

CHAPTER 13

OPERATION LOGGING

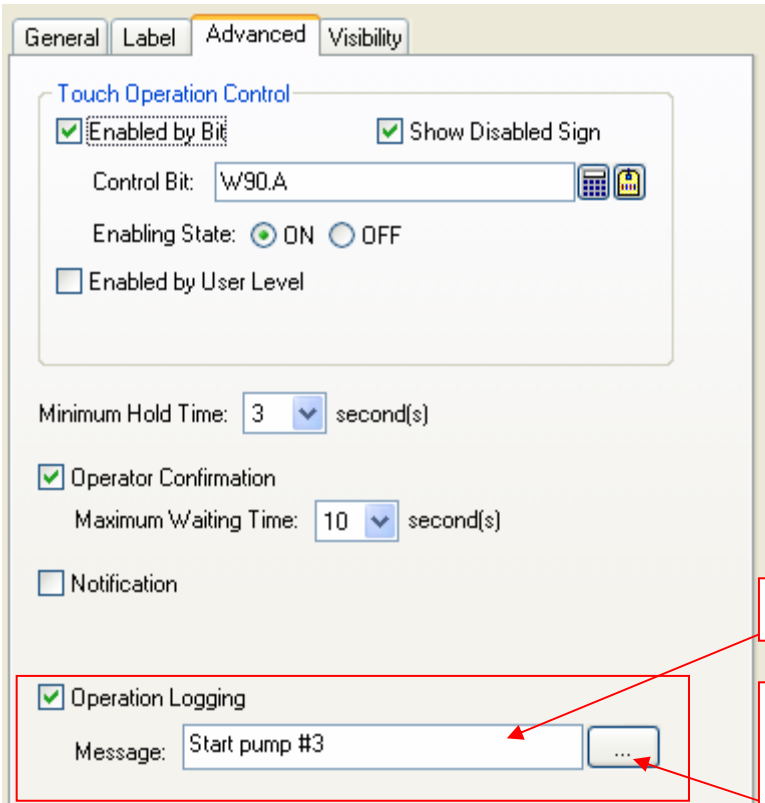
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This chapter describes how to set up operation logging and configure the operation log display to show the operation loggers.

13.1. Using Operation Logging

To use operation logging in your application, please do the following:

- 1. Setting up Operation Logging
Described in [Section 13.2](#)
- 2. Adding custom operation messages in the Advanced page of the related object
Described in [Section 4.4.5](#)



Enter the operation message of the first language.

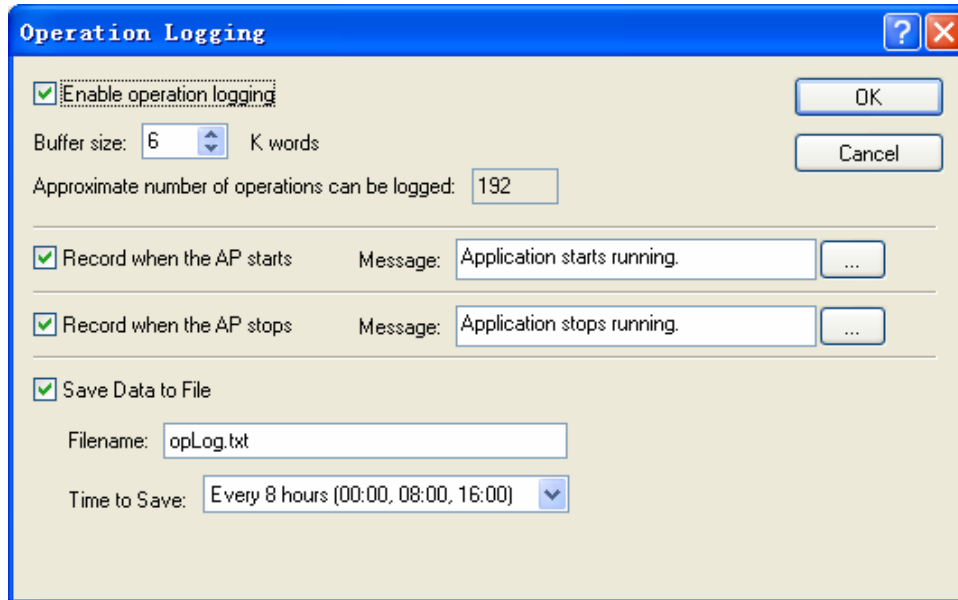
Click the button to bring up the Operation Message dialog box to edit the message for all the languages. Please see details in [Section 13.2.1](#).

- 3. Creating and configuring Operation Log Displays
Described in [Section 13.3](#)

The software also lets users clear the operation logging buffer with the function button. To know how to define a function button to clear the operation history, please see [Section 5.4.1 Basic Operations](#) of function buttons.

