#### **Chapter 10. Change History**

#### Changes For Version 1.6.20 (November 10, 2009)

- This release is primarily a transitional one, intended to prove out the significant changes to the development environment. Earlier this year, the FXRuby source code repository was moved from Subversion (hosted at RubyForge) to Git (hosted at GitHub). More recently, I've revamped the build system, replacing some custom scripts with a more standardized process based on the Hoe and rake-compiler extensions to Rake. The intent of these changes is to make it easier for interested parties to participate in FXRuby's development. As a result, despite a good bit of code churn, there are (by design) no significant functional differences between this release and version 1.6.19.
- The installation procedure for FXRuby now depends entirely on RubyGems. One consequence of this is that several of the previous distribution mechanisms (such as the source tarball, and the Windows installer .exe package) are no longer supported. On the other hand, we are making the effort to provide precompiled binaries on a larger number of platforms than before (e.g. Linux and OS X).
- The previous release of FXRuby couldn't be built from source against Ruby 1.9.1 final due
  to a change in some of the file-related utility libraries (see <u>RubyForge Bug #23786</u>). This
  problem has been corrected.

## Changes For Version 1.6.19 (March 6, 2009)

- The previous release of FXRuby couldn't be built from source against Ruby 1.9.1 final due
  to a change in some of the file-related utility libraries (see <u>RubyForge Bug #23786</u>). This
  problem has been corrected.
- The previous release of FXRuby couldn't be built from source against Ruby versions 1.8.5 or earlier (see RubyForge Bug #23967). This problem has been corrected.
- A change in the return value for Ruby's instance\_variables method broke some of the code related to message handling in FXRuby (see <u>RubyForge Bug #23787</u>). This problem has been corrected.
- The addAccel method for the FXAccelTable class now accepts lambda functions (or any other objects that respond to call). See the <u>API documentation</u> for FXAccelTable for examples of how this works.

# Changes For Version 1.6.18 (December 29, 2008)

 Some users were having trouble building FXRuby on 64-bit operating systems (see <u>RubyForge Bug #23375</u>). This problem has been corrected.

#### Changes For Version 1.6.17 (December 24, 2008)

- The Ruby interpreter was generating a large number of warning messages about redefined methods in the *kwargs.rb* library (see <u>RubyForge Bug #19231</u> and elsewhere). This problem has been corrected.
- Due to recent changes in Ruby's garbage collection algorithm, FXRuby applications could under some circumstances crash for large numbers of table items (see RubyForge bugs 21983 and 23188). This bug has been fixed.
- The documentation for the FXTable class referred to the non-existent setColumnX and setRowY instance methods (see <u>RubyForge Bug #21987</u>). These entries have been removed from the documentation.
- A number of instance methods for the FXTable class could crash an application if they were passed out-of-bounds index arguments (see <a href="RubyForge Bug #21987">RubyForge Bug #21987</a>). These methods now raise IndexError when they're passed out-of-bounds indexes.
- Due to a change in the URL scheme for the Dilbert web site, the *dilbert.rb* example program was no longer working properly (see <a href="RubyForge Bug #21538">RubyForge Bug #21538</a>). This has been fixed.
- The lower method for the FXRangef was returning self instead of an FXVec3f instance for the range's low bound (see <a href="RubyForge Bug #22488">RubyForge Bug #22488</a>). This has been fixed.
- Made a number of minor fixes for compatibility with Ruby 1.9.1.

## Changes For Version 1.6.16 (July 3, 2008)

- Historically, if you called create on a window before its parent window was created, your application would crash (see <a href="RubyForge Bug #20702">RubyForge Bug #20702</a> and elsewhere). Now, the code should raise a RuntimeError with a message indicating the problem.
- The message data that the FXPicker widget sends along with its SEL\_CHANGED and SEL\_COMMAND messages wasn't being handled properly, and as a result, applications using this widget could crash (see <a href="RubyForge Bug #20780">RubyForge Bug #20780</a>). This problem has been fixed.

#### Changes For Version 1.6.15 (June 4, 2008)

- FXRuby applications could crash (with a segmentation fault) if nil was passed in as the first argument to FXDialogBox.new Or FXMainWindow.new (see RubyForge Bug #14642). These methods now raise an ArgumentError if nil is passed as the first argument.
- You should only ever construct one FXApp object per application, but there was no protection against doing so in the code (see <a href="RubyForge Bug #16275">RubyForge Bug #16275</a>). Now, FXApp.new will raise a RuntimeException if an FXApp object already exists.

- The babelfish.rb example program, which previously depended on an external web service
  to perform translation between languages, was broken since that web service no longer
  exists (see <u>RubyForge Bug #16962</u>). The example has now been updated to use Dr. Nic's
  <a href="https://doi.org/10.1007/j.com/nic/state/">Tranexp library instead</a>.
- The value of the MBOX\_SAVE\_CANCEL\_DONTSAVE option (for the FXMessageBox class) wasn't wrapped properly and was unusable (see <a href="RubyForge Bug #17094">RubyForge Bug #17094</a>). There was also no constant corresponding to the MBOX\_CLICKED\_DONTSAVE return value. Both of these problems have been fixed.
- The fields for new FXHiliteStyle objects were uninitialized and as a result sometimes gave unpredictable results (see <u>RubvForge Bug #19637</u>). This has been fixed.
- The columnHeaderFont and rowHeaderFont attributes for FXTable weren't implemented properly (see <a href="RubyForge Bug #20142">RubyForge Bug #20142</a>). This has been fixed.
- Ruby 1.8.7 adds a new first method to the Enumerable module, and this conflicts with the existing first method defined in the FXWindow base class for a number of FXRuby classes which mix in Enumerable (see <a href="RubyForge Bug #20418">RubyForge Bug #20418</a>). This problem has been resolved.
- Due to a bug in the extconf.rb script, the build was failing for Ruby 1.9.0 (see <u>RubyForge</u> <u>Bug #20426</u>). This has been fixed.

