# Java™ Device Test Suite
# Local Relay User's Guide

Version 2.4
Java ME Platform

Sun Microsystems, Inc.
www.sun.com

May 2009

Submit comments about this document by clicking the Feedback[+] link at: http://docs.sun.com

Copyright © 2009 Sun Microsystems, Inc., 4150 Network Circle, Santa Clara, California 95054, U.S.A. All rights reserved.

Sun Microsystems, Inc. has intellectual property rights relating to technology embodied in the product that is described in this document. In particular, and without limitation, these intellectual property rights may include one or more of the U.S. patents listed at http://www.sun.com/patents and one or more additional patents or pending patent applications in the U.S. and in other countries.

THIS PRODUCT CONTAINS CONFIDENTIAL INFORMATION AND TRADE SECRETS OF SUN MICROSYSTEMS, INC. USE, DISCLOSURE OR REPRODUCTION IS PROHIBITED WITHOUT THE PRIOR EXPRESS WRITTEN PERMISSION OF SUN MICROSYSTEMS, INC.

U.S. Government Rights - Commercial Software. Government users are subject to the Sun Microsystems, Inc. standard license agreement and applicable provisions of the FAR and its supplements.

This distribution may include materials developed by third parties.

Sun, Sun Microsystems, the Sun logo, Java, Jini, Solaris, JavaTest, JRE, JDK, Javadoc and the Java Coffee Cup logo are trademarks or registered trademarks of Sun Microsystems, Inc. or its subsidiaries, in the U.S. and other countries.

All SPARC trademarks are used under license and are trademarks or registered trademarks of SPARC International, Inc. in the U.S. and other countries. Products bearing SPARC trademarks are based upon architecture developed by Sun Microsystems, Inc.

The Adobe logo is a registered trademark of Adobe Systems, Incorporated.

Products covered by and information contained in this service manual are controlled by U.S. Export Control laws and may be subject to the export or import laws in other countries. Nuclear, missile, chemical biological weapons or nuclear maritime end uses or end users, whether direct or indirect, are strictly prohibited. Export or reexport to countries subject to U.S. embargo or to entities identified on U.S. export exclusion lists, including, but not limited to, the denied persons and specially designated nationals lists is strictly prohibited.

DOCUMENTATION IS PROVIDED "AS IS" AND ALL EXPRESS OR IMPLIED CONDITIONS, REPRESENTATIONS AND WARRANTIES, INCLUDING ANY IMPLIED WARRANTY OF MERCHANTABILITY, FITNESS FOR A PARTICULAR PURPOSE OR NON-INFRINGEMENT, ARE DISCLAIMED, EXCEPT TO THE EXTENT THAT SUCH DISCLAIMERS ARE HELD TO BE LEGALLY INVALID.

---

Copyright © 2009 Sun Microsystems, Inc., 4150 Network Circle, Santa Clara, California 95054, États-Unis. Tous droits réservés.

Sun Microsystems, Inc. détient les droits de propriété intellectuelle relatifs à la technologie incorporée dans le produit qui est décrit dans ce document. En particulier, et ce sans limitation, ces droits de propriété intellectuelle peuvent inclure un ou plusieurs des brevets américains listés à l'adresse suivante: http://www.sun.com/patents et un ou plusieurs brevets supplémentaires ou les applications de brevet en attente aux États - Unis et dans les autres pays.

CE PRODUIT CONTIENT DES INFORMATIONS CONFIDENTIELLES ET DES SECRETS COMMERCIAUX DE SUN MICROSYSTEMS, INC. SON UTILISATION, SA DIVULGATION ET SA REPRODUCTION SONT INTERDITES SANS L AUTORISATION EXPRESSE, ÉCRITE ET PREALABLE DE SUN MICROSYSTEMS, INC.

Droits du gouvernement des États-Unis – Logiciel Commercial. Les droits des utilisateur dugouvernement des États-Unis sont soumis aux termes de la licence standard Sun Microsystems et aux conditions appliquées de la FAR et de ces compléments.

Cette distribution peut inclure des éléments développés par des tiers.

Sun, Sun Microsystems, le logo Sun, Java, Jini, Solaris, JavaTest, JRE, JDK, Javadoc et le logo Java Coffee Cup sont des marques de fabrique ou des marques déposées enregistrées de Sun Microsystems, Inc.ou ses filiales, aux États-Unis et dans d'autres pays.

