



Ericom Blaze™

Enhanced Compression and Acceleration
of Microsoft Remote Desktop Protocol
(RDP)

User's Guide

Version 2.2

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About this Document

This guide provides instructions on how to install and use Ericom Blaze to accelerate and compress Microsoft Remote Desktop Protocol (RDP) communication. Follow the instructions in this document and start enjoying the benefits of Ericom Blaze within minutes!

This guide includes the following information:

- Overview of Ericom Blaze
- Preparation and installation procedures
- Usage instructions
- Troubleshooting and FAQ

This manual assumes that the reader has knowledge of the following:

- Enabling RDP on Windows operating systems
- Firewall configuration
- Web server administration

Important terminology used in this document:

- RDP – Remote Desktop Protocol. A remote display protocol developed by Microsoft. RDP is a standard component of Microsoft Windows.
- RDP Host – a Windows system that can be remotely accessed using Microsoft RDP, such as a Terminal Server (RDS Session Host) or Windows workstation with remote access enabled.
- HTML5 – a new update to the HTML specification. Extends HTML with new features and functionality for communication, display, etc.
- WebSocket – a bi-directional, full-duplex communication mechanism introduced in the HTML5 specification.
- SSL – Secure Sockets Layer is a cryptographic protocol that provides communications security over the Internet.

1. Overview

Ericom Blaze provides end-users with an enhanced remote computing experience on most Wide Area Networks (WAN), such as Satellite, Broadband, and aircards. This is achieved by significantly accelerating and compressing the Microsoft Remote Desktop Protocol (RDP). The results are higher frame rates, improved response times, and smoother screen updates. Ericom Blaze performs the following operations:

- Introspects the RDP communication, identifying and compressing *graphical* elements such as bitmaps. The quality / compression ratio is configurable to provide the optimal user experience.
- Identifies key *graphical* elements, such as the Taskbar and Start Menu, and compresses them at a high quality level regardless of general quality settings. This provides a visually lossless quality remote computing experience.
- Compresses the entire RDP transmission using a high-performance bulk compression formula.
- Performs packet shaping to optimize network utilization and to speed up transmission of data packets.
- Intelligently renders frames so that screens are displayed as single units rather than as a sequence of blocks.

Ericom Blaze works with any x86 or x64 based host system that supports RDP, including Windows Terminal Servers, remote physical systems and VDI based desktops. Ericom Blaze consists of the following components:

- **Ericom Blaze Server**
This component is installed on the RDP server/host to compress and accelerate RDP. The following platforms are supported:
 - Windows 2003 and 2003 R2 – 32 bit and x64
 - Windows 2008 – 32 bit and x64
 - Windows 2008 R2
 - Windows XP, Vista and Windows 7 – 32 bit and x64
- **Ericom Blaze Client**
This client component connects to Blaze Servers using accelerated RDP and can also connect to any standard RDP host. The following platforms are supported:
 - Windows 2003 and 2003 R2 – 32 bit and x64



- Windows 2008 – 32 bit and x64
- Windows 2008 R2
- Windows XP, Vista and Windows 7 – 32 bit and x64
- Windows XPe, CE
- Linux
- Mac OS X

NOTE Ericom Blaze may not be backward compatible with earlier versions. If you are using an earlier version of Blaze, please upgrade all Blaze client and server components to the same version for the best results.

Getting Started in 5 Minutes

Ericom Blaze is a feature rich and easy to use application. The manual covers all available features in detail to help customers best configure the application to fit their environment.

The basic installation will take approximately five minutes and will make a Windows RDP host (server or workstation) accessible from any device running a Blaze client (including mobile devices running AccessToGo).

- 1) Download the Ericom Blaze Server MSI installer from the Ericom website
- 2) Run the MSI installer and click *Next* through all the dialog boxes and then *Finish* at the last one
- 3) Configure (or disable) the Windows Firewall for use with Blaze.
 - a. Go to the Windows *Control Panel* and open *Windows Firewall*
 - b. Click "Allow Program or Feature ..."
 - c. Click "Allow another program ..."
 - d. Click *Browse* and navigate to <drive>:\Program Files (x86)\Ericom Software\Ericom Blaze Server\BlazeServer32.exe
 - e. Click *Add* and then *OK*
- 4) Once the Blaze Server is installed on the RDP host, it is ready for use. Now, install the Blaze Client (or AccessToGo) on the device that you want to make the connection from.
- 5) Enter the parameters of the Blaze Server into the Blaze Client and press the *Connect* button to start the connection.

2. Ericom Blaze Server

Ericom Blaze Server performs the RDP compression and acceleration. This component is installed on the RDP host (the computer the user is connecting to). The host may be any Windows system that has RDP access enabled, such as a Windows Terminal Server or a Windows workstation. The Blaze Server uses a customizable port – by default this is port number 3399.

Ericom Blaze Server Requirements

- Windows operating system; see Chapter 1 for a list of supported platforms
- Incoming RDP connections enabled on the OS
- 20 MB of free Hard-Disk space
- MMX and SSE2 capable CPU
- Firewalls are configured to allow traffic over the Blaze port

The Blaze Server should be installed on *each* server/host that requires accelerated access. Terminal Servers only require one installation to accelerate all user sessions. Each workstation desktop (physical or virtual) requires an installation. It is possible to include Blaze Server as part an image that will be deployed using Microsoft® Sysprep or Symantec® Ghost.

Bind Service to All Network Interfaces

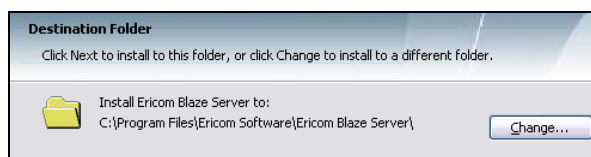
In a virtual network environment - it is recommended to bind the Blaze Server to use all virtual network interfaces, rather than just one virtual NIC. Always ensure that the network interface(s) that Blaze Server is using is accessible by the desired group of end-users.

Installing Ericom Blaze Server

Run *Ericom Blaze Server.msi* and follow the instructions of the installation wizard.

Review and accept the License Agreement.

If desired, click *Change* to select the *installation location* and specify the target path.





Click *Install* (if prompted, accept the security elevation request). Click *Finish* at the last screen to complete the installation

Verify that the Blaze port is available and accessible on the host system. Additional firewall configuration may be necessary.

On Windows XP, a system restart (reboot) may be required after installing the Ericom Blaze Server.

Blaze Server can be automatically and silently installed using a management application such as Microsoft System Center.

To perform a silent install run: `msiexec /I "EricomBlazeServer.msi" /q`

EricomBlazeServer.msi represents a valid path to the .msi file

On Windows Vista, 7, Windows Server 2008, and R2 this command may need to be performed with elevated credentials.

Using Ericom Blaze Server

To modify Blaze Server settings, go to *Start | Programs | Ericom Software | Blaze Server*



By default, Ericom Blaze Server listens for incoming connections on port 3399. This does not interfere with the Microsoft Windows RDP port, which is 3389 by default.

Blaze Server Configuration

The *Server Configuration* console presents a series of tabs that allow the administrator to configure various settings for the server service. The Configuration console only works on systems with Microsoft Internet Explorer 7 or later (the console will not launch on systems with IE6 installed).

HINT When installing Blaze Server on a Terminal Server, it is recommended to hide the Blaze Server Configuration application from end users to prevent unexpected changes to the Blaze Server settings.

General

This page provides functions to restart and stop the Blaze Server service. For certain configuration changes, a service restart is required. This page also displays the number of active Blaze sessions to this system.

NOTE When the Blaze Server service is restarted, all Blaze sessions on the server will be disconnected.



Licensing Information

This page displays licensing information for the Blaze Server. The *Connected to licensing server* field indicates the license server that is currently in use.

NOTE In a production VDI or Terminal Server environment the licensing server must be **centralized** on a robust system. See section on Central Server Configuration for additional details.

By default, Blaze Server uses DNS lookup to locate the Licensing Server. The DNS entries used are *ericom-license-server.<domain-name>* or *_ericom-license-server._tcp.<domain-name>*. If the DNS entries do not exist, the Blaze Server attempts to connect to a Licensing Server that is running on the same computer as itself.

The other option is to explicitly specify the address of the Licensing Server in the Blaze Server Configuration under *Licensing server address*. In the sample image below, 192.168.1.1 represents the location of the License Server. This is used to configure the Blaze Server with the location of the central license server. After changing the Licensing Server address restart the Blaze Server service using the *Service* tab.

The license server communicates over port 8888 by default.

If no valid license is found, Blaze Server will continue to run if the grace period has not expired. Once the grace period expires, Blaze Server will not allow user sessions. A "grace period" lasts up to 10 days within a 30 day period.

General	Licensing	Performance	Communication	Acceleration	Security	Logging	Advanced
---------	-----------	-------------	---------------	--------------	----------	---------	----------

Information | **Activation**

Blaze

License type: Per Device
 Used Licenses: 5 of 8
 License duration: Permanent
 Connected to licensing server: us-support0.ericom.local

Use DNS lookup
 Licensing server address:

Changing this setting may take effect only after the Blaze Server service is restarted.

Specify the address - domain name or IP address - of the centralized Licensing Server. An empty value instructs Blaze to locate the Licensing server using DNS lookup. If DNS lookup does not succeed, the locally installed Licensing server will be used. See the [Getting Started Guide](#) for details.

Manage Licensing Service on localhost

Licensing Activation

Click on *Licensing | Activation* to enter the serial number and activation key into the product’s configuration. To activate an installation from an evaluation, send the “key to send to Ericom” along with the serial number to supportusa@ericom.com for processing. An activation key will be returned. Once the activation key is entered, click on the *Activate License* button. The Blaze Server does not have to be restarted for the license to take effect.

To extend an evaluation, send the “key to send to Ericom” to an Ericom sales representative for processing. A standard two week extension key will be returned once the request is approved.

General	Licensing	Performance	Communication	Acceleration	Security	Logging	Advanced
---------	-----------	-------------	---------------	--------------	----------	---------	----------

Information | **Activation**

License Description:

License Status: Valid
 License Type: Concurrent Users
 Counting Mode: Permanent
 Expiration Date: Never Expires
 Number of Licenses: 10
 Used Licenses: 0

If you have received a serial number from Ericom, please enter it into the field below before clicking the "Email to Ericom" button.

Serial Number:

Key to send to Ericom:

Key received from Ericom:

Performance

This page displays current Blaze Server performance statistics.

General	Licensing	Performance	Communication	Acceleration	Security	Logging	Advanced
---------	-----------	-------------	---------------	--------------	----------	---------	----------

Server to Client communication

Number of sessions: 0

Average compression ratio: 69 %

Total data received from host: 5 MB

Total data sent to client: 1 MB

Real-time cumulative performance information for all sessions since Blaze Server was started. Counters are reset when the Blaze Server service is restarted. Display is automatically updated approximately once every 10 seconds.

Communication

This page provides functions to change the Blaze listening port and the address of the host running RDP.

When using a Blaze listening port other than the default (3399), the port number must be explicitly specified in the client address field (i.e., rdpdemo.ericom.com:23)

The RDP host address is used when the destination system is not the system running Blaze Server. In this scenario, the Blaze server is acting as a proxy between the end user and the destination host system. This type of configuration is not recommended as it adversely impacts Blaze performance.

Changes to both settings require a service restart (see Service page).

General	Licensing	Performance	Communication	Acceleration	Security	Logging	Advanced
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Blaze port number:

Changing this setting will take effect only after the Blaze Server service is restarted.

Specifies the TCP/IP port on which the Blaze Server service listens for incoming connections. Do not use a port number which is already in use by some other service or application on the computer. If you do, Blaze Server service will not start.

Important: Blaze Clients automatically connect to port *3399* when using accelerated RDP. If a different port value is selected, that value must be explicitly specified in the Clients' host address field.

RDP host address:

Changing this setting will take effect only after the Blaze Server service is restarted.

Specifies the address - domain name or IP address - of the RDP host for which Blaze acceleration is used. Best performance is achieved when the Blaze Server is installed on the RDP host itself. In that case the address *localhost* should be used.

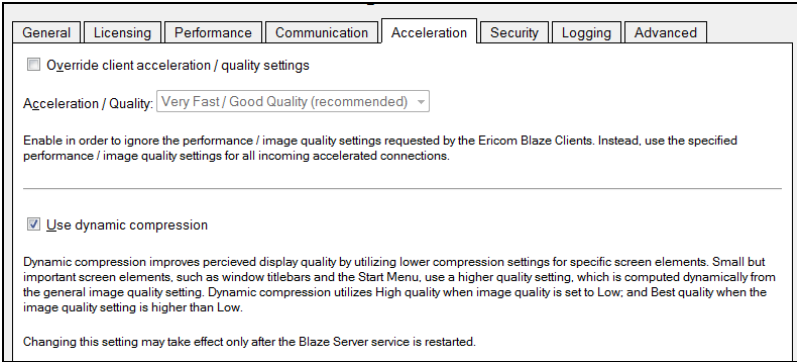
When connecting to *localhost*, Blaze Server will automatically determine the RDP port by retrieving that value from the system. When connecting to any address other than *localhost*, Blaze Server will connect to the default RDP port, which is port 3389. To specify a different port use the format: *address.port-number*

When running Blaze server on a machine with multiple network cards, change the RDP host address from *localhost* to the IP or DNS address of the network card that has RDP access to the system.

