

Customizing RCP UI using the Presentations API

Sébastien Moran

Eclipse Summit Europe 2009



Agenda

Context

RCP Customization & Presentations API

Demo

UI Tips & Tricks

Conclusion

Questions

Sierra Wireless

- Formerly known as “Anyware Technologies”
- Third quarter of 2009 : Sierra Wireless - Solutions & Services

Four product categories...



...serving a diversified set of segments in mobile computing and machine-to-machine

Espresso

Discovery & Learn tool

- Fast configuration of modems
- Easy access to basic features

User friendly

- Intuitive graphical user interface
- One click shows both ATCommand & its result

Features

- SMS & Voice call configuration
- AT Console View
- Photographic help system
- ...

Initial work

“Classical” RCP Application

OS native look & feel

Eclipse visual flavor

Several Perspectives

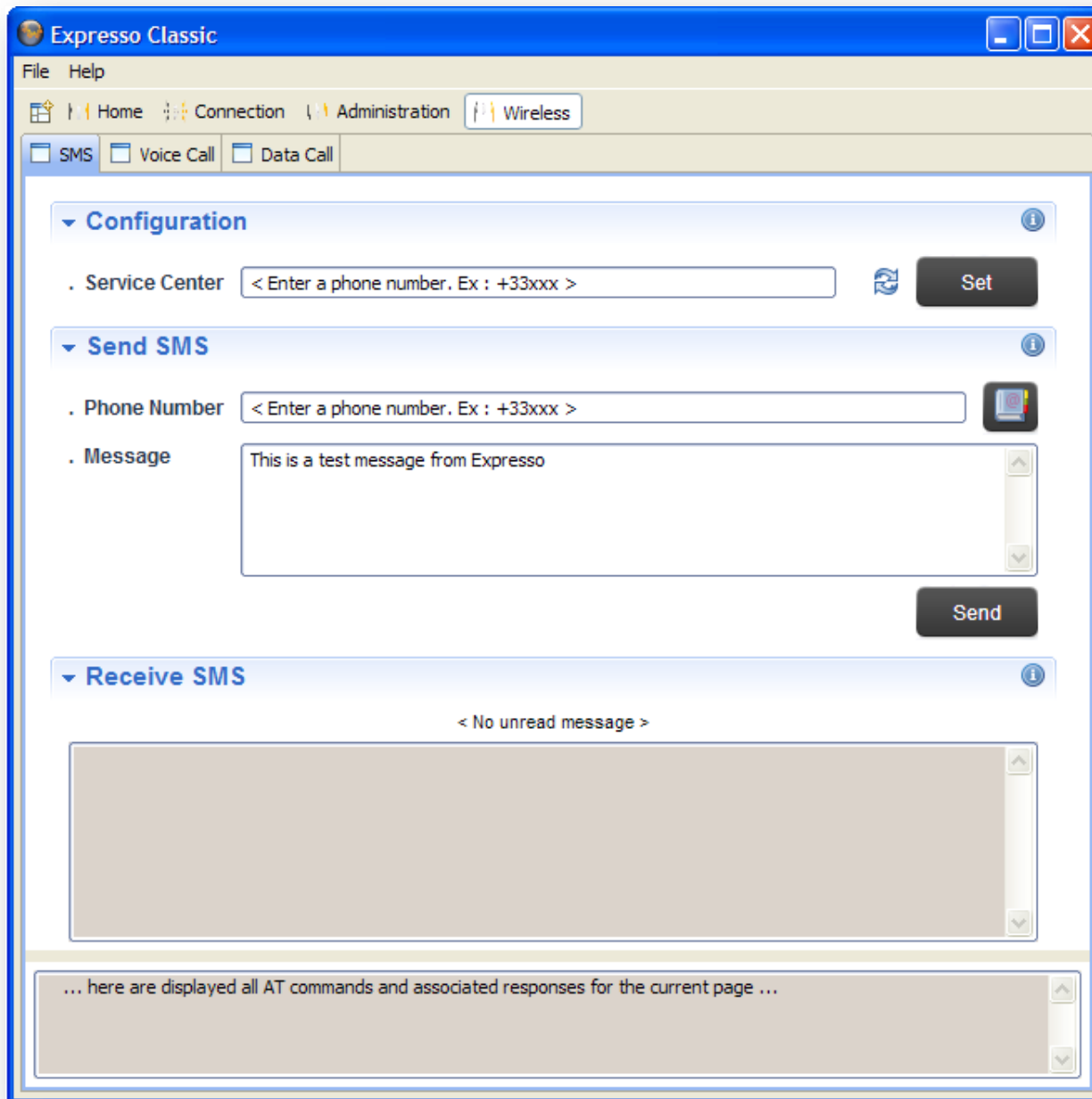
One per discovery thematic

Aggregates several views

Several Views

One per specific discovery feature

Can be used in several perspectives

