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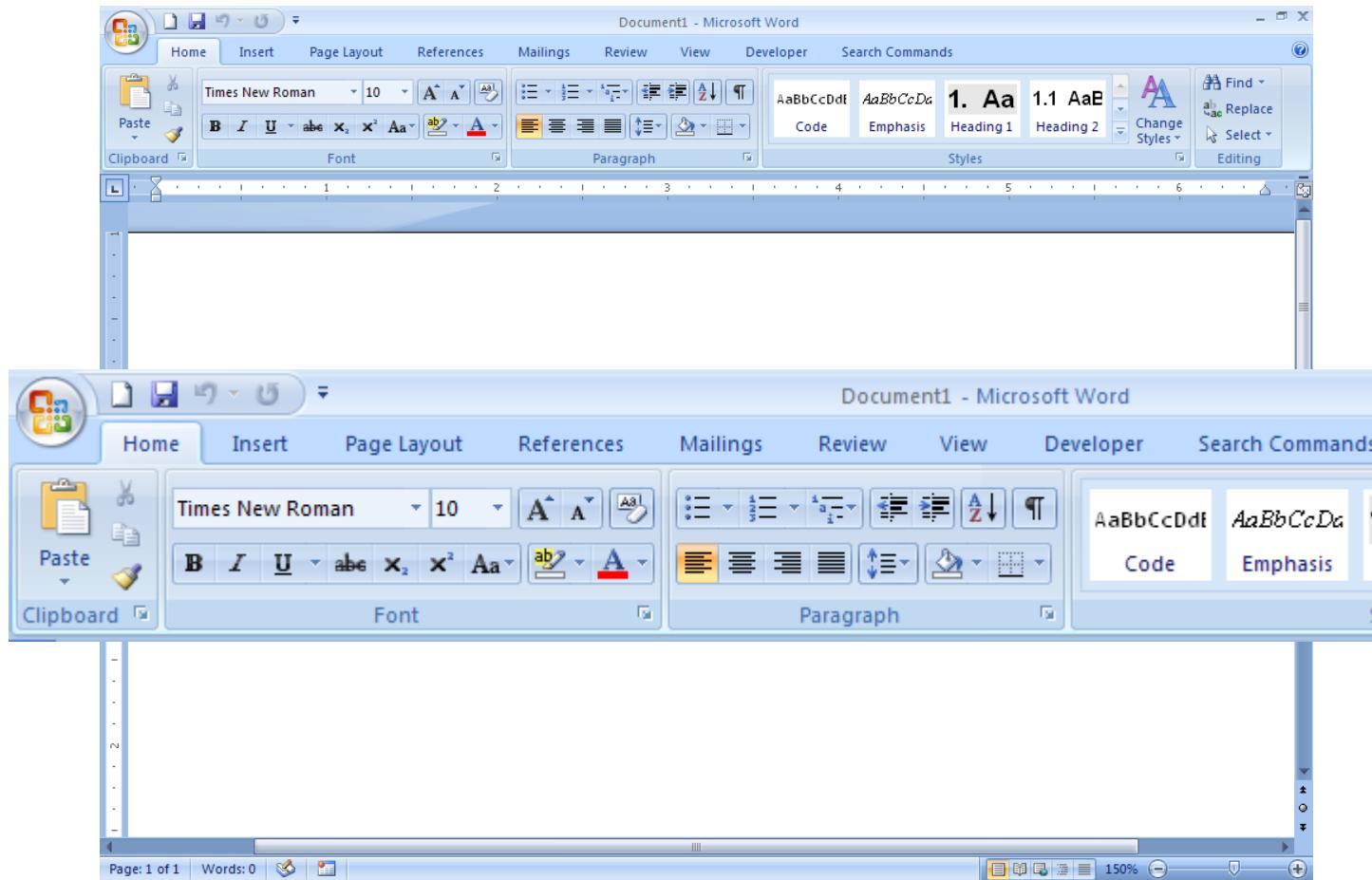
Flamingo: Bringing the Ribbon Component to Swing

Kirill Grouchnikov
Amdocs

Agenda

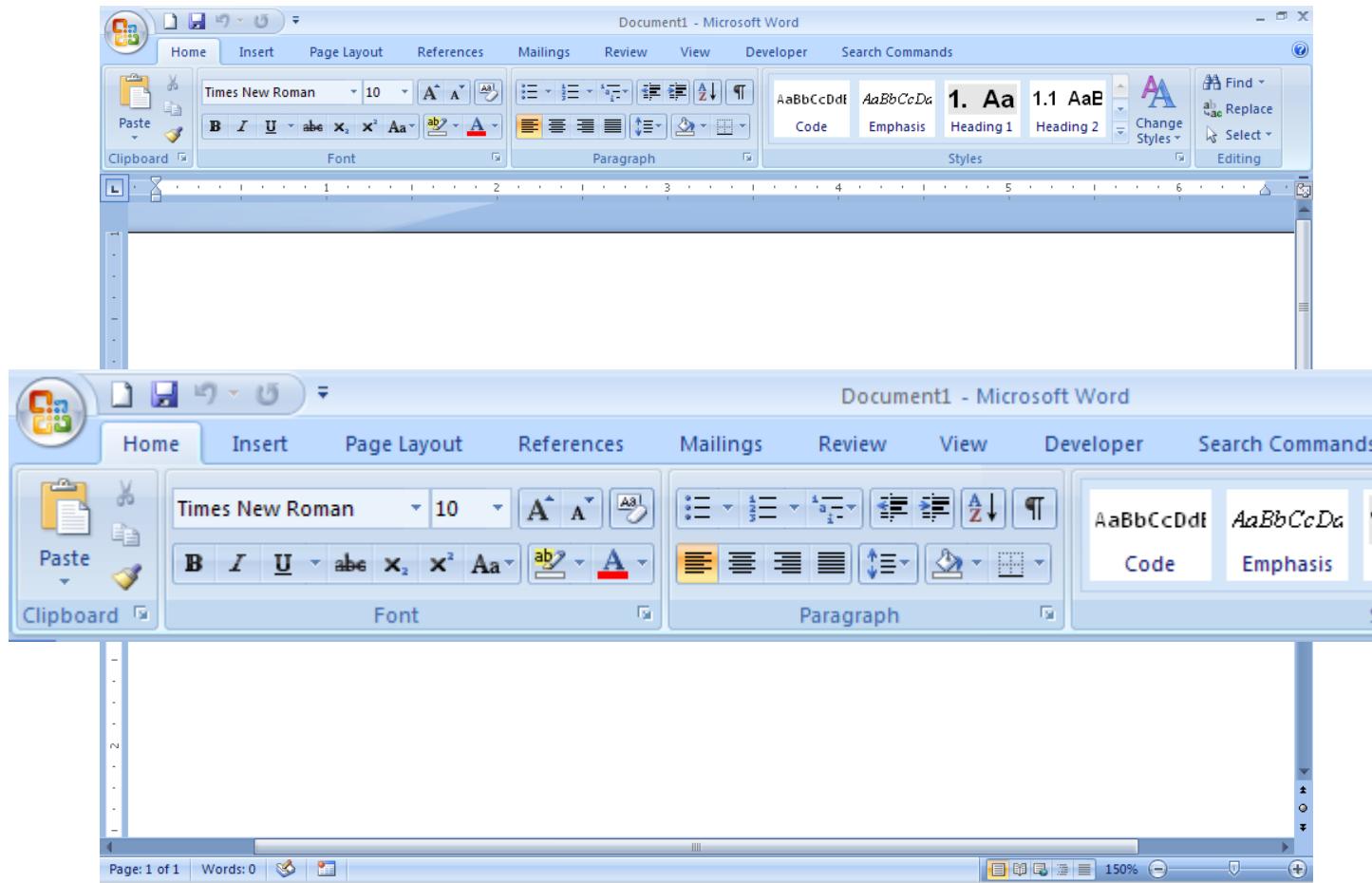
- > What is a ribbon?
- > Swing ribbon implementation
- > Swing ribbon structure
 - Basic terminology
 - Command buttons
 - Ribbon bands
 - Ribbon tasks
 - Miscellaneous
- > Where to next?

