

Devon IT
VDI Blaster
Dell Edition

Administration Manual



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.

Information in this publication is subject to change without notice.

© 2012 Dell Inc. All rights reserved.

Reproduction of these materials in any manner whatsoever without the written permission of Dell Inc. is strictly forbidden.

Trademarks used in this text: Dell™, the DELL logo, and OptiPlex™ are trademarks of Dell Inc. Devon IT, the Devon IT logo, Devon IT Echo™ Thin Client Management Software, and VDI Blaster™ are registered trademarks of Devon IT Inc. in the U.S. and other countries. Microsoft®, Windows®, Windows Server®, MS-DOS® and Windows Vista® are either trademarks or registered trademarks of Microsoft Corporation in the United States and/or other countries. Citrix®, Xen®, XenServer®, XenDesktop™, ICA™, and XenMotion® are either registered trademarks or trademarks of Citrix Systems, Inc. in the United States and/or other countries. VMware®, VMware View™, View Client™, Virtual SMP®, vMotion®, vCenter®, and vSphere® are registered trademarks or trademarks of VMware, Inc. in the United States or other countries.

Other trademarks and trade names may be used in this publication to refer to either the entities claiming the marks and names or their products. Dell Inc. disclaims any proprietary interest in trademarks and trade names other than its own.

Contents

Devon IT VDI Blaster Dell Edition	5
What is VDI Blaster?	5
Technical Specifications	6
Installation Methods	7
Standard Installation Method: Dual Boot with Microsoft Windows XP	7
Full Hard Drive Installation.....	8
USB Boot.....	8
Using the VDI Windows Installer MSI	9
Using a Bootable USB Key	17
Administration.....	20
VDI Blaster Licensing	20
Achieving Persistence in VDI Blaster Systems	23
Echo Agent System Information	25

Frequently Asked Questions	27
How is VDI Blaster Installed, and How Does it Work?	27
What Servers/Connection Brokers are Supported in VDI Blaster?	27
Will VDI Blaster Overwrite my Hard Drive?	28
What Hardware do I Need to Install VDI Blaster?	28
Do PCs repurposed with VDI Blaster have wireless networking capabilities?	28
 Getting Help.....	 29
Contacting Dell	29

Devon IT VDI Blaster Dell Edition

What is VDI Blaster?

Devon IT VDI Blaster Dell Edition software allows users to repurpose Windows XP based systems into stateless thin clients. It extends the useful life of hardware and allows secure central management of systems using Devon IT Echo Thin Client Management Dell Edition.

VDI Blaster can be installed without erasing the existing XP installation and can be uninstalled at any time, reverting the system back to its normal Windows OS boot mode. When systems reach end of life, they can be replaced by a terminal with minimal disruption.



NOTE: VDI Blaster does not currently support local options.



NOTE: VDI Blaster currently does not support x11, No Machines, and VPN connections.



NOTE: VDI Blaster's Control Panel does not have a network tab.

Organizations of all sizes can deploy VDI Blaster to:

- Repurpose old systems.
- Extend the life of systems (and their original capital investment).
- Experience the benefits of virtual desktop and thin client environments at a fraction of the price of a vast, new system of thin client deployment.

Technical Specifications

Hardware Requirements

- A system running Microsoft Windows XP (32-bit)
- Minimum 1 GHz CPU, 1 GB RAM

Features

- Includes VMware View, Citrix, and Microsoft Remote Desktop clients
- Includes Firefox Web Browser to connect to web applications. Supports Kiosk mode.
- Thin Client Management Software (Devon IT Echo Management Console Dell Edition) is included in the price and allows to centrally manage repurposed systems along with Dell's thin clients
- Devon IT VDI Blaster Dell Edition can be installed without erasing existing data or reformatting the hard drive. Devon IT VDI Blaster Dell Edition is easy to uninstall.

Installation Methods

Visit support.dell.com for instructions on downloading VDI Blaster Dell Edition software. Or, for Software Solution support in the U.S., call 1-877-459-7304. For support outside the U.S., contact the Dell ProSupport for Software Solution support using the contact information provided on your purchase invoice, packing slip, or Dell product catalog.

