

Devon IT Terminal
Operating System
(DeTOS)

**Administration
Manual
Ceptor Edition**



Notes, Cautions, and Warnings



NOTE: A NOTE indicates important information that helps you make better use of your computer.



CAUTION: A CAUTION indicates potential damage to hardware or loss of data if instructions are not followed.



WARNING: A WARNING indicates a potential for property damage, personal injury, or death.

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Federal Communications Commission (FCC) Statement

You are cautioned that changes or modifications not expressly approved by the part responsible for compliance could void the user's authority to operate the equipment.

This equipment has been tested and found to comply with the limits for a Class B digital device, pursuant to part 15 of the FCC rules. These limits are designed to provide reasonable protection against harmful interference in a residential installation.

This equipment generates uses and can radiate radio frequency energy and, if not installed and used in accordance with the instructions, may cause harmful interference to radio communications. However, there is no guarantee that interference will not occur in a particular installation.

If this equipment does cause harmful interference to radio or television reception, which can be determined by turning the equipment off and on, the user is encouraged to try to correct the interference by one or more of the following measures:

- -Reorient or relocate the receiving antenna.**
- -Increase the separation between the equipment and receiver.**
- -Connect the equipment into an outlet on a circuit different from that to which the receiver is connected.**
- -Consult the dealer or an experienced radio/TV technician for help.**

This device complies with part 15 of the FCC Rules. Operation is subject to the following two conditions:

- 1) this device may not cause interference and**
- 2) this device must accept any interference, including interference that may cause undesired operation of the device.**

FCC RF Radiation Exposure Statement:

This equipment complies with FCC radiation exposure limits set forth for an uncontrolled environment.

End users must follow the specific operating instructions for satisfying RF exposure compliance.

This transmitter must not be co-located or operating in conjunction with any other antenna or transmitter.

This equipment should be installed and operated with a minimum distance of 20 centimeters between the radiator and your body.

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Introduction

What is DeTOS?

Devon IT Terminal Operating System (DeTOS) is an embedded Thin Client Operating System designed to be simple, secure, and centrally manageable. DeTOS can be used to access hosted desktops using Microsoft Remote Desktop Services, VMware Horizon View, Citrix XenApp or XenDesktop, web-based applications, and more.

DeTOS Features

- **Simple**-Configuring a session out of the box is quick and painless using the DeTOS intuitive web based control panel. The same control panel can be used either locally from the thin client or remotely from the management software.
- **Modern**-DeTOS can connect to hosted desktops using the industry's best protocols including Citrix ICA Client, RDP, or VMware Horizon View.
- **Centrally Managed**-DeTOS-based terminals can be centrally managed using Devon IT Echo Management Console.
 - Echo is shipped as a virtual appliance, so it is easy to set up.
 - Echo can automatically discover and inventory the thin clients on your network.
 - Echo has the concept of a default profile. Using a default profile, additional thin clients are automatically configured when you plug them into your network.
 - Echo allows individual profiles for different users, including specific Connections, Thin Client Settings, Passwords, and Customizable Desktop Icons.

- Echo allows you to update the thin client's embedded OS. Updates can be scheduled to happen outside of production hours, for example over the weekend.

DeTOS Installation

No installation is required for customers who have purchased DeTOS based thin clients from Devon IT. Your thin client already contains a factory installed DeTOS operating system. A USB re-flash utility is available if you need to reinstall the operating system at any point in the future.

First Boot Wizard

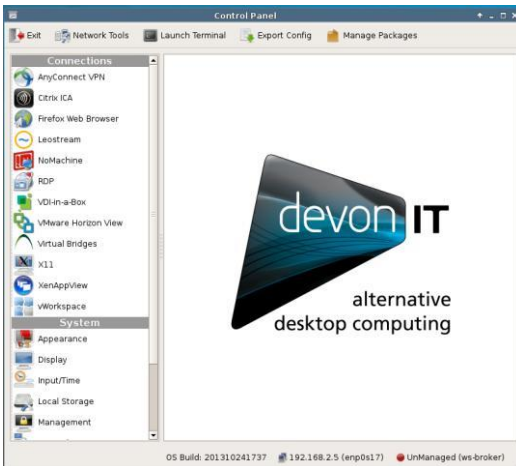
The first time your terminal boots up, you will be taken through a first boot wizard. This wizard can help you to configure a variety of settings in order to better utilize your terminal. It is advised that you are familiar with the material in this guide as well as the Echo Administration Guide to best utilize the first boot wizard.

Getting Started

To get started, do the following:

- Check that your thin client is connected to the network.
- If you have set up a management server in your network, check that the thin client was able to contact the management server and is in managed mode.
- Create a desktop shortcut to allow thin client users to get connected to a remote server. (See Chapter 6, “Connections,” for more information.)

To check the network connection status, click the **DeTOS** button and then select **Control Panel**.



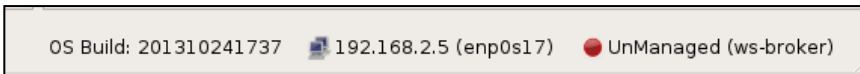
Along the bottom of the **Control Panel** is a row of status messages. These messages include the DeTOS build number, the terminal's current IP address, and a Thin Client Management Connection Indicator.

DeTOS default factory setting is DHCP. If you have a DHCP server on your network, the status bar should show the leased IP address. If you want the thin client to use a fixed IP address please refer to this guide's network section. A message of `no ip address` will appear if network connectivity is lost or was never established in the first place. This may be related to a loose or faulty network cable. It may also be an indication of DHCP issues. If you need to troubleshoot a network issue, please refer to the network diagnostic section below.

Along with the IP address, the **Control Panel** status section also shows you whether your thin client is in managed or unmanaged (stand alone) mode. By default, DeTOS based terminals try to locate a management server. If a management server is found, the terminal switches to managed mode, where it “pulls” its configuration from the management server. If not, it will stay in standalone/unmanaged mode and use its local configuration.

The **Control Panel** status area also shows the OS build. This is a string based on the DeTOS version and the build date, using the following format: `7.x.x (YY.MM.DD)`

Management Server Splash Screen



During bootup, if the terminal cannot make contact with a Management Server, then a black splash screen will appear just prior to the DeTOS desktop loading. This screen contains the Devon IT logo and displays a message saying, `Attempting to connect to Management Server`. The splash screen will be displayed until successful contact is made with a management server, the cancel button is pressed, or the specified timeout (30 seconds by default) is reached.

