Isode

XMPP Form Discovery & Publishing Evaluation Guide

Configuring Isode's M-Link for use with Isode's Windows Desktop and Web-based FDP Tools.

Objectives

This guide will show you how to set up a basic XMPP Form Display and Publishing (FDP) configuration using Isode's M-Link server, Isode's Demonstration Web Client and Isode's FDP Demonstration (Windows) Desktop Client.

This evaluation assumes that you have an existing M-Link Installation or will build a new one and will only cover the FDP configuration. The M-Link Evaluation Guide can be followed for setting up a basic XMPP service and gaining experience of using the M-Link Console (MLC) management tool used in this guide. During this evaluation we will:

- Configure an FDP Domain & upload sample form templates.
- Configure BOSH on the M-Link Server (for use with the FDP Web Client).
- Install the FDP Desktop (Windows) Client and the FDP Web Client.
- Use both desktop and web clients to submit (as a publisher) and receive (as a subscriber) a CASREP form.

For the purposes of this evaluation guide we have assumed that this is a 'clean' installation of both M-Vault and M-Link R16.3. Please do not 'Mix and Match' M-Vault and M-Link Versions.

Note for Windows Users

If you're running Windows 7, 8 or 10 you will need to run Isode Management tools (like Sodium and MVC) as an Administrator. You can do this by right-clicking on the program icons and choosing 'Run as administrator' from the pop-up

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Installation Requirements

You should visit [www.isode.com/products/supported-platforms.html] to discover which operating systems are supported for Isode evaluations. Evaluation downloads (excluding documentation) are held in a password-protected section of the Isode website. If you have not already done so you should apply for password access by filling in the form located at [www.isode.com/evaluate/evalrequest.html].

Obtain Isode Server Products

Many Isode management tools are written in Java. You should install Java before installing the Isode packages, on Linux platforms you will need to add Java to the $PATH. You can obtain the required packages (Java SE 7 – JRE) from [www.oracle.com/technetwork/java/javase/downloads/index.html].

After obtaining password access to the Isode binary files you should download and install **M-Vault** and **M-Link** following the instructions on the download page for your platform. The number of packages required will vary depending on platform. Available server downloads are listed at [www.isode.com/evaluate/instant-messaging-xmpp.html].

You'll also need to download the installer for the Isode desktop FDP tool (both available from the FDP Evaluation page) and the files necessary to enable the FDP Web Client.

Note for Linux Users

On Linux platforms you should create an M-Link runtime user account 'mbox'. After installation you should change the ownership of the /etc/isode directory to this user.

Evaluation License File

Isode server products require a valid license from Isode before they will run correctly. Licenses are issued by Isode Customer Service. If you haven't already been sent a license when requesting access to the evaluation files, please send a message to request a license to [pre-sales@isode.com] remembering to specify which Isode server products you need a license file for.

By default the license file you receive needs to be installed in \Isode\etc\ (Windows) or /etc/isode/ (Linux) as 'license.dat'. You may have chosen an alternative installation directory when installing the software, in which case you will have to place the license file there. For Linux it is important to ensure that the license file is readable by all users on Linux systems.

Configuring the Service

In this section you will set up an FDP domain, upload some sample FDP templates and configure BOSH (Bidirectional streams Over Synchronous HTTP) on the M-Link server.

