

# Description of connection and configuration procedure of the File Gateway to the DES

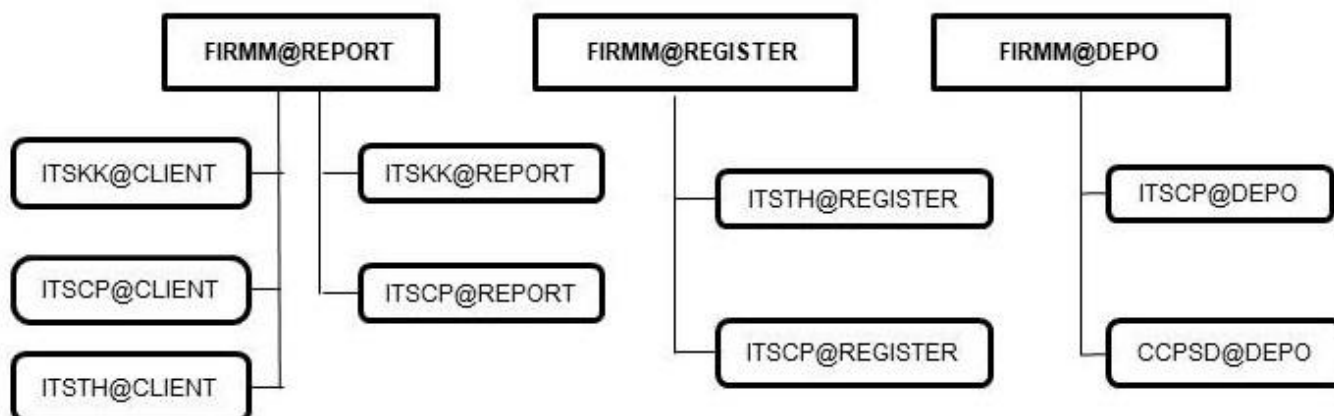
## Connection of the File Gateway to the DES

1. The file gateway of ITS Tech Limited Private Company's Document Exchange System (hereinafter referred to as DES) is an application designed for file exchange. A client application, file gateway (FG.Client2) is installed on the member's side, through which files are exchanged with the server. The application sends and receives files by connecting to one of the file gateways. The file gateway and work directories of the program are set in the FG.Client2 application settings.

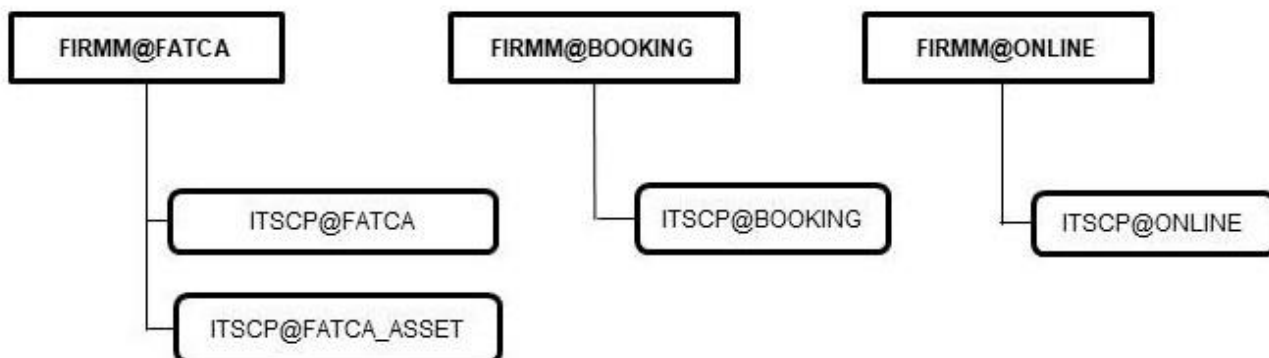
- If there are files in the output files folder, the application sends them to the server. To send a document, it is required to put it in the output files folder (/out by default) and start processing in the application;
- If files are received by a member on the server, the application downloads them to the input files folder (/in by default). In order to retrieve the files, it is necessary to run the processing in the application.

File gateway can operate in two modes: as an application and as a service. The document workflow on the member side is divided into 6 different gateways on 1 DES server. After adding the certificate to the DES system, you will be sent a list of DES addresses that are used to configure the file gateway and messaging, where FIRMM is the five-letter identifier of the DES member.

### Basic set of EDMS addresses



### Additional EDMS addresses



2. To install the file gateway it is necessary to download the latest version of the program distribution kit from the server <https://static.itsx.kz/uploads/FileGate%202.0.7.7z> and unpack the archive into the work folder.

*The file gateway software runs on Windows with .NET Framework 4.0 installed.*

3. Run the **FG.Client2.exe** application and configure it according to the file gateway configuration instructions below. For this purpose, it is necessary to specify the user's certificate, the DES address assigned to him, save the program settings and install the server certificate (Item 3 of the File Gateway Configuration Instructions). A separate file gateway instance must be configured for each DES address.

In order to send messages to other addresses, you must create a folder for each recipient with a name consisting of the client address in the output files folder (default is **.\out**). All files in this directory will be sent to the same address as the folder name. For example, in order to send messages to the **ITSCP@CLIENT** address, the **.\out\ITSCP@CLIENT** directory must be created.

For a single file gateway, the settings are similar for all organizations that documents are exchanged with. The file gateway distribution kit already includes standard directories (out\...) for sending files:

Address	Description
<b>For exchange documents with ITS Tech Limited Private Company</b>	
ITSTH@CLIENT	documents, requests, notifications
ITSTH@REGISTER	registration of logins in accordance with Informational and Technical Support Service Provision (tariff plans included): <a href="https://itsx.kz/services/tech/">https://itsx.kz/services/tech/</a>
<b>For exchange of documents with International Trading System Limited</b>	
ITSCP@CLIENT	documents, requests, notifications of Clearing Members
ITSCP@DEPO	interaction with the Settlement Depository in accordance with Annex 4 to the Regulations on Clearing Activities: <a href="https://itsx.kz/about/governing-docs/">https://itsx.kz/about/governing-docs/</a>
ITSCP@REGISTER	documents issued from Annex 3 to the Regulations on Clearing Activities and registration of client codes in accordance with Annex 2 to the Regulations on Clearing Activities: <a href="https://itsx.kz/about/governing-docs/">https://itsx.kz/about/governing-docs/</a>
ITSCP@REPORT	receipt of clearing reports in accordance with Annex 5 to the Regulations on Clearing Activities: <a href="https://itsx.kz/about/governing-docs/">https://itsx.kz/about/governing-docs/</a>
ITSKK@CLIENT	documents, requests, notifications of Trading Members
ITSKK@REPORT	Receiving reports on trading results in accordance with the Procedure for Additional Report Provision by ITS: <a href="https://itsx.kz/services/reports/">https://itsx.kz/services/reports/</a>
<b>Additional addresses</b>	
ITSCP@FATCA	sending messages with the Identification form FATCA_QUESTIONNAIRE in accordance with the Regulations on Information Exchange for Implementation of the US Foreign Account Tax Compliance Act (FATCA), German Tax Code and Other Legislation in the Field of Taxation of Income from Securities of Foreign Issuers: <a href="https://itsx.kz/services/fatca-crs/">https://itsx.kz/services/fatca-crs/</a>
ITSCP@FATCA_ASSET	Provision of tax disclosure ASSET_REQUEST and notifications of amounts of paid income PAYMENT_REQUEST in accordance with the Regulations on Information

