Tisio Linux
Users Guide

Tisio

Thin Clients with Peace of Mind®

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Revision History

June 2007, Tisio Linux V1 Users Guide First Release.

January 2008, Tisio Linux V1.5 Users Guide Release.

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Tisio Linux User's Guide

This guide is for people who use Tisio Linux thin client terminals.

Tisio Linux Basics

This guide describes basic operating procedures for Tisio Linux Thin Client or Windows-based terminals (WBTs).

It explains how to turn on your terminal, how to create and start connections, and how to end your work session.

What is a Thin Client Terminal?

Your Tisio terminal is a thin device that allows you to use Microsoft Windows applications on servers running Microsoft Windows 2000/2003 Terminal Services or Citrix Presentation Server.

The Microsoft Windows servers may also be running Citrix Presentation Server. These Citrix products allow connections via the ICA (Independent Computing Architecture) protocol.

It also allows you to run Local Firefox Browser sessions, Secure Shell sessions and XDM Sessions to Linux or UNIX hosts. In addition, your system administrator may have added optional software to your terminal that allows you access to other local user applications.

In this manual, Terminal Services refers to the Microsoft server software, and Terminal Server host refers to the server computer. Once you connect to a server and log on, the server's desktop or the application you request appears on your terminal screen and you can begin your work session.

What is a Client?

A client is an application or device that can communicate over a network with a server (a computer that provides services, such as applications). The Tisio Linux thin client is a simple device, with built-in software, that can communicate with powerful servers.

The programs that provide the ability to connect to servers are called connection clients. Three connection clients are included in the software built into the Tisio Terminals: the Microsoft Terminal Server Client, the Citrix ICA Client, and the Microsoft IE Browser. The Tisio Terminal Emulation Client can be added an option.

What is new in Version 1.5?

The latest release for the Tisio Linux is version 1.5, it includes many new features the both the user will notice and the administrator. A summary of these new feature include:

- ■ Improved UI appearance and look - New fonts provide a look more like Windows and sizes are automatically define by the Display Size setting.

- ■ PDF Viewer - Added support for a new PDF viewer, (Xpdf) to be used with the local Firefox Web Browser.

- ■ Java Runtime Environment - Java JRE support is available, choose from Java JRE 1.6, Java JRE 1.5 or Java JRE 1.4.

- ■ New Boot Agent - A new and improved local Boot Agent reduces device boot up time and adds support for new TDM 1.5 features.

- ■ Device License Management – A new device license management tool allows for easier management of your licensed devices through TDM.

- ■ Updated support for various Network devices, Realtek Gigabyte Ethernet controllers, Intel 2200/2915 Wireless cards and updated ieee80211 driver modules.

- ■ Device Cloning - The devices Flash ROM images is cloned and stored on the TDM server offering another remote device management tool for Tisio device. Requires TDM Version 1.5.

- ■ Device Mirroring – The Tisio devices screen can now be remotely viewed and controlled from the Tisio Device Manager.

- ■ Improvements in Network Startup – Network startup times have been improved along with better network device detection schemas.

Initial Screens

Your initial screen may be the application that you requested. Other possibilities are:

■ Windows desktop or logon information dialog.
If a connecting message briefly appears, and the Windows desktop or <u>logon dialog</u> appears, you are connected to a Windows host through either a Microsoft RDP (Remote Desktop Protocol) connection or Citrix ICA connection.

■ Connection Manager
If the <u>Tisio Connection Manager</u> appears, to connect to a server, select a Connection Name and click Connect.

■ Startup Wizard
If the <u>Tisio Startup Wizard</u> appears, your terminal has not been configured. You need to take further steps in order to use it.

■ If a Desktop or Logon Dialog Box Appears

If automatic logon has not been configured, you need to log on before the desktop appears. This section describes the logon process and the two desktops that are likely to appear.

Logon Dialog Box

If a Logon Information dialog box appears:

1. Enter your user name and password.

2. If the domain in the Domain field is not correct, select another from the drop-down list. If you are not sure which domain to use, ask your system administrator.

3. Click OK.

Terminal Server Session

A Terminal server session is a connection to a Windows 2000/2003, Windows 4.0, Citrix Presentation Server or Meta Frame Desktop Windows server. Go to Start > Programs and select the program you wish to run.
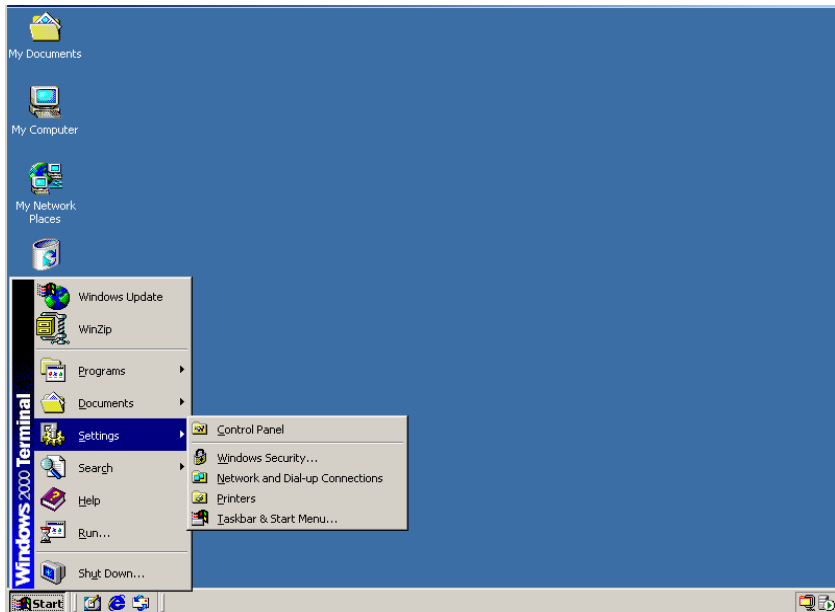
Figure 1 - Terminal Server Session

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Linux XDM/GDM Desktop Session

A XDM/GDM Desktop session is a connection to a Linux or UNIX
server. Go to Application > Office and select the program you wish
to run.
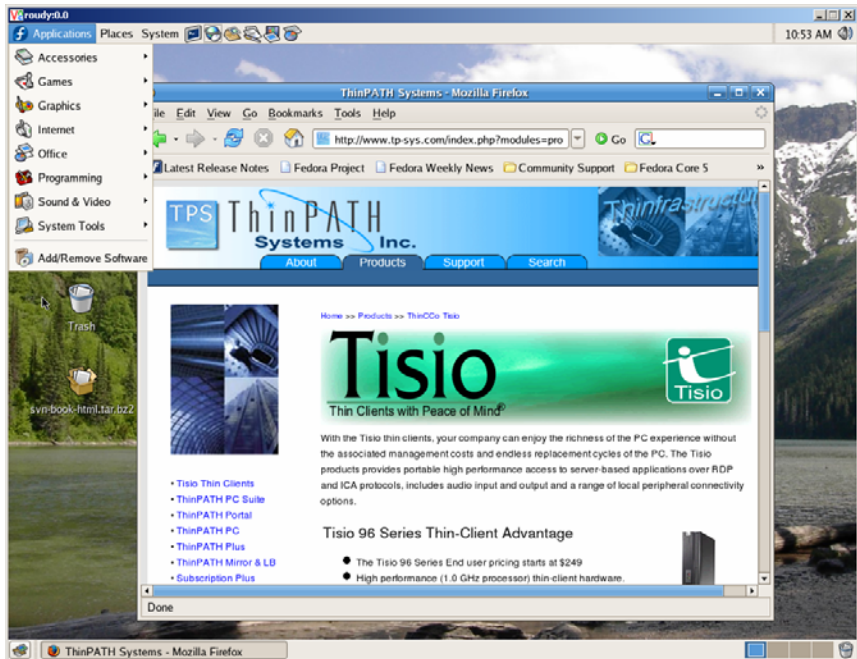
Figure 2 – Linux XDM/GDM Desktop Session

If just the Connection Manager Appears

Depending on how your terminal is configured, the Connection Manager lists one or more connections. To select a connection, select a Connection name in the connection list and click Connect.

■ If the connection was defined for automatic log-on and the server it connects to is running, the terminal makes the connection and you are logged on.

■ If the connection was defined for automatic logon and automatic application startup, and the server it connects to is running, the terminal makes the connection, you are logged on, and your application starts.

■ Otherwise the connection contacts the server and its logon dialog appears.

See Using the Connection Manager .
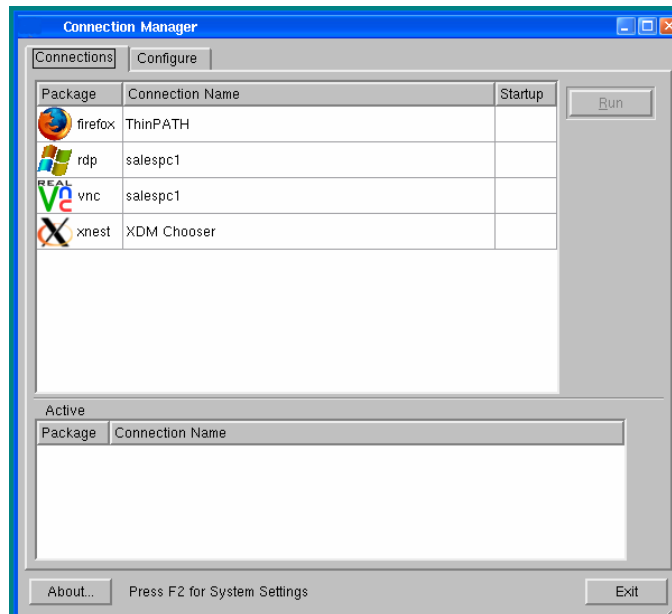
Figure 3 - Connection Manager

If the Start Menu and Task Bar Appears

Depending on how your terminal is configured, the Start Menu displayed at the bottom of the display lists one or more connections. To open a connection, select a Connection name from the Start Menu list and click.

The Start Menu & Task Bar is included by default but can be disabled or set to Auto Hide.

■ If the connection was defined for automatic log-on and the server it connects to is running, the terminal makes the connection and you are logged on.

■ If the connection was defined for <u>automatic logon and automatic application startup</u>, and the server it connects to is running, the terminal makes the connection, you are logged on, and your application starts.

■ Otherwise the connection contacts the server and its <u>logon dialog</u> appears.

See Using the Start Menu & Task Bar
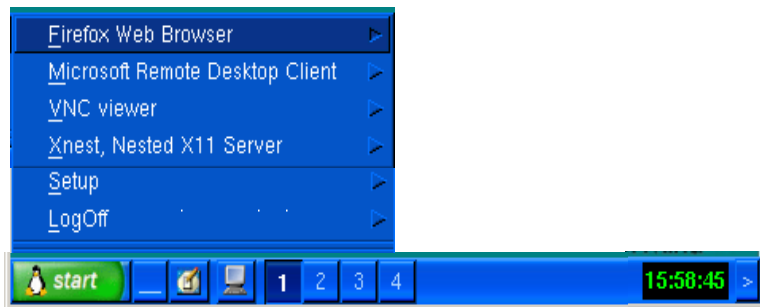
Figure 4- Start Menu & Task Bar

If the Setup Wizard Appears

The first time a terminal starts, the Setup Wizard appears. The Startup Wizard may also appear under other circumstances controlled by your system administrator.
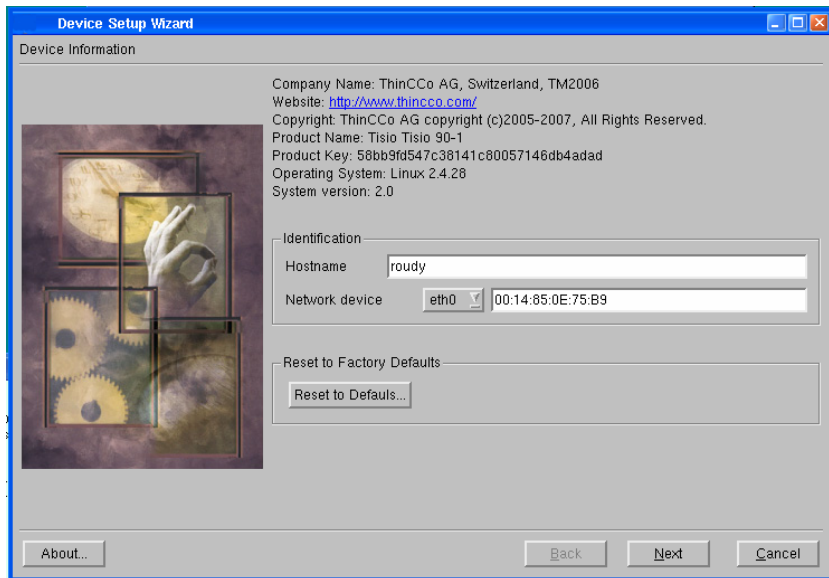
Figure 5 – Device Setup Wizard

Ask your system administrator whether you need to change any of the data in the Setup Wizard screens. See Using the Startup Wizard. The following instructions assume you are using the terminal's default values.

To page through the Setup Wizard:

1. Enter a host name or us the default value. Click Next.

2. Select the Color and display resolution settings. Click Next

3. Set the default Network settings and Click Next.

4. Click Next to accept the default Device Manager Settings.

5. Set desired system settings. Click Next.

6.   Set desired access settings. Click Next.

7.   Set desired printer settings. Click Next.

8.   Set any optional packages to install.

9.   Click Finish.

After you finish with the Tisio Setup Wizard, you will be required to reboot. Click yes to reboot.
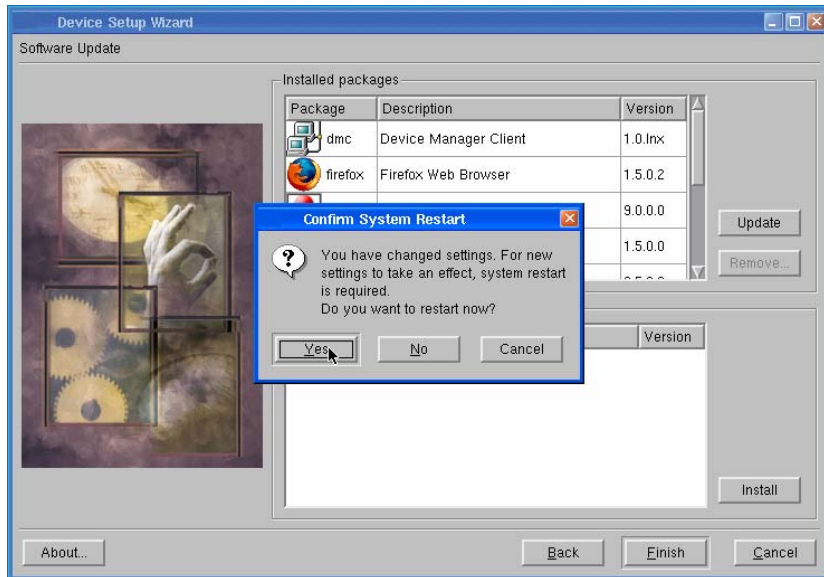
Figure 6 – Device Setup Wizard, Finish

Using Connection Wizards

A connection wizard also appears when you add or edit a connection in the Connection Manager.