What is a ribbon?



Ribbon demo

<http://blogs.msdn.com/jensenh>



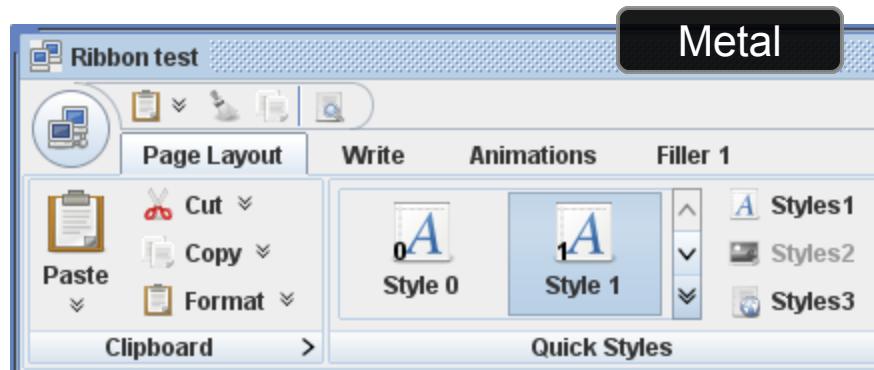
Ribbon availability

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

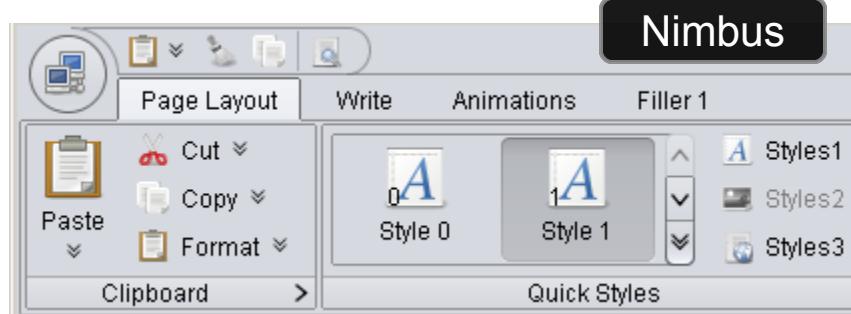
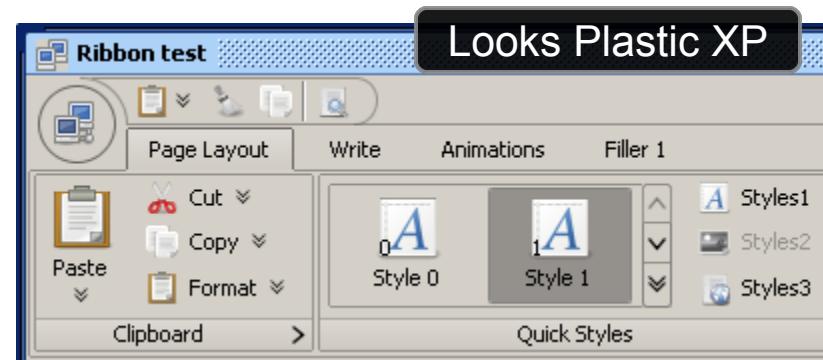


- > Microsoft – WPF 3.5, Windows 7 (scenic ribbon)

