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Logger, Release 4.0
User Manual

March 4, 2004
BT-UM-0039, Revision 0.1

Abstract

The TI Logger version 4.0 uses both tracing log messages and as a Protocol Monitor. The Logger records log messages generated by TI Bluetooth host controller and the Protocol Monitor displays the communication transactions between the connected devices.

Revision Control

Revision 0.1 → 0.2,

Contents

Table of Content

1. Introduction

The TI Logger version 4.0 is used for both tracing log messages and as a protocol transactions monitor. The Logger records log messages generated by TI Bluetooth host controller and the Protocol Monitor displays the communication transactions between the connected devices.

1.1 Documents Reference

Reference	Description / Comments
BT-DS-0022	BRF6150 Product Preview, Rev 0.1
BT-SW-0026	BRF6150 Vendor Specific Commands
BT-UM-0040	Island Message Trace User Manual, Rev 0.1
BT-UM-0038	Logger Protocol Monitor User Manual, Rev 0.1
	Bluetooth Specification versions 1.1 and 1.2

1.2 Main Features

- User friendly intuitive interface
- Able to log traces with different importance levels
- Rich configuration options including color tagging

2. Installation

2.1 System Requirements

- PC running Pentium II (minimum requirement).
- Operating Systems Windows 2000, Windows XP.
- Serial COM port (RS232).

## 2.2 Installing the Logger

1. Whether from the installation CD or our website, please follow the instructions accompanying the Logger software program.

2. During the installation process, follow the on-screen prompts.

3. When installation is completed, the Texas Instrument\Bluetooth Tools program group displays the Logger program icon.

4. Using an RS-232 cable, connect the PC to the TX_Debug port of the Bluetooth device.
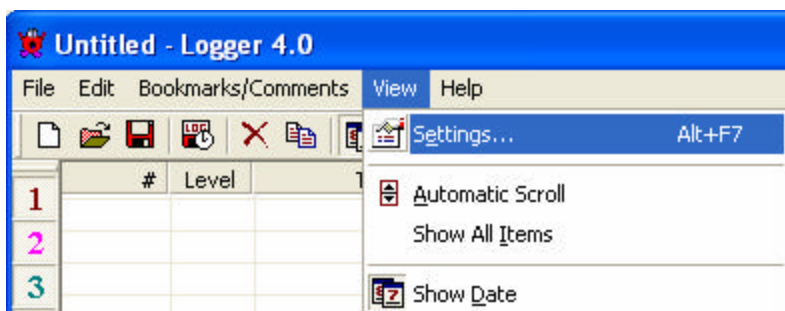
3. Setup

3.1 Loading the Logger

Executes the logger application. The Logger window opens.
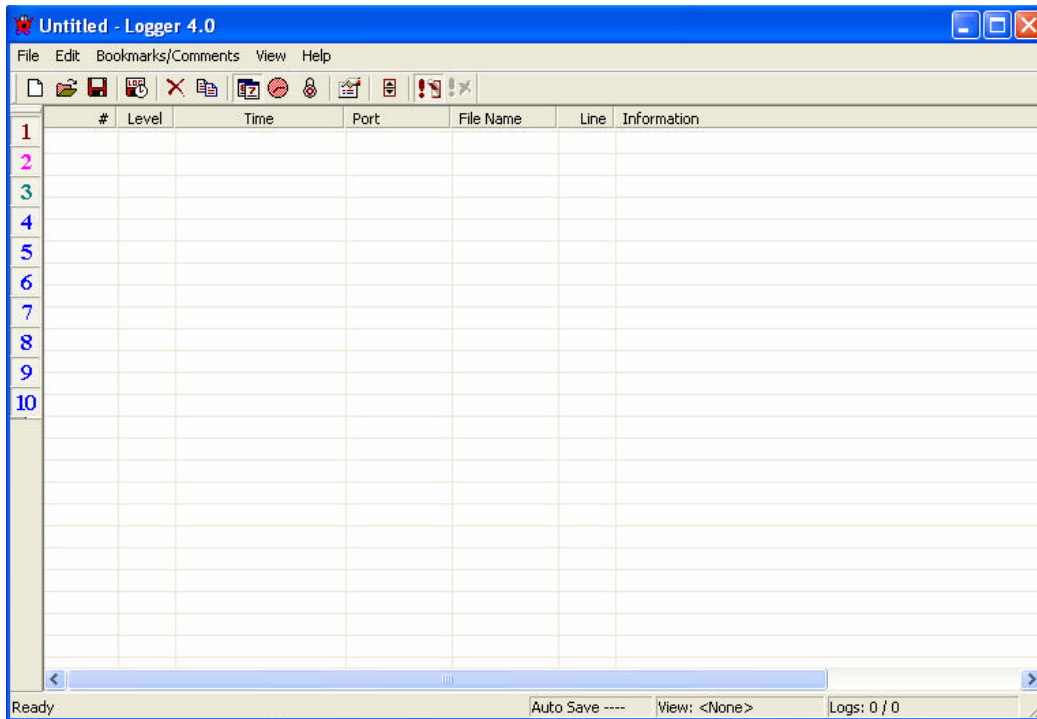
3.2 Logger Settings