Standard Installation Method: Dual Boot with Microsoft Windows XP

VDI Blaster Dell Edition can be used without the risk of erasing your existing Windows installation. To install VDI Blaster, just execute the installer on the system you want to repurpose. After installation, the system reboots by default in thin client mode, running VDI Blaster.

In this mode, repurposed systems can be managed with Devon IT's Echo Management Console Dell Edition. It is still possible to reboot repurposed systems in Windows XP mode and uninstall VDI Blaster to return the system to its initial configuration (with Windows XP as the only operating system).

The standard installation method for VDI Blaster is the VDI Blaster MSI file, **dell-`vdiblaster-installer.msi`**

Using this installer, VDI Blaster can be installed without erasing the existing XP installation. Uninstall it at any time to revert the system back to its normal Windows OS boot mode.

Full Hard Drive Installation

If you prefer to overwrite your system's existing operating system with VDI Blaster, then you may use the **installer msi (dell-vdiblaster-installer.msi)**.



NOTE: Overwriting your system's existing operating system will overwrite all contents of your hard disk, and if you choose to reinstall the original operating system sometime in the future you will need to do so with your system's original installation CD.

USB Boot

VDI Blaster can be installed via a USB drive (**VDIBLASTER-usb--<date and version>-.exe**).

This version of VDI Blaster allows you to run on a system without altering the current operating system or files already installed on your system's hard drive. VDI Blaster will run completely off of the USB Flash Drive and is a great way to test without actually installing it.

Using the VDI Windows Installer MSI

This section describes the hardware requirements and installation steps for installing VDI Blaster on a system.

Hardware Requirements

- A system running Microsoft Windows XP (32-bit)
- NTFS formatted hard drive with 1 GB available disk space



NOTE: NTFS is the default file system for Windows XP

- Minimum 1 GHz processor, 1 GB RAM

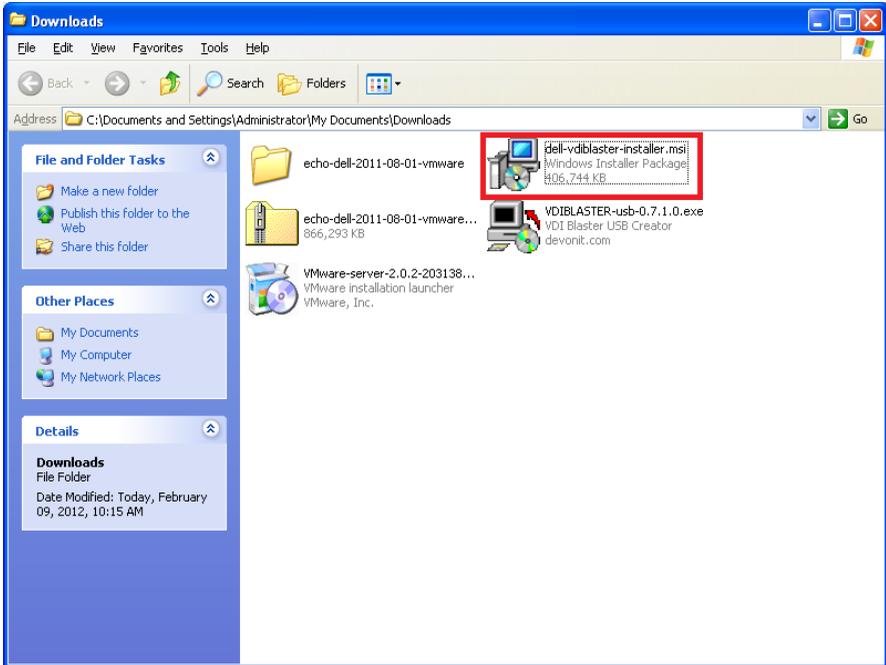


NOTE: If you have a version of VDI Blaster already installed on your system, you must uninstall it before attempting to install again.

