

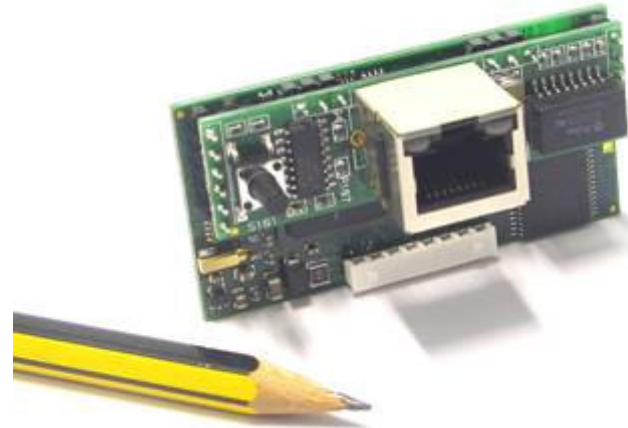


Connectivity Solutions
pCOWeb

pCOWeb

CAREL

- PCO1000WB0 - ETHERNET :
- BACnet Ethernet
- BACnet over IP
- SNMP v1, v2.c, v3
- HTTP (web server)
- FTP push
- FTP, DHCP,...



Devices

CAREL

pCO 1



pCO 2

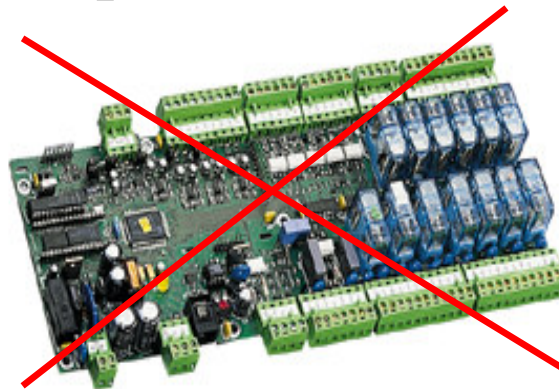


pCO C



pCO 3


pCO B



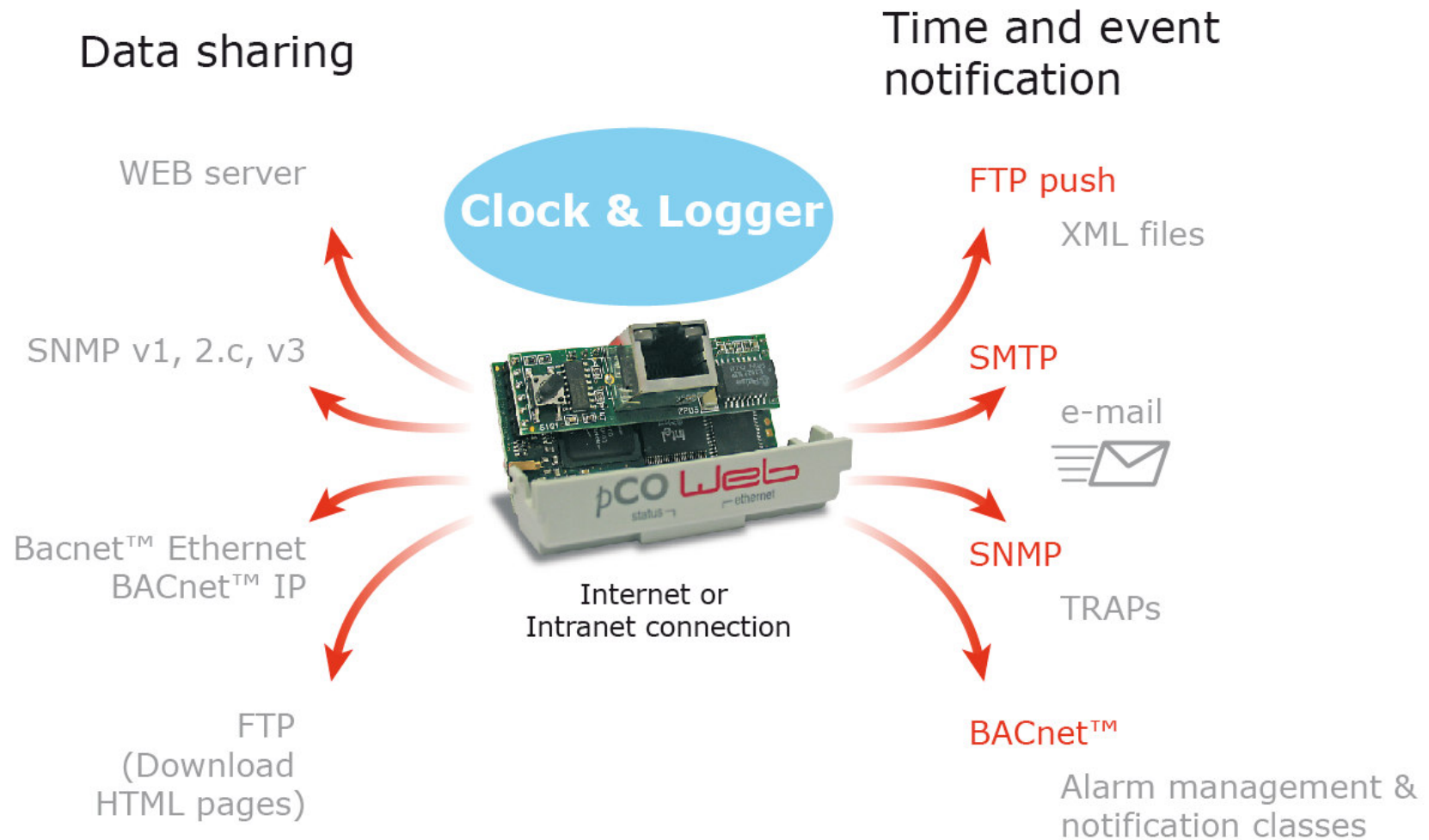
pCO XS

Features



- It allows to access to the variables of the controller (pCOx) through a common Ethernet LAN.
