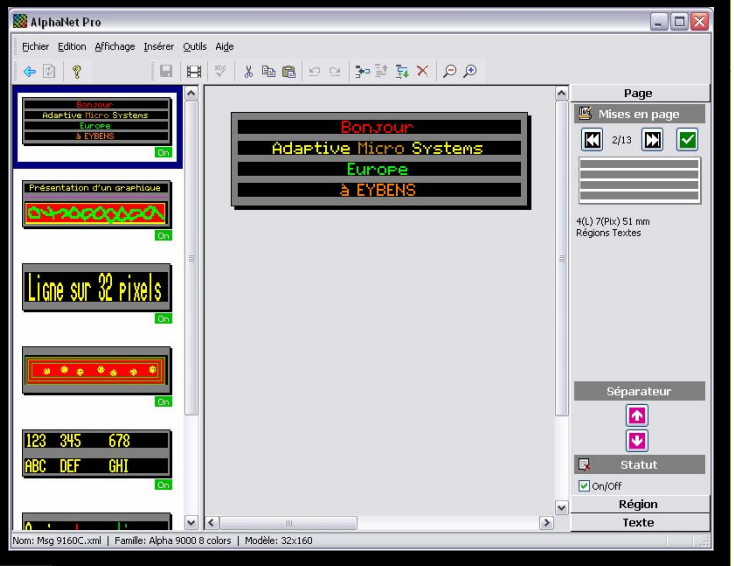
Adaptive Micro Systems

Connecting people, places and ideas

To discover the d'AlphaNet PRO's universe and start to use it in few minutes only...

AlphaNet PRO

For the non Pros...



A reference for the rest of us !

1. Create a driver...
2. Create a sign...
3. Sign connection testing...
4. Create a message...
5. Send a message...
6. Schedule a message...
7. The edition's secrets...
8. Insert a variable...
9. Insert a counter...

1 Create a driver

What's a driver?

Should I really create one?

- A driver is a software component used as an interface between the application and the sign.
- This is what allows to define the communication parameters and the physical layer of the device being used. It is absolutely necessary to create a driver in order to be able to connect to a sign.
- AlphaNet PRO can dialog with a sign thanks to multiple connection types such as Ethernet (TCP/IP), serial links RS232/RS485, modem, wireless links WIFI or Bluetooth.

1- Identify the connection's type available on the sign...

2- Collect all data required to configure the driver...

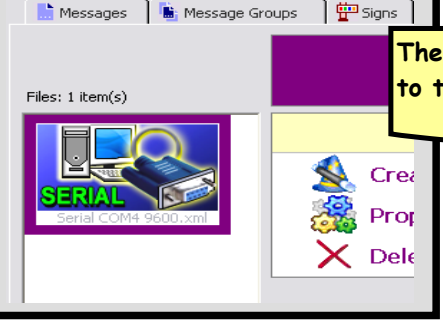
192.168.1.150
Port 3001
(33)4761476
COM4
COM1
9600
8N1

3- Select the "Drivers" tab...

4- Launch the driver creation Wizard (Ctrl+N)...

5- Select the driver's type then Enter the parameters allowing to configure it...

6- Click on "Finish"



The new driver is added to the list.

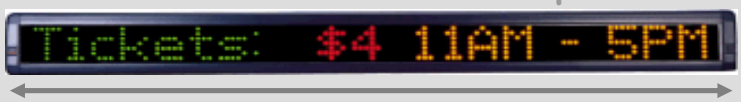
The End

2 Create a sign

What's family and model my sign belong to?

X = 7 pixels

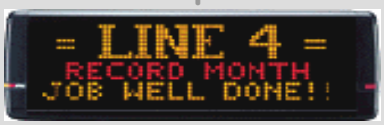
Alpha 220C



Y = 120 pixels

Alpha 7080C

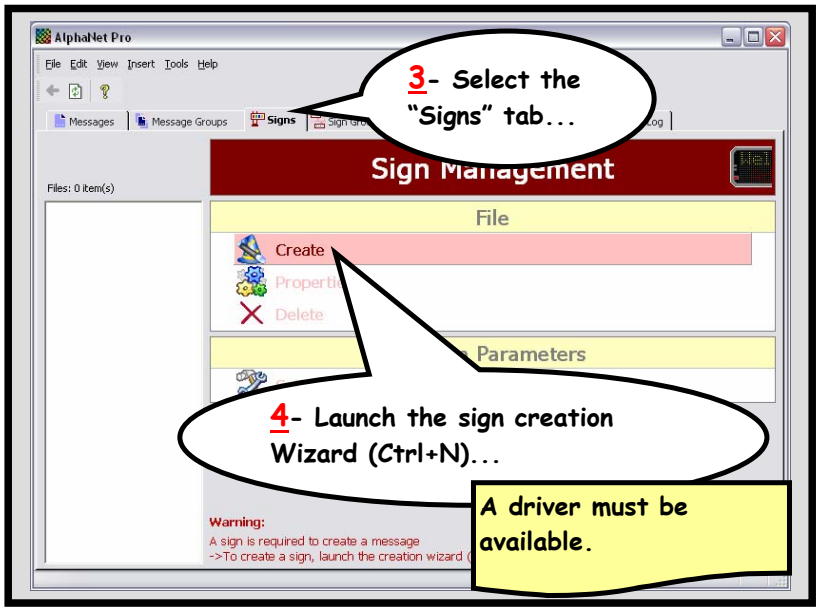
X = 24 pixels

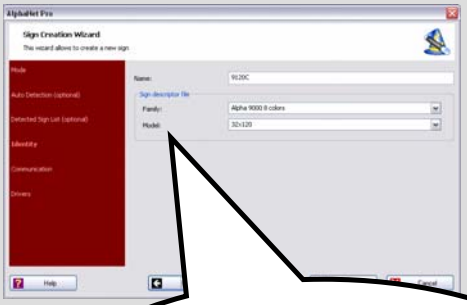


Y = 80 pixels

1- Identify the sign's type to create.
If necessary, look at the label located on the back of the sign or on the packing slip...

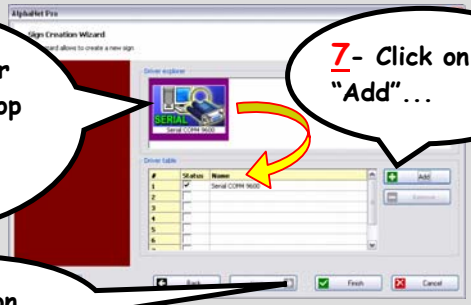
2- Assign an address (keyboard or jumpers)...





5- As the auto detection mode is not still implemented, go through the manual creation.

Select the right sign's family and model...



6- Select a driver in the explorer (top window)...

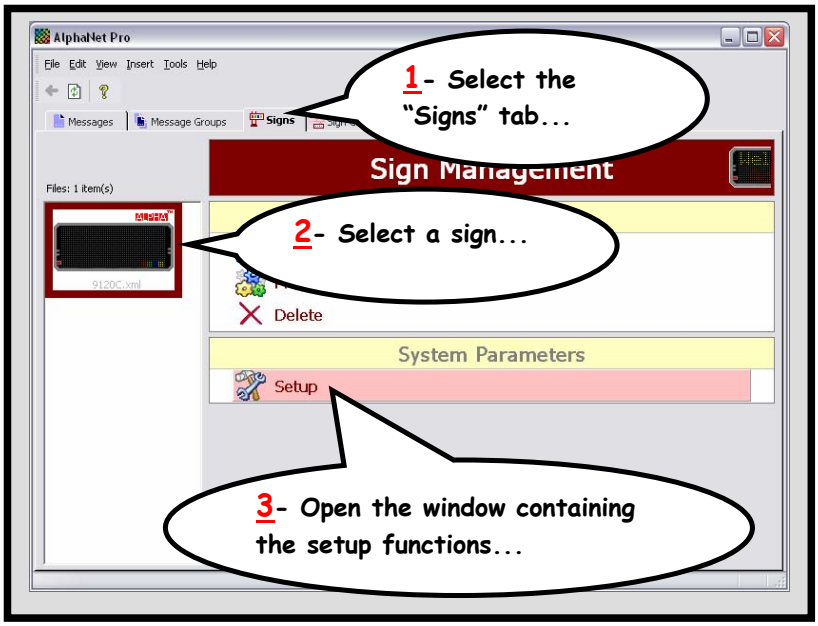
7- Click on "Add"...

