



SkyFile Mail v10.xx

AFT (Automatic File Transfer)

User guide

June 2018
Réf : v.13

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1. REVISIONS

DATE:	VERSION REF:	MODIFICATIONS:	AUTHOR:
06-Feb-08	5.0	Original document	Jean-Marc Duc
15-Sep-08	6.0	SkyFile Anti-Virus	Jean-Marc Duc
29-Apr-09	7.0	New AFT settings for shore-to-ship	Jean-Marc Duc
22-Sep-09	7.1	SkyFile Mail 7.5 additional settings	Jean-Marc Duc
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July-12	9.1	Note on Network drive (page 9)	Jean-Marc Duc
April-14	10	New AFT (Automatic File Transfer), former API	Jean-Marc Duc
8 Jan 15	11	SkyFile Mail v9	Jean-Marc Duc
June 16	12	SkyFile Mail v10 & Marlink branding	Jean-Marc Duc
June 18	13	SkyFile Mail v10.20 – Minor corrections	Jean-Marc Duc

2. NOTES

- This symbol  indicates important points. Please read them carefully.
- As an example for shore to ship messages, the following sample email address has been used for the screenshots in this document: Victoriastar.shipping@orange.fr.

3. INTRODUCTION

From **SkyFile® Mail v8.27** the API (*Application Programmer Interface*) function of SkyFile Mail is replaced and renamed **AFT (Automatic File Transfer)**. The service itself remains the same. New elements have been added for providing more flexibility and to make the service even more easy to use.

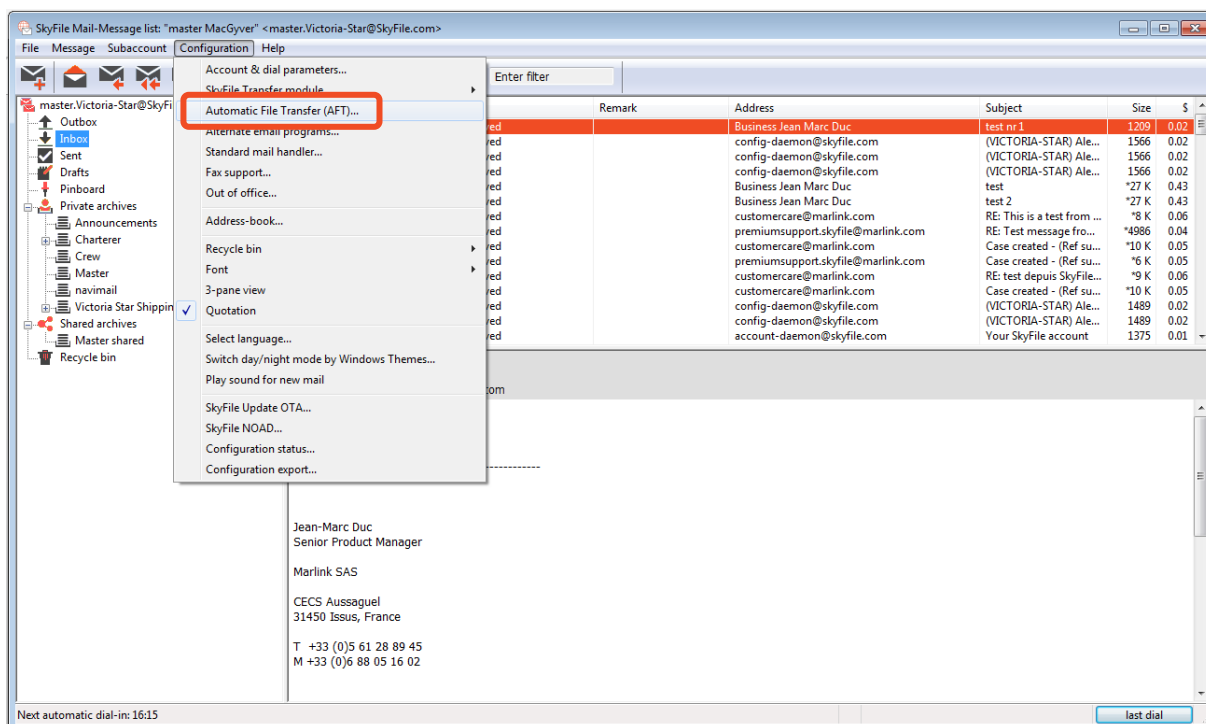
4. GENERAL DESCRIPTION

SkyFile Mail messaging software is employed in many fields of mobile satellite communications. Via the AFT function it provides the possibility to exchange data-files between ship management systems on board and on land-side (both directions possible, ship-shore and shore-ship) in a total transparent way, which is important for advanced ship management systems on board. Although SkyFile Mail provides a range of interfaces for the synchronisation of processes in both direction (ship-to-shore and shore-to-ship), the most convenient and flexible tool is the Automatic File Transfer (AFT).

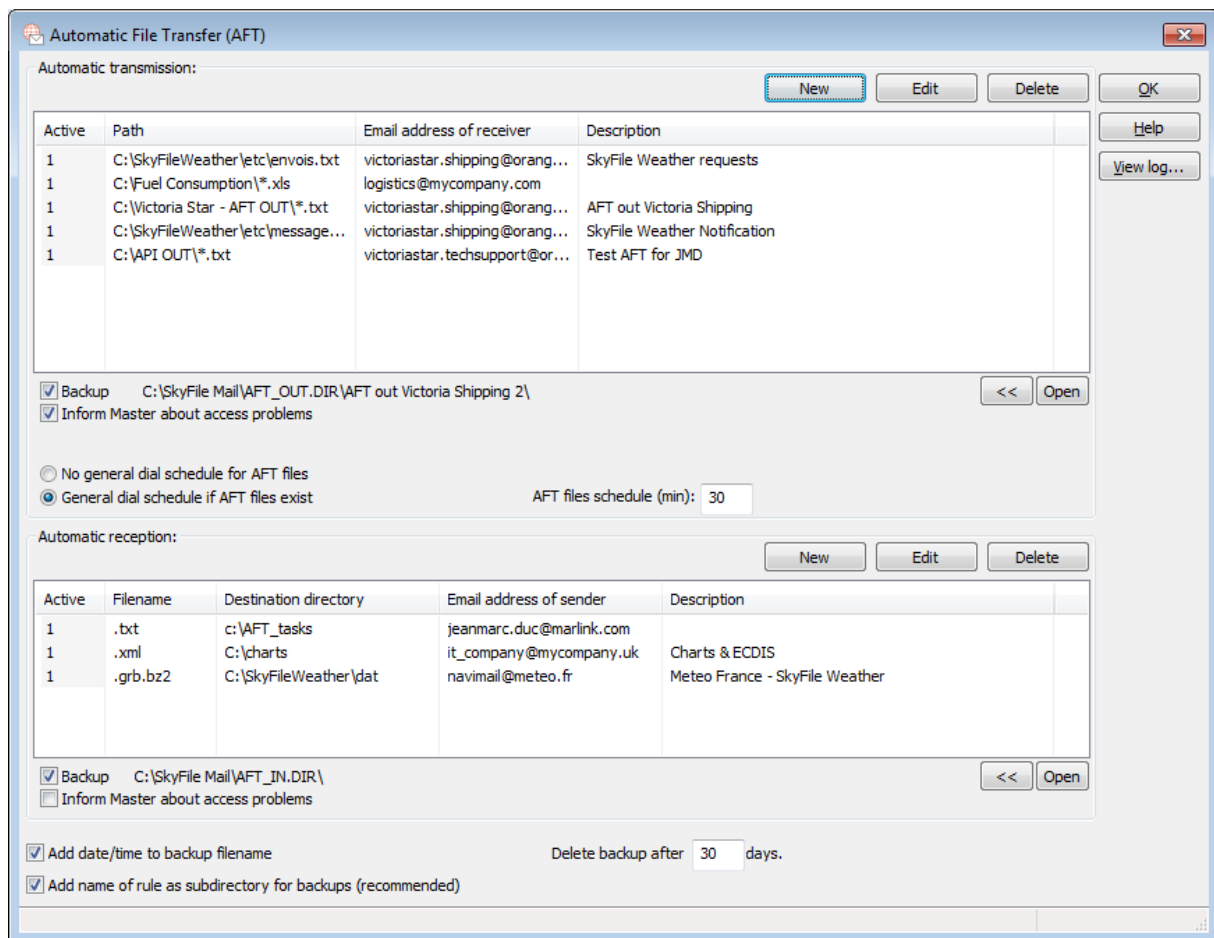
5. USAGE OF AFT FUNCTION WITHIN SKYFILE MAIL

