

Configuration of the BATCH mode on Windows

This document is intended to explain the configuration of the SOFiE client's batch mode. This mode is included in every client account but is not activated by default. IT skills are required for its implementation. The batch mode allows the automation of sending and receiving files without manual intervention of the user. For the Linux/Unix environment, please refer to the SOFiE package installation manual for this environment. The batch configuration remains substantially identical. The folder separators to be used are: '\' or '/' or '/.'. "

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Preamble

When using batch mode, you can only choose one context (Test and Production) by default to send your files in the default configuration. The context can only be used by the SOFiE user account that allows file sending, it is useless to activate this option on a non-sending account, for example SOFiE-SORT-Crypt.

Please note that file exchange takes place between the client and its interlocutor without our intervention regardless of the context used. If you want to perform a file exchange in the "Test" context, please first contact your interlocutor directly to agree on this exchange. By default, file sending takes place on the Production environment. Some institutions have a test environment, it is important to contact them to know the procedures to follow for its use.

Following an evolution to this default configuration, since version 5.19, the two modes can be used at the same time under certain conditions.

If you are using at least version 5.19, you can modify your batch configuration file to include the two modes in the same batch instance. Only the user account that sends/receives files can choose its context. Please note that as of April 1, 2022, only versions 6 or higher are officially supported. If you have not yet migrated, we strongly recommend that you do so as soon as possible. Please consult our documentation at <http://www.sofie.lu> (support section then documentation).

In case of technical questions related to the configuration of the batch mode, please contact the dedicated SOFiE helpdesk, sofie.lux@worldline.com, +352.355.66.600

1. Batch mode settings table.

"<SOFIE_HOME>\properties\batch\9999xxxx.batch.properties" (9999xxxx is your user_ID)."

Parameter Name	Description	Value
sofie.client.batch.<user_ID>.useContext	Context used for encrypting files. After decryption, the required directories are created automatically and files are stored according to the context.	Production, Test
sofie.client.batch.<user_ID>.STOP.filename	Name of the stop file that indicates SOFiE to stop processing. If the parameter run.forEver is set to "yes", SOFiE is stopped when a modification on the stop file is detected. You can use the script "stop_batch" in the bin folder to alter the stop file.	Any name (no space or special character allowed)
sofie.client.batch.<user_ID>.toDecrypt.refused.filter1	Filter of files that are refused for decryption	Any name (no space or special character allowed). '.' and '*' are allowed.
sofie.client.batch.<user_ID>.receipt.activated	Activation flag of the reception function	yes, no
sofie.client.batch.<user_ID>.encryption.activated	Activation flag of the encryption function	yes, no
sofie.client.batch.<user_ID>.decryption.activated	Activation flag of the decryption function	yes, no
sofie.client.batch.<user_ID>.waiting.time	Waiting time (milliseconds) in the processing	Any number
sofie.client.batch.<user_ID>.fileSwitch	Activation of fileswitch	yes, no
sofie.client.batch.<user_ID>.toCrypt.folder	Directory containing the files that are encrypted and sent	Any valid directory path

sofie.client.batch.<user_ID>.t oDecrypt.folder	Directory containing the files to decrypt	Any valid directory path
sofie.client.batch.<user_ID>. clear.folder	Directory containing files that are not treated by the batch (if fileswitch activated)	Any valid directory path
sofie.client.batch.<user_ID>.t oCrypt.refused.filter1	Filter of refused files to be encrypted	Any name (no space or special character allowed). '.' and '*' are allowed.
sofie.client.batch.<user_ID>. STOP.file.delete	Flag indicating the if the stop file shall be deleted when the batch mode is stopped.	yes, no
sofie.client.batch.<user_ID>.t oDecrypt.accepted.filter1	Filter of files accepted for decryption	Any name (no space or special character allowed). '.' and '*' are allowed. recommende d value: SOFI.*
sofie.client.batch.<user_ID>. run.forEver	When this flag is set to "yes", the SOFiE process is constantly running (to stop it, you have to make a random modification on the stop file), checking and processing files when they are ready. If the value is set to "no", the files that are ready are checked and processed then the SOFiE process is stopped.	yes, no
sofie.client.batch.<user_ID>.t oCrypt.accepted.filter1	Filter of files accepted for encryption	Any name (no space or special character allowed). '.' and '*' are allowed. recommende d value: *.*
sofie.client.batch.<user_ID>. sending.activated	Activation flag of the sending function	yes, no

2. Configuration of the batch in standard mode of the user SOFiE-SORT(2 accounts Crypt + Transport).

The batch user's folder is stored in SOFiE HOME\properties\batch. This folder remains unchanged.