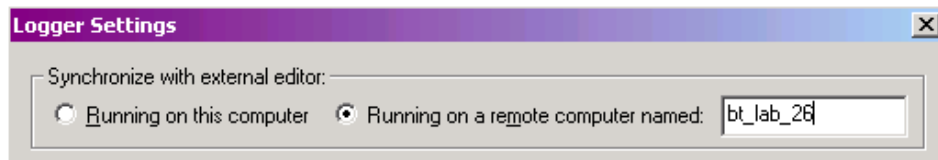From the Menu bar, click the View Menu and choose Settings.

The Logger Settings window opens.

3.2.1 Synchronizing With External Editor

Logger is able to synchronize log events containing filename and line number with an external editor. Currently supported editor is Microsoft Visual Studio.

Specify on which computer the editor is installed and is running.

3.2.2 Port Selection and Setup

From the list of installed port plug-ins, select a port. In this example, we selected the Island1 plug-in.
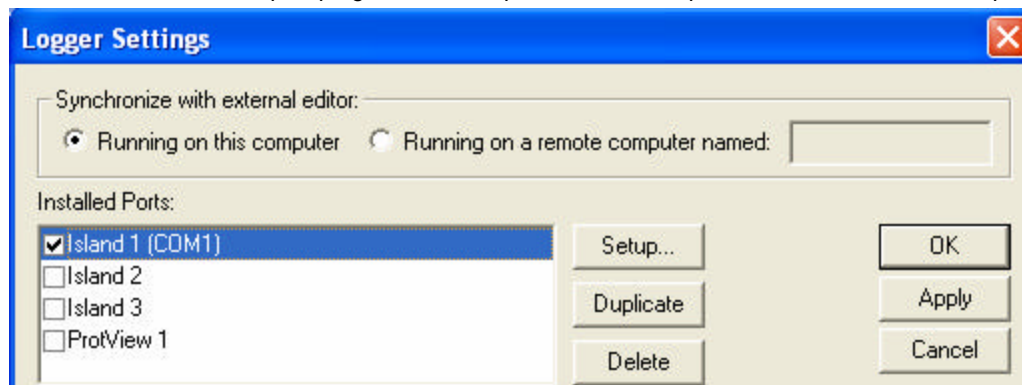
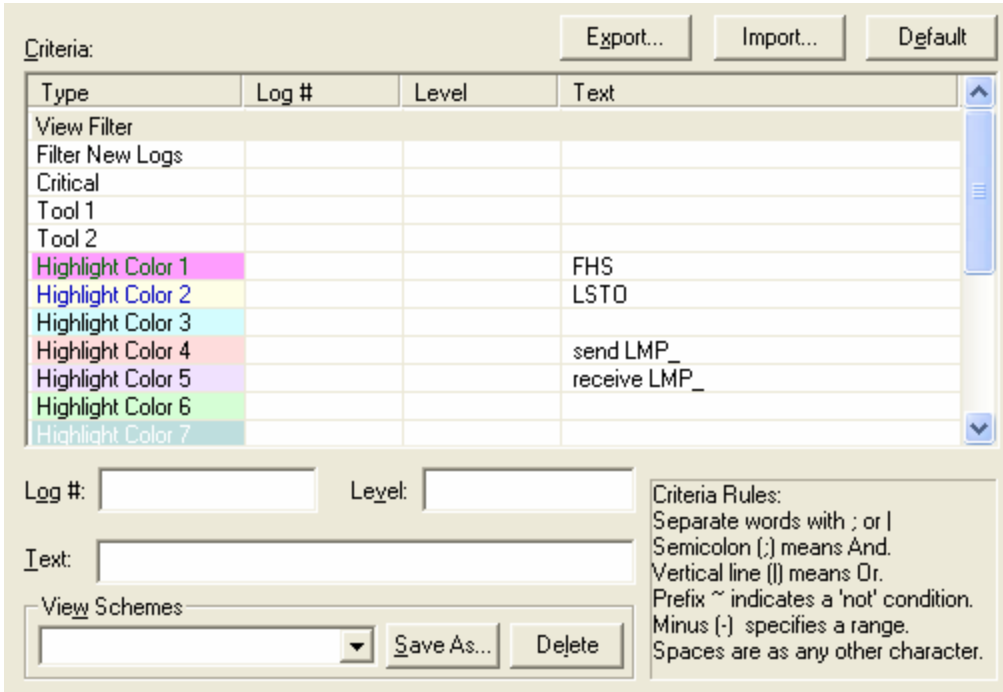| Button	Description
Setup	Opens the setup window
Duplicate	Duplicates the selected port to create a new instance of that port (enables logging from different sources)
Delete	Deletes the selected port
Apply	Applies the changes without closing the window
Cancel	Discards the changes and closes the window
OK	Saves the new settings and closes the window

3.2.3 Criteria Settings Window

The criteria settings are used to differentiate between different logs. See section 3.2.4 **Editing a Criteria** on page 8. When setting a criterion first choose a criteria type, and then type values in the appropriate edit boxes.