Creating an FDP Domain using MLC

The instructions and screenshots below refer to a domain "headquarters.net". You will need to make the relevant changes to match your domain. Open MLC and select the **[Form Discovery and Publishing]** option, as in the screenshot below.
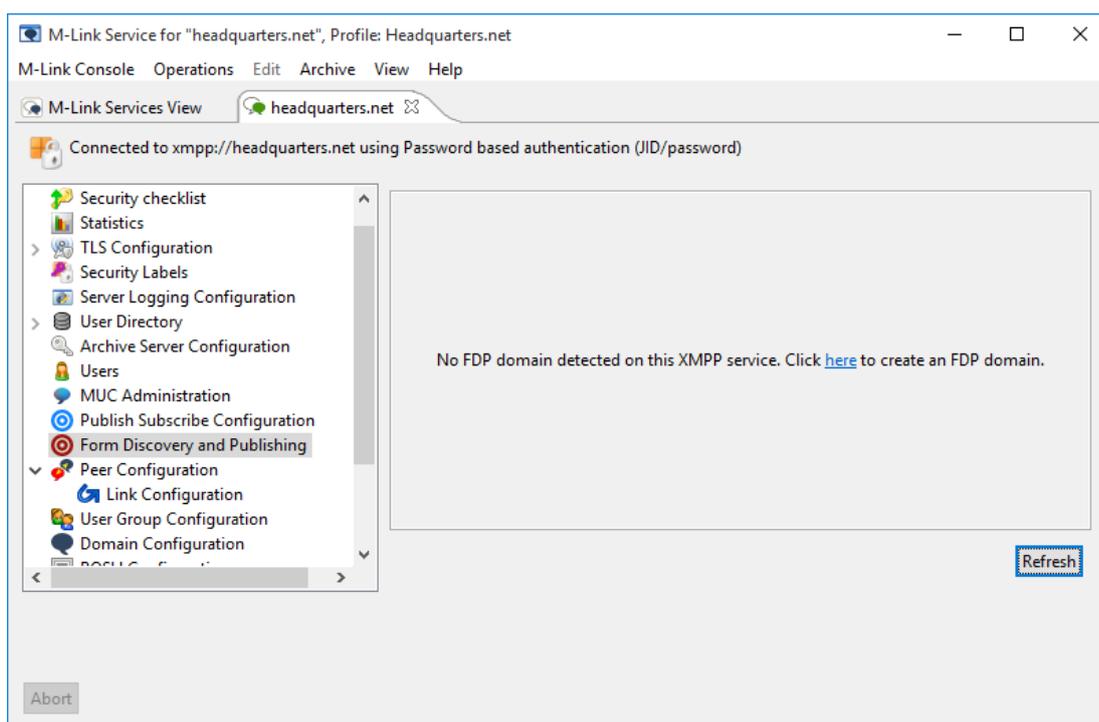
Click the **[Add FDP Domain...]** button and, as below, specify a name for your FDP domain. In this case we are using "fdp" giving us the full domain name of "fdp.headquarters.net". Note that you can type either the sub-domain, as below, or the full domain into the Domain Name box.
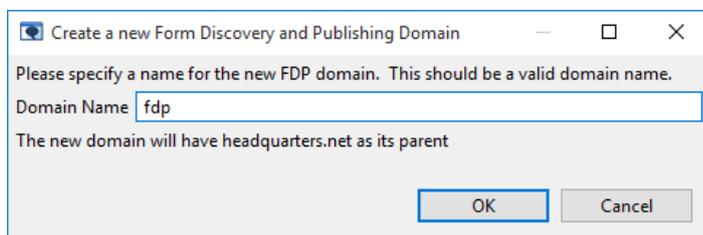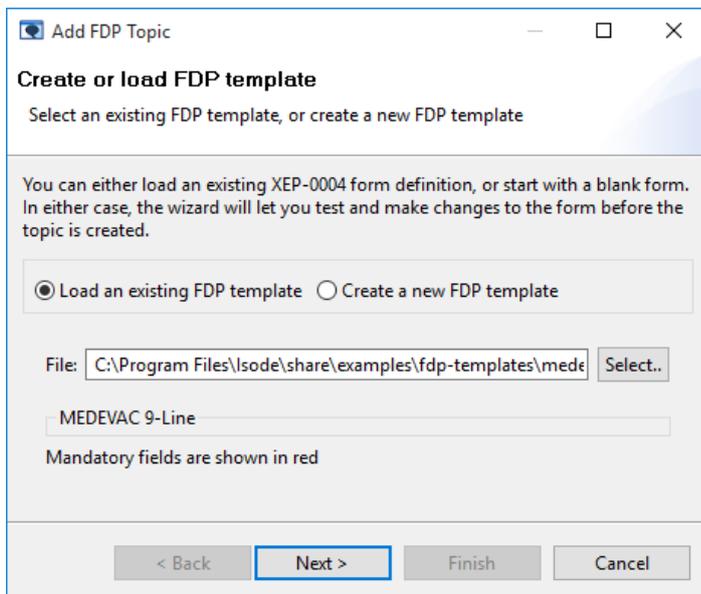

