



Etasoft – EDI Hub 1.x

EDI Hub data exchange server for EDI files.

Setup

For Windows install the software using provided setup file edihubsetup.exe.

For Linux install the software unzipping the file edihublinux.zip with all the directories.

Installation contains command line server and data transmission tools.

Processing

Start EDI Hub web server using edihub.exe or edihub program.

Once server is running you can access web interface using Internet browser. Server program also supports FTP and SMTP protocols. It will start with most protocols disabled. This allows you to gradually enable each protocol and test it.

It is important to pick correct communication ports in order to use protocols. Ports might be blocked on the computer or not allowed through network firewalls. While default port for standard FTP is **21** and default SMTP port is **25** they are occasionally blocked. If you find that standard ports are blocked, try alternatives such as **2121** or **2525** or **25025**. If you change port numbers via web interface make sure to restart edihub.

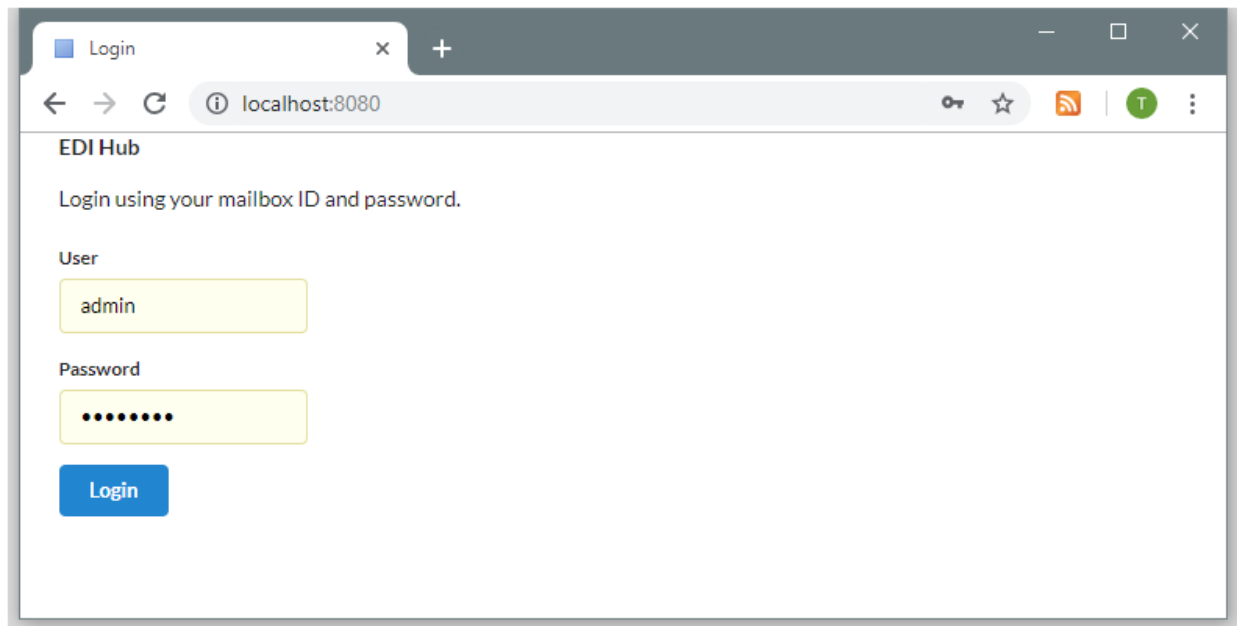
EDI Hub installation comes bundled with few additional utilities. Two of them are command line programs to send files via FTP and SMTP. They are included for testing purposes. Use them to test your server setup. Their use is covered in following chapters.

FTP and SMTP protocols have number of extensions and secure versions. EDI Hub supports standard protocols covered by RFCs. FTP protocol RFC959, RFC2389, RFC2428. In addition SMTP server supports SPF Checks, automated FROM validation (MX checking).

TLS support is not available in current version of EDI Hub.

Default username to access web interface is **admin**. Default password is **admin123**. Once you login

please change the password to secure the server.



