



OpenOffice.org

Conference 2008 Beijing
世界开源大会

CREATED WITH LOTUS® SYMPHONY™



Lotus Symphony Extension Model

Jin Hua, Chen

IBM

Agenda



- Introduction and overview
- Lotus Symphony programmability
- Extending Lotus Symphony
- Lotus Symphony extension examples
- Future plan
- Q&A



IBM Lotus® Symphony™ Overview



A set of office productivity applications

- Create, edit, share documents, spreadsheets, and presentations
- Can handle the majority of tasks required by end users
- Support OpenDocument Format (ODF)
- Support Microsoft® Office and other formats



Available at *no charge* to anyone and everyone

- www.ibm.com/software/lotus/symphony
- Web-based support and community forums



Reference: Symphony Sessions



IBM Lotus Symphony Technical Overview

Lotus Symphony extension model

Accessibility in Lotus Symphony

Symphony performance improvement best practices

Introduction of SMIL Animation and Implementation in IBM Lotus Symphony

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



Why extension?



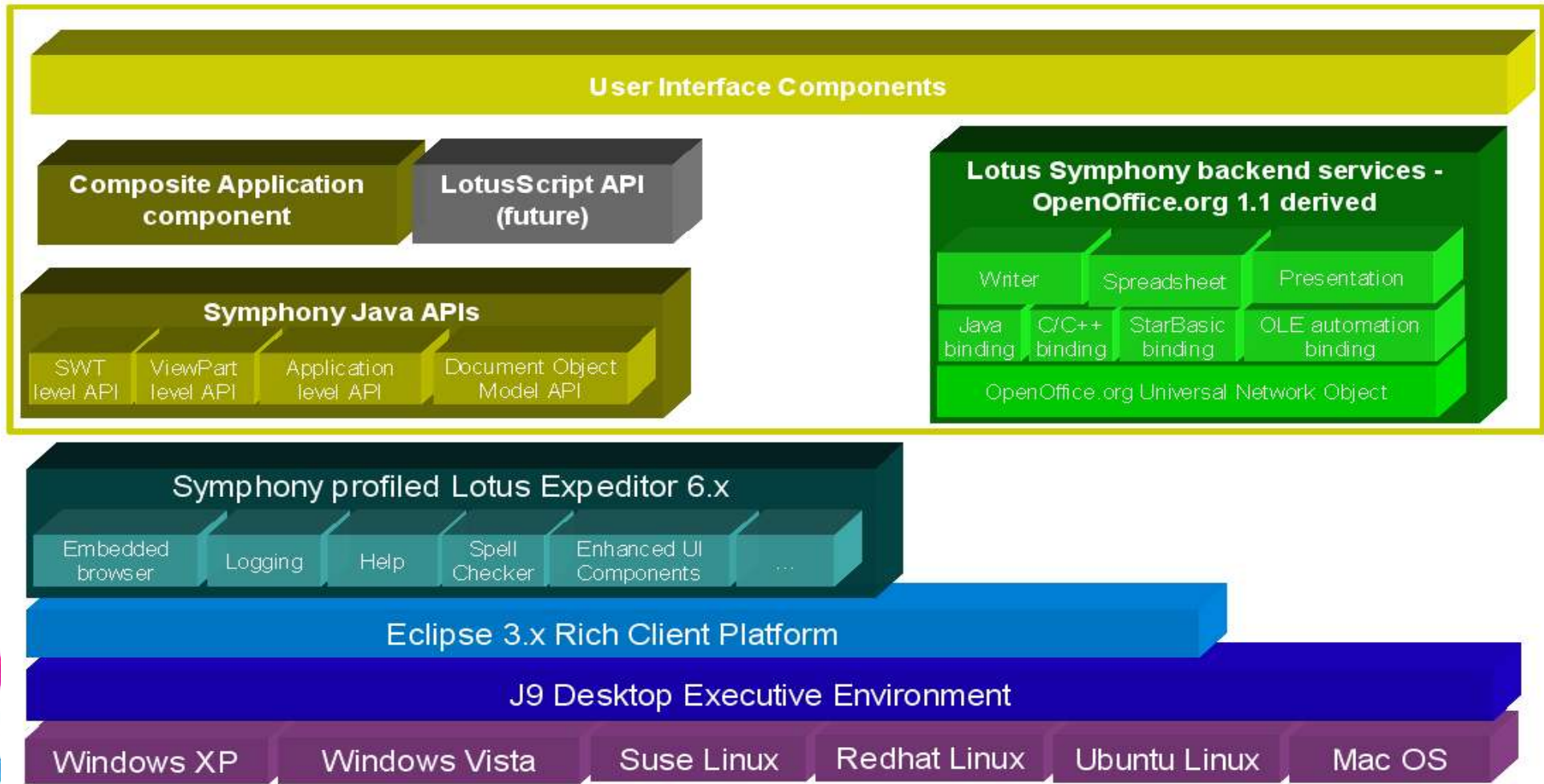
- Developing independent third-party extensions
- Enrich the base functionality
- Linkage to customer's business logic and data
- Customizing for business need



