

**Versions:  
9.x - 16.x**

# ThinAnywhere Client Users Guide



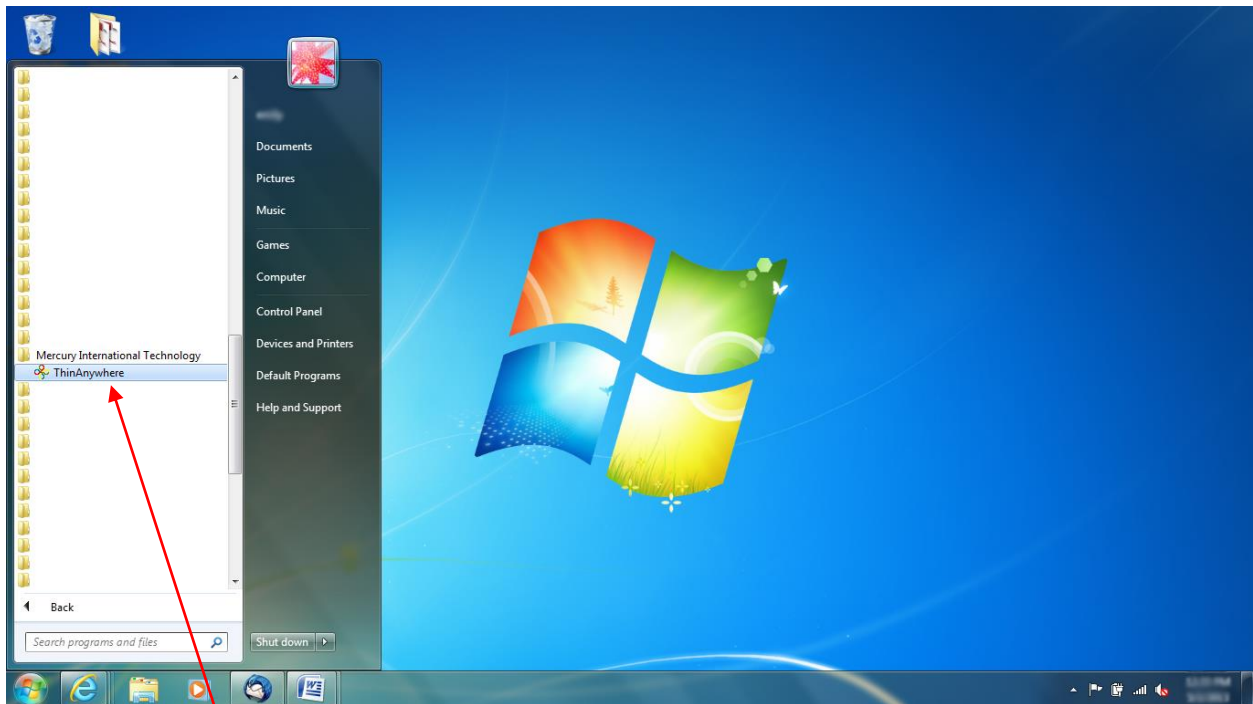
ThinAnywhere, Inc.

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## ❖ How do I log into a ThinAnywhere Enabled Server?

**Initiate ThinAnywhere from the Start menu.**



Follow the links to the Mercury International Technology folder and then click on the ThinAnywhere button.

## Logging Into A Server

Type in your user name.

For Client HELP, click on the “?” and then click on the word ThinAnywhere below and the help interface will appear.

Type in the IP address of the server you want to connect to.

Type in you password.

The host name appears here if it is in the **ta.w.ini** file.

Port 27500 is the default value. If you encounter problems logging into a server contact your administrator to verify what port ThinAnywhere is running on.

To collaborate with a user already logged into a server with ThinAnywhere, ask the user what their session ID is and type it into this box. Otherwise leave it as 0 if you are not trying to collaborate.

Server Code is an optional parameter that acts as another password to log into the server and also changes the encryption key.

Select the bandwidth for the type of connection you are using. Also see “Changing Compression Types”.

Select from defaults or type in the width and height of the screen size that you want.

Click the Cancel button to cancel the session login.

Click the OK button to login to the server.

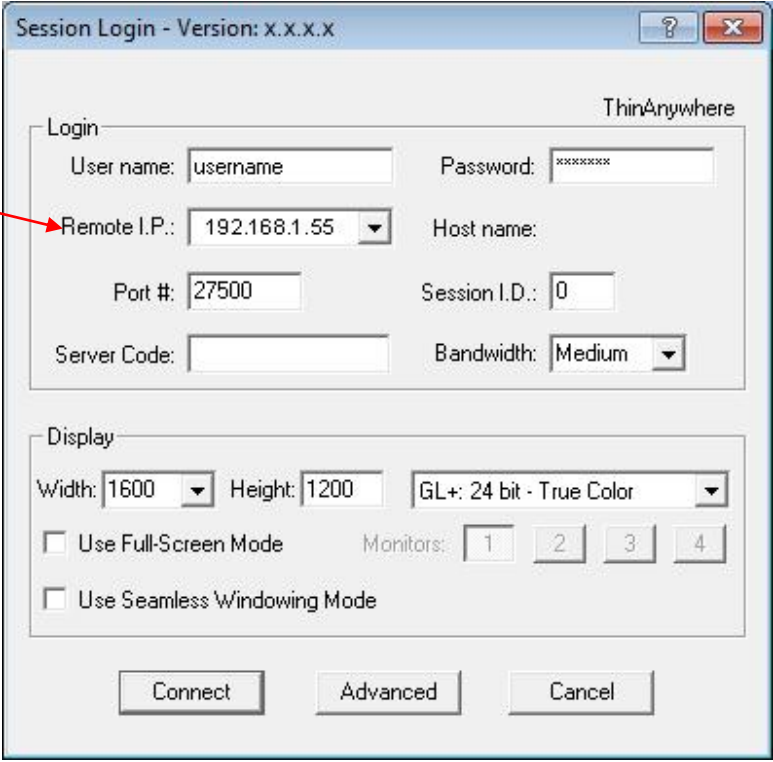
Click the Advanced button for advanced login options such as: Xdmcp, RDP and iIP or SSL (Secure Socket Layer) Protocols.

Select the Color Depth and visual class that you want the display to be set to.