Web server runs on port 8080 by default. This is good for development but standard web port is 80. Start web server using port 80 pass parameter `-port=:80` via command line to the edihub program. This parameter is not available via web interface.

```
C:\Windows\System32\cmd.exe - edihub -port=:80

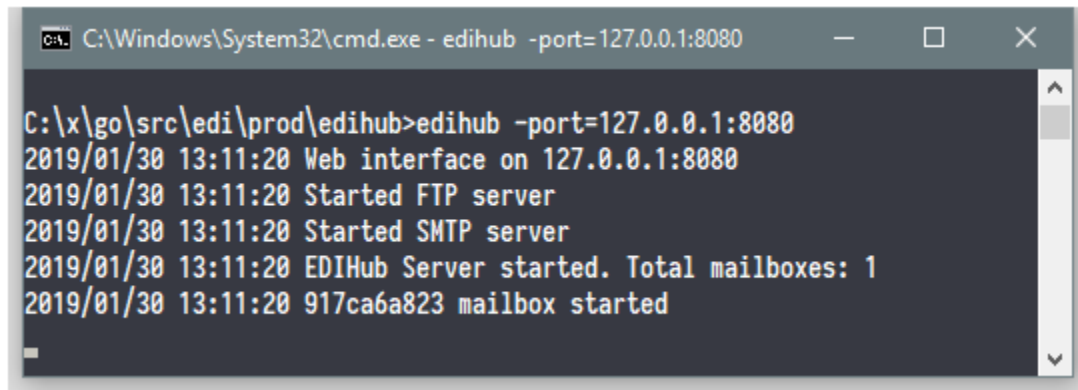
C:\x\go\src\edi\prod\edihub>edihub -port=:80
2019/01/29 11:40:23 Listening on port :80
hub: 2019/01/29 11:40:23 Started FTP server
hub: 2019/01/29 11:40:23 Started SMTP server
hub: 2019/01/29 11:40:23 EDIHub Server started. Total mailboxes: 1
hub: 2019/01/29 11:40:23 917ca6a823 mailbox started
```

EDI Hub server writes log messages into the standard error stream. You can always redirect output into the file using OS specific redirection techniques. Such as

```
edihub -port=:8080 > C:\mylogs\log.txt
```

This will write all logging output into log.txt file.

Ability to work with command line is basic skill required to use these tools. Command line tools are easy to automate. Setup to run them via Scheduled Tasks, Cron jobs or systemd services.



```
C:\Windows\System32\cmd.exe - edihub -port=127.0.0.1:8080

C:\x\go\src\edi\prod\edihub>edihub -port=127.0.0.1:8080
2019/01/30 13:11:20 Web interface on 127.0.0.1:8080
2019/01/30 13:11:20 Started FTP server
2019/01/30 13:11:20 Started SMTP server
2019/01/30 13:11:20 EDIHub Server started. Total mailboxes: 1
2019/01/30 13:11:20 917ca6a823 mailbox started
```

If you want to restrict access to the web interface of the EDI Hub server then pass

```
edihub -port=127.0.0.1:8080
```

This is **default setting** if edihub is started without any parameters or runs as Windows Service.

This will restrict web access to local computer only. It will also block all web uploads to mailboxes. It is great way to secure server if you plan to accept only FTP or email (SMTP) connections. Now only internet browser running on the same computer as EDI Hub server will be able to open web interface.

Another way to set port number is via EDIHUBPORT environment variable. If command line parameter -port is not provided at all then EDIHUBPORT environment variable will be used. If both -port and EDIHUBPORT are not provided then edihub program will default to using "127.0.0.1:8080".

EDIHUBPORT environment variable is very useful if you decide to run edihub as Windows Service.

Configuration

Once you login initial screen shows mailboxes, configuration and customization options. Click on Configuration to setup parameters global for whole server setup.

Changes made in Configuration screen take affect after you restart EDI Hub server.

EDI Hub server starts with all FTP and SMTP connections **disabled** for extra security. Enable them via Configuration screen.

The screenshot shows a web browser window with the address bar displaying 'localhost:8080/config/main'. The page has a navigation bar with tabs: 'Mailboxes', 'Configuration' (selected), 'Custom Text', 'Log Off', and 'EDI Hub Server v1.0'. Below the navigation bar is a 'Save' button. The main content area is divided into three sections:

- FTP**
 - Host name: 0.0.0.0
 - Port: 21
 - ☒ FTP server enabled
- SMTP**
 - Host name: localhost
 - Port: 25
 - ☒ Email via SMTP server enabled
- Administrator - admin**
 - Password: [masked]
 - Re-enter Password: [masked]
 - Software License: EVGVtcG9yYXJ5fDIwMTkwMjE5fDF8RURJSFVCfDEzMjA4MDcxNzg-
 - License: 19 days

Server accepts incoming FTP and SMTP connections on address "0.0.0.0". You can change it using Host name parameter. Address "0.0.0.0" is special. It means "accept all incoming connections". If you change it to "localhost" or "127.0.0.1" instead of "0.0.0.0" then only connections from the same computer will be accepted. You might use it for testing when you do not want anyone else connecting to the server.