## Changes For Version 1.6.14 (March 29, 2008)

- Updated the documentation for the FXImage class to indicate which methods call render after they're finished, and which ones do not.
- Corrected a little typo in the *gembrowser.rb* example program.
- Updated the dilbert.rb example program to use the more popular-and-likely-to-be-installed <u>Hpricot</u> HTML parser library instead of <u>Rubyful Soup</u>.
- Re-added the documentation for the TOGGLEBUTTON\_KEEPSTATE option, which had mysteriously disappeared (see <a href="RubyForge Bug #2286">RubyForge Bug #2286</a>).
- Made a number of minor fixes to support building FXRuby against Ruby 1.9.
- Added a binary gem for OS X. This works with the Ruby that's included with OS X (Leopard).
- The binary gem for Windows was built with FOX version 1.6.32 and FXScintilla version 1.71.

## Changes For Version 1.6.13 (November 9, 2007)

 Calls to the extractText method for the FXTable class were causing various memoryrelated errors on certain platforms (see <u>RubyForge Bug #15444</u>). This problem has been fixed.  The binary gem for Windows was built with FOX version 1.6.28 and FXScintilla version 1.71.

#### Changes For Version 1.6.12 (October 19, 2007)

- The API documentation for FXMDIClient referred to the non-existent instance method activeChild= (see <a href="RubyForge Bug #10259">RubyForge Bug #10259</a>). This method has been added.
- The API documentation for FXMDIClient also referred to the non-existent instance methods getMDIChildFirst and getMDIChildLast. These entries have been removed.
- The API documentation for FXMDIChild referred to non-existent instance methods getMDINext and getMDIPrev (see RubyForge Bug #10436). The documentation has been corrected.
- Added the <code>:repeat</code> parameter for the <code>addChore</code> and <code>addTimeout</code> methods. See the documentation for more details, and <code>gltest.rb</code> for an example of its use.
- Corrected a number of minor typos in the API documentation.
- Corrected a typo in the *imageviewer.rb* example.
- Modified the inputs.rb example program to use Pipe.read\_nonblock() instead of Pipe.read().
- Fixed a bug in the implementation of the findText method for the FXText class, when used with the SEARCH REGEX option.
- The binary gem for Windows was built with FOX version 1.6.28 and FXScintilla version 1.71.

# Changes For Version 1.6.11 (April 18, 2007)

- Added editable as an alias for FXTextField#editable?.
- Added each\_child\_recursive instance method for the FXWindow class. This method performs a depth-first traversal of the widget tree starting at the receiver window.
- Corrected some errors in the keyword arguments support for the FXVec2d, FXVec2f, FXVec3d, FVec3f, FXVec4d and FXVec4f classes.
- Corrected an error in the keyword arguments support for the FXIconDict class.
- Modified the gem specification so that the RDoc generated during a gem install is consistent with that generated by other methods (see <u>RubyForge Bug #10035</u>).
- Changes to the *iterators* library in version 1.6.6 introduced a bug in the each method for the FXFoldingList, FXTreeList and FXTreeListBox classes (see RubyForge Bug #10175). This problem has been fixed.

- Applied submitted patches for building FXRuby against Ruby 1.9 (see <u>RubyForge Bug</u> #10181). Please note that building FXRuby against the Ruby 1.9 code base is still officially unsupported; however, I'm glad to accept patches that will help make this possible.
- The binary gem for Windows was built with FOX version 1.6.25 and FXScintilla version 1.71.

# Changes For Version 1.6.9 (April 8, 2007)

- A bug was discovered in the keyword arguments library support for the FXMenuBar class (see RubyForge Bug #9927). This problem has been fixed.
- The binary gem for Windows was built with FOX version 1.6.25 and FXScintilla version 1.71.

## Changes For Version 1.6.8 (April 5, 2007)

- Due to an internal bookkeeping error, applications like the *glviewer.rb* example program
  which create multiple FXGLViewer instances could cause an assertion to fail. When this
  assertion fails on Windows, the program simply crashes (see <u>RubyForge Bug #9775</u>). This
  problem has been fixed.
- The keyword arguments library, introduced in version 1.6.5, is now included automatically when you load FXRuby; it is no longer necessary to explicitly require it.
- The binary gem for Windows was built with FOX version 1.6.25 and FXScintilla version 1.71.

#### Changes For Version 1.6.7 (March 31, 2007)

 The binary gem for Windows was built with FOX version 1.6.25 and FXScintilla version 1.71.

#### Changes For Version 1.6.6 (February 10, 2007)

- Somewhere along the way, the RAA browser example program got broken due to changes in the SOAP interface to RAA (see <u>RubyForge Bug #7977</u>). This has been fixed.
- Some debugging code that was meant to detect errors in FXRuby message data conversion was inadvertently causing some user applications to crash when running under Windows (see <u>RubyForge Bug #8049</u>). This debugging code has been changed to avoid the problem.
- Modified the implementations of the each iterator methods for FXFoldingList,
   FXFoldingItem, FXTreeItem, FXTreeList and FXTreeListBox (see RubyForge Bug #8090).
   The new implementation is a bit more robust in terms of modifications (such as deletion) of the iterated-over elements.

