
What's new in GTK+ 2.6

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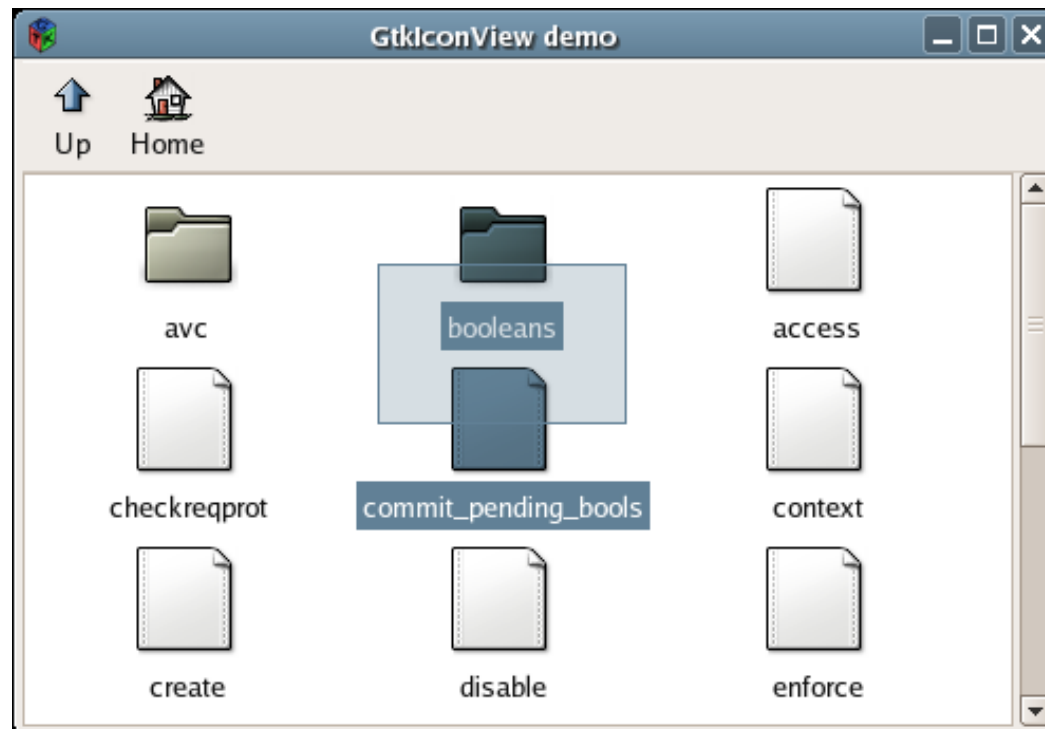


What's new in GTK+ 2.6

- New or improved widgets
- New cell renderers
- Clipboard improvements
- Ellipsization and rotated text
- Named icons
- Better desktop integration

GtkIconView

- intended to replace GnomeIconList
- model-view, uses tree models
- currently no editing, no DND support



GtkIconView

Setting up the model:

```
model = gtk_list_store_new (2, G_TYPE_STRING, GDK_TYPE_PIXBUF);  
gtk_icon_view_set_model (view, model);  
gtk_icon_view_set_text_column (view, 0);  
gtk_icon_view_set_pixbuf_column (view, 1);
```

Appending an item:

```
pixbuf = gdk_pixbuf_new_from_file ("file.png");  
gtk_list_store_append (model, &iter);  
gtk_list_store_set (model, &iter, 0, pixbuf, 1, "text", -1);
```

GnomeIconList:

```
gnome_icon_list_append (list, "file.png", "text");
```

GtkAboutDialog

- replaces GnomeAbout
- supports hyperlinks, clickable email addresses
- very easy to use, 1-function setup



Showing an about dialog:

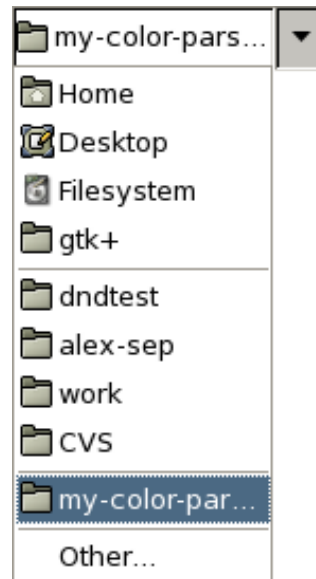
```
gtk_show_about_dialog (GTK_WINDOW (window),
    "name", "GTK+ Code Demos",
    "version", "2.6.3",
    "copyright", "(C) 1997-2004 The GTK+ Team",
    "license", license,
    "website", "http://www.gtk.org",
    "comments", "Program to demonstrate GTK+ functions.",
    "authors", authors,
    "documenters", documentors,
    "logo", pixbuf,
    NULL);
```