	Exchange for Implementation of the US Foreign Account Tax Compliance Act (FATCA) and Other Legislation in the Field of Taxation of Income from Securities of Foreign Issuers of ITS: <a href="https://itsx.kz/services/fatca-crs/">https://itsx.kz/services/fatca-crs/</a>
ITSCP@BOOKING	booking of Codes of the client in accordance with the Annex 2 to the Regulations on Clearing Activities: <a href="https://itsx.kz/about/governing-docs/">https://itsx.kz/about/governing-docs/</a>
ITSCP@ONLINE	activation of a previously booked Code of the client in accordance with the Annex 2 to the Regulations on Clearing Activities: <a href="https://itsx.kz/about/governing-docs/">https://itsx.kz/about/governing-docs/</a>
<b>For exchange documents with ITS CSD</b>	
CCPSD@DEPO	receipt of Trading Accounts statements and notifications from ITS CSD

4. Check the functionality of the file gateway by sending a test file to your own DES address using the **Manual Processing** button (see Item 4 of the File Gateway Setup Instructions).

5. An entry about successful operation should be displayed in the program window and in the text log file. If the file was successfully sent, you can request new messages from the server using the same button. If an error has occurred and you cannot fix it yourself, please contact Technical Support:

Phone: +7 7172 79 95 95 ext. 50020

E-mail: support@itsx.kz

6. The web-interface <https://edo.itsx.kz/Edo/> requires Capicom library version 2.1.0.2 installed on the computer available for download at the link:

<https://static.itsx.kz/uploads/CAPICOM-KB931906-v2102.zip>

Login to the web-interface is performed by the DES user certificate.

*Currently, it allows you to track the DES messaging history, download the esig, verify the signer and esig expiration dates.*

## File Gateway Configuration Instructions

### 1. Configuring file gateways in the FG.Client2 program:

- The current version of the software can be downloaded here:  
<https://static.itsx.kz/uploads/FileGate%202.0.7.7z>  
The software requires no installation. It is necessary to unpack the archive containing the application into the selected directory and run the file FG.Client2.exe.
- A **separate** instance of FG.Client2 must be used for **each** file gateway (FIRMM@REGISTER, FIRMM@REPORT, FIRMM@DEPO, FIRMM@BOOKING, FIRMM@ONLINE, FIRMM@FATCA), each running from its own directory.
- If the same file gateway is to be used by different operators, it is recommended to create a shared network directory for receiving files and local directories for each user for sending. (*Otherwise, received files will be taken to local storage by the member file gateway on which processing will be started first*).
- Principle and startup of the file gateway: the file gateway can be launched in two modes: One-time launch — the *Manual Processing* button on the *Home* tab launches a one-time processing.

Automatic launch — the *Start Automatic Processing* button on the *Home* tab launches periodic processing, where you can customize the period of directories pooling by the *Period of directory polling (s)* field (specified in seconds).

Principle of operation: when processing starts, the file gateway polls directories for outgoing messages on the member's side for the presence of files, and if there are any files, sends them to the folder to be received on the receiver's side. Then, if there are files available for the member to receive, it downloads them to the incoming files directory specified by the member.

- The program must be launched with system administrator rights. To get started, you should correctly set the required parameters using the controls, the parameters for all file gateways are different.

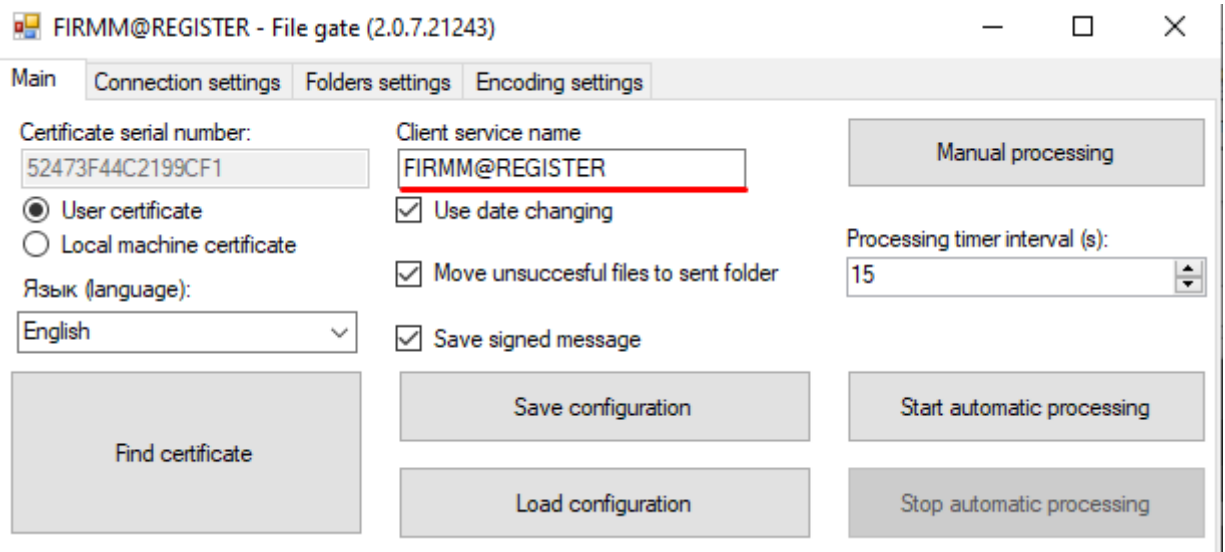
#### Configuring file gateways:

- [FIRMM@REGISTER](#)
- [FIRMM@REPORT](#)
- [FIRMM@DEPO](#)
- [FIRMM@BOOKING](#)
- [FIRMM@ONLINE](#)
- [FIRMM@FATCA](#)