The AFT is a very convenient and flexible interface for exchanging files ship-to-shore and shore-to-ship. AFT is the most used “mechanism” within major shipping companies. The user has to configure and set up his interface according to his individual internal process flow.

To enter the AFT dialog, please click on "Configuration" ► "Automatic File Transfer (AFT)..."



In case you have installed sub-accounts, you need to enter master-username/master-password for authentication. Then the following AFT window will pop up. It allows you to easily access the AFT setup.



5.1 General options & selections.

5.1.1 Backup

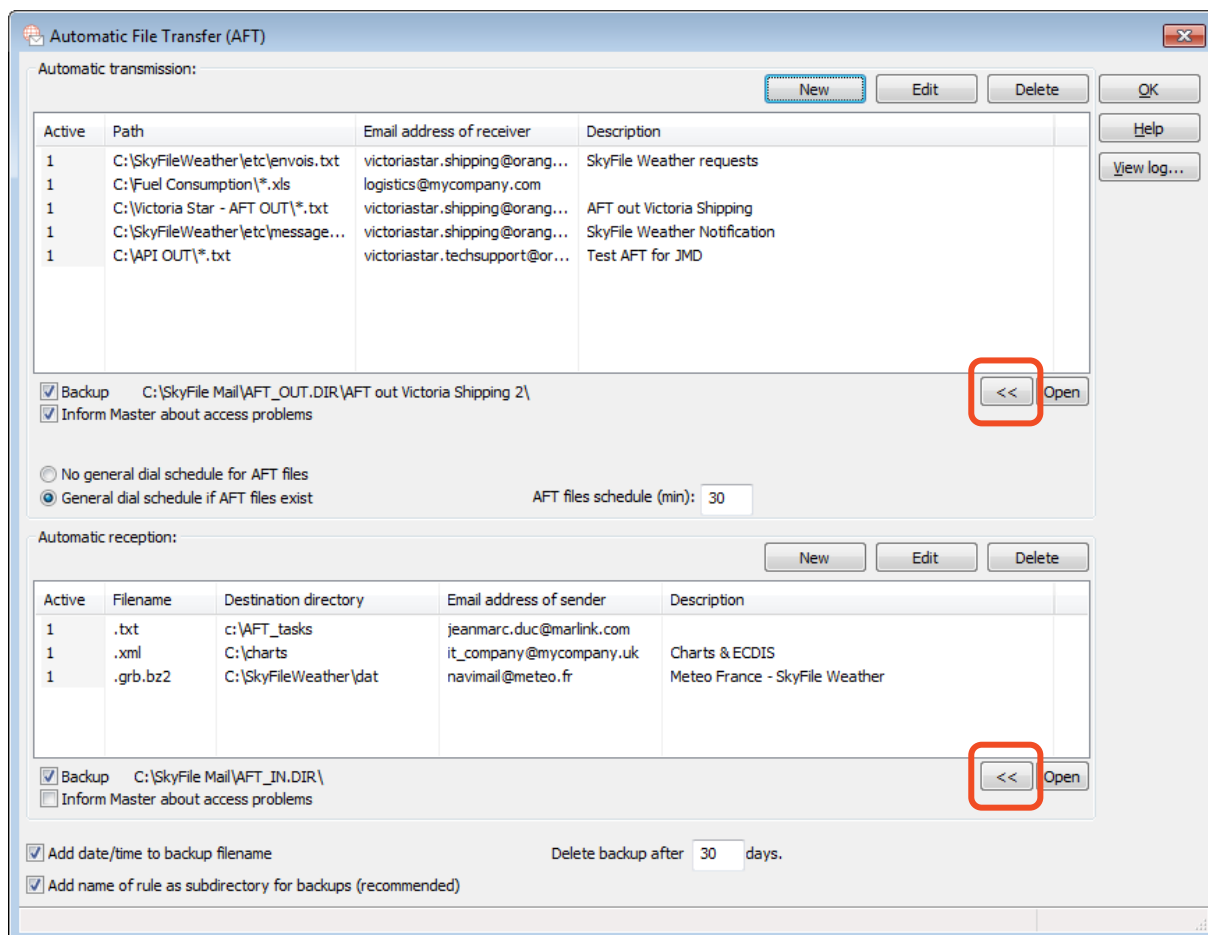
In case you want to backup incoming or outgoing AFT files, please press the respective click-field "Backup" in the AFT overview window (see above). If "Backup" has been selected, each attachment will be stored additionally in the following default directory:

- **Ship to shore files:** AFT files are stored in **"C:\SKYFILE\AFT_IN.DIR"** (C:\SKYFILE: SkyFile installation directory).
- **Shore to ship files:** AFT files are stored in **"C:\SKYFILE\AFT_OUT.DIR"**.

