

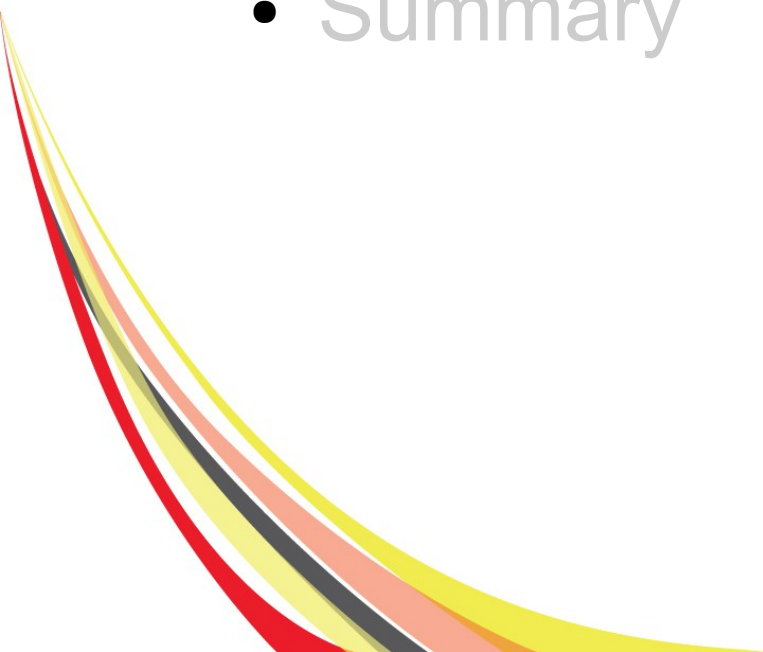
Integration OpenSocial with Apache OpenOffice

Jürgen Schmidt

PMC Member, Apache OpenOffice

stand in for Da Li Liu

Agenda

- Brief Introduction
 - Background
 - Proposal/Solution
 - Summary
- 

Brief Introduction

LIU, DA LI

IBM employee, Regular

IBM China Investment Co. Ltd

IBM Software Group, Application and Integration Middleware Software
ADVISORY SOFTWARE ENGINEER

Technical Enablement Specialist: WPLC.Eclipse based technology

8 DONGBEIWANG WESTEN ROAD BEIJING, 11, 100193 China

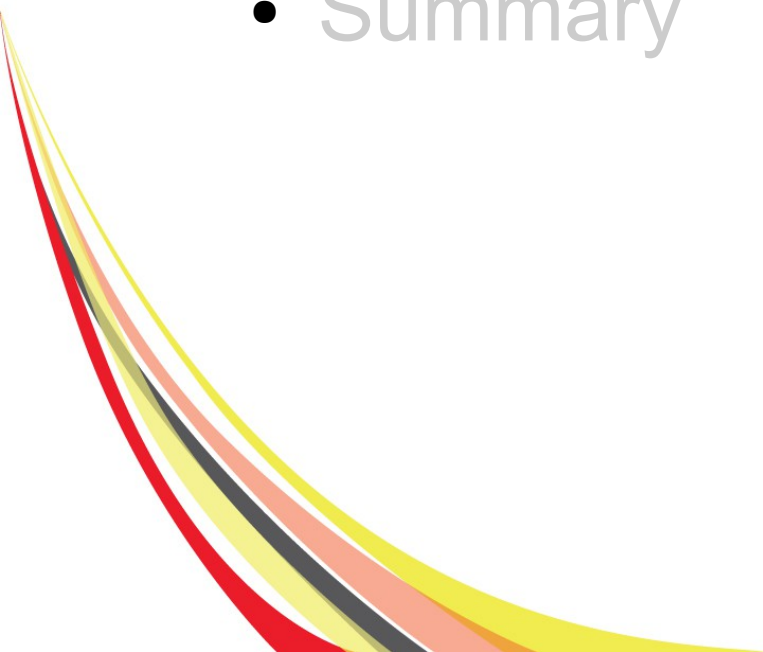
Building: 28B | Floor: F2 | Office: 2PW143

86-10-82452491

liudali@cn.ibm.com



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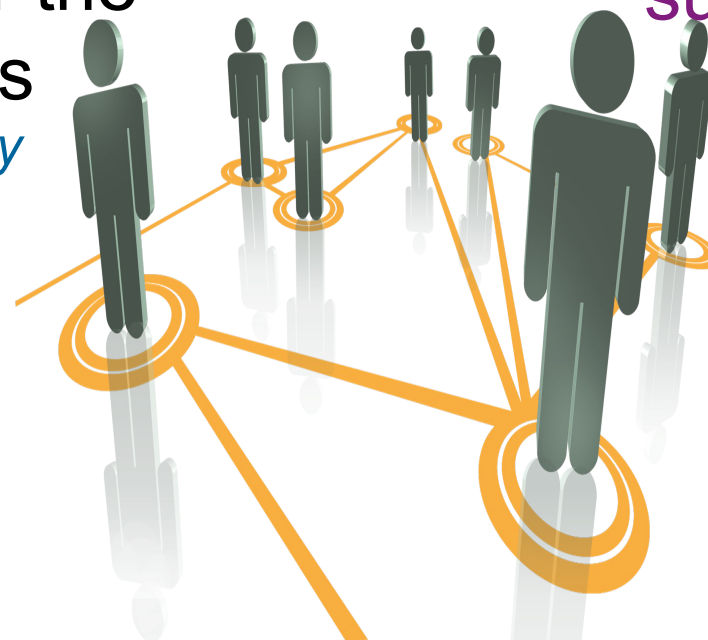
Why Social Matters in Business

95% of standout organizations will focus on '*Getting closer to the customer*' over the next 5 years

IBM's 2010 CEO Study

78% of large businesses said a social media strategy was somewhat or very important to the future success of their business

eMarketer



If Facebook were a Country ...

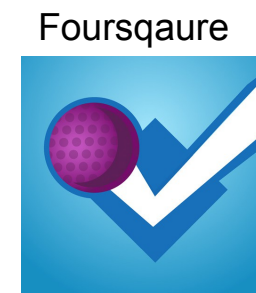
1. China – 1.3 billion
2. India – 1.2 billion
- 3. Facebook – 750 million**
4. USA – 310 million
5. Indonesia – 239 million



... it would be the 3rd largest in the world!

Defining Social

- Definition: The use of web-based and mobile technologies to turn communication into interactive dialogue



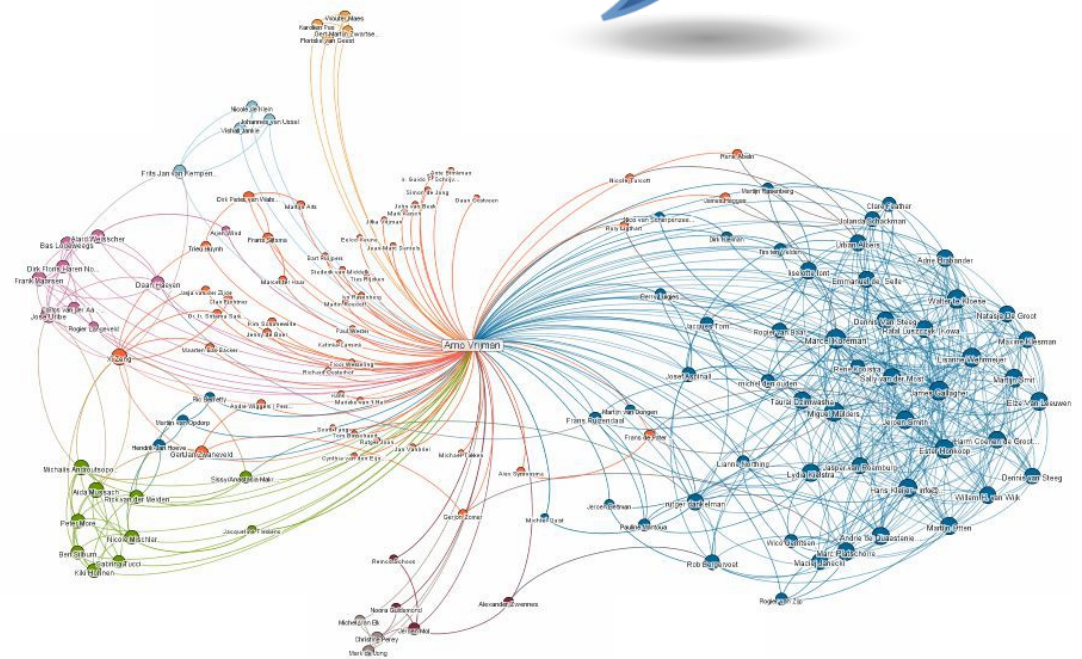
Social is Based on the Network

The value of social software increases exponentially when people can connect to their social networks at anytime and from anywhere allowing users to share and empowers business professionals to be more innovative and productive

