Using the VT2442 Web User Interface
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Using the VT2442 Web User Interface

As we strive to continually improve your customer experience you may, from time to time, notice changes to the Web User Interface of your Vonage VT2442 Device; however the basic functionality that you are familiar with will remain the same. Any settings that you have configured will also remain the same.

This guide is designed to keep you up-to-date with any improvements to the VT2442 Web User Interface (Web UI), and is provided as a supplement to the complete VT2442 User Guide, found at http://www.vonage.com/vt2442.

Introduction to the Web UI

To access the Web UI of the VT2442:

From a PC that is connected directly to one of the yellow Ethernet ports of your Vonage VT2442, open a web browser, such as Microsoft’s Internet Explorer, and type 192.168.15.1 in the Address bar. Press the Enter key on your keyboard.

The Log In page will be displayed.
Enter **router** in the **User Name** field.
Enter your password in the **Password** field. The default password is **router**. So if you have not changed it, enter **router**.
Click on the **Log In** button.

You are now logged in to the Web UI of the VT2442.

You will remain logged in to the Web UI until you do one of the following:
- Click the **LOGOUT** button
- Remain inactive for a period of time (default 10 minutes)
- Close your browser window

**Home Page**

The Web UI of the VT2442 is very simple to use. When you first log in to the Web UI you are at the Home page. The Home page contains a lot of valuable information.

---

**Welcome to the New Way to Phone**

**Setup**
The Setup section allows you to create new connections, edit existing connections, and configure other basic settings.

**Advanced**
The Advanced section lets you configure advanced features like IPv6, IPsec, NAT, Voice, UPnP, IGMP, and LAV clients.

**Tools**
The Tools section lets you carry out system commands and perform simple system tests.

**Status**
The Status section displays status, log and statistical information for all connections and interfaces.

**Help**
The Help section provides information on configuration and settings for each section.

---

**Status Information**

- **System Uptime:** 19 hours 21 minutes
- **Software Version:** 12.0.1.1002200-0.9.2
- **WAN:** Connected
- **LAN:** Connected
- **Current Time:** Fri Jan 16 20:34:19 2009
- **Provisioning Status:** Provisioned/Connected with config server

**Line Status**

- **Phone 1:** 732-369-2015
- **Line Status:** Connected
- **Phone 2:** NA
- **Line Status:** Not Registered

---

View the Terms of Service by visiting the Vonage website at [www.vonage.com/tos](http://www.vonage.com/tos).
The bottom of the Home page has additional status information.

### Status Information

<table>
<thead>
<tr>
<th></th>
<th>Current Time:</th>
<th>Provisioning Status:</th>
</tr>
</thead>
<tbody>
<tr>
<td>System Uptime:</td>
<td>Fri Jan 16 10:54:19 2009</td>
<td>Provisioned/Could not reach config server</td>
</tr>
<tr>
<td>Software Version:</td>
<td>12.0.1-rc612009-0-9-2</td>
<td></td>
</tr>
<tr>
<td>WAN:</td>
<td>Connected</td>
<td></td>
</tr>
<tr>
<td>DHCP IP:</td>
<td>10.111.15.138</td>
<td></td>
</tr>
<tr>
<td>LAN:</td>
<td>Connected</td>
<td></td>
</tr>
</tbody>
</table>

**Status Information**

- **System Uptime:** The amount of time since the VT2442 was last restarted.
- **Software Version:** The current software version running on your VT2442.
- **WAN:** Whether or not your VT2442 is connected to the Internet.
- **xxxx IP:** The IP address of your VT2442 if it is connected to the Internet. This may be a DHCP IP address, a Static IP address or a PPPoE IP address.
- **LAN:** Whether or not you have a device, such as a computer, connected to one of the yellow LAN ports.
- **Current Time:** The current date and time.
- **Provisioning Status:** Whether or not your VT2442 was able to successfully connect to the Vonage Configuration Server.
- **Phone 1/Phone 2:** The phone number(s) assigned to you and the status of your phone lines.

If you encounter a problem with your VT2442 and need to call Vonage customer support, they may need to know this information.

The pane on the right side of the Web UI is dedicated to context sensitive help. This means that the information displayed in this area will change depending upon the contents of the particular page. Although the information displayed in this area will change, the location will remain the same. So no matter what page you are on, the right side is dedicated to help.

### Need Help?

- What Information is available on the Home page?
- What does it mean if it says "N/A" next to a phone line?
- What is a GR-909 test?
- What GR-909 tests are executed on my VT2442?
- How do I know if a problem was detected by a GR-909 test?
- How can I tell if I'm connected to the Internet?
- What does system uptime indicate?
The Navigation bar appears across the top of the Web UI.

Using this menu bar you can navigate to any section of the Web UI. The Navigation bar appears on every page of the Web UI.

The VT2442 Web UI is divided into five sections:

- **Setup**
- **Advanced**
- **Tools**
- **Status**
- **Help**

We will take a closer look at each of these sections below.
Setup

The Setup section of the Web UI allows you to enter the basic information necessary to get your VT2442 running. In many cases, your VT2442 requires no additional configuration to use and once installed, it will function properly right out of the box. However, there are times when a little “tweaking” of the default values may be necessary. For example, DSL users will need to enter their PPPoE user name and password. You do not need extensive networking knowledge to adjust the settings in this section. The Help portion of the Web UI will guide you through adjusting the settings in this section.

The Setup section of the Web UI has two features:

- **WAN Configuration**
- **LAN Configuration**

WAN Configuration

This is the only section that you are required to set up based on your specific Internet Service Provider (ISP). Your ISP determines which type of connection to use. *Once your VT2442 is installed and functioning properly, you should not need to change the “WAN Configuration” setting. However, you may need to change settings in this section if one or more of the following situations occur:*
  - you change your ISP
  - your ISP changes the way you connect to the Internet
  - you take your VT2442 to a different location.

There are three basic connection types, **DHCP**, **Static IP Address**, and **PPPoE**.
DHCP

DHCP is an acronym that stands for Dynamic Host Configuration Protocol. Using this protocol, your ISP assigns you an IP address that can and will change. In very simple terms you can think of your IP address like your street address. Every residence has a street address so the post office knows where to deliver your mail. Every device on the Internet needs an IP address so the data for a particular device can be delivered appropriately. You do not need to be concerned with what your IP address is or when it will change. All this is managed by your ISP. This eliminates the need to manually assign specific IP addresses.

DHCP is most often used by cable Internet service providers. If your cable ISP did not give you a specific IP address to use when you signed up for service, then your ISP dynamically assigns you an IP address.

A DHCP connection is the easiest Internet connection to setup. In most cases, your VT2442 requires no additional configuration to use DHCP. It will function properly right out of the box because it is configured to use DHCP by default.