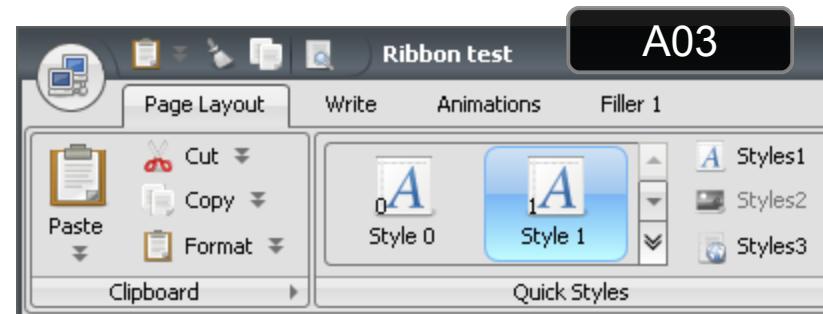
Ribbon for Swing applications



Looks Plastic XP



Nimbus



A03

Ribbon for Swing applications

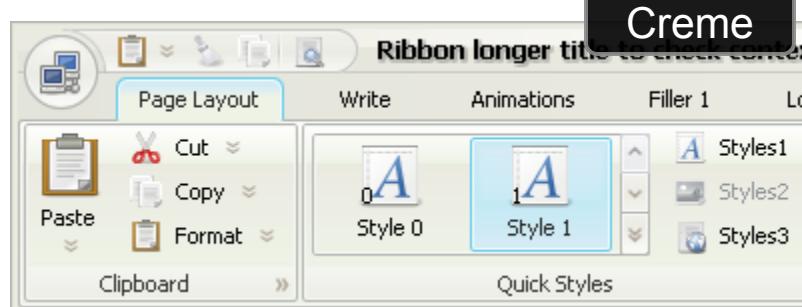
Office Blue 2007



Office Silver 2007



Creme



Nebula



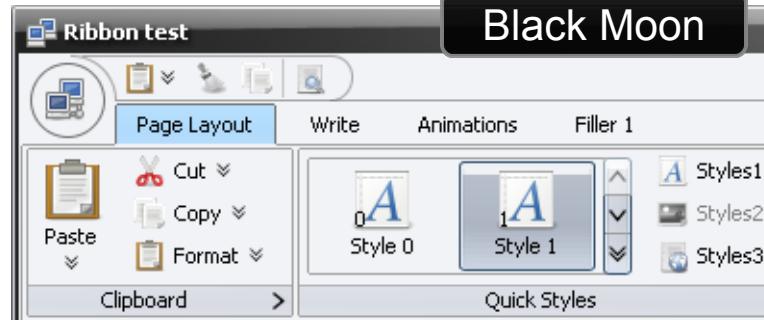
Raven Graphite



Autumn



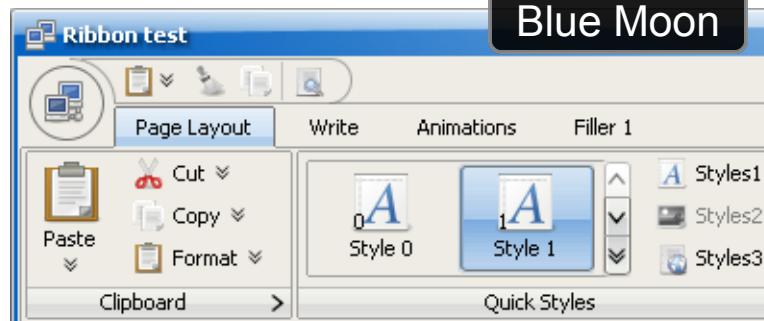
Ribbon for Swing applications



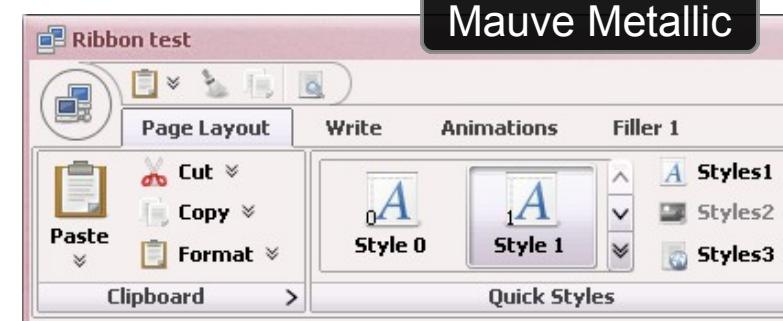
Black Moon



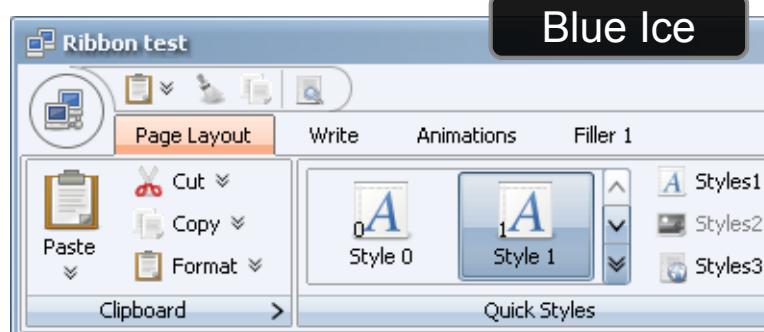
Orange Metallic



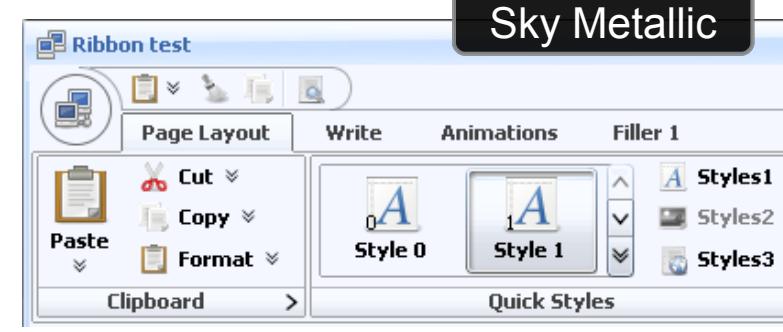
Blue Moon



Mauve Metallic



Blue Ice



Sky Metallic

Ribbon for Swing applications

[http://**flamingo**.dev.java.net](http://flamingo.dev.java.net)

Basic ribbon terminology

Application menu button

Taskbar panel

Ribbon task

Contextual ribbon task group

Contextual ribbon task

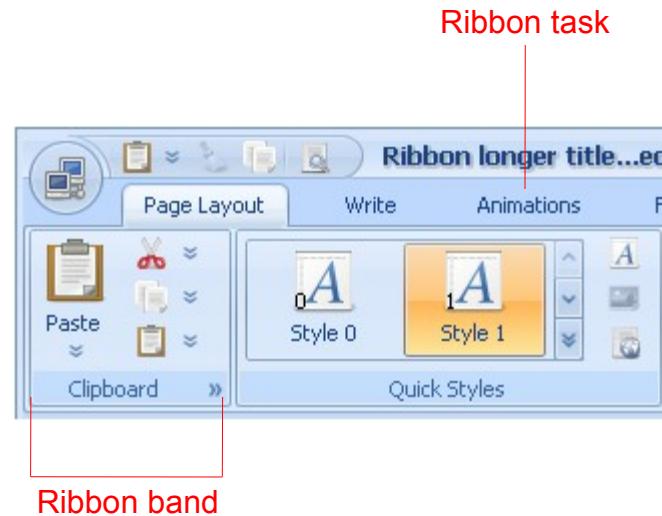
Help button



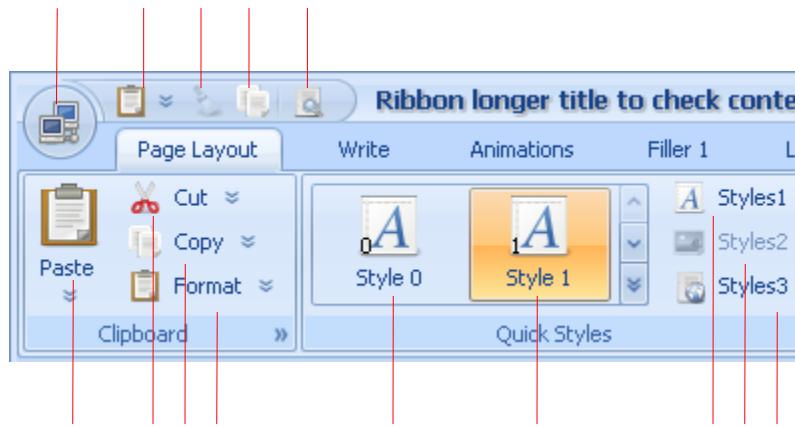
Basic hierarchy

- > Ribbon
 - Contains tasks
 - Containing bands

- > JRibbon
 - RibbonTask
 - AbstractRibbonBand



Basic building block



Command buttons

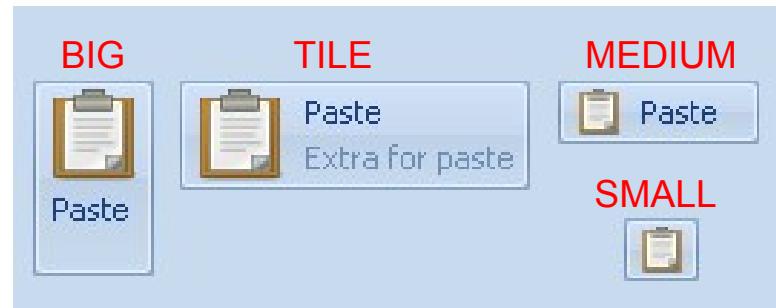
Command buttons

- > AbstractCommandButton
 - JCommandButton
 - JCommandToggleButton

Command buttons demo

Display state

```
AbstractCommandButton.setDisplayState(  
    CommandButtonDisplayStyle)
```



Action and popup areas

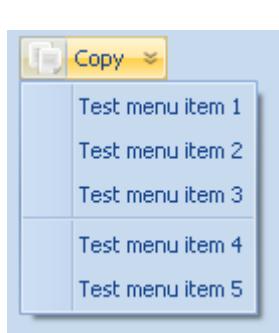
```
JCommandButton.setCommandButtonKind(CommandButtonKind)
```



```
ActionButtonModel AbstractCommandButton.getActionModel()  
PopupMenuModel JCommandButton.getPopupMenu()
```