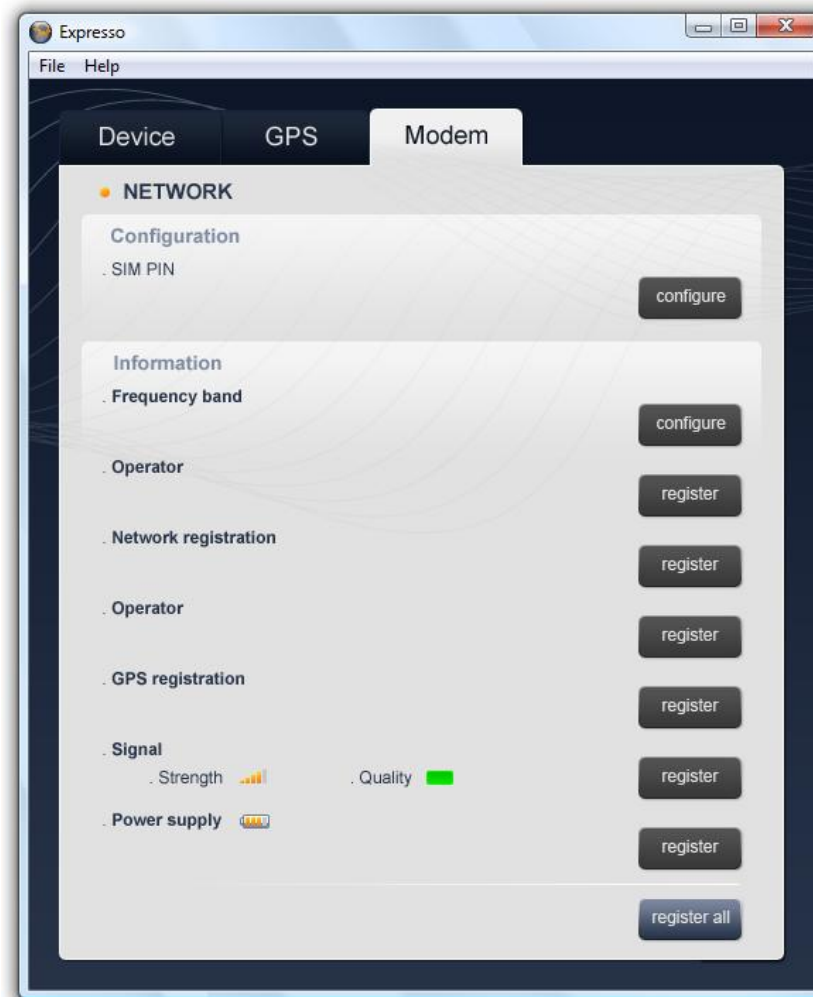


Product Manager remarks

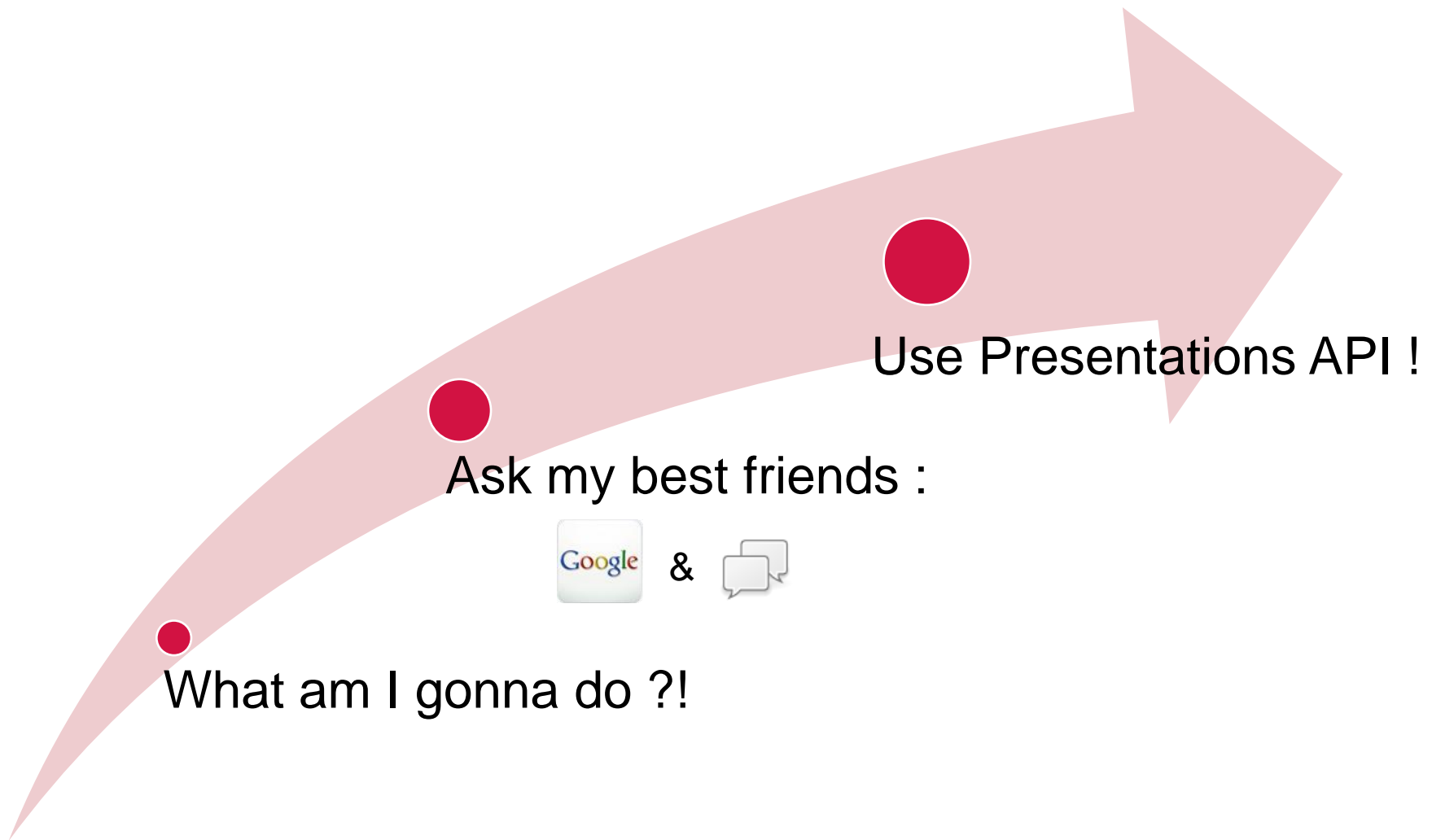
“Great ! It works like a charm.

But ... it really looks like Eclipse... We have to
add some UI love !”

Graphical Designer Mockup



Developer thoughts



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Why ?

Over heard

“[..] It really looks like Eclipse [..]”

“Do I need Eclipse to use your application ?”

Eclipse Look & Feel ?

The way editors and views are shown.