This section describes how to configure connections with the following wizards:

■ Microsoft Remote Desktop Connection Wizard

■ Citrix ICA Client's Connection Wizard

■ Firefox Browser Connection Wizard

■ TeemX Terminal Emulator Client

Note   Your terminal may display other client connection wizards if optional software has been.

Once you create a connection with a connection wizard, the Connection Manager appears.
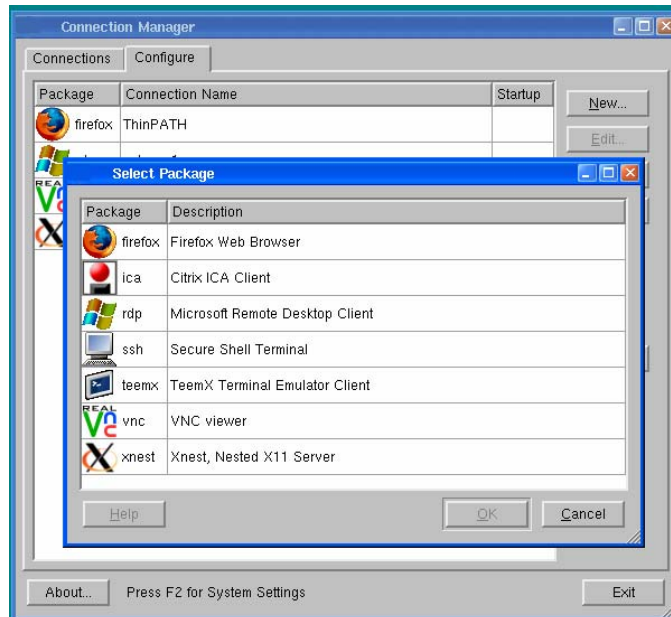
Figure 7 - Starting Connection Wizards

The Microsoft Remote Desktop Connection Wizard

If the Microsoft Remote Desktop Connection Wizard appears, create a Microsoft RDP connection using the name or network address of a server running Windows, Terminal Server Edition, referred to as the Terminal Server host in this Guide.
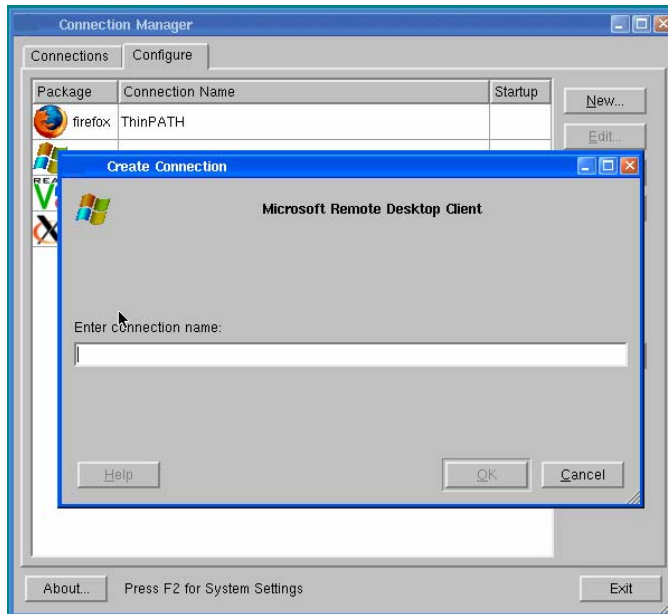
Figure 8 – Microsoft Remote Desktop Wizard initial window
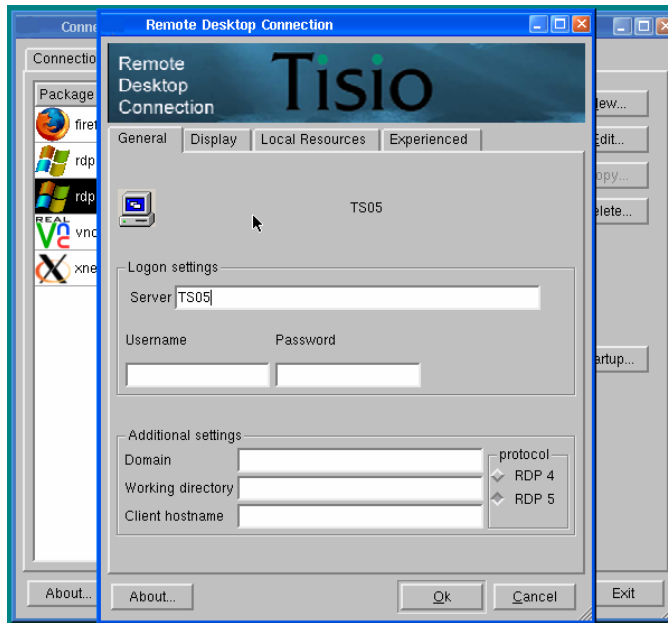
Figure 9 – Microsoft Remote Desktop Wizard Settings window

To create the connection:

1. From the Connection Manager Window click on the Configure Tab. Next select New and double Click the Remote Desktop Connection from the list. If the Connection Manager window is not visible see section on Starting the Connection Manager.

2. In the first dialog box of the Remote Desktop initial Connection Wizard: Enter a brief name for the connection in the field and click ok.

3. In the Server field enter the name or network IP (Internet Protocol) address of a Terminal Server in the Server field and click Next.

4. The tabs at the top of the window allow you to set Display, Local Resource and Experience parameters for your Microsoft Remote Desktop connection. Choose all desired settings.

5. Click Ok. The Connection Manager appears.

6. To open the connection you just created, select the Connection tab and the connection name, and click Run.

The Citrix ICA Connection Wizard

The Citrix ICA Connection Wizard creates a Network ICA connection to a Citrix Presentation Server, WinFrame or MetaFrame (Terminal Server) host using the name or network address of the host computer (server).

As with other connections, you can configure the automatic startup of an application or a published application (ICA connections only). A published application is one that your system administrator has named and made available to everyone on the network.
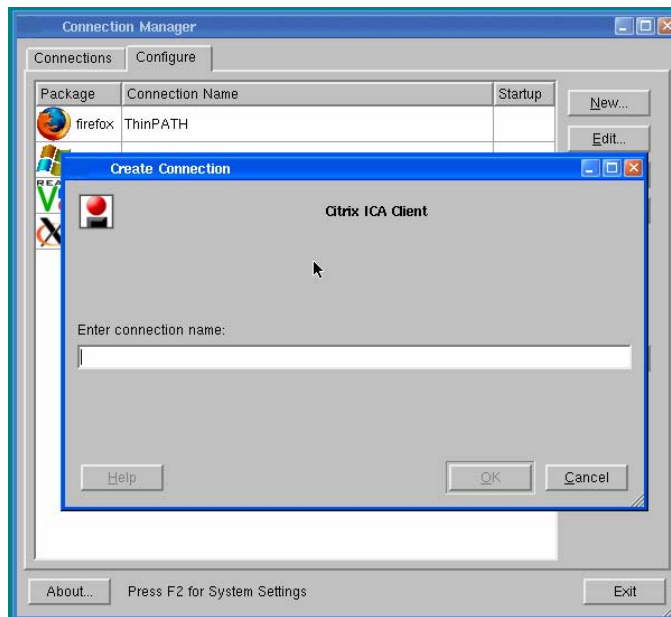
Figure 10 - ICA Connection Wizard
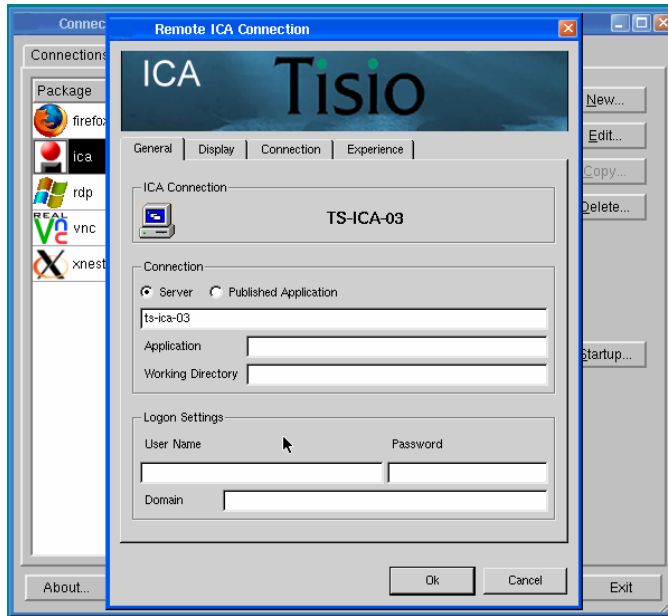
Figure 11 - ICA Connection Wizard Settings Window

To create the connection:

1. From the Connection Manager Window click on the Configure Tab. Next select New and double Click the Citrix ICA Connection from the list. If the Connection Manager window is not visible see section on Starting the Connection Manager.

2. In the first dialog box of the Citrix ICA initial Connection Wizard: Enter a brief name for the connection in the field and click ok.

3. Enter a Citrix server or Published Application for your connection.

4. If desired, specify logon information. Click Next.

5. Select Window Options, if needed. Click Next.

6. Select the ICA options, if needed. Click Next.

The tabs at the top of the window allow you to set Display, Compression, Sound, Speed Screen, Windows Keys, and Encryption Level, if needed (at this time Cache and Microphone Input cannot be configured). Click Next.

7. Select the Firewall settings. Consult your network administrator for settings specific to your local network. Click Done. The Connection Manager appears.

8. Click Ok. The Connection Manager appears.

9. To open the connection you just created, select the Connection tab and the connection name, and click Run.

The Firefox Browser Connection Wizard

The Firefox Web Browser Connection Wizard allows you to create network connections to browse for information on the Web or connect to Web based applications.
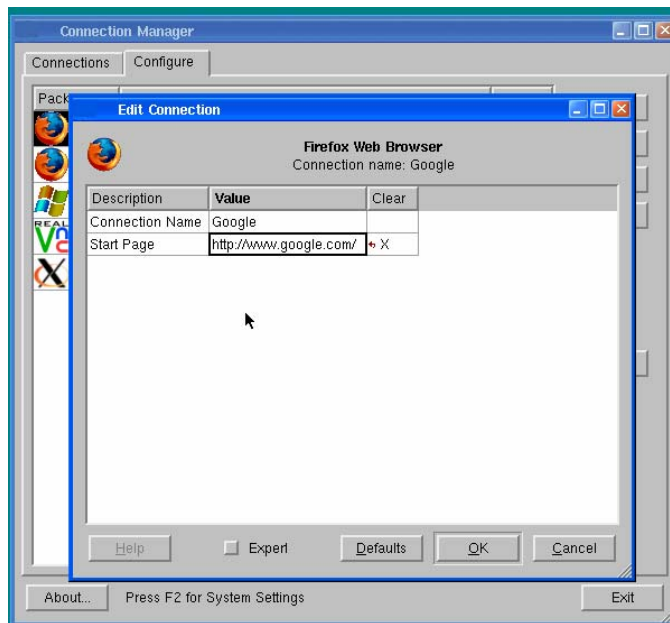
Figure 12 – Firefox Web Browser Connection Wizard

To create the connection:

1. From the Connection Manager Window click on the Configure Tab. Next select New and double Click the Firefox Web Connection from the list.

2. In the first dialog box of the Firefox Web Browser initial Connection Wizard: Enter a brief name for the connection in the field and click ok.
3. Enter the URL or IP address of the web connection. Click Ok.
4. When the Connection Manager appears, open the connection you just created, select the Connection tab and the connection name, and click Run.

The TeemX Terminal Emulator Connection Wizard

The TeemX Terminal Emulator Connection Wizard allows you to connect to legacy UNIX and IBM Mainframe applications.
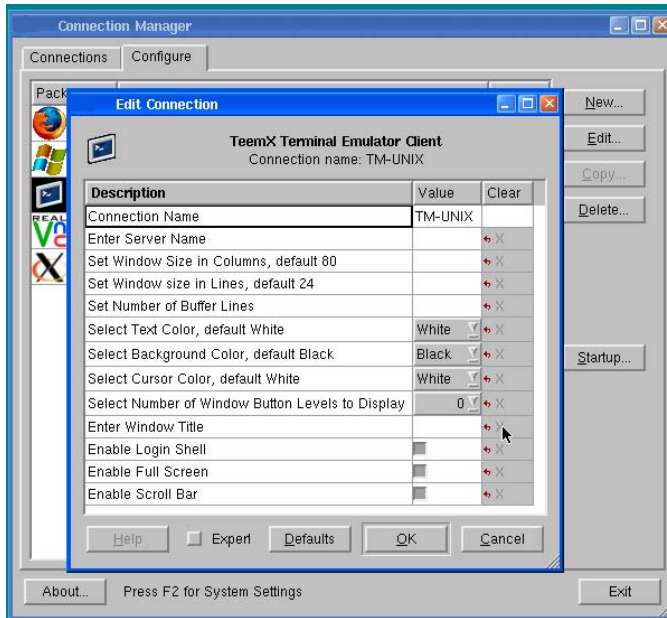
Figure 13 - Terminal Emulation Connection Wizard

To create the connection:

1. From the Connection Manager Window click on the Configure Tab. Next select New and double click on the TeemX Terminal Emulator Connection from the list.

2. In the first dialog box of the TeemX Terminal Emulation initial Connection Wizard: Enter a brief name for the connection in the field and click ok

3. Give the connection a name, and click Ok.

4. Enter the server name or IP you will be connecting to. Consult your Network Administrator for details.

5. Set any other settings required and click Ok.

6. When the Connection Manager appears, open the connection you just created, select the Connection tab and the connection name, and click Run.

Getting Started

The Tisio Linux Thin Client provides a choice of User environments to make the experiences of Tisio thin clients, seamlessly integrate into existing requirements. These choices include:

■ Windows User Environment with Start Menu & Task Bar

■ Traditional Windows Based Terminal User Environment

The Windows Environment provides users the traditional Windows Start Menu and Task Bar. From here connections to other servers can be started and active windows managed. For details see Using the Start Menu and Task Bar. By default the Windows User Environment is initially enabled.

The Windows Based Terminal (WBT) Environment provides user a more simple and controlled environment. From here a single Connection Manager Window is used to start and manage active windows managed. For details see Using the Connection Manager. In the environment the Start Menu and Task Bar are disabled.

To control which environment to enable see the Access Control section on Using the Setup Wizard.