The **Management** section, found under the **Control Panel**, allows you to configure the behavior of this splash screen. Configuration options include:

- Setting the terminal to **Managed** or **Unmanaged** modes.
- Specifying a different management server address
- Adjusting the timeout value
- Enabling or disabling the splash screen **Cancel** button

Management Server Indicator

Once you are on the DeTOS Desktop, the Echo Agent running on your terminal will continue to periodically contact a Management Server named `ws-broker` on your local area network. When successful, the Management **Server Indicator** box found along the bottom of the **Control Panel** will read `Managed`. Otherwise, the icon will change to a red circle and the status will say `Unmanaged`. In this case, verify that your management server is online and accessible on your LAN. Also be sure to check your DNS server to verify that an entry for `ws-broker` exists and points to the IP address of your management server.

Control Panel

The **Control Panel** is the local tool for configuring **Connection and System** settings on your thin client.

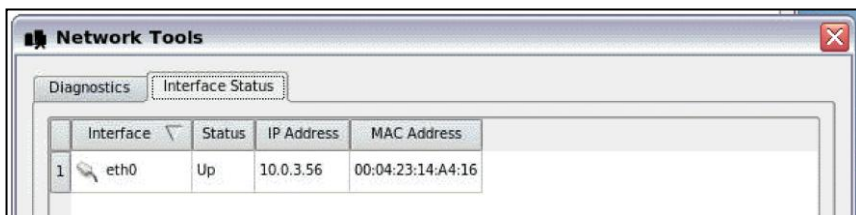
- **Connection Settings** - Your terminal has the ability to connect to remote servers utilizing several types of protocols. The RDP client uses the RDP protocol and allows you to connect to Microsoft Windows Terminal Servers. The Citrix ICA client is used to establish connections to Citrix Presentation and XenApp servers. The VMware Horizon View client allows you to connect to a VMware Horizon View server, which in turn, provides the end-user with their own virtual desktop session.
- **System Settings** - These are the display, sound, keyboard, mouse, and date/time configurations for your terminal. Also under the System section is the ability to set an administrative password for the control panel and change the local storage mode.

Network Tools

The toolbar along the top of the **Control Panel** window contains a button named **Network Tools**. Clicking this button will open a separate, smaller window that provides you with current network status and useful diagnostic programs.

Interface Status

Click the **Interface Status** tab along the top of the **Network Tools** window to view the IP address that is currently assigned to this terminal. The MAC Address for this machine is also reported on this screen.



Diagnostics

If you are experiencing difficulty connecting to servers on certain segments of your LAN, then you may want to use the ping command to verify you are reaching specific servers and/or gateways on the subnet in question. To use ping:

1. Select the **Diagnostics** tab from the **Network Tools** window.
2. In the **Host Address** field, type in the IP address or website you want to test against and then press the **Ping** button.



3. If there is an error in the delivery to the destination, the ping command displays an error message. Otherwise, replies will continuously display for each packet successfully sent and received.
4. Press the Stop button to terminate the ping loop.

Echo Agent System Information

Echo Management- Displays the current status and information of the Echo Management server to which your thin client is connected.

- **Management Status-** Displays when the thin client is being managed by an Echo server.
- **Management Server-** Displays the current address of the Echo server.
- **Change Management Server-** Allows you to change the Echo server.
- **UUID-** Displays the current UUID assigned to the terminal.

Network Information- This displays information about the current network connection.

- **IP Address-** Displays the current IP address assigned to the thin client.
- **MAC Address-** Displays the current MAC address assigned to the thin client.
- **Hostname-** Displays the name assigned to the thin client.
- **Network Tools-** Allows you to run diagnostics test with the network connection and to check on the current status of the network connection.

System Information- Displays information about the operating system and the thin client.

- **Operating System**-Displays the name of the image or operating system that is in use.
- **Processor**-Displays the processor that the thin client is using.
- **Memory**-Displays the total internal memory of the thin client.
- **DOM Size**-Displays the total storage capacity size of the thin client.
- **Hardware Model**-Displays the name of the thin client in use.

The screenshot shows a window titled "System Information" with three main sections: Management, Network Information, and System Information. Each section contains several fields with their respective values.

Section	Field	Value
Management	Management Status	Managed
	Management Server	10.0.15.184
	UUID	TC3M1335000K
	Change Management Server	
Network Information	IP Address	192.168.11.25
	MAC Address	08-9e-01-3c-3b-79
	Hostname	Ceptor
	Network Tools	
System Information	Operating System	DeTOS (201311051734)
	Processor	ARMv7 Processor rev 10 (v7l)
	Memory	369.0 MB
	DOM Size	3.28 GB
	Hardware Model	Ceptor

A "Close" button with an 'X' icon is located in the bottom right corner of the window.

Persistence

Persistence, within the scope of thin client computing, refers to the continuing existence of connections and settings after a terminal has been rebooted.

Upon completion of the first boot wizard, a snapshot of the thin client is taken and saved in a data partition for basic settings. All of the connections, settings, and network settings assigned during the first boot wizard will be saved to the Echo server once this snapshot is taken and they will persist and carry over after a reboot.


After this point, only changes made to your Network Settings will persist if changed through the DeTOS control panel. In order to alter your settings after this point, either the changes will have to be applied through the Echo console, or you must click **Take Snapshot** in the **Local Storage Settings** section of the DeTOS control panel. In order to change or add connections, the changes must be pushed down by Echo.

System Settings

Display Settings

This section describes the display options available for a single monitor attached to a terminal.

- From the DeTOS desktop, select **DeTOS**→**Control Panel**.
- Click the **Display** icon on the left-hand side of the **Control Panel**, under **System Settings**.



The screenshot shows a window titled "Display Settings" with a blue header. The window contains the following settings:

- Screen Resolution: Auto Detect
- Color Depth: 24 bit
- Enable Screen Blanking
- Blank Time (min): 0
- Suspend Time (min): 0

At the bottom left of the window, there are two buttons: "Apply" and "Reset".

- **Screen Resolution**-Your screen resolution is set to automatically detect the optimal settings for your monitor.

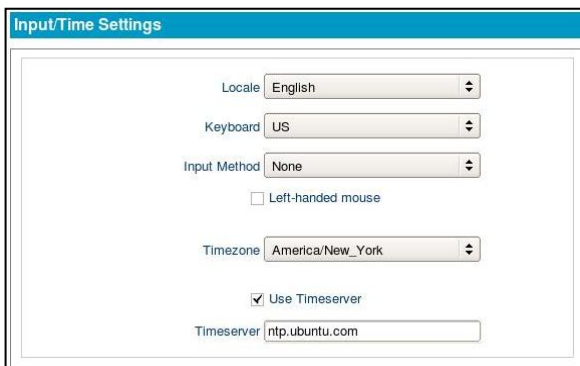
- **Color Depth**-The Ceptor supports a color depth of 24 bit.
- **Enable Screen Blanking**-Checking this box will reveal two timeout values for screen blanking and suspend time.

Once you are finished, press the **Apply** button for the changes to take effect.

