



BBj Spell Checker is all the Buzz!

For Spelling Bee Dropouts



By Jim Douglas



spell checking is a standard feature in most word processing programs which users around the world have come to depend upon. Sadly, many non-word processing applications such as spreadsheet programs, personal data managers, applications built on Visual PRO/5®, etc. do not offer this valuable tool.

With BBj® 7.0, this is no longer the case. Spell checking is now a feature developers can add to any text-based GUI control. Users can now happily spell check their input right inside their BBj application. This article provides an overview of the capabilities of this new feature implemented as the Interface *TextControl*.

Overview

Spelling bee dropouts can depend on this new feature to suggest alternate spellings and correct mistakes with just a click of the mouse. Developers can set this feature as a default in the application or give the user the option to toggle its activation. In either case, users can employ the spell check tool they depend on in other applications.

To enable or disable spell checking in any text-based GUI control, simply use the method `setSpellChecked` as follows:

```
cedit!.setSpellChecked(1)
```

What it Does

Similar to common word processing programs, the BBj spell checker underlines words that appear misspelled in a

distinctive zigzag pattern. By default, the underline is red, but developers can customize it with `setSpellCheckColor`. When the user right-clicks on an underlined word, BBj pops up a menu with several options:

- Suggested corrections (selecting a correction changes only this occurrence of the misspelled word)
- **Ignore All** (removes the red underline from all occurrences of this word in this control)
- **Add to dictionary** (adds this word to your custom dictionary)
- **Cut, Copy, Paste, and Select All**

If the user right-clicks anywhere in the control other than on a misspelled word, the right-click menu shows only **Cut, Copy, Paste, and Select All**.

How it Runs

To see what this new feature might look like in your application, experiment with a sample program available for download at the URL listed at the end of this article.

Figure 1 shows this sample in process. It displays each type of text control that offers this ability – BBjCEdit, BBjEditBox, BBjInputE, and BBjListEdit controls – all containing misspelled words identified with the red zigzag. The sample also shows the spell check menu resulting from right clicking on a misspelled word. A check box option at the bottom of the screen allows the user to toggle the spell check option.

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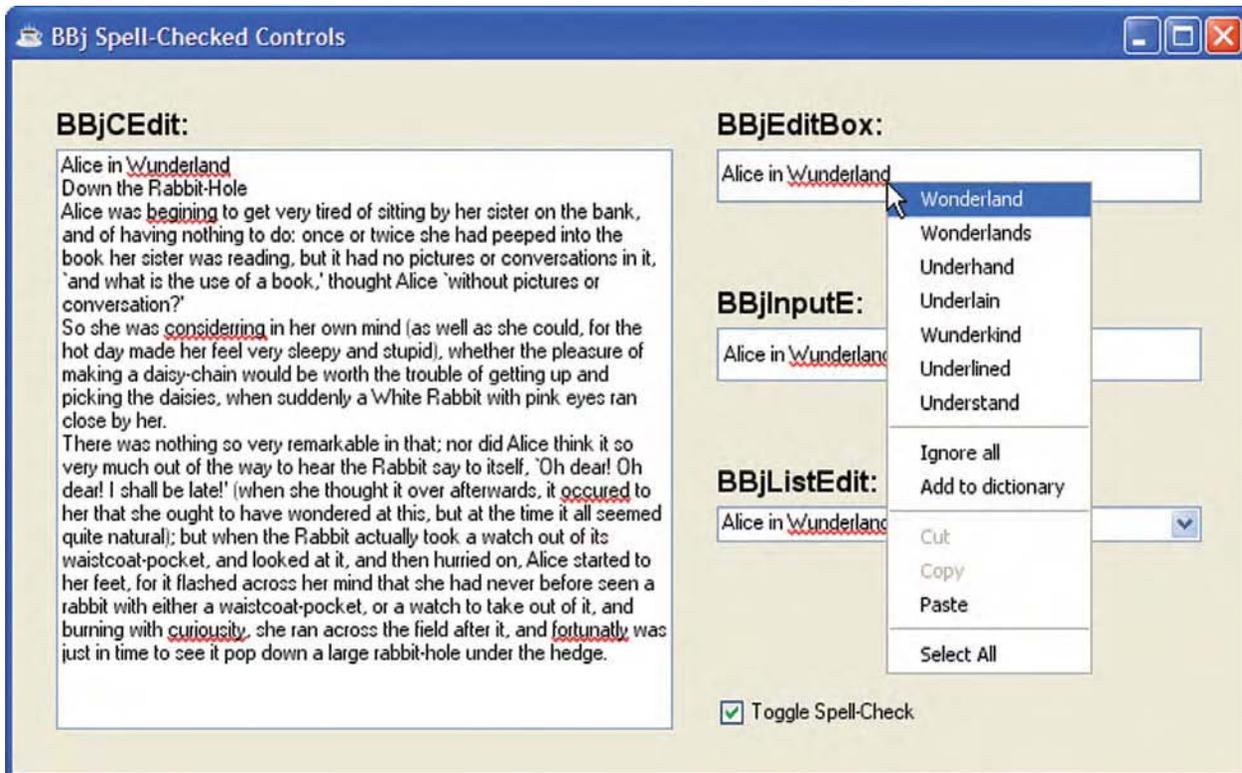


