
OpenOffice.org 2.0 Accessibility White Paper

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Keyboard Navigation

Full Keyboard Navigation and Control

Full keyboard navigation gives the users the ability to perform all input via a keyboard, without using a mouse or other device.

The new and improved features are:

- Complete keyboard shortcuts in the different applications
 - Full keyboard access to toolbars
 - Keyboard-enabled switching between document windows, menus, toolbars, modeless dialogs and floating windows
 - Enhanced keyboard navigation in text documents and online help to navigate and activate hyperlinks
 - Menu and toolbar items for accessing functions which were only accessible via mouse device
 - Disabled menu items are displayed per default
 - You can access help tips via keyboard
 - You can set the duration for the display of help tips
 - Keyboard access for Drawing Objects
 - Drawing objects can be inserted via toolbar with default position and size
 - Each handle of a drawing object can be selected and controlled via keyboard separately, so even polygon manipulation is possible
 - Redesign of several dialogs, including
 - New toolbar customization dialog
 - Improved CSV import control for spreadsheets
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Colors and Fonts

Use of System Color Schemes, High Contrast

OpenOffice.org adapts to the color schemes and contrast display settings of the operating system.

In addition, OpenOffice.org offers additional settings for colors which are not specified in any system color schemes, as well as the possibility to overwrite colors from the current color scheme. You can create and store your own color schemes in OpenOffice.org.

The help system respects the colors from the current color scheme, but also provides different predefined styles. Users can customize the formatting of the help content via the xsl transformation file as well as via the custom style sheet file located in the help directory.

Automatic Text Color

All OpenOffice.org applications now support automatic text color for documents and use this per default, so the text is always readable independent from the background color.

The text will be displayed in the system text color. If this leads to dark text on a dark background, or bright text on a bright background, the text will switch to black or white, whichever provides contrast.

For reading old or imported documents which use hard-formatted text colors, you can use the new option 'Use automatic font color for screen display'.

All text content as well as table borders and some other elements will be displayed in the automatic font color.

New Icons and Bitmaps

OpenOffice.org provides complete new icon sets for small and large toolbar icons in normal and in high contrast mode, so the icons are more easily identifiable in the different modes.

All UI elements displaying a graphic offer an alternative graphic for high contrast mode.

OpenOffice.org automatically chooses the set of icons and graphics appropriate for the current system settings.

High Contrast Mode for Impress and Draw

Impress and Draw offer a high contrast mode, in which objects are displayed without fill colors or text colors.

This mode will automatically be used when high contrast is chosen in the system settings. You can turn off this automatic detection in the OpenOffice.org options under “Accessibility”.

System Font

OpenOffice.org can use the operating system font for the user interface, so that OpenOffice.org appears in the same font as your other applications and can be manipulated via the system settings.

There is special handling to ensure that dialogs do not become larger than the screen when schemes with large fonts are chosen.

More Changes

- Highlighted toolbar and menu items are now more perceptible.
- There is improved highlighting of current column and row in spreadsheets.
- You can turn on/off animations for graphics and text.

Assistive Technology

API for Supporting Assistive Technologies

Assistive Technology (AT) tools such as screen readers and magnifiers, as well as other tools, connect to OpenOffice.org using the Java Accessibility API (JAA) via the Java Access Bridge for Windows or GNOME.

OpenOffice.org now has a UNO Accessibility API (UAA) in which all elements of the UI and documents expose all the information about themselves and their contents.

UAA and JAA have some advantages over the off-screen models of AT tools or the Microsoft Active Accessibility API (MSAA).

UAA and JAA provide extended information for the document content, so AT tools do not have to get information via different proprietary application APIs from various applications, or by hooking into the display drivers.

An enormous effort has been made to have UI elements and document contents fully support the accessibility interfaces, for example: providing text with attributes and character bounds information, sending all the necessary notifications and providing names and descriptions of controls.

All AT tools which are able to work with Java applications via the Java Access Bridge will also run with OpenOffice.org.

The Java Accessibility API is supported by the most popular AT tools including:

- JAWS Screen Reader
- ZoomText Screen Reader and Magnifier
- Gnopernicus Screen Reader and Magnifier.
- GNOME On Screen Keyboard (GOK)

Some AT tools send key events to the applications via the message loop, or simply control the mouse, so it makes no difference for the application if the input comes from a user or from an AT tool.

This way, a lot of AT tools such as simple on-screen keyboards, head mice, eye tracking devices and single switches can be used with OpenOffice.org.

Support for Comfortable Reading of Read-Only Documents

Screen reader users sometimes have difficulty reading read-only documents because they cannot navigate with the cursor through the document.

For this, we introduced the feature 'Use text selection cursor in read-only text documents'.

More Changes

- Floating windows, dialogs and menus are now system windows
- Every individual drawing object can have a name
- All sample documents and templates are enhanced to provide names and descriptions for drawing objects

Documentation

Accessible Documentation

All user documentation is provided in HTML and PDF formats so users can use screen readers and magnifiers to read the documentation.

Hyperlinks and graphics in the HTML documentation have names and alternate tags.

All keyboard shortcuts are documented in the online help.

Accessible Online Help

The online help provides information on how to use all the accessibility features in OpenOffice.org.

The online help is accessible itself. Users can access it using screen readers, magnifiers and on-screen keyboards.

Other Accessibility Features

Previous OpenOffice.org releases already offered some features helpful for accessibility:

- Zoom in or zoom out in a document
- Position mouse to default button or center in dialogs
- Configuration
 - Assign a shortcut key to a command
 - Show all commands on menus
 - Change the size of toolbar buttons
 - Customize menus and toolbars
 - Display or hide a toolbar
 - Create a custom toolbar
- Automating tasks
 - Correct misspelled words as you type
 - Quickly set AutoCorrect and Paste options
 - Add AutoCorrect entries for misspellings and typing errors
 - Use AutoComplete
 - Automatically make AutoText entries for frequently used text