Using the Start Menu and Task Bar

The Start Menu and Task Bar provide the user with a more traditional Windows user access to start and manage application sessions. In this environment users will typically open multiple sessions of different types in order to access their UNIX, Linux, Web and Terminal Server applications.

The Start Menu initially includes a Setup and LogOff choice to turn off the Tisio thin client or open the Tisio Setup Wizard and

Connection Manager. See <u>Using the Setup Wizard</u> and <u>Using the Connection Manager</u> for more details on these.

All connections created in the Connection Manager are automatically added to the Start Menu.

From the Task Bar active windows can be displayed or temporally hidden and up to four workspaces can be selected. See <u>Using the Task Bar</u> for more details.

Workspaces offer the user an alternative to managing multiple full screen windows. Each workspace can contain its own set of window or the user can choose to make specific windows visible on all workspaces. See <u>Using Workspaces</u> for more details.

The Window Manger Hot Keys offer yet another level of control when managing active windows and workspaces. For details see <u>Window Manager Hot Keys</u>.

Using the Start Menu

The Start Menu traditionally allows connections to be started and offers access to configuration settings a software power off. The following features are offered from the Start menu:

■ Starting Connections – To start a connection select it from the start menu connection list.

■ Add/Edit Connections – Adding and Editing connections are managed from the Connection Manager. Connections from the Connection Manager are automatically added to the Start menu.

■ Power Off – By default there is a Menu item to Turn off or Reboot the Tisio device.

■ Starting the Setup Wizard – By default the menu item Setup > Setup Wizard opens the Setup Wizard if it is not already running.

■ Starting the Connection Manager – By default the menu item Setup > Application Launcher opens the Connection Manager if it is not already running.

Using the Task Bar

From the Task Bar active windows can be displayed or temporally minimized and up to four workspaces can be used. Below describes the Icons just to the right of the Start Menu.

Icon or Item	Action and Description
Start	Start Menu, See Using Start Menu.
Clock	A Clock is displayed on the right side.
Active Windows	Each active window in the current workspace, is listed by name to the left of the Workspace icons. Clicking on these will Maximize or Minimize active windows.
Hide All	This is a toggle function. It minimizes all windows on the selected workspace. Clicking again make them all visible.
List Windows	This displays a list of open windows in all workspaces. This is like a menu to select any active window in any workspace.
Workspace	Choose one of the four workspaces to be visible.
Local Shell	This is only present when the Enable Local Access Shell is enabled in the Setup Wizard's Access Control section. Allows a local shell to run.
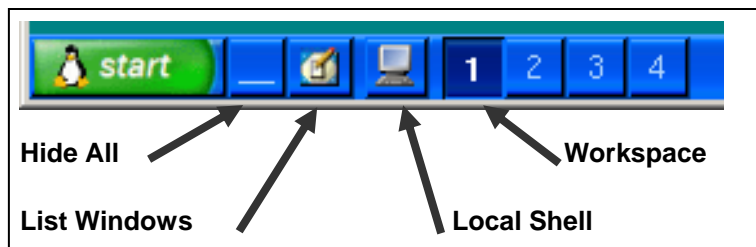
Figure 14 - Task Bar Icon Functions

Using Workspaces

There are four workspaces available on the Tisio Linux thin client device. Workspaces offer the user an alternative to managing multiple full screen windows in one window session. Each workspace can contain its own set of windows. Also specific windows can be made visible on all workspaces.

Workspaces only mange the specific Connection windows launched by the Start menu or in the Connection Manager window. Windows inside a remote Terminal Server session or Linux XDM session are always managed by the remote server.

Workspaces are selected through hot keys and the Task Bar Workspace and Window List Icons. For details on how to select different Workspaces from the Window List menu on the Task Bar see Using the Task Bar. For details on how to select different workspaces see the sections on Window Manager Hot Keys.

Window Control Menu

The Windows Control menu is used to manage active application windows. Right click in the title bar of any active window or select any active window in the Task Bar. Selecting the item or initiating the hot key will perform the function described in the Table below.

Figure 15 - Window Control Menu

This table describes the functions in the Window Control menu.

Item and Hot Key	Action and Description
Restore Alt+F5	Restore Window.
Move Alt+F7	Move window Function
Minimize Alt+F9	Minimize selected window.
Maximize Alt+F10	Maximize selected window.
Fullscreen Alt+F11	Maximize window and remove all window manager decorations.
Hide	Hide the selected window, no longer listed in task bar. Click on Windows List icon to un-hide.
Rollup Alt+F12	Make only the title bar of a window visible.
Raise Alt+F1	Maximize selected window.
Lower Alt+F3	Minimize selected window.
Layer	Force the selected window to always display over or under other windows.
Move To	Move window to the selected workspace.
Occupy All Alt+F2	Display selected window in all workspaces.

Item and Hot Key	Action and Description
Close Alt+F4	Close window.
Window list	Disabled

Table 1 - Window Control menu functions

Window Manger Hot Keys

The Tisio Linux thin client window manager supports a number of hot keys to control and manipulate active windows. The supported hot key functions are described below.

Hot Key	Action and Description
Alt+Tab	Cycle thought an icon list to select a window to raise, top to bottom.
Alt+Shift+Tab	Cycle thought an icon list to select a window to raise, bottom to top.
Alt+Escape	Select the next window to display on top.
Alt+shift+Escape	Select the previous window to display on top.
Ctrl+Alt+LeftArrow	Switch to the previous workspace (cycle).
Ctrl+Alt+RightArrow	Switch to the next workspace (cycle).
Ctrl+Alt+DownArrow	Switch to the previous active workspace.
Alt+F2	Display selected window in all workspaces.
Alt+F3	Lower the window to the bottom of the list in the current workspace.
Alt+F4	Close selected window.
Alt+F6	Select the next window to display on top.
Alt+Shift+F6	Select the previous window and display it to the top.
Alt+F7	Move selected window.
Alt+F8	Initiate resize of selected window. Next press arrow keys to change the size of window.
Alt+F9	Minimize selected window to Task Bar.
Alt+F10	Maximize selected window.
Alt+Shift+F10	Maximize selected window vertically (toggle).
Alt+F11	Maximize window and remove all window manager decorations.
Alt+F12	Make only the title bar of a window visible.

Hot Key	Action and Description
Ctrl+Escape	Display Start Menu. Use arrow keys to select menu item.
Ctrl+Alt+Escape	Display the windows list. Use arrow keys to select a window.
Ctrl+Alt+LeftArrow	Move the focused window to the previous workspace and activate it.
Ctrl+Alt+RightArrow	Move the focused window to the next workspace and activate it.
Ctrl+Alt+DownArrow	Move the focused window to the previously active workspace and activate it.
Ctrl+Alt+KP1	Move selected window to lower left corner.
Ctrl+Alt+KP2	Move selected window to bottom middle side.
Ctrl+Alt+KP3	Move selected window to lower right corner.
Ctrl+Alt+KP4	Move selected window to left middle side.
Ctrl+Alt+KP5	Move selected window to middle.
Ctrl+Alt+KP6	Move selected window to right middle side.
Ctrl+Alt+KP7	Move selected window to upper left corner.
Ctrl+Alt+KP8	Move selected window to top middle side.
Ctrl+Alt+KP9	Move selected window to upper right corner.

Table 2 - Window Manager Hot Key functions

Window manager Mouse functions

The following describes the available mouse controls. The Tisio Linux thin client uses the click to raise mouse pointer model. Clicking with the left mouse button on any part of a window will cause it to be displayed over all other windows and make it active for keyboard input.

Each window contains a frame. The frame of the window is the small area on all four sides of a window. When the mouse pointer is in this area and selected mouse buttons are pressed the frame functions are initiated.

■ **Window Frame functions** – when mouse pointer is in the frame.

Left Button click – Select and raise the window.

Left Button press & hold – Move mouse to resize window; if over one of the four sides, makes the side smaller or larger. If over a corner, makes the window smaller or larger on both sides.

Right Button click – Display window control menu.

Right Button press & hold – Move mouse to move window.

Each window displays a title bar at the top of each window. When the mouse pointer is in this area and selected mouse buttons are pressed the title bar functions are initiated.

■ **Title Bar functions** – when the mouse pointer is in the title bar.

Any Button press & hold – Move mouse to move window.

Alt + Left Button – Minimize the window to the Task Bar.

Middle Button Double Click – Roll up the window making only the title bar of a window visible. Double click again to restore window.

Active windows are displayed in the Task Bar. Moving the mouse pointer over active windows in the Task Bar activates Task bar functions.

■ **Task Bar Functions** – when mouse pointer is in the Task Bar.

— Left Button click – Activate the workspace and display the window. Toggles between the active and minimized state of a window.

— Ctrl + Left Button click - Activate the workspace and display the window. Toggles between the active and minimized state of a window.

— Middle Button click – Toggle to lower the window so it is under all windows or raise the window so it is displayed over all other windows.

— Right Button Click – Display the Window Control menu.

Using the Connection Manager

The Connection Manager lists all defined network connections. Active connections are designated in the active section in the lower portion of the window.

This section explains how to use the Connection Manager to run, stop, add, edit, autostart, and manage connections.

By default the Connection Manager is initially started. The Tisio device can be configured not to start the Connection Manager window. If the Connection Manager is not running, you can display the Connection Manager by pressing Ctrl+Alt+End or Selecting from the Start Menu Start > Setup > Application Launcher. When the Connection Manager is covered by another session, press Alt+Tab and select it from the list of running applications or if the Start Menu & Task Bar is visible click on the Connection Manage in the Task Bar.
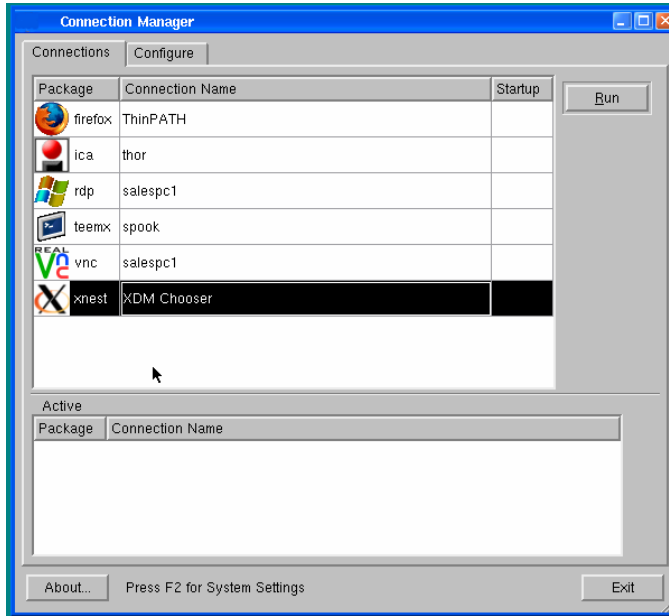
Figure 16 - Connection Manager

The Connection Manager lets you:

■ Start connections

Select the connection name and click Run.

■ Switch among currently active connections.

See <u>Starting Multiple Connections</u> for more details.

■ Stop connections.

If problems on the server cause your connection to be unresponsive to a normal log off, select the connection name and click End. See Logging Off

■ Add or edit new connections.

See <u>Adding or Editing Connections</u> , for more details.

■ Set Connections to Auto Start and Reconnect.

See <u>Autostart and Restart Connections</u> , for more details.

Adding or Editing Connections

To add or edit a connection when connected to a server, bring up the Connection Manager, and click the Configure tab. See section above on how to start the Connection Manager

■ To add a connection, click New. The New Select Package dialog box appears. Select a client from the list and click OK.

■ To edit a connection, select a connection name and click Edit.

In either case, the appropriate connection wizard for the client you selected appears.
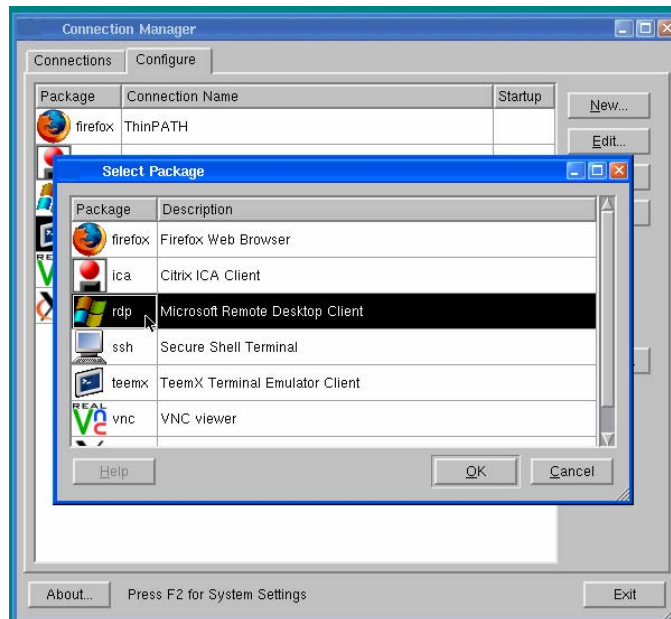
Figure 17 - Connection Manager, Add or Edit

Note   If the Configure tab does not appear, your system administrator has disabled it.

Setting the Default Connections

Specifying a connection as the default connection:

■ Highlights that connection when the terminal starts up and the Connection Manager appears.

■ Click RUN in the Connection Manager to start this connection.

To select a connection as the default:

1. Select the Configure tab of the Connection Manager window.

2. Select a connection (defined previously) and click Startup.

3. Click Select Connection on startup and click OK.

Setting Autostart and Restart Connections

Specifying an auto start or restart connection:

■ Automatically starts that connection when the terminal starts.

■ Restarts the connection when it ends.

1. On the Configure tab of the Connection Manager, select the connection you want to start automatically.

2. To display the Connection Startup dialog box, click Startup.

3. Click Automatically Start the selected connection at startup or Restart when connection is finished and click OK.

For more information, see <u>Ending Auto start Connections</u>.

Note   An auto start connection also functions as the default connection. Designating a different connection as the default makes any auto start connection revert to non-auto start status. When you log off an auto start connection, the connection restarts automatically. For details, see <u>Ending Auto start Connections</u>.

Starting Multiple Connections

The Tisio terminal allows multiple simultaneous LAN connections to one or more servers. The number of connections you can start depends on the amount of memory in your terminal.

To start your second connection:

1. Press Alt+Tab or select it from the Task Bar to bring up the Connection Manager. If it is not running press Ctrl+Alt+End or select Start > Setup > Application Launcher.

2. Select the connection name, and then click Connect.

To switch between running connections:

■ Press Alt+Tab to cycle through the list of active connections. The connection list reflects the order in which the connections were started, the most recent being on top.

    Note   Hot keys for managing multiple connections are explained in more detail in hot keys section and also, Managing multiple connections. See also Window Manager Hot keys

Device Hot Keys

Hotkeys are used to navigate through active connections and to display Tisio setup and configurations screens. These hot keys are used for local control of the Tisio client windows.