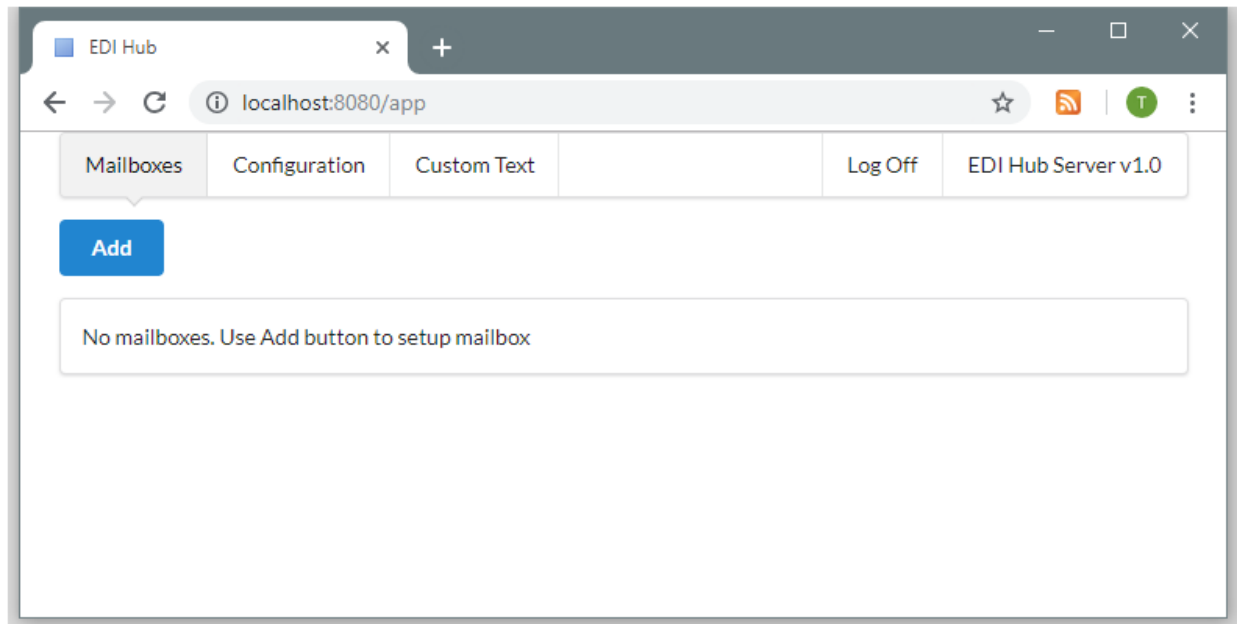
Mailboxes

EDI Hub server works with mailboxes. Mailbox is data exchange folder. Single mailbox can accept files from FTP, email (SMTP) or web upload.

You can create multiple mailboxes per client or use just one mailbox for single client.

Server creates unique ID for each mailbox you add. The ID is important because it is used as username for FTP and as part of email address. It also forms part of unique web address for the web upload.

Once mailbox is created clients can use mailbox ID to connect to FTP or send emails with file attachments. Please see chapters on using FTP and SMTP.



We recommend planning your setup ahead of time. Every setup is different but common trend is to setup single mailbox per EDI transaction type. Then each file placed inside mailbox can be processed via single translation map or translation pipeline. This is way easier than having one mailbox for all transactions.

If single mailbox is setup to contain different transactions then you will need a process to “peek” inside the file and separate different transactions in order to process them. This makes processing step way harder to setup.

Each mailbox gets unique identification number (ID). ID is used to create disk folders where uploaded files will be stored.