Criteria Types

View Filter	The Criteria Settings decide which logs are visible and which are hidden.
Filter New Logs	Permanently deletes all new logs on arrival meeting the set criteria.
Critical	Defines those logs that are deemed critical.
Tool	Used to run any external file or application when the appropriate new log arrives.
Highlight Color	Highlights any log meeting the set criteria with the selected color.

From the Menu bar, click **View** and then choose **Settings**.

Button	Description
Export…	Exports the current criteria settings to an external file
Import…	Imports a previously exported criteria file
Default	Clears all the criteria values for the currently selected type

3.2.4 Editing a Criteria

While selecting the requested criteria type, edit the following fields:

| Editbox	Description
Log #	Selects the log number
Level	Selects the level
Text	For entering the criteria data

Criteria Rules

Each phrase is case insensitive.

Use the following operators to specify logical rules.

Operator	Description
;	And (separates phrases)
|	Or (separates phrases)
~	NOT condition (tilde) placed at the beginning of any phrase to be excluded
-	Range (minus symbol) "From-To", "From-", "-To"
Space	Represents a space character (has the same properties as any other search string character)

3.2.5 Adding and Deleting Schemes

Multiple schemes can be created and later selected from the main screen. Here you can add new schemes or delete existing ones.
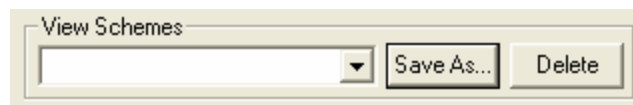
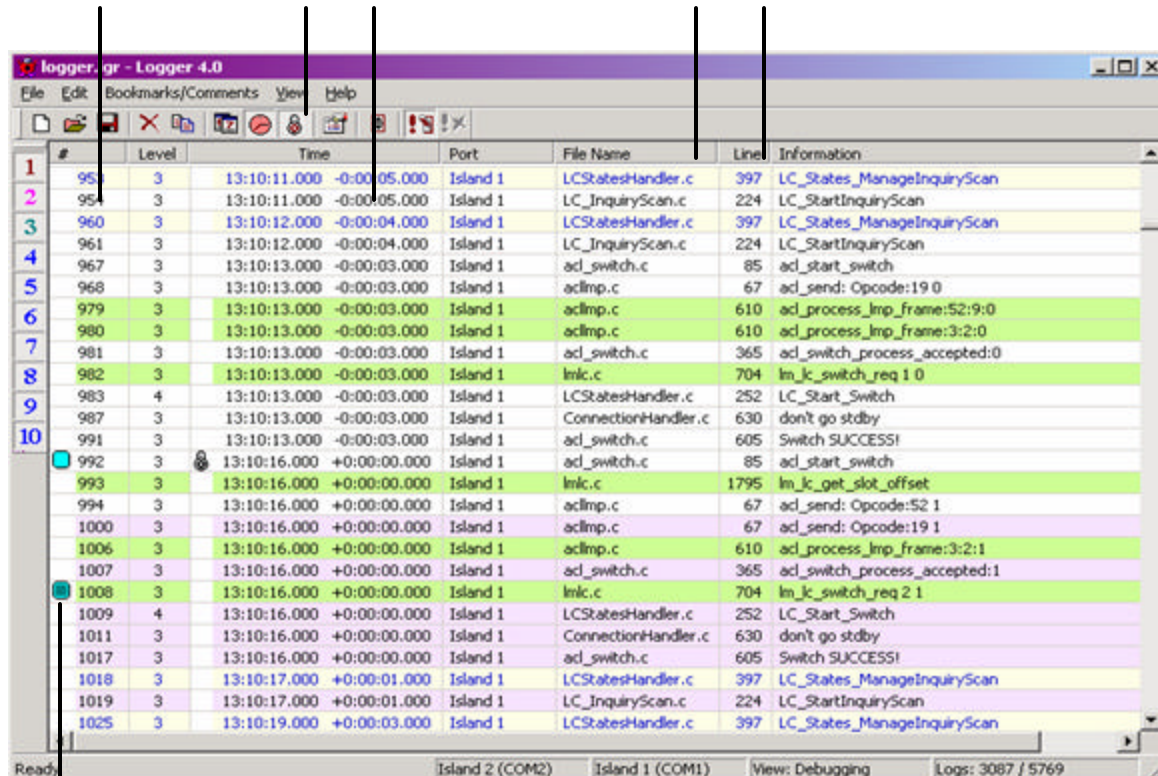1. After creating a new View Scheme, click Save As…The Select View dialog box opens .