**\*\*Please refer to the web based login section for details on logging in through a web browser.\*\***

## Remote I.P.

Remote I.P.



The screenshot shows a dialog box titled "Session Login - Version: x.x.x.x" with a "ThinAnywhere" logo in the top right corner. The dialog is divided into two main sections: "Login" and "Display".

**Login Section:**

- User name:
- Password:
- Remote I.P.:  (indicated by a red box and arrow)
- Host name:
- Port #:
- Session I.D.:
- Server Code:
- Bandwidth:

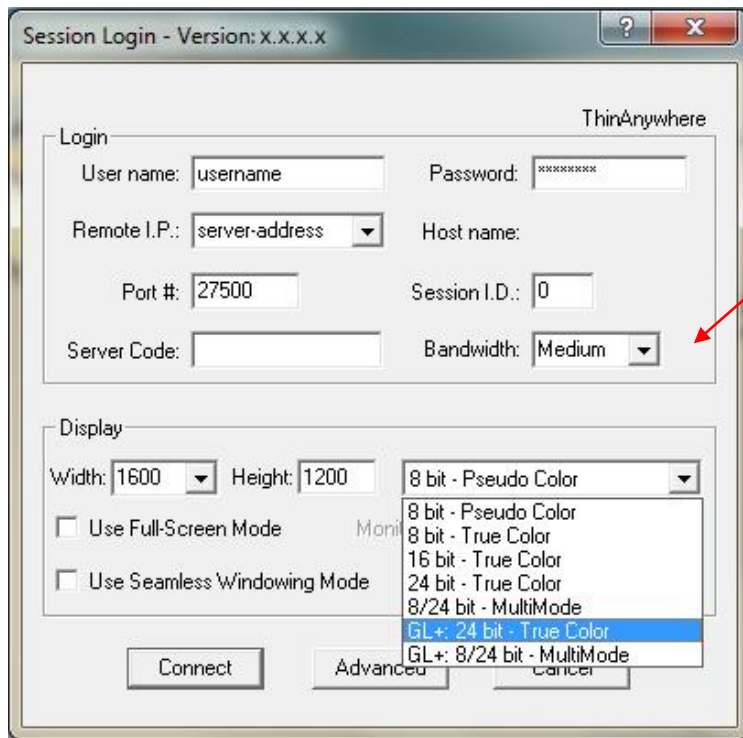
**Display Section:**

- Width:  Height:  GL+:
- Use Full-Screen Mode
- Monitors:
- Use Seamless Windowing Mode

Buttons at the bottom:

The **Remote I.P.** field of the Session Login screen displays the default servers that are in the `taw.ini` file. You may also type in an I.P. address. To edit the `taw.ini` file go to “C:\My Documents\My Connections” and then edit the “**taw.ini**” file.

## Color Depth and Visual Class



**Color Depth** is used to represent the number of colors available. For instance, with 8 bit there are 256 colors available. (See visual classes below.)

**Visual Class** is the mode of the Xserver session. The currently available color depth and visual class combinations are listed and explained below.

8 bit – Pseudo Color: Uses a color table and 8 bits for color information for a total of 256 simultaneous colors.

8 bit – True Color: Uses 8 bits for color information for a total of 256 simultaneous colors and does not use a color table.

16 bit – True Color: Uses 16 bits for color information for a total of 65536 simultaneous colors. Commonly referred to as "High Color".

24 bit – True Color: Uses 24 bits for color information for a total of 1.7 million simultaneous colors. Commonly referred to as "True Color".

8/24 bit – MultiMode: This is a dual-mode visual class in which it is capable of displaying 8 bit Pseudo Color applications as well as 24 bit True Color applications.

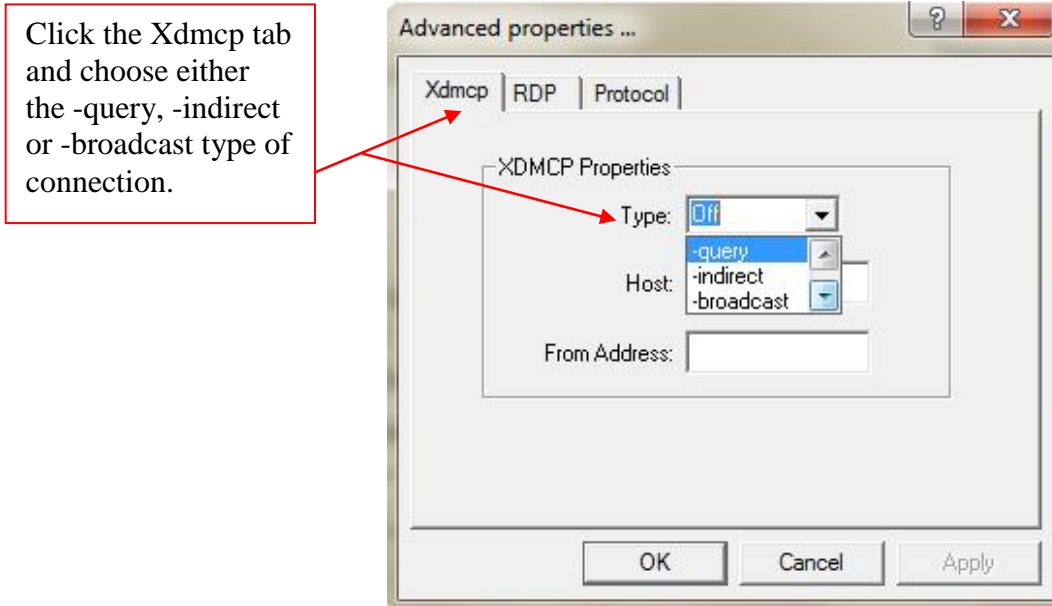
GL+: 24 bit – True Color: (*server add-on option*) Identical to "24 bit True Color" except with optional acceleration for OpenGL graphics. For an explanation of how to change compression methods, please see "Change Compression Methods in a GL +: 24 bit – True Color Session".

GL+: 24 bit – MultiMode: (*server add-on option*) Identical to "8/24 bit MultiMode" except with optional acceleration for OpenGL graphics.