Lotus Symphony architecture



- Lotus Symphony is a set of plug-ins and features based on a Symphony profiled Lotus Expeditor platform.



Comparison with OpenOffice.org extensions



| | Lotus Symphony extension | OpenOffice.org extension |
|----------------------------------|--|--|
| What's the technology base? | Eclipse plug-in framework OpenOffice.org UNO | OpenOffice.org UNO |
| What's the extensions? | Eclipse extension | UNO package |
| What's the development language? | Focus more on Java. OpenOffice.org developing language are supported | Python, Basic, Java, C++, etc. |
| What's the development tools? | More friendly to Eclipse and Lotus Expeditor based tools | Quite a lot of tools for different languages. |
| How to deploy? | Deploy via UI by end user Deploy from remote URL Integrate into installation set | Deploy via UI by end user Integrate into installation set |



Benefit from Lotus Expeditor



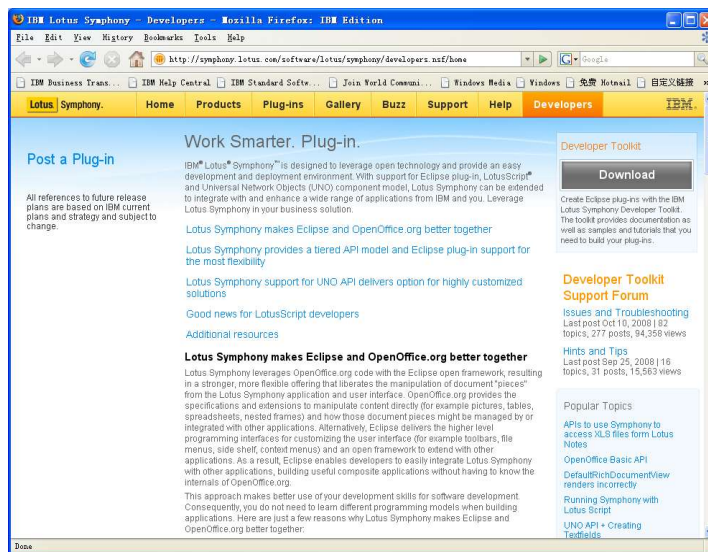
- To end users
 - An Eclipse-based rich client application
 - A world-class user interface across Lotus portfolio
 - An extendable platform more than a stand-alone product
- To business partners and developers
 - Integration and reuse
 - A world-class Java IDE
 - Native look and feel across platform
 - A customizable platform
 - Seamless tool integration
 - The ability to reuse knowledge and skills from the Expeditor and Eclipse ecosystem