File 9999XXXXX.batch.properties, for the example we will use the "Test Crypt user account", 888810011.

Content of the file (standard method). We will highlight only the lines that are important to remember when switching to the new setting mode.

For an explanation of the values in this file, see the table of batch mode settings above.

Account Crypt 888810011: this account can encrypt or decrypt files but cannot send or receive.

```
sofie.client.batch.888810011.sending.activated=no
sofie.client.batch.888810011.toCrypt.accepted.filter1=*. *
sofie.client.batch.888810011.fileSwitch=no
sofie.client.batch.888810011.run.forEver=no
sofie.client.batch.888810011.toCrypt.refused.filter1=*refused*
sofie.client.batch.888810011.toDecrypt.refused.filter1=*refused*
sofie.client.batch.888810011.waiting.time=300000
sofie.client.batch.888810011.decryption.activated=yes
sofie.client.batch.888810011.receipt.activated=no
sofie.client.batch.888810011.toDecrypt.accepted.filter1=*. *
sofie.client.batch.888810011.eFileToXml.activated=no
sofie.client.batch.888810011.toDecrypt.folder=data\888810011\to_decrypt
sofie.client.batch.888810011.encryption.activated=yes
sofie.client.batch.888810011.useContext=Production
sofie.client.batch.888810011.clear.folder=data\888810011\clear
sofie.client.batch.888810011.toCrypt.folder=data\888810011\to_crypt
sofie.client.batch.888810011.STOP.file.delete=no
sofie.client.batch.888810011.STOP.filename=sofie.888810011.stop
```

Transport account 888810012: this account can encrypt, decrypt, send or receive files.

File 9999XXXXX.batch.properties, for the example we will use the "Test Transport User Account" which is 888810012.

```
sofie.client.batch.888810012.STOP.file.delete=yes
sofie.client.batch.888810012.fileSwitch=no
sofie.client.batch.888810012.toDecrypt.folder=data\888810012\to_decrypt
```

```
sofie.client.batch.888810012.encryption.activated=yes
sofie.client.batch.888810012.toDecrypt.refused.filter1=*refused*
sofie.client.batch.888810012.toDecrypt.accepted.filter1=SOFI.*
sofie.client.batch.888810012.decryption.activated=yes
sofie.client.batch.888810012.run.forEver=no
sofie.client.batch.888810012.clear.folder=data\\888810012\\clear
sofie.client.batch.888810012.STOP.filename=sofie.888810012.stop
sofie.client.batch.888810012.toCrypt.refused.filter1=*refused*
sofie.client.batch.888810012.receipt.activated=yes
sofie.client.batch.888810012.sending.activated=Yes
sofie.client.batch.888810012.toCrypt.accepted.filter1=*. *
sofie.client.batch.888810012.efileToXml.activated=no
sofie.client.batch.888810012.toCrypt.folder=data\\888810012\\to_crypt
sofie.client.batch.888810012.useContext=Production
sofie.client.batch.888810012.waiting.time=3000
```

3. Configuration of the batch in standard mode for the SOFiE-Business.

File 9999XXXXX.batch.properties, for the example we will use the "Test Business user account" which is 888810013.