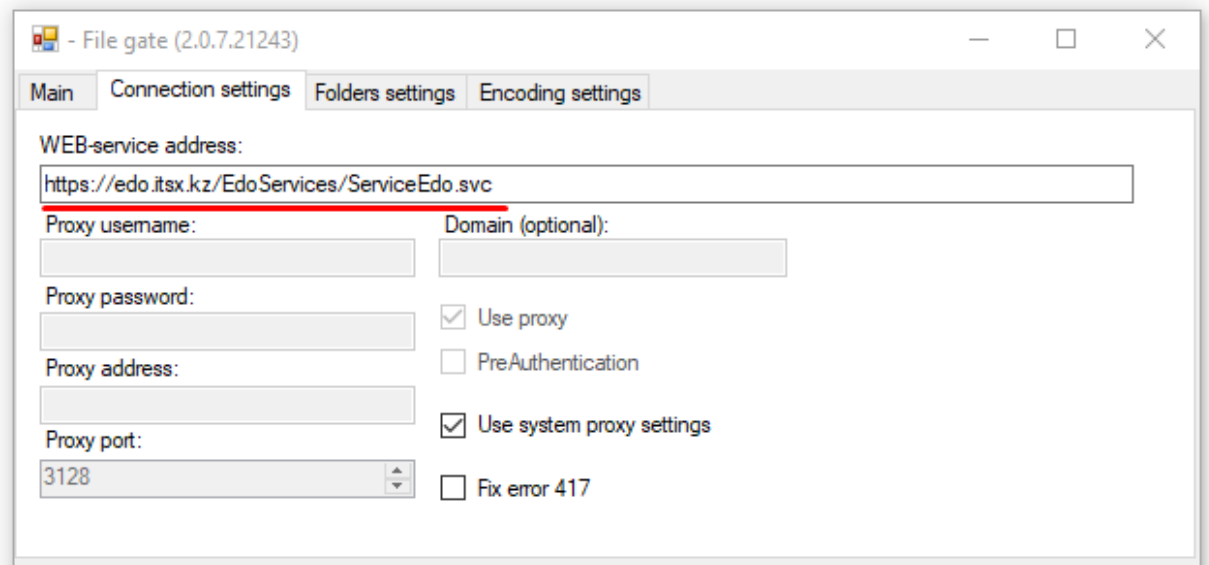
**After changing any settings, you must *Save Configuration* on the *Main* tab!**

## 1) FIRMM@REGISTER

In the *Client service name* on the *Main* tab, you must enter FIRMM@REGISTER, where FIRMM is the five-letter Member Identifier.



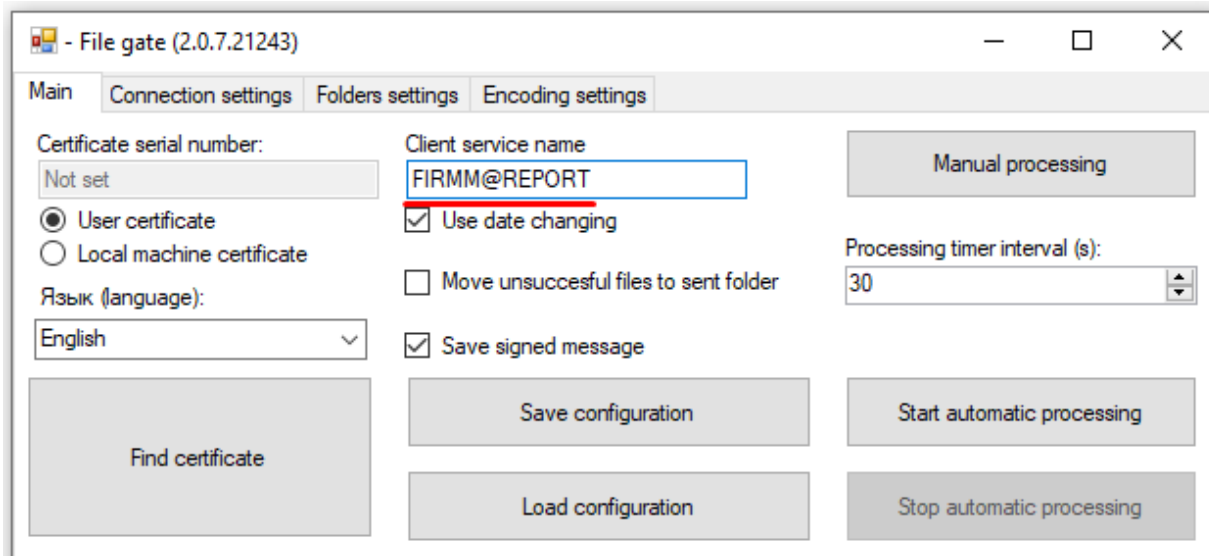
In the WEB-service address field on the Connection settings tab the following address should be entered: <https://edo.itsx.kz/EdoServices/ServiceEdo.svc> (for connection to the gateway of the test site DES the address <https://edo-test.itsx.kz/EdoServices/ServiceEdo.svc> should be entered).



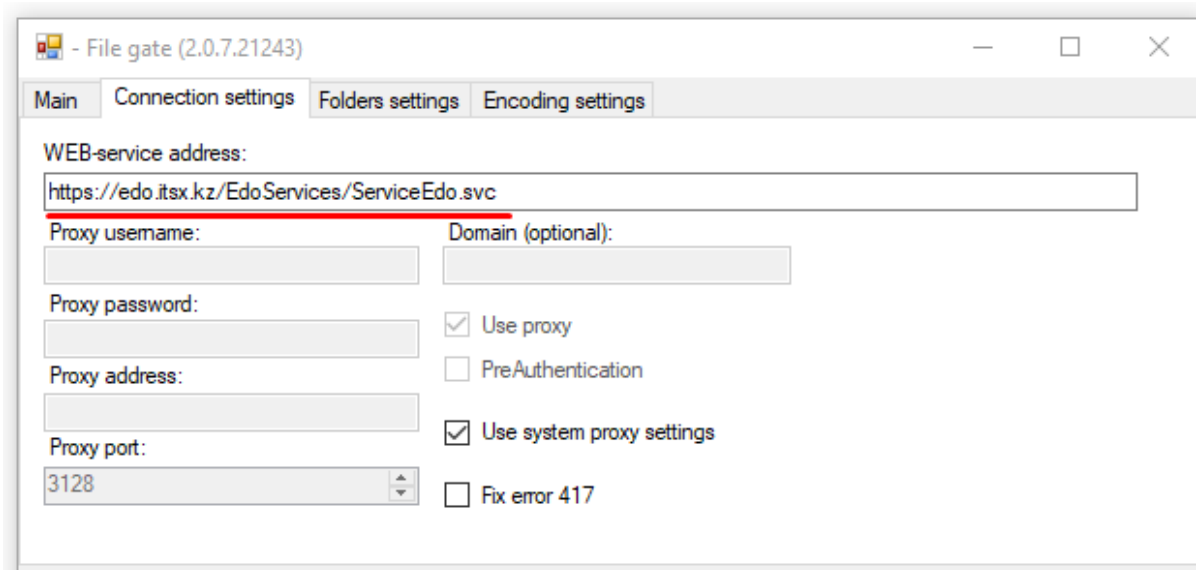
In the *Folders settings* tab, you must specify separate directories of incoming and outgoing messages for this file gateway. The output files folder must contain folders with names: ITSCP@REGISTER, ITSTH@REGISTER. Exactly into these folders you should direct files to be sent to the appropriate file gateway. Directories for incoming and outgoing messages can have arbitrary names, folders for specific file gateways will be created automatically after the files are processed for sending/receiving. A server certificate can be shared across all file gateways. Also, make sure that the Windows account that runs FG.Client2 has access rights to all of the specified directories.

