## 15 MISCELLANEOUS TOOLS :

A set of tools is available to the SysOp. These tools are for manual or automatic maintenance. In most of cases, these tools should be handled with caution, the process can be dangerous for the files.

Avoid using those tools while the server is in operation (the F9 command, as for an example), because the modification of some files duri operation can yield unpredictable corruptions.

### 15.1 INSTAFBB.COM (BIN).

This program is a fullscreen configuration of INIT.SRV. Most of commands are documented. You must only follow the instructions.

If the INIT.SRV file does not exist, you will be prompted to create a new one. Be sure that you are in the FBB directory when running INSTAFBB.COM.

If the INIT.SRV is not of the right version, you will also be prompted, but be carefull, as the results could be hasardous.

The comments of the original file are not changed.

### 15.2 EPURMESS.COM (BIN).

EPURMESS is a DOS tool which allows for modification of messages: status, removal, or archiving. This tool is called every night by the BBS in order to maintain the message list as a function of the time.

The EPURMESS configuration is made by the text file EPURMESS.INI. The parameters which are contained are given as a suggestion, and can be edited later if needed, to suit the targeted archiving and the mass of messages and bulletins received.

EPURMESS searchs the current directory for its EPURMESS.INI initialization file. In that file, it will find out all the parameters for processing, as well as the file name for the report EPURMESS.RES (this file name can be changed in the EPURMESS.INI file).

At the beginning of the process, EPURMESS first copies DIRMES.SYS into DIRMES.OLD to keep an archive trace of the previous file, then creates DIRMES.NEW, in which the processing will take place. At the end of the process, DIRMES.NEW will be copied into DIRMES.SYS. A repor processing will be written in the EPURMESS.RES file.

If the last update of the DIRMES.SYS file has been carried out more than 24 hours ago, EPURMESS will not make its process, in order to avoid any loss of data due to a possible clock error in the system. It will report the error in the EPURMESS.RES file. In such a case, after the reason of the error has been detected, it will be necessary to suppress the EPURMESS.RES report file, in order to re-enable the processing.

The ARCHIVE line has two digits, the first one applies to private messages and the second to bulletins. The '1' digit validate the archiving while the '0' will suppress the messages once and for all.

It is possible to specify origins, destinations or routing for which the obsolete time (X status) are different from the default values. These particular cases are specified at the end of the file with the form of supplementary lines. Each line specifies a particular case.

The line should begin with the character which specifies the field to be tested, then the content of the field and then the number of days before the status X is given.

```
The messages for ALL w
```

Ex : > ALL 1

The messages for ALL will be valide only one day.

Example of EPURMESS.INI file:

```
# message file directory
\FBB\MAIL\
#
# message archive directory
\FBB\OLDMAIL\
#
# binary messages directory
\FBB\BINMAIL\
#
# Fichier DIRMES.SYS
\FBB\SYSTEM\DIRMES.SYS
#
# previous file backup
```

```
\FBB\SYSTEM\DIRMES.OLD
# new file backup
\FBB\SYSTEM\DIRMES.NEW
# report file
\FBB\EPURMESS.RES
# Private and Bulletins : 0=destruction 1=archive
1 0
# PRIVATE MESSAGES EPURATION PARAMETRES
# PN -> PX (days after creation)
30
# PY -> PX (days after change into Y)
# PF -> PK (days after change into F)
\# PX -> PK (days after change into X)
# PK -> PA (days after change into K)
# BULLETINS EPURATION PARAMETRES
# BN -> BX (days after creation)
# B$ -> BX (days after creation)
# BY -> BX (days after creation)
# BX -> BK (days after change into X)
# BF -> BX (days after creation)
# BK -> BA (days after change into K)
-----
# Special cases
> ALL 1
@ FRA 10
```

## 15.3 EPURWP.COM (BIN).

 ${\tt EPURWP}$  is a DOS tool which allows updates and modifications of the white pages database.

An optional parameter can follow and specify the number of days for a data to be valid. If the temporary part of the record has not changed during this number of days, then it will be considered as stable and transfered to the primary (used) part.

### 15.4 LOGSTAT.EXE (BIN).

Statistical analysis software for the FBBLOG file written by FC1MVP.