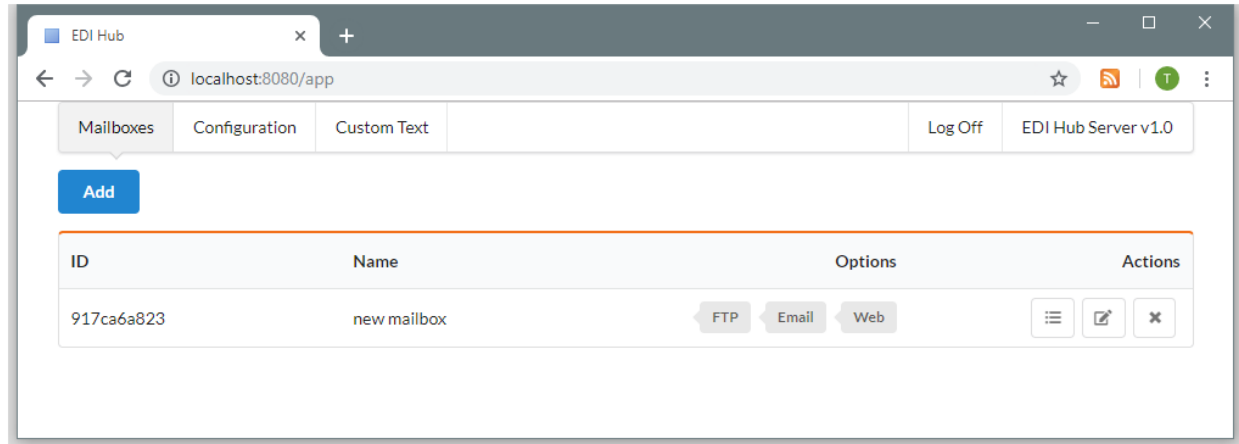
The screenshot shows a web browser window with the title 'EDI Hub'. The address bar displays 'localhost:8080/app'. The navigation bar includes links for 'Mailboxes', 'Configuration', 'Custom Text', 'Log Off', and 'EDI Hub Server v1.0'. Below the navigation bar are 'Save' and 'Back' buttons. The main content area is titled 'Mailbox' and features a teal button with the ID '917ca6a823'. The form includes fields for 'Name' (containing 'new mailbox'), 'Password', and 'Re-enter Password', all masked with dots. Under the 'Options' section, three checkboxes are checked: 'FTP enabled', 'Email via SMTP enabled', and 'Web upload enabled.'. At the bottom, a text box shows the 'Mailbox web upload URL' as <http://hpx:8080/app/user/917ca6a823>.

In this example mailbox ID is 917ca6a823. Same ID is used as part of a link to the web upload page. Page is unique and requires both ID and password to access it.

Mailbox ID is also used as FTP username and is part of email address before '@' sign.

admin user can access any mailbox without restrictions.

Mailbox "Name" field is used for display and logging purposes only. It cannot be used to login into the server.



Use buttons in “Actions” column of the table to see mailbox history, edit and delete mailbox.

Using FTP

FTP username is mailbox ID. Use any FTP client to test mailbox and upload file to it.

You can also use **ftpfiles** command line utility that comes with EDI Hub installation package.

ftpfiles needs -username, -password and -host parameters. Example:

```
ftpfiles -username=917ca6a823 -password=mypass123 -host=localhost:21
```

```
C:\Windows\System32\cmd.exe

C:\x\go\src\edi\cmds\ftpfiles>ftpfiles --help
Usage of ftpfiles:
-dir string
    remote directory
-host string
    hostname with port, eg. localhost:21
-password string
    FTP password
-send
    send/receive. If set true then sends (default true)
-username string
    FTP username

C:\x\go\src\edi\cmds\ftpfiles>
```

This will connect to mailbox with ID 917ca6a823 running on local server with port **21**.

Get full list of parameters run:

```
ftpfiles --help
```

ftpfiles uploads files from “/files” subfolder that is in main installation directory. Make sure you place some data files in order to test FTP connection.

A screenshot of a Windows command prompt window. The title bar shows 'C:\Windows\System32\cmd.exe'. The command prompt shows the following text:

```
C:\x\go\src\edi\cmds\ftpfiles>ftpfiles -username=917ca6a823 -password=admin123 -host=localhost:21
2019/01/29 14:18:06 Connected
2019/01/29 14:18:06 Login
2019/01/29 14:18:06 Uploading files.

C:\x\go\src\edi\cmds\ftpfiles>
```

Parameter –username is mailbox ID.

