when the user logs in using either the Windows or Java version of Leostream Connect.
- Support for new dynamic tags to set registry key values based on Active Directory attributes of the computer running Leostream Connect.
- Support for Connection Broker session permission to automatically add and remove the user to the remote desktop's Remote Desktop Users group (see [Permissions](#)).
- The Leostream Agent now automatically adds the registry keys on the remote desktop required for single sign-on to function properly in Novell environments. These registry keys are added only if the Novell login key is present in the remote desktop's registry.

Leostream Agent 1.1.39 – Java Version

Version 1.1 is the current version of Leostream Agent for Linux. The point release includes the following enhancements.

- New installer simplifies Leostream Agent deployments for Ubuntu, Debian, Red Hat, Fedora, and CentOS Linux and Solaris operating systems (see the [Leostream Installation Guide](#)).
- Leostream Agent installer automatically completely configures the system correctly when deploying on a Sun Ray Server. Separate Leostream Sun Ray Session scripts are no longer required during installation (see the [Leostream Thin Client](#) guide).
- Provides inventory and power control for virtual machines hosted on an open source Xen hypervisor (see the [Leostream Installation Guide](#))
- Reports login and logout events for users connected to their desktops using the HP RGS protocol. The Leostream Agent does not support **Disconnect** or the **Log out rogue user** policy option.
- Enhanced logging functionality

Connection Broker 6.2.47 - Release Notes

The Connection Broker 6.2.47 is a minor update to 6.2.34.

Connection Broker 6.2.47

Resolved Issues

- When selecting the **Login name unique across domains** option on the **> System > General Configuration** page, a user logging into previous Connection Broker releases from different domains would be identified as the same user if their DN, UPN, or email address were identical in these domains. Connection Broker 6.2.47 no longer uses the user's email address to identify the user, allowing multiple users to share a common email address in Active Directory. The email address is now used only if no DN or UPN is provided, which can occur when the user logs in using a smart card.
- Over slow networks, previous releases of the Connection Broker may incorrectly display the Leostream Agent status on the **> Resources > Desktops** page as **Unreachable**. This occurred if, during a VM restarts, the machine's networking capabilities were not ready when the Connection Broker probed the machine for the Leostream Agent status. Connection Broker 6.2.47 continues to probe the VM in a non-blocking fashion for up to 5 minutes, until a proper Leostream Agent status is returned.
- Any pending desktop work queue jobs associated with a power control or release plan are now cancelled when a new login event occurs on that desktop, to prevent the power control or release actions from affecting the newly logged in user, for example, by logging them out.

Connection Broker 6.2.34 - Release Notes

The Connection Broker 6.2.34 is a minor update to 6.2.29.

Connection Broker 6.2.34

Resolved Issues

- Stopped and suspended virtual machines that are offered to a user are now properly restarted when the user selects that desktop to log into.
- ActiveX RDP connections can now be established through a NATed VPN. To enable this feature, select the **Allow connections through NAT'd VPNs** option in the **Web Browser Configuration** section for the policies associated with users making this type of connection.
- Improved support for scrambled passwords when using the NoMachine NX protocol.
- Improved handling of VMs whose DHCP lease expires while the VM is suspended. In this case, the VM is assigned a new IP address when it is resumed, and its previous IP address may be reassigned to another VM. The Connection broker now correctly updates all IP address. In addition, users logged into the VM that was assigned the suspended VM's previous IP address are no longer incorrectly labelled as rogue users.

Connection Broker 6.2.29 - Release Notes

The Connection Broker 6.2.29 update builds on the features available in 6.2.20. Version 6.2.29 is available as an update to any Connection Broker version 6.x via the **Check for updates** option on the **> System > Maintenance** page. See “Upgrading the Connection Broker” in the [Connection Broker Administrator’s Guide](#) for detailed instructions.

To upgrade Connection Broker 5.x, you must first install a new Connection Broker 6.2 virtual appliance then use the **Check for updates** option. See [from Version 5.3.x to Version 6.2](#) for detailed instructions.

Connection Broker 6.2.29 Update

Features

- Power control plans now provide the following two options, instead of the **Reboot** option:
 - **Shutdown and Start:** Prior to 6.2.29, the **Reboot** option always performed a guest shutdown and power up. Now, for virtual machines running in a VMware environment and with VMware Tools installed, **Shutdown and Start** first attempts to reboot the VMs operating system. If the reboot cannot be done, **Shutdown and Start** performs a guest shutdown and power up.

The **Shutdown and Start** selection in the **Allow users to reset desktops** policy option also performs as described above.
 - **Power off and Start:** Forcefully powers off and powers on the VM.
- The **Shutdown and Start** options now try to first restart the VMs OS.
- New performance optimizations added to the login process when using Leostream Connect.
- Minor updates of the following clients and agents to the following versions:
 - Leostream Connect for Windows 2.4.39
 - Leostream Agent for Windows 4.3.53
 - Leostream Connect for Linux 1.4.61

Points of Interest

- Leostream Connect 2.4.x and Leostream Agent 4.3.x contain new versions of the USB drivers. These new drivers are not backwards compatible. Leostream Connect version 2.4.26 and higher must connect to remote desktops running Leostream Agent version 4.3.23 or higher, if you are using Leostream to manage USB devices.
- Updating the Leostream Agent using the **Update** action on the **> Resources > Desktops** page will not update the USB drivers if you did not reboot the desktop when the Leostream Agent was first installed. In this case, manually install the Leostream Agent on this desktop, and ensure that you reboot the desktop after the installation.

When manually installing the Leostream Agent, the installation process warns you if the prior installation was not completed. In this case, you must manually uninstall the previous Leostream Agent version before proceeding with the new installation.

- When creating a Citrix XenApp center, Leostream recommends you enter the IP address, and not the host name, of the XenApp farm. In some cases, the Connection Broker cannot resolve Citrix XenApp host names.

Connection Broker 6.2.20 - Release Notes

To start using Connection Broker 6.2, either upgrade an existing Connection Broker or install a new version, as follows.