The configuration file for this software is in the text file LOGFBB.CNF, which should be located in the same directory.

### LOGFBB.CNF file layout :

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This file is made of several lines indicating:

- BBS Callsign
- the name of the SysOp port, a comment.
- The abbreviated name of the 1st port, a comment.
- The abbreviated name of the 2nd port, a comment.
- and so on until the last port (8 ports maximum).Three stars (\*\*\*) at the beginning of the line means the end of the ports.
- The BIOS screen access option.

The BBS callsign must have 6 characters maximum. It will be truncated should it be longer.

The abbreviated port name may have up to 10 characters, it is recommended to limit at 4 (ex VHF1 or HF2).

A comma separates the abbreviated name from the comment which follows it, without any space. The comment may have 10 characters too (frequency).

At the end of the comment, it is possible to add a comment which is internal to the CNF file, and which will not be used elsewhere, using the ":" as a separation.

If the BIOS line has a NON at the beginning, the screen access will be direct. The word OUI means that the screen access is made via the BIOS. The direct access improves the processing speed by 50 percent but is careless with DesqView.

#### Example of LOGFBB.CNF file:

\_\_\_\_\_

```
F6FBB: BBS name.

SYSOP, at keyboard: port name @, comment.

VHF, 144.675: Port A, comment.

VHF, 145.275: Port B, comment.

UHF, 430.675: Port C, comment.

HF, 21.107: Port D, comment.

SHF, 1299,675: Port E, comment.

MODEM, Telefone: Port F, comment.

*** End of ports definition.

NON: Screen access through BIOS (OUI) or Direct (NON).
```

### Software limitations :

The software is able to handle a log file within the following limits:

- Maximum number of days : 35, or 5 weeks if you chain 5 log files.
- Maximum number of channels: 50

- Maximum number of ports : 8+1, corresponding to ports A to H handled by the BBS and the SysOp keyboard "port".
- Maximum nr of callsigns : 300 (This is not the number of the call signs known by the BBS, but the number of calls which were used the BBS during the log period.

In case an overflow occurs, the mention AUTRES for the callsign and 99 for the day will be displayed in the corresponding areas.

Regarding the forward efficiency, only the stations which have actually forwarded will be given a value, the others will be mentioned "nc".

## Usage :

On the same diskette (or the same disk) there should be at least the program LOGSTAT.EXE, the config file LOGFBB.CNF and enough disk free space for the result files to be created. The log file may stay on another diskette.

For the startup you should type in LOGSTAT FBBLOG.nn (nn is the number of the week) or A:FBBLOG.nn (if the file is located on A:)

The results are recorded into the files LOG.@, LOG.A ... LOG.T being the total of the logs.

### Archiving:

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A suggestion: you should better archive your FBBLOG.nn file rather than the LOG.x files. You should ZIP them (or ARC or LZH) with the name LOG990nn.ZIP (.ARC or .LZH) with 990 standing for 1990 (000 will be for 2000...) and nn is the number of the week.

## Log structure :

The number of resulting files created is equal to the number of ports of the BBS plus 2. The 2 supplementary files correspond to the console port and the sum of the various ports as being the total result.

The first log, named LOG.@ corresponds to the SysOp log (console), the last one, named LOG.T is the summation of the ports. The files LOG.A to LOG.H are the logs of the various ports.

Obviously, if a port has not been used, the corresponding file will not be created.

For each LOG.x file, you find in the following order:

- Diary of the connections per day (y-axix) and the time (x-axix) with the daily total at the end of the line and the hourly total at the bottom of each column.
- The total connection time: it is the sum of the connection times of each user. For the LOG.T file, the total connection time per channel will also be given.
- Mean time per connection : this is the total connection time divided by the number of connections.
- Mean time per user : total connection time divided by the number of users.
- Number of killed messages : self explanatory.

