Instruction Manual

Entis Pro Attention Scan

February 2013

PART NO: 4416386

REV.0
Preface

This manual describes how to operate the Entis Pro Attention Scan. It has been written for system supervisors as well as engineers to provide them with all information to configure the system.

Safety and prevention of damage

‘Notes’ have been used throughout in this manual to bring special matters to the immediate attention of the reader.

A note points out a statement deserving more emphasis than the general text.

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- Execution of activities that are not prescribed.
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1. Overview

Attention Scan is an Entis Pro add-on. It is installed on one or more Entis Pro workstations, and intended to view level data from user selectable gauges, with increased update rates. Attention Scan connects to Enraf’s Gauge Data Server (EGDS).

![Figure 1 Typical configuration](image)

Attention Scan together with EGDS (Enraf Gauge Data Server) forms a Client Server application. One or more Attention Scan clients can be connected to one or more EGDS servers. This is only limited by bandwidth usage.
2. Getting Started (First Use)

The application can be started through the Start Menu under Entis Pro.

![Figure 2 Windows Start Menu](image)

When clicked the Main Screen is shown:

![Figure 3 Attention Scan main dialog](image)

Since there is no Instrument or Gauge selected yet, a blank display shown.
2.1. Controls

These are the controls to use the Attention Scan application.

![Figure 4 Attention Scan main dialog controls](image)

In the following paragraphs each control is described separately.
2.1.1. **Select Group or Instrument**

Instruments are gathered in groups to create a structure.

The ‘Select Group or Instrument’ button will start a new dialog to enable the user to either select a group or an instrument in a group.

![Figure 5 ‘Group or Instrument Selector’ dialog](image)

The picture shows several Instruments which are a member of the ‘ALL’ group. By selecting the group ‘ALL’, the ‘Select Instrument’ combo box is filled with all instruments from ‘ALL’ group. In this case these are DEMOGAUGE_mm, DEMOGAUGE_mm10, TK_01…TK03.

![Figure 6 Select Instrument Combo box](image)
If an Instrument is selected directly from the ‘Instrument Selector’, for example ‘DEMOGAUGE_mm’, the ‘Select Instrument’ combo box is still filled with all instruments from the group of the selected instrument, in this case ‘ALL’, but additionally the instrument is selected directly.

![Select Instrument Combo box prefilled](image)

**Figure 7 Select Instrument Combo box prefilled**

### 2.1.2. Select Instrument

The ‘Select Instrument’ combo box is used to select an instrument from the previous selected group with ‘Select Group or Instrument’ button, by clicking the down arrow symbol.

The ‘Select Instrument Selector’ will be empty initially, because it will be filled with the instrument list from the selected group from the select group / instrument function. (Refer to paragraph 2.1.1)

If the group is not selected yet, the instrument cannot be selected since the combo box will be empty.

Always first select a group and or instrument with the ‘Select Group or Instrument’ button.

Groups and Instruments are user configurable, through the configuration tool, described in the Entis Pro Attention Scan Installation Guide part no.: 4416387
2.1.3. Display Scaling

To create readability from great distance, the Attention Scan application supports scaling the size of the data field in two ways. Either by selection of the Font directly or by using the Enlarge and Diminish Font buttons the appearance can be changed.

![Scaling example](image)

Figure 8 Scaling example

2.1.4. Start a New Instance

Since the Attention Scan application will show one instrument at the time, it can be started multiple times. This is done by clicking the ‘Start New Instance’ button.

Please note that more instances mean a higher load on the field bus. It could lead to low responsiveness or timeout errors. Using many instances defeats the purpose of the application, since this will degrade the overall performance.
2.1.5. Help

The Help Button will show the user manual (this file), a non contextual help in PDF format.