Purpose: Connecting People to People



Example: Visualization of LinkedIn Users' Network



OpenSocial



- A public specification that defines a component hosting environment (container)
- A set of common application programming interfaces (APIs) for web-based applications
- With OpenSocial API users can access the Social services from their application easily
- OpenSocial SNS:
<http://www.opensocial.org>
- Discussion Forums
<http://groups.google.com/group/opensocial>



OpenSocial Supporting Products

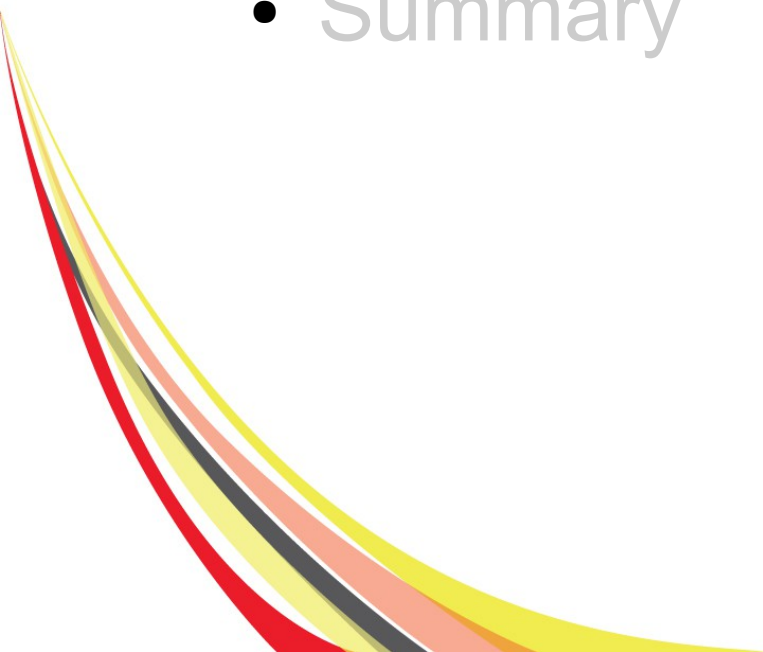


Thinking

- How to use social services to improve your productivity when do office documents editing?
- How to share your document or content to your social network easily?



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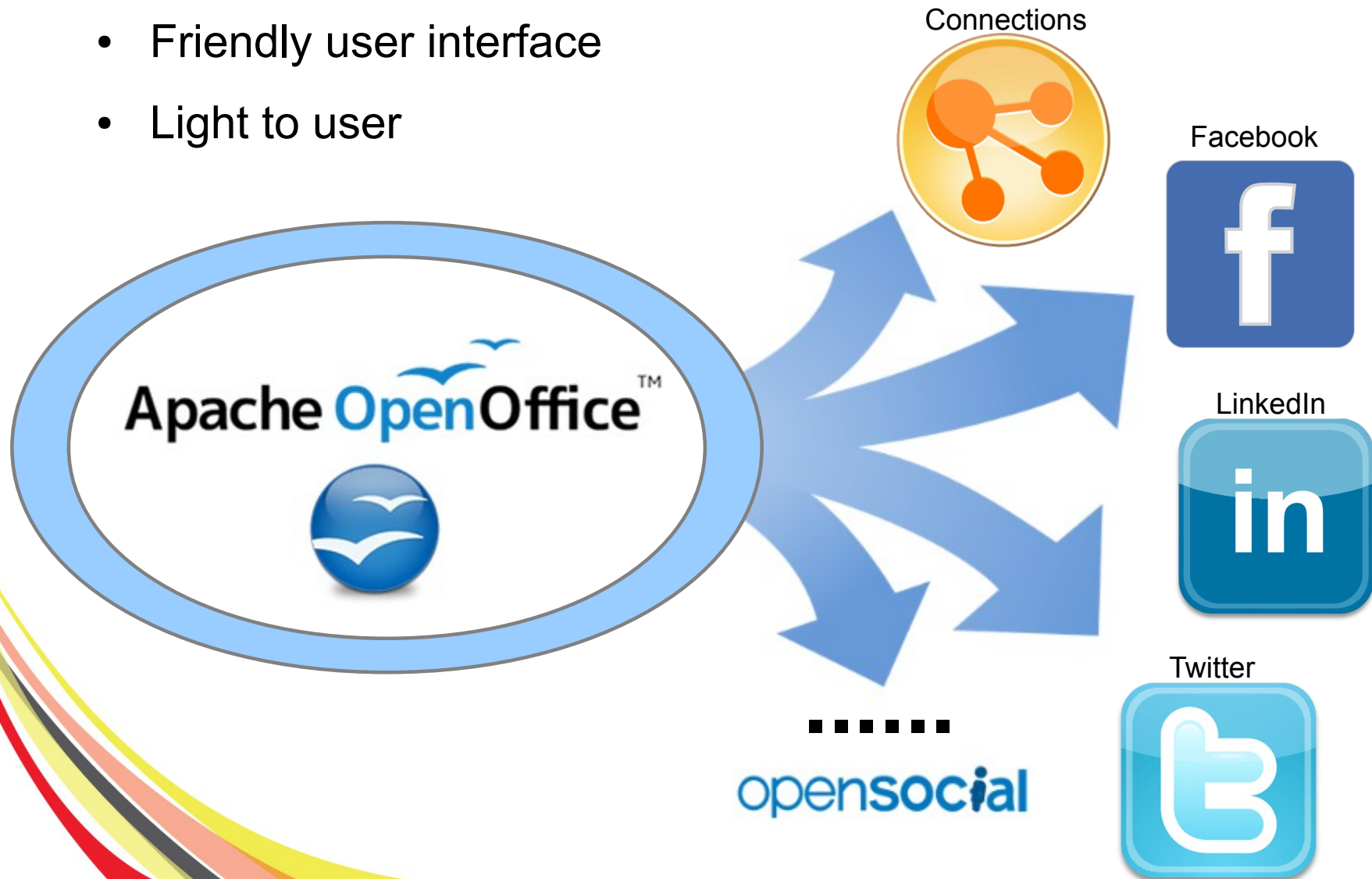
Apache OpenOffice

- An open-source office productivity software suite containing word processor, spreadsheet, presentation, graphics, formula editor, and database management applications. It is distributed under the Apache License.

