# Default CSS Gets a Makeover

**H**ow would you like to instantly improve your BBj® web browser user interface (BUI) applications?

*What about updating them to a contemporary look that improves the responsiveness of controls to give the user instant visual feedback while enhancing the user experience by making controls easier to click, select, highlight, spin, and navigate?*

Although it sounds almost too good to be true, you will reap all of these rewards by simply updating to BBj 14.0, previewed in 13.10, to employ the new default BUI cascading style sheets (CSS) theme.

## Why BASIS Updated the Default Theme

BBj BUI has always relied on CSS, utilizing the base GWT CSS file along with BASIS-custom definitions to control how a BBj application was rendered in the desktop or mobile browser. The default GWT theme was rather plain, painting splashes of bright blue here and there amid a sea of white to mimic more closely a basic web page. While perfectly functional, the theme started to show its age and struggled to compete with present-day web pages, web app solutions, and especially, mobile applications. Additionally, it did not exploit the full power of CSS to add user feedback to the interface, such as modifying a control's appearance when the user hovered over or clicked a button, gave focus to an input field, or tried to interact with a read-only control.

The original GWT CSS, created years ago, had to work consistently across all browsers available at the time, including Internet Explorer 6. Because of this requirement, it often catered to the lowest common denominator, foregoing useful functionality in the process. BASIS wanted any BUI app, from the simplest program to the most complex application, to look

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better and provide a more gratifying user experience. If the user runs a BUI app in a modern and capable browser, they should be able to take full advantage of its capabilities. Providing a new default CSS implementation was a great way to accomplish this as all BUI applications benefit from the new theme without any changes to configuration or code.

## Improved Appearance

The new BUI default theme improves the general appearance of all BUI applications without any extra work from the developer. The theme revamps all BBj controls, updating their appearance from what can only be described as plain, to a more engaging and compelling presentation. The addition of subtle gradients, drop shadows, outlines, and colors goes a long way to provide a fresh look that is more pleasing, improves interaction, and reduces eye strain over long periods of use. BASIS applied as many of the thematic elements across multiple controls as applicable, providing a unified consistency amongst the components of a BUI application. Controls such as the BBjGrid and BBjTabCtrl now sit comfortably alongside every other BBjControl, with matching styles and colors.

## Improved Interactivity

Although one of the primary goals was to improve the general appearance of any BUI application, this CSS project had a few secondary goals as well. For starters, the new theme was meant to be more interactive. Instead of changing a 1-pixel border around a hovered button from medium gray to medium blue, the new theme changes the appearance of the button by adding color and saturation to the entire control.

Another example of improved visual feedback occurs when you give an input control focus. Using the previous theme, giving an input control focus by clicking or tapping in it did not change the appearance of the control at all (depending on which browser you were using). The addition of a 1-pixel wide I-beam cursor was the only indication that the input control now had keyboard focus. This made it especially difficult to tell at a glance which control was in focus and was especially problematic when the user shifted focus to

the control via the tab key or task-switched away from and back to the application. The new theme shown in **Figure 1**. adds a bright outline and an outer glow to a focused control, making it easier to distinguish it from the other input controls, and improves the contrast and legibility of text in read-only and disabled controls.
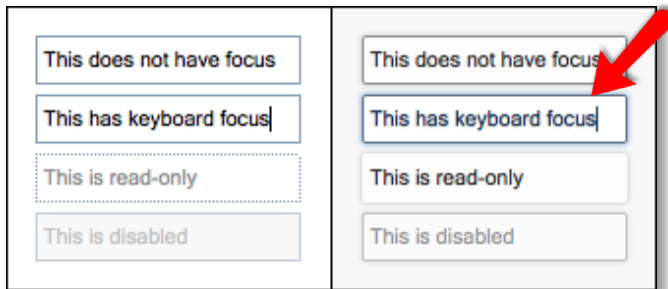


