# Application note

Starting with Collect & Alert

- The Collect & Alert solution
- Activation of the Collect & Alert option on the Etic Telecom box
- Activation of the Pack SMS option on the Etic Telecom Box
- Configuring variables to query
- Remote user configuration
- Configuring an alert cycle
- Acknowledging alerts
- Configuring the data logger
- Display mode configuration (histogram and dynamic visualization of a variable)
- Hot line support during your tests
- Virtual Showroom

Latest update **14/11/2017**
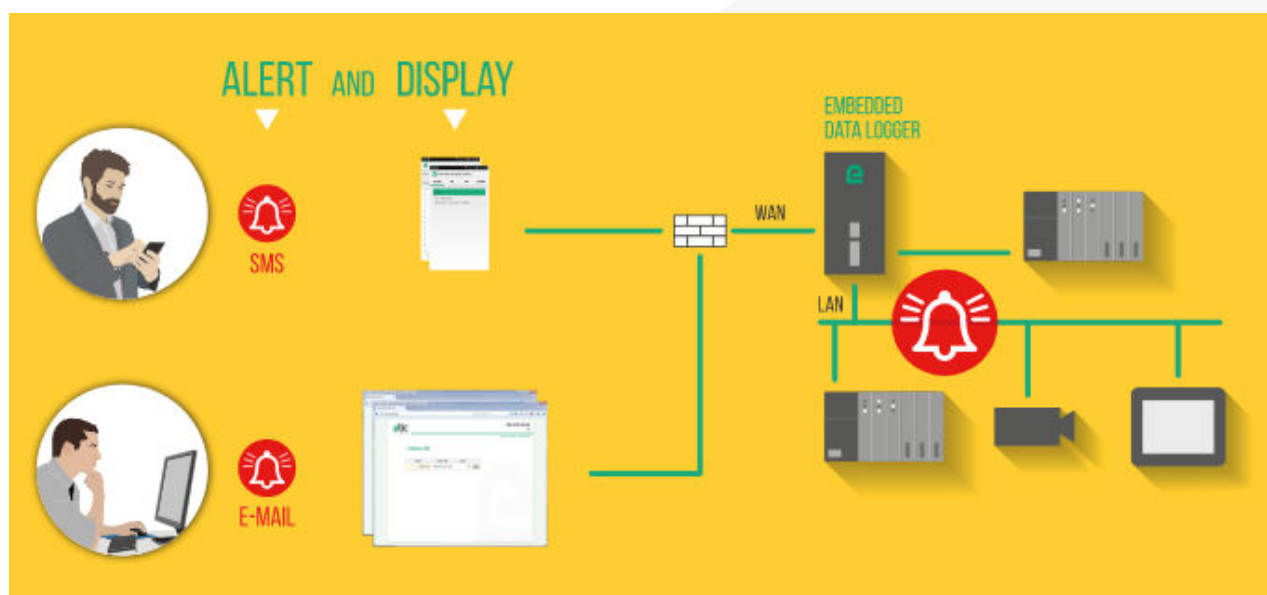
1) The Collect & Alert solution

Collect & Alert solution targets machine or industrial process managers.
It allows recovery of alarms from industrial equipment via SMS, e-mail or the Alphapage network of e*MESSAGE.
The alerted manager can simply and safely view WEB pages (https link) from his PC, Smartphone or Tablet.
The manager can also remotely take control of a PLC or an HMI to deepen his remote management by simply combining Collect & Alert and M2Me solutions.
Collect & Alert allows as well to store and forward CSV file (email or FTP) for further processing.

NB: the Collect & Alert option may appear in some files or on some WEB pages under its old name: Alert & Display.

2) Activation of the Collect & Alert option.

The Collect & Alert option is activated from your customer space of the Etic Telecom WEB site. You need to:
1) create your customer area
2) create the remote site corresponding to the box (IPL or RAS) which will carry the option Collect & Alert
3) add the option to the Etic Telecom box.

- **Creation of your customer area**

Log on to www.etictelecom.com and create your own customer area (click on "sign up now"). Fill out the form (all fields marked in green are mandatory).

THE BENEFITS OF AN ETIC TELECOM ACCOUNT

- Simple visualization of your connected remote sites.
- Access to additional options (SMS alert, M2Me function ...).
- Crediting SMS in the Machine Access Box or the router (RAS / IPL).
- M2Me client activation on the M2Me server.

ACCOUNT CREATION

Company

You are...

Web site

Last name   First name

Function

E-mail address

Phone number

Password   Password

At least 8 characters

☐ I want to receive the last information concerning the Etic Telecom products

☐ I'm not a robot   reCAPTCHA

Sign up

A message will be sent to the registered email address to finalize the creation of your account.