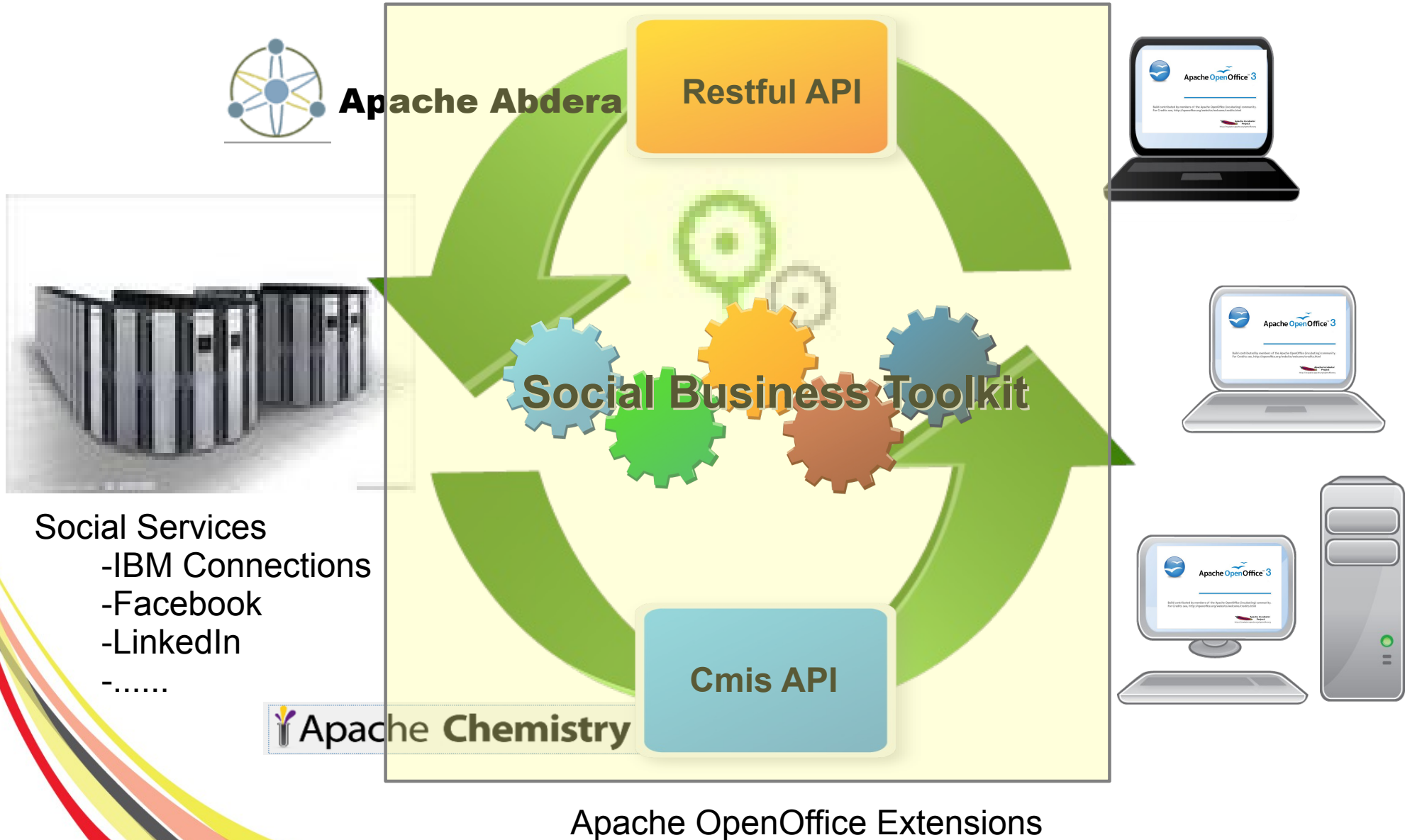


OpenSocial Connectors for AOO

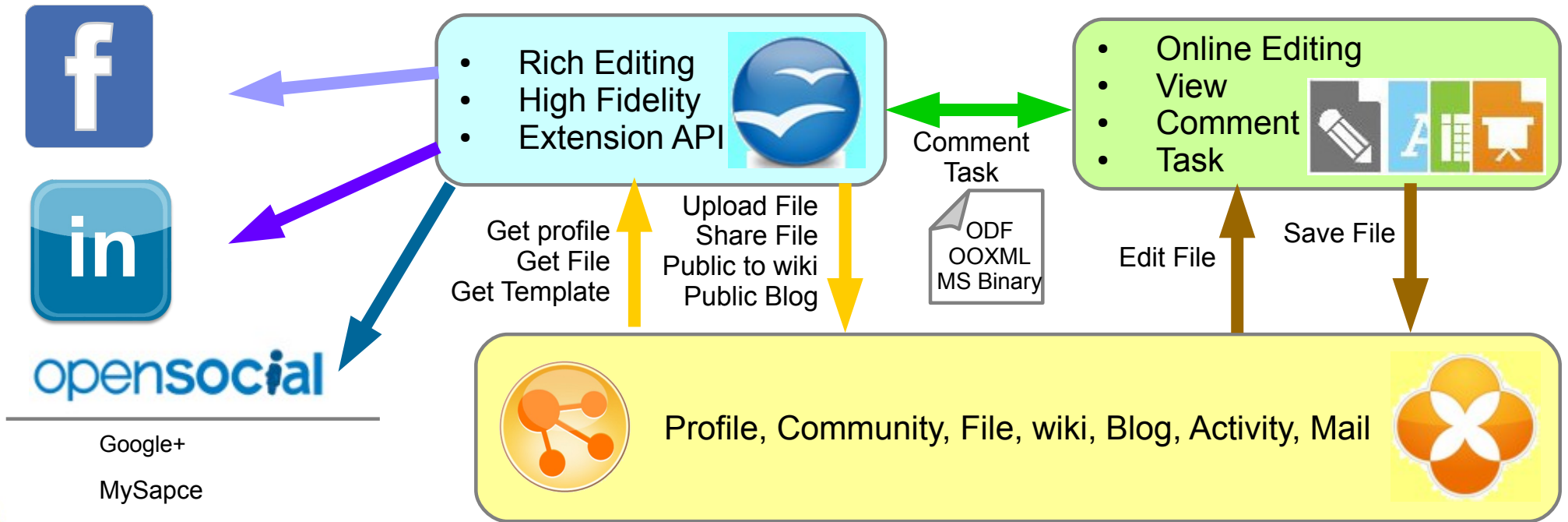
- Provide AOO linked value with social and cloud applications.
- Friendly user interface
- Light to user



Social Connectors



Output Extensions



opensocial

Google+
MySapce
...