- To upgrade an instance of Connection Broker 6.0 or 6.1, use the **Check for updates** option on the > **System > Maintenance** page. See “Upgrading the Connection Broker” in the [Connection Broker Administrator’s Guide](#) for detailed instructions.
- To upgrade Connection Broker 5.x, you must install a new Connection Broker 6.2 virtual appliance, and then transfer the old Connection Broker data base to the new installation. See [from Version 5.3.x to Version 6.2](#) for detailed instructions.

Note: When upgrading from version 5.x, Connection Broker 6.2 requires a new style of license key. Please, contact sales@leostream.com to convert your existing key to the new format.

- For a new installation, download the 6.2 Connection Broker virtual appliance and install it into your virtualization layer. Connection Broker virtual appliances are available at:

www.leostream.com/cb

For more information on installing the Connection Broker, see the [Leostream Installation Guide](#).

Connection Broker 6.2.20

For a complete description of the features listed below, see the referenced section in the [Connection Broker Administrator’s Guide](#) (displayed in **bold** within parentheses).

Features

- **Microsoft® Hyper-V™ Support**
 - The Connection Broker now natively installs into Microsoft Hyper-V™ Server 2008 and Microsoft Windows Server® 2008 R2 Hyper-V (see **Installing into Microsoft® Hyper-V™ Server 2008** in the [Leostream Installation Guide](#))
 - The Connection Broker now integrates with the Microsoft System Center Virtual Machine Manager (SCVMM), providing native support for virtual machines in Hyper-V, including inventory, assignment, and power control (see **Microsoft System Center Virtual Machine Manager Centers**)
 - Leostream Connect 2.4 and Leostream Agent 4.3 can now be installed on clients and remote desktops running Microsoft Windows 7 operating system (see the **Leostream Installation Guide**)
 - The Connection Broker now establishes RDP 7 connections between clients and remote desktops running a Windows 7 operating system
- **Location-based Printer Assignment:** The Connection Broker now allows you to register network printers with the Connection Broker, and attach these printers to remote desktops based on the location of the client connecting to the desktop (see **Managing Printers**)
- **Leostream Agent for Linux Desktops:** The new Leostream Agent for Linux desktops is a Java application that can be installed on Linux desktops to provide information about the user’s session, including differentiating between disconnects and logouts for NoMachine NX remote viewer sessions (see the **Leostream Agent Administrator’s Guide**)
- **Session Expiration:** Connection Broker policies now provide an option to expire the user’s session after a selected elapsed time, improving the security of the system by preventing users from logging into additional resources (see **Adding a New Policy**)

- **Wyse Virtual Desktop Accelerator Support:** Connection Broker policies can now be configured to support Wyse Virtual Desktop Accelerator (VDA) connections (see **Wyse Virtual Desktop Accelerator (VDA) Support** in the Leostream [Thin Clients Guide](#))
- **Improved Duplicate Desktop Handling:** If the same desktop (physical or virtual) is registered with the Connection Broker multiple times, the Connection Broker now uses the union of desktop attributes for assignment and pooling (see **Handling Duplicate Desktops**)
- **Connection Broker Performance Tuning:** New option on the > **System > General Configuration** page to select how long to stall before reporting the RPC throttling limit has been reached (see **Setting RPC threshold**)
- **Client Page Filters:** The contents of the **Clients** page can now be sorted using customized filters, making it easy to sort clients by, for example, location (see **Filtering the Client List**)
- **Disable Connection Broker Updates:** The **Check for updates** option on the > **System > Maintenance** page can now be removed using an option in the Connection Broker virtual machine console, allowing administrators to lock down Connection Broker versions in production environments (see **Removing the Update Option**)
- **Reporting Enhancements:** The **Resources Usage** report on the > **Status > Reports** page now indicates the remote viewer protocol in use for each active session (see **Reporting Resource Usage**)
- **Leostream Client and Agent Downloads:** The > **Status > Downloads** page contains new versions of the Leostream Clients and Agents, including Leostream Agent/Java (see **Updating Leostream Connect and Leostream Agent**)
- **Keepalive Signal for Load Balancing:** New Connection Broker query `is_alive` returns warnings when the Connection Broker is heavily loaded, for use in load balancing Connection Broker clusters (see **Using Commercial Load Balancers**)

Points of Interest

For best performance, if you are using the Leostream USB management features, ensure that you are using Connection Broker 6.2 with the latest versions of Leostream Connect and the Leostream Agent. If you use the new Leostream Connect and the Leostream Agent with an older version of the Connection Broker, your users may experience a delay when attaching USB devices to their remote desktops.

Leostream Connect for Windows 2.4.33

Version 2.4.33 is the current version of Leostream Connect for Windows operating systems. The point release available with Connection Broker 6.2 includes the following enhancements.

- Windows 7 installation support
- New driver version for USB device management



The new USB drivers are not backwards compatible. Leostream Connect version 2.4.26 and higher must connect to remote desktops running Leostream Agent version 4.3.23 or higher, if you are using Leostream to manage USB devices.

- Keyboard and mouse are now excluded from USB device selection and redirection, at all times
- Support for Connection Broker policy option for limiting the number of desktops a user can be assigned
- Support for Connection Broker policy option for session expiration

Leostream Connect for Linux 1.4.60

Version 1.4.60 is the current version of Leostream Connect for Linux operating systems. The point release available with Connection Broker 6.2 includes the following enhancements.

- Support for Connection Broker policy option for limiting the number of desktops a user can be assigned
- Support for Connection Broker policy option for session expiration
- Leostream Connect for Linux version 1.4.44 and later can be automatically updated based on the settings in the **Leostream Connection Configuration** section of the > **System > General Configuration** page.

Leostream Agent for Windows 4.3.45

Version 4.3.45 is the current version of Leostream Agent for Windows operating systems. The point release available with Connection Broker 6.2 includes the following enhancements.

- Windows 7 installation support
- Support for Connection Broker location-based printer assignment
- New driver version for USB device management



The new USB drivers are not backwards compatible. Leostream Agent version 4.3.23 and higher must connect to clients running Leostream Connect version 2.4.26 or higher, if you are using Leostream to manage USB devices

- The installation process now automatically starts the Leostream Agent as soon as the installation is complete.