## Using the Advanced Button

After clicking the “Advanced” button on the ThinAnywhere client, the “Advanced properties” window will appear. The user can then select from one of three different login options; Xdmcp, RDP (Remote Desktop Protocol) for Windows connections and Protocol.

### Xdmcp Login



### Using XDMCP

XDMCP *X Display Manager, Control Protocol* is a convenient method for connecting to other local UNIX systems via Xdm on the LAN. It provides a graphical login mechanism similar to logging into the console. To use XDMCP, start the ThinAnywhere client and fill out the Session Login screen with the same parameters as you would to connect to a ThinAnywhere server. Remember that *all* connections, even to local UNIX servers, still go through the ThinAnywhere server. Click on "Advanced" and select the XDMCP tab. Click on the “Type” pull-down menu, which selects either *query*, which gives a direct login on the local UNIX system or *indirect/broadcast* which will display a "chooser" program *from* the local UNIX system. Select either “query”, “indirect” or “broadcast”. Type in the "Host" box the I.P. address or host name of the local UNIX system to connect to.

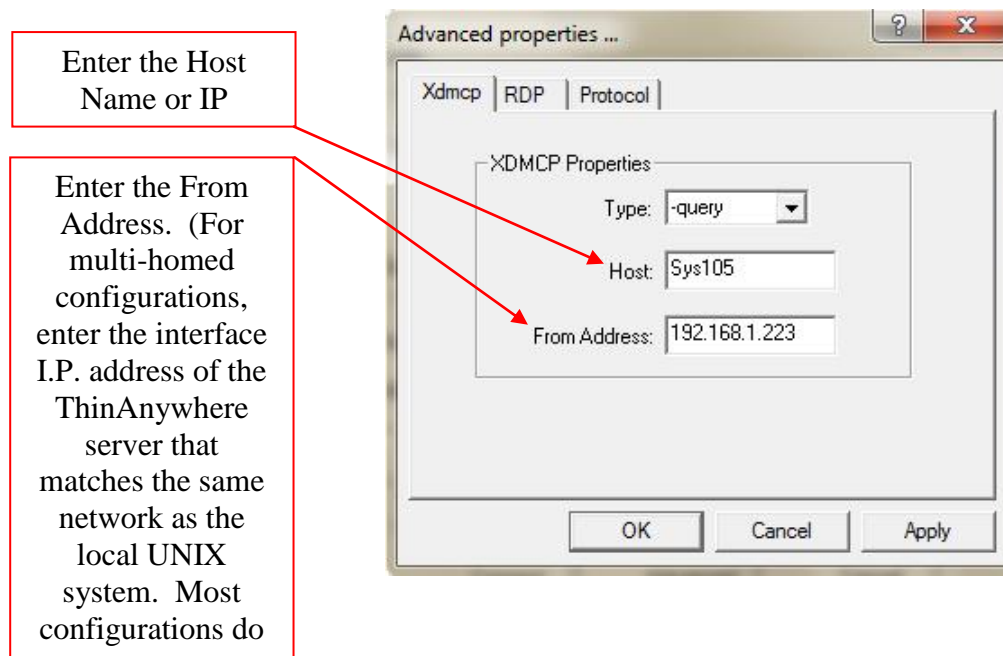
### From Address

The "From" address should be the I.P. address of the local *interface* of the ThinAnywhere system. If the ThinAnywhere system is *not* being used in a *multi-homed* configuration, the "From" address will not be needed. If the ThinAnywhere system is configured with multiple interfaces, this feature will allow ThinAnywhere to connect to UNIX systems that span

multiple networks. You may need to ask your system administrator for this parameter depending upon the configuration. Click the "Apply" and "Ok" buttons and then click "Connect". When the connection is made, you will be greeted with either a direct login on the local UNIX system or a chooser program generated from the local UNIX system.

### **XDMCP (query option)**

Starting XDMCP with a query option will send Query packets to the specified host. This will result in a login to the specified host. Type in a host name or I.P address of a UNIX system to connect to. For multi-homed configurations, enter the interface I.P. address of the ThinAnywhere server that matches the same network as the local UNIX system. Most configurations do not require this parameter.



### **XDMCP (indirect option)**

Starting XDMCP with the indirect option will send Indirect Query packets to the specified host. This will result in a "chooser" program being displayed from the specified host.

### **XDMCP (broadcast option)**

Similar to the "indirect" option, however, a host IP address does not need to be entered.

### **Error Conditions:**

If after the connection is made and a login does not appear, probable causes are:

1. The "Host" address is invalid.
2. The "From" address is invalid.
3. The local UNIX system has XDMCP turned off or is not configured. Most SUN and SGI systems are turned on by default and need little if any configuration. Linux systems, however, often require modifications to the "gdm.conf" file.
4. A firewall is blocking XDMCP requests. (port 177)
5. The system is not on the same network or there is no route between these systems and the ThinAnywhere server.