## 2) FIRMM@REPORT

In the *Client service name* on the *Main* tab, you must enter FIRMM@REPORT, where FIRMM is the five-letter Member Identifier.



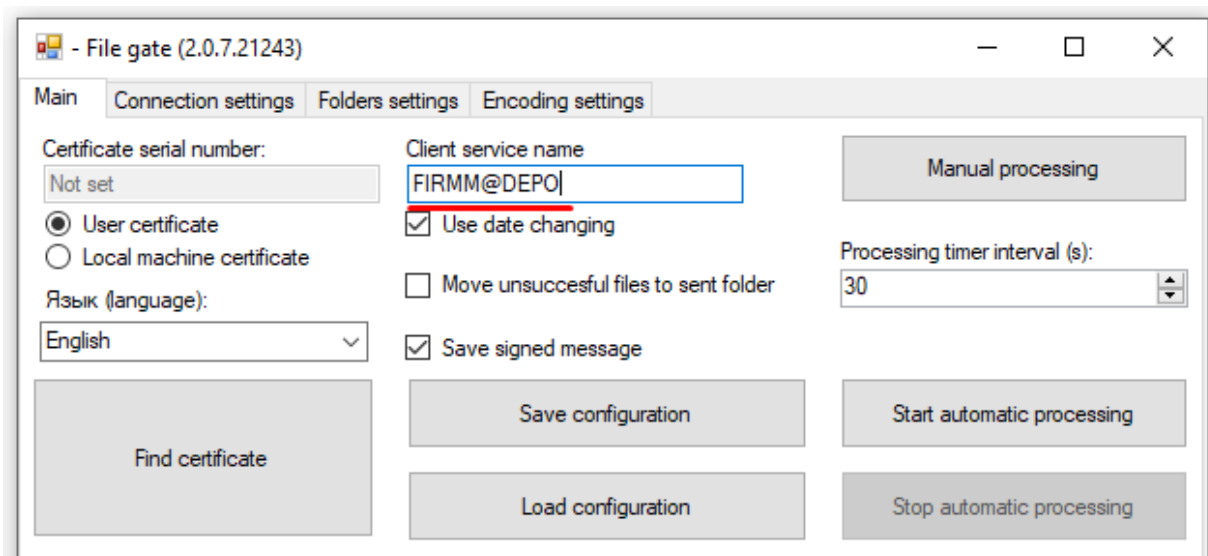
In the WEB-service address field on the Connection settings tab the following address should be entered: <https://edo.itsx.kz/EdoServices/ServiceEdo.svc> (for connection to the gateway of the test site DES the address <https://edo-test.itsx.kz/EdoServices/ServiceEdo.svc> should be entered).



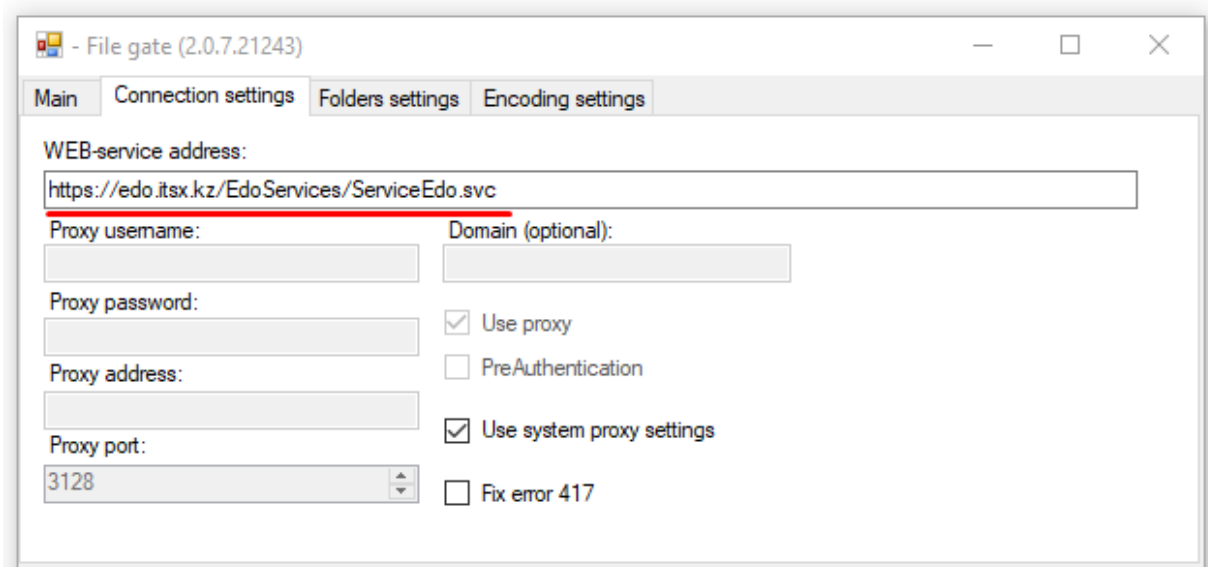
In the *Folders settings* tab, you must specify separate directories of incoming and outgoing messages for this file gateway. The output files folder must contain folders with names: ITSCP@REPORT, ITSKK@REPORT. Exactly into these folders you should direct files to be sent to the appropriate file gateway. Directories for incoming and outgoing messages can have arbitrary names, folders for specific file gateways will be created automatically after the files are processed for sending/receiving. A server certificate can be shared across all file gateways. Also, make sure that the Windows account that runs FG.Client2 has access rights to all of the specified directories.

