Java Desktop System Release 3
Accessibility Release Notes
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Preface

These release notes provide release information about the accessibility features and accessibility applications in the Sun Java™ Desktop System Release 3. Please read these release notes before you install or use the accessibility features of the Java Desktop System Release 3.

Supported Systems

This release of the Java Desktop System supports the following systems:

- Systems running Linux on Intel-compatible hardware, including most desktop and laptop systems from most vendors.
- Systems running the Solaris™ 10 Operating System on SPARC® platforms.
- Systems running the Solaris 10 Operating System on x86 platforms.

Table P-1 describes where you can find information about systems that are supported by the Solaris Operating System, relevant to this product release. In the Java Desktop System documentation, the term x86 refers to the processor families shown in Table P-1.

<table>
<thead>
<tr>
<th>Architecture</th>
<th>Processor Families</th>
<th>Solaris Systems</th>
</tr>
</thead>
<tbody>
<tr>
<td>SPARC</td>
<td>SPARC64</td>
<td>See the Solaris 10 Hardware Compatibility List at the following location:</td>
</tr>
<tr>
<td></td>
<td>UltraSPARC</td>
<td><a href="http://www.sun.com/bigadmin/hcl">http://www.sun.com/bigadmin/hcl</a></td>
</tr>
</tbody>
</table>

Table P–1 Supported Solaris Systems
Who Should Read These Release Notes

These release notes are for users who perform the following tasks with the Java Desktop System Release 3:

- Install the Java Desktop System accessibility features.
- Administer the Java Desktop System accessibility features.
- Use the Java Desktop System accessibility features.

How These Release Notes Are Organized

These release notes are structured in the following manner:

- Chapter 1 introduces you to the accessibility features of the Java Desktop System Release 3.
- Chapter 2 describes known accessibility issues in the Java Desktop System Release 3 for which a workaround has not yet been identified.
- Chapter 3 describes known accessibility issues in the Java Desktop System Release 3 for which there is a workaround available.

Related Documentation

The following manuals are related to these release notes:

- Java Desktop System Release 3 Accessibility Guide
- Java Desktop System Release 3 Administration Guide

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<table>
<thead>
<tr>
<th>Architecture</th>
<th>Processor Families</th>
<th>Solaris Systems</th>
</tr>
</thead>
<tbody>
<tr>
<td>x86</td>
<td>AMD64</td>
<td>See the Solaris 10 Hardware Compatibility List at the following location:</td>
</tr>
<tr>
<td></td>
<td>Pentium</td>
<td><a href="http://www.sun.com/bigadmin/hcl">http://www.sun.com/bigadmin/hcl</a></td>
</tr>
<tr>
<td></td>
<td>Xeon</td>
<td></td>
</tr>
</tbody>
</table>

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TABLE P–1 Supported Solaris Systems

(Continued)
Associated Documentation

Java Desktop System Release 3 on Linux:
- Java Desktop System Email and Calendar User Guide
- StarOffice 8 Administration Guide
- StarOffice 8 Getting Started Guide
- StarOffice 8 Programming Guide for BASIC

Java Desktop System Release 3 for the Solaris 10 Operating System:
- Java Desktop System Email and Calendar User Guide
- StarOffice 7 Office Suite Administration Guide
- StarOffice 7 Office Suite Basic Guide
- StarOffice 7 Office Suite Setup Guide
- StarOffice 7 Office Suite User’s Guide

Documentation CD

The accompanying Java Desktop System Release 3 Documentation CD contains files or links for those manuals directly-related, or closely associated with, the Java Desktop System Release 3 on Linux.

Accessing Sun Documentation Online

The docs.sun.com Web site enables you to access Sun technical documentation online. You can browse the docs.sun.com archive or search for a specific book title or subject. The URL is http://docs.sun.com
Ordering Sun Documentation

Sun Microsystems offers select product documentation in print. For a list of documents and how to order them, see “Buy printed documentation” at http://docs.sun.com.

Typographic Conventions

The following table describes the typographic changes that are used in this book.