13.2. Setting up Operation Logging

You can set up operation logging with the Operation Logging dialog box. In this dialog, you can determine the required memory for the operation logging buffer, and specify how to save the operation logs to a text file. To open the dialog box, double click the Operation Logging node in the Project Manager tool window, or use the Operation Logging... command on the Panel menu. The following is an example of the Operation logging dialog box.



The table below describes each property in the Operation Logging Properties dialog.

Property		Description
Enable operation logging	<Check Box>	Check this option to enable operation logging.
	Buffer Size	The size of the operation logging buffer. The unit is K words. The buffer size can be specified between 1 and 512 K words.
	Approximate number of operations can be logged	The maximum number of operation loggers that the operation logging buffer can hold. The formula to calculate the approximate number is: $\text{Number} = \text{Buffer Size} * 1024 * 2 / 64$
Record when the AP starts	<Check Box>	Check this option to enable operation logging.
	Message	Enter the operation message of the first language when the AP starts.
	...	Click the button to bring up the Operation Message dialog box to edit the message for all the languages. Please see details in Section 13.2.1.
Record when the AP stops	<Check Box>	Check this option to enable operation logging.
	Message	Enter the operation message of the first language when the AP stops.
	...	Click the button to bring up the Operation Message dialog box to edit the message for all the languages. Please see details in Section 13.2.1.
Save Data to File	<Check Box>	Check this option so new operation loggers will be written to a specified file periodically. Each time when a save is performed, the panel writes only the operation loggers that have not been saved to a file before.
	File Name	The filename or the prefix of the filename of the file to save the operation loggers as. The operation loggers are saved in text format and the file extension name must be ".txt". You can use any text editor and Microsoft Excel to directly view the operation loggers. This item is available when the option Save Data to File is checked.
	Time to Save	Specifies the period to save the operation loggers. This item is available when the option Save Data to File is checked. There are nine periods available: Every hour on the hour ; Every 8 hours (00:00, 08:00, 16:00) ; Every 12 hours (00:00, 12:00) Every day at 00:00; Every day at 08:00; Every day at 12:00; Every Sunday at 00:00; Every Monday at 00:00; Every month's first day at 00:00.

13.3. Setting up Operation Log Displays


13.3.1. Basic Operations

You can display a list of operation logs by using an operation log display.

Operation Log Display Demo		
Date	Time	Message
31/08/09	16:56:53	Scrolled the slide switch (637)
31/08/09	16:56:49	Inputted a new value (896.7)
31/08/09	16:56:33	Button is clicked. (OFF)
31/08/09	16:56:32	Scrolled the slide switch (318)
31/08/09	16:56:29	Inputted a new value (5.0)
31/08/09	16:56:25	Button is clicked. (ON)
31/08/09	16:56:19	Cleared the operation history

Button

896.7



Clear

The above is an example of the operation log display. The first row is the title row. It displays the title of each column. The other rows display one operation per row. You can create scroll button groups or scroll bars to scroll the contents. An operation log display can have three columns. The following table describes the content of each column for an operation log display.

Column	Description
Date	The date when the record is created. This column is optional.
Time	The time when the record is created. This column is optional.
Message	The message of the associated operation. This column is optional.

The text color and font of a row are determined by the settings in the General Page.

13.3.2. Operation Options

The following operation option can be added to an alarm display. Select and set the option in the Operation Log Display dialog box.

Options	Description
Visibility Control	You can show and hide an operation log display with a specified bit or the current user level. Select and set this option in the Visibility page.

13.3.3. Settings

You can complete all the settings of an operation log display in the Operation Log Display dialog box. This dialog box contains the following two pages.