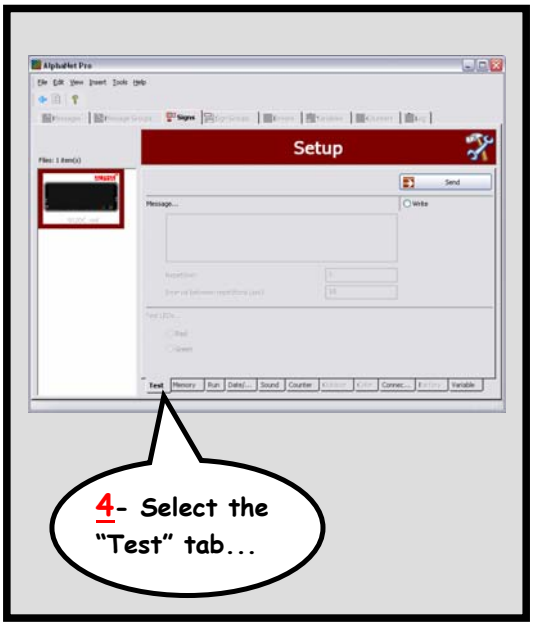
8- Click on "Finish"

The End

3 Sign connection testing

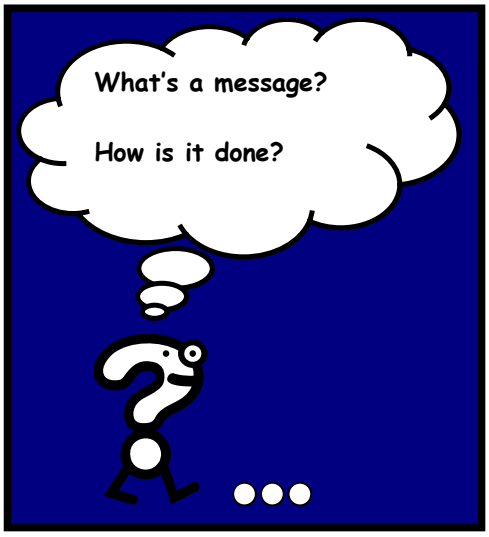
- After having created a driver and a sign, it is good to make sure that AlphaNet PRO communicates well with it.
- This operation is very important since it allows to eliminate all potential connection issues.
- AlphaNet PRO provides a set of useful and easy to use commands specially dedicated to the sign's configuration and diagnostics.





If the connection is correctly done, the sign should display the text previously entered.

4 Create a message (theory)

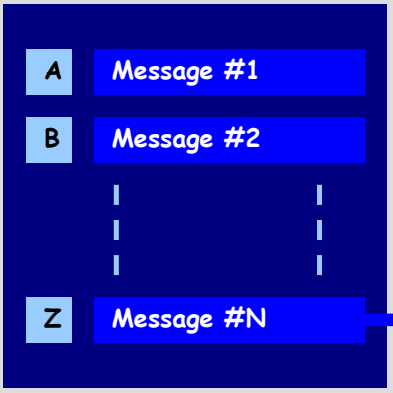


- A sign owns in its memory a list of messages which are cyclically displayed according to certain parameters and criteria.
- A message contains a list of pages running ones after the others.
- Each page represents the full screen and can have different page layouts.
- A page layout is defined by several vertical or horizontal regions.
- Each region can contain text, variables, counters or graphic animations.
- A message can be linked to a predefined, a weekly or a calendar schedule.