IBM Connections Extension

IBM SmartCloud for Business Extension

Online Editing Extension

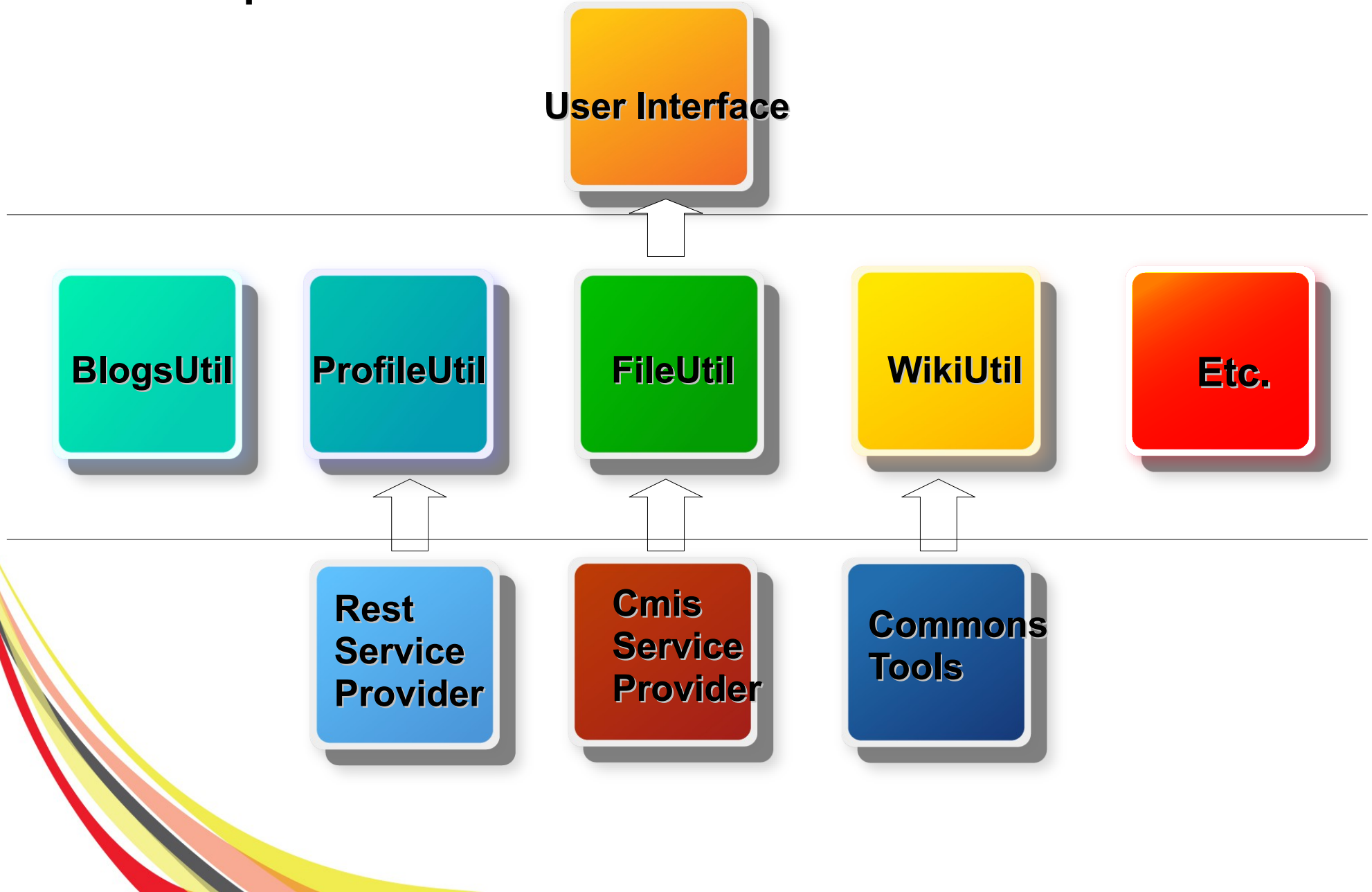
FaceBook Extension

Linkedin Extension

OpenSocial Extension

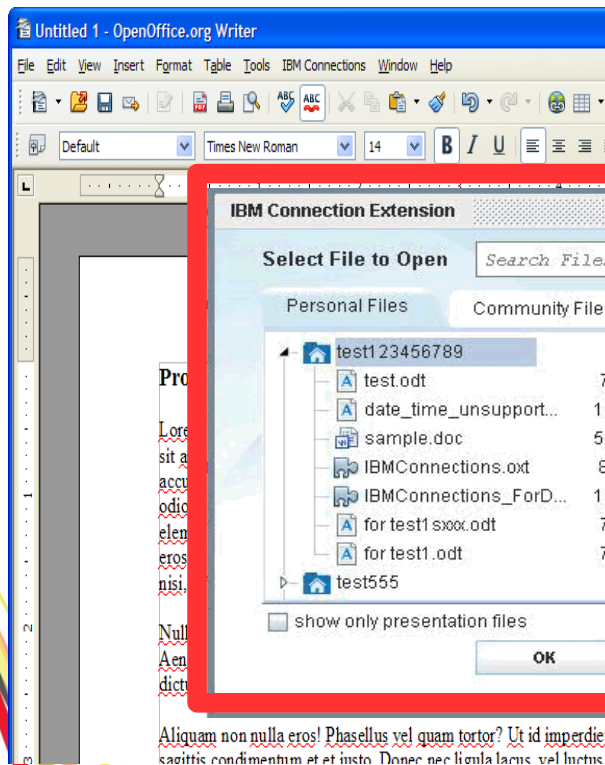
More

Sample: IBM Connections Connector

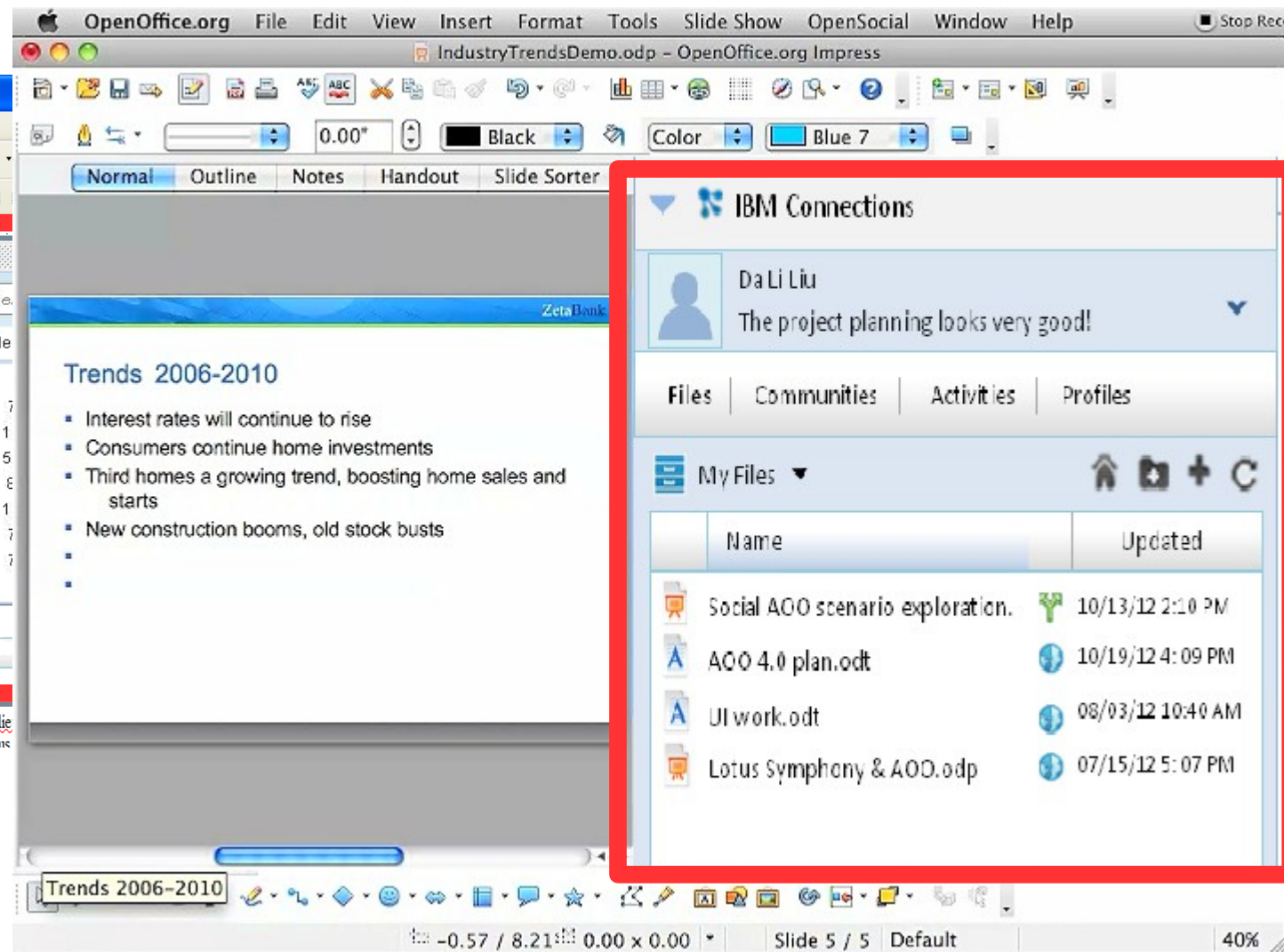


Which Is better?

Dialogs Model



Tasks Panel Model



Demos

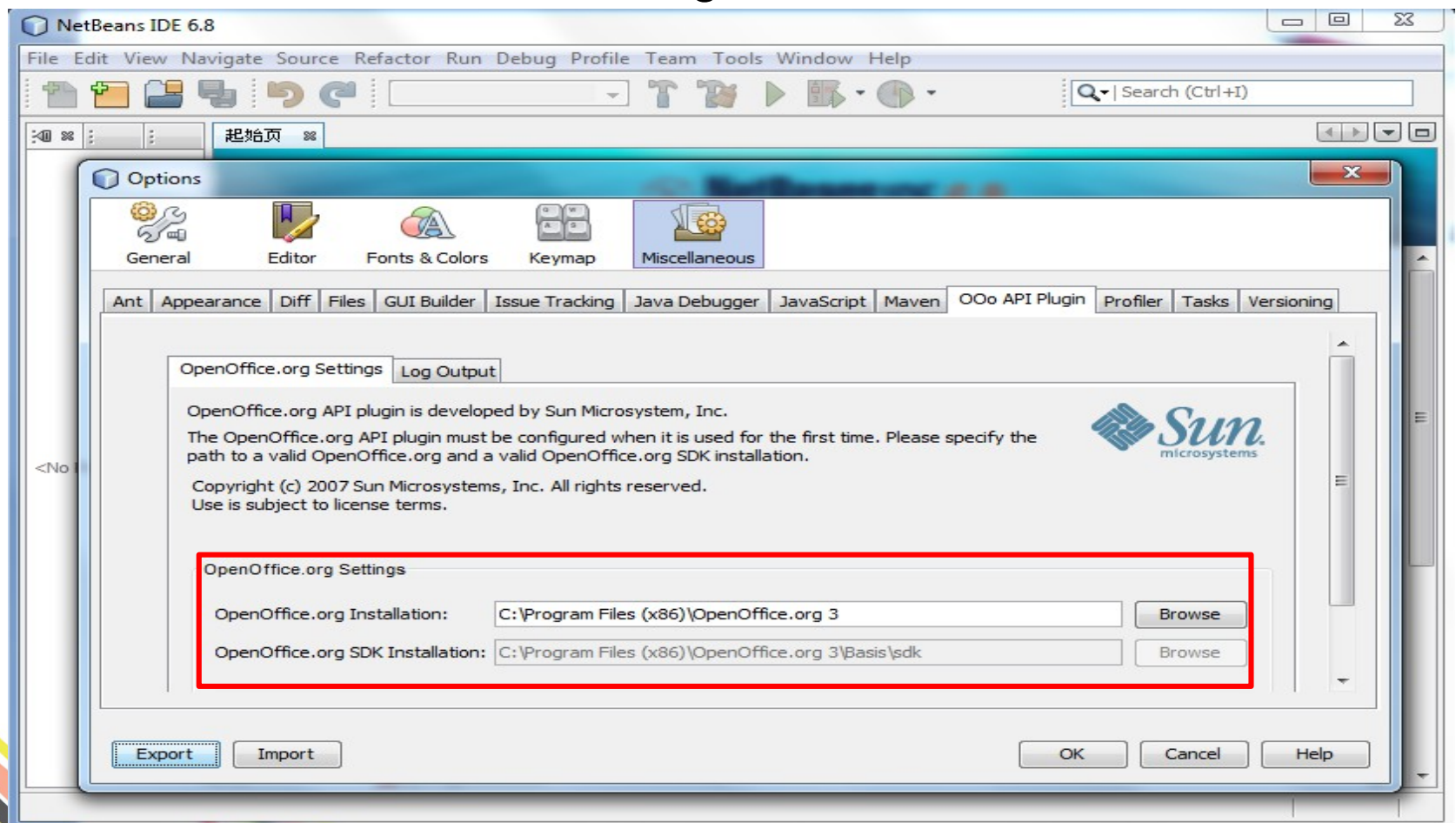
- 1. Share your files to others. (Dialog Model)
- 2. Get comments from your network. (Tasks Panel Model)