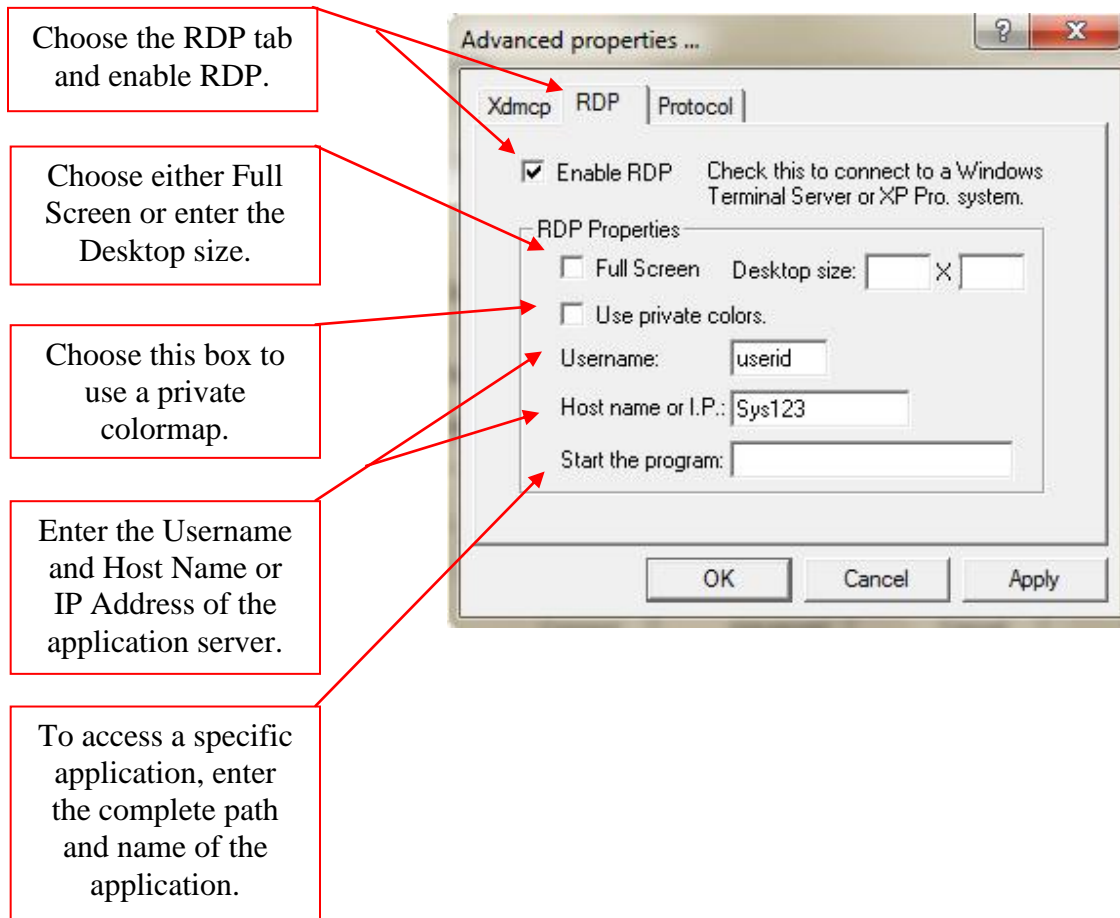


## RDP (Remote Desktop Protocol) Login

### Connecting to a Microsoft Terminal Server or XP Pro. System.

Connectivity to a Microsoft Windows Terminal Server and or XP Pro. system is now built into the software, via RDP, configurable through the "Advanced" button on the client. Follow the steps below to connect to a Terminal Server or XP Pro. system.

1. Fill out the Session Login screen in the normal manner.
2. Click on the "Advanced" button and select the "RDP" tab.
3. Select the "Enable RDP" box.
4. Select either "Full Screen" or specify the width and height of the window.
5. Enter the user name and host I.P. of the Windows system you are connecting to.
6. To start a specific program on the Windows system, enter the complete path and program name using a "/" forward slash in the path. When you close the program the ThinAnywhere connection will exit.



**\*\*Remote Desktop Protocol is the protocol used by a Microsoft Windows system between a client and a server. RDP is available only on Windows Terminal Server Edition (NT4.0 T.S. and Win2000 T.S) as well as a single user connection on XP Professional.\*\***

## Protocol Settings Login

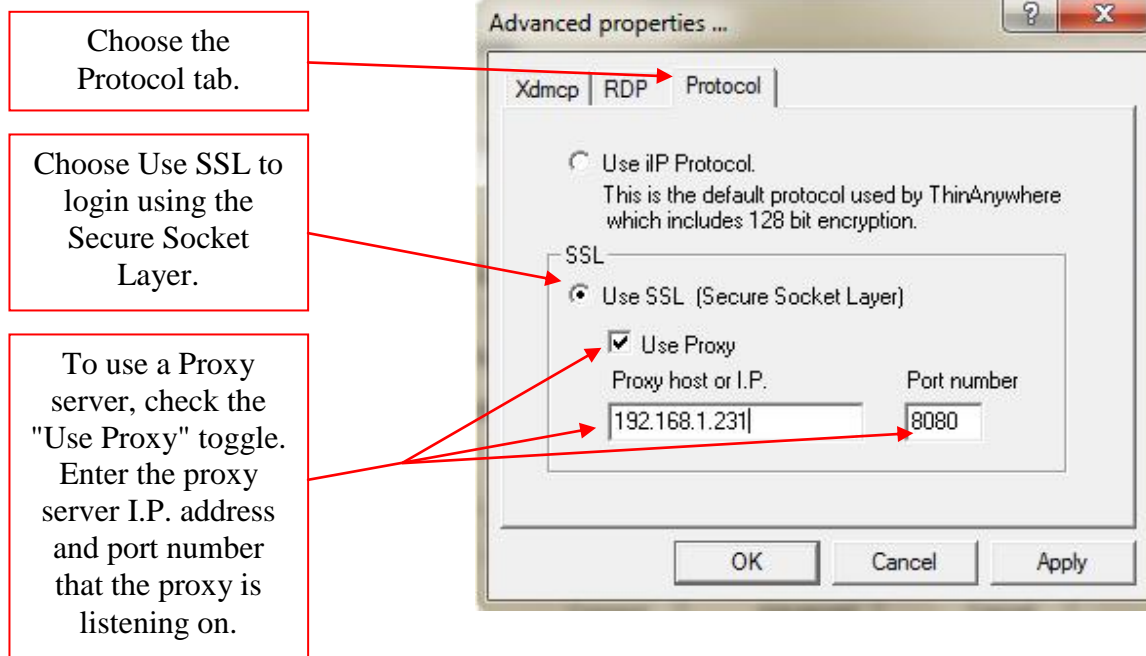
### iIP Protocol

The proprietary protocol that ThinAnywhere uses to communicate between the client and the server which includes 128 bit AES encryption.

### SSL Protocol

A protocol, which defines the Secure Socket Layer implementation for secure network communications by using public and private key technologies.

To use a Proxy server to connect to a ThinAnywhere server, select the "Protocol" tab. Select "SSL". Check the "Use Proxy" toggle. Enter the proxy server I.P. address and port number that the proxy is listening on. Press "Ok". The ThinAnywhere client will now use the specified proxy server and automatically switch to port 443 to contact a ThinAnywhere server.