A sign owns

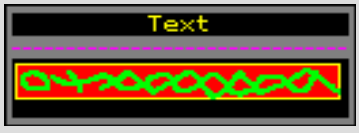
Message data base

Scheduler



About 90 messages

1 schedule per message



Page #1

- 4 text regions

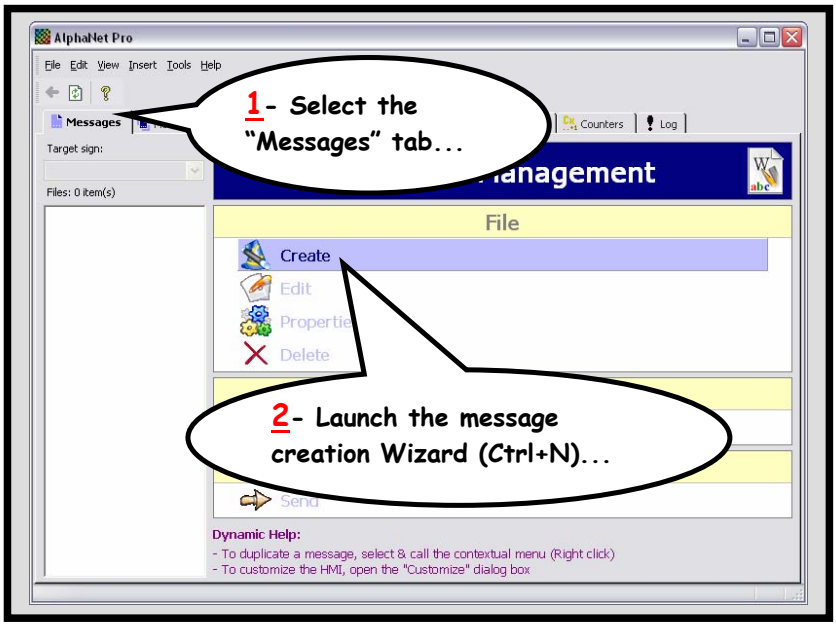
Page #2

- 1 text region
- 1 graphic region

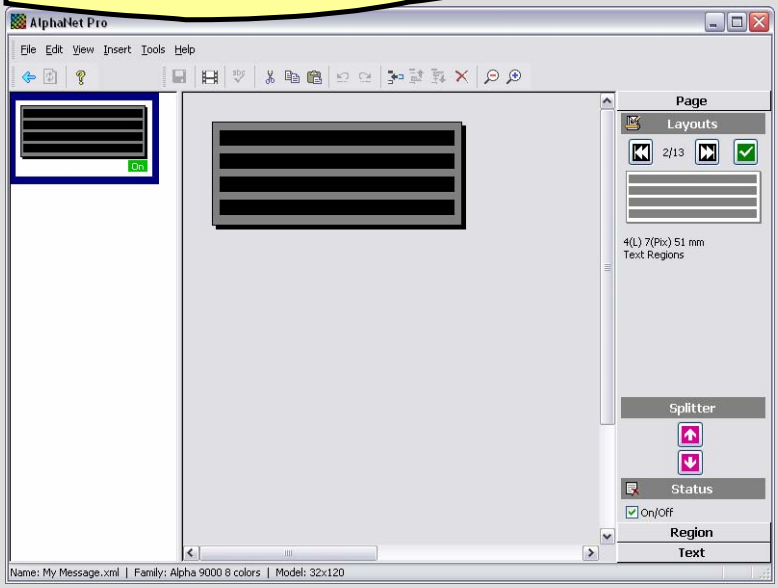
Page #3

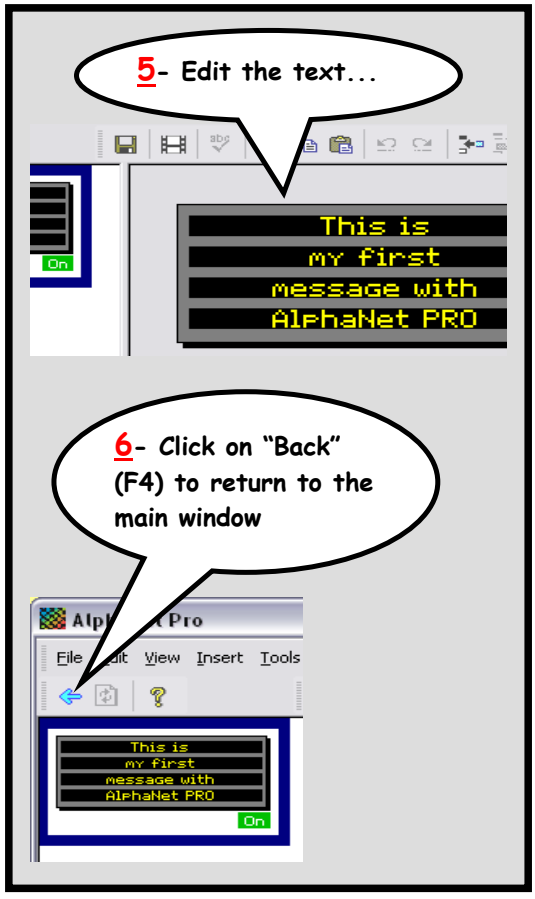
- 1 text region

4 Create a message (practical)



When the Wizard ends, the edition window automatically opens on an empty page with a default page layout selected. Refer to the "The edition's secrets..." chapter to get all information and details related to the message edition.



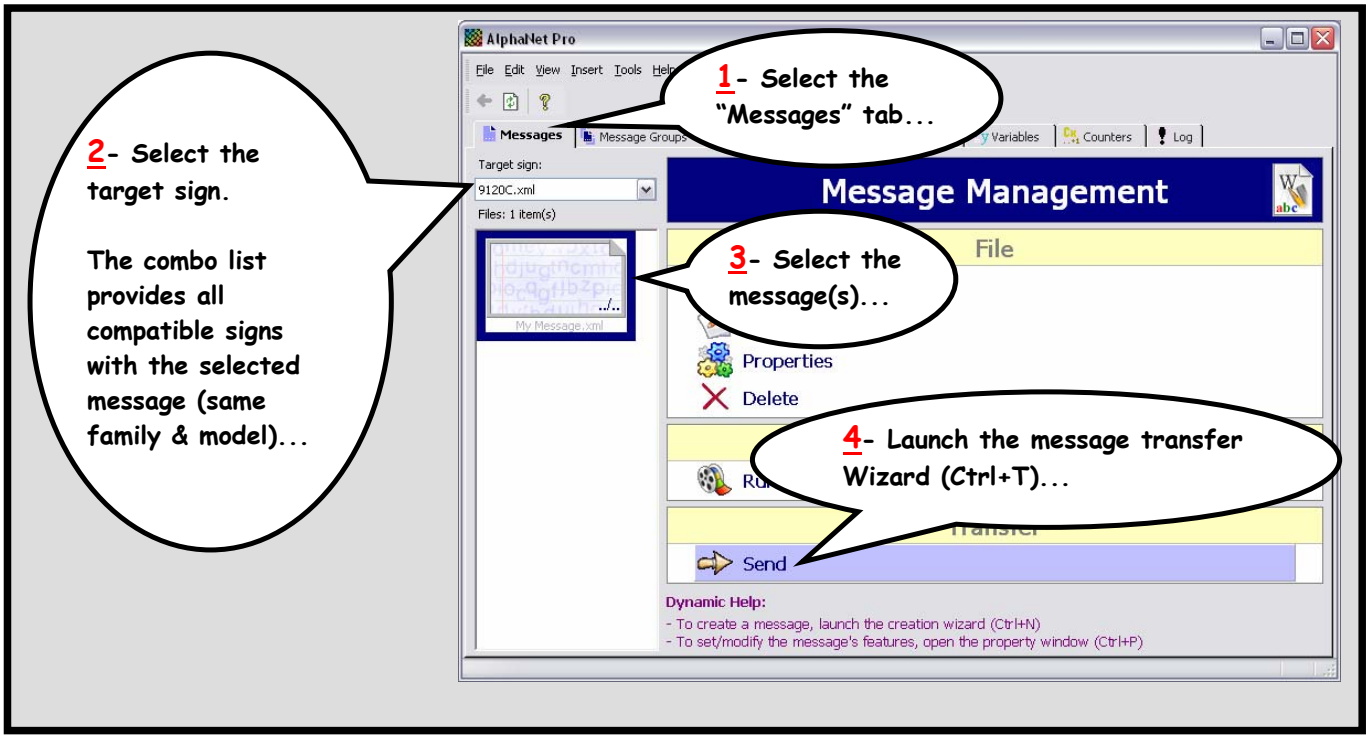


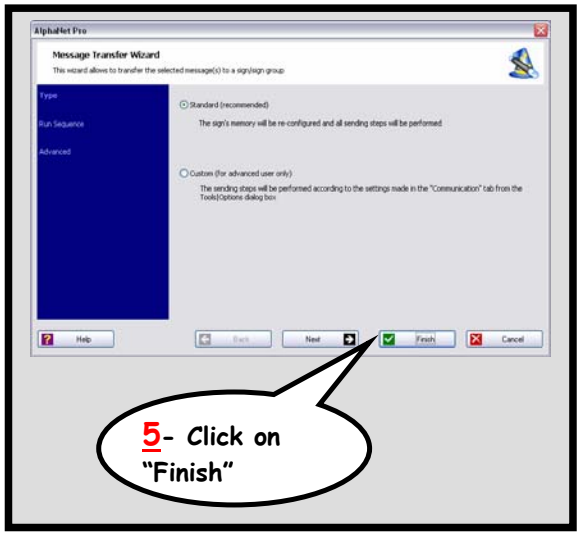
The new message is added to the list.

5 Send a message

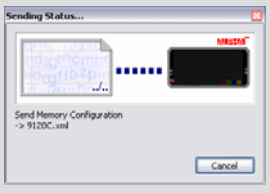
How do I do to send a message to a sign?

- AlphaNet PRO allows to send simultaneously one or several messages to a sign.
- At each transfer, a series of frames (protocol commands) is sent to the sign in order to configure its memory, its graphics, its variables, to download the messages and the graphics and finally to synchronize the date and the time with the PC. This operation can take from a couple of seconds to several minutes depending on the message's contents.
- AlphaNet PRO also allows to perform some advanced transfer operations. To do so, please contact the technical support.



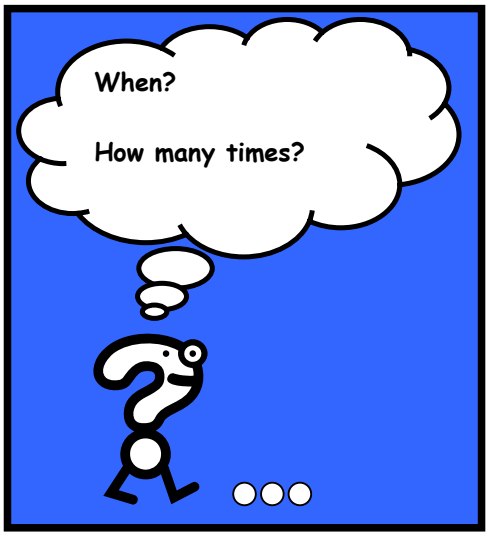


The status window displays the current transmission step in process. Don't touch anything!!!