Acceleration

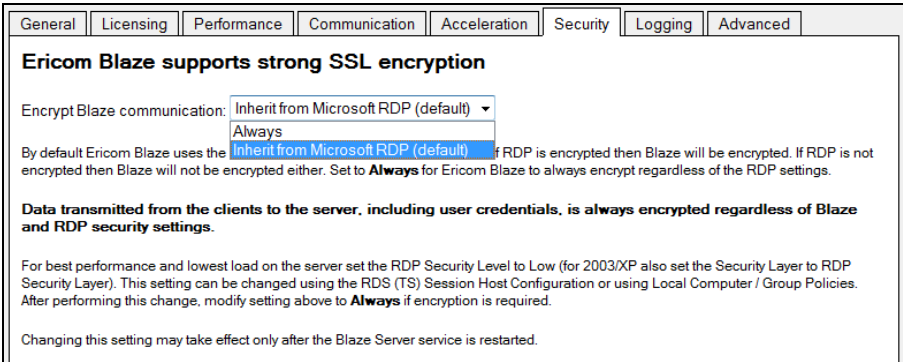
This page provides functions to force the Acceleration/Quality level and disable dynamic compression. When the *Override client acceleration / quality settings* checkbox is checked all Blaze sessions will use the configured setting. All client settings will be ignored. When checking or unchecking this setting, the service must be restarted for the change to go into effect. When the setting is enabled, changing the acceleration level does not require a service restart, but active users must reconnect to use the new setting.

Dynamic Compression identifies small graphical objects on the screen (such as toolbar icons, taskbar icons, Start Menu icons, etc.) and compress them using *High* quality when the Blaze Quality setting is Low; and at *Best* quality when the Blaze Quality setting is higher than Low. All other graphical objects are compressed at the chosen quality. This provides the visual impression of a high quality remote desktop session. By default, this feature is enabled. To disable, uncheck the "Use dynamic compression" box.



Security

This page configures the Blaze security settings.



Ericom Blaze provides integrated *128-bit SSL* encryption. For best performance, set the host's RDP Security Encryption level to Low and change the *Encrypt Blaze communication* to *Always*. Using this configuration, Ericom Blaze SSL encryption will be used instead of the RDP encryption. See the *Ericom Blaze Optimization* chapter in this document for more details.

Logging

This page provides functions to enable/disable certain logging features. Ericom Support may request a debugging log for diagnostic purposes. The debugging log is enabled here.

General	Licensing	Performance	Communication	Acceleration	Security	Logging	Advanced
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Log level: Custom Log flags: Run Session Configuration

Maximum log file size: 16384 Kb

Maximum number of log file backups to keep: 100

Changing this setting may take effect only after Ericom Blaze Server service or/and Ericom Licensing Server service are restarted.

Log files will be generated in a subfolder called *Logs* under the Ericom Blaze installation folder. The current log files are called *BlazeServer.log* and *LicenseManager.log*. When a log file reaches its maximum allowed size it will be backed up, and new log file will be created.

For Ericom Blaze Server, Backups of previous logs will have the format *BlazeServer.bck-xxx.log*, where an *xxx* value of *001* is the most recent backup.

For Ericom Licensing Server, Backups of previous logs will have the format *LicenseManager.xxx.log*, where an *xxx* value of *000* is the most recent backup.

View Current Log Open Log Folder

Generate debugging log (for Ericom support)

Changing these setting1 may take effect only after Ericom Blaze Server service or/and Ericom Licensing Server service are restarted.

Advanced (For Administrator Use Only)

This page provides access to advanced Ericom Blaze Server settings that are stored in the system's Registry.

Open Registry – opens the Registry editor and displays the location where the Ericom Blaze Registry keys are stored.

Export Settings – exports the Blaze Server Registry key to the user's home folder (i.e., My Documents).

Import Settings – imports previously saved Blaze Server Registry settings.

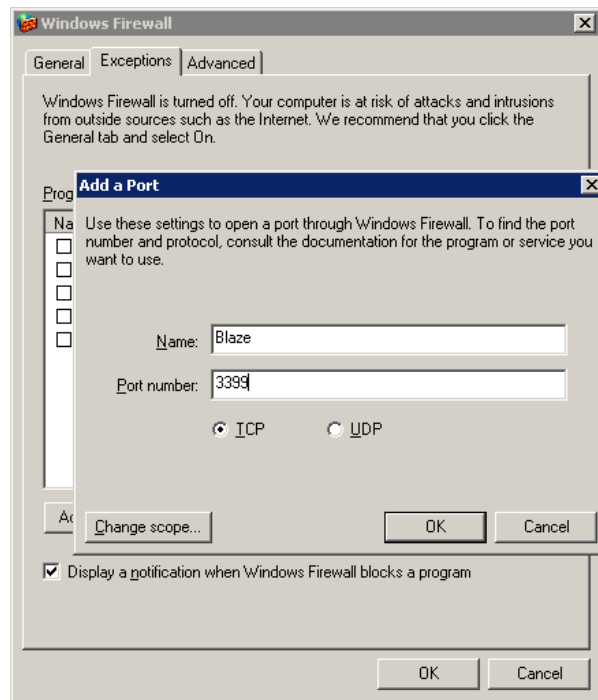
Advanced Configuration – adds all configurable Registry key settings to the Registry. By default, only settings that are changed from the default value are saved into the Registry.

Host Firewall Configuration

Make sure to allow Ericom Blaze traffic communication from the end-user device to the Blaze enabled host. Firewall configuration may be necessary.

On Windows operating systems, ensure that the Windows Firewall is configured to allow traffic to the Blaze port (by default 3399).

Sample firewall configuration on Windows:



Port Forwarding Configuration

When configuring a firewall for port forwarding to a Blaze enabled host, make sure that it is directed to the Blaze port (default: 3399). Do not forward to 3389 (default RDP port).

If a custom Blaze port is being used, configure the firewall to forward to the port value configured under the Communication page.

3. Licensing Overview

Evaluation (Demo) Period

Every Blaze Server installation includes a Licensing Server that is installed on the same device. By default, the license server includes an evaluation period of 30 days. During this period, the Licensing Server allows up to 50 Concurrent User licenses. The evaluation period can be extended by contacting an Ericom sales representative.

Licensing Modes

The Ericom License Server service manages licensing for Ericom Blaze. Any *accelerated* Ericom Blaze Client session requires an Ericom license. A single licensing server can manage licensing for any number of Blaze Servers.

There are two modes of licensing:

Concurrent User – Ericom licenses are counted based on the number of active users that are currently connected to all the Blaze Servers utilizing the same Licensing Server. In this licensing mode:

- There is no licensing limit on the number of Blaze sessions that the same user can open concurrently on a single client device. Only one license will be used regardless of the number of sessions the user opens on the device
- The same user opening Blaze sessions concurrently from several devices will take the same number of licenses as the number of devices used
- Several users using the same device (i.e. using Fast User Switching) will take the same number of licenses as the number of users that have active Blaze sessions

Named User – Ericom licenses are counted based on the number of names registered that *have ever* connected to all the Blaze Servers utilizing the same Licensing Server. In this licensing mode:

- A license is allocated for a name when it is first used by any user
- The license is automatically released after a period of 14 days during which the name has not been used for running Blaze Clients at all. A license allocated to a name cannot be released prior to the end of the 14 day period

Central Server Configuration

The Blaze Server can be configured to use a remote Licensing Server so that a single pool of licenses may be shared among multiple Blaze Servers.

For example, a 10 user license would be activated once on a central server. All Blaze Servers on the network would then be directed to use the pool of licenses on the central server. Ericom recommends that in an environment with more than two Terminal Servers (RDP hosts) that a dedicated server be made available to host the licenses to prevent disruptions and conflicts. Guidelines for the central license server are as follows:

- The central license server must be hosted on a server that is highly available so that it can distribute licenses.
- In a VDI environment, do not install the license server on a cloned desktop or the gold image template. It should be installed on a static machine that does not experience system changes.
- In a TS/RDS environment with two or more servers, avoid installing the license server on the Terminal Server.
- Minimize the amount of reboots and disruptions on the server. Apply updates only during off-peak times.

When no valid license is found, Blaze Server will continue to run if the grace period has not expired. Once the grace period expires, Blaze Server will not allow user sessions. A "grace period" lasts up to 10 days within a 30 day period. When there is an issue with the license server, it should be rectified before the grace period expires.

There are three methods to use a central license server:

Use DNS Lookup

Use DNS lookup

When using this setting, Blaze Server will always attempt to find a centralized Licensing Server before using the local one that was installed along with it. If a central license server is found and used, the local one will be ignored. When the Ericom Blaze Server service starts, it looks for the central licensing server address (IP or DNS name) in the following order.

1) DNS-SRV Entry

Blaze Server will look for the Licensing Server address in a DNS-SRV entry: `_ericom-license-server._tcp.<domain>`
For example, `_ericom-license-server._tcp.ericom.local`



2) DNS Entry

If the DNS-SRV record does not exist, Blaze Server will look for the Licensing Server address in a DNS entry: *ericom-license-server.<domain>*
For example, *ericom-license-server.ericom.local*

3) Localhost

If the DNS entry does not exist, the locally installed Licensing Server will be used (i.e. localhost will be used as the address of the Licensing Server).

Manual Entry

Licensing server address

The administrator may also explicitly specify the license server that will be used at the Licensing page in the Blaze Server Configuration application.

Licensing server address:

Use PowerTerm WebConnect

When the Ericom PowerTerm WebConnect broker is used, all licenses are obtained from the *broker*. Blaze Server licensing is completely ignored.

4. Ericom Blaze Client for Windows

The Ericom Blaze Client connects to a Blaze enabled host. This component is installed on the client device (the computer the user is connecting from).

Ericom Blaze Client Requirements

The Ericom Blaze client is installed on the user’s devices.

- See section 1 for a list of supported platforms
- 20 MB of free Hard-Disk space
- MMX capable CPU

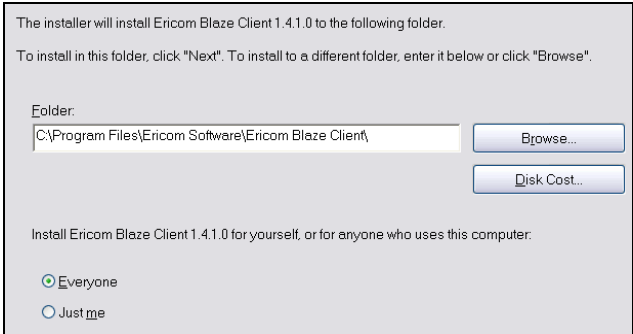
Installing Ericom Blaze Client

- The Blaze installer may overwrite any previous installations.

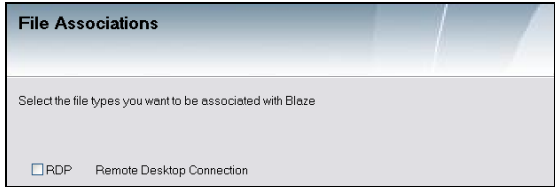
Run Ericom Blaze Client.msi.

Review and accept the License Agreement.

Select *installation location* and specify which users can utilize Ericom Blaze.



Click *Next* to associate **.rdp** files to use the Blaze Client. The **.blaze** extension will be automatically added to the system. When double clicking on an associated configuration file, the Blaze Client will be launched with the file’s settings.



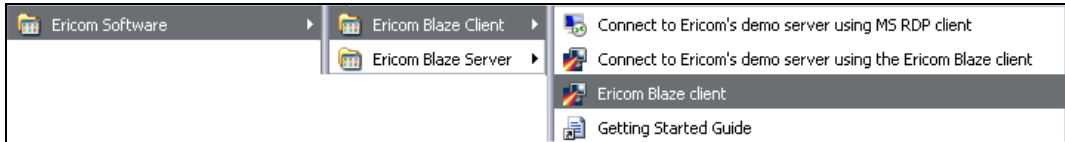
HINT To auto-connect a Blaze session using a .rdp file created with the RDP Client (MSTSC.exe), the .rdp file must be saved using the Blaze client *first*. Launching a .rdp file before it is saved using the Blaze client will open the Blaze client user interface. Simply save the .rdp file using the Blaze client (all settings will be maintained) and it will auto-connect when launched in the future.

Click *Next* to start the installation and wait for the installation to complete (you may be required to accept a security elevation request).

Click *Close* when prompted, and the Blaze Client will be ready for use.

