

Full Install Setup Guide

Actiontec F2250 Gateway

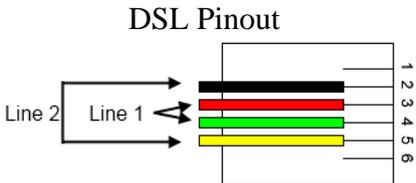
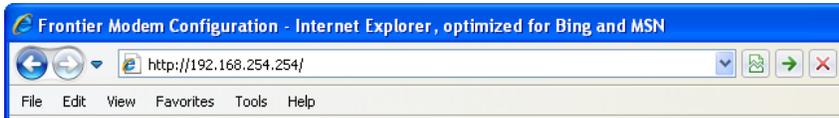
ACTIONTEC F2250 GATEWAY	2
OVERVIEW	2
AVAILABLE TRAINING	2
REQUIRED INSTALL STEPS	2
GOOD THINGS TO KNOW	2
SETUP GUIDE: RESIDENTIAL, DYNAMIC AND STATIC BUSINESS.....	3
INITIAL PROVISIONING	3
REMOTE ACCESS.....	9
STATIC LAN SETUP	11
OPTION: STATIC BUSINESS CLASS WITH DHCP ON PUBLIC LAN.....	14
VERIFY SERVICE.....	17
INSTALLATION COMPLETE	17
FIXING CONNECTION TYPE.....	18
CHANGE FROM CONNECTION TYPE DHCP TO PPPoE.....	18
WIRELESS SETTINGS.....	21
ENABLE WIRELESS	21
DISABLE WIRELESS.....	22
REVISIONS	23

Actiontec F2250 Gateway

Overview	<p>The Actiontec F2250 Gateway is capable of ADSL single line, bonded and VDSL operation.</p> <p>The F2250 Gateway will auto detect the DSL technology. As a result, the F2250 setup steps are the same for any DSL technology. This guide supports provisioning for single line, bonded and VDSL.</p>
Available training	<p>Search in TEDS for the keyword: F2250</p>  <p>Online training focusing on the Actiontec F2250 will continue to be released throughout the year.</p>
Required install steps	<p><u>Residential or Dynamic Business Class install</u></p> <p>Complete the following sections:</p> <ol style="list-style-type: none">1. Initial provisioning2. Verify service <p><u>Static Business Class install</u></p> <p>Complete the following sections:</p> <ol style="list-style-type: none">1. Initial provisioning2. Remote access3. Static LAN setup4. Verify service
Good things to know	<p>Repair Escalation Process:</p> <ul style="list-style-type: none">• Frontier Service Bulletin 506.2013 “HSI Troubleshooting – Escalation to Tier 2 Support” <p>Resetting F2250 to factory defaults:</p> <ul style="list-style-type: none">• Hold reset button in until power light turns orange/yellow (about 10 seconds) <p>Approved firmware version (12/13/2013): F2250-36.128L.02</p>

Setup Guide: Residential, Dynamic and Static Business

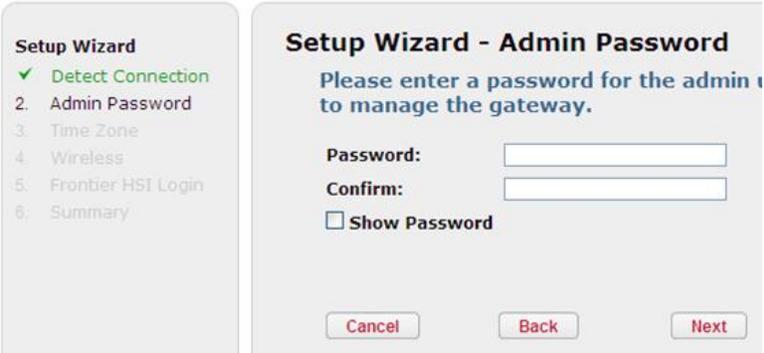
Initial provisioning

Step	Action
1	<p>Complete physical connections to the Actiontec F2250</p> <ul style="list-style-type: none"> • Power (switch on) • DSL • Laptop via Ethernet (any port 1-4) <div data-bbox="998 478 1414 661" style="text-align: center;">  <p>DSL Pinout</p> </div>
2	<p>Open a browser window, the setup wizard should automatically be displayed, however if the wizard does not appear, direct the browser to 192.168.254.254.</p> <div data-bbox="565 850 1404 968" style="text-align: center;">  </div>
3	<p>The Setup Wizard will start by auto detecting the WAN configuration. Once the Broadband, Transport and Connection information is green, click: Next.</p> <div data-bbox="597 1157 1421 1648" style="text-align: center;">  </div>