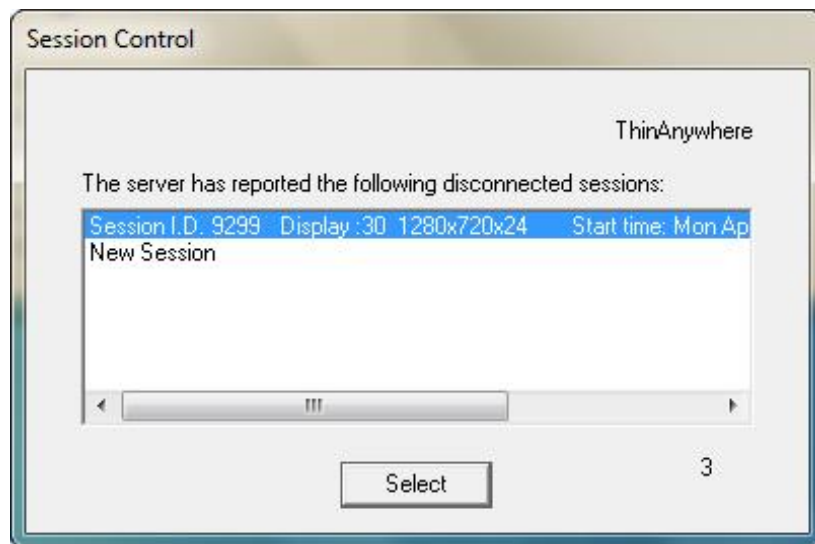


## Status During the Login Process

The screen will show the stages of the login process. First the protocol is initialized, the client then contacts the server, the server logs you on, and then you are authenticated.



## Connecting To Disconnected Sessions



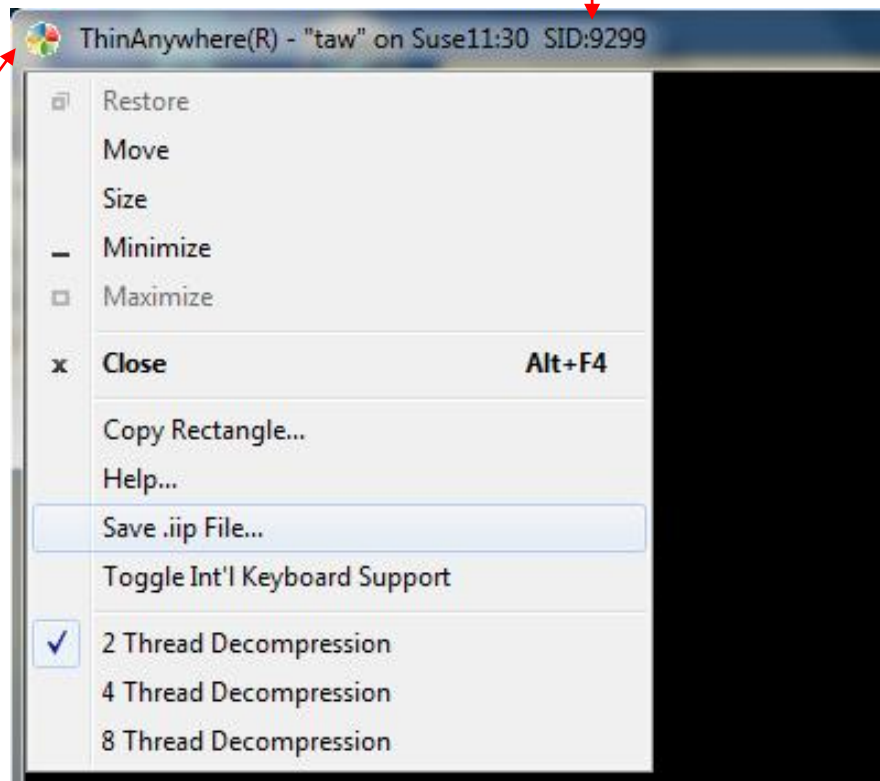
If you have any disconnected sessions on the server that you are logging into then a window with a list of those sessions will appear. You can select one of the previous sessions and reconnect to it or you can select “New Session” to start a new session.

## You Are Now Connected To A ThinAnywhere Server

Once connected, the ThinAnywhere window will open. Depending on how the administrator has setup your account you may see a full desktop, just a published application, or even just a simple motif windows manager. Your login can be personalized to the settings that you desire.

Your username, the system name, Display number and SID number (Session ID) is always shown on the top bar of the ThinAnywhere window.

You can save the **.iip** file for any session by clicking on the ThinAnywhere logo and choosing the "Save **.iip** file" option from the pull down menu.



### The .iip File

The **.iip** file type is a registered extension of ThinAnywhere. When this file is opened, Windows will start the ThinAnywhere executable and pass this file as an argument. The file contains parameters such as a username and remote IP to successfully connect to a ThinAnywhere server.

### Saving a .iip File

To save a **.iip** file, first establish a connection to a ThinAnywhere server. Click on the system menu of the ThinAnywhere display window and select "Save **.iip** file". Alternatively, you may right click on the ThinAnywhere icon in the system tray and select "Save **.iip** file". The default path for the saved file is \My Documents\My Connections.

## Inside The .iip File

The **.iip** file contains parameters such as a username and remote IP to successfully connect to a ThinAnywhere server.

VersionRequired     *"Reserved value"*  
DisplayClientType   *"Reserved value"*  
DisplayServerAddress     < Remote ThinAnywhere I.P. address or host name >  
DisplayServerPort    < Listen port number of remote ThinAnywhere server >  
DisplayProtocol       *"Reserved value"*  
DisplayClientAutoStart   *"Reserved value"*  
DisplayServerName    < Host name for display purposes only >  
DisplayWidth         < Width of ThinAnywhere display. -1 for full screen >  
DisplayHeight        < Height of ThinAnywhere display. -1 for full screen >  
DisplayDepth         < Visual depth. 8, 16, 24 and 124 for 8/24 MultiMode >  
DisplayVisual        < 3 = Pseudo color AND depth MUST be 8, 4 = True Color >  
UseGLPlus            < (*only with optional server add-on*) 0 = off, 1 = on >  
ServerCode            < Encrypted server code of remote ThinAnywere server. Do not modify  
>  
ProjectID             < ASCII string for user defined project >  
DeviceClientAutoStart   *"Reserved value"*  
DeviceUserName        < User login name on remote ThinAnywhere server >  
DeviceGroupName       *"Reserved value"*  
DeviceSupport         *"Reserved value"*  
DeviceServerPort       *"Reserved value"*  
DeviceServerAddress   *"Reserved value"*  
Authentication1        *"Reserved value"*  
Authentication2        *"Reserved value"*  
Authentication3        *"Reserved value"*  
Authentication4        *"Reserved value"*  
SessionID             < 0 = New session, xxxx = Session ID of originator to collaborate with >  
Password  
password  
                      entry >  
EnvVars                < Environment variables passed to server.  
                      MYVAR=myvalue;MYVAR2=myval2 >  
Xdmcp                  < XDMCPType=-indirect or -query. XDMCPHost=I.P.  
                      XDMCPAddr=I.P.>

