
FaxFinder IP®

IP Fax Server

Model: FF240-IP

Administrator User Guide



FaxFinder IP® Administrator User Guide

S000493A, Version A

Model: FF240-IP

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Revisions

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A	06/08/11	Initial release.

Patents

This device covered by the following patents: 6,031,867; 6,012,113; 6,009,082; 5,905,794; 5,864,560; 5,815,567; 5,815,503; 5,812,534; 5,809,068; 5,790,532; 5,764,628; 5,764,627; 5,754,589; D394,250; 5,724,356; 5,673,268; 5,673,257; 5,644,594; 5,628,030; 5,619,508; 5,617,423; 5,600,649; 5,592,586; 5,577,041; 5,574,725; D374,222; 5,559,793; 5,546,448; 5,546,395; 5,535,204; 5,500,859; 5,471,470; 5,463,616; 5,453,986; 5,452,289; 5,450,425; D361,764; D355,658; D355,653; D353,598; D353,144; 5,355,365; 5,309,562; 5,301,274, 6,219,708. Other patents pending.

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CONTENTS

CHAPTER 1 – PRODUCT DESCRIPTION & SPECIFICATIONS	5
PRODUCT DESCRIPTION	5
SAFETY WARNINGS	5
TECHNICAL SPECIFICATIONS	6
CHAPTER 2 – GETTING STARTED	7
FF240-IP OPERATING MODES.....	7
MECHANICAL MOUNTING	10
EXTERNAL DESCRIPTIONS	11
Back Panel Connections.....	11
Front Panel LEDs.....	11
INSTALLATION OVERVIEW.....	12
CHAPTER 3 – WEB MANAGEMENT INTERFACE	18
LOGIN SCREEN.....	18
Forgot Password?	18
HOME SCREEN	19
STATUS & LOGS SECTION	20
System Status.....	20
Fax Status.....	21
Mail Queue	24
Mail Log	25
Inbound Fax Log.....	26
Outbound Fax Log.....	27
Call Log.....	28
SYSTEM CONFIGURATION SECTION	29
Network	29
SMTP	30
Time	31
Printer	32
Shares	34
Certificates.....	36
Save/Restore.....	38
Software Update.....	39
Reboot	40
Debug.....	40
FAX CONFIGURATION SECTION	41
SIP / T.38 Configuration	41
Inbound Routing	44
Outbound.....	48
Outbound Approval	49
Cover Pages	51
Store & Forward Fax (T.37).....	53
Fax Log	55
USERS SECTION	56
CONTACTS SECTION.....	60
Personal	60
Global.....	61
Personal Groups.....	62

Global Groups	62
SEND A FAX SCREEN	63
Send Fax	64
LOGOUT	66
CHAPTER 4 – CLIENT SOFTWARE INSTALLATION	67
INSTALLATION	67
Push Installation Method	71
SETTING THE USAGE RIGHTS FOR THE PRINTER	72
ASSOCIATING CLIENT SOFTWARE AND USER WITH THE FF240-IP UNIT.....	72
Disassociating the Client from a Specific FF240-IP Unit	75
CHAPTER 5 – FAXFINDER-IP OPERATION	76
SENDING FAXES	77
The Schedule Fax Screen (New Fax)	77
Send Fax with Client Software	81
Send Fax by Printing	81
Send Fax from Email (T.37)	82
Send Fax from Web Interface	82
Send Fax by Web API	83
USING THE CLIENT SOFTWARE.....	83
File Menu Command Descriptions	83
Edit Menu Command Descriptions	84
Tools Menu Command Descriptions.....	86
Devices Tab (Main Window)	87
Print Capture Tab (Main Window).....	89
USING THE MULTI-TECH TIFF VIEWER	90
Toolbar Icons	90
Importing Fax Images into Other Application Programs	91
APPENDIX A – TROUBLESHOOTING	92
APPENDIX B – CUSTOMIZATION	95
WEB SERVICES API	95
T.37 ADVANCED USAGE	116
APPENDIX C – CREATING COVER PAGES	118
SOME OF THE SOFTWARE KNOWN TO WORK.....	118
TEXT FIELD NAMES AND DESCRIPTIONS	118
APPENDIX E – REGULATORY COMPLIANCE	119
APPENDIX F - ENVIRONMENTAL INFORMATION.....	121
APPENDIX G – END USER LICENSE AGREEMENT.....	124
IMPORTANT – READ BEFORE OPERATING	124
INDEX	126

Chapter 1 – Product Description & Specifications

Product Description

The FaxFinder IP provides fax functionality to an IP-based telephony environment, eliminating the need for analog-based phone connections dedicated to supporting analog fax applications.

We Supply

FF240-IP
<ul style="list-style-type: none">• A FF240-IP with factory-installed software• One power supply with power cord• A product CD that contains: a software package for client PCs and additional documentation• A serial console cable

Safety Warnings

Internal Lithium Battery

- A lithium battery located within product provides backup power for the timekeeping capability. The battery has an estimated life expectancy of ten years.
- When the battery starts to weaken, the date and time may be incorrect. If the battery fails, the board must be sent back to Multi-Tech Systems for battery replacement.
- Lithium cells and batteries are subject to the Provisions for International Transportation. Multi-Tech Systems, Inc. confirms that the Lithium batteries used in the Multi-Tech product(s) referenced in this manual comply with **Special Provision 188 of the UN Model Regulations, Special Provision A45 of the ICAO-TI/IATA-DGR (Air), Special Provision 310 of the IMDG Code, and Special Provision 188 of the ADR and RID (Road and Rail Europe).**

Warning! There is danger of explosion if the battery is incorrectly replaced!

Ethernet Ports Caution

Caution: The Ethernet ports and command ports are not designed to be connected to a Public Telecommunication Network.

Technical Specifications

	FF240-IP
Connectors	1 RJ45 Console Serial Port, 1 RJ45 Ethernet Port, 2 USB Ports (inactive)
Size	9.1" W x 6.1" L x 1.7" H (23.11 cm x 15.49 cm x 4.32 cm)
Weight	2.6 lbs. (1.2 kg)
Input Voltage Requirements	12 V @ 5A
Maximum Power Consumption*	12 v Typical: 0.870 A / 10.65 W; Max: 0.955 A / 11.65 W Peak Reset: Inrush Current: 15.40 AMPS
Operating Environment	-22° to 140° F (-30° to +60° C) – [UL listed @ 104° F/ 40° C] relative humidity 20 to 90% noncondensing
Storage Temperature	-40° to 185° F (-40° to +85° C)
EMC Approvals	FCC Part 15 Class A, EN 55022 Class A, EN 55024
Safety Approvals	UL\cUL 60950-1 ed.2, IEC 60950-1 ed.2 & EN (2006 +am.11)
Maximum T.38 Ports	8
Web Connections	50
File Upload Size**	50MB is the maximum with: 48MB max for the Send Fax Web page 36MB max for T.37, Client software and API
Warranty	2 years

* Multi-Tech Systems, Inc. recommends that the customer incorporate a 10% buffer into their power source when determining product load.

** The difference in maximum size allowed is due to the data encoding for T.37, the client software and API attachments.

Chapter 2 – Getting Started

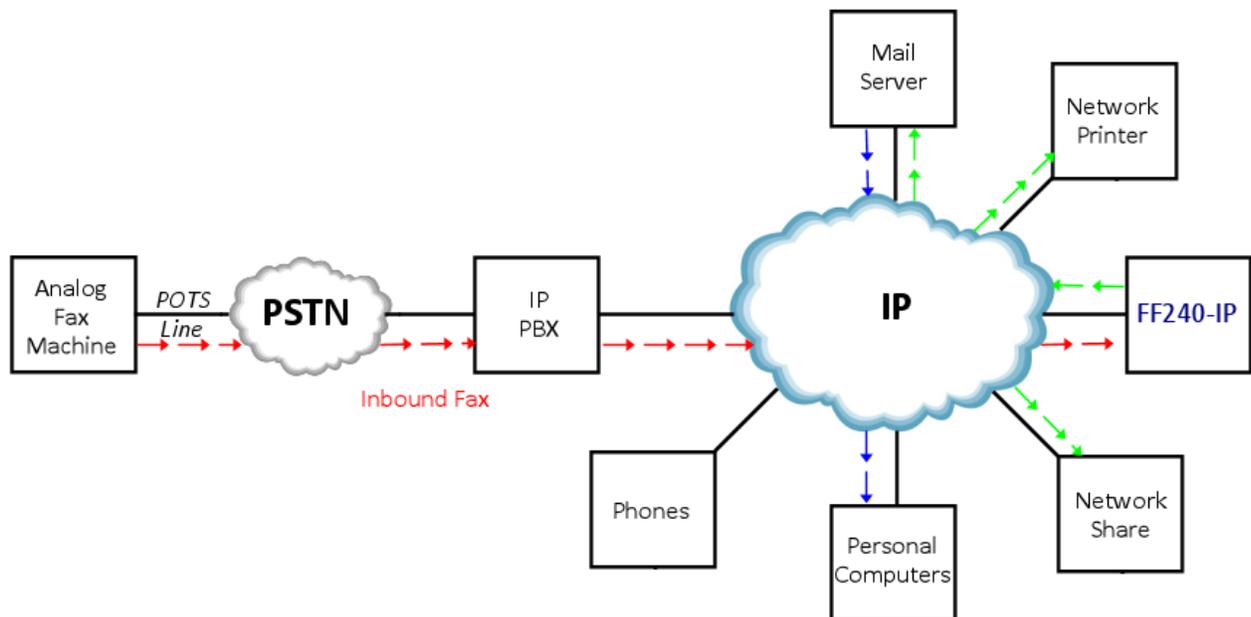
Introduction

This chapter shows example usage scenarios for inbound and outbound faxes as well as basic setup instructions for your Multi-Tech Model FF240-IP. The setup process includes both cabling of the FF240-IP unit and configuration of the FF240-IP server software. The FF240-IP server software resides on the FF240-IP unit and does not need to be installed.

FF240-IP Operating Modes

When placed in the optimal environment, the Multi-Tech Systems FF240-IP can provide a host of useful functions. Inbound routing, that is fax transmissions coming into the FF240-IP unit, can be sent to many destinations, as shown below. Following that, there are some outbound fax examples showing different ways that faxes can be sent by users.

Inbound Routing. Fax users receive faxes in the form of email attachments. Also, inbound faxes can be automatically printed or stored in a shared folder for archiving or multiple user access.

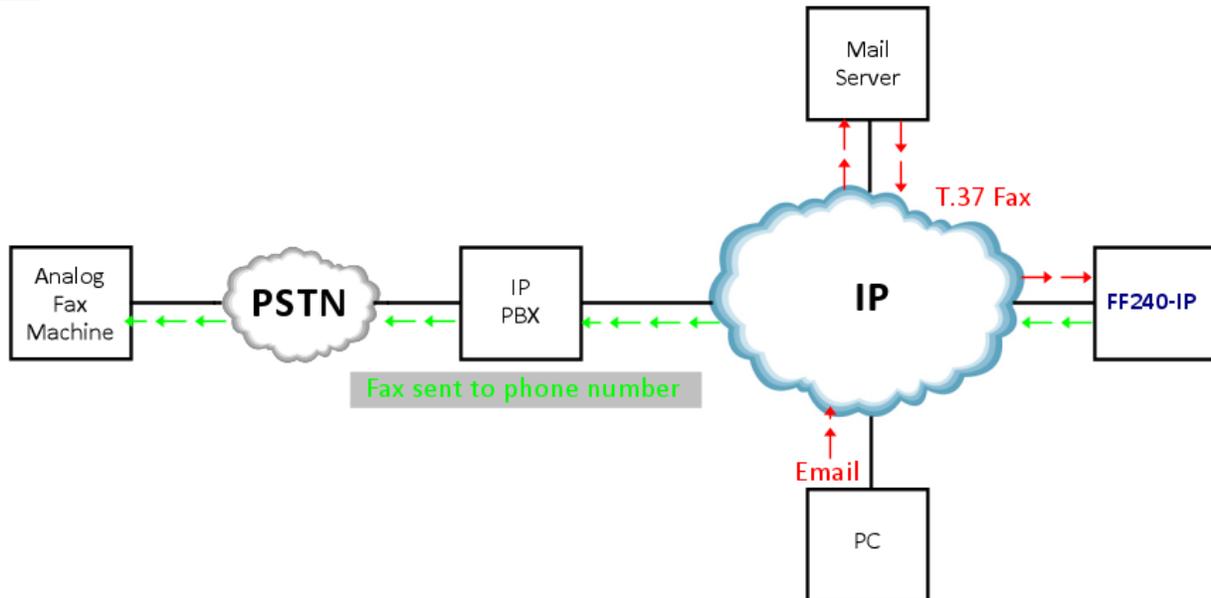


The red arrows indicate an incoming fax; the green arrows show all the possible routing options and the blue arrows show the incoming fax converted to an email.

Just like a telephone, the FF240-IP has phone numbers mapped to it. So a call from the analog fax machine is routed to the FF240-IP just as any other call is routed. Once the fax is received on the FF240-IP, it will use its inbound routing settings to send the fax to a printer, network share, email client or any combination of these.

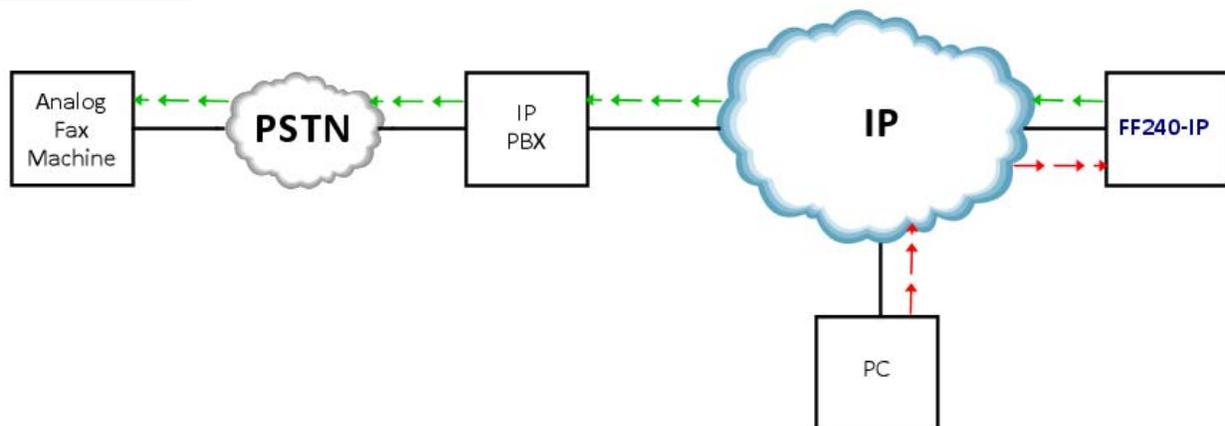
Outbound Routing. FaxFinder users on the network can send faxes directly from their Windows PC using any application program that can print (if the Client software is installed). The application program must be set so that the FF240-IP itself is its printing destination. In response to the 'Print' command, the FF240-IP turns the 'print file' image into a fax. Store and Forward faxing (T.37) allows for emails to be sent through the FF240-IP as a fax or users can simply log in to the web interface (Send Fax screen) and send a fax from the unit directly. Graphic depictions of these outbound routing examples are shown below.

T.37

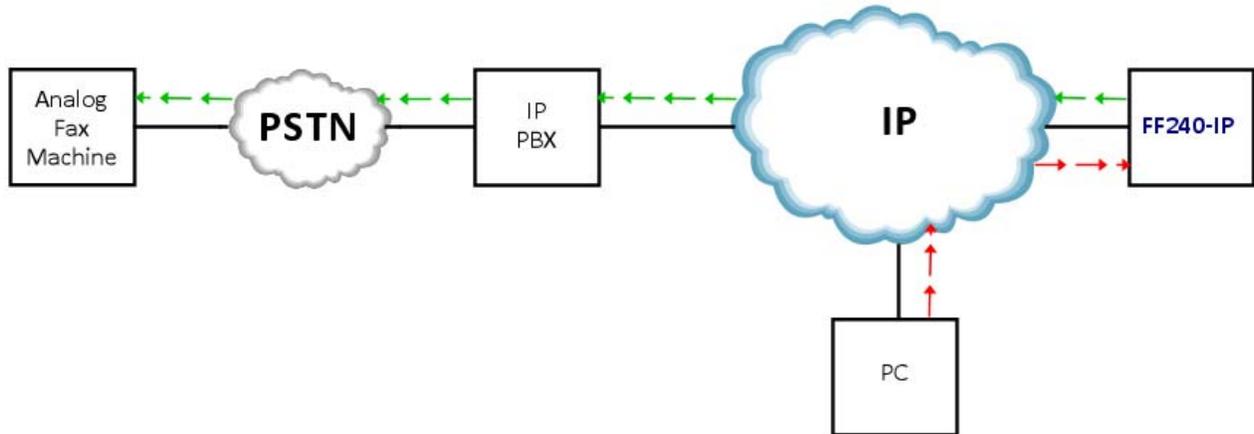


In this example, the FF240-IP acts as a mail server. The red arrows show an email originating from a PC and the green arrows show the FF240-IP sending that email to a phone number.

Send Fax screen



Here the red arrows indicate a user browsing to the FF240-IP and utilizing the Send Fax page. The green arrows represent the FF240-IP sending that fax to a phone number.

Client software

Here the red arrows show the use of the Client software and the green arrows represent the FF240-IP sending that fax to a phone number.

This example requires that the FaxFinder Client software be installed on a user's Windows PC.

The Client software can be used in two ways:

- 1) Invoke it directly to send faxes.
- 2) Invoke it indirectly using the Print function from any application program that can print (*e.g.* Microsoft Word) with the FaxFinder installed as an available printer.

Mechanical Mounting

Rack Mounting

Ensure proper installation of the unit in a closed or multi-unit enclosure by following the recommended installation as defined by the enclosure manufacturer. Do not place the unit directly on top of other equipment or place other equipment directly on top of the unit. If installing the unit in a closed or multi-unit enclosure, ensure adequate airflow within the rack so that the maximum recommended ambient temperature (40° C) is not exceeded. Ensure that the unit is properly connected to earth ground by verifying that it is reliably grounded when mounted within a rack. If a power strip is used, ensure that the power strip provides adequate grounding of the attached apparatus.

When mounting the equipment in the rack, make sure mechanical loading is even to avoid a hazardous condition. The rack used should safely support the combined weight of all the equipment it supports.

Ensure that the mains supply circuit is capable of handling the load of the equipment. See the power label on the equipment for load requirements.

This equipment should only be installed by properly qualified service personnel. Only connect like circuits - connect SELV (Secondary Extra Low Voltage) circuits to SELV circuits and TN (Telecommunications Network) circuits to TN circuits.

Note: The ambient temperature of the rack interior must not exceed 40° Celsius.

19-Inch Rack Enclosure Mounting Procedure

Attaching the FF240-IP to the rail of an EIA 19-inch rack enclosure will likely require two persons. Essentially, the technicians must attach the brackets to the FF240-IP chassis with the screws provided and then secure unit to rack rails by the brackets. Because equipment racks vary, screws for rack-rail mounting are not provided. Follow the instructions of the rack manufacturer and use screws that fit.

1. Remove the side screws of the unit.
2. Position the rack-mounting brackets on the FF240-IP using the screw holes.
3. Secure the brackets to the FF240-IP using the screws that were removed.
4. Mount the FF240-IP in the rack enclosure per the rack manufacturer's mounting procedure.

External Descriptions

Back Panel Connections

Descriptions of the connections available on the back of the FF240-IP unit.

Power Connector: Threaded connector for the provided power supply.

Console: RJ 45 connection for serial access and control of the FF240-IP units.

USB Ports (reserved for future use): These ports are inactive.

Reset: Pressing the reset button will reboot the unit.

LAN 1: RJ 45 receptacle for network connection.

Front Panel LEDs



Label	Name	Description
Speed	Speed	When lit, if the color is: Green: Ethernet rate is 1000 Mbps; Yellow: Ethernet rate is 100 Mbps Unlit: Ethernet rate is 10 Mbps
Link/Act	Link / Activity	Lit when a physical link has been established with the Ethernet network. Blinking when there is activity.
HDD	Hard Disk Drive	When the internal hard drive is accessed, this LED will light yellow. When unlit, HDD is not being accessed.
Power	Power	Solid (constant) green if unit is on.

Installation Overview

Part A: Cabling – Connecting the FF240-IP to Power and Ethernet

Summary: Place the FF240-IP in a convenient location, and then connect the power supply to your AC power outlet and then connect to the Ethernet network.

1. Connect FF240-IP to AC Outlet.

Plug the DC power transformer into a power outlet or power strip. Secure the other end to the Power Receptacle on your FF240-IP.

Caution: Use only the DC power transformer supplied with the FF240-IP. Use of any other transformer voids the warranty and can damage the FF240-IP.

2. Verify Powering.

After power is applied, the **Power** LED comes on immediately.

3. Connect FF240-IP to Ethernet Network.

Plug one end of your RJ45 Ethernet cable into the FF240-IP's Ethernet jack and the other end into your network. This Ethernet cable is not included with your FF240-IP unit.

Caution: Before connecting to the Ethernet Network, make sure that the network to which you are connecting the FF240-IP is not a 192.168.2.x subnet. Because the FF240-IP's factory default IP address is 192.168.2.1, connecting it to a network that has a different device at that same IP address would cause data interference.

If it is a 192.168.2.x subnet, connect from the Administrative PC to the FF240-IP using an RJ 45 crossover cable until the FF240-IP's IP address has been configured. Thereafter, connect the FF240-IP into the network with an ordinary RJ 45 cable.

Part B: Configuring the FF240-IP Server

1. Setting Admin PC to Startup IP Address

To initially access the FF240-IP, you will need to connect the unit directly to a compatible computer. This process is detailed below. After the first setup, you can change the IP address of the FF240-IP unit to one that is capable of operating on the network where it will permanently reside. If the FF240-IP is already attached to a network, the Client software can Auto-discover the IP address.

Alternatively, using the Command/Console port, you can use a terminal program (like HyperTerminal) and type “ifconfig eth0 *IP address*”. After that you can temporarily use the web interface for access and permanently set the IP address in the System Configuration section.

A. Connect a PC directly to your FF240-IP unit using an RJ 45 network cable (this may entail disconnecting the PC from its current network).

B. Set the computer now connected to the FF240-IP to IP address **http://192.168.2.x**, where **x** can be from 2 to 254 (the factory default for the FF240-IP is 192.168.2.1). *Make sure you write down your PC’s original network settings so you may re-enter them when finished.*

<p>Windows XP/2003</p> <ol style="list-style-type: none"> From the Windows desktop, right-click on “My Network Places,” and select “Properties.” In the Network Connection screen, right-click on “Local Area Connection.” In the Local Area Connection Properties screen, on the “General” tab, scroll to the “Internet Protocol (TCP/IP)” entry and select it. Click “Properties.” In the Internet Protocol (TCP/IP) Properties screen, record the existing IP address. Then reset the IP address to 192.168.2.2. 	<p>Windows 2000</p> <ol style="list-style-type: none"> From the Windows desktop, right-click on “My Network Places,” and select “Properties.” In the Network and Dialup Connections screen, right-click on “Local Area Connection” and select “Properties.” In the Local Area Connection Properties screen, select the “Internet Protocol (TCP/IP)” entry. Click “Properties.” In the Internet Protocol (TCP/IP) Properties screen, record the existing IP address. Then reset the IP address to 192.168.2.2.
<p>Windows Vista</p> <ol style="list-style-type: none"> Click on Start and go to Network. In the left-hand ‘Folders’ pane, Right-click on Network and select Properties. For the Local Area Connection, click on the View Status link. In the Status window, click on Properties. Click Continue when the permission window pops-up. In the Properties window, click once to highlight “Internet Protocol Version 4 (TCP/IPv4)” and then click Properties below. Here you can select the “Use the following IP address:” radio button, and then set the “IP Address” to 192.168.2.2. Click OK, then click Close and then Close again. 	

2. Logging In

- A. Bring up a Web browser on your PC. In the browser address line, type the IP address of the FF240-IP: type **192.168.2.1** and press **Enter**.

Note: Your browser may show a warning message at this point. This is related to the certificate issued by the FF240-IP. Browsers will not allow access without a valid certificate - the FF240-IP does have a valid certificate, but it is self-signed (*i.e.* no third party verification), so your browser displays a warning about this. You may safely continue (more details are given in step 5).

- B. The **Login** screen will appear. At this point you can be assured that the FF240-IP is connected to the network.
- C. At the **Login** screen, enter **admin** (all lower case) in the Username field and **admin** (all lower case) in the Password field.
- D. Click the **Login** button. The Web Management **Home** screen will appear. From this screen, you can access all of the FF240-IP Server software screens.

Note: The FF240-IP units have real-time clocks. The default setting is to set the time via a timer server (time.nist.gov). If the time is not accurate, a message may be issued by the web browser that the certificate is invalid or expired. If this occurs, you should add an exception **temporarily** until the IP Address and date/time are correctly set.

Once the date/time and IP Address are set, you will be able to generate a certificate with your information (see Certificates section of Chapter 3).

3. Setting FF240-IP IP Addresses

- A. Click on **System Configuration** in the top navigation bar.
- B. Network Configuration is the first sub-category found in the left-hand navigation frame. Fill in the IP information that applies to your unit. The fields for "IP Address," "Subnet Mask," and "Default Gateway" are required. The Hostname contains the domain name for the FF240-IP. This is used for T.37 store and forward faxing. Email clients must send the email with the 'To' address in the format: *FAX=7635551234@Hostname* (where "Hostname" is the FF240-IP domain name). A "Primary DNS" and "Secondary DNS" may be considered optional, but, in any case, do not leave an invalid value in either of these fields.
- C. Click **Save**. After the **Save** button has been clicked, it takes a moment for the FF240-IP to update the addresses.

4. Resetting Admin PC to Its Regular IP Address

In step #1 above, you recorded the original network configuration of the administrator's PC and then reset the IP address as required to allow communication with the FF240-IP unit. You may now set the network settings of the administrator's PC back to its original value or to any other value that will allow you to communicate with the FF240-IP at its new IP address.

5. Log In After Reset

Having reset the IP address of the administrator's PC, you must log into the FF240-IP Server software again. Enter the new IP address of the FF240-IP into your browser, and then enter **admin** as Username and **admin** as Password to log in again.

If the IP has been changed, your browser may show a warning message at this point. This is related to the certificate issued by the FF240-IP (the default is for the IP address 192.168.2.1 – changing the IP will cause an invalid certificate warning). Browsers will not allow access without a valid certificate and the FF240-IP does have a valid certificate, but it is self-signed (*i.e.* no third party verification), so your browser displays a warning about this. You may safely continue (Internet Explorer), or in the case of Firefox, temporarily add the FF240-IP certificate to the exception list.

Firefox Add Exception Process:

Secure Connection Failed

192.168.52.248 uses an invalid security certificate.

