

Java Bluetooth Stack Requirements definition

Version 1.0

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| Java Bluetooth Stack | Version: 1.0 |
| Requirements Definition | Date: 2004-01-15 |
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Revision History

| Date | Version | Description | Author |
|-------------|----------------|--------------------|----------------|
| 2003-11-30 | 0.1 | Initial Draft | Tomislav Sečen |
| 2003-12-11 | 0.2 | Minor changes | Tomislav Sečen |
| 2004-01-13 | 1.0 | Final version | Tomislav Sečen |

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1. Introduction

1.1 Purpose of this document

This document is intended to give a list of requirements for the Java Bluetooth Stack (JBS) project.

1.2 Intended Audience

Project supervisor, customer.

1.3 Scope

Scope is to give basic information about the requirements for the project.

1.4 Definitions and acronyms

1.4.1 Definitions

| Keyword | Definitions |
|-----------------|---------------------------------------|
| Java | The programming language |
| Bluetooth | Technology for wireless communication |
| Bluetooth stack | Layered Bluetooth architecture |

1.4.2 Acronyms and abbreviations

| Acronym or abbreviation | Definitions |
|-------------------------|--|
| J2ME | Java 2 Micro Edition |
| JSR | Java Specification Request |
| L2CAP | Logical Link Control and Adaptation Protocol |
| SDP | Service Discovery Protocol |
| RFCOMM | Serial communication protocol |
| HCI | Host Controller Interface |
| OBEX | Object EXchange protocol |

1.5 References

Java APIs for Bluetooth Wireless Technology (JSR-82), specification version 1.0a, 2002.

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2. Requirements

The main requirement is to extend the functionality of the existing Bluetooth stack code base to the full JSR-82 compliance.

To do that, we need to implement following software stack layers:

| Identity | Priority | Description | Source |
|-------------------------|----------|--|----------|
| I Implementation | | | |
| I-1 | 1 | Support for RFCOMM Definition: The implementation should fully support RFCOMM protocol. Motivation: The user may want to use Serial port profile as a reliable data stream between two devices. | Customer |
| I-2 | 1 | Support for OBEX Definition: The implementation should fully support OBEX protocol. Motivation: The user may want to use Object Push profile or Synchronization profile. | Customer |
| I-3 | 1 | Support for security Definition: The implementation should fully support Bluetooth security measures (authentication, data transfer encryption and authentication). Motivation: The user may want to use secure file transfer over OBEX or over RFCOMM using GAP. | Customer |