The End

6 Schedule a message (theory)



- AlphaNet PRO allows to schedule a message one or several times during the day.
- The schedule is based on three types of periodicity:
  - Predefined
  - Weekly
  - Calendar
- To define multiple running occurrences of a same message, it is absolutely necessary to go through a message group creation process.
- A schedule belongs to the message's properties

Predefined Periodicity (The minimum step for the minute is 10mn)

- **Always**
  The message is displayed every day, all day
- **Every day**
  The message is displayed every day either all day or from HH :MM to HH :MM
- **Week**
  The message is displayed from Monday to Friday either all day or from HH :MM to HH :MM
- **Week-end**
  The message is displayed Saturday and Sunday either all day or from HH :MM to HH :MM

Weekly Periodicity (The minimum step for the minute is 10mn)

The message's running cycle is defined over a week
The periodicity in term of day is comprised between Monday and Sunday from HH :MM to HH :MM

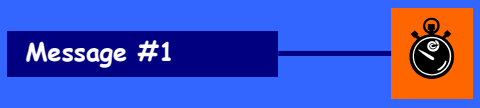
Calendar Periodicity

In this case, the message's running period can be selected among a precise date and a time from the calendar

1x message's running occurrence

The message runs only one time during the day, the week or the year.

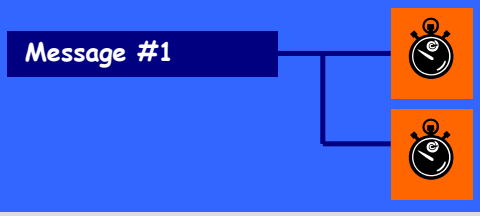
This is defined via the message's properties.



Nx message's running occurrences

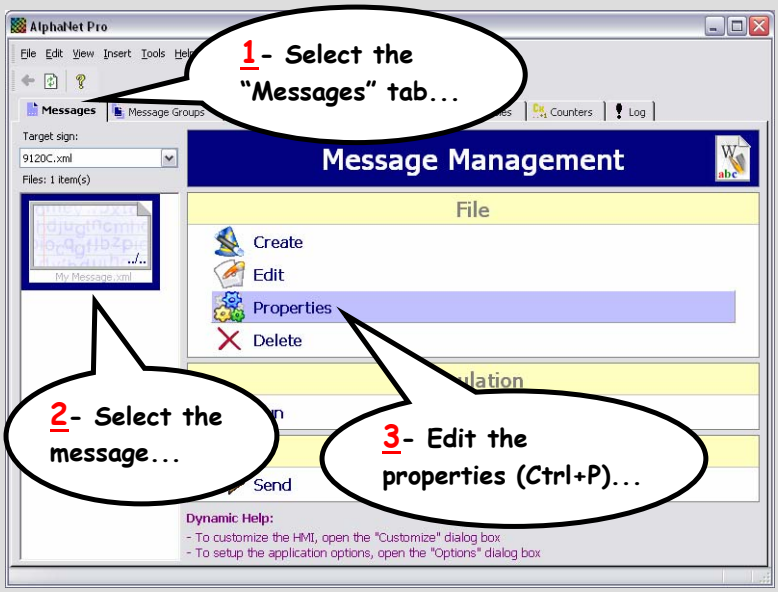
The message runs several times during the day, the week or the year.

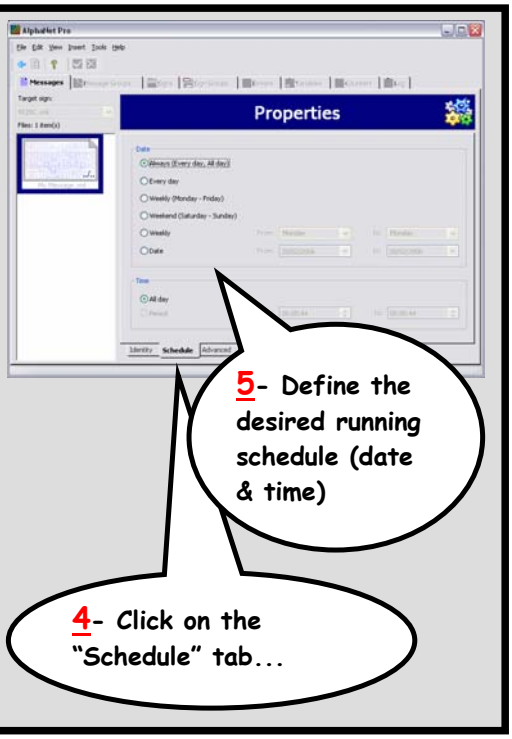
This is done via a message group creation containing N times the selected message attached to N different schedules.



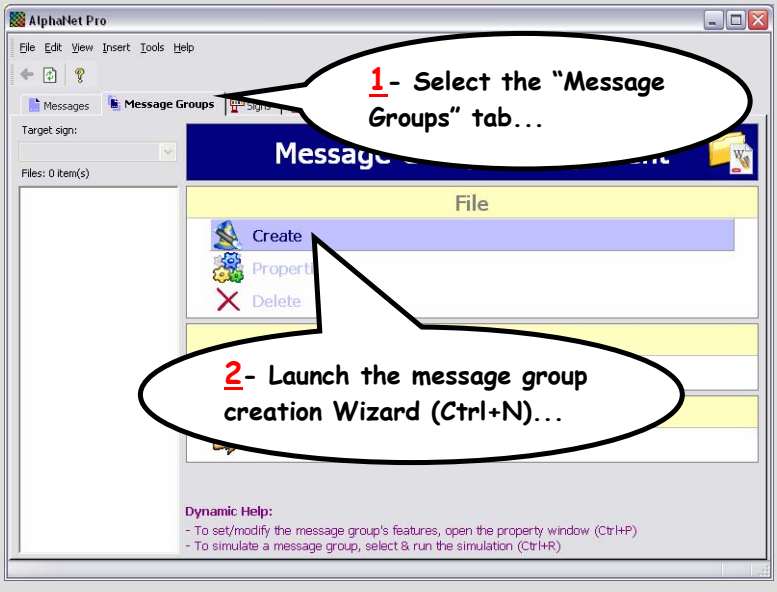
6 Schedule a message (practical)

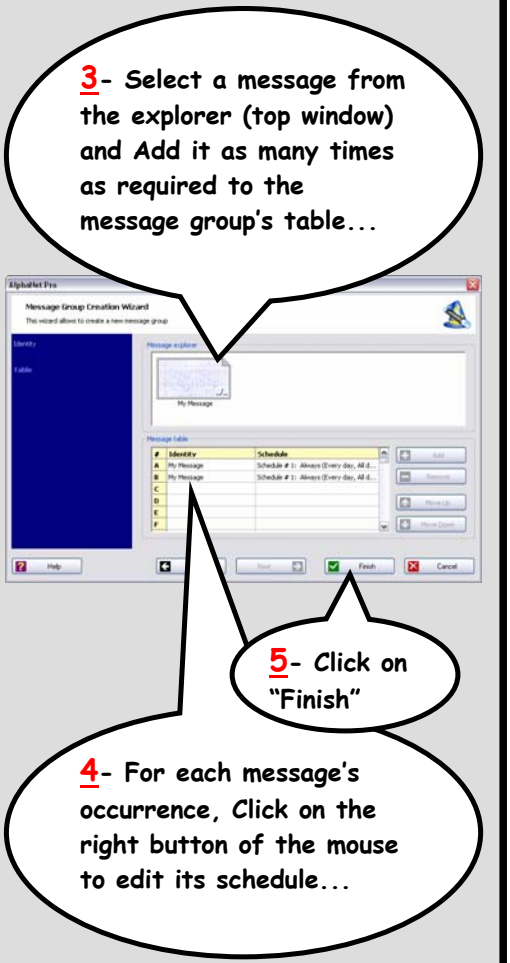
Display only one message's running occurrence.