Click on **[OK]** and you'll be returned to MLC, with your newly created fdp domain shown as follows.
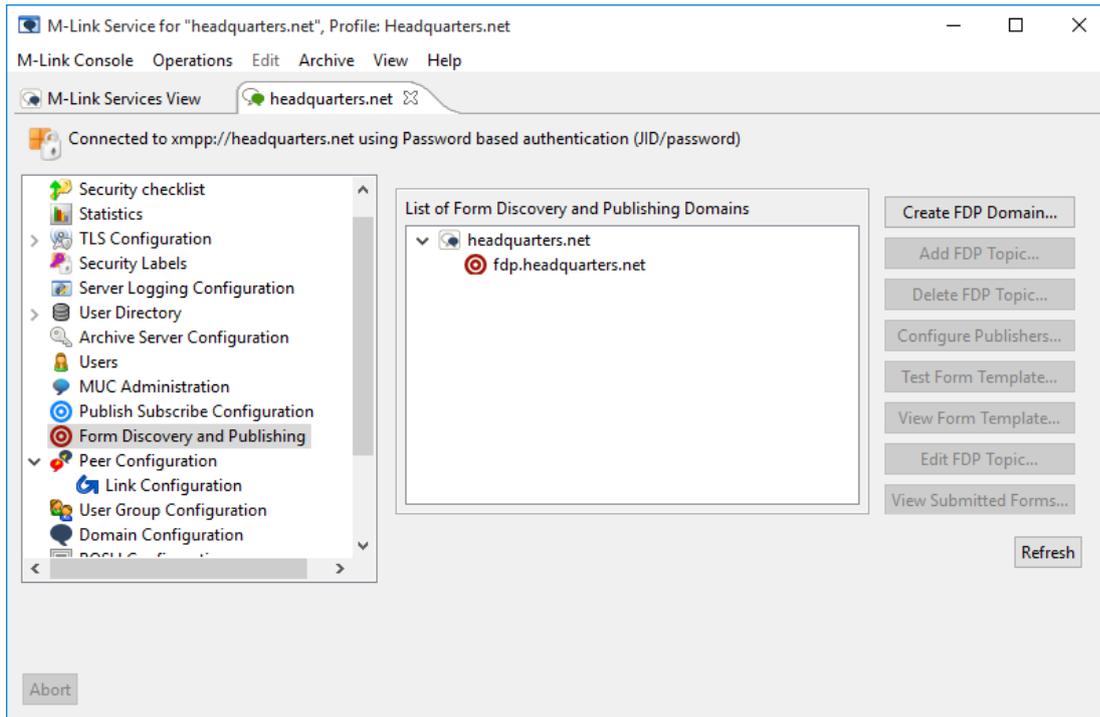
Upload Sample FDP Templates

Select the FDP domain in MLC and click on **[Add FDP Topic]** button. Select the "Load an existing FDP template" radio button and click "Select". There will now be presented with a list of FDP templates, click on MEDEVAC then click Open. You should now see the below:

Click **[Next]**, A preview of the form contents will be shown on selection.

