



Using FaxFinder[®] Fax Server with etherFAX

FF240-IP Application Notes Rev. 1.0

FaxFinder® FF240-IP etherFAX Guide

Models: FF240, FF440, FF840, FF240-IP

Copyright

This publication may not be reproduced, in whole or in part, without the specific and express prior written permission signed by an executive officer of Multi-Tech Systems, Inc. All rights reserved. **Copyright © 2017 2018 by Multi-Tech Systems, Inc.**

Multi-Tech Systems, Inc. makes no representations or warranties, whether express, implied or by estoppels, with respect to the content, information, material and recommendations herein and specifically disclaims any implied warranties of merchantability, fitness for any particular purpose and non-infringement.

Multi-Tech Systems, Inc. reserves the right to revise this publication and to make changes from time to time in the content hereof without obligation of Multi-Tech Systems, Inc. to notify any person or organization of such revisions or changes.

Trademarks

FaxFinder, Multi-Tech, and the Multi-Tech logo are registered trademarks of Multi-Tech Systems, Inc. Windows is a registered trademark of Microsoft in the U.S. and other countries. All other products and technologies are the trademarks or registered trademarks of their respective holders.

Patents

This device covered by the following patents: 5,673,268.

Legal Notices

The MultiTech products are not designed, manufactured or intended for use, and should not be used, or sold or re-sold for use, in connection with applications requiring fail-safe performance or in applications where the failure of the products would reasonably be expected to result in personal injury or death, significant property damage, or serious physical or environmental damage. Examples of such use include life support machines or other life preserving medical devices or systems, air traffic control or aircraft navigation or communications systems, control equipment for nuclear facilities, or missile, nuclear, biological or chemical weapons or other military applications ("Restricted Applications"). Use of the products in such Restricted Applications is at the user's sole risk and liability.

MULTITECH DOES NOT WARRANT THAT THE TRANSMISSION OF DATA BY A PRODUCT OVER A CELLULAR COMMUNICATIONS NETWORK WILL BE UNINTERRUPTED, TIMELY, SECURE OR ERROR FREE, NOR DOES MULTITECH WARRANT ANY CONNECTION OR ACCESSIBILITY TO ANY CELLULAR COMMUNICATIONS NETWORK. MULTITECH WILL HAVE NO LIABILITY FOR ANY LOSSES, DAMAGES, OBLIGATIONS, PENALTIES, DEFICIENCIES, LIABILITIES, COSTS OR EXPENSES (INCLUDING WITHOUT LIMITATION REASONABLE ATTORNEYS FEES) RELATED TO TEMPORARY INABILITY TO ACCESS A CELLULAR COMMUNICATIONS NETWORK USING THE PRODUCTS.

Contacting FaxFinder

FaxFinder

324 Main Street South, Suite 260, Stillwater, MN 55082

Phone: (763) 777-1124

Fax: (763) 777-7655

Business Hours: M-F, 8am to 5pm CT

Support Portal

To submit a support case, simply send an email to support@faxfinder.net or visit the FaxFinder Support Portal at support.faxfinder.net.

Warranty

FaxFinder hardware is subject to MultiTech's FaxFinder Hardware Warranty Terms & Conditions. read the warranty statement for your FaxFinder hardware, visit www.multitech.com/legal/warranty-faxfinder

Multi-Tech Systems, Inc.

2205 Woodale Drive, Mounds View, MN 55112

Phone: (800) 328-9717 or (763) 785-3500

Fax (763) 785-9874

Overview

This document describes the configuration steps required for FaxFinder® Fax Server FF240-IP to interoperate with the etherFAX provider. Provided are product specifics, interoperability test results, typical setup configuration, troubleshooting steps and other important product-related information.

FaxFinder IP provides distributed faxing capabilities through etherFAX, allowing companies to provide fax services to remote offices and field sales people. FaxFinder converts inbound faxes to PDF or TIFF files and delivers them to a recipient's inbox, a network folder, or a network printer. Users can send outbound faxes through a fax client, web browser, email, or the print function of other applications.

Outgoing faxes can be sent from the FaxFinder Client application, from any PC application that supports print or from the FaxFinder web interface. For compliance testing, the FaxFinder web interface was the primary method used to send outgoing faxes.