### 3) FIRMM@DEPO

In the *Client service name* on the *Main* tab, you must enter FIRMM@DEPO, where FIRMM is the five-letter Member Identifier.



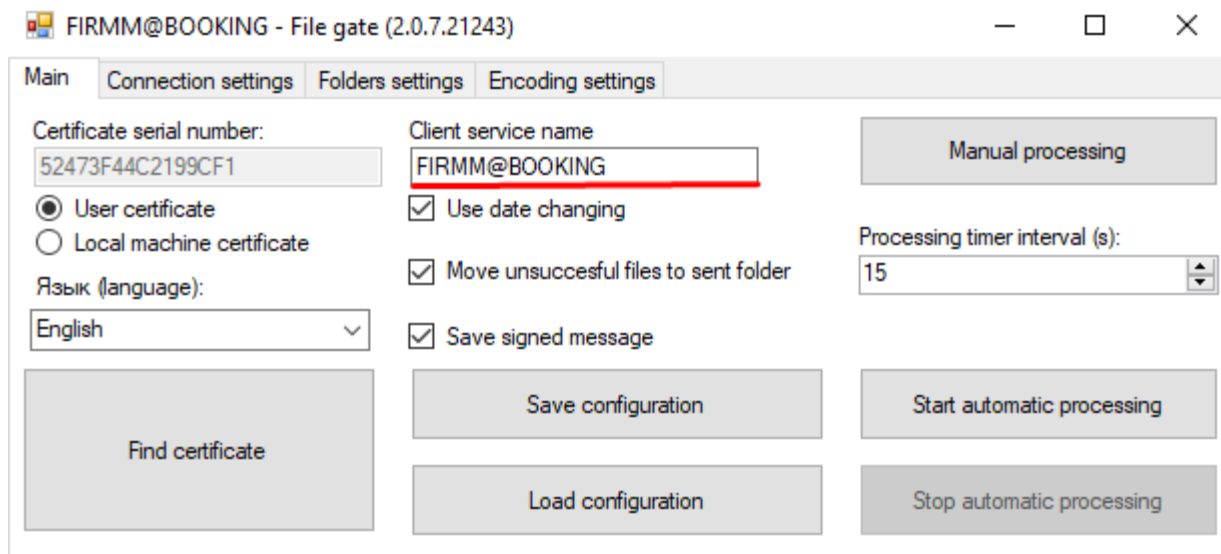
In the WEB-service address field on the Connection settings tab the following address should be entered: <https://edo.itsx.kz/EdoServices/ServiceEdo.svc> (for connection to the gateway of the test site DES the address <https://edo-test.itsx.kz/EdoServices/ServiceEdo.svc> should be entered).



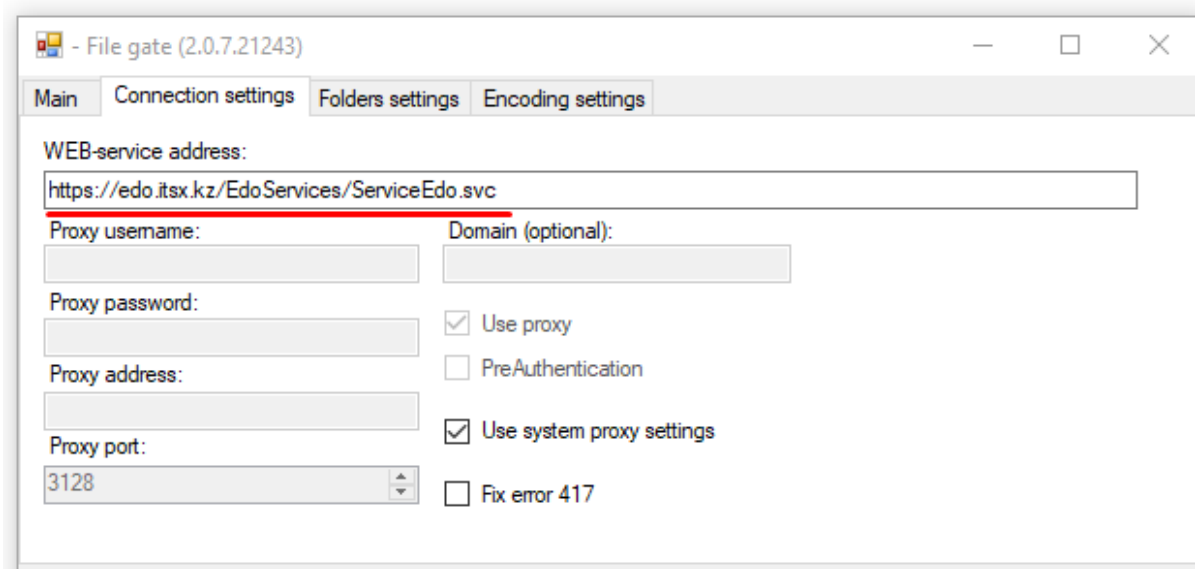
In the *Folders settings* tab, you must specify separate directories of incoming and outgoing messages for this file gateway. The output files folder must contain folders with names: ITSCP@DEPO, CCPSD@DEPO. Exactly into these folders you should direct files to be sent to the appropriate file gateway. Directories for incoming and outgoing messages can have arbitrary names, folders for specific file gateways will be created automatically after the files are processed for sending/receiving. A server certificate can be shared across all file gateways. Also, make sure that the Windows account that runs FG.Client2 has access rights to all of the specified directories.

#### 4) FIRMM@BOOKING

In the *Client service name* on the *Main* tab, you must enter FIRMM@BOOKING, where FIRMM is the five-letter Member Identifier.



In the WEB-service address field on the Connection settings tab the following address should be entered: <https://edo.itsx.kz/EdoServices/ServiceEdo.svc> (for connection to the gateway of the test site DES the address <https://edo-test.itsx.kz/EdoServices/ServiceEdo.svc> should be entered).