Using Ericom Blaze Client for Windows

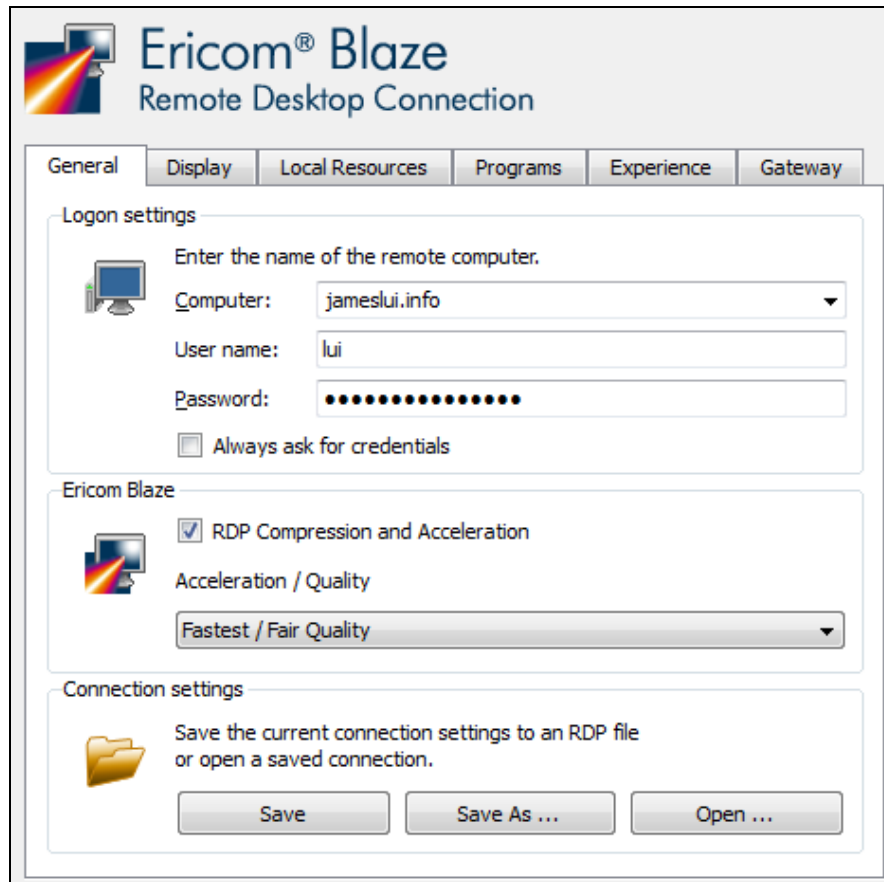
Once installed, the Ericom Blaze Client may be launched from the Start menu.



The Ericom Blaze Client can also be launched by double-clicking on a configuration file that has the .blaze extension. This will cause the Blaze Client to immediately connect using the settings specified in the file, without displaying its configuration user interface. A .blaze file can also be used as a parameter for the executable blaze.exe.

NOTE To replace the Ericom logo in the splash banner with a custom image, create a file named *splash.png* in the same directory where blaze.exe is located in. This file must be 700x120 pixels. Copy the desired logo or image into this file and it will appear at the top of the splash banner.

General Configuration



Computer – enter the address of the host that is running the Ericom Blaze Server or any standard RDP host (host name or IP address). By default, if the port number is not specified, then port 3399 will be used for Blaze accelerated connections, and port 3389 for regular RDP.

To specify a different port number, add “:<port number>” to the end of the address. Example using port 23: rdpdemo.ericom.com:**23**

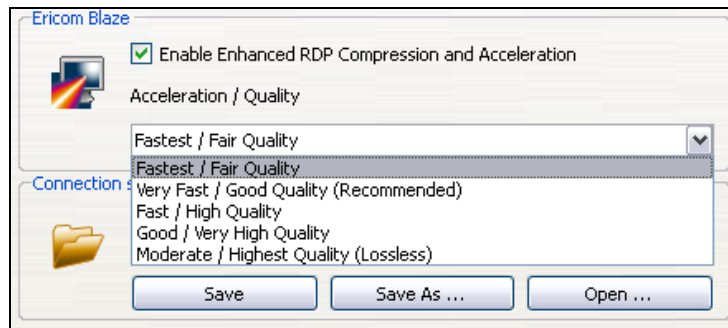
User name/Password (optional fields) – enter credentials to login to the destination host. Provide both to circumvent the host’s login dialog.

Enable Enhanced RDP Compression and Acceleration – Uncheck this box to disable compression and acceleration. When disabled, RDP will be used.

Ericom Blaze Acceleration / Quality Settings

- **Moderate/Highest** – Perfect quality (lossless compression). Appropriate when exact image rendering is required.

- **Good/Very High** – Minimal image quality loss.
- **Fast/High** – Slightly less quality, slightly greater acceleration than Best.
- **Very Fast/Good** – Balanced quality and performance, ideal for most cases.
- **Fastest/Fair** – Lower quality but better performance. Appropriate when bandwidth is limited, especially when using graphic intensive applications.



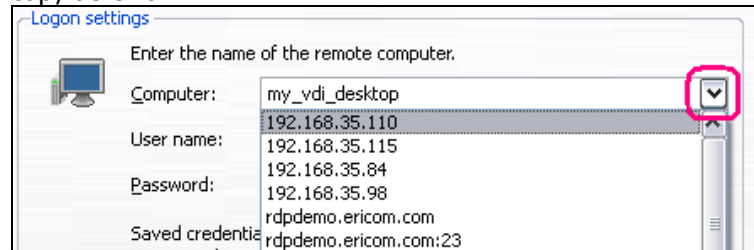
Connection Settings:

- **Save** – Save settings to the file from which they were read. If setting were not read from a file then the behavior is the same as Save As (see below)
- **Save As** – Save settings to a new .blaze file. It is also possible to save to a file that has the .rdp extension
- **Open** – Read settings from an existing .blaze file. It is also possible to load settings from a file that has the **.rdp** extension

Accessing previous configurations:

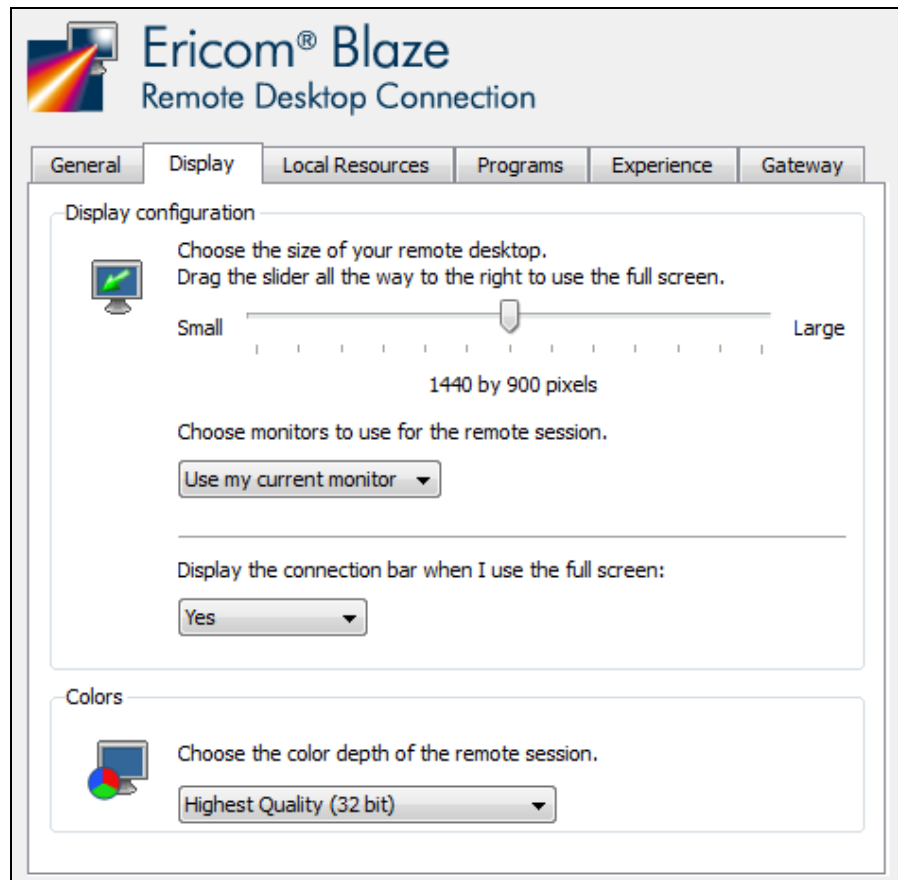
- Settings for all successful past sessions are automatically preserved for reuse.
- To use previous configurations, click on the drop-down arrow icon to the right of the **Computer** name. The sessions are displayed in order of use, with the most recently used session appearing at the

top, as shown:



Click **Connect** once all parameters are set to begin the Ericom Blaze session!

Display Configuration



Display Configuration – Specify the screen size of the Ericom Blaze session. Full screen sessions will cover the entire local screen(s).

Choose monitors to use for the remote session



- Use my current monitor – Blaze session only opens on the current monitor (where the Blaze dialog appears).
- Use all my monitors – Blaze session opens using all monitors.

When connecting to Windows Server 2008 R2 or Windows 7 the RDP Multimon feature is used to create virtual monitors in the remote session that exactly match the local monitors.

When connecting to earlier versions of Windows, multi-monitor spanning is used to create a single remote monitor that covers all local monitors, similar to MSTSC.exe's /span flag. Regardless of how many monitors are being used, the maximum desktop resolution will be 4096x2048. In this mode, Ericom Blaze will automatically adjust size and position of windows so that they are properly displayed within the monitors. For example, maximized application windows will only cover its primary monitor.

- Span all my monitors – Blaze session opens using all monitors.
Multi-monitor spanning creates a single remote monitor that covers all local monitors. This feature is implemented for all operating systems.
- Monitor X – Blaze session opens on the monitor identified as X (X denotes the numeric identifier of the monitor).

Display the connection bar when I use full screen

The Blaze full screen connection bar has three modes:

- Yes – The connection bar is available and starts in auto-hide mode (default). Can be changed to Pinned mode.
- Yes (Pinned) – The connection bar is available and starts in pinned mode. Can be un-pinned to change to auto-hide mode.
- No – No connection bar is available. This is useful for kiosks and thin clients environments.

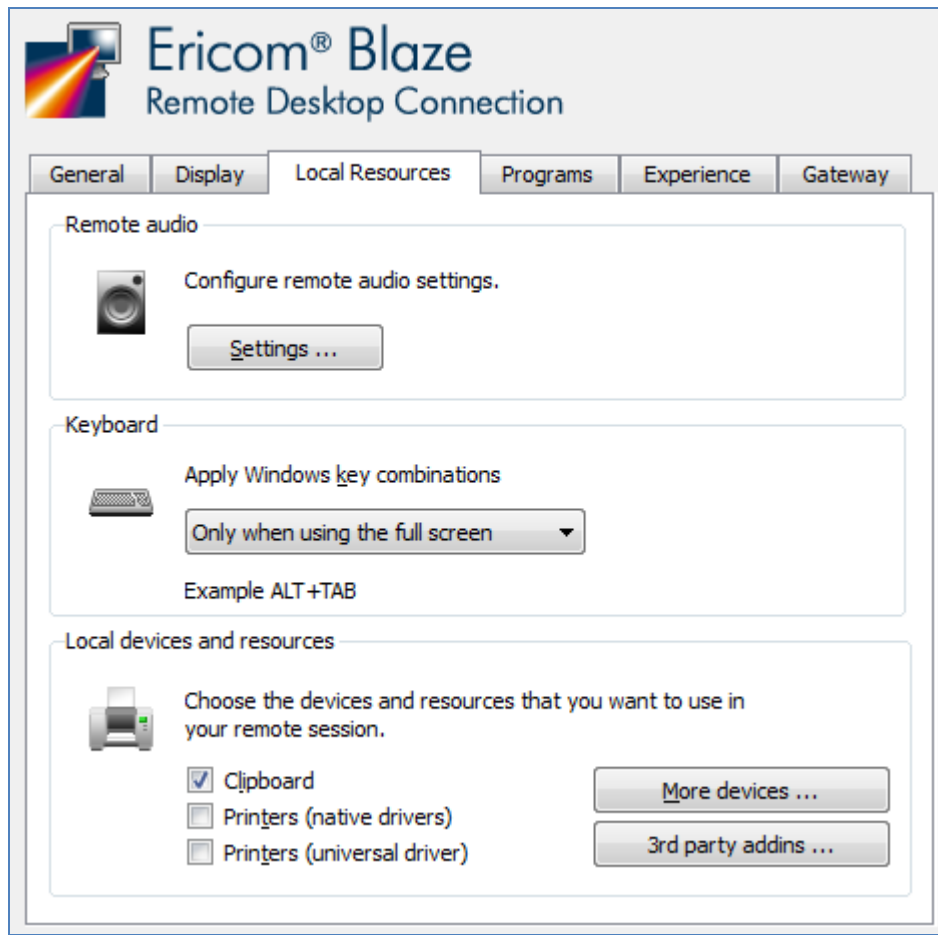
Colors – Specify the color depth for the Ericom Blaze session. Specify 32 bit colors to use the highest color setting provided by the host platform, whether it is 32 bit color or less – for example, for Windows 2003 it will use 24 bit)

NOTE: When connecting to Windows 2003 SP2 servers, if the client desktop resolution is very large the color depth will be reduced. A Microsoft Hotfix is available to fix this. Please read the FAQ for more details.