- Number of read messages : idem.
- Number of users.
- A matrix of forwarded messages per day (y-axix) and per hour (x-axix) is made like before. This matrix will not appear if there has not been at least one forward on this port.
- Number of forwarded messages: number of messages sent to another BBS or  ${\sf PMS}$ .
- Number of messages received in forward: number of messages transmitted by other BBS in forward.
- Number of messages received in back-forward: number of messages received from another BBS when forwarding towards it.
- Number of messages refused as already received.
- An array giving the number and the size of the messages received from or sent to another BBS and the efficiency in Bits/s (Max  $1200 \, !$ ).

The BBS's are sorted by alphanumeric order, and the efficiency indication appears for callsigns having conducted only forwarding operations. This matrix will not appear unless there has been at least one BBS forwarded.

- A matrix of the main functions utilized, with on the y-axix the callsigns sorted by alphabetical order, and on the x-axis the total time of connections in minutes, the number of connections, and the various functions used (see the comment following the array).

In the LOG.T file, the X.F column (forced disconnection entered by the SysOp) is replaced by the number of killing commands. At the end of each column is the compound sum.

# Log of a specific station.

- The LOGCALL program yields generation of a log for a specific station

The principle of operation is the same as for LOGSTAT, except that a supplementary calling parameter is required to define the station.

### LOGCALL FBBLOG.33 FE1ZZZ

The generated file will be of the same format as the FBBLOG, but it will enclose only the lines specific to the callsign. The name of the file will match the format FE1ZZZ.LOG, if the requested callsign is FE1ZZZ.

While executing LOGSTAT FE1ZZZ.LOG, you will have the statistics related to that station (in the LOG.A, LOG.B,...).

If you specify the SSID, you will create a log corresponding only to the callsign and the specified SSID. Ex:

#### LOGCALL FBBLOG.33 FE1ZZZ-2

Editing the file  ${\tt FE1ZZZ.LOG}$  will allow you to display all the commands sent by that station.

```
15.5 SATUPDAT.EXE (BIN).
```

SATUPDAT.EXE will read messages from AMSAT copied via packet radio. This is the english version of AJOURSAT.EXE. This software was developed by F6BVP.

It extracts keplerian elements both in NASA and AMSAT formats and updates the results into the satellites data base of the F6FBB's BBS (SATEL.DAT)

Loading SATUPDAT without arguments will print the following message on your screen (between lines ----):

\_\_\_\_\_

Automatic update of satellites orbital parameters for F6FBB's bbs Version 1.77e - June 1991 - Bernard Pidoux, F6BVP

Usage: SATUPDAT [file name<.txt>] </option> </option>

```
Reading option:
/a AMSAT format (default)
/n NASA format

Update option:
/f merging new and old data (default)
/u update only satellites present in the

data base
/s keep only satellites present in the input file

<<767 satellites maximum>>
```

This version 1.77e verifies checksum both for AMSAT files and NASA files. For automatic update of keplerian elements into F6FBB's bbs just create a virtual BBS into BBS.SYS file. Its name could be AMSAT for example.

Then declare the following forward in the file FORWARD.SYS :

```
A AMSAT

*
G AMSAT

P @
C C:\FBB\SYSTEM\SAT\AMSAT.TXT

*
-----
```

CAUTION: The name of the disk unit and the path name should be the exact one of your configuration.

In order to run automatically SATUPDAT when your computer boots, you must modify the batch file like the following example:

```
:direct
if not exist c:\fbb\system\sat.amsat.txt goto appel
cd \fbb\system\sat
satupdat amsat /n > satupdat.res
satupdat amsat >> satupdat.res
del amsat.txt
cd \fbb
:appel
echo Running the BBS ^C for stopping
sleep 3
serv -t
```

if errorlevel 2 goto direct
if errorlevel 1 goto suite
:suite

(Once again be carefull with the disk name and directories !)

# SATUPDAT OPTIONS

The default extention for input file is .TXT, however you can specify another extention.

Both arguments after the filename in the command line are optional: the first one indicates the reading format, either the AMSAT format or the NASA "2-line" format. The first one is selected by default.

The second option is for the choice of update mode. By default the program will merge the old list with the new one (same if you select option /f). Old data of satellites which are not present in the input file are kept as is and the other one are updated.

Option /u can be selected if you dont want to add new satellites to the one already present. Only keplerian elements from known satellites are updated. This prevents the list to grow with incoming satellites that you are not eventually interested in.