Introduction to Symphony Programmability



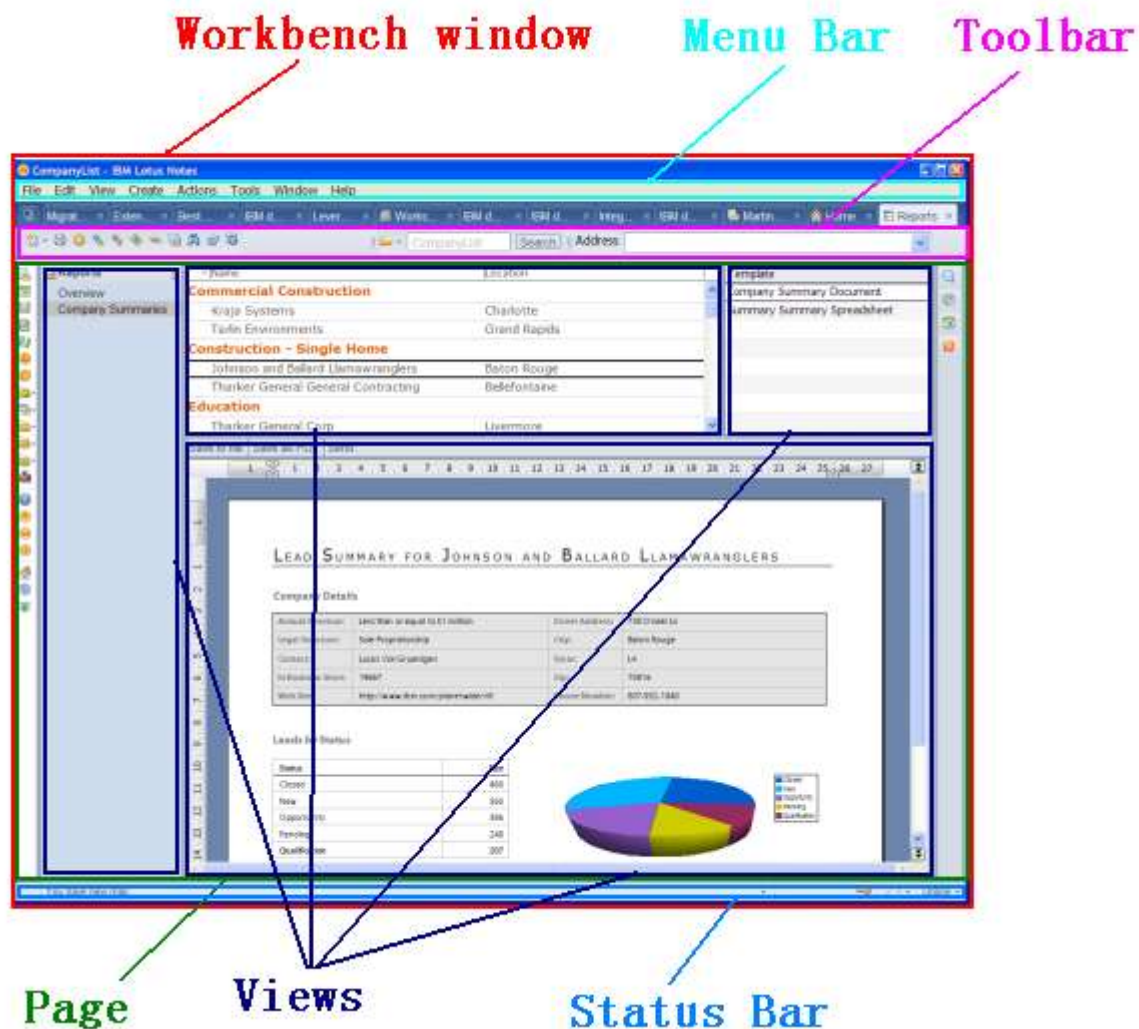
- Programming model
 - OpenOffice.org programming model
 - Rich Client programming model
 - Composite Application programming model
 - Domino/Notes programming
 - Scripting model