- **Creation of a remote site**

From your customer area (Site Management section), create a remote site by naming it and enter the product key of the Machine Access Box (RAS). The product key is visible from the "About" section of the configuration menu of the Etic Telecom box (RAS or IPL).
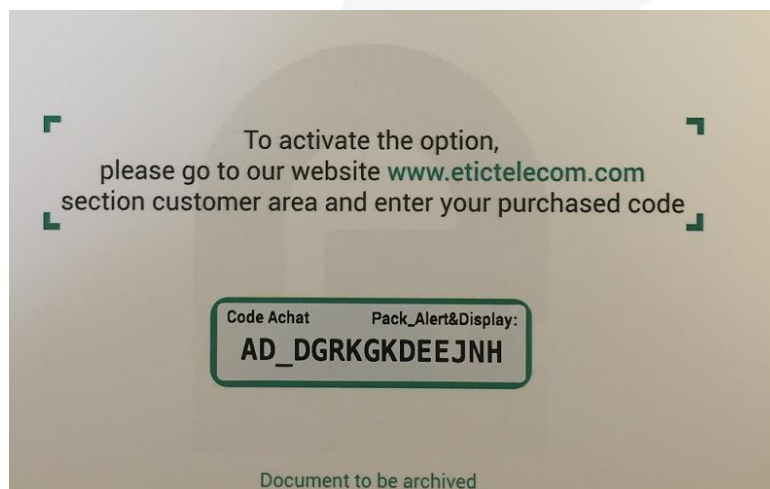

- **Activation of the Collect & Alert option on the Etic Telecom box**
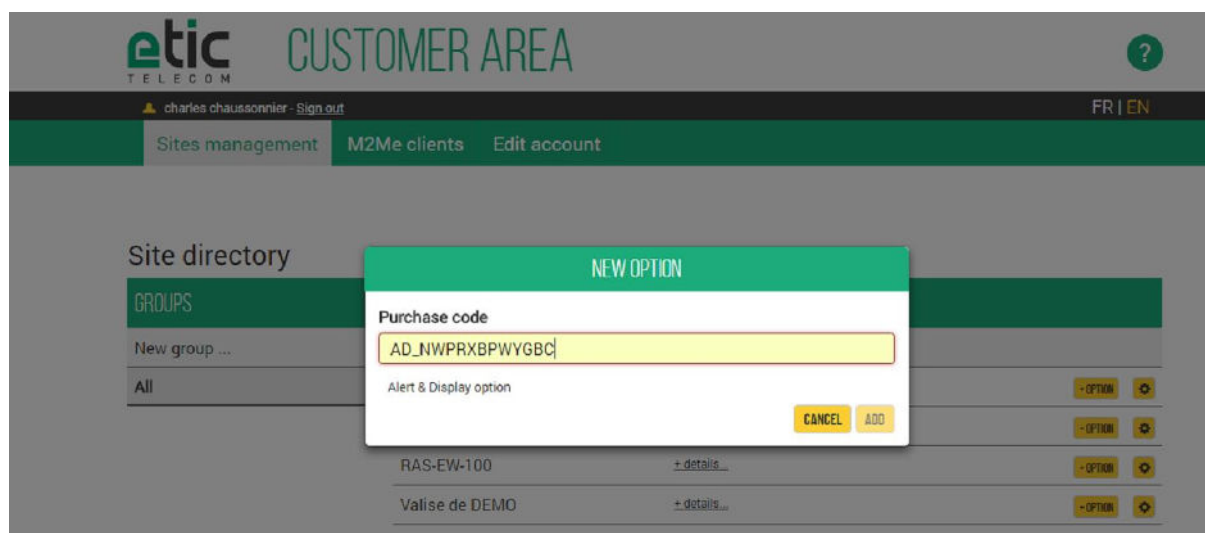
Choose from the site directory of your customer area the site that will have the option Collect & Alert and click on "+OPTION".
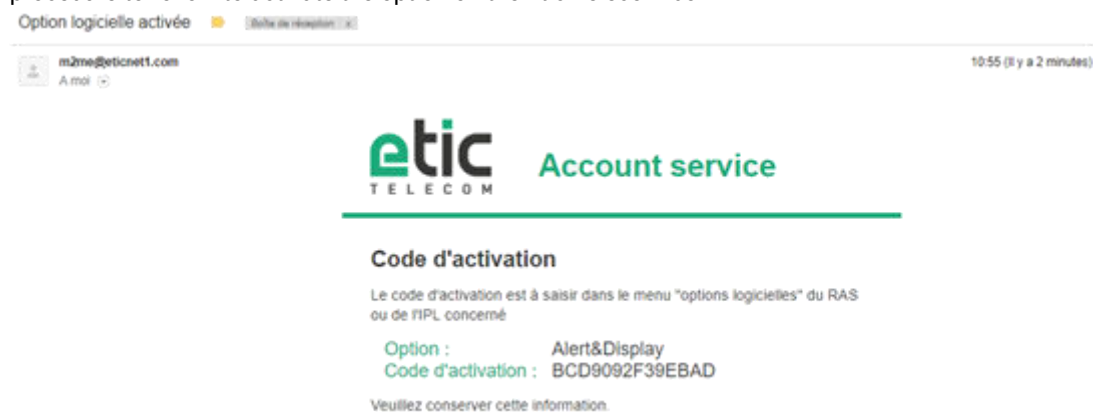