Continued on next page

Setup Guide: Residential, Dynamic and Static Business, Continued

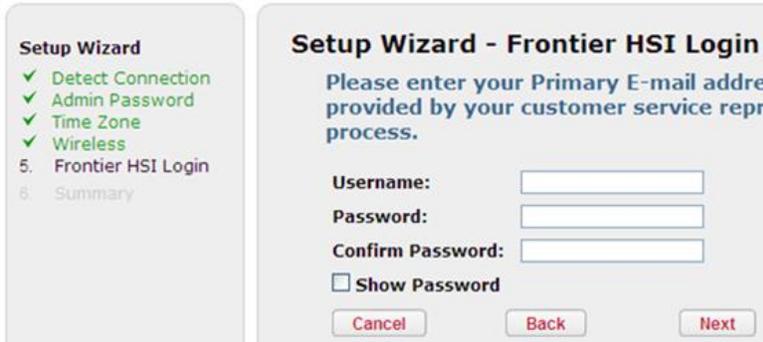
Initial provisioning (continued)

Step	Action
4	<p>Enter the modem password for the admin user. The passwords are as follows:</p> <ul style="list-style-type: none"> • Residential HSI: <ul style="list-style-type: none"> ○ Enter: admin twice and click: Next • Business Class HSI: <ul style="list-style-type: none"> ○ Enter: fr0nt13r twice and click: Next 
5	<ul style="list-style-type: none"> • Select: local Time Zone from the dropdown menu • Click: Next 

Continued on next page

Setup Guide: Residential, Dynamic and Static Business, Continued

Initial provisioning (continued)

Step	Action
6	<ul style="list-style-type: none"> Configure the desired wireless settings Click: Next 
7	<p>Enter the account Username and Password. *</p> <p>This is the account's primary e-mail address and password. If you wish to see the password as you type it, check the Show Password checkbox.</p> <p>Click: Next</p>  <p>*Note: If the Setup Wizard does not present this screen and instead shows the screen in step 8, the customer's port is incorrectly provisioned. Continue with step 8. You'll be directed to fix the connection later.</p>

Continued on next page

Setup Guide: Residential, Dynamic and Static Business, Continued

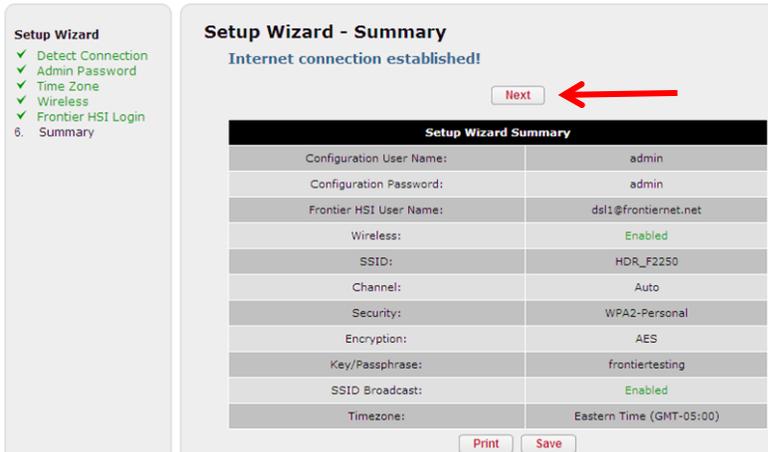
Initial provisioning (continued)

Step	Action
8	<p>The Wizard will now attempt to establish a connection to the Internet. The following screen will appear for a short time.</p>  <p>IF you receive the screen shown below...Click: Retry Note: DSL must be up and trained for this step to be successful.</p> 

Continued on next page

Setup Guide: Residential, Dynamic and Static Business, Continued

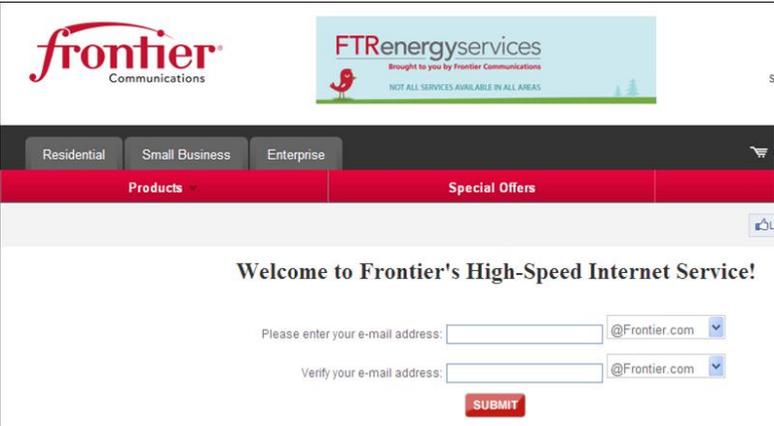
Initial provisioning (continued)

