



Properties Sidebar: Make editing much easier

Yang Jin Fang, Presentation Dev Lead Ma Li, Symphony UX Designer Wang Qiang, Symphony UX Designer

IBM

Agenda



What's Symphony

Symphony UI overview

How does properties sidebar comes out?

What's in properties sidebar?

Key technical points

Properties sidebar in the future





What's Symphony



- A set of office productivity applications
 - Create, edit, share documents, spreadsheets, and presentations
 - Based on OpenOffice.org and Eclipse
 - Support OpenDocument Format (ODF)
 - Support Microsoft® Office and other formats



- Available at no charge to anyone and everyone
 - Download: www.ibm.com/software/lotus/symphony
 - Web-based support and community forums





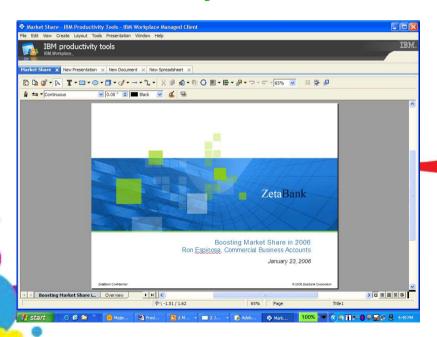
The Road for Symphony UI



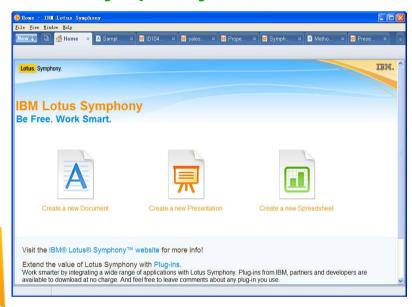


* Focus on users when improve UX

Productivity tools, 2006



Symphony 1.1, 2008



- User research
 - Interview
 - Online feedback
 - Customer feedback
 - Usability testing
- * Benchmark
- Storyboard/Prototype
- * Agile Development with UX



Symphony UI Strategy



Seamless

Three editors in one ...

Consistency! Consistency!





Modern Visual

- GUI
- Gallery, Template



Activity Oriented

- Help users focus on activities, rather than functions
- Progressive explore



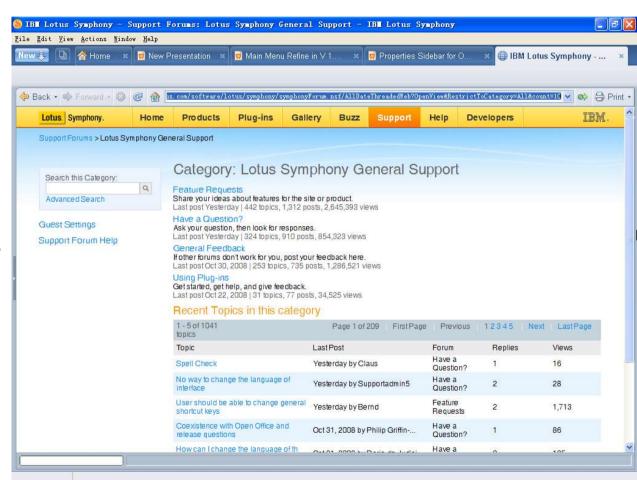




What Symphony UI Achieved



- Seamless UI
 - ► Tab UI
 - Show thumbnails for tab window
 - Embeded browser
 - Integrated UI elements
 - Main menu, toolbar, status bar, preference page, help
- Properties sidebar

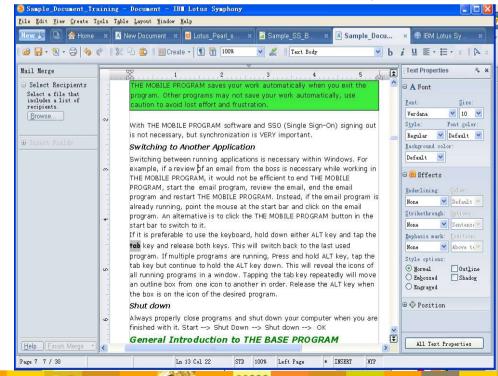


What Symphony UI Achieved Cont.



- Mail merge
- Import data from external file in Spreadsheet
- Insert slides from external file in Presentation
- Embeded table in Presentation
- Thumbnail slider in Presentation
- Print Preview in Presentation
- Template in Presentation
- Other usability enhancement





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User's pain



Oops, too much attributes, how can I find them?