Input/Time

This section allows you to configure keyboard, mouse, and time settings for the terminal.

- From the DeTOS Desktop, select **DeTOS→Control Panel**.
- Select the **Input/Time** icon on the left-hand side of the **Control Panel** under **System**.



- **Locale**-English is the default locale setting. Switching to a new locale will, upon reboot, adjust the system locale and translate the user interface of the local DeTOS desktop to the selected language.
- **Keyboard**-**US** is the default keyboard input setting. Switching to a new keyboard input will alter the keyboard mapping immediately after selecting **Apply** .
- **Left-Handed Mouse**-Select this checkbox if you are using a left-handed mouse and need to invert the right and left mouse buttons.

- **Time Zone**-The time zone options are organized geographically by region first and then by city. Select the appropriate time zone for your location.
- **Timeserver**-Defining a timeserver allows the terminal to query an NTP service in order to keep its date and time in sync. By default, this is enabled and set to Ubuntu's timeserver.

Press the **Apply** button for the changes to take effect. Most settings will be changed immediately, but changes to system locale will require a reboot.

Local Storage

The **Local Storage** section of the **Control Panel** allows the administrator to choose one of two options pertaining to persistence.

- From the DeTOS Desktop, select **DeTOS**→**Control Panel**.
- Click the **Local Storage Settings** icon on the left-hand side of the **Control Panel** under **System**.



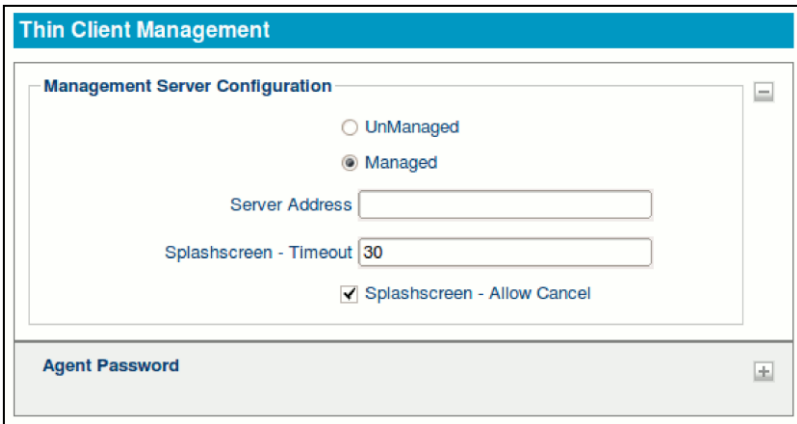
- **Clear Local Storage**-Press this button to clear-out all settings currently stored in local or snapshot storage. Be sure to reboot the thin client after you pressed this button.
- **Take Snapshot**-While running in a **Snapshot Storage** mode, you may press this button to capture the thin client's current settings configuration. Be sure to reboot the terminal after you pressed this button.

Management

Management Server Configuration

During bootup, if the thin client cannot make contact with a Management Server, then a white splash screen will appear just prior to the DeTOS desktop loading. This screen contains a message saying `Attempting to connect to Management Server`. The splash screen will be displayed until successful contact is made with a management server, the cancel button is pressed, or the specified timeout (30 seconds by default) is reached. The **Management Server Configuration** screen allows you to configure the behavior of this splash screen, along with other management server options.

- From the DeTOS Desktop, select **DeTOS**→**Control Panel**.
- Click the **Management** icon on the left-hand side of the **Control Panel** under **System**.




The screenshot shows the 'Thin Client Management' window. The 'Management Server Configuration' section is expanded, showing the following options:

- UnManaged
- Managed
- Server Address:
- Splashscreen - Timeout:
- Splashscreen - Allow Cancel

Below this section is the 'Agent Password' field, which is currently empty and has a '+' icon to its right.

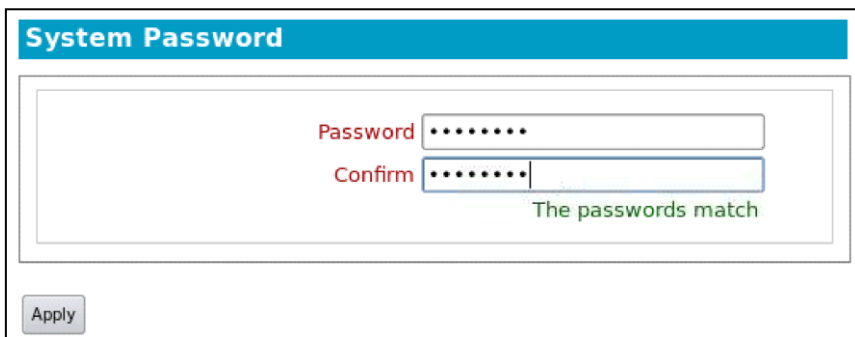
- **Managed/Unmanaged**-By default, the thin client is set to **Managed** mode and will attempt to make contact with a management server. You have the option of severing all communications with a management server by selecting the **Unmanaged** radio button. Press **Apply** and reboot the thin client for this to take effect.

- **Server Address**-While in managed mode, the thin client will maintain contact with a management server named `ws-broker`. Use this field to specify a different hostname or IP address for your management server.
- **Splash Screen – Timeout**-Use this field to adjust the number of seconds the splash screen appears on the screen before it times-out and loads the DeTOS Desktop. Enter a value of 0 to bypass the screen altogether.
- **Splash Screen – Allow Cancel**-A **Cancel** button is provided on the splash screen that allows the user to abort the timeout delay. Uncheck this box to hide the cancel button and force the user to wait the required amount of time.

 **NOTE:** The purpose of the splash screen feature is to gracefully handle network latency that may occur during the thin client's first contact with a management server during bootup. This feature becomes vital in the case where you have a management server applying connections to the thin client that are configured to Autostart on bootup.

Agent Password

A system Password can be set to restrict access to the **Control Panel**.



System Password

Password

Confirm

The passwords match

Apply

To set the Password:

- Select **DeTOS→Control Panel**.
- Click the **Management** icon on the left-hand side of the **Control Panel** under **System**.
- Select the plus **[+]** to open the **Agent Password** section of this screen.

- Enter a password in the password field and re-enter it to confirm your password.
- Press the **Apply** button to save your password.



NOTE: Once a system password is set, the user will be prompted for the password when they attempt to open the **Control Panel**. If the **Cancel** button is pressed or a user incorrectly types the password, then the **Control Panel** will open in a read-only mode. A small padlock icon will also appear along the bottom of the **Control Panel** window, indicating that edits are not allowed. Keep your password safe!

Security Restrictions

The screenshot shows a window titled "Security Restrictions" with a close button in the top right corner. Inside the window, there is a checkbox labeled "Allow Screenshots (Print Screen)" which is currently checked. Below the checkbox, there are two buttons: "Apply" and "Reset".