Simple popups

```
JCommandButton.setPopupCallback(PopupPanelCallback)
```



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

Command button strips

JCommandButtonStrip

HORIZONTAL



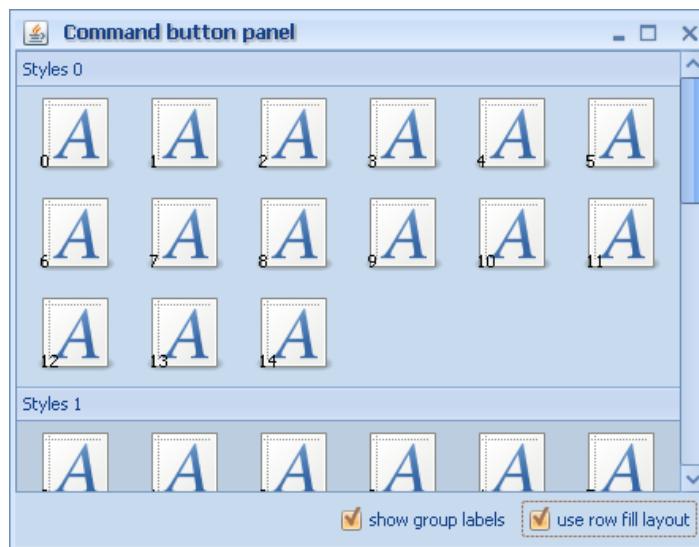
VERTICAL



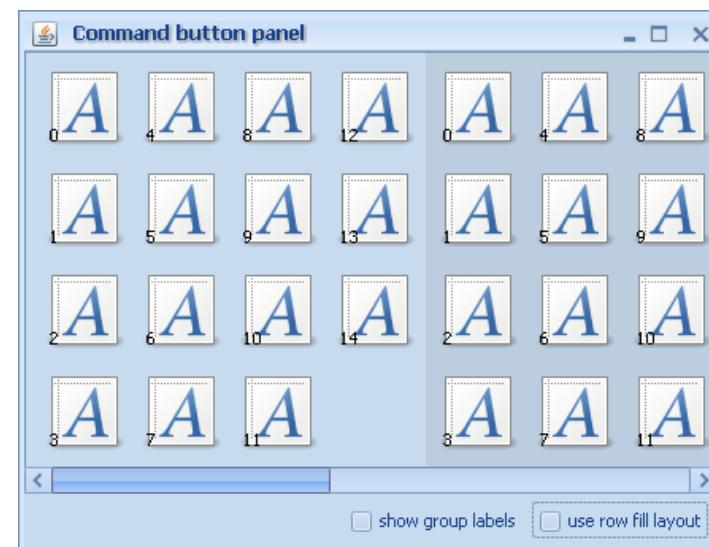
Command button panels

JCommandButtonPanel

ROW_FILL



COLUMN_FILL



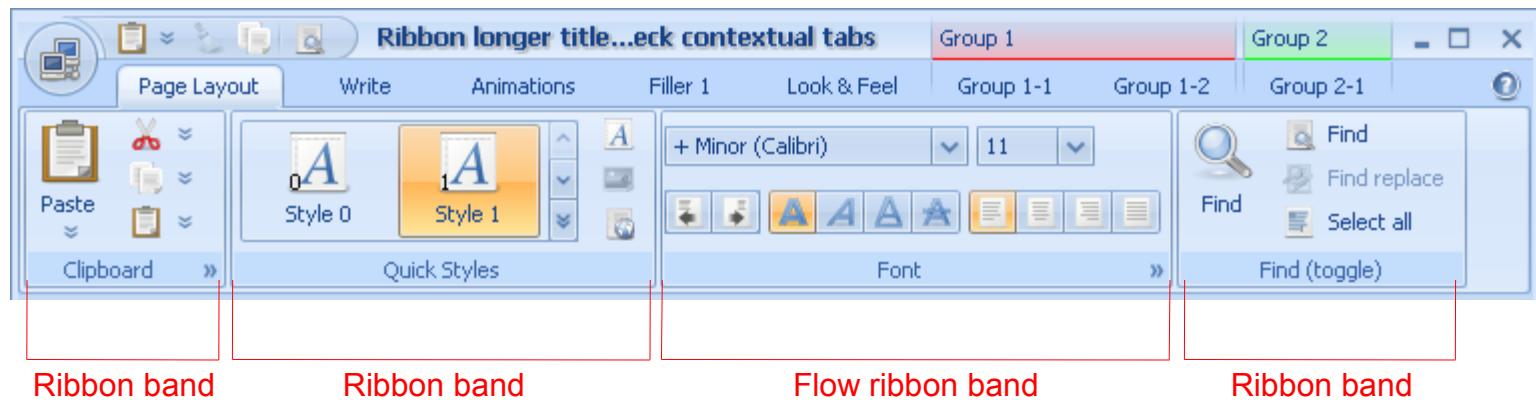
Rich popups



```
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)
```



Two row flowing content



Three row flowing content



Collapsed

Regular ribbon bands

JRibbonBand

Can host:

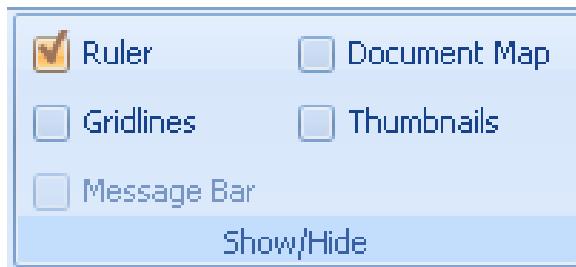
- > command buttons
- > wrapped core / 3rd party components
- > ribbon galleries

Hosting command buttons



```
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);
```

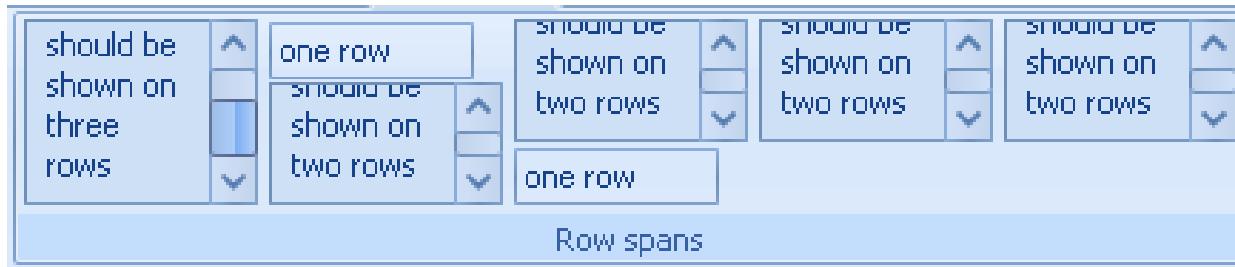
Hosting core and 3rd party controls



Simple wrapping



Wrapping with icon and caption



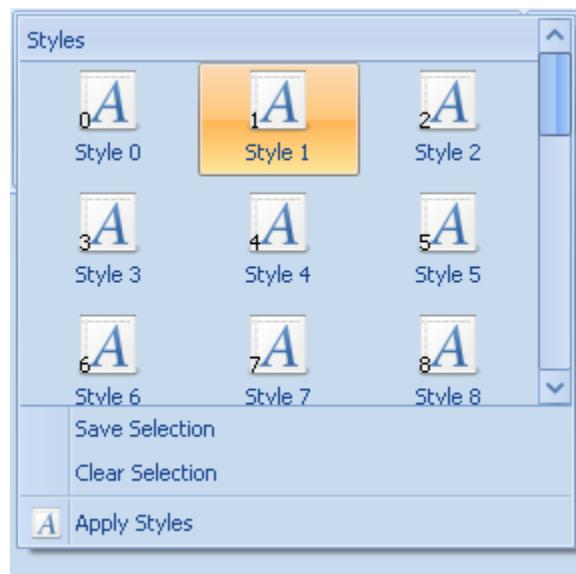
Wrapped components spanning multiple rows