Requirements

The following are the basic requirements for interoperation between the FaxFinder IP and etherFAX provider:

- Active etherFAX account with account number, username, password, and etherFAX assigned phone number
- FaxFinder IP fax server
- IP network with Internet access

Equipment and Software

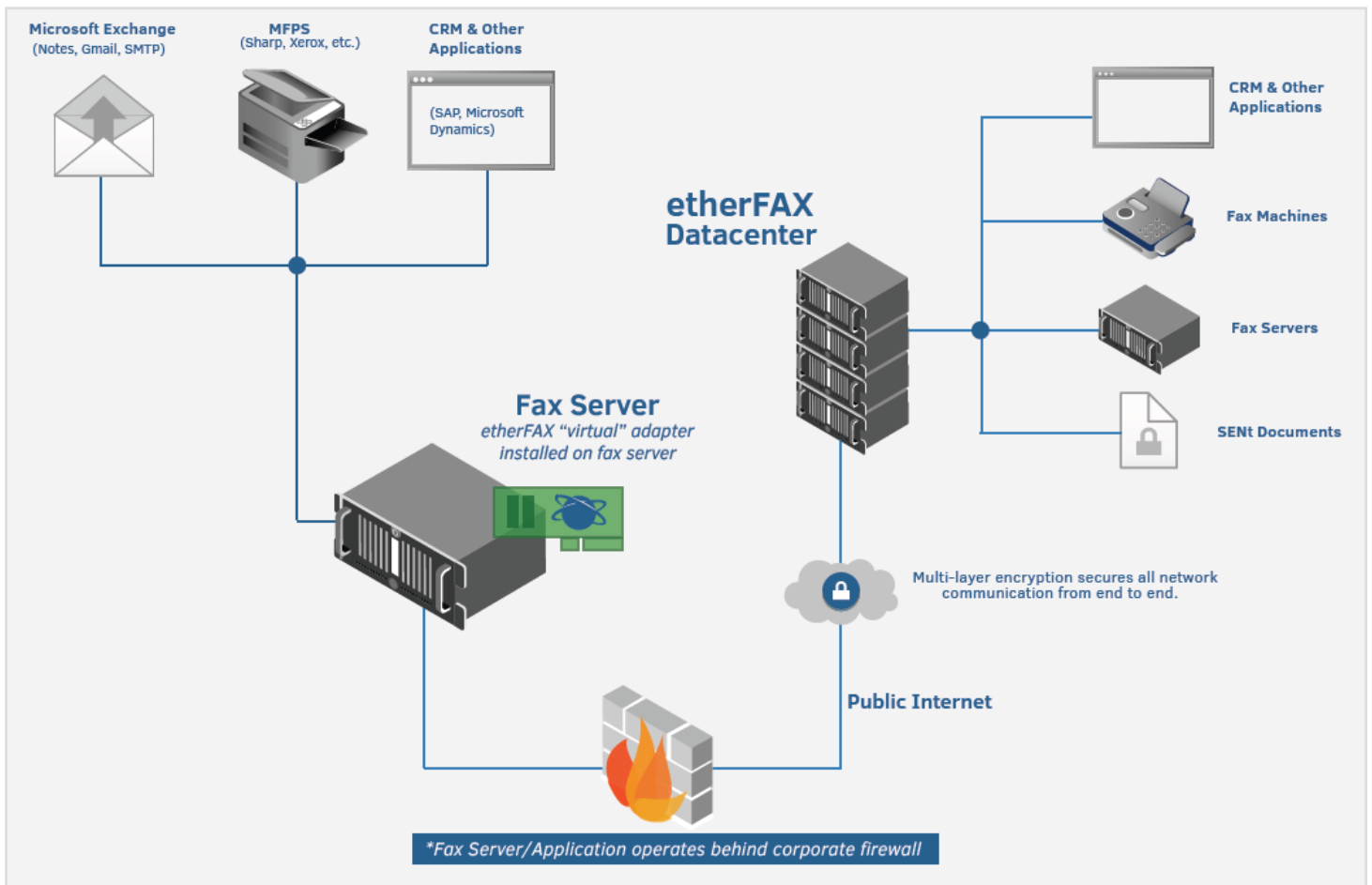
The following equipment and software were used during interoperability testing:

Equipment/Software	Release/Version
FaxFinder® FF240-IP.R1	4.0.0
FaxFinder FF240-IP	4.0.0
etherFAX fax service	(05/17/2016 through 05/25/2016)

etherFAX Service Information

For more detailed information on how etherFAX works see the etherFAX webpage <https://etherfax.net>

Refer to figure below from Overview Faxes Without Fax Lines at <http://etherfax.net/resources>.