The Security Restrictions tab allows administrators to enable or disable the ability of users to take screenshots by using the Print Screen button on their keyboards. By default, this option is enabled. To disable screenshots, uncheck the box next to Allow Screenshots and click Apply.

Network Settings

By default, the thin client attempts to contact a DHCP server on your network during bootup. If you have a DHCP server on your network, then the thin client will acquire an IP address automatically and no further network configuration is required on your part. However, there are additional options available.

Thin clients capable of connecting to wireless networks will still default to a wired connection if available. To change the network for your connection:

- 1 From the DeTOS Desktop, select **DeTOS** → **Control Panel**.
- 2 Select the **Network Settings** icon on the left-hand side of the **Control Panel** under **System**.
- 3 Select the desired connection from the **Networks** dropdown menu in the **Networks** section.
- 4 Click **Apply**.

If you wish to use a wireless network, a **Wireless Network** section is located beneath the **Networks** section. To further configure a wireless connection:

- 1 Select the authentication method used on your network from the **Authentication** dropdown menu
- 2 Depending on the authentication method selected, you may have to enter additional information into the fields that appear.
- 3 When all the required fields have been filled, click **Apply**.

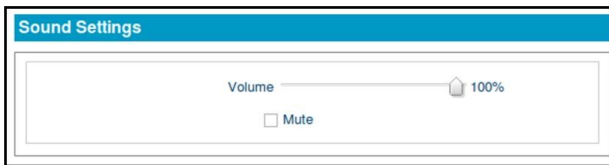
Alternatively, you can now access the connections available to you by utilizing the **Network** tray icon. To connect using the tray icon:

- 1 Right click on the **Network** tray icon in the lower left corner of the desktop.
- 2 Select the network desired from the list of available networks that is displayed.
- 3 Enter your password into the **Password** field in the popup that appears.
- 4 Click **OK** to connect.

Sounds

This section allows you to adjust the master volume level for the terminal.

- From the DeTOS Desktop, select **DeTOS→Control Panel**.
- Click the **Sound** icon on the left-hand side of the **Control Panel** under **System**.
- Left-click and drag the bar left or right to decrease or increase the volume.
- Press the **Apply** button to save. Your changes will take place automatically.



USB Permissions



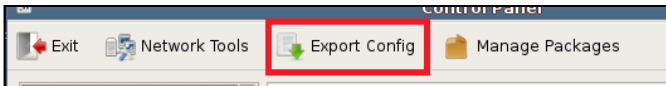
This section allows you to adjust what USB capabilities the user of the device is able to access. Any type of device that has a check mark next to it is authorized to be used. To disable a device, uncheck the box to the left of the type of device desired and then click **Apply**.

Advanced Options

Export Config

If you are working with a Devon IT Support Analyst to troubleshoot a problem on your terminal, you may be asked to send your terminal's **Config** file. You can easily export your own **Config** file by following these steps:

1. Plug a USB flash drive into the terminal.
2. Click the button found along the top of the **Control Panel** named **Export Config**.



3. The process only takes a few seconds. Once it is finished you will receive a message saying the export is finished and you may remove the flash drive.




4. A file named **DeTOSConfig.tar** will now exist on the flash drive. This file contains important diagnostic information that can be analyzed by Devon IT Support and will help troubleshoot and solve issues you may be experiencing.

Manage Packages

In the upper toolbar of the DeTOS Control Panel is a button that says **Manage Packages** which opens the DeTOS Package Manager. This tool can be used to enable or disable individual update packages that may be made available, as well as customization packages.

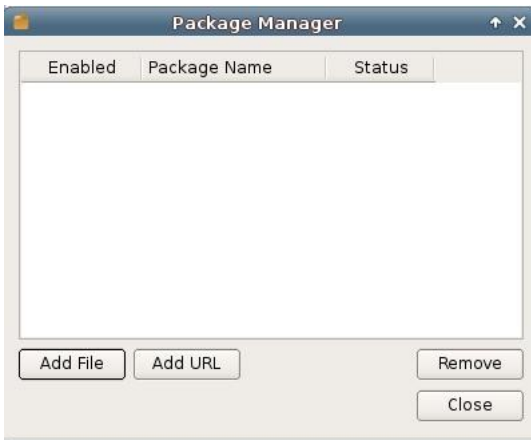
These packages will be in a squashfs file type and can be provided by Devon IT.

There are two methods of locating the files to be added to the list of available packages. They can be added locally using the **Add File** button, or they can be added from a remote location by clicking the **Add URL** button.

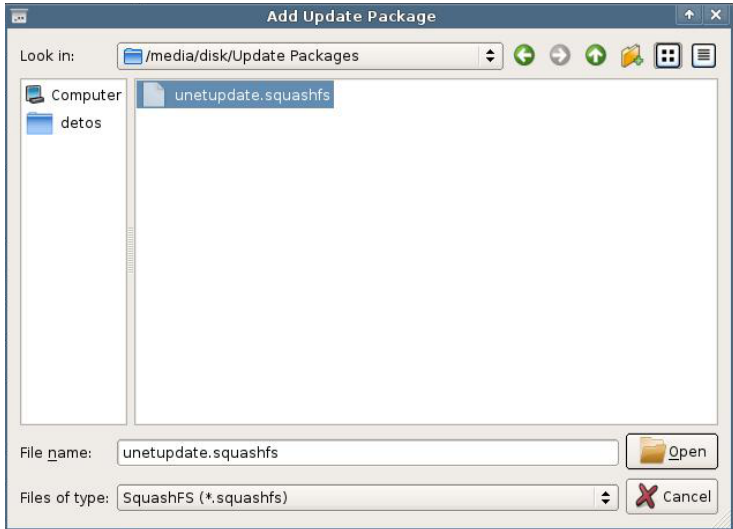
 **NOTE:** In order for newly added packages to take effect, or for packages to be effectively enabled, disabled, or removed, you must first reboot your terminal.