Option /s, on the contrary, gives you the possibility to keep only in the data base the data from the satellites whose name is in the input file.

This can help you to suppress old satellites from the data base.

In all cases the program takes care of the permanent data of satellites such as the frequency (for doppler) and the step for computing the tracking (you must provide both manually only the first time).

If the keplerian elements of the input file are older than the one already present in the BBS data base, the old one are kept.

The list is sorted by name in order to help the finding of the satellite name when someone is connected to the BBS.

If elements for one satellite are duplicated in the input file, the program will look again for the newest data.

Of course, if CRC computed by the program is not the same as the one in the input file, the program informs you that the CRC is BAD and it does not take the keplerian elements.

In the batch file example given above you have certainly noticed that I call twice the program SATUPDAT with two different format arguments. The first time I ask the program to read the NASA format and the second time to read the default format AMSAT. The reason is that the probability for an error to occure in both formats for the same satellite is very small. Thus if an error occurs in one format the program will complete the update when he will found unaffected keplerian elements in the other format. Thanks to the recently adopted checksum by AMSAT!

## 15.6 SLEEP.COM (BIN).

Utility which spends the time (in seconds specified as argument) while doing nothing. It can be interrupted by a Ctrl-C, and allows interruption of a Batch file running.

The syntax to call it is of the type :

SLEEP nn

nn is the number of seconds to wait.

## 15.7 TLABEL.COM (BIN).

Utility to update the file YAPPLDL.SYS which contains the various labels (informations) of the files received while the YAPP protocol was used. TLABEL renames YAPPLBL.SYS into YAPPLBL.OLD and creates a new YAPPLBL.SYS containing only the labels of the existing YAPP files. This program was written by FC1EBN.

The execution of this utility should be done only in the directory  ${\tt SYSTEM}$ . There is no argument for this command.

### 15.8 MAKEPG.COM (BIN).

\_\_\_\_\_

Utility used to generate .EXE (or .COM) program file out of the binary file (xxx.BIN) using English or French language.

The syntax is of the type:

MAKEPG program FR
To generate a program in French

MAKEPG program GB
To generate a program in English.

 ${\tt MAKEPG}$  can transform the following programs :  ${\tt SERV.BIN}$   ${\tt ->}$   ${\tt SERV.EXE}$ 

MAINTINF.BIN -> MAINTINF.COM EPURMESS.BIN -> EPURMESS.COM EPURWP.BIN -> EPURWP.COM

### 15.9 SETUSER.COM (BIN).

Utility giving the property of a file to a user for further use by FBBDOS.

The syntax is of the type:

SETUSER callsign filename.

The command "SETUSER F6FBB TOTO" will allow F6FBB, and him only, to modify or delete the file TOTO.

## 15.10 CLEANUP.COM (BIN).

Utility killing all messages files unused and not defined in DIRMES.SYS. This program should be run in the SYSTEM directory.

The syntax is of the type :

CLEANUP mail\_directory

Be carefull when using this utility. If another directory than MAIL or  ${\tt BINMAIL}$  is specified, it should delete all the files of the directory.

## 15.11 MAINTINF.COM (BIN).

Utility maintaining the INF.SYS file. The INF.SYS file holds the users' database. In case of problem in INF.SYS file, goto the SYSTEM directory and run MAINTINF followed by a number of monthes. The records of users not connected within this number of monthes will be deleted and these users will be asked as for a new connection. The number 0 will not delete any record and only check the INF.SYS file.

## 15.12 MAINTREJ.COM (BIN).

Utility maintaining the REJET.SYS file. The REJET.SYS file describes the Reject, Hold and Local hold informations.

The program reformats the lines and verify the number of parameters.

# 15.13 CUT.COM (BIN).

Utility allowing to peak a part of a file and copy or append it to another file. The format is:

CUT From-file To-file length offset [/A]

To-file will have added up to length bytes of From-file, starting at offset. If the switch /A is specified, then datas will be appended to To-file, otherwise To-file will be replaced.

This little utility is usefull to take parts or file, or to do copy/paste with either binary nor ascii files.

