



Interscan Corporation

ARC-MAX III -

DATA ARCHIVING SOFTWARE

V. 2.1.0.9

OPERATION MANUAL

Contents

1	Opening the program.....	3
2	Login Window.....	3
2	Menu & Toolbar	4
2.1	Current Data Display.....	5
2.2	Alarm Settings.....	7
2.3	Shift Reports.....	7
2.3.1	Shift Reports page additional functions.....	9
2.4	Group Report.....	9
2.4.1	Group Report Channel selection	10
2.4.2	Group Reports page additional functions	12
2.4.3	Group Report Graph Dialog	12
2.4.4	Group Report Graph Screen	12
2.4.5	Graph View Manipulation	13
2.4.6	Graph Configuration	14
2.5	Raw Device Report.....	15
2.5.1	Raw Data Report page additional functions.....	16
2.5.2	Raw Data Report Graph Dialog.....	16
2.5.3	Raw Device Report (Graph)	17
2.6	Alarm Logs	18
2.7	Clear All Logs	20
2.8	No Communication List.....	20
3	Configuration Menu	21
3.1	Define Regions	21
3.2	Define Devices.....	22
3.2.1	Define Devices (New).....	23
3.2.2	Define Devices (Modify)	24
3.3	Define Users	24
3.3.2	Define Users (New or Modify)	25
3.4	Define Ports	26
3.4.2	Define Ports (New or modify)	26
3.5	Define Shifts	27
3.6	Diagnostics.....	28
3.7	Start and Stop Server	28
4	Program Menu	29
4.5	Change Password	30
4.6	Change Parameters	30

NOTE: All examples shown in this manual correspond to a two channel setup for a 2-point Ethylene Oxide monitoring system. Your actual configuration and gas may differ.

1 Opening the program.

Start the Teos/Arcmax III program by opening the ARCMAXIII folder installed on your PC's primary drive and locating the file titled "ARCMAXIII.exe". Double click this file to open the program. For future access to ARCMAX, you may wish to create a copy of the program icon on your desktop. Right click the "ARCMAXIII.exe" file and select "Send to Desktop" (create shortcut)". **NOTE: For orders where a PC was included as part of the ARCMAX package, the ARCMAX Icon will already appear on the PC's desktop.**

2 Login Window



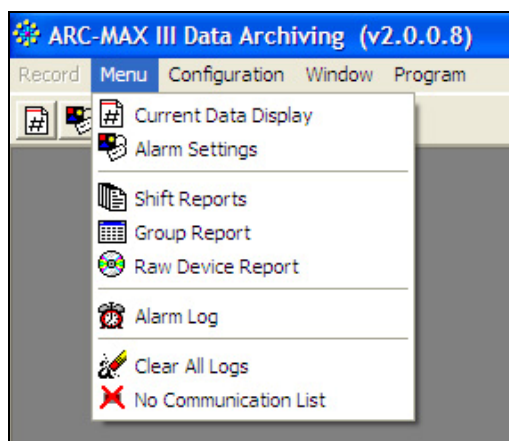
The Login window will appear upon opening the program and is designed to keep the system secure from unauthorized persons entering the control portion of the program.

- (1) Each person must log in under his or her own user name and password.
- (2) After entering the proper information select OK to enter the program or Cancel to exit.

The default User Name is ADMIN
The is no default Password

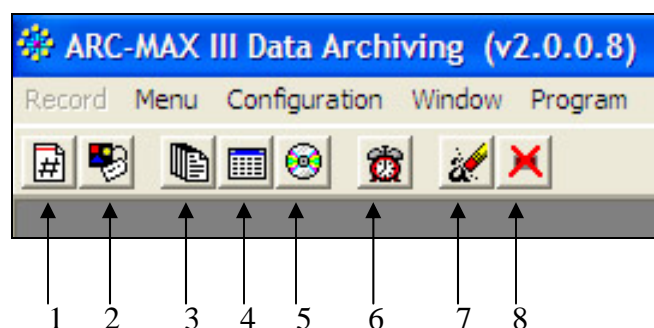
It is recommended that a password be added upon initial startup and new/additional User Names and Passwords be established as needed. See 3.3 "Define Users" on page 24 for details on how to change this password and add new users.

2 Menu & Toolbar

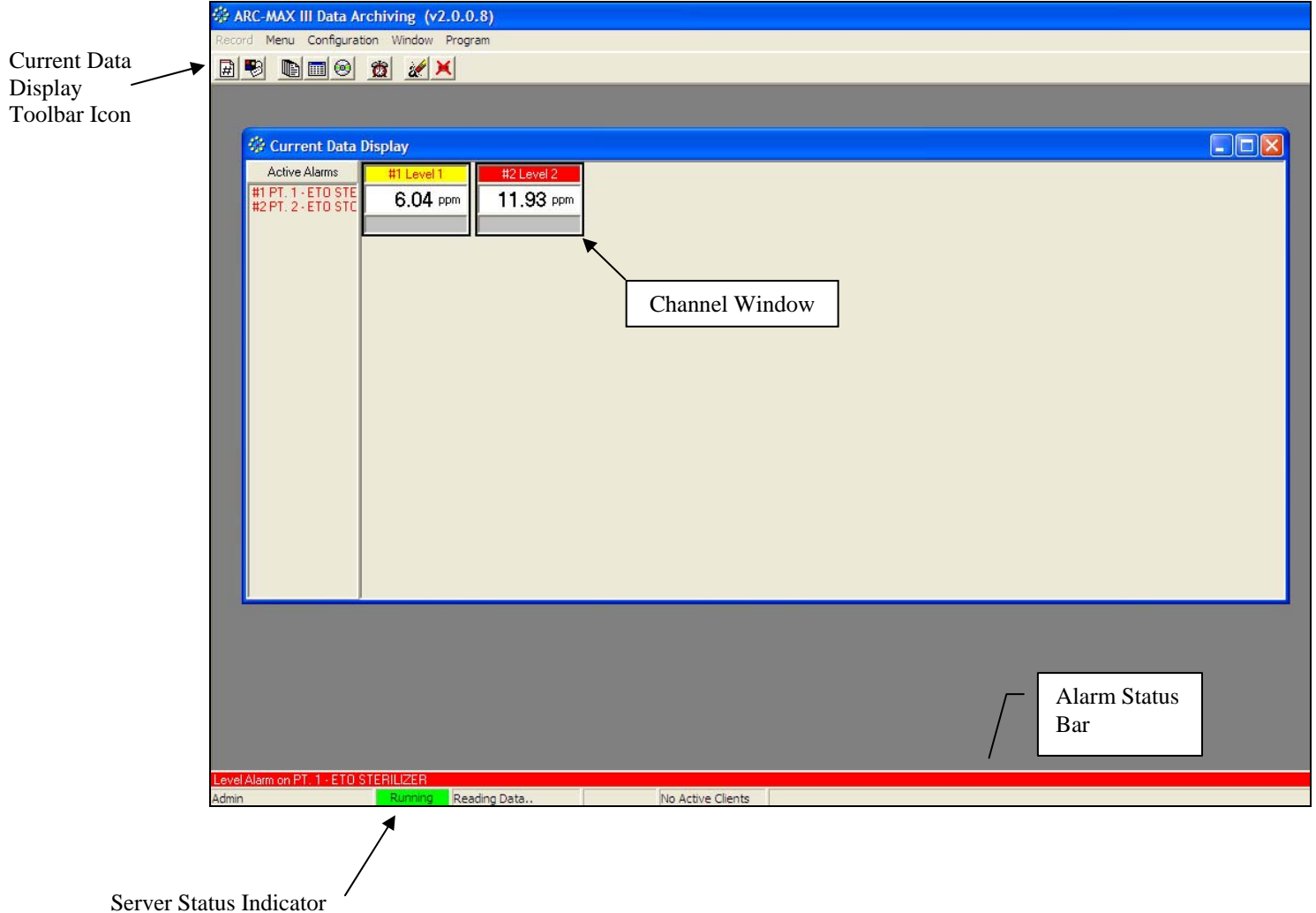


You can select various displays and reports either using the Menu tab on the top toolbar as shown above or by clicking on the related icon on the Menu toolbar as shown below. Each menu item is described below and numbered according to the icon figure shown.

- 1) **Current Data Display:** Main gas monitoring window showing gas levels, and alarm status for all sample points. See section 2.1 on the next page.
- 2) **Alarm Settings:** Provides for modification of the two available alarm level set points. See section 2.2 on page 7.
- 3) **Shift Reports:** Data collection reporting page for all channels based on data collected in each shift period. Includes STEL values. See section 2.3 on page 7.
- 4) **Group Report:** Accesses gas monitoring report and graph page for a grouping of up to eight multiple channels. See section 2.4 on page 9.
- 5) **Raw Device Report:** Accesses gas monitoring report and graph page for an individual channel. See section 2.5 on page 15.
- 6) **Alarm Log:** Accesses alarm history page. See section 2.6 on page 18.
- 7) **Clear All Logs:** Clears all logs in the database. See section 2.7 on page 20.
- 8) **No Communication List:** Troubleshooting page to monitor current devices that are not communicating with server on the last poll. See section 2.8 on page 20.



2.1 Current Data Display



To open the Current Data Display from the tool bar, click on the Current Data Display icon as shown above or select **Current Data Display** from the drop down MENU list.

This page displays all channels' current Gas PPM levels and gas level alarms. LOW level alarms will be indicated by a yellow bar at the top of the channel window and HIGH level alarms will be indicated by a red bar at the top of the channel window as shown.

The Alarm Status bar at the bottom will pop-up any time there is a new alarm or System Fault. All alarms are logged in the Alarm Log (see section 2.6).

Click on any channel window to display a dedicated display detail window for that channel as shown below.

Current Data Display	
Gas Detection	
Yesterday Today	
Shift 4 Shift 1 Shift 2 Shift 3 Shift 4	
PT. 1 - ETO STERILIZER	
Item	Value
Current Value	6.04 PPM
Shift Min Value	0.00 PPM @ 10:30 AM
Shift Max Value	6.07 PPM @ 11:13 AM
Minute Average	6.04 PPM (170 samples)
8 hr Average	0.03 PPM
Current STEL	0.51 PPM
STEL Max 1	0.51 PPM @ 11:14 AM
STEL Max 2	0.11 PPM @ 11:13 AM
STEL Max 3	0.06 PPM @ 11:03 AM
STEL Max 4	0.06 PPM @ 11:02 AM
SHIFT #2 (10:30 AM to 2:30 PM) Friday, November 06, 2009, 11:14:20 AM	

The dedicated data display window displays/controls the following:

Shift Selection– Clicking on the appropriate shift button displays data for the shift selected. Currently active shift is indicated by an orange bar below the shift button.

Channel Name – The title given to the channel, usually indicating the location being monitored. This can be changed by the user. See section 3.2 on page 22.

Current Value – Current active gas concentration value for the channel.

Shift Min Value – Minimum gas concentration value and time of its first occurrence for the shift being viewed.

Shift Max Value - Maximum gas concentration value and time of its first occurrence for the shift being viewed.

Minute Average – Average gas concentration value over the past minute for the channel.

8-Hour Average – Average gas concentration value over the past eight hours for the channel.

Current STEL – Running average of the past 15 Minute Averages for the channel.

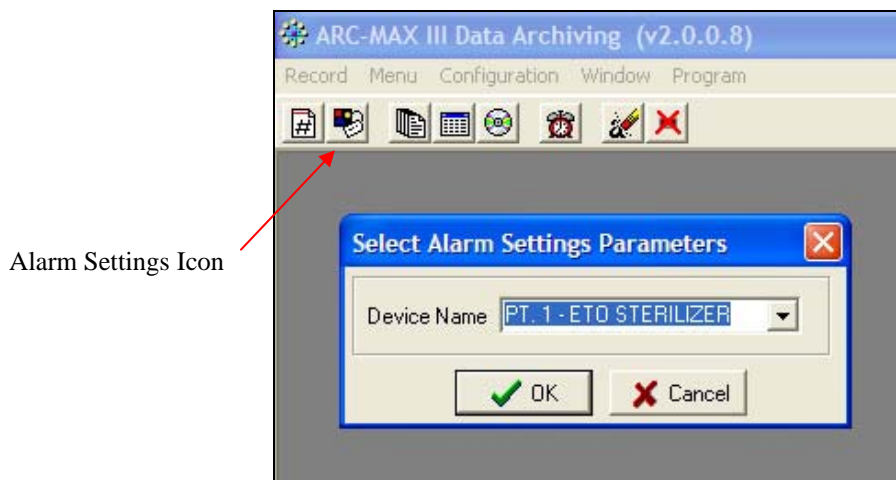
STEL Max 1 – Selected shift's highest 15 minute running average logged and the time the 15 minute period ended.