- Board features
 - Power by pCO
 - ARM7 74MHZ
 - 16MB RAM, 8MB flash
 - Linux 2.4.21 
 - 10Mbit
- Protocols
 - HTTP (web pages 4MB)
 - SNMP (Simple Network Management Protocol)
 - BACnet (BACnet over IP and BACnet over Ethernet)
 - FTP server, FTP client

Communication



Web server

CAREL



Ethernet™



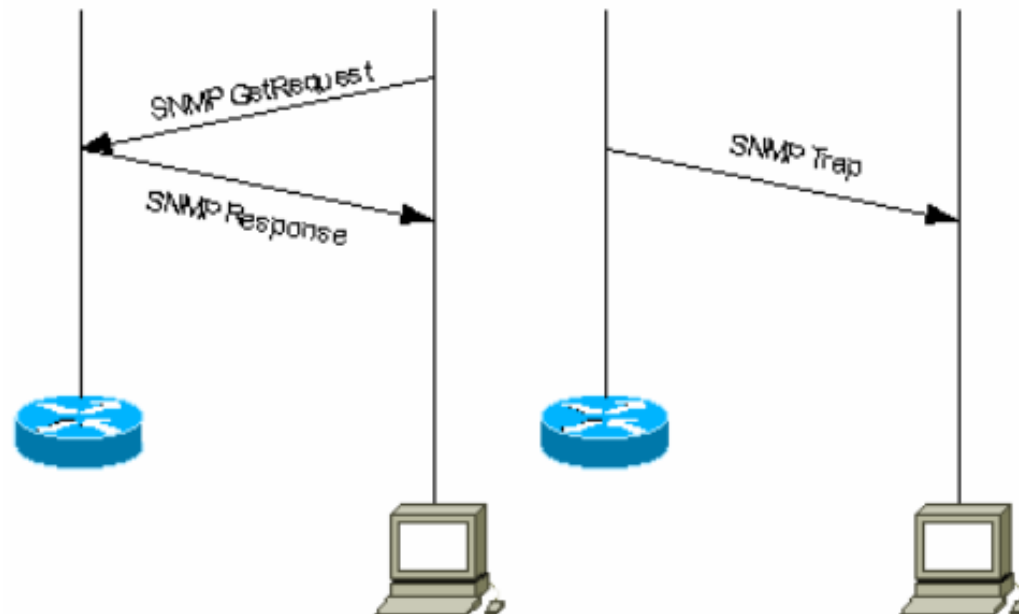
**4Mb memory
space for custom
HTML pages**