- A bug in the new keyword arguments library (introduced in version 1.6.5) caused the
  initialize method for the FXDCWindow class to do the wrong thing (see RubyForge Bug
  #8441). This has been corrected.
- A different bug in the keyword arguments library caused the initialize method for the FXFont class to do the wrong thing (see <a href="RubyForge Bug #8517">RubyForge Bug #8517</a>). This also has been corrected.
- Yet another bug in the keyword arguments library broke the part of the code that used to yield self to an optional block attached to the call to new (see <u>RubyForge Bug #8518</u>). This has been corrected.
- Most of the FXRuby example programs have been updated to use the keyword arguments library.
- Added a new "virtual" keyword argument :padding that can be used in place of (or in addition to) the :padLeft, :padRight, :padTop and :padBottom arguments for a constructor. When a :padding value is passed in to the arguments hash, that value will be used for any of the four regular padding values that aren't otherwise specified. See the example programs for, you know, examples.
- The binary gem for Windows was built with FOX version 1.6.20 and FXScintilla version 1.71.

## Changes For Version 1.6.5 (January 20, 2007)

- Clicking outside of the visible cells for an FXTable when there was no current selection
  caused the code to raise an exception (see <u>RubyForge Bug #5907</u>). This problem has
  been fixed.
- The hasTimeout? method for the FXApp class was implemented incorrectly (see RubyForge Bug #7564). This problem has been fixed.
- The FXFoldingList and FXFoldingItem classes did not have each iterator methods like most of the other list-based widgets (see <u>RubyForge Patch #7978</u>). These have been added.
- The API documentation for FXMDIClient claimed that FXScrollArea was its base class (see RubyForge Bug #7979). This has been corrected; the base class for FXMDIClient is FXComposite.
- There was a small typo in the documentation for the FXFoldingList class options (see RubyForge Bug #7981). This has been fixed.
- Added preliminary support for keyword-style arguments, as described in the "Differences
  Between FOX and FXRuby" section of the FXRuby User's Guide.
- The binary gem for Windows was built with FOX version 1.6.20 and FXScintilla version 1.71.

### Changes For Version 1.6.4 (November 30, 2006)

- A change made in Ruby 1.8.5 for cyclic requires led to a problem that caused the Ruby interpreter to emit a large number of warnings (see <a href="RubyForge Bug #5633">RubyForge Bug #5633</a>). This problem has been fixed.
- The binary gem for Windows was built with FOX version 1.6.16 and FXScintilla version 1.71.

#### Changes For Version 1.6.3 (October 27, 2006)

- Widgets of some classes (namely FXTopWindow and FXMDIChild) weren't properly sending a SEL\_CLOSE message to their message targets (see RubyForge Bug #5498). Thanks to a change in FOX version 1.6.16, this problem has been fixed.
- The getControlFor method for the FXComboTableItem class was coded incorrectly (see RubyForge Bug #5906). This has been fixed.
- There was a minor typo in the API documentation for the FXTriStateButton class (see RubyForge Bug #5962). This has been fixed.
- The each\_row and each\_column iterator methods for the FXTable class were incorrectly coded (see <a href="RubyForge-Bug#6036">RubyForge Bug#6036</a>). This has been fixed.
- The new class methods for <code>FXColorItem</code>, <code>FXDirItem</code>, <code>FXFileItem</code>, <code>FXFoldingItem</code>, <code>FXHeaderItem</code>, <code>FXIconItem</code>, <code>FXListItem</code> and <code>FXTreeItem</code> were all raising exceptions when a non-nil value was passed in for the last argument (see <a href="RubyForge Bug #6197">RubyForge Bug #6197</a>). A similar problem was present for various instance methods in the <code>FXColorList</code>, <code>FXListBox</code> and <code>FXMDIClient</code> classes. These problems have been fixed.
- A few problems were discovered for the *inputs.rb* example program (see <u>RubyForge Bug</u> #6209). These problems have been fixed.
- Several instance methods for the FXTable class were not actually present under their documented names (see <u>RubyForge Bug #6211</u>). This has been fixed.
- The build script was not compatible with changes made in the recently-released FXScintilla
   1.71 (see <u>RubyForge Bug #6313</u>). This has been fixed.
- The binary gem for Windows was built with FOX version 1.6.16 and FXScintilla version 1.71.

# Changes For Version 1.6.2 (September 13, 2006)

- The expandTree() and collapseTree() methods for the FXFoldingList class were incorrectly identified as expandFolding() and collapseFolding() in the API documentation (see <a href="RubvForge Bug #5354">RubvForge Bug #5354</a>). This has been fixed.
- The FXDockTitle class was not supported (see RubyForge Bug #5632). This has been

fixed.

- The API documentation for the FXGLCanvas class claimed it had a shared? method, but it didn't (see <u>RubvForge Bug #5591</u>). Now it does.
- The FXGradientBar class was not supported (see RubyForge Bug #5746). This has been fixed.
- The binary gem for Windows was built with FOX version 1.6.14 and FXScintilla version 1.67 (from CVS).

#### Changes For Version 1.4.7 (September 13, 2006)

- The children instance method for the FXWindow class always returned an array of FXWindow instances, even if the actual types should have been instances of subclasses of FXWindow (see RubyForge Bug #4342). This has been fixed.
- The *dilbert.rb* example program was broken due to a change in the Dilbert.com web site structure (see <a href="RubyForge Bug #4597">RubyForge Bug #4597</a>). This has been fixed.
- The expandTree() and collapseTree() methods for the FXFoldingList class were incorrectly identified as expandFolding() and collapseFolding() in the API documentation (see <a href="RubyForge Bug #5354">RubyForge Bug #5354</a>). This has been fixed.
- The FXDockTitle class was not supported (see RubyForge Bug #5632). This has been fixed.
- The API documentation for the FXGLCanvas class claimed it had a shared? method, but it didn't (see RubyForge Bug #5591). Now it does.
- The FXGradientBar class was not supported (see RubyForge Bug #5746). This has been fixed.
- The binary gem for Windows was built with FOX version 1.4.34 and FXScintilla version 1.63.

