



Module 11

Setting up Customization Environment

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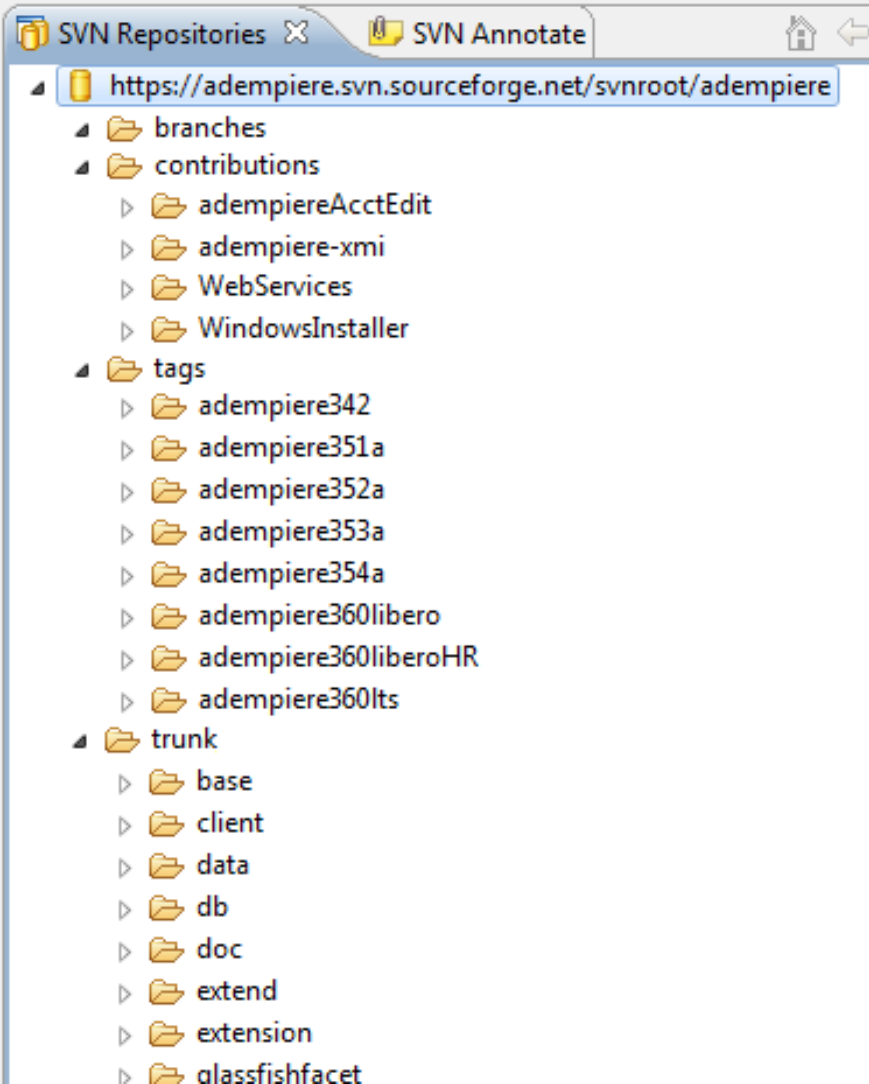
Module Objectives



- Downloading ADempiere Source Code
- Setup Development Environment
- Deploy new development



ADempeire SVN – Community Process



- **branches**

Experimental Area

- **contributions**

Functional Modules

- **tags**

Official Releases

- **trunk**

Latest Workable Version

Switching from SVN to Mercurial



Timeframe for the Switch to Mercurial

- ✓ On Friday, January 14th: HG becomes the main line of development
- ✓ On Wednesday, January 19th there will be a "switch day"
- ✓ On Tuesday, February 1st, we will drop /trunk from SVN
- ✗ On Wednesday, April 20th, another "switch day"
- ✗ On Monday, May 2nd, we will finally drop the SVN repo

Mercurial Resource

- Maybe the best tutorial on HG: <http://hginit.com/>
- Practical and ADempiere related info: [Mercurial Test Environment](#)
- Docs about Mercurial on Sourceforge: <https://sourceforge.net/apps/trac/sourceforge/wiki/Mercurial>
- Online-Book "Mercurial: The Definitive Guide": <http://hgbook.red-bean.com/>

