# HL7Proxy v1.1.0

HL7Proxy is a proxy solution for any TCP connections, focused on HL7 data integrations with HL7 communication servers and the FORUM Server.

It consists as a single Windows EXE file "hl7proxy.exe". Cross compiling to MacOS or Linux is also possible.

HL7Proxy is a command line tool which either can be run in application mode in Windows GUI or as a Windows service in the background.

#### Workflow

HL7Proxy must be located between the HL7 communication server and the FORUM server.

It has a persistent server socket on which the HL7 communication server can connect and server socket stays connected.

If a data transfer is done from the HL7 communication server via HL7Proxy to the FORUM server HL7Proxy tries to contact the FORUM server. If the connection can be established to the FORUM server the data transfer is done.

After a successful data transfer the connection will likely be dropped by the FORUM server. HL7Proxy recognizes this and tries to re-establish the connection to the FORUM server the next time a new data transfer is initiated from the HL7 communication server.

In case there is a data transfer ongoing and a connection to the FORUM server cannot be stablished the HL7Proxy drops the connection to the HL7 communication server to indicate the unreachable FORUM server. Immediately the after the drop the server socket connection is recreated to be available again to the HL7 communication server.

## Installation

HL7Proxy can be copied to any directory and just executed from there. There is no need for an OS dependent installation.

If HL7Proxy is run as a Windows service please use a local filesystem directory and not a shared location in the network.

# Configuration

HL7Proxy is configured with command line parameters.

An overview of all supported parameters can be show with the command "hl7proxy.exe -?"

## Parameter

Parameter	Description	Default	Mandatory
-;	Shows flag usage		
-d	Defines the client connection to		*
	the FORUM server in the		
	format		
	" <ip_or_hostname>:<port></port></ip_or_hostname>		
-S	Defines the server connection		*
	on which HL7Proxy waits for		

	HL7 communication server to connect in the format ": <port>"</port>		
-f <filename></filename>	If a filename is defined all received data from the Proxy port (-s) is logged to this file		
-loglevel	Defines the logging level. Available level are "debug", "info", "warn", "error"	info	
-logfile	File path for the logging file.		
-service	Defines the Windows service actions. Available actions are "install", "uninstall", "start", "stop", "simulate"		

## Samples

hl7proxy -loglevel -logfile=. debug -s :9999 -f d:\temp\hl7proxy.data -d :9000 -service simulate

Running HL7Proxy as application (not Windows service) in a Windows shell. The HL7 communication server can connect on port ":9999" and FORUM server is expected to be on "localhost:9000". "debug" log level is activated, logfile "." Stores the logfile in the installation directory of "hl7proxy.exe". All received data to the proxy port (-s) is logged to the file "d:\temp\hl7proxy.data"

hl7proxy -loglevel -logfile=. debug -s :9999 -d :9000 -service install

Installs HL7Proxy as a Windows service. All given parameters beside the "-service" parameter a configured of the registered Windows service. Be aware that installation of the Windows service must be done in "Administrator" mode in a Windows shell.

hl7proxy -service uninstall

Uninstalls HL7Proxy as a Windows service. Be aware that installation of the Windows service must be done in "Administrator" mode in a Windows shell.