This account can encrypt, decrypt, send or receive files.

```
sofie.client.batch.888810013.receipt.activated=yes
sofie.client.batch.888810013.fileSwitch=no
sofie.client.batch.888810013.waiting.time=60000
sofie.client.batch.888810013.run.forEver=yes
sofie.client.batch.888810013.encryption.activated=yes
sofie.client.batch.888810013.decryption.activated=yes
sofie.client.batch.888810013.toCrypt.refused.filter1=*refused*
sofie.client.batch.888810013.toDecrypt.folder=data\888810013\to_decrypt
sofie.client.batch.888810013.toDecrypt.accepted.filter1=SOFI.*
sofie.client.batch.888810013.toCrypt.folder=data\888810013\to_crypt
sofie.client.batch.888810013.useContext=Production
sofie.client.batch.888810013.toCrypt.accepted.filter1=*. *
sofie.client.batch.888810013.sending.activated=yes
sofie.client.batch.888810013.clear.folder=data\888810013\clear
sofie.client.batch.888810013.toDecrypt.refused.filter1=*refused*
sofie.client.batch.888810013.STOP.filename=sofie.888810013.stop
sofie.client.batch.888810013.STOP.file.delete=yes
sofie.client.batch.888810013.efileToXml.activated=no
```

4. New parameterization method (dual context).

This setting is identical for the SOFiE-SORT-Transport client (here 888810012) and for the SOFiE-Business client (here 888810013).

Create 2 new folders under SOFiE HOME/Transport_USER (here 888810012) / or Business 888810013.

- ⇒ crypt_en_prod
- ⇒ crypt_en_test

- ⇒ Content of the file after modification (includes the 2 modes (Test and Production)).

- ⇒ We comment on unnecessary lines by putting a # sign in front of them.


```
sofie.client.batch.888810012.STOP.file.delete=yes
sofie.client.batch.888810012.fileSwitch=no
sofie.client.batch.888810012.toDecrypt.folder=data\\888810012\\to_decrypt
sofie.client.batch.888810012.encryption.activated=yes
sofie.client.batch.888810012.toDecrypt.refused.filter1=*refused*
sofie.client.batch.888810012.toDecrypt.accepted.filter1=SOFI.*
sofie.client.batch.888810012.decryption.activated=yes
sofie.client.batch.888810012.run.forEver=no
sofie.client.batch.888810012.clear.folder=data\\888810012\\clear
sofie.client.batch.888810012.STOP.filename=sofie.888810012.stop
sofie.client.batch.888810012.toCrypt.refused.filter1=*refused*
sofie.client.batch.888810012.receipt.activated=yes
sofie.client.batch.888810012.sending.activated=Yes
sofie.client.batch.888810012.toCrypt.accepted.filter1=*. *
sofie.client.batch.888810012.efileToXml.activated=no
#sofie.client.batch.888810012.toCrypt.folder=data\\888810012\\to_crypt
sofie.client.batch.888810012.waiting.time=3000
#sofie.client.batch.888810012.useContext=Production
# We define here the folder that will contains the files to be encrypted with Production context
sofie.client.batch.888810012.toCryptProduction.folder=data\\888810012\\crypt_en_prod
#We define here the folder that will contains the files to be encrypted with Test context
sofie.client.batch.888810012.toCryptTest.folder=data\\888810012\\crypt_en_test
```

In this second configuration, after adding the 2 highlighted lines, the bold one will be ignored. So you can delete them or put a comment character at the beginning of each line "#" or leave it as it is.

In this second case configuration, all files that are to be sent in the "Test" context, must be stored in the `crypt_en_test` folder respectively the files that are to be sent in the "Production" context must be stored in the `crypt_en_prod` folder.

5. Special additional configuration for SOFiE-SORT users of ATLAS.

If you are using ATLAS to generate TRAM files, you may also need to change the encryption user.

Depending on your configuration, you will need to check both your CRYPT and TRANSPORT files.

You must replace each occurrence of `dataTRANSPORT_USER\to_crypt` with `dataTRANSPORT_USER\crypt_en_prod`.

Please note that the "Test" context cannot be used for TRAM files, only the "Production" context can be used.

6. Tree structure of the SOFiE client.

Any user account has the same tree structure. This is created automatically when the account is initialized on the computer. The folders and subfolders are identical for all even if they are not necessarily used. The root directory of the client is the folder (data).

Description of each folder on the Figure 1.