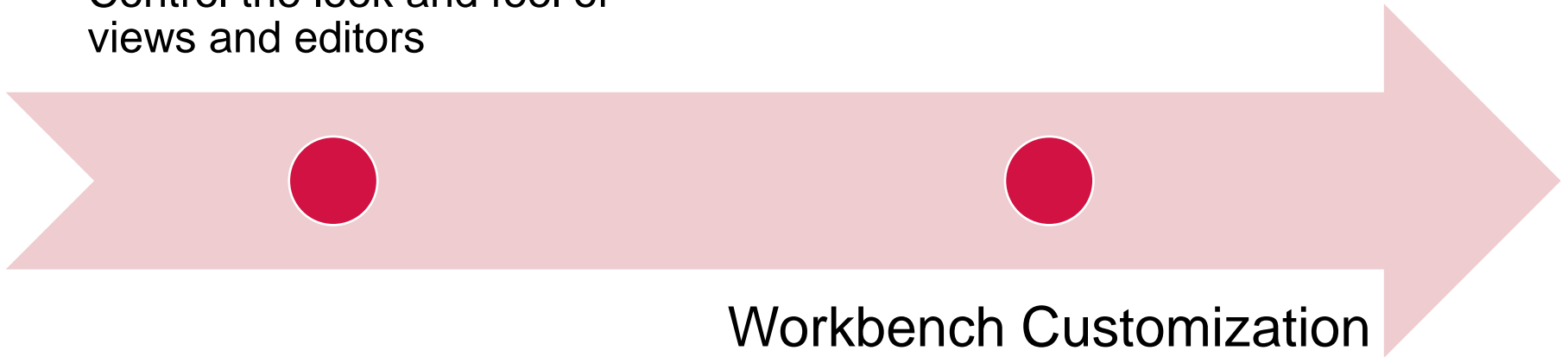
Custom tabs Look & Feel

Perspectives switcher

If you don't like it – change it !

Presentations API

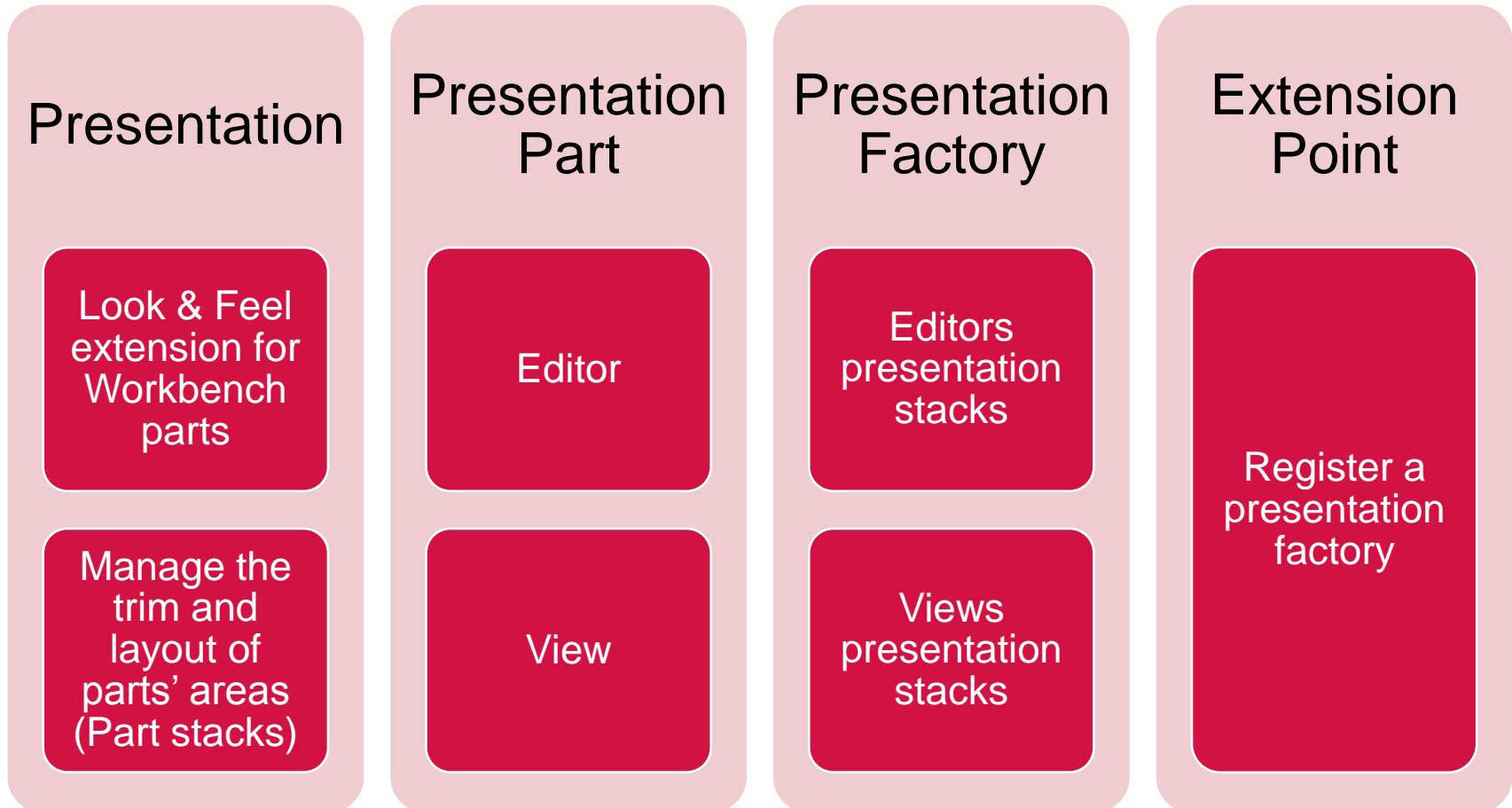
- Control the look and feel of views and editors