Ribbon galleries

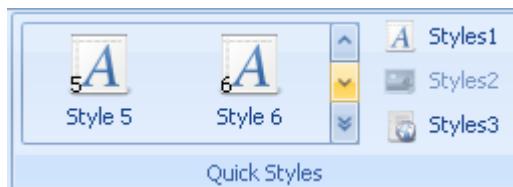
Hosted gallery



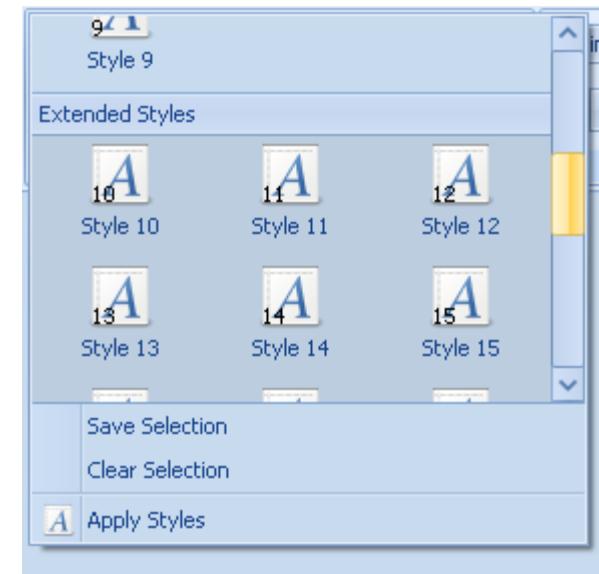
Expanded gallery
shown in a popup



Hosted gallery
scrolled down

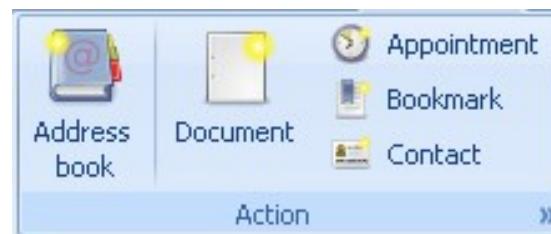


Expanded gallery
scrolled down



Groups in ribbon bands

Two unnamed groups with command buttons



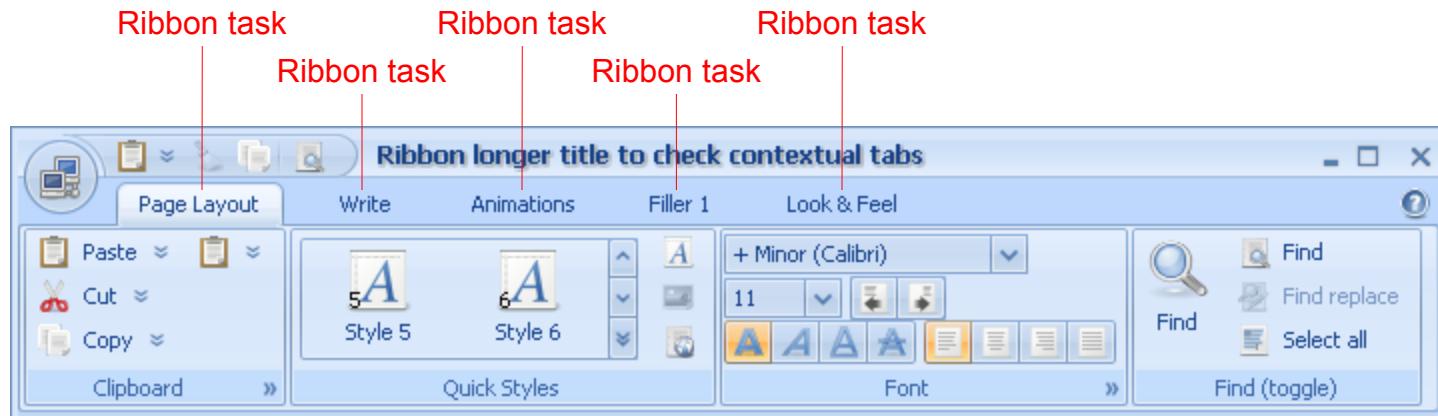
Three unnamed groups with command buttons



Two named groups with wrapped core components



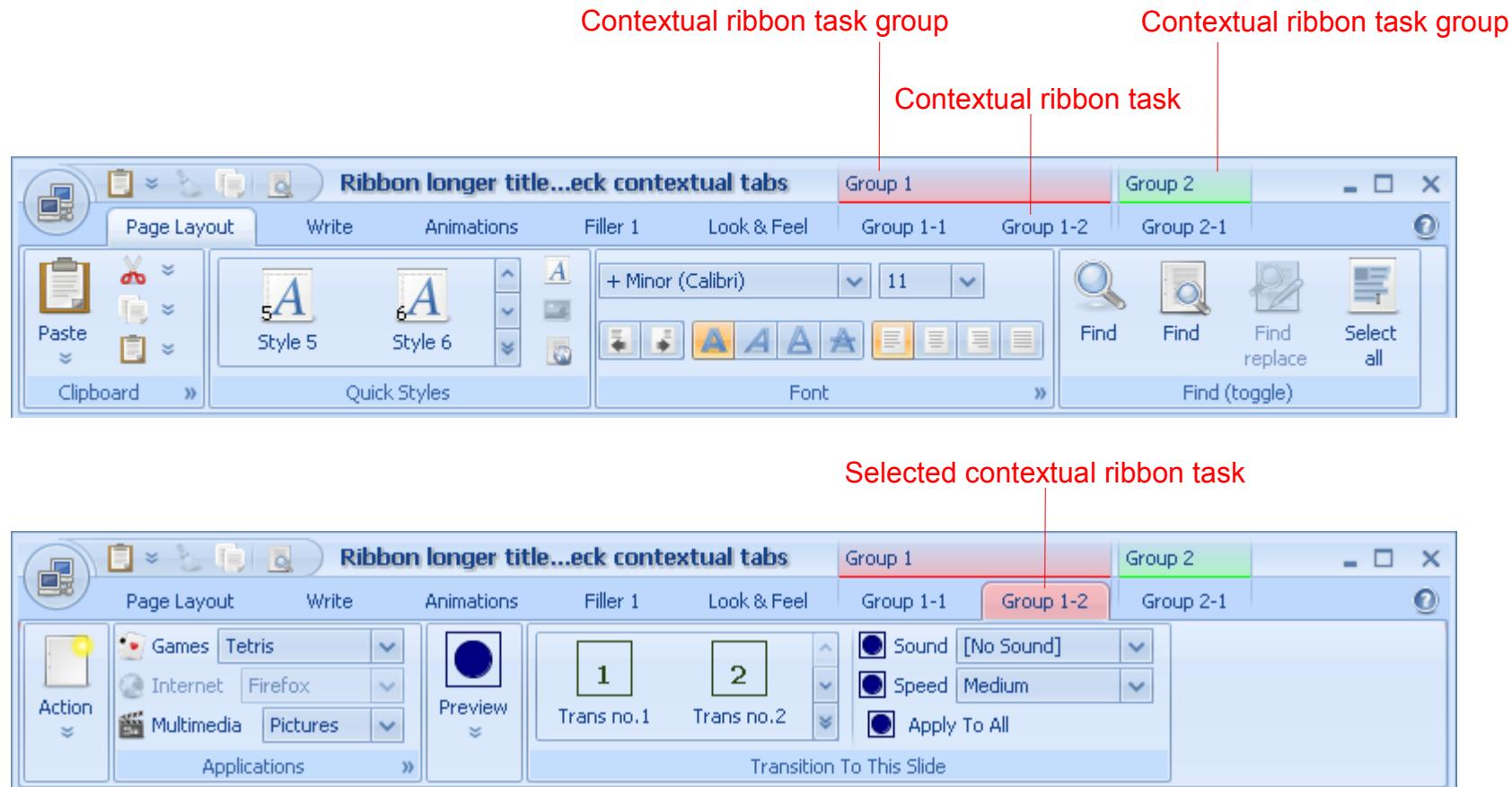
Ribbon tasks



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

JRibbon.addTask(RibbonTask)

