

E-Business Suite Accessibility

An Oracle White Paper
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1. BUILDING/CUSTOMIZING E-BUSINESS SUITE

Oracle's goal is to ensure that disabled end-users of our products can perform the same tasks, and access the same functionality as other users. To accomplish this, the E-Business Suite has been designed to generate content that meets the standards of Section 508, a milestone U.S. law passed in 1998 that requires federal agencies to purchase information technology products that meet specifications defined by the Access Board. Many products also further adhere to the Web Accessibility Guidelines (WCAG) version 1.0, level 'AA'. E-Business Suite applications include several accessibility features to help people with disabilities. Oracle E-Business Suite applications can be used by people with disabilities such as blindness, low-vision, color blindness and deafness. E-Business Suite applications support the use of assistive technologies, such as screen readers for blind users.

Oracle E-Business Suite applications are either Forms-based or HTML-based. There are four distinct facets of accessibility related to E-Business Suite:

- how to use Oracle Applications Framework JDeveloper IDE to design and generate content that is accessible
- how to use Oracle Forms Builder to design and generate content that is accessible
- how to use HTML-based E-Business Suite Applications if you are disabled
- how to use Forms-based applications if you are disabled.

Oracle makes no warranty that code generated by Oracle Applications Framework JDeveloper IDE or Oracle Forms will inter-operate with all Assistive Technology (AT) or user agents (browsers). An accessible solution is achieved only when the user's operating system, browser, assistive technology and Oracle software all have coded to, and interpreted similarly, the same standards.

For more information about Oracle's Accessibility program, including additional resources to learn more about accessibility laws, standards, and

regulations, as well as Oracle product status, visit www.oracle.com/accessibility

a. Using JDeveloper

To create accessible HTML pages with Oracle Applications Framework JDeveloper IDE, Developers should:

- Follow the accessibility guidelines described in the [Oracle Application Framework Developer's Guide Release 12](#) and [Oracle Application Framework Developer's Guide Release 11.5.10 RUP4](#) in order to adhere to specific standards in the Section 508 Standards and WCAG guidelines
- Adhere to the United States Access Board [Section 508 Standards](#) and the [Web Content Accessibility Guidelines \(WCAG\)](#)
- test their product at runtime for accessibility standards

b. Using Forms

To create accessible Forms-based pages with Oracle Forms Builder, the recommendations in the [Accessibility in Oracle Forms](#) white paper need to be followed.

2. RUNNING E-BUSINESS SUITE IF YOU ARE DISABLED

a. HTML-based Pages

Only when accessibility features are turned on will self service pages generate HTML necessary for compliance with section 508 standards. This setting only affects E-Business Suite HTML-based pages and not E-Business Suite Oracle Forms-based pages.

In Release 12, the user needs to enable accessibility mode from the Login page by choosing one of these values for the Accessibility poplist value:

- 'Screen Reader Optimized'
- 'Standard Accessibility'



Figure 1: Release 12 Login Page

In Release 11i, there is a Preference to control accessibility mode settings for users after logging in. The user needs to set Accessibility Features poplist value to ‘Screen Reader Optimized’ or ‘Standard Accessibility’.

Note: If the Preferences link does not appear on the page, contact your system administrator to enable this feature.

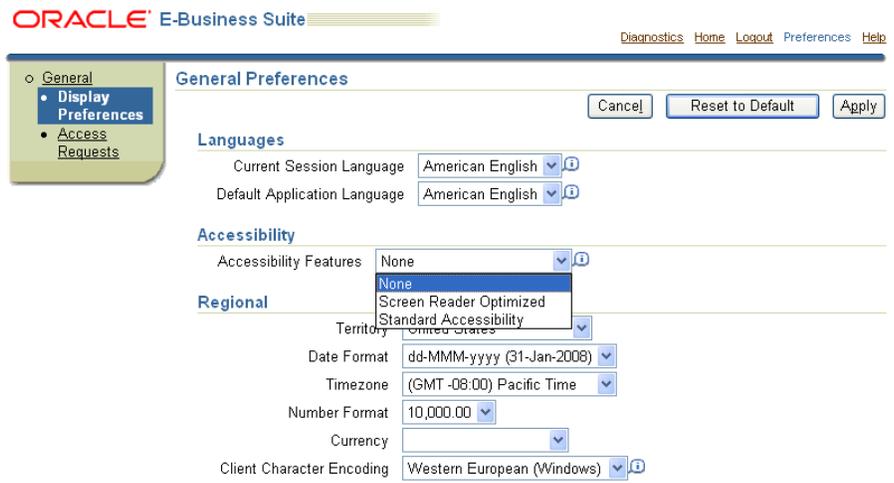


Figure 2: Release 11i Preferences Page

Screen Reader Optimized

‘Screen Reader Optimised’ mode adds extra information and may move content around so that screens work better with a screen reader.