Click **[Next]** use defaults on the **FDP Topic Details** screen, click **[Next]**. At the **Set Publisher** screen enter the list of users who you wish to be able to access this form and publish (submit) completed examples. Users, should be identified by their XMPP JIDs. Note that you can also enter a domain here so that all users within that domain are allowed to publish.
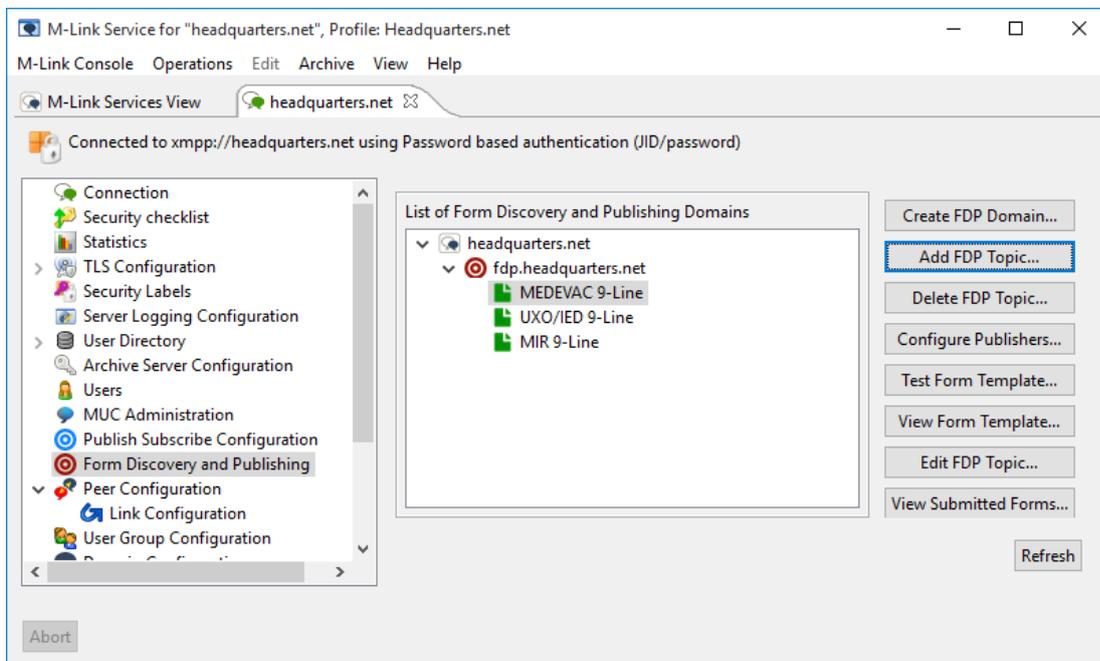

Click **[Next]** to commit the list of publishers and then **[Finish]** to receive the Summary screen, below.
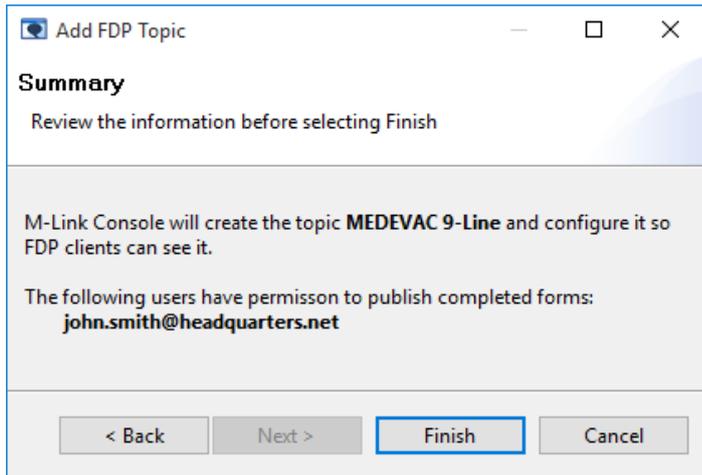
You'll be taken back to the MLC screen which will now show that the form template is now associated with your domain. In the screenshot below we've repeated this process to add other form templates.