Enter the purchase code corresponding to the option you bought. (See diagram below).

DOC_MPR_Collect & Alert_Starter kit_A

After validation, you will receive an email (at the email address used to access your customer area) with the procedure to follow to activate the option on the Etic Telecom box.


Access the WEB pages of the configuration menu of your Etic Telecom box (see diagram below). Enter the activation code received by e-mail. Clicking on "Upgrade now" will activate the option on your box.
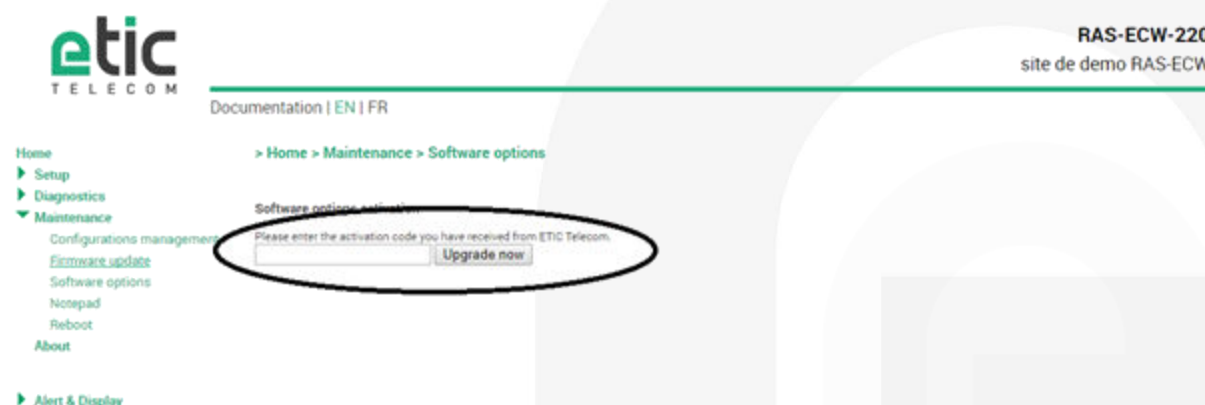
3) Activation Of the pack SMS option

The SMS Pack option is used to send an SMS alert from an Etic Telecom box that does not have an integrated cellular module (WAN: Ethernet, ADSL or Wi-Fi).

