MULTITECH®

Using FaxFinder® Fax Server with etherFAX

FF240-IP Application Notes Rev. 1.0

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Knowledge Base

The Knowledge Base provides immediate access to support information and resolutions for all Multi-Tech products. Visit http://www.multitech.com/kb.go.

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Support

Business Hours: M-F, 9am to 5pm CT

Country	By Email	By Phone
Europe, Middle East, Africa:	support@multitech.co.uk	+(44) 118 959 7774
U.S., Canada, all others:	support@multitech.com	(800) 972-2439 or (763) 717-5863

World Headquarters

Multi-Tech Systems, Inc.
2205 Woodale Drive
Mounds View, Minnesota 55112
Phone: 763-785-3500 or 800-328-9717
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Warranty

To read the warranty statement for your product, please visit: http://www.multitech.com/warranty.go.

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.
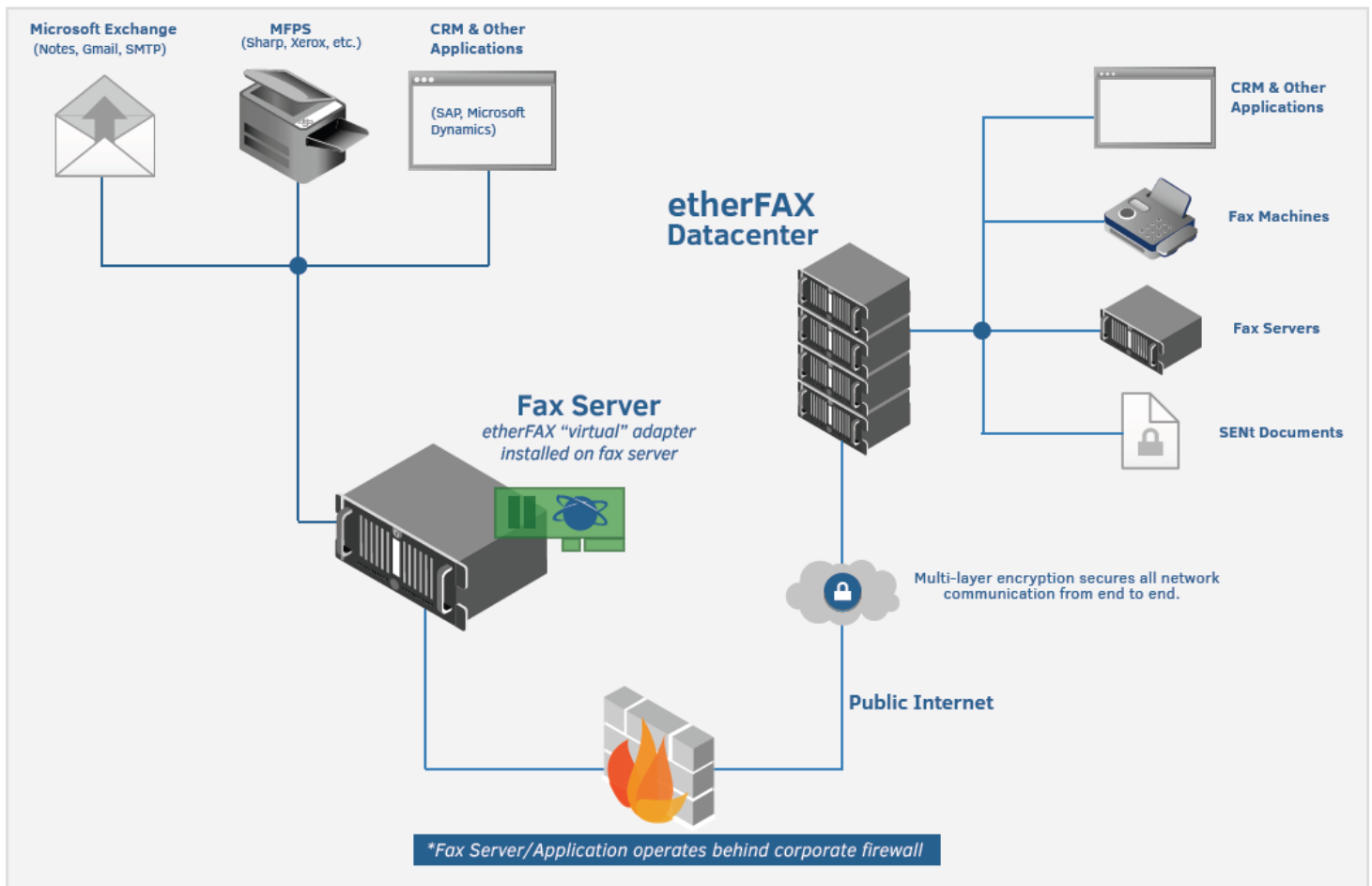
Once you submit a job to the FF240-IP, the documents are rendered and readied for transmission. Each fax is authenticated and securely delivered over HTTPS to its destination using etherFAX's carrier grade telephony network. The fax transmission is updated and monitored in real-time with final call progress 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 no 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.multitech.com 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.multitech.com.