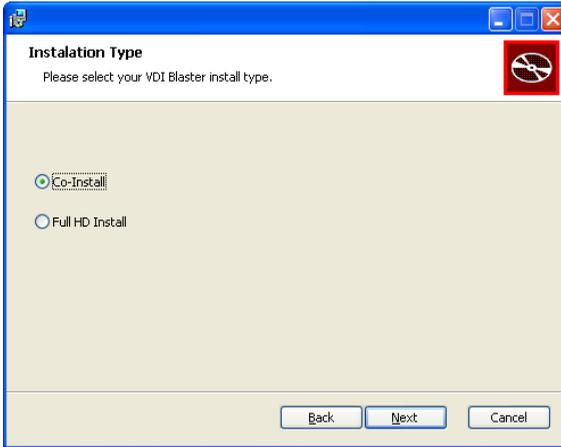
Dual Boot Installation Steps

In order to perform a dual boot installation, which will install VDI Blaster without overwriting Windows XP, using the MSI installer:

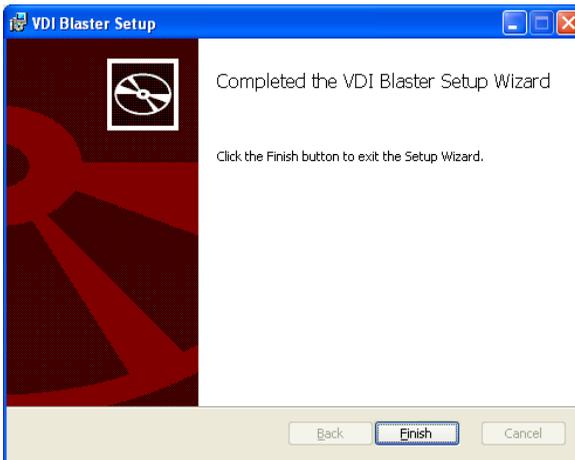
- 1 Log-in as Administrator on the system you want to repurpose and double click on the icon for the VDI Blaster Installer MSI.



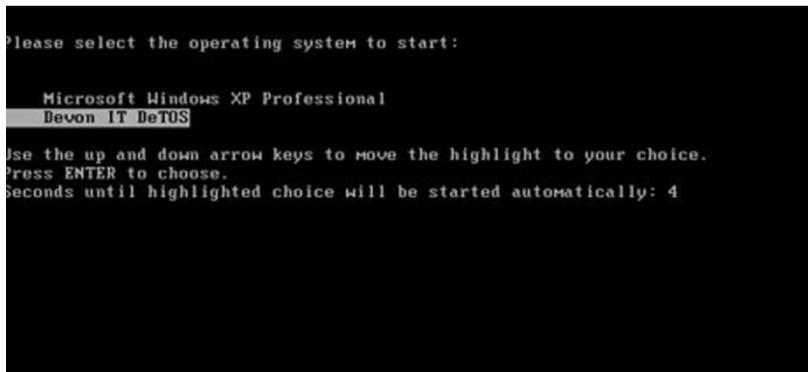
- 2 Accept the EULA and click **Install** to continue.
- 3 Select **Co-Install** and click **Next**.



- 4 VDI Blaster will begin installing. Once it has finished, you must click **Finish** to complete the installation.



- 5 Once installation is complete, reboot the system. It is now configured to automatically boot into thin client mode. Optionally, you may edit the **win.ini** file if you want to change the default behavior. You will see two entries, one for Windows XP and one for Devon IT DeTOS (Devon Terminal Operating System).