Select the site which will carry the option and enter the purchase code corresponding to the option you bought. (See diagrams below).
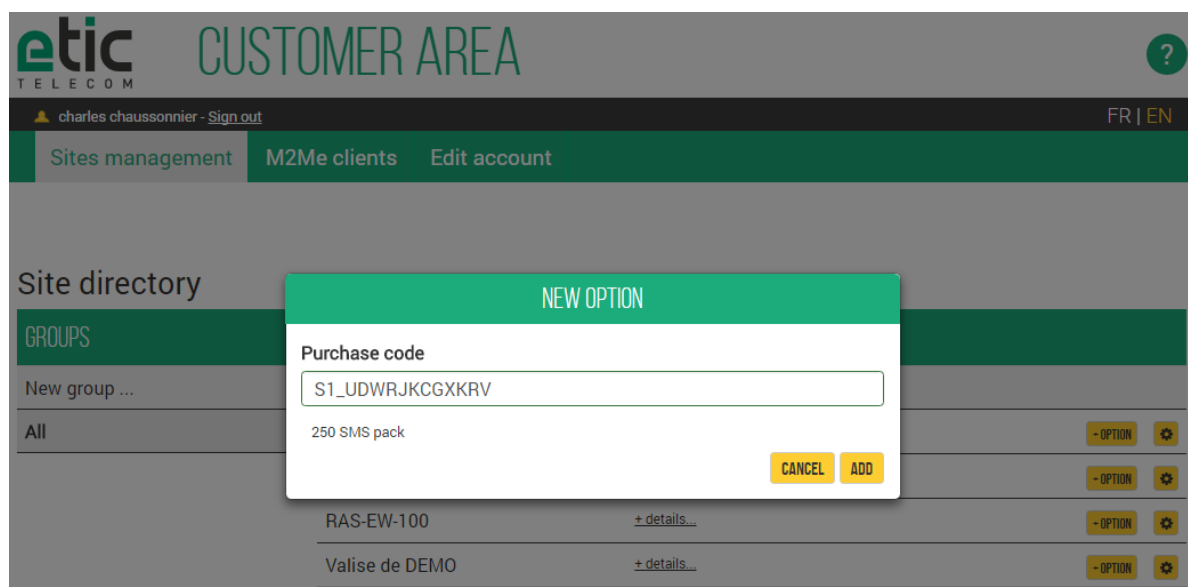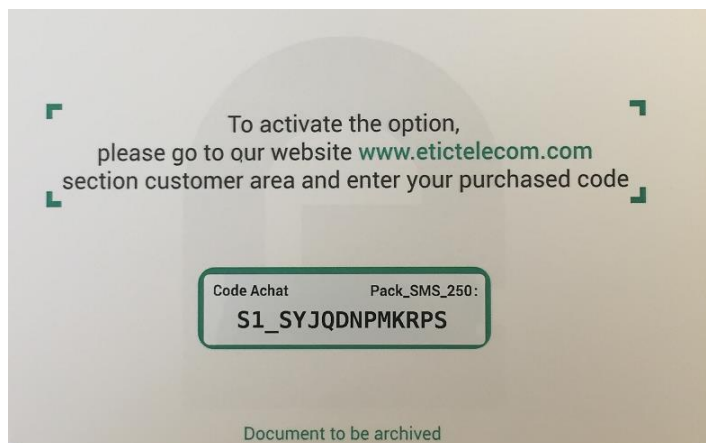
After validation, your option is activated and you should see the number of SMS remaining.

4) Configuring variables to query

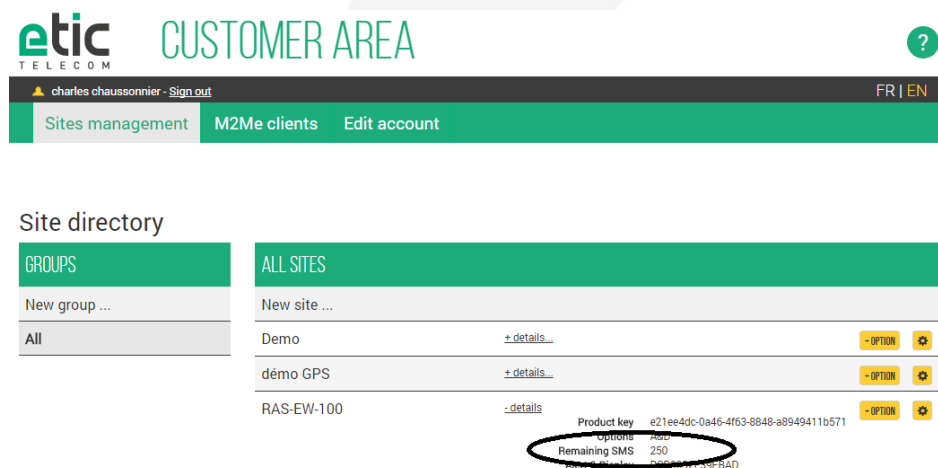The Etic Telecom box interrogates in ModBus (TCP, RTU) or Unitelway an equipment called data source. This equipment will provide the values of several variables.

- **Creating a data source**

Click on "Data Sources" and provide a name for the data source, a sampling period and timeout, and an IP address (see diagram below).

- **Creating a variable**

Click on "Variables" and "Add" in the variables table. Fill in the fields (see diagram below):

1st variable : unsigned 16bit integer with alarm triggering

NOTE: filling the field "failure description" is optional

2nd variable: unsigned 16 bit integer without alarm triggering

> Home > Alert & Display > Variables > Variables

Name	Incrementation

Acquisition

Variable type	Modbus ▼
Data source	Mon_Automate ▼
Register address	1

Calibration

Type	Unsigned 16bit integer ▼	
Decimal places	0	(0 to 10, step 1)
Gain	1	
Offset	0	
Unit		