Until SkyFile Mail v8.25, SkyFile Mail AFT (API) has the following options for backups:

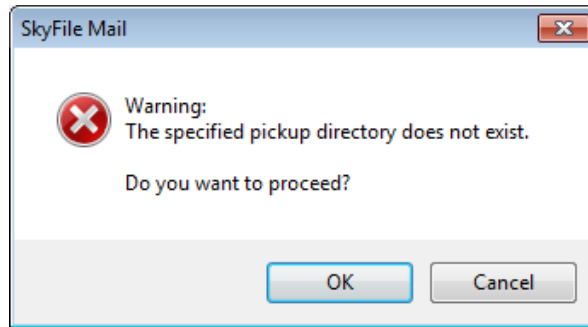
- A backup directory for all sent files
- A backup directory for all received files
- A backup live time for all backup files
- An option to extend the file names with the date and time.

From SkyFile Mail v8.27, the default back-up file can be selected by the user. To select your own default back-up file use the **AFT explorer**.



5.1.2 Inform Master about access problems

If the user is specifying a directory manually in the AFT configuration for incoming and outgoing files which does not exist, the user is warned by a message box when trying to save the rule.



The syntactical validity of specified email addresses is checked and a message box appear if there are errors when trying to store the rule.

If SkyFile Mail is processing the AFT-Out rules (for sending files), it will generate emails to the master of the ship if a specified directory does not exist or cannot be accessed. The email will have the subject "SkyFile Mail AFT". This warning can be activated by an option within the rule definition. Additionally these errors are logged in the new AFT process log.

If SkyFile Mail is processing the AFT-In rules (for received files), it will generate emails to the master of the ship if a mail matches the rules but the file cannot be placed into the destination directory because it does not exist or cannot be accessed. Again, the email will have the subject "SkyFile Mail AFT". This warning can be activated by an option within the rule definition. Additionally these errors are logged in the new AFT process log.

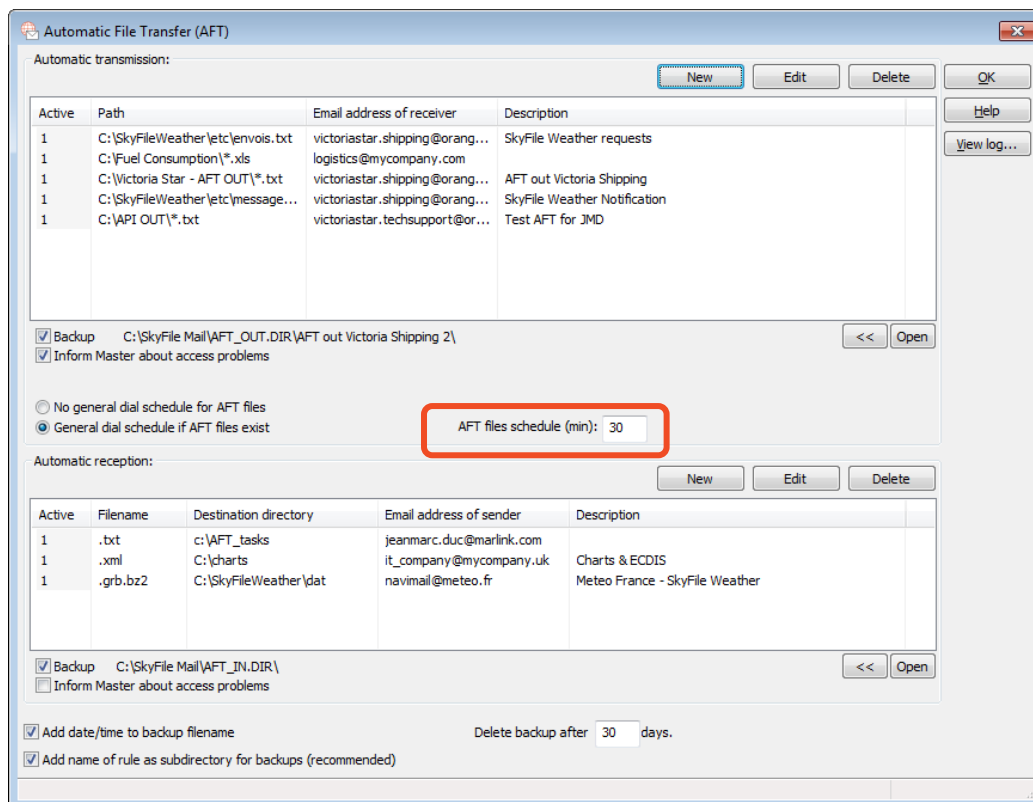
5.1.3 Dial parameters

5.1.3.1 No special dial schedule for AFT files

Until SkyFile Mail v8.25, AFT-Out is only processed every time when the SkyFile Mail Client starts a post-paid connection to the server. This happens for automatic and manual connections.

5.1.3.2 Special dial schedule if AFT files exist

To boost the immediate transmission of files, it is now possible to specify a faster scanning of outgoing files by specifying a period of minutes (minimum 15 minutes). SkyFile Mail will check all specified directories whether there are files matching one of the rules. If so the transmission of files will start automatically after the specified period of minutes.



There is a common parameter “scan frequency for auto connect” for all AFT-Out rules. This special scan is done for all rules which are marked with a new option “auto connect”.



Each manual or automatic connection restarts the AFT schedule.

If a dial-in is done, either because of automatic or manual initiation or by a file matching an AFT rule with activated “Auto-connect”, this dial-in includes the mail and AFT transfer, not only the single file matching the rule – all mails and all AFT files are transferred.

5.1.4 Add date/time to backup filename

In case the names of the AFT files are always the same, please press this option. In this case the date/time of the creation will be added: (“data.bin” → “data_20131218_1459.bin”).

5.1.5 Add name of rule as subdirectory for backups

If selected, the backup file will be put into a specific subdirectory. For instance:

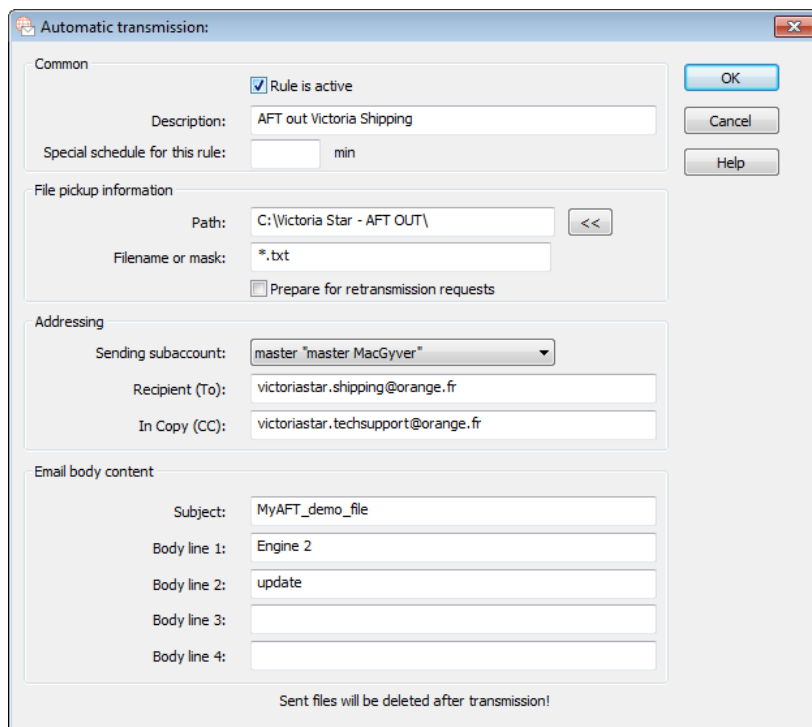
- The backup directory specified is “C:\skyfile_AFT_IN_backup\”
- The user has set up 3 rules: “rule1” – “rule2” and “rule3”