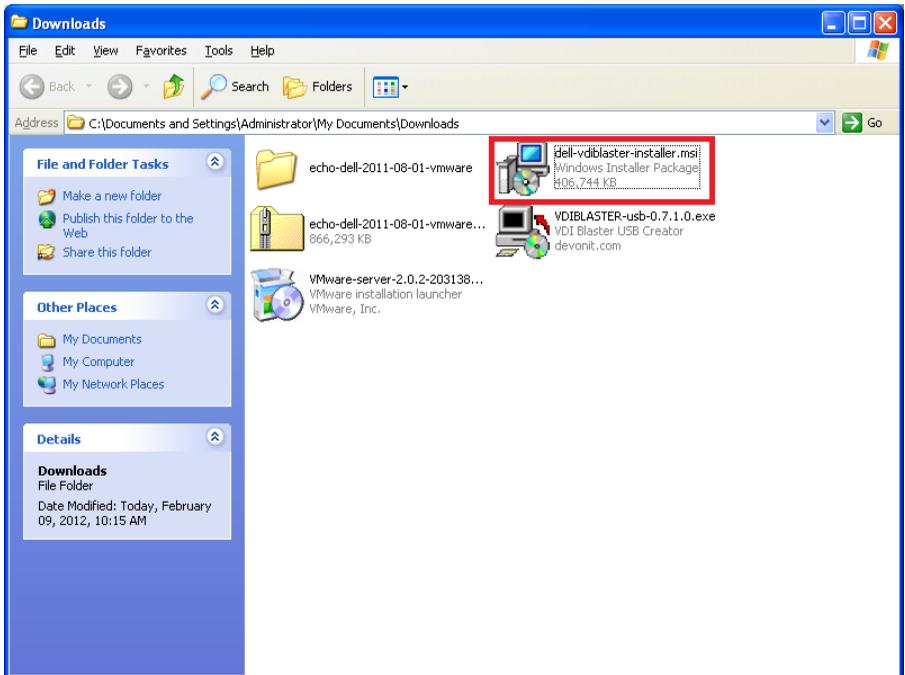


- 6 Provided the hardware detection for the video card, network card and sound card is successful, you should see the system acquire a DHCP address (this is the default behavior) and start a graphical desktop. If you see a black screen please contact **support.dell.com** and provide your system model or specifications. Should the VDI Blaster not work on your system, you can reboot the system and select **Windows XP** during the boot up sequence with the keyboard arrow keys.

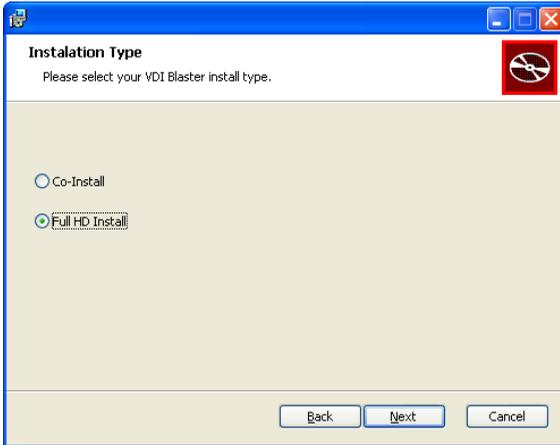
Full Hard Drive Installation Steps

In order to perform a full hard drive installation, which will completely overwrite the hard drive of your system, using the MSI installer:

- 1 Log-in as Administrator on the system you want to repurpose and double click on the icon for the VDI Blaster Installer MSI.



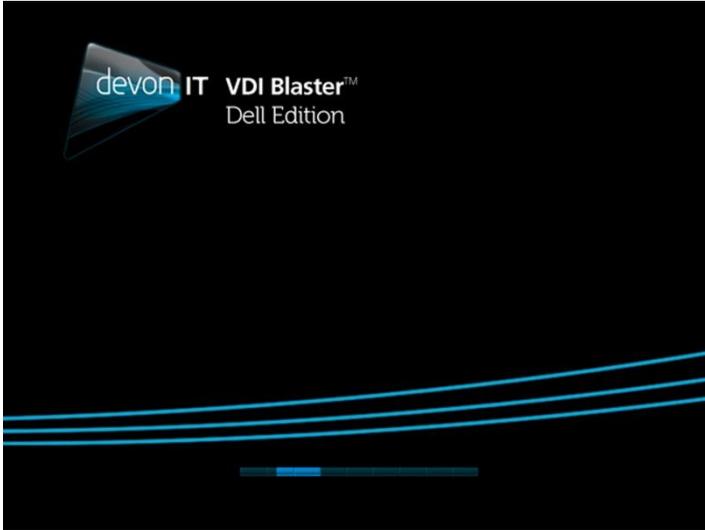
- 2 Accept the EULA and click **Install** to continue.
- 3 Select **Full HD Install** and click **Next**.