1. Root folder of data
2. Archive folder (root folder of successful treatments)
 - Folder received (contains a copy of the received file without error + timestamp)
 - Folder to_crypt (contains a copy of the original file before encryptions + timestamp)
 - Folder to_decrypt (contains a copy of the original file before decryptions + timestamp)
 - Folder to_send (contains a copy of the encrypted and sent file + timestamp)
3. Folder crypted (contains the encrypted file + timestamp)
4. Folder decrypted (contains the decrypted file + timestamp)
5. Folder error (root folder of error treatments)
 - Folder received (contains a copy of the file in error at reception + the error report in log format). The 2 files have the same name to distinguish them more easily in case of errors on multiple files.
 - Folder to_crypt (contains a copy of the file in error during encryption + the error report in log format). The 2 files have the same name to distinguish them more easily in case of errors on multiple files.
 - Folder to_decrypt (contains a copy of the file in error during decryption + the error report in log format). The 2 files have the same name to distinguish them more easily in case of errors on multiple files.
 - Folder to_send (contains a copy of the file in error when sending + the error report in log format). The 2 files have the same name to distinguish them more easily in case of errors on multiple files.
6. Folder received (contains the file received without error)
7. Folder to_crypt (contains the file to encrypt)
8. Folder to_decrypt (contains the file to be decrypted)
9. Folder to_send (contains the file to send)

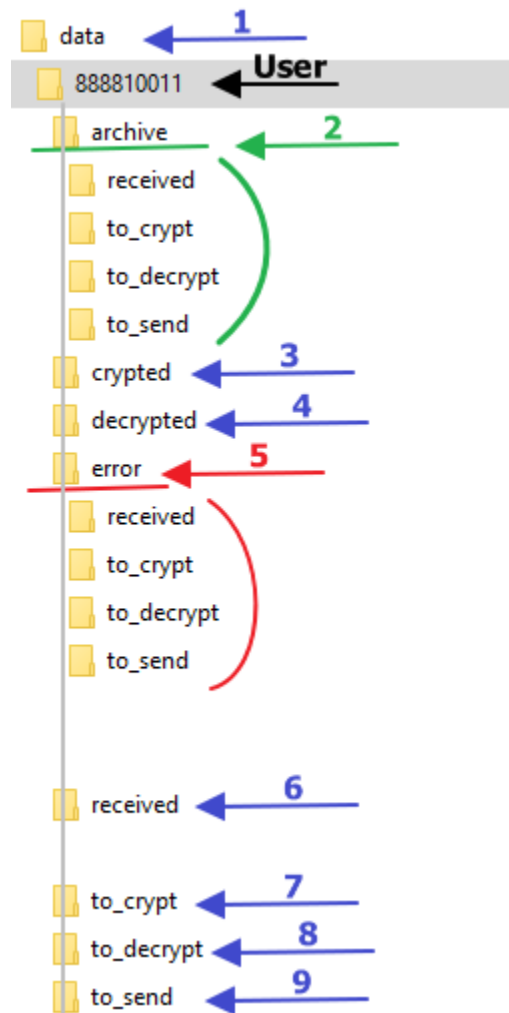


Figure 1.

The SOFiE client works in steps and processes the file sequentially. In case several files are to be processed at the same time, each step will be performed individually on each file sequentially.

7. Configuration of the client file used in batch and GUI mode.

File 9999XXXXX.client.properties, its location is SOFiE HOME\properties\clients. In our example the files to modify are 888810011.client.properties, 888810012.client.properties and 888810013.client.properties.

The SOFiE Business client has only one account which simplifies the implementation of the batch mode since there is only one user account to set up.

The SOFiE-SORT client has 2 user accounts (CRYPT, TRANSPORT) which makes the configuration a bit complex since there are 2 users to set up and each one depends on the other to process a file.

We will thus expose here the 2 possible methods of parameter setting.

7.1 Simple configuration of the SOFiE-SORT pair.

This configuration is the one installed by default. Each client account scans its own folders and drops the files in its own tree.

The CRYPT account (in this case 888810011) scans its home directory (to_crypt) and encrypts the files in it and drops them into the directory (crypted). In the 888810011.client.properties file you should have the following line:

```
sofie.client.888810011.filesToEncrypt.folder=.\data\888810011\to_crypt
sofie.client.888810011.encryptedFiles.folder=data\888810011\crypted
```

The TRANSPORT account (here 888810012) scans its input directory (to_crypt) and encrypts the files in it with the context defined in the settings file, then drops them in (crypted). If the send option is enabled, the files will be put in the (to_send) directory and then transmitted. In the client file it looks like this:

```
sofie.client.888810012.filesToEncrypt.folder=data\888810012\to_crypt
sofie.client.888810012.encryptedFiles.folder=data\888810012\crypted
sofie.client.888810012.exchange.filesToSend.folder=data\888810012\to_send
```

In this type of configuration, an external script is needed to transfer files from one client account to the other.