If a file is sent with “rule3”, the backup file will be put into the directory “C:\skyfile_AFT_IN_backup\rule3\”

5.1.6 Delete backup after xx days.

To avoid the overrun of the backup-directory, the AFT files will be deleted after a user-defined number of days (default: 30 days).

6. AFT - AUTOMATIC TRANSMISSION (SHIP-TO-SHORE)



- **Rule is active:** Select this option to make your rule active or inactive. The activity of the rules is reflected in the overview of the rules. “0” means inactive and “1” means active.
- **Description:** Enter the general description of the rule.
- **Path:** Enter or select the path of the file. It is the area where the files to be sent are located. This folder will be checked by SkyFile Mail Client each time a dial-in occurs.

*(A **path**, the general form of the name of a file or directory, specifies a unique location in a file system. A path points to a file system location by following the directory tree hierarchy expressed in a string of characters in which path components, separated by a delimiting character, represent each directory)*

- **Filename/mask:** Enter the filename. **The field may include wildcards.**
They can be (for instance):

- *.bin - *.zip - *.txt

Or

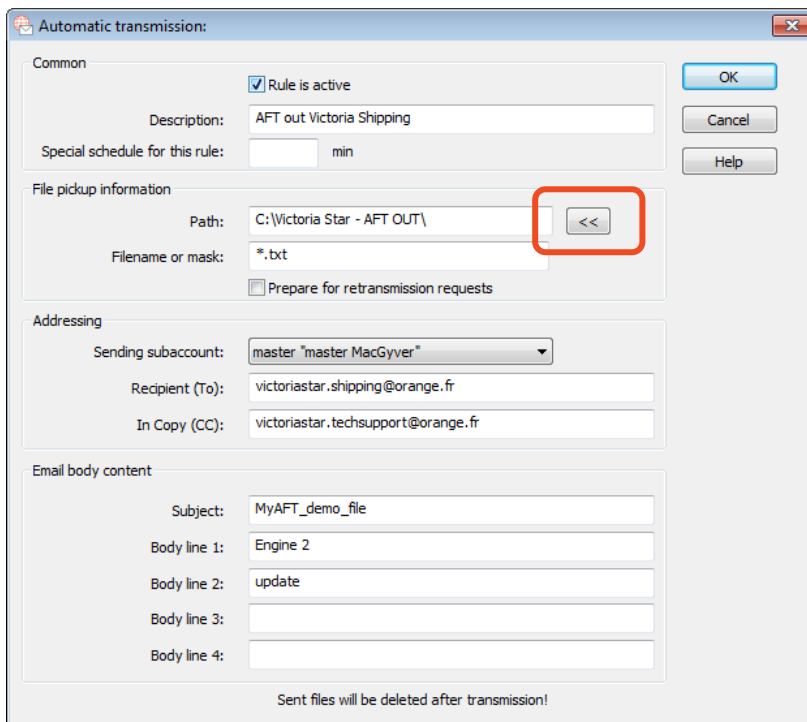
- *.b?? - *.z??

This function allows sending files with different extensions like .zip, .z01, .z02 etc.

- **Addressing:**
 - **Sending subaccount:** Select the subaccount used to send the file.
 - **Recipient (To):** Enter the email-address of the recipient of the file.
 - **In Copy (CC):** Enter the email-address of the recipient in copy.
- **Subject:** Enter the subject. It will be inserted in the subject-line of the automatically generated AFT-email. (optional)
- **Body line:** These 4 fields allow to define a body text with up to 4 lines.

Notes:

- If you do not fill in some fields, these items are not taken as selection criteria.
- To make the selection of the path easier, please use the AFT explorer

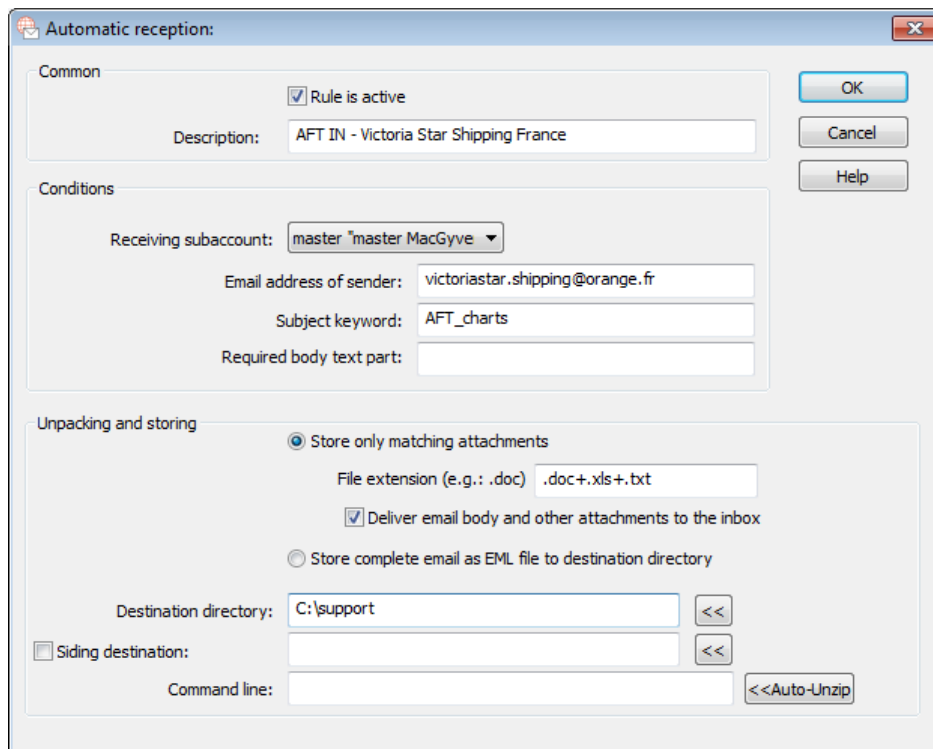


The screenshot shows the 'Automatic transmission' dialog box with the following fields and settings:

- Common:**
 - Rule is active
 - Description: AFT out Victoria Shipping
 - Special schedule for this rule: [] min
- File pickup information:**
 - Path: C:\Victoria Star - AFT OUT\ (with a red box around the '<<' button)
 - Filename or mask: *.txt
 - Prepare for retransmission requests
- Addressing:**
 - Sending subaccount: master "master MacGyver"
 - Recipient (To): victoriastar.shipping@orange.fr
 - In Copy (CC): victoriastar.techsupport@orange.fr
- Email body content:**
 - Subject: MyAFT_demo_file
 - Body line 1: Engine 2
 - Body line 2: update
 - Body line 3: []
 - Body line 4: []

Sent files will be deleted after transmission!