- 4 VDI Blaster will begin installing. Once it has finished, you must click **Finish** to complete the installation.



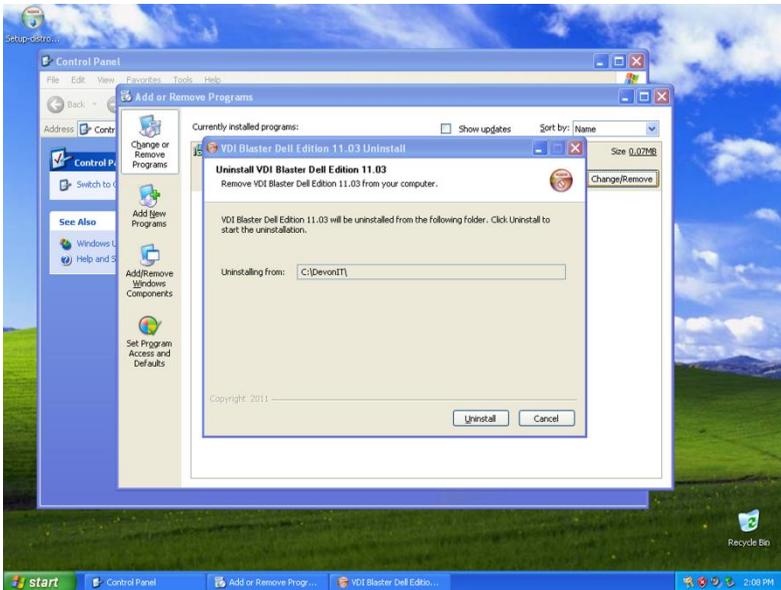
- 5 Once installation is complete, reboot the system. It is now configured to automatically boot into thin client mode. When you boot up your computer, it will now start the Devon IT DeTOS (Devon Terminal Operating System).



- 6 Provided the hardware detection for the video card, network card and sound card is successful, you should see the system acquire a DHCP address (this is the default behavior) and start a graphical desktop. If you see a black screen please contact **support.dell.com** and provide your system model or specifications.

How to Uninstall VDI Blaster (Dual Boot Only)

- 1 Reboot the system. During boot up you will see the OS boot menu briefly appear on your screen. Use the arrow keys on your keyboard to select the **Windows XP** option for bootup.
- 2 Log-in as the Administrator account for that XP system.
- 3 Select **Start→Control Panel→Add or Remove Programs→Devon IT DeTOS Thin Client**. Press the **Change/Remove** button to uninstall VDI Blaster.
- 4 The VDI Blaster software will no longer exist on your hard drive and the default boot option will revert back to its original setting of Windows XP .