STEL Max 2 – Selected shift's second highest 15 minute running average logged and the time the 15 minute period ended.

STEL Max 3 - Selected shift's third highest 15 minute running average logged and the time the 15 minute period ended.

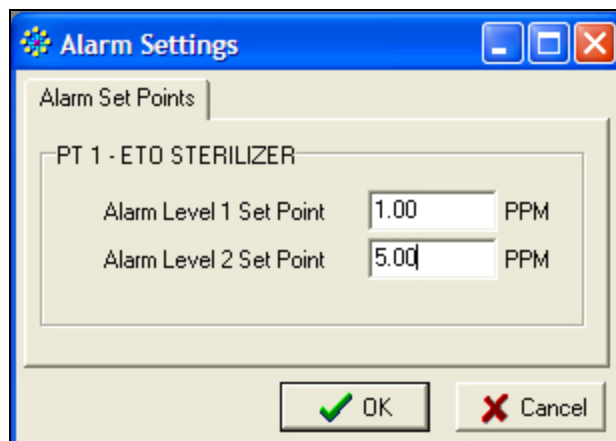
STEL Max 4 - Selected shift's fourth highest 15 minute running average logged and the time the 15 minute period ended.

2.2 Alarm Settings



To open the Alarm Settings page from the tool bar click on the “Alarm Settings” icon shown above or select **Alarm Settings** from the drop down MENU list.

To access a channel’s alarm settings click the drop down arrow, highlight the desired channel and then click OK. The alarm set points for the selected channel will be displayed as shown below.

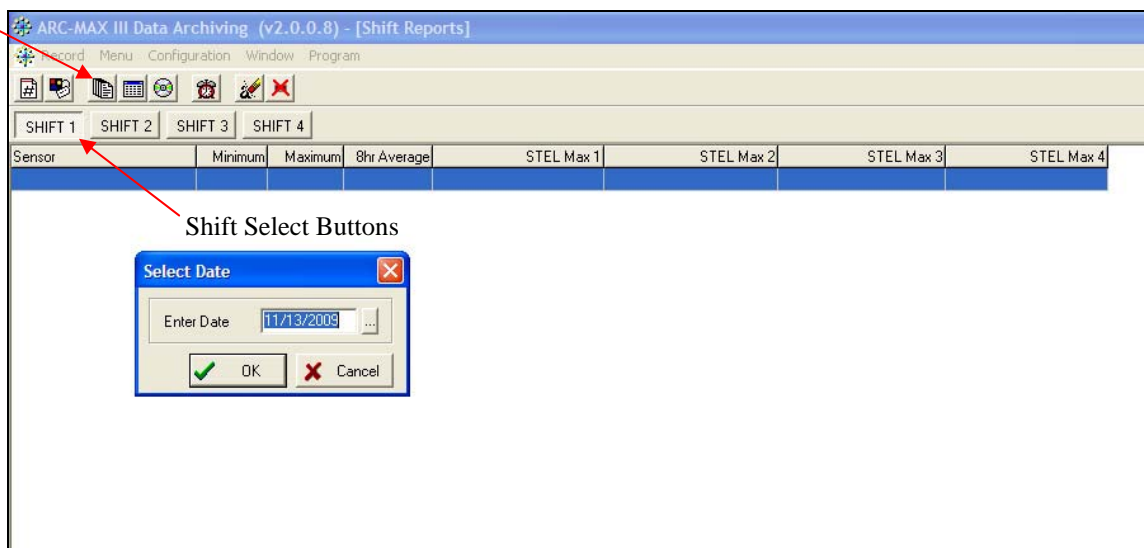


To change an alarm set point value, click in the desired field and change the value by backspacing to erase the previous value and typing in the new value. Click “OK” when finished to save the new value. Repeat as needed for additional channels.

2.3 Shift Reports

Teos provides for collecting data in “shift” periods corresponding to work shift hours as defined by the Define Shifts parameters (see section 3.5 on page 27). Data collected during these shift periods can be viewed by clicking the “Shift Reports” icon shown below or by selecting **Shift Reports** from the drop down MENU list.

Shift Report Icon



When the Select Date window opens, type in the date desired or click on the button to the right of the date field and select a date from the pop up calendar, then click OK. If you click OK without entering a date the current day report will be displayed. (To change, delete or add shifts, see section 3.5, “Define Shifts”, pg 27.)

Once on the shift report page, the shift to be viewed can be selected by clicking on the appropriate SHIFT button at the top of the report page. Any shifts not defined will show a greyed out button. Additionally, a shift report will only display data for a shift that has fully elapsed. If you select the current day’s date and a shift that hasn’t fully elapsed, there will be no data for that shift in the shift report.

Once the date and shift are selected, the shift report for that day will be displayed as shown below.

ARC-MAX III Data Archiving (v2.0.0.8) - [Shift Reports - 11/13/2009 (Shift 1)]							
Record Menu Configuration Window Program							
SHIFT 1 SHIFT 2 SHIFT 3 SHIFT 4 7:00 AM - 11:30 AM							
Sensor	Minimum	Maximum	8hr Average	STEL Max 1	STEL Max 2	STEL Max 3	STEL Max 4
PT. 1 - ETO STERILIZER	0.00	13.34	0.57	2.65 @ 10:28 AM	2.61 @ 10:29 AM	2.56 @ 10:30 AM	2.52 @ 10:26 AM
PT. 2 - ETO STORAGE	0.00	26.32	0.95	4.25 @ 10:26 AM	2.73 @ 10:27 AM	2.65 @ 10:28 AM	2.63 @ 10:29 AM

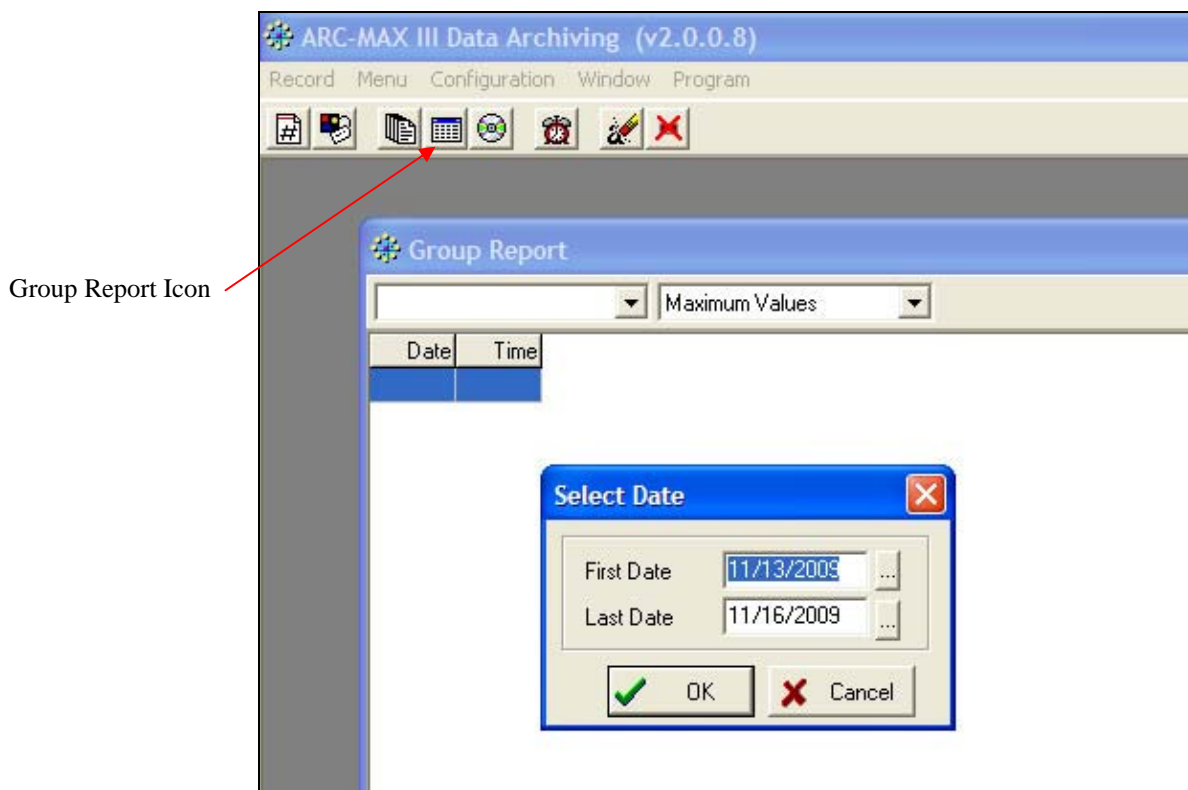
The shift report shows the minimum, maximum and average gas concentration values for the duration of the shift as well as the four highest STEL values logged during the shift and the times each STEL ended. NOTE: Should the data regions not appear in the report as they do in the example above and data appears missing, simply drag the region boundary to the right to expand the data column.

2.3.1 Shift Reports page additional functions

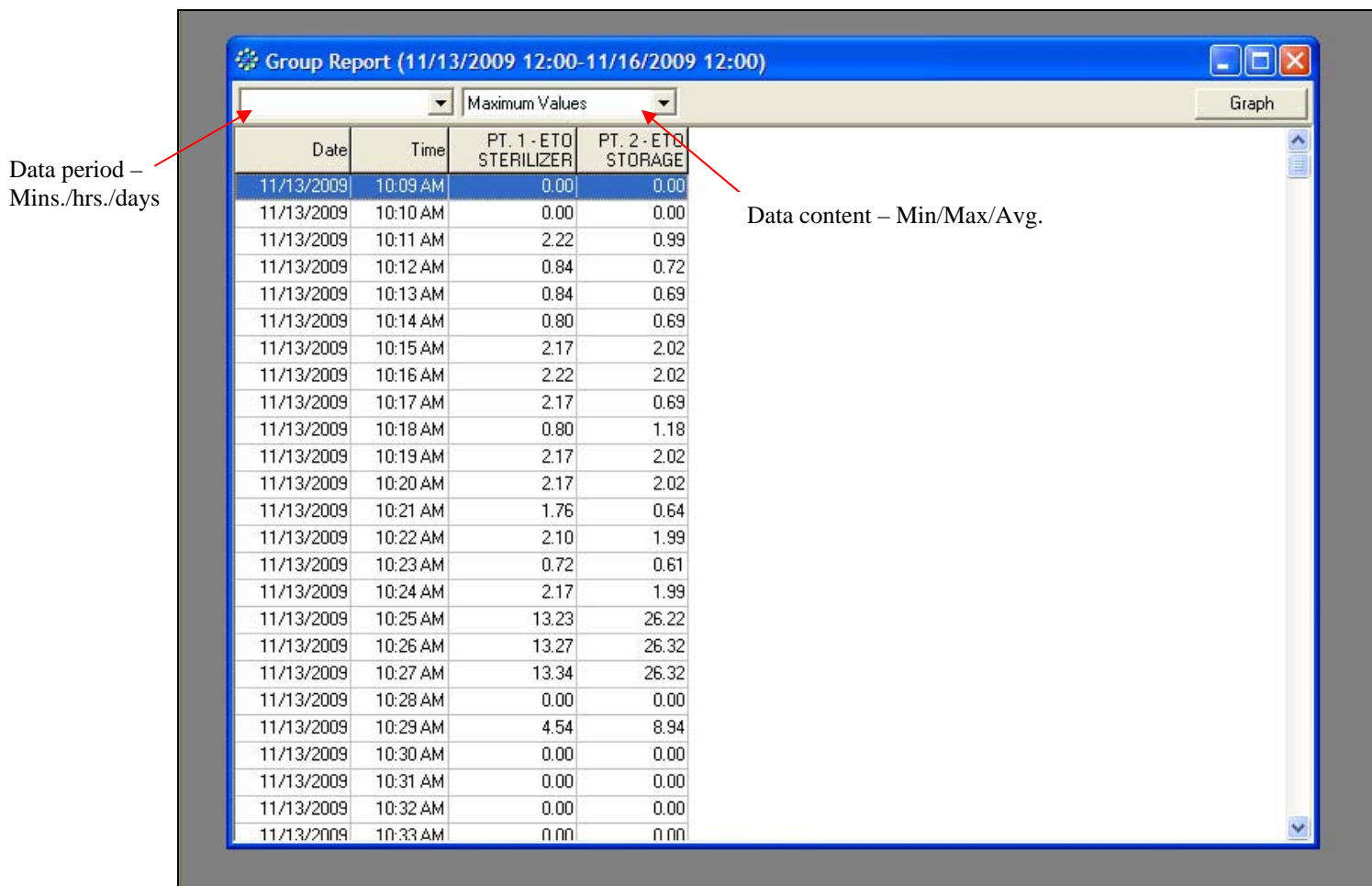
To access page setup, print report or export report to a *.csv file right click on any line and select the desired function from the pop-up menu. Parameter F9 brings up the date entry window.