Client applications windows used to connect to remote hosts resources are displayed in full screen mode. In most cases the full screen client application does not display a title bar allowing the full screen window to be lowered. Hotkeys are used to lower and raise these windows to enable access other active client application sessions, local configuration windows and even local Operating System recovery scenarios.

Hot Key	Use
Alt+Tab	Cycle through active connections in the Connection Manager.
Ctrl+Alt+Home	Go to the default connection. The connection is started if it is not already active.
Ctrl+Alt+End	Start the Connection Manager Window
F2	Display Device Setup Window. The Connection Manager Window must be visible and avtive.

Table 3 - Device Hot Keys Description

Logging Off

To log off and end your session:

1. If you connected to an application instead of a server's desktop, closing the application terminates the connection.

2. If you connected to a Windows server running Microsoft Terminal Services or Citrix Presentation server:

    — Close all applications.

    — Click Start on the taskbar at the bottom of the Windows server desktop.

    — Select Logoff, and then click OK. The Windows server closes any programs that are still running.

3. If you connected local Terminal Emulator session:

    — Logoff as described by your application.

    — Close Terminal Emulator window.

4. If problems on the server cause your connection to not respond to a normal log off, bring up the Connection Manager by pressing Ctrl-Alt-End, select the connection name and click End. Your session is will be disconnected, but you may not be logged off. Contact your systems administrator for more astistance.

Once a session ends, a new session starts or the Connection Manager appears. Repeat the steps to end all active connections and then you can turn off the terminal.

Disconnecting vs. Logging Off

To disconnect from a server session:

- Select Start > Disconnect on a Windows server or Citrix MetaFrame
- Select File > Disconnect on Citrix WinFrame.

This suspends all open applications.

When you reconnect to the session later by logging on again, your applications resume. Because disconnected sessions still consume server resources, most system administrators prefer that you log off.

When you log off, your programs are terminated and the session is ended. You must restart the programs at the next log on.

Ending Autostart Connections

To end an autostart connection, follow these steps:

1. Press Ctrl+Alt+End to bring up the Connection Manager and select the Configure tab.
2. Select the autostart connection name, click Startup and the Connection Startup dialog box appears.
3. Select Make the selected connection your Default connection and click OK.
4. Log off from the session as described above or select the Connections tab, select the connection name, and click End.

Using the Startup Wizard

The first time a terminal is powered on, the Setup Wizard appears. The Setup Wizard may also appear if the Tisio thin client was reset to factory defaults or a <u>System Recovery</u> was performed.

This section describes the configuration settings associated Startup Wizard:

- ■ Device Information – Lists device information.
- ■ Display Settings – Color, Resolution and screen saver settings.
- ■ Network Settings – Defines network connectivity settings
- ■ Device Manager – Defines the Management server settings
- ■ System Settings – Language, Time, Mouse and Sound settings.
- ■ Access Control – User modes, Security and Diagnostics settings.
- ■ Printer Settings – Define printer settings.
- ■ Software Updates – Manage software updates.

Once you exit from the Startup wizard, the <u>Connection Manager</u> and <u>Start Menu and Task Bar</u> appears.

Device Information Screen

The device information screen displays identification information of the device. It includes Host Name to modify the name of the Tisio thin client. Click Next to continue.

Host Name

The Host Name field defines the name of the Tisio and is the same as the <u>Terminal Name</u>. By default the *TTC-* is added to the device's MAC address, *TTC-000fea6ebc71.* Enter a new host name of use the default.

Display Settings Screen

The Display Settings screen provides access to initially set the Tisio display settings that will be used for the attached video monitor or LCD Flat Panel Display. These settings include:

- Desktop Area and Refresh Frequency setting.
- Colors selection for 256 Color, High Color & True Color depths.
- Monitor Controls and settings.

Set the desired Display settings required for your attached monitor. For a full description of these settings see <u>Display Settings</u>.

Network Settings Screen

The Network Settings window provides information and access to modify the Tisio Network settings that will be used when attached to a Local Area or Wide Area Network. These settings include:

- Network Adapter Settings – Defines the network IP Address, Subnet Mask and Default Gateway settings.
- Wireless Settings – View and modify the wireless settings of the Tisio thin client.
- Configure VPN – Modify the Cisco VPN settings.

Network Adapter Settings

The Network Adapter Settings allows configuration of all TCP/IP Network parameters. The network parameters can be automatically assigned or statically set.

The setting *Enable DHCP* is the normal choice. To manually set the IP Address settings refer to <u>Network Adapter Settings</u> section.

Wireless

The Wireless settings define the wireless encryptions settings that will be used identify it from other network devices and connect to the local wireless network.

Virtural Private Network (VPN)

The Configure VPN is used to configure the local Cisco VPN client. The setting defines the location where to read the Cisco VPM configuration file.

Device Manager Screen

The Device Manager screen provides settings to specify the management server also known as the Device Manager.

The controls and settings under the Device Manger screen include:

- Device Manager (TDM) Server name field – Modify the host name of the thin client management server.
- HTTP Proxy – Used to specify a Proxy server for your Tisio Linux device.
- Test button – Used to test connections to the Tisio thin client management server.

Device Management Server

The Device Manager field defines the network host name and URL of the Tisio Device Management server. This field can contain a simply hostname, IP address or a full URL address. Enter a HTTP Proxy server if required.

Enter a new Tisio Device Manager server URL or accept the default. See <u>Device Management Server</u> description for more details.

Testing the Device Manager Connection

In the Device Manager window the **Test** button verifies communication to the Device Management server.

Click on the Test button. A message indicating a pass or fail will be returned in the message box.

System Settings Screen

The System Settings screen provides general settings for the Tisio Linux thin client.

The controls and settings under the System Settings screen include:

◼ Language, Keyboard & Number Lock fields – Define Language and Number Lock start up state.

◼ Time Zone, Time & Time Server fields. – Used to specify the local Time Zone, Time and Time server for the Tisio Linux device.

◼ Mouse Control & Sound Level fields. – Used to specify Mouse and Sound settings for the Tisio Linux device.

See System Settings description for more details. Set desired settings and click Next.

Access Control Screen

The Access Control screen provides user access, security and troubleshooting settings for the Tisio Linux thin client.

The controls and settings under the Access Control screen include:

◼ User Access Control – Defines what local controls the user has access to.

◼ Remote Display Management. – Enable/Disable VNC for remote display Access.

◼ Troubleshooting Access. – View diagnostic log files and enable local shell access.

See Access Control descriptions for more details. Set desired settings and click Next.

Printers Screen

The Printers screen provides printer settings for the Tisio Linux thin client to establish local Printers or establish connections to network print servers.

See Printers descriptions for more details. Set desired settings and click Next.

Software Update Screen

The Software Update screen provides access to controlling software and local package updates for the Tisio Linux thin client.

See Software Update descriptions for more details.

Click *Finish* to begin using you Tisio thin client. You also have the opportunity to go *Back* and modify any previous Tisio Setup Wizard setting.

Once you have selected Finish you will be required to reboot your Tisio thin client before you can begin using it. To change any settings once you have finished the Tisio Setup Wizard refer to Setting Tisio Properties with the Setup Wizard.

Using the Connection Manager Wizards

This section provides a quick reference and some additional detail on the Connection Manager. There is a separate GUI used to create connections. This describes the individual settings for making client connections to application servers.

Modifying your terminal's configuration can cause unexpected and undesirable results — ask your system administrator before attempting any of these procedures.

After initial configuration, you can modify connections using the Connection Manager.

The Start Menu & Task Bar and the Connection Manager is on the screen by default, unless you have chosen to disable either of them. To access the Connection Manager Wizards the Connection Manager window must be running.

Each connection type in the Connection Manager includes a connection wizard to create and edit connections. They are:

■ Firefox Web Browser – Used to browse the World Wide Web

■ Citrix ICA Client – Connects to Citrix Presentation Services.

■ Microsoft Remote Desktop Client – Connects to Microsoft Terminal Services.

■ Secure Shell Terminal – Connects to secure legacy Unix and Linux servers.

■ TeemX Terminal Emulator Client – Connects to legacy mainframe servers, VMS, IBM, UNIX.

■ VNC Viewer – Connects to VNC Servers

■ Xnest Nested X11 Server – Connects to Linux and UNIX servers using XDMCP login services.

Firefox Web Browser

The Tisio Linux thin client includes the Firefox web browser V1.5.0.2. For full details on using Firefox please refer to their web site for user documentation.

When creating a Firefox connection, first enter a name describing the connection. Next the Firefox connection edit screen is displayed. Once a connection has been created it can be edited again by selecting the Edit button in the Connection Manager Window. The following connection settings are available for Firefox.

Connection Setting	Description	Default
Connection Name	This is the name describing the connection defined in the first window that appeared when the connection was first created. Enter a valid Connection name.	Blank
Start Page	Enter a World Wide Web URL address as the initial start page.	www.tp-sys.com

Table 4 - Firefox Basic Settings

Citrix ICA Client

The Tisio Linux thin client includes the Citrix ICA client V9.0. For full details on using the Citrix Server please refer to their web site for user documentation.

When creating an ICA connection, first enter a name describing the connection. Next the ICA connection Wizard screen is displayed. Once a connection has been created it can be edited again by selecting the Edit button in the Connection Manager Window. The following connection settings are available in the Citrix ICA Client Connection window.

Connection Setting	Description	Default
General Tab		

Connection Setting	Description	Default
Connection Name	This is the name describing the connection defined in the first window that appeared when the connection was first created.	Value first entered
Connection Server	When Server is selected enter the name or IP address of the Citrix ICA server.	Blank
Connection - Published Application	In the Connection section when Published Application is selected enter a published application to connect to.	Blank
Connection - Application	Enter the name of application to run on the Citrix Server. Connect to Server required.	Blank
Connection – Working Directory	Enter the name of working directory on the Citrix Server. Connect to Server required.	Blank
Logon Settings – User Name	Enter the Windows Login name	Blank
Logon Settings – password	Enter the Windows Login password	Blank
Logon Settings – Domain	Enter the Windows Login Doman name	Blank
Display Tab		
Window Size	The window size can be full screen, a percentage of the screen or a specific size.	Full Screen
Window Colors	Select Default,16, 256, 32 Thousand, or 16 Million. It is recommended that at lease 16 Million colors be selected.	Use Default
Window Colors 256	When set to 256, colors can be shared with other application on the Tisio screen. Select the desired color share mode.	Default Color
Connection Tab		
Network Protocol	Select the network protocol to connect to the Citrix server.	Blank

Connection Setting	Description	Default
Server Location	Enter the IP address or hostname of a Citrix server in a different network to access Citrix services.	Blank
Proxy Type	Select Proxy type used on your network.	Use Default
Proxy Server	Enter the IP address or hostname of the Proxy server.	Blank
Experience Tab		
Use Data Compression	Enable Data Compression	Enabled
Enable Middle Button Paste	Enable when using a 3 button mouse. Enable X windows cut and paste features.	Disabled
Use Disk Cache for Bitmaps	Use local memory to speed up the redraw of bitmaps in ICA session window.	Disabled
Enable Default Printer	The Tisio defined local default printer will automatically be mapped back from the Citrix server.	Enabled
Enable Sound	Select high, medium or low sound quality.	Disabled
Enable Comport mapping	Map local serial and parallel ports to be with local attached peripherals.	Enabled
Enable USB Drive mapping	Enable USB Drive mapping. Select which drive letter to map.	Enabled, Drive A
Encryption Level	Defines the Encryption level use for the ICA connection.	Basic
Speed Screen – Mouse Feedback	Control mouse local (Enabled) or remote from server (Disabled).	Disabled
Speed Screen – Keyboard	Control keyboard local Text echo	Off
Auto Reconnect	Reconnect to server when connection ends	Disabled
Maximum Retries	Maximum times to try reconnect	Blank
Delay Retry	Number of seconds to wait between retries	Blank

Table 5 - ICA client Settings

Remote Desktop Client

The Tisio Linux thin client includes the Remote Desktop client V1.5. For full details on using the Microsoft Terminal Server please refer to their web site for user documentation.

When creating a Remote Desktop Connections, first enter a name describing the connection. Next the Remote Desktop connection Wizard screen is displayed. Once a connection has been created it can be edited again by selecting the Edit button in the Connection Manager Window. The following connection settings are available in the Remote Desktop Client Connection window.

Connection Setting	Description	Default
General Tab		
Connection Name	This is the name describing the connection defined in the first window that appeared when the connection was first created.	Value first entered
Connection Server	When Server is selected enter the name or IP address of the Microsoft Terminal server.	Blank
Logon Settings – User Name	Enter the Windows Login name	Blank
Logon Settings – password	Enter the Windows Login password	Blank
Domain	Enter the Windows Login Doman name	Blank
Working Directory	Enter the name of working directory on the Terminal Server.	Blank
Protocol	Select RDP client support version	RDP 5
Display Tab		
Window Size	The window size can be full screen, or a specific size.	smallest
Window Title	Enter the title for the window	Blank

Connection Setting	Description	Default
Window Colors	Select 256, Hi-Color 16 bit, True Color (24). It is recommended that at lease Hi-Color be selected.	True Color
Window Colors 256	When set to 256, colors can be shared with other application on the Tisio screen. Select the desired color share mode.	Disabled
Hide Decorations	Currently not supported.	Disabled
Keep Key Bindings	Grab all key entered in RDP session. Do not pass to local window manager.	Enabled
Include in other window	Enter Window ID number	Disabled
Local Resources Tab		
Shell	Enter a shell other that explorer to run on the Windows Terminal Server.	Blank
Attach to Console	Instead of opening a new session grab the Terminal Servers local console.	Disabled
Enable Numlock	Synchronize local Number lock with server Number lock key.	Use Default
Keyboard layout	Pass local keyboard setting to Windows Terminal Server.	en_us
Enable Serial port Redirection	Map local serial ports to local attached peripherals.	Enabled
Enable LPT port Redirection	Map local parallel ports to local attached peripherals.	
Enable USB Drive Redirection	Enable USB Drive mapping.	Enabled
Enable Sound	Select local, remote or off sound redirectio.	Local
Enable Default Printer	The Tisio defined local default printer will automatically be mapped back from the Windows Terminal server.	Enabled
Experience Tab		

Connection Setting	Description	Default
Connection Speed	Controls local user experience. Select LAN setting for all network connections	LAN (10 Mbps)
Force bitmap updates	Force server to send screen updated as bitmaps rather than using higher-level drawing operations.	Disabled
RDP Compression	Encrypt RDP protocol communication between client and server.	Enabled
Use Backing store	Use backing store on the local Xserver in place of the one in the Rdesktop client.	Disabled
Use Encryption	Disable Data Encryption between client and server. When disabled only the login is Encrypted.	Enabled
Use Persistent Bitmap Caching	Use local memory to speed up the redraw of bitmaps in RDP session window.	Disabled

Table 6 - Remote Desktop Settings

Secure Shell Terminal

The Tisio Linux thin client includes the Secure Shell Terminal V2.5.2.0. For full details on using Secure Shell please refer to Linux documentation on using ssh.