## The law.ini File

The law.ini file is the user's personal initialization file for ThinAnywhere. This file stores default parameters when a **.iip** file is not available. When the client first starts, it looks in the users “\My Documents\My Connections” directory for a law.ini file. If the directory is not found, the program will make this directory and copy the global law.ini in “\Program Files\Mercury International Technology\ThinAnywhere” to the new one. If the client is started from a **.iip** file, parameters will be taken from the **.iip** file.

## Inside The law.ini File

[User]

Username law

[Hosts]

63.167.55.101 Sentry101 supersentry

63.167.55.102 Sentry102 supersentry

[Viewer]

DisplayPort 27500

MaxScreenWidth 1024

MaxScreenHeight 768

ColorDepth 8

VisualClass 3

UseGLPlus 0

BackingStore 0

AddOptions

DefaultDisplayProtocol IIP

ConnectDialog 0

CloseDialog 1

Bandwidth 2

SessionLoginDialog 0

ProjectIDDialog 0

LogFile log1.txt

PrintDebug 1

[END]

To modify the file with your personal preferences, open the file with wordpad or notepad. To comment a line in the law.ini file, use the "#" character. Blank lines are ignored and keywords between the braces are reserved. Below is an example law.ini file.

Parameters which may be changed are:

### **Username**

Insert your username after the keyword.

### **Hosts**

Host I.P Host name Server code

192.x.x.x Sentry101 supersentry

The host name and server code are optional parameters.

### **DisplayPort**

Insert the listen port number of the ThinAnywhere server.

### **MaxScreenWidth and Height**

Insert the width and height of the desired display. For best results, use standard screen sizes (1024x768, 1280x1024). A -1 in this field gives a full screen display.

### **ColorDepth and VisualClass**

ColorDepth	VisualClass	Result
8	3	8 bit Pseudo Color
8	4	8 bit True Color
16	4	16 bit True Color
24	4	24 bit True Color
124	4	8/24 bit MultiMode True Color

### **UseGLPlus**

*(For use ONLY with server add-on option)* Default is "0" - GL+ mode off. If the server supports the optional accelerated OpenGL graphics, then a value of "1" will request "GL+" mode for 24 bit True Color and 8/24 bit MultiMode connections.

### **BackingStore**

Insert a 1 for backing store support, otherwise a 0 turns it off.

### **Bandwidth**

Settings for bandwidth are: 0=Low, 1=Medium and 2=High.



## ThinAnywhere Help Menu

Once a ThinAnywhere session has been established, hold down the “shift” key and press the “F1” key to see the ThinAnywhere Help menu.

Your Session I.D. is used to collaborate with another user.

**Shift-F2** will disable the mouse movements and keyboard input from the collaborators.

**Shift-Ctrl-F2** disconnects all current collaborators and will disable the collaboration feature of the current session. This will prevent future collaboration attempts. To re-enable the collaboration feature look at Shift-Ctrl-F3.

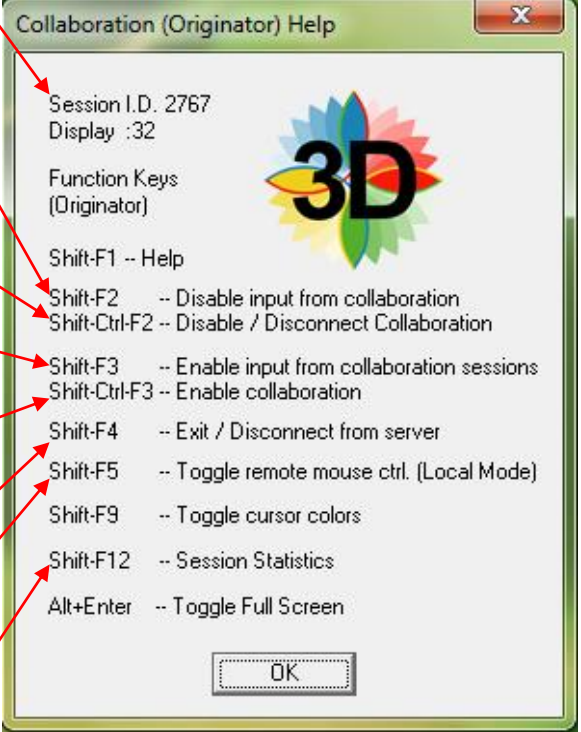
**Shift-F3** will re-enable the input of collaborator’s keyboard and mouse movements after disabling it.

**Shift-Ctrl-F3** will re-enable the collaboration feature of the current session after disabling it.

**Shift-F4** will prompt you if you want to exit or disconnect from the current session.

**Shift-F5** will prevent the movement of the collaborators mouse from moving your mouse.

**Shift-F12** will prompt you with the Session Statistics window.



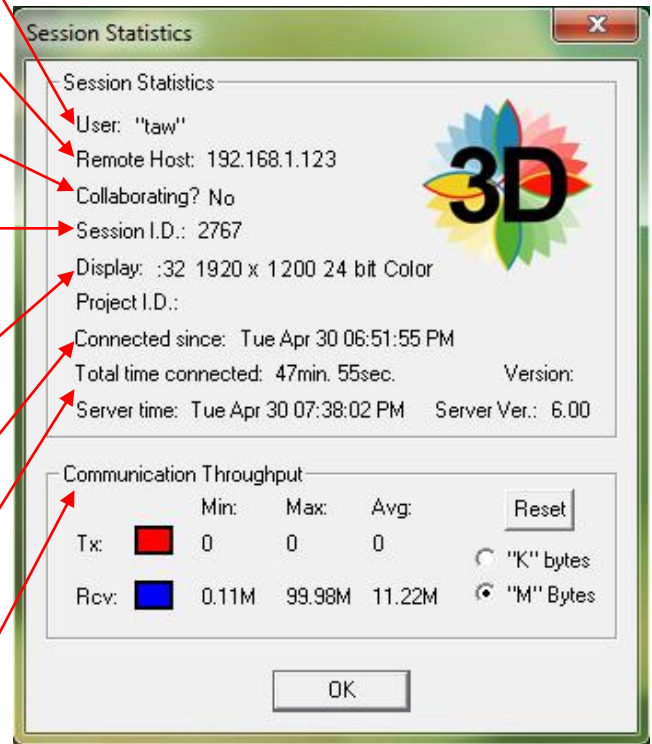
## Changing Compression Methods in a GL+: 24 bit True Color Session