<table>
<thead>
<tr>
<th>Typeface or Symbol</th>
<th>Meaning</th>
<th>Example</th>
</tr>
</thead>
<tbody>
<tr>
<td>AaBbCc123</td>
<td>The names of commands, files, and directories, and onscreen computer output</td>
<td>Edit your .login file. Use ls -a to list all files. machine_name% you have mail.</td>
</tr>
<tr>
<td>AaBbCc123</td>
<td>What you type, contrasted with onscreen computer output</td>
<td>machine_name% su Password:</td>
</tr>
<tr>
<td>AaBbCc123</td>
<td>Command-line placeholder: replace with a real name or value</td>
<td>The command to remove a file is rm filename.</td>
</tr>
<tr>
<td>AaBbCc123</td>
<td>Book titles, new terms, and terms to be emphasized</td>
<td>Read Chapter 6 in the User’s Guide. These are called class options. Do not save the file. (Emphasis sometimes appears in bold online.)</td>
</tr>
</tbody>
</table>

Shell Prompts in Command Examples

The following table shows the default system prompt and superuser prompt for the C shell, Bourne shell, and Korn shell.
### Table P-3 Shell Prompts

<table>
<thead>
<tr>
<th>Shell</th>
<th>Prompt</th>
</tr>
</thead>
<tbody>
<tr>
<td>C shell prompt</td>
<td>machine_name$</td>
</tr>
<tr>
<td>C shell superuser prompt</td>
<td>machine_name#</td>
</tr>
<tr>
<td>Bourne shell and Korn shell prompt</td>
<td>$</td>
</tr>
<tr>
<td>Bourne shell and Korn shell superuser prompt</td>
<td>#</td>
</tr>
</tbody>
</table>

### Mouse Usage Conventions

The following table lists the conventions for mouse usage in documentation for the Java Desktop System.

<table>
<thead>
<tr>
<th>Action</th>
<th>Definition</th>
</tr>
</thead>
<tbody>
<tr>
<td>Click</td>
<td>Press and release the left mouse button, without moving the mouse.</td>
</tr>
<tr>
<td>Click-and-hold</td>
<td>Press and do not release the left mouse button.</td>
</tr>
<tr>
<td>Left-click</td>
<td>Same as click. Left-click clarifies the action when there might be confusion with right-click.</td>
</tr>
<tr>
<td>Middle-click</td>
<td>Press and release the middle mouse button, without moving the mouse.</td>
</tr>
<tr>
<td>Right-click</td>
<td>Press and release the right mouse button, without moving the mouse.</td>
</tr>
<tr>
<td>Double-click</td>
<td>Press and release the left mouse button twice in rapid succession without moving the mouse.</td>
</tr>
<tr>
<td>Drag</td>
<td>Click-and-hold a mouse button, then move an object. For example, you can drag a window or an icon. The left and middle mouse buttons can perform drag actions.</td>
</tr>
<tr>
<td>Drag-and-drop</td>
<td>Click-and-hold a mouse button, then move an object. For example, you can drag-and-drop a window or an icon. Release the mouse button to place the object in a new location.</td>
</tr>
<tr>
<td>Grab</td>
<td>Point to an item that you can move, and click-and-hold on the mouse button. For example, you can grab the titlebar of a window, then drag the window to a new location.</td>
</tr>
</tbody>
</table>
Accessibility Release Notes

These release notes provide accessibility information for the following releases of the Java Desktop System:

- Java Desktop System Release 3 on Linux.
- Java Desktop System Release 3 for the Solaris 10 Operating System on SPARC platforms.
- Java Desktop System Release 3 for the Solaris 10 Operating System on x86 platforms.
1.1 Accessibility Features

The Java Desktop System includes the following accessibility features:

<table>
<thead>
<tr>
<th>Feature</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>Accessible login</td>
<td>The Java Desktop System includes an Accessible Login feature. The Accessible Login feature enables you to:</td>
</tr>
<tr>
<td></td>
<td>- Log in to the desktop even if you cannot easily use the screen, mouse, or keyboard in the usual way.</td>
</tr>
<tr>
<td></td>
<td>- Launch assistive technologies at login time by using special gestures from the standard keyboard, or from a keyboard, pointing device, or switch device that is attached to the USB or PS/2 mouse port.</td>
</tr>
<tr>
<td></td>
<td>- Change the visual appearance of the login dialog before you log in, for example, you might want to use a high contrast theme for better visibility.</td>
</tr>
<tr>
<td></td>
<td>For information about configuring your system for accessible login, see the Java Desktop System Release 3 Accessibility Guide.</td>
</tr>
<tr>
<td>Keyboard Accessibility</td>
<td>This preference tool, also known as AccessX, enables you to configure the keyboard accessibility options such as mouse keys, slow keys, bounce keys, sticky keys, toggle keys, and repeat keys.</td>
</tr>
<tr>
<td>preference tool</td>
<td></td>
</tr>
<tr>
<td>Assistive technologies</td>
<td>The Java Desktop System contains the following applications to enable users with a physical disability to use the desktop:</td>
</tr>
<tr>
<td></td>
<td>- On-Screen Keyboard</td>
</tr>
<tr>
<td></td>
<td>- Screen Reader and Magnifier</td>
</tr>
<tr>
<td></td>
<td>For more information about these applications, see the online Help for On-Screen Keyboard and Screen Reader and Magnifier.</td>
</tr>
<tr>
<td>Keyboard navigation</td>
<td>Users who have difficulty using a mouse or other pointing device can navigate and use the desktop from the keyboard. For more information about keyboard navigation, see the Java Desktop System Release 3 Accessibility Guide.</td>
</tr>
<tr>
<td>Accessible themes</td>
<td>There are several themes available that suit different accessibility needs. For more information about themes, see the Java Desktop System Release 3 Accessibility Guide.</td>
</tr>
</tbody>
</table>
1.2 Support for Sun Ray Systems

The Java Desktop System Release 3 currently provides minimal accessibility support for Sun Ray™ systems. The following accessibility features do not work on Sun Ray systems:

- Keyboard Accessibility preference tool
- On-Screen Keyboard
- The magnifier component of the Screen Reader and Magnifier application

1.3 Where To Find Documentation

You can view PDF and HTML versions of the documentation for the Java Desktop System in the following locations:

- On the accompanying Documentation CD.
- On http://docs.sun.com
Known Issues Without Workarounds

This chapter describes known accessibility issues in the Java Desktop System Release 3 for which a workaround has not yet been identified.

2.1 Caret Navigation Mode

- **Platform**: Solaris and Linux
- **Problem**: Change Request Number: 6216850
  - Caret navigation mode does not work on web pages that use the CSS keyword float.

2.2 Screen Reader and Magnifier

- **Platform**: Solaris
- **Problem**: Change Request Number: 6255964
  - The Nautilus file manager crashes frequently when the Screen Reader and Magnifier application is running.
2.3 Screen Reader and Magnifier and On-Screen Keyboard

<table>
<thead>
<tr>
<th>Platform</th>
<th>Solaris</th>
</tr>
</thead>
<tbody>
<tr>
<td>Problem</td>
<td>Change Request Numbers: 6200425 and 6200696</td>
</tr>
</tbody>
</table>

When you use the Screen Reader and Magnifier or On-Screen Keyboard applications with the Mozilla web browser, the performance is slow in some areas, for example, when you open the **File** menu or move the scrollbar.
Known Issues With Workarounds

This chapter describes workarounds for known accessibility issues in the Java Desktop System Release 3.