How we build this sample

- Tools
 - Netbean + OpenOffice API plugin
 - <http://netbeans.org/downloads/index.html>
 - Apache OpenOffice SDK
 - <http://www.openoffice.org/download/sdk/>
 - AOO Developer's Guide - Extensions
 - http://wiki.openoffice.org/wiki/MediaWiki:Collections/Developer%27s_Guide_-_Extensions
 - IBM Social SDK Toolkit
 - <https://greenhouse.lotus.com/llapiexplorer/>
 - OpenSocial API
 - <http://www.opensocial.org>
 - Apache Chemistry CMIS library
 - <http://chemistry.apache.org>

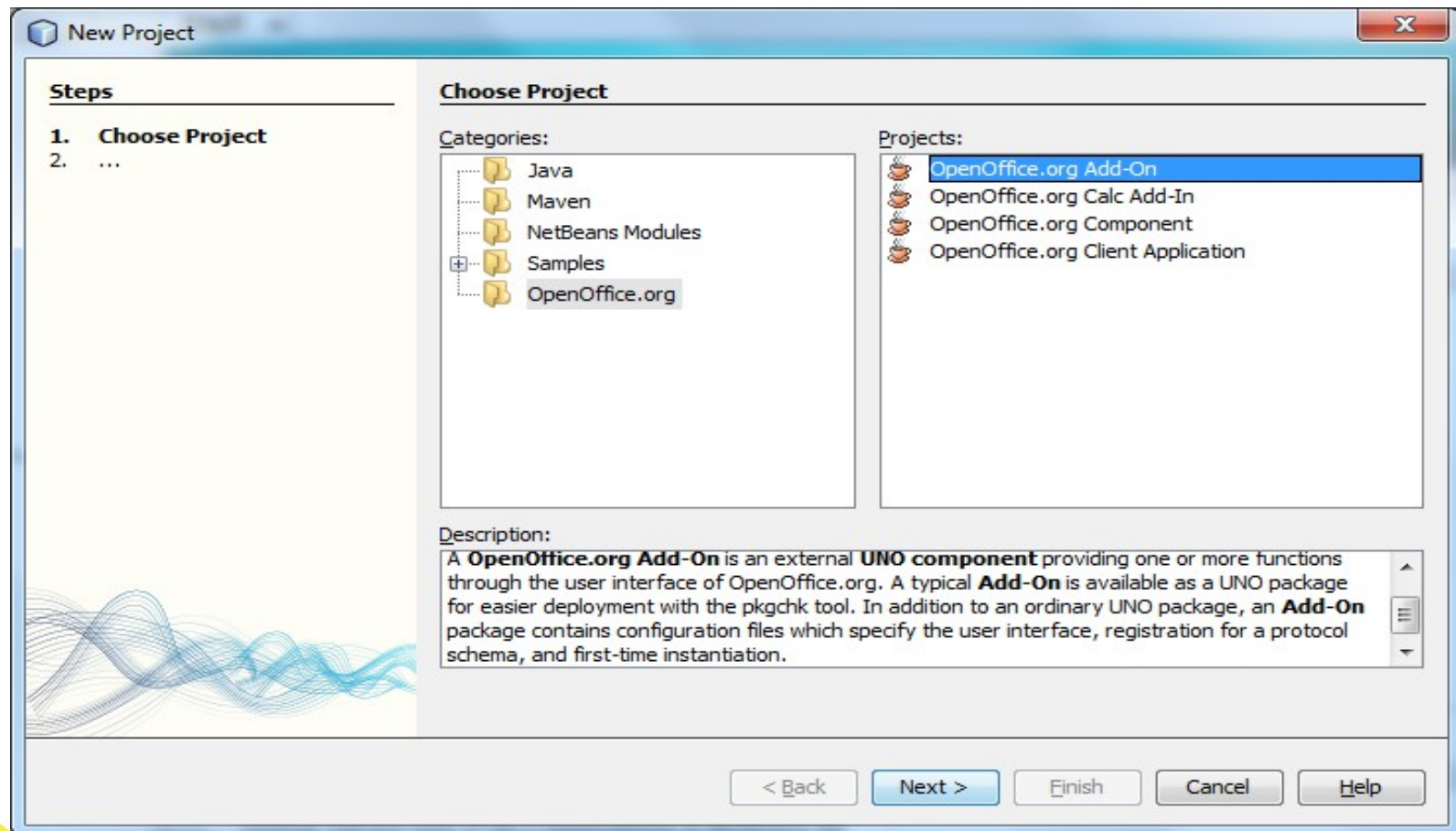
Configure your IDE

- Make sure that you have configured a valid OpenOffice.org and OpenOffice.org SDK installation under Tools > Options > Miscellaneous > OOo API Plugin