Once you submit a job to the FF240-IP, the documents are rendered and readied for transmission. Each fax is authenticated and securely delivered over HTTPS to its destination using etherFAX’s carrier grade telephony network. The fax transmission is updated and monitored in real-time with final call progress notification sent to the FF240-IP and viewable on the fax status page.

Setup and Installation

Will the etherFAX service work with my network setup?

Yes. Simply configure your FF240-IP to connect to the etherFAX network using your etherFAX account parameters.

Do I need a special Internet connection?

Depending on your Internet usage, you may need to use a separate Internet connection for your etherFAX telephone service. At least 32Kbps in bandwidth is needed for each line used for voice only. 90Kbps must be available for each line that will be used for conventional fax calls (fax machine to fax machine) and data transmission (financial transaction terminals, alarm systems, modems). The reliability of data and DTMF transmission is totally dependent on the consistent quality of your Internet connection.

What happens if Internet or power goes down?

You can receive your calls even if your Internet service is interrupted. etherFAX will hold incoming faxes until the FF240-IP is ready to download them.

Can my FF240-IP connect to etherFAX from behind my firewall?

Yes. However, some firewalls may need minor adjustments to avoid a rare situation where the firewall could block incoming calls. For details on the recommended changes, refer to the firewall help or contact your firewall provider for assistance.

Consistent NAT: Firewalls that do not use a Consistent NAT can block incoming calls. In this situation the firewall changes the address/port to which etherFAX needs to send the incoming call. If a call arrives at that moment, before etherFAX is notified of the new address/port, then that call will not reach your device. To avoid this, change your firewall setting to enable Consistent NAT.

Strict firewalls: In the case of very strict firewalls, such as the ones allowing traffic only on limited well-known IP ports, they may block your incoming calls. To resolve this, add a rule to allow incoming UDP packets from etherFAX. Refer to your etherFAX account for detailed SIP parameters.

FaxFinder IP Configuration

For configuration details on the FaxFinder® IP, see the FaxFinder IP Administrator Guide. Please visit www.faxfinder.net to find FaxFinder IP documentation. A brief overview of the required setup is shown here but refer to the guide for more information.

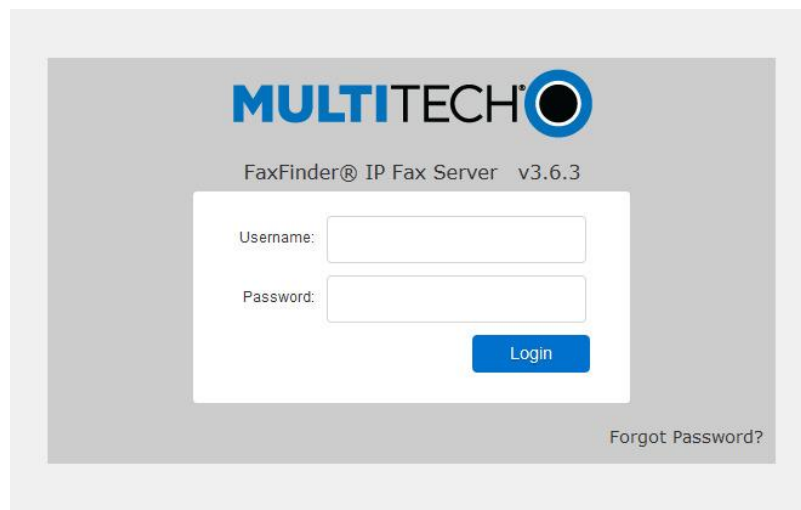
The FaxFinder IP must be installed on an IP network with internet access. When configured properly, the FaxFinder IP can deliver incoming faxes to email accounts, network shares or network printers. The FaxFinder IP supports multiple methods for sending faxes. Faxes can be sent from email using T.37 fax, FaxFinder IP web interface Send Fax page, FaxFinder client software or via the FaxFinder IP API. Refer to the FaxFinder IP Administrator Guide for details on these methods.