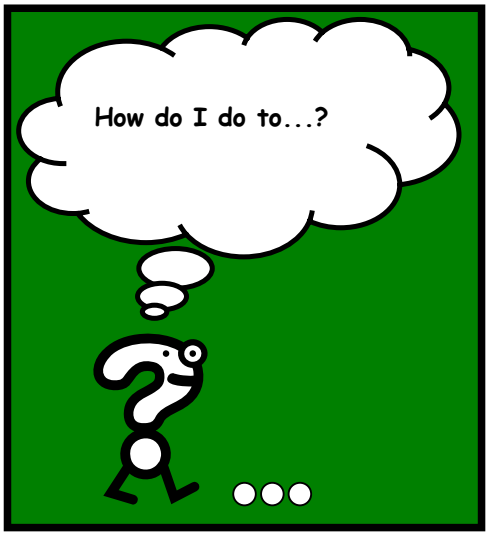


Display several message's running occurrences.

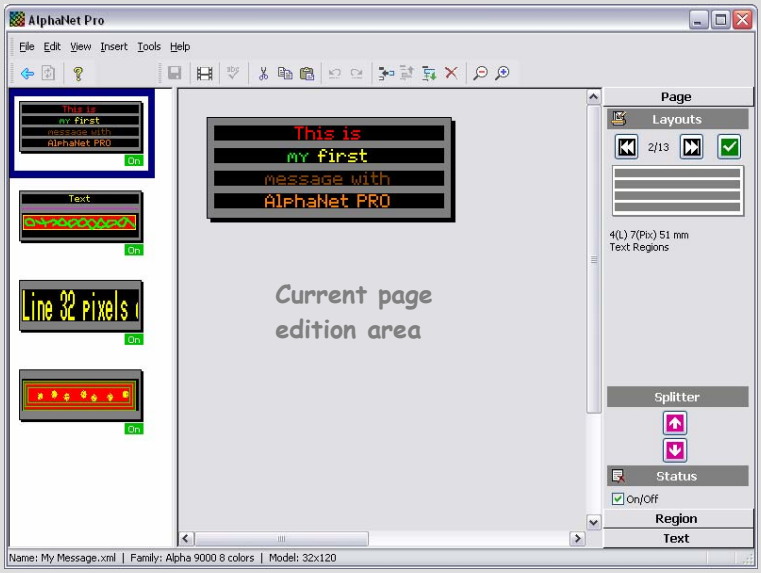




7 The edition's secrets



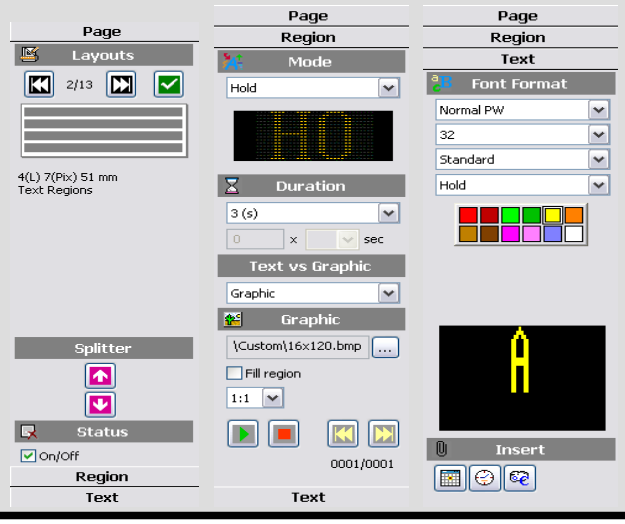
- It is through the main edition window that the message is designed and simulated before to be sent to the sign.
- This window is split in three parts having the following purpose:
  - On the left, message's page list
  - In the middle, current page edition area
  - On the right, selected object's properties also divided in sub-windows (3 tabs)



Message's page list

Current page edition area

Selected object's properties



According to the selected object i.e. page, region, text or graphic, click on the adequate tab in order to display its properties.

7 The edition's secrets

Page Tab: There are 3 types of page layouts. The selection of a certain type of layout defines each region's behavior and the way of how they are going to be used. Each sign has its own non exhaustive list of predefined page layouts. Others can be elaborated according to the needs.

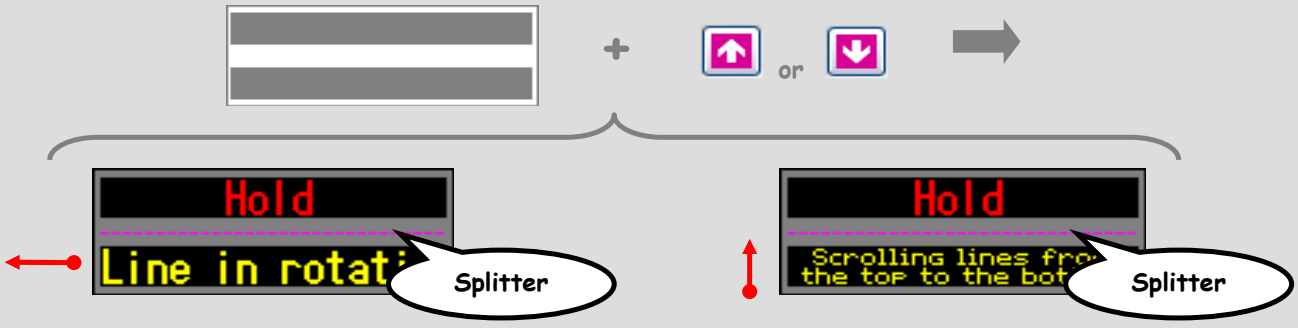
Each region is independent from the others and is limited to edit text only.

Each region is independent from the others and allows to enter graphics (.BMP, .JGP, .GIF, .AVI) or free text.

Each region is independent from the others and is limited to edit left justified text to allows character array alignment.

Page Tab: The page layout splitter (dashed and pink line) allows to divide the sign's screen in two areas (top/bottom or left/right) in order to define a maximum of two running modes per page.
This limitation is given by the sign.
This allows to perform for example, the following configurations:

- One hold line on the top and one line in rotation on the bottom,
- One hold line on the top and several scrolling lines on the bottom.

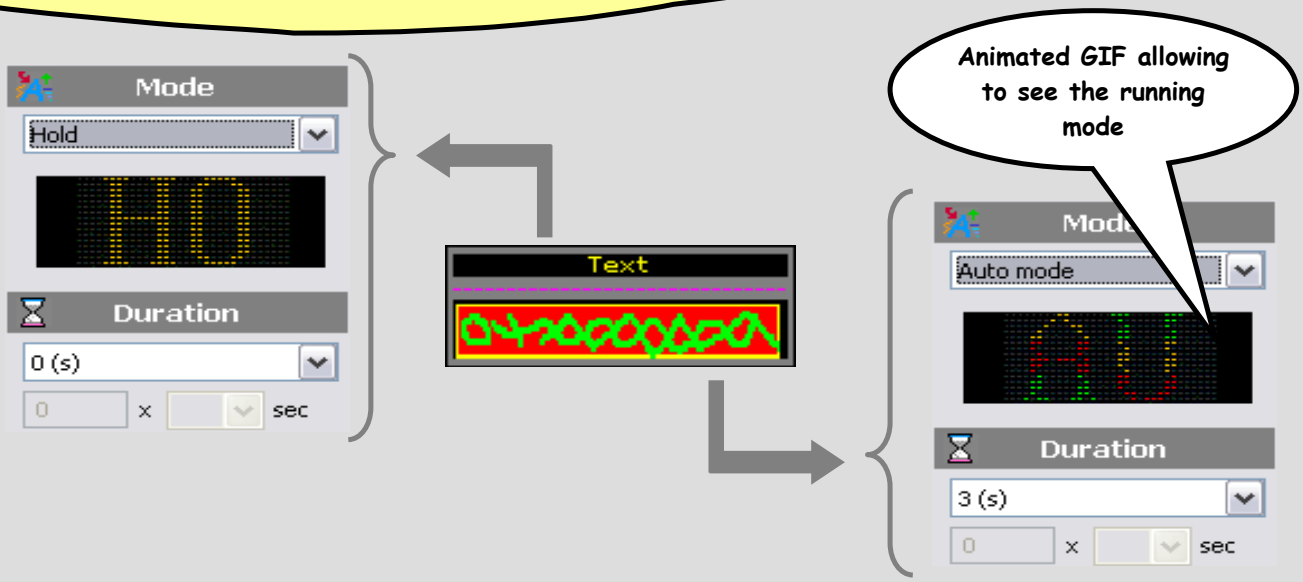


7 The edition's secrets

Region Tab:

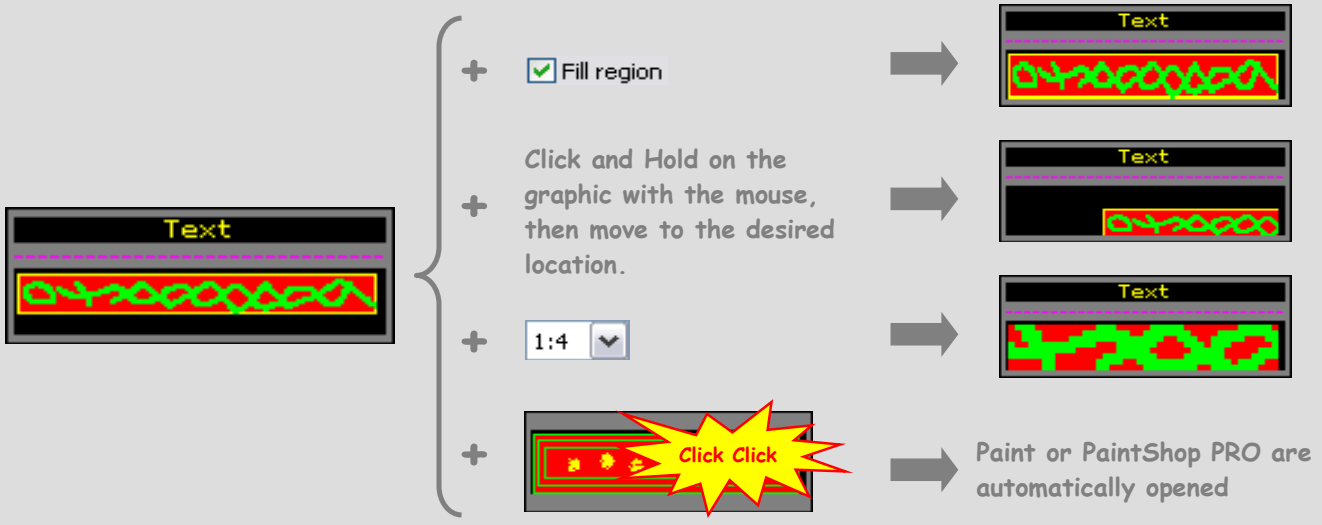
- If there is no splitter in a page, all regions have the same running mode and duration,
- If there is a splitter in a page, all top regions (above the pink line) have a different running mode and duration than the bottom ones. The top regions will be displayed then a couple of seconds after, it will be the bottom regions. To synchronize and make the two running modes starting at the same time, it is necessary to setup the top regions with the duration equal to 0(s).

Tips: To display variables updated by a PLC, setup the region with the duration equal to 0(s) in order to have the variable's refreshment immediately visible on the screen.

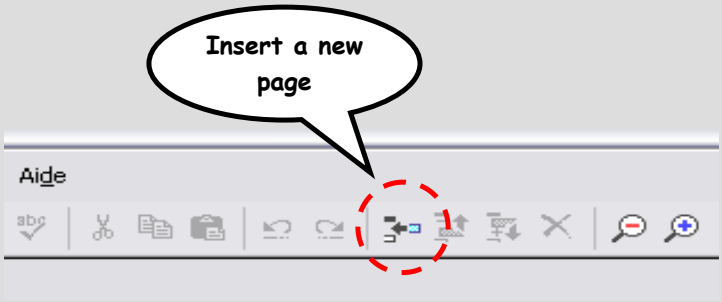


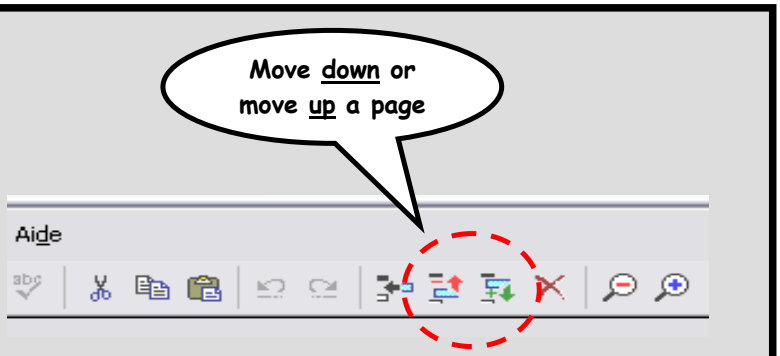
Region Tab: When a graphic is inserted in a region, it is possible:

- To adjust its size to the region dimensions,
- To position it anywhere in the region,
- To zoom out the original graphic and pick a part of it only,
- To open it in Paint or PaintShop PRO to modify its contents.

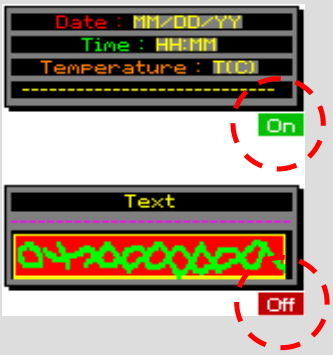


7 The edition's secrets

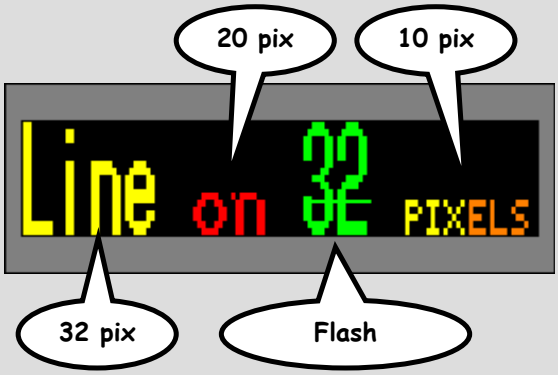




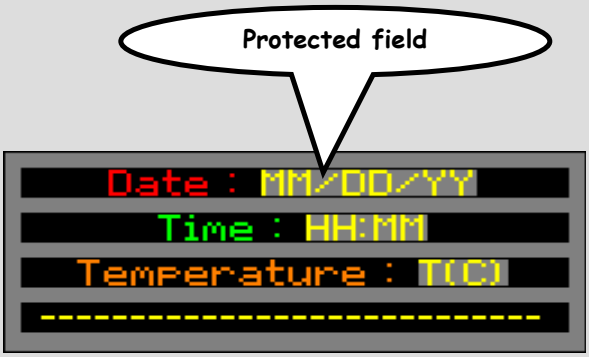
Page Tab: Each page of a message can be activated or not.
If the status is OFF, it will not be displayed. This feature allows to create a message containing N pages and just selecting a couple of them when it is sent to the sign.



