

# HylaFAX Enterprise Web Interface Admin Guide

iFAX Solutions, Inc.

Version 1.6, November 2018

# Contents

- 1. Introduction ..... 1
  - 1.1. Document Management ..... 2
  - 1.2. Fax Processing ..... 2
- 2. Integration with HylaFAX Enterprise ..... 3
  - 2.1. faxrcvd ..... 3
  - 2.2. notify ..... 3
  - 2.3. faxcover ..... 3
- 3. Installation & Configuration ..... 4
  - 3.1. Installation ..... 4
  - 3.2. Configuration ..... 4
- 4. Managing Users ..... 5
  - 4.1. Creating Users ..... 5
  - 4.2. Importing user accounts ..... 6
- 5. Configuring Fax lines ..... 7
  - 5.1. Configure Modems ..... 7
  - 5.2. Configure DID/DTMF Groups ..... 8
- 6. Setting up Fax Categories ..... 8
- 7. System Maintenance ..... 9
  - 7.1. Backing up ..... 9
  - 7.2. System Logs ..... 9
- 8. Advanced Configuration ..... 10
  - 8.1. LDAP User Authentication support ..... 10
  - 8.2. Configuring Barcode support ..... 10
  - 8.3. Configuring the Blacklist ..... 10
  - 8.4. Configuring OCR Support ..... 11
  - 8.5. Configuring HTTPS ..... 12
  - 8.6. Cover Pages ..... 13
  - 8.7. Fax Retention ..... 14

# 1. Introduction

HylaFAX Enterprise Web Interface is a web-based application for managing faxes on HylaFAX Enterprise fax servers. It provides a true enterprise-grade solution for delivering, receiving, forwarding, and archiving an elevated number of faxes. HylaFAX Enterprise Web Interface is helping companies world-wide to digitize, categorize, and archive their fax documents and improve the efficiency of their document workflow.

Developed on the UNIX/Linux platform, HylaFAX Enterprise Web Interface's interface is compatible with any web browser on any platform including a number of web-enabled devices with PDF capabilities. Equipped with a sophisticated and yet easy to use archiving system, contact manager, and an integrated emailing system, HylaFAX Enterprise Web Interface is the ideal fax solution for any company.

These are some of the supported features:

- Users can view faxes online with any standard web browser (IE, Mozilla/Firefox, Safari, and Opera)
- Download faxes in PDF format
- Recognizable fax numbers can have their faxes forwarded directly to an email address in PDF format
- Users can forward faxes via email without the need of an email client
- Enhanced cover page support for HylaFAX Enterprise
- Theme support using Smarty
- Unlimited user accounts
- Unlimited fax lines - the number of fax lines managed by HylaFAX Enterprise Web Interface is not limited
- Email to FAX support
- Black listing support using DynamicConfig RejectCall
- Barcode based routing
- DID/DTMF-based routing support
- OCR support (using Tesseract) for improved keyword searching
- Address book importer for both Email addresses and Fax numbers in vCard (.vcf) format
- Multiple language support - each user can use the interface in their native language
- Fax archive - search your fax archive for received and sent faxes by company, date, category, and keyword

# 1.1. Document Management

Every fax that is sent and received has a Fax Identification (FaxID) number. HylaFAX Enterprise Web Interface's Archive is designed not only to allow the user to categorize and add descriptions to faxes but also to permit external applications to access faxes by their FaxID.

How can my company benefit from this? Many companies have already have a system for tracking client proposals and confirmed orders. However, instead of having multiple copies of the same fax on different systems, each fax can be referenced by its FaxID from one single location. Also, HylaFAX Enterprise Web Interface's Archive interface allows the user to search for single or multiple faxes by company name, date, category, and by keywords in the fax's notes.



Figure 1. The Fax Menu

Let's say that a customer has confirmed an order by fax. The user simply processes the order, adds the order number and other information in a note, and assigns a category to that fax. HylaFAX Enterprise Web Interface keeps track of the user and the date of the last modification to each fax's note and category. In the future, that fax will be easily located by performing a search in the Archive.

# 1.2. Fax Processing

The administrator authorizes users to view all incoming faxes or only faxes that arrive on certain fax modems or DID/DTMF groups. All faxes that arrive pass through HylaFAX Enterprise Web Interface's database system where the fax is archived in PDF format and the preview images are generated for viewing online. If the sender's fax number is setup in Fax to Email routing, HylaFAX Enterprise Web Interface will send the received fax directly to the assigned email address and skip the web interface.