Configuring FaxFinder IP with etherFAX

Before configuring your device for etherFAX, you must first complete the basic FaxFinder IP setup and configuration. Refer to the FaxFinder Fax Server FF240-IP Administrator Guide on www.faxfinder.net.

To configure the device to be used with the etherFAX provider:

1. Login to the device web management interface as an administrator.



2. Go to **Fax Configuration > Fax Provider**. From the **Fax Provider** section, select **etherFAX** from the pulldown menu.

The screenshot shows a web interface titled "Fax Provider Configuration" with a "Defaults" button in the top right. The main content is divided into two sections: "Fax Provider" and "etherFAX".

Fax Provider

Provider: etherFAX (selected from a dropdown menu)

etherFAX

Please enter your EtherFax account information here.
If you do not have one, please click this link <http://etherfax.net/login> to create an account

Server Address:

etherFAX Account: Username:

Phone Number: Password:

Fax ID: Confirm Password:

Figure 1 – Example etherFAX configuration setup using etherFAX account parameters.

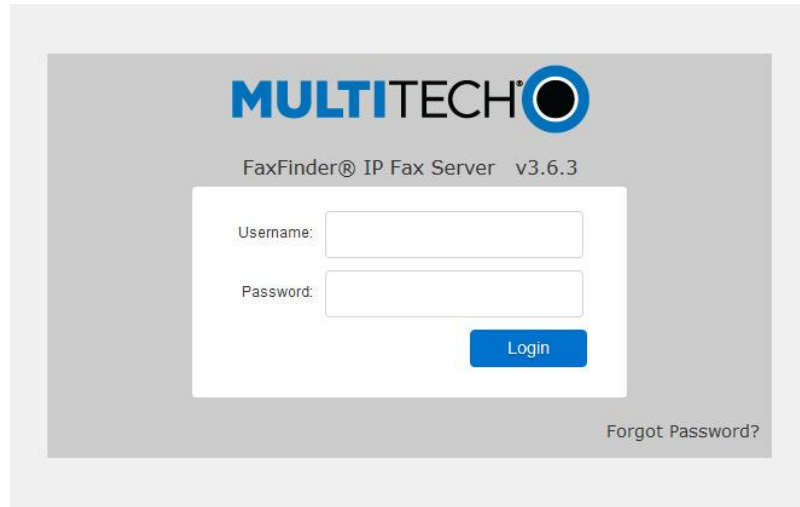
3. Enter the following **etherFAX** parameters of your etherFAX account.
 - **Provider:** select **etherFAX**
 - **etherFax Account:** use the etherFAX account assigned by etherFAX.
 - **Phone Number:** use the phone number assigned by etherFAX.
 - **Username:** use your etherFAX Username.
 - **Password:** use the password specified in your etherFAX account.
 - **Confirm Password** use the password specified in your etherFAX account.
4. Click **Save**.

NOTE: To test the service, click on **Test Service Connectivity**. If your recently-entered account information is correct and valid, the system displays a green alert confirming the device can connect to the etherFAX service.

Verification Steps

To verify proper configuration of the device with etherFAX:

1. Login to the device web management interface.



2. Click the **Send Fax** button.

Send Fax ?

Sender Information

Recipient Information

Find Recipient: Personal Contacts

Contact/Group: Select Contact/Group

Name: [Text Field]

Organization/Description: [Text Field]

Fax Number: [Text Field]

Phone Number: [Text Field]

Add Recipient

Recipients

Name	Organization/Description	Fax	Phone
------	--------------------------	-----	-------

Cover Page Information

Attachments

Options

Send Fax

3. Send a fax to a remote fax machine. Verify the remote fax machine received the fax.

4. Send a fax from the remote fax machine to the device. Verify that the device received the fax. Click **Status & Logs**. Then click:
 - a. **Fax Status:** shows faxes currently in progress.
 - b. **Inbound Fax Log:** shows faxes that have been delivered. Click **Details** to view a pop-up window of fax delivery details.