When creating a Secure Shell (ssh) connection, first enter a name describing the connection. Next the ssh connection edit screen is displayed. Once a connection has been created it can be edited again by selecting the Edit button in the Connection Manager Window. The following connection settings are available for Secure Shell.

Connection Setting	Description	Default
Connection Name	This is the name describing the connection defined in the first window that appeared when the connection was first created. Enter a valid Connection name.	Blank

Connection Setting	Description	Default
Remote Server	Enter the hostname or an IP address of the remote Secure Shell server. A valid hostname or IP address must be entered.	Blank
Remote username	Enter the user name logging into the remote Secure Shell server. If the username is not entered the server will prompt for a user name.	Blank

TeemX Terminal Emulator

The Tisio Linux thin client includes the TeemX Terminal Emulator V5.0.26.0. The TeemX Terminal Emulator includes support to VT100, VT52, VT320, IBM3270, IBM5250, Wyse50/60 and many others. For full details on using TeemX Terminal Emulator and all supported terminal emulators, please refer to TeemX Reference and User documentation.

When creating a TeemX Terminal Emulator connection, first enter a name describing the connection. Next the TeemX connection edit screen is displayed. Once a connection has been created it can be edited again by selecting the Edit button in the Connection Manager Window.

By default only the basic settings are listed, by clicking on the **Expert** box will display all available settings for TeemX connections. The **Default** button will reset all values to their stated default value.

The following connection settings are available for TeemX.

Connection Setting	Description	Default
Connection Name	This is the name describing the connection defined in the first window that appeared when the connection was first created. Enter a valid Connection name.	Blank

Connection Setting	Description	Default
Server Name	Enter the hostname or an IP address of the remote server. A valid hostname or IP address must be entered.	Blank
Window Columns	Enter the window size in columns of characters.	80
Window Lines	Enter the window size in lines of characters.	24
Buffer lines	Set the number of buffer character lines that can be scrolled off screen. The maximum is 10,000.	24
Text Color	Select the color to use for Characters in the TeemX Window.	White
Background Color	Select the color to use for the background of the window.	Black
Cursor Color	Select the color of the cursor in the TeemX window.	White
Button Levels	Sets the levels of soft buttons to display at the bottom of the TeemX window. Soft buttons can be used in place of keyboard function keys.	1
Window Title	Enter the Title of the window.	TeemX
Enable Login Shell	Request UNIX/Linux host to execute user shell startup scripts, i.e. .profile, .login.	Enabled
Enable Full Screen	Start initially in full screen mode.	Enabled
Enable Scroll Bar	Display Scroll bar on right edge of window.	Enabled

Table 7 - Basic TeemX Settings

Below list the advance settings for the TeemX window.

Connection Setting	Description	Default
Telnet Port	Set the TCP/IP port number to use for the telnet connection.	23
Internal Border	Enter the width in pixels of the internal border on the TeemX window.	1

Connection Setting	Description	Default
Program	Specify the program to run in place of telnet. Currently this feature is disabled. Entering a name may cause the TeemX window to not open.	Blank
Arguments	Specify the program arguments to be used with the program above. Currently this feature is disabled. Entering a name may cause the TeemX window to not open.	Blank
Set TERM variable	Force the TERM variable to be set to value entered.	vt220
XRM Resource	Enter any X11 xrm resource setting to override internally controlled TeemX settings.	Blank
Class Name	Change X11 Class Name of the TeemX window.	Xteemx320
Script File	Enter the name of the script file to run when starting TeemX.	Blank
Alternate setup file	Enter the name of an alternate setup file name.	teemx340.nv
Keyword & Binding Characters	Enables the configuration of keys to perform specific tasks when pressed. Valid keywords are brk, dsusp, eof, eol, erase, flush, intr, kill, lnext, quit,rprnt, start, stop, susp, swtch, & weras. Control keys are specified buy including the hat character (^). For ^a is the same as Ctrl + a, ^? Is delete. Place double quotes around entered string.	Blank
Zmodem Startup	When enabled check incoming data for remote ZMODEM startup sequence.	Disabled
Enable Debug Mode	Track all character communications between server and client.	Disabled
Input Queue	Set input queue size for network data. Can be set to 0-4096.	255

Connection Setting	Description	Default
Enable Quite Mode	Disable message from being sent to the console display.	Disabled
EOL Cut & Paste	Define End of line character during a cut & paste function.	CR (carriage return)
Mouse Multi-Click Time	Defines the mouse double click time. Enter a value in milliseconds.	250 milliseconds
Enable Cursor to EOL	Cursor Line Selection Extent, define how much of the line is selected when the mouse is clicked 3 times. Either Cursor to end of line or entire line.	Enabled from cursor to end of line
Keyboard Type	Keyboad types are PC, VT, HP, Sun4 or Sun5.	PC
Bell volume	Select the Bell Volume	100%
Enable IBM Reply Mode	Enabling will prevent color information from being sent in reply to a IBM host. IBM emulation only.	Disabled
Use Printer Program	Use the entry for the print output of the TeemX window. Currently this is disabled. Defining a printer in the Tisio Setup Wizard will force TeemX to send screen data to this printer. This field should be blank.	Blank, Defined by Setup Wizard.
Display Printer Aliases	Display the aliased printers listed in the printer names list. Display the First, last or All.	All
Exit String	Send string of characters to host when TeemX window closes.	Blank
Enable Telnet Keepalive	Enable keep alive messages to be sent to the connect host.	Enabled
Suppress Telnet Echo	Suppress generation of Telnet Echo option on connection with host.	Disabled
Closing Telnet Action	Select the telnet close option, Prompt or Exit.	Prompt

Connection Setting	Description	Default
Closing Telnet Option	Select telnet close option when Closing Telnet Action is set to Prompt. Select Prompt, Exit, Reconnect or Close.	Prompt
Use Backing Store	Use the Backing Store feature on Tisio X11 server.	Disabled
Start as an Icon	When TeemX starts place it in a lowered state on the task bar.	Disabled
Window size	Enter the X11 geometry window size to use for the TeemX window to use. Enter =WxH+xoffset+yoffset in screen pixels.	Blank
Enable Top Menu Bar	Enable the menu bar at the top of the Teem X window.	Enabled
Enable Menu Items	Enable the File, Edit, and Settings Menu on the Menu bar.	Enabled
Cursor type	Select cursor type, Blinking or Static.	Blinking
Border Color	Enter window border color.	Black
Font Lists	The Font lists define the various font sizes to use as the TeemX window is resized. As the window is resized the number of character lines and columns is maintained. The fonts size is changed to compensate for the changing window size. See TeemX Reference Manual for details.	Blank
Preload Fonts	Preload fonts at startup or load as needed.	Disabled

Table 8 - Advanced TeemX settings

VNC Viewer

The Tisio Linux thin client includes the VNC Viewer V3.3.7.0. For full details on using VNC Viewer please refer to the documentation on using VNC Viewer.

When creating a VNC viewer connection, first enter a name describing the connection. Next the VNC Viewer connection edit screen is displayed. Once a connection has been created it can be edited again by selecting the Edit button in the Connection Manager Window. The following connection settings are available for the VNC viewer connections.

By default only the basic settings are listed, by clicking on the **Expert** box will display all available settings for VNC viewer connections. The **Default** button will reset all values to their stated default value.

The following connection settings are available for VNC Viewer.

Connection Setting	Description	Default
Connection Name	This is the name describing the connection defined in the first window that appeared when the connection was first created. Enter a valid Connection name.	Blank
Remote Server	Enter the hostname or an IP address of the host running a VNC server session and optional the display number to connect to. Format is host:display A valid hostname or IP address must be entered.	Blank
Share Desktop	When a connection is made to a VNC server, all other existing connections are normally closed. This option requests that they be left open, allowing the desktop to be shared with other VNC viewer sessions	Not Shared
Full Screen	Start in full screen mode.	Enabled
Password	Specify a local password file on the server to be used. ~/.vnc/passwd	Blank

Connection Setting	Description	Default
Remote username	Enter the user name logging into the remote VNC server. If the username is not entered the server will prompt for a user name it required.	Blank

Table 9 - VNC Viewer Basic Settings

Below list the advance settings for the VNC viewer connections.

Connection Setting	Description	Default
Window Name	Enter the Window name or title of the window.	Server Name
Pop Up Menu Key	The key which brings up the popup menu	F8
Debug Delay	Milliseconds to display inverted pixel data - a debugging feature. 0 is disabled. Enter 0 – 9.	0
Display Number	The X Window System display number, overrides the DISPLAY variable value.	Blank
Geometry	Enter the X11 geometry window size to use for the TeemX window to use. Enter =WxH+xoffset+yoffset in screen pixels.	Blank
Listen for Connections	Listen for connections from VNC servers on the given TCP/IP port number.	0
Send Primary Selection	Send the primary selection and cut buffer to the server as well as the clipboard selection	Enabled
Send Clipboard	Send clipboard changes to the server.	Enabled
Receive Clipboard	Accept clipboard changes from the server	Enabled
View Only	Don't send any mouse or keyboard events to the server, view only mode.	Disabled

Connection Setting	Description	Default
Show Dot Cursor	Show the dot cursor when the server sends an invisible cursor	Enabled
Use Local Cursor	Render the mouse cursor locally	Enabled
Decoration Height	Height of window manager decoration around a window in pixels.	24
Decoration Width	Width of window manager decoration around a window in pixels.	6
Pointer Event Interval	Time in milliseconds to rate-limit successive pointer events	0
Log Target	Specifies which log output should be directed to which target logger, and the level of output to log. Format is <log>:<target>:<level>[, ...].	Blank
Compression Level	Zlib compression level	-1

Table 10 - VNC Viewer Advanced Settings

Xnest - Nested X11 Server

The Tisio Linux thin client includes the Xnest 2.1.1.0. Xnest allows for full XDM Login Sessions to legacy UNIX servers, from Sun, HP or IBM and Linux hosts where XDMCP has been enabled. A full desktop session from servers supporting KDE or Gnome and other X11 window technologies can be displayed in a Xnest client window. For full details on using Xnest please refer to the documentation on using Xnest client.

When creating an Xnest connection, first enter a name describing the connection. Next the Xnest connection edit screen is displayed. Once a connection has been created it can be edited again by selecting the Edit button in the Connection Manager Window. The following connection settings are available for the Xnest connections.

By default only the basic settings are listed, by clicking on the **Expert** box will display all available settings for Xnest connections. The **Default** button will reset all values to their stated default value.

The following basic connection settings are available for Xnest.

Connection Setting	Description	Default
Connection Name	This is the name describing the connection defined in the first window that appeared when the connection was first created. Enter a valid Connection name.	Blank
Select Display Number	Select an alternant X11 Display number to be used by the Xnest connection. If the VNC server feature has been enabled in the Setup Wizard, select a value 2 or above.	2
Select XDM Login Connection Type	Select the type of XDM login connection to make. **Direct** – Display a Login window from the server specified in the Server Name field. **Indirect** – Display a Chooser window from the server specified in the Server Name field. **Broadcast** – Broadcast on the local subnet and Display a Login Window from the first server that responds. **Multicast** – Display a Login window from a server with Multicast support.	Direct
Server Name	Enter the Server name or IP address for the Direct, Indirect or Multicast connections.	Blank

Connection Setting	Description	Default
Window Size	Enter the X11 geometry window size to use for the TeemX window to use. Enter =WxH+xoffset+yoffset in screen pixels.	Blank
Window Name	Enter the Window name or title of the window.	Server Name
Border Width	Set the window border width	Blank

Table 11 - Xnest Basic Settings

Below list the advance settings for the Xnest connections.

Connection Setting	Description	Default
Class Name	Enter the X resource Class Name to send with the XDMCP request. This can be used to control specific Login Window setting from the Server providing the login window.	TTC-Client
Local Address	The Local address or name to use when requesting a Login window.	Local IP Address
Font Server	Enter the Font Server to use for this XDMCP connection. "tcp/<font_server>:<port no.>"	Blank
UDP Port for XDMCP	Enter the UDP port number to use for XDMCP requests.	177
XDMCP Magic Cookie	Enter the XDMCP magic cookie string to use for this connection.	Randomly Selected
Listen for X11 Connections	Listen for X11 connections from other servers on the given TCP/IP port number 6000 + <display no>.	Disabled
Terminate after one connection	Terminate connection after one login/logout session.	Disabled
Backing Store	Enable Backing Store on the X server session.	Disabled
When Mapped	Force Backing Store setting to When Mapped for this session.	Disabled
Color Depth	Set the color dept for this X11 session. Choices are 256 Color, High Color and True Color.	True Color

Table 12 - Xnest Advanced Settings

Setting Tisio Properties with the Setup Wizard

After initial configuration, you can modify settings using Setup Wizard.

To display the setup wizard if the Start Menu and Task Bar is on the screen select **Start > Settings > Setup Wizard**.

To display setup wizard when the Connection Manager is on the screen, press **F2**.

After making changes, you can click **OK** to apply changes without closing Tisio Device Properties, click **OK** again to close Device Properties.

Note   Your system administrator may have set a password in order to prevent you from making changes to Device Properties. In that case, access to the Device Properties window is denied until you enter the password when prompted. If no password has been set, you can make changes to any Device Properties field.

This section describes the configuration settings associated Device Manager:

- ◼ Device Information – Set terminal name and reset to factory
- ◼ Display Properties – Color, Resolution and screen saver settings
- ◼ Network Configuration – Defines network connectivity settings
- ◼ Device Manager – Defines the Management server settings
- ◼ Systems Settings – Defines basic Tisio thin client settings
- ◼ Access Control – Defines user access to device features.
- ◼ Printers- Define local and remote printers.
- ◼ Software Manager – Defines software update settings

Device Information Tab

The Introduction window provides information about the Tisio thin client, the terminal name and factory-default.

■ ThinPATH Systems contact Information.

■ Tisio thin client Device Model.

■ Device Key – Used to license Microsoft Terminal Server sessions.

■ Software Version – Base Tisio software version.

■ Device License – Used to license the device management client.

■ Identification – View and modify the terminal name of the Tisio thin client.

■ Factory-defaults button – Reset all settings to their factory default.

Terminal Name

The Terminal Name field defines the name of the Tisio that will be used on the network to identify it self from other network devices.

The Terminal name can be viewed or modified. To modify the Terminal Name simply enter a new name. The next time the device is rebooted the new name will be registered with the Tisio Device Management server.