Display the connection bar – Uncheck this box to hide the Ericom Blaze RDP bar that appears at the top of the RDP window in full screen mode.



Local Resources Configuration



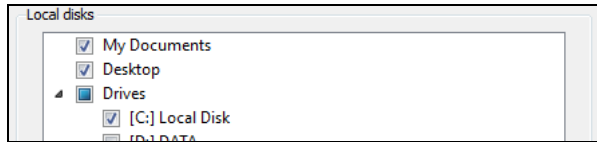
Remote Audio – Specify the audio settings for the Ericom Blaze session.

Keyboard – Specify the Windows key combinations configuration.

Local devices and resources – enables Printer and Clipboard redirection.

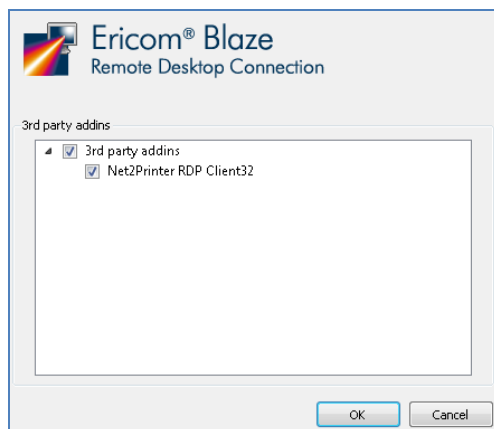
HINT In order to use standard RDP printer redirection, the printer driver must be installed on the host and the client

Click *More ...* to specify *mapping of local disks* on the remote host. It is possible to map special folders: *My Documents* and *Desktop* for the local user; and enable mapping of plugged in drives while the session is active.



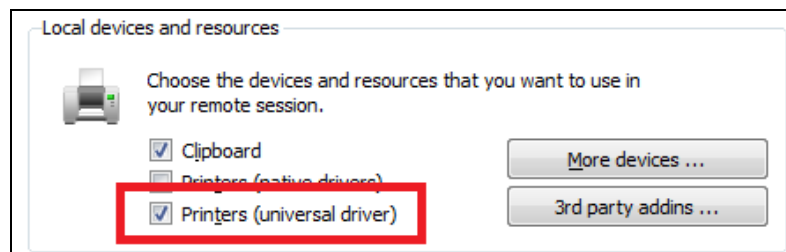
3rd party add-ins – enables the use of 32-bit third-party RDP add-ins (i.e. universal printing redirection support). Blaze only supports 32-bit based add-ins, x64-based third-party components are not supported (for example: triCerat’s x64 Screwdrivers client). On x64 systems, use the 32-bit version of the add-in.

If the third party add-in is not installed properly on the client system, the selection for it will not appear in the Blaze client. Universal printing solutions that have been tested include Net2Printer, ThinPrint, triCerat, and Print2RDP. AudioTS two-way audio redirection is also supported. Contact Ericom (sales@ericom.com) for more information on supported third-party solutions.

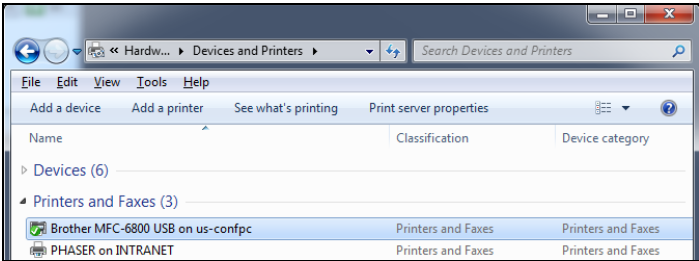


Universal Printing

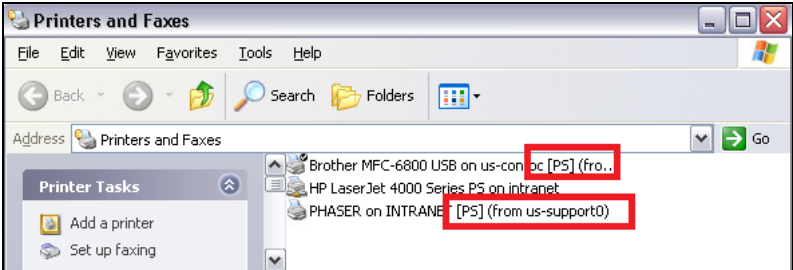
Ericom Blaze includes support for universal printing. The built in universal printer is based on Postscript and will redirect remotely executed print jobs to local printers. All local printers will appear in the remote session as available printers. To enable universal printing, check the *Printers (universal)* setting:



In this example, the Windows 7 system running the Blaze client has two local printers available:

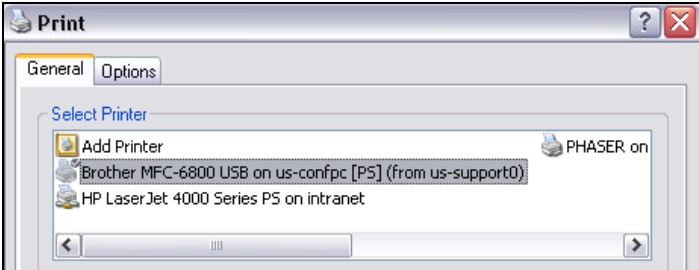


In the Blaze RDP session, the redirected printers will appear alongside any printers configured on the remote desktop. Redirected printers will have the symbol "[PS]" along with the computer name in its label.

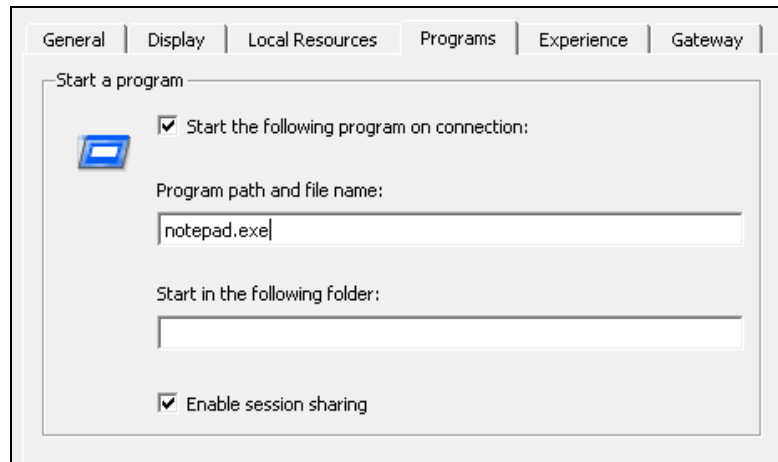


NOTE A generic HP Postscript driver is used to process the print jobs. Users will be able to print to most types of printers, however, certain printer specific functions may not be available (i.e. duplex printing). To support printer specific features, consider using a third-party print solution or standard RDP printing (by loading the printer driver(s) on the RDP host).

To print to a redirected printer, simply select the desired printer when the application's *Print* dialog appears.



Programs Configuration



Ericom Blaze Seamless Applications are remote applications that appear as local applications on the user's desktop. The remote desktop will not be visible. This allows remote applications to appear side by side with user's local applications. Seamless Applications are supported in accelerated and non-accelerated modes via the Blaze Client. Blaze Server is required on the host system where the application will be launched from.

Check *Start the following program on connection* to specify the path and startup folder of a program that will be launched as a seamless application. Remember to enter the application's path on the *remote* system. Do not enter an application path located on the local (user's) system.

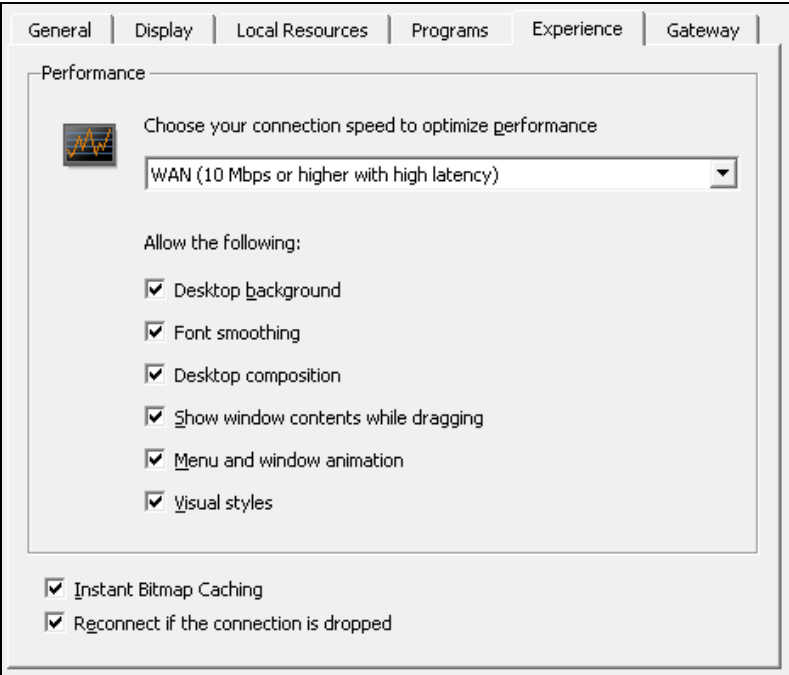
Ericom Blaze supports Session Sharing with seamless applications. Multiple seamless applications can be launched using the same session to minimize unnecessary logins. To enable, check the *Enable session sharing* box.

HINT Blaze Seamless Applications may be used as an alternative to Microsoft RemoteApps. Blaze configuration files can be set to launch a seamless application from the remote host running Blaze Server. By placing Blaze icons on the user's desktop, users can easily access Blaze-enabled applications.

Sample icons:



Experience Tab Configuration



Click the Experience drop down box to select the setting that best matches the user’s network speed. Session features may also be specifically disabled by deselecting the respective checkboxes.

NOTE If *Show window content* is selected, it will also need to be enabled on the RDP host. The configuration varies based on the operating system, search the Internet for “*Show window content*” to find instructions.

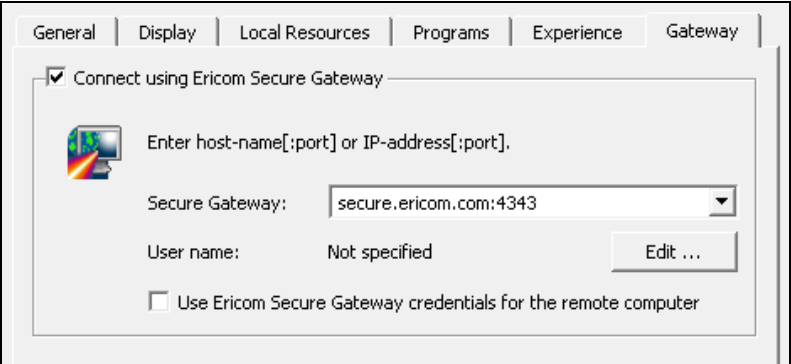
Instant Bitmap Caching – This allows bitmaps to be cached for best performance. Uncheck this setting when connecting to an RDP host that also has Microsoft RemoteFX enabled.

Reconnect if the connection is dropped – This enables a session to reconnect automatically when the Blaze session is interrupted by a network outage.

Gateway Tab Configuration

If the Ericom Secure Gateway will be used - check the box *Connect using Ericom Secure Gateway*. Enter the address of the Ericom Secure Gateway server. If no port is explicitly specified, the default 443 is used. To specify a port, enter ‘:’ and the port value after the address, as show in the example below. A user account is required to login to the Secure Gateway; this can be

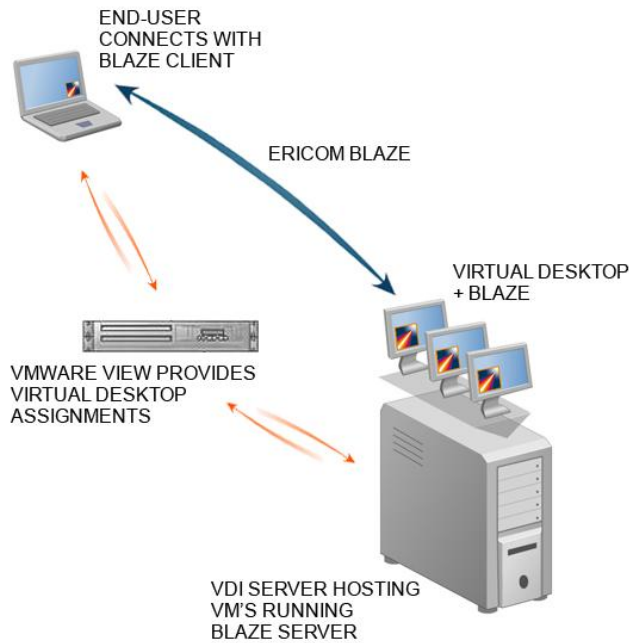
manually entered or passed from the credentials stored in the Ericom Blaze client.