For example, when encrypting a file by the CRYPT account (here 888810011) the encrypted file will be placed in data888810011\crypted. The file will have to be moved to the input folder of the next treatment, i.e. TRANSPORT account (here 888810012), in the folder data\8810012\to_crypt.

7.2 Complex configuration of the SOFiE-SORT pair.

This configuration is frequently used and is best suited in the case where the 2 SOFiE-SORT accounts (CRYPT and TRANSPORT) are installed in the same tree structure (same system file).

In this configuration we will create a fork of parameter setting of the 2 SOFiE-SORT accounts. This will allow to place the files to be treated by the other sofie account without using an external script.

The principle consists in defining one of the two following configurations:

- 1- Adapting the CRYPT account (here 888810011).

The CRYPT account deposits the encrypted files on the to_crypt folder of the TRANSPORT account.

In the file 888810011.client.properties we make the following modification:

```
sofie.client.888810011.encryptedFiles.folder=data\888810012\to_crypt
```

The CRYPT account scans the folder where the received and decrypted files are stored.

In the file 888810011.client.properties we make the following modification.:

```
sofie.client.888810011.filesToDecrypt.folder=.\data\888810012\decrypted\Production
```

The 888810012.client.properties file remains unchanged and keeps the default settings (simple configuration).

- 2- Adaptation of the TRANSPORT account (here 888810012).

The TRANSPORT account retrieves the files to encrypt and send in the crypted directory of the CRYPT account.

In the file 888810012.client.properties we make the following modification:

```
sofie.client.888810012.filesToEncrypt.folder=data\888810011\crypted
```

The TRANSPORT account deposits the decrypted files in the to_decrypt directory of the CRYPT account.

```
sofie.client.888810012.decryptedFiles.folder=data\888810011\to_decrypt
```

The 888810011.client.properties file remains unchanged and keeps the default parameters (simple configuration).

Another configuration with a mix of the 2 solutions above remains possible.

7.3 Simple configuration of the SOFiE-Business client.

The configuration of the SOFiE-Business client is identical to the simple configuration of the SOFiE-SORT-TRANSPORT client.

In case you have 2 SOFiE-Business accounts working together as for SOFiE-SORT, the same configuration as for SOFiE-SORT can be implemented.

7.4 Creation of the batch start and stop files.

Each SOFiE user account requires the creation of its startup file and its shutdown file. These files must be stored in the bin directory under SOFiE HOME.

The file can have any name you want. By default we use the following nomenclature: start_batch_<SOFiE_UID>.bat and stop_batch_<SOFiE_UID>.batch where <SOFiE_UID> represents the client account. In our example we will create 2 files, the start_batch_888810011.bat, stop_batch_888810011.bat and start_batch_888810012.bat, stop_batch_888810012.bat.

The contents of the batch file should contain the following command lines in order:

- 1- The definition of the variable JAVA_HOME
- 2- Initialization of the variable allowing the update of the batch client (optional, activated by default)
- 3- Launching the batch

start_batch_888810011.bat

```
SET JAVA_HOME="C:\Cetrel\sofie\java\jdk-11.0.2"  
SET SOFIE_BATCH_UPDATE=ON  
start_run main.java.com.worldline.sofie.client.SofieMain -mode batch -user 888810011
```