To add an update package locally:

1. Click on the **Add File** button in the DeTOS Package Manager.

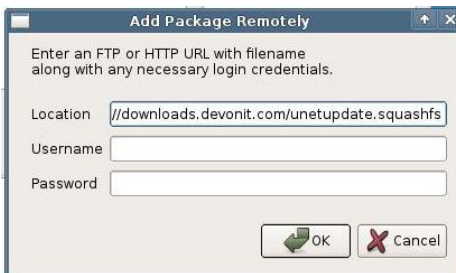


2. Navigate to the location of the update package on your system or USB key and select **Open**.



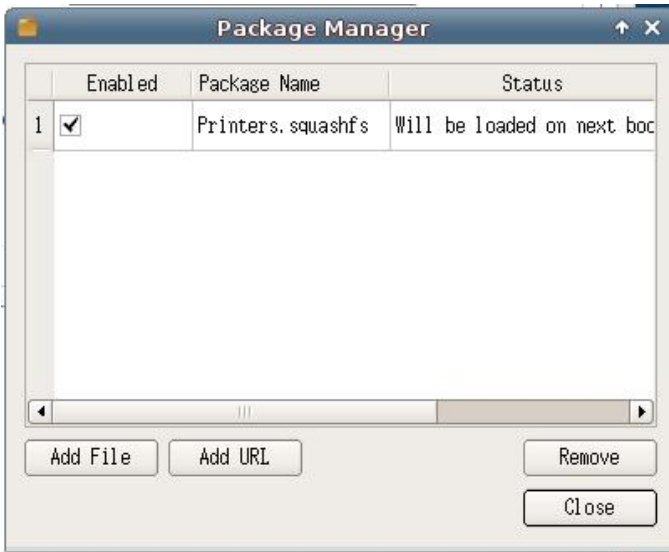
The package you have selected will now appear in the DeTOS Package Manager menu. In order to add a package that is not locally stored:

1. Click on the **Add URL** button in the DeTOS Package Manager.
2. Enter the complete URL for the location of the update package, using either FTP or HTTP protocol.



3. If necessary, enter the **Username** and **Password** needed to access the location where the file is held.
4. Click **Ok**.

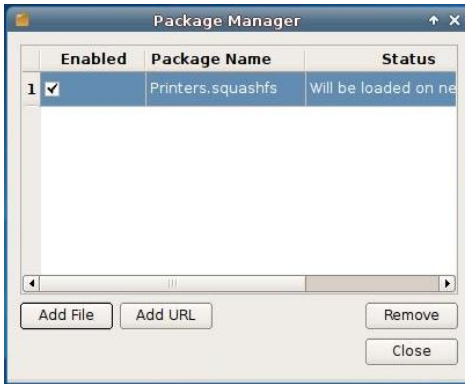
The package will now appear in the DeTOS Package Manager menu.



Newly added update packages will default to the **Enabled** status. In the DeTOS Package Manager, clicking the checkbox next to a file in the table under the **Enabled** column will toggle it between being enabled or disabled. Any changes to this status require a reboot before they will take effect.

In order to completely remove a package:

1. Select the file you wish to remove from the table.



2. Click the **Remove** button.
3. A prompt will appear to ensure that this is what you want to do. Click **Confirm** to continue, or **Cancel** to back out of the process.



Once you have clicked **Confirm**, the package has been deleted. For this change to become permanent, the terminal will need to be rebooted.

Connections

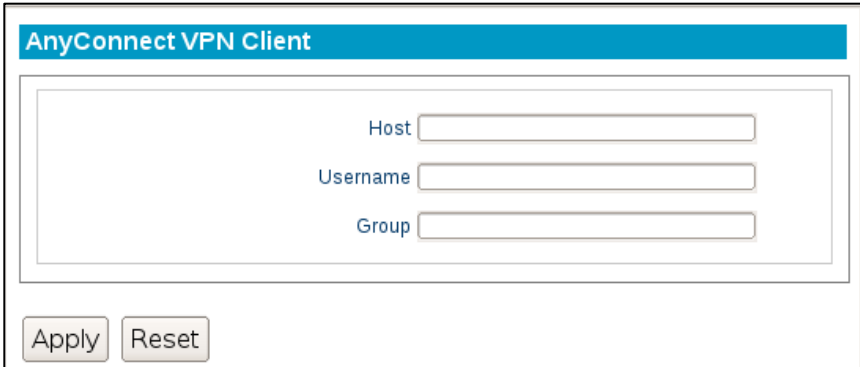
Adding New Connections

Connections can be created on Ceptor units in two different ways. The primary way is through the First Boot Wizard, which gives you the opportunity to set up Citrix ICA, RDP, or VMware Horizon View connections that are accessible as soon as the wizard is completed. Another way is to push them down to a unit using the Echo Management Console. For more details on how to do this, please consult the Echo Administration Guide.

The following sections will provide some details and explanations about what to expect when creating a new connection for these various protocols

AnyConnect VPN

AnyConnect VPN allows the user to connect to a Virtual Private Network provided they have the correct credentials.



The screenshot shows a window titled "AnyConnect VPN Client". Inside the window, there are three text input fields labeled "Host", "Username", and "Group". Below the input fields, there are two buttons: "Apply" and "Reset".

There are three fields required to set your AnyConnect VPN up:

- **Host**-This field requires the server IP address where your VPN connection exists.
- **Username**- Enter the username that has permission to access the VPN in this field.
- **Group**- Enter the domain name associated with your username. For example, /**ACCOUNTING** or **yourcompanyname.com**

Citrix ICA

The Citrix Receiver client in DeTOS allows you to connect to Citrix XenApp Servers (formerly known as Presentation Server). This Citrix client also contains the necessary plug-in used for connecting to XenDesktop via the thin client's local web browser.

The Connection Section

The first section displayed for a Citrix ICA session is **Connection**. This form panel will already be expanded for you.



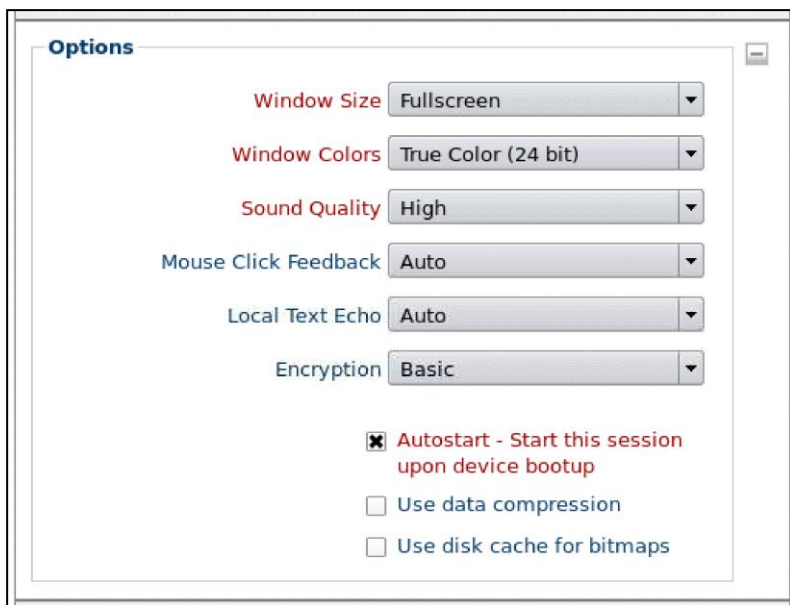
The screenshot shows a window titled "Citrix ICA Connection" with a sub-section "Connection". The form contains the following fields and options:

- Server Location:** A text input field containing "10.0.15.203".
- Protocol:** A dropdown menu currently set to "TCP/IP".
- Connection Type:** Two radio buttons: "Server" (unselected) and "Published Application" (selected).
- Name:** A text input field containing "Notepad".
- Browse for Name:** A checked checkbox.
- Name:** A dropdown menu currently set to "Notepad".
- Browse:** A button located below the second Name dropdown.