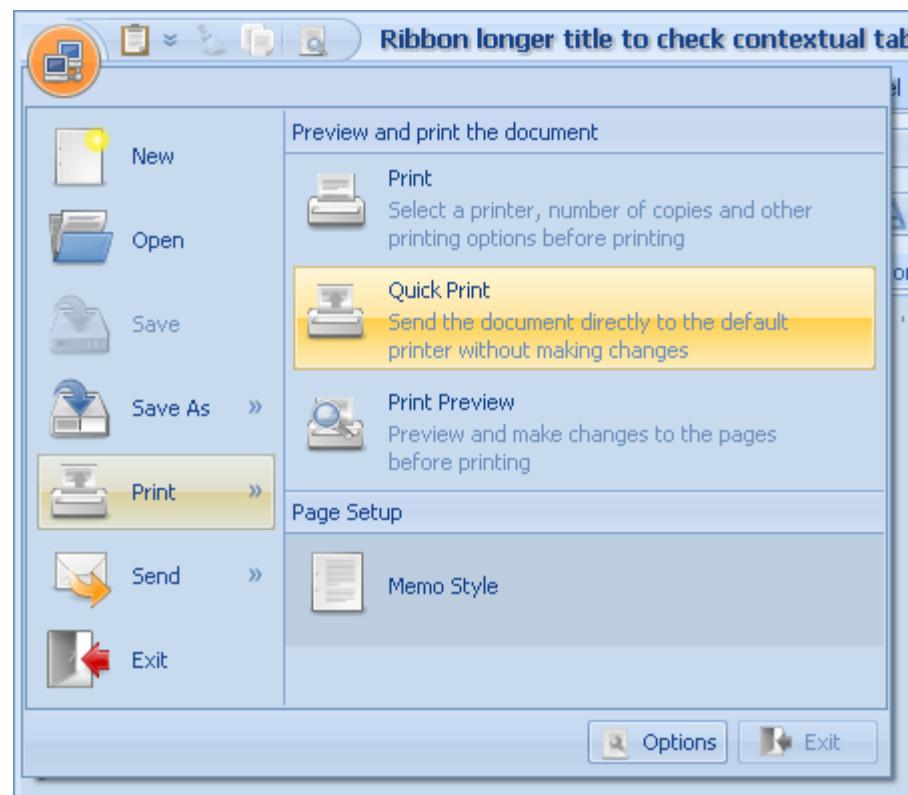
Contextual task groups



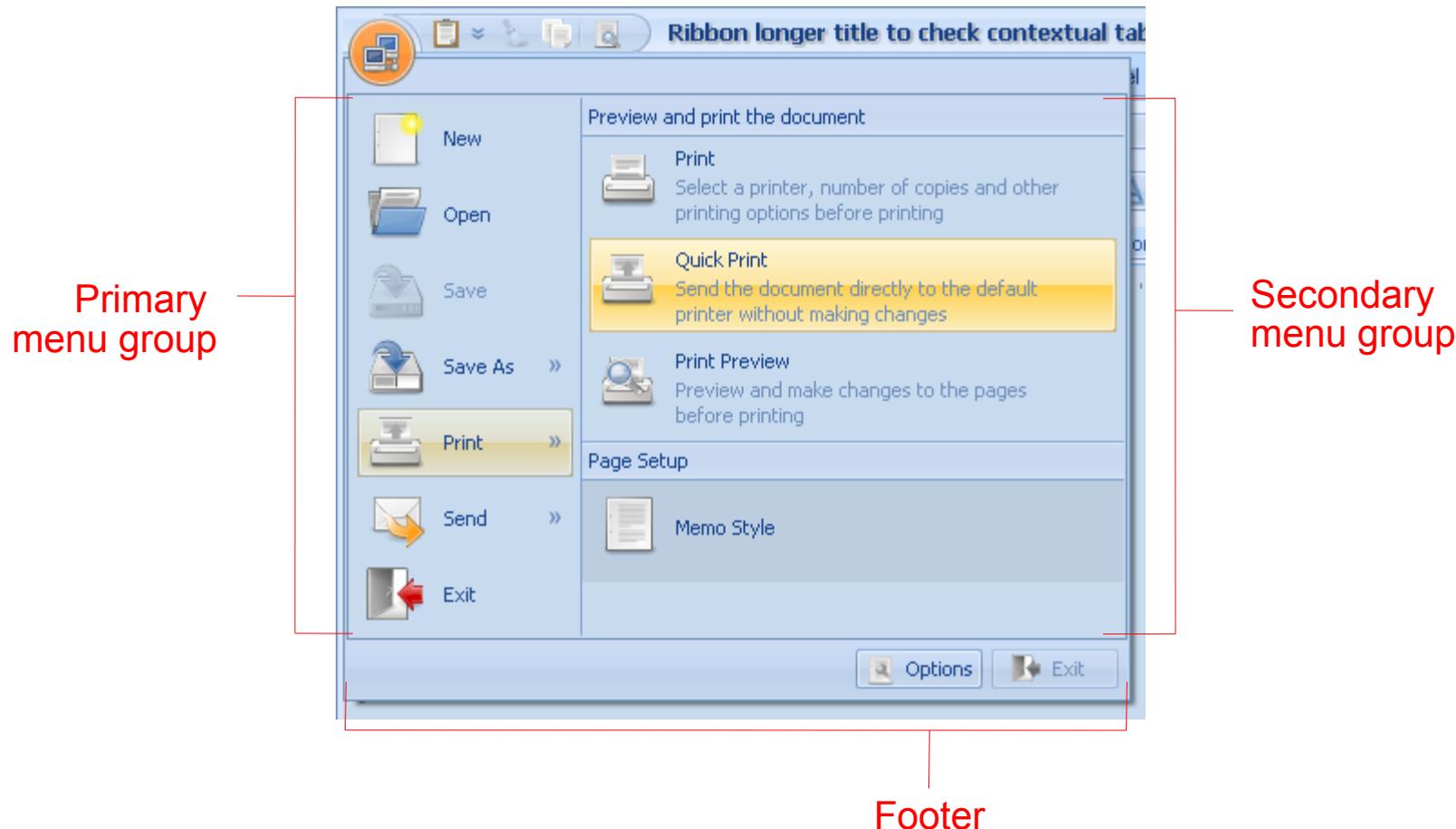
Menu button / taskbar demo

Application menu button

Application menu button

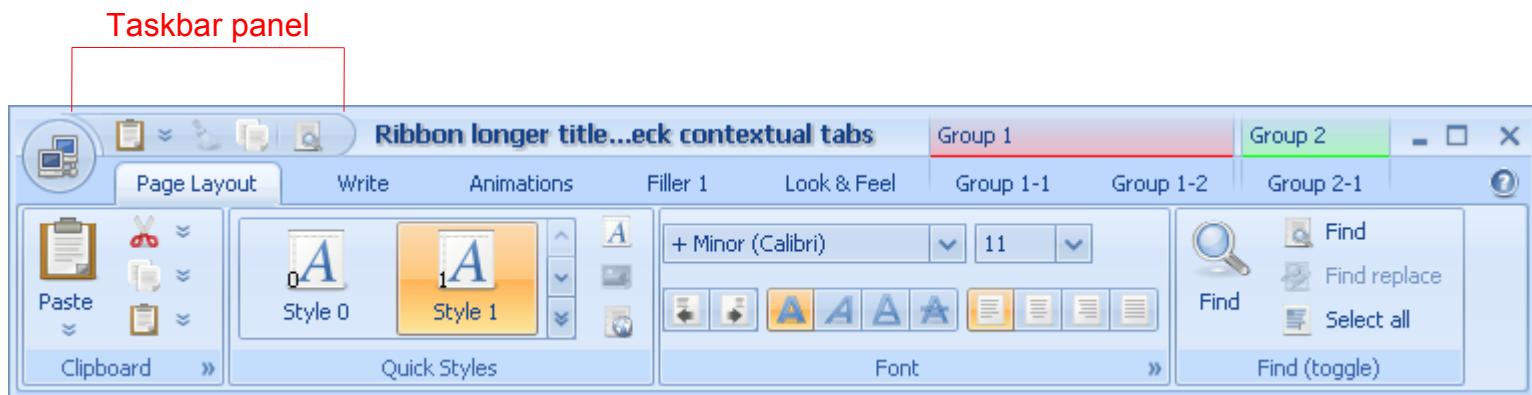