2.4 Group Report

Group reports provide for simultaneous viewing of channel PPM data in table or graph form for up to eight channels in any combination covering single or multiple days. Data available includes Min, Max, and Average values spanning minute, hour or day periods. To open the Group Reports page from the tool bar click on the “Group Reports” icon shown below or select **Group Reports** from the dropdown MENU list. Type in the date range desired or press the right hand date field button and select a date from the pop up calendar then click OK. If you click OK without entering the date range the current day report will be displayed. If you enter only the First Date then the date range beginning from the First Date to current date will be displayed.



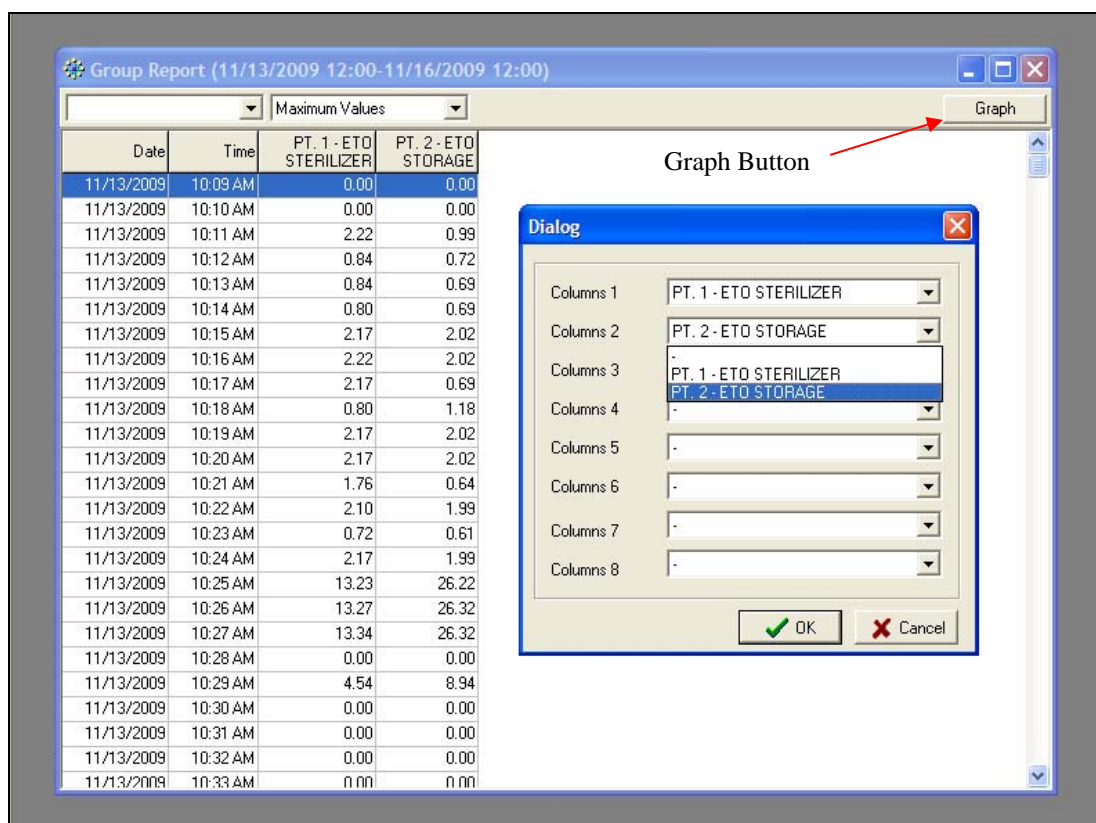
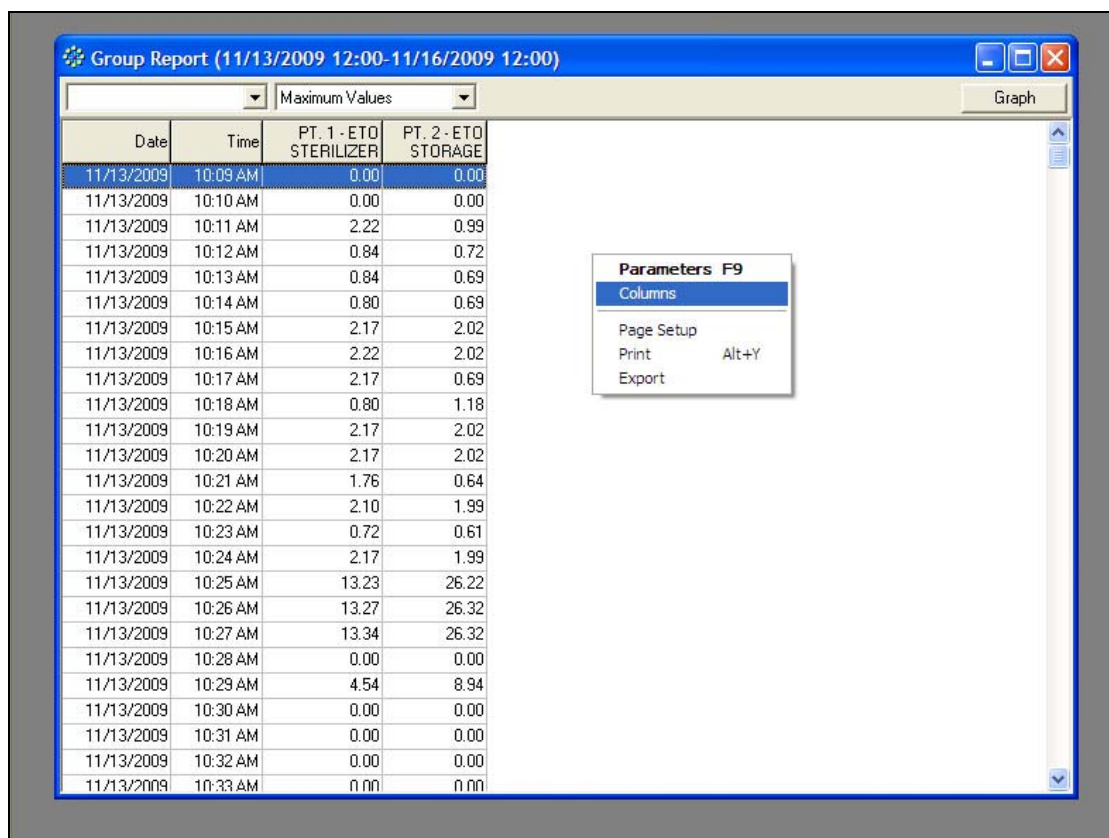
The report will display data for the channels selected when the last group report was generated. (See section 2.4.1, pg 10 for new channel selection instructions). Select the period between each displayed data set via the left side drop down box (minutes/hours/days – “minutes” shows as a blank selection). Select the data content to be displayed from the right side drop down box (Minimum/maximum/average value).



2.4.1 Group Report Channel selection

To select/change the desired channels to display in a group report, right click on any line in a displayed group report and select “Columns” from the pop-up menu (see figure below). In the dialog that opens (see second figure below), click on the arrow on the column desired and select the channel to display in that column from the drop down menu. To display nothing in the column, select the blank option at the top of the selection dropdown.

When done with all selections click OK. Close the Group Report window and open it again to refresh the column/channel setup of the window.



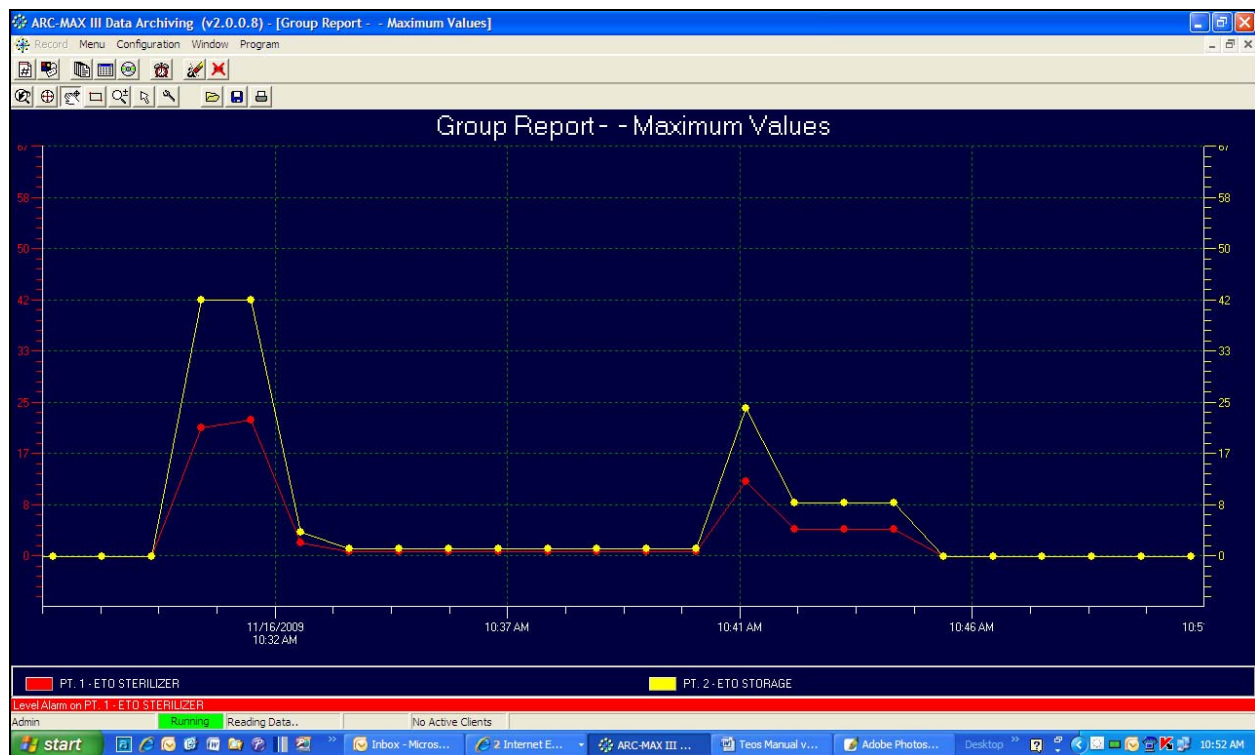
2.4.2 Group Reports page additional functions

To access page setup, print report or export report to a *.csv file right click on any line and select the desired function from the pop-up menu. Parameter F9 brings up the date entry window.