- Symphony Toolkit
 - Developer's Guide
 - API Documentation
 - Samples
- Symphony Developer's forum
 - plug-ins
 - Issues and Troubleshooting
 - Hints and Tips



Rich Client Application programming model



Composite application programming model

- **Composite Applications are generally a collection of loosely coupled components that define a particular business logic. These components could be a mix of Notes components and Eclipse based Lotus Expeditor components.**

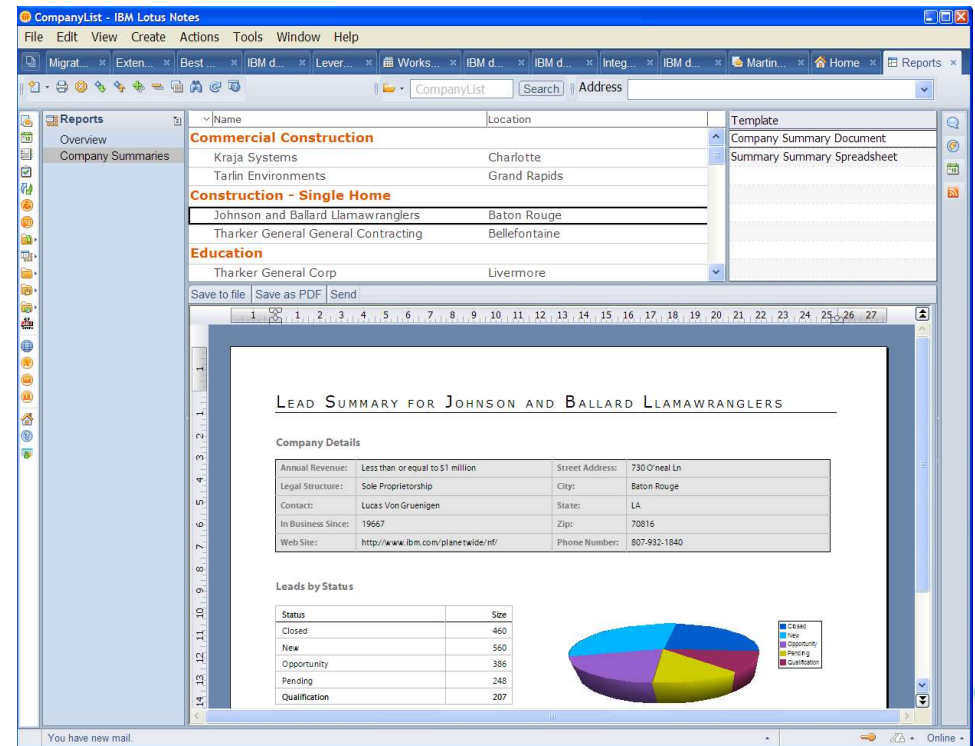
- Symphony as an Eclipse based component in Notes 8.x

- Properties

- FileSaved
- SelectionChanged

- Actions

- LoadFile
- Insert



The screenshot shows the IBM Lotus Notes interface with a report titled "LEAD SUMMARY FOR JOHNSON AND BALLARD LLAMAWRANGLERS". The report includes a table for "Company Details" and a table for "Leads by Status".

| Company Details | |
|--------------------|-----------------------------------|
| Annual Revenues: | Less than or equal to \$1 million |
| Legal Structure: | Sole Proprietorship |
| Contact: | Lucas Von Gruenigen |
| In Business Since: | 19667 |
| Web Site: | http://www.ibm.com/planetwide/rs/ |
| Street Address: | 730 O'neal Ln |
| City: | Baton Rouge |
| State: | LA |
| Zip: | 70816 |
| Phone Number: | 807-932-1040 |