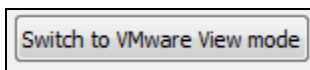
For additional information about the Ericom Secure Gateway, refer to the Ericom Secure Gateway manual.

5. VMware® View Client Mode

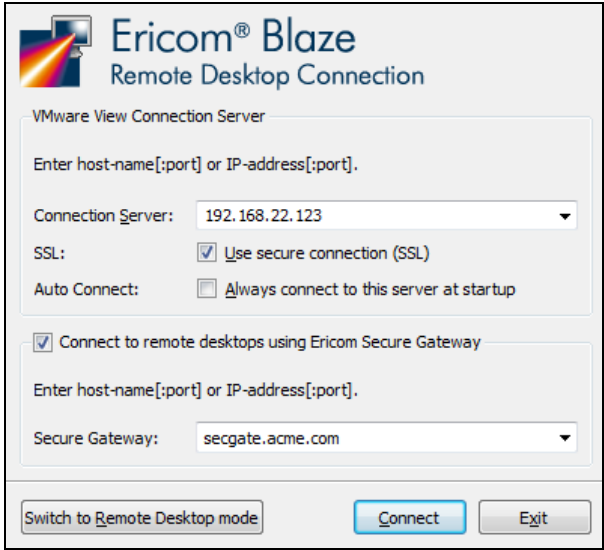
Ericom Blaze Client supports VMware View connection brokers. Ericom Blaze uses the View broker for authentication and then connects directly to the target virtual desktop. When using Ericom Blaze RDP acceleration for VMware View access, the Blaze client is used *in place* of the View client. The Blaze client does not require the View client, and does not replace it either.



To enable VMware View mode in the Blaze client, click the *Switch to VMware View mode* button.

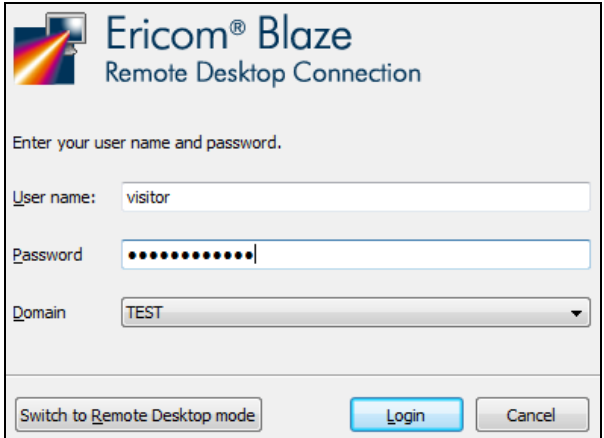


The Ericom Blaze – VMware View interface will appear.

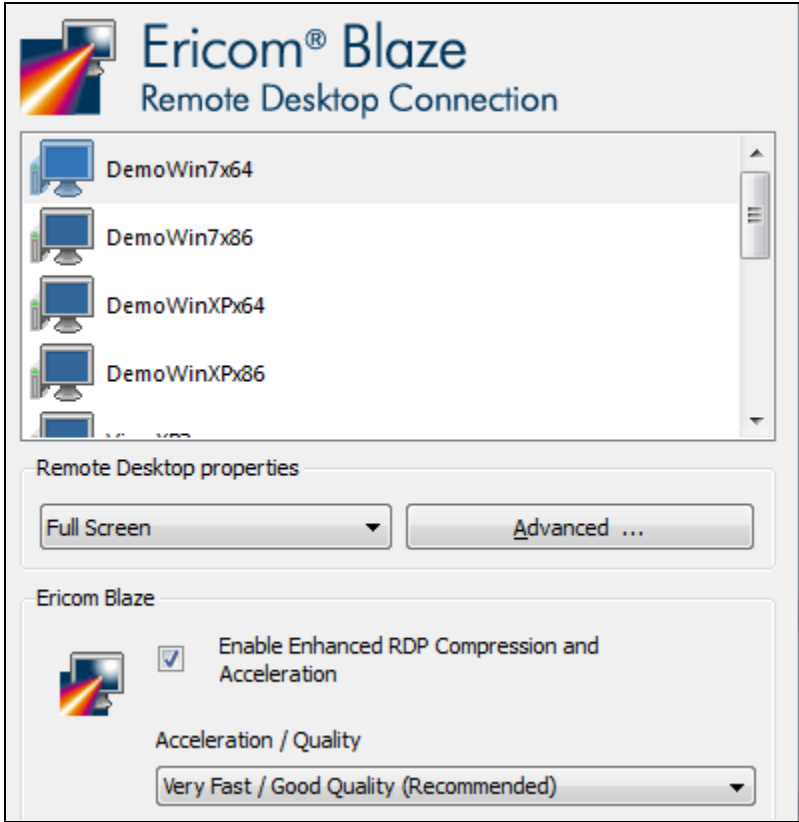


Enable SSL if it is required by your VMware View connection broker. Enter the address of the VMware View server in the *Computer* field and click *Connect*.

The next dialog will prompt the user for credentials.



Once authenticated, the Blaze client will display a list of desktops available via the View broker to the user.

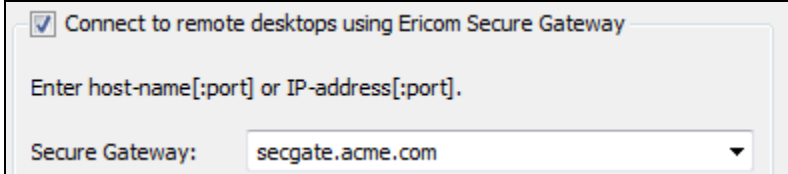


Configure any Blaze settings as desired and click the *Connect* button to connect to the selected desktop.

NOTE The Blaze client does not support PCoIP. The Ericom Blaze client and Blaze protocol functions independently from the View client and PCoIP protocol.

Secure Gateway Access

If the Ericom Secure Gateway will be used - check the box *Connect using Ericom Secure Gateway*. Enter the address of the Ericom Secure Gateway server. If no port is explicitly specified, the default 443 is used. To specify a port, enter ':' and the port value after the address, as show in the example below. In the example above, the Secure Gateway has an address of *secgate.acme.com*; since no port is specified 443 is automatically used.



6. Ericom Blaze Client for Linux

Installation Prerequisites

- Most current Linux distributions, such as Red Hat, Fedora, Suse and Ubuntu. Requires Linux kernel 2.6 and above.
- 20 MB of free hard-disk space
- MMX capable CPU
- The following X11 libraries must be installed prior to using Blaze: Xcursor, Xrandr, and Xinerama

Installing Ericom Blaze Client for Linux

There are four types of installers for Ericom Blaze Client for Linux:

- rpm for most Linux distributions such as Red Hat / Fedora / Suse
- deb for Debian based Linux distributions such as Ubuntu and HP® ThinConnect
- Graphical installer that is compatible with most Linux environments and can be used by root and by other users
- Blaze.tar.gz archive containing all the files – this is appropriate for installation on Linux Thin Clients

To install using rpm enter the following command:

```
rpm -I Ericom-Blaze-Client.rpm
```

To install using deb double-click on the file `Ericom-Blaze-Client.deb`

The deb version can also be installed running the command:

```
dpkg -i Ericom-Blaze-Client.deb
```

NOTE When installing the Blaze deb package on Linux thin clients, a software installation tool is may be required by the thin client vendor.

To use the graphical installer:

- 1. Unzip Ericom-Blaze-Client-For-Linux.zip
- 2. Launch Ericom-Blaze-Client-For-Linux.sh which was extracted from the zip
- 3. Follow the instructions in the installation Wizard

If the installer is run by root then the default installation location will be:

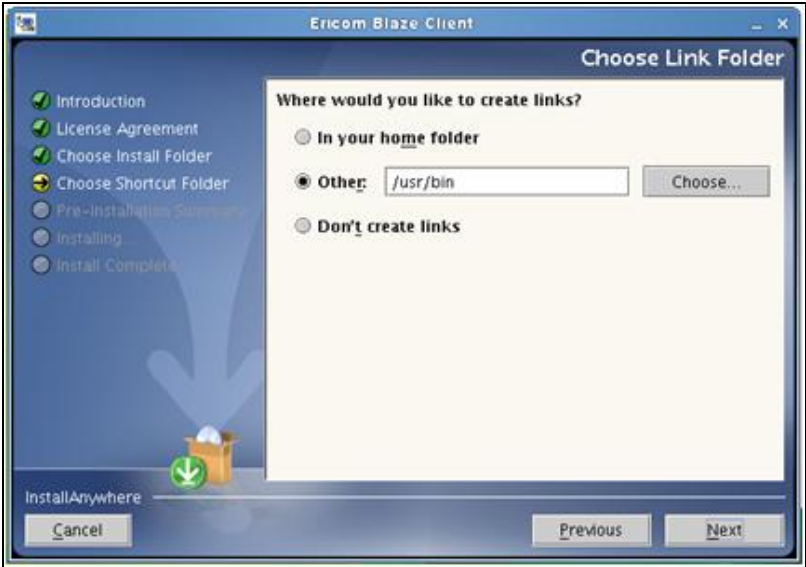
```
/Ericom-Blaze-Client
```

Otherwise the installation directory will be created under the installing user's home directory, e.g.:

```
/home/user/Ericom-Blaze-Client
```

The installation directory will contain an executable file called blaze. Run this file to launch the Ericom Blaze Client.

The graphical installer provides an option to create a link file to the executable in the directory of your choice – the default being /user/bin



Write permissions to the destination folder is required, otherwise an error message will be displayed.

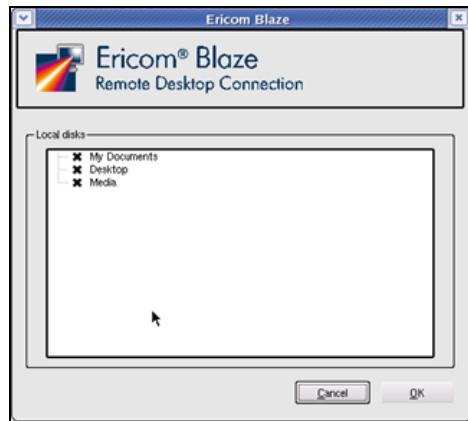
Using Ericom Blaze Client for Linux

To launch the Ericom Blaze Client run the blaze executable or the link. A connection Wizard is displayed that is the same as on the Windows platform – see *Blaze Client for Windows* Chapter for details. The executable is located in the directory `/opt/Ericom-Blaze-Client`.

Review the chapter on the Blaze Client for the Windows platform for instructions on the proper usage of various features. The contents that follow cover the differences between certain feature functionality between the Windows and Linux version of the Blaze client.

Drive Mapping

The drive mapping dialog provides three options:



- Select *My Documents* to map the home directory
- Select *Desktop* to map the desktop directory
- Select *Media* to map the `/media` directory. This directory is used for mounting file systems on removable media like CD-ROM drives, floppy disks, and Zip drives

Printer Redirection

Printer redirection for Linux clients only supports postscript printers. The following printer driver must be installed on the Windows RDP host:

- On 32-bit systems (x86) install HP Universal Print Driver for Windows PostScript
- On 64-bit systems (x64) install HP Universal Print Driver for Windows PostScript x64

7. Ericom Blaze Client for Mac

Installation Prerequisites

- Mac OS X 10.5 or higher
- 20 MB of free hard-disk space
- MMX capable CPU

Installing Ericom Blaze Client for Mac

To launch the Ericom Blaze Client for Mac, run installer and follow the instructions contained in the installation wizard.

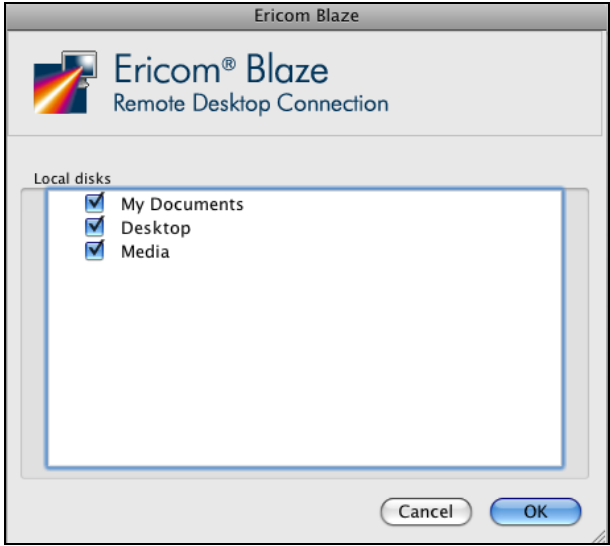
Using Ericom Blaze Client for Mac

To launch the Ericom Blaze Client run the blaze executable or the link. A connection Wizard is displayed that is the same as on the Windows platform – see *Blaze Client for Windows* Chapter for details.