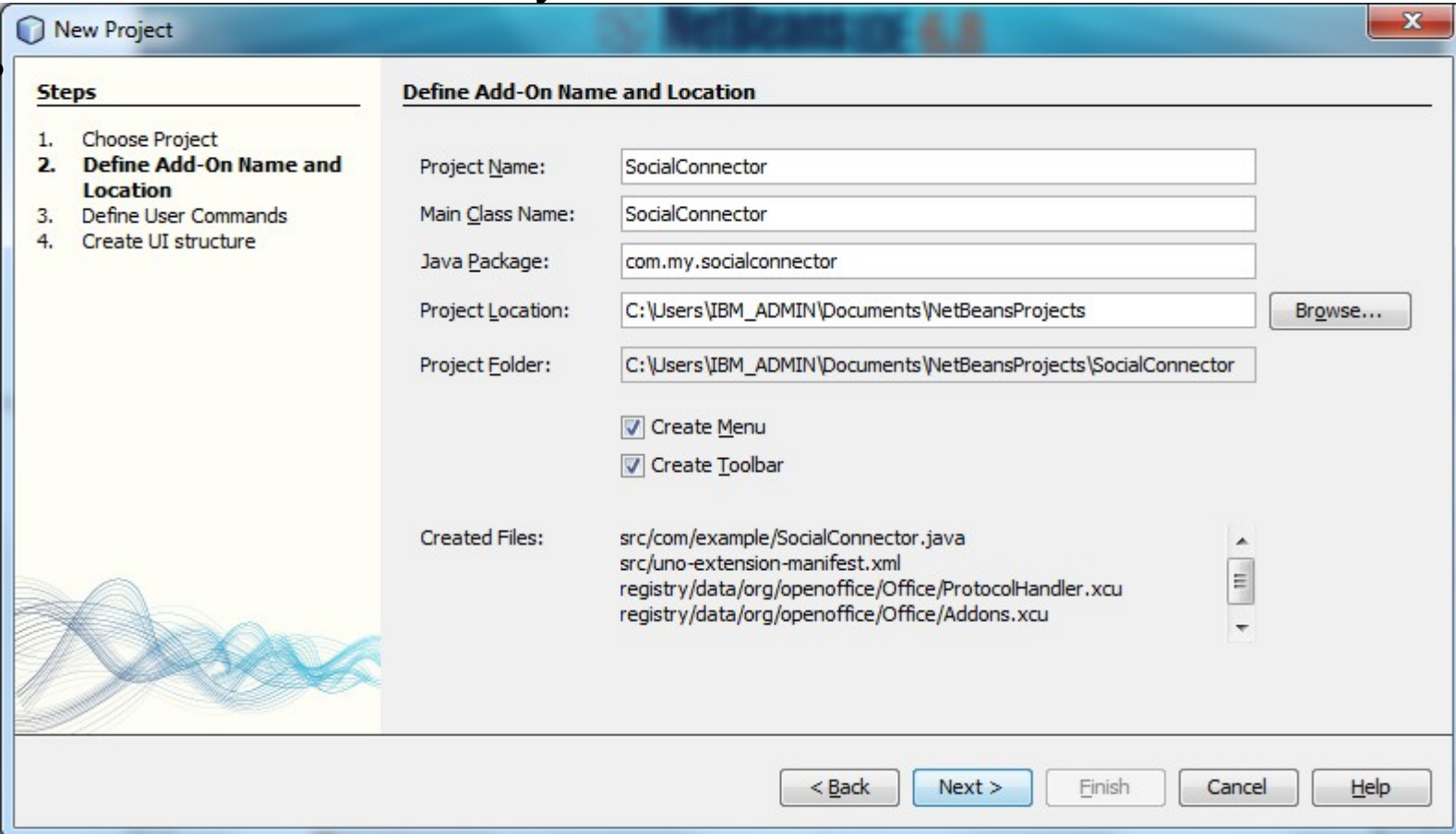
Create a OpenOffice Addon Project

- Choose File > New Project > OpenOffice.org > OpenOffice.org Add-on.



Specify the project information.

- The Project name, Main Class Name, with menus / toolbar
- The extension description files and core source file will be created automatically.



The screenshot shows the 'New Project' dialog box in NetBeans, specifically the 'Define Add-On Name and Location' step. The dialog is titled 'New Project' and has a close button (X) in the top right corner. On the left, there is a 'Steps' panel with a list of four steps: 1. Choose Project, 2. Define Add-On Name and Location (which is the current step), 3. Define User Commands, and 4. Create UI structure. The main area of the dialog is titled 'Define Add-On Name and Location' and contains several input fields and checkboxes. The 'Project Name' field is set to 'SocialConnector'. The 'Main Class Name' field is also set to 'SocialConnector'. The 'Java Package' field is set to 'com.my.socialconnector'. The 'Project Location' field is set to 'C:\Users\IBM_ADMIN\Documents\NetBeansProjects' and has a 'Browse...' button to its right. The 'Project Folder' field is set to 'C:\Users\IBM_ADMIN\Documents\NetBeansProjects\SocialConnector'. There are two checked checkboxes: 'Create Menu' and 'Create Toolbar'. At the bottom, there is a 'Created Files' section with a list of files: 'src/com/example/SocialConnector.java', 'src/uno-extension-manifest.xml', 'registry/data/org/openoffice/Office/ProtocolHandler.xcu', and 'registry/data/org/openoffice/Office/Addons.xcu'. At the very bottom of the dialog, there are five buttons: '< Back', 'Next >', 'Finish', 'Cancel', and 'Help'.

Steps

1. Choose Project
2. **Define Add-On Name and Location**
3. Define User Commands
4. Create UI structure

Define Add-On Name and Location

Project Name: SocialConnector

Main Class Name: SocialConnector

Java Package: com.my.socialconnector

Project Location: C:\Users\IBM_ADMIN\Documents\NetBeansProjects Browse...

Project Folder: C:\Users\IBM_ADMIN\Documents\NetBeansProjects\SocialConnector

Create Menu

Create Toolbar

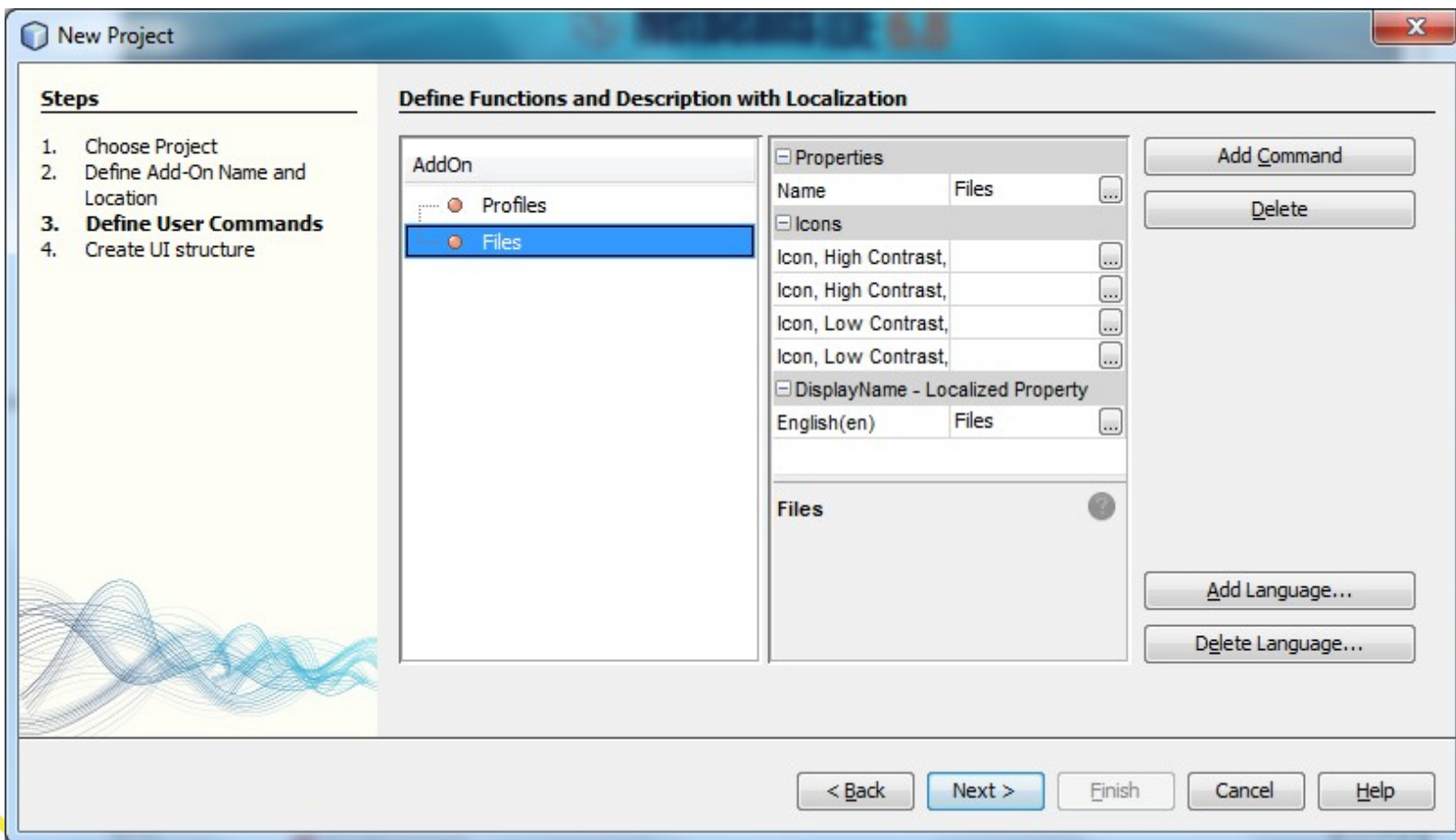
Created Files:

- src/com/example/SocialConnector.java
- src/uno-extension-manifest.xml
- registry/data/org/openoffice/Office/ProtocolHandler.xcu
- registry/data/org/openoffice/Office/Addons.xcu