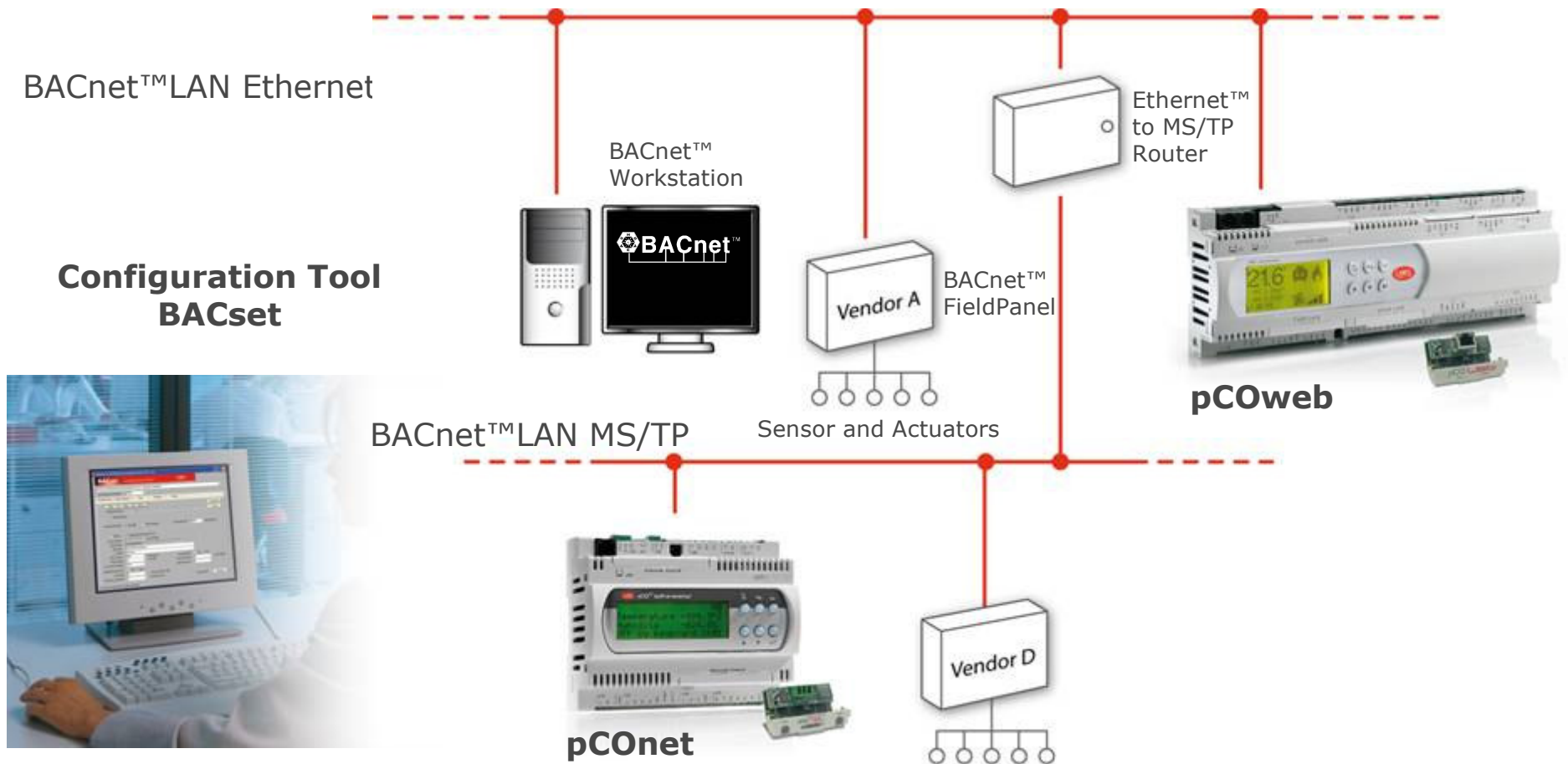
Internet or
Intranet connection

SNMP - TRAP

- Carel OID: 1.3.6.1.4.1.9839
- SNMP v3: encrypting version available
- SNMP traps are an important part of the SNMP standard, and allow devices to self-report problems.
- These traps are typically logged by the network manager, and drive event notifications.
- Traps are asynchronous and outside of the control of the network manager