Review the chapter on the Blaze Client for the Windows platform for instructions on the proper usage of various features. The contents that follow cover the differences between certain feature functionality between the Windows and Mac version of the Blaze client.

Drive Mapping

The drive mapping dialog provides three options:



- Select *My Documents* to map the home directory
- Select *Desktop* to map the desktop directory
- Select *Media* to map the /media directory. This directory is used for mounting files systems on removable media like CD-ROM drives, floppy disks, and Zip drives

Printer Redirection

Printer redirection for Mac clients only supports postscript printers. In addition, the following printer driver must be installed on the Windows RDP host:

- On 32-bit systems (x86) install HP Universal Print Driver for Windows PostScript
- On 64-bit systems (x64) install HP Universal Print Driver for Windows PostScript x64

8. Ericom Blaze Client for CE (Beta)

Installation Prerequisites

- Windows CE 5.0 or 6.0 or higher
- 15 MB of free hard-disk space
- MMX capable CPU

Obtaining Ericom Blaze Client for CE

Contact Ericom support for more details on the beta download (supportusa@ericom.com).

Installing Ericom Blaze Client for CE

Windows CE devices will vary in configuration. The most straightforward method of testing the Ericom Blaze Client on CE is to extract the contents of the ZIP folder (Blaze.exe and msvc90.dll) onto a USB key and run it from the USB drive. For CE devices that are fully locked down, it will be necessary to contact the thin client vendor and request that Ericom Blaze for CE be added to the thin client image.

9. Best Practices

Improving performance by tuning security settings

DISCLAIMER Please consult with your security administrator before implementing any security-related changes on your systems and servers.

When encryption is enabled for Microsoft RDP, it will consume additional resources on the server (host). To lower the resource usage, and improve Ericom Blaze performance, configure the Session Host (Terminal Server) RDP *Encryption level* setting to *Low*. By setting the RDP Encryption level to *Low*, RDP encryption is disabled for traffic from the server to the clients. However, traffic from the clients to the server (including user credentials) will continue to be encrypted.

Ericom Blaze provides integrated strong 128-bit SSL encryption. This feature can be used in place of standard Microsoft RDP encryption and will result in better Blaze performance. This is enabled by using the Ericom Blaze Server Configuration console and setting the *Encrypt Blaze communication* to *Always*.

For networks where RDP encryption is not necessary (i.e., a third party security device is being used), disabling RDP encryption and setting Ericom Blaze SSL to *inherit from RDP* will result in the best performance.

Ericom Blaze supports strong SSL encryption

Encrypt Blaze communication: ▼

Instructions for adjusting RDP encryption

Windows 2003, 2008, 2008R2 Terminal Server

On Windows 2003 and 2008: go to Administrative Tools | *Terminal Services Configuration*

On Windows 2008 R2: go to Administrative Tools | *Remote Desktop Session Host Configuration*

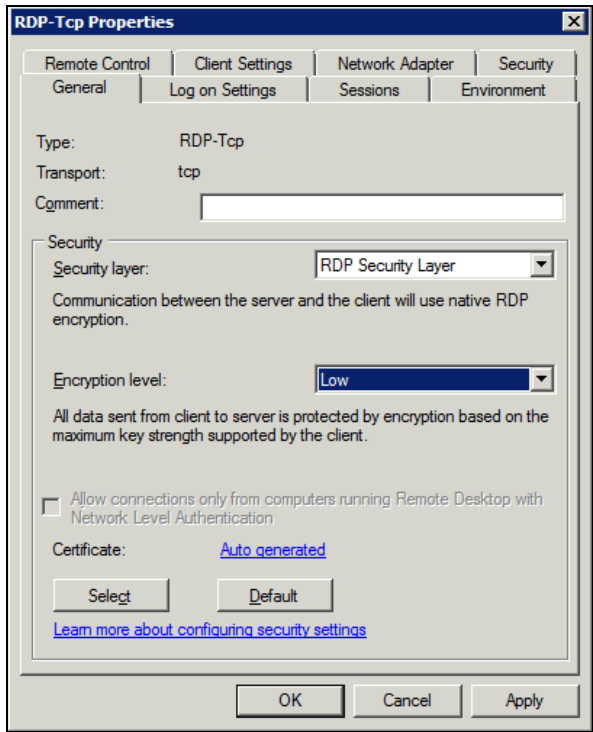
Open the *General* tab

Set the *Security layer* to *RDP Security Layer* (this is the server default)

Set the *Encryption level* to *Low*

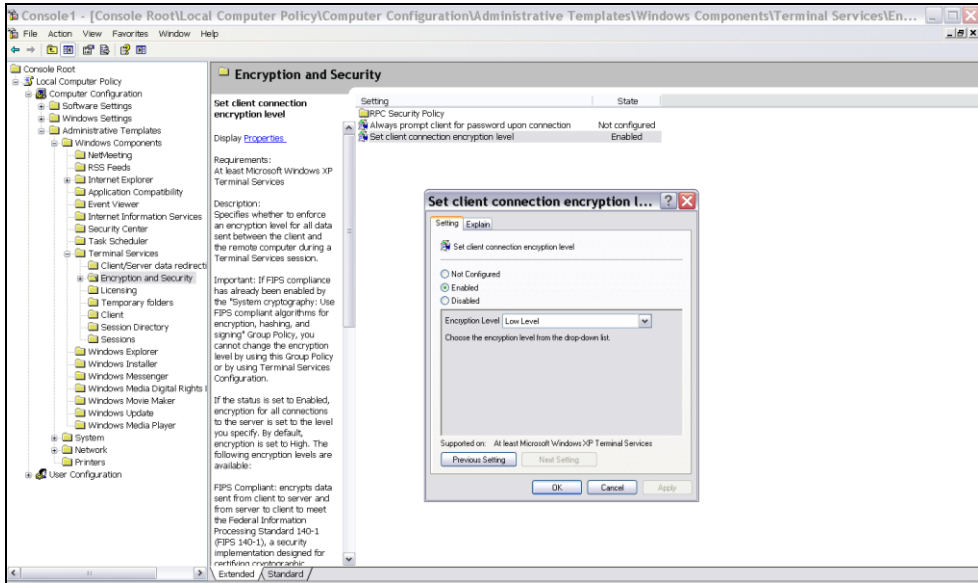
Click OK to accept the settings

NOTE If these settings are gray and cannot be changed, they are likely being managed by group policy. Please consult with your server administrator to request changes.



Windows workstations (XP, Vista, 7)

RDP encryption is configured under the local/group policy of the system. Consult with your systems administrator if assistance is needed to make changes.



Using Load Balancers

Larger application and desktop hosted deployments will require multiple RDP host servers. The Ericom PowerTerm WebConnect connection broker may be used to handle larger loads and evenly distribute users across a large base of Terminal Servers. Third-party Terminal Server aware load balancers (i.e. Microsoft Windows 2008 R2 Remote Desktop Connection Broker or 2X Load Balancer) may also be used.

Configuration

When using a software based load balancer (i.e., Remote Desktop Connection Broker) that runs on a Windows operating system (2003 and higher), the Ericom Blaze Server may be installed on the same machine. For all others load balancers, install Ericom Blaze on a separate machine.

Ericom Blaze Server must be configured to connect to the load balancer address and port. This is performed by using the Ericom Blaze Server Configuration Tool. Go to *Communication* and enter the load balancer's *address:port#* for the *RDP host address*. When Blaze Server is installed on the same Windows machine as the load balancer use *localhost:port#*.

Service	Licensing	Performance	Communication	Acceleration	Security	Logging	Advanced
---------	-----------	-------------	---------------	--------------	----------	---------	----------

Blaze port number:

Changing this setting will take effect only after the Blaze Server service is restarted.

Specifies the TCP/IP port on which the Blaze Server service listens for incoming connections. Do not use a port number which is already in use by some other service or application on the computer. If you do, Blaze Server service will not start.

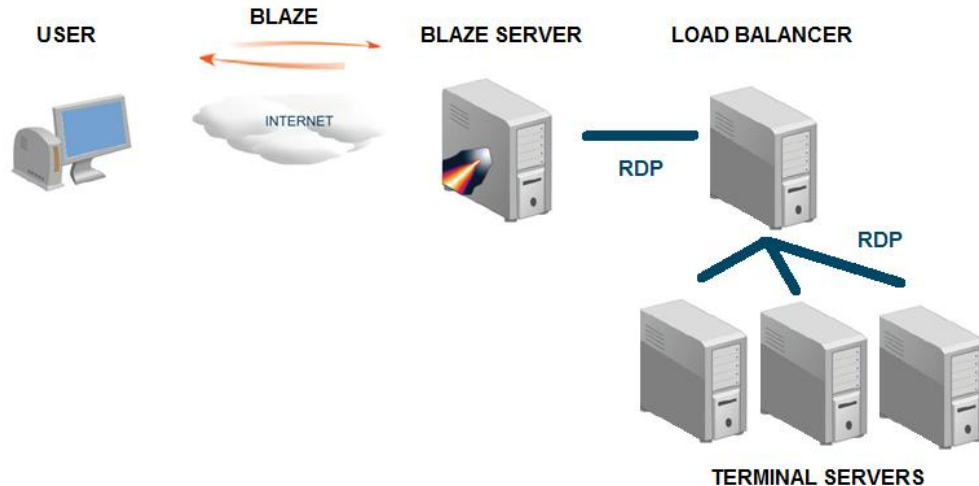
Important: Blaze Clients automatically connect to port 3399 when using accelerated RDP. If a different port value is selected, that value must be explicitly specified in the Clients' host address field.

RDP host address:

Changing this setting will take effect only after the Blaze Server service is restarted.

Configure Ericom Blaze clients to connect to the address of the Blaze Server. Blaze Server will forward communication onto the load balancer. In this environment, the connection between the Blaze Server, load balancer, and RDP hosts must be in very close proximity, with minimal latency, to ensure good performance.

This diagram illustrates how Ericom Blaze works with a load balancer:



The system running Ericom Blaze Server must be equipped with enough memory to handle the total number of active users.

Sample configuration

Each Blaze Server session uses approximately 7MB. If the Blaze server has 2560 MB of memory, the amount of users it can handle is:

$$512 \text{ MB} + 2048 \text{ MB} / 7\text{MB} = 292 \text{ users}$$

512 MB is allocated to the operating system. The rest of the memory can be used for user sessions. Since Blaze Server is a 32 bit application, only 2 GB can be utilized. If you need to support over 300 users please contact Ericom Support for assistance.

Foreign keyboard layout and languages

Installation Prerequisites

The language that will be used on the client is defined on the host where Blaze is installed.

Mac and Linux Configuration

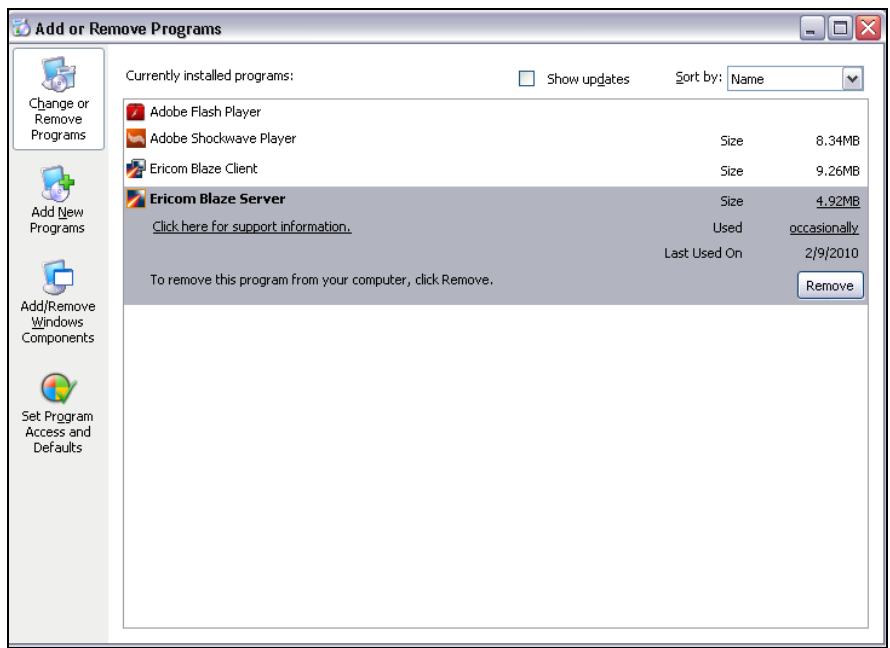
The LANG environment variable is used to determine the client device language. Verify that the LANG environment variable is set correctly on the client. Verify that the environment variable value matches one of the entries in the `lang.txt` file under the Blaze Client folder.

International Spanish is currently not supported, please use Traditional Spanish.