Step	Action																								
9	<p>Once an Internet connection has been established and authentication is complete the Summary page will be displayed.</p> <p>This Summary page can be saved or printed, however you must click Next in order to complete the installation process. The browser will be redirected to the Frontier Welcome Page.</p> <p>Click: Next</p> <div data-bbox="576 772 1344 1224">  <table border="1" data-bbox="803 892 1339 1207"> <thead> <tr> <th colspan="2">Setup Wizard Summary</th> </tr> </thead> <tbody> <tr> <td>Configuration User Name:</td> <td>admin</td> </tr> <tr> <td>Configuration Password:</td> <td>admin</td> </tr> <tr> <td>Frontier HSI User Name:</td> <td>dsl1@frontiernet.net</td> </tr> <tr> <td>Wireless:</td> <td>Enabled</td> </tr> <tr> <td>SSID:</td> <td>HDR_F2250</td> </tr> <tr> <td>Channel:</td> <td>Auto</td> </tr> <tr> <td>Security:</td> <td>WPA2-Personal</td> </tr> <tr> <td>Encryption:</td> <td>AES</td> </tr> <tr> <td>Key/Passphrase:</td> <td>frontiertesting</td> </tr> <tr> <td>SSID Broadcast:</td> <td>Enabled</td> </tr> <tr> <td>Timezone:</td> <td>Eastern Time (GMT-05:00)</td> </tr> </tbody> </table> </div>	Setup Wizard Summary		Configuration User Name:	admin	Configuration Password:	admin	Frontier HSI User Name:	dsl1@frontiernet.net	Wireless:	Enabled	SSID:	HDR_F2250	Channel:	Auto	Security:	WPA2-Personal	Encryption:	AES	Key/Passphrase:	frontiertesting	SSID Broadcast:	Enabled	Timezone:	Eastern Time (GMT-05:00)
Setup Wizard Summary																									
Configuration User Name:	admin																								
Configuration Password:	admin																								
Frontier HSI User Name:	dsl1@frontiernet.net																								
Wireless:	Enabled																								
SSID:	HDR_F2250																								
Channel:	Auto																								
Security:	WPA2-Personal																								
Encryption:	AES																								
Key/Passphrase:	frontiertesting																								
SSID Broadcast:	Enabled																								
Timezone:	Eastern Time (GMT-05:00)																								

Continued on next page

Setup Guide: Residential, Dynamic and Static Business, Continued

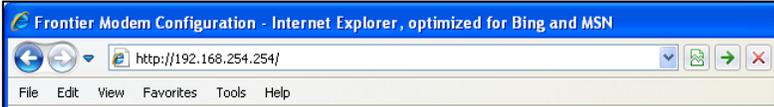
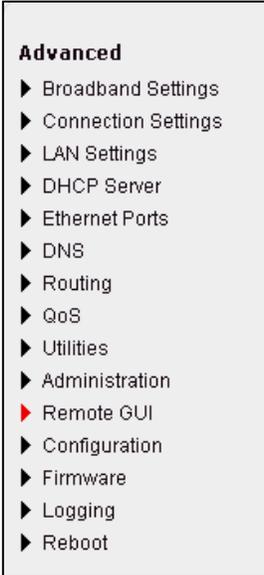
Initial provisioning (continued)

Step	Action						
10	<ul style="list-style-type: none"> Residential HSI install: Complete E-signature page. Business HSI install: E-signature page is not used. 						
11	<p>The next step depends on whether the Setup Wizard skipped the Username/Password screen back on Initial provisioning, page 5</p> <table border="1" data-bbox="570 1163 1409 1318"> <thead> <tr> <th data-bbox="570 1163 932 1241">Was User/Pass screen skipped?</th> <th data-bbox="932 1163 1409 1241">Go to...</th> </tr> </thead> <tbody> <tr> <td data-bbox="570 1241 932 1276">No</td> <td data-bbox="932 1241 1409 1276">Next step (step 12)</td> </tr> <tr> <td data-bbox="570 1276 932 1318">Yes</td> <td data-bbox="932 1276 1409 1318">Fixing connection type (p18)</td> </tr> </tbody> </table>	Was User/Pass screen skipped?	Go to...	No	Next step (step 12)	Yes	Fixing connection type (p18)
Was User/Pass screen skipped?	Go to...						
No	Next step (step 12)						
Yes	Fixing connection type (p18)						
12	<p>The next step depends on the type of install.</p> <p>Residential HSI.....Go to Verify service (page 17) Dynamic Business Class HSI.....Go to Verify service (page 17) Static Business Class HSI.....Go to Remote access (page 9)</p>						