Configure BOSH on the M-Link Server

You'll need to configure BOSH if you intend to use the Isode Web FDP Client. Select the **[BOSH Configuration]** option from within MLC.

The default BOSH Port is "5280" and the default BOSH URI Path is "http-bind" so enter these values in the relevant fields. The BOSH Files folder defaults to C:\Isode\ms\bosh_files (on Windows) and, unless you have previously created this location, it will be highlighted in yellow warning you that it does not exist. For the purposes of this deployment it is not required so click **[Apply]**. You will need to restart the M-Link server for these changes to take effect.
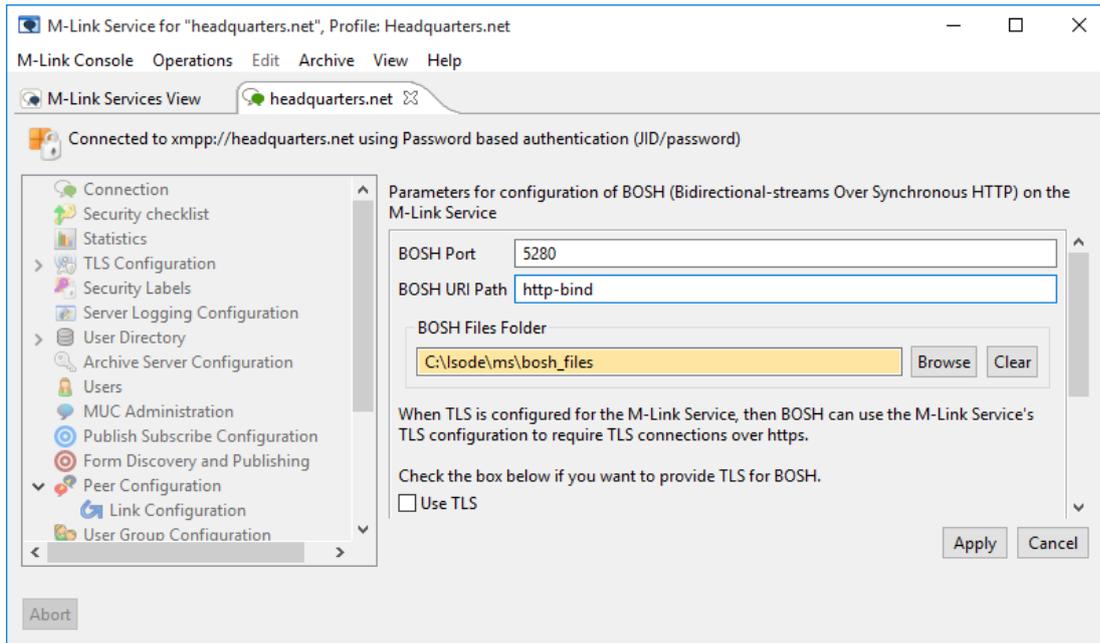
Note

You must ensure that port 5280 is open on your firewall for BOSH to function correctly.

Installing & Using FDP Clients

Isode provides two clients for use with an FDP service; for Windows and for use via a web-browser. In this section you will set up and briefly explore both.

The Isode FDP Windows Clients

Install the Isode Program "fdptool-1.0.0.msi". Before you run this program ensure that both the Client machine and server machine have the XMPP domain (headquarters.net in this example) in their hosts file if you do not have the DNS SRV records setup for that domain.