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

1. Login to the device web management interface as an administrator.
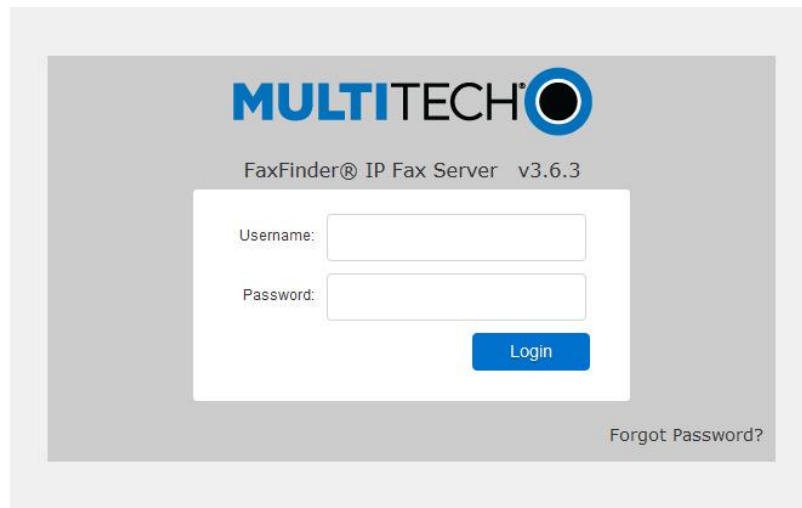
2. Go to **Fax Configuration** > **Fax Provider**. From the **Fax Provider** section, select **etherFAX** from the pulldown menu.

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

3. Enter the following **etherFAX** parameters of your etherFAX account.

   o **Provider**: select **etherFAX**

   o **etherFax Account**: use the etherFAX account assigned by etherFAX.

   o **Phone Number**: use the phone number assigned by etherFAX.

   o **Username**: use your etherFAX Username.

   o **Password**: use the password specified in your etherFAX account.

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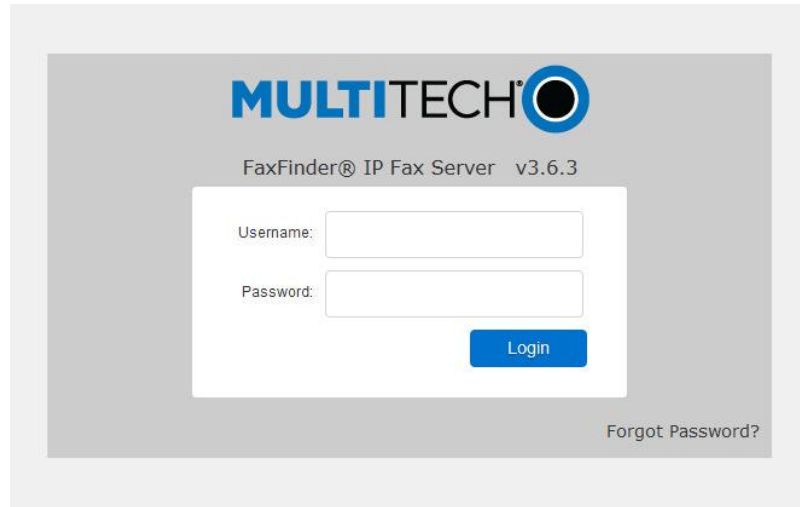
2. Click the **Send Fax** button.

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.multitech.com.

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 MultiTech support as described below and provide them the debug information.

MultiTech Technical Support

Knowledge Base
The Knowledge Base provides immediate access to support information and resolutions for all Multi-Tech products. Visit http://www.multitech.com/kb.go.

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U.S., Canada, all others:	support@multitech.com	(800) 972-2439 or (763) 717-5863

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Fax: 763-785-9874

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.

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