Using Email

Email username is mailbox ID. For example if your server is running on localhost (local computer) then for mailbox 917ca6a823 email will be 917ca6a823@localhost.

Test email (SMTP) connection using email client and send data file as attachment.

You can also use **emailfiles** command line utility that comes with EDI Hub installation package.

Get full list of parameters run:

emailfiles –help

This will list all mandatory and optional parameters. Optional parameters get reasonable default values if they are not supplied.


```
C:\Windows\System32\cmd.exe
C:\x\go\src\edi\cmds\emailfiles>emailfiles --help
Usage of emailfiles:
  -body string
        Text body, optional (default "Files attached")
  -from string
        Email From address, eg: from.me@example.com
  -host string
        Host address with port for server connection, eg: smtp.gmail.com:587
  -password string
        SMTP server password
  -subject string
        Subject line, optional (default "Files")
  -to string
        Email To address, eg: test@example.com
  -username string
        SMTP server username, if not provided defaults to 'to' parameter
Mandatory parameters are: -to, -from, -host, -password. If -username is omitted then -from is used as username.
C:\x\go\src\edi\cmds\emailfiles>
```

Example:

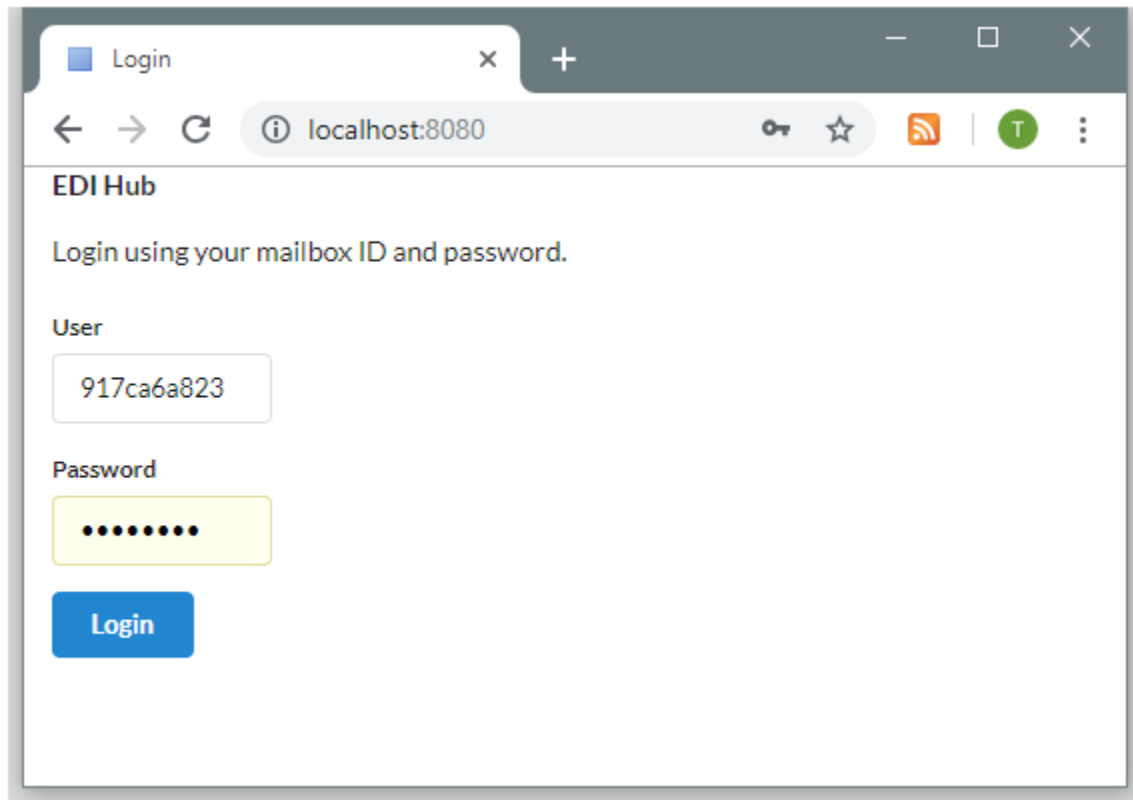
```
emailfiles -to=917ca6a823@localhost -from=917ca6a823@localhost -password=admin123 -host=localhost:25
```

This will send email to mailbox ID 917ca6a823 and use same email 917ca6a823 as from address. -host=localhost:25 parameter uses server on localhost port 25.

```
C:\Windows\System32\cmd.exe
C:\x\go\src\edi\cmds\emailfiles>emailfiles -to=917ca6a823@localhost -from=917ca6a823@localhost -password=admin123 -host=localhost:25
2019/01/29 14:36:57 Uploading data.txt
C:\x\go\src\edi\cmds\emailfiles>
```

Using Web Upload

Web upload option is easiest to test. You can simply login with specific mailbox ID and password. Browser URL will contain direct link to the mailbox. Then upload the file.