3.1 Application Crash Affects Accessibility Applications

<table>
<thead>
<tr>
<th>Platform</th>
<th>Solaris</th>
</tr>
</thead>
<tbody>
<tr>
<td>Problem</td>
<td>If an application crashes, the application can continue to run but CORBA traffic to and from the application stops. This situation might prevent accessibility information from passing between other applications and the accessibility applications.</td>
</tr>
<tr>
<td>Solution</td>
<td>To resolve the situation, set the following environment variable value to 1: GNOME_DISABLE_CRASH_DIALOG</td>
</tr>
</tbody>
</table>

3.2 Configuring a Switch Device on a Laptop System

<table>
<thead>
<tr>
<th>Platform</th>
<th>Linux</th>
</tr>
</thead>
</table>
Problem  
Change Request Number: 6285741

The instructions to describe how to configure an alternative pointer device in the Java Desktop System Release 3 Accessibility Guide are incomplete for systems that already have two pointer devices configured, such as a laptop with a track pad and an external mouse.

Solution  
In addition to the instructions in the section entitled “Configuring Alternative Pointer Devices on Linux Systems” in the Java Desktop System Release 3 Accessibility Guide, you might need to perform the following steps:

- Modify the first two InputDevice sections in /etc/X11/XF86Config.
- Insert a third InputDevice section with the Identifier set to, for example, Mouse[5].
- Edit the ServerLayout section to include the third InputDevice line. Ensure that this line does not have any associated SendCore or AlwaysCore attributes.

If you are using multiple USB pointer devices, please ensure that the Identifier sections refer to /dev/input/mouse0, /dev/input/mouse1, and so on, instead of /dev/input/mice. If you use /dev/input/mice, the system associates all USB input devices with the primary pointer device, which can cause conflicts when you are using USB devices with On-Screen Keyboard.

3.3 Configuring GDM

Platform  Linux

Problem  Change Request Number: 6291788

The Java Desktop System Release 3 Accessibility Guide contains an incorrect instruction in the section entitled “To Configure GDM on Linux Systems”. 
3.4 Gestures for Starting Accessibility Applications Do Not Work

Platform: Solaris

Problem: Change Request Number: 6214222

The GNOME Display Manager (GDM) gestures for starting the assistive technologies such as On-Screen Keyboard and Screen Reader and Magnifier do not work.

Solution: Use the full path to the applications in the GDM configuration files.

Perform the following steps:
1. Edit the following two files:
   - /etc/X11/gdm/modules/AccessKeyMouseEvents
   - /etc/X11/gdm/modules/AccessDwellMouseEvents
2. Replace all occurrences of gok with /usr/sfw/bin/gok.
3. Replace all occurrences of srcore with /usr/sfw/bin/srcore.
4. Save the files.
3.5 Magnifier and Keyboard Accessibility Features Do Not Work

Platform: Solaris

Problem: Change Request Number: 6273030

The magnifier and the keyboard accessibility features are not working.

Solution: Perform the following steps:
1. Open the /etc/X11/gdm/gdm.conf file in a text editor.
2. Search the file for the following line: command=/usr/openwin/bin/Xsun ...
3. Insert the following at the end of the above line: 
   +xb -accessx
   -dev <framebuffer1> -dev <framebuffer2>, for example, -dev /dev/fbs/pfb1 -dev /dev/fbs/pfb0

3.6 Magnifier Crashes When Using a Second Framebuffer

Platform: Solaris

Problem: Change Request Number: 6205225

On a system with two framebuffers configured, full screen magnification does not work.

Solution: Please contact the Customer Resolution Center to obtain a patch for this issue.
3.7 Magnifier Does Not Display Desktop Icons

Platform: Solaris and Linux

Problem: Change Request Number: 6284593

If the value of the /apps/nautilus/desktop/primary_screen GConf preference key is not set correctly, the user cannot see the desktop icons in the magnification area.

Solution:

Perform the following steps:
1. Click Launch, then choose Applications → Utilities → Configuration Editor
2. In GConf, choose Apps → Nautilus → Desktop.
3. Select the primary_screen key and set the value to the value of the magnified screen. For example, if the target screen for magnification is 1, set the value to 1.