#### Changes For Version 1.6.1 (July 21, 2006)

- The message data sent along for the SEL\_INSERTED, SEL\_DELETED and SEL\_REPLACED messages from an a FXText widget to its target was not being converted properly (see RubyForge Bug #4666). This has been fixed.
- The code related to the localization of application messages in FOX wasn't implemented properly in FXRuby, and as a result, constructing certain dialogs (like the color dialog) could cause a program to crash (see <u>RubyForge Bug #5000</u>). This has been fixed.
- The "Stop Spin" button in the gltest.rb example program didn't stop the cubes from spinning after either the "Spin Timer" or "Spin Chore" option was selected (see <u>RubyForge Bug</u> #5001). This was actually a symptom of a larger problem, that FXRuby wasn't properly handling timers and chores. These problems have been fixed.

- Setting the current item for an FXCOMDOBOX to -1 (to indicate that there's no current item) would cause FXRuby to erroneously raise an IndexError (see RubyForge Bug #5007).
  This has been fixed.
- The documentation for the reparent instance method for the FXWindow class was incorrect (see RubyForge Bug #5035). This has been fixed.
- The *textedit.rb* example program was not up to date with some of the changes for FOX 1.6. This example has been updated.
- The new font method for the FXFont class was not documented. This has been fixed.
- The *dilbert.rb* example program has been modified to use the RubyfulSoup HTML library instead of the html-parser library.
- As discussed in various forums (see for example this post), the autorequire directive for RubyGems specifications is now deprecated. As a result, this has been removed from the FXRuby gem specification. This change will break any code that was using a statement like:

```
require_gem 'fxruby'
```

as the sole means for loading FXRuby. Such programs should instead use:

```
require 'fox16'
```

which will work for either gem based or non-gem based installations.

 The binary gem for Windows was built with FOX version 1.6.8 and FXScintilla version 1.67 (from CVS).

## Changes For Version 1.6.0 (May 29, 2006)

- This is the first release of FXRuby compatible with FOX version 1.6. One of the most signficant changes for FOX 1.6 has been the addition of Unicode support; all FOX widgets and internal string processing routines are now Unicode aware. For a comprehensive overview of the changes made to FOX since version 1.4 (including those made in the FOX 1.5 development series), please refer to the <a href="News archives">News archives</a> at the FOX web site.
- Added the allowside, disallowside and allowedside? methods for the FXDOCKBar class, as complements to the allowedsides accessor methods (see <u>RubyForge Feature Request</u> #2307).
- Added the visible= and visible? accessor methods for the FXWindow class, as complements to the show, hide and shown? methods (see <a href="RubyForge Feature Request">RubyForge Feature Request</a> #3579).
- The browser.rb example was making use of a deprecated API (see <u>RubyForge Bug</u> #4325). This has been fixed.

- The children instance method for the FXWindow class always returned an array of FXWindow instances, even if the actual types should have been instances of subclasses of FXWindow (see RubyForge Bug #4342). This has been fixed.
- The *dilbert.rb* example program was broken due to a change in the Dilbert.com web site structure (see <u>RubyForge Bug #4597</u>). This has been fixed.
- The binary gem for Windows was built with FOX version 1.6.5 and FXScintilla version 1.67 (from CVS).

# Changes For Version 1.4.6 (April 26, 2006)

- FXRuby would not compile properly on some x86-64 systems (see <u>RubyForge Bug #3729</u>).
   This error has been corrected. Thanks to Javier Goizueta for initially reporting this problem, and especially to Tobias Peters for providing a patch.
- The FXIconDict widget was accidentally "lost" in the transition between FXRuby versions 1.2 and 1.4 (see RubyForge Bug #4117). This error has been corrected. Thanks to Manfred Usselmann for reporting this problem.
- The FXSwitcher widget was not sending the appropriate message data to its message target for the SEL\_COMMAND message type (see RubyForge Bug #4157). This error has been corrected. Thanks to Manfred Usselmann for reporting this problem.
- The FXSeparator class wasn't implemented properly (see <u>RubyForge Bug #4158</u>). This error has been corrected. Thanks to Gerard Menochet for reporting this problem.
- The findItemByData method was implemented incorrectly for the FXComboBox, FXFoldingList, FXIconList, FXList and FXListBox classes (see RubyForge Bug #4172). This error has been corrected. Thanks to Gerard Menochet for reporting this problem.
- The FXListBox widget was not sending the appropriate message data to its message target for the SEL\_COMMAND message type (see RubyForge Bug #4255). This error has been corrected. Thanks to Gerard Menochet for reporting this problem.
- The binary gem for Windows was built with FOX version 1.4.29 and FXScintilla version 1.63.

# Changes For Version 1.4.5 (April 10, 2006)

- The FXTextField class was not properly responding to the ID\_INSERT\_STRING command (see RubyForge Bug #3320). This error has been corrected. Thanks to Uwe Hartl for reporting this problem.
- The text and getText methods for the FXMenuCaption class were returning nil instead of the actual value (see <a href="RubyForge Bug #3458">RubyForge Bug #3458</a>). This error has been corrected. Thanks to Meinrad Recheis (Henon) for reporting this problem.
- The API documentation for the FXMDIChild class erroneously listed SEL\_CLOSEALL as one of the message types that an MDI child window might send to its message target (see

RubyForge Bug #3508). This error has been corrected. Thanks to Meinrad Recheis (Henon) for reporting this problem.