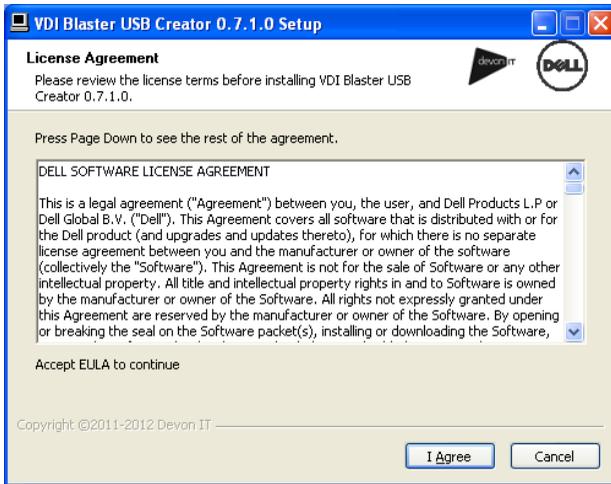


Using a Bootable USB Key

Creating a USB Key

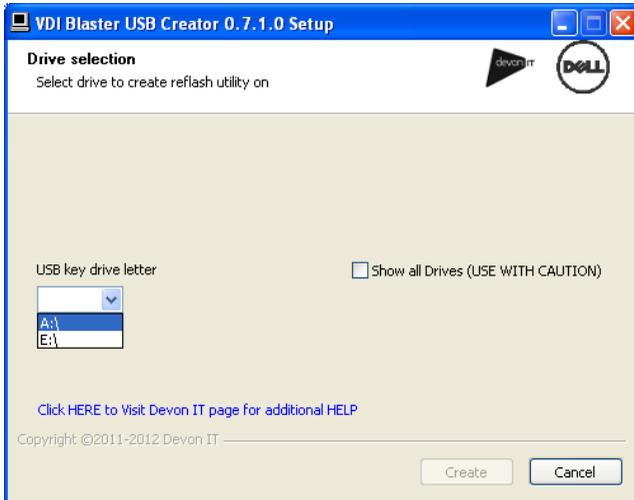
In order to perform a USB boot to run VDI Blaster, you must first create a USB key by using the VDI Blaster USB Creator (**VDIBLASTER-usb--<date and version>- .exe**) Once the EXE file has been downloaded, follow these steps to create your bootable USB key:

1. Run the executable as an administrator.
2. If a security warning opens, select **Run**.
3. Click **I Agree** in the EULA screen to continue.



4. Select the drive letter of your USB key from the dropdown menu. If the desired drive does not appear in the dropdown, click in the box next to **Show All Drives**.

△ CAUTION: Selecting Show All Drives will populate the list with every available drive, including the C:\ drive. Be certain you are selecting the desired drive before continuing.



5. If you want to format the drive, click the checkbox titled **Format Drive as FAT32**. This will erase everything else from your key.
6. Select **Create**.

7. A dialog box will appear to confirm the changes you are making. If all the information is correct, click **Yes**. Clicking **No** will cancel the operation.



8. After the action is carried out, select **Close**.

Running VDI Blaster Using a USB Key

Once your USB key is made, you can now run your system in VDI by booting from your USB drive. Upon bootup, a menu will display with two options: **VDI Blaster** and **Install VDI Blaster to first hard disk**. Selecting **VDI Blaster** will allow you to run DeTOS directly from the USB key without removing any files from your hard drive. If the user does not enter any input on this screen, VDI Blaster will load automatically after a short timer.

Selecting **Install VDI Blaster to first hard disk** will immediately begin the process of overwriting your hard drive with VDI Blaster. This is a full hard drive install.



NOTE: Overwriting your system's existing operating system will overwrite all contents of your hard disk, and if you choose to reinstall the original operating system sometime in the future you will need to do so with your system's original installation CD.

Administration

VDI Blaster Licensing

This section describes how to install your VDI Blaster license. It is assumed you already have an Echo Management Server online. If this is not the case, then please revisit this section once your management server is up and running.

Receiving a License File

Upon completing the purchase of VDI Blaster, the customer will receive an email from Dell that provides the necessary information for downloading the VDI Blaster software and obtaining the VDI Blaster license key. Follow the steps below to install this license key in the Thin Client Management software (Devon IT Echo Management Console Dell Edition).

How to Install the License

- 1 Open a web browser, enter the address to your management server (i.e. **ws-broker**), and then enter your credentials to log-in to the Admin GUI.
- 2 Open the **Manage Licenses** inventory table by selecting **Maintenance**→**Manage Licenses** in the bar on the left.

Welcome bwadmin [logout]

devon IT

Terminals

Connections

Profiles

Disk Images

Terminal Settings

Certificates

Logs

Maintenance

Save/Restore Server Config

Server Settings

Manage Licenses

Icons

Manage Licenses

Show entries

License	Allowed Devices
0000-DB3-100-A0FF-F224-00A-9D2A	10
0000-D0E-100-B745-2227-032-0003	50

Showing 1 to 2 of 2 entries

First | Previous | 1 | Next | Last

- 3 Select **Add License** from the top of this page. The details pane on the right-hand side will display a **License Key** form.