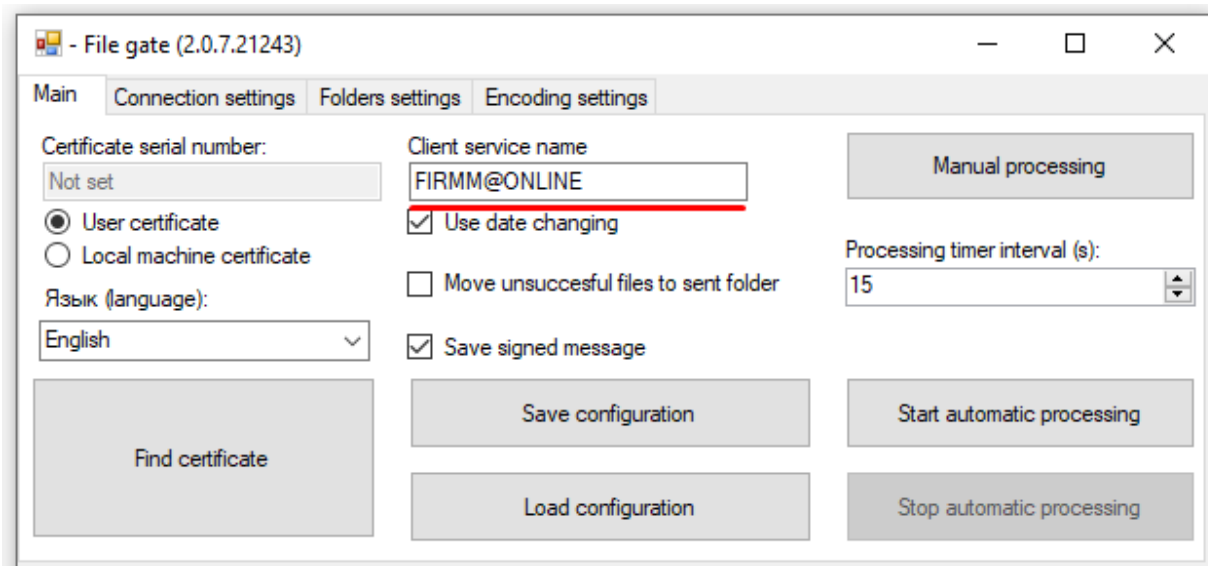


In the *Folders settings* tab, you must specify separate directories of incoming and outgoing messages for this file gateway. The output files folder must contain folders with names: ITSCP@BOOKING. Exactly into these folders you should direct files to be sent to the appropriate file gateway. Directories for incoming and outgoing messages can have arbitrary names, folders for specific file gateways will be created automatically after the files are processed for sending/receiving. A server certificate can be shared across all file gateways. Also, make sure that the Windows account that runs FG.Client2 has access rights to all of the specified directories.

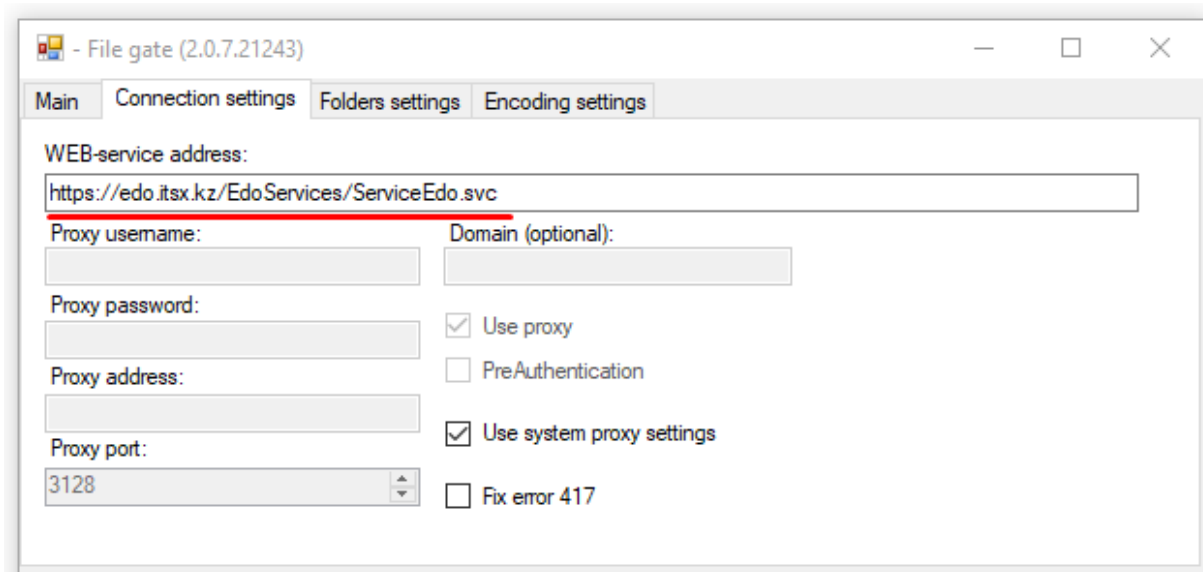


## 5) FIRMM@ONLINE

In the *Client service name* on the *Main* tab, you must enter FIRMM@ONLINE, where FIRMM is the five-letter Member Identifier.



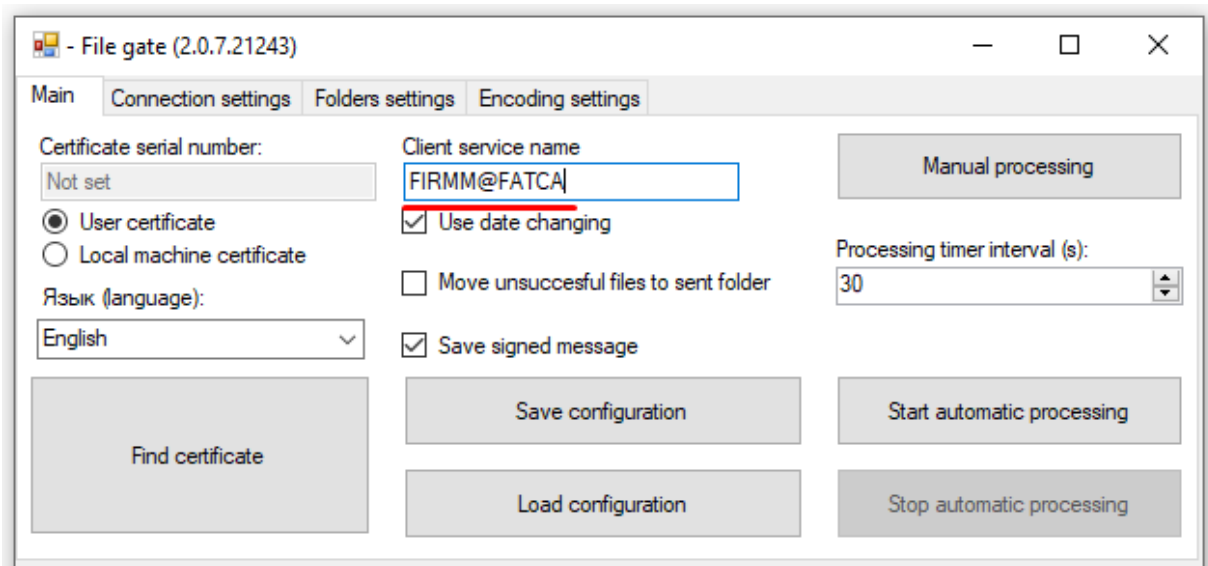
In the WEB-service address field on the Connection settings tab the following address should be entered: <https://edo.itsx.kz/EdoServices/ServiceEdo.svc> (for connection to the gateway of the test site DES the address <https://edo-test.itsx.kz/EdoServices/ServiceEdo.svc> should be entered).