- **Server Location**-Type in the IP address or hostname of your Citrix server.
- **Protocol**-Select the appropriate protocol needed to connect to your Citrix Server. There are two methods for connecting to your Citrix Server:
 - **Server**-To connect to the desktop of your Citrix Server, click the radio button called **Server**.

- **Published Application**-To connect to a published application on your Citrix Server, select the radio button called **Published Application** .
- **Browse for Name**-Mark the checkbox called **Browse for Name** . Then click the **Browse** button once. This will contact the server and populate the list. Click the down arrow on the Name list and select your server name or published application name.

The Options Section



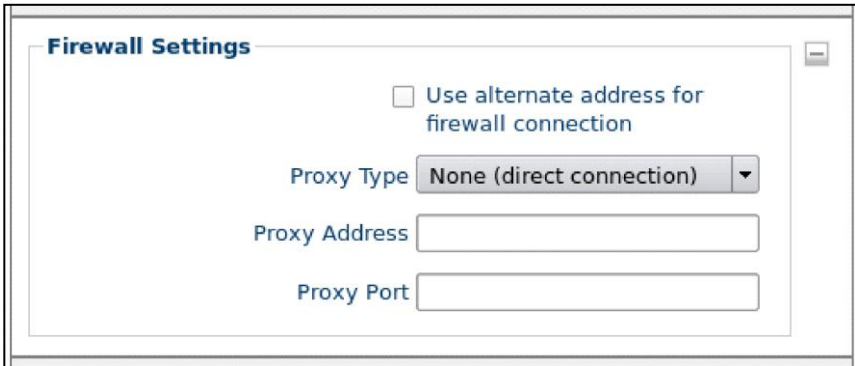
The screenshot shows the 'Options' dialog box with the following settings:

- Window Size: Fullscreen
- Window Colors: True Color (24 bit)
- Sound Quality: High
- Mouse Click Feedback: Auto
- Local Text Echo: Auto
- Encryption: Basic
- Autostart - Start this session upon device bootup
- Use data compression
- Use disk cache for bitmaps

- **Window Size**-Select the type of window you want your ICA session to display in.
 - Full screen-The ICA session will take up the entire display.
 - Fixed Size-You may select fixed sized windows, such as **640x480**, **800x600**, and **1024-x768**.
 - Percentage Based-You may select a size based on the percentage of available desktop display, such as **25%**, **50%**, and **75%**.

- **Seamless**-When using the **Published Application** feature, you can select Seamless mode to launch Windows applications like **Notepad** directly on DeTOS, without using the Citrix Window.
- **Windows Colors**-Color depth options are **16 colors**, **256 colors**, **16-bit**, and **24-bit**.
- **Sound Quality**-Adjust the sound from **Low**, **Medium**, or **High Quality**.
- **Citrix SLR (Speed Screen Latency Reduction) Options**-Enabling the following two options are usually only needed when high latency is occurring or poor bandwidth conditions exist.
 - **Mouse Click Feedback**-The mouse cursor will change to an hourglass as soon as a user performs a mouse click on an event and will wait for a response from the server before it changes back.
 - **Local Text Echo**-This option allows a user to see the character they type into their session on the screen, without this key press hitting the actual server at that time.
- **Encryption**-Select the appropriate level of encryption to be used when connecting to this Citrix Server.
- **Autostart**-Enable this checkbox to automatically launch this session each time the thin client completes its boot procedure.
- **Auto Restart**-Select **Yes** or **Prompt** to automatically restart the connection.
 - **Yes**-Once the session is terminated, the session will automatically restart. There is no way for the end-user to stop it from occurring every time it closes.
 - **Prompt**-Once the session is terminated, the user will receive a **YES/NO** prompt asking them if they wish to reconnect to the session.
- **Use data compression**-In an environment where system and client resources are not a concern, data compression can be used to decrease the amount of data that must be sent across the network.
- **Use disk cache for bitmaps**-Allows graphical objects to be stored in the local disk cache on the client device.

The Firewall Settings Section



Firewall Settings

Use alternate address for firewall connection

Proxy Type: None (direct connection) ▼

Proxy Address:

Proxy Port:

- **Use alternative address for firewall connection**-Mark this checkbox if you need the ICA session to connect to the Citrix server's external IP address. The *external* address for the server is specified as the *alternate* address.
- **Proxy Settings**-If your Citrix environment utilizes a proxy server, then choose the appropriate type from the **Proxy Type field**. Enter the address of the proxy server and port number in the **Proxy Address** and **Proxy Port** fields, respectively.

The User Log On Section



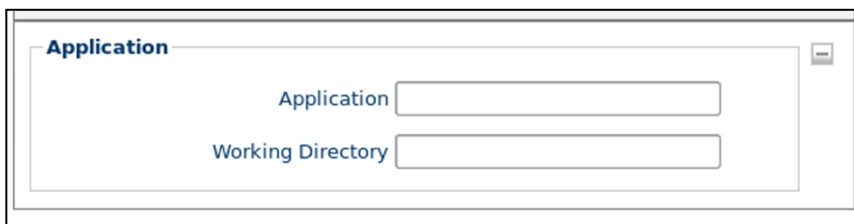
User Logon

User name: mricci

Domain: SUPPORT-WGJ0WAJ

- **User Name**-Specify the name of a user account to log on as. This is an optional field.
- **Domain**-Specify the domain to log on to. This is an optional field.

The Application Section



The screenshot shows a configuration window titled "Application" in blue text. Inside the window, there are two input fields. The first field is labeled "Application" and the second is labeled "Working Directory". Both labels are in blue text. The input fields are empty text boxes. The window has a standard title bar with a close button in the top right corner.

- **Application**-Specifies the path of the application on the Citrix server to be automatically launched when the connection is made. This is an optional field.
- **Working Directory**-Specifies the working directory used for the application.

VMware Horizon View

The VMware Horizon View client allows you to connect to a VMware server, which in turn, provides the end-user with their own virtual desktop session. The following section describes the basic steps for configuring the View Client in DeTOS.