The screenshot shows a web browser window with a single tab titled "Login". The address bar displays "localhost:8080". The page content is titled "EDI Hub" and includes the instruction "Login using your mailbox ID and password." Below this, there are two input fields: "User" with the value "917ca6a823" and "Password" with masked characters. A blue "Login" button is positioned below the password field.

EDI Hub

Login using your mailbox ID and password.

User

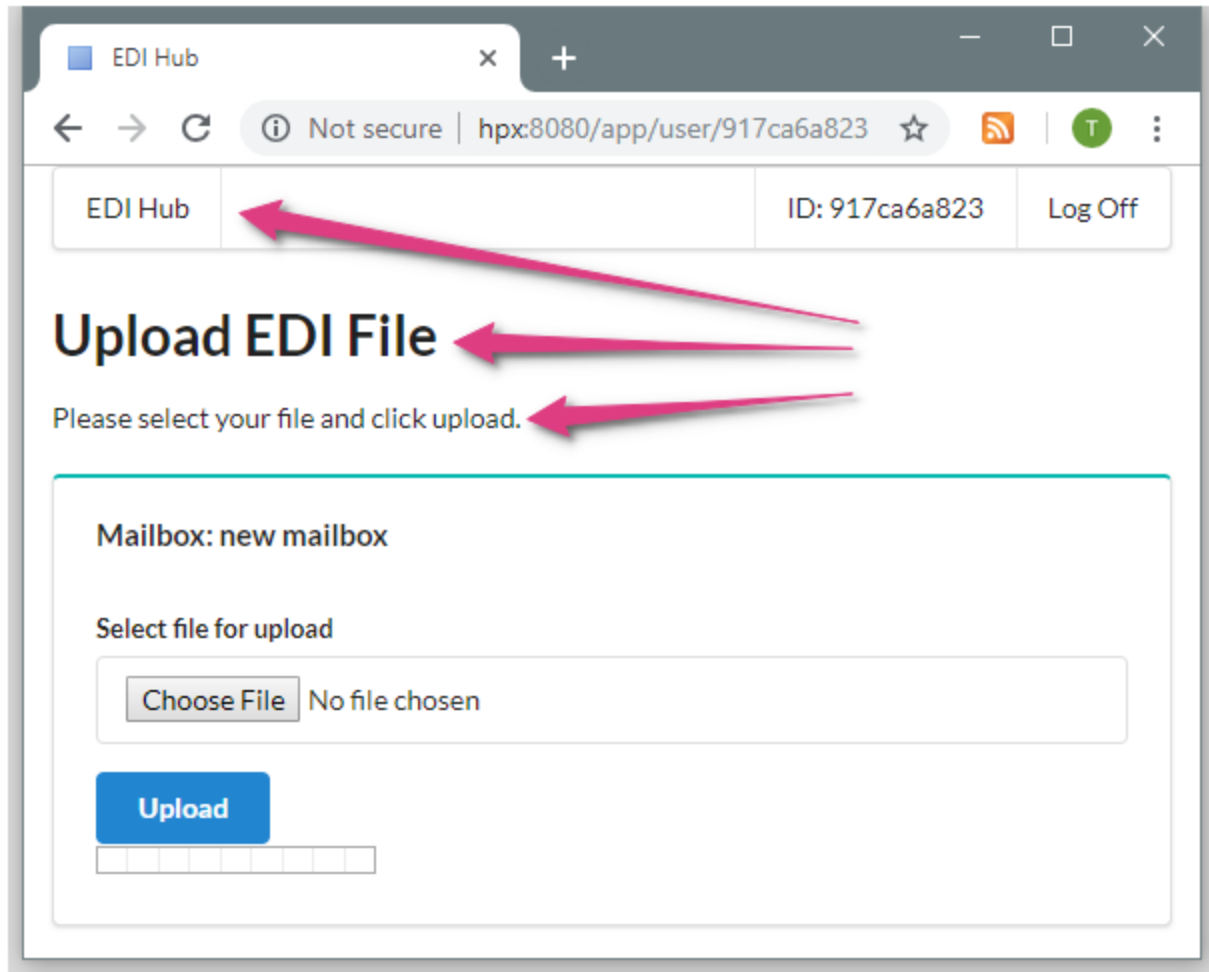
917ca6a823

Password

.....