The session originator and collaborator can change compression types by using the shift+F7 and shift+F8 keys. Compression type of A and B will use the most bandwidth but will be under 25 mbit/second. Compression type C is the default and uses no more than 20 mbit/second. Compression type D is quite strong (and will have less image quality) and will use the least bandwidth. D1 will use around 3.5 mbit, D2 will use about 2.5 mbit and D3 will use about 1.5 mbit/second.

## Session Statistics

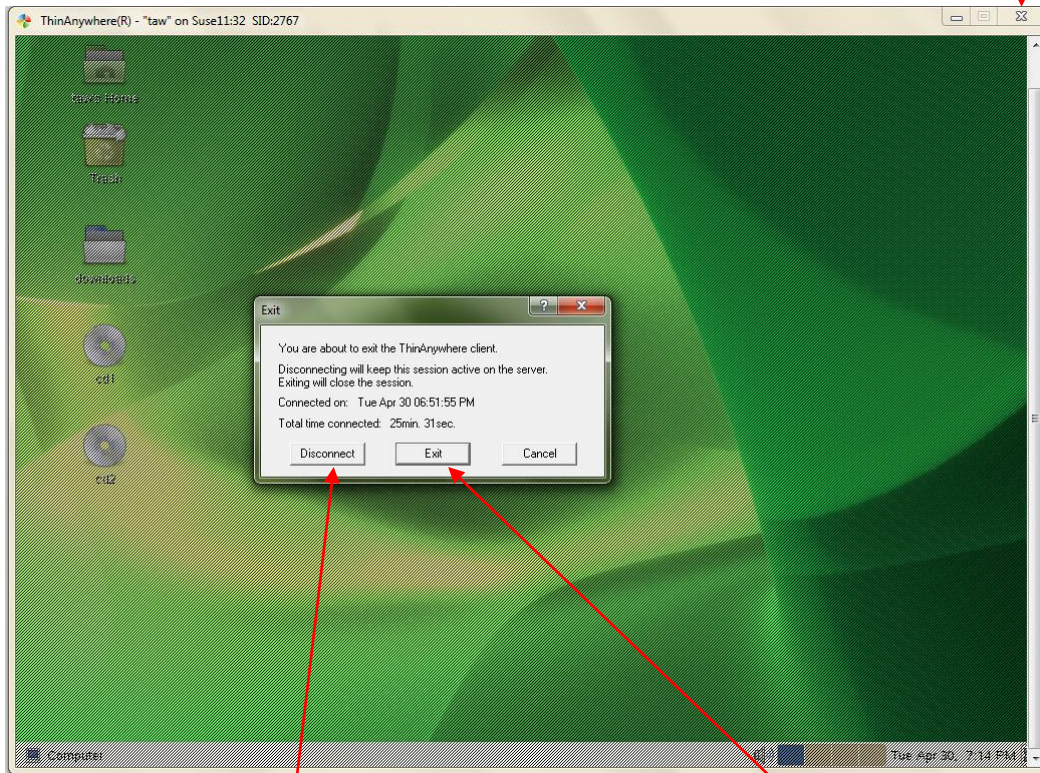
Hold down the “shift” key and press the “F12” key view the Session Statistics window.

- Shows the user name that you are logged in as.
- Shows the IP address of the server you are connected to.
- Displays Yes if you are a collaborator and No if you are an originator.
- Displays your Session ID which is used for collaboration.
- Shows the display settings such as size and color depth.
- Displays the starting date and time of the current session.
- Displays the total time the current session has been connected.
- Shows the minimum, maximum, and average throughput of data for the current connection. Select the “K” or “M” options of the right hand side to see the values in kilobytes or Megabytes.



## Exiting or Disconnecting from a ThinAnywhere Session

Click on the “X” to exit/disconnect the session.

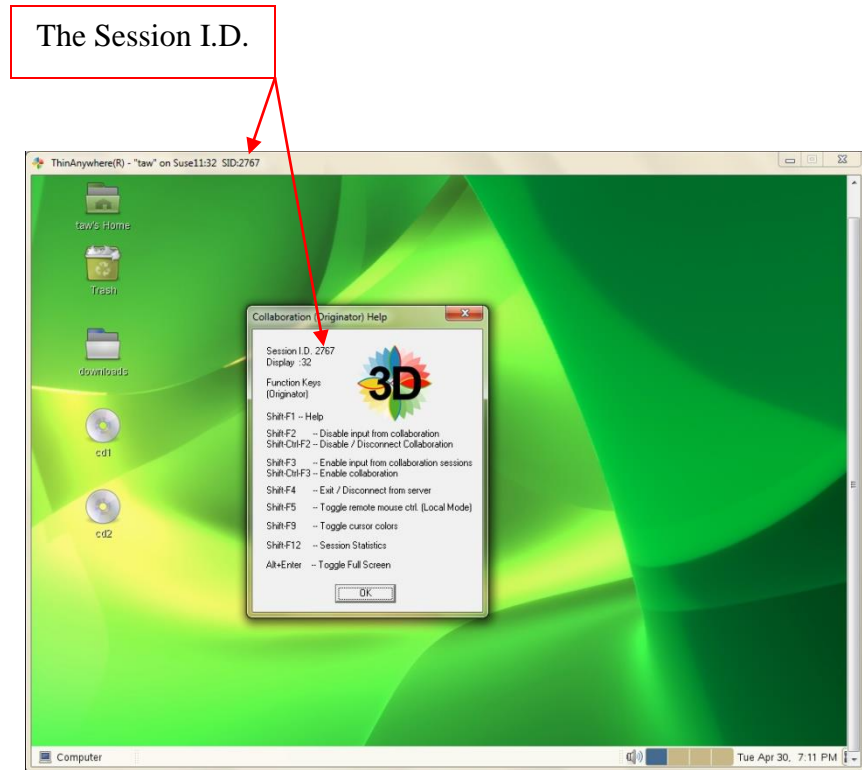


Disconnecting from a session will allow you to reconnect to that exact same session at a later time.