The screenshot shows the 'VMware View Connection' window with the 'General' tab selected. The settings are as follows:

- Server Address: vdm-server.vdi-test1.com
- User Name: Administrator
- Password: [Redacted]
- Domain: VDI-TEST1
- Desktop Name: Individual
- Enable background on startup
- Protocol: RDP
- Desktop Layout: Fullscreen
- Autostart - Start this session upon device bootup
- Auto Restart: No

- **Server Address**-Enter the Hostname or IP address of your VMware Horizon View Broker.
- **Credentials**-Specify the User Name and Password of a user account you wish to log on as.
- **Domain**-Specifies the domain to log on to.
- **Desktop Name**-If the user of this thin client should always connect to the same desktop, then you may consider entering its name into this field. If you choose to leave the field empty, then the user will be prompted to select an available desktop at the time they connect to the VMware Horizon View server.

- **Protocol:** Choose whether to connect to your VMware Horizon View server using the RDP or PCOIP protocol.
- **Desktop Layout:** Choose the desktop option that best suits your display setup.
- **Autostart:**-Enable this checkbox to automatically launch this session after the thin client completes its boot procedure.
- **Auto Restart:** Select **Yes** or **Prompt** to automatically restart the connection.
 - **Yes**-Once the session is terminated, the session will automatically restart. There is no way for the user to stop it from occurring.
 - **Prompt**-Once the session is terminated, the user will receive a **YES/NO** prompt asking them if they wish to reconnect to the session.

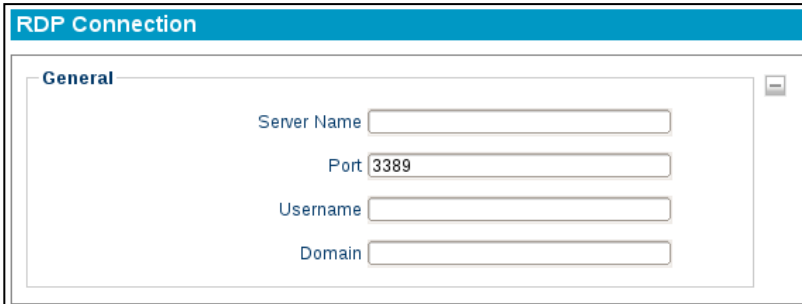
Troubleshooting Tips for VMware Horizon View Connection

- If you set your session to full screen but the display covers only a fraction of the entire screen, then your allocated RAM for the virtual desktop may need to be set a little higher.
- If certain features like foreign keymaps, CD-ROM, OR USB stick are not passing through to the virtual desktop session, check if your VM is at the correct version. You can download the latest agent software executables at VMware's website at: <http://www.vmware.com/downloads>.
- If you plan to use USB flash drives within your session, it is best to use sticks formatted in FAT or NTFS. Long delays sometimes occur when using flash drives formatted in FAT32. Other USB troubleshooting tips can be found at the following VMware site: <http://kb.vmware.com/kb/1026991>.

RDP

The General Section

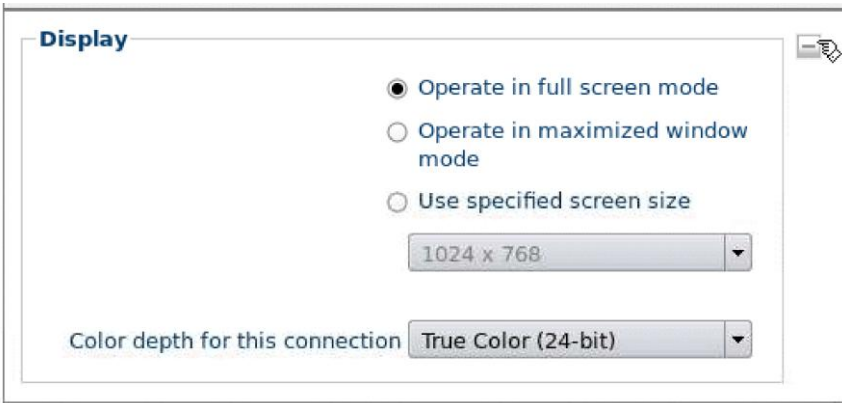
The first section displayed for an RDP session, is named General. This form panel will already be expanded for you.



The image shows a screenshot of the 'RDP Connection' window. The title bar is blue with the text 'RDP Connection'. Below the title bar is a white area with a blue header 'General' and a minus sign icon on the right. The main area contains four input fields: 'Server Name' (empty), 'Port' (containing '3389'), 'Username' (empty), and 'Domain' (empty).

- **Server Name**-Enter the hostname or IP address of the Windows Terminal Server.
- **Port**- Enter the port number used in this connection.
- **User Name**-Specifies the name of a user account to log in as. This is optional.
- **Domain**-Specifies the domain to log on to.

The Display Section



Display

Operate in full screen mode

Operate in maximized window mode

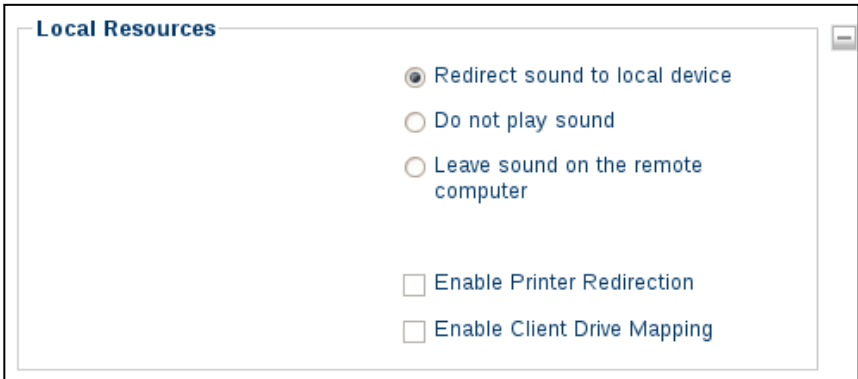
Use specified screen size

1024 x 768

Color depth for this connection True Color (24-bit)

- **Operate in full screen mode**-The RDP session will take up your entire display and will not allow minimization.
- **Operate in maximized window mode**-This option will display the RDP session in a window within DeTOS. You will be able to maximize and minimize this window if you want.
- **Use specified screen size**-The RDP session will launch in a fixed sized window, specified by the dimensions chosen in the dropdown list below. You can ONLY minimize this window, the fixed size is the MAX size allowed.
- **Color depth for this connection**-Select the desired color depth for this RDP session.