Point of Interest

The new USB drivers will not be installed if you upgrade the Leostream Agent using the **Upgrade** option on the > **Resources > Desktops** page. If you are using the Leostream USB management feature, you must manually upgrade the Leostream Agents on your remote desktops. For best results, uninstall your old Leostream Agents before installing Leostream Agent 4.3.45.



Do not install Leostream Agent 4.3.45 with the single sign-on task selected if you are running a 64-bit Windows operating system. Please, download Leostream Agent version 4.2.53 from the Leostream Downloads & Documentation Web site if you are installing the agent on a 64-bit Windows operating system

Leostream Agent for Linux 1.0.14

Version 1.0.14 is the initial release of the Leostream Agent for Linux. This version allows you do the following.

- Install a Leostream Agent on Linux remote desktop (see the [Leostream Installation Guide](#))
- Register Linux desktops with the Connection Broker **Uncategorized Desktops** center
- View the attributes of Linux desktops on the > **Resources > Desktops** page
- When using the NoMachine NX protocol, apply policy options based on user disconnect and log out
- Also, for user's connecting to their desktops using NoMachine NX connections, log out any rogue users already logged into the desktop

Connection Broker 6.1.35 - Release Notes

Connection Broker 6.1.35 Update

For a complete description of the features listed below, see the referenced section in the [Connection Broker Administrator's Guide](#).

Features

- Improved power state detection and power-up control for wake-on-LAN and 1E WakeUp support.
- New **MAC address** options on the **Edit Desktop** form allows you to specify a desktop's MAC address, in cases where the Connection Broker cannot learn this information from the desktop's center or the Leostream Agent.
 - ✓ The Connection Broker requires a correct MAC address in order to power up desktops using wake-on-LAN.
- The **Control** action and all power control options are now shown for all desktops. Certain power control actions will have no effect on the desktop, depending on the type of desktop and the desktop's current power state.
- New desktops registered with the **Uncategorized** center now appear as **Stopped**.
- The **Monitor desktop power status** option is no longer available on the **Edit Center** page for the **Uncategorized** center. The Connection Broker always scans the power state of desktops in the **Uncategorized** center.
- Leostream Connect updated to version 2.3.45 for the Windows client and to version 1.4.40 for the Java client.
- Leostream Agent updated to version 4.2.83.

Resolved Issues

- The Connection Broker now retrieves the desktop's MAC address from the Leostream Agent.
- Removed Application Pools from the extended filters list in the **Filter this list** drop-down menu on the **> Resources > Desktops** page.
- The Connection Broker now automatically adds filters associated with application pools to the **Filter this list** drop-down menu on the **> Resources > Applications** page. These extended filters now correctly filter the application list.
- No longer receive an internal server error when bulk deleting clients when the **Location** column is included on the **> Clients > Clients** page.

Connection Broker 6.1.28 - Release Notes

Connection Broker 6.1.28 Update

For a complete description of the features listed below, see the referenced section in the [Connection Broker Administrator's Guide](#).

Features

- New options on the **Edit Desktop** form that allow you to specify a desktop's IP address and operating system, in cases where the Connection Broker cannot learn this information from the desktop's center.
- New option on the **Create Pool** form that allows you to create pools containing desktops running any version of Windows operating system.
- Clients that support Teradici PC-over-IP can now offer more than 10 desktops to a user.
- Wyse thin clients now honor the setting in the **Display to user as** drop-down menu in a user's policy.
- New encoding methods to support additional character sets, including German characters
- HP SAM clients now support adjusting time zone settings
- Leostream Connect updated to version 2.3.43
- Leostream Agent updated to version 4.2.73

Resolved Issues

- Centers created directly from VMware ESX no longer remained in the **Refreshing** state.
- Duplicating a policy now copies over any **Filters** set in the original policy.
- Potential errors resulting from uploading a Connection Broker 5.3.50 databases to 6.1.28 have been addressed.
- Physical desktops with an installed Leostream Agent, in the **Uncategorized** center, can be rebooted.

Connection Broker 6.1.20 - Release Notes

For a complete description of the features listed below, see the referenced section in the [Connection Broker Administrator's Guide](#).

Connection Broker 6.1.20

Features

- **Policy enhancements:**
 - Policies now contain a separate section that applies to hard-assigned desktops, including user hard-assigned and client hard-assigned desktops (see [Configuring Policies for Hard-Assigned Desktops](#)).
 - Policies now allow you to limit the number of desktops assigned to a user of that policy (see [Adding a New Policy](#)).
 - Power control and release sections of policies are now defined in *plans*. Plans allow you to define common power control and release scenarios and apply them to multiple policies (see [Chapter 13: Building Power Control and Release Plans](#)).
 - The **Default** policy now provides a **Filters** section for fine-grain control over desktops assigned from this policy (see [Desktop Filters](#)).
- **Reporting enhancements:** The > **Status** > **Reports** page contains two new reports:
 - Connection Broker metrics report provides information on disk usage and load averages for all Connection Brokers in a cluster (see [Reporting Connection Broker Metrics](#)).
 - Policy report summarizes the setup of all policies in the Connection Broker (see [Reports](#)).
- End users can now launch their Citrix XenApp desktops and applications via the Connection Broker Web browser (see [Access to Citrix XenApp Applications](#)).
- Physical machines that are Wake-on-LAN-enabled can now be powered up (see [Wake-on-LAN for Power Control](#)).
- The Connection Broker can now send Microsoft SMS server calls that invoke the 1E WakeUp service to power up physical machines (see [1E WakeUp Communications](#)).
- To improve performance for Connection Brokers with large pools, the > **Resources** > **Pools** page is no longer refreshed every time you navigate to this page. Each pool now contains a **Refresh interval** option, which specifies how often to refresh each pool (see [Pools](#)).
- Administrators can more easily manage resources with bulk delete, release, and refresh actions for desktops (see [Actions for Desktops](#)), bulk delete for clients (see [Clients](#)), and bulk delete for users (see [Multiple Users](#)).
- Roles provide more granularity for setting permissions for administering desktops and applications, as well as for interacting with the > **System** > **Maintenance** page. See [Desktop and Application Permissions](#) and [Access to the Maintenance Page](#), respectively.
- Bulk upload for client can load new clients into the Connection Broker, in addition to modifying existing clients (see [Clients](#)).