2.4.3 Group Report Graph Dialog

To select the desired channels to be displayed in a graph click on the “Graph” button on the right side of the Group Report window toolbar. Then click on the drop down menu arrow for the Parameter desired and select the channel to display for that parameter. The default setting is Parameter 1 – Channel 1, Parameter 2 = Channel 2 etc. When done with all selections click OK. The graph will be displayed as shown below in section 2.4.4 below.

2.4.4 Group Report Graph Screen

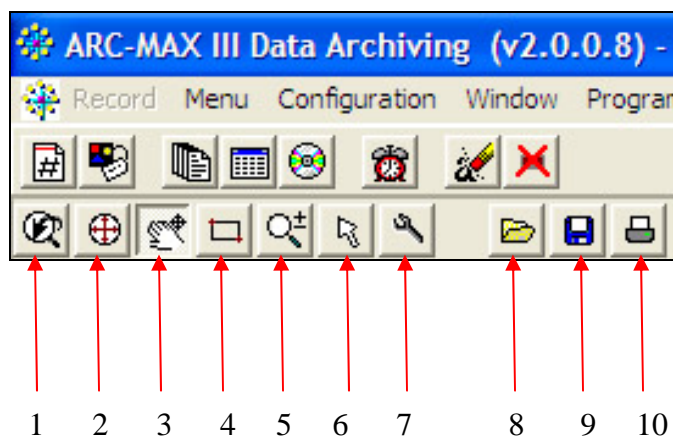


The graph displayed will show the data content and data period for the channels selected in the graph dialog. The graph can be manipulated in numerous ways to better understand the data shown. See section 2.4.5 below for a description of the graph view management tools.

2.4.5 Graph View Manipulation

A tool bar is provided at the top of the graph to enable the operator to change or manipulate this screen to better illustrate and understand the data. The toolbar buttons are as follows: (See figure below table.)

- 1- Zoom Previous: Move back to the previous zoom level. Grayed out if in initial full display.
- 2- Zoom Extents: Move back to initial full display. Grayed out if in initial display.
- 3- Pan: Manually move graphic anywhere within x-y area. Left click and drag to move.
- 4- Zoom Window: Zoom to selected area. Left click and drag rectangle to select area to be viewed.
- 5- Zoom Dynamic: Dynamically zoom in/out on the graph display on pointed area. Left click a point on the display and drag.
- 6- Pointer: Use to display detailed time and data value on the graph screen. Right click on the desired point and slightly drag right. The time display will pop-up and the measured value will be displayed next to the related parameter at the bottom of the graph display.
- 7- Configure: Use to configure graph screen labels and units. See section 2.5.5 below.
- 8- Load: You can load any previously saved *.csv data file to view on the graphic display.
- 9- Save As Bitmap: Save as a bitmap picture file.
- 10- Print: Print a hard copy of the presently displayed graph.



NOTE: When a graph is opened, the units and labels displayed will apply to the parameters of the previously viewed graph. As such, the units and labels must be changed if the current graph is showing different parameters than the previous one. See section 2.4.6 below for graph configuration procedures.

2.4.6 Graph Configuration

The graphic display configuration window can be accessed by clicking on the Configure tool icon. Here graphic representation type, format, scaling and color can be selected according to the following:

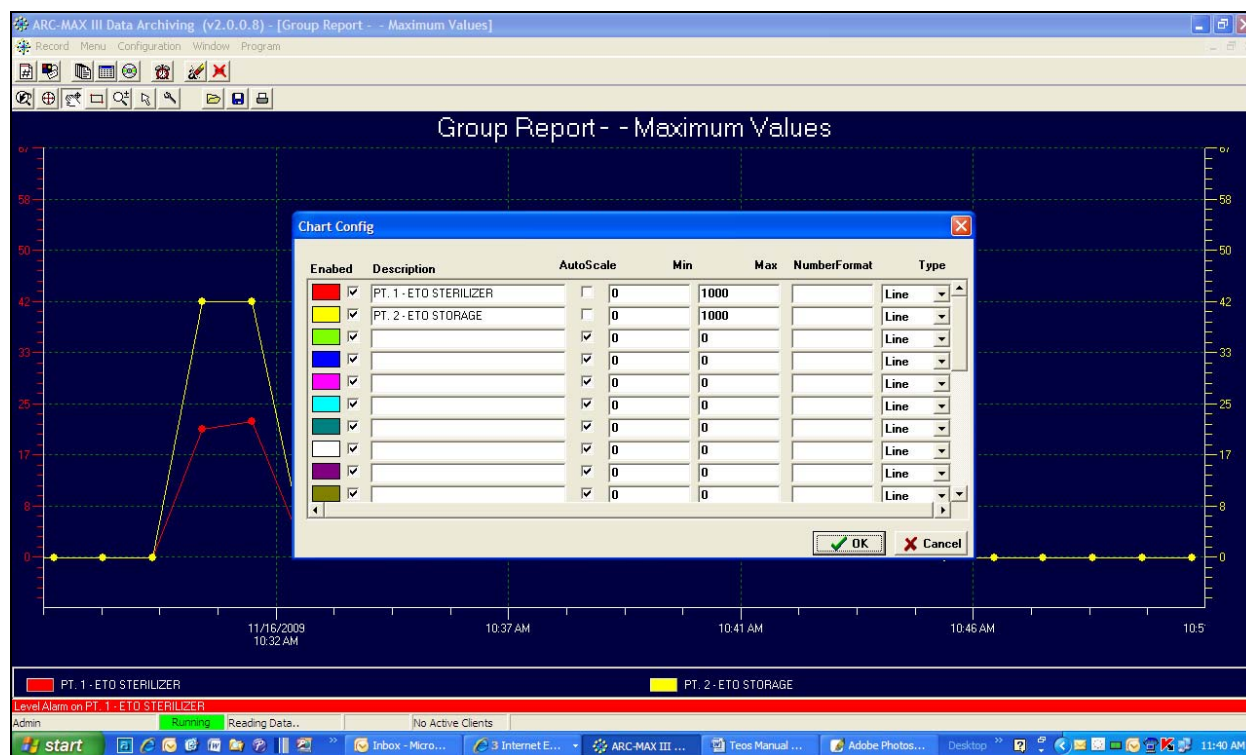
Color: Determines the color of the graphed element for the corresponding parameter. Click in the color box to change the color for that parameter. Check the box to enable/disable the parameter display in the graph.

Description: Indicates the channel name assigned to the parameter. **This field shows the name that was input for the previously viewed graph and should be changed manually if changes are made to selected parameters.**

Scaling: If Auto Scale box is checked then scaling is performed using the logged measurements Max and Min values. To manually set scaling uncheck this box and enter the desired Max and Min values. Usually, the most intuitive view is realized by manual scaling according to the full scale monitoring range of the gas monitor(s) being tracked. This is the default configuration of the software.

Number format: To set the X/Y axis format enter 0 for no decimal points and enter 0.0 for one decimal point and so on.

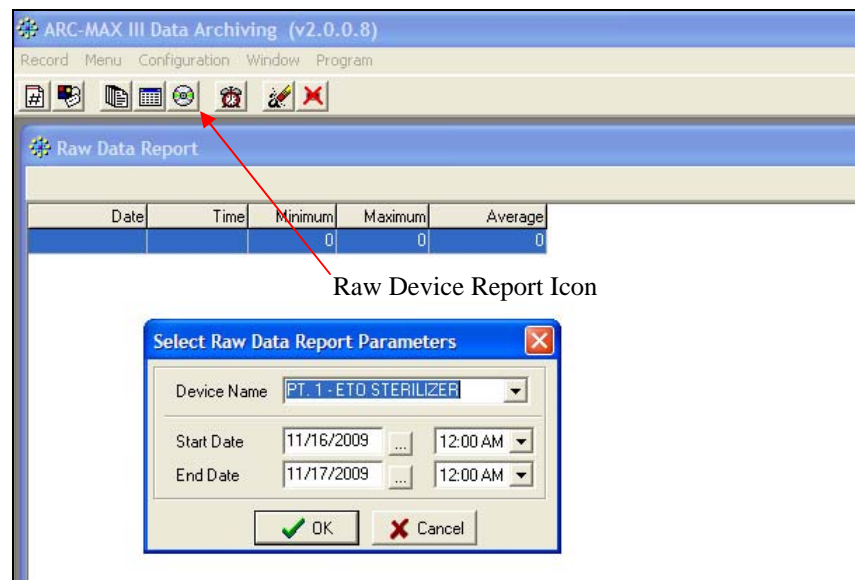
Type: Allows plot display selection of line, dot, bar graph or area graph.



NOTE: It's a good idea to check the configuration with each graph viewing to ensure the labels and scaling setup match each parameter selected when the graph was opened. This is particularly important when viewing GROUP report graphs when the channels displayed are changed from previous graphs or after altering the channels populating the group.

2.5 Raw Device Report

The Raw Device Report allows for viewing of data in table or graph form for any individual channel covering any desired time period. To open the Raw Device Report page from the tool bar click on the “Raw Device Report” icon shown below or select **Raw Device Report** from the drop down MENU list. Select the channel from the DEVICE NAME drop down menu, then type in the date/time range desired or click on the date select button and select a date from the pop up calendar. Click OK when dates and times are as desired.



The report generated will show Min, Max, and Avg data values for each minute of the time period selected. (see figure below). Depending on the size of the time period selected, the data may be displayed in a full screen window that will require scrolling.

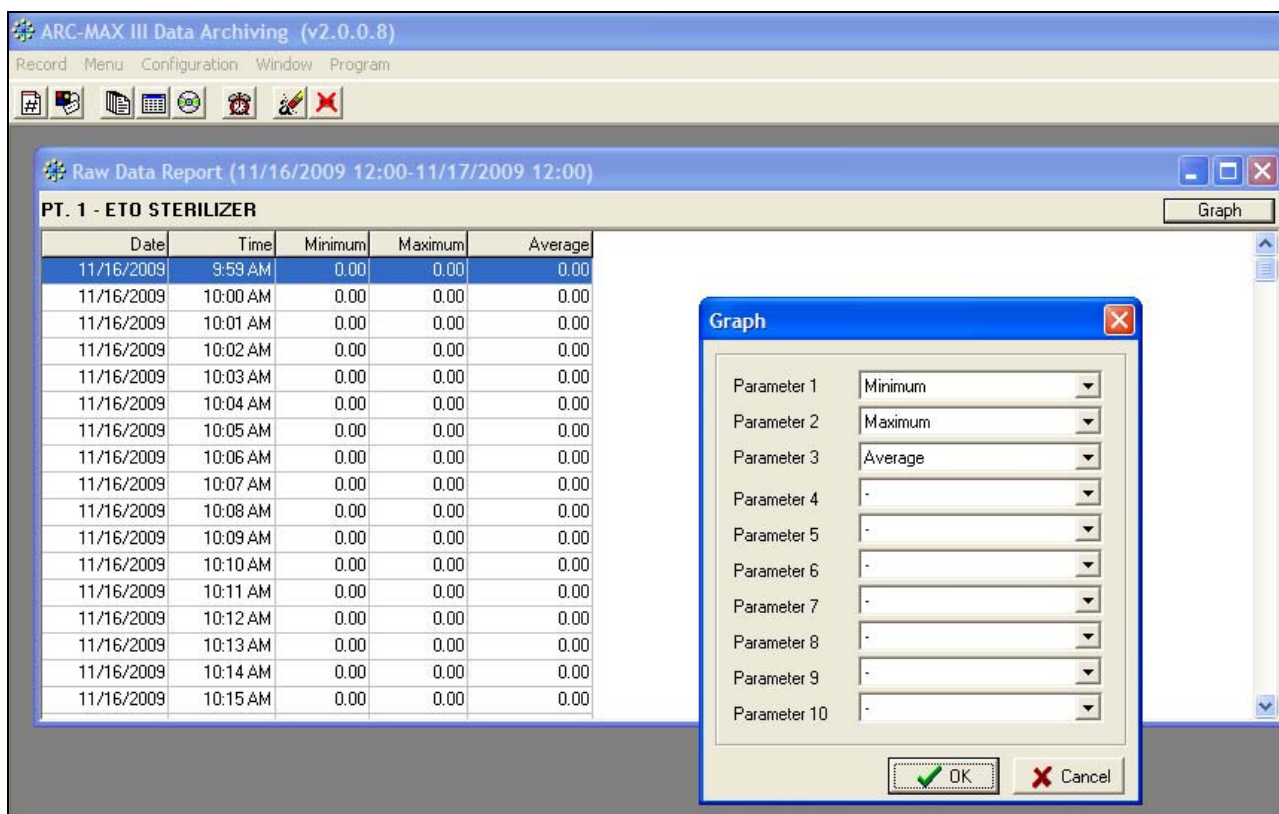
Date	Time	Minimum	Maximum	Average
11/16/2009	9:59 AM	0.00	0.00	0.00
11/16/2009	10:00 AM	0.00	0.00	0.00
11/16/2009	10:01 AM	0.00	0.00	0.00
11/16/2009	10:02 AM	0.00	0.00	0.00
11/16/2009	10:03 AM	0.00	0.00	0.00
11/16/2009	10:04 AM	0.00	0.00	0.00
11/16/2009	10:05 AM	0.00	0.00	0.00
11/16/2009	10:06 AM	0.00	0.00	0.00
11/16/2009	10:07 AM	0.00	0.00	0.00
11/16/2009	10:08 AM	0.00	0.00	0.00
11/16/2009	10:09 AM	0.00	0.00	0.00
11/16/2009	10:10 AM	0.00	0.00	0.00
11/16/2009	10:11 AM	0.00	0.00	0.00
11/16/2009	10:12 AM	0.00	0.00	0.00
11/16/2009	10:13 AM	0.00	0.00	0.00
11/16/2009	10:14 AM	0.00	0.00	0.00
11/16/2009	10:15 AM	0.00	0.00	0.00