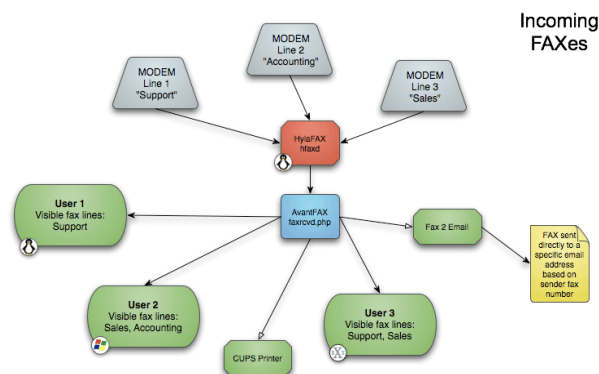


Figure 2. Inbound Processing

As for sending faxes, users can either use the online interface or an application installed on the user's computer with which the user authenticates with the HylaFAX server with their username and password. Once the fax has gone through or if there is a problem sending the fax, the user will receive a notification email. If the fax was sent successfully it will be archived for future reference.

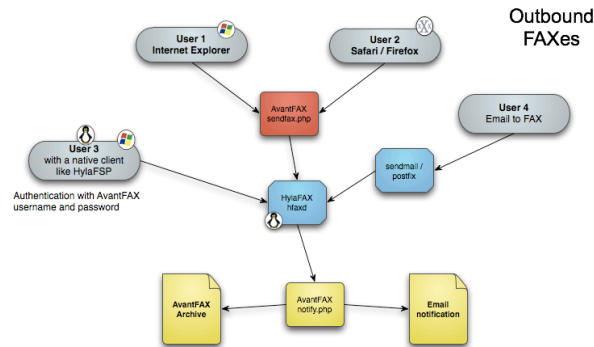


Figure 3. Outbound Processing

## 2. Integration with HylaFAX Enterprise

There are three main portions of HylaFAX Enterprise that have been replaced by HylaFAX Enterprise Web Interface. They are faxrcvd, notify, and faxcover.

### 2.1. faxrcvd

This script was completely rewritten in PHP using the HylaFAX Enterprise Web Interface classes to add received faxes directly to the database, create the fax preview images for the online interface, and to send any Fax to Email faxes to the assigned email address and skip the web interface.

### 2.2. notify

This script was also completely redone similarly to faxrcvd in order to archive sent faxes and send notification emails about a sent fax's status. Find out more in the Fax Processing section.

### 2.3. faxcover

This feature gives you the ability to use HTML-based cover pages instead of PostScript. More details are covered in the Advanced Configuration area of this document.

# 3. Installation & Configuration

## 3.1. Installation

When installing the HylaFAX Enterprise Appliance, the Web Interface module is also installed automatically.

## 3.2. Configuration

To customize the web interface to meet your company's needs, start by modifying the *etc/webconfig.php* file. Some of the settings you can change are:

- Enable and configure DID/DTMF routing support
- Modify the HylaFAX Enterprise Web Interface system email address
- Specify the default system language
- Enable OCR support
- Enable Barcode decoding support
- Enable fax annotation
- Enable printing of each fax
- Specify the default fax cover sheet

This file is very well commented. Once you save the file the changes take effect immediately.

To complete the configuration of your HylaFAX Enterprise Web Interface server, log into the web interface at this address:

```
http://<your server IP>/admin/
```

The default administrative account details are as follows:

```
username: admin  
password: password
```

# 4. Managing Users

Accounts created in HylaFAX Enterprise Web Interface are used for logging into the web interface, and this section will explain how accounts can be created via the web interface and imported using a script.

## 4.1. Creating Users

User accounts can be created with the following criteria: account name, username, password, password expiration cycle, password reusability, email address, language, company name, company location, voice number, fax number, TSI ID, administrator rights, super user rights, fax deletion rights, "any modem" privileges, viewable DID/DTMF Route groups, viewable fax lines, and viewable fax categories.