Continued on next page

Setup Guide: Residential, Dynamic and Static Business, Continued

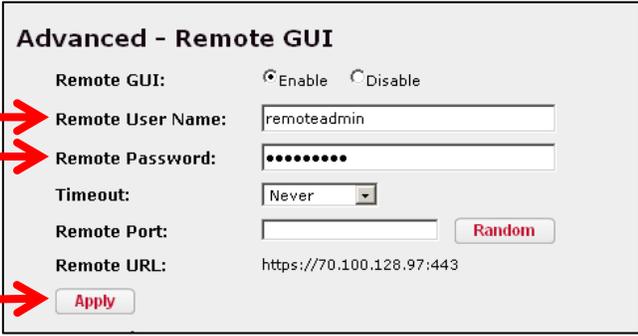
Remote access

Step	Action
1	Direct your browser to: http://192.168.254.254 
2	You may be prompted for the modem's Administrator Username and Password as determined in Initial provisioning: Step 4 section above. <ul style="list-style-type: none"> • Username: admin • Password: fr0nt13r
3	Click: Advanced in the top menu bar. 
4	Click: Remote GUI in the left hand navigation window. 

Continued on next page

Setup Guide: Residential, Dynamic and Static Business, Continued

Remote access (continued)

Step	Action
5	<ul style="list-style-type: none"> Click: Enable Click: Apply 
6	<p>Remove the default information and enter the following:</p> <ul style="list-style-type: none"> Remote User Name: remoteadmin Remote Password: f+rR3m0te ← f plus r R 3 m zero t e Click: Apply 
7	<p>Static Business Class HSI.....Go to Static LAN setup (page 11)</p>

Continued on next page

Setup Guide: Residential, Dynamic and Static Business, Continued

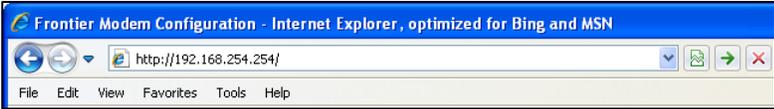
Static LAN setup

The following table gives the steps for a Static Business Class HSI setup only.

For a Static Business Class setup, following actions must be completed:

- **Initial provisioning** (previous section).
- **Remote GUI** (previous section)
- **Static LAN setup** (following section)
- **Verify service** (later section)

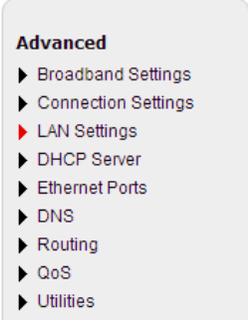
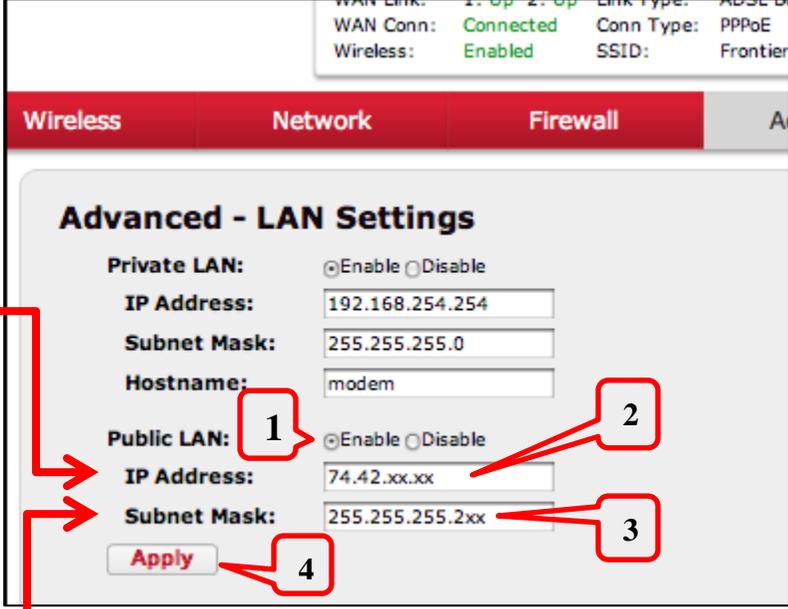
The following steps complete the **Static LAN Setup**.