Resolved Issues

- Resolved internal errors during remote backup of Connection Broker to an FTP server.
- Improvements for handling duplicate records, i.e., a desktop that is registered with the Connection Broker from two centers.
- Correctly size RDP session when launched from a Web browser with various zoom settings.

Points of Interest

- **Networking:** In some cases, switching your Connection Broker from an internal database to a Microsoft SQL Server 2005 database may make your Connection Broker Web interface unreachable on the network. This may also happen if you use the > **System > Network Configuration** page to change to a static network address.

To resolve the issue:

- Log into the Connection Broker VM console by entering Ctrl-C.
- After you log in, from the main Administration Menu, select the Power option.
- From the Power menu, restart your Connection Broker.

You should now be able to access your Connection Broker Web interface. If you are still having issues, and have a current support contract or evaluation agreement, contact the support team at leostream.com/support.

- **Policy Option for Maximum Assigned Desktops:** Leostream Connect 2.3 currently includes launched applications when it is counting the number of desktops assigned to a user. If your users are logging in through Leostream Connect, and will be offered desktops and applications, adjust the policy setting for the **Maximum number of desktops assigned** to a number large enough that users can launch their desktops and applications.

Web browser logins count only assigned desktops, without placing a limit on applications.

- **Connection Broker Metrics**

- For clustered Connection Brokers, if you shut down one of the Connection Brokers directly through your virtualization layer or through the console, the Connection Broker Metrics report will not recognize that this broker has been shut down.

If you are using the Connection Broker Metrics report, shut down your Connection Brokers using the **Shutdown the Connection Broker** option on the > **System > Maintenance** page.

- Similarly, if you remove one of the Connection Brokers from your cluster, for example, by switching the Connection Broker to a different database, the Connection Broker Metrics report does not currently remove that broker from the report. Instead, the report shows the removed Connection Broker as stopped.
- **Internal Database:** In some cases, the internal database in Connection Broker 6.x is case sensitive. If you are upgrading a 5.3 Connection Broker to version 6.x, ensure that all pools, tags, locations, policy filters, etc. that use either the **is equal to** or **is not equal to** conditional take case sensitivity into account.
- **Client Hard-Assignments:** If a user logs into a client that is hard-assigned to a desktop, the Connection Broker offers the user only the hard-assigned desktop. The Connection Broker does not offer the user any of their policy-assigned desktops. However, the broker does currently offer the user all of the policy-assigned applications from the **Application Pool**.
- **Wyse Clients:** Wyse clients do not support domain names that contain blank spaces. Therefore, if you create an authentication server in your Connection Broker that has a name containing blank spaces, the Connection Broker replaces the blank space with `\x20`, which the Wyse client can successfully handle.

- **Sun Ray Support:** When using Leostream Connect/Java with Sun Ray DTUs, if Leostream Connect returns a “Cannot open audio device” error, add the following parameter to the Sun Ray `uttsc` **Command line** field in the **Leostream Connect Configuration** section of the Connection Broker policy:

```
-r:sound off
```

Additional errors, such as 'Invalid Timezone translation', may occur, and may be related to other Sun Ray `uttsc` parameter. Try logging out and logging back in, if unknown errors occur. If the problem persists, and have a current support contract or evaluation agreement, contact the support team at [.leostream.com/support](https://leostream.com/support).

- **Leostream Connect:** On slower networks, users with policies that offer stopped machines may see the following warning when then try to connect to a stopped machine:

```
This computer cannot connect to the remote computer
```

This warning occurs when Leostream Connect attempts to log the user into the desktop before the desktop has finished starting up. If this warning occurs, do not log out of Leostream Connect. Wait a short period of time and try to reconnect to the desktop.

Leostream Connect Version 2.3.42

This is a minor bug-fix release. Please, contact sales@leostream.com for more information.

Leostream Connect/Java Version 1.4.30

- HP RGS support no longer users the RGS Directory Mode. Leostream Connect/Java can now be used on Linux thin clients.
- Additional customization options for the Leostream Connect/Java dialogs.
- Improvements for Sun Ray Servers
- Minor bug fixes. Please, contact sales@leostream.com for more information.

Leostream Agent Version 4.2.70

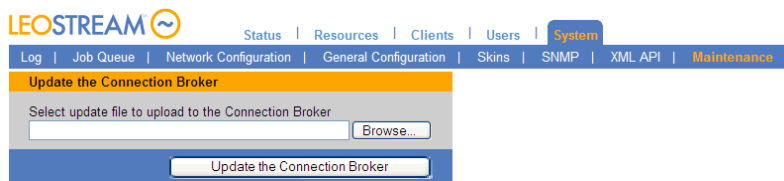
This is a minor bug-fix release for the Leostream extended monitor support. Please, contact sales@leostream.com for more information.

Connection Broker 6.0.11 - Release Notes

Connection Broker 6.0.11 is available as an upgrade from version 6.0.8. To download and install this update, select the **Check for updates** option on the > **System > Maintenance** page and click **Next**. The following updates page opens:



1. Click the **Click here** link in the first step to check for updates. A new Web browser opens, indicating if there are updates for your Connection Broker
2. If an update is available, download the updated file. Once the file is downloaded, close the browser and return to the Connection Broker Web interface.
3. Click the **Click here** link in the second step of the update process. The following **Upgrade the Connection Broker** form opens.



4. Enter the full path to the update file you downloaded, or browse for the file.
5. Click **Upgrade the Connection Broker** to install the update.

You can optionally monitor the update process. Once the upgrade is complete, you may need to sign back into your Connection Broker.

The following lists describe some of the key improvements in Connection Broker 6.0.11. For a complete list of improvements, please contact sales@leostream.com.

Connection Broker 6.0.11

- You can now download an internal database from a 5.3.50 version of the Connection Broker and upload the database into the 6.0.11 version. See [from Version 5.3 to Version 6.0.8](#) for more information)
- Creating pools using tags no longer causes an internal server error.
- RGS connections no longer fail when the user's password contains numbers.
- No longer error out if a customization file is specified when provisioning desktops in a pool.
- Added a high-water mark for license usage to the > **System > Maintenance** page.
- The behavior of the **Forced logout** policy option in the **When User Disconnects from Desktop** section has changed.