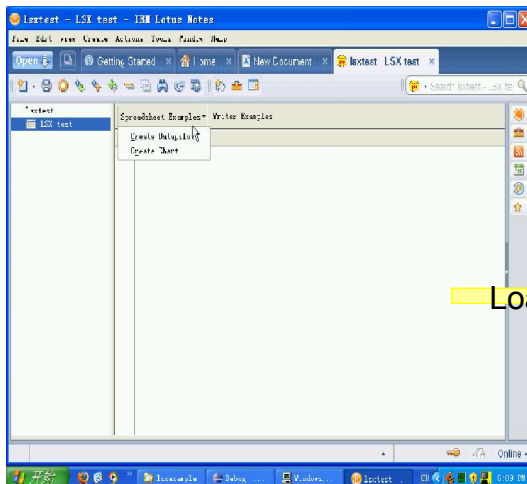
| Leads by Status | |
|-----------------|------|
| Status | Size |
| Closed | 460 |
| New | 560 |
| Opportunity | 386 |
| Pending | 248 |
| Qualification | 207 |

A 3D pie chart is also visible, representing the distribution of leads by status. The legend indicates: Closed (blue), New (orange), Opportunity (green), Pending (red), and Qualification (purple).

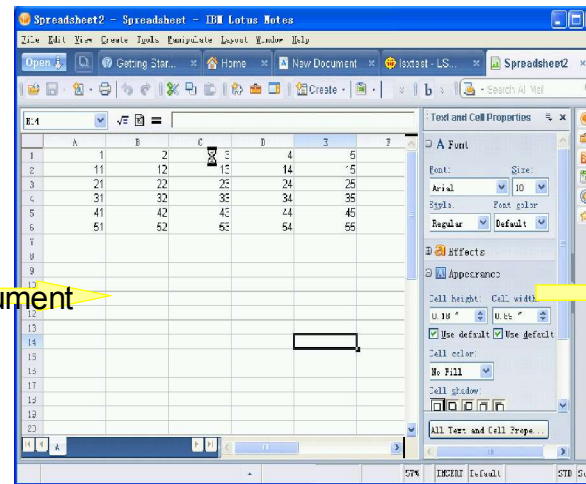
Domino/Notes programming



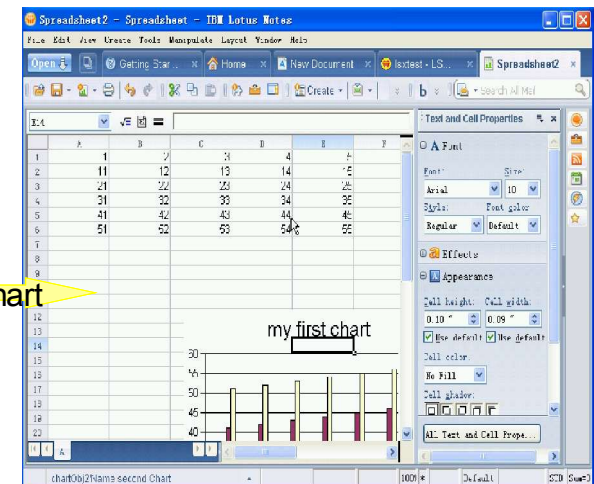
- Symphony is a great alternative for Notes office integration
- Typical scenario: controlling Symphony from Notes application
- LotusScript support is critical for Notes developers
 - COM based LotusScript APIs are not enough
 - Native LotusScript APIs are preferred



Load document



Create chart



my first chart



Scripting model



- Scripting is highly expected from developers and knowledge workers
- StarBasic is supported in Lotus Symphony
- VBA interoperability is challenging and in the Symphony future plan
- LotusScript APIs for Lotus Notes developers will be supported