If you had previously set your VT2442 to use a Static IP Address or PPPoE connection to access the Internet and would like to re-configure it to use DHCP:

Log in to the Web UI. From the home page click on the Setup tab and then choose the WAN Configuration button. Select DHCP from the Type drop down list. The following screen will be displayed:

```
DHCP Connection Setup

Type: DHCP

Options: [ ] NAT [ ] Firewall

DHCP Settings
IP Address: 10.111.12.138
Mask: 255.255.254.0
Gateway: 10.111.12.1
Owanila Mac: [ ]
MAC: 00:17:aa:73:5f

PPPoE Settings
Enable: [ ]
Username: username
Password: ****
Server IP: 192.168.15.20

MPPO: [ ]
MPPE: [ ] No [ ] Req’d [ ] Optional
Strength: [ ] 40-bit [ ] 56-bit [ ] 128-bit
Stateless: [ ]
Authentication: [ ] Auto [ ] CHAP [ ] PAP
[ ] MSCHAP [ ] MSCHAPv2
Debug: [ ]

[ ] Renew [ ] Release

[ ] Save [ ] Cancel
```
1. Specify the Options you want to enable. Selecting NAT enables Network Address Translation and selecting Firewall enables the VT2442 firewall. We recommend leaving both NAT and Firewall selected.

2. If your ISP required you to register a MAC address with them for service, select the Override Mac checkbox and enter the MAC address of the device you registered in the MAC field.

3. Click the Save button.

You may need to request a new IP address if you move your VT2442 to a new location or you experience an unexpected power or Internet service outage. Devices on DHCP networks re-establish network connectivity automatically.

To request a new IP address:
1. First press the Release button.
2. Press the Renew button.

Note: This option is only for users who are connecting to the Internet using DHCP.

VPN Authentication (PPTP Settings)
Although it is not a commonly used configuration, the VT2442 supports VPN authentication. You will need to confirm with your VPN administrator whether or not you need to use VPN authentication. Both a DHCP and a Static connection support VPN authentication. If you do need to setup VPN authentication, you will need information from your VPN administrator. In addition to your username and password, you will need information related to the compression and encryption of the data.

To setup VPN authentication:
1. Under the PPTP Settings section, select the Enable checkbox.
2. Enter your VPN Username and Password in the appropriate boxes.
3. Enter the Server IP address.
4. To enable Microsoft Point-to-Point Compression, MPPC, select the checkbox. If the checkbox is not selected, MPPC is disabled.
5. Indicate whether or not Microsoft Point-to-Point Encryption, MPPE is used by selecting the appropriate radio button. Options are No, Req’d (required) or Optional.
6. If MPPE is active, indicate the strength of the encryption by selecting the appropriate checkboxes. 40-bit, 56-bit and 128-bit encryption is available.
7. If MPPE is active, indicate whether or not Stateless encryption will apply. If the checkbox is checked, then Stateless encryption is enabled. This is the default. If left unchecked, Stateless encryption is not enabled.
8. Indicate the Authentication that will be used by selecting the corresponding radio button. Options are Auto, CHAP, PAP, MSCHAP, and MSCHAP-v2. If Auto is selected, the authentication method will be negotiated between the client and the server.
9. If you would like to run in Debug mode, select the Debug checkbox. This should only be selected if instructed to do so by Vonage Customer Care.
10. Click the Save button.
Static IP Address

A Static IP Address, as the name implies, is an IP address that does not change. Static IP addresses are also used by ISPs, but are not as common as DHCP connections. When you setup your Internet connection for the first time, your ISP may have given you a specific IP address to enter. If this is the case, then your ISP uses Static IP addresses. In this case, you should choose Static IP Address as your connection type.

To setup an Internet connection using Static IP, in addition to the IP address assigned by your ISP, you will need the following information:

- Mask
- Gateway
- DNS 1
- DNS 2
- DNS 3

All of this information is provided by your ISP. This information is used by your ISP to establish your connection to the Internet. If you are uncertain what any of these values should be, please contact your ISP.

Log in to the Web UI. From the home page click on the Setup tab and then choose the WAN Configuration button. Select Static from the Type drop down list. The following screen will be displayed:
To setup your Static IP connection:

1. Enter the following information obtained from your ISP:
   - IP Address
   - Mask
   - Gateway
   - DNS 1
   - DNS 2
   - DNS 3

2. If your ISP required you to register a MAC address with them for service, select the Override Mac checkbox and enter the MAC address of the device you registered in the MAC field.

3. Click the Save button.

To setup VPN authentication, see VPN Authentication (PPTP Settings).
PPPoE

PPPoE is an acronym Point to Point Protocol over Ethernet. PPPoE is most often used by DSL service providers. If you have a DSL line and you are required to log in using a User name and Password to access the Internet then your ISP uses a PPPoE connection. If you are connecting your VT2442 directly to your DSL modem, choose PPPoE as your connection type. You will need your User Name and Password to configure the PPPoE connection. If you are installing behind a router or your DSL modem has a built in router, then choose DHCP as your connection type.

Log in to the Web UI. From the home page click on the Setup tab and then choose the WAN Configuration button. Select PPPoE from the Type drop down list. The following screen will be displayed:

To setup an Internet connection using PPPoE:
1. Enter the PPPoE Username and Password you need to access your DSL connection. This information was given to you when you signed up for your DSL service. If you do not remember this information you will need to contact your ISP.
2. Enter the Keep Alive period in minutes. The Keep Alive period is the time after which your inactive DSL session will be terminated. The default value is 10 minutes. Setting this value to 0 will ensure your DSL session always remains active.
3. We recommend leaving the default setting of Auto for the Authentication field. CHAP (Challenge-Handshake Authentication Protocol) and PAP (Password Authentication Protocol) are also available.
4. Specify the MTU Size*. This indicates the largest packet that can be transmitted across the network. We recommend using the default value unless your ISP or Vonage Customer Care has asked you to change it. The default value is 1492. The maximum is 1500 and the minimum is 64.
Issue 1 April 2, 2009

5. If your ISP required you to register a MAC address with them for service, select the **Override Mac** checkbox and enter the MAC address of the device you registered in the **MAC** field. The **Restore** button will restore the VT2442’s original MAC address.

6. Click the **Save** button.

*Adjusting the MTU size is helpful in rare scenarios where some upstream device is unable to accept larger size packets and fragments them, and consequently it drops packets from the VT2442. We recommend using the default value unless your ISP or Vonage Customer Care has asked you to change it. Please check with your ISP for the MTU setting used on their network.

The **Connect** button will establish your DSL connection and the **Disconnect** button will end your DSL session. Please note that if you disconnect your DSL session you will no longer be able to make phone calls.

If you are still uncertain, contact your ISP to determine which type of Internet connection you have.
LAN Configuration

In addition to providing up to 2 lines of Vonage digital phone service, your VT2442 also has integrated router functionality built in. This means it can be used to create a Local Area Network (LAN).