Interoperability Compliance Testing

Interoperability compliance testing covered the following features and functionality:

- Proper handling of faxes via the FaxFinder channels including send/receive, external faxing, and miscellaneous failure scenarios.
- Proper handling of faxes with different pages and complexities.

Reference Configuration

Two FF240-IP fax servers, each configured with its own etherFAX account, using 2 active channels, sending and receiving faxes. A traditional fax machine was also used to send/receive faxes with the FF240-IP fax server.

General Test Approach and Test Results

The test cases were performed manually. Fax calls were sent using the FaxFinder. The fault insertion test cases were performed manually by disconnecting/reconnecting the cables to the fax machine.

Test Results Summary

FaxFinder® Fax Server FF240-IP configured with etherFAX - Test Cases

FaxFinder FF240-IP with etherFAX			
Basic Feature Test Cases			
ID	Name	Description	Results
1.1.1	Send faxes from FaxFinder to fax machine.	Use the FF240-IP Web UI to send a Fax to a Fax Machine. - Verify that all pages were received and are of good quality	Pass
1.1.2	Receive faxes from fax machine to FaxFinder and fax delivery.	Send a Fax from a Fax Machine to the etherFAX configured FaxFinder FF240-IP. - Verify that the correct extension digits were received on the FaxFinder IP and that it routed the fax correctly.	Pass
1.1.3	Send multi-page documents.	Use the FaxFinder IP Client to send a 3 Page Fax to a fax machine using FaxFinder IP configured with etherFAX. - Verify that all pages were received and are of good quality	Pass

FaxFinder FF240-IP with etherFAX			
Basic Feature Test Cases			
ID	Name	Description	Results
1.1.4	Receive multi-page documents.	Send a 4 Page Fax from a fax machine to the FaxFinder IP configured with etherFAX. - Verify that all pages were received and are of good quality	Pass
1.1.5	Send and receive faxes simultaneously.	Use the FF240-IP configured with etherFAX to send a 3 page Fax to the other FF240-IP. While the first FF240- IP is sending, have the other FF240-IP send a 3 page Fax. - Verify that all pages were sent and received, and that the quality of each page is good quality.	Pass
1.1.6	Load test. Repeatedly send and receive faxes over an extended time period.	Repeatedly send and receive faxes to and from the FF240-IP configured with etherFAX over an extended period of time. - Verify the failure rate is low and the received faxes are of good quality.	Pass

FaxFinder FF240-IP with etherFAX			
Fault Insertion			
ID	Name	Description	Notes
1.2.1	Send partial fax from fax machine to FF240-IP using etherFAX.	Send multi-page fax from fax machine and pull the line after a couple of pages are sent. FF240-IP should receive and deliver the partial fax.	Pass

FaxFinder IP Troubleshooting

To troubleshoot FaxFinder® Fax Server IP, use the FF240-IP Administrator Guide. To download the guide, go to www.faxfinder.net/faxfinder-ip.

Before contacting support, download the debug information from your device:

1. Go to **System Configuration > Debug** menu and set the log level to **Info**.
2. Click **Save and Restart**.
3. Once you return, click **Download Logs**. **Save** the file on your local computer.

Then contact FaxFinder support as described below and provide them the debug information.

Contacting FaxFinder

FaxFinder

324 Main Street South, Suite 260, Stillwater, MN 55082

Phone: (763) 777-1124

Fax: (763) 777-7655

Business Hours: M-F, 8am to 5pm CT

FaxFinder Support Portal

To submit a support case, simply send an email to support@faxfinder.net or visit the FaxFinder Support Portal at support.faxfinder.net.

etherFAX Support

If you need help with etherFax, first, refer to the knowledge base at <https://kb.connect.etherfax.net/>. If you still need assistance, click the support link at <https://etherfax.net/support> or contact etherFAX directly.

etherFAX Contact Information

etherFAX

101 Crawfords Corner Road

Suite 4-102R

Holmdel, NJ 07733

Web: <http://etherfax.net>

Phone: 877-384-9866

Fax: 215-383-9994

Email: info@etherfax.net