Login

admin can change text on web upload screen. Use "Custom Text" menu to change default mailbox upload text.

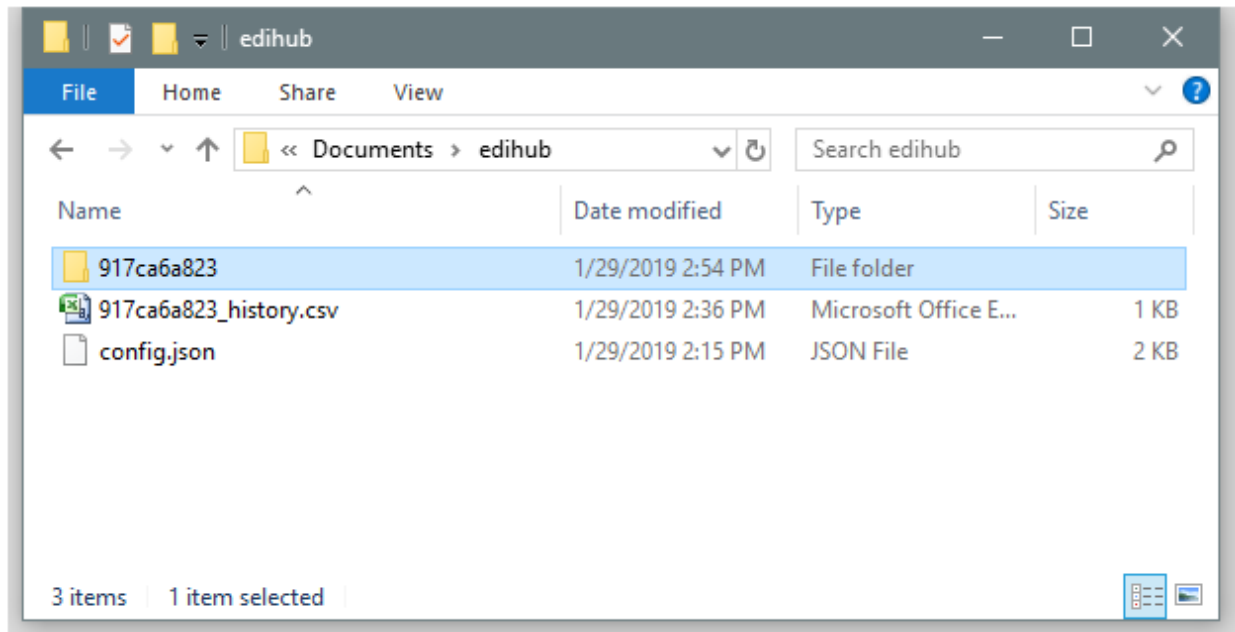


Arrows show text items that **admin** can customize using “Custom Text” menu option. “Custom Text” is available when you login into the web interface as **admin**.

Windows Execution

EDI Hub server sets up processing folders under Documents\edihub root folder. Each mailbox is simply a folder with ID as folder name.

Default installer will setup EDIHub program folder under “C:\Program Files”. For most Windows versions all subfolders under “C:\Program Files” are **read-only** (unless special privileges given). Therefore if you try to setup logging or other file processing inside those folders it will fail.



Processing history is saved in the CSV files with names that match mailbox ID. For example mailbox with 917ca6a823 will have its processing history saved as 917ca6a823_history.csv.

If you want to delete all the mailboxes and clear up all the setup simply stop EDI Hub server if it is running and delete all the files and subfolders in Documents\edihub root folder (all files and subfolders including config.json).

Windows Service

Program also installs Windows Service for automated start and execution. Service EDIHub will not auto-start by default. If you want it to auto-start change "Startup Type" to "Automatic" using Windows Services screen (part of Windows OS).