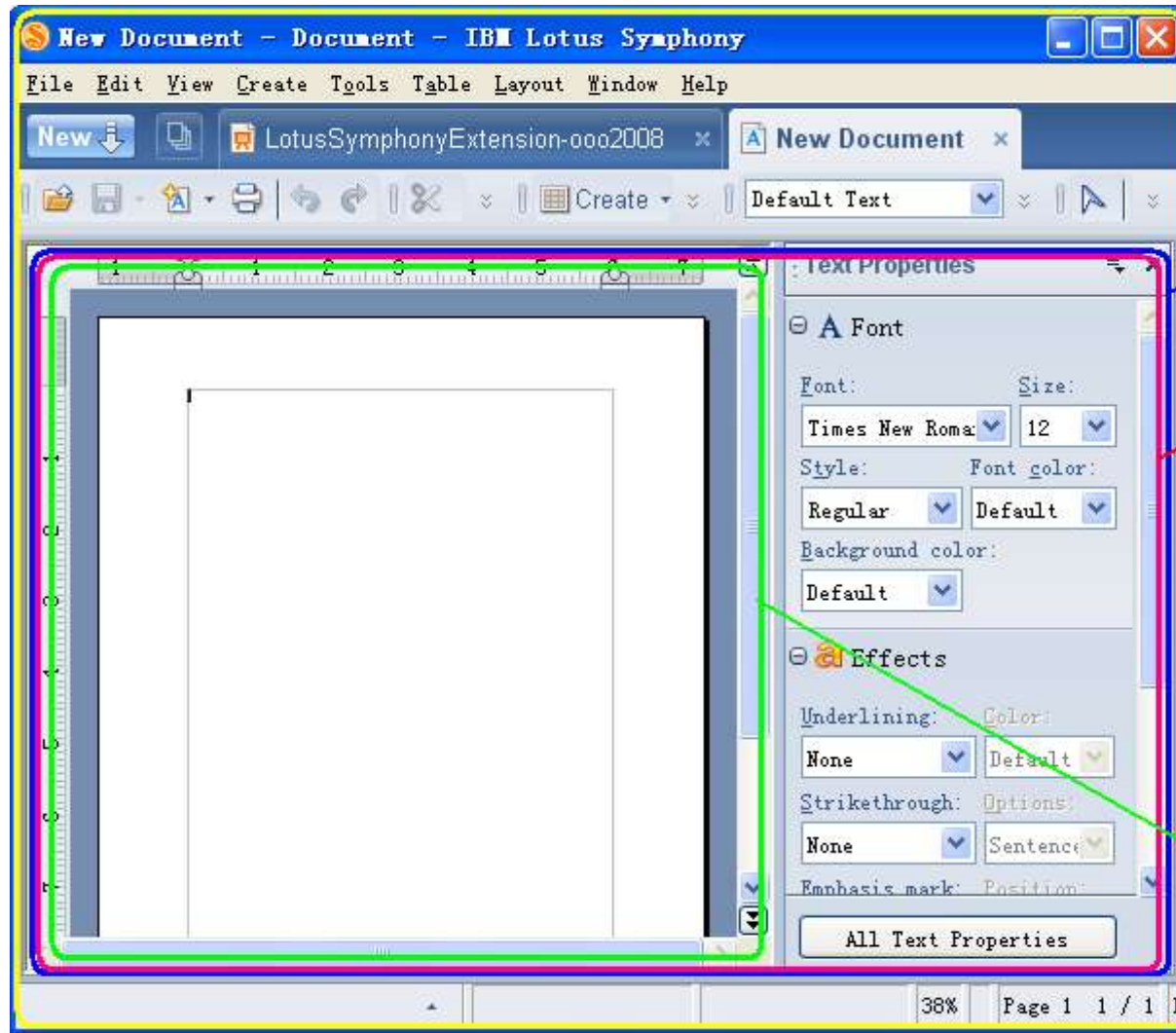
Extending Lotus Symphony - features



- Plug-in based extensions
 - Plug-ins
 - Features
 - Update site
- Eclipse/Expedito IDE
- Extensible user interface
- A set of programming elements
- Deployment