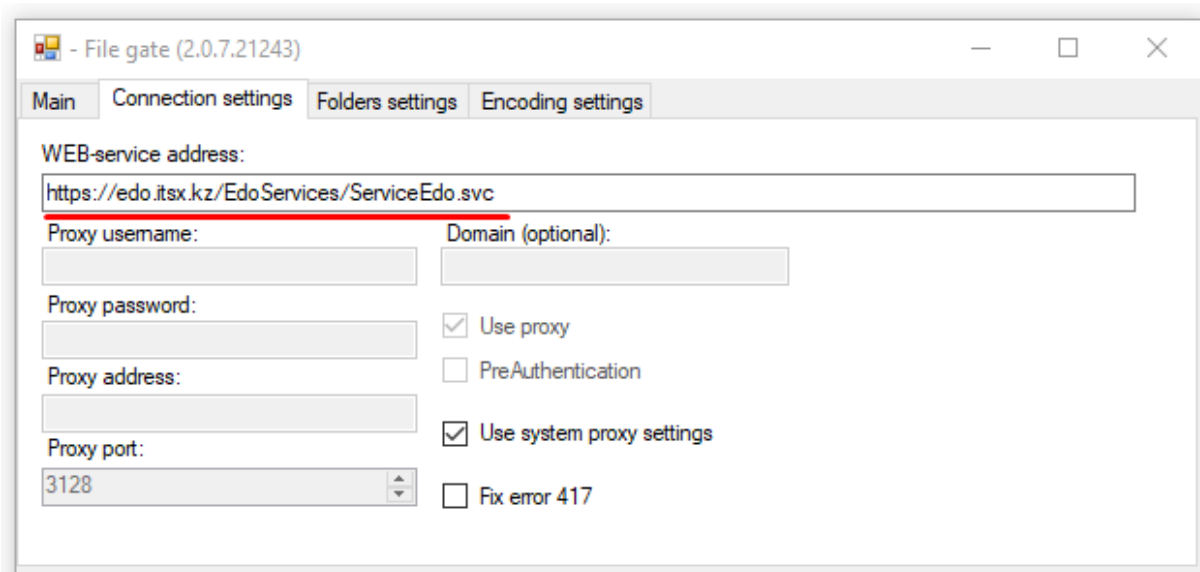
In the *Folders settings* tab, you must specify separate directories of incoming and outgoing messages for this file gateway. The output files folder must contain folders with names: ITSCP@ONLINE. Exactly into these folders you should direct files to be sent to the appropriate file gateway. Directories for incoming and outgoing messages can have arbitrary names, folders for specific file gateways will be created automatically after the files are processed for sending/receiving. A server certificate can be shared across all file gateways. Also, make sure that the Windows account that runs FG.Client2 has access rights to all of the specified directories.

## 6) FIRMM@FATCA

In the *Client service name* on the *Main* tab, you must enter FIRMM@FATCA, where FIRMM is the five-letter Member Identifier.



In the WEB-service address field on the Connection settings tab the following address should be entered: <https://edo.itsx.kz/EdoServices/ServiceEdo.svc> (for connection to the gateway of the test site DES the address <https://edo-test.itsx.kz/EdoServices/ServiceEdo.svc> should be entered).

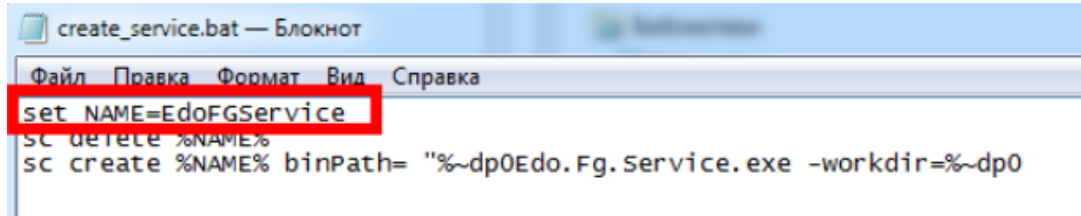


In the *Folders settings* tab, you must specify separate directories of incoming and outgoing messages for this file gateway. The output files folder must contain folders with names: ITSCP@FATCA, ITSCP@FATCA\_ASSET. Exactly into these folders you should direct files to be sent to the appropriate file gateway. Directories for incoming and outgoing messages can have arbitrary names, folders for specific file gateways will be created automatically after the files are processed for sending/receiving. A server certificate can be shared across all file gateways. Also, make sure that the Windows account that runs FG.Client2 has access rights to all of the specified directories.

**After changing any settings, you must *Save Configuration* on the *Main* tab**

## 2. Launching the file gateway as a service:

Launching the application as a Windows service is performed if you need the file gateway to be started automatically at Windows startup and run in the background. *The name of the folder starting the application must not contain spaces.* In the directory containing the File gateway, there is a file named create\_service.bat, which can be used to start the application as a Windows service. To edit it, right-click on the file and select *Edit* in the context menu. If multiple applications are to be run, each must have its own service name (set *NAME* parameter).

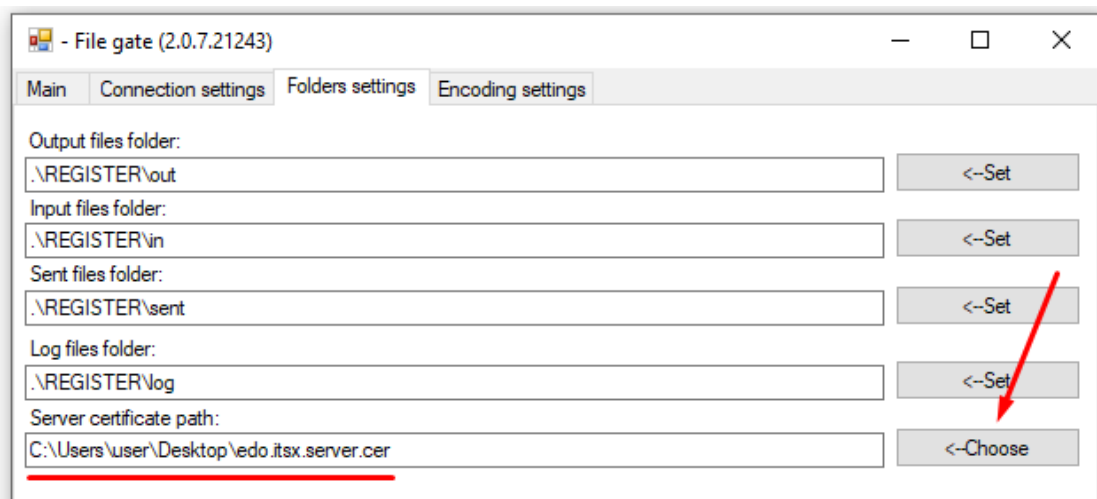


```
create_service.bat — Блокнот
Файл  Правка  Формат  Вид  Справка
set NAME=EdoFGService
sc delete %NAME%
sc create %NAME% binPath= "%~dp0Edo.Fg.Service.exe -workdir=%~dp0
```