Prior to Connection Broker 6.0.11, the **Force logout** policy action was taken *only* if the user was still assigned to their desktop. Therefore, if the **Assignment** action had a shorter wait time than the

Forced logout action, and the assignment action was to release the desktop back to the pool, the forced logout action was never taken.

Starting with Connection Broker 6.0.11, the **Forced logout** action is *always* taken, even if the desktop was released to the pool. For example, if the **Assignment** action releases the desktop 8 hours after the user disconnects from the desktop, and the **Forced logout** action logs the user out 12 hours after the user disconnects, in 6.011, the Connection Broker executes both the release and logout actions. Prior to 6.0.11, the Connection Broker executed only the release action.

Leostream Connect 2.3.41

- Uninstaller replaces the shell registry key with `explorer.exe`, if Leostream Connect had been installed in shell mode.
- Bug fix: Improved internationalization of installer for Portuguese and Spanish versions.

Leostream Connect/Java 1.3.85

- Improvements to `utswitch` for Sun Ray DTUs.
- Added customization parameters to control button colors on the Leostream Connect/Java dialogs. For more information, please, consult the `index.html` included in the ZIP-file.
- UI enhancements on the Resource Selection dialog.
- Disable UI control while a login is in progress.

Leostream Agent 4.2.59

- Improvements to SSL implementation
- Improvements for handling 64-bit operating systems.
- Improvements to multi-monitor support

Points of Interest

- Connection Broker 6.0 introduces a new Web interface design. For best results, close any existing Connection Broker Web interfaces and clear your Web browser's cache before you launch the new Connection Broker Web interface.

If you experience flaws in any of your Connection Broker Web interface pages, press CTRL-Refresh to reload the page.

- In some cases, the internal database in Connection Broker 6.0 is case sensitive. If you are upgrading a 5.3 Connection Broker to version 6.0, ensure that all pools, tags, locations, policy filters, etc. that use either the **is equal to** or **is not equal to** conditional take case sensitivity into account.
- The Connection Broker allows you to hard-assign desktops to client devices. When a user logs into one of these clients, the Connection Broker offers the user *only* the desktop assigned to that client. However, the Connection Broker will offer any applications that are offered to the user via their policy.
- If you switch your 6.0 Connection Broker to an external database, you may lose your network settings. You can reset your network using the Connection Broker virtual machine's console (see "Manually Configuring the Connection Broker Address" in the [Leostream Installation Guide](#) for instructions. After you reset the network at the console, log into your Connection Broker Web interface. Go to the **> System > Network Configuration** page and set your static IP address, here, as well. If you do not

reset the IP address through the **Network Configuration** page, you may need to reset your network in the virtual machine console every time you reboot your Connection Broker.

- When using Leostream Connect/Java with Sun Ray DTUs, if Leostream Connect returns a “Cannot open audio device” error, add the following parameter to the Sun Ray `uttsc` **Command line** field in the **Leostream Connect Configuration** section of the Connection Broker policy:

```
-r:sound off
```

Additional errors, such as 'Invalid Timezone translation', may occur, and may be related to other Sun Ray `uttsc` parameter. Try logging out and logging back in, if unknown errors occur. If the problem persists, and have a current support contract or evaluation agreement, contact the support team at [.leostream.com/support](https://leostream.com/support).

Connection Broker 6.0.8 - Release Notes

Connection Broker 6.0 expands on the feature set available in version 5.3.50.

Connection Broker Version 6.0.8

- **XenServer Support:** New virtual appliance that can be installed on Citrix XenServer 5.0 (see the Leostream [Installation Guide](#)).

The Connection Broker now supports installation on the following platforms:

- VMware Server version 2.0.x
- VMware Workstation version 6.5.x
- VMware ESX and ESXi 3.5
- Citrix XenServer 5.0

Note: The Connection Broker no longer supports installation on the following platforms:

- VMware Server 1.0.x
- VMware ESX 3.0.x

- **Extended Monitor Support:** Create monitor layout groups. Monitor layout groups allow you to define groups of clients that have a predefined number of attached monitors, for example, a call center with two monitors attached to each client.

When a client in a particular monitor layout group connects to a remote desktop running the Leostream Agent, the remote session is extended across all available monitors. End users can either split or span their session across all their monitors, allowing them to position the task bar across a single, or all, monitors. Applications intelligently position and resize, based on the size and number of monitors.

- **Desktop Management:**
 - Register virtual and physical desktops with the Connection Broker using the desktop's IP address. Eliminates the requirement that you must create a Connection Broker center; and allows you to register desktops that are not part of any Active Directory domain.
 - New bulk action to delete multiple desktops from the Connection Broker.
- **Syslog Integration:** Integration with syslog servers to ease audit tracking and compliance.
- **Reporting:** Built-in reports on resource usage and Connection Broker policy setup.
- **Downloading Connection Broker Data:** Option to download CSV-files from all Connection Broker tables, simplifying importing Connection Broker data into a spreadsheet application, such as Microsoft Excel, for future analysis.

- **Filtering Pools:** Filter pools in a policy using any Active Directory attribute. Previous Connection Broker versions allowed filtering pools only using the `managedBy` attribute.
- **Web Interface:** New Connection Broker Web interface look-and-feel.

Leostream Connect Version 2.3.37

- Client-side single sign-on provides direct access to a user's remote desktop as soon as they launch Leostream Connect.
- Leostream Connect start menu name has changed. Upgrading to 2.3 replaces the **Leostream Connect** menu with a general **Leostream** menu.
- Spanish and Portuguese translations of Leostream Connect.
- New installation option to install in shell mode.
- USB drivers are now signed, enabling automatic updates of the Leostream Connect client from the Connection Broker when the drivers are installed.
- Updated version of OpenSSL to v0.9.8k. Leostream Connect first tries to communicate with the Connection Broker using SSL, the fails over to non-SSL communications, over port 443 and 80, respectively.
- USB passthrough improvements.
- Improvements to HP RGS support on 64-bit machines.
- Enhanced discovery of Connection Broker address to include **DNS Suffix Search List**, if one is configured.