A Local Area Network is a group of computers and related devices that share a common communications line. The connected devices are typically within a small geographic area such as an office building or a home. To put it another way, the VT2442 lets more than one device share your Internet connection. The following picture shows an example of a LAN.

You can think of your telephone as a device that needs to share the Internet connection with your computer. If the VT2442 did not have router capability, you would not be able to connect your computer to the Internet. Now, using the VT2442 your computer and your telephone can share your Internet connection. This means that you can be talking on the phone and surfing the Internet at the same time.

If you’d like to connect an additional device, such as a PC, video game console, router or DVR, to your VT2442, you can simply plug the device into one of the yellow Ethernet ports on the back of your VT2442. (This is assuming that the device you are plugging in to the VT2442 Ethernet port has DHCP enabled. If not, follow the manufacturer’s instructions to enable DHCP.) In most cases, your VT2442 requires no additional configuration to use it as a router. Once installed, it will function properly right out of the box because your VT2442 is pre-configured to function as a DHCP server. A DHCP server assigns IP addresses to devices on a network. Remember, an IP address is like a street address. Every device on a network needs a specific location.
If you had previously configured your VT2442 to not work as a DHCP Server, for example if you had setup a Static IP network, and would like to now use DHCP you will need to re-configure it.

Log in to the Web UI. From the home page click on the Setup tab and then choose the LAN Configuration button. The following screen will be displayed:

To configure your VT2442 to work as a DHCP server:

1. **Subnet IP Address** – By default, the Subnet IP Address is 192.168.15.1. *We recommend not changing the default.* If you do change the Subnet IP Address, you will need to login to the VT2442 Web UI using this new address.
2. **Netmask** – The default Netmask is 255.255.255.0. *We recommend not changing the default.*
3. Enter a **Host Name.** The name can contain alphanumeric characters. Spaces are not allowed.
4. Enter a **Domain** name to uniquely identify the VT2442. After a Domain name has been assigned, you can access the Web UI of the VT2442 by entering 192.168.15.1 or domainname.rgw in the address bar of your browser.
5. Select the **Enable DHCP Server** radio button.
6. Select the **Assign ISP DNS, SNTP** checkbox if you would like to provide the DNS that was received from the WAN side instead of the Subnet IP Address to the LAN clients.
7. Specify the range of IP addresses to use by entering a **Start IP** address and an **End IP** address. The **Start IP** specifies the value for the DHCP server to start with when assigning IP address. The **End IP** specifies the last IP address that can be defined.
8. Specify the Lease Time in seconds. When the **Lease Time** expires, a new IP Address will be automatically assigned by the DHCP Server. The default value is 3600 seconds.
9. Click the **Save** button.
If you would like to configure your LAN to use Static IP addresses, you may turn the DHCP server off. You will need to manually configure Static IP addresses onto all the devices you connect to the LAN of the VT2442. To turn the DHCP server functionality off:

1. Select the **Disable DHCP Server** radio button.
2. Click the **Save** button.

**NOTE:** If you turn off the DHCP Server you will not be able to log in to the VT2442 Web UI until you manually configure an IP address on the PC plugged into the VT2442.
Advanced

Now we come to the advanced settings of the VT2442. Most users will never need to adjust any of the settings in this section. Many of the settings in this section require advanced networking knowledge. Incorrectly changing these settings may interrupt your Internet or voice service. We recommend that only users with sufficient networking knowledge change these settings or users who are instructed to do so by a member of Vonage’s Customer Care team.

The Advanced section of the Web UI has twelve features.

<table>
<thead>
<tr>
<th>Feature</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>UPnP</td>
<td>Configure Universal Plug and Play.</td>
</tr>
<tr>
<td>IP QoS</td>
<td>Configure IP Quality of Service for different connections.</td>
</tr>
<tr>
<td>Port Forwarding</td>
<td>Configure Firewall and NAT pass-through to your hosted applications.</td>
</tr>
<tr>
<td>IP Filters</td>
<td>Configure firewall, port filters, and IP filters.</td>
</tr>
<tr>
<td>LAN Clients</td>
<td>Status and configuration of LAN clients.</td>
</tr>
<tr>
<td>Web Filters</td>
<td>Select to setup Web Filters.</td>
</tr>
<tr>
<td>Dynamic DNS Client</td>
<td>Configure Dynamic DNS Client.</td>
</tr>
<tr>
<td>Static Routing</td>
<td>Configure Static routes.</td>
</tr>
<tr>
<td>Dynamic Routing</td>
<td>Configure RIP.</td>
</tr>
<tr>
<td>Remote Web Access</td>
<td>Configure access control list for remote Web access.</td>
</tr>
<tr>
<td>Remote SSH Access</td>
<td>Configure access control list for remote SSH access.</td>
</tr>
<tr>
<td>Ethernet Switch</td>
<td>Configure ethernet switch settings.</td>
</tr>
</tbody>
</table>

The twelve features available are
- UPnP
- IP QoS
- Port Forwarding
- IP Filters
- LAN Clients
- Web Filters
- Dynamic DNS Client
- Static Routing
- Dynamic Routing
- Remote Web Access
- Remote SSH Access
- Ethernet Switch
UPnP

UPnP stands for Universal Plug and Play. UPnP is a standard that enables devices to be plugged into a network and automatically discover each other and know about each other’s capabilities. This option should be enabled if you are running an application on your LAN that requires UPnP.

Log in to the Web UI. From the home page click on the Advanced tab and then choose the UPnP button. The following screen will be displayed:

To enable UPnP, simply check the Enable UPnP check box and click on the Save button. This will enable UPnP until the VT2442 is restarted.
**IP QoS**

QoS stands for Quality of Service. VoIP traffic, file downloads, gaming, streaming media and IM sessions are all competing for your bandwidth. QoS prioritizes your network traffic so that the traffic you identify as most important can pass first. However, because Vonage is committed to providing you with the highest quality digital voice service, voice traffic is always given the highest priority.

For example, let’s say your child is busy on the computer downloading their favorite music videos. You receive a phone call. The QoS feature of the VT2442 will automatically prioritize the voice traffic so that your phone call has the highest possible audio quality and the music video download continues without interruption.

If you have previously defined QoS rules on a router that is installed behind your VT2442, those rules will be honored by the VT2442. The only exception is that voice traffic will always be given the highest priority.

*We recommend that only users with sufficient networking knowledge adjust QoS settings.*

To access the IP QoS portion of the Web UI:

Log in to the Web UI. From the home page click on the **Advanced** tab and then choose the **IP QoS** button. The following screen will be displayed:

![Upstream IP QoS](image)

There are two steps necessary to define QoS settings. First you must define your traffic rules and second you must configure your upstream bandwidth shaper.
To add a traffic rule, click on the Add button on the IP QoS screen.

The following screen will be displayed:
To set your QoS Priorities, you must define a traffic rule and assign a priority to the application.

