

Parsinator User Manual

Version 1.0

Revision History

Version #	Date	Changes Made
1.0	4/19/02	Original Document

Introduction

The purpose of this document is to explain to the user how to use the Parsinator. Within this document, there is an explanation of how to install the program on the Solaris environments. In addition, there is detailed explanation of how to make full functionality of the Parsinator and its many features.

Installation of the Parsinator

The following is a copy of the readme file that we sent to our clients at Motorola. The Parsinator, in our clients' environment, is run on the Solaris operating system.

Instructions for running the PARSINATOR v3.0.0 on the Sun Solaris 8 Platform

Please make sure that you are in the parent folder of where you extracted the package. In the console, use the following command:

Phase I-Starting the GUI

```
"java" - mx192m -classpath "Parsinator/motorola.cs292.parsinator/classes"  
motorola.cs292.parsinator.Parsinator "Parsinator/biglog.txt"  
"Parsinator/HCI_opcodes_v2.txt"
```

Phase II-(Text-based output)

```
"java" - mx192m -classpath "Parsinator/motorola.cs292.parsinator/classes"  
motorola.cs292.parsinator.Parsinator "Parsinator/biglog.txt"  
"Parsinator/HCI_opcodes_v2.txt"  
"<PATH>/<OUTPUTFILE.EXT>"
```

You can substitute 'biglog.txt' for a log file of your choosing.

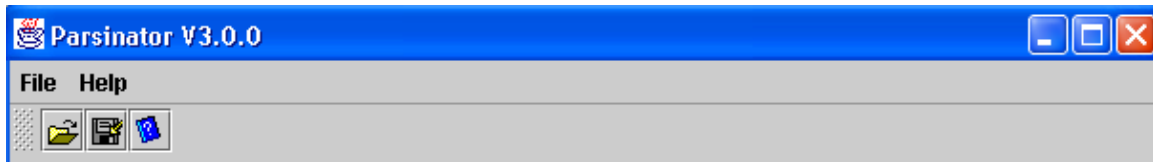
Please note that you MUST be running Java Version 1.2.2 or better to run the Parsinator. You can check your version of java by using the following command:

```
"java" -version
```

Making Full Use of the Parsinator

GUI Features

The GUI features look as follows:



The File Menu has only the “Exit” option which allows the user to exit the program. The Help Menu has the “About” option which lets the user know a little bit more about the program and who to contact for reporting bugs. The buttons found on the right upper corner of the frame are traditional buttons for minimizing, maximizing, and closing the program. The icons that are represented by images are not functional, and they were not meant to be functional as per the Requirements Document. Those buttons are standard buttons that show up when building a frame and, at this time, they do not have any functionality.

HCI Features

When the user starts the GUI-based version of the Parsinator, the application looks as follows:

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File Help

HCI L2CAP RFCOMM

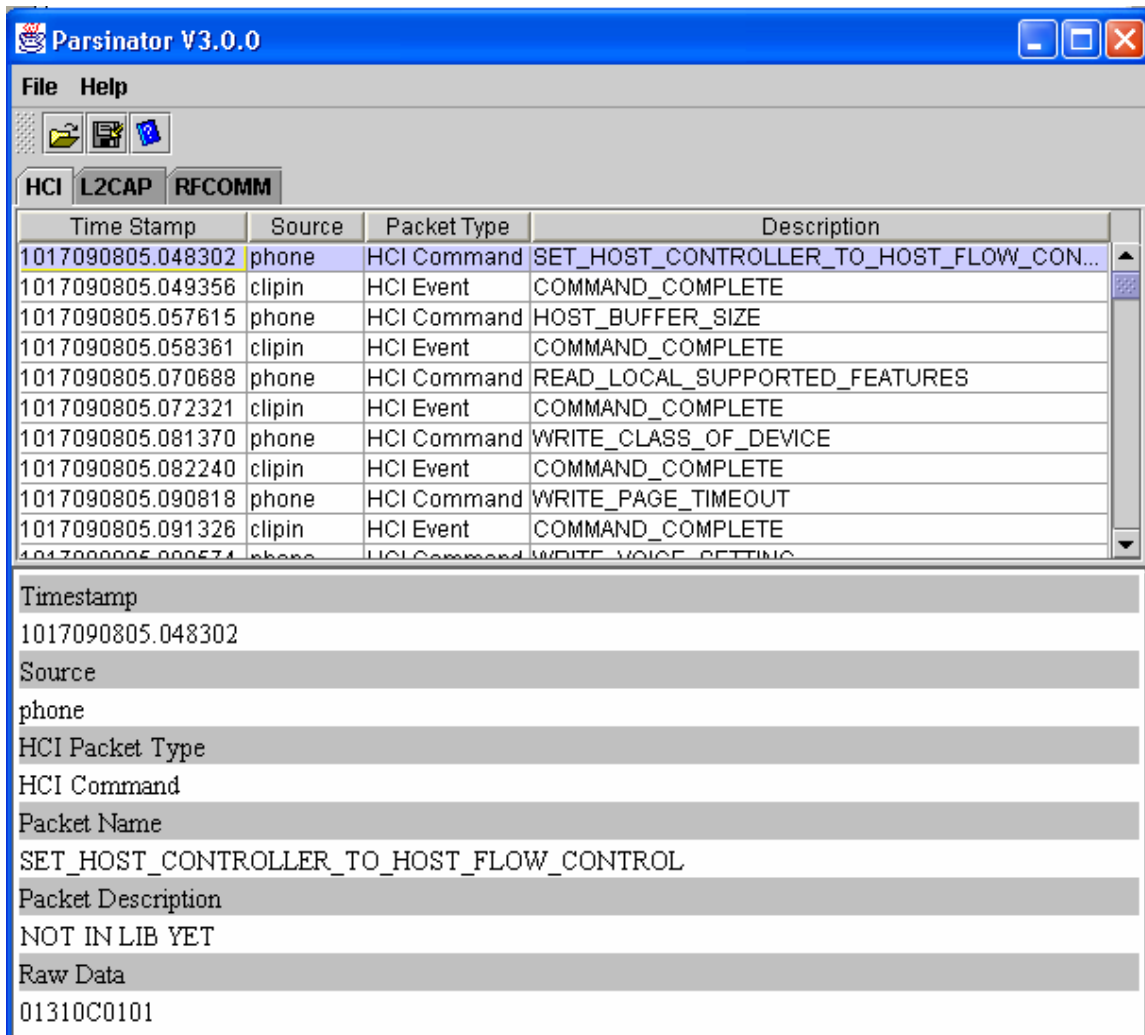
Time Stamp	Source	Packet Type	Description
1017090805.048302	phone	HCI Command	SET_HOST_CONTROLLER_TO_HOST_FLOW_CON...
1017090805.049356	clipin	HCI Event	COMMAND_COMPLETE
1017090805.057615	phone	HCI Command	HOST_BUFFER_SIZE
1017090805.058361	clipin	HCI Event	COMMAND_COMPLETE
1017090805.070688	phone	HCI Command	READ_LOCAL_SUPPORTED_FEATURES
1017090805.072321	clipin	HCI Event	COMMAND_COMPLETE
1017090805.081370	phone	HCI Command	WRITE_CLASS_OF_DEVICE
1017090805.082240	clipin	HCI Event	COMMAND_COMPLETE
1017090805.090818	phone	HCI Command	WRITE_PAGE_TIMEOUT
1017090805.091326	clipin	HCI Event	COMMAND_COMPLETE
1017090805.092574	phone	HCI Command	WRITE_VOICE_SETTINGS

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The HCI tab is defaulted to be standing out above the other Bluetooth parsing layers. If the user wanted to get information, for example, of the first packet in this example (of timestamp 1017090805.048302) then s/he would simple left mouse click on any cell in that particular row and the following information is shown:



The packets within the log file are ordered by timestamp: first to last. As one can see from the image above, a description of the packet is given and more detailed information is found on the lower-half of the GUI. The upper-half of the GUI contains all the HCI packets and for those that cannot be displayed on the GUI, that particular section is scrollable so that the user can view all of the other files.

L2CAP Features

Similar to HCI, the packet from the upper portion of the GUI must be clicked in order for one to get information about the L2CAP packet. Here is a graphical view of the parsed information that is given with L2CAP:

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File Help

HCI L2CAP RFCOMM

Time Stamp	Source	Channel ID	Connection Type
1017090924.396406	clipin	1	Signalling Command
1017090924.421680	phone	1	Signalling Command
1017090924.424284	phone	1	Signalling Command
1017090924.453680	clipin	1	Signalling Command
1017090924.453680	clipin	1	Signalling Command
1017090924.499893	phone	1	Signalling Command
1017090924.713036	clipin	64	Connection-oriented Channel
1017090924.725270	phone	64	Connection-oriented Channel
1017090924.748449	clipin	64	Connection-oriented Channel
1017090924.775880	phone	64	Connection-oriented Channel
1017090924.850235	clipin	64	Connection-oriented Channel

Timestamp
1017090924.396406

Source
clipin

Signalling Command Code
Connection Request (Code 0x02)

Defined PSM Value:
Service Discovery Protocol

Source CID:
64

Signalling Command Raw Data
0201040001004000

RFCOMM Feature

RFCOMM presentation is similar to the other two layers. The following image displays the information that is shown to the user with regards to this layer:

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File Help

HCI L2CAP **RFCOMM**

Time Stamp	Source	Source ID	Destination ID
1017090930.768541	clipin	65	65
1017090930.779651	phone	65	65
1017090930.798149	clipin	65	65
1017090930.814727	phone	65	65
1017090930.827264	clipin	65	65
1017090931.997928	phone	65	65
1017090932.001196	phone	65	65
1017090932.016805	clipin	65	65
1017090932.016805	clipin	65	65
1017090932.032568	phone	65	65
1017090932.035475	phone	65	65

clipin

Address

03

Control

SABM (Set Asynchronous Balanced Mode): 00111111

Length Indicator

E/A Bit: 1 Length: 0

SourceCID -> DestinationCID

65 -> 65

Information

Raw Data

033F011C