10. Uninstalling Ericom Blaze

Windows

Uninstall Ericom Blaze client and server via Control Panel | Add/Remove Programs

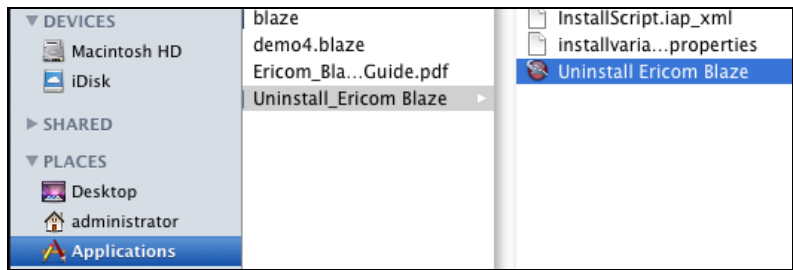


Linux

Run the uninstaller script from the Blaze Application directory

Mac

Run the Uninstaller from the Blaze Application directory



11. Integration with Juniper[®] SSL VPN

Configuration Requirements

Juniper SA-2000 6.0R1

Ericom Blaze Client 1.2 or higher

Ericom Blaze Server 1.2 or higher

Windows Secure Application Manager Configuration (WSAM)

One method to use Ericom Blaze through a Juniper SSL VPN appliance is by configuring the Windows SAM (WSAM) for network access. The WSAM will allow access by tunneling Ericom Blaze traffic via a HTTPS connection.

From the Juniper IVE, browse to: Users → User Roles → <Role Name> → SAM → Applications

Click on Add Server.

In the Name field, enter a display name for the Blaze server. Next, enter a description that will appropriately identify the server.

In the Server field, enter the Blaze Server name. In the following example, *server.widgets.com* is used.

In the Ports field, enter the Ericom Blaze Port(s).

Click on Save Changes



Roles > Users Main >
New Allowed Server

* Type:

Name:

Description:

* Server: Name or IP address
You can use * or ? wildcards.
You can also specify with a
netmask or prefix-length
(10.10.10.20/255.255.255.0
or 10.10.10.20/8).

Port(s): You can specify multiple
ports as comma-delimited
lists (1,2,3,4) or ranges
(1-4).

From the IVE browse to Users → Resource Policies → SAM → Access Control
Check for the policy WSAM applications for <Role Name>. If the Policy does not exist, continue to the next step. Otherwise, the configuration is complete.

Click on "New Policy."

In the Name field enter the display name of the policy for the Ericom Blaze Server.

In the Description field, enter a description that will appropriately identify the policy.

In the Resources field enter the address in the format of <server_name>:<port>.

Under the Roles section, click on the appropriate role that will be accessing the Ericom Blaze server.

Secure Application Manager Policies >
New Policy

* Name: Required: Label to reference this policy.

Description:

Resources

Specify the resources for which this policy applies, one per line.

* Resources: Examples:
 <USER>.domain.com:22,23
 exchange*.domain.com:*
 10.10.10.10/255.255.0.80,443,8080
 10.10.10.10/24:8000-9000

Roles

Policy applies to ALL roles
 Policy applies to SELECTED roles
 Policy applies to all roles OTHER THAN those selected below

Available roles:

Selected roles:

Action

Allow socket access
 Deny socket access
 Use Detailed Rules (available after you click 'Save Changes')

Save changes?

Under the Action section, choose "Allow socket access".
 Click "Save Changes".

Java Secure Application Manager Configuration (JSAM)

An alternate method to use Ericom Blaze through a Juniper SSL VPN appliance is by configuring the Java SAM (JSAM), or network access. The JSAM has the advantage of being cross platform and can be run *without administrative* privileges on the workstation. The JSAM allows access by tunneling Ericom Blaze traffic via HTTPS.

The first step is to configure the appropriate User Role to use the Java SAM instead of the Windows SAM:

From the Juniper IVE, browse to Users → User Roles → <Role Name> → General → Overview

Scroll down to the "Access features" section.

Select "Secure Access Manager", then choose the "Java version" radio button.

Access features

Check the features to enable for this user role, and specify any role-based options for other roles assigned to the user.

- Web** [6 Bookmarks](#) | [Options](#)
- Files, Windows** [3 Bookmarks](#) | [Options](#)
- Files, UNIX/NFS** [0 Bookmarks](#) | [Options](#)
- Secure Application Manager** [0 Applications](#) | [Options](#)
 - Windows version
 - Java version
- Telnet/SSH** [0 Sessions](#) | [Options](#)

- Click the "Save Changes" button
- From the Juniper IVE, browse to Users → User Roles → <Role Name> → SAM → Options
- Verify that the radio button "Java SAM" is selected.
- Under the section "Java SAM Options", select "Automatic Host Mapping" to allow users to use the internal DNS names. Please note that for this option to work, the user needs local administrative access on their local workstation.
- Click on "Save Changes."
- From the Juniper IVE, browse to: Users → Resource Profiles → SAM → Client Applications
- Select "New Profile."
- Set Type to "JSAM."
- Set Application to "Custom."
- Set name, i.e., "Ericom Blaze"
- Add the Ericom Blaze Server to the JSAM Port Forwarding section. The Ericom Blaze Server port is 3399. For each entry, click on the "Add" button
- Verify that the check box "Create and access control policy allowing Sam access to these servers" is selected.
- Select "Save and Continue". The Roles section will be displayed.

Client Application Resource Profiles >

New Client Application Resource Profile

Type: *

Application: *

Name: *

Description:

JSAM Port Forwarding

JSAM secures traffic destined for the following server(s). It listens for this traffic on a local loopback address, which you can also specify (valid loopback addresses are 127.0.0.1 or 127.0.10.x; and higher). JSAM will automatically choose and configure the client loopback addresses if you leave them blank. If you leave the Client Port blank, JSAM will use the Server Port for that server.

Servers:

<input type="checkbox"/>	Server Name *	Server Port *	Client Loopback IP	Client Port	
<input checked="" type="checkbox"/>	server.widgets.com	3399			<input type="button" value="Add"/>
<input type="checkbox"/>					

Create an access control policy allowing SAM access to these servers
 Allow JSAM to dynamically select an available port if the specified client port is in use

Save changes?

* indicates required field

Select the appropriate role from "Available Roles" and click on the "Add->" button.
 Click on the button "Save Changes".

12. Installation on iGel[®] Linux Thin Client

This section provides instructions on how to install the Ericom[®] Blaze client on an iGel Linux Thin Client using the iGel custom partition. The reader should have sufficient knowledge of the iGel Universal Management Suite (UMS) and to manage the devices. Additional information regarding the iGel Custom partition can also be found in the iGel UMS administration guide.

Requirements

Windows 2003 / 2008 Server to install the iGel management tools. The iGel Universal Management Suite 3.5.550 (Build 7867) has been verified by Ericom

An iGel Linux Thin client device, an iGel UD3-720LX running firmware version: 4.03.500.01 was used for testing.

Step 1: The Blaze files and iGel inf file

Contact Ericom Technical Support and ask for the iGel Linux Blaze package. This consists of:

Blaze.rar.bz2 - This archive file contains the blaze components that will be transferred to the device. The extension must be ".rar.bz2".

Blaze.inf - This file is the iGel configuration file, the format of the file is as follows:

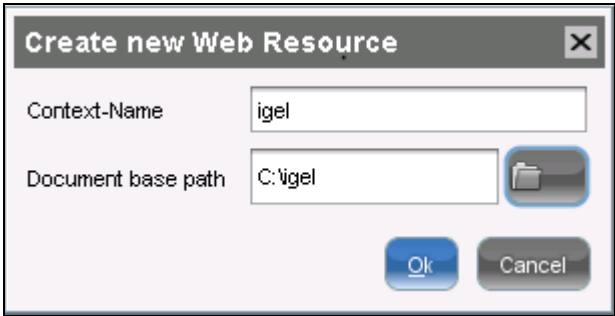
```
[INFO]
[PART]
file="ericom.tar.bz2"
version="1"
```

file= represents the name of the file. *Version=* must be updated with the Blaze version. Further information on these files and how to use them is available in the iGel documentation (Custom Partition).

Step 2: Create the Virtual Directory

- 1) Create a folder on the iGel Universal Management Suite (UMS)
- 2) Copy the iGel files supplied by Ericom into this folder.
- 3) Launch the UMS Administrator (not the console)
- 4) Click on the "*snapshots - File Source*" tab

- 5) Click *add*, assign a name (I will use igel in this example), set the folder to the folder you created in step 2. Click OK to continue.



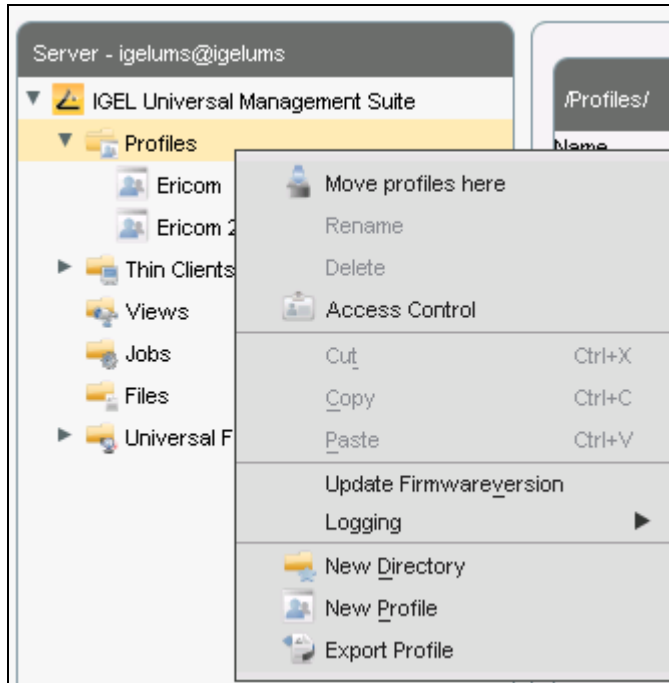
Step 3: Test the Virtual Directory

- 1) Verify that the files are accessible
- 2) Open a web browser and navigate to <http://yourservername:9080/igel>
- 3) Enter the same credentials used to login into the igelums. If needed, add another user account in the UMS, by selecting Administrator Accounts from the System menu.
- 4) If successful, the directory listing will contain the two files, as shown:

Directory Listing For /	
Filename	Size
Blaze.inf	0.1 kb
Blaze.tar.bz2	4136.6 kb
Apache Tomcat/5.5.9	

Step 4: Create the iGel Profile in UMS

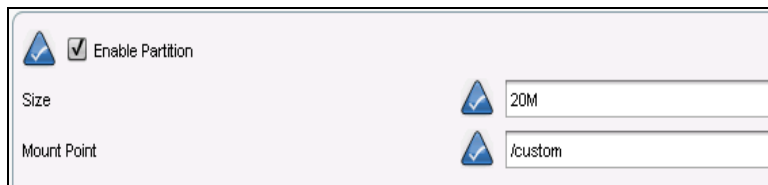
- 1) Return to the UMS. Right-click on **Profiles** and select **New Profile**.



2) Expand System | Firmware Customization | Custom Partition | Partition

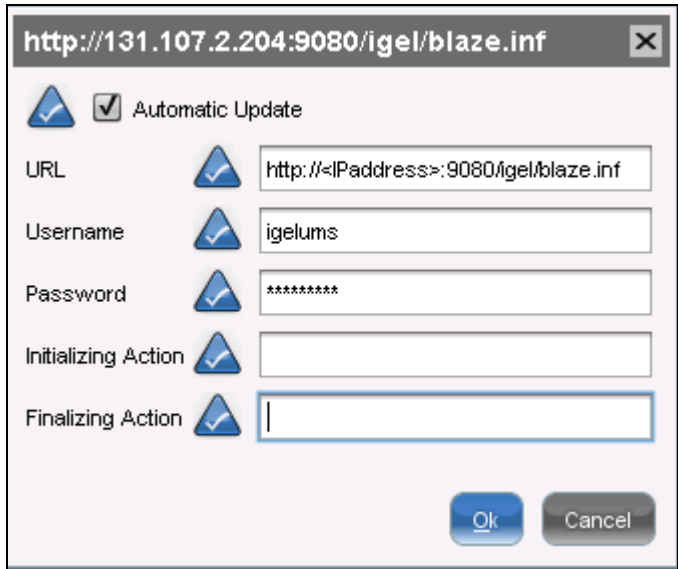
Enable Partition

- 1) Click Enable Partition and set the size of the partition (i.e., 20MB).
- 2) Mount point should be left as ***/custom***



Downloads

- 1) Click on *Downloads* and add a new Partition Data Source.
- 2) Set the URL to: <http://yourservernameorip:9080/igel/ericom.inf>
- 3) Enter a valid username and password (i.e., one used to login into the UMS).
- 4) Enter the following in *Finalizing Action*. **chmod 777 /custom/Ericom/***



Custom Application

- 1) Click on Custom Applications and add a new custom application
- 2) In the session Name field, enter a name for the connection.
- 3) Assign the required starting methods and other attributes.
- 4) Click on Settings and add the following command:

`bash -c '/custom/Blaze/blaze <server>'`



<server> represents the address of the destination server.

