Flamingo: Bringing the Ribbon Component to Swing

Kirill Grouchnikov

Amdocs
Agenda

> What is a ribbon?
> Swing ribbon implementation
> Swing ribbon structure
  • Basic terminology
  • Command buttons
  • Ribbon bands
  • Ribbon tasks
  • Miscellaneous
> Where to next?
What is a ribbon?
Ribbon demo
http://blogs.msdn.com/jensenh
Ribbon availability

> Available for WinForms, Win32, WPF, Silverlight
> Third-party vendors

> Microsoft – WPF 3.5, Windows 7 (scenic ribbon)
Ribbon for Swing applications

Metal

Looks Plastic XP

Nimbus

A03
Ribbon for Swing applications
Ribbon for Swing applications
Ribbon for Swing applications

http://flamingo.dev.java.net
Basic ribbon terminology

- Application menu button
- Taskbar panel
- Ribbon task
- Contextual ribbon task group
- Contextual ribbon task
- Help button
- Ribbon band
- Ribbon gallery
- Ribbon band expand button
Basic hierarchy

> **Ribbon**
  - Contains tasks
  - Containing bands

> **JRibbon**
  - **RibbonTask**
  - **AbstractRibbonBand**
Basic building block

Command buttons
Command buttons

> AbstractCommandButton
  • JCommandButton
  • JCommandToggleButton
Command buttons demo
Display state

AbstractCommandButtonsetDisplayState(
    CommandButtonDisplayState)
Action and popup areas

JCommandButton.setCommandButtonKind(CommandButtonKind)

ActionButtonModel AbstractCommandButton.getActionModel()
PopupButtonModel JCommandButton.getPopupModel()
Simple popups

JCommandButton.setPopupCallback(PopupPanelCallback)

JCommandButton button = ...;
button.setPopupCallback(new PopupPanelCallback() {
  public JPopupMenu getPopupPanel(
    JCommandButton commandButton) {
    JCommandPopupMenu menu =
      new JCommandPopupMenu();
    menu.addMenuButton(...);
    menu.addMenuSeparator();
    ...
    return menu;
  }
});
Command button strips

JCommandButtonStrip

HORIZONTAL

VERTICAL
Command button panels

JCommandButtonPanel

ROW_FILL

COLUMN_FILL
Rich popups

```java
JCommandButton button = ...;
button.setPopupCallback(new PopupPanelCallback() {
    public JPopupPanel getPopupPanel(
        JCommandButton commandButton) {
        JCommandButtonPanel panel =
            new JCommandButtonPanel(...);
        panel.addButtonGroup(...);
        panel.addButtonToGroup(...);
        ...
        JCommandPopupMenu menu =
            new JCommandPopupMenu(panel,
                maxColumns, maxRows);
        ...
        return menu;
    }
});
```
Bands / tasks demo
Ribbon bands

AbstractRibbonBand
  • JRibbonBand
  • JFlowRibbonBand
Flow ribbon bands

JFlowRibbonBand

Adding content:

addFlowComponent(JComponent)
Regular ribbon bands

JRibbonBand

Can host:

> command buttons
> wrapped core / 3rd party components
> ribbon galleries
Hosting command buttons

```java
JRibbonBand clipboardBand = new JRibbonBand(
    "Clipboard", ...);

JCommandButton pasteButton = new JCommandButton(
    "Paste", pasteIcon);
pasteButton.setCommandButtonKind(
    CommandButtonKind.ACTION_AND_POPUP_MAIN_ACTION);
pasteButton.setPopupCallback(...);
clipboardBand.addCommandButton(pasteButton,
    RibbonElementPriority.TOP);

...

clipboardBand.addCommandButton(cutButton,
    RibbonElementPriority.MEDIUM);
```
Hosting core and 3\textsuperscript{rd} party controls

- Simple wrapping
- Wrapping with icon and caption
- Wrapped components spanning multiple rows
Ribbon galleries

Hosted gallery

Expanded gallery shown in a popup

Expanded gallery scrolled down

Hosted gallery scrolled down
Groups in ribbon bands

- Two unnamed groups with command buttons
- Three unnamed groups with command buttons
- Two named groups with wrapped core components
Ribbon tasks

```java
new RibbonTask(title,
    AbstractRibbonBand... bands)

JRibbon.addTask(RibbonTask)
```
Contextual task groups

Selected contextual ribbon task

Contextual ribbon task

Contextual ribbon task group

Contextual ribbon task group
Menu button / taskbar demo
Application menu button
Application menu

```java
JRibbon.setApplicationMenuMenu(RibbonApplicationMenu)
```
Taskbar panel

JRibbon.add(TaskbarComponent(Component))
Tooltips / key tips demo
Rich tooltips

Tooltip for the action area

Tooltip for the popup area

Displayed below the ribbon
Rich tooltips

Tooltip for wrapped core component

Multiple paragraphs

Tooltip for taskbar component

Displayed below the taskbar
Rich tooltips

Tooltip for application menu button

Footer section and images
Key tips

Press Alt or F10 for the top chain

Showing key tips of the selected task

Showing key tips of the selected button
Resizing / minimized demo
Ribbon resizing
Ribbon resizing, collapsing and scrolling

Scrolling tasks

Scrolling bands

Expanding the collapsed ribbon band
Minimized mode

- User double-clicking a task button
- User pressing Ctrl+F1
- User clicking a task button
Big features recap

> Ribbon regular and flow bands
> Ribbon galleries
> Ribbon tasks and contextual task groups
> Application menu button and taskbar panel
> Resizing, collapsing and scrolling
> Rich tooltips and key tips
> Minimized mode
Under the hood

> Visual consistency across LAFs
  > org.jvnet.flamingo.common.ui.BasicCommandButtonUI.paint
  > ButtonBackground

> Key tips
  > org.jvnet.flamingo.ribbon.JRibbonFrame.KeyTipLayer

> Placing content in the title pane
  > org.jvnet.substance.flamingo.ribbon.ui.SubstanceRibbonFrame.TitlePane

> More in the code…
What is missing - small

> Hostimg small buttons in galleries
> Resizing popup panels
> Navigating with keyboard (arrows, tabs)
> Dragging controls to the taskbar panel
> Hosting taskbar panel below the ribbon
What is missing - medium

> Right-to-left support
> High DPI support
Potentially useful

- XML-driven ribbon content
- SWT version
- World domination
Try it now!

http://flamingo.dev.java.net
Thank You

Kirill Grouchnikov
kirillcool@yahoo.com

http://flamingo.dev.java.net
http://www.pushing-pixels.org