- You can choose to define your rule using any or all of the following fields. Enter the appropriate information in the following fields:
  - **Priority**
  - **Source IP**
  - **Source Netmask**
  - **Destination IP**
  - **Destination Netmask**
  - **Protocol**
  - **Source Port**
  - **Destination Port**

- Click the **Save** button.

**IMPORTANT NOTE:** These priorities are always secondary to voice traffic.

There are 5 priorities available. The priorities are Low (best effort), Medium Low, Medium, Medium High and High. By default, every application will have a priority of Low.

Continue defining rules in the above manner until all of your rules have been defined.

Once you have defined your traffic rules, you must configure the QoS shaper.

The shaper allows you to allocate your available upstream bandwidth to the different QoS priorities. Upstream bandwidth refers to the amount of bandwidth available for traffic traveling from your modem to the ISP. If you do not know what your maximum upstream bandwidth is, you should contact your ISP or use one of the many commercially available bandwidth tests. For example, your DSL connection may be 3 Mbps/768 Kbps. In this scenario, your upstream bandwidth is 768 Kbps.

How much bandwidth you assign to each priority is entirely up to you. It is important to note that if you leave any priority group with a bandwidth of 0, that priority group will **NOT** transmit any data.
To define your shaper configuration, click on the **Configure Shaper** button on the **IP QoS** screen.

The following screen will be displayed:
1. Enter your available maximum upstream bandwidth in Kbps in the Max Bandwidth field.
2. Enter the amount of bandwidth, in Kbps, you want to allocate to each of the following priorities:
   - High
   - Medium High
   - Medium
   - Medium Low
The sum of all bandwidth allocations entered in the different priorities must be less than or equal to the Max Bandwidth.

NOTE: The allocated bandwidth for the Low priority group is always set to the Max Bandwidth and it cannot be edited. This ensures that if there is no traffic matching any of the other priority groups, the maximum upstream bandwidth is available to the remaining traffic. If there is traffic matching one or more of the higher priority groups, the remaining bandwidth is available to the Low priority group.
3. Click on the Save button.

Managing Your QoS Traffic rules
You should leave only those rules you want to apply to your current network traffic. By default, voice traffic will always be given priority.

To delete a priority rule listed in your QoS Traffic Rule Configuration table:
1. Check the Delete checkbox for the rule you want to delete in the table.
2. Click the Save button.
Port Forwarding

Port Forwarding is a technique where incoming packets destined for a specific port on a machine are re-directed or ‘forwarded’ to a different port and/or machine. Network clients do not know that port forwarding is being done. It is all done transparently.

Port Forwarding is used when you want to provide public access to services running on your private LAN (such as a web server, e-mail server or FTP server). When a firewall is enabled, certain ports on a LAN may be blocked. Port forwarding allows incoming traffic from the Internet and directs it to specific services on your LAN based on the configured IP address and port number. In other words, requests from users are sent to your network via the Internet, and the VT2442 will forward these requests to the appropriate port on the PC.

The specific port forwarding rules you need to implement will be detailed in the applications’ documentation. For your convenience, we have included a table of commonly used port numbers below.

<table>
<thead>
<tr>
<th>Service</th>
<th>Protocol</th>
<th>Port Number</th>
</tr>
</thead>
<tbody>
<tr>
<td>HTTP</td>
<td>TCP</td>
<td>80</td>
</tr>
<tr>
<td>FTP</td>
<td>TCP</td>
<td>21</td>
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<tr>
<td>TFTP</td>
<td>UDP</td>
<td>69</td>
</tr>
<tr>
<td>SMTP</td>
<td>Both</td>
<td>25</td>
</tr>
<tr>
<td>POP3</td>
<td>TCP</td>
<td>110</td>
</tr>
<tr>
<td>NNTP</td>
<td>TCP</td>
<td>119</td>
</tr>
<tr>
<td>Telnet</td>
<td>Both</td>
<td>23</td>
</tr>
<tr>
<td>IRC</td>
<td>TCP</td>
<td>194</td>
</tr>
<tr>
<td>SNMP</td>
<td>Both</td>
<td>161</td>
</tr>
<tr>
<td>Finger</td>
<td>TCP</td>
<td>79</td>
</tr>
<tr>
<td>Gopher</td>
<td>TCP</td>
<td>70</td>
</tr>
<tr>
<td>Whois</td>
<td>TCP</td>
<td>43</td>
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<tr>
<td>Rtelnet</td>
<td>TCP</td>
<td>107</td>
</tr>
<tr>
<td>LDAP</td>
<td>Both</td>
<td>389</td>
</tr>
<tr>
<td>UUCP</td>
<td>TCP</td>
<td>540</td>
</tr>
</tbody>
</table>
Setting up Port Forwarding

**Caution:** Incorrectly changing these settings may interrupt your Internet or voice service. We recommend that only users with advanced networking knowledge change these settings.

To setup Port forwarding:

From the home page, click on the **Advanced** tab. Click on the **Port Forwarding** button. The following screen will be displayed:

![Port Forwarding Screen](image)

The Allow Incoming **Ping** option specifies whether or not you want your VT2442 to respond to a ping from the Internet. By default, this option is not enabled.

If your application is listed in the pre-defined applications:

1. Select the LAN IP address of the computer that is hosting the server/application from the **LAN IP** drop down list. If the LAN IP address does not appear in the list, you can define it by clicking on the **New IP** button. Selecting this button brings you to the **LAN Clients** page.
2. Select the **Category** for the rule you want to enable. The pre-defined rules for the category will be displayed in the **Available Rules** list.
3. Highlight the rule you want to enable and click the **Add** button. The rule will now appear in the **Applied Rules** list.
4. Repeat steps 2-3 for any additional rules you want to activate.
5. When you have finished selecting the rules you want, click the **Save** button.

To remove or disable a Port Forwarding rule, simply highlight the rule in the **Applied Rules** list and click the **Remove** button. Click the **Save** button.
Custom Port Forwarding

If the particular service or application you want to setup port forwarding for does not appear in the pre-defined lists, you will need to setup a customer port forwarding rule.

To define a Custom Port Forwarding rule, click on the **Custom Port Forwarding** link.
To setup Custom Port forwarding rules:

1. If not already checked, click on the **Enable** checkbox to activate the Port Forwarding rule. This is checked by default.
2. Enter the **Application** name.
3. Select the appropriate **Protocol** used to access your hosting service – TCP, UDP or TCP and UDP
4. Enter the **Source IP Address**.
   The Source **IP Address** is the IP address from which traffic is allowed. Entering a value of 0.0.0.0 when accompanied by a **Source Netmask** of 0.0.0.0 means all.
5. Enter the **Source Netmask**
   Entering a value of 0.0.0.0 when accompanied by a **Source IP Address** of 0.0.0.0 means all.
6. Enter the **Destination IP Address**. It is the private IP address of the computer that is hosting the service/application.
7. **Destination Netmask** has a value of 255.255.255.255 and cannot be changed.
8. Enter the **Destination Port Start**
9. Enter the **Destination Port End**
   **NOTE:** You can enter a single port or a range of ports to forward to a computer on your LAN. To specify a single port, enter the same port number in the **Start Port** and **End Port** fields.
10. Enter the **Destination Port Map**. This is the port that you want incoming traffic directed to.
11. Click **Save**

Repeat the steps to setup additional Custom Port Forwarding rules.
To delete a Custom Port Forwarding rule, simply check the **Delete** checkbox next to the rule you want to delete and click the **Save** button.