stop_batch_888810011.bat

```
CD ..  
echo "" > sofie.888810011.stop
```

start_batch_888810012.bat

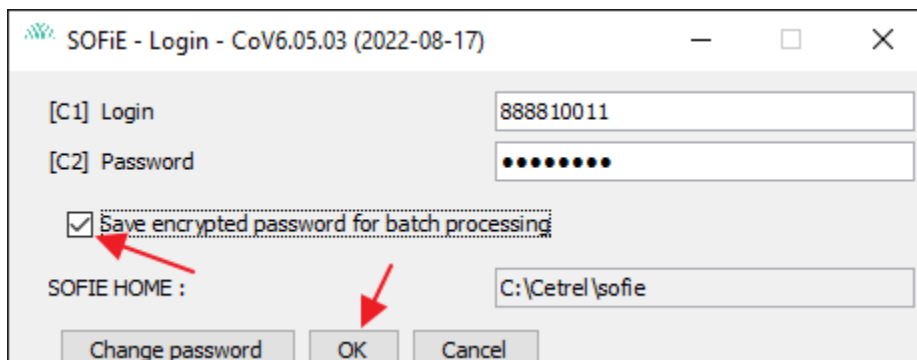
```
SET JAVA_HOME="C:\Cetrel\sofie\java\jdk-11.0.2"  
SET SOFIE_BATCH_UPDATE=ON  
start_run main.java.com.worldline.sofie.client.SofieMain -mode batch -user 888810012
```

stop_batch_888810012.bat

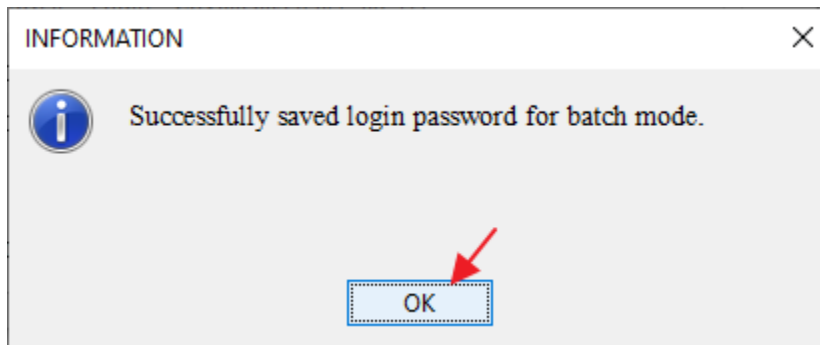
```
CD ..  
echo "" > sofie.888810012.stop
```

7.5 Save password for batch mode.

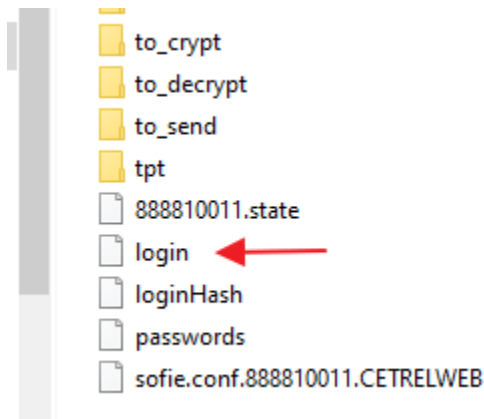
Batch mode requires the password to be saved. When the batch client is launched and the password has not yet been saved, the GUI login window is displayed. It is mandatory to enter the password on the connection window and make sure to check the option "Save encrypted password for batch mode".



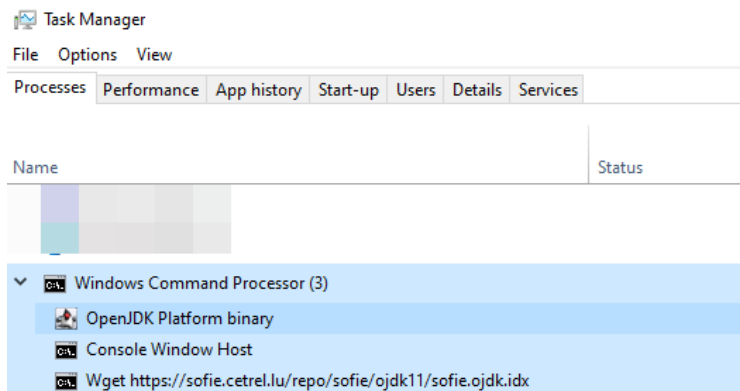
On the next window press OK to confirm.



After that, a new file named "login" will be present in the directory data\<SOFiE_UID. The password is of course encrypted. This operation must be done each time the password is changed.