The certificate is not trusted because it is self signed.
The certificate is only valid for 192.168.2.1

(Error code: sec_error_untrusted_issuer)

- This could be a problem with the server's configuration, or it could be someone trying to impersonate the server.
- If you have connected to this server successfully in the past, the error may be temporary, and you can try again later.

You should not add an exception if you are using an internet connection that you do not trust completely or if you are not used to seeing a warning for this server.

Add Security Exception

 You are about to override how Firefox identifies this site. Legitimate banks, stores, and other public sites will not ask you to do this.

Server

Location:

Certificate Status

This site attempts to identify itself with invalid information.

Wrong Site

Certificate belongs to a different site, which could indicate an identity theft.

Unknown Identity

Certificate is not trusted, because it hasn't been verified by a recognized authority.

Permanently store this exception



6. Save your Configuration to a File on the Local PC

Now that you have setup the FF240-IP unit to the necessary configuration, it is a good idea to save the parameters in case the unit needs to be restored after a factory default. This will save you time if you want to test different settings or need to do some troubleshooting as you will be able to return to these settings easily. Click on the **System Configuration** top navigation link and then click on the **Save/Restore** link in the left-hand pane. In the *Save/Restore Configuration* window, click on the Save Config link in the upper right hand corner to save what you have set so far. The file name "config_#####.bin" (with the #'s replaced by the version number and current date) will appear in the dialog for where you can store the file. This *config* file can then be used to restore the FF240-IP to this configuration.

7. Sending Test Faxes

Set up an email address for the Administrator by going to the Users section (top navigation bar) and click on the Edit action item for the Administrator account to add an email address. Next go to the **Fax Configuration | Inbound Routing** page and verify where the fax will be routed – if no settings are changed, any incoming fax will be emailed to the Administrator email address (by default, all incoming faxes are routed to the Administrator). Next set the SMTP parameters in the **SMTP Configuration** section of the System Configuration.

A two step approach is recommended to verify faxing is working properly using FF240-IP. In the first step, the FF240-IP sends a fax to itself to verify that the fax is sent/received and routed properly. If this works properly, the next step is to configure the SIP/T.38 settings on FF240-IP to match your SIP/T.38 network requirements and send test faxes again.

Sending a loop-back test fax:

- A.** Go to the Fax Configuration screen, enter the IP Address of your FF240-IP in the SIP Proxy/Gateway field leaving default values in the other fields, and click Save to accept the changes. This will cause all outbound faxes to be looped-back to FF240-IP. Next, go the Send Fax screen, select "Enter Recipient Info" in the Find Recipient field, and enter the phone number 123-456-7890 in the "Fax Number" field under Recipient Information. Enter some text in the Subject and Comments fields under Cover Page Information, and then click the "Send Fax" button at the bottom of the screen to send the fax.
- B.** Click on the Status & Logs link in the top navigation bar, and then click on the Fax Status link to observe the status of the loop-back fax. You should see "sending" on one of the channels, and "receiving" on another. When the fax completes, click on the Inbound Fax Log link in the left-hand frame to see if the FF240-IP sends the email. If the email was sent successfully, the "Inbound Fax Log" field will contain the message. Click on the Details link to see where it was delivered. If the email is not delivered within 5 minutes, see the "Troubleshooting Appendix;" specifically "What if I don't get the email to me of the test fax that I sent?"

Sending a test fax on your SIP network:

- A. Go to the Fax Configuration page and configure SIP Proxy/Gateway field with the IP address of the SIP device the FF240-IP will communicate with when sending faxes. This could be a SIP proxy, SIP Gateway or IP PBX. Enter the SIP Domain if required by your SIP device. If your SIP Device requires authorization, enable the Authorization Required check box, and fill out the Username, Password, Confirm Password fields as required. Enable Use Registrar and enter the Registrar IP address if the FF240-IP must use a registrar for SIP call routing. Configure the Local, SIP Proxy, and Registrar Port values if your SIP device requires something other than the normal default 5060 value. Configure the T.38 values as required by your SIP device, the default values are a good starting point for most installations. You may need to reconfigure the Fax Method to T.30 Pass Through if your SIP device does not support T.38. You may configure FF240-IP to use some or all of the extension digits passed to it by the SIP device for routing the incoming faxes by modifying the Extension Digits and Extension Length fields. When you finish configuring SIP/T.38 values, click the Save button. Go to the Send Fax screen and send a fax to a remote fax machine accessible through your SIP device. Configure the dial plan on your SIP device to properly route incoming fax calls to FF240-IP, and then send a fax to FF240-IP from a remote fax machine.
- B. View the status of the fax by viewing Fax Status and Inbound/Outbound Fax Log screens under Status and Logs similar to what was done for the loop-back fax above.
- C. Verify also that you can open the fax in a PDF viewer program on your computer. The PDF viewer could be any commercial or open source PDF viewer. You can also choose to have your fax messages delivered as TIFF files. The TIFF viewer program you use could be either the Multi-Tech TIFF Viewer or a graphic file viewer included with or installed in your PC. (The Multi-Tech TIFF viewer is included on the Product CD and installed with other client programs. During installation, you can choose to associate all TIFF files with the Multi-Tech TIFF Viewer or leave them associated with another program.) In your email program, double-click on the file attached to the email message. The PDF or TIFF viewer program will come up automatically displaying the fax file.

8. Adding Client-Users

It is important to get the users added for the FF240-IP as the contact database is tied to the user account for those users who will send faxes. The best case scenario would have all potential users added before the users install the client software and begin to use the FF240-IP, that way, the contact lists will be automatically populated with any contacts they already have that have been entered into the FF240-IP unit for that user.

- A. Click on the **Users** link in the top navigation bar to create entries for the other users in your office who will send faxes through the FF240-IP. For each such FF240-IP client/user, enter the Username, Password, phone numbers and email address in the appropriate fields.
- B. Click on the Add link in the upper right-hand corner of the Users window to create a new client user. Ensure that you click on the **Update** button after each entry before creating the next one. The new User will appear in the list of FaxFinder Users.

An alternative method for populating the User database is Comma Separated Value importation.

Note: By default, there is an Administrator user that cannot be deleted, but you can click on the Edit action item to change the information and password.

Chapter 3 – Web Management Interface

Introduction

In this chapter, we present the screens of the FF240-IP web management interface and describe the sub-categories for each screen. The major sections are presented along the top navigation bar of the web interface and most of these will activate a left-hand navigation window of sub-categories when clicked. As with any secure browser-based user interface, a certificate is required to allow access. The certificate used by the FF240-IP unit is self-signed, meaning that you will see a security warning when you first access the unit from a browser. These warnings do not mean that the unit is not secure; it is merely an indication that the validated certificate is not signed by a third party. Please select the option to continue when you are presented this information.

Login Screen

When you enter the IP address of your FF240-IP unit in a browser, you will first see the certificate warning as noted above. After continuing past the warning, you will be presented with the Login Screen. When you first receive your unit, the default username is **admin** and the default password is **admin**.



The screenshot shows a login form with a blue header bar containing the text "Login" on the left and "Forgot Password?" on the right. Below the header, there are two input fields: "Username" and "Password". To the right of the "Password" field is a blue button labeled "Login".

Forgot Password?

Should you forget your password, a link is provided that you can click to have your password emailed to you for access. Enter your username in the form provided and click the Send button to have the FF240-IP email the password.



The screenshot shows a "Forgot Your Password?" screen with a blue header bar. Below the header, the text reads "Enter your FaxFinder username." followed by "Your password will be sent to the email address associated with your username." At the bottom, there is a "Username" label next to an input field and a blue button labeled "Send".

Home Screen

The FF240-IP **Home** screen displays the model name, software version and contact resources.



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[Home](#) [Status & Logs](#) [System Configuration](#) [Fax Configuration](#) [Users](#) [Contacts](#) [Send Fax](#) [Logout](#)

FaxFinder® FF240-IP

Web Management - Version faxfinder 1.0.0



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Knowledge Base & Resolutions

Status & Logs Section

System Status

System Status	
Current Time	02/25/2011 04:20:37 PM
Up Time	16 days 2 hours 9 minutes
Time Server Status	
SIP Register Status	Disabled
Printer Status	
There are no Printers	
Network Share Status	
There are no Network Shares	

System Status

The System Status screen provides many key pieces of information that can be used diagnostically or simply as a confirmation of correct settings.

Current Time

This field displays the current time and date on the FF240-IP unit. The format for this display is set in the *System Configuration: Time* screen.

Up Time

This displays the running, total time that the FF240-IP has been in operation since the last reboot/reset or disconnection of power.

Time Server Status

This indicates the status of the Time Server currently in use.

Time Server Status messages include: *Disabled*, *Synchronizing*, *Synchronized at [time]*, and *Failed to synchronize: [error]*.

SIP Register Status

When "Use Registrar" is checked in the *Fax Configuration | SIP settings* section, this shows the status of the FF240-IP registering to the registrar.

Printer Status section

Printer Status

This displays the current status of each printer that has been set up in the *System Configuration: Printers* section.

Network Share Status section

Network Share Status

This displays the current status of any network shares that have been configured in the *System Configuration: Shares* section.

Fax Status

Channel Status											
Channel	State	Page	Baud Rate	Fax Number	ECM	Line Encoding	Resolution	Remote ID	Modulation	Scan Time	Action
1	Waiting For Ring										Reset
2	Waiting For Ring										Reset
3	Waiting For Ring										Reset
4	Waiting For Ring										Reset
5	Waiting For Ring										Reset
6	Waiting For Ring										Reset
7	Waiting For Ring										Reset
8	Waiting For Ring										Reset

Inbound Fax Status
There is no Inbound Fax activity at this time

Outbound Fax Status
There is no Outbound Fax activity at this time

Fax Status details the current state for several key items. Here also the administrators can view and change the state of the channels.

Channel Status

Channel

This column displays the sequential channel number associated with each installed T.38 port.

State

This column displays the current state that the channel is in. Messages include: *Waiting for Ring*, *Connected*, and *Busied Out*.

Pages Sent/Recd

This column displays the total number of pages that a channel has sent or received.

Baud Rate

This column displays the baud rate for the channel.

Fax Number

This column displays the fax number associated with the channel.

ECM

This column shows if Error Correction Mode is on or off for the channel.

Line Encoding

This column shows the line encoding set for this channel.

Resolution

This column shows the resolution (vertical scan line type: 'fine', 'standard', etc.) that the page will be transmitted as.

Remote ID

This column displays the received identification from the remote connection.

Modulation

This column shows the modulation set for this channel.

Action

This option is only available to an administrator.

[Reset](#)

Clicking on this link will reset the channel.

Inbound Fax Status

Inbound Fax Status displays information pertaining to each fax that is incoming, divided into a variety of categories.

State

This column displays the state of a fax that has not yet been completely received. Messages include: *receiving* or *delivering*.

Start Time

This shows the time that the inbound fax was initiated.

Channel

This column displays the channel number associated with each installed T.38 port.

Extension

This will show the extension number where the fax will be routed to (if any).

Recipient

This will display the recipient Username or channel ID.

Remote ID

This shows the ID information sent from the fax originator.

Pages Received

This will show the total number of pages received.

Outbound Fax Status

Outbound Fax Status								
State	Created At	Scheduled For	Sender	Recipients			Fax Details	Action
				Name	Fax	Phone		
pending	12/16/2009 01:33:24 PM	12/16/2010 01:38:04 PM	admin (Administrator)	Admin's Contact	763-555-8648	763-555-4684	Another Company	Test Fax (2 pages) Abort Details

Outbound Fax Status displays information pertaining to each fax that is set to be sent, divided into a variety of categories. There is also an Action section for aborting the fax before it is sent.

State

This column displays the state of a fax that has not yet been sent or completed being sent. Messages include: *new*, *pending* and *sending*.

Created At

This shows when the outbound fax was initially queued.

Scheduled For

If the fax in the Outbox is scheduled to be sent at a time other than immediately, this column will show the scheduled time.

Sender

This shows the sender name and username of the party associated with the fax to be sent.

Recipients

Name

Displays the name of the party intended to receive the fax.

Fax

The telephone number that is intended to receive the fax.

Phone

The voice telephone number of the recipient.

Organization

Name of the business or company intended to receive the fax.

Fax Details

This shows the pertinent pages of the outbound fax.

Action

These are links to specific actions for individual outbound faxes.

Abort

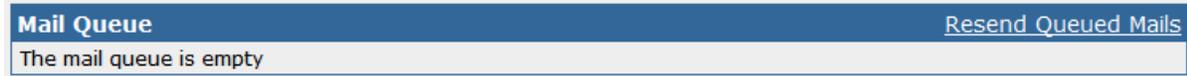
This will cancel all further attempts to send this fax.

Details

Clicking this link will bring up a new windows with details of this specific fax. You may also select to Abort from this window.

Outbound Fax Entry						
State	Attempt	Recipient			Action	
		Name	Fax	Phone		Organization
pending	1 of 3	Admin's Contact	763-555-8648	763-555-4684	Another Company	Abort

Mail Queue



The Mail Queue displays a list of emails residing in the queue waiting to be completed. Information is broken into six sections.

Resend Queued Mails

Clicking on this link will tell the FF240-IP to resend all mail items in the queue immediately.



Date

This column displays the date the email was created on.

Size

This column shows the size of the mail message in bytes.

Sender

This column displays the user name of the party sending the email.

Recipient

This column displays the intended target of the email.

Type

This column shows the delivery type of file that is to be sent; e.g. *local*, *remote*.

Delivery Message

This column shows information about the result of the delivery attempt.

Mail Log

Mail Log			
Most recent mail delivery attempts			
Date	Sender	Recipient	Delivery Message

The Mail Log displays recent delivery attempts, listed from most recent to oldest.

Date

This column displays the date that this mail entry was attempted.

Sender

This column displays the sender of this particular mail attempt.

Recipient

This column displays the recipient for this attempted mailing.

Delivery Message

This column displays a message showing the result of the mail delivery attempt.

For example, if there was a problem, SMTP error messages can be shown here; e.g. *deferral: Sorry, I wasn't able to establish an SMTP connection. (#4.4.1).*

Mail Log			
Most recent mail delivery attempts			
Date	Sender	Recipient	Delivery Message
08/04/2009 02:49:17 PM	root@faxfinder.example.com	admin@mycompany.com	deferral: Sorry, I wasn't able to establish an SMTP connection. (#4.4.1)

Inbound Fax Log

Inbound Fax Log							
State	Complete Time	Remote ID	Line Number	Extension	Recipient	Pages	Action
	10/22/2008 16:08:15 CDT	POTS modem 1	2		POTS Modem 2	1	Details

The Inbound Fax Log is a running tally of all of the faxes received by the FF240-IP unit. The individual logs have several categories that are tracked. Descriptions are below.

State

This will show the current or final state of the fax in question. States include: *complete*, *error – no page received*, *error – partial fax*, and *delivery failure*.

Complete Time

This logs the time at which that the incoming fax was successfully received. The format displayed depends on the settings chosen in *System Configuration | Time*.

Remote ID

This will display the identification associated with the received fax.

Channel

This will show which channel received the fax.

Extension

This column displays the extension that received the fax (if any).

Recipient

This column shows the identification of the recipient of the fax.

Pages

This displays the number of pages that were received.

Action

This category shows actions that can be taken with this log file. [Details](#) is the only option here, which will show more specifics about the fax received as shown below.

Inbound Fax Delivered To				
Type	Destination			
Email	cla@mts.test			
Call Entries				
Channel	Status	Resolution	Baud Rate	Action
3	pass	Fine	14400	Details

Outbound Fax Log

Outbound Fax Log							
Status	Start Time	End Time	Sender Name	Recipient Name	Recipient Fax	Pages	Action
sent	04/16/2011 10:39:33 AM	04/18/2011 09:50:59 AM		test recipient	678	6	Details

The Outbound Fax Log is a running tally of all of the faxes sent by the FF240-IP unit. The individual logs have six categories that are tracked. Descriptions are below.

Status

This column displays the final result of the outgoing fax. Status messages include: *sent*, *aborted* and *failed*.

Start Time

This column displays the time that the transmission was started.

End Time

This column displays the time when the fax transmission completed.

Sender Name

This column displays the user name of the sending party.

Recipient Name

This column displays the name entered as the intended receiver of the fax.

Recipient Fax

This column displays the fax number entered as the intended destination of the fax.

Pages

This column shows the number of pages in the outbound fax.

Action

Clicking on the [Details](#) link will bring up a pop-up window with further information concerning this fax.

Outbound Fax Details				
Status	aborted			
Start Time	02/15/2011 12:03:27 PM			
End Time	02/15/2011 12:04:45 PM			
Username	admin			
Agent	WebClient			
Pages (including cover)	5			
Cover Page Used	yes			
Cover Page Name	mts_template1.pdf			
Priority	3			
Sender Name	Administrator			
Sender Email				
Sender Phone				
Sender Fax				
Sender Organization				
Recipient Name	345			
Recipient Fax	345			
Recipient Phone				
Recipient Organization				
Subject				
Comments				
Call Entries				
Channel	Status	Resolution	Baud Rate	Action
1	pass	Fine	14400	Details

Call Log

Call Log									
Channel	Status	Direction	Fax Number	Time	Size	Pages	Resolution	Action	
2	pass	outbound	123	04/13/2011 12:16:32 PM	138926	4	Fine	Details	
3	pass	outbound	234	04/13/2011 12:16:28 PM	139176	4	Fine	Details	
1	pass	outbound	345	04/13/2011 12:16:25 PM	139014	4	Fine	Details	
4	pass	outbound	456	04/13/2011 12:16:20 PM	139196	4	Fine	Details	
2	pass	outbound	567	04/13/2011 12:15:33 PM	139250	4	Fine	Details	
3	pass	outbound	678	04/13/2011 12:15:30 PM	138927	4	Fine	Details	
1	pass	outbound	789	04/13/2011 12:15:27 PM	138915	4	Fine	Details	
4	pass	outbound	890	04/13/2011 12:15:24 PM	139181	4	Fine	Details	
3	pass	outbound	123	04/13/2011 12:10:31 PM	139201	4	Fine	Details	
1	pass	outbound	234	04/13/2011 12:10:27 PM	138931	4	Fine	Details	
4	pass	outbound	345	04/13/2011 12:10:24 PM	139198	4	Fine	Details	
2	pass	outbound	456	04/13/2011 12:10:21 PM	139177	4	Fine	Details	
3	pass	outbound	567	04/13/2011 12:09:33 PM	138897	4	Fine	Details	
1	pass	outbound	678	04/13/2011 12:09:29 PM	139183	4	Fine	Details	
4	pass	outbound	789	04/13/2011 12:09:26 PM	139171	4	Fine	Details	

Displaying 1 - 15 of 98 [Next](#) [Last](#)

Channel

This column displays which channel the logged fax used.

Status

This column displays the current state that the outgoing fax is considered to be in. Status messages include: *pass*, *aborted* and *failed*.

Direction

This column shows which direction the logged fax went: either *inbound* or *outbound*.

Fax Number

This column displays the phone number that the fax was logged on.

Time

This column displays the time when the fax transmission completed.

Size

This column displays the size.

Pages

This column displays the name entered as the intended receiver of the fax.

Resolution

This column displays the resolution used during the fax transmission.

Action

Clicking on the [Details](#) link will bring up a pop-up window with further information concerning this fax.

Channel	4
Status	pass
Fax Number	8100
Direction	outbound
Pages	1
Size	33446 bytes
Connect Time	2011/05/20 16:14:24
Elapsed Time	31
Baud Rate	9600
Data Compression	MR
Error Correction	disabled
Modulation	V17

System Configuration Section

Network

Network Configuration	
Hostname	<input type="text" value="faxfinder.example.com"/>
Description	<input type="text"/>
IP Address	<input type="text" value="192.168.2.1"/>
Subnet Mask	<input type="text" value="255.255.255.0"/>
Default Gateway	<input type="text" value="192.168.2.254"/>
Primary DNS	<input type="text"/>
Secondary DNS	<input type="text"/>

Network Configuration

This section is for entering the specific network settings needed for the FF240-IP to run on your network. By factory default, the FF240-IP ships with the IP address 192.168.2.1 for setup purposes. After setup and prior to connecting to your live network, enter the needed parameters for proper operation on the network where the FF240-IP is to operate.

Hostname

Enter the hostname that will be associated with this FF240-IP unit. This is what will be used in conjunction with Store and Forward faxing through email. The Fax server will check the hostname entered here and in Fax Configuration | Store & Forward Fax (T.37): Additional Hosts. If an email comes from an email client not listed in either of these locations, that email will be rejected.

Description

Here you may enter a custom description for this network connection.

IP Address

Enter the IP address that has been set for this FF240-IP unit. If you are setting this FF240-IP up for the first time, remember that once this has been changed, you will have to be on the same network to make further changes.

Subnet Mask

Enter the subnet mask that has been set for this FF240-IP unit. A typical subnet mask is 255.255.255.0, though your network may be different.

Default Gateway

Enter the IP address of the default gateway on the network for this FF240-IP unit. The default gateway is what allows the FF240-IP to contact network addresses outside of the local network. This is necessary for contacting an internet time server or SMTP server.

Primary DNS

Enter the primary domain name server (if any) that this FF240-IP unit will use for name resolution of IP addresses. Changing this value will require a reboot of the unit.

Secondary DNS

Enter the secondary DNS server (if any) for this FF240-IP unit. Changing this value will require a reboot of the unit.

Save button

When you have entered your information, be sure to click the save button before navigating away from this page, else your changes will be lost.

SMTP

The screenshot shows a web form for SMTP configuration. It has a blue header bar with the text "SMTP Configuration". Below this, there are several input fields: "SMTP Server Address" (empty), "SMTP Port" (containing "25"), "SMTP Username" (empty), "SMTP Password" (empty), "Confirm SMTP Password" (empty), and "FaxFinder Email Address" (empty). To the right of the "FaxFinder Email Address" field is a blue "Save" button. Below the main form area is a blue bar with the text "Send a Test Email". Underneath this bar, there is a "Send Test Email To Address" field (empty) and a blue "Send Test Email" link.

The SMTP section contains the information needed to setup email usage with the FF240-IP, as well as a way to test the setup by sending an email.

SMTP Configuration

SMTP Server Address

Enter the IP address of your simple mail transfer protocol server here. This can be either an IP address or Hostname. This is where emails will be sent.

SMTP Port

Enter the SMTP port to be used here (the default value for SMTP is 25).

SMTP Username

If your SMTP server requires authentication, enter the username that the FF240-IP unit will use for validation on the email server.

SMTP Password

If necessary for authentication, enter the password associated with the above username.

Confirm SMTP Password

Re-enter the password in order to avoid possible errors in the password previously entered.

FaxFinder Email Address

When an email is sent from the FaxFinder, the 'From' field in that email will be *ffmailer-noreply@'Hostname'* (Hostname is the text entered in at System Configuration | Network | Hostname) unless there is something entered in this FaxFinder Email Address field. If this has a value in it, that value will appear in the 'from' field for emails from the FaxFinder. This is true for all emails the FaxFinder send unless the email is for a fax received. Then the 'from' address is the Fax ID.

Save button

When you have entered your information, be sure to click the save button before navigating away from this page, else your changes will be lost.

Send a Test Email

Send Test Email To Address

Enter an email address here that you would like to send a test email to for verification that the settings entered are correct and then click the ['Send Test Email'](#) link.

Time

The screenshot shows two sections of a web interface. The top section, titled "Time Configuration", contains several fields: "Time Server" with a dropdown menu set to "None", "Custom Time Server" with an empty text input, "Synchronize every" with two input boxes for "Days" (0) and "Hours" (12), "Time Zone" with a dropdown menu set to "America/Chicago", "Date Format" with a dropdown menu set to "MM/DD/YYYY", and "Time Format" with a dropdown menu set to "12 HOUR". A "Save" button is located at the bottom right of this section. The bottom section, titled "Set Current Time", contains two fields: "Set Time" with an input box containing "14:33:38" and a label "(24hr) hh:mm:ss", and "Set Date" with an input box containing "04/13/2011" and a label "MM/DD/YYYY". A "Set" button is located at the bottom right of this section.

Time Configuration

Correct time settings are important for logging and verification purposes. This section allows you to enter a preferred time server as well as your preferences for time and date display format.

Time Server

Select a time server from the choices available in the drop-down box or you may also select 'none.' When you select **None**, use the *Set Time* and *Set Date* at the bottom.

Custom Time Server

Here you may enter the name or address of a time server different from those available in the drop-down list.

Synchronize Every

Enter the interval of time that you want the FF240-IP to synchronize with the time server. This is only valid if you have selected a time server.

Time Zone

Select the time zone where the FF240-IP will be located from the drop-down list. Changing the time zone requires a reboot of the FF240-IP for it to take effect. A pop-up will alert you that a reboot will be performed, to which you may select cancel if you do not want to reboot at this time.

Date Format

Select the format that you want the date to be presented in. Key: 'M' is for month, 'D' is for day and 'Y' is for the year.

Time Format

Select the time format that you want information presented in (options are 24 or 12 hour).

Save button

When you have entered your information, click the save button before navigating away.

Set Current Time

Set Time (24 hour) hh:mm:ss

Enter or verify that the time is what you expect it to be. Key: 'H' is for hour, 'M' is for minute and 'S' is for seconds. This is only for when the Time Server has been set to "None."

Set Date [MM/DD/YYYY]

Enter or verify that the date is what you expect it to be. Key: 'M' is for month, 'D' is for day and 'Y' is for the year. This is only for when the Time Server has been set to "None."

Set button

When you have the time and date you want, click the Set button before leaving this page.

Printer

Printers					Add Advanced Setup
Printer Name	Printer Make	Printer Model	Description	Device URI	Action
HP1	HP	Color LaserJet 2500	Sales Printer	smb://hostname/printer	Print Test Page Edit Delete

Here you can add the printers available to the FF240-IP. Until the first printer is added, the section states 'There are no Printers.' Click the [Add](#) link to add a printer.

Printers

The [Add](#) and [Advanced Setup](#) screens are detailed in the next section. Clicking the Add link will bring up the Add Printer screen where you can add a printer to be used by the FF240-IP.

Printer Name

This displays the name you have entered for this printer.

Printer Make

This will display the maker of the printer selected when you added the printer.

Printer Model

This displays the model selected for this printer.

Description

This column will display any descriptive text that is entered for this printer, *e.g.* "East end printer."

Device URI

This will display the text string that is the Uniform Resource Identifier of the printer. There is a [Help](#) link on the **Add Printer** page that shows valid URI types; *e.g.* socket://192.168.2.250 or http://hostname:631/ipp/port1.

Action

There are three available action links:

[Print Test Page](#)

This will print a standard test page to the printer to ensure proper function.

[Edit](#)

This will open a new screen for editing the printer information. This screen is identical to the Add Printer screen.

[Delete](#)

This will delete the printer.

Add Printer

The Add Printer and the Edit Printer screens are identical, the only difference being that the Edit Printer screen will already contain information previously entered.

Printer Make

Select the manufacturer of the printer you are adding from the drop-down list. If you do not see the manufacturer (make) of your printer, you can use the *Generic* selection.