Figure 9 Coversheet

Please note that hovering over the Help button will show the application ‘About’ text.
It is important for the Help function to operate correctly, that a suitable PDF reader is installed.
2.1.6. Application Status Bar

The Status bar consists of three elements:

- The Non W&M indication, to indicate the application is not suitable for custodial processes.
- The application status, indicating current action or error situations.
- The Watch dog LED / Time indication, indicating the ‘health of the application’.

2.1.6.1. The Non W&M approved icon

The main purpose of the application is high speed level scan. The application is not certified for custodial transfer. Therefore the Non W&M indication indicates that the shown data is not suitable for custodial transfer.

2.1.6.2. Application Status

The Application Status indicates the current status of the program. Possible messages are application activities and or error conditions codes, with a expanded description in the tooltip.

2.1.6.3. LED/Time indication

Both the LED (yellow) and the time indication Watchdog are used to indicate the health of the application. The time system indication, displays the local system time. If the time appears to be stopped, normal operation of the application is disrupted, and eventual displayed data cannot be relied upon. If the LED indicator seem frozen in either state (lit or extinguished), the application has difficulties retrieving valid data from the instrument.
3. Miscellaneous Functionality

3.1. Always On top

Since it is a monitoring application, the Attention Scan application is configured for always on top use. By minimizing the application, it disappears from the desktop and active scanning is stopped to minimize bandwidth usage. Upon restoring the application, the scanning will resume. If the Windows 7 Aero theme is configured in windows, the minimized preview thumbnail will look like figure 10.

![Figure 10 Aero theme thumbnail preview](image)

The actual tank select is shown; the tooltip describes the stopped situation.

3.2. Command line Parameters

During the installation a shortcut is made to the application in the Windows Start Menu only, since it is part of the Entis Pro suite. It is however possible to create your own shortcut with preconfigured group and instrument parameters. `<Group Name>` and `<Instrument Name>` will have to be provided as parameters to Attention Scan separated by a space and in this order. Attention Scan will load the correct group and instrument and begin scanning.

3.2.1. Command Line Parameters Example

**Step 1:** Create a shortcut to the executable located in:

```
"C:\Program Files\Honeywell Enraf\AttentionScan\AttentionScan.exe"
```

Refer to the Windows Help system on how to do this.
Step 2: Open the properties of the shortcut:

![Figure 11 Shortcut parameters](image)

Step 3: Change the Parameters to suit your needs. In the shown example the ‘ALL’ group and a Tank ‘TK_01’ (note the space between the group and the tank) is added to the shortcut. This forces the Attention Scan application to start with the TK_01 tank from the ALL group to be preselected.

Step 4: Apply the settings and close the dialog by clicking the OK Button
## Appendix A, Trouble Shooting Attention Scan