Step	Action
1	Direct your browser to: http://192.168.254.254 
2	You may be prompted for the modem's Administrator Username and Password as determined in Initial provisioning – Step 3 (page 3). <ul style="list-style-type: none"> • Username: admin • Password: fr0nt13r
3	Click: Advanced in the top menu bar. 

Continued on next page

Setup Guide: Residential, Dynamic and Static Business, Continued

Static LAN setup (continued)

Step	Action
4	<p>Click: LAN Settings in the left hand navigation window.</p> 
5	<p>On the Advanced – LAN Settings page, set the following:</p> <ol style="list-style-type: none"> 1. Public LAN: Enable 2. IP Address: Static LAN address + 1 (gateway) 3. Subnet Mask: Static LAN block subnet mask 4. Click: Apply (gateway will reboot) 

Gateway Address

<Static LAN +1>

Example:

Static LAN Block = 128.1.2.16/30

Static LAN + 1 = 128.1.2.17

Static LAN Block Subnet Mask

Example:

Static LAN Block= 128.12.16/30

/30 - 255.255.255.252

/29 - 255.255.255.248

/28 - 255.255.255.240

Continued on next page

Setup Guide: Residential, Dynamic and Static Business, Continued

Static LAN setup (continued)

Step	Action
6	<p>The next step depends on what the customer is expecting. Select the appropriate option (A or B). (Option A is considered the standard option)</p> <p>A. Standard Static Business Class...Go to Verify service (p17) <u>Customer device is manually assigned static IPs</u></p> <ul style="list-style-type: none"> • Customer Device: IP address manually assigned <ul style="list-style-type: none"> ○ Static IP address ○ Subnet mask ○ Default gateway • Actiontec F2250: Assigns Private IPs • Private LAN: Supported (192.168.254.X) • Wireless: Supported (can be disabled or enabled) <p>B. Modify DHCP for Public LAN...Continue on to Static Business Class with DHCP on Public LAN (page 14) <u>Customer device is assigned Static IPs by the modem</u></p> <ul style="list-style-type: none"> • Customer Device: set to obtain IP address automatically • Actiontec F2250: Assigns Static IP addresses • Private LAN: Not available • Wireless: Should be disabled

Continued on next page

Setup Guide: Residential, Dynamic and Static Business, Continued

Option: Static Business Class with DHCP on Public LAN

The following table gives the steps for a Static Business Class HSI setup with DHCP enabled on the Public LAN.

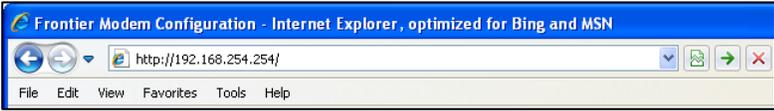
For a Static Business Class with DHCP setup, three items must be completed:

- Complete the **Initial provisioning** section.
- Complete the **Remote access** section.
- Complete the **Static LAN setup** section.
- Complete this **Static Business Class with DHCP on Public LAN** section.

Service behavior using this configuration:

- Customer Device: set to obtain IP address automatically
- Actiontec F2250: Assigns Static IP addresses
- Private LAN: Not available
- Wireless: Should be disabled

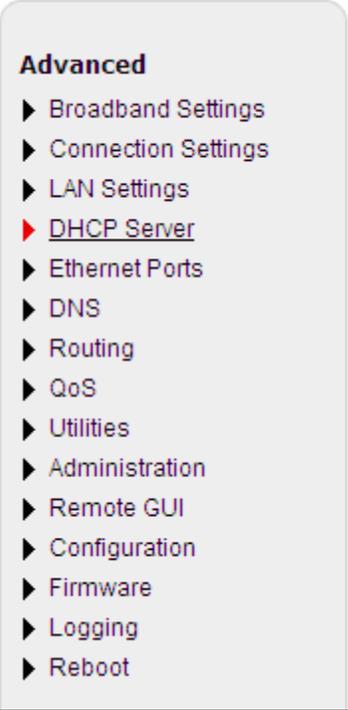
The following table gives the steps necessary to enable DHCP on the customer's public static LAN block.

Step	Action
1	Direct your browser to: http://192.168.254.254 
2	You may be prompted for the modem's Administrator Username and Password as determined in Initial provisioning – Step 3 (page 3). <ul style="list-style-type: none"> • Username: admin • Password: fr0nt13r
3	Click: Advanced in the top menu bar. 