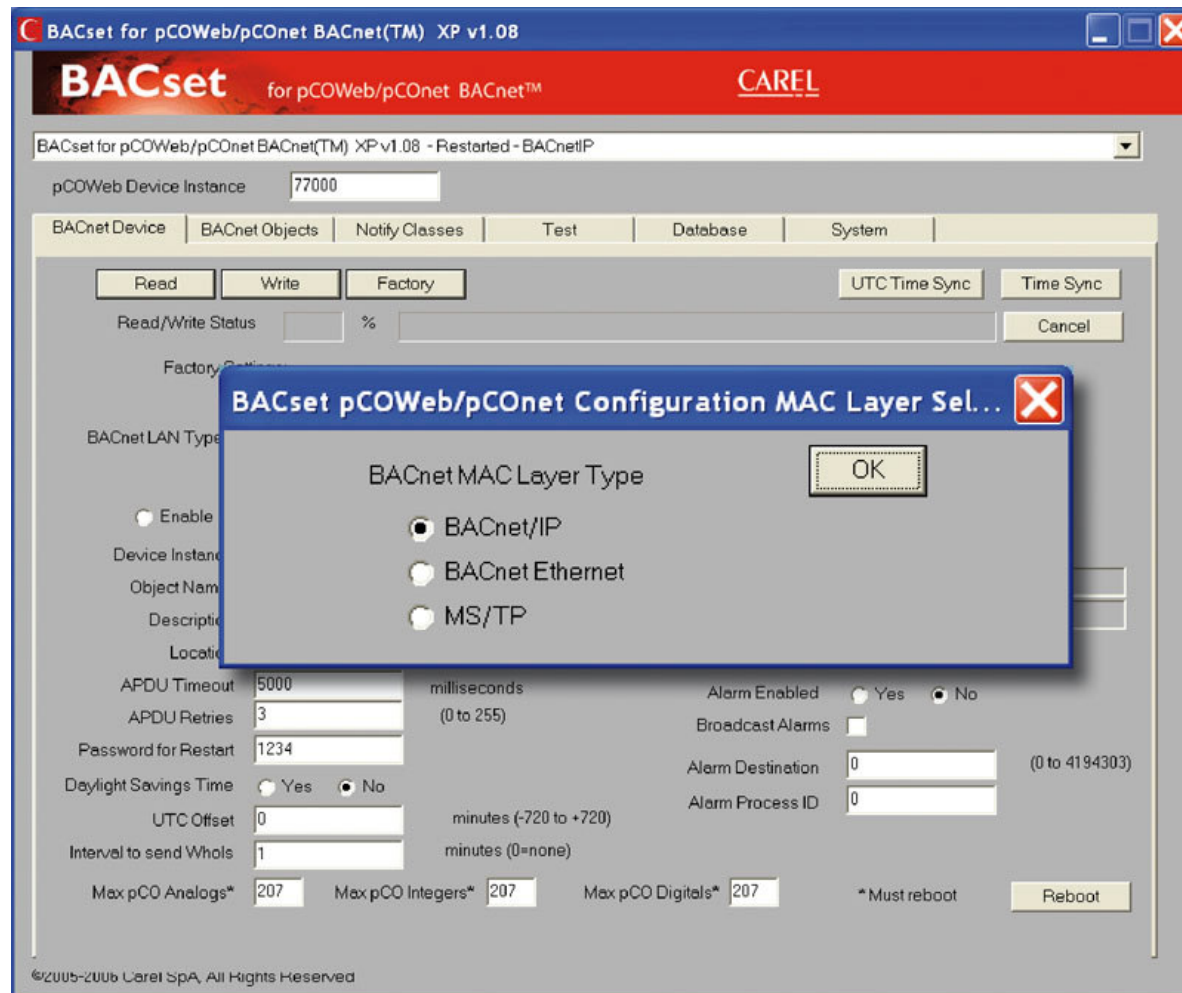


BACnet™ Ethernet™/IP - MS/TP



BACset: BACnet™ configurator

CAREL



Technology & Evolution

Events



Digital Variable Notification - Microsoft Internet Explorer fornito da inwind

pCO Web

Digital Variables	Analog Variables	Integer Variables	Timed events																			
Variable Idx	Digital Variables																					
1-40	Y	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
	T	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
	E	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
	F	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
41-80	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
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	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
81-120	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
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	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
121-160	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
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	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
161-200	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
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201-207	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
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	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-

Digital Variable 142

Y = General Enable Enable all the events (Trap, Email, Ftp push...) configured
 T = Trap SNMP Enable Trap sending
 E = E-mail Enable E-Mail sending
 F = Ftp Push Enable FTP PUSH management

[Close Window](#)

- 207 Digital events
- 207 Analog events
- 207 Integer events
- 40 Timed Events



- Trap SNMP
- e-mail
- FTP Push

FTP PUSH - XML



```
<?xml version="1.0" encoding="UTF-8"?>