Printer Model

Select the model of the printer you are adding from the provided list. If you selected *Generic* above, the selections here will be generic as well.

Printer Name

Enter a name to associate with this printer that users will understand.

Description

Enter a description of the printer you are adding. It is often useful to put the location of the printer here; *e.g.* "East end printer."

Device URI

Enter the Uniform Resource Identifier for this printer. Similar to a website URL, the URI identifies the location of a printer on the network. There is a [Help](#) link that shows valid URI syntax; *e.g.* `socket://192.168.2.250` or `http://hostname:631/ipp/port1`.

Advanced Setup

Advanced Setup

This will bring up the Common UNIX Printing System (CUPS) page. This page is provided for advanced printing configuration and job control.

Note: *This page is provided using the GNU General Public License software agreement. A copy of the GNU GPL can be found on the product CD.*

Save button

When you have entered your information, be sure to click the save button before navigating away from this page, else your changes will be lost.

Cancel button

Clicking on the cancel button will cause you to lose all information entered and return you to the previous screen.

Shares

Shared Resources		
Domain/Workgroup	<input type="text" value="WORKGROUP"/>	<input type="button" value="Save"/>
Network Shares Add		
UNC/Location	Username	Action
//server/faxshare	admin	Connect Edit Delete

The shares screen allows the administrator to create a place for faxes to be sent for retrieval by more than one person. Anyone with network rights to the shared folder can view the faxes sent there. Creating a location to share access to multiple users can be a good way to ensure that faxes are responded to in a timely manner, especially in a sales environment. Other benefits are the ability for employees to cover for each other when someone is out of the office and for electronic archiving of faxes to a single location.

Note: It may be necessary to enable 'Simple File Sharing' when using a Microsoft Windows network.

Shared Resources

Domain/Workgroup

Enter the domain where the FF240-IP will be operating. This box is pre-populated with the default value of 'WORKGROUP.'

Save button

When you have entered your information, be sure to click the save button before navigating away from this page, else your changes may be lost.

Network Shares

By clicking on the Add link, you will bring up the Add Network Share screen where shares can be added.

UNC / Location

This column will display the Universal Naming Convention identifier or location entered for this shared resource.

Username

This column will display the username for the network that is associated with this shared resource.

Action

Connect

Clicking this link will connect you to the shared resource.

Edit

Clicking on this link will allow you to edit the parameters of this shared resource.

Delete

Clicking this link will delete the shared resource from use by the FF240-IP unit.

Add Network Share

Add Network Share	
UNC / Location	<input type="text" value="//server/faxshare"/>
Username	<input type="text" value="user1"/>
Password	<input type="password" value="•••••"/>
Confirm Password	<input type="password" value="•••••"/>
<input type="button" value="Save"/> <input type="button" value="Cancel"/>	

After entering and saving a new network shared resource, you will see the message “Network Share updated” appear at the top of the screen. The network share is a common location when received faxes may be routed to. For those with access rights to this shared location, all information is accessible for use.

UNC / Location

Enter the Universal Naming Convention identifier or network location in this box. An example of a UNC or location would be ‘//server/service’ or ‘\\server\service.’

Username

Enter the username that has *write* access to the shared location. This can be a general account or one specific to the folder that is to be shared.

Password

Enter the password associated with the above username.

Confirm Password

Re-enter the password in order to avoid possible errors in the password previously entered.

Save button

When you have entered your information, be sure to click the save button before navigating away from this page, else your changes will be lost.

Cancel button

Clicking on the cancel button will cause you to lose all information entered and return you to the previous screen.

Certificates

Generate Server Certificate

Common Name	<input type="text" value="faxfinder.example.com"/>
Days	<input type="text" value="365"/>
Country	<input type="text"/> (2 letter code)
State/Province	<input type="text"/>
Locality/City	<input type="text"/>
Organization	<input type="text"/>
Email Address	<input type="text"/>

Server Certificate

```

Certificate:
Data:
  Version: 3 (0x2)
  Serial Number: 1249415829 (0x4a789295)
  Signature Algorithm: md5WithRSAEncryption
  Issuer: OU=FaxFinder, CN=192.168.2.1
  Validity
    Not Before: Aug  4 19:57:28 2009 GMT
    Not After : Sep  3 19:57:28 2009 GMT
  Subject: OU=FaxFinder, CN=192.168.2.1
  Subject Public Key Info:

```

A site certificate is needed for a browser to allow access to the FF240-IP unit. This certificate is self-signed, so your browser will likely show a security warning (which simply means the certificate is not authenticated by a third party) before you can continue. Use this page to replace the default certificate with the one that contains details specific to your installation. These values are for identification purposes only. Creating a new certificate will require a reboot of the FF240-IP. A pop-up will warn of this and allow you to cancel the changes if necessary.

After generating a new certificate, you may have to make an allowance in your web browser to log back in to the FF240-IP unit. Browsers will not allow access without a valid certificate and the FF240-IP does have a valid certificate, but it is self-signed (*i.e.* no third party verification), so your browser displays a warning about this. You may safely continue (Internet Explorer), or in the case of Firefox, temporarily add the FF240-IP certificate to the exception list. Details on how to add to an exception list can be found in Chapter 2.

Generate Server Certificate

Common Name

Enter the common name associated with the certificate. This should be set to the Hostname or IP address, depending on which you will use when connecting to the FF240-IP. A web browser will use this field to check for a valid certificate. No more than 64 characters are allowed.

Days

Enter the number of days that the certificate is valid. No more than 3 digits are allowed.

Country

Enter the country that the certificate is valid for using in, using its two letter code. A search for “country codes” at www.iso.org will give you a list if needed. The code US is for the United States.

State/Province

Enter the state or province that the certificate is valid for. No more than 64 characters are allowed.

Locality/City

Enter the city or locality that the certificate is valid for. No more than 64 characters are allowed.

Organization

Enter the name of the organization that the certificate is valid for. No more than 64 characters are allowed.

Generate Server Certificate continued:

Email Address

Enter the email address of who is responsible for the FF240-IP (typically the administrator). This field may be left blank. No more than 64 characters are allowed.

Generate button

Click on the generate button to create the certificate based on the information above. This will require an immediate reboot of the unit (a pop-up window will allow you to cancel the action).

Server Certificate

The details of the verification certificate for the FF240-IP unit are displayed in this box.

Save/Restore

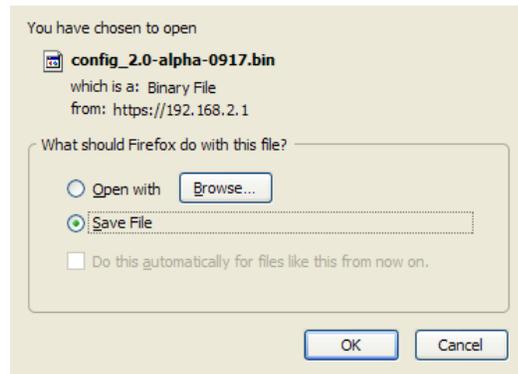
Save/Restore Configuration		Save Config	Restore Factory Defaults
Restore Config	<input type="text"/>	<input type="button" value="Browse..."/>	<input type="button" value="Restore"/>

After you have entered the specific settings to have your FF240-IP working in your environment, coming here to save those settings is a good idea. Were something to happen and you lost what had been entered, you can easily reset the unit to working condition if you have a saved configuration file.

Save/Restore Configuration

Save Config

The Save Config link will save settings entered during this session to a configuration file that can be retrieved later using the restore configuration option.



Click on the **Save File** button, and then click **OK**. When saving a configuration file, try and use a place that will help you remember where it is stored.

Restore Factory Defaults

Clicking this link will reset all data in the FF240-IP to the default values that were set at the factory. Use this with caution. This will reboot the FF240-IP.

Restore Config

Click on the **Browse** button after the box to navigate to a previously saved configuration file. Once selected, click the **Restore** button to have those saved values used once again.

Restore button

Once a saved configuration file has been entered in the *restore config* box, clicking the restore button will use those values that were retrieved above, to set up the FF240-IP with the values saved in that configuration file. This will reboot the FF240-IP.

Software Update

Software Update	
Update Source	<input type="text" value="http://multitech.net/releases/ff240-ip/latest"/> Default
Current Version	1.0.10 <input type="button" value="Check for Updates"/>
License Upgrade	
Current Channels	4
Hardware ID	
Current License Key	
New License Key	<input type="text"/> <input type="button" value="Upgrade License"/>

There may be occasions where features are refined or added to the FF240-IP unit. Such features will be available through updating of the software that exists in the FF240-IP.

Software Update

Update Source

This is the URL for software updates, when they are available. Clicking the **Default** link will return the factory URL for checking update availability.

Current Version

This displays the current software version installed on your FaxFinder.

Check for Updates button

Clicking this button will allow a FaxFinder with Internet access to check the designated site for a newer version of software and subsequently download and install it.

Important: Do not power off the FF240-IP during the update process.

Note: When the FF240-IP unit is being updated, the HTTPS port (TCP 443 by default) and TCP port 80 (the traditional HTTP port) need to be forwarded (open) to the FF240-IP if there is a firewall or other security software that will potentially block those ports.

License Upgrade

If you have purchased additional T.38 ports to upgrade your FF240-IP, you can enter those license keys here. Instructions for this process are included with the License Upgrade Kit.

Current Channels

This line displays the current number of channels installed. [Maximum of 8]

Hardware ID

This displays the Hardware ID of your physical FaxFinder unit (for use when purchasing additional 2-channel licenses).

Current License Key

This displays the current License Key in use on your FaxFinder.

New License Key

Purchasing one or more License Upgrade Kits will allow you to use the upgrade process through the provided website; enter the New License Key here and click the Upgrade License button.

Upgrade License button

Click the Upgrade License button to apply the New License Key you entered above to increase the number of channels available (there is a maximum of 8).

Important: Do not power off the FF240-IP during the upgrade process.

Reboot

Reboot	
Reboot the FaxFinder immediately	Reboot

Reboot Unit

Clicking on the Reboot button will log off the current user and restart the unit. Please make sure that there are no faxes being sent before you click reboot. The FF240-IP will not be able to send or receive faxes during the reboot process.

Debug

The Debug page is for those rare occasions when standard troubleshooting is not enough and debugging files need to be gathered and sent to Multi-Tech for more in-depth analysis.

System Log Level		Download Logs
Current System Log Level	Info	Save
Packet Capture		
Current Status	Stopped	Start

Current System Log Level

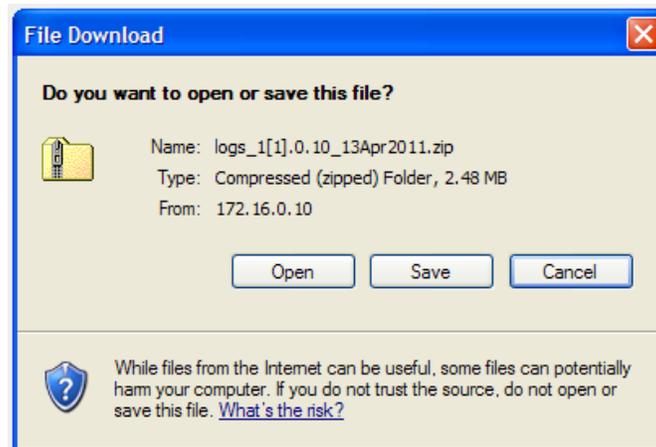
Select the level of logging that Multi-tech has requested from the drop-down list. Options are: *Info, .Emergency, Alert, Critical, Error, Warning, Notice, Debug.*

Save

Once you have selected the correct level of logging, click the save button and then use the Download Logs link above the Save button.

Download Logs link

Clicking on the Download Logs link will bring up the File Download window. Click on the **Save** button and select a location that will be easy to remember. Once this zipped file is created, follow the instructions given by Multi-Tech for sending it on.



Packet Capture

Clicking on the **Start** button will begin the packet capture process on this unit (generally for troubleshooting purposes). When you are finished, click the **Stop** button (the Start button transforms into this). This will change the screen and allow you to download the capture via the provided hyperlink.

Fax Configuration Section

SIP / T.38 Configuration

This screen is where you will need to set all of the necessary settings for your FaxFinder IP to work properly on your network.

If you need to reset all of the SIP and T.38 settings on this screen back to their factory default settings, click on the [Defaults](#) link in the upper right corner. Be aware that the default for many of the boxes is a blank entry.

SIP / T.38 Configuration		Defaults	
SIP			
Transport Protocol	UDP	Local Port	<input type="text" value="5060"/>
SIP Proxy/Gateway	<input type="text" value="172.16.0.25"/>	SIP Proxy Port	<input type="text" value="5060"/>
SIP Domain	<input type="text"/>		
Authorization Required	<input type="checkbox"/>	Use Registrar	<input type="checkbox"/>
Username	<input type="text"/>	Registrar	<input type="text"/>
Password	<input type="text"/>	Registrar Port	<input type="text" value="5060"/>
Confirm Password	<input type="text"/>	Expires	<input type="text" value="900"/> (secs)
T.38			
Fax ID	<input type="text" value="FF240-IP"/>	Max Rate	<input type="text" value="33600"/> ▼
Fax Method	<input type="text" value="T.38 Direct"/> ▼	Error Correction	<input checked="" type="radio"/> on <input type="radio"/> off
Fax Codec	<input type="checkbox"/> G7.11 Alaw <input type="checkbox"/> G7.11 µlaw	Dial Prefix	<input type="text"/>
Redundancy Level	<input type="text" value="3"/>	Jitter Buffer Delay	<input type="text" value="300"/> (msecs)
Max Buffer	<input type="text" value="4000"/>	Max Datagram	<input type="text" value="948"/>
Extension Source	<input type="text" value="SIP To Header"/> ▼		
Extension Digits	<input type="text" value="Use All"/> ▼	Extension Length	<input type="text" value="0"/>
Channel Reservation	<input type="text" value="0"/> Inbound Only <input type="text" value="0"/> Outbound Only		<input type="button" value="Save"/>

SIP**Transport Protocol**

SIP call setup messages are transmitted using UDP. There is currently no option for TCP.

SIP Proxy/Gateway

This displays the IP address of the SIP device the FF240-IP will communicate with when sending faxes. This could be a SIP proxy, SIP Gateway or IP PBX.

SIP Domain

Enter the SIP domain into the box if necessary.

Authorization Required

Check this if the SIP proxy or the registrar the FF240-IP is communicating with requires authentication.

Username

Enter the Username if you checked the "Authorization Required" box.

Password

Enter the Password if you checked the "Authorization Required" box.

Confirm Password

Re-enter the authorization Password.

Local Port

Enter the local port used for SIP. Default is 5060.

SIP Proxy Port

Enter the SIP Proxy port if necessary. Default is 5060.

User Registrar

Check this box if the FF240-IP needs to use a registrar for SIP call routing.

Registrar

Enter the SIP registrar IP address.

Registrar Port

Enter the registrar port if necessary. Default is 5060.

Expires

Enter the registrar expiration time in seconds. Default is 3900 seconds.

T.38**Fax ID**

Enter the Fax ID you want the FaxFinder to send out.

Fax Method

Use the drop-down box to select *T.38 Re-invite*, *T.38 Pass Through* or *T.38 Direct* as your fax method.

Fax Codec

Check the box for each fax codec you want in use. G 7.11 Alaw and G 7.11 μ law are available depending on your Fax Method (*T.38 Re-invite* and *T.38 Pass Through* only).

Redundancy Level

Enter a redundancy level for the FaxFinder. Default is 3.

Max Buffer

Enter the maximum buffer to be used for the FaxFinder. Default is 4000.

Extension Source

Select the extension source to be used by the FaxFinder.

Options are: *SIP to Header* or *SIP Diversion Header*.

Extension Digits

Select the manner in which extension digits are used.

Options are: *Use All*; *Use First Only*; *Use Last Only*.

Channel Reservation

If you want channels reserved for specific use only, enter the number of channels reserved for Inbound Only or Outbound Only in these fields.

Max Rate

Select the maximum fax transmission rate for the channels from the drop-down list.

Options are: *2400*; *4800*; *9600*; *12000*; *14400*; *16800*; *19200*; *21600*; *24000*; *28800*; *31200*; *33600*.

Error Correction

Choose if you want to have fax Error Correction on or off.

Dial Prefix

Enter a dial prefix to be applied to all channels if necessary. The dial prefix is appended as a prefix to all faxes being sent.

Jitter Buffer Delay

Enter the jitter buffer delay (in milliseconds). Default is 30 ms.

Max Datagram

Enter the maximum datagram size allowed. Default is 948.

Extension Length

Enter the extension length allowed for the channels.

Save button

When you have entered your information, be sure to click the save button before navigating away from this page, else your changes will be lost.

Inbound Routing

General Setup			
Email Size Limit	<input type="text" value="5000"/>	K bytes	
Fax Output Format	<input type="text" value="PDF"/>		
Email Fax Details	<input checked="" type="checkbox"/>		<input type="button" value="Save"/>
Global Routing			
Always route faxes here in addition to regular routing.			
Fax Destinations			Action
Email to User: admin			Edit
Default Routing			
Route faxes here when the extension isn't found.			
Fax Destinations			Action
Email to User: admin			Edit
Recipients Add Import Export Delete All			
Route faxes by extension.			
Extension	Name	Fax Destinations	Action
123	123	Email to User: carol	Edit Delete
234	234	Email to User: carol	Edit Delete
345	345	Email to User: carol	Edit Delete
456	456	Email to User: carol	Edit Delete
567	567	Email to User: carol	Edit Delete
678	678	Email to User: carol	Edit Delete
789	789	Email to User: carol	Edit Delete
890	890	Email to User: carol	Edit Delete

There are several ways an incoming fax can be routed: They can be routed globally or by extension. A global routing entry will route every incoming fax to the defined global routing Fax Destination. Incoming faxes from PBXs that provide DTMF digits to the FF240-IP can be routed based on the extension digits to recipients as defined in the Recipient Fax Destination.

A Destination can be an existing User's Email, a printer where you would 'print on receive' to a defined printer, an Email where the Fax would be delivered to an email address, to the trash (the fax is simply thrown away), or a share where the incoming fax is copied to a defined network share location.

General Setup

Email Size Limit

Enter a size limit for inbound emails in Kilobytes. Any incoming faxes that are over this set limit will be split into multiple emails that are below the limit, i.e. a fax from a sender that is too large to be accepted by the email server will be automatically recreated as multiple smaller faxes for the recipient so that the fax is not rejected.

Fax Output Format

Choose the format (either *.PDF* or *.TIFF*) that you want inbound faxes to be presented as.

Email Fax Details

Check this box if you want detailed information about the fax included in the email body for incoming faxes.

Global Routing

Fax Destinations

This displays a destination for inbound faxes to always be routed in addition to their intended recipient.

Action

Here you will find a link to [Edit](#) the parameters set for Global Routing. Details of the edit Global Routing screen are found below.

Add Destination (Global)

Select the global destination from the drop down list. Some of these selections will require you to add the related information in the second field. Destinations available are: *Email*, *Share*, *Print* and *Email to User*. Your choice here will determine what information you must provide before clicking the update button.

Save button

When you are finished with your selection, click the Update button to set the global destination.

Cancel button

Clicking on the cancel button will cause you to lose all information entered and return you to the previous screen.

Default Routing

For any incoming fax that does not have a proper recipient destination, default routing is the catch-all destination.

Fax Destinations

This displays a destination for inbound faxes to be routed when there is no recipient or extension.

Action

Here you will find a link to [Edit](#) the default routing. Click on the Edit link to assign a default destination other than Admin.

Recipients

This will display a list of inbound recipients. There are four action links available: [Add](#), [Import](#), [Export](#) and [Delete All](#).

Add Recipients

Clicking on the Add link will bring up the Add Recipients screen.

Extension

Enter the phone number of the recipient to be added.

Name

Enter the name of the recipient to be added.

Destinations (Extension)

After adding a Recipient, the Add Destination section for this extension will appear.

Add Destination (to created extension)

Click the [Add](#) link to select the default destination for this recipient (*Email, Share, Print, Trash, Email to User*).

Import Recipients from CSV

Clicking on the Import link will bring up the import screen.

CSV File

Click on the Browse button to navigate to an existing CSV file to add them to the recipient list. The format for the CSV file is detailed below.

Existing Recipients

Select to either merge the new CSV file with the existing data or to replace the existing data with the new CSV information.

Import button

Click on the import button to begin the process or all settings will be lost when you navigate away.

Inbound Recipients CSV Import Format**Fields**

Extension,Description,Destination type,Destination value

Values

- Extension: numerical extension
- Description: The description for the recipient. Does not need to be repeated for multiple destinations for the same extension. Only the description for the first destination is used.
- Destination type: One of the following types "Email", "Share", "Print", "User", and "Trash"
- Destination value: The value of the destination appropriate for the type (shown below):
 - Email: email address
 - Share: The full UNC path of the network share. (The share must already be set up on the FF240-IP)
 - Print: The name of the printer. (The printer must already be set up on the FF240-IP)
 - User: The name of the existing FF240-IP user to email
 - Trash: No value needed

Example:

Extension,Description,Destination type,Destination value

1000,John Smith,Email,jsmith@example.com

1000,John Smith,Print,myprinter

1001,Bill,User,bill

1001,Bill,Share,\\server\sharename\folder

9999,Junk,Trash,

Fields may be quoted with double quotes. A header row is optional.

Export Recipients to CSV

This will export the current recipients list to a CSV file. Click Save on the pop-up window and select a location for the file to be saved at.

Delete All

This will permanently delete all entries in the recipients list.

Outbound

The Outbound page contains a selection box for allowing simultaneous faxing and archiving options.

Outbound Options	
Allow simultaneous faxing to the same number	<input type="checkbox"/> Save
Outbound Archive	
Enable Outbound Archive	<input type="checkbox"/>
Archive Format	PDF <input type="button" value="v"/>
Archive Directory	<input type="text"/> Browse Save

Outbound Options

By checking the “Allow simultaneous faxing to the same number” box and clicking the Save button, you allow the FF240-IP unit to send multiple faxes to the same phone number at the same time. This is beneficial for fax configurations where a single number is mapped to multiple lines or a trunk.

By default, this option is off and the FF240-IP will send faxes to the same number one at a time.

Save button

When you have checked or unchecked the “*Allow simultaneous...*” box, be sure to click the save button before navigating away from this page, else your changes may be lost.

Outbound Archive

Enable Outbound Archive

Check this box if you want to enable outbound archiving.

Archive Format

Select the format that you want the archive saved as. Options are PDF or TIFF with .pdf being the default selection. Be aware that these are image files that cannot be searched for specific words or edited – it is basically a “picture” of the information.

The naming convention used for archived files is: `fax_outbound_#dialled_date_time_faxID#`. The number dialed, date, time and fax ID number are variable; “fax_outbound” will always be the first words of the file.

Archive Directory

Enter the location of a shared folder that you want the archive to be saved to or click the [Browse](#) link to manually locate the shared folder. If you do not have a shared folder already setup, any entries or use of the [Browse](#) link will result in an error.

Save button

After setting the options that you want, click the Save button before navigating away from the page or your settings will be lost.

Outbound Approval

Outbound approval gives an administrator the ability to restrict outgoing faxes through several categories. The details of each section are found on the next page.

Outbound Approval Setup

Enable Outbound Approval

Approvers [Add](#)

Users who approve outbound faxes

admin

greg

Remove

Approved Fax Numbers [Add](#)

Fax numbers that do not require approval ('*' matches any digit e.g., 1-555-785-****, ***-****, ****)

Remove

6763*****

Remove

Approved Users [Add](#)

Users that do not require approval

Reminders [Add](#)

Email reminder sent to approver(s) at the specified time(s)

30

minutes

Remove

Save

Outbound Approval Report

Enabled

Report Format CSV

Minutes	Hours	Day of Month	Month	Day of Week
Every Minute	13	Every Day of Month	Every Month	Every Day of Week
0	14	1	January	Sunday
1	15	2	February	Monday
2	16	3	March	Tuesday
3	17	4	April	Wednesday

Save

Outbound Approval Setup

If you want to use any, some or all of the outbound approval options, you must check the 'Enable Outbound Approval' box here.

Approvers

The 'Approvers' section allows you to add users who are able to allow faxes to be sent out. By default, the Admin account is here.

Add

Click on the Add link to add the selected user from the drop-down list to the list of those who can approve outbound faxes.

Approved Fax Numbers

The approved fax numbers section is for adding phone numbers or portions of phone numbers that are always approved. Numbers added in this section will bypass the checks of the Approved Users section.

Add

Click on the Add link to add a phone number or add a portion of a phone number with the asterisk (*) wildcard to allow for variants (*i.e.* digits that follow an approved area code or local prefix).

Clicking the Add link will create an empty text field in this section where you can add the phone number, then click the **Save** button at the bottom of the page to confirm it.

Approved Users

The Approved Users section lists users that can send faxes without needing to be approved. By default, the admin account is entered here. Click on the Add link to add more exempt users.

Add

Clicking on the Add link will create another drop-down list box where you can select the user from the entire list of users entered in the FF240-IP unit. When you have added all the users that you want added to the approved list, click the Save button at the bottom of the page to ensure your entries are not lost.

Reminders

Reminders in the form of an email message will be sent to all users listed in the 'Approvers' section at the top of the section. By default, three time intervals are listed: 30 minutes, 60 minutes and 1440 minutes. Click on the Add link to add more times or the Remove link to delete times.

Add

Click on the Add link to create a new text box for entering a time (in minutes) for the FF240-IP to send an email reminder to all Approved users.

Outbound Approval Report

If you want reports of the approved faxes to be sent to the 'Approvers', check the 'Enabled' box here. Select the format that you want the report sent as from the drop-down list. Both *.csv* and *.xml* formats are available, with CSV being the default selection.

The table at the bottom allows you to customize the frequency in which the report is generated and sent out. This is the same style as used in the [Fax Log purge](#).

Examples of Report Settings:

Send a report every Sunday at 7:00 pm:	Send report at 11:00 pm on the first every month:
<i>Minutes is set to 0</i>	<i>Minutes is set to 0</i>
<i>Hours is set to 19</i>	<i>Hours is set to 23</i>
<i>Day of Month is set to Every day of month</i>	<i>Day of Month is set to 1</i>
<i>Month is set to Every month</i>	<i>Month is set to Every month</i>
<i>Day of Week is set to Sunday</i>	<i>Day of Week is set to Every day of week</i>

Cover Pages

Opt-Out	
Phone	<input type="text"/>
Fax	<input type="text"/>
Cost Free	<input type="text"/>
<input type="button" value="Save"/>	

Cover Pages Add	
PDF in version 1.4 format (Editable cover pages)	
Cover Page	Action
mts_template1.pdf	Delete
mts_template1_1.pdf	Delete
mts_template2.pdf	Delete
mts_template3.pdf	Delete

Here you can view or delete a cover page from the supplied pages created by Multi-Tech, or you can import ([Add](#)) one of your own. For tips on creating custom cover pages, please see the customization appendix. Cover pages must be in the PDF version 1.4 format. The Opt-Out section is available if you use the FF240-IP for advertisement purposes. The "[Editable cover pages](#)" link will take you to the Multi-Tech FTP site where the templates are available in the *.sla* format.