- 5) Click Save.

Using the **bash** command will launch the blaze connection with default settings.

To make changes to the settings and display the Blaze connection dialog, run:

`bash -c '/custom/Blaze/blaze'`

Custom Settings

The blaze client accepts command line switches, these can be appended to the blaze parameter in the **bash** command.

For example, to connect to the Ericom Test Blaze server using "Good" compression with the connection bar enabled run:

```
bash -c '/custom/Ericom/blaze -G -f -x m -Z 50 rdpdemo.ericom.com:22'
```

Common Blaze command line parameters

Usage: blaze [options] server[:port]

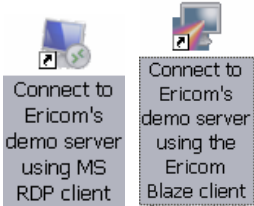
- u: user name
- d: domain
- s: shell
- c: working directory
- p: password
- g: desktop geometry (WxH)
- f: full-screen mode
- G: show connection bar
- M# where # is the monitor to use (1 = first, 2=second, -1 = primary, -2 = secondary, future: 0 all)
- b: force bitmap updates
- A: enable Seamless RDP mode
- T: window title
- a: connection color depth
- Z: blaze image Quality (from 10 to 100). Do not use together with -z.

13. Troubleshooting and FAQ

This section provides suggestions for troubleshooting common configuration problems.

Question: Is there a public demo server to see Ericom Blaze in action without being required to configure an appropriate RDP host?

Answer: Yes, after installing the Ericom Blaze client, there are two selections under the Start | Programs | Ericom | Blaze Client folder available to compare performance using standard RDP with Ericom Blaze RDP.



The demo server includes various applications and documents to evaluate performance.

HINT Connectivity to rdpdemo.ericom.com via port 22 is required from the client device.

Question: The Blaze session is idle, but consuming large amounts of bandwidth. What is going on?

Answer: Disable any graphics or animation rich screensavers. Use a blank screen or a screensaver with text. Animating screensavers will consume large amounts of bandwidth with any protocol.

Question: Does Blaze use upstream bandwidth?

Answer: Yes, Ericom Blaze uses upstream bandwidth as part of its communication. Some applications, such as file sharing programs, use heavy upstream bandwidth. Such applications should have their upstream bandwidth limited, or not be used at all, while there is an active Blaze session.

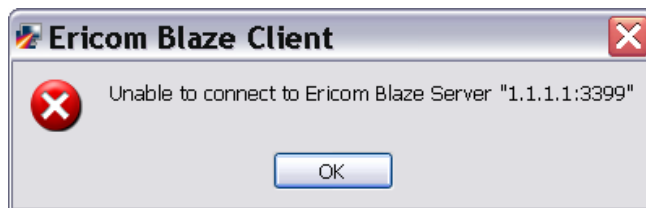
Question: How do I change the RDP port to a custom value?

Answer: Use the Registry Editor (regedit.exe) and modify this setting:

```
HKEY_LOCAL_MACHINE\System\CurrentControlSet\Control\TerminalServer  
\WinStations\RDP-Tcp\PortNumber
```

Enter the desired port value. The Blaze Server will automatically recognize this setting.

Question: Why do I see the following message when I launch the Ericom Blaze Client?



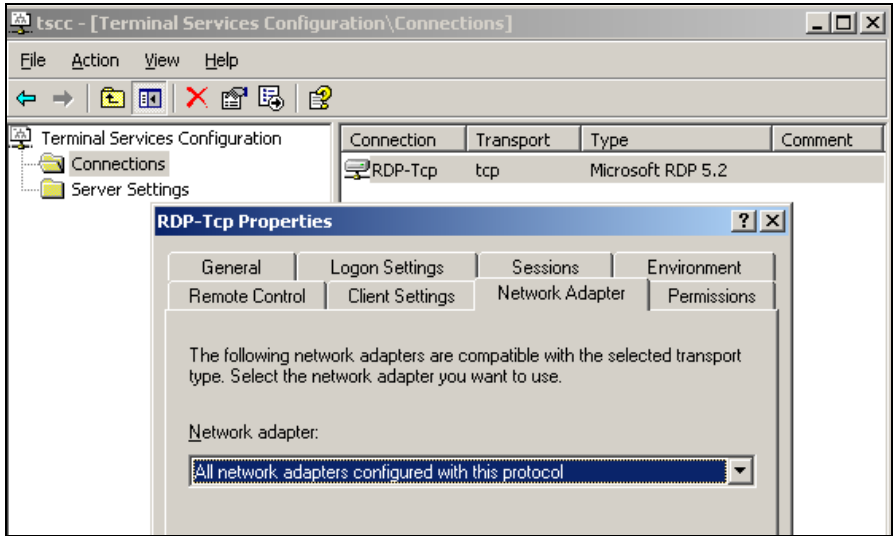
Answer: The Ericom Blaze Server is not running or is unreachable.

- Use ping to verify that the server (i.e., testserver) is reachable.
- Verify that the host/server firewall allows Ericom Blaze traffic (by default, 3399).
- Check the server's Task Manager to ensure that BlazeServer32.exe is running (since it is running as a service, you will need the configure Task Manager to show processes for all users).
- Ensure that the destination port is properly configured in the Blaze Server configuration.

Question: When I launch the Blaze Client with RDP Acceleration enabled I see the splash screen and then nothing happens – what's going on?

Answer: The Blaze Client is able to connect to the Blaze Server, but the Blaze Server is unable to connect to the RDP host (even though it may be running on it). It is possible that the RDP access to that host has been disabled or limited to certain network adaptors.

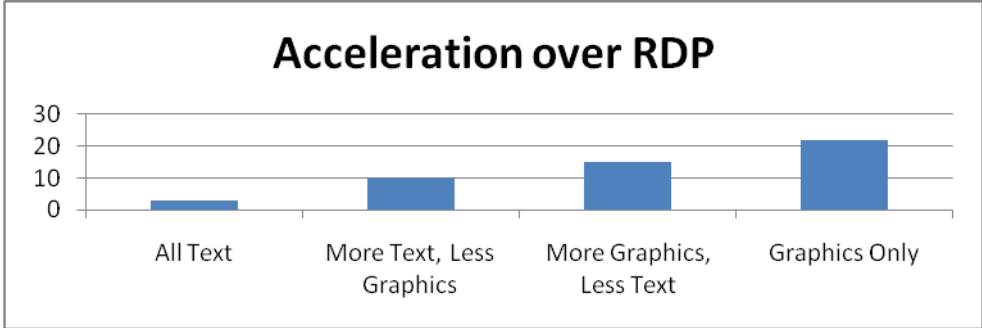
To verify if RDP access to a Terminal Server has been restricted to specific network adaptors, open Terminal Services Configuration from Administrative Tools. In the dialog that is displayed, double-click on RDP-Tcp and select the Network Adapter tab. Make sure that the Network adapter drop-down is set to "All network adaptors configured with this protocol":



Question: How much acceleration can I expect to see with Blaze? Does Blaze accelerate text?

Answer: This will depend on your network type and display content. Blaze will accelerate the RDP session up to 20 times. You will see the most benefit when connecting over a restricted network (with high latency, low bandwidth or both), such as an aircard. If you are connecting over a LAN with no network restrictions, there may not be noticeable improvements.

If your session consists of mostly text (i.e., editing email) or monochromatic images (i.e., black and white images) the acceleration will also be reduced compared to a graphics rich application (i.e., Google Maps in Satellite mode).



Question: When I connect to a 2003 server with a high resolution client system, the color depth is lower than the value I specified. How do I fix this?

Answer: One of the recent Windows 2003 service packs lowers the RDP color depth for high resolution sessions (to save on bandwidth). To restore the original behavior (maintain the configured color depth setting), download the Microsoft Hotfix from the Windows 2003 server using *the link near the top of this page*: <http://support.microsoft.com/kb/942610>

Next, manually update the registry key after the installation

Registry subkey: HKEY_LOCAL_MACHINE\SYSTEM\CurrentControlSet\Control\Terminal Server
 Registry entry: AllowHigherColorDepth
 Type: REG_DWORD

Value: 1

Name	Type	Data
(Default)	REG_SZ	(value not set)
AllowHigherColor...	REG_DWORD	0x00000001 (1)
DeleteTempDirsO...	REG_DWORD	0x00000001 (1)

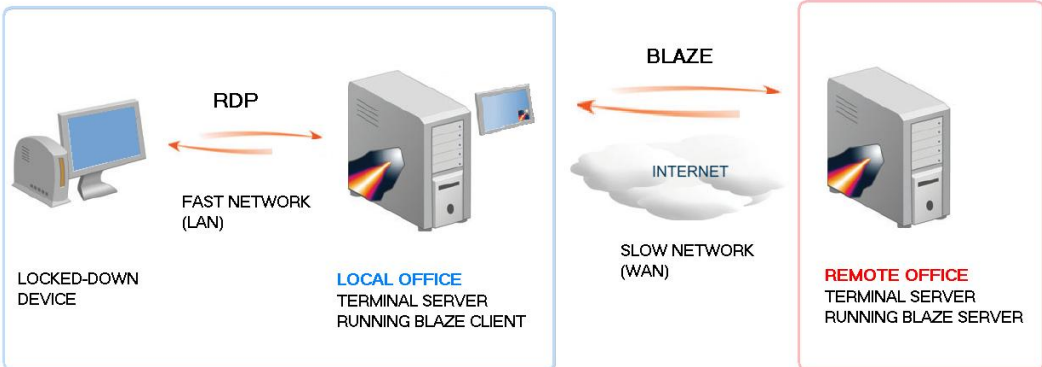
Finally, reboot the server. The next session will be in the color depth specified by the client.

Question: Does Ericom Blaze support WYSE S10/V10 thin OS devices?

Answer: The best way to provide Blaze access for WYSE thin OS devices is the following:

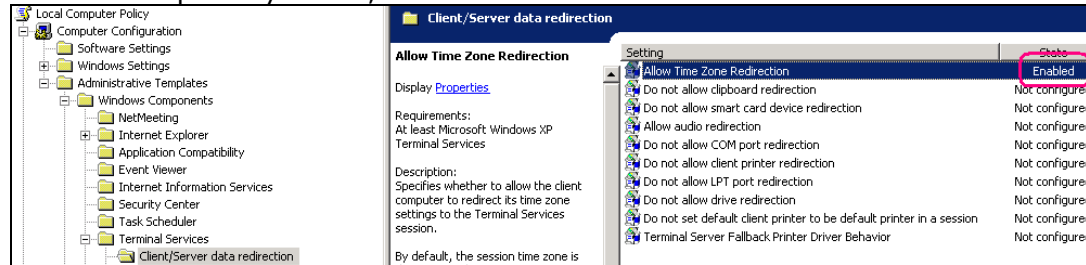
Setup a new (local) Terminal Server at the location where the WYSE terminals are running. Install Blaze on the local TS.

Connect to the local TS with the WYSE terminals (fast LAN connection) using RDP, then run Blaze Client to connect to the remote system (over the slow network connection).



Question: Why is the time under the Blaze session is different than the local time of the client system?

Answer: Enable time zone synchronization on the host. This may be done via the Group Policy Editor, as seen below:



Question: What is the best way to configure many machines running Blaze Server?

Answer: Use Group Policy to modify the Blaze Server registry settings. The registry keys are accessed via the Blaze Server Configuration application - under the Advanced page.

Question: How do I get technical assistance?

Answer: Email SUPPORT@ERICOM.COM and provide the following information:

- Which version of Ericom Blaze are you using ?
- What type of system/operating system are you connecting to (host)? (e.g., Windows server, XP) 32 or 64 bit? Is RDP enabled?
- What type of system/operating system are you connecting from (client)? (e.g., Windows server, XP) 32 or 64 bit?
- Is port 3399 enabled on the host (is the firewall configured with an exception)?
- What error messages are being displayed?
- What type of applications are you using with Blaze? Graphical, text, or both?
- How many people/machines/hosts are having this problem (1, all, etc)?



About Ericom

Ericom[®] Software is a leading global provider of Application Access and Virtualization Solutions. Since 1993, Ericom has been helping users to access business-critical applications running on a broad range of Microsoft[®] Windows[®] Terminal Servers, Virtual Desktops, Blade PCs, legacy hosts and other systems. Ericom provides concrete business value by helping organizations realize the benefits of their IT investments. With offices in the United States, United Kingdom, EMEA, India and China, Ericom also has an extensive network of and partners throughout North America, Europe and Asia. Our expanding customer base is more than 30 thousand strong, with over 7 million installations.

For more information on our products and services, contact us at the location nearest to you or visit our Web site: <http://www.ericom.com>

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