Exiting will completely exit the session and close all programs that are running. You will **NOT** be able to reconnect to the session at a later time.

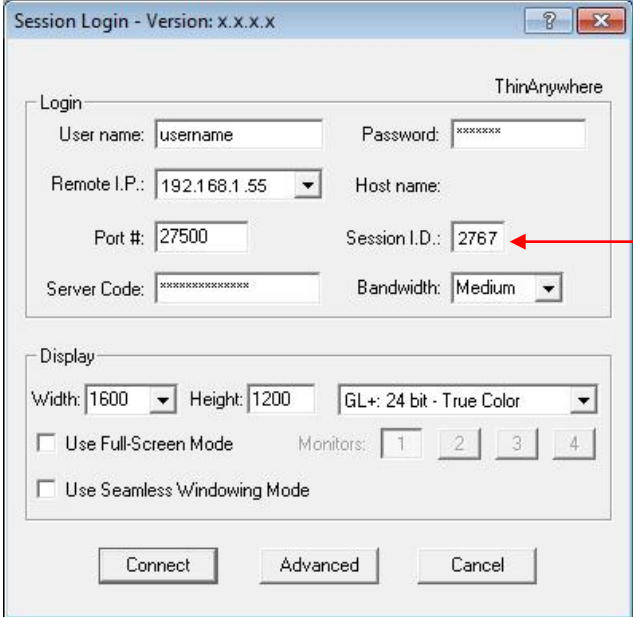
## ❖ How To Collaborate

### Originator Logs In



After the Originator logs in, he can see the Session ID number at the top of the ThinAnywhere window or hold down the “shift” key and press the “F1” key and the ThinAnywhere Help window will appear. At the top is the Session ID. Call the person with whom you wish to collaborate and tell him/her your session ID.

## Collaborator Logs In



The screenshot shows a 'Session Login' dialog box with the following fields and options:

- Login:**
  - User name:
  - Password:
  - Remote I.P.:
  - Host name:
  - Port #:
  - Session I.D.:  (highlighted with a red box and arrow)
  - Server Code:
  - Bandwidth:
- Display:**
  - Width:  Height:
  - GL+:
  - Use Full-Screen Mode
  - Monitors:
  - Use Seamless Windowing Mode

Buttons:

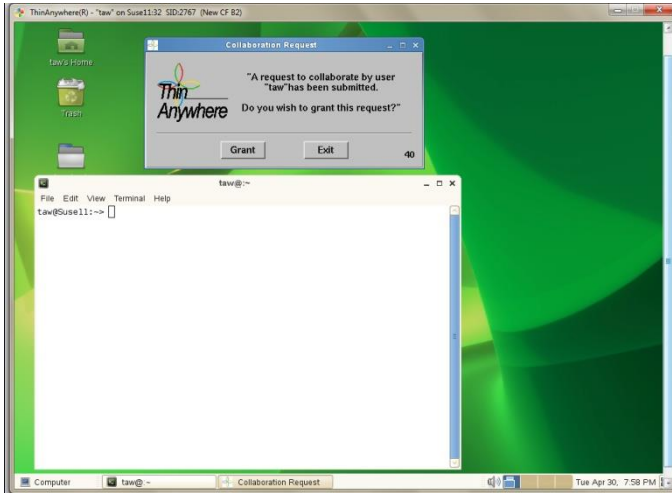
The Collaborator logs in as normal however instead of leaving Session ID as 0, he will enter the Session ID of the Originator's session.

**\*\*Please refer to the web based login section for details on logging in through a web browser.\*\***

\*\*\*\*\*

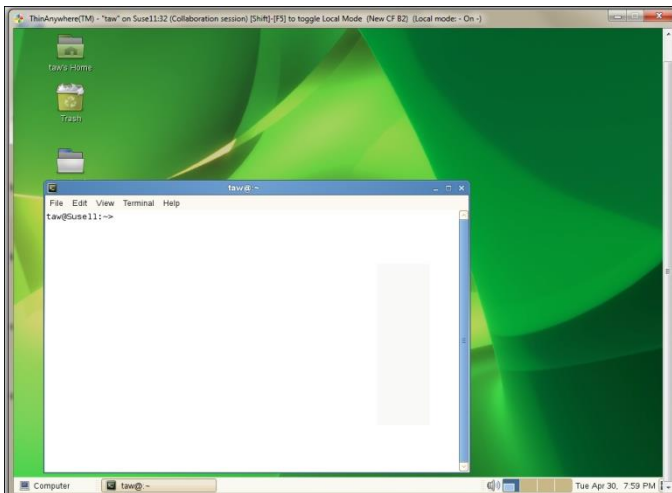
## Originator Confirms Collaboration

### Originator's Window



Once the Collaborator's client tries to login, the Originator is prompted to confirm his/her desire to collaborate. If they click No or leave the box for up to 60 seconds then the Collaborator is not allowed to connect.

### Collaborator's Window



If the Originator accepts the request to collaborate then the Collaborator's client opens a window and connects to the same X session as the Originator's allowing both users to see and interact with the same screen/application.

## ❖ Web Based Login

### Login Page

There are several login configurations used for the ThinAnywhere Web Based Login. Below is an example of one of the Login screens. If your web site is enabled for Web Based Login, please contact your ThinAnywhere Server Administrator to obtain more information on which type of Web Based Login you will be using.

**Powered By ThinAnywhere**

#### ThinAnywhere Log In

To log into a server, enter your user information and click the **Submit** button. Click **Reset** to clear the form.

**User ID:**

**Password:**

**Server:**

**Size:**  X

**Visual:**

**Session ID:**

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