Oracle® Java Micro Edition Software Development Kit

Release Notes

Release 8.1 for Windows

E49310-03

November 2014

- What's New in This Release
- Installation Prerequisites
- Supported Platforms
- Installing Oracle Java ME SDK 8.1 Plugins
- Known Java ME SDK Bugs
- Known Java ME Embedded Runtime Bugs
- Documentation Accessibility
- Installation and Runtime Security Guidelines

What's New in This Release

The following items are new in the Oracle Java ME SDK 8.1 release:

- Support for Java ME Embedded 8.1
- Oracle Java ME SDK 8.1 includes plugins for Eclipse IDE
- Java ME Embedded 8.1 supports new hardware: Freescale Kinetis K70 and K64
- To adhere to Oracle security recommendations, Java ME Embedded 8.1 no longer supports SSLv3

Installation Prerequisites

The Oracle Java ME SDK 8.1 product has three distinct components:

- The Oracle Java ME SDK 8.1 base platform, which includes the runtimes (virtual machines), emulators, libraries, and more.
- A supported IDE, such as NetBeans 8.0.1 or Eclipse 4.4 (installed separately).
- Oracle Java ME SDK 8.1 plugins for NetBeans IDE 8.0.1 and Eclipse IDE 4.4. The
 plugins extend NetBeans and Eclipse so that you can seamlessly access the Oracle
 Java ME SDK 8.1 features and utilities from the IDE.

Note: NetBeans IDE 8.0.1 or Eclipse IDE 4.4 must run with JDK 8u40 or higher in order to work with Oracle Java ME SDK 8.1 plugins.



Supported Platforms

The minimum system configuration for working with Oracle Java ME SDK 8.1 is:

- Microsoft Windows 7 (32-bit or 64-bit) with recent service packs.
- Java Platform, Standard Edition Software Development Kit (JDK) release 7 or 8 with latest updates.
- NetBeans IDE 8.0.1 or Eclipse IDE 4.4 with all the latest patches installed. You can
 download the latest versions at:
 - https://netbeans.org/downloads/
 - https://www.eclipse.org/downloads/

Installing Oracle Java ME SDK 8.1 Plugins

Plugins make Oracle Java ME SDK 8.1 platform features available in NetBeans IDE 8.0.1 or Eclipse IDE 4.4. Plugins are delivered in two bundles:

- Java ME SDK Tools: This bundle is required.
- **Java ME SDK Demos**: This bundle is optional, but useful for getting started quickly. The documentation refers to the demos to illustrate features.

For more information on installing the Oracle Java ME SDK 8.1 plugins, see the *Oracle Java Micro Edition Software Development Kit Developer's Guide for Windows*.

Note: The samples do not implement security measures. The "Installation and Runtime Security Guidelines" suggest how to maintain an environment in which sample code can be run safely.

Known Java ME SDK Bugs

The following bugs are known to directly affect Oracle Java ME SDK 8.1:

Java ME SDK does not install if the path to the destination folder or the user profile folder contains non-ASCII characters

The installer is not able to load certain files that are located on a path with non-ASCII characters if the language for non-Unicode programs is set to a locale other than the one used for that path. For example, if the destination folder where you want to install Java ME SDK or the user profile folder contains Russian characters, the language for non-Unicode programs must be set to Russian locale. This will not happen if you use only ASCII characters in your paths.

However, if you need to have non-ASCII characters, you can manage the language for non-Unicode programs in Windows as follows:

- 1. Open the Control Panel, select Clock, Language, and Region, and then select Region and Language.
- Open the Administrative tab and check the Language for non-Unicode programs section.
- **3.** Click **Change system locale** and select the locale that is used in your paths.
- Click OK and then Apply.

Known Java ME Embedded Runtime Bugs

The following Java ME Embedded 8.1 runtime bugs may affect users of Oracle Java ME SDK 8.1:

A device may not be automatically recognized by the Device Manager

If you start Java on a device, then start the Device Manager, open the Device Connections Manager, and click **Add**, the board may not be present in the **IP Address or Host Name** drop-down list. You should enter the IP address or host name manually.

Device appears to be connected after it is unplugged

If a device is connected in the Device Connections Manager, the status does not change when you unplug the device.

Documentation Accessibility

For information about Oracle's commitment to accessibility, visit the Oracle Accessibility Program website at

http://www.oracle.com/pls/topic/lookup?ctx=acc&id=docacc.

Access to Oracle Support

Oracle customers have access to electronic support through My Oracle Support. For information, visit http://www.oracle.com/pls/topic/lookup?ctx=acc&id=info or visit http://www.oracle.com/pls/topic/lookup?ctx=acc&id=trs if you are hearing impaired.