Factory-Default

The "Reset the terminal to Factory-default property settings" button is used to force the Tisio thin client to reset all setting to factory-defaults on the next reboot or power-up. After a Factory-default, the Tisio Linux thin client will automatically start the Device Manager Startup Wizard requesting input on basic settings required for basic operation of the Tisio thin client.

To reset to factory the Tisio terminal, follow these steps:

1. When the Terminal Connection Manager is showing press F2 to display the Tisio Device Manager Startup Wizard or if the Start Menu is present select Start > Settings > Setup Wizard.

2. Select the Device Information Tab.

3. Chick in the Reset the terminal to Factory-default property settings check box.

4. At the prompt "All settings will be reset to default value. Would you like to do it now?" click Yes.

The Tisio device will now reboot and reset all settings to factory.

Display Properties Tab

The Display Settings window provides information and access to modify the Tisio display settings that will be used for the attached video monitor or LCD Flat Panel Display. These settings include:

■ Desktop Area and Refresh Frequency setting.

■ Colors selection for 256, 16 Bit & 32 Bit Color depths.

■ Monitor Selection and Display Size Settings

■ Hide Video Settings check box.

■ Screen Saver Controls.

The next sections describe in detail these individual controls, settings and how to modify and test a new video resolution.

Desktop Resolution and Refresh Frequency

The Desktop Area and Refresh Frequency setting is used to allow the resolution to be changed. By default the best desktop resolution and refresh frequency will be automatically selected based on the capabilities of the attached video display device. The default resolution and Frequency is set to a value recommended by the video display manufacture. The Tisio device supports the following list of video settings.

Supported Video settings:
— 640 x 480 @60Hz, 60HZ, 70HZ, 75Hz, 85Hz
— 800 x 600 @60Hz, 60HZ, 70HZ, 75Hz, 85Hz
— 1024 x 768 @60Hz, 60HZ, 70HZ, 75Hz, 85Hz
— 1280 x 1024 @60HZ, 70HZ, 75Hz, 85Hz

Note   Your terminal may not display all resolutions listed here. The list of resolutions depends on the capabilities of the attached video display device.

Show all Video Modes

This setting is currently disabled. Uncheck the box labeled "**Show All**" see the full list of supported video resolution settings. The video settings not supported by the Monitor are hidden by default.

Note   Selecting a video setting not supported by your monitor may cause severe damage to your monitor. Please consult the Monitors operators' manual for supported settings not in the supported list.

Desktop Colors

The colors setting allow selection for 256 colors, High Color (16 Bit), and True Color (32 Bit). The default is to set for True Color and this is the recommended setting. For proper support of Windows 2003 Terminal Server sessions, 16 or 32 Bit color modes must be selected.

Color settings for XDMCP sessions under Xnest are controlled by the Xnest connection. For these connections the True Color setting

should be selected so you can make lower color selection in the Xnest connection.

Monitor Autodetect

By default the Monitor auto detect is enabled. This enables the video adapter to use DDC. Using DDC, a monitor can inform the video card about its properties, such as maximum resolution and color depth. The video card can then use this information to ensure that the user is presented with valid options for configuring the display.

If your monitor does not support DDC or the auto detection is not working properly you can disable **Autodetect** and select your monitor from a list to define the **Hsync** and **Vsync** minimum and maximum values.

To disable auto detect and manually select the monitor specifications, follow these steps:

1. When the Terminal Connection Manager is showing press F2 to display the Tisio Device Manager Startup Wizard.

2. Select the Display Setting Tab.

3. Click on the Autodetect box to enable the Configure button.

4. Click on the Configure button and select the Monitor type connected to the Tisio device and click OK.

5. If the Monitor is not found in the monitor list you can enter the correct value for **Hsync** and **Vsync.** The value entered should be the entered as **min-max**, where min is the minimum sync value and max is the maximum sync value support by the attached monitors specifications. There should be no space between the two values just the (-) dash character.

The new settings will take affect on the next reboot.

Monitor Display Size

The Display Size is used to calculate the dot per inch value used by a number of applications. The dot per inch value is used to determine which font size an application should use. Having this

not set correctly can cause applications to display characters outside the graphical field or region or display characters that are too big or small.

The Display size is entered in millimeters. The first field is the Horizontal measurement and the second field is the Vertical measurement. By default the values are 324 and 242 respectively. This equates to a standard 17 inch monitor.

Measure your monitor and enter the appropriate Horizontal and Vertical values in millimeter.

Modifying Display Settings

When modifying display settings the Tisio Linux thin client will require restarting. After changing the display settings following a reboot, if the display is no longer visible then you will need to perform the Display is Blank – Reset Video to VGA Mode by pressing Ctrl+Alt+F8 during reboot in the Troubleshooting section.

To change the display resolution, follow these steps:

1. When the Terminal Connection Manager is showing press F2 to display the Tisio Device Manager Startup Wizard.
2. Select the Display Setting Tab.
3. Select a new display resolution and frequency from the drop down menu.
4. Select the desired Color settings and Monitor settings.
5. Click on OK button.
6. At the prompt "You Have changed settings, Do you want to restart?" click **Yes** to restart the device.

When the Device Manager Setup Wizard window is closed The Tisio device will require rebooting for the new display settings to take affect.

Screen Saver

This setting is currently disabled. The Enable Screen Saver and Wait setting is used to allow the screen saver control to be changed. By default the screen saver is enabled and set to a wait time of 20 minutes. To disable the screen saver click the check box.

Network Configuration Tab

The Network Configuration window provides information and access to modify the Tisio Network settings that will be used when attached to a Local Area or Wide Area Network. These settings include:

- ■ DHCP – Disable or Enable DHCP to automatically define IP information.

- ■ Ethernet or MAC – View the Ethernet or MAC address of the enabled network device.

- ■ Domain Name – View and modify the domain name of the Tisio thin client.

- ■ Network Adapter Settings – Defines the network IP Address, Subnet Mask and Default Gateway settings.

- ■ Wireless settings – Set SSID, WEP or WPA/WPA2-PSK settings.

- ■ Cisco VPN Settings – Incorporate a Cisco Profile for your VPN Connection.

Network Adapter

This displays the device name of the current enabled network adapter. In the current release only one Network adapter and be enabled at a time. If a supported wireless Network Adapter is connected the Wireless Network device will be enabled and the standard wired Network Adaptor will be disabled.

Enable DHCP

By default Dynamic Host Configuration Protocol (DHCP) is enabled. DHCP is a protocol used by networked computers (thin clients) to obtain IP addresses and other parameters such as the default gateway, subnet mask, and IP addresses of DNS servers from a DHCP server. It facilitates access to a network because these settings would otherwise have to be made manually for the client to participate in the network.

The DHCP server ensures that all IP addresses are unique, e.g., no IP address is assigned to a second client while the first client's assignment is valid.

When you disable DHCP you must enter manually a unique IP address, the subnet mask, the gateway address, and DNS IP addresses.

Network Adapter Settings

The Network Adapter Settings allows configuration of all TCP/IP Network parameters. The network parameters can be automatically assigned or statically set. Normally the IP Address, Subnet Mask, Default Gateway, and DNS parameters are obtained via DHCP.

Adapter Name

This is the name assigned to the network interface hardware. The Adapter Name field is automatically defined by the local hardware configuration and can not be changed by the user.

Getting an IP Address via DHCP

By default the "Getting an IP Address via DHCP" is set so at initial boot the Tisio thin client will try broadcast on the local subnet to automatically obtain all TCP/IP address settings. This includes the IP Address, Subnet Mask, Default Gateway, Domain name and DNS host.

When unchecked the TCP/IP address settings below for the Tisio Linux thin client become active enabling them to be manually entered.

Note   Assigning the same IP address to more that one TPC/IP network attached device can cause loss of data. Your network administrator is responsible for assigning the proper network addressing so each device will properly communicate over your network.

IP Address

This defines the address use on the local TCP/IP network. Use this field to manually enter an IP Address. An example IP address is; 192.168.1.22

Subnet Mask

This defines the subnet mask use on the local TCP/IP network. Use this field to manually enter an IP Address. An Example Subnet Mask; 255.255.255.0 where this is a Class C defined network

Default Gateway

This defines the Tisio default gateway use on a TCP/IP network. Use this field to manually enter an IP Address. An Example Default Gateway is; 192.168.1.1, where this is the address of the local gateway on this subnet.

Domain Name

The Domain Name field defines the domain name portion of the host name that will be used on the network to identify it from other network devices.

The Domain name can be viewed or modified. To modify the Domain Name simply enter a new name, i.e. *yourdomain.com*. The next time the Tisio device is rebooted the new domain name will be activated.

The DNS network setting allows for manual setup of Domain Name Service (DNS) hosts. Use these settings to set the Primary and Secondary DNS server names providing domain name lookup on your local area network. The IP address of the DNS server must be used; not the host name of the primary and secondary DNS servers.

Note   When using the Tisio local Web browser the DNS setting must be properly configured to allow for World Wide Web URL host name lookups.

Wireless Network Settings

The Wireless network settings allow wireless security parameters to be defined to establish a wireless network connection to a wireless network access point. The Tisio Linux wireless device currently supports ESSID, WEP-64, WEP-128, WPA-PSK, WPA2-PSK, TKIP and AES wireless security standards.

The Tisio Linux device currently supports the following wireless devices.

Wireless Device	Description	Model
rausb0 – WI-USBLX-11bg	External USB RT73 25A01G-4WB00-C01 wireless device from Gigabyte.	Tisio95LX Tisio96LX
ra0 – WI-PCI-11bg	Internal mini-PCI RT61wireless card from Gigabyte. This wireless device is included in the standard Tisio300LX thin client	Tisio300LX
eth1 - WI-INT-11abg	Intel 2200/2915 Wireless mini PCI network card.	Tisio300LX

Wireless Network Name ESSID

The ESSID is a service set identifier (SSID), which defines a code attached to all packets on a wireless network to identify each packet as part of that network. The code consists of a maximum of 32 alphanumeric characters. All wireless devices attempting to communicate with each other must share the same SSID.

The SSID is defined by your wireless network administrator and the value entered must match the SSID define on you wireless access point. If your wireless network is enabled with no security, generally all that is required is to set the ESSID value.

WPA/WPA2 PSK Key

The Tisio Linux devices support the following wireless security standards for WPA and WPA2. WPA and WPA2 use a sophisticated key hierarchy that generates new encryption keys each time a mobile device establishes itself with an access point. Both WPA's Temporal Key Integrity Protocol (TKIP) and WPA2 AES-CCMP encryption protocol are supported using the WPA Pre Share Key (PSK). The WPA-PSK or WPA2-PSK is a "passphrase" used by either TKIP or AES to automatically change the keys at a preset time interval, making it much more difficult for hackers to find and exploit them.

The WPA/WPA2-PSK Key is a "passphrase" defined by your wireless network administrator and the value entered must match the WPA/WPA2-PSK "passphrase" define on your wireless access point. If your wireless network is enabled with WPA/WPA2-PSK security, generally all that is required is to set the WPA/WPA2-PSK "passphrase" and the ESSID value for your wireless network. The Tisio Linux device uses the WPA Supplicant process to connect and stay connected to your secure wireless network.

WPA-PSK/WPA2-PSK requires a "passphrase" between 8 and 63 characters or 64 hexadecimal digits (256 bits).

WPA/WPA2-PSK security is the most secure and is the recommended method for connecting to your wireless network.

WEP Encryption Key

Wired Equivalent Privacy (WEP) is a scheme to secure IEEE 802.11 wireless networks. It is part of the IEEE 802.11 wireless networking

standard. IT is not as secure as WPA and is no longer recommended in corporate wireless networks.

Both WEP-64 and WEP-128 are supported. For WEP-64 support enter your 10 digit hexadecimal key and for WEP-128 enter your 26 digit hexadecimal key. The WEP key defined by your wireless network administrator and the value entered must match the WEP key define on your wireless access point.

Connecting to your wireless Network

The following will describe how to connect to your wireless network.

Changing Wireless Network Settings

To change the display resolution, follow these steps:

1. When the Terminal Connection Manager is showing press F2 or if the Start Menu present select Start > Settings > Setup Wizard to display the Tisio Device Manager Startup Wizard.

2. Select the Network Configuration Tab.

3. Click on the Wireless button to open the Wireless Network Settings window.

4. Set the desired Wireless security settings. See the section below, Determine Wireless Security Method to determine your requirements for your wireless network.

5. Click on OK button.

6. At the prompt "You Have changed settings, Do you want to restart?" click **Yes** to restart the device.

Determine Wireless Security Method

The security method defined by your wireless network administrator will determine what will be required to connect the Tisio Linux device to your wireless network.

■ If you are using no wireless security, then you will only need to set the **Network Name ESSID** value in the Tisio Setup Wizard Wireless Network. Leave the **WPA/WPA2 KEY (PSK)** and the **WEP Encryption Key** fields empty.

■ If you are using WPA-PSK or WPA2-PSK security enter the SSID in the **Network Name ESSID** field and the "passphrase" in the **WPA/WPA2 KEY (PSK)** field. Leave the **WEP Encryption Key** field empty.

■ If you are using WEP-64 or WEP-128 Key security enter the SSID in the **Network Name ESSID** field and the 10 or 26 hexadecimal digit in the **WEP Encryption Key** field. Leave the **WPA/WPA2 KEY (PSK)** field empty.

Configure VPN

This section allows you to setup your Cisco VPN client. Your administrator should already have created a Cisco VPN profile for you. This setting will allow you to download the Cisco user profile.

At a minimum, you need the following keywords listed in your profile:

• [main]

• Host

• AuthType

• GroupName

• Username

Your Cisco VPN profile is then automatically saved to your Tisio device. On the next reboot the Cisco VPN connection will be automatically started. See your administrator for IP addresses, user names, and any security information. For full details on creating a Cisco VPN profile please refer to the Cisco Systems VPN Client User Guide for Linux .

Device Manager Tab

The Device Manager window provides settings to specify the Tisio management server also known as the Tisio Device Manager. The Tisio Device Manager provides administrators a simple and easy tool to perform remote management for all Tisio thin client configurations.

The controls and settings under the Device Manger tab include:

■ URL: Device Manager Name field – View and modify the host name of the Tisio Linux thin client management server.

■ HTTP Proxy – Used to specify a Proxy server for your Tisio Linux device.

■ Test TDM Connection button – Used to test connections to the Tisio thin client management server.

Device Management Server

The Device Manager field defines the network host name and URL of the Tisio Device Management server. This field can contain a single hostname, IP address or a full URL address. The following syntax is supported:

http[s:]/[<username>:<password>@<hostname>.<domain name>:8080/ThinCCo/Servlet

Example: **tisiodm.yourdomain.com or http://tisiodm/yourdomain.com/ThinCCo/DMServlet**

— At minimum a single host name or IP address must be entered to change it from the <u>default settings</u>.