Opt-Out

The placement of the Opt-Out information will depend on the cover page in use. Note that some cover pages are written to expect a certain type of Cost Free method to be used; *e.g.* "Email _____ to opt-out of further fax communications."

Phone

Enter the phone number that can be called to reach you or someone who can remove a phone number from a contact list (opt-out of receiving faxes from this unit or your business).

Fax

Enter the fax phone number that will accept opt-out faxes (to remove the recipient from contact list of this unit or your business).

Cost Free

Enter a 'cost-free' method (email address, toll-free telephone or fax number, Website, etc.) that recipients can use without incurring a cost, and be removed from the contact list of this unit or your business.

Save

After entering your Opt-Out information, click the save button.

Cover Pages

PDF Cover pages to be used with your FF240-IP unit need to be **version 1.4** to work properly. The [Editable cover pages](#) link will take you to the *.pdf* files on the Multi-Tech website.

Add

Click on the [Add](#) link to open the Add Cover Page screen detailed below.

Cover Page

This column lists the file names of available cover pages as links. Clicking on the name will open the file for viewing.

Action

Delete

Clicking this link will delete the cover page permanently from the FF240-IP unit.

Add Cover Page

Clicking the Add link will take you to the Add Cover Page screen where you can browse to an existing cover page design (PDF file type) that you want to make available as an option on this FF240-IP unit. Even though the browse button allows multiple file types to search for, only PDF files are allowed.



The screenshot shows a web form titled "Add Cover Page". It features a text input field labeled "Cover Page", a "Browse..." button, and two buttons labeled "Add" and "Cancel".

Cover Page

Enter the path and name of the cover page that you want to add or click the **Browse** button to manually navigate to the location of the created cover page.

Add button

Click the add button to save the cover page you entered or browsed to and save it to the FF240-IP unit. Once added, the cover page is saved in the unit for all users.

Cancel button

Click the cancel button to discard changes and return to the previous screen.

Store & Forward Fax (T.37)

Store & Forward Fax (T.37): Parameters	
Enable T.37	<input type="checkbox"/>
Require Authentication	<input type="checkbox"/>
Set User From Envelope Sender	<input type="checkbox"/>
Default Scheduling Priority	2
Maximum Tries	3
Interval Between Tries	300 secs
Email Fax Receipt	failure
Fax Attachment with Receipt	PDF
Include Cover Page	<input type="checkbox"/>
Default Cover Page	coverpage_MyCompany.pdf
Use Email Body as Comments	<input type="checkbox"/>
Save	
Store & Forward Fax (T.37): Additional Hosts	
Add	
No additional hosts added	

Store and Forward fax (or T.37) is described in detail with examples in a later chapter. Here we are describing the parameters for T.37 that can be input into the FF240-IP unit through the web interface.

Store & Forward Fax (T.37): Parameters

Enable T.37

To allow the use of Store and Forward faxing on this FF240-IP unit, check this box, else it will not be allowed.

Require Authentication

Check the Require Authentication box to force users to have a valid username and password to use Store and Forward faxing.

Set User From Envelope Sender

Check this box to set the User from the envelope sender.

Default Scheduling Priority

Select the priority for scheduling store and forward faxing. The range is 0 to 5, with 0 being the highest priority. This setting will come in to play when there are more faxes in the queue that need to be sent out than there are available channels.

Maximum Tries

Enter the maximum number of tries that you want the FF240-IP to attempt without a successful completion before considering the fax as failed.

Interval Between Tries

Enter the time in seconds that you want the FF240-IP to wait between unsuccessful transmission attempts.

Email Fax Receipt

Select the condition that will trigger an email to the sender. There are three options here:

Failure – An email receipt will only be sent if the fax fails.

Always – On completion (success or failure) an email receipt will be sent.

Never – The FF240-IP will not send a receipt for any result.

Fax Attachment with Receipt

Use this drop down box to set the attachment type for fax receipts. Options are PDF, TIFF or None with the default set to .pdf format.

Include Cover Page

Check this box if you want the cover page selected above to be included, otherwise no cover page will be attached.

Default Cover Page

Select the cover page to use by default when using Store & Forward faxing.

Use Email Body as Comments

Check this box if you want to have the body of the email inserted into the fax comments section.

Save button

When you have entered your information, be sure to click the save button before navigating away from this page, else your changes may be lost.

Store & Forward Fax (T.37): Additional Hosts**Recipient Host**

This will display a list of additional hostnames and IP addresses that the FF240-IP will accept for Store and Forward faxing. If your hostname is *example.FF240-IP.com*, and you want to support T.37 faxing from other hostnames (e.g. *mycompany.FF240-IP.com*) this is where you would enter the additional hostname.

Action

These are the action item links available for the T.37 host.

Edit

This will bring up the editing screen for changing the recipient host.

Delete

This will delete the recipient host.

Add

Located in the title bar at the right margin, the Add link will bring up the Add Recipient Host screen where you can add a new recipient host as noted above. Make sure to click the Save button after entering the information or it will be lost once you browse away or close the screen. If you do not wish to add a new recipient, click on the Cancel button and you will be sent back to the Store & Forward Fax screen.

Fax Log

Fax Log Purge
[Purge Logs Now](#)

Purge all fax logs at the specified interval. [Examples](#)

Email Expired Entries to Administrator

Minutes	Hours	Day of Month	Month	Day of Week
Every Minute ▲ 0 (☰) 1 2 3 ▼	Every Hour ▲ 0 (☰) 1 2 3 ▼	Every Day of Month ▲ 1 (☰) 2 3 4 ▼	Every Month ▲ January (☰) February March April ▼	Every Day of Week ▲ Sunday (☰) Monday Tuesday Wednesday ▼

The interval at which the fax log files are deleted can be adjusted here. By default, the logs are removed each day at midnight.

Fax Log Purge

Here is where the timing of log purging is set. The different columns allow for many settings. You can select multiple options by clicking and dragging or by holding down the Shift or Control key while selecting. Clicking on the [Examples](#) link will open a pop-up displaying examples as shown below.

Email Expired Entries to Administrator

If you want have the fax logs sent as an email attachment to the administrator before they are deleted, check this box.

Minutes

Should you want to purge log files at intervals that are not on the hour, you can set the minutes.

Hours

This corresponds to the hour of the day when using a 24-hour clock (e.g. Hour 19 is 7 pm).

Day of Month

The Day of Month counts forward from the first day, so if you want to delete all fax logs on the 5th of every month, this would be set to 5.

Month

As a long term option, you can set the logs to be purged only in a specific month.

Day of Week

Log files can be set to be cleared on a specific day of the week, or every day of the week.

Email Expired Entries

If you want to keep the FF240-IP unit clear of log files, yet wish to retain the log files, you can check this to have the log files emailed to the administrator email address.

Examples of Fax Log Purge Settings:

Examples are provided to help understand the specific columns.

To purge logs every Sunday at 7:00 pm:	To purge logs at 11:00 pm on the first every month:
<i>Minutes is set to 0</i>	<i>Minutes is set to 0</i>
<i>Hours is set to 19</i>	<i>Hours is set to 23</i>
<i>Day of Month is set to Every day of month</i>	<i>Day of Month is set to 1</i>
<i>Month is set to Every month</i>	<i>Month is set to Every month</i>
<i>Day of Week is set to Sunday</i>	<i>Day of Week is set to Every day of week</i>

Purge Logs Now

Clicking on this link will delete all currently stored logs now instead of waiting for the purge time set above.

Users Section

FaxFinder Users							Add Import Export Delete All
Users for logging into the FaxFinder and sending faxes.							
Full Name	Username	Email	Phone	Fax	Organization	Action	
Administrator	admin	admin@mycompany.com	555-717-9876	(555)1234567	And back again	Edit	
First User	Firstuser	first@mycompany.com	5551111	5551112	My Company	Edit Delete	
Second User	Seconduser	numbertwo@mycompany.com	(555) 763-9999	(555) 763-9990	My Company	Edit Delete	
John Doe	johnd	jd@mycompany.com	5552001	5552002	My Company	Edit Delete	

The FF240-IP Users section of the FF240-IP unit displays a list of all of the users that have been entered or imported into the unit itself. With the exception of the default admin account, all users can be edited or deleted as needed. Users are the definitions of people that have access to the FF240-IP for sending faxes. Each user will have a list of Contacts that they use to send faxes. The user information is used gain access to the FF240-IP to send a fax via the web interface Send Fax page or an external Web API client such as the FF240-IP Client software.

It is important that each user of the FF240-IP is entered in to the unit so that their contact list is populated. All contacts are stored in the FF240-IP unit and the Client software will retrieve this list when the user installs the software. When a user adds or deletes a contact, it is done to the database of the FF240-IP unit, as it is the only place where this information is kept. Users of the FF240-IP system should log in to the unit and add to their Contact list manually (the [Add](#) link) or automatically (the [Import](#) link). When importing a contact list, the user can choose to overwrite any existing information, or simply add the new information (the 'Merge' option).

FaxFinder Users

This section will list all of the users added to the FF240-IP unit. Click on the [Edit](#) action item to see the Contact lists for individual users. Contact lists are the primary source for information when sending out faxes. The Phone, Fax and Organization fields will be used to populate the corresponding fields on the cover page.

Add / Import / Export / Delete All

A User must first be added before they can add Contacts to their account. Adding a User can be done manually through the [Add](#) link or automatically through the [Import](#) link if a CSV file is available. The entire User list can also be Exported to a CSV file for use with other FF240-IP units or programs. The Add, Import and Export screens are shown below.

Full Name

This displays the text entered as the full name for a user.

Username

This displays the username.

Email

This displays the email address associated with the user account.

Phone

This displays the phone number associated with the user. Typically this is a voice number for contacting the user regarding a fax they have sent or received.

Fax

This displays the fax number associated with the user account.

Organization

This displays the organization (if any) that is associated with the account.

Action

Edit

Users <small>help</small>	Edit joes
FaxFinder Users	Username: joes
Edit joes	Full Name: <input type="text" value="Joe Smith"/>
Edit Contacts for joes	Password: <input type="password" value="••••••"/>
Edit Groups for joes	Confirm Password: <input type="password" value="••••••"/>
	Email: <input type="text" value="joes@mycompany.com"/>
	Phone Number: <input type="text" value="555-651-5512"/>
	Fax Number: <input type="text" value="555-651-5521"/>
	Organization: <input type="text" value="My Company"/> <input type="button" value="Update"/>

Clicking on the Edit link will bring up the editing screen for a user. You will also see this list of Contacts associated with this user. The same options are available: *Add*, *Import*, *Export* and *Delete All*. Contact lists use four primary pieces of information for speed and simplicity of use: *Name*, *Fax Number*, *Phone Number* and *Organization*.

Edit username

Here you will find all of the previously entered User information. Every field except the assigned Username can be changed. Click on the Update button to save any changes.

Edit Contacts for username

Here is the list of contacts that have been associated with this account. Links are available to Add, Edit, Import, Export or Delete All for entries here. More contacts can be added manually or imported from a CSV file. Please note that imported files with matching names will overwrite the current information. You can also *Export* this contact list to a CSV file for possible importation by another user to save time when contact lists are shared. Each entry can be edited or deleted in the Action column.

Edit Groups for username

Here is the list of groups that have been associated with this account. There are links for Adding, Editing or Deleting All of the listed groups.

Add

Clicking the Add link will bring up the Add FF240-IP User screen. Here you will enter the information to be associated with the new user account.

Import
CSV File

Click on the Browse button to navigate to an existing CSV file to import. See Contact CSV File Import Format below for specifics on the fields imported.

Existing Users

Select to either **merge** the new CSV file with the existing data or to **replace** the existing data with the new CSV information.

Import button

Click on the import button to begin the process or all settings will be lost when you navigate away.

Cancel button

This will return you to the Users screen.

Contacts CSV Import Format**Fields**

Name, Fax Number, Organization, Phone Number

Values

- Name: name of the contact
- Fax Number: contact's fax number
- Organization: contact's company name
- Phone Number: contact's phone number

Example:

```
Name,Fax Number,Organization,Phone Number
Fred Johnson,111-555-1000,Another Company,111-555-1001
Contact 2,1234,Company Two,5678
```

Fields may be quoted with double quotes. A header row is optional.

Users CSV Import Format

There are two types of records in the User CSV format: a **User record** type and a **Contact record** type. The first column determines which type of record the line is, so you may see both types in one CSV file.

User Record**Fields**

Type, Username, Password, Full Name, Email, Phone, Fax, Organization

Values

- Type: must be "User"
- Username: user's username
- Password: user's password
- Full Name: user's full name
- Email: user's email address
- Phone: user's phone number
- Fax: user's fax number
- Organization: user's company name

Example:

Type,Username,Password,Full Name,Email,Phone,Fax,Organization

User,john,my_password,John Smith,jsmith@acompany.com,612-555-1234,612-555-2222,"A Company, Inc."

User,joe,joe_password,Joe Doe,jdoe@workplace.com,612-555-1234,612-555-2222,Workplace

Contact,john,Fred Johnson,111-555-1000,Another Company,111-555-1001

Contact,joe>Contact 2,1234,Company 2,5678

Fields may be quoted with double quotes. A header row is optional. A header row is any row that starts with "Type,".

Contact Record**Fields**

Type, Username, Contact Name, Fax Number, Organization , Phone Number

Values

- Type: must be "Contact"
- Username: username of the user this contact belongs to
- Contact Name: name of the contact
- Fax Number: contact's fax number
- Organization: contact's company name
- Phone Number: contact's phone number

Example:

Type,Username,Password,Full Name,Email,Phone,Fax,Organization

User,john,my_password,John Smith,jsmith@acompany.com,612-555-1234,612-555-2222,"A Company, Inc."

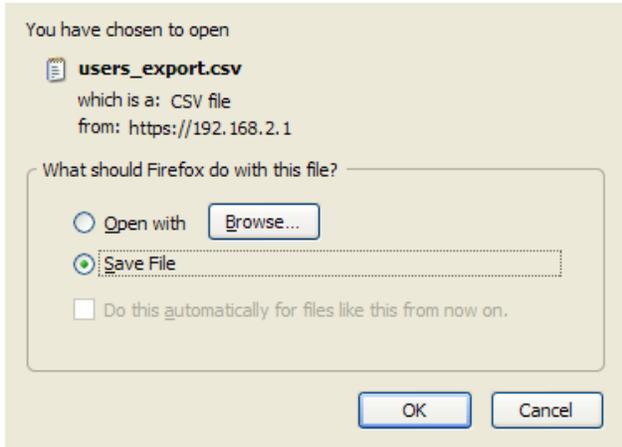
User,joe,joe_password,Joe Doe,jdoe@workplace.com,612-555-1234,612-555-2222,Workplace

Contact,john,Fred Johnson,111-555-1000,Another Company,111-555-1001

Contact,joe>Contact 2,1234,Company 2,5678

Fields may be quoted with double quotes. A header row is optional. A header row is any row that starts with "Type,".

Export



Click on the **Save File** button, then click **OK** to save the current Users as a Comma Separated Value file.

Delete All

This will permanently delete all users in the list.

Contacts Section

The contacts section will list all of the available recipients for the user that is currently logged in. This is separated into four sections for organization and ease of use (Personal, Global, Personal Groups and Global Groups).

Personal

The personal contact section shows all of the personal contacts added by the currently logged in user.

Contacts for admin				Add	Import	Export	Delete All
Name	Fax Number	Phone Number	Organization	Action			
Admin's Contact	763-555-8648	763-555-4684	Another Company	Edit Delete			

Contacts for n

There are four links for managing personal contacts: [Add](#), [Import](#), [Export](#) and [Delete All](#).

Name

This displays the contact name as entered.

Fax Number

This displays the fax number entered for this contact.

Phone Number

This displays the voice phone number entered for this contact.

Organization

This displays the organization that has been entered for this contact.

Action

[Edit](#)

Clicking on the Edit link will open the editing screen so that the personal contact information can be changed.

[Delete](#)

Clicking on the Delete link will permanently remove this contact from the FF240-IP.

Global

The global contact group displays all of the global contacts entered by the administrator for use by all users.

Global Contacts				Add Import Export Delete All
Name	Fax Number	Phone Number	Organization	Action
Sales Dept	7635559637	7635559638	Our Company	Edit Delete

Global Contacts

There are four links for managing global contacts: [Add](#), [Import](#), [Export](#) and [Delete All](#).

Name

This displays the contact name as entered.

Fax Number

This displays the fax number entered for this contact.

Phone Number

This displays the voice phone number entered for this contact.

Organization

This displays the organization that has been entered for this contact.

Action

Edit

Clicking on the Edit link will open the editing screen so that the personal contact information can be changed.

Delete

Clicking on the Delete link will permanently remove this contact from the FF240-IP.

Personal Groups

The personal groups screen will display all personal groups available for the logged in user.

Personal Groups for admin		Add Delete All
Name	Description	Action
AllEmps	All Employees	Edit Delete

Personal Groups

There are two links available for personal groups: [Add](#) and [Delete All](#).

Name

This displays the contact name as entered.

Description

This will display the description entered for the created group.

Action

Edit

Clicking on the Edit link will open the editing screen so that the personal contact information can be changed.

Delete

Clicking on the Delete link will permanently remove this contact group from the FF240-IP.

Global Groups

The global groups screen will show all of the global groups created by the administrator that are available to all users.

Global Groups		Add Delete All
Name	Description	Action
SalesCusts	All Customers	Edit Delete

Global Groups

There are two links available for global groups: [Add](#) and [Delete All](#).

Name

This displays the contact name as entered.

Description

This will display the description entered for the created group.

Action

Edit

Clicking on the Edit link will open the editing screen so that the personal contact information can be changed.

Delete

Clicking on the Delete link will permanently remove this contact group from the FF240-IP.

Send a Fax Screen

The Send Fax screen is a one page form for sending faxes directly from the FF240-IP unit when accessed from a web browser.

Send Fax

Sender Information

Name

Organization

Phone Number

Fax Number

Email Address

Recipient Information

Find Recipient

Contact/Group

Name

Organization/Description

Fax Number

Phone Number

[Add Recipient](#)

Name	Organization/Description	Fax	Phone	Action

Cover Page Information

Include cover page with this fax? Yes No

Select Cover Page

Subject

Comments

Attachments

.txt, .tif, .tiff, .pdf or .ps files

Attachment [Browse...](#)

[Add Another Attachment](#)

Options

Max Attempts

Priority

Retry Interval seconds

Send a receipt

Fax Attachment with Receipt

[Send Fax](#)

Send Fax

Sender Information

If a cover page is selected (the 'Yes' check box detailed below), much of the sender information will be already populated in the cover page from what is provided for the logged-in user. This can be changed if needed, or left as is.

Name

Enter the name of the sender here.

Organization

Enter the name of the sending organization (if needed) here.

Phone Number

Enter the sending phone number here (a voice line that should be used to contact the sender should there be any questions or problems).

Fax Number

Enter the fax number where you want to receive faxes.

Email Address

Here you may provide an email address that can be used by recipients for contacting the sender.

Recipient Information

Find Recipient

Select from the drop-down menu how you would like to enter your recipients:

Personal Contacts

Personal Groups

Global Contacts

Global Groups

Enter Recipient Info

Enter Recipient Info and save as Personal Contact

Contact/Group

Use the drop-down box to select a recipient from the contact list that is associated with the **Find Recipient** list selected above. Once selected, the Name, Organization/Description, Phone Number and Fax Number below will be automatically populated with that information from the Contact list.

Note: You need to click the **Add Recipient** button after making this selection if you are not adding the recipient manually.

Name

If not already populated, enter the name of the intended recipient.

Organization/Description

If not already populated, enter the organization (if any) of the recipient. If a group was entered, the description will be here.

Fax Number

If not already populated, enter the fax number of the recipient.

Phone Number

If not already populated, enter the voice phone number of the recipient.

Add Recipient button

Click this button to add a selected or manually entered recipient to the list. Repeat the process to add more recipients.

Recipient list

The current list of added recipients is listed here. If needed, you can [Delete](#) individual entries.

Cover Page Information**Include cover page with this fax?**

Select Yes or No for your choice.

Select Cover Page

Choose a cover page from the drop-down box.

Subject

Enter a subject for the fax here.

Comments

Enter any comments needed for this fax transmission.

Attachments

Browse to any attachments that you need to add. Click the **Add Another Attachment** button if there is more than one attachment needed. Allowed attachment types are: *.PDF, .TIF, .TIFF, .TXT, .PS*.

Options**Max Tries**

Enter the number of tries that you want the FF240-IP to attempt before aborting the fax.

Priority

Select the transmission priority for this fax. The range is from *1st Priority* to *Low*. The default setting is *Medium* priority.

Retry Interval (seconds)

Enter the number of seconds for the FF240-IP to wait between unsuccessful transmission attempts. The default is 300 seconds.

Send a receipt

Select from the drop-down box under what condition you want a receipt sent. There are three options here:

Failure – An email receipt will only be send if the fax fails.

Always – On completion (success or failure) an email receipt will be sent.

Never – The FF240-IP will not send a receipt for any result.

Fax Attachment with Receipt

Select from the drop-down menu the format of the receipt attachment: *.PDF, .TIF* or *None* (do not attach). The default is PDF formatting.

Send Fax button

When all of the send fax information is completed, click the send fax button to activate this fax. Navigating away from this screen or exiting the browser without clicking the send fax button will clear all data and the fax will not be sent.

Logout



[Home](#) [Status & Logs](#) [System Configuration](#) [Fax Configuration](#) [Users](#) [Contacts](#) [Send Fax](#) [Logout](#)

Clicking this navigational link will log you out of the FF240-IP unit. This is always a good practice to follow when you are finished using the FF240-IP, especially if you were logged in with an administrator's privileges for security reasons. There is no screen associated with the Logout link – after clicking Logout, you will be redirected to the Login screen.

Chapter 4 – Client Software Installation

The Client software is for general use of the FF240-IP, but it needs to be associated with a FF240-IP unit for proper operation. Your administrator should provide the software or a location where it can be obtained from. You will need to install the Client software on your PC and set the FF240-IP that it is to work with. You will need to be logged in with administrator rights before starting any installation.

Installation

- A. Insert the FF240-IP Product CD into the CD-ROM drive of the client PC. If the CD does not auto start, use Windows Explorer to navigate to your CD drive and launch the installation program by double-clicking on **cd_start.exe** file on the CD. From the menu presented, click the Software button.

From the new screen presented, select the Client Software button to install the Multi-Tech FF240-IP Client software for using the FF240-IP unit.

- or -

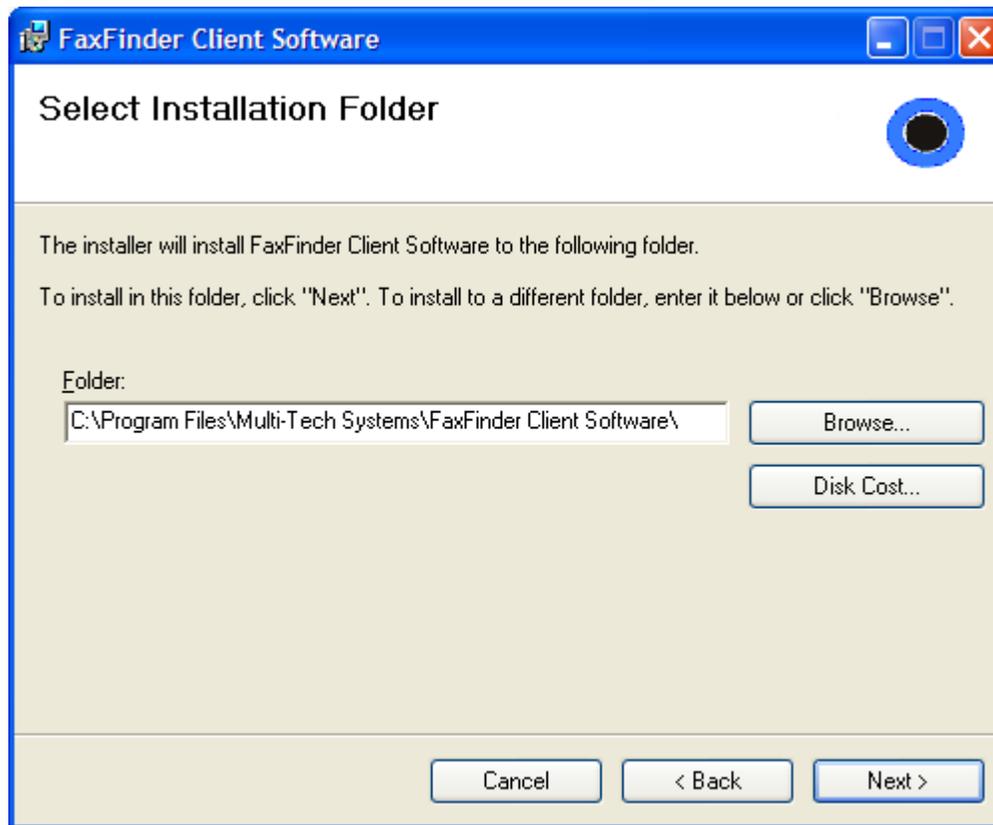
Retrieve the software installer from the location provided by your administrator.

Double-click the filename (default is *FFClientInstall.msi*) to begin the installation. The file labeled *FFClientTSinstall* is for Windows Terminal Services only.

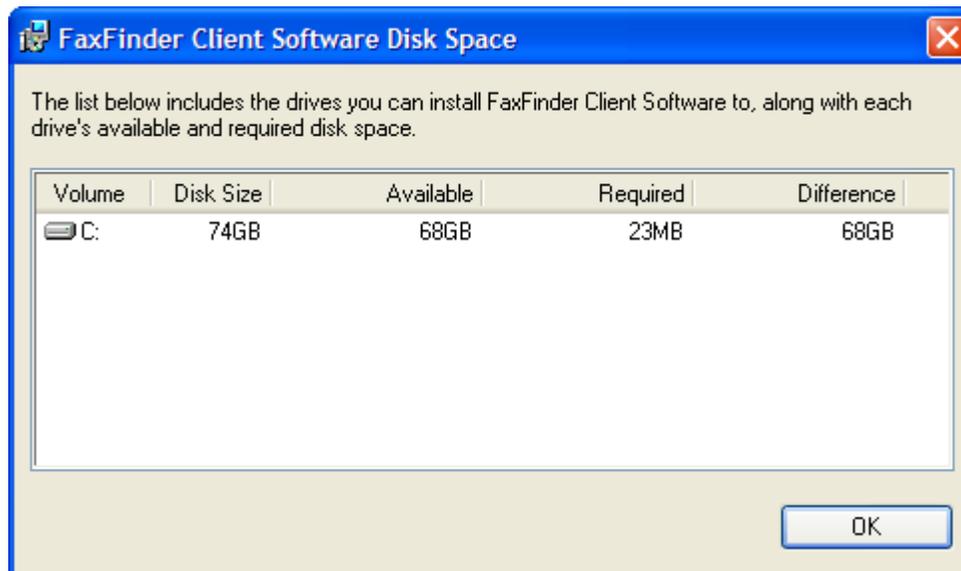
Important: If you have any old versions of the FF240-IP client software installed (for any FF240-IP model family), please uninstall that prior to installing the new version. The FF240-IP client utilizes Windows Add or Remove Programs utility in the Control Panel.