Continued on next page

Setup Guide: Residential, Dynamic and Static Business, Continued

**Option: Static
Business Class
with DHCP on
Public LAN**
(continued)

Step	Action
4	<p>Click: DHCP Server in the left hand navigation window.</p>  <p>The screenshot shows a vertical list of settings under the heading "Advanced". The items are: Broadband Settings, Connection Settings, LAN Settings, DHCP Server, Ethernet Ports, DNS, Routing, QoS, Utilities, Administration, Remote GUI, Configuration, Firmware, Logging, and Reboot. A red arrow points to the "DHCP Server" item.</p>

Continued on next page

Setup Guide: Residential, Dynamic and Static Business, Continued

Option: Static Business Class with DHCP on Public LAN
(continued)

Step	Action
5	<p>1. Select: Public from the LAN dropdown menu.</p> <p>Note: The IP Range Start, IP Range End, Subnet Mask, and Default Gateway information should be filled out automatically. The Public LAN information will be calculated from the configuration of the Public LAN entered on the LAN Settings Page.</p> <p>2. Click: Apply</p> <div data-bbox="570 842 1409 1528" style="border: 1px solid black; padding: 10px;"> <p>Advanced - DHCP Server</p> <p>DHCP Server: <input checked="" type="radio"/> Enable <input type="radio"/> Disable</p> <p>LAN: Public 1</p> <p>IP Range Start: <input type="text" value="74.42.36.54"/></p> <p>IP Range End: <input type="text" value="74.42.36.54"/> or <input type="text" value="1"/> Users</p> <p>Subnetmask: <input type="text" value="255.255.255.252"/></p> <p>Default Gateway: <input type="text" value="74.42.36.53"/></p> <p>DNS Server: Dynamic</p> <p>Wins Server: <input type="text"/></p> <p>Lease Time: <input type="text" value="4"/> Hours <input type="text" value="0"/> Minutes</p> <p>DHCP Option 66: <input type="checkbox"/> <input type="text"/></p> <p>Additional Option: Value: <input type="text"/></p> <p>Additional Option: Value: <input type="text"/></p> <p>Auto DHCP Reservation: <input checked="" type="radio"/> Enable <input type="radio"/> Disable</p> <p style="text-align: center;">2 <input type="button" value="Apply"/></p> </div>
6	<p>Disable wireless. See the Wireless Settings – Disable wireless section (page 22)</p>
7	<p>Go to the Verify service section (page 17)</p>

Continued on next page

Setup Guide: Residential, Dynamic and Static Business, Continued

Verify service Use this table to select the proper service verification steps called out below:

Type of Install	Verification Steps
Residential	Residential / Dynamic Business Class Install
Dynamic Business Class	Residential / Dynamic Business Class Install
Static Business Class (Default: Private DHCP)	Static Business Class Install > DHCP set to Private LAN Subnet (default setting)
Static Business Class (Option: Public DHCP)	Static Business Class Install > DHCP to Public LAN Subnet

Residential / Dynamic Business Class Install

1. Access e-signature page.
2. Verification complete!

Static Business Class Install

DHCP set to Private LAN Subnet (default setting)

1. Manually assign an IP address from customer's LAN block to your PC
 - IP address: <static LAN block +2>
 - Subnet mask: <as set on page 12, step 5>
 - Default gateway: <static LAN block +1>
 - DNS address: 74.40.74.40
2. Go to: <http://www.myipaddress.com>
 - It should report the IP address you assigned to your PC
3. Verification complete!

Static Business Class Install

DHCP to Public LAN Subnet (option)

1. Release and renew your PC's IP address
 - ipconfig/release
 - ipconfig/renew
2. New IP address should be: <static LAN block +2>
3. Go to: <http://www.myipaddress.com>
 - It should report the IP address you assigned to your PC
4. Release customer's IP address from your PC
 - ipconfig/release
5. Verification complete!

Installation complete

If you passed the **Verify service** testing, the install is complete.

Fixing Connection Type

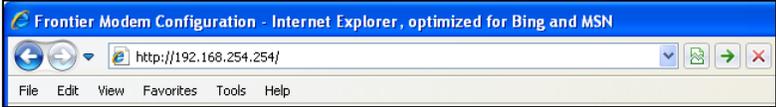
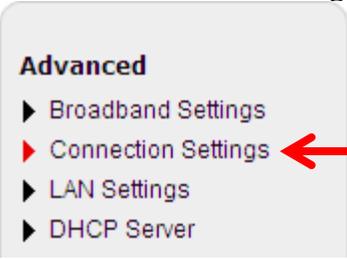
Change connection type from DHCP to PPPoE

The Actiontec F2250 must be on a PPPoE connection.