— If the Tisio Device Manger server was set up as a secure web server use *https://* otherwise use *http://*. If not included, the value *http://* will be used.

— The username and password can optionally be used if the Tisio Device Manger server was configured to require user name and password values for enhanced security.

— The Tisio Device Manger is configured by default to use *port :8080*, and can be left off. This value should be included however, if changed at the Tisio Device Manger server.

— The Tisio Device Manger server is configured by default to use the directory path */ThinCCo/Servlet,* and can be left off. If the virtual directory path was changed on the Tisio Device Manger server, the directory path is required.

Tisio Device Manager *Default Settings*

The Device Manager field is initial set to *default settings*. When set to *default settings*, the Device Management server name used to contact the management server will be ***http://tisiodm.<your domain>:8080/ThinCCo/Servlet***, where *your domain* is the Tisio thin client's domain name set by DHCP or from the <u>Domain Name under Network Setting</u>.

Testing the Device Manager Connection

In the Device Manager window the **Connection** button allows communication to the Device Management server to be verified to validate the Device Manager Server name field.

1. When the Terminal Connection Manager is showing press F2 or if the Start Menu present select Start > Settings > Setup Wizard to display the Tisio Device Manager Startup Wizard.

2. Click in the Device Manager tab.

3. Enter the <u>device Manger server name</u>.

4. Click on the Test button. A message indicating a pass or fail will be returned in the message box.

System Settings Tab

The Systems Settings window provides settings to control Language, Keyboard, Mouse, Time and Sound settings on the local Tisio Linux device.

The controls and settings under the Systems Settings tab include:

■ Language field – View and modify the language setting for local and remote applications.

■ Keyboard field- View and modify the Keyboard language setting.

■ Numlock field – View and modify the state of the Number lock key at startup.

■ Time Zone field - View and modify the local time Zone setting.

■ Date field – Set the Date and Time on the local device. This sets the Date and time of the local on board clock.

■ NTP Server field - View and modify the name of the NTP (Network Time Protocol) server. This enables the Tisio Linux device to synchronize its local clock with a more accurate network clock.

■ Mouse Control – View and modify the Mouse speed and orientation.

■ Sound – View and set the Volume level of sound.

Language Settings

The following languages are supported and selectable on the Tisio Linux device.

Language or Keyboard setting
English (US)
English (Intl)
English (Great Brittan)
German
German (Switzerland)

Language or Keyboard setting
Spanish
French
Dutch
Russian
Swedish

The following special (Non-PC) Keyboard types are also supported for English keyboards only.

Special Keyboard setting
English (US) Sun5
English (US) LK411

Mouse Accelleration and Threshold

The mouse Acceleration and Threshold controls the mouse movement. The movement parameters for the mouse are acceleration and threshold. The acceleration specified as an integer. The mouse will go acceleration times as fast when it travels more than threshold pixels in a short time. This way, the mouse can be used for precise alignment when it is moved slowly, yet it can be set to travel across the screen in a flick of the wrist when desired. The default values are 2 and 4 respectively.

Mouse Orientiation

The mouse orientation reverses the order of the mouse buttons for easier left handed use. Normally the mouse is defined as button 1 on the left, button 2 in the middle and button 3 on the right. Selecting **Left** as the orientation reverses this.

Access Control Tab

The Access Control window provides security settings to block access to all local settings and configurations. It also controls the User Interface the user can have access to. Setting a password here will require a password to be entered to change any setting under the Terminal Properties window. If "Hide the Configure tab" is checked the Configure tab is not displayed in the Connection Manager window. So users are unable to edit or create new connections.

The controls and settings under the Access Control tab include:

■ **Controlling Local Configuration Access**

Set Settings Password field – Used to assign a local password to the Tisio device requiring a password be entered before any local Tisio settings can be changed.

Hide Configure Tab field – This is used to control access to the Configure tab in the Connection Manager window so users can not change or add connections to the Start Menu or Connection Manager window.

■ **Controlling User Interface Access Modes**

Autohide field – Used to make the Start Menu and Task Bar auto hide or roll off the bottom of the display when not in use.

WBT mode field – Controls the startup of the Start menu and Task Bar.

Start Launcher field - Controls if the Connection Manager window is included on startup.

■ **Controlling Remote Assistance Access**

Enable VNC Server field – Controls the startup of the VNC Server service. This is required for remote control and viewing of the thin clients display from another PC or thin client device.

Set VNC Password field – Sets the password for the VNC server connection. By default the password is "remote".

■ **Controlling Access to Diagnostic Tools**

Enable Local Shell **Access** field – This enables local shell access to the local operating system.

Diagnostics Log field – View local log files on system status.

Controlling Local Configuration Access

For Tisio thin client device controlling user access to local setting is a requirement. The Set Settings Password and Hide Configure page fields are used to control this access. By default these are disabled allowing anyone to change all settings and create connections.

To require a password be entered to change any setting or connection, follow these steps:

1. When the Terminal Connection Manager is showing press F2 or if the Start Menu present select Start > Settings > Setup Wizard to display the Tisio Device Manager Startup Wizard.

2. Select the Access Control Tab.

3. Click on the **Set Settings Password** button to open the Access Control password window.

4. Enter the desired password twice.

5. Click on OK button.

6. Click on the **Hide Configure Page** button.

7. Click on the OK button in the Device Setup Wizard window to accept the new settings.

8. At the prompt "You Have changed settings, Do you want to restart?" click **Yes** to restart the device.

Controlling User Interface Access Modes

The Tisio Linux Thin Client provides a choice of User environments to make the experiences of Tisio thin clients, seamlessly integrate into existing requirements. These choices include:

■ Windows User Environment with Start Menu & Task Bar

■ Traditional Windows Based Terminal User Environment

The Windows Environment provides users the traditional Windows Start Menu and Task Bar. From here connections to other servers can be started and active windows managed. For details see <u>Using the Start Menu and Task Bar</u>. By default the Windows User Environment is initially enabled.

To enable the Full Windows like UI, follow these steps:

1. When the Terminal Connection Manager is showing press F2 or if the Start Menu present select Start > Settings > Setup Wizard to display the Tisio Device Manager Startup Wizard.

2. Select the Access Control Tab.

3. Click on the **WBT mode** button so it is not enabled (button is out).

4. Optionally, you can choose to not display the Connection Manager window on startup. Click on the **Start Launcher** button so it is not enabled (button is out).

5. Optionally, you can choose to Autohide the Start Menu and Task Bar. Click on the **Autohide Taskbar** button so it is enabled (button is in).

6. Click on the OK button in the Device Setup Wizard window to accept the new settings.

7. At the prompt "You Have changed settings, Do you want to restart?" click **Yes** to restart the device

The Windows Based Terminal (WBT) Environment provides users a more simple and controlled environment. From here a single Connection Manager Window is used to start and manage active windows managed. For details see <u>Using the Connection Manager</u>. In the environment the Start Menu and Task Bar are disabled.

To enable the WBT mode or more limited user interface, follow these steps:

1. When the Terminal Connection Manager is showing press F2 or if the Start Menu present select Start > Settings > Setup

Wizard to display the Tisio Device Manager Startup Wizard.

2. Select the Access Control Tab.

3. Click on the **WBT mode** button so it is enabled (button is in)..

4. Click on the **Start Launcher** button so it is enabled (button is in).

5. Click on the OK button in the Device Setup Wizard window to accept the new settings.

6. At the prompt "You Have changed settings, Do you want to restart?" click **Yes** to restart the device

Controlling Remote Assistance Access

The Tisio Linux device also offers remote assistance or remote access to the local desktop. This allows full mouse and keyboard controls to the remote session and is password protected. The Tisio device includes a VNC Server service that can be enabled when the device is started. It also includes a VNC viewer client so you can view the desktop of a Tisio Linux device from another Tisio Linux device. By default this service is disabled.

To enable remote assistance or remote display access, follow these steps.

1. When the Terminal Connection Manager is showing press F2 or if the Start Menu present select Start > Settings > Setup Wizard to display the Tisio Device Manager Startup Wizard.

2. Select the Access Control Tab.

3. Click on the **Enable VNC Server** button so it is enabled (button is in).

4. Click on the **Set VNC Password** button to open the Access Control password window. By default the password is predefined as "remote".

5. Enter the desired password twice.

6. Click on OK button.

7. Click on the OK button in the Device Setup Wizard window to accept the new settings.

8. At the prompt "You Have changed settings, Do you want to restart?" click **Yes** to restart the device

Controlling Access to Diagnostic Tools

The Diagnostic tools include access to view local log files and to allow a user to open a local shell window to access the local operating and file system. By default the local shell window access is disabled.

When the local shell access is enabled, the Task Bar includes a terminal icon. Clicking on this icon will open a local xterm window.

Pressing Ctrl+Alt+F2 will switch the Tisio device to a black screen also enabling access to a local shell. This can be used incase there is a problem with the Local X11 server. Login as the user root and issue the password "!3+me1n". Press Ctrl+Alt+F3 to switch back to the X windows desktop.

To enable local shell access, follow these steps.

1. When the Terminal Connection Manager is showing press F2 or if the Start Menu present select Start > Settings > Setup Wizard to display the Tisio Device Manager Startup Wizard.

2. Select the Access Control Tab.

3. Click on the **Enable Local Shell Access** button so it is enabled (button is in).

4. Click on the OK button in the Device Setup Wizard window to accept the new settings.

5. At the prompt "You Have changed settings, Do you want to restart?" click **Yes** to restart the device

Printers Tab

The Printers tab is used to setup local or remote printers to enable local printing support. Local printers normally connect to one of the serial, USB or Parallel port. Remote printer can either be Network attached Printers or printers connected to another server.

The Tisio Linux device includes a full functioning LPD print spooler and can also function as a small print server for other Tisio thin client devices.

The controls and settings under the Printers tab include:

■ Select Printer field – When multiple printers are defined, select the printer to modify.

■ Printer Name field – Defines the printer name. This is also the common LPD print spooler name.

■ Printer Driver field – Defines the printer driver to use when in a RDP or ICA Windows Terminal Server session.

■ Printer Device field – Defines how the Printer is attached to the Tisio Linux device.

■ Options field – Defines baud rate settings when Serial attached printers are used.

■ Remote Host – Defines the remote printer name or print server name when the Device field is set to "Remote LPD".

■ Remote Queue – Defines the remote printer queue name when the Device field is set to "Remote LPD".

Below are three examples of setting up printers. When one printer is defined as the default printer then applications on the Tisio thin client will use this printer to print. With RDP or ICA connections the default printer will be auto created in a Windows Terminal Server session.

Printer Example 1

In the first example there will be a USB printer attached to the Tisio Linux device.

The following settings are defined in the Printer section of the Setup Wizard:

- — Printer Name: hp5500
- — Printer Driver: HP Deskjet 5500
- — Printer Device: USB
- — Options:
- — Set as Default

Printer Example 2

In the first example there will be a generic serial printer attached to the Tisio Linux device.

The following settings are defined in the Printer section of the Setup Wizard:

- — Printer Name: generic
- — Printer Driver: Generic
- — Printer Device: COM1
- — Options: speed 38400 -imaxbel
- — Set as Default

Printer Example 3

In the first example there will be a network printer used by the Tisio Linux device.

The following settings are defined in the Printer section of the Setup Wizard:

- — Printer Name: lj4000

— Printer Driver: HP LaserJet 4000 Series PS

— Printer Device: Remote LPD

— Options:

— Remote Host: 192.43.154.50

— Remote Queue: ps

— Set as Default

Software Update Tab

The Update Manager window allows new client components to be installed from the Tisio Device Manager (TDM) server. The TDM server must be correctly defined under the Device Manager tab.

The Software Update window shows Installed Software components and any new available components to install.

Installed Packages

The Installed Packages window displays the version of installed software client components. The Information button displays detailed information about the selected installed component. Select the Uninstall button to remove the selected component.

Available Packages

The Available Packages window displays either newer or new software client components that can be installed from the TDM server. The table below lists the available packages and the minimum memory requirements to use them.

There are additional packages that can be installed from the Tisio Device manager server. They are listed in Only one Java package can be installed. Installing a different Java version causes the

previous to be removed. The Java add on packages can be
downloaded from www.tps-sy.com.

Supported Upgrade Add-on Packages	Min Flash	Min RAM
Java JRE Version 1.6.0.2	256 Meg	512 Meg
Java JRE Version 1.5.0.12	256 Meg	512 Meg
Java JRE Version 1.4.2.14	128 Meg	256 Meg
Adobe Flash Player Version 9.0.115.0	128 Meg	256 Meg
Linux 2.0 O/S Upgrade	128/256 Meg	128 Meg

Table 13 – Optional add-on packages

Once the packages have been installed on the Tisio Device Manage
server, they will be visible. Select the package to install and click on
Install button to include the package. If installing/upgrading to a
new Tisio Linux operating system from TDM where the Java
package has already been installed, 256 Meg of Flash will be
required for the upgrade to complete.

Tisio System Recovery

There are two recovery systems available for the Tisio devices. The built-in recovery system offers methods to reload or update the Linux 2.0 operating system, reset video settings for the device, update the RecoveryOS System or Clone the contents of the Flash ROM to the TDM server. In later version it is controlled by a new RecoveryOS system.

The Tisio Linux devices can support one of the following recovery and boot systems:

■ RecoveryOS System – The RecoveryOS System is used on Tisio Linux device running version 1.5.0 or newer software. The RecoveryOS System provides support for reloading or updating the Tisio Linux 2.0 operating system, resetting video settings for the device, update the RecoveryOS System and Clone the operating system on the Flash ROM to the Tisio Device Manager server. For details on using the RecoveryOS see section below

■ Boot Agent System - In earlier versions prior to version 1.5.0, the Boot control was handed by the Boot Agent. This system supported ways to recover the Tisio Linux 2.0 operating system and reset the video settings. For details on recovering using the Boot Agent see section on Tisio System Recovery (Boot Agent).

Tisio RecoveryOS System

The Tisio RecoveryOS provides methods to reload or update the Linux 2.0 operating system, reset video settings for the device, update the RecoveryOS System or Clone the contents of the Flash ROM to the TDM server.

When the terminal is powered on, the Tisio RecoveryOS starts and loads the Linux 2.0 operating system. After the operating system has been loaded, the Tisio will display the <u>initial screens</u> for normal use. If the initial screens do not display properly or the Tisio boot screen never disappears then a system recovery should be performed.

Tisio System RecoveryOS Menu

The System RecoveryOS menu provides methods for system recovery and special system updates. The menu is accessed by pressing the Escape key during the boot process. The RecoveryOS menu includes:

■ Start Linux 2.0 – This starts the Tisio Linux 2.0 System in normal operating mode. This is the default choice when the device is turned on.

■ Linux 2.0 Video Factory Reset – This starts the Tisio Linux 2.0 system and resets the displays video to the standard resolution of 1024x768.