7. AFT - AUTOMATIC RECEPTION (SHORE-TO-SHIP)



7.1 General description

- Rule is active:** Select this option to make your rule active or inactive. The activity of the rules is reflected in the overview of the rules. "0" means inactive and "1" means active.
- Description:** Enter the general description of the rule.
- Receiving sub-account:** In case you have installed sub-accounts, select the sub-account which will receive the file. If you do not use the sub-account feature, this field shows "Gateway" only.
- Email address of sender:** Enter the sender's email address, from which the AFT files are sent. Sender can be a list of senders like Victoriastar.shipping@orange.fr
- Subject keyword:** Enter a subject keyword, which need to appear in the subject of the AFT emails (optional).
- Required body text part:** Allows to define a body-text.
- Siding destination:** The user can specify a second destination path. This will be used if the first path is not available.

7.2 Unpacking and storing

- **Store only matching attachments:** if enabled you can also enter a filename mask with an extension (like .doc) or an explicit filename for which this rule shall be valid. You can also enter a question mark for a variable character (e.g. .z?? for files ending with .zip, .z00, .z01 and so on). Alternatively, multiple extensions are possible like “.doc+.xls+.pdf”. It can be combined with “?” like “.z??+.rar” will include .zip,.z00,.z01 and .rar.

Note1: SkyFile Mail 7.50 and higher supports both of the two formats given above.



Note2: SkyFile Mail 7.50 and higher allows different rules for the same extensions from different senders and also allows multiple senders separated by additional commas.

- If “**Deliver mail body and other attachments to the inbox**” is checked, the other parts of the email are not deleted.
- **Store complete mail as EML file to destination directory:** in this case the text body is written as an .EML file and all attachments to a folder with the same name as the .EML file but without the .EML at the end.
- **Destination directory:** Enter or select the Windows directory where the incoming AFT files shall be stored.
- **Command line:** In case certain treatments are needed for the receiving files, you could enter a DOS-command line with the variable %1 for the full received filename and %2 for the previously defined destination directory. If the received files are ZIP-files (filename=.zip), by pressing “**Auto-Unzip**” a command to automatically unzip the files is inserted. Please read “UNZIP.TXT” in the SkyFile Mail installation directory for further options of the unzip-command.

Note: If you do not fill in fields, these items are not taken as selection criteria.

Note on network drive:

There are two ways to specify network directories.

- Network drive: a virtual network drive is configured on your (windows) PC. It is redirected to a drive or a directory on a file server. You can access those files with a path like M:\documents
- UNC path: this is the direct way to access to the network shares. The name looks like [\\servername\share-name\directory](#)

Examples:

- [\\server\c\documents](#)
- [\\192.168.0.34\c\documents](#)



The SkyFile AFT is able to use all of these naming schemes. Of course, it is important that the network directory has appropriate network access privileges. (read, write, create, delete).

So either a local drive, a network drive or a UNC path can be used for AFT-In directory and for the AFT-Out directory. Files can be picked up from all of these sources and can be store there.

*The Microsoft Windows **UNC**, short for **Universal Naming Convention** or **Uniform Naming Convention**, specifies a common syntax to describe the location of a network resource, such as a shared file, directory, or printer. The UNC syntax for Windows systems has the generic form: \\ComputerName\SharedFolder\Resource.*

Important note: UNC path works with SkyFile Mail version 8.0x and following.

7.3 New service with SkyFile v10.20 (Jun-18)

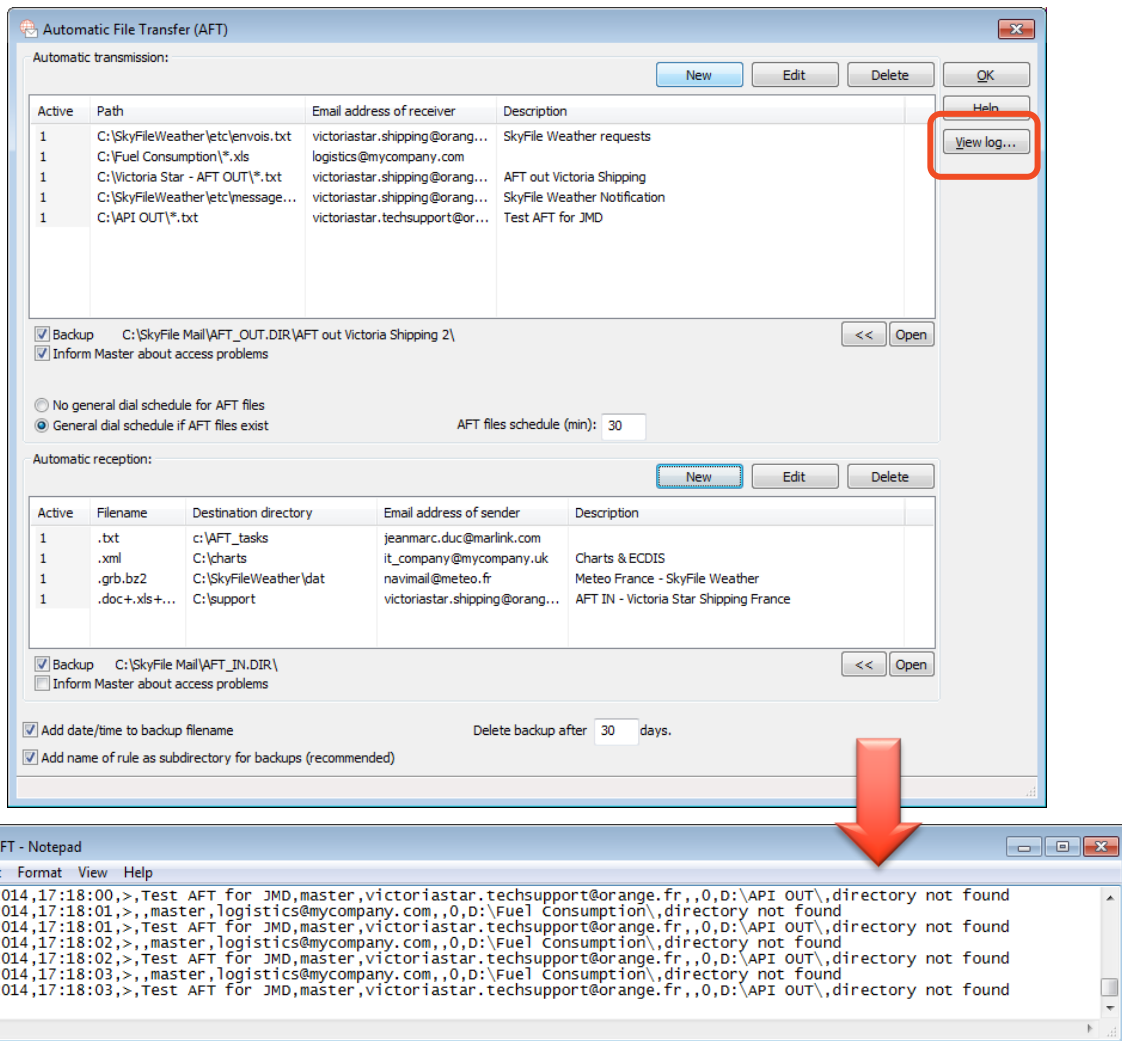
When defining a new automatic reception rule you can store an attachment not only based on its extension but also on the filename. When defining a new automatic reception rule, you can choose to define:

- Either the extension of the attachment
- Either the filename of the attachment

You can enter the whole filename of the attachment or only a part of the filename with the character "*" before and/or after the filename part.

8. AFT PROCESS LOG

There is an existing API log (API-LOG.txt) with limited information. It is accessible from the AFT configuration window. It can be viewed by clicking a button in the AFT configuration window, the Windows text editor is used to show the file.



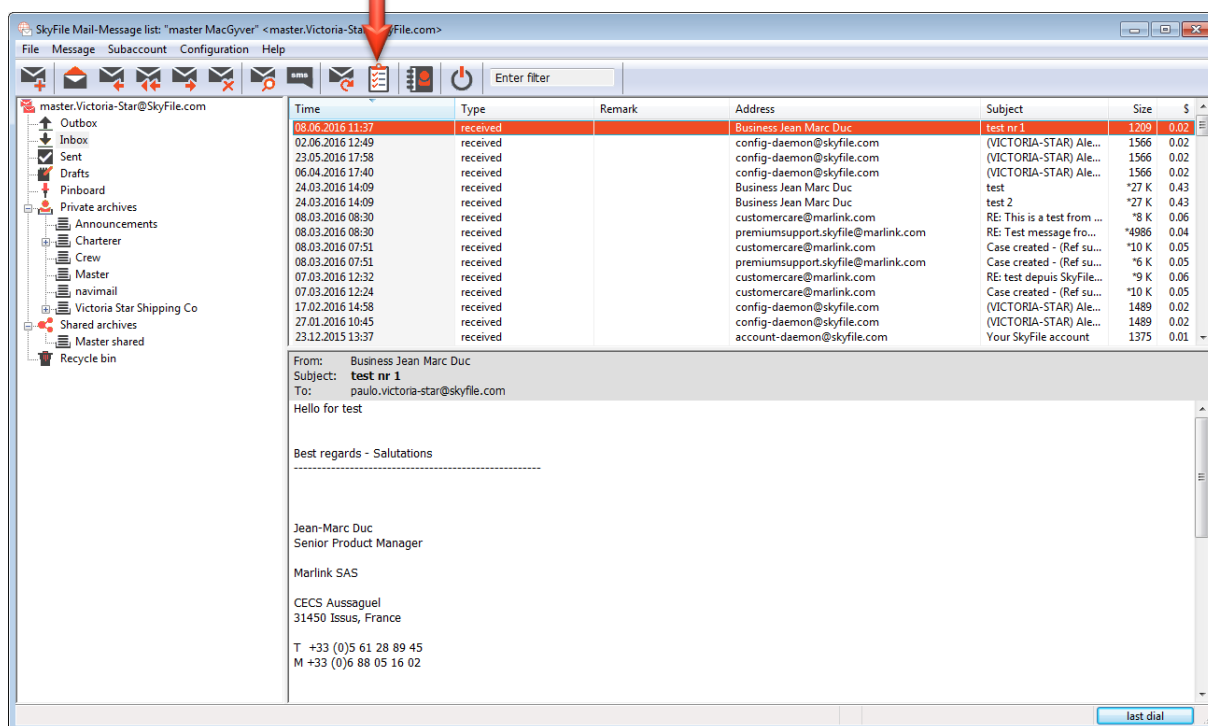
The new name is “**AFT-LOG.txt**” and it contains the following information for all files sent and received regarding AFT:

- Date/Time
- Type (in/out)
- Name of the rule
- Sender address
- Receiver address
- File name
- File size

- Directory
- Status
 - Sent
 - Received
 - Stored
 - Errors like “*directory not found*” or “*file access problem*” during scan process.

Important note: entries in the log older than the specified AFT backup time are removed if the file is bigger than 200 Kbytes.

In SkyFile Mail Client v8.27 and following, the file “AFT-LOG.txt”, is completed by a more easy-to-understand online tool named “**Call Detail Viewer**”, accessible from the main window of the interface to all customers/users.



From the **Call Data Viewer** interface, you can consult :

- Messages and AFT
- Messages only
- AFT only

The following example shows the “**AFT only**” files

Call Detail Viewer

Postpaid Prepaid Show connections for: <All accounts> Show attachments Messages and AFT
 Messages only AFT only
 Show all addresses

Search word in address, subject or filename: _____

Month	#	Time	Type	Emails	Duration	Volume	Compressed	Status
2014.09	23	10.03.2016 08:56:44	TCP 1:Indium OpenPort	1	4 s	290 K	28 K	Ok
2014.10	20			===	===	===	===	
2014.11	11		Total	1	4 s	290 K	28 K	
2015.01	2							
2015.02	3							
2015.06	1							
2016.03	1							

Day #

10.03.2016 1

<All> 1

Direction	Type	Account	Sender/Receiver	Duration	Volume	Compres...	Subject/File name
received	AFT	master	JeanMarc.Duc@marlink.com	1 s	290 K	28 K	test AFT (AFT: JMD Test)
	File				10 K	3 K	ALT_0000.HTM
	File				262 K	9 K	Anbi Virus log files.txt
	File				14 K	14 K	image001.png
	File				1 K	1 K	image002.jpg
	File				1 K	1 K	image003.jpg
	File				1 K	1 K	image004.jpg
	File				1 K	1 K	image005.jpg

Log-files can be easily exported in a common "CSV" format

9. WINDOWS STANDARDS

SkyFile Mail provides two general Windows standards to send files (only for ship-to-shore direction): **MAPT** and **MAILTO**. These standards can be used by ship management systems for the automatic dispatch of emails to terrestrial users. Please be aware that these mechanisms only work one way ship-to-shore.