Leostream Connect/Java Version 1.3.75

- New and expanded GUI look-and-feel.
- Performance and usability enhancements.
- Support for unauthenticated logins.
- No longer require a `policy.dat` file to store Connection Broker policies used by Leostream Connect

Leostream Agent Version 4.2.55

- New extended monitor support provides true multi-monitor support for clients connected to any number of monitors. Applications position and maximize intelligently. Works in conjunction with Connection Broker monitor layout groups.
- Updated version of OpenSSL to v0.9.8k. The Leostream Agent can now use SSL to communicate with the Connection Broker.
- Enhanced single sign-on.
- Leostream Agent start menu name has changed. Upgrading to 4.2 replaces the **Leostream Agent** menu with a general **Leostream** menu.
- Enhanced discovery of Connection Broker address to include **DNS Suffix Search List**, if one is configured.

- USB drivers are now signed, enabling automatic updates of the Leostream Connect client from the Connection Broker when the drivers are installed

Points of Interest

- Connection Broker 6.0 introduces a new Web interface design. For best results, close any existing Connection Broker Web interfaces and clear your Web browser's cache before you launch the new Connection Broker Web interface.

If you experience flaws in any of your Connection Broker Web interface pages, press CTRL-Refresh to reload the page.

- The internal database in Connection Broker 6.0 is case sensitive. If you are upgrading a 5.3 Connection Broker to version 6.0, ensure that all pools, tags, locations, policy filters, etc., take case sensitivity into account. For example, in 5.3 a pool created with desktops that start with "QA" will include all desktops that start with "QA", "qa", "Qa", and "qA". In 6.0, the pool will contain only desktops whose names begin with "QA".
- The Connection Broker allows you to hard-assign desktops to client devices. When a user logs into one of these clients, the Connection Broker offers the user *only* the desktop assigned to that client. However, the Connection Broker will offer any applications that are offered to the user via their policy.
- If you switch your 6.0 Connection Broker to an external database, you may lose your network settings. You can reset your network using the Connection Broker virtual machine's console (see "Manually Configuring the Connection Broker Address" in the [Leostream Installation Guide](#) for instructions). After you reset the network at the console, log into your Connection Broker Web interface. Go to the > **System > Network Configuration** page and set your static IP address, here, as well. If you do not reset the IP address through the **Network Configuration** page, you may need to reset your network in the virtual machine console every time you reboot your Connection Broker.
- When using Leostream Connect/Java with Sun Ray DTUs, if Leostream Connect returns a "Cannot open audio device" error, add the following parameter to the Sun Ray `uttsc` **Command line** field in the **Leostream Connect Configuration** section of the Connection Broker policy:

```
-r:sound off
```

Additional errors, such as 'Invalid Timezone translation', may occur, and may be related to other Sun Ray `uttsc` parameter. Try logging out and logging back in, if unknown errors occur. If the problem persists, and have a current support contract or evaluation agreement, contact the support team at [.leostream.com/support](https://leostream.com/support).

Connection Broker Version 5.3.x - Release Notes

Connection Broker Version 5.3.50 Update

Features

The following features were added to the 5.3.50 update.

- Citrix Presentation Server centers no longer require an installed Leostream Agent if the Presentation Server enables its XML RPC service. The Connection Broker now communicates with the Presentation Server over the Citrix XML RPC port. If you do not enable this service, or the XML RPC port is blocked, you must install the Leostream Agent. Using the XML RPC service provides a higher level of performance for Presentation Servers that contain a large number of applications.
- Include port check for the HP RGS remote viewer when the **Automatically select remote viewer protocol** option is selected in the **Leostream Connect Configuration** section on the **> System > General Configuration** page. See "Configuration Leostream Connect" in the [Connection Broker Administrator's Guide](#) for more information on using this option.
- New **<All>** option in the **Number of desktops to offer** drop-down menu in each **Pools** section in a policy. By selecting **<All>**, you can offer a user all the desktops in a particular pool, with the exception of desktops that are hard-assigned to another user.
- You can now define locations based on the client's operating system. To do so, select the new **Operating system** option in the **Client attribute** drop-down menu in the **Create Location** page. To create a location that contains all clients running a Microsoft Windows operating system, select **Windows (any version)** from the **Value** drop-down menu.
- You can now override the Leostream Connect remote viewer protocol selected in a policy based on the client's location. From the **Leostream Connect** drop-down menu in the **Protocol Override** section on the **Create Location** page, select the protocol to assign to clients in this location. The location-based remote viewer protocol is not checked during the **Test Login** operations on the **> Users > Users** page.
- New **Desktop Assignment Mode** column on the **> Clients > Clients** page, which indicates if a client has a hard-assigned or policy-assigned desktop. If you previously customized the columns displayed on this page, use the **customize** option at the bottom of the table to display this new column.

Resolved Issues

The following is a sample of the bugs addressed in the 5.3.50 Connection Broker update. For a complete list of bugs addressed in the 5.3.50 update, please contact sales@leostream.com.

- Fix for `USB_ENABLED` return parameter in the thin client API `ThinWin.connection_list`.
- Wyse thin clients cannot display domain names that contain blank spaces. Therefore, in your Connection Broker, if you defined an authentication server with a name that contained spaces, users could not successfully log into these domains. As a work around in 5.3.50, for Wyse thin clients, the Connection Broker replaces blank spaces in an authentication server name with `\x20`. For example:

`My Domain`

appears as:

`My\x20Domain`

To avoid this reformatting, do not use blank spaces in Connection Broker authentication server names.

Connection Broker Version 5.3.36 Update

Features

The following features were added to the 5.3.36 update. These features are described in the remainder of these release notes.

- New **Login name unique across domains** option on the > **System > General Configuration** page.
- New power control policy option to force a desktop to power off.
- New error messages displayed to users when they are locked out or disabled in a particular authentication server.
- Ability to reorder the rows in the **Assigning User Role and Policy** section of the authentication server, when the authentication server is created with the **Query for group information** option *not* selected.

Resolved Issues

The following is a sample of the bugs addressed in the 5.3.36 Connection Broker release. For a complete list of bugs addressed in the 5.3.36 release, please contact sales@leostream.com.