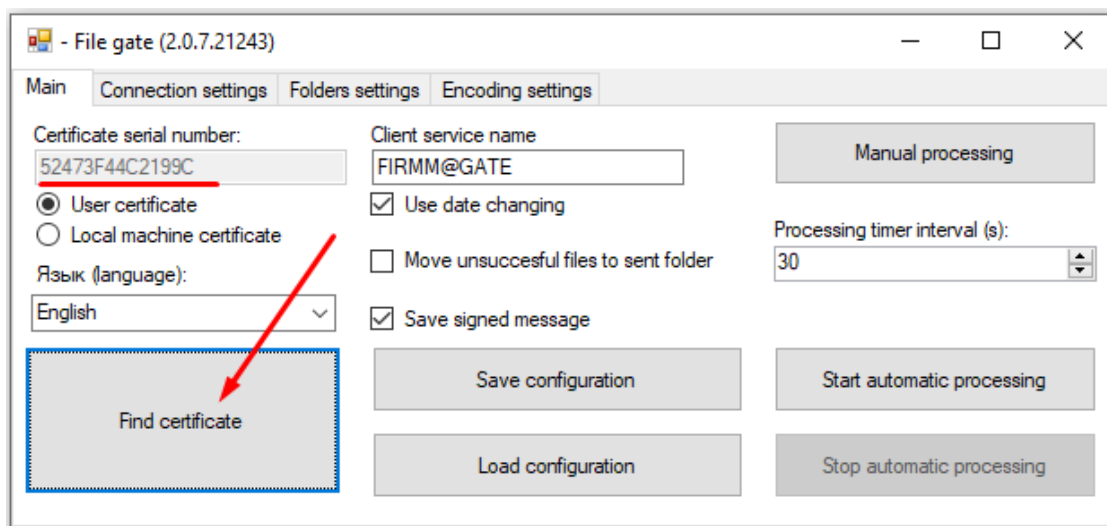
## 3. Configuring Certificates:

In order to use the file gateway, you must use a server certificate and your own certificate.

You need to download the server certificate from the following link as it may be updated: [https://static.itsx.kz/uploads/EDO\\_server\\_PROD.zip](https://static.itsx.kz/uploads/EDO_server_PROD.zip). You need to place the server certificate in any directory and specify the path to this file in FG.Client2 settings on the *Folders settings* tab, also you need to make sure that FG.Client2 has access to the directory with the server certificate.



In case you need to replace or add your own certificate, you need to add it on the side of ITS Tech Limited. Your own public key certificate (*file with .cer extension in a zip archive*) and certificates of the entire chain of trusted verification centers that are in your own certificate should be sent to mem@itsx.kz. *You should send certificates in a .zip archive, as mail servers and clients may block certificates from being sent.* Your own private key certificate should be added to Personal Certificates; then on the *Main* tab you should press the *Find certificate* button and select a valid certificate that was registered on the DES servers. You can use a single certificate to work with multiple DES file gateways.



#### 4. Testing of the file gateway of electronic workflow:

You can send a file to yourself to test the gateway. It requires:

- 1) In the outgoing messages directory, create a folder with the name corresponding to the *Client service name* field on the *Main* tab.
- 2) Put any file (not more than 40MB) in the created folder.
- 3) Then you should launch manual processing twice on the *Main* tab, or run automatic processing and wait for 2 "directory polling periods" (*in the first launch the file is processed for sending, in the second one it is processed for receiving*).
- 4) If everything is set up correctly, the file will appear in the incoming messages directory in a folder with a name corresponding to the *Client service name* field.

#### 5. Typical errors and solutions:

- 1) **Error text:** Certificate mismatch between server and reply certificate.  
**Cause:** The server certificate has not been updated.  
**Solution:** It is necessary to download an up-to-date version of the certificate [https://static.itsx.kz/uploads/EDO\\_server\\_PROD.zip](https://static.itsx.kz/uploads/EDO_server_PROD.zip), then on the *Folders settings* tab in the *Server certificate* field specify the path to this file, then *Save configuration* on the *Main* tab.
- 2) **Error text:** Not found service or abonent.  
**Causes:** 1. The address of the WEB service is incorrect.  
2. The Member is not registered with the given file gateway.  
**Solutions:** 1. Specify the correct WEB service address (*second item in FIRMM@GATE Gateway parameters*)  
2. Email mem [@itsx.kz](mailto:mem@itsx.kz) to ask for advice on getting access to the file gateway.
- 3) **Error text:** WEB-service initialization failed: Authorization error.  
**Cause:** The public part of the member certificate on the side of ITS Tech Limited is not specified.  
**Solution:** Email the certificate in a zip archive to mem [@itsx.kz](mailto:mem@itsx.kz) with a request to install this certificate in the DES.

4) **Error text:** Crypto system initialization failed: Certificate not found or not valid for signing.

**Cause:** Errors were detected during certificate chain validation.

**Solution:** It is necessary to check the correctness of certificates installation in the Personal and Trusted Root Certification Centers storage, integrity of the certificate chain, reinstall certificates to create a correct chain. It is also necessary to make sure that the private key is installed and the EDS with this key is connected to the PC.

If the certificate is installed in the registry, make sure that the private key is present.

5) **Error text:** Directory check error.

**Cause:** The network folder to which the directories specified on the *Folders settings* tab or if there are unfilled fields on this tab are referenced is disabled.

**Solution:** Reconnect to the network folder, or fill in the path in the fields on the *Folders settings* tab.

6) **Error text:** WEB-service call error:

**Cause:** There are problems on the network with the proxy server configuration.

**Solution:** Perform correct proxy server configuration and check availability of WEB-addresses of DES servers.