Toutes les marques SPARC sont utilisées sous licence et sont des marques de fabrique ou des marques déposées de SPARC International, Inc. aux États-Unis et dans d'autres pays. Les produits portant les marques SPARC sont basés sur une architecture développée par Sun Microsystems, Inc.

Le logo Adobe est une marque déposée de Adobe Systems, Incorporated.

Les produits qui font l'objet de ce manuel d'entretien et les informations qu'il contient sont regis par la legislation americaine en matière de contrôle des exportations et peuvent être soumis au droit d'autres pays dans le domaine des exportations et importations. Les utilisations finales, ou utilisateurs finaux, pour des armes nucleaires, des missiles, des armes biologiques et chimiques ou du nucleaire maritime, directement ou indirectement, sont strictement interdites. Les exportations ou reexportations vers des pays sous embargo des États-Unis, ou vers des entites figurant sur les listes d'exclusion d'exportation americaines, y compris, mais de maniere non exclusive, la liste de personnes qui font objet d'un ordre de ne pas participer, d'une façon directe ou indirecte, aux exportations de des produits ou des services qui sont regi par la legislation americaine sur le contrôle des exportations et la liste de ressortissants specifiquement designes, sont rigoureusement interdites.

LA DOCUMENTATION EST FOURNIE "EN L'ÉTAT" ET TOUTES AUTRES CONDITIONS, DECLARATIONS ET GARANTIES EXPRESSES OU TACITES SONT FORMELLEMENT EXCLUES, DANS LA MESURE AUTORISEE PAR LA LOI APPLICABLE, Y COMPRIS NOTAMMENT TOUTE GARANTIE IMPLICITE RELATIVE ÀLA QUALITE MARCHANDE, À L'APTITUDE À UNE UTILISATION PARTICULIERE OU À L'ABSENCE DE CONTREFAÇON.

Please
Recycle

# Contents

**Preface vii**

**1. Shared and Local Relays 1**

**2. Installing and Updating a Local Relay 5**

Installing a Local Relay 5

Prerequisites 5

▼ Installing a Local Relay 6

Updating a Local Relay 6

**3. Using a Local Relay 9**

**4. Uninstalling a Local Relay 11**

**Index 13**

# Figures

FIGURE 1-1 Standard Shared Relay Installation 2

FIGURE 1-2 Optional Local Relays Installation 3

# Preface

The *Java Device Test Suite Local Relay User's Guide* describes the optional local Relay compares it to the standard shared Relay, and gives instructions for installing and using a local Relay. It is primarily aimed at administrators, secondarily at testers.

## Before You Read This Document

To make best use of this document, you must have a working knowledge of the Installing and Launching chapter of the *Java Device Test Suite Administration Guide*. You should also be prepared to consult the tester harness online help.

## How This Document Is Organized

Chapter 1 describes what a local Relay is, how it differs from the standard shared Relay, and how it can help in some testing situations.

Chapter 2 describes how to install a local Relay.

Chapter 3 refers to the online help and command line Errata topics that describe how to switch to and configure a local Relay.

Chapter 4 describes how to uninstall a local Relay.

# Using UNIX Commands

This document might not contain information about basic UNIX® commands and procedures such as shutting down the system, booting the system, and configuring devices. Refer to the following for this information:

- Software documentation that you received with your system
- Solaris™ Operating System documentation, which is at:

  http://docs.sun.com

# Shell Prompts

| Shell | Prompt |
|---|---|
| C shell | *machine-name*% |
| C shell superuser | *machine-name*# |
| Bourne shell and Korn shell | $ |
| Bourne shell and Korn shell superuser | # |

# Typographic Conventions

| Typeface* | Meaning | Examples |
|---|---|---|
| AaBbCc123 | The names of commands, files, and directories; on-screen computer output | Edit your .login file.<br>Use ls -a to list all files.<br>% You have mail. |
| **AaBbCc123** | What you type, when contrasted with on-screen computer output | % **su**<br>Password: |
| *AaBbCc123* | Book titles, new words or terms, words to be emphasized. Replace command-line variables with real names or values. | Read Chapter 6 in the *User's Guide*.<br>These are called *class* options.<br>You *must* be superuser to do this.<br>To delete a file, type rm *filename*. |

* The settings on your browser might differ from these settings.