- Calling the selectRange method for class FXTable would cause a fatal error instead of merely raising an IndexError exception (see <a href="RubyForge Bug #3615">RubyForge Bug #3615</a>). This error has been corrected. Thanks to Meinrad Recheis (Henon) for reporting this problem.
- Due to an error in the SWIG interface files, the FXChoiceBox class was basically unusable (see <u>RubyForge Bug #3676</u>). This error has been corrected. Thanks to Uwe Hartl for reporting this problem.
- The API documentation for the FXRealSlider and FXRealSpinner classes erroneously claimed that the message data for the SEL\_COMMAND and SEL\_CHANGED messages sent by these widgets to their targets were integers (see RubyForge Bug #3749). Along the same lines, the message data for those widgets wasn't being converted correctly (see RubyForge Bug #3750). Both of these errors have been corrected. Thanks to Meinrad Recheis (Henon) for reporting these problems.
- The API documentation for the Fox module incorrectly listed the names of the FXSELTYPE and FXSELID methods as SELTYPE and SELID (see RubyForge Bug #3940). This error has been corrected. Thanks to Joel VanderWerf for reporting this problem.
- The FXTableItem constructor was supposed to (optionally) accept a reference to an arbitrary Ruby object as its third argument, but this wasn't working properly (see <u>RubyForge Bug #4005</u>). This error has been corrected. Thanks to Mark Volkman for reporting this problem.
- The binary gem for Windows was built with FOX version 1.4.29 and FXScintilla version 1.63.

# Changes For Version 1.4.4 (January 21, 2006)

- The build instructions for Unix platforms had not been updated recently and as such
  contained some errors (see <u>RubyForge Bug #3014</u>). These errors have been corrected.
  Thanks to Dave Burns for reporting this problem.
- The extendSelection method for the FXTable class was raising an exception if an out of bounds row or column index was passed in (see <a href="RubyForge Bug #3050">RubyForge Bug #3050</a>). This has been changed so that extendSelection instead returns false for out of bounds arguments. Thanks to Leonid Moiseichuk for reporting this problem.
- The each\_child iterator method for the FXWindow class would fail if the child window was destroyed in the block (see RubyForge Bug #3134). Thanks to Liam Irish for reporting this problem and providing a patch.
- The message data for the SEL\_REPLACED message sent by the FXTable class to its target was not being handled properly (see <a href="RubyForge Bug #3244">RubyForge Bug #3244</a>). There were also problems with the message data for the SEL\_SELECTED and SEL\_DESELECTED messages. Furthermore, the SEL\_REPLACED message was not documented in the RDoc documentation for the FXTable class. All of these problems have been corrected. Thanks to \_blackdog for reporting this problem.

 The binary gem for Windows was built with FOX version 1.4.29 and FXScintilla version 1.63.

#### Changes For Version 1.4.3 (November 7, 2005)

- The TOGGLEBUTTON\_KEEPSTATE option for the FXTOggleButton class was not documented (see <u>RubyForge Bug #2286</u>). This oversight has been corrected. Thanks to Tim Smith for reporting this problem.
- The scintilla.rb library file was not up to date with the latest FXScintilla release, and as a
  result it was missing some methods (see <u>RubyForge Bug #2479</u>). This oversight has been
  corrected. Thanks to Maxim Kulkin for reporting this problem.
- Due to changes in the APIs for timers and chores, the mechanisms for removing chores and timeouts were broken (see <u>RubyForge Bug #2563</u>). This bug has been fixed. Thanks to "moinker" for reporting this problem.
- An error in the test setup caused all of the tests for the FXList class to fail (see <u>RubyForge</u> <u>Bug #2564</u>). This bug has been fixed. Thanks to Peter for reporting this problem.
- Due to a bug in the test suite runner script, not all test cases were being exercised (see <u>RubyForge Bug #2565</u>). This bug has been fixed.
- Calling the getPixel method for the FXImage class when the client-side pixel buffer for the image has already been released would cause a program to crash (see RubyForge Bug #2611). Now, getPixel will raise an exception if it's called after the pixel buffer has been released. The documentation for getPixel has been updated accordingly. Thanks to Gonzalo Garramuno for reporting this problem.
- The makePositionVisible method for the FXTable class was raising an exception when passed out-of-bounds values for the row or column index (see RubyForge Bug #2660). This could happen, for example, if you were to click in a table area outside of the regular cells (which indirectly triggers a call to makePositionVisible). This was actually inconsistent with standard FOX behavior, which simply ignores out of bounds values for that method's arguments. This bug has been fixed, and the documentation for makePositionVisible has been updated accordingly. Thanks to Ralf Jonas for reporting this problem.
- The binary gem for Windows was built with FOX version 1.4.21 and FXScintilla version 1.63.

# Changes For Version 1.4.2 (August 22, 2005)

- Due to a bug in the implementation, the <code>checked?</code> method for the <code>FXCheckButton</code> class always returned <code>false</code> (see <a href="RubyForge Bug #1852">RubyForge Bug #1852</a>). This bug has been fixed. Thanks to Meinrad Recheis for reporting this problem.
- The API documentation for the FXTable class listed several obsolete attributes (see <u>RubyForge Bug #1928</u>). Those errors have been corrected. Thanks to Pavel Sokolov for reporting these problems.