There are some internal network scenarios that will result in the F2250 selecting to use a DHCP connection type. In these cases, the F2250 must be changed to a PPPoE connection type and the customer's port must be rebuilt by the MCO.

Use the following steps to change to a PPPoE connection type.

IMPORTANT: These steps must be followed in the order they are presented. Any other order can result in the customer's port reverting back to a DHCP connection type.

Step	Action
1	Direct your web browser to: http://192.168.254.254 
2	Click: Advanced on the top menu bar. 
3	Click: Connection Settings on the left hand menu. 

Continued on next page

Fixing Connection Type, Continued

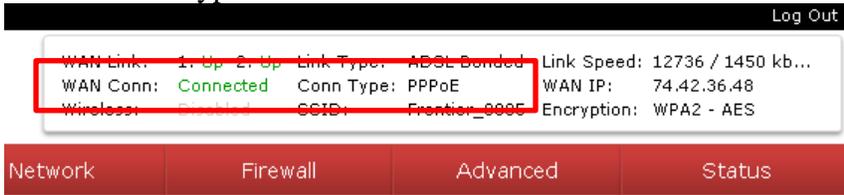
Change connection type from DHCP to PPPoE (continued)

Step	Action									
4	<p>1. Select: PPPoE from the ISP Protocol drop down menu</p> <p>2. Enter: customer's PPP username and password</p> <p>3. Click: Apply</p> <div data-bbox="565 548 1352 1251" style="border: 1px solid gray; padding: 10px;"> <p>Advanced - Connection Settings</p> <p>1 ISP Protocol: PPPoE</p> <p>PPP Username: <input type="text" value="labstatic2@frontier.com"/></p> <p>2 PPP Password: <input type="password" value="....."/></p> <p>Confirm PPP Password: <input type="password" value="....."/></p> <p><input checked="" type="checkbox"/> Hide Password</p> <p>PPP Auto Connect: <input checked="" type="radio"/> Enable <input type="radio"/> Disable</p> <p>No PPP Credentials: <input type="radio"/> Enable <input checked="" type="radio"/> Disable</p> <p>MTU: <input checked="" type="radio"/> Auto <input type="radio"/> Manual</p> <p>Proxy Arp: <input type="radio"/> Enable <input checked="" type="radio"/> Disable</p> <p>Keep Alive: <input checked="" type="radio"/> Enable <input type="radio"/> Disable</p> <p>Lcp Echo Failures: <input type="text" value="3"/> (1-30)</p> <p>Lcp Echo Duration: <input type="text" value="30"/> (5-300)</p> <p>Lcp Echo Retry Duration: <input type="text" value="5"/> (5-300)</p> <p>DNS Type: <input checked="" type="radio"/> Dynamic DNS <input type="radio"/> Static DNS</p> <p>3 <input type="button" value="Apply"/></p> </div>									
5	<p>Authentication is expected to fail.</p> <ul style="list-style-type: none"> • WAN Conn: will indicate Disconnected • Conn Type: will be PPPoE • The F2250's Internet light will be red <div data-bbox="565 1444 1411 1740" style="border: 1px solid gray; padding: 10px;"> <p style="text-align: right;">Log Out</p> <table border="1" style="width: 100%; border-collapse: collapse;"> <tr> <td style="padding: 2px;">WAN Link: 1: Up 2: Up</td> <td style="padding: 2px;">Link Type: ADSL Bonded</td> <td style="padding: 2px;">Link Speed: N/A</td> </tr> <tr> <td style="padding: 2px;">WAN Conn: Disconnected</td> <td style="padding: 2px;">Conn Type: PPPoE</td> <td style="padding: 2px;">WAN IP: N/A</td> </tr> <tr> <td style="padding: 2px;">Wireless: Enabled</td> <td style="padding: 2px;">SSID: Frontier_0005</td> <td style="padding: 2px;">Encryption: Off</td> </tr> </table> <p style="text-align: center;"> Network Firew Advanced Status </p> <div style="text-align: center; margin-top: 10px;">  </div> </div>	WAN Link: 1: Up 2: Up	Link Type: ADSL Bonded	Link Speed: N/A	WAN Conn: Disconnected	Conn Type: PPPoE	WAN IP: N/A	Wireless: Enabled	SSID: Frontier_0005	Encryption: Off
WAN Link: 1: Up 2: Up	Link Type: ADSL Bonded	Link Speed: N/A								
WAN Conn: Disconnected	Conn Type: PPPoE	WAN IP: N/A								
Wireless: Enabled	SSID: Frontier_0005	Encryption: Off								