Application menu



```
JRibbon.setApplicationMenu(RibbonApplicationMenu)
```

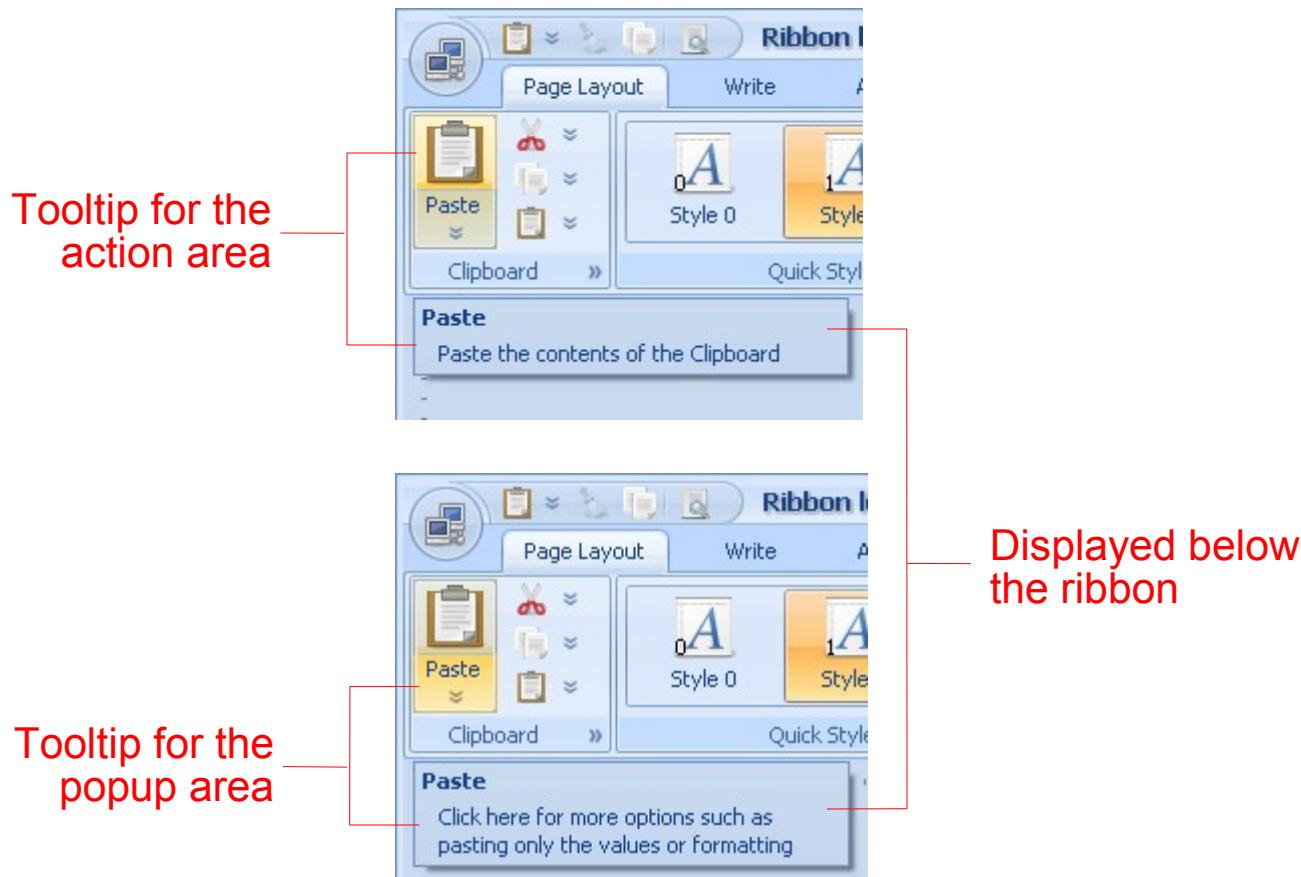
Taskbar panel



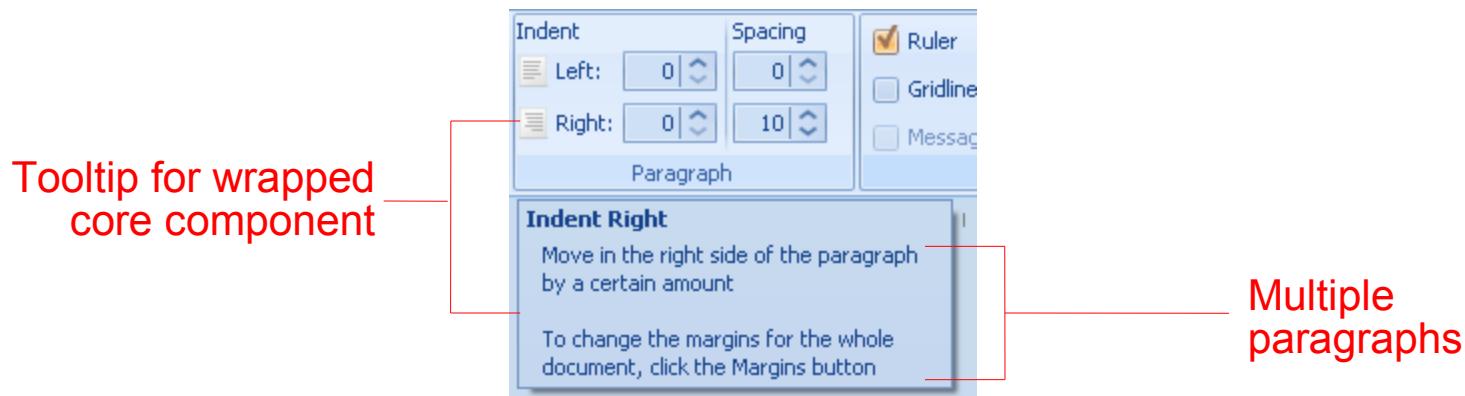
```
JRibbon.addTaskbarComponent(Component)
```