**Figure 1.** Comparing the old (left) and new (right) text controls



**Figure 2.** Comparing the old (left) and new (right) BBjInputD calendar

## Improved Accessibility

In addition to providing better visual feedback to the user for various control states, the new theme also improves usability by increasing the size of interactive components. For example, MSGBOX buttons are larger and more consistently sized regardless of text, making it easier than ever to select the appropriate action. Spinner controls have improved horizontal and vertical layouts and their buttons are easier to click. The BBjInputD calendar (shown in **Figure 2**) is now larger, so navigating through months, selecting dates, and differentiating between weekends, weekdays, today's date, and the selected date is much more straightforward and less error-prone.
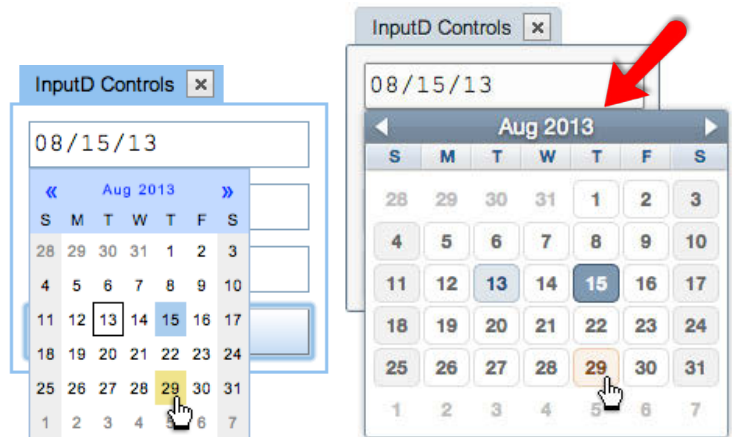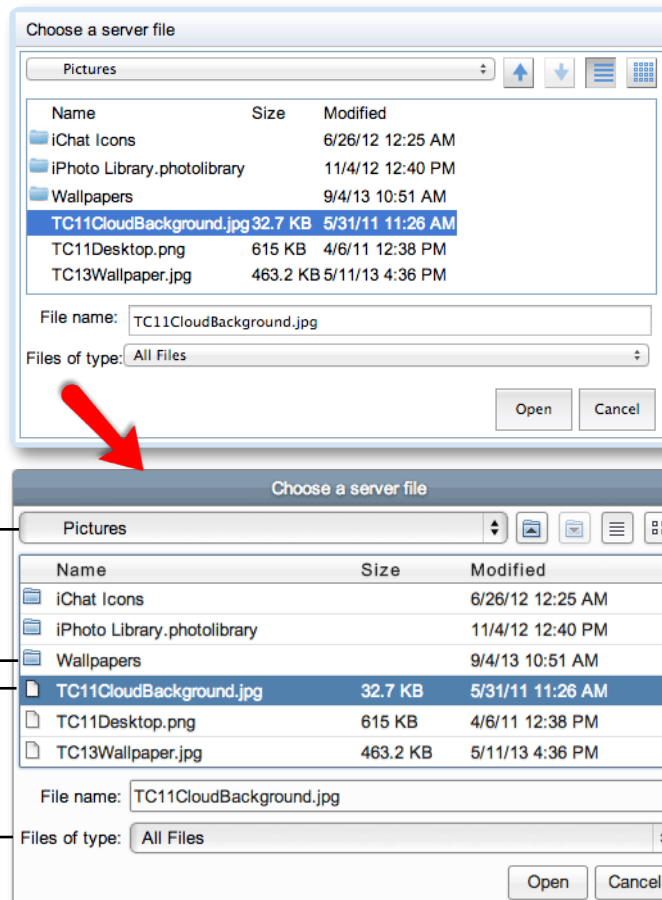
## Improved Layouts

Although the CSS is responsible for much of the new theme, various other tweaks and changes polish the layout and appearance of many other language elements and constructs. A good example of this is the file chooser, shown in **Figure 3,** which is the basis for the FILEOPEN() and FILESAVE() functions and the BBjFileChooser controls. BASIS applied dozens of changes to improve the appearance of these choosers, including replacing the icons, improving the overall layout, standardizing the control types and sizes, improving the detail view header, and adding grid lines.



**Figure 3.** Comparing the old (top) and the new (bottom) file chooser

## Improved Controls

Because BBj is a fully featured language that offers dozens of user interface controls, the new theme had to cover a lot of ground. Some of the more basic controls, such as a BBjEditBox, have not changed radically. However, they now offer enhanced hover, focus, and read-only indicators. Complex componentized controls like the BBjGrid, BBjTabCtrl, and BBjInputD calendar practically begged for modification and so BASIS improved their appearance dramatically. BASIS also improved many aspects of an application that may not immediately come to mind – message boxes shown in **Figure 4**,
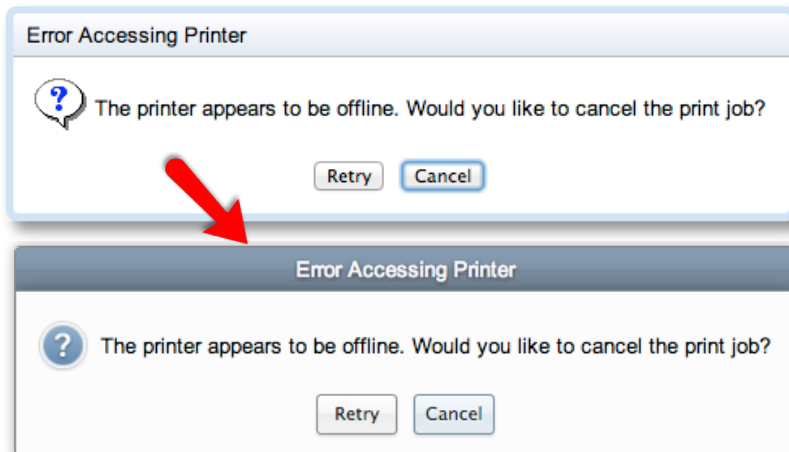


**Figure 4.** Comparing the old (top) and the new (bottom) message boxes

authentication dialogs, the mini console – and even added a translucent glass pane that distinguishes the MSGBOX(), FILEOPEN(), and FILESAVE() functions from the underlying application to clearly indicate their modal nature.

## Review

It is worth reiterating that any new or existing BUI app will benefit from the updated default theme without requiring any extra work on the developer's part. Simply update to BBj 14.0 and the new theme is now standard. BASIS put a lot of time and effort into designing the new theme, making almost 1,000 modifications to almost 800 selectors and augmenting the BUI-CSS interaction by adding scads of new selectors. This considerable endeavor results in your BUI applications looking and running better than ever, while also laying the groundwork for increased customization and control when creating your own theme with a CSS file that you provide. Update to 13.10 to preview BBj 14.0 features and instantly improve your BUI apps! ■

For more information, refer to
 • *A Bountiful Selection of New CSS Selectors* online at links.basis.com/13selectors
 • *Adding Style to BBx Web Apps With Custom CSS* at links.basis.com/11css
 • *BBj BUI: Getting Started* at links.basis.com/buiguide
 • *BUI CSS Component Styles* at links.basis.com/buicss