To edit a Custom Port Forwarding rule, simply check the **Edit** checkbox next to the rule you want to edit. The rule fields above the table will be populated and allow you to edit them. Make any necessary changes and click the **Save** button.
DMZ Settings

A DMZ (demilitarized zone) host is a network device that is visible directly from the public Internet (WAN). This device has unrestricted access to and from the Internet.

A DMZ host is often setup when running software applications that use random port numbers and do not function correctly when using Port Forwarding. Use this option with caution, as the device setup as a DMZ host is exposed to the public Internet.

To setup a DMZ Host, click on the DMZ link on the Port Forwarding page.
1. Check the **Enable DMZ** checkbox
2. Select the IP **Address** of the device you want to be the DMZ Host from the list in the **Select a LAN IP Address** drop down list. If the LAN IP address does not appear in the list, you can define it by clicking on the **LAN Clients** link. Selecting this link brings you to the **LAN Clients** page.
3. Click **Save**

**NOTE:** Remember to disable the DMZ host when the application that needed it is no longer running.

To disable a DMZ Host, simply uncheck the Enable DMZ checkbox associated with the LAN IP address of the DMZ host and click the **Save** button.
IP Filters

IP Filtering allows you to block access to the Internet based on a specific IP address. You can specify a single IP address or a range of IP addresses. Although not required, we recommend that IP Filtering be used on Local Area Networks that use Static IP Addresses or reserved IP addresses. If you are using DHCP on your LAN and want to reserve IP addresses for devices in your network instead of assigning Static IP addresses, you can do so on the LAN Clients page. Without Static or reserved IP Addresses (i.e. IP addresses that change) you would need to re-configure your IP Filtering settings every time your devices received new IP Addresses. This will happen every time a device is rebooted or if there is a power outage.

Setting up IP Filtering

From the home page, click on the Advanced tab. Click on the IP Filters button. The following screen will be displayed:

Incorrectly changing these settings may interrupt your Internet or voice service. We recommend that only users with advanced networking knowledge change these settings.

To block all traffic to the LAN IP address:

- Select the LAN IP address of the computer that you want to block from accessing the Internet from the LAN IP drop down list. If the LAN IP address does not appear in the list, you can define it by clicking on the New IP button. Selecting this button brings you to the LAN Clients page.
- Select the Block All Traffic checkbox.
- Click the Save button.
To block selected traffic to the LAN IP address and your application is listed in the pre-defined applications:

- Select the LAN IP address of the computer that you want to block from accessing the Internet from the **LAN IP** drop down list. If the LAN IP address does not appear in the list, you can define it by clicking on the **New IP** button. Selecting this button brings you to the **LAN Clients** page.
- Select the **Category** for the rule you want to enable. The pre-defined rules for the category will be displayed in the **Available Rules** list. If your application or service does not appear in the pre-defined list, you will need to create a Customer IP Filters rule.
- Highlight the rule you want to enable and click the **Add** button. The rule will now appear in the **Applied Rules** list.
- Repeat steps 2-3 for any additional rules you want to activate.
- When you have finished selecting the rules you want, click the **Save** button.

To remove or disable an IP Filter rule, simply highlight the rule in the **Applied Rules** list and click the **Remove** button. Click the **Save** button.

The **Block Outgoing Ping** option specifies whether or not you want your device with the specified LAN IP address to be able to send a ping to the Internet. By default, this option is not enabled. Blocking outgoing pings can be useful if a computer has a virus that attempts a Ping-of-Death denial of service attack.

If your video game does not appear on the list, you will need to setup a Custom IP Filter rule. The specific information necessary to setup the rule is provided in the game’s documentation.

To define a Custom IP Filter rule, click on the **Custom IP Filters** link on the **IP Filters** page.
Enter the following information for the application or service you want to define the IP filter for:
- Filter Name
- Source IP
- Source Netmask
- Destination IP
- Destination Netmask
- Port Start
- Port End
- Protocol

Be sure the **Enable** checkbox is selected

Click the **Save** button
LAN Clients

The **LAN Clients** page displays a list of all the clients connected to your VT2442. If your VT2442 is configured as a DHCP server IP addresses will be assigned to those devices automatically. If you’d like to reserve IP addresses for devices in your network, you can do so on the **LAN Clients** page.

To access the LAN Clients page, from the home page, click on the **Advanced** tab. Click on the **LAN Clients** button. The following screen will be displayed:

For each client the IP Address, Hostname, MAC address and Type of connection is displayed. The type is either **Dynamic** or **Static**.

To add a computer or other device on your LAN with a static IP address:

1. Enter the IP address of the device in the **Enter IP address** field.
2. Enter the Hostname of the device. This field is optional.
3. Enter the MAC address of the device in the **MAC Address** field.
4. Click the **Save** button.

You can think of the Reserve checkbox as converting a dynamic IP address to a static IP address without having to define a static IP address on the client. The VT2442 will assign the current dynamic IP address to the client for 30 days. When the 30 day lease expires the same IP address will be reassigned. So from the VT2442 perspective, this is a permanent or static IP address.
**Web Filters**

The Web Content filter allows you to control data flow from the Internet to your LAN. Using various settings, you can block or allow different types of data to pass from the Internet, through your device and to your LAN. These filters can enhance the firewall protecting your network.

To access the Web Filters page of the VT2442 Web UI, from the home page, click on the **Advanced** tab. Click on the **Web Filters** button. The following screen will be displayed:

The Web Content Filter feature allows you to control the following:

**Proxy**
A proxy is a computer that acts as a bridge between two other computers that use different standards, formats, or protocols.

**Cookies**
Cookies are data stored on your computer every time you visit an Internet site. This information is saved and used by the website the next time you visit. It can be used to store such things as preferences, shopping cart information or login information.

**Java Applets**
Java Applets are small programs written in the Java programming language that are often run on websites to provide functionality not available in HTML. If you block Java Applets from running you may not have access to applications that use it.

**ActiveX controls**
Like Java Applets, ActiveX is a programming language used for websites. If you block ActiveX controls from running you risk not having access to websites that use it.
Popup Windows
Like Java Applets and ActiveX controls, pop up windows are usually associated with visiting Internet sites. They are secondary windows that appear ("pop up") in your web browser and are often used in online advertising.