Alternatively, you can enter the following command from a terminal window:

gconftool-2 --type integer --set /apps/nautilus/desktop/primary_screen 1

3.8 Magnifier Does Not Display Java Applications Correctly

Platform: Solaris

Problem: Change Request Number: 6202413

Java applications are not displayed correctly in the magnifier. The entire Java window might initially be blank in the magnified area.

Solution:

Set the following environment variable: NO_J2D_DGA=true
3.9 Magnifier Does Not Show Window Movement

**Platform**  
Solaris

**Problem**  
Change Request Number: 6199904

When you move windows, the movement is not visible in the Screen Reader and Magnifier magnification area.

**Solution**  
Disable wire frame mode in Window Manager.

Perform the following steps:
1. Click Launch, then choose Applications → Utilities → Configuration Editor.
2. In GConf editor, choose Apps → Metacity → General.
3. Ensure that the **reduced_resources** key is not selected.

Alternatively, you can enter the following command from a terminal window:

```
gconftool-2 -t bool -s /apps/metacity/general/reduced_resources false
```

3.10 On-Screen Keyboard Does Not Display Web Browser Submenus

**Platform**  
Solaris and Linux

**Problem**  
Change Request Number: 5070427

The On-Screen Keyboard application cannot display Web Browser submenus if the submenus were not previously displayed.
3.11 Pointer Highlighting Feature Freezes the Desktop

Platform: Solaris
Problem: Change Request Number: 6291127

If you enable the Highlight the pointer when you press Ctrl option in the Mouse preference tool and you use the Ctrl key to copy and paste files, the desktop freezes.

Solution: Perform the following steps:
1. Click Launch, then choose Preferences → Desktop Preferences → Mouse.
2. Click on the Cursors tab in the Mouse Preferences dialog.
3. Deselect the Highlight the pointer when you press Ctrl option.

3.12 Setting Dual-Head Magnification

Platform: Solaris
Problem: Change Request Number: 5083128

You have difficulty setting dual-head magnification.
Solution To set either virtual or real dual-head magnification in the Screen Reader and Magnifier application, you must perform the following steps:
1. Open the Zoomer Options dialog.
2. Type the value you require in the Source field, then press Return.
3. Type the value you require in the Target field, then press Return.

*Note* – The changes to the Source and Target fields do not take effect until you press Return.

### 3.13 Screen Reader Does Not Read Hyperlinks

<table>
<thead>
<tr>
<th>Platform</th>
<th>Solaris and Linux</th>
</tr>
</thead>
<tbody>
<tr>
<td>Problem</td>
<td>Change Request Number: 5085440</td>
</tr>
</tbody>
</table>

When you use the Screen Reader and Magnifier application to read mail messages in the Email and Calendar application in caret navigation mode, the speech output is interrupted when there is a hyperlink in the message.

**Solution** Move the cursor into the hyperlink. On Linux systems, use flat review mode instead of caret navigation mode to navigate the message.

### 3.14 Speech and Navigation Does Not Work

<table>
<thead>
<tr>
<th>Platform</th>
<th>Solaris and Linux</th>
</tr>
</thead>
<tbody>
<tr>
<td>Problem</td>
<td>Change Request Number: 6216962</td>
</tr>
</tbody>
</table>

You are unable to navigate or receive speech output for HTML containers such as web pages, email messages, or Help content.
3.15 StarOffice and Java Applications Are Not Accessible

Platform
Solaris

Problem
Change Request Number: 4768049
StarOffice and Java applications cannot detect an accessible Java runtime environment.

Solution
Perform the following steps:
1. Follow the instructions in the section entitled “Configuring the Java Environment for Accessibility” in the Java Desktop System Release 3 Accessibility Guide.
2. Enter the following command from a terminal window:
   `/usr/staroffice7/program/jvmsetup`
3. Log in as the root user.
4. Enter the following commands to create two symbolic links:
   `ln -s /usr/share/jar/accessibility.properties /usr/java/j2redefault/lib/accessibility.properties`
   `ln -s /usr/share/jar/gnome-java-bridge.jar /usr/java/j2redefault/lib/ext/gnome-java-bridge.jar`