- Fix for Thin client API `ThinWin.Session.Status`.
- Fix for the LDAP size limit error that could occur if an authentication server contained a large number of disabled users.
- Fix for the **Signed in** field on the > **Users > Users** page, when a user is logging in from a Wyse client. Now always indicates the last time the user signed in from a Wyse client, whether they successfully signed into a VM, or not.
- No longer create duplicate entries of Wyse clients on the > **Clients > Clients** page. Existing duplicates must be manually removed.
- Now show IP address for Leostream Connect clients on the > **Clients > Clients** page.

Connection Broker Version 5.3.27

If you installed Connection Broker 5.3.21, you can select the **Check for updates** option on the > **System > Maintenance** page to upgrade to 5.3.27.

Features

The following features were added to the 5.3.27 release. These features are described in the remainder of these release notes.

- Support for logging into the Leostream Connection Broker from a device running an HP SAM client.
- Ability to specify a name for the Connection Broker Microsoft SQL Server 2005 database.
- New tuning option to throttle incoming RPC traffic.
- Ability to reorder the rows in the **Assigning User Role and Policy** section of the authentication server, when the authentication server is created with the **Query for group information** option selected.
- Ability to specify wait periods in days, for policy-based power control or assignment actions.

- Ability to use Skins to customize text on the Connection Broker Web interface **Sign In** form.

Resolved Issues

The following is a sample of the bugs addressed in the 5.3.27 Connection Broker release. For a complete list of bugs addressed in the 5.3.27 release, please contact sales@leostream.com.

- No longer revoke offered applications after the user releases the application.
- Improved monitoring of VM power states.
- Modified the **Time Release** section on the **Edit Policy** form so that desktops can no longer be immediately released after the user logs in.
- Better handling of VMware VirtualCenter errors.
- Improved handling of SSL communications with the Leostream Agent.

Connection Broker Version 5.3

The following features were added after the 5.2.x Connection Broker release.

- Citrix® XenApp™ support when used with Leostream Connect (Microsoft Windows® and Linux® version) and Wyse thin clients.
- Remote upgrade feature for Leostream Connect client.
- New > **Status** > **Downloads** page with links for downloading the Leostream Agent, Leostream Connect, and Leostream Documentation.
- New ability to specify multiple authentication server addresses inside one record on the > **Users** > **Authentication Servers** page.
- New **Domain** option on the **Test Login** option on the > **Users** > **Users** page.
- Allow additional special characters on smart card logins.
- Enhanced USB support in policies when used with Leostream Connect version 2.2.
- Context sensitive help for Connection Broker forms.
- The **Templates** pool has been removed from the > **Resources** > **Pools** page. Please, use VMware® VirtualCenter to view the templates you use for provisioning.
- Bulk upload feature, to import users, desktops, and clients from a CSC-file.
- Additional columns available on the > **Users** > **Users** page to list Active Directory attributes for users.

The above features are described in the [Connection Broker Administrator's Guide](#) available on the Leostream Downloads and Documentation Web site.

Leostream Connect for Windows Version 2.2.34

Features

- Smart card authentication when using the following smart card technology:
 - ACOS5 smart cards used in conjunction with bit4id Card Manager Admin software and readers.

- CAC smart cards used in conjunction with ActivIdentity® ActivClient™ security software.
- Smart cards compatible with the IAS (Identification, Authentication et Signature) middleware (Pilote Carte IAS), jointly developed by Dictao and Gemalto. This feature includes support for French CPS (health care professional's card) certificates.
- Support for launching Citrix® Presentation Server™ version 4.5 applications.
- Fingerprint authentication using DigitalPersona® Pro.
- Support for SafeNet iKey 1000 USB two-factor authentication tokens.
- Support multiple certificates on smart cards, when used with Microsoft Vista remote desktops. Users can now select which certificate to use for authentication.
- The **Allow user to modify password** Leostream Connect general configuration option has been replaced with **Allow unauthenticated logins (hides password field)** .
- Support for NoMachine NX Clients.
- New ability to reboot remote desktops from the Leostream Connect client, based on the end-user's policy.

Resolved Issues

- Fixes for HP RGS running on a 64-bit Windows platform.
- Enhanced Connection Broker auto-discovery algorithm to use the **DNS Suffix Search List**, if one is available.

Limitation

1. Leostream Connect 2.2.x does not support the **Allow users to reset offered desktops** option. If a user's policy enables this option, Leostream Connect will show a **Restart** option in the task bar menu, however the user will not be able to restart their machines.
2. Prior to version 2.2.28, the Leostream Connect installation did not automatically stop any running `LeostreamConnect.exe` process. Therefore, you could not run silent scripts to update Leostream Connect if the old client was running.

Leostream Connect versions 2.2.29, and above, now stop any running `LeostreamConnect.exe` process when installed over versions 2.2.28 and above. For example, a script that installs version 2.2.30 over version 2.2.28 will run silently, even if the 2.2.28 client process is running. However, that same script will not run silently if installing over version 2.2.27, if the client process is running.
3. Smart card readers must be attached to the client before launching Leostream Connect. If you connect the smart card reader after launching Leostream Connect, Leostream Connect cannot read the smart card.

Leostream Connect for Linux Version 1.2.19.15

- Support for the HP RGS remote viewer protocol, using directory mode.
- Usability improvements for GUI.
- Report MAC address of Sun Ray DTU.
- Display domain as a drop-down menu, based on Connection Broker policy.

- Remove user credentials from login screen after remote viewer sessions are launched.
- New ability to reboot remote desktops from the Leostream Connect client, based on the end-user's policy.
- Support for NoMachine NX Clients.
- Support for launching Citrix® Presentation Server™ version 4.5 applications.
- New command line parameters to pass in user name, password, and domain to the client.

Upgrading your Connection Broker

Upgrading from Version 5.3.x to Version 6.3

To upgrade to Connection Broker 6.3 from version 5.3 you must, first, update your 5.3 Connection Brokers to the latest patch version. See “Updating the Connection Broker” in the [Connection Broker Administrator’s Guide](#) for detailed instructions on upgrading the 5.3 Connection Broker.