- There were a number of bugs in the textedit.rb example program (see <u>RubyForge Bug</u> #1979), and those bugs have been fixed. Thanks to Claude Marinier for reporting these problems.
- The API documentation for the FXTreeList class' new method still showed the number of visible items (nvis) as its second argument (see RubyForge Bug #2171). This problem has been corrected. Thanks to Bill Atkins for reporting this problem.
- The API documentation for the FXTopWindow class had a number of errors (see <u>RubyForge</u> <u>Bug #2269</u>). This problem has been corrected.
- The API documentation for the FXTreeList class still listed the obsolete reparentItem method (see RubyForge Bug #2270). This problem has been corrected. Thanks to Jacob Hansen for reporting this problem.
- Due to a bug in how the SWIG typemaps for the FXlong type were defined, some methods for the FXFileStream class were broken (see <u>RubyForge Bug #2275</u>). This problem has been corrected. Thanks to Gonzalo Garramuno for reporting this problem.
- Merged in all of the fixes for FXRuby 1.2.6.
- The binary gem for Windows was built with FOX version 1.4.17 and FXScintilla version 1.63.

# Changes For Version 1.4.1 (August 20, 2005)

- This is the second release of FXRuby which is compatible with FOX 1.4, and as such should be considered an "unstable" release. For a history of the changes made during the FOX 1.3 and 1.4 development, see the <a href="News">News</a> page at the FOX Web site.
- The unit tests (in the *tests* subdirectory) had not been updated to require the fox14 feature, and were still looking at fox12. This has been corrected.
- A number of minor problems were corrected for the Windows build of FXRuby.
- The binary gem for Windows was built with FOX version 1.4.17 and FXScintilla version 1.63.

# Changes For Version 1.4.0 (August 19, 2005)

 This is the first release of FXRuby which is compatible with FOX 1.4, and as such should be considered an "unstable" release. For a history of the changes made during the FOX 1.3 and 1.4 development, see the <a href="News">News</a> page at the FOX Web site.

#### Changes For Version 1.2.6 (April 15, 2005)

• Some additional problems related to calling the setTableSize method for an FXTable were discovered (see <a href="RubyForge Bug #1597">RubyForge Bug #1597</a>). This problem has been corrected. Thanks to Joel VanderWerf for reporting this problem.

- The *iconlist.rb* example program had a "Sort" pulldown menu filled with a number of commands that didn't really do anything, including sorting the items (see <u>RubyForge Bug</u> #1654). This pulldown menu has been removed from that example.
- The API documentation for the FXDC class erroneously referred to the font attribute as textFont (see RubyForge Bug #1667). This problem has been corrected. Thanks to Meinrad Recheis for reporting this problem.
- The checked?, unchecked? and maybe? methods for the FXMenuCheck class were missing (see RubyForge Bug #1677). This problem has been corrected. Thanks to Oliver Smith for reporting this problem.
- The API documentation for the FXScrollArea class incorrectly spelled the names of the horizontalScrollBar and verticalScrollBar methods as horizontalScrollbar and verticalScrollbar (see <a href="RubyForge Bug #1678">RubyForge Bug #1678</a>). The documentation has been corrected. Thanks to Jannis Pohlmann for reporting this mistake.
- Some code in the *groupbox.rb* example program was calling the <code>getRootWindow</code> method, but that method has been renamed to <code>getRoot</code> (see <a href="RubyForge Bug #1692">RubyForge Bug #1692</a>). This problem has been corrected. Thanks to Jaroslav Stika for reporting this problem.
- The hasChar? method for the FXFont class was spelled without a trailing question mark, but it seems more Ruby-like that it should, so we've added an alias for that (see RubyForge Bug #1714). This method also now accepts a string of size 1 (i.e. a single character) as its input, as an alternative to an ordinal value. Thanks to Meinrad Recheis for these suggestions.
- The API documentation for the FXImage class mistakenly listed IMAGE\_ALPHA as a valid image rendering hint, but this flag is no longer needed since FOX images now always contain an alpha channel (see <u>RubyForge Bug #1715</u>). The documentation has been corrected. Thanks to Meinrad Recheis for reporting this mistake.
- Due to an error in the SWIG interface files, the data method for the FXSettings class was not being wrapped properly. As a result, this method was unavailable and in turn led to other dependent methods (like each\_section) to be unavailable as well (see <a href="RubyForge Bug">RubyForge Bug</a> #1771). This error has been corrected. Thanks to Jannis Pohlmann for reporting this problem.
- The binary gem for Windows was built with FOX version 1.2.16 and FXScintilla version 1.62.

# Changes For Version 1.2.5 (March 1, 2005)

- The change made for FXRuby version 1.2.4 regarding garbage collection for table items
  corrected only one of the problems described in <a href="RubyForge Bug #1445">RubyForge Bug #1445</a>; There was still a
  problem related to the "destructive" effects of the <a href="SetTableSize">SetTableSize</a> method for the <a href="FXTable">FXTable</a>
  class. This problem has now been corrected as well. Thanks to David Peoples, Jamey
  Cribbs and Joel VanderWerf for their assistance in helping me to track down this problem.
- The extractText and overlayText methods for the FXTable class were implemented

incorrectly and weren't listed in the API documentation. These problems have been corrected.