Continued on next page

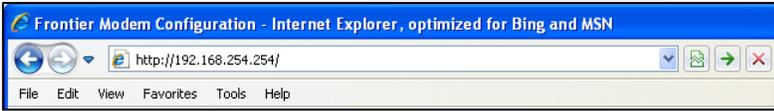
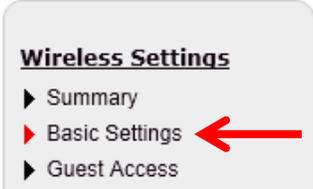
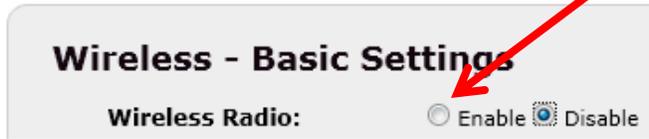
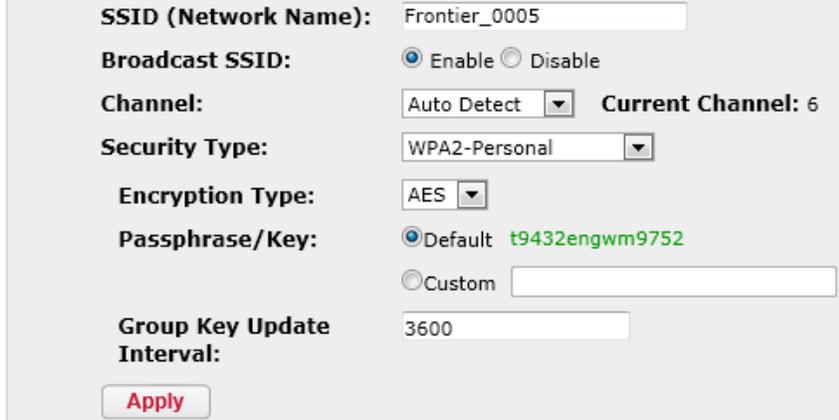
Fixing Connection Type, Continued

Change connection type from DHCP to PPPoE
(continued)

Step	Action
6	<p>Contact MCO to have customer's port rebuilt: 877-626-8990.</p> <p>Announce to MCO "The Actiontec F2250 selected DHCP connection type. Please rebuild customer's port for a PPPoE connection".</p> <p>Wait for MCO to complete port rebuild.</p> 
7	Reboot F2250 (power cycle)
8	<p>Authentication is expected to succeed. After DSL light/s are green, log into F2250 and verify...</p> <ul style="list-style-type: none"> • F2250 Internet light is blue (blinking is OK) • WAN Conn: is Connected • Conn Type: is PPPoE  <p>Log Out</p> <p>WAN Link: 1: Up 2: Up Link Type: ADSL Bonded Link Speed: 12736 / 1450 kb... WAN Conn: Connected Conn Type: PPPoE WAN IP: 74.42.36.48 Wireless: Disabled SSID: Frontier_9995 Encryption: WPA2 - AES</p> <p>Network Firewall Advanced Status</p>
9	Go back to Initial provisioning – Step 12 (page Error! Bookmark not defined.)

Wireless Settings

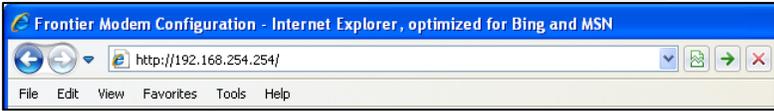
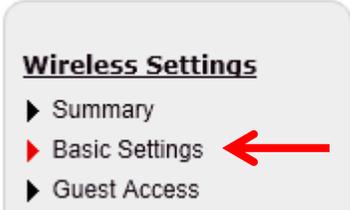
Enable wireless Perform the following steps to enable wireless.

Step	Action
1	Direct your web browser to: http://192.168.254.254 
2	Click: Wireless on the top menu bar. 
3	Click: Basic Settings on the left hand menu. 
4	Click: Enable . 
5	Configure desired settings and click: Apply . 

Continued on next page

Wireless Settings, Continued

Disable wireless Perform the following steps to disable wireless.

Step	Action
1	Direct your web browser to: http://192.168.254.254 
2	Click: Wireless on the top menu bar. 
3	Click: Basic Settings on the left hand menu. 
4	Click: Disable , and then click: Apply . 

Revisions

Name	Date	Ver.	Description
Mark Krasz	12/13/2013	1.0	Initial release supporting roll out