Workbench Customization

- Customize the content area
- Customize the window's shape

Presentations API Concepts



Presentation Responsibilities

Create part stacks' trim

Tabs

Title

System menu

Part management buttons

Borders

Control layout & visibility

Parts

Toolbars

View menus

Drag & Drop regions

More details

Eclipse Con 2005 presentation slides

- eclipsecon2005-presentationsAPI.ppt

Retrieve them from eclipse CVS repository

- org.eclipse.ui.examples.presentation

Workbench customization

Next step : change the application window's layout

- WorkbenchWindowAdvisor participates in window creation
- Control things in the Workbench that regular plug-ins can't
- Perfect Presentations API's complement
- Adapt Workbench default layout to your needs

Espresso Customizations

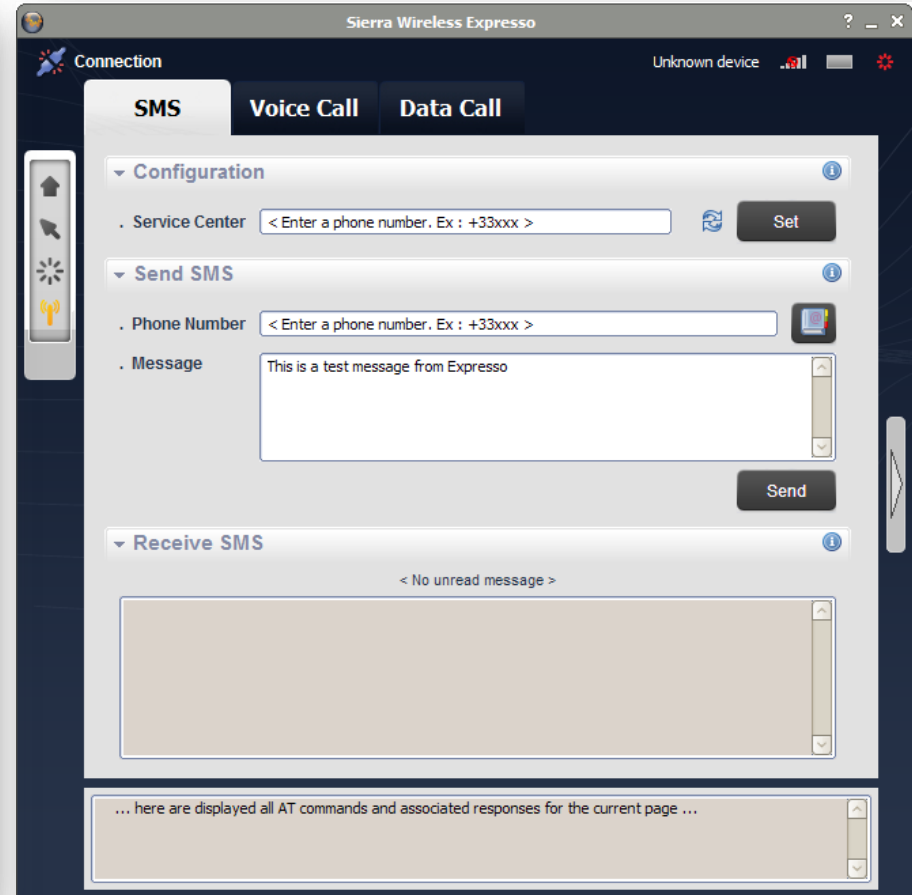
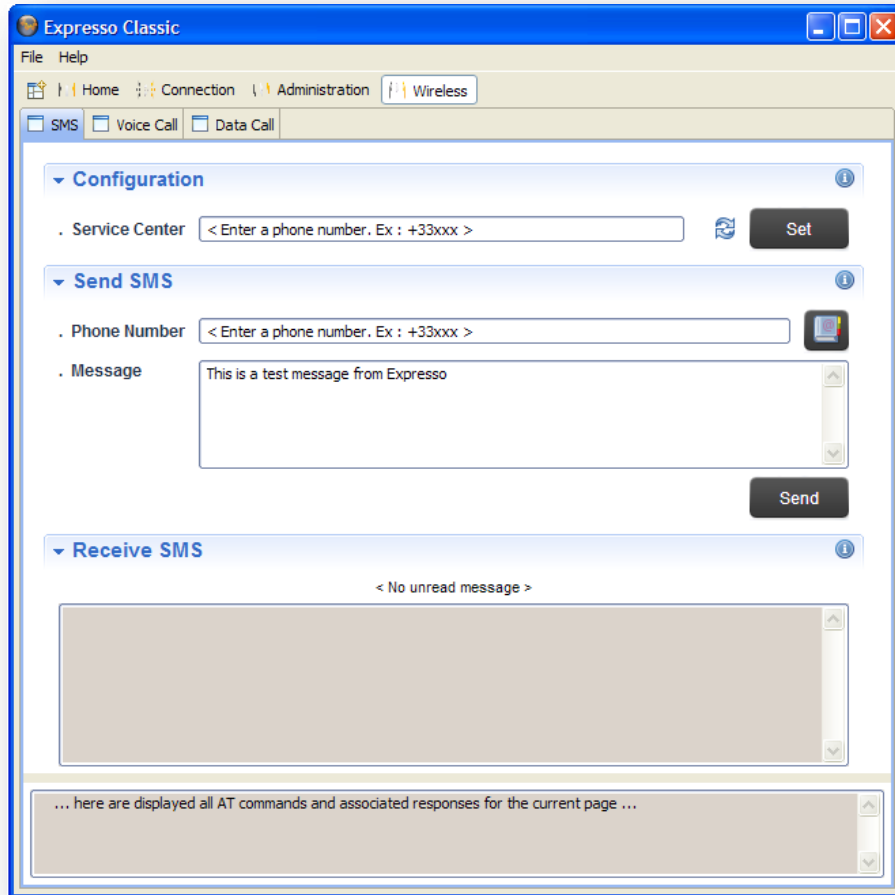
Presentations API

- Customize Parts' stacks display

Workbench customization

- Specific window's shape
- Specific workbench layout
- Specific perspective switcher

Espresso Customizations



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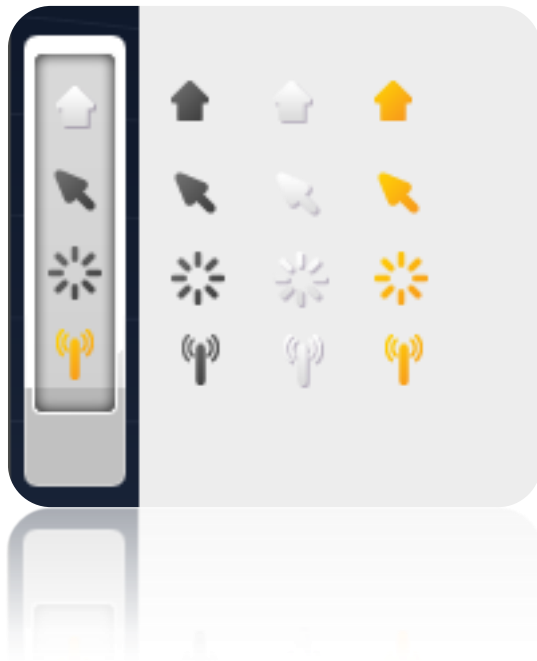
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Three states widgets