2.5.1 Raw Data Report page additional functions

To access page setup, print report or export report to a *.csv file right click on any line and select the desired function from the pop-up menu. Parameters F9 brings up the date entry window.

2.5.2 Raw Data Report Graph Dialog

Selecting the GRAPH button from the device report window opens the graph parameter dialog box. (see figure below).



Here you can select any or all of the three data values shown in the Raw Device Report to be displayed in graphical form. Click on any parameter window to select the desired data value for that parameter. The default settings are Parameter 1=Minimum, Parameter 2=Maximum, Parameter 3=Average. If you only wish to view one of the three values (for example, Maximum), you must set that value in the first parameter window and select a blank setting for the other two parameters. (see below).

NOTE: Changing the parameter selection does NOT automatically change the graph configuration settings (name labels/colors etc) from their default values. When changing the parameter selections, you must access and modify the graph configuration settings to ensure your graph is labeled and displayed properly.

Graph

Parameter 1: Maximum

Parameter 2: -

Parameter 3: Minimum

Parameter 4: Maximum

Parameter 5: Average

Parameter 6: -

Parameter 7: -

Parameter 8: -

Parameter 9: -

Parameter 10: -

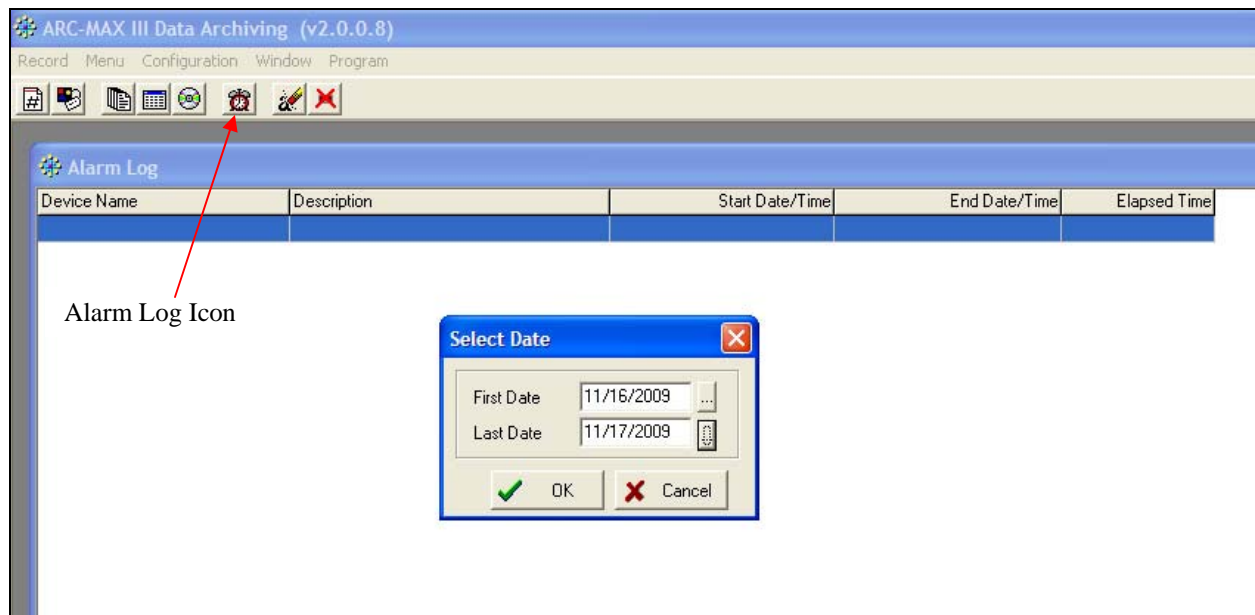
OK Cancel

2.5.3 Raw Device Report (Graph)



The Raw Device graph will display the parameters specified earlier in the graph dialog. As with the Group Report Graph, the labels and units shown will correspond to the previously viewed graph and should be adjusted to match the currently viewed graph if changes were made since the last viewing. The graph view can be manipulated as needed according to sections 2.4.5 and 2.4.6.

2.6 Alarm Logs



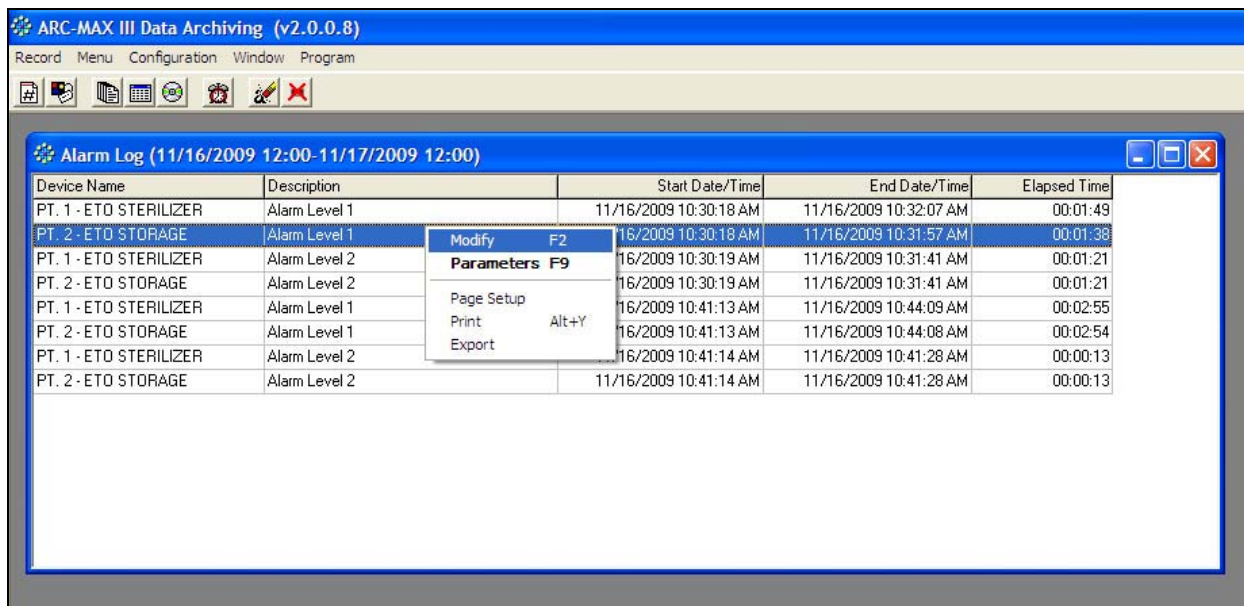
The alarm log provides access to alarms and System Fault events that have been logged during the monitoring period selected. To open the Alarm Log page from the tool bar click on the “Alarm Log” icon shown above or select **Alarm Log** from the dropdown MENU list. Type in the date range desired or click on the date select button and select a date from the pop up calendar. Click OK when dates and times are as desired. If you click OK without entering the date range the current day report will be displayed. If you enter only the First Date then the date range beginning from the First Date to current date will be displayed.

The screenshot shows the same software interface as before, but the "Alarm Log" window now displays data for the date range "11/16/2009 12:00-11/17/2009 12:00". The table contains the following data:

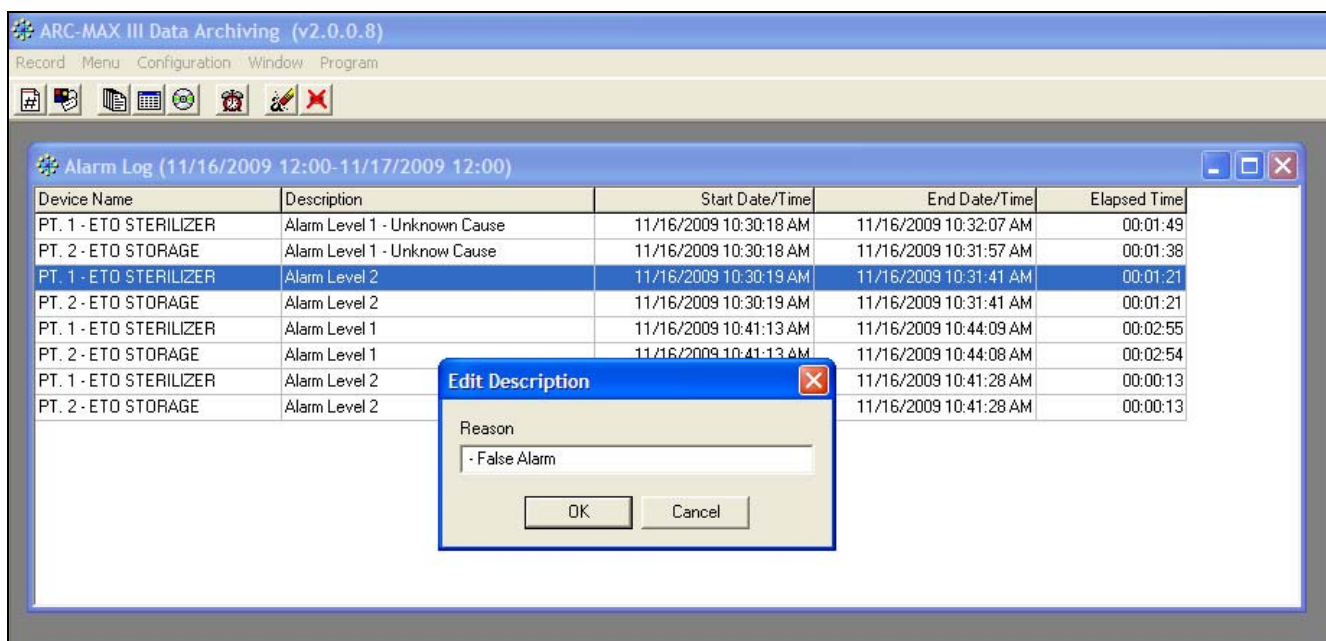
Device Name	Description	Start Date/Time	End Date/Time	Elapsed Time
PT. 1 - ETO STERILIZER	Alarm Level 1	11/16/2009 10:30:18 AM	11/16/2009 10:32:07 AM	00:01:49
PT. 2 - ETO STORAGE	Alarm Level 1	11/16/2009 10:30:18 AM	11/16/2009 10:31:57 AM	00:01:38
PT. 1 - ETO STERILIZER	Alarm Level 2	11/16/2009 10:30:19 AM	11/16/2009 10:31:41 AM	00:01:21
PT. 2 - ETO STORAGE	Alarm Level 2	11/16/2009 10:30:19 AM	11/16/2009 10:31:41 AM	00:01:21
PT. 1 - ETO STERILIZER	Alarm Level 1	11/16/2009 10:41:13 AM	11/16/2009 10:44:09 AM	00:02:55
PT. 2 - ETO STORAGE	Alarm Level 1	11/16/2009 10:41:13 AM	11/16/2009 10:44:08 AM	00:02:54
PT. 1 - ETO STERILIZER	Alarm Level 2	11/16/2009 10:41:14 AM	11/16/2009 10:41:28 AM	00:00:13
PT. 2 - ETO STORAGE	Alarm Level 2	11/16/2009 10:41:14 AM	11/16/2009 10:41:28 AM	00:00:13

The alarm log records device name, alarm description (level), date/time of start of alarm event, date/time of end of alarm event and duration of alarm event as shown in the figure above.