Now run the program FDP Tool from the FDP Tool program group.
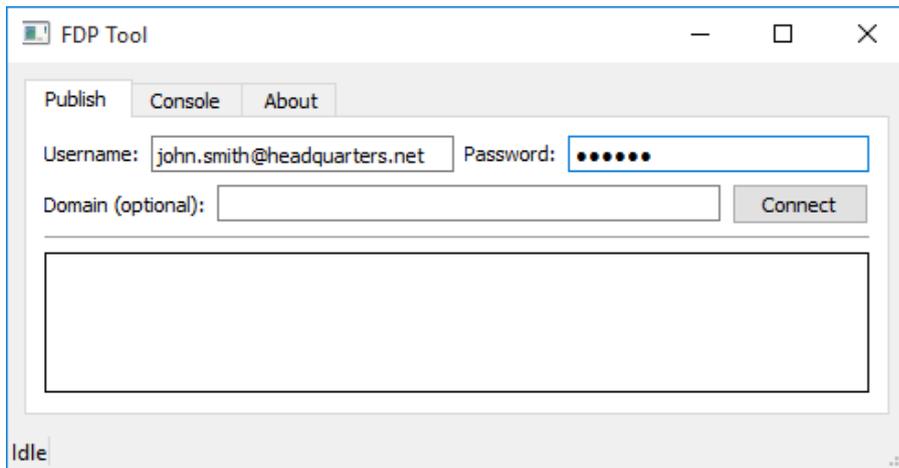
Enter the username (JID) and password for a user who has permission to publish completed forms and click **[Connect]**.
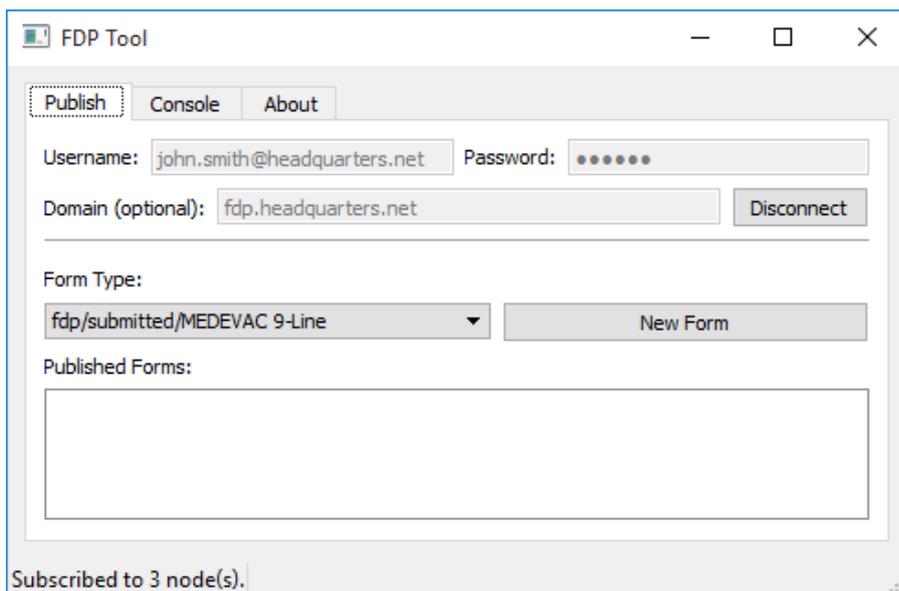
The Form Type drop down shows the forms that this user is subscribed to and also allows you to fill in and publish a completed form of the selected type by clicking the **[New Form]** button. In the screenshot that

follows, an example of MEDEVAC form, completed and ready to publish, is shown.

Fill in the details and click **[Publish]**, and you immediately see it appear in the Published Forms List.