- B. At the **Welcome** screen, click **Next**.



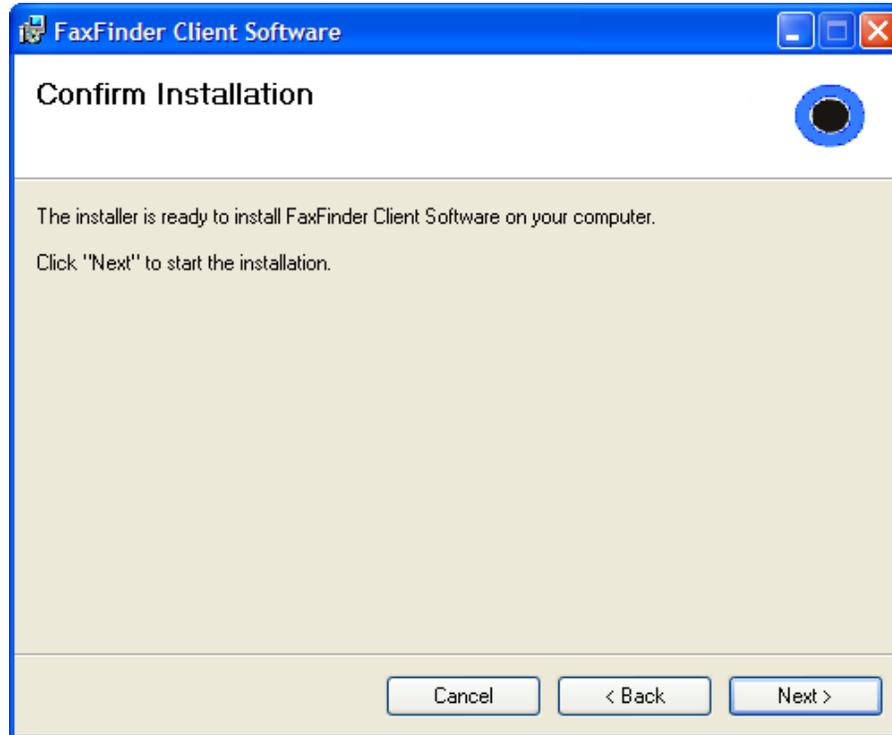
- C. At the **Select Installation Folder** screen, browse to the desired file location for the FF240-IP client software. In most cases, the default file location is recommended.



Clicking on the **Disk Cost** button will show you the size of the software being installed as well as the available disk space of the target drive.

When the destination location is correct, click **Next**.

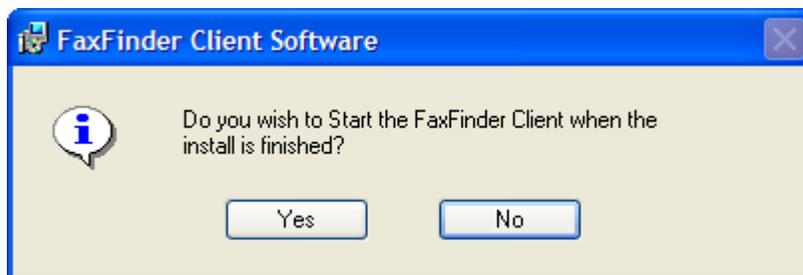
- D. At the **Confirm Installation** screen, click **Next** to begin the installation.



A transient screen ("Installing FF240-IP Client Software") will appear while files are being copied.



- E. The FF240-IP Client software can place a shortcut in the Startup directory so that the client software will start automatically when the PC is booted.



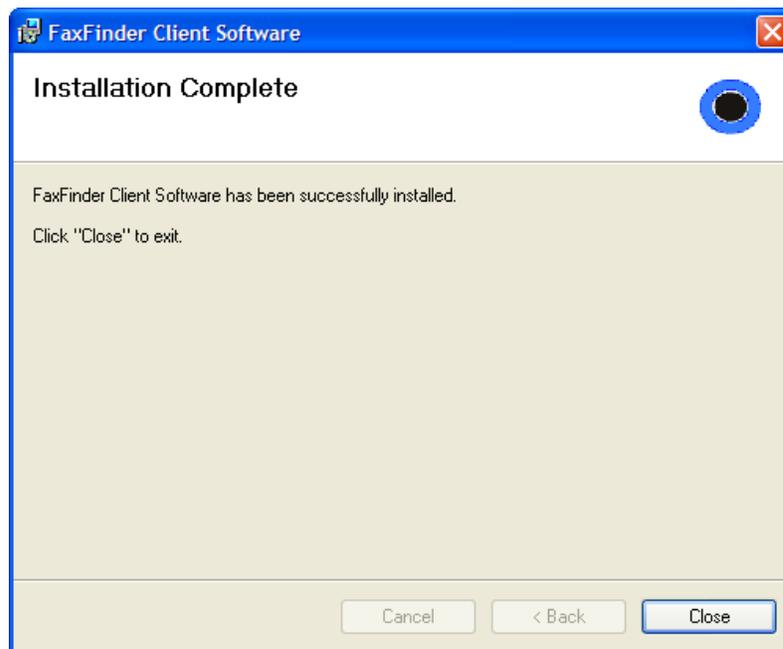
- F. You will be asked if you want the Client software to automatically launch when the installation is complete. Select your preference.
Note: This window does not pop-up during a Terminal Services installation.



- G. You will be asked whether or not you want to associate *.tif* and *.cpg* files with the Multi-Tech Tiff Viewer. Click **Yes** (unless you prefer to use a different viewer program). The *.cpg* files become associated with the legacy Cover Page software that is used with the legacy FaxFinder FFx20 models.

If a Question screen appears asking "Warning - the extension *.tif* is already registered, Overwrite?"; click **Yes** if you wish to use the TIFF viewer installed with the FF240-IP Client Software. Click **No** if you prefer to leave the current association for viewing *.tif* files.

- H. Then the **Installation Complete** screen will appear.



Click the **Close** button.

If you chose 'Yes' above to have the client software start after installation, you will see the application icon down in your System Tray. Click on the icon and select "show FF240-IP Client software" to use the program.

Push Installation Method

Push Installs of the Client Software

The FF240-IP Client installer is now available as an MSI package. This provides the ability to perform remote installation using Microsoft Group Policy, SMS, as well as other third party tools. The installer can be run like any other Windows software installer and it can also be invoked from the command line using the Windows Installer command 'msiexec'. **Previous versions of the FF240-IP Client (1.08.xx and older) must be uninstalled before upgrading.**

Note: The User Account Control (UAC) feature of Windows Vista and Windows Server 2008 will need to be turned off for push installations to complete successfully.

The installer supports the following options when being used from the command line or remote installation:

- Set a different install directory:
 - TARGETDIR=PATH (default is *Program Files/Multi-Tech Systems/FF240-IP Client Software*)
- Add file associations for Multi-Tech TIFF Viewer and Cover Page Editor:
 - ADDFILEEXT=1 (default is 0)
- Start the FF240-IP client after installation:
 - LAUNCHPRODUCT=1 (default is 0)
- Automatically Start the FF240-IP Client
 - LAUNCHPRODUCTONBOOT=1 (default is 0)
- Example command to install in silent mode with options:
 - msiexec /i FFClient-x_x_x.msi /q TARGETDIR="C:\FF240-IP Client" ADDFILEEXT=1 LAUNCHPRODUCT=1 LAUNCHPRODUCTONBOOT=1
- Example command to uninstall in silent mode:
 - msiexec /x FFClient-x_x_x.msi /q

An example of how to perform a remote software installation using Microsoft Group Policy is available from Microsoft's website.

- Search for Knowledge Base article number 816102 at microsoft.com.

Client Install Shield Mass Uninstall

An MSI package is available on the web site, and the Installation CD, that can be used to mass un-install the previous version of FF240-IP Client (versions before 1.08.xx).

- Example command to uninstall the Install Shield FF240-IP Client in silent mode:
 - msiexec /i remove_installshield_faxclient.msi /q

Setting the Usage Rights for the Printer

The printer that is installed into Windows for the FF240-IP to work requires some settings of the rights.

For Windows Server 2003, Windows XP and earlier:

The Windows account/user that is to "use" the printer, needs to have the "Print" permission associated with (enabled on) their Windows account (regarding the printers security properties).

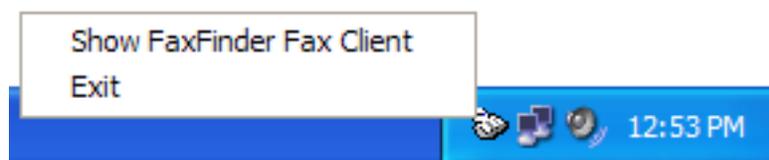
For Windows Vista, Windows 7 and later:

The Windows account/user that is to "use" the printer, needs to have the "Print" permission and the "Manage Printers" permission associated with (enabled on) their Windows account (regarding the printers security properties).

Associating Client Software and User with the FF240-IP Unit

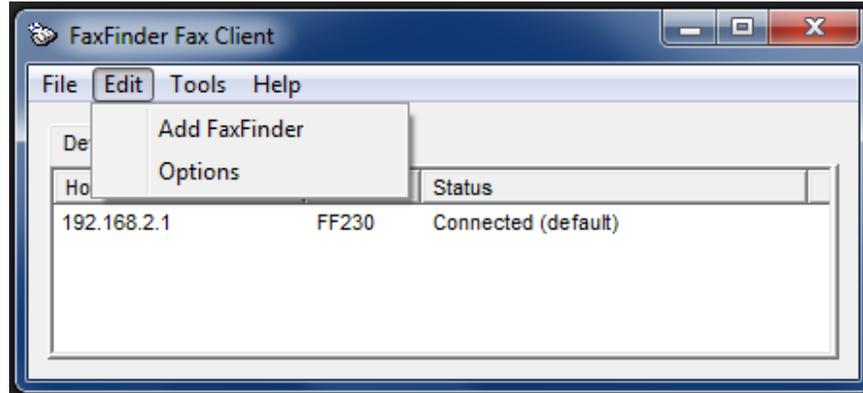
After the FF240-IP client software is installed, you must associate it with one or more FF240-IP units. Sometimes more than one FF240-IP unit is available for use. In some cases, certain client users might be assigned to some FF240-IP units and not assigned to others. This procedure shows you how to make this association so that faxes may be sent from a particular FF240-IP unit to the email inbox of your PC. To do this procedure, you will need to know the IP address of the FF240-IP unit that you are able to use. You should also be given a valid username and password for every unit that you can use. Be aware that an individual FF240-IP client user can be associated with more than one FF240-IP unit. This could easily be the case in an office that is large and/or an office that has a great deal of fax traffic.

The icon for the FF240-IP Client software application will appear in the Windows Start menu programs selection. After installation, the Client Software starts up whenever the computer is booted if the 'Yes' option was chosen when the 'Do you wish to start the FF240-IP Client automatically?' prompt appeared during installation. When running, a FF240-IP icon appears in the system tray area at the lower-right corner of the screen. The FF240-IP Fax Client Software screen can be opened from either the Start menu icon or the tray icon. If the Client Software is shut down, it can be re-opened from the Start menu or by double-clicking on a file named FF240-IPClient.exe (or something very similar), which, following a typical, default installation, is located at C:\Program Files\Multi-Tech Systems\FF240-IP Client Software\FF240-IPClient.exe. When the client software is launched, it will reside in the System Tray by default.

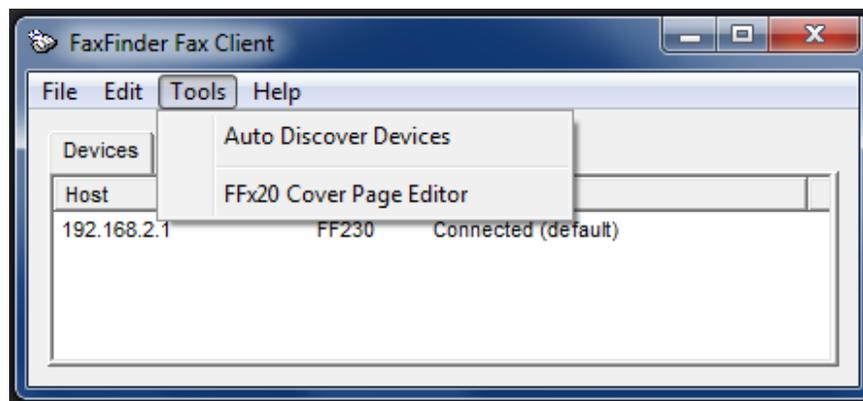


System Tray Icon

1. At the main screen of the **FF240-IP Fax Client Software**, click on **Edit** and select “Add FF240-IP” if you know the IP address or Host Name of the FF240-IP, otherwise open the **Tools** menu and select “Auto-Discover Devices” to have the Client software search the network for FF240-IP units.

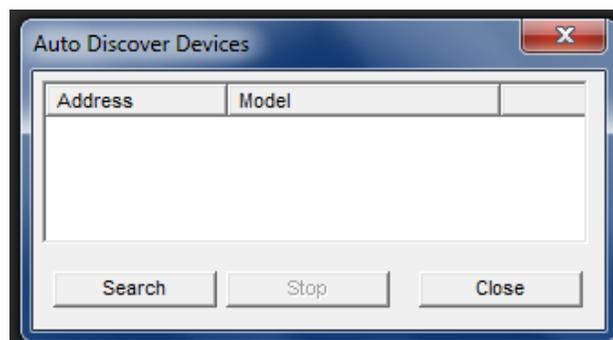


Add FF240-IP Manually



Use Auto Discover to Locate FF240-IP

- a. If you are using the Auto Discover Device method, click the ‘Search’ button to have the FF240-IP Client software search the available network for FF240-IP units that are available.



- To add a FF240-IP when the IP address is known, select the FF240-IP model family from the Type drop-down, enter the IP address “Server Address” field along with your Username and Password.

If you need to use a secure login, tick the ‘Use SSL’ checkbox.

If the **Auto Discover Devices** feature was used, you may Right-click and select **Add** or double Left-click on the IP address or name of the FF240-IP unit that was detected. Use the ‘X’ in the upper right hand corner to close the Auto Discover window after you have added it to the client.

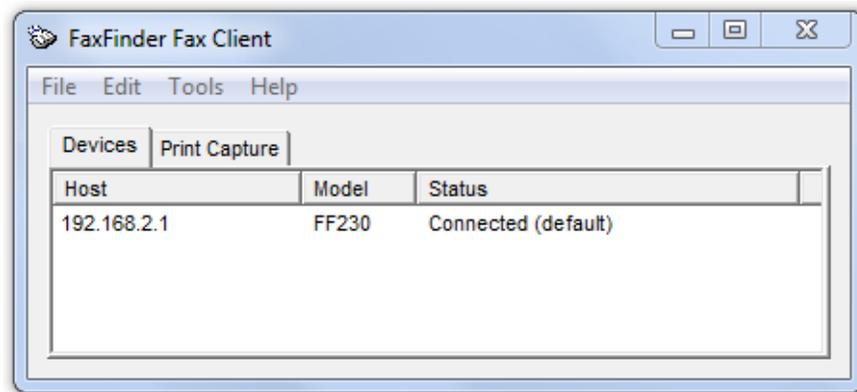
- Enter, in the appropriate fields, the **Username** and **Password** that the client will use when accessing this FF240-IP unit. If the client is to be associated with multiple FF240-IP units, a different Username and Password could be established for each. However, in most cases, it is advisable (for the sake of simplicity and convenience) to use the same Username and Password for all FF240-IP units.

NOTE: The Username entered here must match the entry used in the “Username” field of the **Users** screen on the FF240-IP Server. The password entered here must match the password entered for this user.

The Username and Password are *case-sensitive*.

Click **OK**.

4. A new FF240-IP entry should appear on the “Devices” tab of the **FF240-IP Fax Client Software** screen.



The status of the newly registered FF240-IP unit may momentarily go from “Not logged in” to “Logging in” to “Connected.” A FF240-IP x20 unit will show *Idle* instead of connected.

If it goes to Login Failure, then one of two things is wrong:

- The IP address or domain name is wrong. If that is the case, delete that entry (by right-clicking **DELETE**), and enter a new one;
- or -
- The Username/Password combination may be wrong. Verify that the client Username/Password combination (accessible by right-clicking and selecting **Properties** on the FF240-IP listed in the Devices tab of the client software) matches the **Username/Password** combination assigned to the client-user by the FF240-IP Administrator.

Note: Username and Password are case-sensitive.

Disassociating the Client from a Specific FF240-IP Unit

In this procedure, you will un-do the procedure “Associating Client with a Specific FF240-IP Unit.” This situation might occur when changes are being made in the network faxing system. In any event, this procedure severs the tie between your PC and a specific FF240-IP unit so that you will no longer be connected to it for sending fax messages. (Faxes can be received in email form from the FF240-IP server, despite disassociating from the FF240-IP server, as long as the receiving party is defined in the Inbound Routing section of the FF240-IP unit.) In cases where the client is currently associated with more than one FF240-IP unit, you will need to know the IP address of the specific FF240-IP unit from which you want to disconnect.

- Open the FF240-IP Client Software program and go to the Devices tab. Select the FF240-IP unit from which you want to disconnect (you can identify the FF240-IP unit by its IP address or domain name), Right-click on it and select **delete**.
- Your FF240-IP Client Software will no longer be able to send faxes through this particular FF240-IP unit.

Chapter 5 – FaxFinder-IP Operation

Introduction

This chapter describes the things that a user can do with the FF240-IP system. The software programs involved are the FF240-IP Client Software and the Multi-Tech Tiff Viewer (or designated PDF viewer). The FF240-IP Client Software interfaces with the FF240-IP Server and has its own user interface. When previewing outgoing faxes, the PC's operating system calls up the designated TIFF viewer to display the outgoing fax. When viewing received faxes, the PC's operating system calls up the appropriate viewer (PDF or TIFF). The choice of file types (PDF or TIFF) is made in the FF240-IP Server software. Note that client users can choose to display either on the Multi-Tech TIFF viewer or on a different (non-Multi-Tech) TIFF viewing program. Likewise, if the FF240-IP system distributes incoming faxes as PDF files, the client can designate which PDF viewer to use. The Multi-Tech TIFF viewer is installed automatically with the FF240-IP Client software.

Overview:

Sending Faxes

- The FF240-IP Schedule Fax Screen (New Fax)
- Send Fax with Client Software
- Send Fax by Printing
- Send Fax from Email (T.37)
- Send Fax from FF240-IP Web Interface
- Send Fax by Web API

Using the Client Software

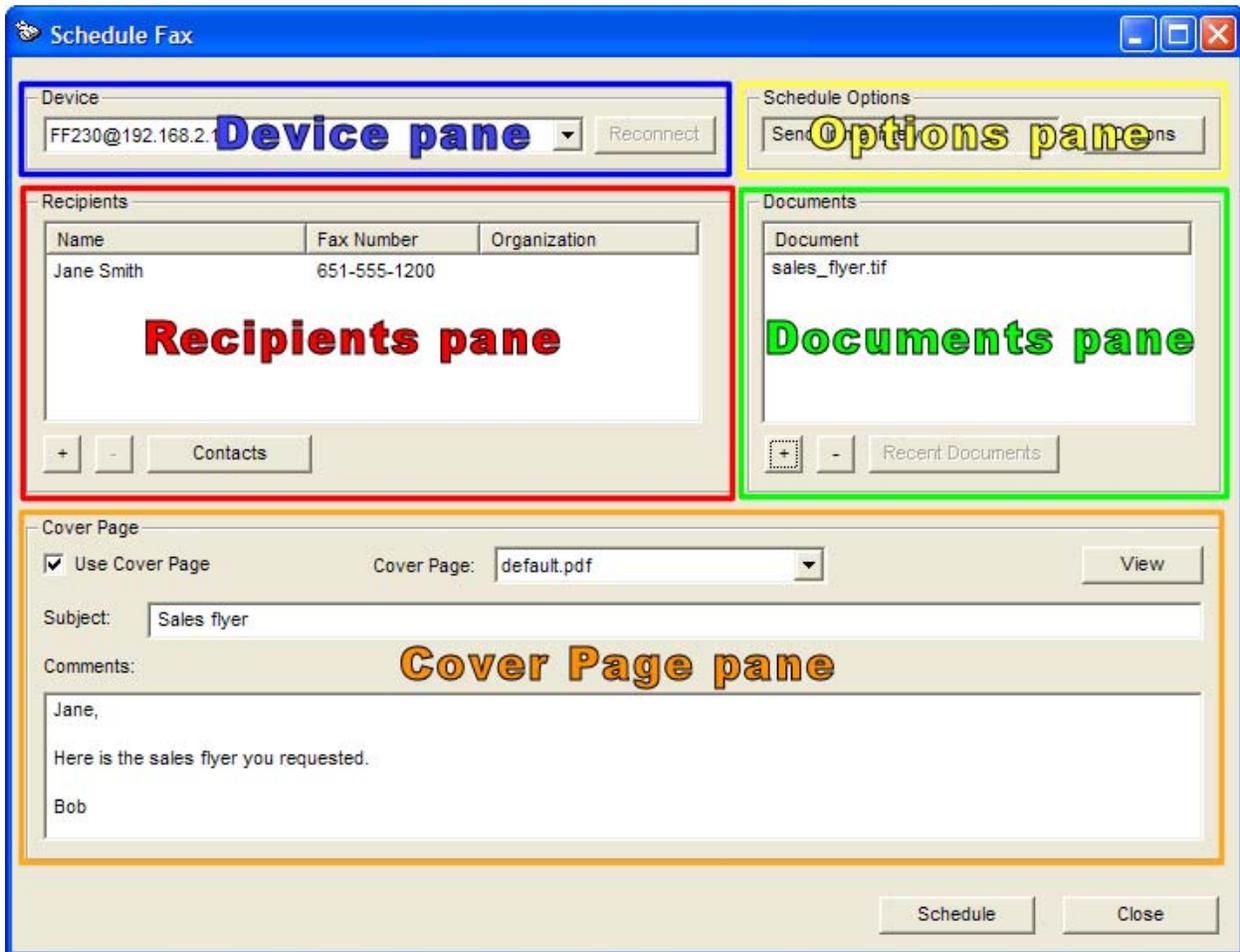
- Details of Software Commands
 - Add a contact
- Using the Cover Page Generator
- Using the Tiff Viewer

Sending Faxes

Sending faxes through the FF240-IP is quick and simple and offers a variety of methods that can be used to accomplish this. This section will show all the possible ways to send a fax with the FF240-IP.

Depending on how your administrator has set up the unit, several or even all options may be available. First, the FF240-IP Schedule Fax window will be explained as it is used for the majority of faxing through the FF240-IP unit.

The Schedule Fax Screen (New Fax)



The **FF240-IP Schedule Fax** screen appears (a) when you double-click an item from the Print Capture tab of the client, or (b) when you select the **New Fax** command from the File menu of the Client Software screen or (c) when you Right-click an item in the Print Capture tab and select 'Fax.'

There are four sections (called 'panes' hereafter) to the Fax Scheduler: the Recipients pane, the Documents pane, the Options pane and the Cover Page pane. At the bottom are the two main function buttons – one to send or schedule the fax and the other to cancel it entirely.

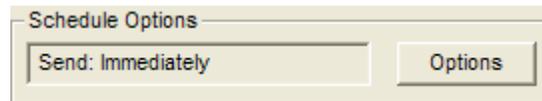
Device pane

The device pane provides a drop-down list of all FF240-IP units available to this client. Select the unit that you want this fax sent from.

Reconnect button

If you have multiple FF240-IP units available and the unit you want to use is not selected, select the FF240-IP you want to send through and click the Reconnect button.

Schedule Options pane



Options text box: This text box will display 'Send Immediately' by default. If you want to schedule this fax to be sent at a specific time or date, then you must click the Options button.

Options (button): If you want to specify a time or date for the fax to be sent, you must click the Options button which will open the Fax Scheduling Options window. The Options button will also allow you to change the Maximum Attempts, Priority and Fax Receipt options from the default values.

Fax Scheduling Options

Send Immediately

By default, the 'Send Immediately' box will be checked which has the 'Date' and 'Time' fields grayed-out.

By un-checking the 'Send Immediately' box, you can set a specific time and date for this fax to be sent.

Fax Priority

You can select the level of priority for your fax from the drop-down list. The options are (in order of highest priority first): *1st Priority; High; Medium/High; Medium; Medium/Low; Low*.

The default priority is Medium.

Fax Receipt

Select the condition for receipt from this job. The options are: Always; Failure; Never.

The default receipt condition is Failure.

Fax Attachment with Receipt

If you have selected to receive receipts as attachments, you can select the format from this drop-down list. Options are: None; PDF; TIFF.

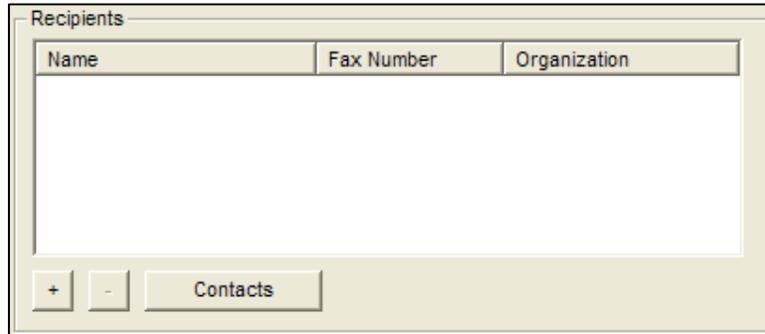
The default attachment type is PDF.

Retry Interval

Enter the retry interval for instances where the fax does not complete.

The default retry time is 5 minutes and 0 seconds.

Recipients pane



Name (column): Party to whom the fax will be sent. You cannot type in this window. When a recipient is specified either from the **Contacts** or from the **New Recipient** window (the '+' button), that recipient's name will appear in this field.

Fax Number (column): Fax number to which the fax will be sent. You cannot type in this window. When a fax number is specified either from the **Contacts** or from the **Enter a Fax Recipient** window; that fax number will appear in this field.

Organization (column)

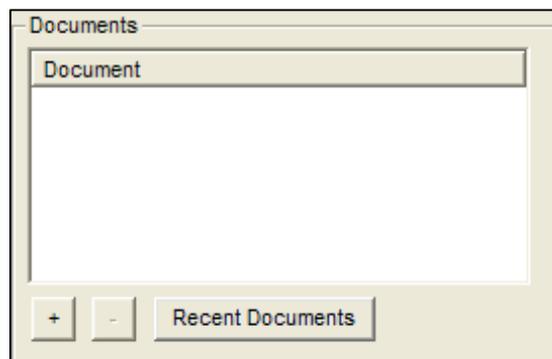
This column will display the organization associated with the recipient (if there is one). You cannot type in this window.