9.1 MAPI (Microsoft Application Programmer Interface)

If you install SkyFile Mail as your standard mail handler, it allows MAPI-compliant applications like Word, Excel or Acrobat Reader to send emails. Please check the Microsoft documentations for further details.

9.2 MAILTO:

If you install SkyFile Mail as the standard mail handler, you can click on a "mailto" link in the Internet Explorer. SkyFile Mail will be started automatically and the destination mail address is filled in.

Example:

```
mailto:abc@prov.de?SUBJECT=Test&BODY=c:\work\test.txt&FILE=c:\autoexec.bat&AUTO
```

All parameters after the first question mark are optional (so mailto:abc@prov.de could be used, too) and describe the functions:

- *SUBJECT* the subject of this mail,
- *BODY* either the text itself, or a pathname to a text file,
- *FILE* an optional attachment (? and * can be used to send more than one attachment),
- *AUTO* can be used if this email should be sent without user interaction alternatively,
- *AUTO=subaccount* can be used in case the email should not be sent with the sub-account name currently configured on this PC.

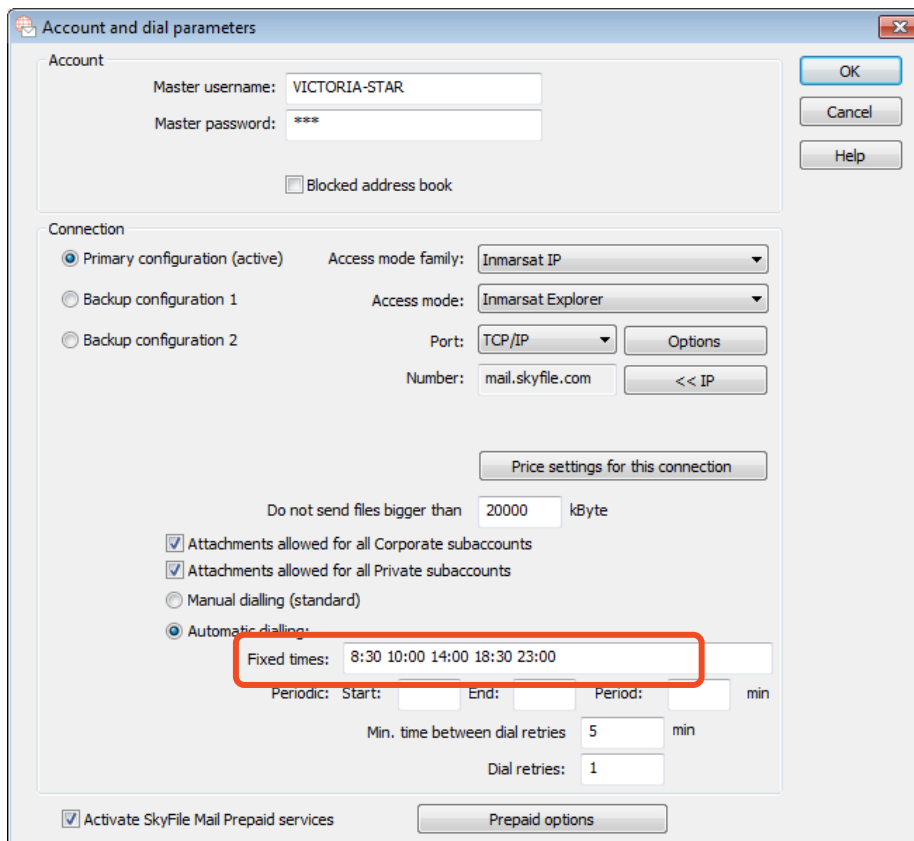
Within these parameters, spaces must be replaced by %20 and question marks by %3F. As a result, Autosync.exe will be called with these parameters in its command line.

10. SCHEDULED AUTOMATIC DIAL-IN

SkyFile Mail offers two dial-in options to automatically start the mail-exchange (dial-in) to transmit the data files (as defined in the previous paragraphs.)

10.1 Scheduled automatic dial-in at fixed times

10.1.1 Automatic Dial in at fixed times:



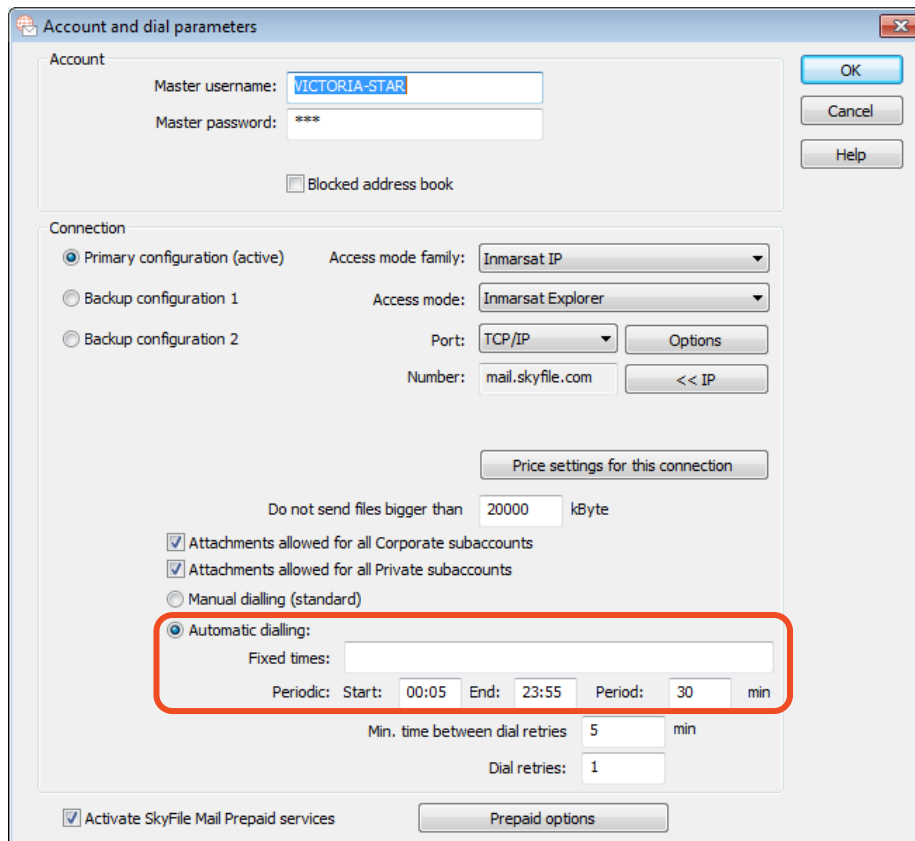
The screenshot shows the 'Account and dial parameters' dialog box. The 'Account' section contains 'Master username: VICTORIA-STAR' and 'Master password: ***'. The 'Connection' section has 'Primary configuration (active)' selected, with 'Access mode family: Inmarsat IP', 'Access mode: Inmarsat Explorer', 'Port: TCP/IP', and 'Number: mail.skyfile.com'. Under 'Automatic dialling', the 'Fixed times' field is highlighted with a red box and contains '8:30 10:00 14:00 18:30 23:00'. Other options include 'Attachments allowed for all Corporate subaccounts', 'Attachments allowed for all Private subaccounts', 'Manual dialling (standard)', and 'Automatic dialling'. The 'Min. time between dial retries' is set to 5 minutes and 'Dial retries' is set to 1.

