

ACS 蓝牙库更新指南 [iOS 及 Android]

用户指南 V1.01

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1.0. 简介

本用户指南介绍如何在客户创建的应用程序上更新 ACS 蓝牙库。下面是更新蓝牙库的常规步骤。需要 注意的是,更新库时可能出现不兼容问题,需要对应用程序做进一步的修改。

1.1. ACS 智能卡 I/O Android 库

"acssmcio"库主要提供与 ACS 蓝牙读写器进行通信的类和接口。该库基于 JSR 268 [1]定义的 Java 智能卡 I/O API 中的服务提供商接口(TerminalFactorySpi)。

Java 智能卡 I/O API 定义了通过 ISO/IEC 7816-4 APDU 与智能卡进行通信的 Java API。该 API 允许 Java 应用程序与智能卡上运行的应用程序进行交互,实现卡片数据的存储和检索等功能。

"smartcardio"库从 OpenJDK 中导入 Java 包:

- javax.smartcardio
- sun.net.www
- sun.nio.cs
- sun.security.action
- sun.security.jca
- sun.security.util

[1] https://jcp.org/en/jsr/detail?id=268

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1.1.1. Android 库的安装

1) 下载更新后的 Android 库并解压

找到解压后的类库文件夹"C:\BLETest\app\libs\",可以看到"acssmcio-x.y.z.aar"和 "smartcardio-x.y.z.aar"文件。将这两个类库文件复制到项目文件夹"app\libs"。



2) 导航到 File -> Project Structure -> Dependencies。





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3) 在"Declared Dependencies"选项卡中,点击下拉菜单并选择"Jar Dependency"。



4) 在"Add Jar/Aar Dependency"对话中,输入路径到"libs/acssmcio-x.y.z.aar"并选择 "implementation"配置。



5) 按照上述步骤添加"libs/smartcardio-x.y.z.aar"。





Advanced Card Systems Ltd. Card & Reader Technologies

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6) 在您应用程序的"build.gradle"文件中,可以看到下列代码行。

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implementation files('libs/acssmcio-x.y.z.aar') implementation files('libs/smartcardio-x.y.z.aar')

7) 关于添加 ACR1555U 终端类型的说明

a. 找到 strings.xml 文件:

打开项目并导航到 res/values/目录,找到 strings.xml 文件。

b. 添加终端类型:

在 strings.xml 文件中,将下列代码行插入<string-array>标签,添加 ACR1555U 终端 类型:

<item>ACR1555U</item>

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a) 搭建项目和测试:

添加好终端类型后,继续搭建项目。搜索 ACR1555U 终端的功能将启用。

需要注意的是,更新库时可能出现不兼容问题,需要对应用程序做进一步的修改。

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1.2. ACS 智能卡 I/O iOS 框架

"ACSSmartCardIO"框架主要提供与 ACS 蓝牙读写器进行通信的类和接口。该框架基于 JSR 268 [1] 定义的 Java 智能卡 I/O API 中的服务提供商接口(TerminalFactorySpi)。

Java 智能卡 I/O API 定义了使用 ISO/IEC 7816-4 APDU 与智能卡进行通信的 Java API。该 API 允许 Java 应用程序与智能卡上运行的应用程序进行交互,实现卡片数据的存储和检索等功能。

"SmartCardIO"框架包含下列从 OpenJDK 移植到 Swift 的源代码。

- javax.smartcardio

- java.security.Provider

[1] https://jcp.org/en/jsr/detail?id=268

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1.2.1.iOS 库的安装

要将该框架用于您的项目,请将 "BLETest\SmartCardIO.xcframework"和
 "BLETest\ACSSmartCardIO.xcframework"这两个文件夹复制到您的项目文件夹。

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2. 在 Targets 的 General 标签页中,点击 Embedded Binaries 下的"+"号。

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3. 在弹出的对话框中,点击"Add Other..."按钮,将框架添加到您的项目当中。

Choose frameworks and libraries to add:
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4. 您会看到下列库被添加到项目中



5) 关于添加 ACR1555U 终端类型的说明

找到 TerminalListViewController,并将下列代码添加到"ACR1255-J1 V2"小节的后面。



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然后将下列代码添加到 alert.addAction(terminalTypeAction3)后面





6) 搭建项目和测试:

添加好终端类型后,继续搭建项目。搜索 ACR1555U 终端的功能将启用。

需要注意的是,更新库时可能出现不兼容问题,需要对应用程序做进一步的修改。

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