Note: Connection Broker 6.3 requires a new license key. Please, contact sales@leostream.com to convert your existing key to the new format.

Connection Broker 6.x introduces a new Web interface design. If upgrading from 5.3, for best results, close any existing Connection Broker Web interfaces, and clear your Web browser’s cache before you launch the new Connection Broker Web interface. If your Connection Broker Web interface does not render correctly, press **CTRL-Refresh** to reload the page.

Upgrade Instructions when Using an Internal Database

If your 5.3.x Connection Broker runs with an internal database, upgrade to the 6.3 Connection Broker, as follows.

1. Change the **Refresh Interval** of all your centers to **Manual**.
2. Back up your existing 5.3.x Connection Broker database.
3. After you have updated your old Connection Brokers to the latest 5.3.x patch, go to the > **System** > **Maintenance** page.
4. Select the **Download** option.
5. Click **Next**.
6. Save the Connection Broker configuration.
7. Use the **Shutdown** option on the > **System** > **Maintenance** page to shut down your 5.3.x Connection Broker.
8. Back up your 5.3 Connection Broker.
9. Install the 6.3 Connection Broker.
10. When you sign into the 6.3 Connection Broker, the **Leostream license** page, shown in the following figure, appears. Enter your new 6.3 license key.



Connection Broker 6.3 will not accept previous versions of the Leostream license. If you are upgrading from Connection Broker 5.3, you must obtain a new license from Leostream.

11. Select the **I have read and accept the License Agreement** option.

12. Click **Save**.
13. In the new Connection Broker, go to the > **System > Maintenance** page.
14. Select the **Restore** option.
15. Browse to the file you saved from your previous Connection Broker, and restore the database.

Your version 6.3 Connection Broker now contains all the information from your 5.3 version. Please, scan through the Web interface to ensure no information was lost. If you encounter problems, and have a current support contract or evaluation agreement, contact the support team at [.leostream.com/support](https://leostream.com/support).

Upgrade Instructions when Using an External Database

If your 5.3.x Connection Broker runs with an external Microsoft SQL Server® 2005 database, upgrade to the 6.3 Connection Broker, as follows

1. Change the **Refresh Interval** of all your centers to **Manual**.
2. Shut down all 5.3.x Connection Brokers that point to your SQL Server database. (You can use the **Shutdown** option on the > **System > Maintenance** page to shut down your Connection Brokers.)
3. Back up your existing 5.3.x Connection Broker database.
4. Install the 6.3 Connection Broker.
5. When you sign into the 6.3 Connection Broker, the **Leostream license** page, shown in the following figure, appears. Enter your new 6.3 license key.

Note: Connection Broker 6.3 will not accept a Connection Broker 5.x license key.

6. Select the **I have read and accept the License Agreement** option.
7. Click **Save**.
8. Again, in the > **System > Maintenance** page, select **Switch database**.
9. Select the **External database** option.
10. Enter the information for your existing 5.3.x Connection Broker data base. A warning appears, indicating that the 5.3.x database will be upgraded to the 6.3 format.
11. Accept the warning to upgrade the database. The upgrade is not reversible.

Note: Once the database is upgraded, it cannot be connected back to a 5.3.x Connection Broker.

Your version 6.3 Connection Broker now contains all the information from your 5.3 version. Scan through the Web interface to ensure no information was lost. If you encounter problems, and have a current support contract or evaluation agreement, contact the support team at [.leostream.com/support](https://leostream.com/support).

Upgrading from Version 5.2.x to Version 5.3.x

The upgrade to Connection Broker 5.3 from version 5.2 requires a reinstall of the Connection Broker. The following Web site contains the Connection Broker 5.3 virtual appliances.

[.leostream.com/cb/index53sp3.php](http://leostream.com/cb/index53sp3.php)

To upgrade a version 5.1.x or 5.2.x Connection Broker to version 5.3, you must, first, update your 5.1 or 5.2 Connection Brokers to the latest 5.2.10 version. See “Updating the Connection Broker” in the [Connection Broker Administrator’s Guide](#) for detailed instructions on upgrading the 5.2 Connection Broker.

Upgrade Instructions when Using an Internal Database

If your 5.2.x Connection Broker runs with an internal database, upgrade to the 5.3.x Connection Broker, as follows.

1. After you have updated your Connection Brokers to the latest 5.2.x patch, go to the > **System > Maintenance** page.
2. Select the **Download** option.
3. Click **Next**.
4. Save the Connection Broker configuration.
5. Shut down and back up your 5.2.x Connection Broker.
6. Download the Connection Broker 5.3.x file.
7. Install the 5.3.x Connection Broker.
8. In the new Connection Broker, go to the > **System > Maintenance** page.
9. Select the **Upload** option.
10. Browse to the file you saved from your previous Connection Broker.

Your version 5.3 Connection Broker now contains all the information from your 5.2 version. Please, scan through the Web interface to ensure no information was lost. If you encounter problems, and have a current support contract or evaluation agreement, contact the support team at [.leostream.com/support](http://leostream.com/support).

Upgrade Instructions when Using an External Database

If your 5.2.x Connection Broker runs with an external Microsoft SQL Server® 2005 database, upgrade to the 5.3.x Connection Broker, as follows

1. Back up your existing 5.2.x Connection Broker database.
2. Shut down all 5.2.x Connection Brokers that point to this database.
3. Download the Connection Broker 5.3.x file.
4. Install the 5.3.x Connection Broker.
5. In the new Connection Broker, go back to the > **System > Maintenance** page.
6. Select **Switch database**.
7. Select the **External database** option.

8. Enter the information for your 5.2.x Connection Broker data base. A warning appears, indicating that the 5.2.x database will be upgraded to the 5.3.x format.
9. Accept the warning to upgrade the database. The upgrade is not reversible.

Note: Once the database is upgraded, it cannot be connected to a 5.2.x Connection Broker.

Your version 5.3 Connection Broker now contains all the information from your 5.2 version. Please, scan through the Web interface to ensure no information was lost. If you encounter problems, and have a current support contract or evaluation agreement, contact the support team at [.leostream.com/support](https://leostream.com/support).