<!-- edited with XMLSpy v2005 rel. 3 U (http://www.altova.com) by Alessandro Schiavo (Carel S.p.A.) -->
<PCOWEB>
  <SYSTEM>
    <HOSTNAME>localhost</HOSTNAME>
    <DATE>19700102232431</DATE>
    <IP_ADDRESS/>
    <MAC_ADDRESS>00:0a:5c:10:00:06</MAC_ADDRESS>
    <UPTIME>1d5h54mn</UPTIME>
    <SYS_VERSION>B1.1.4be</SYS_VERSION>
    <APP_VERSION>A1.2.6be</APP_VERSION>
    <SEPARATOR_CHAR>.</SEPARATOR_CHAR>
  </SYSTEM>
  <PCO>
    <PCONAME>Prova PcoWeb</PCONAME>
    <PCOID>1</PCOID>
    <DIGITAL>
      <VARIABLE>
        <INDEX>1</INDEX>
        <VALUE>0</VALUE>
        <PAR_DESCRIPTIONS>
          <NAME>Al_hp_1</NAME>
          <DESCRIPTION>
            <EN>High pressure compressor 1</EN>
            <IT>Alta pressione compressore 1</IT>
          </DESCRIPTION>
          <CODE>
            <EN>HP1</EN>
            <IT>HP1</IT>
          </CODE>
          <EXTD_DESCRIPTION>
            <EN>High pressure circuit 1, chiller 2</EN>
            <IT>Alta pressione circuito 1, chiller 2</IT>
          </EXTD_DESCRIPTION>
        </PAR_DESCRIPTIONS>
        <OPTIONS>
          <UNIT>--</UNIT>
          <MIN>0</MIN>
          <MAX>1</MAX>
        </OPTIONS>
      </VARIABLE>
    </DIGITAL>
  </PCO>
</PCOWEB>
```

e-mail



E-Mail Configuration

Username	<input type="text" value="alberto.zennaro"/>
Password	<input type="password" value="••••••"/>
E-Mail Account	<input type="text" value="pcoweb@carel.com"/>
Identification	<input type="text" value="pCOWeb System Alarm Notifier"/>
Reply to	<input type="text"/>
Destination #1	<input type="text" value="alberto.zennaro@carel.com"/>
Destination #2	<input type="text"/>
Destination #3	<input type="text"/>
Destination #4	<input type="text"/>
Destination #5	<input type="text"/>
SMTP Server Address	<input type="text" value="192.168.0.30"/>
Attachment	<input type="text"/>