I cannot find enough preview...
I need change, apply verify
and change again??



I like actions with simple click...

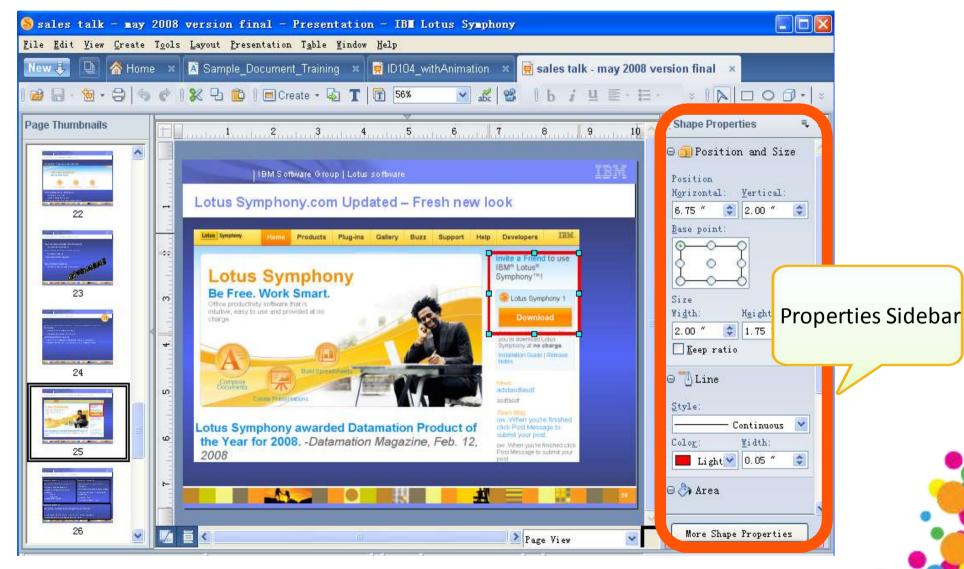
I want the functions I need always at my hand...

Is it necessary for me to learn Symphony, OpenOffice and Msoffice?
Too much different Ul...



Properties Sidebar Comes

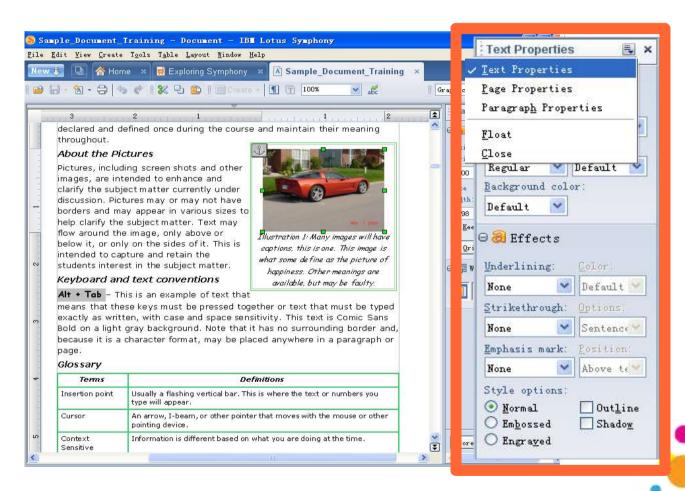




Properties Sidebar Advantage



- Easy Access
- Click to Apply
- Context Sensitive
- Multi in one



What's in



Category	Properties on object	Details	More items required
Common	Graphic	Position&Size, wrap	
	Drawing	Position, Line, Area	
Documents	Text / Paragraph	Font, Effect, Position, Alignment, Indent&spacing	
	Table	Font, Effect, Position, Alignment, Indent&spacing	
	Page	Page	
Spreadsheets	Cell and text	Font, Effect, Appearance, Alignment	Cell border
Presentations	Textbox	Font, Effect, Position, Paragraph	Table
	Page	Page	

Key technical points



- High-level design
- Sidebar instance
- How to add sections to sidebar
- Context sensitive
- Synchronization with preference and dialogs