+ (button): Brings up the **New Recipient** window. At this window, you enter the name and fax number of the party to whom the fax will be sent.

— (button): Removes a selected (left-click to select) entry or entries from the Recipients list. You will be prompted to confirm removal of the recipient(s) from the list of recipients. Multiple entries can be selected by holding the *Ctrl* key (individually) or *Shift* key (all entries between) while clicking.

Contacts (button): Brings up the **Select Contacts** screen from which a fax recipient can be chosen (this is retrieved from the user contacts stored in your user ID on the FF240-IP unit). If enabled on the FF240-IP server, this will also display contacts from Microsoft Outlook. Multiple entries can be selected by holding the *Ctrl* key (individually) or *Shift* key (all entries between) while clicking.

Documents pane



Document (column): File name and type extension of document(s) to be transmitted as a fax.

+ (button): Click this button to add another document to the fax transmission. Only *.tif*, *.pdf* and *.txt* files can be added with this.

— (button): Click this button to remove a document from the list of items to be faxed. You will be prompted to confirm removal.

Recent Documents (button): Clicking this will bring up a list of the most recent attachments. Selecting an item from the list will make the **Add** button available. Click the Add button to add the attachment to the current fax.

Cover Page pane

The screenshot shows a 'Cover Page' configuration window. At the top left, there is a checked checkbox labeled 'Use Cover Page'. To its right is a 'Cover Page:' dropdown menu and a 'View' button. Below this, there are three text input fields. The first is labeled 'Subject' and contains the text 'API document you requested.'. The second is labeled 'Comments' and contains the text 'Hello Jane, Here is the file.'. The third is an unlabeled text field containing 'Bob|'.

Use Cover Page (checkbox): Check this checkbox to include a cover page with your fax.

Cover Page (drop-down selection box): This field will be active when the 'Use Cover Page' check box is ticked. By clicking on the down arrow, you will see the selection of cover pages available from the FF240-IP unit. Click to highlight and select the cover page you want to use.

View (button): Brings up the cover page to be used.

Subject (text field): Here you can type a brief description of the contents of the fax. The placement of this "Subject" description will depend on the cover page style that you use.

Comments (text field): Here you can type a lengthy comment about the fax or related topics.

Send the Fax



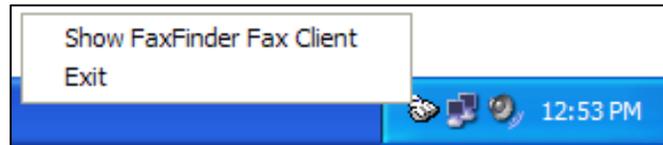
Schedule (button): When you have completed the other sections, click the Schedule button to have the fax sent according to the time set by the Options parameters.

Close (button): To exit the Fax Schedule window and discard all changes, click the close button.

Send Fax with Client Software

When a document (.tif, .pdf, or .txt) is complete and ready to be sent as a fax, opening the client software and using the Schedule Fax option is quick and easy.

To begin, either double-click the FF240-IP Client Software icon in the System Tray or launch it manually from the program listing on the Start menu, which will place it down in the System Tray.



1. Open the File menu and select 'New Fax'
2. The Fax Scheduler screen will open
3. Enter recipients manually by clicking the '+' button or select from an already available contact
4. Click on the '+' button in the Documents pane and browse to the file you want sent (you may add more files by repeating this step)
5. Highlight and click Open to use the selected file

Note: If you do not see the file you want to use, make sure that the type of your source file (PDF, Text, Postscript, Tiff) is valid
6. Set any Options that you need (priority, time to send, etc.)
7. Select and modify a cover page as needed
8. Enter a subject and/or comments if needed
9. Click the Schedule button in the lower left corner to send the fax according to the options set

Send Fax by Printing

The easiest and most convenient way to utilize the FF240-IP once the client software is installed on a computer is to take advantage of the Print function of a software program.

To begin, create the text that you want to send out as a fax and save your work.

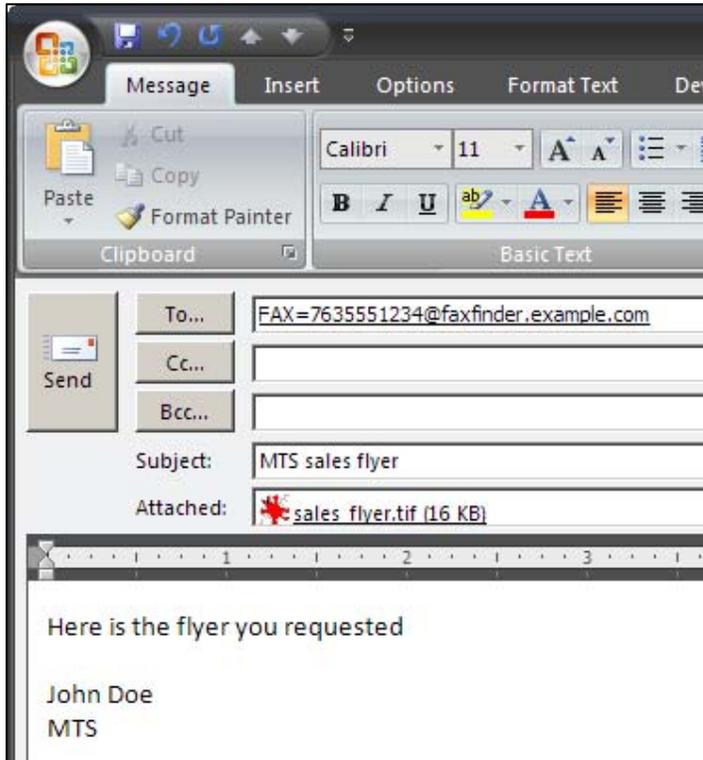
1. Select the Print option from the software you are using
2. Select the FF240-IP as your print destination and click on the Print button
3. The Schedule Fax window opens
4. Enter recipients manually by using the '+' button or select from an already available contact list
5. Set any Options that you need (priority, time to send, etc.)
6. Select and modify a cover page as needed
7. Enter a subject and/or comments if needed
8. Click the Schedule button in the lower left corner to send the fax according to the options set

Send Fax from Email (T.37)

When you wish to send an email as a fax, using the T.37 format in the **To:** field will take advantage of the FF240-IP from your Outlook email software. To do this you will need to know a few things: your administrator should provide you with the domain name of the FF240-IP unit and you need to know the phone number of the fax recipient.

To begin, compose the message as a new email.

1. In the **To:** field, enter the recipients in this format: **FAX=phone number of recipient fax machine@FF240-IP domain** (e.g. FAX=7635551234@FF240-IP.example.com as shown below)



2. Add any graphical attachments (PDF, Text or Tiff)
3. Click the Send email button

Send Fax from Web Interface

Logging in to the FF240-IP unit via a web browser is another simple way to have a fax sent from the FF240-IP unit. This process is started by simply entering the IP address (e.g. 192.168.2.1) in the address bar of the browser and using the links to access the Send Fax screen. Depending on the browser used, you may see security warnings. Click 'Yes' to proceed in Internet Explorer; for Firefox, you may have to add an exception for the FF240-IP unit's IP address.

To begin, enter your Username and Password.

1. Click on the top navigation link "Send Fax"
2. The Sender Information will be pre-entered with your user info
3. Enter the recipient information or select from an available contact list and click 'Add Recipient'
4. Select and fill out any information to be included as a cover page if you are using one
5. Browse to the file that is the fax information (you can add more with the 'Add Another Attachment' button)
6. Choose any option variables for this fax
7. Click the Send Fax button at the bottom left of the screen

Send Fax by Web API

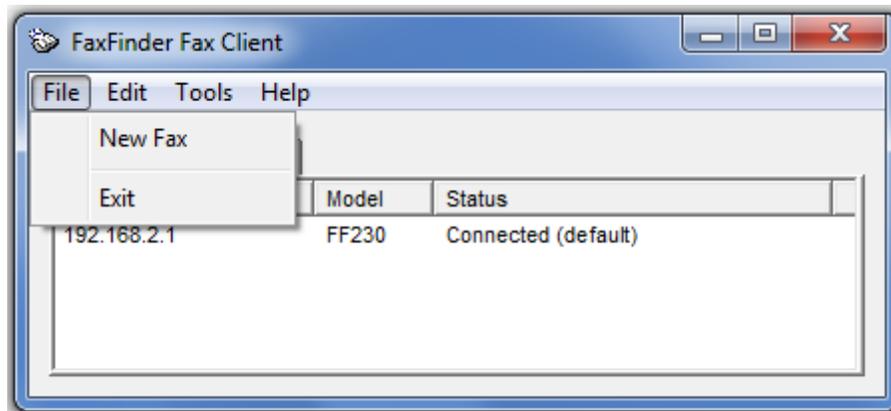
If your administrator has created a custom API (Application Programming Interface) for you to use, that is another option available for sending faxes through the FF240-IP. This will be unique for your company, so you should look for information from your Administrator or IT department.

Using the Client Software

This section will detail all of the commands, tabs and screens that the Client Software offers. While not every user will need all of the options available, you may want to glance through what is here for something that will prove useful to you. The Schedule Fax window is the primary means of sending a fax through the software and populating the contact list can save time by having those contacts readily available when a fax needs to be sent.

File Menu Command Descriptions

The following options are available from the **File** menu.



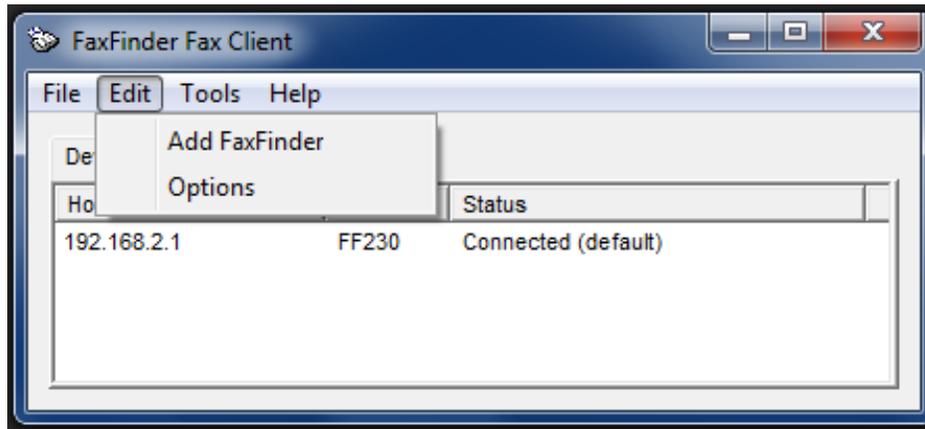
File menu Commands

New Fax: Clicking this command will bring up the 'Schedule Fax' window of the default FF240-IP unit, where a user can enter the needed information and schedule a fax to be sent by the active FF240-IP unit.

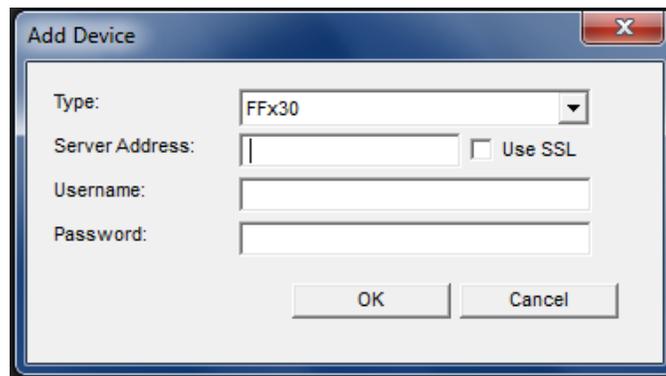
Exit: This will exit the FF240-IP Client software. You will be prompted with a pop-up verifying that you actually want to exit the software. Another option is to click on the window minimize button to return the FF240-IP client to the system tray.

Edit Menu Command Descriptions

The following options are available from the **Edit** menu.



Add FF240-IP



Type: Select the FF240-IP series you are connecting to.

FFx30 for the FF130, FF230, FF430 and FF830

FFx20 for the FF120, FF220, FF420 and FF820

Server Address: Enter the IP address of the FF240-IP unit that you want to add.

Use SSL: Check this box to use the secure sockets layer when accessing the FF240-IP.

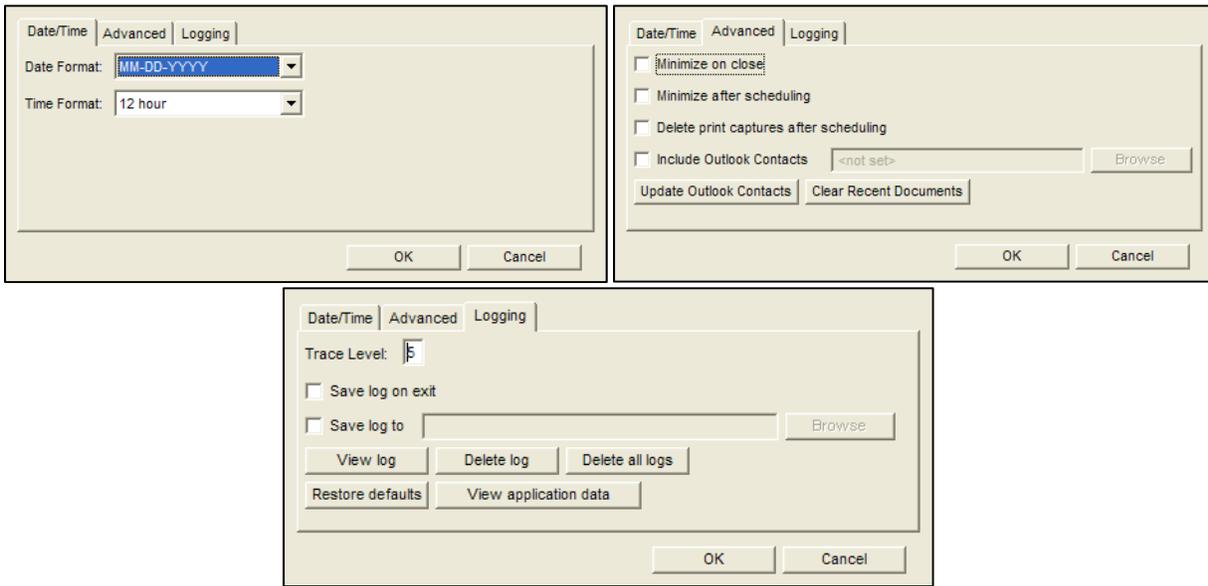
Username: Enter the user name you have been assigned for this unit.

Password: Enter the password associated with the user name you have been assigned for this unit.

Click **OK** to add the new FF240-IP unit to the client software.

Options

The following is available from the **Edit | Options** menu.



Date/Time tab:

Here you enter the date and time formats for the fax header from the drop-down menus provided.

Advanced tab:

Here you designate the circumstances that will make the Send Fax window become minimized (**on close** or **after scheduling**) and allow the enabling of the importation of a Microsoft Outlook address book. To save on disk space, you can select to have print captures deleted after they are scheduled.

The **Include Outlook Contacts** checkbox will automatically find your Outlook (2000 version and newer) folder and import the contacts that exist there. If you have Outlook installed to a directory other than the default, a Browse button is available for determining the correct folder.

The **Update Outlook Contacts** button will update the entire Outlook contact list in the FF240-IP unit if you have selected the 'Include Outlook Contacts' selection above. This will ensure the two sources are synchronized in the case of contact deletions, as by default, the FF240-IP will only automatically track additions and changes. A confirmation pop-up window will ask you if you are sure you want to do this.

The **Clear Recent Documents** button will delete the list of recently sent faxes. A confirmation pop-up window will ask you if you are sure you want to do this.

Logging tab:

A **Trace Level** of 9 is the highest trace setting. A Trace Level of 1 is the lowest (least amount of trace) setting.

Select **Save Log on Exit** to ensure the Log file exists after the application is closed.

Select **Save Log to** if you want to create a log file other than the default. You may **Browse** to an existing File Folder and type in the name of the custom log file in the edit field.

Click **View Log** to view the existing log file.

Click **Delete Log** to erase the current log.

Click **Delete All Logs** to remove any previously existing Log Files.

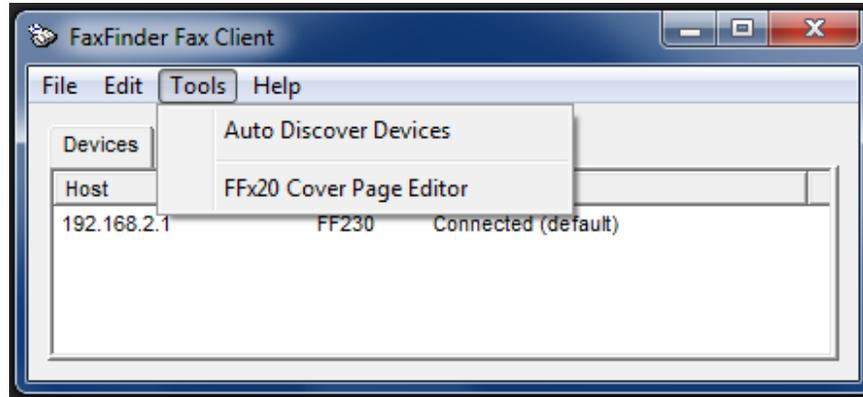
Click **Restore Defaults** to restore the Logging information to factory defaults.

Click **View Application Data** to start an explorer window to find and view existing log files.

Click **OK** to save your changes.

Click **Cancel** to Cancel any changes made.

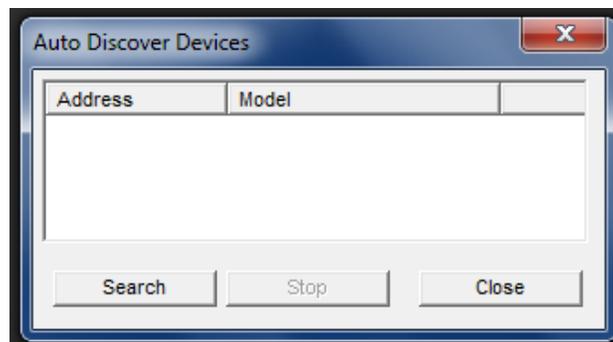
Tools Menu Command Descriptions



Auto Discover Devices: Selecting Auto Discover Devices will have the Client software search the network for active FF240-IP units that are on the same network.

Click on the **Search** button to begin the auto discovery. Once begun, you can click the **Stop** button to end the search at any time. When you are finished, click the **Close** button.

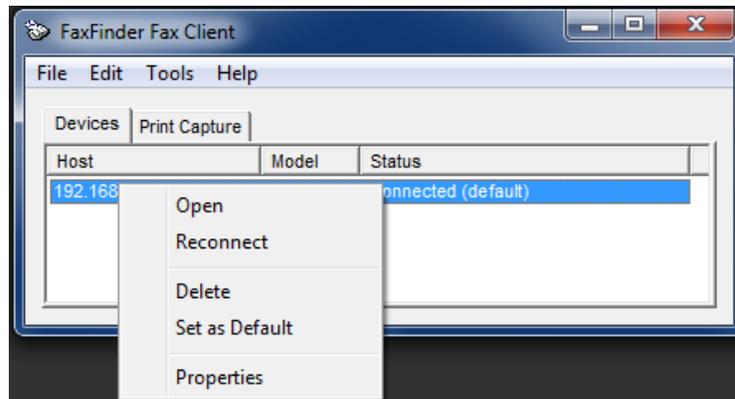
Any device found can be added by right-clicking and selecting *Add* or double-clicked to add it to the Client software.



FFx20 Cover Page Edit: Selecting this option will open the FF240-IP x20 Cover Page Editing software that was installed with the client. The software allows you to edit existing covers pages or create entirely new ones for the FF240-IP x20 models only.

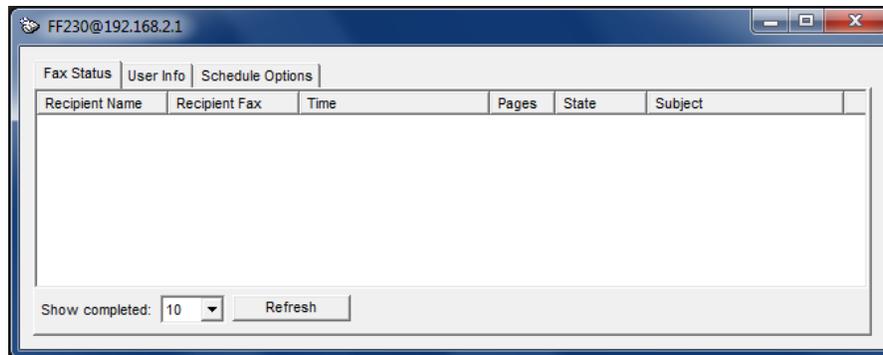
Devices Tab (Main Window)

The Devices tab will show all of the FF240-IP units that are associated with the client software. This window has three columns: *Host* (the name or IP address of a FF240-IP unit), *Model* (the model number of the FF240-IP unit) and *Status* (displays the connection state of the FF240-IP unit as well as showing which unit is set as the default unit for use). By **right-clicking** on the name or IP address of the FF240-IP unit in the *Host* column, you will get an option window.



Open

Selecting Open will launch the FF240-IP summary window.



Fax Status tab

This tab will show the name, number, time, pages, state and subject for any pending or sent faxes.

User Info tab

The user info tab lists your information as it is entered in to the FF240-IP unit.

Contacts (button)

The contacts button will open the contacts associated with the user currently logged in (you). The drop-down box allows you to choose contacts from the four available contact options (Personal, Global, Personal Groups and Global Groups).

The window below the drop-down selection will list all of the contacts for the option selected.

Search (button)

The search button will open a new window allowing you to search for a contact or contact group by Name or Description.

Save (button)

The Save button will save any changes made to the User Info on the FF240-IP unit.

Retrieve (button)

The retrieve button will query the FF240-IP unit for the current user information and update what is displayed in the client software.

Schedule Options tab

In the options tab you can change the default settings that are used for faxing: *Max Attempts, Fax Priority, Fax Receipt, Try Interval.*

Save (button)

Click the save button to make these changes to the FF240-IP unit for this user.

Reconnect

Selecting this option will attempt to reconnect the user to the selected FF240-IP.

Delete

Selecting this will delete the FF240-IP unit from use by this software. There is a delete confirmation window that will pop-up prior to actual deletion.

Set as Default

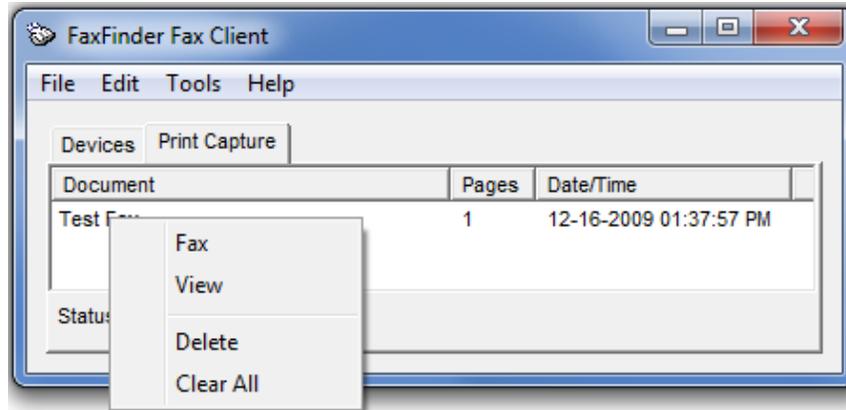
Selecting set as default will make the unit clicked the default unit for sending faxes through this software.

Properties

Selecting properties will bring up a window showing the FF240-IP unit type (FFx20 or FFx30), the IP address the unit is using and your user name and password. The password is replaced by asterisks for security.

Print Capture Tab (Main Window)

Any potential faxes sent from the print to FF240-IP option will be here, ready for additions, setting changes or scheduling. There are two columns to this field: *Document* (the name of the document ready to be scheduled) and *Pages* (the total number of pages in the document). To access the options for items in the print capture area, right-click on the document name.



Fax

Selecting this will open the Fax Scheduler window allowing you to change any parameters as needed and schedule your fax for a specific time or send it immediately. The Fax Schedule screen is covered earlier in this chapter.

View

Selecting the view option will open the document (a TIFF file) with the program associated with its extension type; if you chose to associate TIFF files with the TIFF Viewer during installation, that is the program that will open the file.

Delete

Selecting this will permanently delete the document from the client software. Entries in the Print Capture tab will remain until they are manually deleted using this command.

Clear All

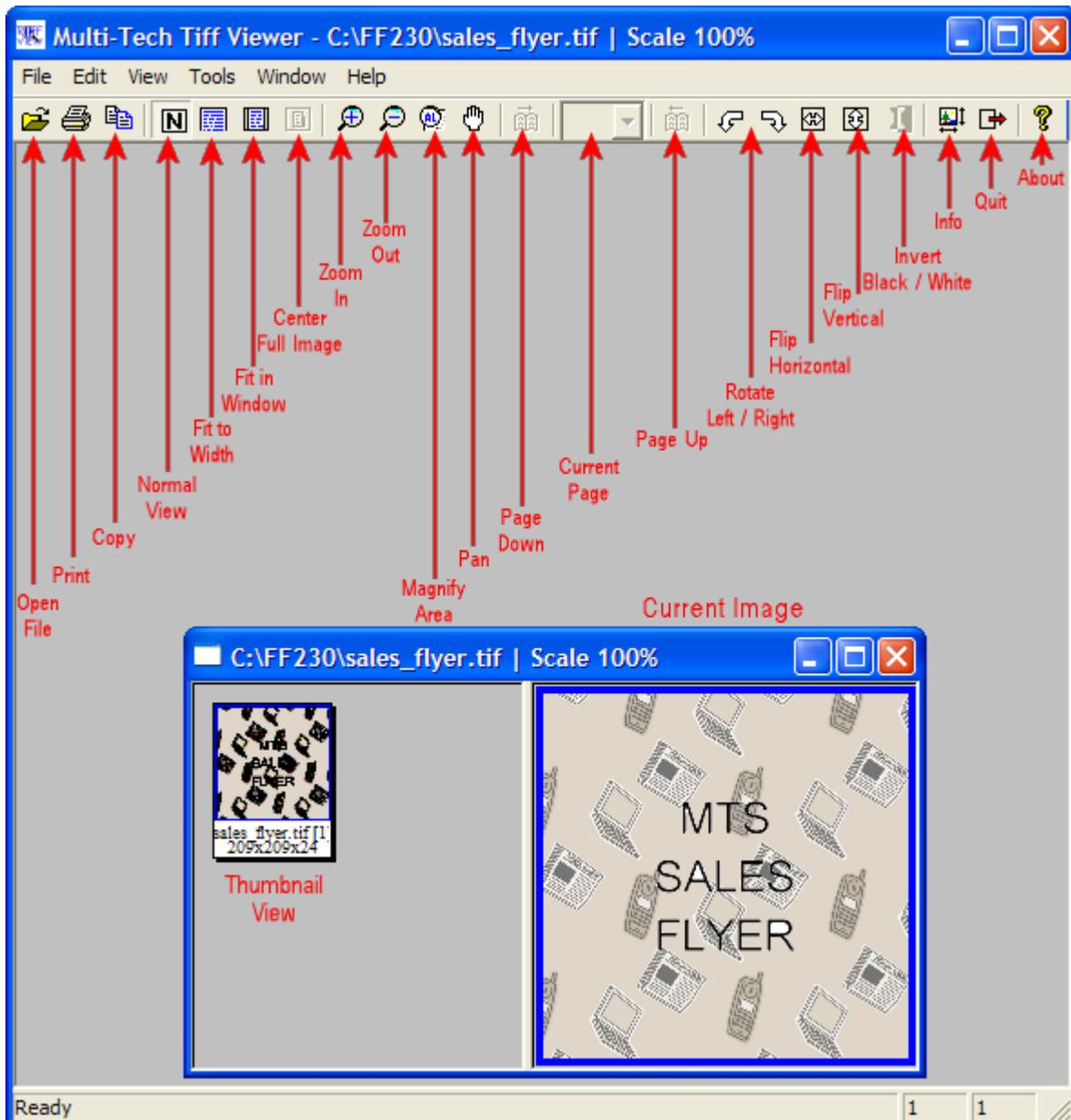
Selecting this option will clear the entire list of entries in the Print Capture section.