Making links clickable:

```
gtk_about_dialog_set_email_hook (open_link, NULL, NULL);
gtk_about_dialog_set_url_hook (open_link, NULL, NULL);
```

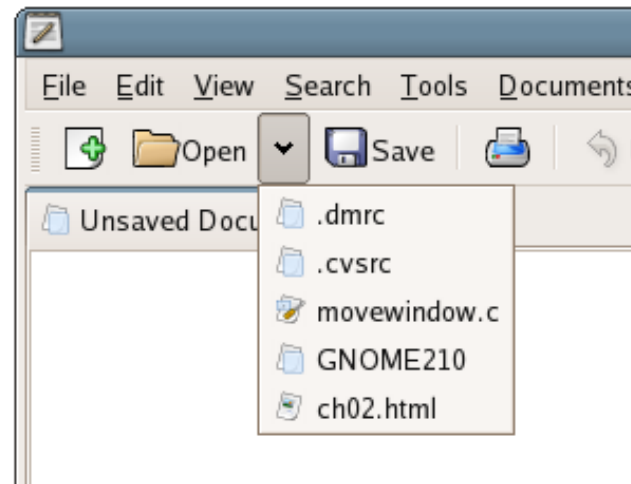
GtkFileChooserButton

- replaces GnomeFileEntry
- implements GtkFileChooser API
- only open and select-folder modes



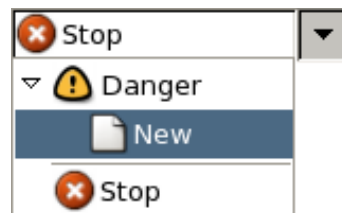
GtkMenuToolButton

- provides dropdown menus for toolbar buttons
- derived from similar widgets in Epiphany, Galeon and Gedit



GtkComboBox

- supports trees
- separators
- insensitive items
- list mode improvements: selection follows mouse, expand/collapse on hover



GtkComboBox

Rendering separators:

```
gtk_combo_box_set_row_separator_func (GTK_COMBO_BOX (combo),
                                       is_separator, NULL, NULL);

gboolean is_separator (GtkTreeModel *model,
                      GtkTreeIter  *iter,
                      gpointer       data)
{
    gboolean result;

    gtk_tree_model_get (model, iter, SEPARATOR_COLUMN, &result, -1);

    return result;
}
```

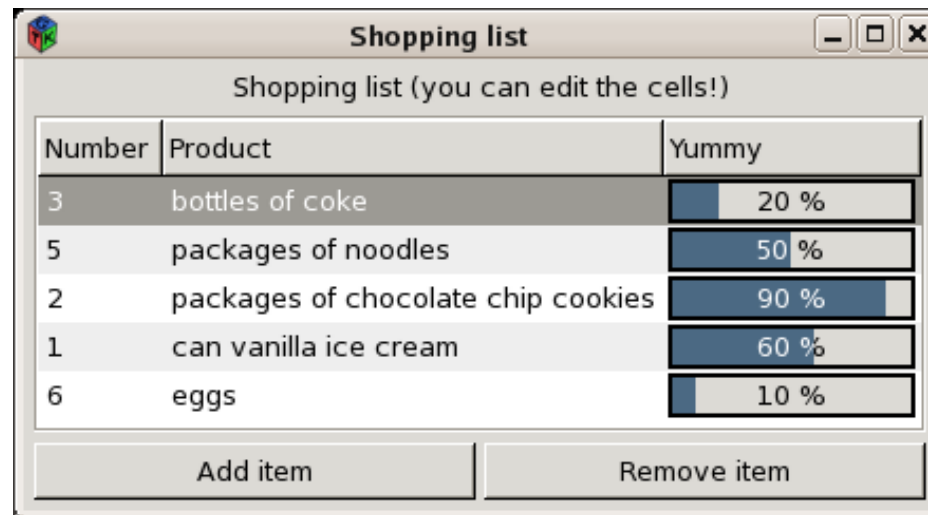
GtkComboBox

Making rows insensitive (a row is insensitive if all visible rows are insensitive):

```
gtk_cell_layout_set_attributes (GTK_CELL_LAYOUT (combo),  
                               pixbuf_renderer,  
                               "pixbuf", PIXBUF_COLUMN,  
                               "sensitive", SENSITIVE_COLUMN,  
                               NULL);
```

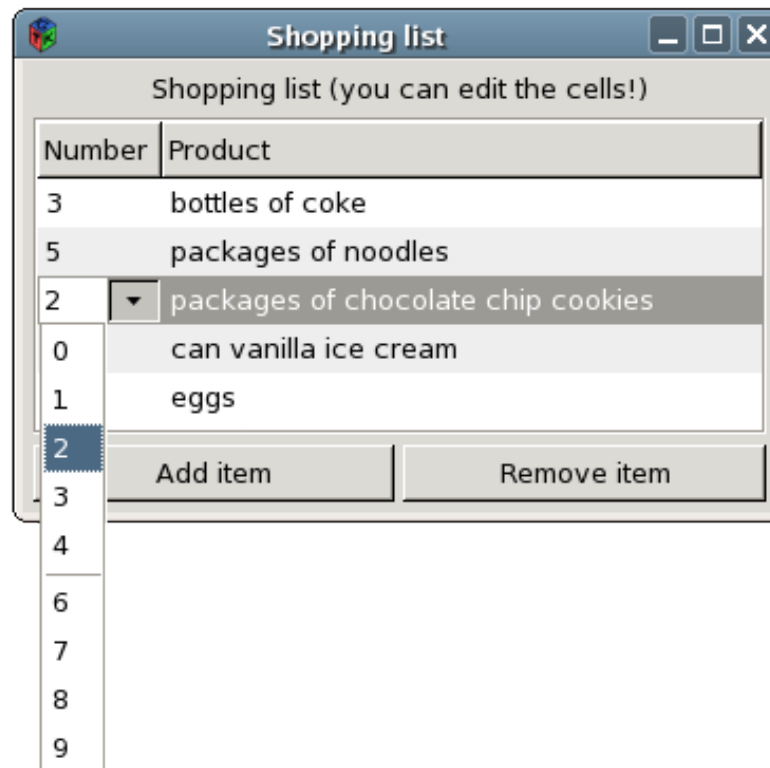
GtkCellRendererProgress

- displays a numeric value as a progress bar



GtkCellRendererCombo

- derived from `GtkCellRendererText`
- uses a `GtkComboBox` to edit
- uses a separate tree model for allowed values



GtkCellRendererCombo

```
renderer = gtk_cell_renderer_combo_new ();
g_object_set (renderer,
              "editable", TRUE,
              "has-entry", FALSE,
              "model", numbers_model,
              "text-column", COLUMN_NUMBER_TEXT,
              NULL);

gtk_tree_view_insert_column_with_attributes (treeview,
                                             -1, "Number",
                                             renderer,
                                             "text", TEXT_COLUMN,
                                             NULL);

g_signal_connect (renderer, "edited",
                  G_CALLBACK (cell_edited), model);
```

Clipboard improvements

- can store clipboard data at exit (requires a clipboard manager)
- API for handling URIs
- API for handling images:

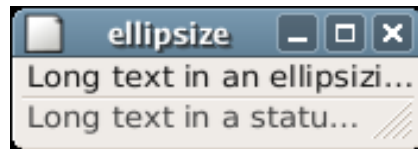
```
gtk_clipboard_set_image()  
gtk_clipboard_request_image()
```

```
gtk_selection_data_set_pixbuf()  
gtk_selection_data_get_pixbuf()
```

```
gtk_drag_source_add_image_targets()  
gtk_drag_dest_add_image_targets()
```

Text display

- Text can be ellipsized if it does not fit
- Text can be rendered at an angle
- But not both at the same time...



- Useful functions:

```
gtk_label_set_max_width_chars()  
gtk_file_chooser_button_width_chars()
```

Named icons

- follow the icon theme
- can be used for window icons
- can be used in GtkImage

Desktop integration

GTK+ 2.6 has settings to control

- display of icons in buttons
- display of icons in menus
- button order in dialogs

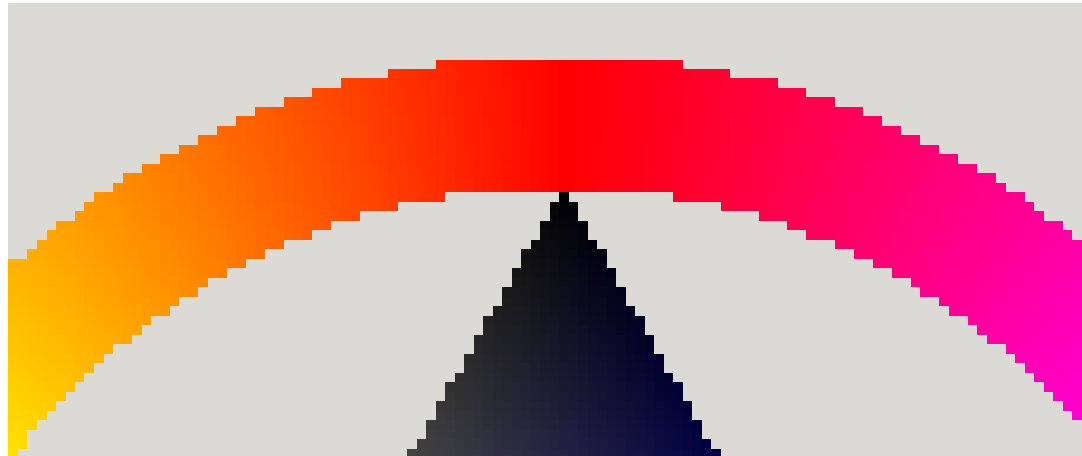
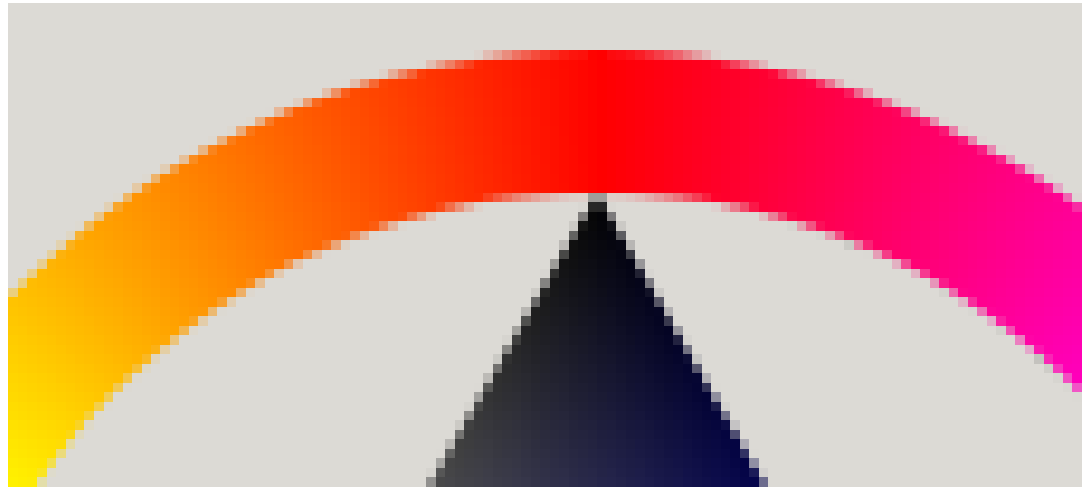
The Windows port includes the Wimp theme engine and the IME input method

What will be new in GTK+ 2.8

- Cairo rendering
- Visuals with an alpha channel
- Iconview improvements

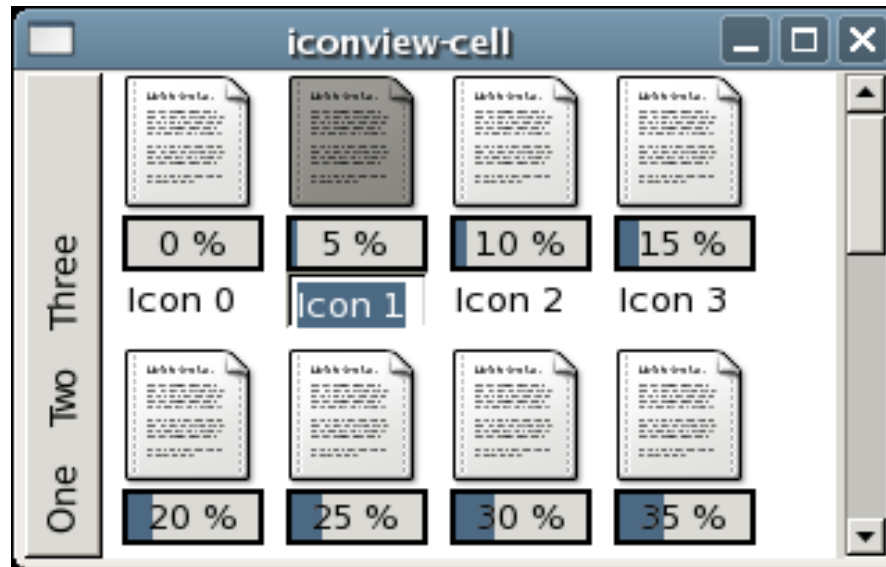
Cairo rendering, RGBA visuals

- Owen talked about these



Iconview improvements

- Use cell renderers
- Support DND



References

- GTK+ migration checklist
- Detailed migration guides for GnomeIconList, GnomeAbout, GnomeColorPicker
- Lists of new symbols in GTK+ 2.2, 2.4 and 2.6

(all of these in the GTK+ API documentation: <http://www.gtk.org/api>)

- Code examples in gtk-demo