Text Tab: Each character of a text region can be set with a type, a style, a colour and an effect different than the others.

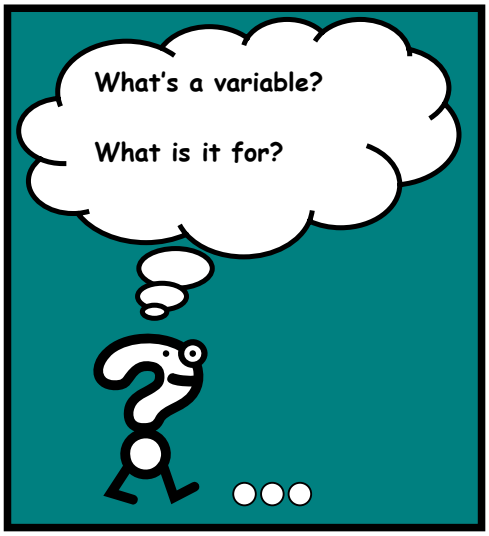


Text Tab: Inserting a variable, a counter or a system object (date, time, temperature) in a region makes its background colour changing.
An inserted object cannot be modified. It just can be deleted.

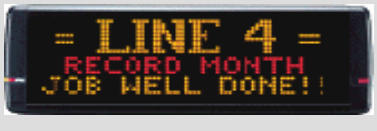


Text Tab: For the "Tri Colour" signs, there are four specific colours available; Rainbow 1, Rainbow 2, Mix and Auto- colour.
These four colours are represented in the editor by colours not used by the sign.

8 Insert a variable (theory)



- A variable is a real time data inserted in the text of a message and which can be updated by a PLC, an ActiveX control or any kind of intelligent system.
- The maximum refresh rate is about 50ms.
- Variables are often used in the industry world to display production data (objectives, number of parts produced...) or process control data (temperature, pressure, level...)
- AlphaNet PRO allows to create messages embedding variables, to configure, to initialize and also to update them.



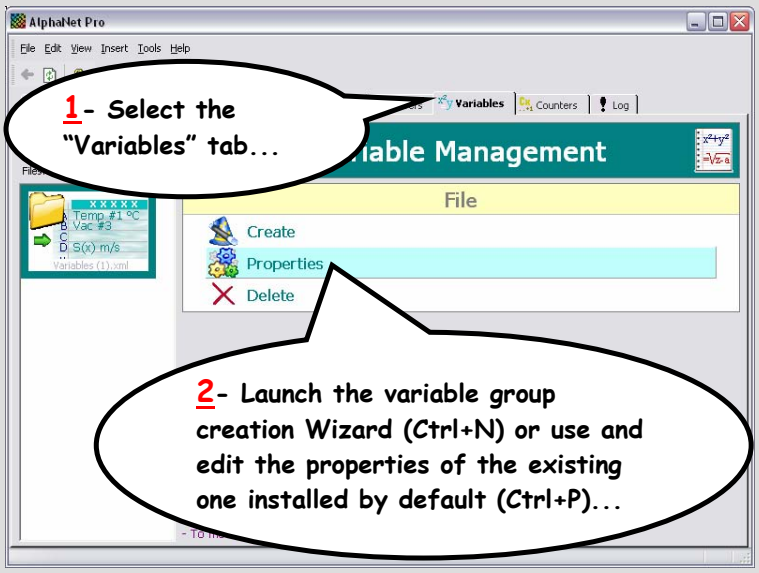
A sign owns

Message data base		Variable data base	
A	Message #1	A	Variable #1
B	Message #2	B	Variable #2
Z	Message #N	Z	Variable #N
About 90 messages		About 90 variables	

Message #N refers to two variables.
All messages from the data base can access to any variable.

Update variables from a PLC thanks to the Alpha protocol frames.

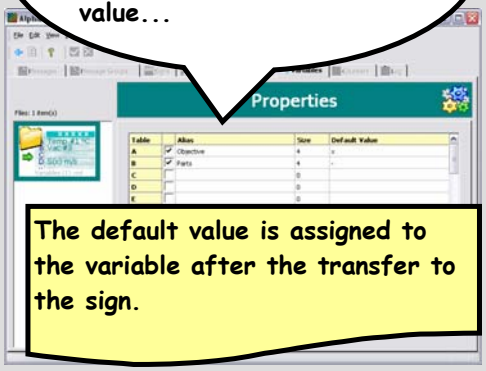
8 Insert a variable (practical)



1- Select the "Variables" tab...

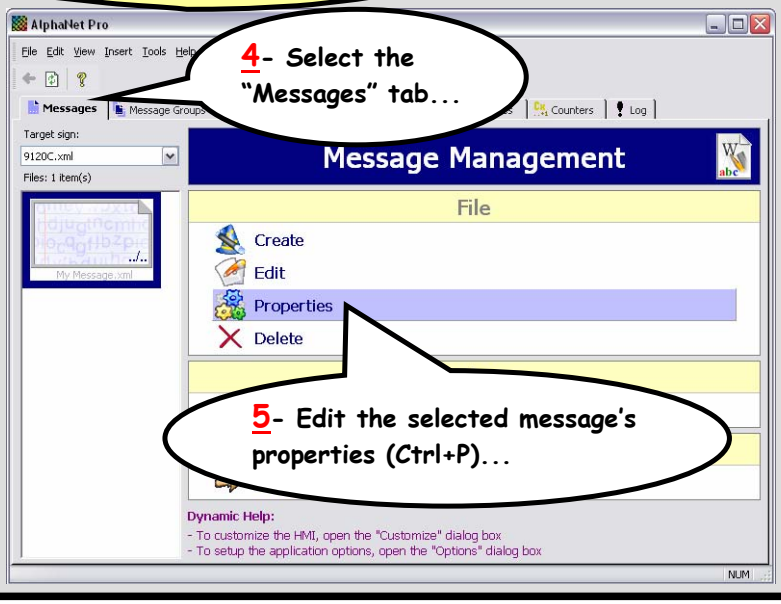
2- Launch the variable group creation Wizard (Ctrl+N) or use and edit the properties of the existing one installed by default (Ctrl+P)...

3- Create each variable by assigning them an alias, a size and a default value...



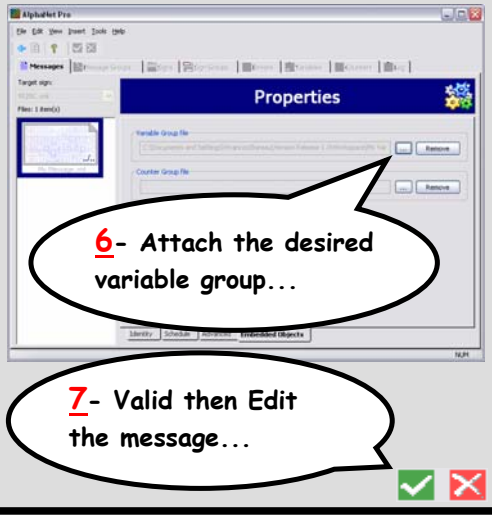
The default value is assigned to the variable after the transfer to the sign.

After having created a variable group and configured each variable, it is necessary to attach the group to the message where the variable is going to be inserted.
It is absolutely needed to perform this operation in order to see the variable icon in the edition window (Text pane).



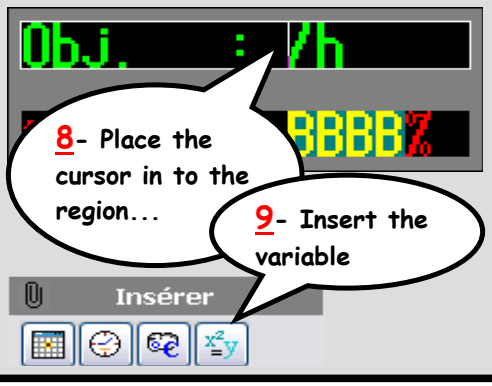
4- Select the "Messages" tab...