To activate any of the features, click the Enable radio button next to the associated feature. Similarly if you would like to disable a feature, click the Disable radio button. When you have chosen all the features you want, click the Save button. All of the settings you have chosen will be activated and a reboot of the device is not required.
Dynamic DNS Client

Dynamic DNS service makes it possible for other sites on the Internet to establish connections to your machine without needing to track the IP address themselves. It is commonly used for running server software on a computer that has a dynamic IP address. Many Internet service providers dynamically assign IP addresses. Configuring Dynamic DNS allows your device to register its WAN IP with a Dynamic DNS server on the Internet.

You may want to enable the DDNS client if you are hosting a server behind your VT2442. For example, you may be hosting a web server or email server on your LAN running behind the VT2442. By enabling the DDNS client, users will be able to enter a more user-friendly, English like name for your server in their web browser instead of having to remember a specific IP address.

Before you can use the Dynamic DNS feature of the VT2442, you must have previously established an account with a DNS service provider. You will need your user name, password and domain name associated with that account. If you do not remember your user name or password, please contact your DNS provider.

To access the Dynamic DNS page of the VT2442 Web UI, from the home page, click on the Advanced tab. Click on the Dynamic DNS Clients button. The following screen will be displayed:

```
Dynamic DNS Client

DDNS Server: DynDNS
Enable Client: [ ]
User Name: [ ]
Password: [ ]
Domain Name: [ ]

Save  Cancel
```
To enable Dynamic DNS Clients service:

- Select the service provider from the **DDNS Server** drop down list. The VT2442 supports **DynDNS** and **TZO** as possible service providers.
- Check the **Enable Client** checkbox
- Enter the **User Name** and **Password** associated with your DNS account
- Enter the **Domain Name**
- Click the **Save** button

You can check the DDNS status by accessing the DDNS Update Status page. From the home page, click on the **Status** tab. Click on the **DDNS Update Status** button.
**Static Routing**

Static routing is used to connect different/multiple networks on your LAN that are not on the same subnet. For example, suppose as shown in the example below, you have a router connected behind your VT2442. The computers attached directly behind the VT2442 (i.e. PC #1) will not be able to communicate directly with the computers behind the router (i.e. PC #2) unless you define a static route. You can define up to 16 static routes.
To setup static routing, from the home page, click on the Advanced tab. Click on the Static Routing button. The following screen will be displayed:

- Enter the New Destination IP. This is either the network IP address of the subnet or you can enter the IP address of each individual device on the subnet.
- Enter the Mask. The default value is 255.255.255.0.
- Enter the address of the next hop the traffic will take when traveling towards the destination subnet in the Gateway field.
- Enter the number of hops the traffic will take between network nodes in the Metric field. The default value is 0 which indicates the subnet is one hop away on your LAN.
- Click the Save button.

To delete a static route, simply check the Delete checkbox associated with the route you want to delete in the Routing Table and click the Save button.
Dynamic Routing

The VT2442 can dynamically define routes for WAN and LAN subnets using the Dynamic routing feature. It uses RIP (Routing Information Protocol) to exchange routing information with other routers on the network. The VT2442 supports RIP v1 (UDP protocol), RIP v2 (multicast protocol) and RIP v1 compatible (UDP protocol with multicast format). Routers using RIP v1 or RIP v1 compatible can communicate with each other. However, they will not be able to communicate with a router using RIP v2.

To enable dynamic routing, from the home page, click on the Advanced tab. Click on the Dynamic Routing button. The following screen will be displayed:

- Click the Enable RIP checkbox.
- Select the Protocol from the drop down list. Options are RIP v1, RIP v2, and RIP v1 Compatible.
- If using RIP v2, enter a Password. (optional). If you are using RIP v1, this field is disabled. The password can have a maximum of 16 characters.
- Specify the Direction in which routes will be distributed for both the LAN and WAN interfaces. The following options are available:
  - None – Do not send or receive any routing updates on the LAN/WAN interface
  - In – Receive routing updates on the LAN/WAN interface but do not send routing updates out
  - Out – Send routing updates out on the LAN/WAN interface but do not receive any updates from routers connected to the interface
  - Both – Receive and send routing updates on the LAN/WAN interface
- Click the Save button.

To disable dynamic routing, simply uncheck the Enable RIP checkbox and click the Save button.
Remote Web Access

Remote Web Access allows the device to be accessed and configured from anywhere on the Internet by using the WAN IP address and a specified port. For example, if the IP address of the Internet port of your VT2442 is 11.22.33.44 then you could access the device remotely by typing http://11.22.33.44:8080 in the address bar of your Internet browser. You control who can access your VT2442. You can limit access to a specific device (remote host) or provide unlimited access.

To enable remote web access, from the home page, click on the Advanced tab. Click on the Remote Web Access button. The following screen will be displayed:

- **Check the Enable checkbox.**
- **Enter the IP address of the device you want to allow access to you VT2442 in the Remote Network IP field.** If you want to provide access to all devices, enter 0.0.0.0.
- **Enter the subnet mask of the device accessing the VT2442 in the Remote Netmask field.** If you entered 0.0.0.0 in the Remote Network IP field to provide access to all devices, you will need to enter 0.0.0.0 here as well. Note that remote Web UI access using HTTP is not secure; hence it is recommended not to provide access to all devices on the Internet. The default is 255.255.255.255.
- **If you want to provide access via a port other than 8080, enter it in the Redirect Port field.** By default, port 8080 is used.
- **Click the Save button.**
Remote SSH Access

SSH stands for Secure Shell. SSH allows for advanced troubleshooting. This option should only be enabled under the supervision of Vonage Customer Care.

To enable remote SSH access, from the home page, click on the Advanced tab. Click on the Remote SSH Access button. The following screen will be displayed:

- Check the Enable checkbox.
- Enter the IP address of the device you want to allow access to you VT2442 in the Remote Host IP field. The default value is 0.0.0.0.
- Enter the subnet mask of the device accessing the VT2442 in the Remote Netmask field. If you entered 0.0.0.0 in the Remote Host IP field to provide access to all devices, you will need to enter 0.0.0.0 here as well. The default is 255.255.255.255.
- Click the Save button.
**Ethernet Switch**

The Ethernet Switch feature of the VT2442 allows you to manually set the speed of the Ethernet ports on your device. You would only need to set the value of your Ethernet port if auto detection failed for some reason.

You can individually set your Ethernet ports to **Auto** (auto detection), **10/Half Duplex**, **10/Full Duplex**, **100/Half Duplex** and **100/Full Duplex**. **Auto** is the default value.