Tooltips / key tips demo

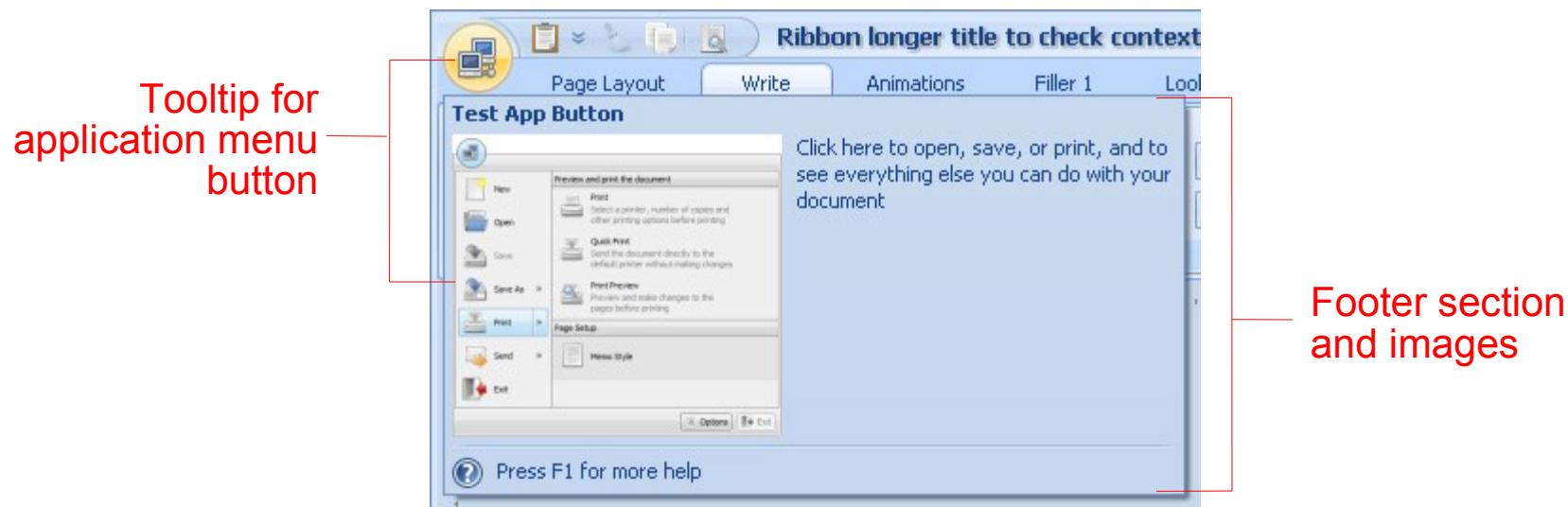
Rich tooltips



Rich tooltips



Rich tooltips



Key tips

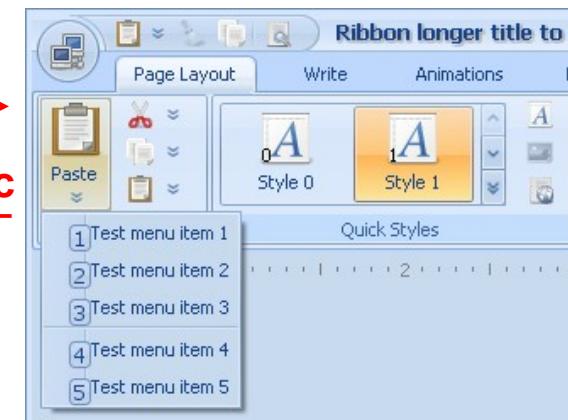
Press Alt or F10 for the top chain



Showing key tips of the selected task

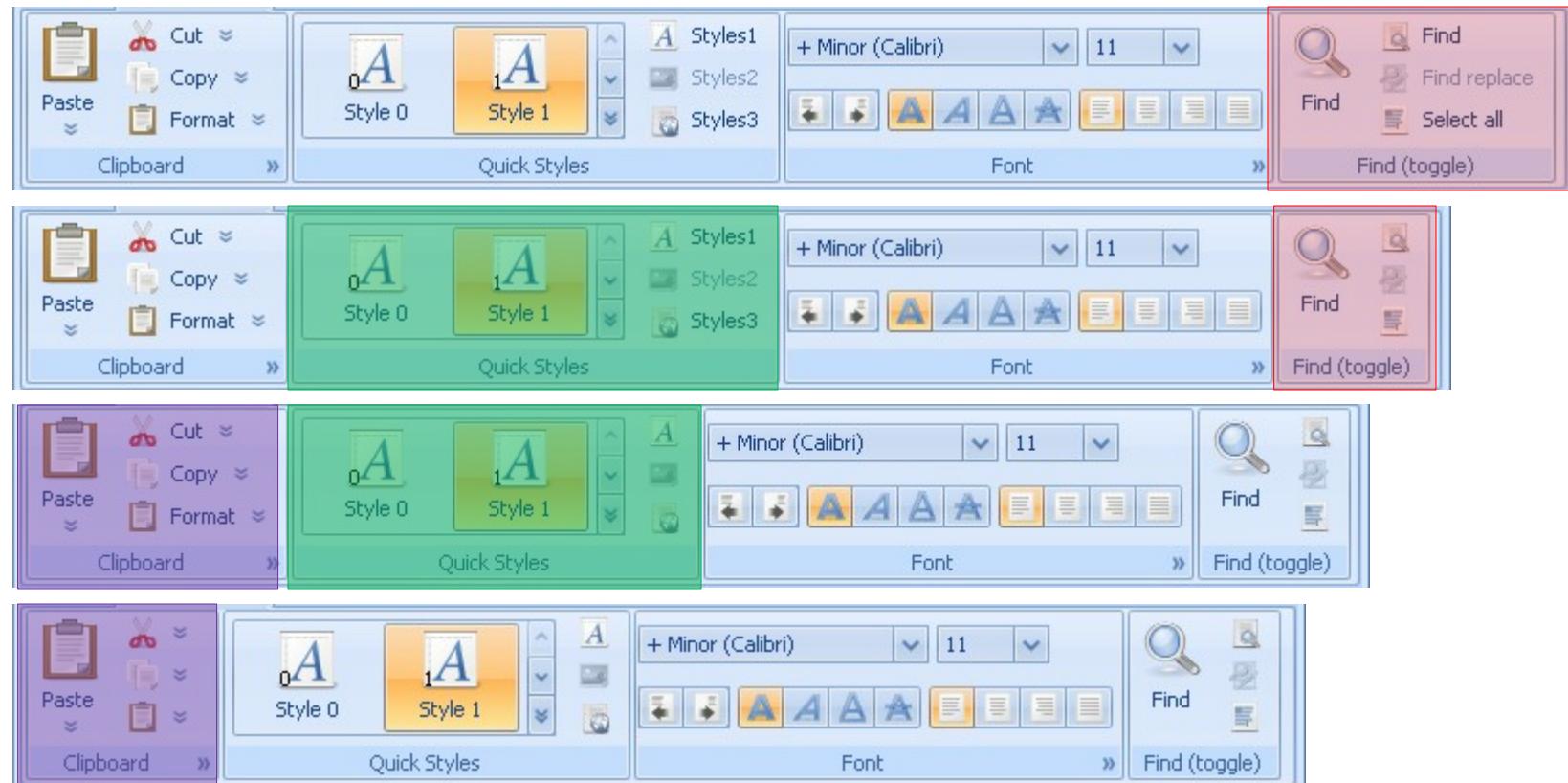


Showing key tips of the selected button



Resizing / minimized demo

Ribbon resizing

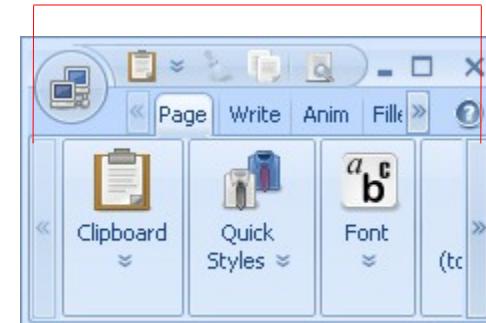


Ribbon resizing, collapsing and scrolling

Scrolling tasks

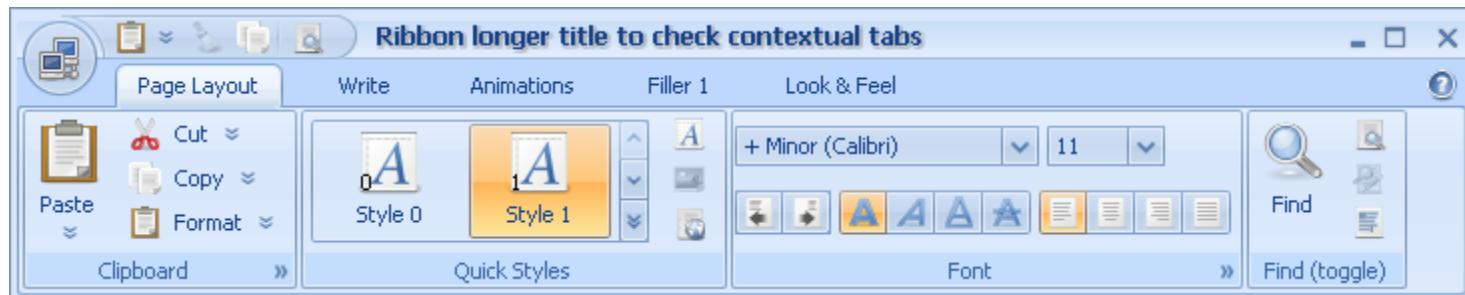


Scrolling bands



Expanding the
collapsed ribbon
band

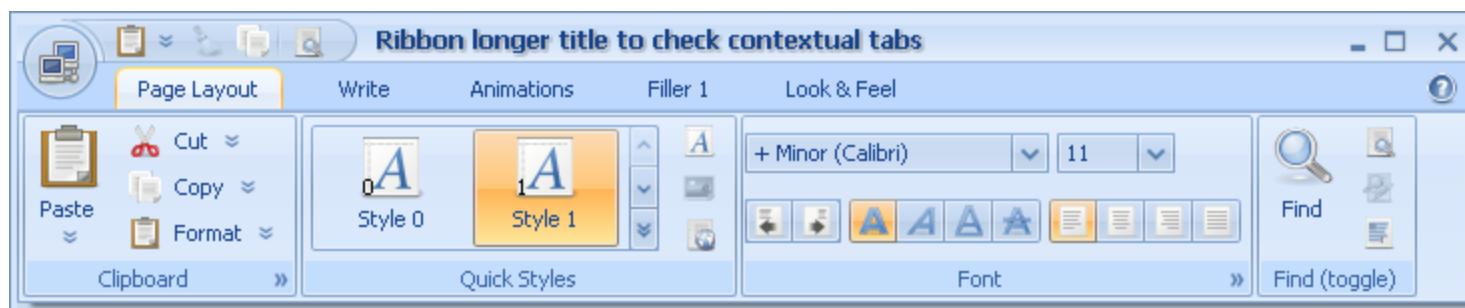
Minimized mode



JRibbon.setMinimized(true)
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.SubstanceRibbonF
rameTitlePane
- > More in the code...

What is missing - small

- > Hosting 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>



JavaOneSM

Thank You

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<http://www.pushing-pixels.org>