Figure 1. Spell check sample



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Language Support

Spell checking in BBJ is currently available in several languages and dialects. Select from Dutch, English (American, Canadian, or British), French (including Canadian French), German (pre- or post-reform spelling), Italian, Spanish, and Swedish.

The default spell-checking language is taken from `STBL(" !LOCALE")`. For a complete list of supported language codes, see `setSpellCheckLanguage` in the online documentation at www.basis.com.

Standard and Custom Dictionaries

While the standard English dictionary ships with about 100,000 words, dictionaries for other languages typically include more words. The Italian dictionary, for example,

includes 417,000 words. In all cases, the goal is to include the vast majority of commonly used words in any given language while omitting infrequently used words. Over time, users will build up one or more custom dictionaries based on their unique requirements. By default, the spell checker creates a custom dictionary file named `CUSTOM.DIC`. Setting `STBL(" !DICTIONARY")` or calling the `setCustomDictionary` method will override this default.

Advanced Features

Many applications will simply call `setSpellChecked` to enable interactive spell checking. However, for specialized requirements, developers can customize the spell checker defaults and update the custom dictionary under program control via the following methods:

METHOD	COMMENTS
<code>addWord</code>	Adds a word to the custom dictionary. This is equivalent to selecting "Add to dictionary" from the right-click menu.
<code>removeWord</code>	Removes a word from the custom dictionary.
<code>ignoreWord</code>	Ignores a misspelled word without adding it to the customized dictionary, equivalent to selecting "Ignore all" from the right-click menu.
<code>setMaxSuggestions</code>	Sets the maximum number of suggestions to display in the right-click menu.
<code>setSpellCheckColor</code>	Changes the color of the zigzag underline.
<code>setSpellCheckLanguage</code>	Changes the spell-check language; the default language is from <code>STBL(" !LOCALE")</code> .
<code>setCustomDictionary</code>	Specifies a different custom dictionary file. The default custom dictionary is either <code>STBL(" !DICTIONARY")</code> or <code>CUSTOM.DIC</code> .
<code>isMisspelled</code>	Returns whether a word appears to be misspelled.
<code>getMisspelledWords</code>	Returns a list of words in this control that appear to be misspelled.
<code>getSuggestions</code>	Gets suggested corrections for a misspelled word.
<code>setSpellCheckOption</code>	Customizes specialized options. This is typically not required; the default option settings are appropriate for most applications.



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For a complete list of methods relating to spell checking, see the Interface *TextControl* topic in the BASIS online documentation.

Thin Client Deployment

Because the language dictionaries are rather large and because most applications do not use all languages, the dictionary files are not included in the standard thin client jar configuration. When deploying a client application that uses spell checking, be sure to add the required dictionary file from the list below to the cache archive. 

LANGUAGE	SPELL-CHECK LANGUAGE FILE(S)
American English	SpellCheckerDictionary-en.jar SpellCheckerDictionary-am.jar
British English	SpellCheckerDictionary-en.jar SpellCheckerDictionary-br.jar
Canadian English	SpellCheckerDictionary-en.jar SpellCheckerDictionary-ca.jar
Spanish	SpellCheckerDictionary-sp.jar
French	SpellCheckerDictionary-fr.jar
Italian	SpellCheckerDictionary-it.jar
Dutch	SpellCheckerDictionary-du.jar
Swedish	SpellCheckerDictionary-sw.jar
German	SpellCheckerDictionary-ge.jar

Summary

A familiar interface such as BBj's spell checker is easy to use and intuitive. With one simple call to the specific text control, developers can empower users and spelling bee dropouts alike to perform their jobs to their greatest potential. Perfection may now be just a click or two away! 



Download the sample at
www.basis.com/advantage/mag-v11n1/spellchecker.zip



For an introduction to spell checkers, see
en.wikipedia.org/wiki/Spell_checker

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