To see the form content from a subscriber perspective, click on it in the Published Forms window, as follows.
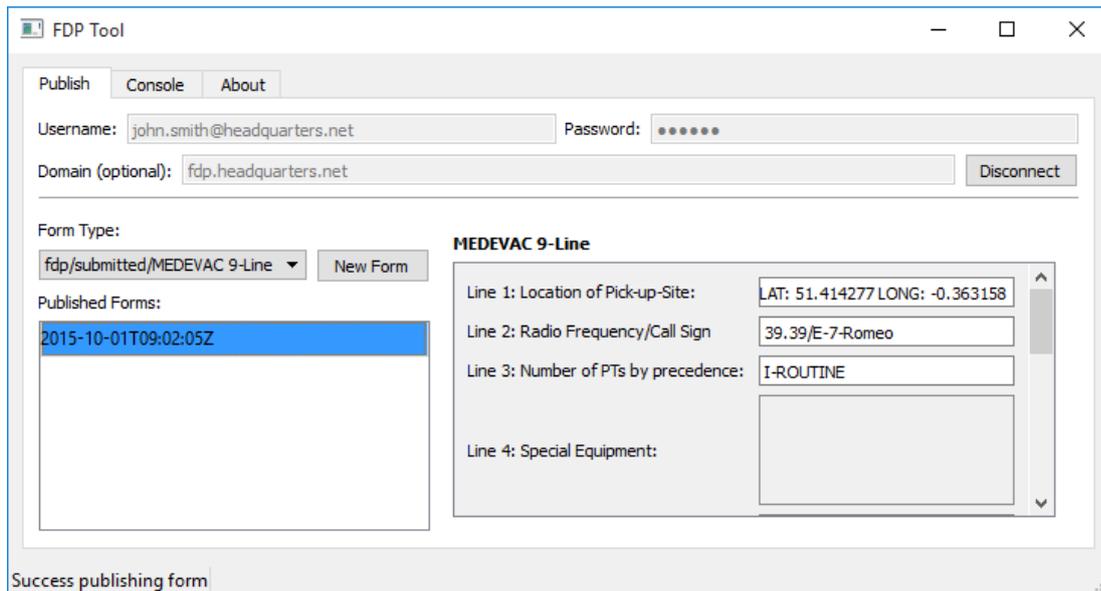
The Isode FDP Web Client

Installation of the Web Client requires a web server, ideally co-located with the M-Link XMPP server. Expand the WebMlink.zip archive onto your Web Server as a sub-folder of the main server, in this example http://headquarters.net/WebMlink/.

Within this folder, locate the config.js file and edit it to reflect the details of your server setup. The file, edited with the details of headquarters.net is shown below, with edited sections shown in red.

```
/*
*Copyright (c) 2014, Isode Limited, London, England.
*All rights reserved.
*
*Acquisition and use of this software and related materials for any
*purpose requires a written licence agreement from Isode Limited,
*or a written licence from an organisation licensed by Isode Limited
*to grant such a licence.
*/

// Auto login and go to page
var autoLoginToPage = null;
var cfg_headquarters = {
transport: 'bosh',
boshURL: 'http://headquarters.net:5280/http-bind/',
wabacURL: 'http://headquarters.net:5080',
hideLoginURLs: true,
wabacDisabled: true,
login: '',
pwd: ''
};
var cfg = cfg_headquarters;
```

The Web Client is now ready for use.

Enter the URL of your Web Client, in this case http://headquarters.net/webmlink/, into your browser. Login using the JID and password details of the user you previously granted forms publishing rights to, click **[Submit]** and the main Web Client screen will be displayed.
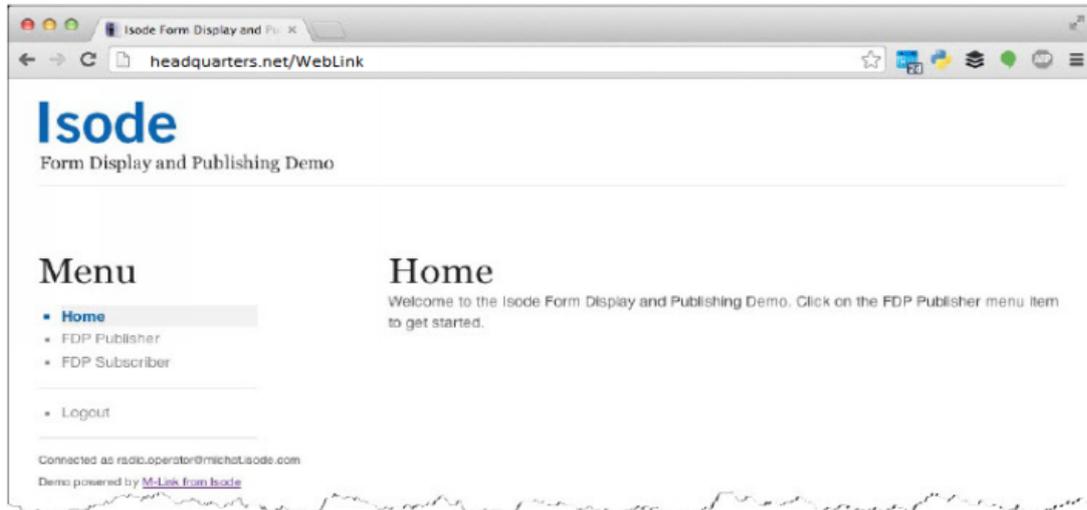
Form Publishing & Subscription

