



Advanced Card Systems Ltd.
Card & Reader Technologies

ACOSJ Development Environment



User Manual V1.00



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1.0. Introduction

This user manual provides the guidelines in installing and compiling applications for the ACOSJ applet development.



2.0. Installation Procedures

This section discusses the applications needed to be installed for running the ACOSJ Applet.

2.1. Download and install Java Development Kit (JDK)

The Java Development Kit (JDK) provides runtime environment, compiler and Application Programming Interface (API) for writing Java-enabled applications.

Note: *The commercial version of Java Development Kit (JDK software) Version 6 Update 10 (JDK 6 Update 10) or later is required for the ACOSJ Applet.*

To install:

1. Download the JDK software from <http://www.oracle.com/technetwork/java/javase/downloads>.
2. Follow the instructions on how to install the software based from the website.

2.2. Download and install Java Card Development Kit (JCDK)

The Java Card Development Kit (JCDK) provides a complete, standalone development environment in which applets written for the Java Card platform can be developed and tested.

To install:

1. Download the **Java Card Classic Development Kit 3.0.4** revenue release from http://www.oracle.com/technetwork/java/javasebusiness/downloads/java-archive-downloads-javame-419430.html#java_card_kit-classic-3_0_4-rr-bin-do.
2. Accept the license agreement, then download the **java_card_kit-classic-3_0_4-rr-bin-do-b28-windows-06_sep_2011.jar**.
3. Double-click the .jar file to install JCDK.

2.3. Download and install other tools

To run other tools and applications for the ACOSJ applet:

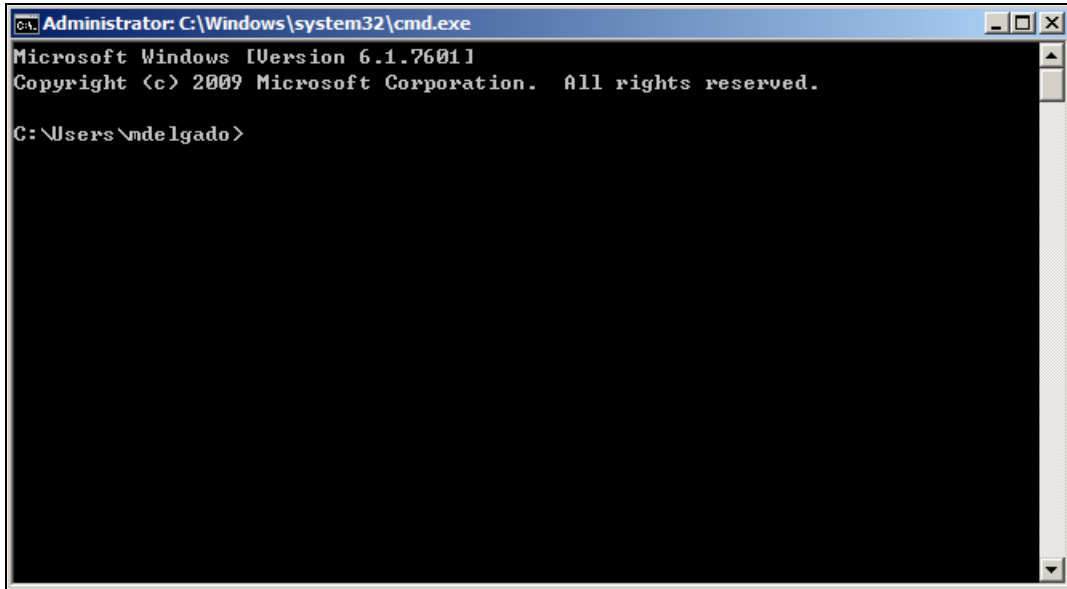
1. Open **JCDevKitUG-Classic-3_0_4.pdf** from:
x:\Projects\COS\ACOSJ\SDK_SampleCode\JCDK3.0.4_ClassicEdition\docs
Note: "x" is the drive letter of your Windows local drive.
2. Follow the instructions on how to **Download and install Java Development Kit (JDK)** and **Download and install Java Card Development Kit (JCDK)** to set up the remaining tools and environment variables.

3.0. Compile applets and build a CAP file

The following steps show how to compile the applets after the application development.

To compile:

1. Open the Windows Command Prompt.



2. Specify the path where the compiling applet source code is located.

Example:

samples\classic_applets\HelloWorld\applet

3. Enter **ant all** command to start the build process.

Note: A "build" sub-folder containing the Chip Authentication Program (CAP) file will appear if the build process is successful.



3.1. Sample Build Process of ACOSJ Applet

Below is an example of the build process in compiling an ACOSJ applet.

```
D:\ACOSJ\JCDK3.0.4_ClassicEdition\samples\classic_applets\HelloWorld\applet
>ant
all
Buildfile:
D:\ACOSJ\JCDK3.0.4_ClassicEdition\samples\classic_applets\HelloWorld\
applet\build.xml

init:

compile_applet:
[javac]
D:\ACOSJ\JCDK3.0.4_ClassicEdition\samples\classic_applets\HelloWorld
\applet\build.xml:39: warning: 'includeantruntime' was not set, defaulting
to bu
ild.sysclasspath=last; set to false for repeatable builds

convert_applet:
[convert] Java Card Ant Tasks, Version 1.0
[convert] Copyright ? 2010, 2010, Oracle and/or its affiliates. All rights
res
erved.
[convert] 5 3 26, 2016 5:46:18 2
[convert] INFO: Converter [v3.0.4]
[convert] 5 3 26, 2016 5:46:18 2
[convert] INFO: Copyright (c) 2011, Oracle and/or its affiliates. All
righ
ts reserved.
[convert]
[convert]
[convert] 5 3 26, 2016 5:46:18 2
[convert] INFO: conversion completed with 0 errors and 0 warnings.
[copy] Copying 3 files to D:\ACOSJ\JCDK3.0.4_ClassicEdition\samples\classic
_applets\HelloWorld\applet\build

generate_script:
[scriptgen] Java Card Ant Tasks, Version 1.0
[scriptgen] Copyright ? 2010, 2010, Oracle and/or its affiliates. All
rights res
erved.
[scriptgen] ScriptGen [v3.0.4]
[scriptgen] Copyright (c) 2011, Oracle and/or its affiliates. All
rights res
erved.
[scriptgen]
[scriptgen]
[scriptgen] APDU script file for CAP file download generated.

run:
[java] Java Result: 1

all:

BUILD SUCCESSFUL
Total time: 2 seconds
```



```
D:\ACOSJ\JCDK3.0.4_ClassicEdition\samples\classic_applets\HelloWorld\applet  
>
```

Windows is a registered trademark of Microsoft Corporation in the United States and/or other countries.