5- Edit the selected message's properties (Ctrl+P)...



6- Attach the desired variable group...

7- Valid then Edit the message...

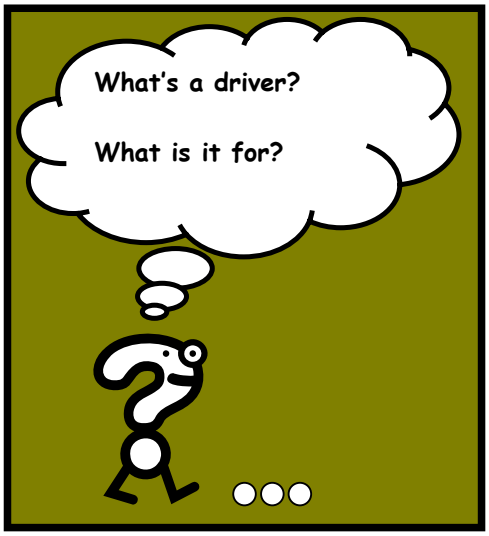


8- Place the cursor in to the region...

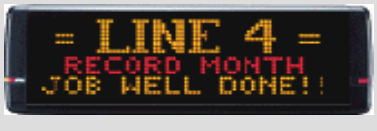
9- Insert the variable

The variable is inserted in the text and its background colour allows to recognize it.

9 Insert a counter (theory)



- A counter is a special intern variable managed by the sign itself.
- A sign contains up to 5 independent counters which can count up or count down days, hours or minutes.
- Counters are often used to display for example, the number of days worked without any accident or the time remaining before a big event.
- AlphaNet PRO allows to create messages embedding counters, to configure (day, hour, minute, count up or count down) and to initialize (starting, target values, auto-reload...) them.



A sign owns

Message data base

A	Message #1
B	Message #2
Z	Message #N

About 90 messages

5 Counters

- Counter #0
- Counter #1
- Counter #4

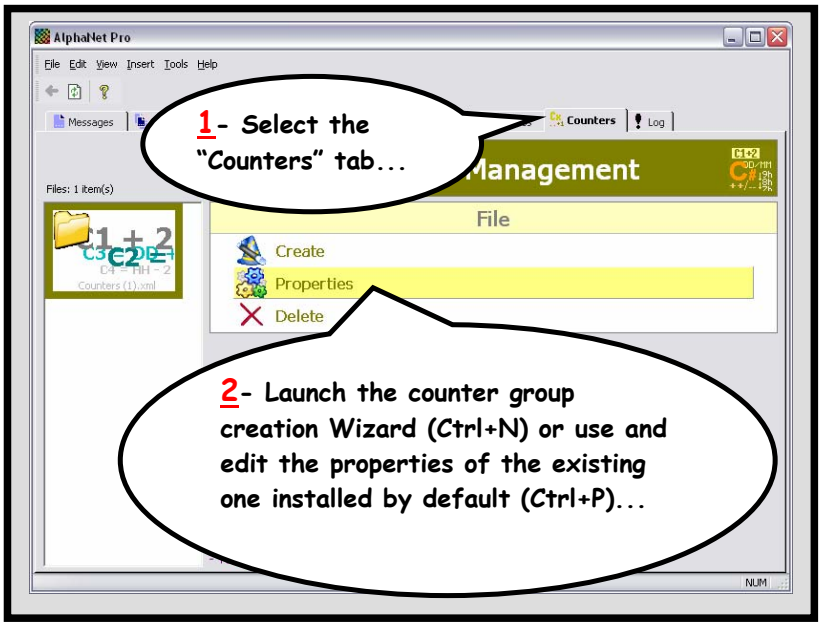
Message #N refers to one counter.
All messages from the data base can access to any counter.

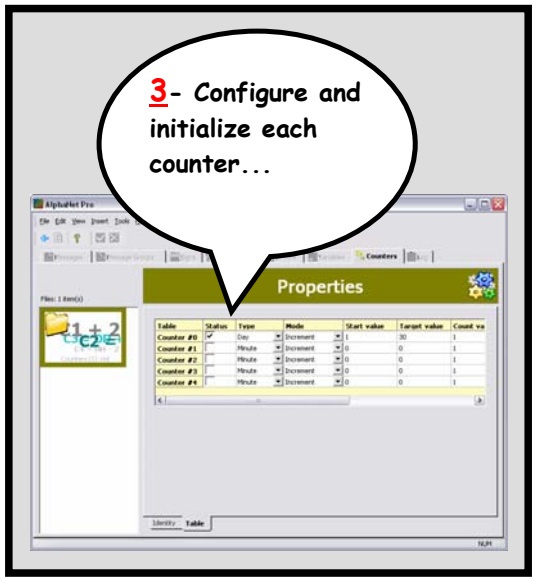
Each day, the counter will be incremented automatically by the sign.

Message #N

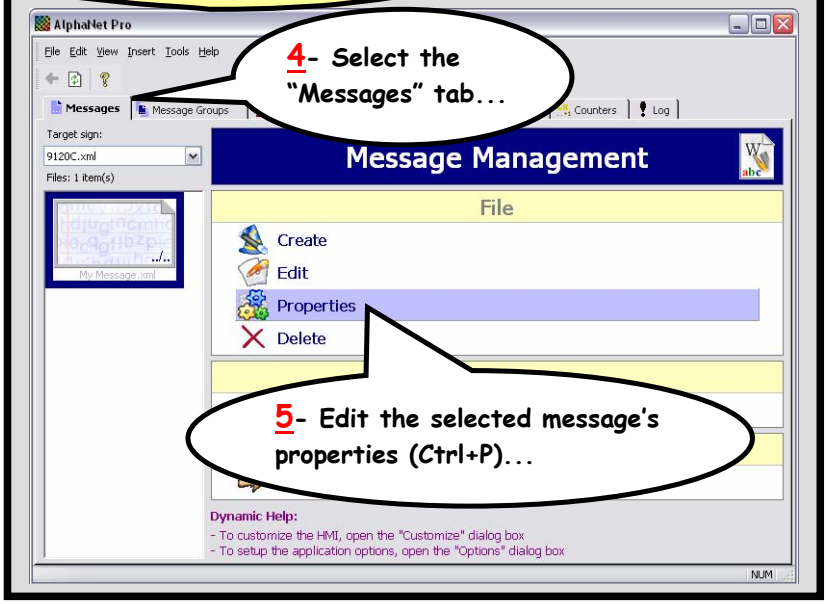
Counter #0

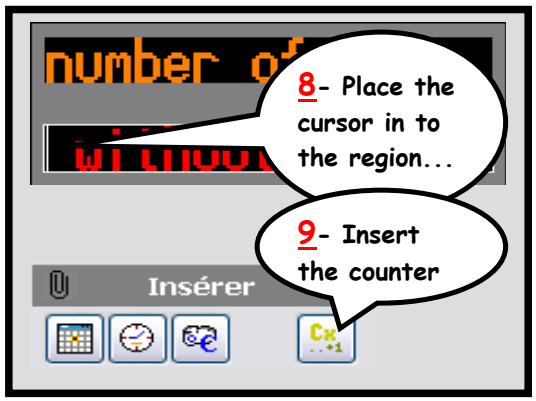
9 Insert a counter (practical)





After having created a counter group and configured each counter, it is required to attach the group to the message where the counter is going to be inserted.
It is absolutely needed to perform this operation in order to see the counter icon in the edition window (Text pane).





The counter is inserted in the text and its background colour allows to recognize it.