In this next section we'll see how the Web Client is used to publish a completed form and receive subscriber notification that a form has been published. Click on the **[FDP Publisher]** menu option then select the form you wish to publish from the drop-down list in the right-hand section of the screen. In the screenshot that follows we've chosen a MEDEVAC form.

Fill in the form as required, scroll to the bottom of the screen and click on **[Submit]**. You'll now notice a notifying exclamation mark appear next the the FDP Subscriber link, indicating that a completed form has been received. Click on the **[FDP Subscriber]** link and you'll see the completed form displayed from the perspective of a subscriber.

Isode
Form Display and Publishing Demo

Menu

- Home
- FDP Publisher
- **FDP Subscriber**

- Logout

FDP Subscriber

[2014-06-27 15:25:41]

Line 1: Location of Pick-up-Site: *	LAT: 51.414277 LON(
Line 2: Radio Frequency/Call Sign *	39.36/E-7 Romeo
Line 3: Number of PTs by precedence: *	1-ROUTINE
Line 4: Special Equipment: *	B

What next/other resources

Help us improve our Evaluation Guides

Producing evaluation guides that are easy to follow and that help evaluators get started with our products is important to us. Please help us improve this guide by emailing us at customer-service@isode.com.

Product Information

While following this guide you have installed M-Link (XMPP Server) and M-Vault (LDAP/X.500 Directory Server). For more information on these server products and the MLC Management tool, follow the links below:

- M-Link: [www.isode.com/products/m-link.html]
- M-Vault: [www.isode.com/products/m-vault-directory.html]
- M-Link Console: [www.isode.com/products/m-link-management.html]

Further Evaluations

Evaluations of other Isode products are available from [www.isode.com/evaluate/index.html].

Further XMPP evaluation guides, which follow on from this one are, "XMPP for Constrained Link Environments", "Using the SPIF Editor". Isode messaging products, including M-Link, have special functionality to optimize operation over constrained links (such as HF Radio and SatCom). By the end of these new evaluation guides you will have:

- Configured two M-Link servers on separate hosts to communicate using Isode's optimized server-to-server protocol over TCP and/or over STANAG 5066 (HF Radio).
- Learned how to filter traffic types over the link.
- Set up a Federated Multi-User Chat (FMUC) room.
- Created 3 files with the SPIF Editor: label-catalog.xml, clearance-catalog.xml and policy.xml

Documentation

This guide has covered only the basic functionality of Isode's M-Link server. To extend your system and explore the capabilities of M-Link further you should read the Administration Guide available from the Isode website in PDF format. The M-Link Administration Guide, together with all other Isode documentation is available from [www.isode.com/support/docs.html].

Whitepapers

Isode regularly publishes whitepapers relevant to XMPP. All whitepapers can be searched from the whitepaper index page on the Isode website at [www.isode.com/whitepapers/index.html].

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