Alarm triggering

Alarm trigger	No alarm triggering ▼
Failure description	

3rd variable : bit in word

> Home > Alert & Display > Variables > Variables

Name	Interupteur_0

Acquisition

Variable type	Modbus ▼
Data source	Mon_Automate ▼
Register address	3

Calibration

Type	Bit in word ▼
Value when 0	off
Value when 1	on
Bit index on word	0

Alarm triggering

Alarm trigger	No alarm triggering ▼
Failure description	

Note: the bit index on word is counted from 0 to 15

1st system variable: status of system variable

> Home > Alert & Display > Variables > Add/edit a System variable

Name	pollerr
System event	Polling error
Trigger on any data source	Yes
Failed polling attempts	3
Alarm trigger	Yes

Table of created variables:

Variables table

	Name ▼	Data source	Register address	Unit	Alarm trigger
●	Incrementation	Mon_Automate	1		No alarm triggering
○	Interupteur_0	Mon_Automate	3		No alarm triggering
○	Niveau_cuve	Mon_Automate	0	%	Trigger if var > high threshold

Show Edit Delete Add ... Copy and edit   < >

System variables table

	Name ▼	System event	Alarm trigger
●	pollerr	Polling error	Yes

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5) Remote user configuration

The implementation of the Collect & Alert option assumes the existence of remote users receiving alarms and who might take remotely control of the industrial process that triggered the alert.
Click in the menu "remote access" then "Users List"

> Home > Setup > Remote access > Users List

Home
▼ Setup
  ▶ WAN Interfaces
  ▶ LAN Interface
  ▼ Remote access
       Connect
       Users List
       Remote access servers
  ▶ Network
  ▶ Security
  ▶ Serial gateways
  ▶ System
▶ Diagnostics
▶ Maintenance
About

▼ Alert & Display
   Data sources
   Variables
   Alert cycles
   Synoptics

   ModBus polling state
   Alert status
   Alert log

Authorized certificate list

This table is useful if you select the user authentication by login / password + certificate. A certificate will only be accepted if its common name (CN) is present in this table.

	Active	Authorized CN

Show Edit Delete Add ... Copy and edit Λ V   < >

Users list

	Active	Full name	E-mail adress	Company	Phone number (International format : +33611223344)
●	Yes	charles chaussonnier	charles.chaussonnier@etictelecom.com	ETIC TELECOM	+33643961116
○	Yes	Chaussonnier PC	charles.chaussonnier@etictelecom.com	ETIC TELECOM	+33643961116

Show Edit Delete Add ... Copy and edit Λ V   < >

Fill in the fields and select access rights for this user:

> Home > Setup > Remote access > Users List > User Configuration

User information

Active	☑
Full name	charles chaussonnier
Company	ETIC TELECOM
E-mail adress	charles.chaussonnier@etic
Phone number (International format : +33611223344)	+33643961116
User name	Chaussonnier
Password	·············· ·············· Passwords match
Password strength	medium

For security reasons, choose a password longer than 8 characters with uppercase and lowercase letters, numbers and special characters

Access rights

Select on the table below the devices and services the user will be authaurized to access.

Authorize	Device	Services
☑	All the devices	＋ All
☐	All devices on the LAN	＋ All
☐	All devices on the additional LAN	＋ All
☐	This device	＋ All
☑	Pages_Web_S7-1200	＋ Page_Web_S7-1200
☑	RAS-ECW	＋ All

6) Configuring an alert cycle

Since the variables and remote users are known, you can create an alert scenario (alert cycle). A cycle is characterized by the variables triggering it, the alert recipients and the transmission mode (email, SMS, e * MESSAGE) and the broadcast frequency.
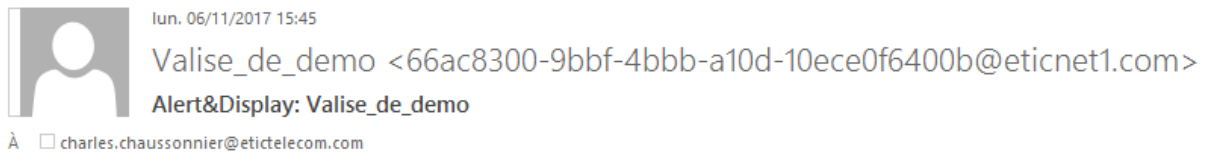
Click on "Alert cycles" and fill in the fields (see diagram below):