2. In the Name field, type a scheme name.

3. Click OK.

4. Using the Main Working Window Controls

The columns can be drag and dropped for arranging the column sequence.

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4.1 Log Levels

- Each log has a specific level and can be toggled on and off
- Using the right-click menu you can select all levels or deselect all levels
- Press the Ctrl key and click a level to select only that level ON

1   2   3   4   5   6   7   8   9   10

4.2 Toolbar

Icon	Description
	Opens new screen (Ctrl+N)
	Opens file (Ctrl+O)
	Saves screen (Ctrl+S)
	When the log reaches a predetermined size the logs are automatically saved and the log buffer is cleared.
	Deletes messages (DEL)
	Copies messages (Ctrl+C)
	Shows or hides the Date (toggles)
	Shows or hides the time (toggles)
	Shows or hides the relative time (toggles)
	Opens the Settings window
	Toggles automatic scrolling
	Audio beep on critical alarm (toggles)
	Mutes critical alarm

4.2.1 Status Bar

| Island 1 (COM1) | Auto Save ---- | View: Colors | Logs: 3780 / 3780 |

Name	Description
Island1 (COM1)	Currently selected port (Example only. This area can display different port names and connections)
Auto Save	Auto saves every predetermined time duration.
View	Currently selected view scheme. Clicking on this pane enables toggling between view schemes. Ctrl+Tab Switches to previous view schemes Ctrl+0..9 Switches to a specific view scheme
Logs: <Visible> / <Total>	Information of how many visible logs are currently displayed

4.2.2 Bookmarks and Comments

These commands are in the Bookmarks/Comments menu.

You can add or edit comments or toggle the bookmarks on and off using the right-click popup menu.

All comments and bookmarks are automatically saved when the logs are saved to file.
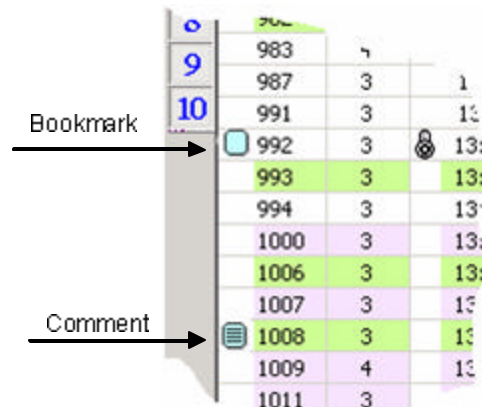
F2	Next Bookmark
Ctrl+F2	Toggle Bookmark
Enter	Edit Comment

4.2.3 Find Function
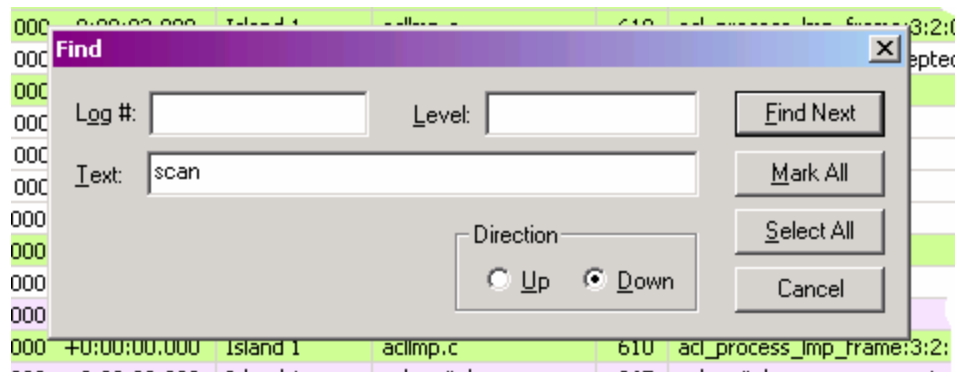
Ctrl+F	Find Dialog Box
F3	Find Next
1..9	Find Next Level
A..Z	Incremental Search

5. Appendix A: Glossary

BD_ADDR	Bluetooth Device Address
BRF6100	TI Bluetooth single chip
BRF6150	Second generation TI Bluetooth single chip
BT	Bluetooth
HCI	Host Controller Interface
Host/Host PC	A PC connected to the device via the serial port
LMP	Link Manager Protocol
RF	Radio Frequency
SW	Software

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