To set the value of your Ethernet port, from the home page, click on the **Advanced** tab. Click on the **Ethernet Switch** button. The following screen will be displayed:

- Select the value you want to assign to the Ethernet port from the **Set Value** drop down list. Possible values are **Auto** (auto detection), **10/Half Duplex**, **10/Full Duplex**, **100/Half Duplex** and **100/Full Duplex**.
- Click the **Save** button.
Tools
The next section of the VT2442 Web UI is the tools section. The tools section allows you to save or import a configuration, restart the VT2442, set up remote logging and run PING tests.

The Tools section of the Web UI has six features.

- Restore Defaults
- Import/Export Configuration
- Remote Log – Router
- User Management
- Ping Test
- Restart
**Restore Defaults**

To access the Restore Defaults page, from the home page, click on the **Tools** tab. Click on the **Restore Defaults** button. The following screen will be displayed:

The **Restore Defaults** button will perform a factory reset on the VT2442. A factory reset sets the device back to the default values; therefore it will clear all the router settings you have configured in the device. Examples of the settings that will be lost are ISP information and security settings. Before performing a **Restore Defaults**, we suggest you save your current configuration settings. See **Export Configuration**.

**Caution:** Performing a factory reset on the VT2442 will reset ALL the values you defined. You will need to define these values again or restore them from a previously saved backup.

To restore the factory default values, click the **Restore Defaults** button. The VT2442 will automatically reboot. You will need to login to the Web UI again once the device finishes rebooting.

In addition to the restore Defaults function, this page also gives you access to enable/disable the PMTU Discovery setting. PMTUD stands for Path Maximum Transmission Unit Discovery. It is a method of calculating the maximum transmission unit size that can be sent between two IP addresses without causing IP Fragmentation. PMTUD should only be disabled if there is a problem with fragmentation and packet size. You should only Disable (or Enable) PMTUD if instructed to do so by your ISP or Vonage Customer Care. **We do not recommend you change this setting.**
Import/Export Configuration

So you’ve spent time installing your VT2442 and perhaps customizing it. Maybe you’ve set up some PPPoE settings or entered some special port forwarding rules. It’s working great – now what? We recommend you save your configuration.

When you save the configuration you are saving all the router settings you have configured in the device. Examples of the settings that are saved are ISP information including DSL PPPoE user name and password, and security settings.

It is a good idea to save your current configuration for a couple of reasons:

- If you will be using your VT2442 in different locations
- In the event you need to perform a reset of the VT2442 (either by pressing the reset button on the back of the VT2442 or via the Restore Defaults page of the Web UI)

Having multiple configurations is useful if you use your VT2442 at different locations. For example, suppose you travel extensively between New York and Vancouver. You can have a configuration file for each city. The file will contain all information necessary for you to connect to your ISP in that city. When you move from one location to the other, you can simply restore the configuration file for that city. You will not need to go through the user interface and reset all your router values.

Although it’s not common, there may be a need to perform a hard reset on the VT2442. A hard reset is performed by pressing and holding the Reset button on the back of the device for 30 seconds. Typically the only reasons you may need to perform a hard reset of the device is if you forget the password you defined (assuming you changed it from the default password) or you are instructed to do so by a member of Vonage’s Customer Care team. If you perform a hard reset, it resets all the settings you entered back to the original values.
Log in to the Web UI. From the home page click on the **Tools** tab and then choose the **Import/Export Configuration** button. The following screen will be displayed:

To save your current configuration:
- Click on the **Export** button. The **File Download** window will be displayed. Click on the **Save** button.
- The **Save As** window will be displayed. Enter a **File name** (or use the default) and click **Save**.

To restore a previously exported configuration, you need to import the configuration file:
- Click on the **Import** button. The **Import** window will be displayed.
- Click on the **Browse** button. The **Choose file** window will be displayed.
- Locate the file you want to restore and click on the **Open** button. The filename will appear in the **Enter Filename** field.
- Click on the **Import** button.
- A message will appear indicating the VT2442 is restarting.
**Remote Log – Router**

Most users will not need to use the Remote Log utility. The log entries should be interpreted by users who have sufficient networking knowledge or a member of the Vonage Customer Care team.

To access the remote log feature of the VT2442, from the home page click on the **Tools** tab and then choose the **Remote Log – Router** button. The following screen will be displayed:

To setup remote logging:
- Select the **Log Level** from the drop down list. Any messages that have the severity level you chose, or higher, are logged to the destination you specified.
- If you would like to specify a new syslog server to send the log entries to (or have not previously entered one) enter the IP address of the syslog server in the **Add an IP address** field and click on the add button.
- Select a Logging Destination from the drop down list.
- Click on the **Save** button. The log entries are now being sent to the syslog server you specified.
The following is a list of the available log levels in order of severity:

- **Panic** — condition that causes the VT2442 to completely stop functioning
- **Alert** — conditions that require immediate correction
- **Critical** — critical conditions
- **Error** — error conditions that generally have less serious consequences than panic, alert, or critical errors
- **Warning** — conditions that may need to be monitored
- **Notice** — conditions that are not errors but might need special attention; this is the default Log Level setting
- **Info** — events or non-error condition
- **Debug** — software debugging messages; specify this level only when directed by a Vonage Customer Care agent
User Management

The User Management page of the Web UI allows you to change your User Name and password as well as set the Idle Timeout period.

From the home page click on the Tools tab and then choose the User Management button. The following screen will be displayed:

User Management

User Management is used to change your User Name or Password.

- User Name: [Input Field]
- Password: [Input Field]
- Confirmed Password: [Input Field]
- Idle Timeout: [Input Field] minutes

Save  Cancel
User Name and Password

The default user name is **router** and the default password is **router**.

You can change your user name or password.

To change your user name, enter the new user name in the **User Name** field.

To change your password:

1. Simply enter a new password in the **Password** field. A valid password can contain has up to 64 characters.
2. Re-enter that same password in the **Confirmed Password** field.

**Caution:** If you change the password from the default settings, be sure to remember it. If you forget the password you define, the only way to gain access to these web pages will be to perform a hard reset on the device. Performing a hard reset on the device will reset ALL user defined router values. You will need to define these values again or restore them from a previously saved backup.

To perform a hard reset on the device:

1. Press and hold the reset button for 10 seconds. The reset button is located on the back of the device and may require a small non-conducting object, such as a plastic body pen, be inserted to press it.
2. Wait for the device to reboot. Wait until the VT2442 completes its startup sequence. This usually takes about 30 seconds.
3. You will now be able to login to the device using the default user name and password.

Idle Timeout

Idle Timeout specifies the length of time a user can be inactive without having to re-login to the VT2442 user interface. The default is 10 minutes. So this means if you are logged in to the VT2442 user interface but are not actively using it, you will automatically be logged out after 10 minutes. You can change the Idle timeout value by entering a new value in the field and clicking on the **Save** button.
Ping Test

Ping stands for Packet Internet Groper. It is a utility used to determine if a particular IP address is present on line and accessible. It works by sending a packet to the IP address in question and waiting for a reply.