> Home > Alert & Display > Alert cycles > Add/Edit an alert cycle

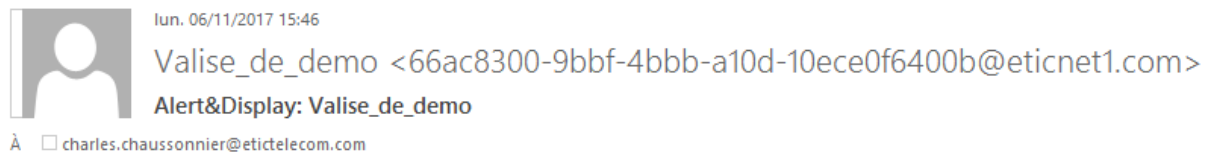|	
Name	Alarmes_Urgentes
Variables triggering the alert cycle	☐ Incrementation ☐ Interupteur_0 ☑ Niveau_cuve
System variables triggering the alert cycle	☐ pollerr
Recipients of the alert messages	☑ charles chaussonnier ☐ Chaussonnier PC
Type	Email and SMS ▼
Reminder count	1 (0 to 20, step 1)
Reminder period (minutes)	30 (1 to 2880, step 1)

7) Acknowledging alerts

- **visualizing an alert received by e-mail …**
  … and its acknowledgment

lun. 06/11/2017 15:45

Valise_de_demo <66ac8300-9bbf-4bbb-a10d-10ece0f6400b@eticnet1.com>

Alert&Display: Valise_de_demo

À   ☐ charles.chaussonnier@etictelecom.com

From : Valise_de_demo
Date : 2017 Nov 06, 15:45:15
Alarm id : JZZC
Reminder : 1/2
Variable : Niveau_cuve = 129 %

Alerte inondation

lun. 06/11/2017 15:46

Valise_de_demo <66ac8300-9bbf-4bbb-a10d-10ece0f6400b@eticnet1.com>

Alert&Display: Valise_de_demo

À   ☐ charles.chaussonnier@etictelecom.com

From : Valise_de_demo
Date : 2017-11-06 15:46:18
Alarm id : JZZC
Variable : Niveau_cuve

Alarm Acked by Chaussonnier PC

Visualization of an alert received by SMS and … its acknowledgment by SMS
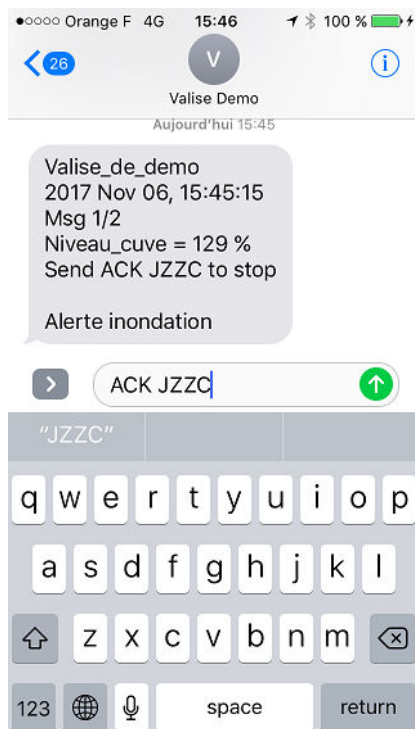
The alert can also be acknowledged locally when the Etic Telecom product has a digital input (dry contact). The digital input is available on all RAS / IPLs except the RAS-E-100, IPL-E-100, RAS-C-100, IPL-C-100, RAS-EW-100, IPL-EW -100.You can also acknowledge an alarm from the operating menu of the Etic Telecom box (see chapter 9).

8) Configuring the data logger

- **Creating an archive file**

Find data Logger setup in « System menu ».
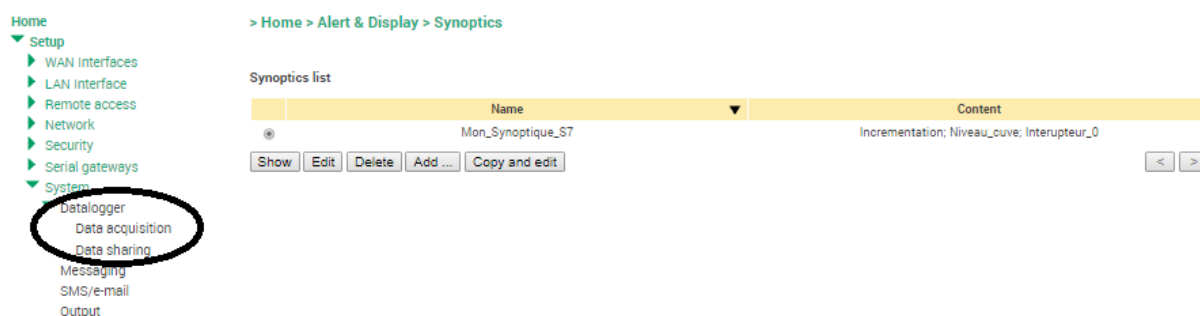
Click "Data Acquisition" to create an archive file. You can then define the variables to be archived, the recording period, the column separator (; in the example below) and the maximum file size.
NB: to create the file, do not forget to click on "Enable" and "Save".