< Back Next > Finish Cancel Help

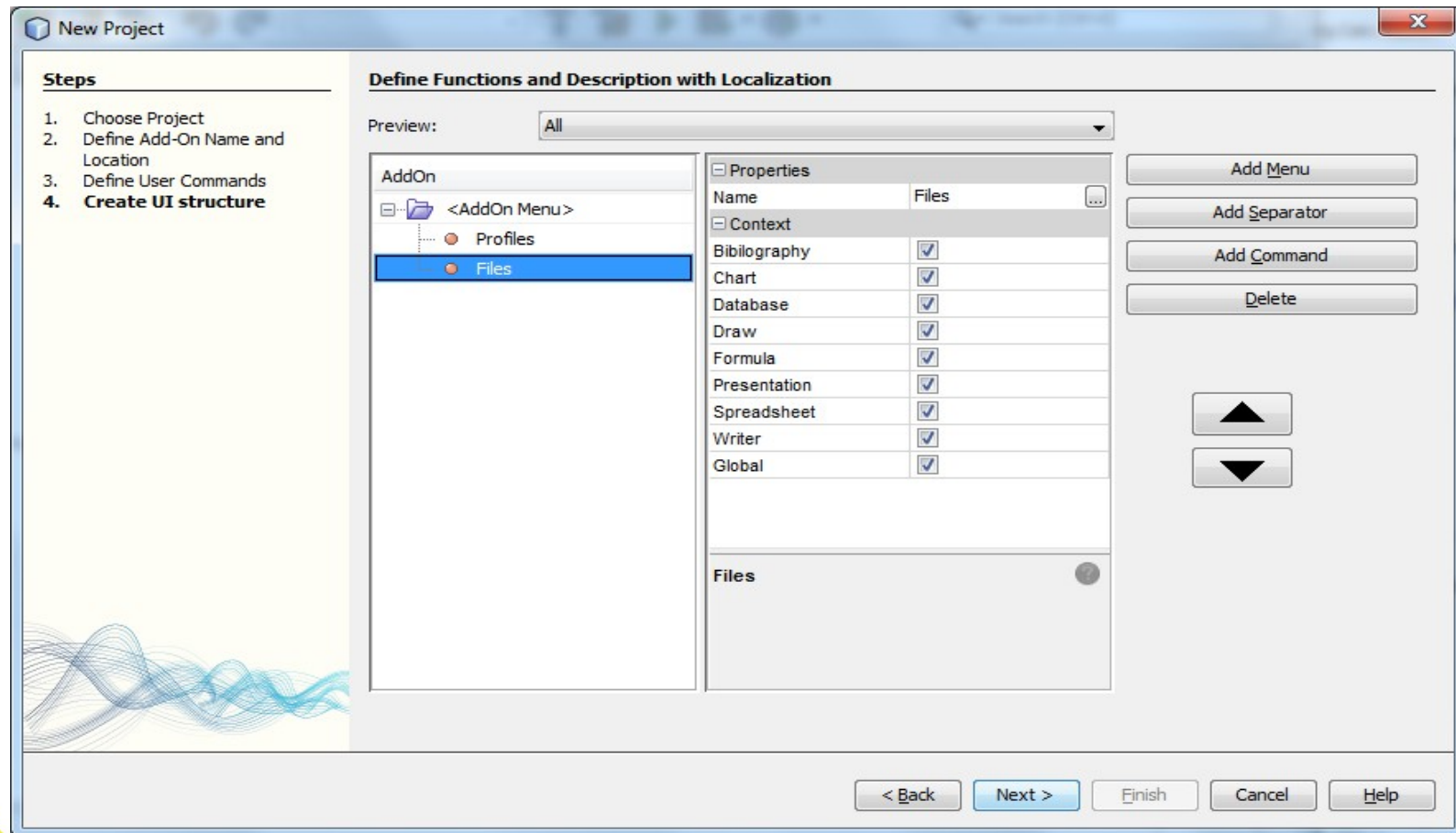
Define User Commands

- The commands will be used by the UI.