# Third-Party Web Sites

Sun is not responsible for the availability of third-party web sites mentioned in this document. Sun does not endorse and is not responsible or liable for any content, advertising, products, or other materials that are available on or through such sites or

resources. Sun will not be responsible or liable for any actual or alleged damage or loss caused by or in connection with the use of or reliance on any such content, goods, or services that are available on or through such sites or resources.

# Sun Welcomes Your Comments

Sun is interested in improving its documentation and welcomes your comments and suggestions. You can submit your comments by going to:

http://java.sun.com/docs/forms/sendusmail.html

Please include the title of this document with your feedback:

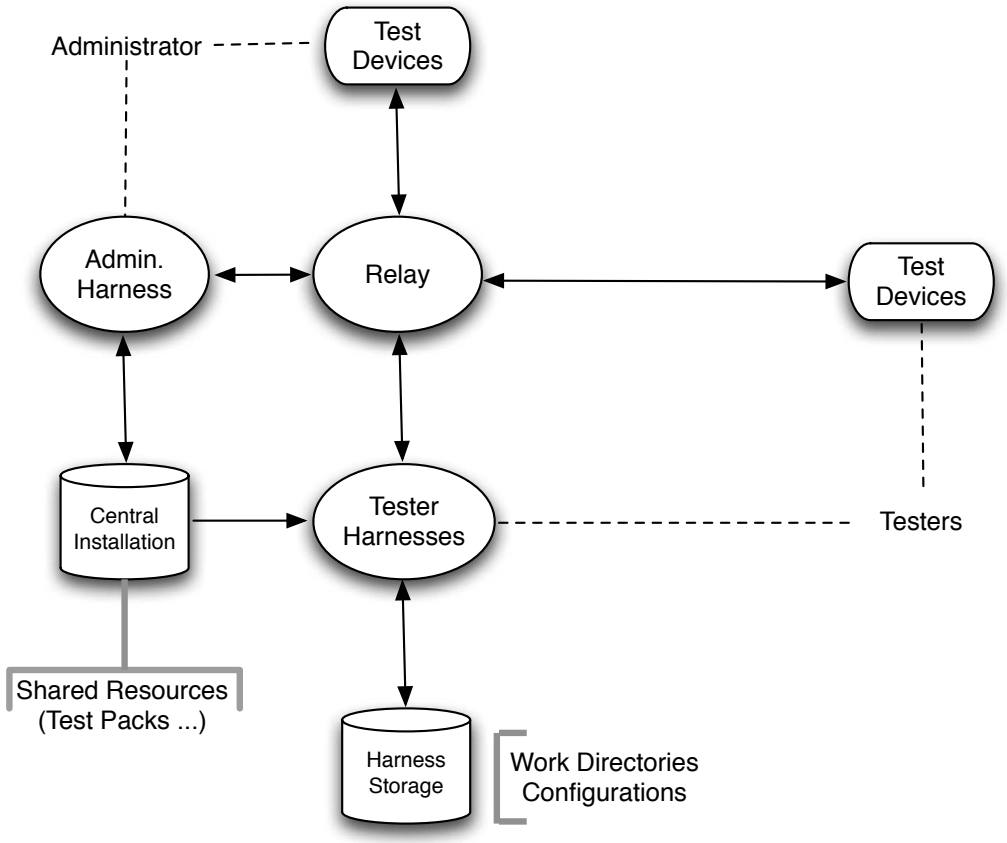
*Java Device Test Suite Local Relay User's Guide*

CHAPTER 1

# Shared and Local Relays

In a standard Java Device Test Suite installation, harnesses and test devices share a single instance of the Relay as shown in FIGURE 1-1. The Relay acts as an intermediary between harnesses and test devices. Harnesses send test bundles to the Relay, which sends them to test devices in response to HTTP requests. The devices send the HTTP requests over the mobile network (over the air) or a local area network. Test devices return results to the Relay, which returns them to the appropriate harness. When a test needs a file, such as a media file, it sends a request to the Relay, which returns the file.