DOC_MPR_Collect & Alert_Starter kit_A
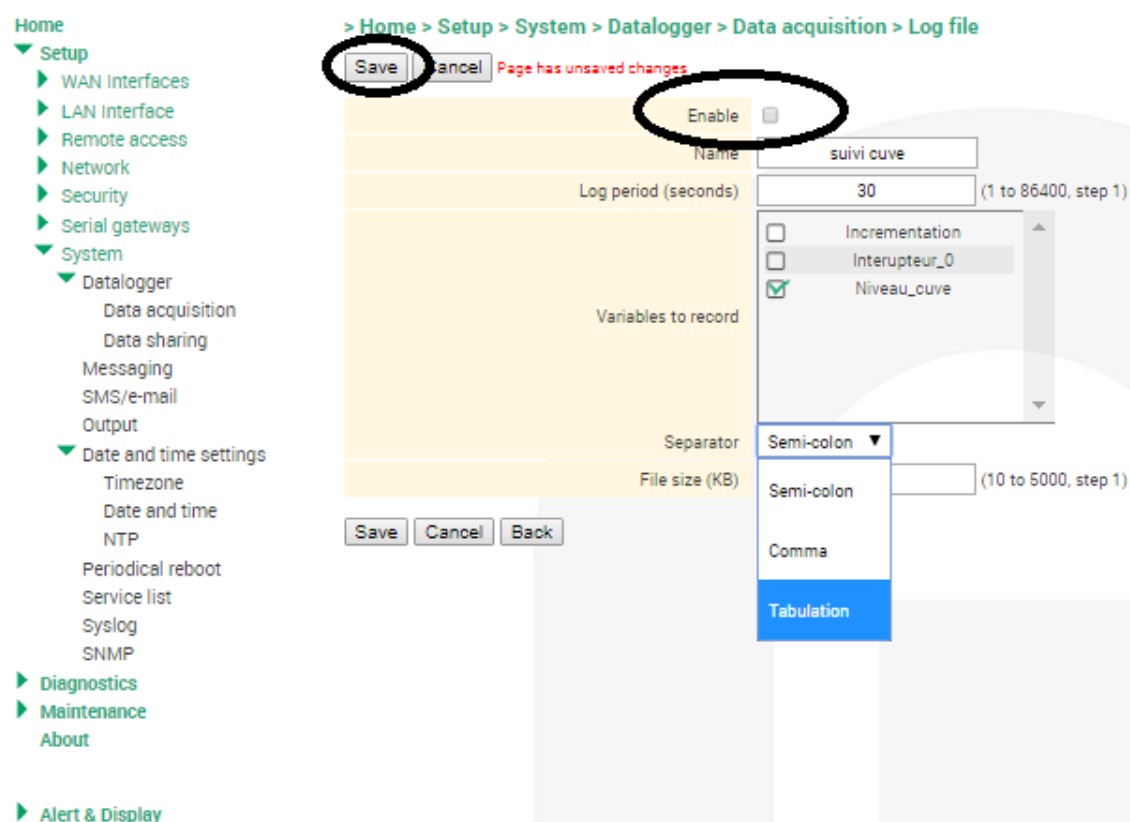
- **Extract from a CSV file (separator retained: ";")**

```
Time;Niveau_cuve (%)
2017-11-06 16:43:00;134
2017-11-06 16:43:30;134
2017-11-06 16:44:00;134
2017-11-06 16:44:30;134
2017-11-06 16:45:00;134
2017-11-06 16:45:30;134
2017-11-06 16:46:00;134
2017-11-06 16:46:30;5
2017-11-06 16:47:00;0
```

You can also choose the archive file location (internal memory, USB key, microSD card).
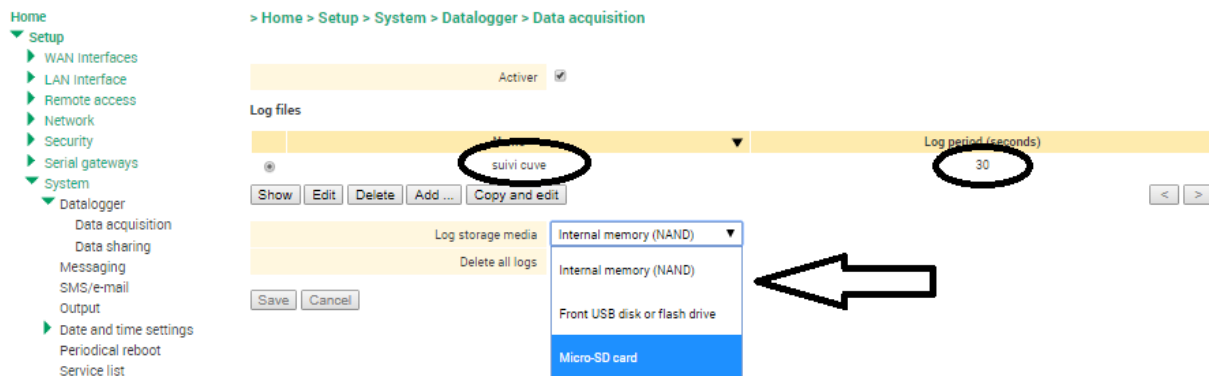
- **How to share an archive file**