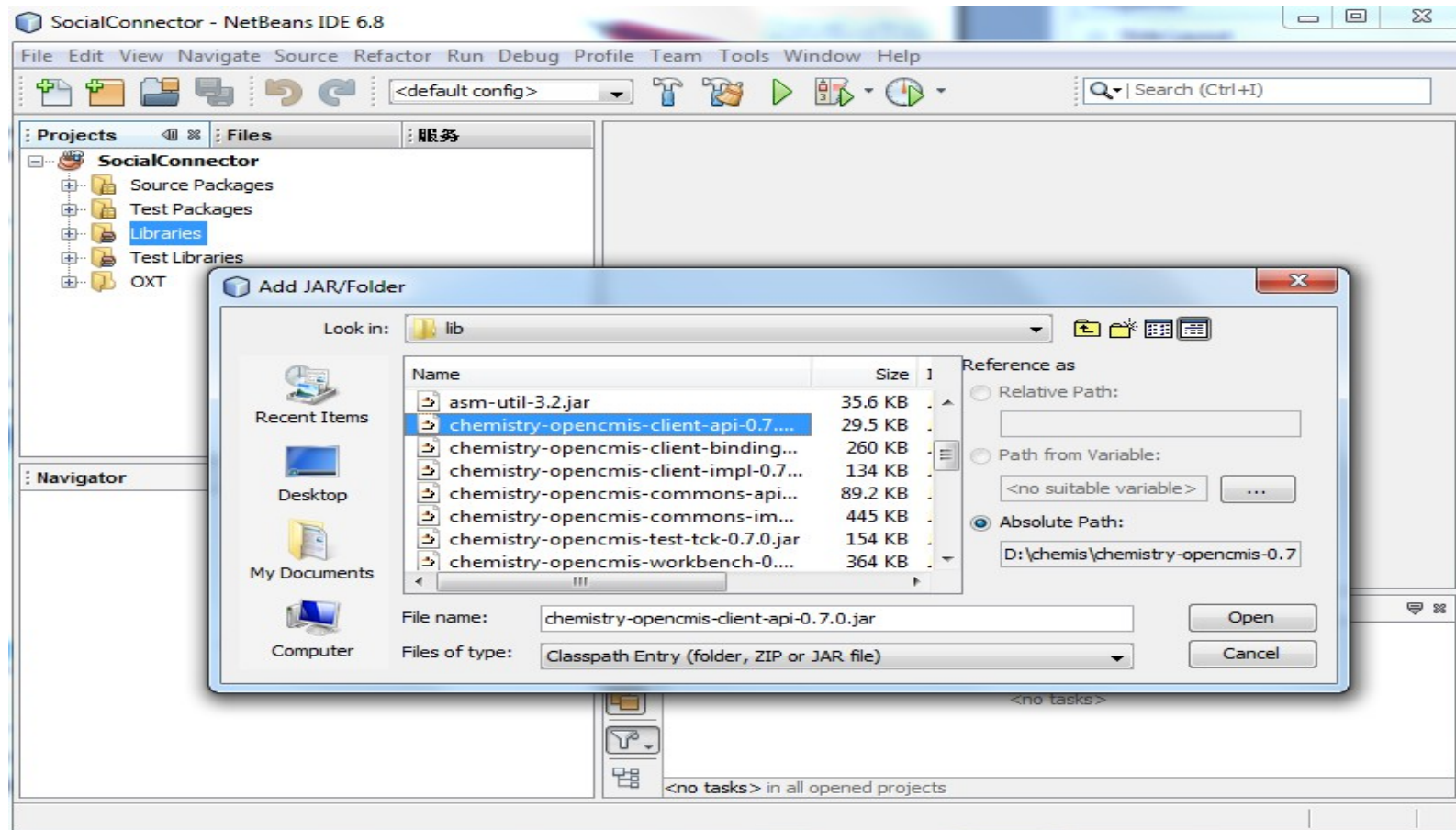
Create UI structure

- Show the Commands in which component



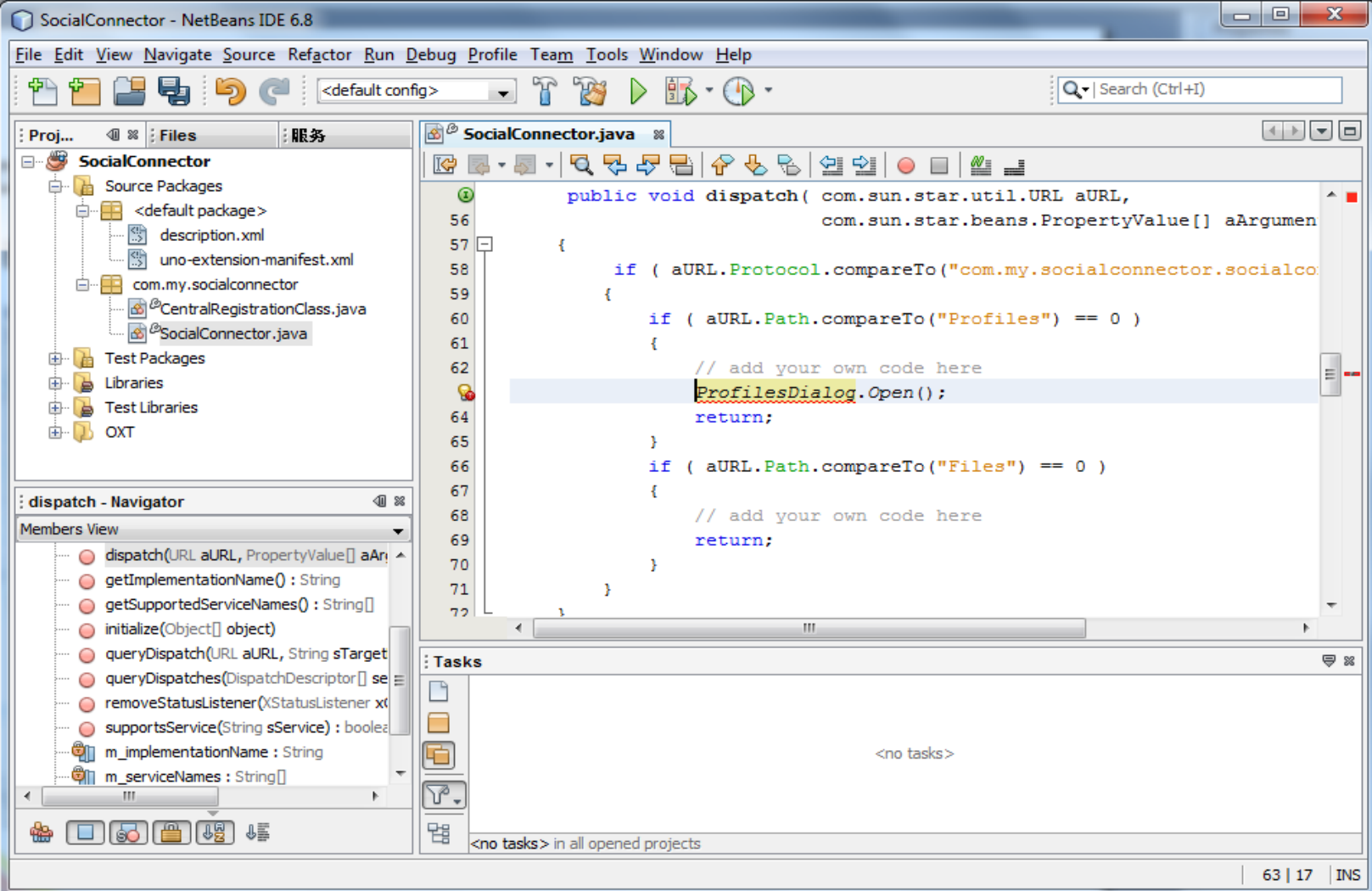
Configure the classpath for the project.

- Extend project tree > Right Click on Libraries >Add Jar/Folder...



Start Coding

- Add your own codes at the main java class



The screenshot displays the NetBeans IDE 6.8 interface for a project named "SocialConnector". The main editor window shows the "SocialConnector.java" file with the following code:

```
public void dispatch( com.sun.star.util.URL aURL,
                    com.sun.star.beans.PropertyValue[] aArgumen
56
57
58     if ( aURL.Protocol.compareTo("com.my.socialconnector.socialco
59     {
60         if ( aURL.Path.compareTo("Profiles") == 0 )
61         {
62             // add your own code here
63             ProfilesDialog.Open();
64             return;
65         }
66         if ( aURL.Path.compareTo("Files") == 0 )
67         {
68             // add your own code here
69             return;
70         }
71     }
72
```

The project explorer on the left shows the following structure:

- Proj...
 - Files
 - SocialConnector
 - Source Packages
 - <default package>
 - description.xml
 - uno-extension-manifest.xml
 - com.my.socialconnector
 - CentralRegistrationClass.java
 - SocialConnector.java
 - Test Packages
 - Libraries
 - Test Libraries
 - OXT

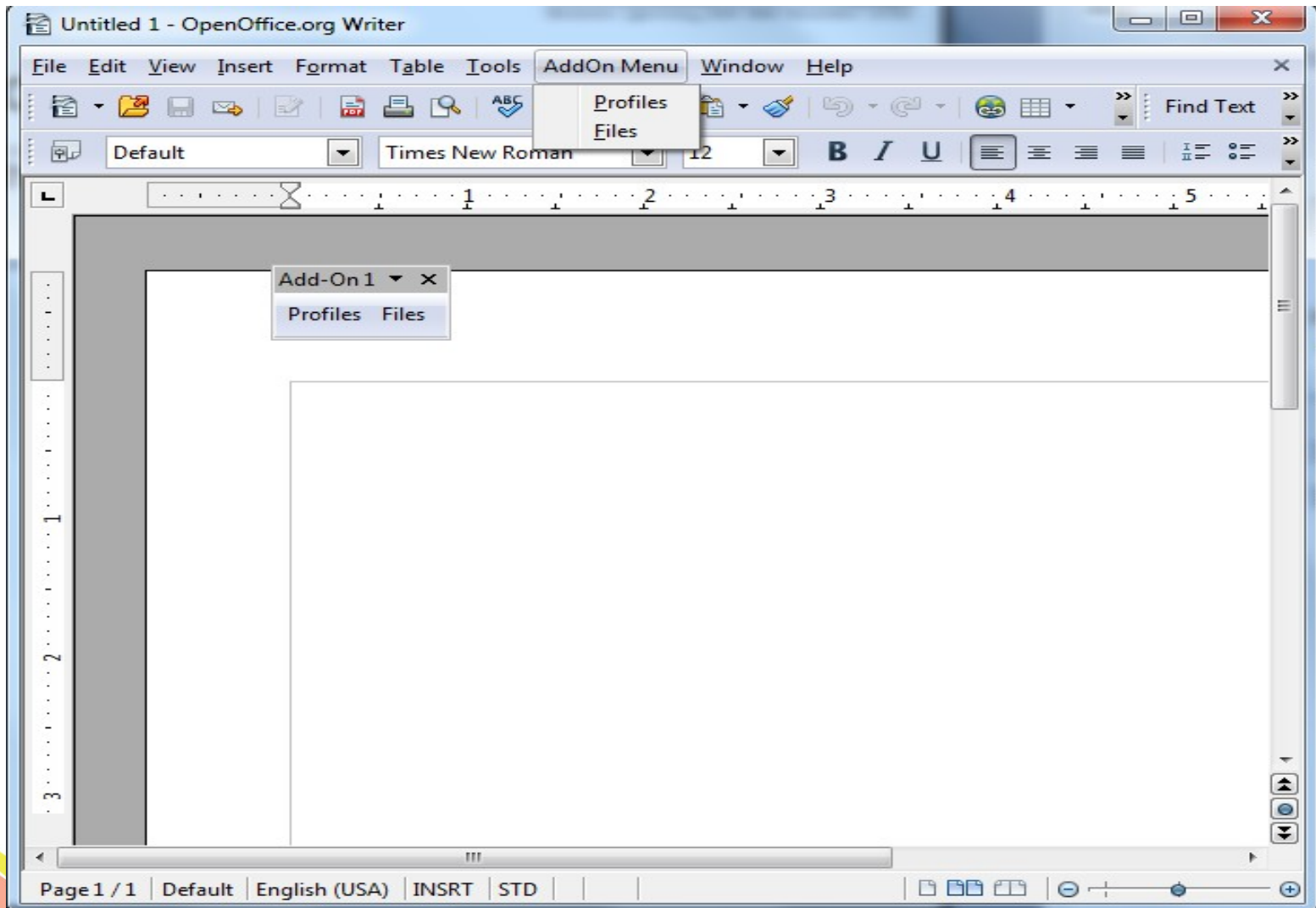
The "dispatch - Navigator" window shows the "Members View" with the following methods and fields:

- dispatch(URL aURL, PropertyValue[] aArg...
- getImplementationName() : String
- getSupportedServiceNames() : String[]
- initialize(Object[] object)
- queryDispatch(URL aURL, String sTarget
- queryDispatches(DispatchDescriptor[] se
- removeStatusListener(XStatusListener xt
- supportsService(String sService) : boolea
- m_implementationName : String
- m_serviceNames : String[]

The "Tasks" window at the bottom shows "<no tasks>".

Test your first Add-on

- Right Click on Project Name > Debug Extension in target OpenOffice.org



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Summary

OpenSocial Connector

- A set of Extensions
- Provide AOO linked value with social and cloud applications.
- Sample extensions Available at
 - <http://extensions.openoffice.org/en/project/IBMConnections>
 - <http://extensions.openoffice.org/en/project/smartcloud>

Configure your IDE

- Make sure that you have configured a valid OpenOffice.org and OpenOffice.org SDK installation under Tools > Options > Miscellaneous > OOo API Plugin