Here are a few bullet points about the various criteria:

- The username should not contain spaces
- To reset an account password, fill in the new password and click Save
- Super users can view all faxes sent and received
- Administrator gives the user to access the Admin Control Panel
- The TSI ID is the "Company Name" that appears in the fax "tagline" (on the header of each page in a fax)

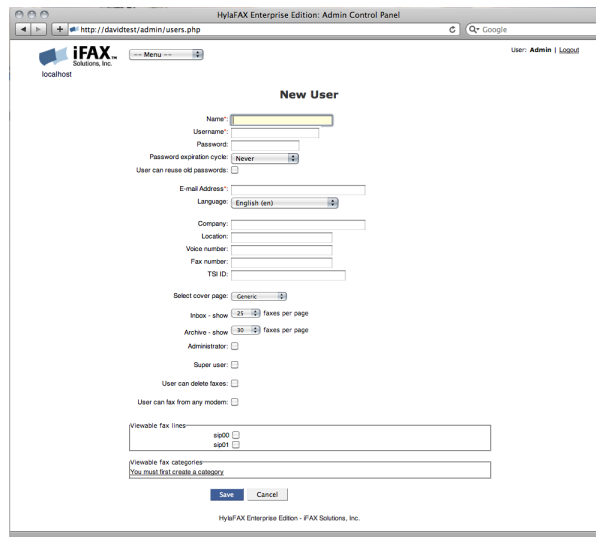


Figure 4. Creating Users

## 4.2. Importing user accounts

Users can be easily imported via the Web Interface's Admin Settings → Import Users area. You can import users from a CSV file with the following fields: name, username, and email. Any account settings selected will be applied to each account that is imported.

CSV example:

```
John Doe,john,john@example.com  
Jane Doe,jane,jane@example.com
```

Alternatively, users can be imported from a text file with the 'import\_users.php' utility located in the 'tools/' directory of the HylaFAX Enterprise Web Interface web installation (typically, /var/www/fax/tools/).

The users list file should be in the following format: account name, username, password, email address.

Here's an example:

```
John Doe    johndoe    secret    john.doe@mycompany.com
```

Each column is separated by a single tab. One account per line.



# 5. Configuring Fax lines

## 5.1. Configure Modems

Fax modems must be configured in HylaFAX before they can be used with HylaFAX Enterprise Web Interface, and a modem entry must be created for each modem device you intend to use with HylaFAX Enterprise Web Interface. The Device field is for the name of the device as it is configured in HylaFAX (ie: boston00, ttyS0, or ttyds01). The Alias field is used to describe the location or purpose for the modem. For example, Sales or Support for a fax line dedicated for those departments. The Contact field is for an email address, and every fax that arrives on this modem will be emailed to the Contact. The Printer field specifies which CUPS/lpr printer to print the fax on. Normal users can only view faxes from the modems assigned to them.

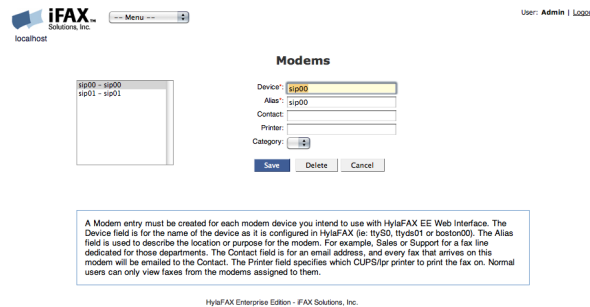


Figure 5. Configure Modems

## 5.2. Configure DID/DTMF Groups

DID/DTMF routing is used to route faxes sent to a hunt group. HylaFAX must be properly configured for this to work. An individual entry must be created for each hunt group you intend to use with HylaFAX Enterprise Web Interface. The DID/DTMF digits field is for hunt group information as received by HylaFAX — typically the last 3 or 4 digits or even 10 digits of the fax number. The Alias field is used to describe the location or purpose for the hunt group. For example, Sales or Support for a fax line dedicated for those departments. The Contact field is for an email address, and every fax that arrives for this group will be emailed to the Contact. The Printer field specifies which CUPS/lpr printer to print the fax on. Normal users can only view faxes from the hunt groups assigned to them.

To enable DID/DMTF support, you must set `$ENABLE_DID_ROUTING` to true in `webconfig.php`.