A Ping test is useful in troubleshooting network problems. It not only determines whether your computer can communicate with a remote device, but also provides indicators of the general speed or reliability of the network connection. The VT2442 allows you to test your Local Area Network (LAN) connection using the Ping command.

Most users will not need to use the ping utility unless asked to do so by a member of the Vonage Customer Care team. The results of a ping test should be interpreted by users who have sufficient networking knowledge or a member of the Vonage Customer Care Team.

To perform a Ping test, from the home page click on the Tools tab and then choose the Ring Test button. The following screen will be displayed:

- Enter the IP address you want to ping in the Enter IP Address to Ping field.
- Specify the size of the packet you want to send in the Packet Size field.
- Specify the number of times you want to send a packet to the remote device in the Number of Echo Requests field.
- Click on the Test button.
Restart

The Restart function of the VT2442 will reboot your VT2442. It has the same effect as power cycling your device.

Before restarting your device, if you want to save the current configuration settings active on your device press the Save button on the page on which you made changes. These settings will be restored when you restart the device.

To restart your VT2442, from the home page click on the Tools tab. Click on the Restart button. The following screen will be displayed:

Click the Restart button. The device will reboot. You will need to login again to the VT2442 Web UI.
Status

The Status section contains information about your VT2442 and its configuration. This information may be useful when troubleshooting problems with your VT2442. If you call Vonage Customer Support you may be asked to provide some of this information.

The Status section of the Web UI has six features.

- **Network Statistics**
- **Connection Status**
- **DDNS Update Status**
- **DHCP Clients**
- **Product Information**
- **System Log – Router**

Network Statistics

The Network Statistics page displays information related to both your Ethernet and WAN connection. *Understanding the information on this page requires advanced networking knowledge. We recommend that only users with advanced networking knowledge or a member of Vonage Customer Care interpret these statistics.*

To access the Network Statistics of your VT2442, from the home page click on the **Status** tab. Click on the **Network Statistics** button. The following screen will be displayed:

![Network Statistics Screen](image)

Choose an interface to view your network statistics:

- Ethernet
- WAN

<table>
<thead>
<tr>
<th>Transmit</th>
<th></th>
<th></th>
</tr>
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<tbody>
<tr>
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<td>Good Tx Broadcast Frames</td>
</tr>
<tr>
<td>Good Tx Multicast Frames</td>
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<td>Good Rx Frames</td>
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<td>Good Rx Broadcast Frames</td>
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<td>Good Rx Multicast Frames</td>
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<td>Undersized Frames</td>
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<tr>
<td>Overtimes</td>
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<td></td>
</tr>
</tbody>
</table>

To display information related to your Ethernet (LAN) connection, click on the **Ethernet** radio button.
To display information related to your WAN (Internet) connection, click on the **WAN** radio button.

The information on the **Network Statistics** page is not updated automatically. To update the information displayed on the page, click the **Refresh** button.
Connection Status
The Connection Status Page displays the status of your WAN connection.

To access the Connection Status page of your VT2442, from the home page click on the Status tab. Click on the Connection Status button. The following screen will be displayed:

There are 6 fields displayed on the page.

- **Description** – Indicates that the WAN connection information is displayed
- **Type** – Indicates the type of WAN connection. Values are DHCP, Static or PPPoE.
- **IP** – Displays the IP address of the WAN connection
- **State** – Indicates whether or not the VT2442 is connected to the Internet
- **Online** – Indicates how long the VT2442 has been connected to the Internet
- **Disconnect Reason** – If the VT2442 is not connected to the Internet, indicates the reason it was disconnected
DDNS Update Status

The DDNS Update Status page displays the status of your DDNS Client.

To access the Connection Status page of your VT2442, from the home page click on the Status tab. Click on the DDNS Update Status button. The following screen will be displayed:

The DDNS status is updated every time the VT2442 receives a new IP Address. To update the information displayed on the page, click the Refresh button. The possible status values are Updated, No IP Address Change and Error.

By default, the DDNS Client is disabled. To enable the DDNS client, click on the Advanced tab and then click on the Dynamic DNS Client button. Enter the appropriate information on that page and click the Save button.
DHCP Clients

The DHCP Clients page displays a list of LAN DHCP Clients.

To access the DHCP Clients page of your VT2442, from the home page click on the Status tab. Click on the DHCP Clients button. The following screen will be displayed:

A DHCP Client table will appear if your VT2442 is configured to be a DHCP server and there is a device plugged into the Ethernet (LAN) port. For each DHCP client, the following information is displayed:

- **MAC Address**: This is the MAC address of the device plugged into the LAN port of your VT2442.
- **IP Address**: The IP address assigned by the VT2442 to your device.
- **Host Name**: The name of the device that is plugged into the VT2442. This value may be blank.
- **Lease Time**: The number of days, hours, minutes and seconds until the current lease expires. A lease is how long you have your current IP address before a new one is assigned.

To update the information displayed on the page, click the Refresh button.
Product Information

The Product Information page displays the current hardware and software versions of your VT2442. If you need to call for support, a Vonage Customer Care agent may ask you for information from this page.

To access the **Product Information** page of your VT2442, from the home page click on the **Status** tab. Click on the **Product Information** button. The following screen will be displayed:

```
Product Information

Model Number: VT2442
HW Revision: 3
Serial Number: 159303615006752301015261
Ethernet MAC: 00:17:EE:06:73:6F

Software Versions
Gateway: 12.0.1-0000109-0.10.2
Boot Loader: 1.3.3.1101
```
System Log – Router

The System Log – Router displays all router-related activities. Understanding the information on this page requires advanced networking knowledge. We recommend that only users with advanced networking knowledge or a member of Vonage Customer Care interpret these statistics.

The System Log is a circular file. Once it reaches its maximum size, it will overwrite itself. A maximum of 32 entries can be displayed on the System Log page. Each time the VT2442 is restarted the system log is erased and a new one is created.

If remote logging is enabled, a log report is generated to a remote host. The information that is logged is dependent upon the severity level. You can enable remote logging on the Remote Log-Router page. Click on the Tools menu and then click on the Remote Log-Router button.

To access the System Log – Router page of your VT2442, from the home page click on the Status tab. Click on the System Log - Router button. The following screen will be displayed:

To update the information displayed on the page, click the Refresh button.
Help
In addition to the context sensitive help available throughout the Web UI, there is also a section dedicated to help.

The Help section of the Web UI has two features.

- Glossary
- Contact Information

Glossary
The Glossary contains explanations for terms used throughout the Web UI that you may not be familiar with. It is arranged alphabetically and contains a quick index up front to aid in finding terms quickly.

Contact Information
The Contact Information section provides information on how to reach Vonage’s Customer Care Team. In addition it gives you a link to quickly access your Vonage Account and the Online User Manual for the VT2442.