Programming elements



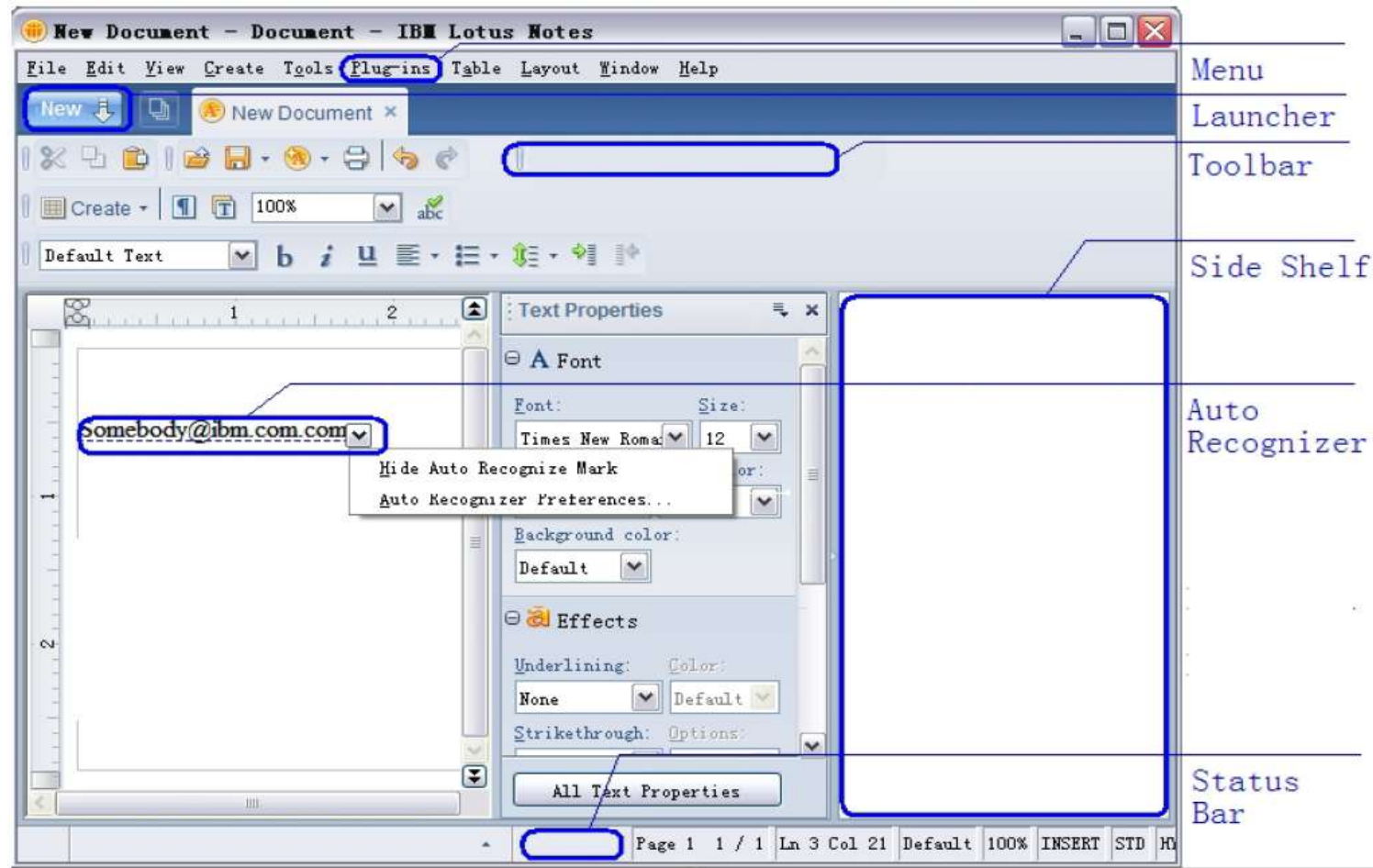
Workbench

ViewPart

SWT control

Document Model
-Writer
-Spreadsheet
-Presentation

User Interface extensions



Deploying extensions

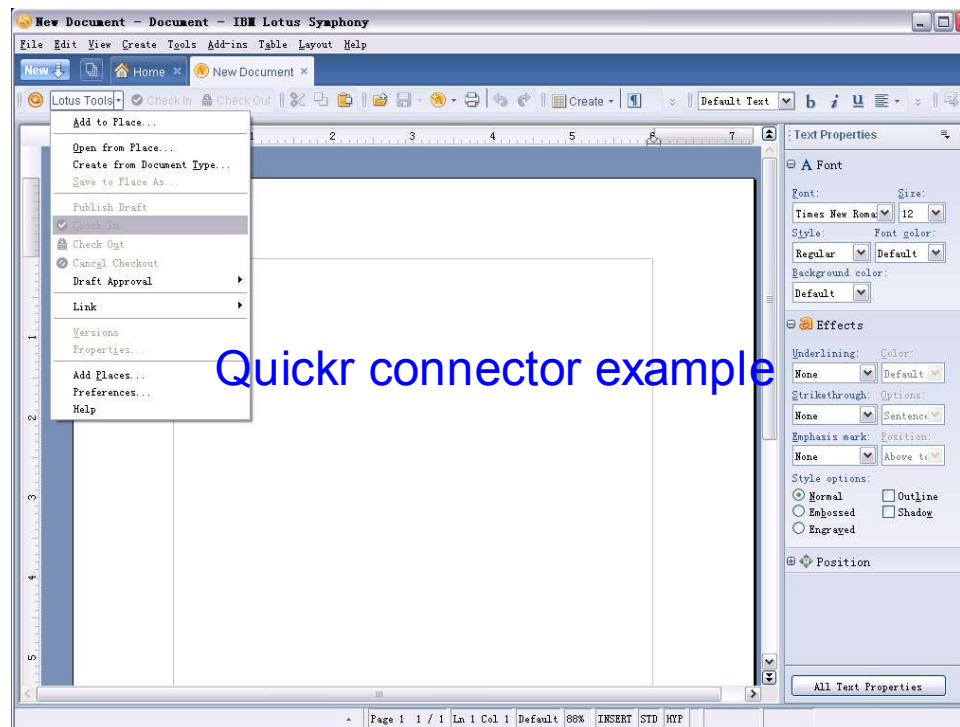


- To end users
 - Deploying and managing the extensions through user interface
- To business partners
 - Patched installation package
 - Server managed deployment pushes to client



Lotus Symphony extension examples

- Lotus Quickr connector plug-in
- Websphere Translation Server plug-in
- Database connection plug-in
- Exporting presentation to flash plug-in



Note: all extensions can be found from <http://symphony.lotus.com/software/lotus/symphony/plugin.nsf/home>



Future plan



- Support OpenOffice.org extensions
- Enhance with user-friendly Java APIs for document models
- VBA interoperability
- More customizable user interface
- Local composite application programming model
- Full Lotus Expeditor integration
- More options on extension deployment



Summary



- Lotus Symphony is the combination of OpenOffice.org and Lotus Expeditor
 - Lotus Symphony Leverages the plug-in framework from Lotus Expeditor
 - Lotus Symphony inherits and enhance the base functionality for writer, spreadsheet and presentation from OpenOffice.org
- Lotus Symphony is extensible and designed for integration
 - Lotus Symphony provides highly extensible user interface and many APIs for third party extensions
 - Lotus Symphony is easy to integrate with Eclipse/Expeditor based applications, such as Lotus Notes
- Lotus Symphony is developer friendly
 - OpenOffice.org developers can start developing directly, UNO APIs are supported
 - Eclipse/Expeditor developers can leverage their existing skills; new developers can leverage lots of articles, tutorials, books from Eclipse
 - Lotus Symphony toolkit is provided for both stand-alone Symphony and Symphony in Notes



Thanks!

凝聚全球力量 绽放开源梦想

www.OOobeijing2008.com