The Local Resources Section



Local Resources

- Redirect sound to local device
- Do not play sound
- Leave sound on the remote computer
- Enable Printer Redirection
- Enable Client Drive Mapping

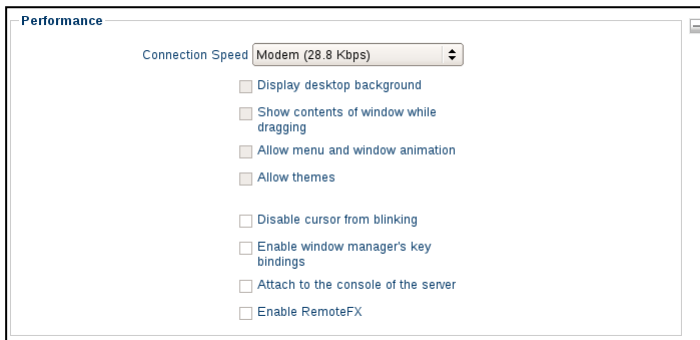
- **Sound Redirection Options**-By default, sound from the server will redirect to the local thin client. If you do not want sound to be sent to the local device, then select either the **Do not play sound** or **Leave sound on the remote thin client** radio buttons below **Redirect sound to local device** (selected by default).
- **Enable Printer Redirection**-Mark this checkbox to redirect printing to a printer attached the local terminal.
- **Enable Client Drive Mapping**-Allows the user plug USB Flash Drives locally into the terminal and access the contents of the drive via the RDP session.

The Start a Program Section



- **Program path and filename**-Specifies the path of the application on the Terminal server to be automatically launched when the connection is made. This will launch the application in a window within DeTOS, not RDP.
- **Working Directory**-Specifies the working directory used for the application.

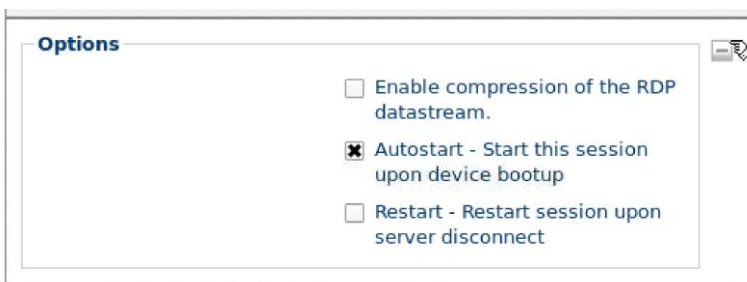
The Performance Section



- **Connection Speed**-Specifies the RDP Experience. As you change connection options in this dropdown box, associated behaviors in the checkboxes below will be selected or deselected accordingly.

- **Disable cursor from blinking**-Indicates that *cursor blinking* should be disabled during the RDP session.
 - **Enable window manager's key bindings**-By default RDP attempts to grab all keyboard input when it is in focus.
 - **Attach to the console of the server**-The session will connect to the console of the server (requires Windows Server 2003 or newer).
- Enable RemoteFX**- Enables RemoteFX for this RDP connection in order to enhance the visual quality of the session.

The Options Section



- **Enable compression of the RDP DataStream**-In an environment where system and client resources are not capable, data compression can be used to decrease the amount of data that must be sent across the network.
- **Autostart**-Enable this checkbox to automatically launch this session after the thin client completes its boot procedure.
- **Auto Restart**-Select **Yes** or **Prompt** to automatically restart the connection.
 - **Yes**-Once the session is terminated, the session will automatically restart. There is no way for the user to stop it from occurring.
 - **Prompt**-Once the session is terminated, the user will receive a **YES/NO** prompt asking them if they wish to reconnect to the session.

X11 Connection

The X11 client allows you to connect to an X11 server, which provides the user with their own virtual desktop session. The following section describes the basic steps for configuring the X11 connection in DeTOS.

X11 Connection

General

Session Type: X11 SSH App

Server Address: _____

User Name: _____

Password: _____

Application: _____

Resolution: fullscreen

Autostart - Start this session upon device bootup

Auto Restart: No

Apply Reset

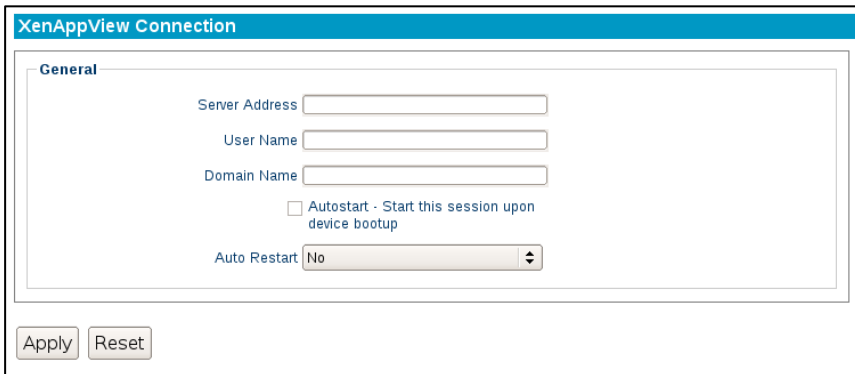
- **Session Type**-Choose from the single **SSH App** type or the **XDMCP** connection.
- **Server Address**-Specify which IP address is the X11 server.
- **Credentials**-Specify the User Name and Password of a user account you wish to log on as.
- **Application**-This is the file path of the application if you are planning on launching a single application within DeTOS, using the X11 connection. This is only available when choosing the **SSH App** session type.
- **Resolution**-Choose the resolution for your connection, ranging from full screen to various fixed resolutions.
- **Autostart**-Enable this checkbox to automatically launch this session after the thin client completes its boot procedure.

- **Auto Restart**-Select **Yes** or **Prompt** to automatically restart the connection.
 - **Yes**-Once the session is terminated, the session will automatically restart. There is no way for the user to stop it from occurring.
 - **Prompt**-Once the session is terminated, the user will receive a **YES/NO** prompt asking them if they wish to reconnect to the session.



NOTE: Not all of these fields will be available to you if you chose **XDMCP** as the **Session Type**. You will not be required to supply credentials and there will be no application line. By default, **SSH App** is the **Session Type**.

XenAppView



The screenshot shows a dialog box titled "XenAppView Connection" with a "General" tab. It contains the following fields and controls:

- Server Address: Text input field
- User Name: Text input field
- Domain Name: Text input field
- Autostart: A checkbox labeled "Autostart - Start this session upon device bootup".
- Auto Restart: A dropdown menu currently set to "No".
- Buttons: "Apply" and "Reset" buttons at the bottom left.

There are three fields required to set your XenAppView connection up:

- **Server Address**-This field requires the IP address of your XenServer.
- **Username**- Enter the username that has permission use a XenAppView connection in this field.
- **Group**- Enter the domain name associated with your username. For example, /**ACCOUNTING** or **yourcompanyname.com**
- **Autostart**-Enable this checkbox to automatically launch this session after the thin client completes its boot procedure.
- **Auto Restart**-Select **Yes** or **Prompt** to automatically restart the connection.
 - **Yes**-Once the session is terminated, the session will automatically restart. There is no way for the user to stop it from occurring.
 - **Prompt**-Once the session is terminated, the user will receive a **YES/NO** prompt asking them if they wish to reconnect to the session.