When the batch starts, a DOS window persists as long as the batch client is running. However, if you close the DOS window by clicking on the cross, the batch service may persist in the background. It is important to monitor the task manager to ensure that the batch has been stopped. This precaution must be taken before each new launch of the batch to avoid having several instances of the same batch client launched in parallel and which can cause processing problems.



7.6 Types of batch mode operations.

It is possible to configure the batch in 2 different modes of operation. Each mode has its advantages and disadvantages that we will not explain here.

7.6.1 The « Run for ever” mode.

This mode consists in starting the batch which executes these tasks intermittently according to the parameters communicated to it in the batch parameterization file.

The phases of this mode are:

- a- Start processing (encryption, decryption, receiving, sending), standby for XXXXXX milliseconds.
The configuration of this mode is done on the file 888810012.batch.properties

```
sofie.client.batch.888810012.run.forEver=yes  
sofie.client.batch.888810012.waiting.time=60000
```

This treatment is done in an infinite loop as long as a stop_batch command is not launched.

To stop the batch properly, you must execute the batch stop_batch<SOFIE_UID>.bat which will create the file set in the batch configuration file, here for the account 888810012 it will be the file sofie.888810012.stop

The batch will be automatically stopped once it has finished its current processing.

The following line indicates to the batch that if a file with this name is in the SOFIE HOME directory it must stop.
Example of the configuration of the client batch 888810012.batch.properties

```
sofie.client.batch.888810012.STOP.filename=sofie.888810012.stop
```

This line tells the batch to delete the file once it has stopped following the execution of stop_batch_888810012.bat

```
sofie.client.batch.888810012.STOP.file.delete=yes
```

7.6.2 The « Run and stop” mode.

This mode consists in starting the batch which executes these tasks once and then stops. This mode must be coupled with an event manager to allow a launch by intervals according to the desired use.

This mode is also suitable for an on-demand launch useful to automate sporadic tasks usually performed in manual mode (GUI).

The phases of this mode are :

- a- Launching of the treatment (encryptions, decryptions, reception, sending), then automatic stop.
For each new treatment it is necessary to restart the batch. It is obvious that this mode does not require the file stop_batch_... because it stops itself at the end of the treatment.

7.6.3 Recommendations and useful information.

The execution of the batch can be done either manually or using the Windows event manager.

8. Example of file processing.

In this series of examples we will give a fictitious name to the files used as examples in order to facilitate understanding. In reality, each type of report must respect a certain nomenclature and therefore cannot have any name.

Example 1 : Sending file_1 and file_2 without errors

- Folder to_crypt (contains file_1 and file_2)
 - o Encryptions file_1
 - Archive file_1 (archive\to_crypt\file_1.Timestamp)
 - o Encryptions file_2
 - Archive file_2 (archive\to_crypt\file_2.Timestamp)
 - o Send file_1' (the file changes name at each processing)
 - Archive file_1.Timestamp
 - o Send file_2' (the file changes name at each processing)
 - Archive file_2.Timestamp

Example 2 : Error when sending a file_3

- Folder to_crypt (contains file_3)
 - o Encryptions file_3
 - Error encountered, moved and renamed file_3 to file_3.Timestamp + file_3.Timestamp.log in error\to_crypt

Example 3: Error-free reception of file_4

- Start reception
 - o Folder received (contains file_4)
 - Archive file_4.Timestamp in archive/received
 - Move file_4 into to_decrypt
 - Decrypt file_4
 - Depositing file_4' into decrypted
 - Archive file_4.Timestamp to archive\to_decrypt

Example 4 : Receipt of file_5 and file_6, error during decryption of file_6.

- Start reception
 - o Received folder (contains file_5 and file_6)
 - Archive file_5.Timestamp and file_6.Timestamp in archivereceived
 - Move file_5 and file_6 to the folder to_decrypt
 - Start decryption of file_5
 - Success, file_5' moved to the decrypted folder, copy of file_5.Timestamp placed in archive\to_decrypt
 - Start decryption file_6
 - Error, file_6.Timestamp + file_6.log placed in error\to_decrypt

9. Links and additional information.

Additional useful information can be found in the online help at www.sofie.lu, under Support, then Documentation, then General Documentation (only in English).