Comments can be added to any description field by right clicking on the desired entry and selecting MODIFY from the drop down box as shown below.

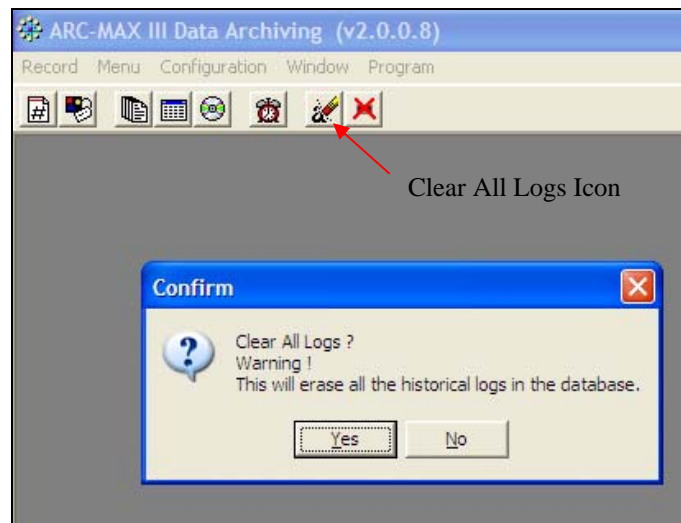


In the Edit Description box that opens, enter the desired message text to be displayed in the Description field. This text will be placed next to the existing description text. It is a good idea to enter a dividing character such as a dash or slash at the front of the comment entry (see examples below). Comments can be added to or deleted by following the same procedure for entering the initial comment.

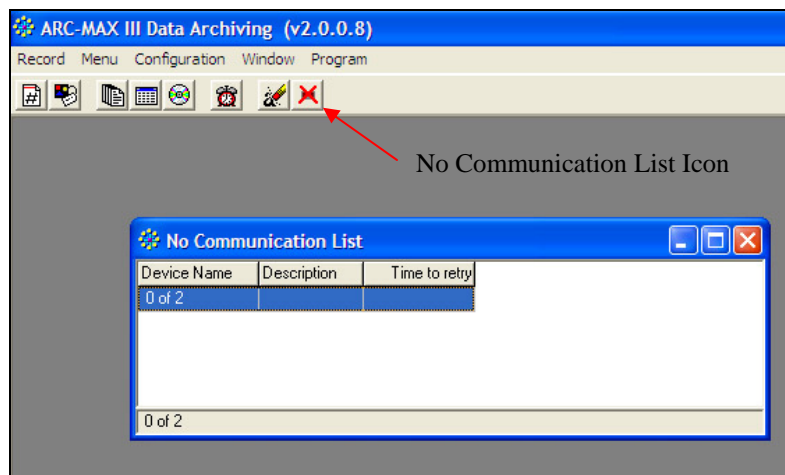


2.7 Clear All Logs

To clear all the historical logs in the database click on the “Clear All Logs” icon shown below or select **Clear All Logs** from the dropdown MENU list. The Software will prompt you for a confirmation. If Yes is selected, a second confirmation box will appear as a double check to ensure no accidental loss of data, type YES to clear all logs.



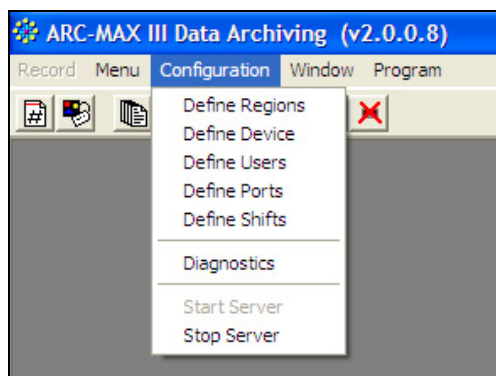
2.8 No Communication List



To troubleshoot channels that may not be communicating with the software, click on the “No Communication List” icon or select **No Communications List** from the drop down MENU list. This will open a window that displays the Device Name, Description and Time to retry connection of each device not communicating. Right clicking a device on the list allows the user to restart communications via “Retry Now”, or view devices by region via “Show Regions”.

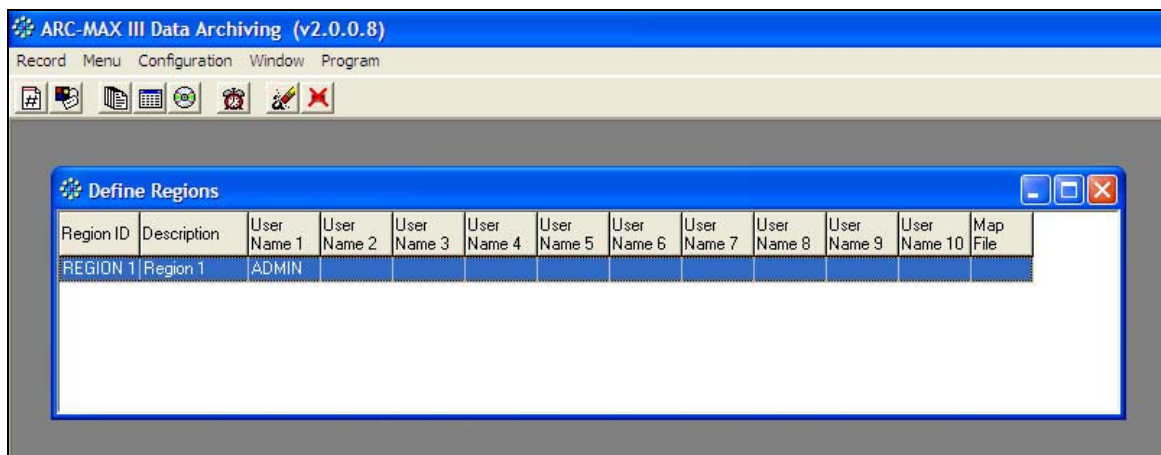
3 Configuration Menu

The Configuration Menu allows access to all configuration parameters. This menu is only accessible by users who have administration ranking as determined when the user is created (see section 3.3, “Define Users”). Clicking the “Configuration” tab opens the drop down shown below from which the various parameters can be accessed.

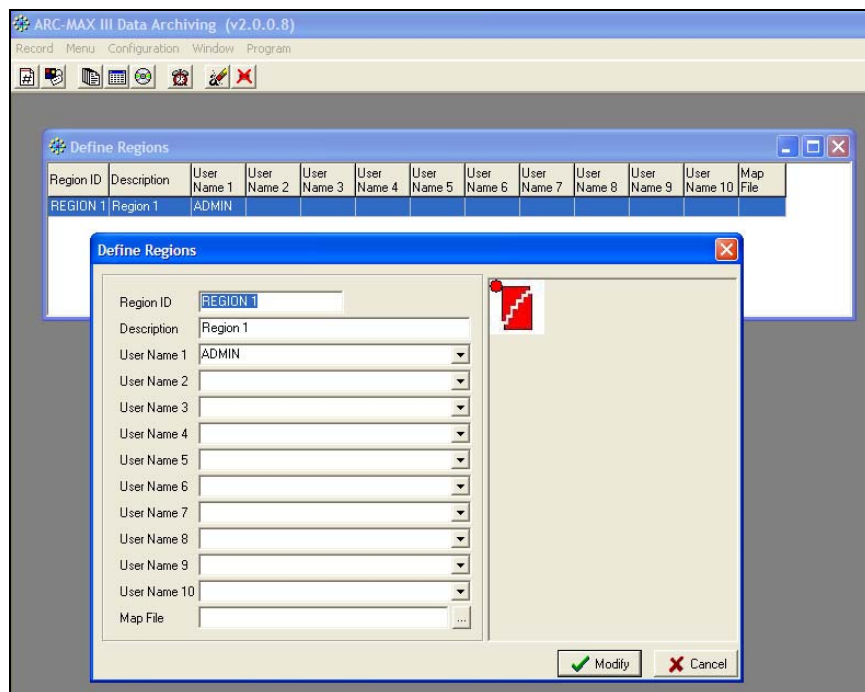


3.1 Define Regions

The REGION parameter is used when the application calls for multiple channels spread over multiple geographical regions. Multiple regions will not be applicable for most multipoint gas monitoring applications. However, within the default master region, any new User Names added by the administrator(s) will need to be included in the Region list. To access this list, click on “Configuration” then “Define Region” to open the Define Region page shown below.



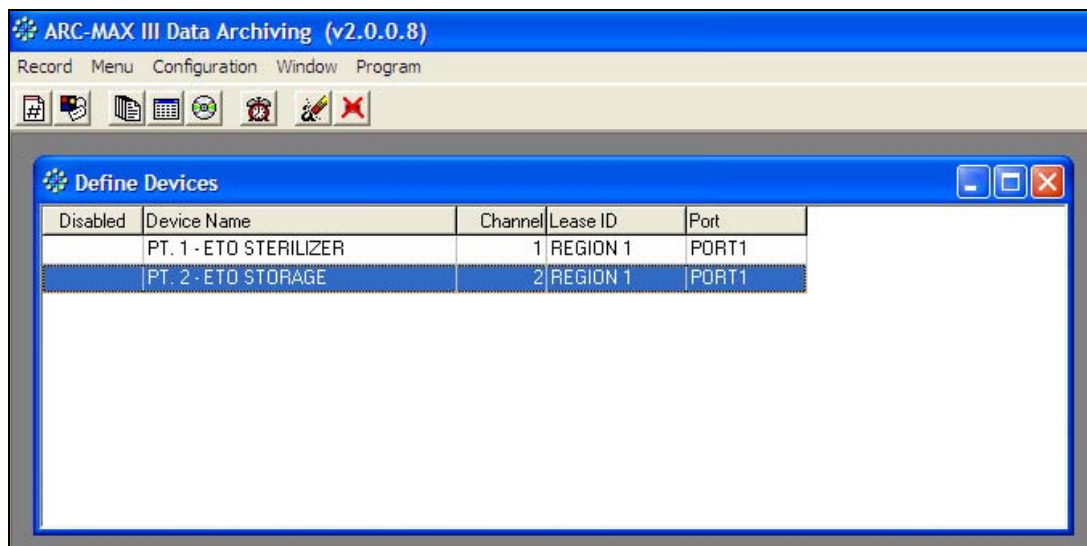
Right clicking anywhere on this page then clicking “Modify” opens the Define Region dialog box shown below. In this box, make sure all established User Names are assigned in the User Name list. Click on the drop down arrow on a User Name field and choose the User Name to assign to that field. To remove a name, right click on the name the click “Delete”. When finished with all active User Names, click **Modify** to save.



3.2 Define Devices

This DEVICE parameter defines the name, channel #, region #, port #, display scaling, decimal place configuration, modbus addressing, and disable status for every active input channel. “Device Name” settings can be changed by the user as desired for channel descriptions that suit the application (see section 3.2.2 below). All other device settings should not be altered from the factory settings unless directed to do so by Interscan.