To set your user-defined dial-in times for the automatic mail-exchange via SkyFile Mail, please define the times per day in the entry

"Configuration" → "Account & Dial parameters" → "Automatic dialling" → "Fixed times".

Important note: for minutes, only 00, 15, 30 and 45 are accepted and that the real dial-in can be carried out up to 10 minutes later (there is a random-generator). This is to avoid that in a fleet of 50 vessels with the same installation all vessels are dialling-in at the same time.

10.1.2 Automatic dial-in periodic



The screenshot shows the 'Account and dial parameters' dialog box. The 'Automatic dialing' section is highlighted with a red box. It contains the following settings:

- Automatic dialing:
 - Fixed times: [Empty text box]
 - Periodic: Start: 00:05, End: 23:55, Period: 30 min
 - Min. time between dial retries: 5 min
 - Dial retries: 1
- Manual dialing (standard)
- Attachments allowed for all Corporate subaccounts
- Attachments allowed for all Private subaccounts

Additionally to the automatic dial-in at fixed times, you can select the “**Periodic Automatic dial-in**”. It enables you to determine a fix time-frame during the day and a connection-time period.

For instance: an automatic connection every 30 minutes between 02:00 in the morning until 23:00 in the evening.

11. DIAL-IN EXECUTED BY THE SHIP MANAGEMENT APPLICATION

To provide the ship management system with the minimum of reply time of the land-based server, the files from the ship management system should be sent instantly after creation to the land side. And similar the files processed from the land side need to be received instantly by SkyFile Mail.

For this time critical case, the automatic dialling at fixed times might not be sufficient. As an alternative, SkyFile Mail provides a mechanism, where the on board-application can start the email transfer automatically. Actually, if the on board application saves a file with the filename "dial.now" into the SkyFile Mail directory (mostly "C:\skyfile\"), the email-transfer is started automatically. The file "dial.now" will be deleted after transmission! This mechanism enables the ship management system to create its own and more appropriate time schedule of dial-ins.

For the described time critical case above, dial-in sequences could be as follows:

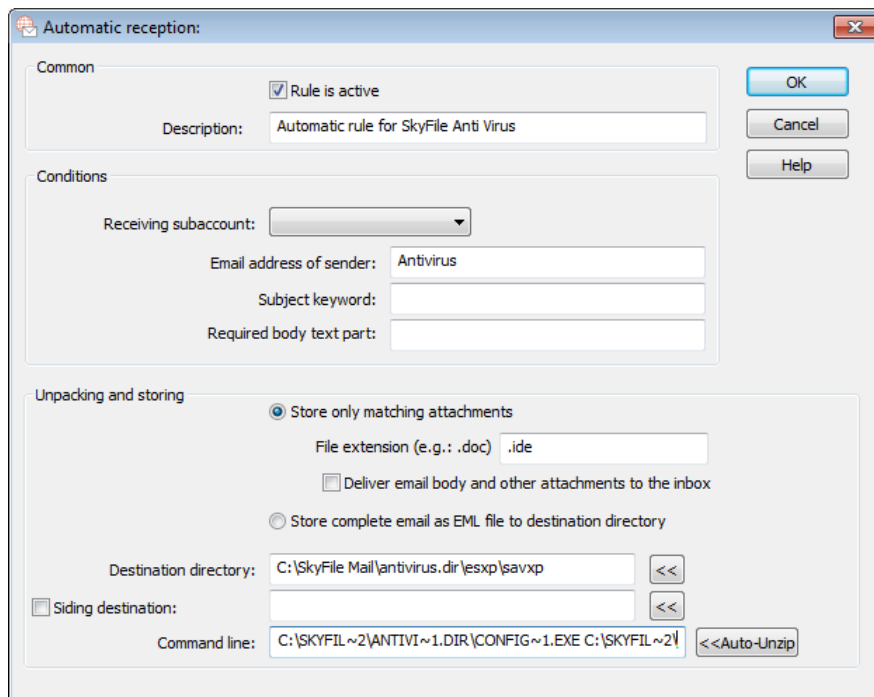
- 1) application puts files in AFT-OUT directory
- 2) application saves a file "dial.now" in the SkyFile Mail directory to send the files instantly to the terrestrial user
- 3) application is waiting for the maximum reply time of the land-based server (e.g. 1 hour) application writes a file "dial.now" in the SkyFile Mail directory to receive the files instantly from the terrestrial user

12. SKYFILE ANTI VIRUS

SkyFile Anti-Virus is an anti-virus software that protects your remote computer assets from potentially harmful viruses. Fully automatic anti-virus updates, notification and version verification ensures you keep your computers and Local Area Network safe even while at sea by combating a wide range of threats, including spyware, adware, Trojan horses and other **malicious software** (malware).

Software updates are performed automatically for all registered PCs of your vessels network thanks to SkyFile Mail's **Automatic File Transfer (AFT)** feature.

When SkyFile Anti-Virus option has been activated and only if you are using **SkyFile Mail V7.10** and higher, a new AFT is automatically registered into your local AFT functions list.



13. KUAS PATCH

A non-editable AFT rule is automatically created and activated as soon as KeepUpAtSea (Palantir's services) is activated on the shore-side. This AFT allows to receive software patches via email. This rule is neither editable nor changeable.

14. AFT COMPATIBILITY

Thanks to our close collaboration with the most important software-providers around the world, SkyFile Mail is 100% compatible with:

- BassNet Replicator



- Chartco



- Danaos



- GeoEye Orbimage



- Port It



- Spectec



- KUAS from Palantir



15. AFT – RETRANSMISSION

The AFT (Automatic File Transfer) functionality of SkyFile Mail v8.27 and following, supports new functions for backup handling and new options for AFT scheduling. Shipping companies might want to complete these functionalities by additional features for AFT. First this is the possibility to request a retransmission of already sent files from ship to shore, which should be initiated from the shore side. Furthermore there might be a hardware and software redundancy on the ships. There might be a second machine on board always ready to replace the working SkyFile installation.

A separated document describes the features implemented in that case.



17. NEED SUPPORT?

If you have any questions, please contact your Key Account Manager or Marlink Customer Care:

Email: servicedesk@marlink.com
EMEA: +33 (0)1 70 48 98 98
Americas: +1 (310) 616-5594
+1 855 769 39 59 (toll free)
Asia Pacific: +65 64 29 83 11