- **General**

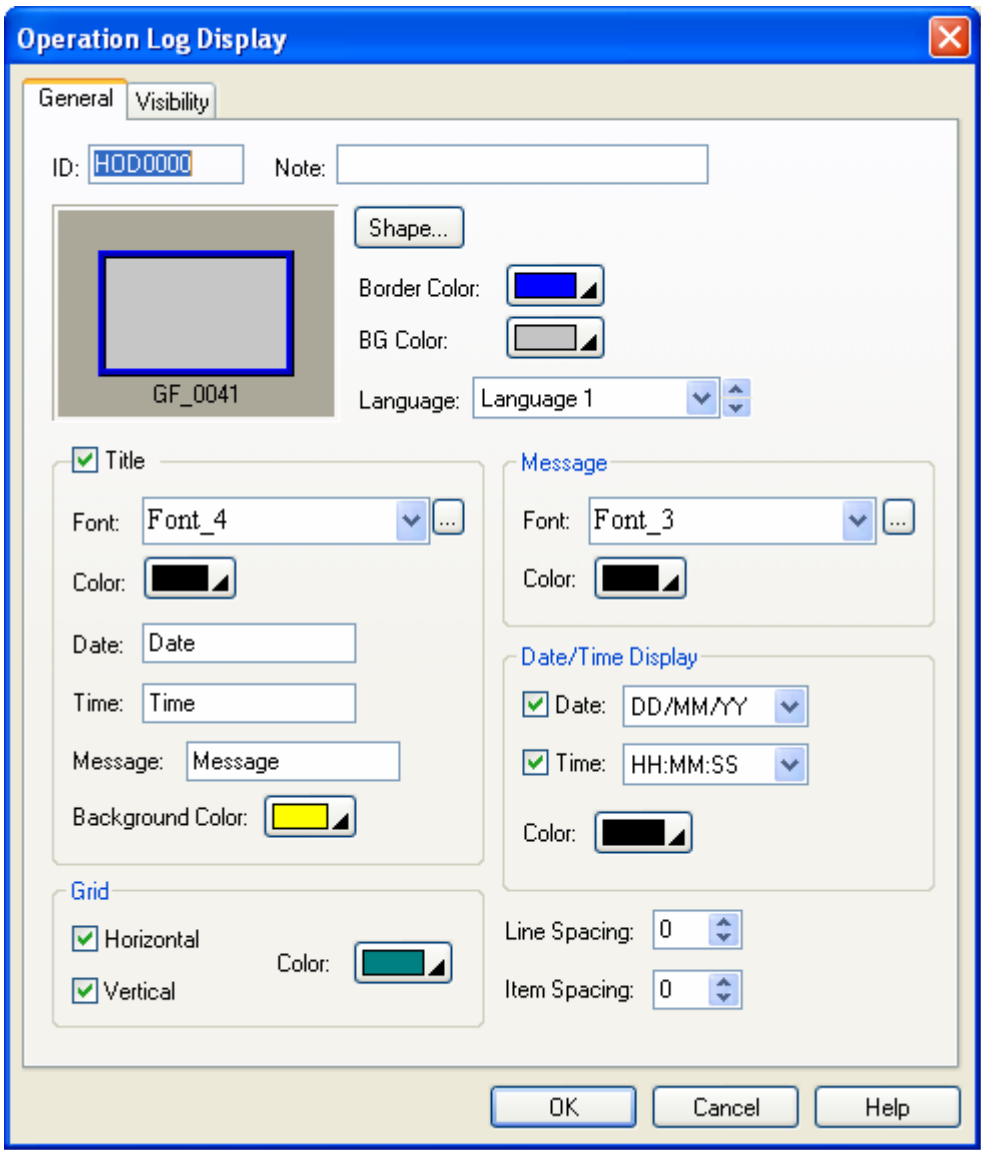
Described in [Section 13.3.3.](#)

- **Visibility**

Described in [Section 4.4.6.](#)

13.3.4. General Settings

This section describes how to define the general settings for an operation log display. The following is an example of the General page of the Operation Log Display dialog box.



The following table describes each property in the General page.

Property	Description
ID	The object’s identifier. It is generated when the object is created. The identifier is unique within the screen where the object is located and is unchangeable. The format of the IDs for the operation log display is HODnnnn.
Note	You can type a note for the object.
Shape settings	For details about the following properties, see Section 4.3.4 Setting up the Shape of an Object. <div>Shape...</div> , Border Color, BG Color
Language	Select a language so you can view and edit the language dependent settings in the Title group and Message group for that language. The language dependent properties in the Title group include Font and Message; in the Message group include Font.

Continued

Property			Description
Title	<Check Box>		Select this option if you want the operation log display to have a title row to show the title for each column of the displayed list.
	Font		Select a font for the title text.
	Color		Select a color for the text.
	Date		Specifies the title for the Date column.
	Time		Specifies the title for the Time column.
	Message		Specifies the title for the Message column.
	Background Color		Select a background color for the title row.
Grid	Horizontal		Select this option if you want the operation log display to have horizontal grids.
	Vertical		Select this option if you want the operation log display to have vertical grids.
	Color		Select a color for the grids.
Message	Font		Select a font for the message.
	Color		Select a color for displaying the predefined message.
Date/Time Display	Date	<Check Box>	Check this option if you want the operation log display to have the Date column.
		<Drop-down List>	Select a format for displaying the date
	Time	<Check Box>	Check this option if you want the operation log display to have the Time column.
		<Drop-down List>	Select a format for displaying the time
	Color		Select a color for Date/Time.
Line Spacing			Specifies the extra space in pixels for two adjacent rows of the operation log display.
Item Spacing			Specifies the extra space for every column of the operation log display.