- The checks for out-of-bounds indices in the <code>getColumnX</code>, <code>setColumnX</code>, <code>getRowY</code>, <code>setRowY</code> and <code>updateRange</code> methods for the <code>FXTable</code> class were incorrect. These have been fixed.
- The setTableSize method for the FXTable class now raises ArgError if either the number of rows or columns passed in as arguments is less than zero.
- A typo in one of the source files was causing the build to fail when compiled against Ruby versions 1.8.1 or earlier (see <u>RubyForge Bug #1551</u>). This error has been corrected. Thanks to Alex McGuire for reporting this problem.
- The selectItem method for the FXTable class was removed in FOX 1.2, so we've added a convenience method for this that just calls the selectRange method under the hood (see RubyForge Bug #1562). Thanks to Joel VanderWerf for this suggestion.
- The binary gem for Windows was built with FOX version 1.2.13 and FXScintilla version 1.62.

## Changes For Version 1.2.4 (February 23, 2005)

- Due to a change in some of the internal Ruby C APIs, a compile-time error for FXRuby was introduced in some of the Ruby 1.8.2 preview releases (see <u>RubyForge Bug #1039</u>). One should not see any compile-time errors when compiling FXRuby (versions 1.2.3 or later) against the Ruby 1.8.2 final release, but I've neverthless made a change to how those internal APIs are used, to avoid any potential problems. Thanks to the many users who pointed out this problem.
- Joel VanderWerf suggested some enhancements to the *image.rb* example program in order to improve its startup time (see <a href="RubyForge Bug #1281">RubyForge Bug #1281</a>). Those changes have been incorporated. Thanks to Joel for this suggestion.
- One change for the FXImage class between FOX versions 1.0 and 1.2 is the nature of the pixel buffer that's passed to the FXImage constructor. Previously, this pixel buffer was expected to be a string of bytes; now it's expected to be an array of FXColor values. This modification was not implemented correctly for FXRuby versions 1.2.3 and earlier (see <a href="RubyForge Bug #1427">RubyForge Bug #1427</a>). This bug has been corrected, and the example program (image.rb) and test cases have been updated as well. Thanks to Oliver Smith and others for reporting this problem.
- A couple of different problems, reported by Patrick Fernie and David Peoples, exposed a flaw in how FXRuby manages the links between FOX objects and their Ruby peers when the FOX objects are destroyed (see <u>RubyForge Bug #1445</u>). Without going into all the gory details, let's just say that since we have no explicit control over when Ruby's garbage collector decides to "collect" those Ruby peers that point to C++ objects that have been destroyed, we need to take steps to neutralize those Ruby peer objects so that they can't cause your application to crash in the meantime; I've implemented a fix to take care of this situation. Thanks to Patrick and David for reporting these problems.

- The API documentation for FXRuby 1.2 still contained references to the old "spellings" of the fxparseAccel and fxparseHotkey method names, which were all lowercase (i.e. fxparseaccel and fxparsehotkey). (see <u>RubyForge Bug #1470</u>). These errors have been corrected.
- Added the FXScrollArea#scrollCorner method, which returns a reference to the scroll corner for any window derived from FXScrollArea (see RubyForge Feature Request #1226). Thanks to Brian Sheehan for this suggestion.
- Added the FXMemoryBuffer#to\_a method, which is just an alias for the data accessor method that returns a copy of the data buffer as an array (see <u>RubyForge Feature Request</u> #1295). Thanks to Meinrad Recheis for this suggestion.
- Added the appendRows and appendColumns methods to the FXTable class (see <u>RubyForge</u> <u>Feature Request #1295</u>). Thanks to Brett Hallett for this suggestion.
- The binary gem for Windows was built with FOX version 1.2.13 and FXScintilla version 1.62.

## Changes For Version 1.2.3 (January 22, 2005)

- Since group boxes containing radio buttons no longer enforce the radio behavior of radio buttons (i.e. keeping only one radio button selected at a time), some of the example programs were no longer working as desired (see <u>RubyForge Bug #751</u> and <u>RubyForge Bug #1280</u>). This problem has been corrected. Thanks to Yuri Leikind and Barry DeZonia for reporting this problem.
- Bob Sidebotham reported a little typo in the table.rb example program (see RubyForge Bug #990). This has been corrected.
- The API documentation for FXList did not reflect the changes for FOX 1.2; the retrieveItem() has been renamed to getItem() and insertItem() has been renamed to setItem() (see RubyForge Bug #1037 and RubyForge Bug #1257). This has been corrected. Thanks to Remy Drouilhet and Stephan Kamper for reporting this problem.
- The Windows installer was missing some of the documentation files (see <u>RubyForge Bug</u> #1139). This has been corrected. Thanks to Curt Hibbs and Mark Smith for reporting this problem.
- The browser.rb example program was broken (see <u>RubyForge Bug #1146</u>). This has been corrected. Thanks to Stefan Lang for reporting this problem.
- The attribute setter for FXHeaderItem#justification was defined incorrectly (see RubyForge Bug #1276). This has been corrected. Thanks to Joel VanderWerf for reporting this problem (and providing a patch to fix it).
- The filenames alias for the FXFileDialog#getFilenames() instance method was missing (see <u>RubyForge Bug #1277</u>). This error has been corrected. Thanks to Barry DeZonia for reporting this problem.
- The API documentation for the FXFileDialog class methods getOpenFilenames(),

getOpenDirectory(), getOpenFilename() and getSaveFilename() was extremely inadequate (see <a href="RubyForge Bug #1279">RubyForge Bug #1279</a>). This documentation has been improved. Thanks to Barry DeZonia for reporting this problem.