Installation and Runtime Security Guidelines

Oracle Java ME SDK 8.1 requires an execution model that makes certain networked resources available for emulator execution. These required resources might include, but are not limited to, a variety of communication capabilities between the Oracle Java ME SDK 8.1 components. It is important to note that the Oracle Java ME SDK 8.1 installation and runtime system is fundamentally a developer system that is not specifically designed to guard against any malicious attacks from outside intruders. Given this, the Oracle Java ME SDK 8.1 architecture can present an insecure operating environment to the Oracle Java ME SDK 8.1 installation file system itself, as well as its runtime environment, during execution. For this reason, it is important to observe the precautions outlined in the following security guidelines when installing and running the Oracle Java ME SDK 8.1.

To maintain optimum network security, Oracle Java ME SDK 8.1 can be installed and run in a *closed* network operating environment, meaning the Oracle Java ME SDK 8.1 system is not connected directly to the Internet, or to a company Intranet environment that could introduce unwanted exposure to malicious intrusion. This is the ideal secure operating environment when it is possible. Oracle Java ME SDK 8.1 does not require an Intranet connection that supports network connections to systems outside the Oracle Java ME SDK 8.1 architecture to intra-company resources.

An example of a requirement for an Internet connection is Oracle Java ME SDK 8.1 running wireless functionality that requires a connection to the Internet to support the communications with the wireless network infrastructure that is part of the Java ME application execution process. Whether or not an Internet connection is required depends on the particular Java ME application running on Oracle Java ME SDK 8.1. For example, some Java ME applications can use an HTTP connection. In any case, if

the Oracle Java ME SDK 8.1 is open to any network access you should be aware of the following precautions to protect valuable resources from malicious intrusion:

- Installing the Java ME SDK Demos plugin is optional. Some sample projects use network access and open ports. Because the sample code does not include protection against malicious intrusion, you must ensure your environment is secure if you choose to install and run the sample projects.
- Install Oracle Java ME SDK 8.1 behind a secure firewall that strictly limits unauthorized network access to the Oracle Java ME SDK 8.1 file system and services. Limit access privileges to those that are required for Oracle Java ME SDK 8.1 usage while allowing all the bidirectional local network communications that are necessary for the Oracle Java ME SDK 8.1 functionality. The firewall configuration must support these requirements to run Oracle Java ME SDK 8.1 while also addressing them from a security standpoint.
- Follow the principle of *least privilege* by assigning the minimum set of system access permissions required for installation and execution of Oracle Java ME SDK 8.1.
- Do not store any sensitive data on the same file system that is hosting Oracle Java ME SDK 8.1.
- To maintain the maximum level of security, make sure the operating system patches are up-to-date on the Oracle Java ME SDK 8.1 host machine.

Oracle® Java Micro Edition Software Development Kit, Release 8.1 for Windows E49310-03

Copyright © 2009, 2014, Oracle and/or its affiliates. All rights reserved.

This software and related documentation are provided under a license agreement containing restrictions on use and disclosure and are protected by intellectual property laws. Except as expressly permitted in your license agreement or allowed by law, you may not use, copy, reproduce, translate, broadcast, modify, license, transmit, distribute, exhibit, perform, publish, or display any part, in any form, or by any means. Reverse engineering, disassembly, or decompilation of this software, unless required by law for interoperability, is prohibited.

The information contained herein is subject to change without notice and is not warranted to be error-free. If you find any errors, please report them to us in writing.

If this is software or related documentation that is delivered to the U.S. Government or anyone licensing it on behalf of the U.S. Government, the following notice is applicable:

U.S. GOVERNMENT END USERS: Oracle programs, including any operating system, integrated software, any programs installed on the hardware, and/or documentation, delivered to U.S. Government end users are "commercial computer software" pursuant to the applicable Federal Acquisition Regulation and agency-specific supplemental regulations. As such, use, duplication, disclosure, modification, and adaptation of the programs, including any operating system, integrated software, any programs installed on the hardware, and/or documentation, shall be subject to license terms and license restrictions applicable to the programs. No other rights are granted to the U.S. Government.

This software or hardware is developed for general use in a variety of information management applications. It is not developed or intended for use in any inherently dangerous applications, including applications that may create a risk of personal injury. If you use this software or hardware in dangerous applications, then you shall be responsible to take all appropriate fail-safe, backup, redundancy, and other measures to ensure its safe use. Oracle Corporation and its affiliates disclaim any liability for any damages caused by use of this software or hardware in dangerous applications.

Oracle and Java are registered trademarks of Oracle and/or its affiliates. Other names may be trademarks of their respective owners.

Intel and Intel Xeon are trademarks or registered trademarks of Intel Corporation. All SPARC trademarks are used under license and are trademarks or registered trademarks of SPARC International, Inc. AMD, Opteron, the AMD logo, and the AMD Opteron logo are trademarks or registered trademarks of Advanced Micro Devices. UNIX is a registered trademark of The Open Group.

This software or hardware and documentation may provide access to or information on content, products, and services from third parties. Oracle Corporation and its affiliates are not responsible for and expressly disclaim all warranties of any kind with respect to third-party content, products, and services. Oracle Corporation and its affiliates will not be responsible for any loss, costs, or damages incurred due to your access to or use of third-party content, products, or services.