Submit

- 5 destinations
- XML Attachment
- HTML or text Body part
- Reply to

Clock Synchronization



The screenshot shows a web interface with two tabs: "Clock" (selected) and "Logger". The main content area contains a warning message: **!!TAKE CARE!!** The application software on board of pCOx has to be configured to transmit clock variables to pCOWeb using 5 integer supervisor variables, otherwise clock synchronizer and logger will do not work. Contact EasyTools Customer Care for more informations.

Below the warning, the "Actual date" is displayed as 2006-07-19 07:22.

The "Clock Configuration" section includes a radio button group for "Enable Clock Syncer", with "Disabled" selected and "Enabled" unselected. Below this, a prompt asks to "Choose the index of the integer variables which contain:". Five dropdown menus are provided for "Day", "Month", "Year", "Hour", and "Minute", each with a value of 1, 2, 3, 4, and 5 respectively.

A "Submit" button is located at the bottom of the configuration section.

- pCOWeb sincronized with the pCO every minutes

Logger



- ☒ **Download logged data**
- ☒ Update csv files and graph
- ☒ Download all the csv and graphs
- ☒ Download only the latest csv files
- ☒ **Logger status**
- ☒ Check logger status and free space available

Logger Configuration

Time Sample

Compression (.gz) ☒ Disabled ☐ Enabled

Choose index and type and put a simple description for the logged variables.

Variable	Enabled/Disabled	Type	Index	Short Description
Variable 1	<input checked="" type="radio"/> Disabled <input type="radio"/> Enabled	<input type="text" value="Digital"/>	<input type="text" value="1"/>	<input type="text"/>
Variable 2	<input checked="" type="radio"/> Disabled <input type="radio"/> Enabled	<input type="text" value="Digital"/>	<input type="text" value="1"/>	<input type="text"/>
Variable 3	<input checked="" type="radio"/> Disabled <input type="radio"/> Enabled	<input type="text" value="Digital"/>	<input type="text" value="1"/>	<input type="text"/>
Variable 4	<input checked="" type="radio"/> Disabled <input type="radio"/> Enabled	<input type="text" value="Digital"/>	<input type="text" value="1"/>	<input type="text"/>
Variable 5	<input checked="" type="radio"/> Disabled <input type="radio"/> Enabled	<input type="text" value="Digital"/>	<input type="text" value="1"/>	<input type="text"/>
Variable 6	<input checked="" type="radio"/> Disabled <input type="radio"/> Enabled	<input type="text" value="Digital"/>	<input type="text" value="1"/>	<input type="text"/>
Variable 7	<input checked="" type="radio"/> Disabled <input type="radio"/> Enabled	<input type="text" value="Digital"/>	<input type="text" value="1"/>	<input type="text"/>
Variable 8	<input checked="" type="radio"/> Disabled <input type="radio"/> Enabled	<input type="text" value="Digital"/>	<input type="text" value="1"/>	<input type="text"/>
Variable 9	<input checked="" type="radio"/> Disabled <input type="radio"/> Enabled	<input type="text" value="Digital"/>	<input type="text" value="1"/>	<input type="text"/>
Variable 10	<input checked="" type="radio"/> Disabled <input type="radio"/> Enabled	<input type="text" value="Digital"/>	<input type="text" value="1"/>	<input type="text"/>

Technology

Graph

View last graph

- Csv files
- Downloadable via HTML page
- 10 variables
- Graph of 1 variable
- Time Sample configurable
- GZ Compression

Useful Address



pcoweb@carel.com