To view the define device window, click “Configuration” then “Define Device” from the drop down menu. This will call up the DEFINE DEVICES window shown below.



3.2.1 Define Devices (New)

Monitoring channels can easily be added to Teos (up to eight channels) by creating a new device record in the Define Devices table. To create a new device record right click anywhere in the Define Device display window and select New. The Define Device parameter window opens as shown below.

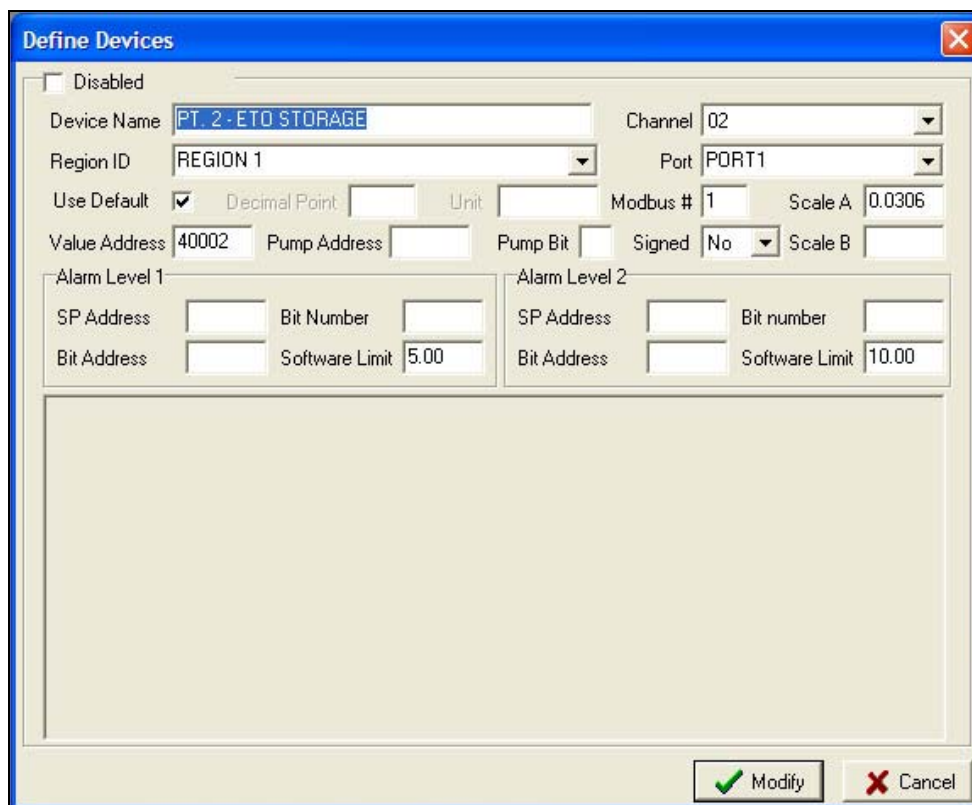
The screenshot shows the 'ARC-MAX III Data Archiving (v2.0.0.8)' application window. Inside, the 'Define Devices' window is open, displaying a table with columns: Disabled, Device Name, Channel, Lease ID, and Port. Below the table, the 'Define Devices' dialog box is shown. It includes a 'Disabled' checkbox, a 'Device Name' text field, a 'Region ID' dropdown, a 'Channel' dropdown (set to '01'), a 'Port' dropdown, a 'Use Default' checkbox, a 'Decimal Point' text field, a 'Unit' text field, a 'Modbus #' text field (set to '1'), 'Scale A' and 'Scale B' text fields, 'Value Address', 'Pump Address', 'Pump Bit', and 'Signed' (set to 'No') text fields. There are also sections for 'Alarm Level 1' and 'Alarm Level 2', each with 'SP Address', 'Bit Number', 'Bit Address', and 'Software Limit' text fields. At the bottom right of the dialog are 'Add' and 'Cancel' buttons.

The Device Name, Region ID, Channel, Port, Value Address, Scale A, Decimal Point and Unit values must be input in the associated fields in this window. Contact the Interscan Systems dept for the correct values to enter in these fields for your application. Once these values are entered, click **Add** to save the values and create the new channel device.

To delete a Device entry, simply right click on the device to be deleted in the Define Devices display window and click on **Delete** from the pop-up menu then click **Delete** in the parameter window that opens.

3.2.2 Define Devices (Modify)

To modify a Device parameter either left click to select the device line in the Define Device window and then press F2, or right click on the device line in the Define Device window and then click on the **Modify** option. The dialog box shown below will open.



The image shows a 'Define Devices' dialog box with a blue title bar and a red close button. It contains several input fields and checkboxes. At the top left is a 'Disabled' checkbox. Below it are fields for 'Device Name' (containing 'PT. 2-ETO STORAGE'), 'Channel' (dropdown with '02'), 'Region ID' (dropdown with 'REGION 1'), and 'Port' (dropdown with 'PORT1'). There are also checkboxes for 'Use Default' (checked), 'Decimal Point', 'Unit', 'Modbus #' (dropdown with '1'), 'Scale A' (text field with '0.0306'), 'Value Address' (text field with '40002'), 'Pump Address', 'Pump Bit', 'Signed' (dropdown with 'No'), and 'Scale B'. Below these are two sections for 'Alarm Level 1' and 'Alarm Level 2'. Each section has fields for 'SP Address', 'Bit Number', 'Bit Address', and 'Software Limit'. The 'Software Limit' for Alarm Level 1 is '5.00' and for Alarm Level 2 is '10.00'. At the bottom right are 'Modify' and 'Cancel' buttons.

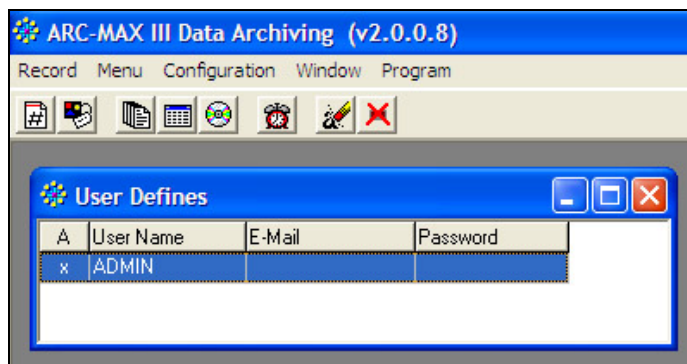
ONLY THE “DEVICE NAME” PARAMETER SHOULD BE CHANGED BY THE USER UNLESS DIRECTED TO DO SO BY **INTERSCAN**. To change the DEVICE NAME, click in the DEVICE NAME field, backspace over the old name and type in the desired name then click **Modify** to save the changes.

NOTE: TEOS must be stopped and re-started for any device changes to take effect. See section 3.7, pg 28 for “Stop Server” instructions.

3.3 Define Users

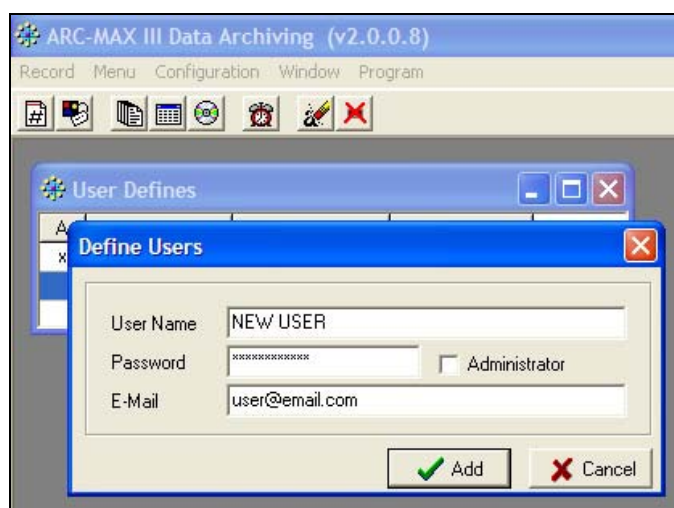
Teos’ default user configuration provides a single user (see below). Additional users can be added via the Define User window shown below which can be accessed by clicking “Configuration” then “Define Users”. The Define Users window displays Administrator rights settings, User Name, E-mail and Password. The sample shows the default user with an additional user added.

To access page setup, print report or export report to a *.csv file for this window, right click anywhere in the Define Users window and select the desired function from the pop-up menu.



NOTE: The default User Name is ADMIN and there is no default password. Add a password and additional users as described below in section 3.3.2 to suit your operational needs.

3.3.2 Define Users (New or Modify)



To create a new user record, right click anywhere in the Define Users window and select New. The entry window shown above will open. Type the name of the new user and click the administrator option if you wish to give them full access rights (non administrators cannot alter configuration settings). Create a Password and enter email address as needed. Click **Add** to save settings. **Additionally, new users must be added to the REGION list.** See section 3.1, pg 21 “Define Regions” for details on adding new users to the Region list.

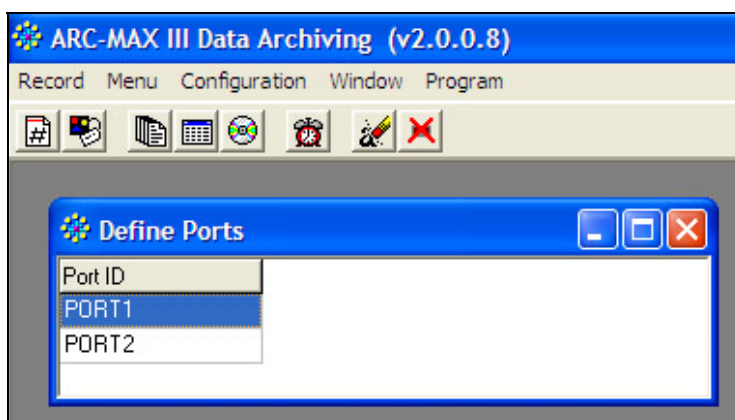
A password is recommended for each user, however this field can be left blank if no password protection is required. To modify a user record press F2 or right click on the appropriate user line in the Define User window to make the desired changes. Click Modify to save changes.

NOTE: TEOS must be closed and re-started for any user changes to take effect. See section 3.7 for “Stop Server” instructions.

3.4 Define Ports

The PORT configuration determines how TEOS communicates with the data source(s). This has been preset in your software to communicate with your particular monitor configuration and should not be altered. In some cases, the software will be running on a networked PC. Depending on your network setup, the addressing in the port settings may need to be changed. If the Teos Current Data Display is showing blank data after several minutes of operation, it is likely not communicating with the source and addressing may be incorrect. Contact the Interscan Systems Dept should this be the case.

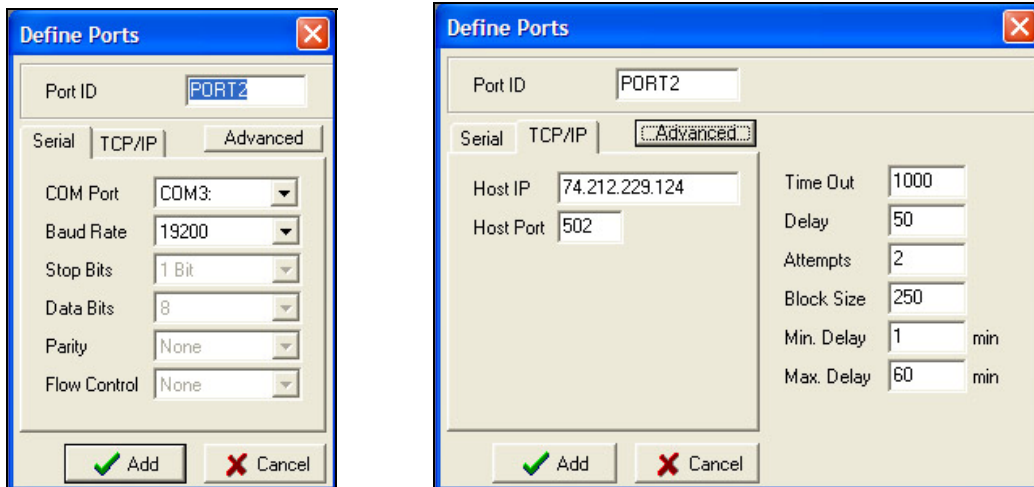
To display all available ports click on “Configuration” then “Define Ports”. Each defined port will be displayed as shown below (2 ports shown – The default setting for most applications will be a single port listing named “Port1”). To access page setup, print report or export report to a *.csv file, right click anywhere in the Define Ports window and select the desired function from the pop-up menu.