License Key

License

- 4 Enter the alphanumeric license key and then press the **Add** button.
- 5 A new entry will appear in the **Manage Licenses** inventory table in the center of the page. Your license is now successfully installed.

Achieving Persistence in VDI Blaster Systems

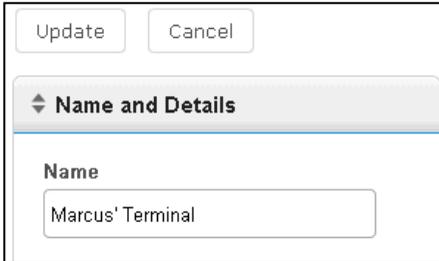
Once you have installed the VDI Blaster software, for all intents and purposes, your system has been converted into a terminal and now possesses virtually all of the same attributes and behaviors one would expect from a typical terminal. Your system now runs in a stateless, non-persistent mode. This means any connections or system settings configured in the **Control Panel** will be discarded on reboot unless the terminal is being remotely managed by an Echo Thin Client Management server. More specifically, a profile must be created AND applied to these newly converted thin client terminals to maintain persistent settings across multiple system reboots.

The VDI Blaster terminals run a service, called the Echo Agent, which communicates back and forth with the Echo server. When a terminal is booted, the Echo Agent will announce its presence to the Echo server by continuously sending XML-based messages known as heartbeats. By default, the agent will be sending these messages out to a server named **ws-broker**. You can change the **Server Address** to another IP in the **Control Panel** by clicking **Management**.

Once the agent heartbeats into the server for the first time, the discovery process begins and varied information about that device will be displayed in a new row in the **Terminals** table in Echo. The default name of the device will be set to a unique identifier, consisting of 32 alphanumeric characters. The terminal's IP Address and MAC Address are also reported in this row. The best method for identifying newly discovered terminals is to match these two addresses with the IP and MAC addresses reported on the terminal's Interface Status screen.

4454aa5deabe7f0420122639c9ac5be2	10.0.11.84	2012-02-09 15:26:52
----------------------------------	------------	------------------------

Once you locate your terminal in the inventory table, it is recommended that you rename that terminal entry to a more meaningful value. To do this, left-click the terminal in the table. This will open a **Name and Details** pane to the right hand side of the inventory table. Enter a name into the **Name** field and select **Update** to change the name of the terminal.



The image shows a software interface for editing a terminal's name. At the top, there are two buttons: "Update" and "Cancel". Below them is a section titled "Name and Details" with a downward-pointing arrow icon. Under this section, the label "Name" is positioned above a text input field. The input field contains the text "Marcus' Terminal".

Another important step that occurs during the discovery process is the application of profiles. Upon receiving a heartbeat message, Echo will determine whether a profile has been associated to this terminal. If so, then all connections and settings included in that profile will immediately be applied to that terminal. If the terminal does not have a profile associated with it, then the next step that Echo takes is to search for a special profile named Default in its profile inventory and proceed to apply all connections and settings defined within that “default” profile to the terminal. At this point, if a default profile isn't found, then Echo has reached the end of its profile search and the result will be a terminal that simply has no connections or settings permanently associated with it.



NOTE: For more information on profiles, cloning, and settings management, please refer to the **Dell Edition Echo Administration Guide** and the **DeTOS Dell Edition Manual**.