You can send the file as an e-mail attachment or FTP. For security reasons, be advised to favor sending by e-mail or FTP (box used as client AND NOT FTP server) to an application server.

By clicking on "data sharing" you can choose how to send the data.

9) Display mode configuration (histogram and dynamic visualization of a variable)

To create a viewable histogram, you first need to create a synoptic by choosing variables that should be displayed.

- **Creating a synoptic**

Home
  Setup
    WAN Interfaces
    LAN Interface
    Remote access
    Network
    Security
    Serial gateways
    System
  Diagnostics
  Maintenance
  About

  Alert & Display
    Data sources
    Variables
    Alert cycles
    Synoptics

    ModBus polling state
    Alert status
    Alert log

	Name	Mon_Synoptique_S7
		☑ Incrementation
		☑ Interupteur_0
	Content	☑ Niveau_cuve

Save   Cancel   Back

- **Access to the operating mode (variable monitoring and histogram display)**

Return to the home page of the configuration menu and click on "operation"

etic
TELECOM   Valise_de_demo

EN | FR

Administration   Operation

Enter the login and password that you have been assigned as a remote user and click on "Log in".

Click on the "Collect & Alert" icon.

By clicking on "Datalogger" you have the opportunity to download (.zip file) the file to attach to your e-mail for exploitation by a third party or display the histogram of values.
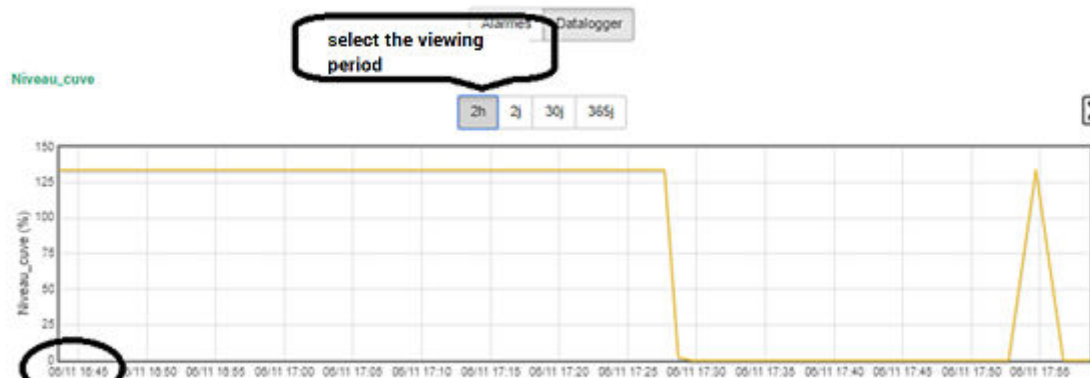

- **Visualization of the histogram**

By clicking on "Alarms", you can simply monitor your industrial process by:
1) visualizing in real time the values of the variables
2) acknowledging a triggered alarm
3) visualizing the alarm log.

- **Dynamic visualization of variables**

Viewer	Alarms	Log

Mon_Synoptique_S7	
Incrementation	35
Interupteur_0	on
Niveau_cuve	0%

- **Alarms to acknowledge**

Viewer	Alarms	Log

Niveau_cuve

Current value   0%
Date   2017-11-13 17:29:47

Acknowledge

by clicking here, you have the possibility to acknowledge an alarm received

- **Log file**

Viewer	Alarms	Log

Niveau_cuve

Alarm time: 2017-11-13 17:29:47
Acked on: 2017-11-13 17:34:47
Acked by: Chaussonnier PC

pollerr

Alarm time: 2017-11-09 09:18:24
Acked on: 2017-11-13 17:29:36
Acked by: Chaussonnier PC

10) Hot line support during your tests

You can contact our hotline at any time during this training phase with the Collect & Alert solution at +33 4 76 04 20 05 or via hotline@etictelecom.com.

11) VIRTUAL SHOWROOM

You also have the possibility by simply logging on our website http://www.etictelecom.com ("Support" and then "Virtual showroom") to familiarize you with the configuration of our products.