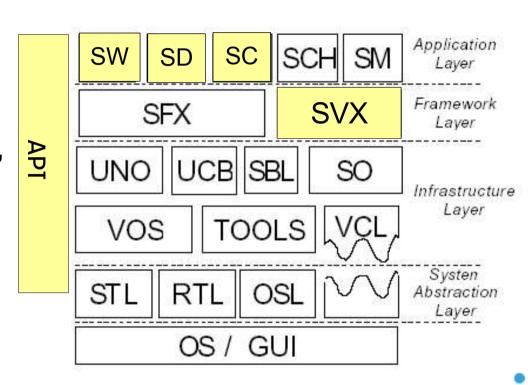




High Level Design



- Re-use the FCM model
- A new encapsulated window
- Sidebar framework locates in svx, including sidebar window management, page loading, context switch...
- Sidebar pages implementation in svx(Specialized page impl in app)
- Pages are organized in app (sw, sc, sd)



Sidebar Instance



- Each application has one sidebar instance.
- Pages in one application will be initialized at the first time it shows up.
- Inside one application, when new another document, the page will use the copy in memory.
- When sidebar close and open again, get from memory



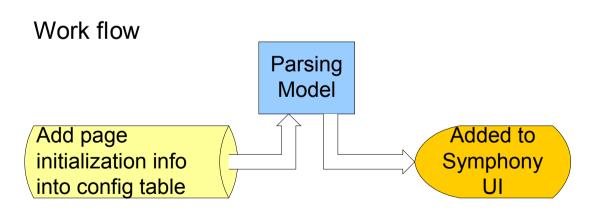
How to add new sections



- 1. Describe the page in src file, add to makefile and add page resource
- 2. Add page to sidebar

Model support

Each application has one table to contain the static page information, including page category, context, default open/close, resource id...



Context Sensitive



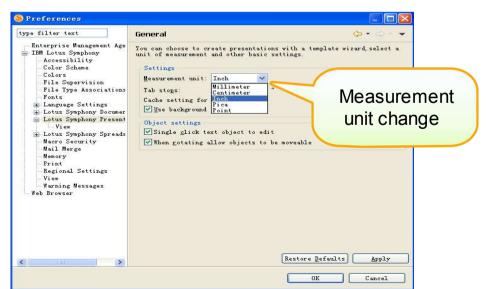
- How to detect context switching?
 - Receive notification from SfxWorkWindow, similar to object bar
 - Add UpdateSideBars_Impl to SfxWorkWindow
- How to listen to object's attributes change?
 - Combine the attributes with SfxBindings
 - Use StateChanged to response the change

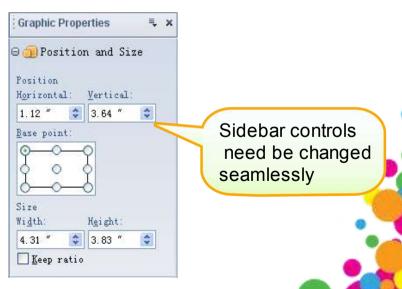


Synchronization



- Sidebar need synchronize with other properties dialogs and align with preference dialog's settings.
- Problem: Some settings are changed in preference pages, how can sidebar refresh timely? For example, metric can be changed to inch, cm, mm... and the controls with metric need be changed accordingly.





Synchronization Cont.



Structure preparation

Define control in impacted pages, such as SID_ATTR_METRIC. Register it into page's listener

Solution Flow

Item changed in preference page will impact itemset.
Change SID_ATTR_METRIC will

Change SID_ATTR_METRIC will be catched

Go through all document handle to get the corresponding binding SfxBindings to inform the sidebar about the changes

Pass the sate change to impacted pages through the controller

Impacted page do refresh



Properties sidebar in future



- Optimization
 - Utilize space
 - Make items visible enough
 - Refine common used operations
- Customized properties pages
- Easy to extend by program
- Interactive with toolbar





Demo of future properties sidebar

What Sidebar Inspires



- Focused on common usage
 - Impact most users much
 - Flat: decrease the levels between users and functions
 - Visible: make commons functions at the first sight
- Bring in some new & easy user experience
 - People do not like change, but they like change to easier
 - Fancy UI/Usability can attract more people from MS Office





Q&A



Symphony Reference Session



- IBM Lotus Symphony Technical Overview
- Lotus Symphony extension model
- Introduction of SMIL Animation and Implementation in IBM Lotus Symphony
- Accessibility in Symphony
- Symphony performance improvement best practices
- Properties Sidebar, make editing much easier
- Learn more about office users Feature usage study by document element statistics
- Visualize Writer Document Structure for Productive Development





Thanks!

凝聚全球力量 绽放开源梦想