3.4.2 Define Ports (New or modify)

NOTE: PORT SETTINGS SHOULD NOT BE ALTERED UNLESS DIRECTED TO DO SO BY INTERSCAN.

To modify the existing Port setup, right click anywhere in the Define Ports window and select “Modify”. For Ethernet connections, select the TCP/IP tab and change the Host IP setting and Host Port setting as needed. For serial connections, select the Serial tab and change the associated settings as needed. (see figures below).



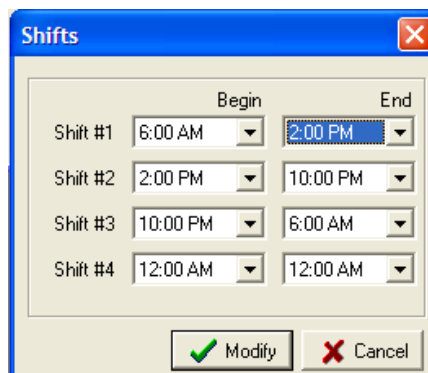
To create a new Port ID, right click anywhere in the Define Ports window and select New. A Port ID must be input in order to create a new record. Select the serial Tab to set the Com Port and Baud Rate settings for serial connections or select the TCP/IP tab to enter Ethernet settings for Ethernet connections. The Advanced option allows user to edit Time Out, Delay, Attempts, Block Size, Min Delay and Max Delay values.

NOTE: TEOS must be stopped and re-started for any Port changes to take effect. See section 3.7, pg 28 for “Stop Server” instructions.

3.5 Define Shifts

The shift configuration provides for the collection of data in time blocks corresponding to up to four work day shifts. The shifts can be defined in half hour increments and can overlap.

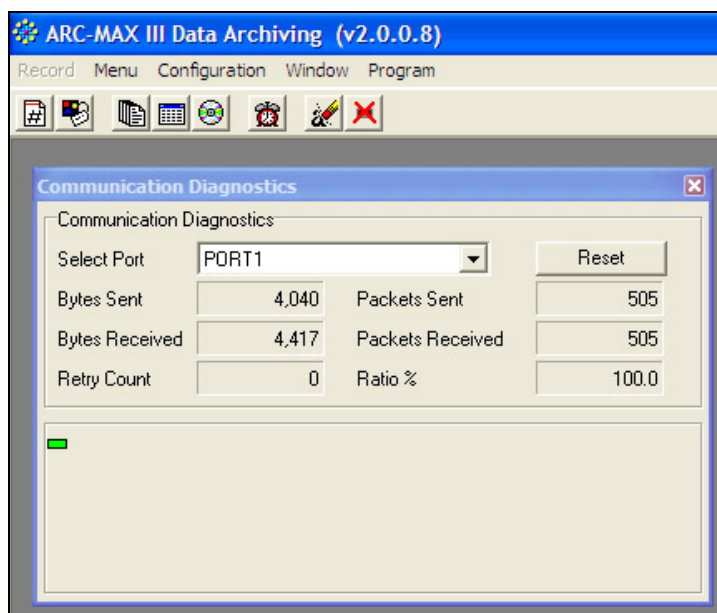
To open the Shifts dialog box, click on “Configuration” then “Define Shifts”. Each shift has an applicable Begin and End setting. Click on any time window to select the desired time. If a shift is not to be utilized, set the Begin and End times to 12:00 AM and that shift will be ignored. Click “Modify” to save changes. NOTE: Unless specified otherwise when your software was ordered, the default Shift configuration will be as shown below.



NOTE: TEOS must be stopped and re-started for any shift changes to take effect. See section 3.7, pg 28 for “Stop Server” instructions.

3.6 Diagnostics

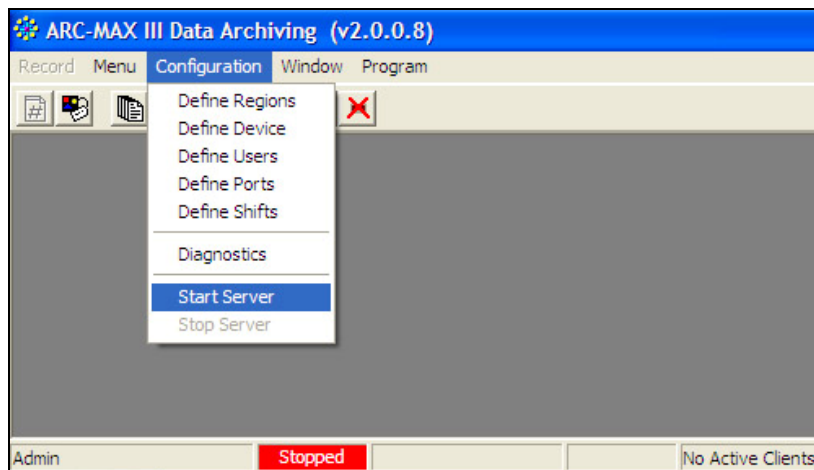
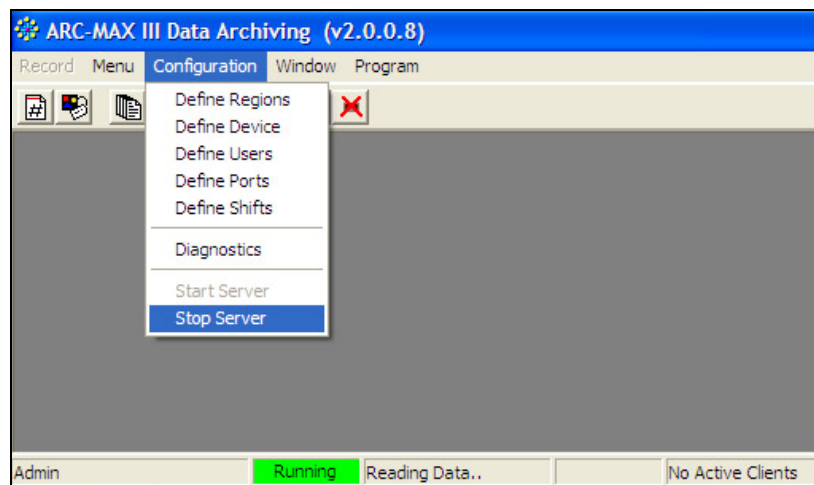
Click on the “Diagnostics” option to bring up the Communications Diagnostics window shown below. To select a port click on the Select Port arrow and make a selection from the drop down menu. Once a port is selected the Byte Sent, Byte Received, Packets Sent, Packets received, Retry Count and Ratio information will be displayed.



The status of each Port is displayed graphically in the lower half of the Communications Diagnostics window – to give the user a quick overview of attached devices. A colored rectangle represents each port accessed. A white rectangle indicates that device status is not yet determined. A green rectangle indicates device communications are good. A red rectangle indicates a device communications error. A yellow rectangle indicates that the device communication status is currently being updated.

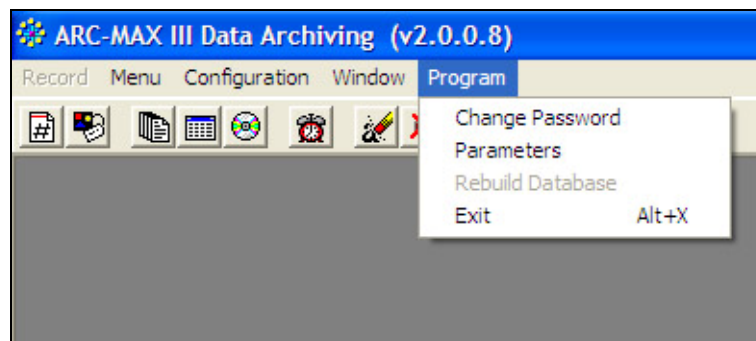
3.7 Start and Stop Server

After a change had been made to the Configuration of the software, the server communications require a restart to bring the change into effect. To do this select “Stop Server” from the Configuration options. The system will then stop communications and a ‘Stopped’ message will be displayed in the screen footer (see image below). To restart communications select “Start Server” from the Configuration options, a ‘Running’ message will then be displayed in the screen footer (see image below).



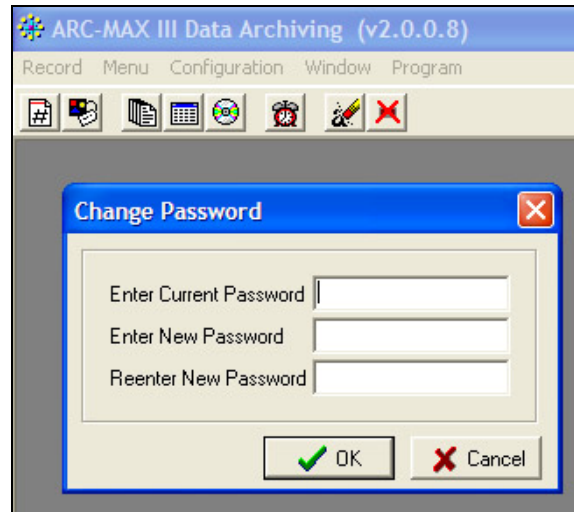
4 Program Menu

The Program menu includes the following options: Change Password, Parameters, Rebuild Database and Exit



4.5 Change Password

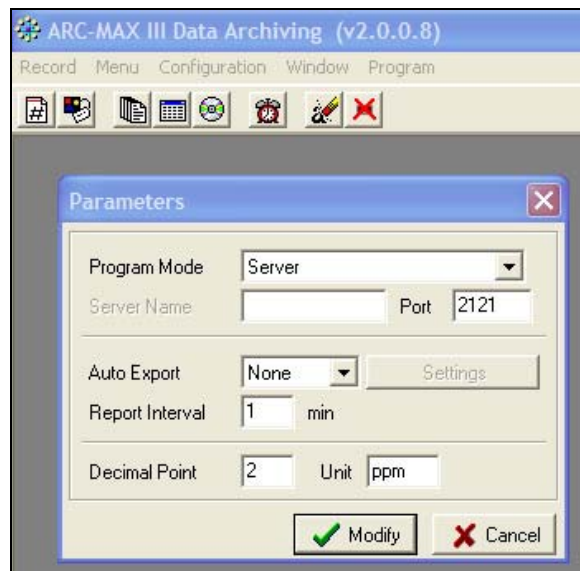
To change the current users Password click on “Change Password”. Enter the current password and new password in the Change Password window and click OK to accept the changes. The new password will be effective upon the next user login.



4.6 Change Parameters

The Parameters window accesses settings for deep program functions as described below.

NOTE: DO NOT CHANGE ANY OF THESE SETTINGS UNLESS DIRECTED BY INTERSCAN TO DO SO.



Program Mode: This parameter sets how the program operates in relation to the PC it is running on. If you chose “Server” in this field, the program will run in server mode as the primary “host” to all other instances of the program, if any. All system settings, configuration and data log manipulation will be accessible to the user.

If you chose “Client” in this field, the program will run in client mode as a slave to the server. Client is the remote monitoring only mode. Configuration and setup cannot be accessed in this mode.

Server Name: In “Client” mode, you must enter a server name in this field.

Port: You must fill this field to set a port number.

Auto Export: You can choose this field if you want to auto export to database any data.

Repeat Interval: This setting determines how frequently data is auto exported.

Decimal Point: This setting determines the default number of decimal places displayed when the “Use Default” box is checked in the **Define Devices** window (see section 3.2).

Units: This setting determines the default units displayed when the “Use Default” box is checked in the **Define Devices** window (see section 3.2, pg 22).