**FIGURE 1-1** Standard Shared Relay Installation

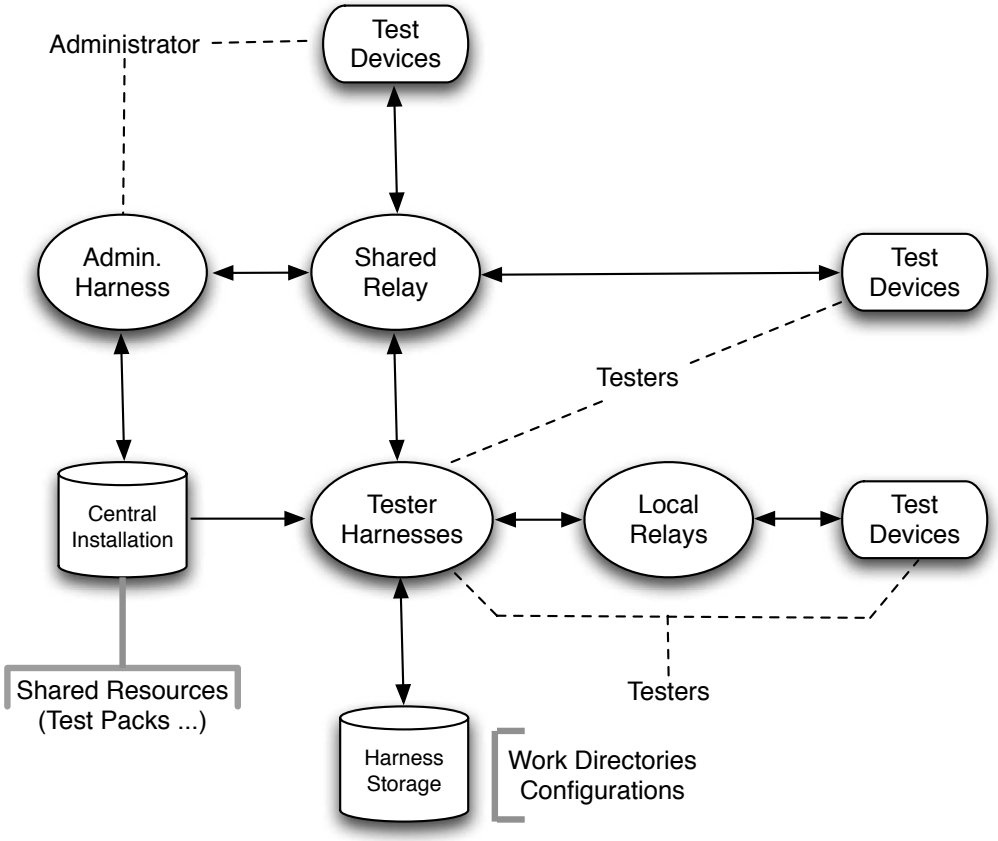



However, mobile networks can be slow for testing, and some devices do not support local area networks. Some of these devices support HTTP over a serial cable, which is fast, but limited: The device can only communicate with the harness host that is connected to the serial cable.

In this case, a shared Relay is usually not practical because the shared Relay is located on a host that is remote from the tester's workstation (harness host). A tester could install a complete Java Device Test Suite on the tester's host, which would create a "private shared Relay" that a limited device could communicate with. But multiple testers would then have multiple Central Installations, which would eliminate the administrative advantage of a single shared Central Installation. There are other potential workarounds, such as port forwarding and network address translation, but they cannot be used at all sites.

Local Relays, shown in FIGURE 1-2, are the solution to testing devices that can only communicate with the harness host that is connected to the serial cable.

**FIGURE 1-2** Optional Local Relays Installation




Independent of supporting devices with limited communications, local Relays distribute the Relay workload, potentially providing better performance than an overloaded shared Relay. Local Relays can also be useful when testing new test packs. Test developers can use local Relays which isolate their activities from the Relays used for production work.

An installation with local Relays can have as many of them as desired, up to one per test harness. One shared Relay is also required for test pack installation and the administrator harness, which cannot use a local Relay. Testers who have a local Relay can switch their harness between their local Relay and the shared Relay. Switching makes it simple to test devices that can communicate with a shared Relay.

CHAPTER 2

# Installing and Updating a Local Relay

This chapter describes how to install and update a local Relay on a tester host computer in these sections:


- Installing a Local Relay
- Updating a Local Relay


## Installing a Local Relay

You can install a local Relay on a test harness host before or after installing the test harness. If a test harness has been installed it can be running or not.