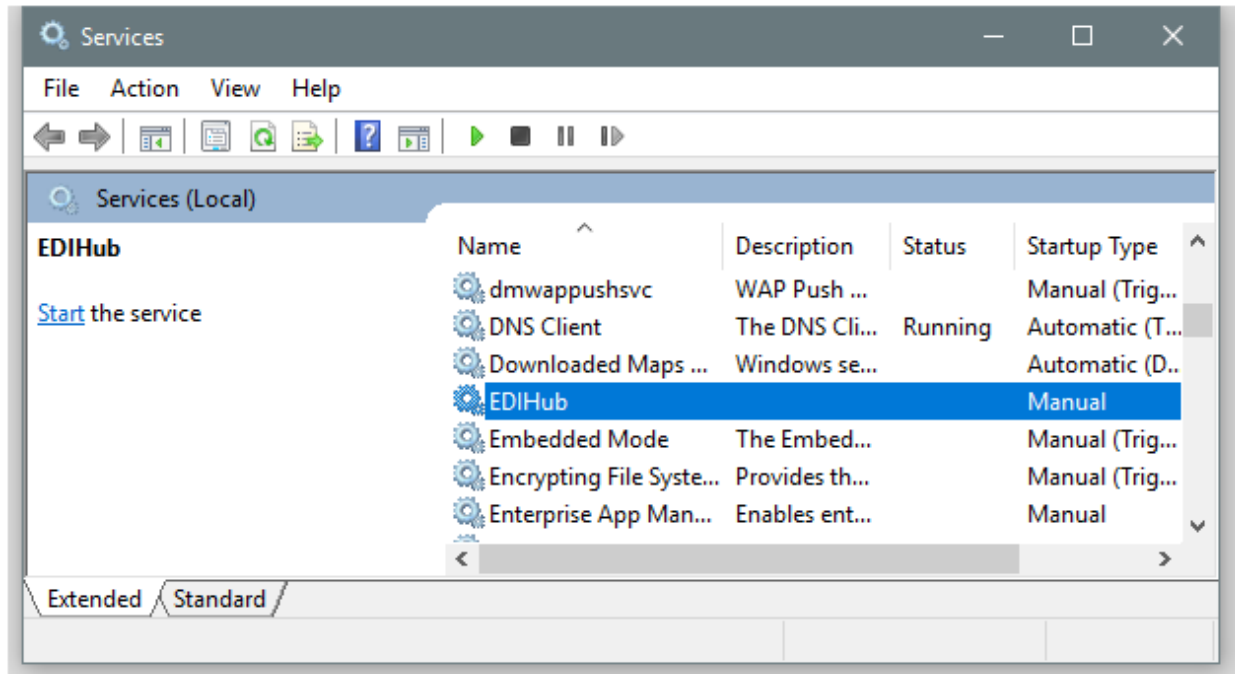
Before you try EDIHub service please try running EDI Hub server via command line. It is easier to find configuration issues using interactive command prompt.

Use EDIHUBPORT environment variable to pass port number into EDIHub service.

Important: only single process can bind and use specific port on the computer. While testing you may run edihub using command line and see actual output. Running it as service is very different since no on-screen log is provided.

If you start edihub via command line and then also try to run it as a Windows Service it will fail to start. If Windows Service fails make sure that **no other process** on the computer is using that same port number.

EDIHub redirects on-screen output into log file **servicelog.txt** when it runs as Windows Service.



Access EDIHub service via Windows Services.

Linux Execution

Linux package comes without installer. Simply unzip the package and set executable permission bit on the binaries. Package contains systemd service example configuration. Please modify it for your own needs.

When starting `./edihub` process make sure you have navigated inside the directory that has edihub binary. Program needs current working directory to be correct in order to open configuration files.

Binaries compiled for Linux 64-bit systems.

Home Directory

If environment variable `EDIHUBDIR` is set then EDIHub will use it to locate and store processing files and subfolders under `%EDIHUBDIR%\Documents\edihub`.

In case if environment variable `EDIHUBDIR` is not set then `%USERPROFILE%\Documents\edihub` will be used on Windows and current directory will be used on Linux.

Change of environment variable may require to restart computer.

License

EDI Hub Server comes with trial and retail license. You can try and evaluate it free for 3 weeks. Once trial license expires please purchase retail license online. Then enter new license in Configuration screen.

Once license expires web server will still start but it will not allow mailbox access.