Echo Agent System Information

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

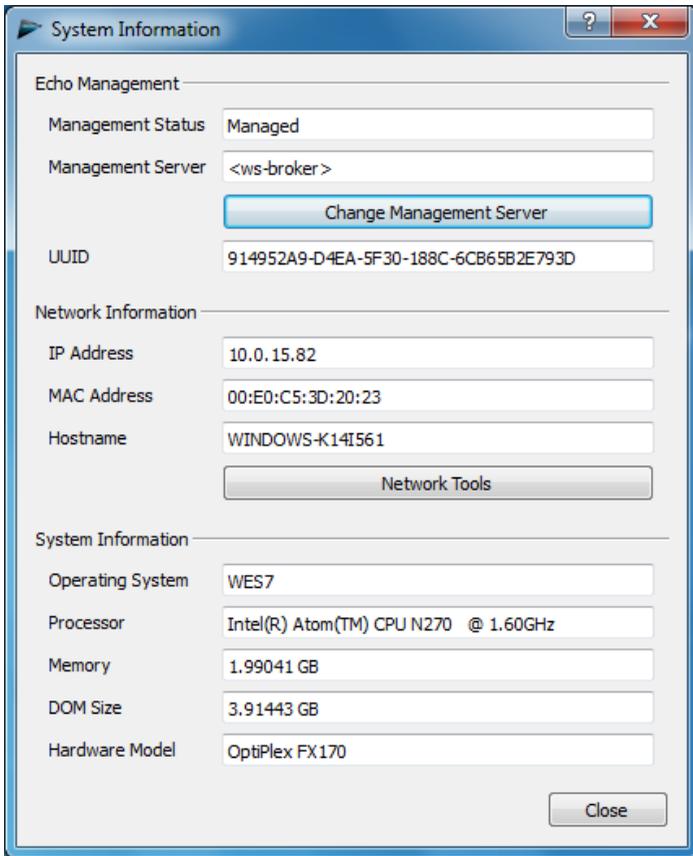
- **Management Status-**Displays when the terminal is being managed by an Echo server.
- **Management Server-**Displays the current address of the Echo server.
- **Change Management Server-**Allows you to change the Echo server.
- **UUID-**Displays the current UUID assigned to the terminal.

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

- **IP Address-**Displays the current IP address assigned to the terminal.
- **MAC Address-**Displays the current MAC address assigned to the terminal.
- **Hostname-**Displays the name assigned to the terminal.
- **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 terminal.

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



Frequently Asked Questions

How is VDI Blaster Installed, and How Does it Work?

Dual boot with Windows XP is a great way to test VDI Blaster without erasing your existing Windows installation.

To install VDI Blaster, run the installer on the system you want to repurpose. After installation, the system reboots by default in thin client mode, running VDI Blaster Dell Edition software. In this mode repurposed systems can be managed with Devon IT Echo Management Console Dell Edition.

However it is still possible to reboot repurposed systems in Windows XP mode and uninstall the VDI Blaster, in which case the system returns to its initial configuration (with Windows XP as the only operating system).

VDI Blaster can be installed via a USB drive. This is very useful to test compatibility with your system without actually installing it.

You can also perform a full hard drive installation.

What Servers/Connection Brokers are Supported in VDI Blaster?

- VMware View, Citrix, and Microsoft Remote Desktop clients.
- Firefox Web Browser to connect to web applications. Supports Kiosk mode.

Will VDI Blaster Overwrite my Hard Drive?

Not automatically. If VDI Blaster is installed in dual boot mode, the software keeps the original operating system intact and it is possible to boot back into Windows if desired.

You can select to perform a full hard drive installation.

What Hardware do I Need to Install VDI Blaster?

Dell recommends using a system with a processor running at least at 1 Ghz and at least 1 GB of RAM.

Do PCs repurposed with VDI Blaster have wireless networking capabilities?

No, at this time VDI Blaster does not support wireless functionality in repurposed PCs.

Getting Help

Contacting Dell

For customers in the United States, call 800-WWW-DELL (800-999-3355).

Dell provides several online and telephone-based support and service options. Availability varies by country and product, and some services may not be available in your area. To contact Dell for sales, technical support, or customer service issues:

- 1 Visit **support.dell.com**.



NOTE: If you do not have an active internet connection, you can find contact information on your purchase invoice, packing slip, or Dell product catalog.

- 2 Click your country/region at the bottom of the page. For a full listing of country/region click **All**.
- 3 Click **All Support** from **Support** menu.
- 4 Select the appropriate service or support link based on your need.
- 5 Choose the method of contacting Dell that is convenient for you.