Examples are

- The level information in HGrids.

- Skip Navigation links at global links and tab/subtab level.

Note:

- This mode may degrade the output for a sighted user.
- The Rich Text Editor is rendered in Rich Text Mode only when Accessibility mode is set to 'None', otherwise it is rendered in Text Mode.

Standard Accessibility

'Standard Accessibility' mode may look the same as 'None' mode but pages are accessible to users using other assistive technology such as screen magnifiers.

None

If the Accessibility value is set to 'None' then the HTML page size is greatly reduced because the additional tags and text required by accessibility are not included in the page.

b. Forms-based Pages

Forms-based pages are java applets and require Sun's Access Bridge to be installed to communicate between the java applet and a screen reader or screen magnifier. Detailed information for screen readers is available in the [Accessibility in Oracle Forms](#) white paper. Information for screen magnifiers is also in the [Accessibility in Oracle Forms](#) white paper. Nothing needs to be configured for voice recognition software per the [Accessibility in Oracle Forms](#) white paper.

3. COLORS AND FONTS

a. HTML-based Pages

OA Framework provides a set of skins or web page layout Look and Feel (LAF) themes. You can use these skins to change the way Oracle E-Business Suite HTML-based application pages lay out their content. They control both the content that is generated for each component and the visual properties (colors, fonts, borders, etc...) used to style the component. These skins may be applied at the Site, Responsibility, Application, Organization or User level by setting the profile option **Oracle Applications Look and Feel**.

System Administrations may change the colors and fonts of self service web pages of E-Business Suite via Personalizations. Please review the Oracle Application Framework Personalization Guide for your particular Release of E-Business Suite at

<http://www.oracle.com/technology/documentation/applications.html>

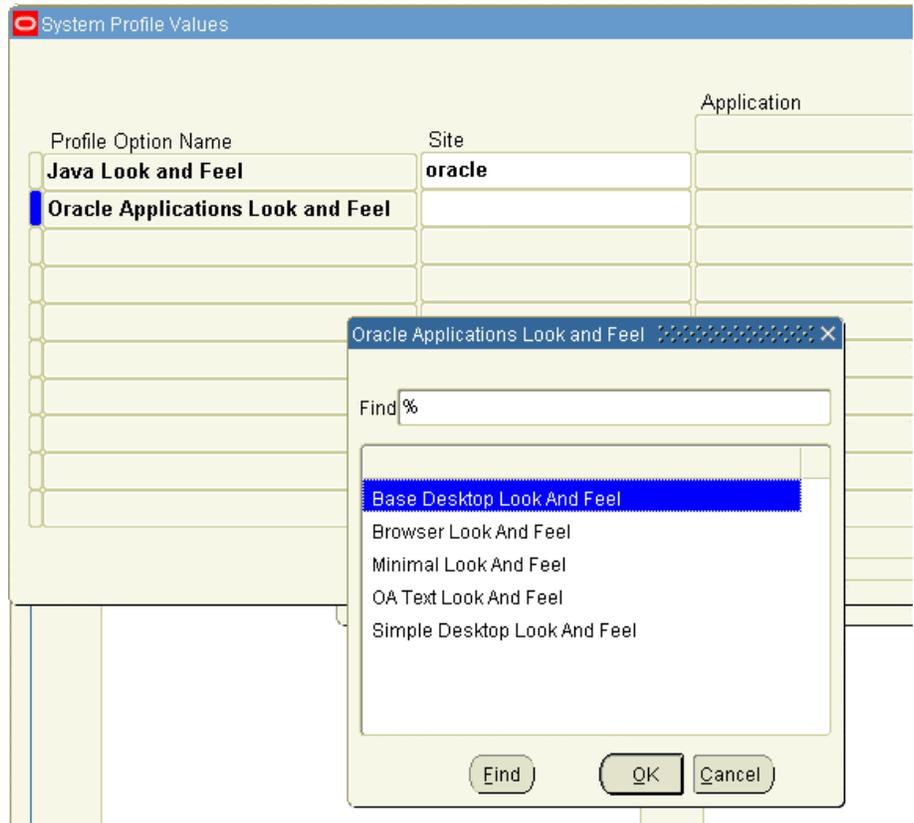


Figure 3: System Profile Values Page

Valid Values for Profile Oracle Applications Look and Feel that can be set at any of the Site, Application, Responsibility or User levels:

- Not set (null), implies Oracle's corporate **Browser Look and Feel**
- **Base Desktop Look and Feel** - the root of all LAF implementations.
- **Browser Look and Feel (BLAF)** – the default LAF that conforms to Oracle's corporate UI guidelines.
- **Minimal Look and Feel (MLAF)** - Generates "minimal" content to reduce the size of HTML pages and overall network overhead.
- **OA Text Look and Feel**- Produces a plain text version of the page. (typically used to send a plain text version of a page to an e-mail client). **Note:** the plain text LAF does not support all the existing component styles.
- **Simple Desktop Look and Feel** - a LAF built on top of Base Look and Feel to offer more customization features, and to serve as an illustration of how to create LAF extensions on top of a base LAF.

- **any Custom Look and Feel (CLAF)** - created in the Customizing Look-and-Feel (CLAF) UI - All new LAFs created in the CLAF UI get registered in a lookup table that this profile option reads.

Release 12 of the E-Business Suite also has a Customizing Look and Feel (CLAF) User Interface. You can build custom LAFs by extending Base LAF, Simple LAF, or another custom LAF. **Note:** You cannot extend BLAF or MLAF.

b. Forms-based Pages

Detailed information is available in the [Accessibility in Oracle Forms](#) white paper.

4. ACCELERATOR KEYS

a. HTML-based Pages

Accelerator keys bypass menu and page navigation, and perform an action directly, as if the user has pressed an action/navigation button or link. Accelerator keys are also commonly called "hot keys". Common accelerator keys in a Windows application, such as Internet Explorer, are Ctrl+O for "Open" and Ctrl+P for "Print".

In Oracle HTML-based applications, accelerator keys consist of Alt + key combinations, and are typically provided only for action/navigation buttons.

Some Oracle HTML pages provide just the Mnemonic (Common) Accelerator Keys while other pages may also contain Numeric (Application-Specific) Accelerator Keys.

There is a list of supported Common hot keys in HTML-based applications in the [Oracle Applications User's Guide](#) at <http://www.oracle.com/technology/documentation/applications.html>

Note: Accelerator keys are turned off in 'Screen Reader Optimized' so as not to interfere with any assistive technology accelerator keys.

b. Forms-based Pages

Access Keys are explained in much detail in the [Accessibility in Oracle Forms](#) white paper.

5. SUMMARY

Beginning with E-Business Suite Release 11i delivered in June 2001, Oracle has made many enhancements to ensure that the HTML-based and Forms-based pages generated by JDeveloper and Oracle Forms meets the standards of Section 508. If you are developing a product using JDeveloper or Oracle Forms, you should be able to create a

product that meets the Section 508 standards by following these guidelines. If you are a user of E-Business Suite Applications, you should be able to operate the product in a manner comparable to a user that is not disabled, and with a wide variety of AT provided that any AT and any other products used properly interoperate with it.

6. REFERENCES

[United States Access Board Section 508 Standards](#)

[Web Content Accessibility Guidelines \(WCAG\)](#)

[Oracle Application Framework Developer's Guide Release 12](#)

[Oracle Application Framework Developer's Guide Release 11.5.10 RUP4](#)

[Oracle Application Framework Development FAQ Release 12](#)

[Oracle Application Framework Development FAQ Release 11i \(11.5.10\)](#)

[Oracle Application Framework Support Guidelines for Customers Release 12](#)

[Oracle Application Framework Support Guidelines for Customers](#)

[Oracle Application Framework Documentation Resources, Release 12](#)

[Oracle Application Framework: JDeveloper 9.0.3 IDE vs JDeveloper 10.1.3 IDE](#)

[Accessibility in Oracle Forms white paper](#)

[Oracle Applications User's Guide](#)



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