- Brett Hallett contributed a Ruby port of the "ratio" example program from the regular FOX distribution, for demonstrating the use of the new FXSpring layout manager (see <u>RubyForge</u> <u>Bug #1282</u>). Many thanks to Brett for this addition!
- Joel VanderWerf contributed code to simplify how programs interact with modal and non-modal dialog boxes (see <u>RubyForge Bug #1283</u>). See the API documentation for the new FXDialogBox#execute\_modal and FXDialogBox#execute\_nonmodal methods for examples of their use.
- The attribute setters for FXRealSpinner#selBackColor and FXSpinner#selBackColor were defined incorrectly (see <a href="RubyForge Bug #1297">RubyForge Bug #1297</a>). These have been corrected. Thanks to Meinrad Recheis for reporting this problem.
- The tooltipPause attribute reader for the FXApp class was missing (see <u>RubyForge Patch</u> #1306). Thanks to Joel VanderWerf for reporting this omission and providing a patch to fix it.
- The API documentation for the FXT001BarTab class was missing (see <u>RubyForge Bug</u> #1322). Thanks to Joel VanderWerf for reporting this omission.
- The attribute accessors for FXText#visibleRows and FXText#visibleColumns were defined and documented incorrectly (see <a href="RubyForge Bug #1325">RubyForge Bug #1325</a>). These have been corrected. Thanks to Karl El-Koura for reporting this problem.
- The binary gem for Windows was built with FOX version 1.2.13 and FXScintilla version 1.62.

# Changes For Version 1.2.2 (October 1, 2004)

 In order to avoid versioning problems when dealing with a mix of applications based on either FXRuby 1.0 or 1.2, the feature name for FXRuby has been changed from "fox" to "fox12". For most application developers, this means that you will need to modify the source code for applications targeted at FXRuby 1.2 to begin with the line

```
require 'fox12'
```

Note that no changes should be required for legacy applications targeted at FXRuby 1.0.

- Made a number of updates to the documentation, to reflect API changes for FXRuby 1.2.
- The binary gem for Windows was built with FOX version 1.2.9 and FXScintilla version 1.61.

# Changes For Version 1.2a2 (July 10, 2004)

• This is the second "alpha" release of FXRuby 1.2. This release should be compatible with

any FOX library version 1.2; it is not compatible with any previous FOX library versions. As this is an alpha release, users should expect a certain amount of instability, bugs, etc.

- For this release, all of the FOX 1.2 classes are available with the exception of the
   FXBitmapView class. There is a small problem with how the FXBitmapView class is declared
   in the FOX 1.2 header files, and I'm trying to decide how best to resolve that problem. The
   goal is to have this problem resolved by the next alpha release of FXRuby.
- For this release, all of the RDoc-based online documentation has been brought up to date with the new APIs.
- Portions of the FXRuby User's Guide were still out of date with respect to the new APIs (see SourceForge Bug #988623). This has been fixed.
- The *mditest.rb* example program was not up to date with the new APIs. This has been fixed.
- The glviewer.rb example program was not up to date with the new APIs (see <u>SourceForge</u> <u>Bug #986479</u>). This has been fixed. Thanks to Remy Drouilhet for reporting this problem and suggesting the fixes.
- The FXGLGroup#bounds method was defined incorrectly (see <u>SourceForge Bug #986476</u>).
   This has been fixed. Thanks to Remy Drouilhet for reporting this problem and suggesting the fix.
- The *scintilla-test.rb* example program was not up to date with the new APIs (see <u>SourceForge Bug #986172</u>). This has been fixed. Thanks to Peter Watkins for reporting this problem and submitting a corrected version of the program.
- There was a small typo in the table.rb example program (see <u>SourceForge Bug #988152</u>).
   This has been fixed. Thanks to Jamey Cribbs for reporting this problem and suggesting the fix.
- Due to an oversight on my part, one of the overloaded constructors for the FXRegion class wasn't wrapped properly (see <u>SourceForge Bug #986181</u>). This has been fixed. Thanks to Bil Bas for reporting this problem.
- Removed some obsolete aliases for the old leading and trailing rows and columns for the FXTable class (see <u>SourceForge Bug #988038</u>). Thanks to Yuri Leikind for reporting this problem.
- Added FXTable instance methods horizontalGridShown=() and verticalGridShown=() to complement the already available horizontalGridShown? and verticalGridShown? methods.
- The binary gem for the 1.2a1 release on Windows didn't have PNG or JPEG image support built-in (see <u>SourceForge Bug #986180</u>). This has been fixed. Thanks to Bil Bas for reporting this problem.
- The binary gem for Windows was built with FOX version 1.2.7 and FXScintilla version 1.61.

#### Changes For Version 1.2a1 (June 28, 2004)

• This is the first "alpha" release of FXRuby 1.2. This release should be compatible with any FOX library version 1.2; it is not compatible with any previous FOX library versions. As this is an alpha release, users should expect a certain amount of instability, bugs, etc.

The intent of this first alpha release is twofold. The primary intent is allow application developers who have current projects based on FXRuby 1.0 to begin the process of updating their applications for compatibility with FXRuby 1.2. For this release, all of the classes that existed in FXRuby 1.0 have been updated for compatibility with FOX 1.2, and so developers should at least be able to begin to "port" their applications forward now. Note that there have been a number of changes for FOX 1.2 and FXRuby 1.2, both in terms of API changes and less obvious "behavioral" changes. For a detailed summary of these changes, please see "What's New in FOX 1.2" (also available as a PDF). Note that few, if any, of the new classes introduced in FOX 1.2 are available in this first alpha release of FXRuby 1.2. Support for those new classes should come along quickly in subsequent alpha releases of FXRuby 1.2.

The secondary intent of this first alpha release is to introduce the new <u>RubyGems</u>-based packaging of FXRuby and to begin to work out the inevitable kinks in that system.

• The binary gem for Windows was built with FOX version 1.2.4 and FXScintilla version 1.57.

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