■ Linux 2.0 Recovery – This is used to reload the Tisio Linux 2.0 system on local Flash.

■ Recovery System Update – This is used allow the RecoveryOS system on the Flash to be updated.

■ Cloning – This is used to create an image copy of the current Linux 2.0 system and all its current settings. For details on the use of cloning see the user manual TDM Startup Guide V1.5.
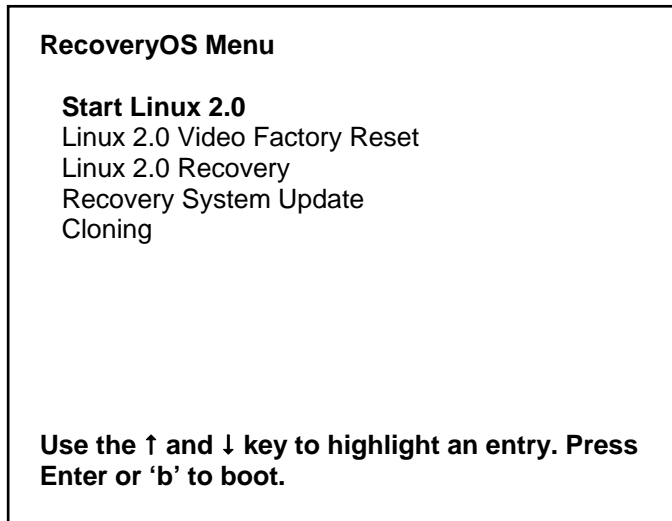
```
┌─────────────────────────────────────────────┐
│                                             │
│  RecoveryOS Menu                            │
│                                             │
│   Start Linux 2.0                           │
│   Linux 2.0 Video Factory Reset             │
│   Linux 2.0 Recovery                        │
│   Recovery System Update                    │
│   Cloning                                   │
│                                             │
│                                             │
│                                             │
│                                             │
│  Use the ↑ and ↓ key to highlight an entry. Press │
│  Enter or 'b' to boot.                      │
│                                             │
└─────────────────────────────────────────────┘
```

Figure 18 - Tisio Linux RecoveryOS Menu

Accessing the RecoveryOS Menu

To access the Tisio RecoveryOS follow these steps.

1. Power on the Tisio terminal.

2. After power on wait for following information to be displayed on the Tisio device:

   Booting GBLDR
   Turning On Gate A20 Success...
   Press 'ESC' to enter the menu… 0

3. You have just a few seconds to press the Escape key to stop the device from booting and display the Tisio RecoveryOS menu. If you see the following text on the display you will need to restart at step 1 again.

   Booting 'Start Linux 2.0'
   Loading…….

4. When the RecoveryOS menu is displayed, press the up or down arrow keys to select one of the menu items.

> Note   Only one menu item is displayed at a time. See Figure 18 - Tisio Linux RecoveryOS Menu for example showing all items.

Initiating Video Factory Reset

The Tisio Video Factory Reset starts the Tisio Linux 2.0 system and resets the displays video to the standard resolution of 1024x768.

The Tisio video reset process is initiated from the Tisio RecoveryOS menu. See section above Accessing the RecoveryOS Menu. From the Tisio RecoveryOS menu select item **Linux 2.0 Video Factory Reset.**

To start Tisio video reset, follow these steps.

1. Power on the Tisio terminal.
2. Press the Escape key to display the Tisio RecoveryOS menu. See Accessing the RecoveryOS Menu.
3. Press the down arrow and select item **Linux 2.0 Video Factory Reset** and press enter.
4. Wait for the system to load and display the Tisio Setup Wizard. Go to the Display section and select the correct video settings and click to finish and close the Setup Wizard.
5. After reboot the Tisio device will retain all its previous settings except for the video setting that was reset.

Initiating System Recovery (from RecoveryOS Menu)

The Tisio system recovery process downloads a new Operating System image from the Tisio Device Management recovery server or other web server. See the Tisio Recovery Guide manual on installing, downloading and configuring the Tisio Device Management recovery server or web server.

The Tisio system recovery process is initiated from the Tisio RecoveryOS menu. See section above Accessing the RecoveryOS

Menu. From the Tisio RecoveryOS menu select item **Linux 2.0 Recovery.**

Note   The power to the Tisio terminal should not be interrupted until the system recovery has completed. The device must be connected using the wired network cable and a DHCP server must be available to assign a network address to the Tisio device for the recovery process.

Start System Recovery from RecoveryOS menu

To start Tisio system recovery, follow these steps.

1. Power on the Tisio terminal.

2. Press the Escape key to display the Tisio RecoveryOS menu. See Accessing the RecoveryOS Menu.

3. Press the down arrow and select item **Linux 2.0 Recovery** and press enter.

4. Wait for the RecoveryOS to reload and when prompted for: "*The 2nd partition is going to be formatted. Are you sure? [y/n]*" type **y** and press the Enter key.

5. The recovery files will be downloaded and the operating system installed. After installation is complete press any key to restart the Tisio device with the recovered operation system.

6. After power on the Tisio device will be in the initial state as shipped from the factory.

Initiating Update of RecoveryOS

The Tisio system recovery process downloads a new Operating System image from the Tisio Device Management recovery server or other web server. See the Tisio Recovery Guide manual on installing, downloading and configuring the Tisio Device

Management recovery server or web server.

The Tisio RecoveryOS system update process is initiated from the Tisio RecoveryOS menu. See section above Accessing the RecoveryOS Menu. From the Tisio RecoveryOS menu select item **Recovery System Update.**

Note   The power to the Tisio terminal should not be interrupted until the RecoveryOS system has been updated. The device must be connected using the wired network cable and a DHCP server must be available to assign a network address to the Tisio device for the recovery process.

Start RecoveryOS System Update

To start Tisio RecoveryOS system update, follow these steps.

1. Power on the Tisio terminal.
2. Press the Escape key to display the Tisio RecoveryOS menu. See Accessing the RecoveryOS Menu.
3. Press the down arrow and select item **Recovery System Update** and press enter.
4. Wait for the RecoveryOS to update and when prompted for: "*The RecoveryOS is going to be updated. Are you sure? [y/n]*" type **y** and press the Enter key.
5. The RecoveryOS files will be downloaded and installed. After installation is complete press any key to restart the Tisio device with the recovered operation system.

Initiating Cloning

Cloning is used to create an image copy of the current Linux 2.0 system and all its current settings. For details on the using cloning see the TDM Startup Guide V1.5 user manual**.**

Tisio System Recovery (Boot Agent)

The Tisio Boot Agent recovery system is used on all Tisio devices prior to version 1.5.0.

When the terminal is powered on, the Tisio Boot Agent starts and loads the Linux 2.0 operating system. After the operating system has been loaded, the Tisio will display the <u>initial screens</u> for normal use. If the initial screens do not display properly or the Tisio boot screen never disappears then a system recovery should be performed.

The Tisio system recovery process downloads a new Operating System image from the Tisio Device Management recovery server or other web server. See the Tisio Recovery Guide manual on installing, downloading and configuring the Tisio Device Management recovery server or web server.
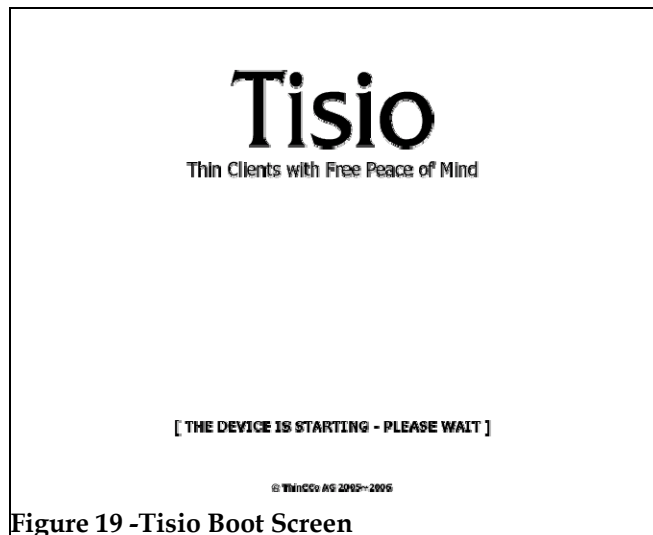

Tisio

Thin Clients with Free Peace of Mind

[THE DEVICE IS STARTING - PLEASE WAIT]

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Figure 19 -Tisio Boot Screen

The Tisio system recovery process is initiated just after power on by a key press sequence. During the system recovery process the **Error! Reference source not found.** is shown.

Note   The power to the Tisio terminal should not be interrupted until the system recovery has completed.

Figure 20- Tisio Boot Screen

Initiating System Recovery

When the terminal is powered on, system recovery can be initiated using the key sequences below.

Key Press Sequence	Use
Ctrl+Alt+F10	Used to initiate a normal system recovery of the Operating System.
Ctrl+Alt+F2	Used to initiate an advanced system recovery of the Operating System with logging enabled.

The system recovery key sequence can only be pressed within a short period of time and only during the initial power up sequence. After power

on, wait for a second beep before pressing the system recovery key sequence. There is a 3 second window in which the system recovery key sequences can be pressed. If the system recovery key sequence is pressed after the 3 second window it will be ignored. The diagram below shows what happens during power on and the recovery process.
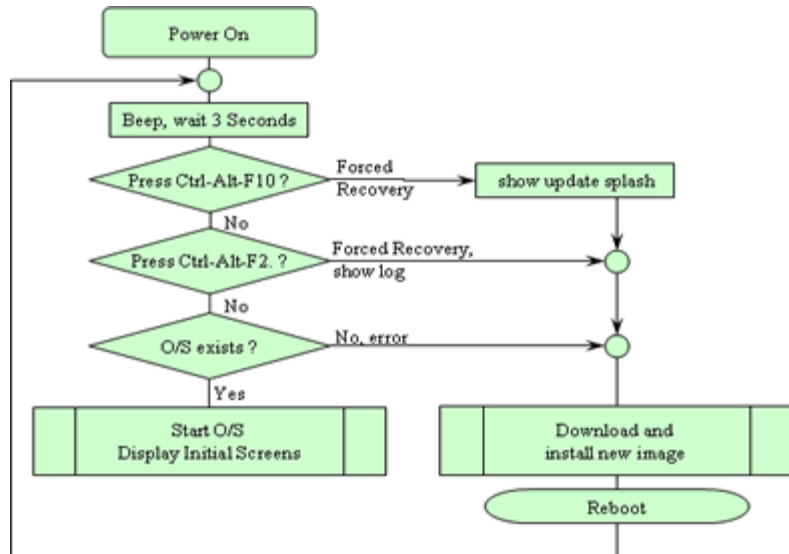

Figure 21 - Tisio Recovery Process

Start System Recovery

The system recovery key sequence can only be pressed within a short period of time and only during the initial power up sequence. To start Tisio system recovery, follow these steps.

1. Power on the Tisio terminal.

2. After power on wait for a first beep, and a short while later there will be a second beep. After the second beep there is a three second window in which the system recovery key sequences can be pressed.

3. Press the system recovery key sequence before the three second window.

4. If the system recovery key sequence is pressed after the three second window it will be ignored. Repeat the steps until the **Error! Reference source not found.** is shown.

After the Tisio recovery sequence completes, the <u>Tisio Startup Wizard</u> will appear indicating Tisio thin client has been fully recovered and set to factory defaults. Follow the steps in the section <u>If the Tisio Setup WizardAppears</u> to configure your Tisio terminal.

In Case of Trouble

This section describes some exceptional circumstances that may occur when you power on the Tisio terminal or while using it. This is the place to look for information if the initial screen on your terminal does not resemble those described in initial screens.

If your problem is not addressed in this section, see your system administrator.

This section explains the steps to take if a network error dialog box or other error message appears and how to handle upgrade messages. Also discussed are screen display problems and blinking LEDs.

Display is Blank – Reset Video to VGA Mode

When the attached display is blank the video setting defined on the Tisio device may not match the supported video rates of the attached monitor. When the terminal is powered on, a video system initialization can be initiated.

If the Tisio device is running Software Version 1.5.0 or above use the procedure found in section Initiating Video Factory Reset .

For previous version use the key sequences below during power up. This will reset all Tisio video settings to a default VGA mode.

Key Press Sequence	Use
Ctrl+Alt+F8	Used to initiate a normal video system initialization of settings stored in the Operating System.

ALT+TAB does not work in a Remote Sever Session

A remote server session is defined as a session from a Windows Terminal Server, A Citrix Presentation Server or a Linux/UNIX X Windows session. By default the Atl+Tab key sequence is used by the Tisio's local window manager. Pressing the **Scroll Lock** key so the Scroll Lock is enabled will allow the Alt+ Tab to be passed through to all remote server sessions.

The Tisio IP address is set to 0.0.0.0

If the terminal cannot detect the network connection, the Tisio IP address is set to "0.0.0.0". Check the network cable is properly attached and network indicator led next to the network connector is on. Also ensure there is a DHCP server running on your network or open the Tisio Device Properties window and under the Network Settings assign a valid IP address.

Fixing a Cable Problem

If there is a problem with the terminal's network cable, the Network dialog box appears indicating that the terminal may not be connected to the network.

First, check the network cable connection at the terminal and at the outlet on the wall or hub. If the cable is not secure, make sure it is plugged. Once properly attached the Tisio terminal will automatically initialize its network interface and obtain an IP address from a DHCP server.

Fixing an Address Problem

If the terminal cannot be assigned the address information required for network communication. Contact your system administrator.

If the system administrator is able to fix the problem on the Terminal Server host, click Restart when told to do so.

If you have to fix the problem at the terminal:

1. Obtain the necessary address information from the system administrator.
2. Open the Tisio Device Properties window and under the Network Settings assign a valid IP address.
3. Enter the address information obtained from your system administrator.

A Device Manager Update Message Appears

Each time it is turned on, the Tisio terminal checks the network for a newer version of its operating software. If it detects that an upgrade is necessary, it displays the following upgrade message:

Figure 15 - Device Manager Update dialog

Note   Do not turn off the Tisio terminal during a software upgrade. Turning off the terminal at this time may damage it.

After the upgrade is complete, the terminal automatically restarts.

The Screen Looks Garbled

If the screen is unreadable or blank when you turn on the terminal, this means that the terminal's monitor settings (desktop area and/or refresh frequency) may be incorrect.

To restore the screen to a readable state, you must perform the [Reset Video to VGA mode](#).

Error Messages Appear

If error messages appear right after you power on the terminal, the terminal may not be able to start. For example:

Unable to Load Operating System

If such messages appear and the terminal does not connect to a Terminal Server host or display a panel, contact your system administrator.

LEDs Blink on Front of Base Unit

If there is a problem and the terminal is not able to display an error on the screen, the screen goes blank, the base unit beeps, and an LED on the front of the base unit blinks. If this happens, contact your system administrator.