<table>
<thead>
<tr>
<th>Error code name</th>
<th>Description</th>
<th>Remedy</th>
</tr>
</thead>
<tbody>
<tr>
<td>NO_ERROR</td>
<td>Occurs when there is no error</td>
<td>This normally not shown!</td>
</tr>
<tr>
<td>BCC_ERROR</td>
<td>Serial message checksum</td>
<td>Noise or instability: Check Serial Connections between PC and CIU and/or CIU field lines; Check cable shielding</td>
</tr>
<tr>
<td>CRC_ERROR</td>
<td>Serial message checksum</td>
<td>Noise or instability: Check Serial Connections between PC and CIU and/or CIU field lines; Check cable shielding</td>
</tr>
<tr>
<td>TIMEOUT_ERROR</td>
<td>Communication time out</td>
<td>Instrument does not respond: Check addressing, and or serial Connections between PC and CIU and/or CIU field lines</td>
</tr>
<tr>
<td>PARSING_ERROR</td>
<td>1) On protocol level this occurs when a reply cannot be converted to a valid message. 2) Occurs also when client/server XML message fails</td>
<td>Possible problem with network interface, or unscheduled disconnect: Check network connection, routing</td>
</tr>
<tr>
<td>SERIALPORT_PARITY_ERROR</td>
<td>Occurs when serial port parity fails</td>
<td>Noise or instability: Check Serial Connections between PC and CIU and/or CIU field lines; Check cable shielding</td>
</tr>
<tr>
<td>CHECKSUM_ERROR</td>
<td>Serial message checksum</td>
<td>Noise or instability: Check Serial Connections between PC and CIU and/or CIU field lines; Check cable shielding</td>
</tr>
<tr>
<td>LRC_ERROR</td>
<td>Serial message checksum</td>
<td>Noise or instability: Check Serial Connections between PC and CIU and/or CIU field lines; Check cable shielding</td>
</tr>
<tr>
<td>DEVICE_ALREADY_OPEN_ERROR</td>
<td>Occurs when sending open device request 2 or more times</td>
<td>Possible double use of serial port: Check for other application that uses the serial port.</td>
</tr>
<tr>
<td></td>
<td>1) Occurs when sending a request while the device is closed. 2) Occurs when sending close device request 2 or more times</td>
<td>Possible double use of serial port: Check for other application that uses the serial port.</td>
</tr>
<tr>
<td>DEVICE_ALREADY_CLOSED_ERROR</td>
<td>Occurs when a COM port is claimed by another application.</td>
<td>Possible double use of serial port: Check for other application that uses the serial port.</td>
</tr>
<tr>
<td>DEVICE_ALREADY_OPENED_BY_NON_DST_APPLICATION_ERROR</td>
<td>Occurs when a COM port is still in use by another EGDS client</td>
<td>Possible double use of serial port: Check for other application that uses the serial port.</td>
</tr>
<tr>
<td>DEVICE_CANNOT_CLOSE_ERROR</td>
<td>Occurs when serial port does not exists</td>
<td>The application tries to open a remote port that is not there: Check Instrument configuration with the configuration tool</td>
</tr>
<tr>
<td>COULD_NOT_CREATE_SERIALDEVICE_ERROR</td>
<td>Occurs when timeout, turnaround delay or retries are out of range</td>
<td>Latency timeout value configured, out of range: Try to use a smaller non negative value, or the default 5000ms</td>
</tr>
<tr>
<td>CONFIG_ERROR</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Error Code</td>
<td>Description</td>
<td>Solutions</td>
</tr>
<tr>
<td>---------------------------</td>
<td>-----------------------------------------------------------------------------------------------</td>
<td>-----------------------------------------------------------------------------------------------</td>
</tr>
<tr>
<td>DEVICE_UNKNOWN_ERROR</td>
<td>Occurs when the error is unknown (Global exception in the code)</td>
<td></td>
</tr>
<tr>
<td>DEVICE_ILLEGAL_ERROR</td>
<td>1) If an illegal device is selected (Not COM1…255 or UDP, TCP)</td>
<td>Serial Port number out of range: Valid range 1-31 through GUI, 1-255 in XML configuration</td>
</tr>
<tr>
<td></td>
<td>2) If the serial port configuration is failing</td>
<td></td>
</tr>
<tr>
<td>NETWORK_CONNECTION_DENIED_ERROR</td>
<td>1) When a client cannot connect to the EGDS server.</td>
<td>No network connection: Check network cabling, IP addresses and Firewall settings both at the client and the EGDS server machine</td>
</tr>
<tr>
<td></td>
<td>2) When the Ethernet layer (UDP/TCP) of the EGDS server cannot connect to a Gateway/Device</td>
<td></td>
</tr>
<tr>
<td>NETWORK_CONNECTION_LOST_ERROR</td>
<td>When client is losing connection with the server</td>
<td>No network connection or performance issue: Check network cabling, reduce number of Attention Scan clients, Check Firewall settings both at the client and the EGDS server machine</td>
</tr>
</tbody>
</table>

The application, beside the error code name, will also show an error number. This is mainly intended to communicate to the service engineer, in case of a support contact.