Using the Multi-Tech Tiff Viewer

The Multi-Tech Tiff Viewer program has a variety of features that enhance the viewing of fax messages in graphic file form (thumbnails, zooming, spot magnification, scrolling, rotating, etc.). The program can also manipulate and permanently alter the graphic files.

Toolbar Icons

The most commonly used functions are available as icons on the toolbar. In the diagram below, we label the functions of these icons.



While most of these features are common to many graphical programs, some warrant a bit of explanation, provided below.

Copy. The Copy function allows you to copy the fax file and insert it into a different application program. When you click the copy button, the current image will be copied to Windows Clipboard, from which you may then Paste into another applicable program or document. See “Importing Fax Images into Other Application Programs” below.

Pan (Omni-Directional Scroll). The “hand” icon allows you to bring any desired portion of the image into view by clicking and holding down the left mouse button and then moving the mouse to “drag” the image to where you want it.

Zoom to Selection. Click and drag with the mouse over the rectangular area you would like to view. The Multi-Tech Tiff Viewer zooms in sufficiently to fill the screen with the selected area.

Magnify Area (Spot Magnifying Glass). In this viewing mode, a magnifying glass icon (cursor) appears. It can be used in one of three ways to magnify any portion of the image: (a) Click over Area, (b) Click-and-Hold Over Area, (c) Scan the Graphic.

Click over Area. A secondary window will appear that shows the ‘clicked-on’ area magnified. You can adjust the size of the secondary window by dragging on its borders. You can re-locate the secondary window by putting the cursor inside the window, clicking, holding, and dragging.

Click-and-Hold over Area. Two additional windows will appear. The cursor itself becomes a small secondary window of fixed size. The same image also appears on a third window. You can adjust the size of the secondary window by dragging on its borders. You can re-locate the secondary window by putting the cursor inside the window, clicking and dragging.

Scan the Graphic. If you *click, hold, and drag*, you can scan the image in a magnified view. Two magnifying windows will appear as in the “Click-and-Hold Over Area” description above.

Thumbnail. The thumbnail shows a reduced size version of the current image as well as the dimensions. If you left-click on the thumbnail image, you will reset the current graphic to the original. *This will not undo any changes that were saved.*

Importing Fax Images into Other Application Programs

The **Copy** command in the Multi-Tech Tiff viewer program allows you to import the fax image into other application programs. A fax, in the TIF format can be **Copied** from the Multi-Tech Tiff viewer program and **Pasted** into a word processing program document. The Windows Clipboard will only hold one copy at a time, so make sure not to use any copy command until you have pasted the current image to the new location.

Appendix A – Troubleshooting

1. What if I can't see the web page for my FF240-IP?

REMEDY: Verify that the Admin PC is actually on the same subnet as the FF240-IP and that it can be “pinged.”

Launch a Command Prompt.

(In WinXP, go to **Start | All Programs | Accessories | Command Prompt**.

In Win2000, go to **Start | Programs | Accessories | Command Prompt**.)

Type **ipconfig** to verify that the Admin PC's IP address is in the same network as the FF240-IP's IP address.

Then type **ping 192.168.2.1** (or *server's current IP address*) and press **Return**.

If the FF240-IP unit does reply to the ping and you are still unable to view the FF240-IP web page, then contact Multi-Tech Technical Support on our portal at <https://support.multitech.com>.

To see what the IP address of the FF240-IP unit is, plug a serial cable into the Console/Command port, open communication software (like HyperTerminal) set to a serial speed of 115,200 bps and type **ifconfig**.

2. What if I don't get an email when I click the Send Test Email link?

This pertains to the procedure “System Configuration | SMTP.”

The email may have failed due to one of several causes:

- (A) the name server cannot be resolved,
- (B) the mail server cannot be contacted; or
- (C) the client PC running the mail software cannot connect to the mail server; or
- (D) the administrator's email address may be missing or incorrect;
- (E) the email server does not support SMTP; or
- (F) a discrepancy exists between settings established in the FF240-IP **System Configuration | SMTP** screen and the email server's requirements for User ID and/or Password in establishing authentication with the FF240-IP.

CAUSE A: During transmission, the name server's address could not be resolved (that is, the FF240-IP unit could not contact your name server).

RESPONSE A: Contact the FF240-IP unit using secure shell and try to ping the name server.

```
ssh user@ip
user: admin
password: admin
# ping 192.168.y.y (where this is the address of the name server)
```

If the name server ping fails, you must determine why it failed.

The name server may not be reachable because it is on a different subnet. The name server ping could also fail because the default gateway has been set incorrectly.

If the name server ping succeeds, then try to ping the mail server using its domain name.

```
# ping mail.ourcompany.com
```

If you succeed in pinging the mail server by its IP address but yet it cannot be pinged via its domain name, then the name server is not functioning correctly.

If the mail server can be pinged neither by its domain name nor by its IP address, then consider item B below.

CAUSE B: The mail server is not running or cannot be contacted from the FF240-IP unit.

RESPONSE B: Verify that the mail server is running by sending an email to yourself using your email software.

If you cannot send an email to yourself using your email software, then the mail server is not running and you should find out why.

If you can send an email to yourself using the email software, then there is a problem between your mail server and the FF240-IP unit. Contact Multi-Tech Technical Support on our portal at <https://support.multitech.com>.

CAUSE C: The client PC running the mail software cannot connect to the mail server.

RESPONSE C: If you, as a client, cannot send yourself an email, then contact your administrator; there may be a problem with your mail server.

CAUSE D: The administrator's email address may be missing or incorrect.

RESPONSE D: Check and add/correct the administrator's email address, as needed.

No email message after mail server setup (cont'd)

CAUSE E: The email server does not support SMTP.

RESPONSE E: Contact the FF240-IP unit using secure shell either at its IP address or name (if a name server is present) and specify the SMTP Port Number (25 is the common/standard port number, but this number is configurable in the FF240-IP **System Configuration | SMTP** screen). Using Telnet (*IP address: port*) to get to the SMTP server is the easiest method.

The email server should then return a “Welcome” message.

Type EHLO

The email server should then return a listing of supported protocols and other information.

If the email server does not respond with a ‘Welcome’ message, or, if it does not respond to EHLO, then, either the email server does not support SMTP or the port number is wrong (that is, the port number used in the telnet command does not match what was already specified in the **System Configuration | SMTP** screen).

If the email server does not support SMTP, it will not inter-operate with any FF240-IP unit.

CAUSE F: A discrepancy exists between settings established in the FF240-IP **System Configuration | SMTP** screen and the email server’s requirements for User ID and/or Password in establishing authentication with the FF240-IP.

After you have set the FF240-IP Administrator’s email address, go to the **System Configuration | SMTP** screen and click “Update.” In response to this, an email will be sent to the FF240-IP Administrator.

Email servers have different requirements about User ID and Password with respect to authentication to another server. In order to authenticate, some email servers will require a User ID and Password and will reject authentication if a User ID and a Password have not been provided. For other email servers, a User ID and Password are not required and not allowed and these email servers will reject authentication if a User ID and Password are included.

RESPONSE F: Consult with the administrator of your email server about its User ID/Password requirements for authentication. Then configure the FF240-IP’s **System Configuration | SMTP** screen fields accordingly. The specific fields are “SMTP Server User ID” and “SMTP Password.” Leave these fields blank or fill in these fields according to the requirements of your email server.

3. SMTP Error Code List

Many messages now contain the last response from the email server. These error codes may be looked up to give more details of exactly what occurred. The Internet Engineering Task Force (IETF) maintains information about SMTP error codes. You can look them up online at *ietf.org* in the RFC repository.

Appendix B – Customization

Web Services API

Introduction

This section illustrates the HTTP/XML communication between the FF240-IP Web Service (FFWS) and a client. FFWS provides an interface to the FF240-IP units for client applications. Client applications can use FFWS for sending faxes, managing contacts and monitoring fax status.

Authorization

All request requiring authorization must have the Authorization header set using Basic authentication. If this is not set or the username or password are incorrect then “401 Unauthorized” is returned. See RFC 2617 for implementation

HTTPS

The server supports HTTPS. Secure requests can be sent to the default HTTPS port 443.

Creating a new fax

An application can schedule a fax by posting the schedule fax XML to the *ofax* resource. If the fax is successfully scheduled then a response is returned with the scheduled entries.

Each file that you wish to attach as fax pages must be placed in an attachment element. An "inline" attachment is an attachment with the contents of the file inserted into the content tag. Inline attachments must be encoded using base64. The name of the attachment can usually be set to the basename of the file unless that name is not unique among the attachments. The name is used primarily for error responses, so if you would like to know the attachment which failed then it is important to make this field unique. The content type of the attachment should be set to match the type of file being transferred. For example, if you are attaching a PDF, then the content type should be set to "application/pdf". It is important to properly set the type because this field is used when converting the file into fax pages. No attempt is made to guess the content type on the server.

Limits

Request size: 2MB for [12]30, 5MB for [48]30
Maximum Recipients per Fax: 400

Query Parameters:

None

HTTP Request line:

```
POST /ffws/v1/ofax HTTP/1.1
```

HTTP Response Status Codes:

201 Created

The fax has been created successfully.

400 Bad Request

Invalid request. The fax has not been scheduled. A more verbose message may be provided in the response message if possible.

Example:

```
POST /ffws/v1/ofax HTTP/1.1
content-type: application/xml
authorization: Basic YWRtaW46YWRtaW4=
```

```
<?xml version="1.0" encoding="UTF-8"?>
<schedule_fax>
  <cover_page>
    <url>https://192.168.2.1/ffws/v1/data/cover_pages/default.pdf</url>
    <enabled>true</enabled>
    <subject>Test Subject</subject>
    <comments>Test Message</comments>
  </cover_page>
  <sender>
    <name>Sender Name</name>
    <organization>Sender Org</organization>
    <phone_number>111-222-3333</phone_number>
    <fax_number>111-222-3334</fax_number>
    <email_address>sender@example.com</email_address>
  </sender>
  <recipient>
    <name>Rcpt 1 Name</name>
    <organization>Rcpt 1 Org</organization>
    <fax_number>111-222-3335</fax_number>
    <phone_number>218-555-3336</phone_number>
  </recipient>
  <attachment>
    <location>inline</location>
    <name>attachment1.txt</name>
    <content_type>text/plain</content_type>
    <content_transfer_encoding>base64</content_transfer_encoding>
    <content>dGVzdA==</content>
  </attachment>
  <max_tries>3</max_tries>
  <priority>3</priority>
  <try_interval>30</try_interval>
  <receipt>failure</receipt>
  <receipt_attachment>none</receipt_attachment>
  <schedule_all_at>2008-08-07T20:30:00</schedule_all_at>
</schedule_fax>
```

```
-----
HTTP/1.1 201 Created
content-type: application/xml
```

```
<?xml version="1.0" encoding="UTF-8"?>
<response>
  <message>Success</message>
  <fax_entry>
    ..<fax_entry_url>https://192.168.2.1/ffws/v1/ofax/0000001B/0000</fax_entry_url>
    <fax_url>https://192.168.2.1/ffws/v1/ofax/0000001B</fax_url>
    <state>preprocessing</state>
    <schedule_message>New fax entry</schedule_message>
    <created>2008-08-01 08:43:29</created>
    <stime>2008-08-01 08:52:29</stime>
    <try_number>1</try_number>
    <agent>FFWS</agent>
    <preview>https://192.168.2.1/ffws/v1/data/preview/0000001B-0000.pdf</preview>
```

```

<cover_page>
  <url>https://192.168.2.1/ffws/v1/data/cover_pages/default.pdf</url>
  <enabled>>true</enabled>
  <subject>Test Subject</subject>
  <comments>Test Message</comments>
</cover_page>
<sender>
  <username>admin</username>
  <name>Sender Name</name>
  <organization>Sender Org</organization>
  <phone_number>111-222-3333</phone_number>
  <fax_number>111-222-3334</fax_number>
  <email_address>sender@example.com</email_address>
</sender>
<recipient>
  <name>Rcpt 1 Name</name>
  <organization>Rcpt 1 Org</organization>
  <fax_number>111-222-3335</fax_number>
  <phone_number>218-555-3336</phone_number>
</recipient>
<max_tries>3</max_tries>
<priority>3</priority>
<try_interval>30</try_interval>
<receipt>failure</receipt>
<receipt_attachment>none</receipt_attachment>
<pages>0</pages>
<approver></approver>
<approval_time></approval_time>
</fax_entry>
</response>

```

Retrieving Fax Entries

HTTP Request line:

```

GET /ffws/v1/ofax HTTP/1.1
GET /ffws/v1/ofax/FAXKEY HTTP/1.1
GET /ffws/v1/ofax/FAXKEY/ENTRYKEY HTTP/1.1

```

Query Parameters:

`all_users=true|false`

An Admin level user can set this option to query all users instead of just faxes belonging to the authenticated user.

`complete_limit=LIMIT`

Limit the number of completed faxes returned in a general query (/ffws/v1/ofax) to LIMIT. By default the limit is 10. Faxes displayed in the completed list are (pre)viewable and re-schedulable.

`class=pending|sending|complete`

Retrieve faxes by class.

`include_modem_info=true|false`

Include Modem level information in the response (init_time, connect_time, ...). Requesting this information is costly and it also increases the size of the response. Modem information only exists after the modem has completed at least one full attempt.

HTTP Response Status Codes:

200 OK

Here are the fax entries.

Example:

```
GET /ffws/v1/ofax HTTP/1.1
content-type: application/xml
authorization: Basic YWRtaW46YWRtaW4=
```

```
-----
HTTP/1.1 200 OK
content-type: application/xml
```

```
<?xml version="1.0" encoding="UTF-8"?>
<response>
  <message>Success</message>
  <fax_entry>
    <fax_entry_url>https://192.168.2.1/ffws/v1/ofax/0000001B/0000</fax_entry_url>
    <fax_url>https://192.168.2.1/ffws/v1/ofax/0000001B</fax_url>
    <state>aborted</state>
    <schedule_message>Fax aborted by user</schedule_message>
    <created>2008-08-01 08:43:29</created>
    <stime>2008-08-01 08:52:29</stime>
    <try_number>1</try_number>
    <agent>FFWS</agent>
    <preview>https://192.168.2.1/ffws/v1/data/preview/0000001B-0000.pdf</preview>
    <cover_page>
      <url>https://192.168.2.1/ffws/v1/data/cover_pages/default.pdf</url>
      <enabled>>true</enabled>
      <subject>Test Subject</subject>
      <comments>Test Message</comments>
    </cover_page>
    <sender>
      <username>admin</username>
      <name>Sender Name</name>
      <organization>Sender Org</organization>
      <phone_number>111-222-3333</phone_number>
      <fax_number>111-222-3334</fax_number>
      <email_address>sender@example.com</email_address>
    </sender>
    <recipient>
      <name>Rcpt 1 Name</name>
      <organization>Rcpt 1 Org</organization>
      <fax_number>111-222-3335</fax_number>
      <phone_number>218-555-3336</phone_number>
    </recipient>
    <max_tries>3</max_tries>
    <priority>3</priority>
    <try_interval>30</try_interval>
    <receipt>failure</receipt>
    <receipt_attachment>none</receipt_attachment>
    <pages>1</pages>
  </fax_entry>
</response>
```

Aborting a Fax Entry

HTTP Request line:

```
DELETE /ffws/v1/ofax/FAXKEY HTTP/1.1
DELETE /ffws/v1/ofax/FAXKEY/ENTRYKEY HTTP/1.1
```

HTTP Response Status Codes:

202 Accepted

An abort has been sent. The fax entry will be aborted if possible.

400 Bad Request

The fax specified could not be aborted. The user may not be the owner of the fax or the fax could not be found.

Example:

```
DELETE /ffws/v1/ofax/0000001B/0000 HTTP/1.1
content-type: application/xml
authorization: Basic YWRtaW46YWRtaW4=
```

```
-----
HTTP/1.1 202 Accepted
content-type: application/xml
```

Rescheduling a Fax Entry

HTTP Request line:

```
PUT /ffws/v1/ofax/FAXKEY/ENTRYKEY?at=TIME HTTP/1.1
```

Query Parameters:

```
at=TIME
TIME := now | DATETIME.UTC.URLENCODED
DATETIME.UTC.URLENCODED := YYYY-MM-DDTHH%3AMM%3ASS
```

Note: The "now" value was added in *version 2.1*. Earlier versions of firmware could reschedule a fax for the current server time by omitting all query parameters. This usage is now deprecated and may be removed in a future release.

HTTP Response Status Codes:

202 Accepted

Attempting to reschedule faxes. There is no guarantee that all entries will be rescheduled. For instance, entries that are sending when the reschedule is received will not be rescheduled.

400 Bad Request

The fax specified could not be rescheduled. The user may not be the owner of the fax or the fax could not be found

Example:

```
PUT /ffws/v1/ofax/0000001B/0000?at=2008-08-09T22%3A30%3A00 HTTP/1.1
content-type: application/xml
authorization: Basic YWRtaW46YWRtaW4=
```

```
-----
HTTP/1.1 202 Accepted
content-type: application/xml
```

Retrieving User Information

HTTP Request line:

```
GET /ffws/v1/users/USERNAME HTTP/1.1
```

HTTP Response Status Codes:

200 OK

Success

403 Forbidden

Authenticated user does not have permission to view data associated with username.

404 Not Found

No user found with that username.

Example:

```
GET /ffws/v1/users/admin HTTP/1.1
content-type: application/xml
authorization: Basic YWRtaW46YWRtaW4=
```

```
-----
HTTP/1.1 200 OK
```

```
content-type: application/xml
```

```
<?xml version="1.0" encoding="UTF-8"?>
<response>
  <message>Success</message>
  <user>
    <user_url>https://192.168.2.1/ffws/v1/users/admin</user_url>
    <name>Administrator</name>
    <username>admin</username>
    <email_address>admin@example.com</email_address>
    <phone_number>111-222-3333</phone_number>
    <fax_number>111-222-3334</fax_number>
    <organization>Example Org</organization>
  </user>
</response>
```

Retrieving Contacts

HTTP Request line:

```
GET /ffws/v1/contacts/USERNAME HTTP/1.1
GET /ffws/v1/contacts/USERNAME/ID HTTP/1.1
GET /ffws/v1/contacts/global_contact_list HTTP/1.1
GET /ffws/v1/contacts/global_contact_list/ID HTTP/1.1
```

Query Parameters:

limit=LIMIT

Limit the number of results to LIMIT.

offset=OFFSET

Skip OFFSET entries from the start. Only valid when limit is specified.

name=SUBSTR

fax_number=SUBSTR

phone_number=SUBSTR

organization=SUBSTR

Search for contacts by field name. If you specify more than one they are logically ANDed.

HTTP Response Status Codes:

200 OK

Success

403 Forbidden

Authenticated user does not have permission to view data associated with username.

404 Not Found

No user found with that username.

Example:

```
GET /ffws/v1/contacts/admin HTTP/1.1
content-type: application/xml
authorization: Basic YWRtaW46YWRtaW4=
```

```
-----
HTTP/1.1 200 OK
content-type: application/xml
```

```
<?xml version="1.0" encoding="UTF-8"?>
<response>
  <message>Success</message>
  <contact>
    <contact_url>https://192.168.2.1/ffws/v1/contacts/admin/3</contact_url>
    <name>Contact Name</name>
    <fax_number>111-222-4444</fax_number>
    <phone_number>218-555-3336</phone_number>
    <organization>Contacts Org</organization>
  </contact>
</response>
```

Adding New Contacts

HTTP Request line:

```
POST /ffws/v1/contacts/USERNAME HTTP/1.1
```

HTTP Response Status Codes:

200 OK

Created

403 Forbidden

Authenticated user does not have permission to change data associated with username.

404 Not Found

No user found with that username.

400 Bad Request

The provided XML is not valid.

Example:

```
POST /ffws/v1/contacts/admin HTTP/1.1
```

```
content-type: application/xml
```

```
authorization: Basic YWRtaW46YWRtaW4=
```

```
<?xml version="1.0" encoding="UTF-8"?>
<contact>
  <name>Test Recipient</name>
  <fax_number>111-222-4444</fax_number>
  <phone_number>218-555-3336</phone_number>
  <organization>Some org</organization>
</contact>
```

```
-----
HTTP/1.1 200 OK
```

```
content-type: application/xml
```

```
<?xml version="1.0" encoding="UTF-8"?>
<response>
  <message>Created</message>
  <contact>
    <contact_url>https://192.168.2.1/ffws/v1/contacts/admin/6</contact_url>
    <name>Test Recipient</name>
    <fax_number>111-222-4444</fax_number>
    <phone_number>218-555-3336</phone_number>
    <organization>Some org</organization>
  </contact>
</response>
```

Modifying Contacts

HTTP Request line:

```
POST /ffws/v1/contacts/USERNAME/id HTTP/1.1
```

HTTP Response Status Codes:

200 OK

Modified successfully.

403 Forbidden

Authenticated user does not have permission to change data associated with username.

404 Not Found

No user found with that username.

400 Bad Request

The provided XML is not valid.

Example:

```
POST /ffws/v1/contacts/admin/6 HTTP/1.1
content-type: application/xml
authorization: Basic YWRtaW46YWRtaW4=
```

```
<?xml version="1.0" encoding="UTF-8"?>
<contact>
  <name>Change name</name>
  <fax_number>111-222-4444</fax_number>
  <phone_number>218-555-3336</phone_number>
  <organization>Some org</organization>
</contact>
```

```
-----
HTTP/1.1 200 OK
content-type: application/xml
```

```
<?xml version="1.0" encoding="UTF-8"?>
<response>
  <message>Modified</message>
</response>
```

Deleting Contacts

HTTP Request line:

```
DELETE /ffws/v1/contacts/USERNAME/id HTTP/1.1
```

HTTP Response Status Codes:

200 OK

Deleted

403 Forbidden

Authenticated user does not have permission to change data associated with username.

404 Not Found

No user found with that username.

Example:

```
DELETE /ffws/v1/contacts/admin/6 HTTP/1.1
content-type: application/xml
authorization: Basic YWRtaW46YWRtaW4=
```

```
-----
HTTP/1.1 200 OK
content-type: application/xml
```

```
<?xml version="1.0" encoding="UTF-8"?>
<response>
  <message>Deleted</message>
</response>
```

Retrieving Contact Groups

HTTP Request line:

```
GET /ffws/v1/contact_groups/USERNAME HTTP/1.1
GET /ffws/v1/contact_groups/global_contact_list HTTP/1.1
```

Query Parameters:

```
limit=LIMIT
Limit the number of results to LIMIT.
offset=OFFSET
Skip OFFSET entries from the start. Only valid when limit is specified.
name=SUBSTR
description=SUBSTR
Search for groups by field name. If you specify more than one, they are
logically ANDed.
```

HTTP Response Status Codes:

200 OK

Success

403 Forbidden

Authenticated user does not have permission to view data associated with username.

404 Not Found

No user found with that username.

Example:

```
GET /ffws/v1/contact_groups/admin HTTP/1.1
content-type: application/xml
authorization: Basic YWRtaW46YWRtaW4=
-----
HTTP/1.1 200 OK
content-type: application/xml
<?xml version="1.0" encoding="UTF-8"?>
<response>
  <message>Success</message>
  <contact_group>
    <contact_group_url>https://172.16.128.5/ffws/v1/contact_groups/admin/4
    </contact_group_url>
    <name>g one</name>
    <description>g one</description>
    <contact>https://172.16.128.5/ffws/v1/contacts/admin/1</contact>
    <contact>https://172.16.128.5/ffws/v1/contacts/admin/2</contact>
    <contact>https://172.16.128.5/ffws/v1/contacts/global_contact_list/3
    </contact>
  </contact_group>
  <contact_group>
    <contact_group_url>https://172.16.128.5/ffws/v1/contact_groups/admin/6
    </contact_group_url>
    <name>g two</name>
    <description>g two org</description>
    <contact>https://172.16.128.5/ffws/v1/contacts/admin/2</contact>
    <contact>https://172.16.128.5/ffws/v1/contacts/global_contact_list/4
    </contact>
  </contact_group>
</response>
```

Retrieving Cover Pages

HTTP Request line:

```
GET /ffws/v1/data/cover_pages HTTP/1.1
```

HTTP Response Status Codes:

200 OK

Success

Example:

```
GET /ffws/v1/data/cover_pages HTTP/1.1
content-type: application/xml
authorization: Basic YWRtaW46YWRtaW4=
```

```
-----
HTTP/1.1 200 OK
```

```
content-type: application/xml
```

```
<?xml version="1.0" encoding="UTF-8"?>
<response>
  <message>Success</message>
  <file>
    <name>default.pdf</name>
    <type>application/pdf</type>
    <url>https://192.168.2.1/ffws/v1/data/cover_pages/default.pdf</url>
  </file>
  <file>
    <name>multitech.pdf</name>
    <type>application/pdf</type>
    <url>https://192.168.2.1/ffws/v1/data/cover_pages/multitech.pdf</url>
  </file>
  <file>
    <name>sample1.pdf</name>
    <type>application/pdf</type>
    <url>https://192.168.2.1/ffws/v1/data/cover_pages/sample1.pdf</url>
  </file>
  <file>
    <name>sample2.pdf</name>
    <type>application/pdf</type>
    <url>https://192.168.2.1/ffws/v1/data/cover_pages/sample2.pdf</url>
  </file>
</response>
```

Verify User

Authenticates the user and then simply returns 200 OK.