Together with the specification of the offset in the XGET command, in case of crash, first note the amount of datas already received (ie: 50300), save the part of the file already received, and then ask "XGET filename 50000". The transfert will start at offset 50000 and then you will be able to receive the end of the file. The paste the two parts, either with COPY command or with the CUT command. It is more secure to cut the first received part before as the last bytes should be garbaged.

16 WHITE PAGES DATABASE AND SERVER

#### 16.1 DESCRIPTION.

-----

The White Pages implementation in FBB software has been based upon the WORLI model (many thanks to Hank for his work). I've tried to maintain a high degree of comptibility whilst making further development to my own criteria.

I shall try to explain how FBB White Pages works.

I have probably mis-understood some features of WORLI's specifications but I hope that this will not greatly affect the compatibility.

First of all, why do we need White Pages?

White pages has some interesting features. Not least:

- ${\rm -}~{\rm A}$  dynamic database containing users Name, zip code, HomeBBS and QTH (as well as other fields).
- Automatic addressing/routing of mail to the HomeBBS of the destination callsign.
- A White Pages server for remote interrogation of the database.

The database information is updated, firstly from the information given by users when they exercise the N, NH, NQ and NZ features at their home (or another WP equipped) BBS; and secondly, from information contained within the messages headers as they traverse the Network.

The database is dynamic, it is changing constantly, and it updates itself in real time. Either as soon as a line of a message header is received when in ASCII forwarding mode, or when a complete message is decoded in compressed forwarding mode; or else when a user disconnects from the BBS (this is to prevent multiple updates being generated during a session).

So, the database can hold many callsigns. In fact it maintains a list of all the callsigns seen from all individuals sending messages as well has all of the BBS's seen in the forwarding paths. More than 10,000 valid records is not impossible today, and this will surely increase as the number of packet radio users grows with each day. This will allow user to send messages to other users around the world without necessarily having to be concerned to find their full Heirarchical Address, the old principle of the user typing:

BBS PROMPT > SP K6VAZ @ KM6WU.#CENCA.CA.USA.NOAM

should now be replaced by the user entering:

BBS PROMPT > SP KM6VAZ

The BBS will add the HA and send the response:

BBS PROMPT > SP K6VAZ WP ROUTING @KM6WU.#CENCA.CA.USA.NOAM ADDED TITLE ?

If the routing destination HA is not recorded in the database then the user will be advised and prompted to enter the address manually.

Another capability of FBB White Pages is the automatic sending of update messages to other BBS's. These messages are generated every night during House-Keeping and are a listing of the additions and modifications made to the database during thhat day. These messages are sent addressed both to and from WP.

When passing through or terminating at another White Pages equipped BBS, the message will automatically update the 'local' WP database at that BBS. This feature MUST BE USED WITH CARE, as updates can generate a lot of traffic and the Network must be able to support it.

\*\*\* It's not be a good idea to send these update messages on HF ! \*\*\*

A built-in White Pages server (WP) will provide information from the database in response to a remote request. This server is described in paragraph xx.

All files used by White Pages are in the FBB\SYSTEM\WP subdirectory.

### 16.2 UPDATE REQUESTS.

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The database receives information from three sources. The s indicated on each line of the update message as a suffix to the callsign:-

- The /U suffix denotes that the information in this line of the update is User-Generated as is therefore assumed to be CORRECT. This information is collected by the BBS whenever the User responds to the N, NH, NQ or NZ commands. The date associated with the information is the date when the User disconnects that session.
- The /G suffix denotes that the information in this line has been gathered by examining the header of a message to GUESS at which BBS the sender is registered. The HomeBBS of the User is assumed to be the BBS shown in the first R: header line. The date associated with this information is the date shown on this R: header line.
- The /I suffix denotes information about forwarding BBS's taken from the R: header lines. This information can consist of the HA (the Heirarchical Address), the QTH (within brackets) and the zip code (following the Z:). The date of this information is again taken from the R: header line of the BBS in question.

When the BBS is idle the Database Manager is called and the update information detailed above is processed.

#### 16.3 DATABASE DESCRIPTION.

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The database is composed of individual records. Each record following components:

- Callsign and Name.
- Active information.
- Temporary information.

The active and temporary information components are identical and each includes the following fields: