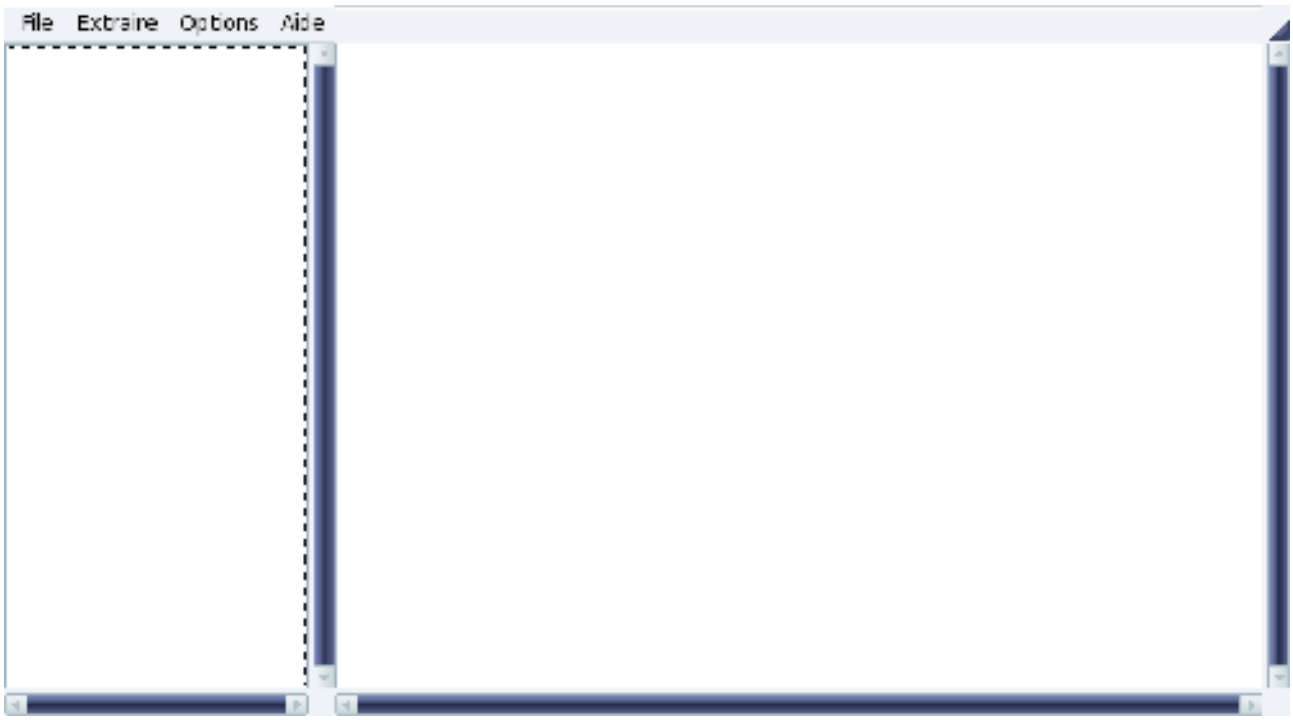
Follow instruction in the INSTALL file to compile and install awsedit.
Then at the prompt, type:
$awsedit
This leads you to:



Structure of the menu

File:

1. open an aws tape file (Ctrl-O)
2. Find string or hexadecimals in aws file (Ctrl-F)
3. quit (Ctrl-Q)
4. settings (Ctrl-S)

Extraire (extract)

1. switch to Convesion mode (this will be explained later)
2. load or save configuration file (this will be explained later)
3. set the data type (this will be explained later)
4. record data

Options

1. EBCDIC data expected
2. ASCII data expected

Aide (help) Some useful informations.

Warning :

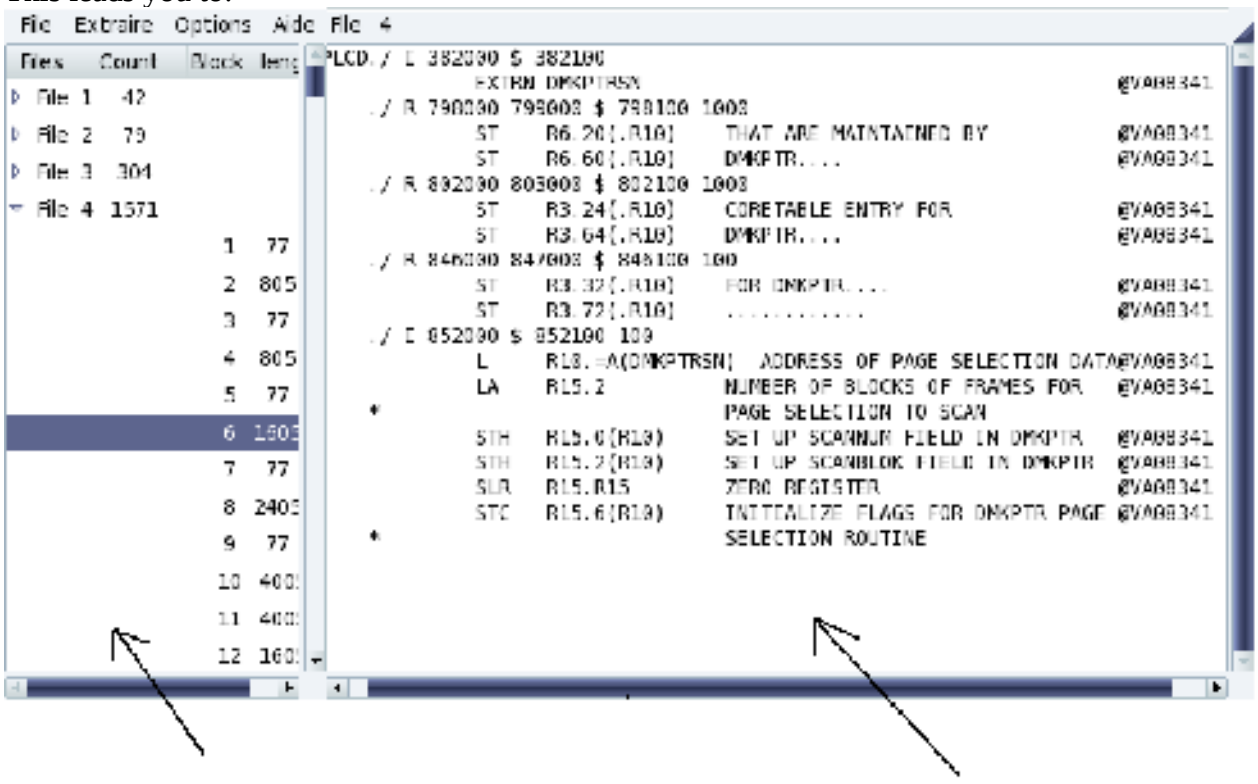
Most comments and legends in Awsedit are in french because this program was intended for Algeria where people master this language.
So when I started to write awsedit in 2007 I never thought that one day I would have to put it on the net. This has been possible, thanks to github.

Trying Awsedit :

Awsedit accepts only one argument: the AWS file name.
At the prompt, type:

$awsedit tape/ptf-616.aws

This leads you to:



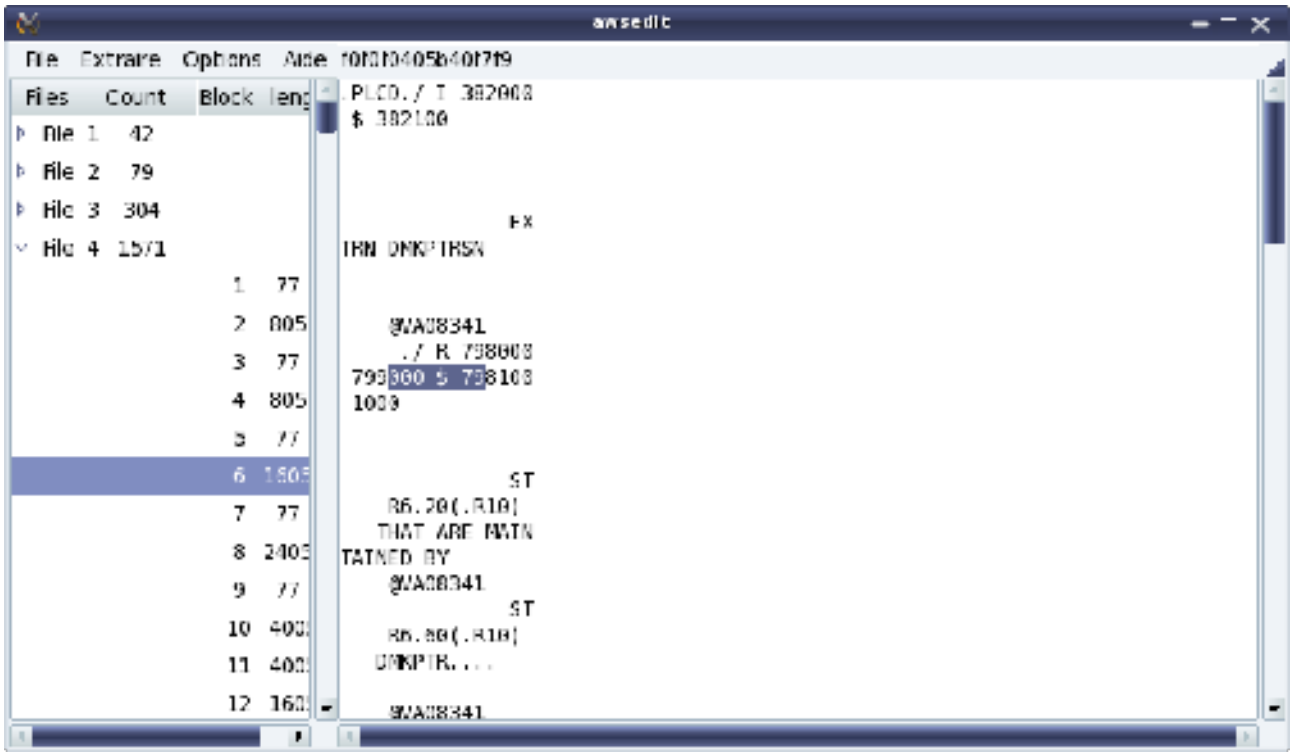
This pane lists files and blocks within them.

This pane displays content of a block

In general, blocks contain logical records with a fixed or vaiable length. In case of source or executable programs, records are usualy 80 bytes length. Thus in awsedit the default record length is set to 80. To modify or adjust it do: **File → Settings**

As an example, just modify the record length to 16.

The right pane becomes:



About the right pane:

Of course, only bytes that have graphical representation are shown. All the others are replaced by a dot. Nevertheless, It is possible to view the corresponding hexadecimals by highlighting a field then pressing the right button of the mouse.The hexadecimals are displayed on the status bar above.

The width of the right pane.

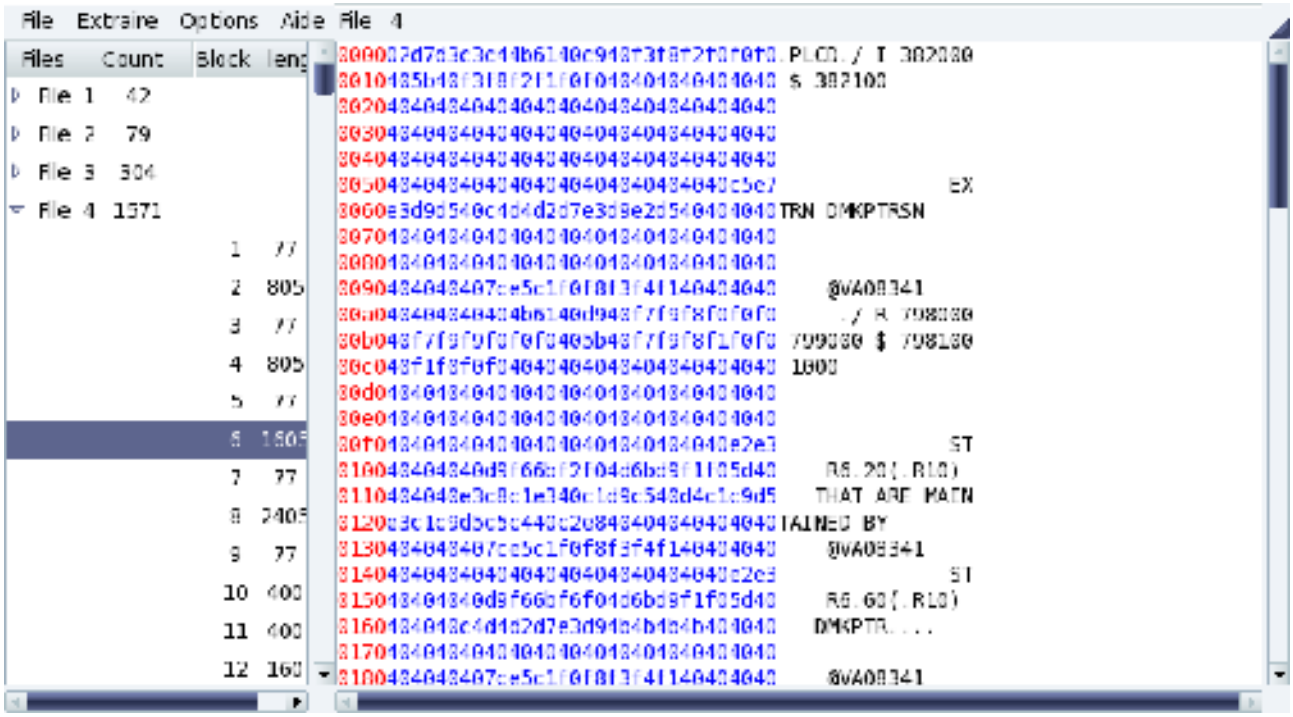
I introduced a limit to the width of the right pane to 4750 bytes length because beyond characters will not be viewable. I never mind about that, but if this limit is a constraint I can remedy it.
Notice: This LIMIT is suppressed, the record length could be up to 65535 (maximum block length).

It is possible to display a permanent hexadecimal array and (or) index by doing:

File → Settings

then checking the following boxes

This leads you to:

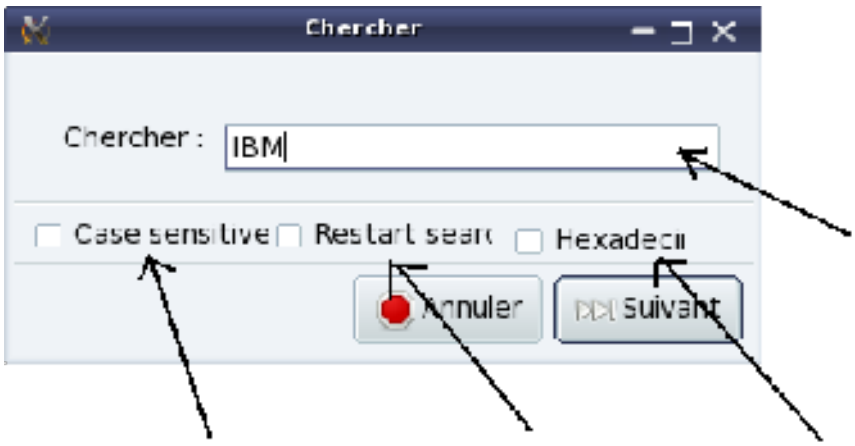


The index is colored in red and the hexadecimal array is colored in blue.

In both cases, even with the index and (or) hexadecimal arrays, you can do a search:

File → Rechercher(Find) or Ctrl-F

The following dialog box will be displayed:

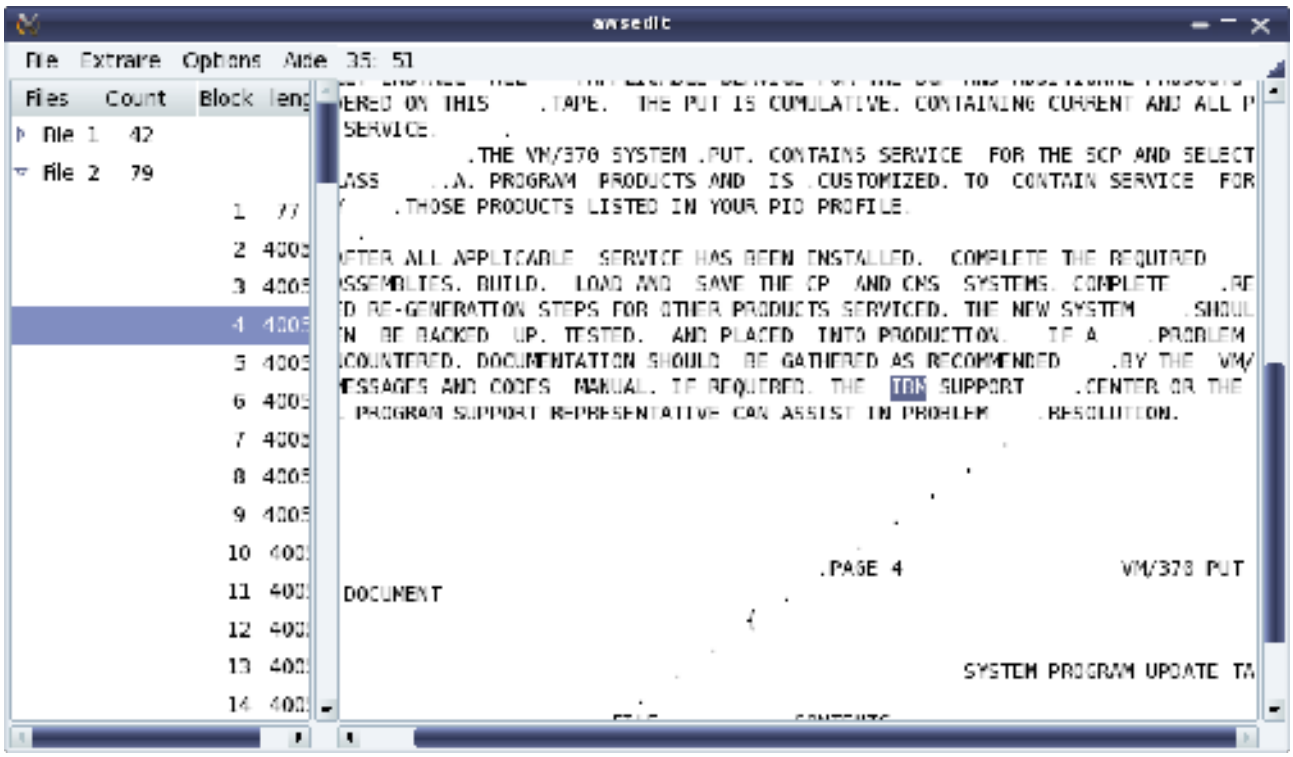


The string you search (no regular expressions)

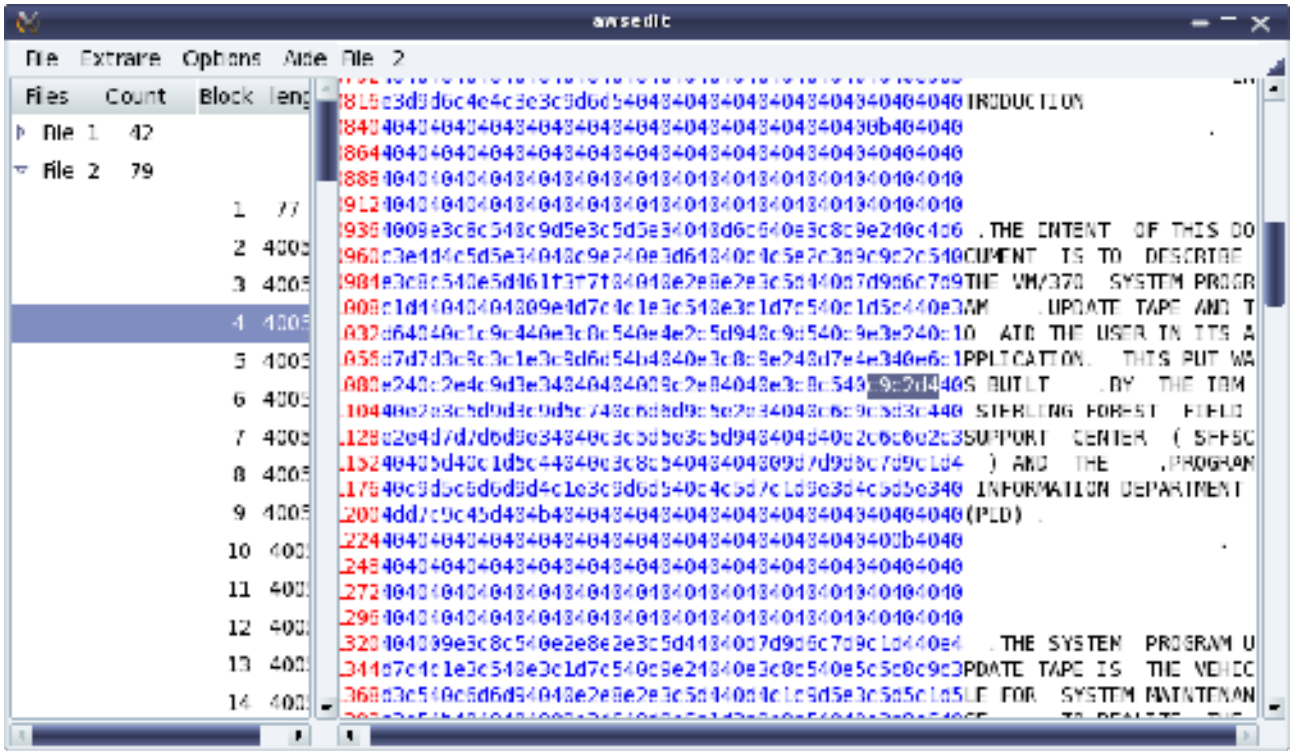
check this box if your string is in hexadecimals

check this box for case sensitive check this box to restart the search

If you search for string «IBM» or its equivalent hexadecimals «c9c2d4» in EBCDIC , in either case you will get:



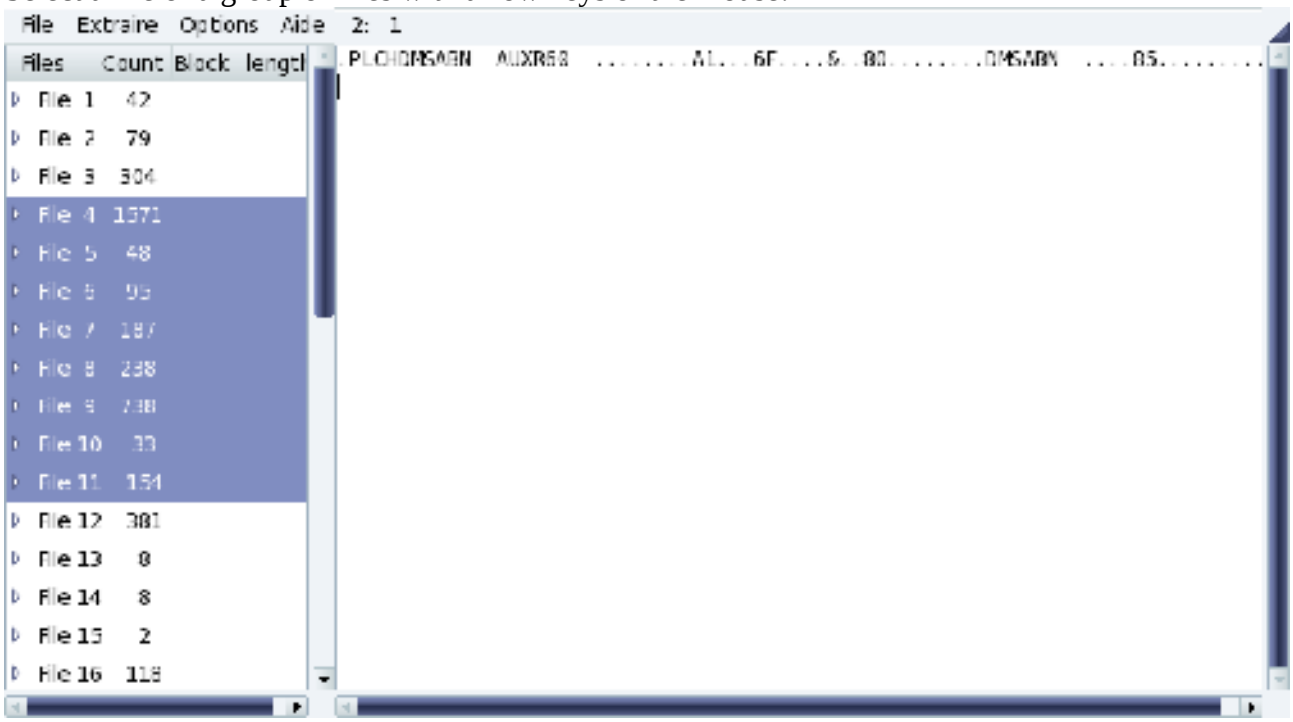
or the following:



Result of the search when both the index and hexadecimal boxes are checked in the settings dialog box.

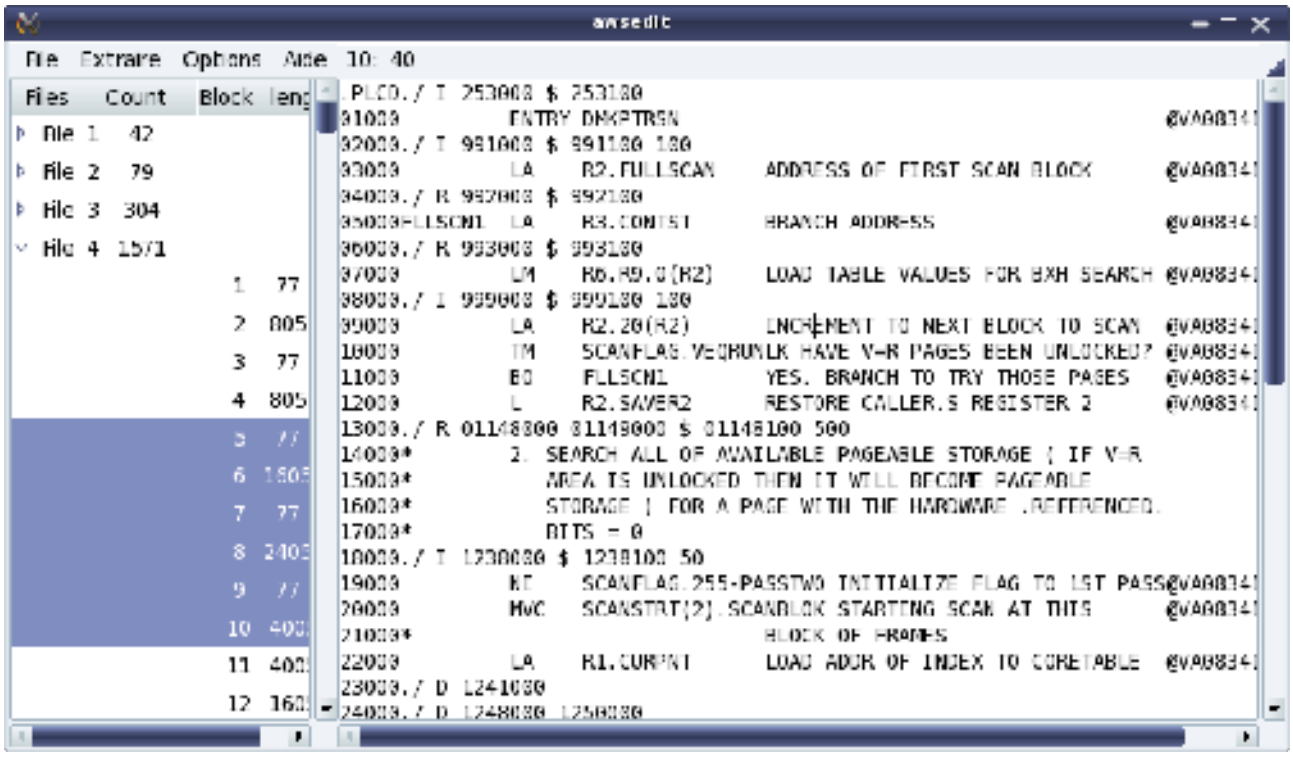
Extracting data.

Select a file or a group of files with arrow keys or the mouse:



When you are at File level, only the first block of the selected file is displayed. To view the entire file you must expand it.

or a block or group of blocks:



Then activate menu: **Extraire (Extract)→ Enregistrer (record)**

The following dialog box is displayed.

While not recommended, before recording, It is possible to modify the sequence of the selected files or blocks.

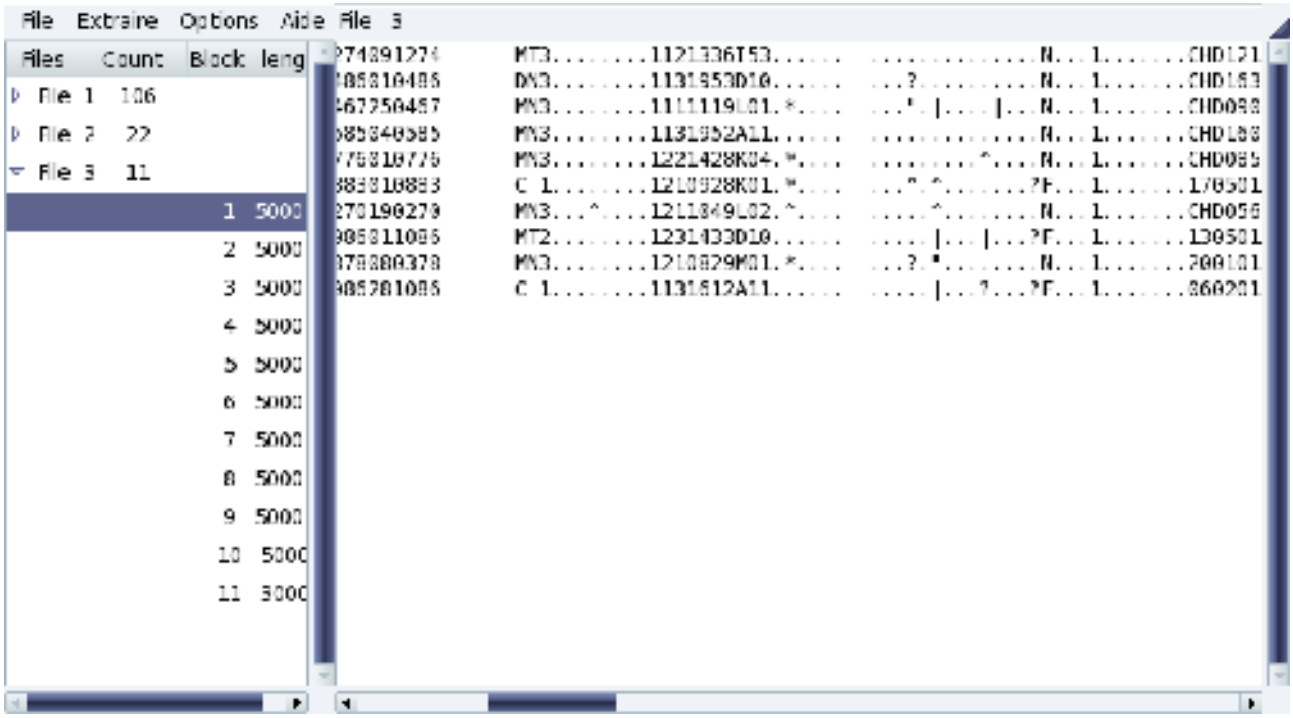
Warning:
Records of DOS files end with two bytes (x'OD' x'OA') while those of UNIX files end with only one byte (x'OA').

Very Important!

The Awsedit's paradigm is «**what you see is what you get**».This means that in both cases, either in EBCDIC or ASCII, you will never get raw data: What is displayed is what is recorded !

Nevertheless, and only in case when EBCDIC option is set, it is possible to select some fields to be translated from raw to ASCII while data is extracted. These fields must be either in packed decimal format or zoned decimal format. And this is allowed only for data files that contain sequential fixed length blocked records.

As an example, lets display the content of a data file on tape that contains sequential fixed blocked records with a fields in zoned decimal format and others in packed decimal format.



File 3 is composed of blocks that are 5000 bytes length. Within them records are blocked by 10. Thus setting the record length to 500.

Notice

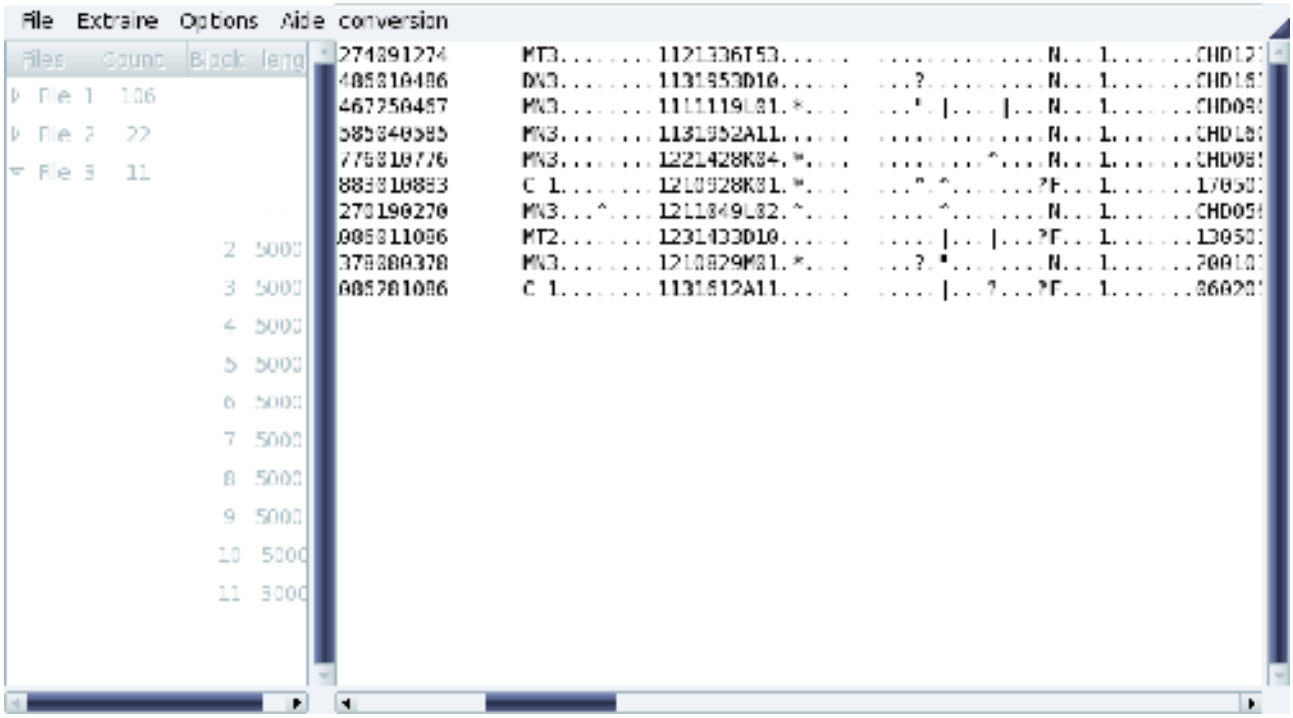
In the right pane some fields are unreadable because they are in packed decimal format and therefore they don't correspond to graphical EBCDIC characters. So they are replaced by a dot.

Definitions

The zoned decimal format and the packed decimal format are used in COBOL to define numbers and correspond, by example, to PIC S9(7)V99 for zoned decimal and to PIC S9(7)V99 comp-3 for packed decimal. To understand decimal numbers refer to IBM documentation:
Entreprise System Architecture/ 390 Principles of Operation (Chapter 8. Decimal Instructions).

Selecting fields

Before selecting fields to translate you have to choose a block within a file then enter Conversion mode by going to menu: **Extraire (extract) → Conversion. Result: the left pane will be frozen.**



Once in the conversion mode, if you press the right button of the mouse a popup menu appears.

The popup menu contains four entries:

1. **Packed decimal**
2. **Zoned decimal**
3. **Suppress field**
4. **Annul**

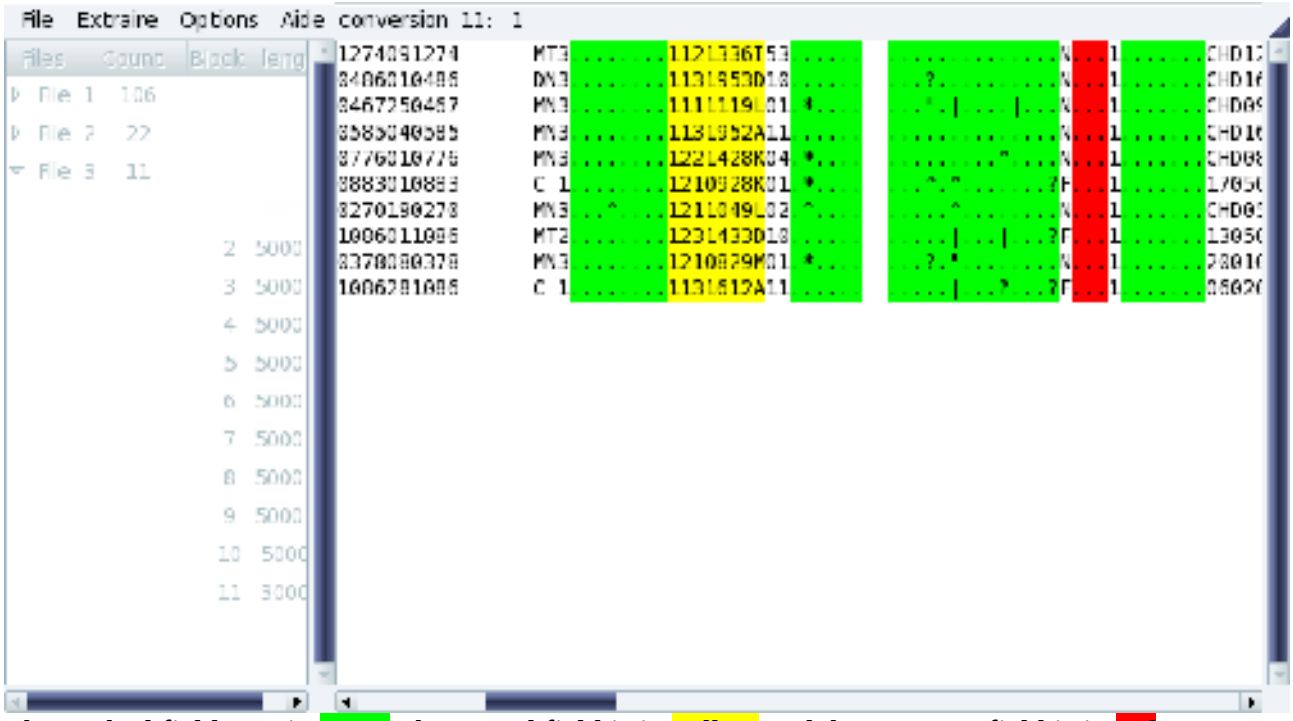
About the popup menu.

If you have not already highlighted a field all the entries in the popup menu are grayed. But once you highlight a field and press the right button of the mouse, the first three entries become visible.

The Annul entry will be visble after you have selected at least one field. It lets you remove the last selected one.

The Suppress field entry lets you select fields to be bypassed when data is extracted.

Lets select some fields:



The packed fields are in green, the Zoned field is in yellow and the suppress field is in red.

To be fast, you can gather several contiguous numbers that are either zoned or packed in the same field.

Before extracting data you must choose how the Zoned and Packed fields will be converted. So go to menu : **Extraire (Extract) → Type ->**

1.**TRAILING SEPARATE**

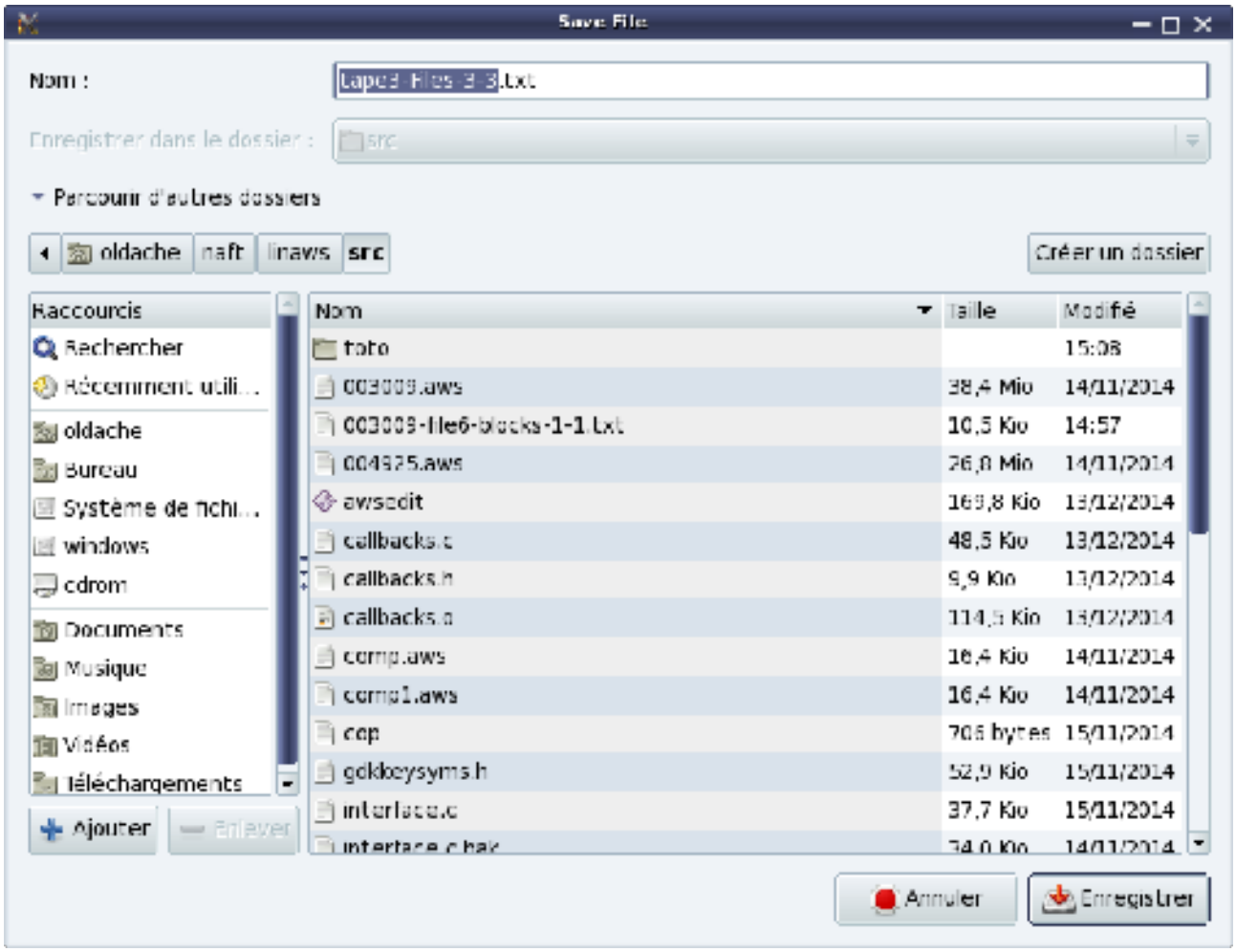
2. **IBM MScobol**

IBM MScobol is the default. TRAILING SEPARATE is an alternate format.

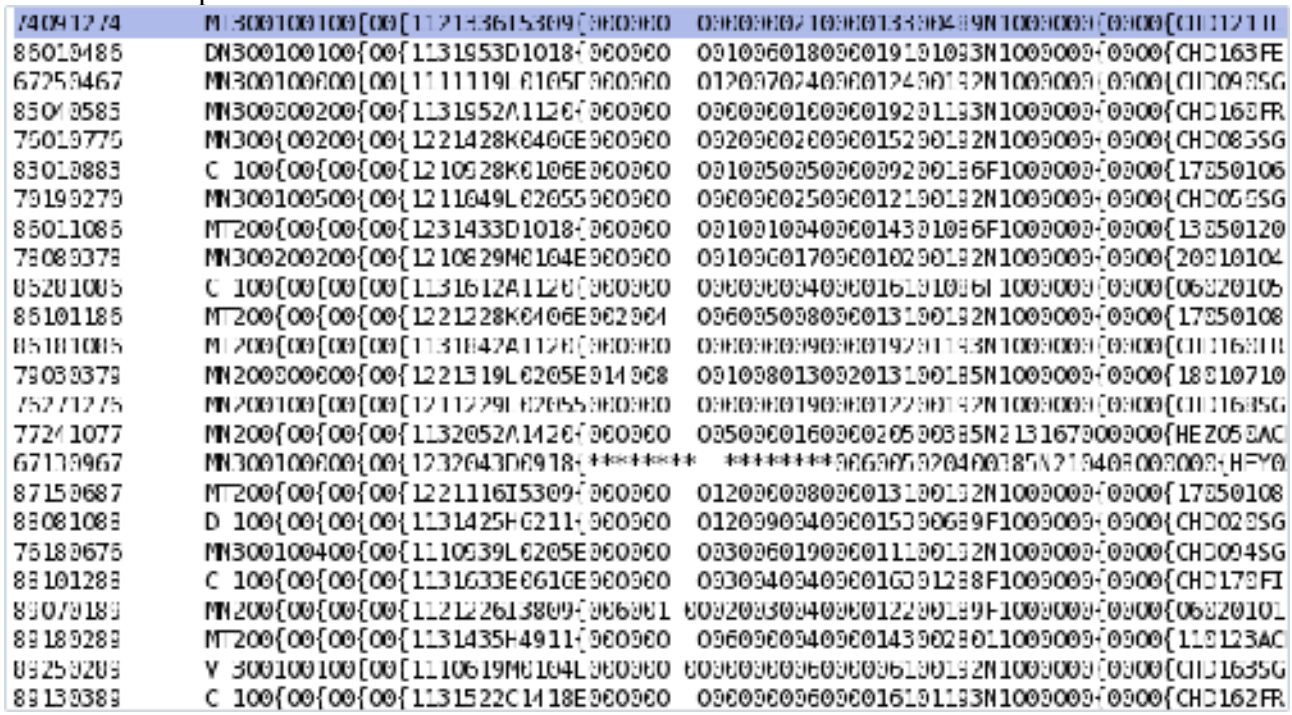
TRAILING SEPARATE is accepted by most COBOL compilers like MicroFocus and NetCobol.

IBM MScobol is not an official format name. I call it this way because it is what people have obtained when they migrated from Mainframe to PC.

To extract data go to menu **Extract → record(Enregistrer)**



As you see, Awsedit suggests you a name. This is helpful if you are extracting files after files, or blocks after blocks, and you want some names meaningful.
The extraction produces a file like this :



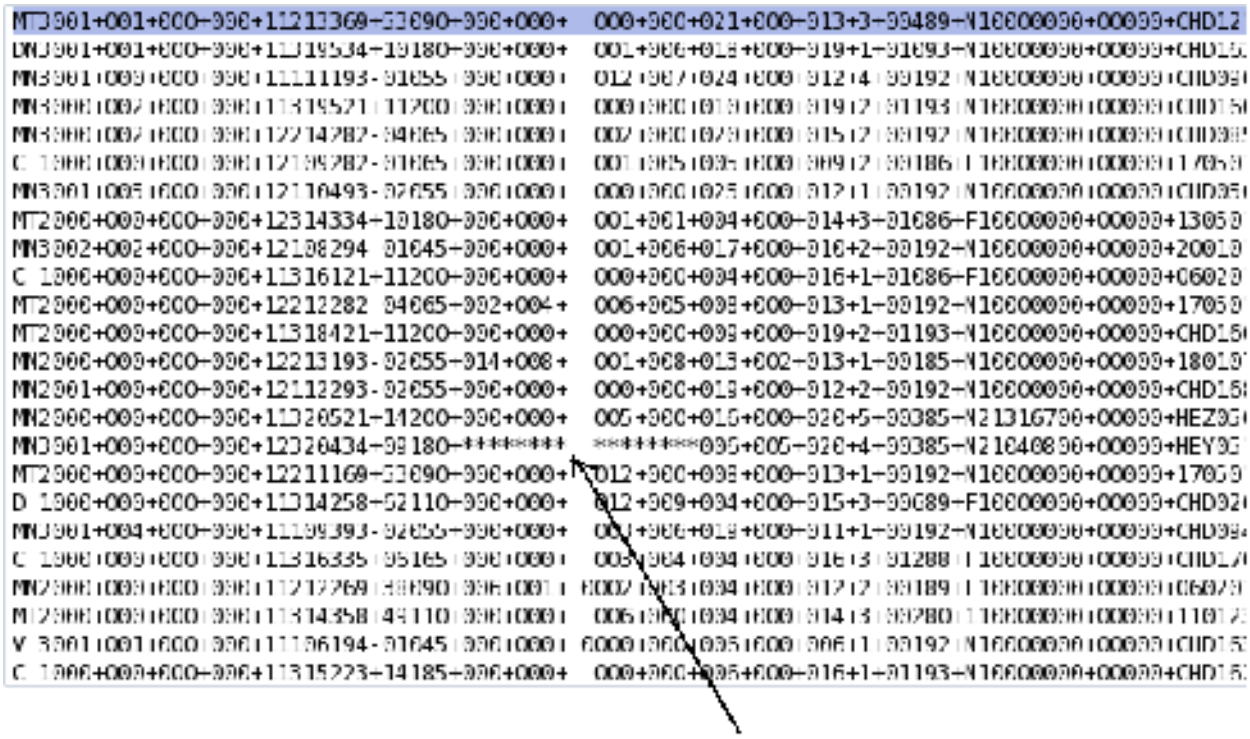
Some History.

I will not enter in details about this extracted file : It is the one that people have obtained when they transfered data files from Mainframe to PC by means of IBM PC3270 card or HP IRMA card that emulate 3270 terminals. Files in this format are accepted by MSCobol and MicroFocus.

Notice that MSCobol is the ancestor of MocroFocus.

The other way.

Now lets try the second fomat. Go to menu : **Type → TRAILING SEPARATE**
Then **Extract → record (Enregistrer)**



Stars are printed in place of wrong numbers.

Notice.

The TRAILING SEPARATE is more explicite : the signe appears in clear at the right of a number.

Last but not least.

Selecting fields to be translated may be fastidious and repetitive. Fortunatly this can be done only once a time for a kind of file because it is possible to save the description of the selected fields to a configuration file to be reloaded later.

While in Conversion mode, save the description: **Extract → Description → Save**

To quit the Conversion mode go to menu : **Extract → Conversion**

Later, reload the description : **Extract → Description → Load**