HTTP Request line:

```
GET /ffws/v1/verify HTTP/1.1
```

HTTP Response Status Codes:

```
200 OK
    Verified
```

Example:

```
GET /ffws/v1/verify HTTP/1.1
content-type: application/xml
authorization: Basic YWRtaW46YWRtaW4=
-----
HTTP/1.1 200 OK
content-type: application/xml
<?xml version="1.0" encoding="UTF-8"?>
<response>
  <message>Verified</message>
</response>
```

Retrieving information about the FF240-IP

HTTP Request line:

```
GET /ffws/v1/about HTTP/1.1
```

HTTP Response Status Codes:

```
200 OK
    Success
```

Example:

```
GET /ffws/v1/about HTTP/1.1
content-type: application/xml
authorization: Basic YWRtaW46YWRtaW4=
-----
HTTP/1.1 200 OK
content-type: application/xml
<?xml version="1.0" encoding="UTF-8"?>
<response>
  <message>Success</message>
  <about>
    <model>FF230</model>
    <version>2.0</version>
  </about>
</response>
```

General Status Codes

Be aware that other Status Codes that do not pertain specifically to the resource requested may be returned.

See RFC 2616 for a listing of all possible codes.

Some FFWS general errors:

401 Unauthorized

Authorization required

415 Unsupported Media Type

Content-Type must be set to 'application/xml'

405 Method Not Allowed

The resource does not support that method

503 Service Unavailable

Temporary overloading

Schedule Fax Element

Most elements under `schedule_fax` are optional. If an element is left out then an appropriate default or the empty string will be substituted.

```
<!-- Describes one or more faxes to send -->
<schedule_fax>
  <!-- Cover page information -->
  <cover_page>

    <!-- URL of cover page on server to use -->
    <!-- default: default.pdf -->
    <!-- required: no -->
    <!-- value: string -->
    <url>https://192.168.2.1/ffws/v1/data/cover_pages/default.pdf</url>

    <!-- Enable or disable the inclusion of a cover page -->
    <!-- default: true -->
    <!-- required: no -->
    <!-- value: boolean -->
    <enabled>true</enabled>

    <!-- Subject added to subject field on cover page -->
    <!-- default: "" -->
    <!-- required: no -->
    <!-- value: string -->
    <subject>Test Subject</subject>

    <!-- Message added to the comments field on cover page -->
    <!-- Formatting is not preserved. Newlines and spaces -->
    <!-- are reduced to a single space. -->
    <!-- default: "" -->
    <!-- required: no -->
    <!-- value: string -->
    <comments>Test Message</comments>
  </cover_page>
```

```

<!-- Sender information -->
<sender>

  <!-- The name of the sender -->
  <!-- default: "" -->
  <!-- required: no -->
  <!-- value: string -->
  <name>Sender Name</name>

  <!-- Sender Organization/company -->
  <!-- default: "" -->
  <!-- required: no -->
  <!-- value: string -->
  <organization>Sender Org</organization>

  <!-- Sender phone number -->
  <!-- default: "" -->
  <!-- required: no -->
  <!-- value: string -->
  <phone_number>111-222-3333</phone_number>

  <!-- Sender fax number -->
  <!-- default: "" -->
  <!-- required: no -->
  <!-- value: string -->
  <fax_number>111-222-3334</fax_number>

  <!-- Sender email address-->
  <!-- This field must be included to receive email alerts -->
  <!-- default: "" -->
  <!-- required: no -->
  <!-- value: string -->
  <email_address>sender@example.com</email_address>
</sender>

<!-- Recipient information -->
<!-- At least one recipient must be included -->
<!-- A fax is sent to each recipient -->
<recipient>

  <!-- Recipient Name -->
  <!-- default: "" -->
  <!-- required: no -->
  <!-- value: string -->
  <name>Rcpt 1 Name</name>

  <!-- Recipient Organization -->
  <!-- default: "" -->
  <!-- required: no -->
  <!-- value: string -->
  <organization>Rcpt 1 Org</organization>

  <!-- Recipient Fax Number -->
  <!-- The fax number to send to -->
  <!-- required: yes -->
  <!-- value: string -->
  <fax_number>111-222-3335</fax_number>

```

```

    <!-- Recipient Phone Number -->
    <!-- default: "" -->
    <!-- required: no -->
    <!-- value: string -->
    <phone_number>218-555-3336</phone_number>
  </recipient>

  <!-- Attachments to send as fax pages -->
  <attachment>

    <!-- Attachment location -->
    <!-- required: yes -->
    <!-- value: inline | external -->
    <location>inline</location>

    <!-- Attachment name -->
    <!-- A unique name associate with this attachment -->
    <!-- Used to differentiate between attachments -->
    <!-- required: yes if location == inline -->
    <!-- value: string -->
    <name>attachment1.txt</name>

    <!-- Attachment type must be one of: -->
    <!--   application/pdf -->
    <!--   application/postscript -->
    <!--   text/plain -->
    <!--   image/tiff -->
    <!-- required: yes if location == inline -->
    <!-- value: string -->
    <content_type>text/plain</content_type>

    <!-- Content encoding -->
    <!-- Must be set to base64 -->
    <!-- required: yes if location == inline -->
    <!-- value: string -->
    <content_transfer_encoding>base64</content_transfer_encoding>

    <!-- Content of attachment base64 encoded -->
    <!-- required: yes if location == inline -->
    <!-- value: string -->
    <content>dGVzdA==</content>

    <!-- Url of attachment -->
    <!-- required: yes if location == external -->
    <!-- value: string -->
    <url>/ffws/v1/data/userspace/admin/report.pdf</url>
  </attachment>

  <!-- Maximum number of tries until failure of fax -->
  <!-- default: 3 -->
  <!-- required: no -->
  <!-- value: integer -->
  <max_tries>3</max_tries>

```

```

<!-- Priority level of fax -->
<!-- Must be of value from 0..5 where 0 is the highest -->
<!-- A higher priority fax will send before a lower priority fax -->
<!-- when there are more than one fax ready to send. -->
<!-- default: 3 -->
<!-- required: no -->
<!-- value: integer -->
<priority>3</priority>

<!-- Interval in seconds between failure tries -->
<!-- default: 30 -->
<!-- required: no -->
<!-- value: integer -->
<try_interval>30</try_interval>

<!-- Fax Receipt -->
<!-- Send a fax receipt to senders email: "always" | "never" | "failure" -->
<!-- default: "failure" -->
<!-- required: no -->
<!-- value: string -->
<receipt>failure</receipt>

<!-- Fax Attachment with Receipt -->
<!-- Send the fax pages as an attachment with receipt: "pdf" | "tiff" |
"none" -->
<!-- default: "pdf" -->
<!-- required: no -->
<!-- value: string -->
<receipt_attachment>none</receipt_attachment>

<!-- URL of scheduled faxes -->
<!-- Added by FFWS -->
<!-- value: string -->
<fax_url>https://192.168.2.1/ffws/v1/ofax/0000001C</fax_url>

<!-- Total number of fax pages not including the cover page -->
<!-- Added by FFWS -->
<!-- value: integer -->
<pages>1</pages>

<!-- Schedule all faxes to send at a specified UTC time -->
<!-- If this options is not present then faxes will be -->
<!-- scheduled to send as soon as possible. -->
<!-- Format: %FT%T -->
<!-- required: no -->
<!-- value: string -->
<schedule_all_at>2008-08-07T20:30:00</schedule_all_at>

</schedule_fax>

```

Fax Entry Element

This element represents an actual fax that will be sent. Some of the elements are the same as elements provided in `schedule_fax`. See the documentation above for an explanation of those fields.

```
<!-- Describes a Fax Entry -->
<fax_entry>
  <!-- URL of this fax_entry -->
  <!-- value: string -->
<fax_entry_url>https://192.168.2.1/ffws/v1/ofax/00000FD1/0000</fax_entry_url>

  <!-- URL of scheduled_fax group to which this fax_entry is a part of -->
  <!-- value: string -->
<fax_url>https://192.168.2.1/ffws/v1/ofax/00000FD1</fax_url>

  <!-- Current state of this fax entry -->
  <!-- Can be one of: -->
  <!--   preprocessing-->
  <!--   approval_pending -->
  <!--   pending -->
  <!--   sending -->
  <!--   sent -->
  <!--   aborted -->
  <!--   failed -->
  <!--   dead -->
  <!-- value: string -->
<state>sent</state>

  <!-- Human readable string describing the current status -->
  <!-- value: string -->
<schedule_message>Successfully sent fax</schedule_message>

  <!-- Human readable time representing the time -->
  <!-- in the FF240-IPs time zone, when the fax -->
  <!-- was created. -->
  <!-- This value will be approximately the time when -->
  <!-- the fax was scheduled. -->
  <!-- value: string -->
<created>2008-08-01 08:43:29</created>

  <!-- A contextual field which varies based on the -->
  <!-- state. -->
  <!-- When the fax is pending this field represents -->
  <!-- the time when FF240-IP will try to send it. -->
  <!-- When the fax is sending this field represents -->
  <!-- the time when FF240-IP actually started sending it. -->
  <!-- In any other case it is the time of completion. -->
  <!-- value: string -->
<stime>2008-08-01 08:52:29</stime>

  <!-- The number of unsuccessful tries that have already occurred -->
  <!-- value: string -->
<try_number>1</try_number>

  <!-- Sending Agent -->
  <!-- value: string -->
<agent>FFWS</agent>

  <!-- Fax Preview URL -->
  <!-- value: string -->
<preview>https://192.168.2.1/ffws/v1/data/preview/00000FD1-0000.pdf</preview>
```

```

<cover_page>
  <enabled>>false</enabled>
  <url></url>
  <subject></subject>
  <comments></comments>
</cover_page>

<sender>
  <username>admin</username>
  <name></name>
  <organization></organization>
  <phone_number></phone_number>
  <fax_number></fax_number>
  <email_address></email_address>
</sender>

<recipient>
  <name>test recipient</name>
  <organization>test org</organization>
  <fax_number>5816</fax_number>
  <phone_number></phone_number>
</recipient>

<max_tries>3</max_tries>
<priority>3</priority>
<try_interval>300</try_interval>
<receipt>failure</receipt>
<receipt_attachment>failure</receipt_attachment>
<pages>6</pages>
<approver>_SYSTEM_</approver>
<approval_time>2009-01-30T04:43:28</approval_time>
<!-- Modem level information included when include_modem_info=true. -->
<!-- A modem entry is added for each attempt and is only available -->
<!-- after one full attempt has completed. -->
<modem_entry>
  <modem_number>1</modem_number>
  <status>pass</status>
  <remote_id>POTS modem 1</remote_id>
  <size>403498</size>
  <pages>6</pages>
  <resolution>Fine</resolution>
  <baud_rate>33600</baud_rate>
  <width>1728</width>
  <height>Variable</height>
  <data_compression>mh</data_compression>
  <error_correction>on</error_correction>
  <init_time>2009-01-30T05:00:09</init_time>
  <off_hook_time>2009-01-30T05:00:18</off_hook_time>
  <connect_time>2009-01-30T05:00:51</connect_time>
  <elapsed_time>172</elapsed_time>
  <scan_line_time>0</scan_line_time>
</modem_entry>
</fax_entry>

```

User Element

This element represents a user registered on the FF240-IP.

```
<!-- Describes a User -->
<user>

  <!-- Url of this user -->
  <!-- value: string -->
  <user_url>https://192.168.2.1/ffws/v1/users/admin</user_url>

  <!-- Full name of user -->
  <!-- required: yes -->
  <!-- value: string -->
  <name>Administrator</name>

  <!-- Username -->
  <!-- Must be a unique -->
  <!-- Must contain only characters [A-Za-z0-9_] -->
  <!-- required: yes -->
  <!-- value: string -->
  <username>admin</username>

  <!-- Email address of user -->
  <!-- Must be a valid email address -->
  <!-- required: no -->
  <!-- default: "" -->
  <!-- value: string -->
  <email_address>admin@example.com</email_address>

  <!-- Phone number of user -->
  <!-- required: no -->
  <!-- default: "" -->
  <!-- value: string -->
  <phone_number>111-222-3333</phone_number>

  <!-- Fax number of user -->
  <!-- required: no -->
  <!-- default: "" -->
  <!-- value: string -->
  <fax_number>111-222-3334</fax_number>

  <!-- Organization of user -->
  <!-- required: no -->
  <!-- default: "" -->
  <!-- value: string -->
  <organization>Example Org</organization>
</user>
```

Contact Element

This element represents a user contact.

```
<!-- Describes a Contact -->
<contact>
  <!-- URL of this contact -->
  <!-- value: string -->
  <contact_url>https://192.168.2.1/ffws/v1/contacts/admin/1</contact_url>

  <!-- Contact Name -->
  <!-- required: yes -->
  <!-- value: string -->
  <name>contact name</name>

  <!-- Contact Fax number -->
  <!-- required: yes -->
  <!-- value: string -->
  <fax_number>111-222-4444</fax_number>

  <!-- Contact Phone Number -->
  <!-- required: no -->
  <!-- default: "" -->
  <!-- value: string -->
  <phone_number>218-555-3336</phone_number>

  <!-- Contact Organization -->
  <!-- required: no -->
  <!-- default: "" -->
  <!-- value: string -->
  <organization>Contacts Org</organization>
</contact>
```

T.37 Advanced Usage

Introduction

For individual faxes, you can use the commands below to override settings entered in the administrator or user web interface. Many options for the use of email to fax (T.37) follow the Request For Comment (RFC) standards provided by the IETF. We will briefly describe some of these options, but in-depth descriptions are available at the IETF website (www.ietf.org) where you will need to search for the relevant RFC number to see the explanations.

Using T.37 for the sending of faxes involves entering one or more options in a specific format (*option=value*) with multiple options divided by a forward slash (/). All *options* must be entered exactly as shown or else they will not trigger the event, whereas the value statements are replaced by specific values allowed by the command. The easiest way to understand this is to present a list of the options and give an example of how it would be used below it. Capitalized OPTIONS must be entered as shown; italicized *values* will be replaced by characters and/or numbers specific to the fax you are sending.

Options

FAX=number

[Required, all other settings are optional]

Where "number" is the fax number to dial.

Example: FAX=555-1234@example.test

COVER-PAGE-ENABLED=true/false

Example: FAX=5551234/COVER-PAGE-ENABLED=false@example.test

COVER-PAGE-NAME=name

Where "name" is the filename of the cover page on the FF240-IP.

Example: FAX=5551234/COVER-PAGE-NAME=mts_template2.pdf@example.test

ATTN=name

Where "name" is the name of the recipient the fax is being sent to and will be filled in on the cover page.

Example: FAX=5551234/ATTN=John Smith/COVER-PAGE-ENABLED=true@example.test

ORG=name

"name" is the name of Organization the fax is being sent to and will be filled in on the cover page.

Example: FAX=5551234/ORG=Multitech Systems@example.test

INLINE-COMMENTS=true/false

Inline comments specifies whether the message body is treated as cover page comments or not. By default, the first inline text body part will be used as the cover page comments. This can be changed by setting /INLINE-COMMENTS=false.

Example: FAX=5551234/INLINE-COMMENTS=false@example.test

FAX-PRIORITY=0-5

The fax priority specifies the order of scheduling (0 is highest and 5 is lowest).

Example: FAX=5551234/FAX-PRIORITY=5@example.test

RECEIPT=always/failure/never

Controls when an email receipt for the fax is sent to the sender. "always" means send an email receipt for successful and failed faxes, "failure" means only send a receipt if the fax failed to send, and "never" means not to send any receipt.

Example: FAX=5551234/RECEIPT=failure@example.test

RECEIPT-ATTACHMENT=*pdf/tiff/none*

Determines the format and whether or not to include a copy of the sent fax with any email receipts sent to the sender. A value of "pdf" will attach the sent fax in PDF format to any email receipts, "tiff" will attach the sent fax in TIFF format, and "none" will disable attaching the sent fax entirely.

Example: RECEIPT-ATTACHMENT=pdf

Multiple Options Example

Below is an example of the format you would use when stringing together multiple variants for the fax to be sent. As mentioned, using these commands will override the settings set by the administrator of the FF240-IP on the T.37 configuration page.

Parameters:

Send a fax to the phone number 111-555-1234 with a cover page noting the recipient as "John Smith" at the company "Multitech".

String of T.37 options:

FAX=111-555-1234/COVER-PAGE-ENABLED=true/ATTN=John Smith/ORG=Multitech@example.test

Relaying

If you want to send through an MTA such as *mail.multitech.com* then *mail.multitech.com* would need to be configured to forward mail to the FF240-IP for some domain that the FF240-IP will accept mail for.

For most mail servers, if the domain of the email can be successfully resolved, the mail server will forward mail to that destination without any extra configuration.

Appendix C – Creating Cover Pages

Cover pages for the FF240-IP are PDF forms. The FF240-IP will fill out the form fields that it knows about, with information specific to the fax, and insert the PDF as the first page of the fax. In order to do this, the field names in the form must match exactly with the field names that FF240-IP will try to fill in. FF240-IP x30 models only know how to fill in text fields and ignores most formatting. For best results make your form as simple as possible. You will probably have to send a couple of test faxes to get the formatting the way you want. Check out the examples which are pre-installed on the FF240-IP for a starting point.

Tips:

- Make sure your text fields are large enough to fit the information that you wish to be displayed. If the text doesn't fit in the field it will be truncated.
- Choose a standard font of reasonable size.

Some of the Software Known to Work

Scribus version 1.3.3.8 or greater

OpenOffice

Adobe Acrobat Pro

- See Adobe's documentation

Text Field Names and Descriptions

Below are the names recognized by the FF240-IP. Please ensure that your document matches the titles exactly. The format below is *Exact Name* (Description) – please do not include any of the description in the field name.

- *date* (Date and time now)
- *rcpt_name* (Name of recipient)
- *rcpt_fax* (Fax number of recipient)
- *rcpt_phone* (Phone number of recipient)
- *rcpt_org* (Organization of recipient)
- *sender_name* (Sender name)
- *sender_org* (Organization of sender)
- *sender_fax* (Fax number of sender)
- *sender_phone* (Phone number of sender)
- *sender_email* (Email address of sender)
- *pages* (Number of pages without cover page)
- *pages_with_cover* (Number of pages with cover page)
- *pages_without_cover* (Number of pages without cover page)
- *subject* (Subject of fax)
- *comments* (Extra comments)
- *optout_fax* (Opt-out notice fax number)
- *optout_phone* (Opt-out notice phone number)
- *optout_costfree* (Opt-out notice email or toll free number or Website)

Appendix E – Regulatory Compliance

47 CFR Part 15 Regulation

This equipment has been tested and found to comply with the limits for a **Class A** digital device, pursuant to 47 CFR Part 15 regulations. The stated limits in this regulation are designed to provide reasonable protection against harmful interference in a commercial environment. This equipment generates, uses, and can radiate radio frequency energy, and if not installed and used in accordance with the instructions, may cause harmful interference to radio communications. However, there is no guarantee that interference will not occur in a particular installation. If this equipment does cause harmful interference to radio or television reception, which can be determined by turning the equipment off and on, the user is encouraged to try to correct the interference by one or more of the following measures:

Reorient or relocate the receiving antenna.

Increase the separation between the equipment and receiver.

Plug the equipment into an outlet on a circuit different from that to which the receiver is connected.

Consult the dealer or an experienced radio/TV technician for help.

This device complies with Part 15 of the CFR 47 rules. Operation of this device is subject to the following conditions: (1) This device may not cause harmful interference, and (2) this device must accept any interference that may cause undesired operation.

Warning: Changes or modifications to this unit not expressly approved by the party responsible for compliance could void the user's authority to operate the equipment.

Fax Branding Statement

The Telephone Consumer Protection Act of 1991 makes it unlawful for any person to use a computer or other electronic device, including fax machines, to send any message unless such message clearly contains the following information:

- Date and time the message is sent
- Identification of the business or other entity, or other individual sending the message
- Telephone number of the sending machine or such business, other entity, or individual

This information is to appear in a margin at the top or bottom of each transmitted page or on the first page of the transmission. (Adding this information in the margin is referred to as *fax branding*).

Any number of fax software packages can be used with this product. Refer to the fax software manual for setup details. Typically, the fax branding information must be entered via the configuration menu of the software.

Canadian Limitations Notice

Notice: The ringer equivalence number (REN) assigned to each terminal device provides an indication of the maximum number of terminals allowed to be connected to a telephone interface. The termination on an interface may consist of any combination of devices subject only to the requirement that the sum of the ringer equivalence numbers of all the devices does not exceed 5.

Notice: The Industry Canada label identifies certified equipment. This certification means that the equipment meets certain telecommunications network protective, operational, and safety requirements. The Industry Canada label does not guarantee the equipment will operate to the user's satisfaction.

Before installing this equipment, users should ensure that it is permissible to be connected to the facilities of the local telecommunications company. The equipment must also be installed using an acceptable method of connection. The customer should be aware that compliance with the above conditions may not prevent degradation of service in some situations. Repairs to certified equipment should be made by an authorized Canadian maintenance facility designated by the supplier. Any repairs or alterations made by the user to this equipment or equipment malfunctions may give the telecommunications company cause to request the user to disconnect the equipment.

Users should ensure for their own protection that the electrical ground connections of the power utility, telephone lines and internal metallic water pipe system, if present, are connected together. This precaution may be particularly important in rural areas.

Caution: Users should not attempt to make such connections themselves, but should contact the appropriate electric inspection authority, or electrician, as appropriate.

Industry Canada

This Class A digital apparatus meets all requirements of the Canadian Interference-Causing Equipment Regulations.

Cet appareil numérique de la classe A respecte toutes les exigences du Règlement Canadien sur le matériel brouilleur.

Appendix F - Environmental Information

WEEE Statement

(Waste Electrical and Electronic Equipment)

July, 2005

The WEEE directive places an obligation on EU-based manufacturers, distributors, retailers and importers to take back electronics products at the end of their useful life. A sister Directive, ROHS (Restriction of Hazardous Substances) complements the WEEE Directive by banning the presence of specific hazardous substances in the products at the design phase. The WEEE Directive covers all Multi-Tech products imported into the EU as of August 13, 2005. EU-based manufacturers, distributors, retailers and importers are obliged to finance the costs of recovery from municipal collection points, reuse, and recycling of specified percentages per the WEEE requirements.

Instructions for Disposal of WEEE by Users in the European Union

The symbol shown below is on the product or on its packaging, which indicates that this product must not be disposed of with other waste. Instead, it is the user's responsibility to dispose of their waste equipment by handing it over to a designated collection point for the recycling of waste electrical and electronic equipment. The separate collection and recycling of your waste equipment at the time of disposal will help to conserve natural resources and ensure that it is recycled in a manner that protects human health and the environment. For more information about where you can drop off your waste equipment for recycling, please contact your local city office, your household waste disposal service or the vendor from whom you purchased the product.



REACH Statement

Registration of Substances:

After careful review of the legislation and specifically the definition of an “article” as defined in EC Regulation 1907/2006, Title II, Chapter 1, Article 7.1(a)(b), it is our current view Multi-Tech Systems, Inc. products would be considered as “articles”. In light of the definition in § 7.1(b) which requires registration of an article only if it contains a regulated substance that “is intended to be released under normal or reasonable foreseeable conditions of use,” our analysis is that Multi-Tech Systems, Inc. products constitute nonregisterable articles for their intended and anticipated use.

Substances of Very High Concern (SVHC)

Per the candidate list of Substances of Very high Concern (SVHC) published October 28, 2008 we have reviewed these substances and certify the Multi-Tech Systems, Inc. products are compliant per the EU “REACH” requirements of less than 0.1% (w/w) for each substance. If new SVHC candidates are published by the European Chemicals Agency, and relevant substances have been confirmed, that exceeds greater than 0.1% (w/w), Multi-Tech Systems, Inc. will provide updated compliance status. Multi-Tech Systems, Inc. also declares it has been duly diligent in ensuring that the products supplied are compliant through a formalized process which includes collection and validation of materials declarations and selective materials analysis where appropriate. This data is controlled as a part of a formal quality system and will be made available upon request.

Restriction of the Use of Hazardous Substances (RoHS)



Multi-Tech Systems, Inc.

Certificate of Compliance

2002/95/EC

Multi-Tech Systems, Inc. confirms that this product now complies with the chemical concentration limitations set forth in the directive **2002/95/EC** of the European Parliament (Restriction Of the use of certain Hazardous Substances in electrical and electronic equipment - **RoHS**)

These Multi-Tech Systems, Inc. products do not contain the following banned chemicals:

Lead, [Pb] < 1000 PPM

Mercury, [Hg] < 1000 PPM

Hexavalent Chromium, [Cr+6] < 1000 PPM

Cadmium, [Cd] < 100 PPM

Polybrominated Biphenyl, [PBB] < 1000 PPM

Polybrominated Diphenyl Ether, [PBDE] < 1000 PPM

Moisture Sensitivity Level (MSL) =1

Maximum Soldering temperature = 260C (wave only)

Notes:

1. Lead usage in some components is exempted by the following RoHS annex; therefore, higher lead concentration could be found.
 - a. Lead in high melting temperature type solders (i.e., tin-lead solder alloys containing more than 85% lead).
 - b. Lead in electronic ceramic parts (e.g., piezoelectronic devices).
2. Moisture Sensitivity Level (MSL) – Analysis is based on the components/material used on the board.

C-ROHS HT/TS Substance Concentration

依照中国标准的有毒有害物质信息

根据中华人民共和国信息产业部 (MII) 制定的电子信息产品 (EIP) 标准—中华人民共和国《电子信息产品污染控制管理办法》(第 39 号), 也称作中国 RoHS, 下表列出了 Multi-Tech Systems Inc. 产品中可能含有的有毒物质 (TS) 或有害物质 (HS) 的名称及含量水平方面的信息

成分名称	有害/有毒物质/元素					
	铅	汞	镉	六价铬	多溴联苯	多溴二苯醚
印刷电路板	O	O	O	O	O	O
电阻器	X	O	O	O	O	O
电容器	X	O	O	O	O	O
铁氧体磁环	O	O	O	O	O	O
继电器/光学部件	O	O	O	O	O	O
IC	O	O	O	O	O	O
二极管/晶体管	O	O	O	O	O	O
振荡器和晶振	X	O	O	O	O	O
调节器	O	O	O	O	O	O
电压传感器	O	O	O	O	O	O
变压器	O	O	O	O	O	O
扬声器	O	O	O	O	O	O
连接器	O	O	O	O	O	O
LED	O	O	O	O	O	O
螺丝、螺母以及其它五金件	X	O	O	O	O	O
交流-直流电源	O	O	O	O	O	O
软件/文档 CD	O	O	O	O	O	O
手册和纸页	O	O	O	O	O	O
底盘	O	O	O	O	O	O

X 表示所有使用类似材料的设备中有害/有毒物质的含量水平高于 SJ/Txxx-2006 限量要求。

O 表示不含该物质或者该物质的含量水平在上述限量要求之内。

Appendix G – End User License Agreement

IMPORTANT – READ BEFORE OPERATING

MULTI-TECH SYSTEMS, INC. END USER LICENSE AGREEMENT

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