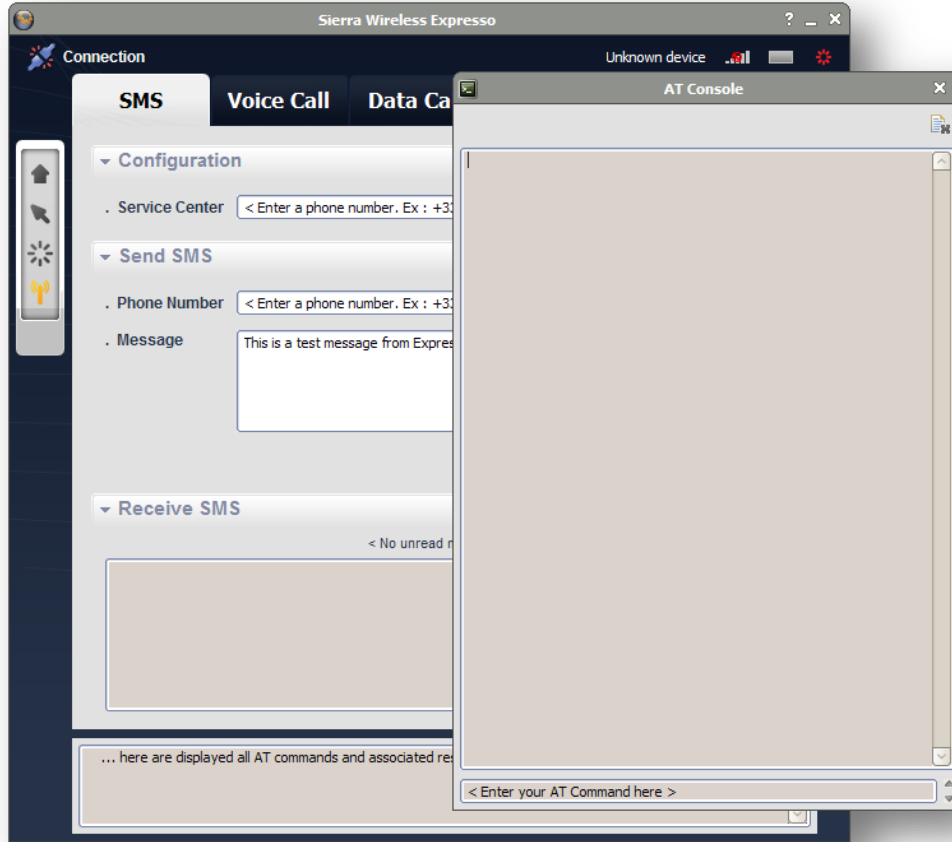


Single image containing all widget's states

- Normal
- Hover
- Clicked & Selected

Specific image's region is paint depending on the state

Shells decorations



Custom dialog without trim

- `SWT.NO_TRIM`

Create SWT Regions to define the Shell's shape

- `org.eclipse.mylyn.commons.ui`
- `AbstractNotificationPopup.java`

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First of all: You NEED a Graphic Designer ☺

StackPresentation implementation is the most tricky part

- Start from the examples
 - org.eclipse.ui.examples.presentation
 - org.eclipse.ui.presentations.r21

SWT Graphics knowledge

- Mandatory for Shell's shape customization & custom widgets
- Eclipse article
 - http://www.eclipse.org/articles/Article-SWT-graphics/SWT_graphics.html

Eclipse's future of UI customization : e4

- Modeled Workbench
- CSS styling

Questions ?

Sébastien Moran

SMoran@sierrawireless.com