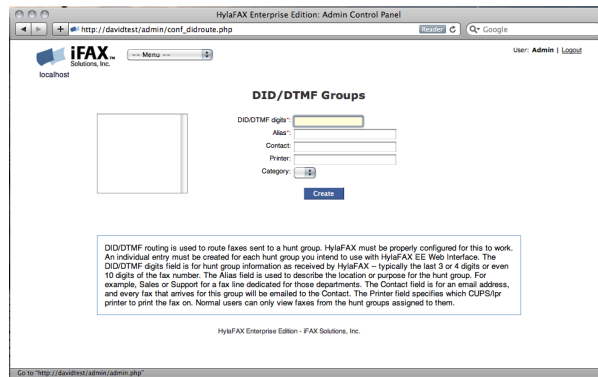


Figure 6. Configure DID/DTMF Groups

## 6. Setting up Fax Categories

Categories are useful for organizing faxes in the HylaFAX Enterprise Web Interface Archive. Normal users are limited to viewing the categories assigned to them.

# 7. System Maintenance

## 7.1. Backing up

The HylaFAX Enterprise Web Interface PDF fax archive can be downloaded via the web interface or bundled directly from the command line. To download from the interface, navigate to the "System Functions" area of the Admin Control Panel, and click on "Download Archive" and "Download Database".

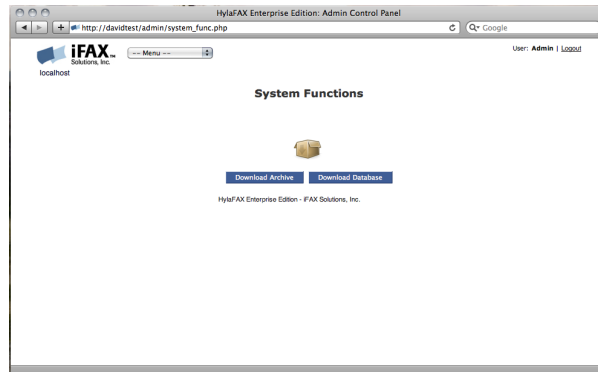


Figure 7. System Functions

To bundle your HylaFAX Enterprise Web Interface system via the command line, execute the following commands:

```
# mkdir ~/faxbackup  
  
# cd /var/www/fax  
  
# mysqldump --user=hylafaxweb --password=eeweb hylafaxweb > ~/faxbackup/db_backup.sql  
  
# cp -ru includes/local_config.php faxes/ css/custom/ ~/faxbackup  
  
# tar cvfz eeweb-backup.tgz ~/faxbackup
```

## 7.2. System Logs

If you're trying to debug a problem or would like to monitor activity on your HylaFAX Enterprise Web Interface server, take a look in the System Logs area of the control panel. The logs will show a series of events and specify the name of the class, script, or function where the event happened.

# 8. Advanced Configuration

## 8.1. LDAP User Authentication support

To setup LDAP/Active Directory authentication on CentOS 7, using the following script:

<http://people.ifax.com/~david/scripts/setup-ldap.sh>

When that's complete, you can use the following utility for testing authentication with LDAP/AD:

```
# /var/www/fax/tools/testpamauth.php username password
```

Keep in mind that an account must exist in the Web Interface already in order for the user to login after being authenticated over LDAP/AD. Accounts can be imported via the Admin Settings area of the Web Interface.

## 8.2. Configuring Barcode support

Barcode based routing is used to route faxes based on the barcode contained in the fax. Enter the barcode that you want matched to this rule in the Barcode field. The Alias field is used to describe the purpose for this rule. For example for a specific service or product. The Contact field is for an email address, and every fax that arrives for this group will be emailed to the Contact. The Printer field specifies which CUPS/lpr printer to print the fax on. Also, you may select a category to automatically categorizing the fax.

To enable barcode decoding support, you must set `ENABLE_BARDECODE_SUPPORT` to true in *webconfig.php*.

## 8.3. Configuring the Blacklist

HylaFAX's DynamicConfig and RejectCall features are used to reject fax transmissions from known offenders. To add an entry to the blacklist, enter the Caller ID of the sender you would like to block. Optionally, you may select a device if you only want to block this sender on that device.

## 8.4. Configuring OCR Support

Optical Character Recognition support is provided by [Tesseract](#), which must be installed separately. OCR usage in HylaFAX Enterprise Web Interface will allow your users to effectively search the Archive with words found in the fax itself.

Here is a short guide for the installation and configuration with HylaFAX Enterprise Web Interface.

First download the tesseract package and any desired language support files.

To install on CentOS 7, run:

```
# yum install tesseract
```

Now, you must enable OCR support in HylaFAX Enterprise Web Interface. In *etc/webconfig.php*, set `ENABLE_OCR_SUPPORT` to true.

```
define('ENABLE_OCR_SUPPORT', true);
```

To process the faxes already in your HylaFAX Enterprise Web Interface archive you can use the `ocr_import` script in the `tools/` directory.

```
# ./ocr_import.php
```

Finally, to verify that OCR support is working correctly, try to search for keywords, names, or product codes in your faxes using the HylaFAX Enterprise Web Interface Archive.

## 8.5. Configuring HTTPS

On CentOS 7, enabling HTTPS requires installing the `mod_ssl` package.

In `/etc/httpd/conf.d/ssl.conf`, you'll want to set `SSLEngine off`.

The Apache configuration for the web interface is located at the following path:

`/etc/httpd/conf.d/fax.conf`



You'll must delete the symlink and create a normal `fax.conf` file so that updates to the `hylafax-enterprise-web` RPM do not overwrite your changes to that file.

There is a sample SSL configuration in that file, but you'll want to rely on your SSL certificate's instructions for Apache on CentOS 7 for the installation procedure.

When complete, verify the configuration by running: `apachectl configtest`

If the syntax is OK, restart Apache by running: `systemctl restart httpd`

Finally, open the firewall for HTTPS:

```
# firewall-cmd --zone=public --permanent --add-service=https
```

```
# firewall-cmd --reload
```



If you would like to setup a Self-Signed Certificate, you can use the following script:  
<http://people.ifax.com/~david/scripts/setup-ssl-apache.sh>

## 8.6. Cover Pages

HylaFAX Enterprise Web Interface's version of faxcover behaves exactly like the standard HylaFAX version. The only differences are:

- It's rewritten in PHP
- It doesn't implement the `pageWidth` and `pageLength` switches
- It requires the values to be preceded by `XXXX-`
- It uses values in the following list:

```
XXXX-to  
XXXX-to-company  
XXXX-to-location  
XXXX-to-voice-number  
XXXX-to-fax-number  
XXXX-regarding  
XXXX-from  
XXXX-from-company  
XXXX-from-location  
XXXX-from-voice-number  
XXXX-from-fax-number  
XXXX-page-count  
XXXX-todays-date  
XXXX-comments0 ... XXXX-comments30
```

The values are identical to the standard faxcover except that they actually include the "XXXX-" unlike HylaFAX style cover pages. When `sendfax` calls `faxcover` everything performs as normal. Older style cover pages are not compatible.

### 8.6.1. Making A Custom HTML Cover Page

HylaFAX Enterprise Web Interface allows you to use an HTML page as your cover page. This means that it will be much easier to make and maintain your own coverpages. Your custom HTML cover pages must be located in the HylaFAX Enterprise Web Interface "images/" directory where you'll also find a sample called *coverpage.html*.

To enable HTML support on CentOS 7, use the following script:

<http://people.ifax.com/~david/scripts/install-wkhtmltox.sh>

## 8.7. Fax Retention

By default, the web interface will retain all of your sent and received faxes indefinitely. If you would like to delete older faxes, there's a tool called `webfaxcron.php` that can help you do this.

```
# /var/www/fax/includes/webfaxcron.php
```

```
usage: webfaxcron.php [-i num-days] [-d num-days] -t num-days
options:
-i num-days prune Inbox of faxes older than number of days
-d num-days delete faxes from Inbox/Archive that are older than number of days
-t num-days clean web temporary directory of files older than number of days
```

For example, if you want to delete all faxes older than 180 days, run:

```
# /var/www/fax/includes/webfaxcron.php -t 0 -i 30 -d 180
```

The `webfaxcron` script should already be scheduled in the `/etc/cron.d/hylafax-enterprise-web` crontab to clean the temp files in `/var/www/fax/tmp/` at midnight every night. If you'd like, you can configure `webfaxcron` to automatically delete faxes for you there as well.