### Prerequisites

Before installing a local Relay, be sure the following are true:

- The local Relay host can read files in the Central Installation. In this chapter, the Central Installation is referred to as *centralInstallDir*. It contains `ReleaseNotes.html`, `admin/`, `docs/`, and other files and directories.
- The local Relay host meets the Relay Host requirements listed in the *Java Device Test Suite Administration Guide*. A local Relay requires roughly 50 megabytes less disk space than a shared Relay because the local Relay uses the shared Relay's test-related files, such as media samples.

- You know the local Relay `.war` file's path. The default name is *centralInstallDir*`/admin/shared/resources/localRelay/JdtsServer.war`, but the `JdtsServer` part of the name is different if your administrator chose a different application context name when installing the shared Relay. This chapter uses *appContext* for the application context name.

---

**Note –** A local Relay runs on a Sun Java System Application Server, which requires a Java Developer's Kit, not a Java Runtime Environment.

---

## ▼ Installing a Local Relay

1. **If a Sun Java System Application Server is not already installed on your harness host, use the administrator graphical installer to install a Sun Java System Application Server.**

   Refer to the *Java Device Test Suite Administration Guide*'s "Performing a Custom Installation" section. In the Choose Install Set screen, select Sun Java System Application Server.

   You cannot use the Java Device Test Suite command line installer to install a Sun Java System Application Server.

2. **Copy** *centralInstallDir*`/admin/shared/resources/localRelay/`*appContext*`.war` **to** *AppServerInstallDir*`/domains/domain1/autodeploy/`**.**

3. **Wait 30 seconds.**

4. **Verify that the local Relay is running by entering the following URL in a web browser:** `http://localhost:`*appServerPort*`/`*appContext*`/`

   For example: `http://localhost:8080/JdtsServer/`. If installation is successful, a "JDTS Relay *Version* is running" page appears with Relay Mode: Local.

# Updating a Local Relay

After updating a Central Installation with a new version of the Java Device Test Suite, you must update all local Relays as follows:

1. **Be sure the local Relay is running.**

   If you are not sure, enter the following URL in a web browser:
   `http://localhost:`*appServerPort*`/`*appContext*`/`

   For example, `http://localhost:8080/JdtsServer`. If the Relay is running, a "JDTS Relay *Version* is running" page appears.

2. **Copy**
   *centralInstallDir*`/admin/shared/resources/localRelay/`*appContext*`.war` **to**
   *AppServerInstallDir*`/domains/domain1/autodeploy/`**.**

   The default *appContext* is `JdtsServer`.

3. **Wait 30 seconds.**

4. **Verify that the local Relay is the new version by entering the following URL in a web browser:** `http://localhost:`*appServerPort*`/`*appContext*`/`

   For example, `http://localhost:8080/JdtsServer`. If updating is successful, a "JDTS Relay *Version* is running" page appears with Relay Mode: Local.

The tester harness uses the new Relay in the next test run.

CHAPTER 3

# Using a Local Relay

If you are running a tester harness that has a local Relay installed on the same host, you can switch between the local Relay and the shared Relay, and you can change the local Relay's default configuration if necessary. You can perform these operations with the harness's graphical or command line interfaces. See the tester online help (Java Device Test Suite Preferences and Errata for Java Device Test Suite topics) for instructions.

If you are running an administrator harness, you cannot switch to a local Relay, but you can configure the shared Relay. See the adminstrator online help (Java Device Test Suite Preferences and Errata for Java Device Test Suite topics) for instructions.

CHAPTER 4

# Uninstalling a Local Relay

To uninstall a local Relay, follow these steps:

1. **If a test run is in progress, stop it.**
2. **Switch the harness to the shared Relay if it is not already switched.**
   See the online help (Java Device Test Suite Preferences) for instructions.
3. **Uninstall the Sun Java System Application Server as described in the** *Java Device Test Suite Administration Guide***.**
4. **If you have scripts or batch files that assume the presence of a local Relay, modify them.**

# Index


## L

local Relay
- for distributing workload, 3
- for testing limited devices, 2
- installing, 5, 6
- uninstalling, 11
- updating, 6
- using, 9

## P

prerequisites for installation, 5

## R

Relay
- defined, 1
- switching, 3