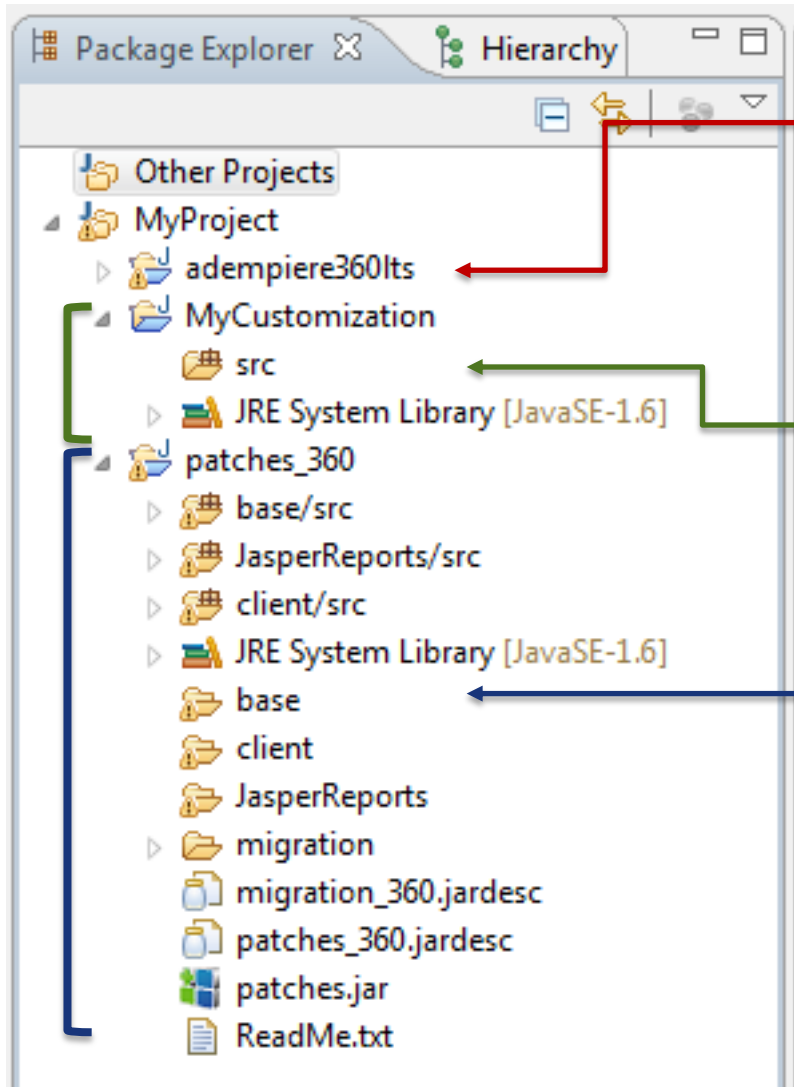
Adempiere Precedence of JAR

1. **Customization.jar**
2. **Patches.jar**
3. **<Package>.jar** (i.e., LiberoHR.jar, LiberoManu.jar, etc...)
4. **Adempiere.jar**

Deploying as a new JAR

- From eclipse Export the Development Project as JAR file
- Copy and Paste to Adempiere
 1. As customization.jar in C:\Adempiere\lib
 2. As <Package>.jar in C:\Adempiere\Packages\<Package>\<Package>.jar
- Execute Run_Setup.bat or RUN_SilentSetup.bat to include the new classes into the system runtime

Setup Development Environment



1. Main AD Project

2. Patch Project

3. Customization Project

Customization Project
Overwrite
Patch Project
Overwrite
Main ADempiere Project

Creating Migration Script



From User's Preference

A screenshot of a software preference dialog box. The 'Printing' section is expanded, showing a 'Printer' dropdown set to 'SnagIt 7' and an unchecked 'Always Preview Print' checkbox. Below this, the 'Date' field is set to '13/03/2554', 'Dictionary Maintenance' is unchecked, and 'Log Migration Script' is checked. The 'Charset' dropdown is set to 'UTF-8'. A red rectangular box highlights the 'Log Migration Script' checkbox and its label.

Migration Script will be stored in

C:\Users\<User>AppData\Local\Temp\migration_script_postgresql.sql

WORKSHOP



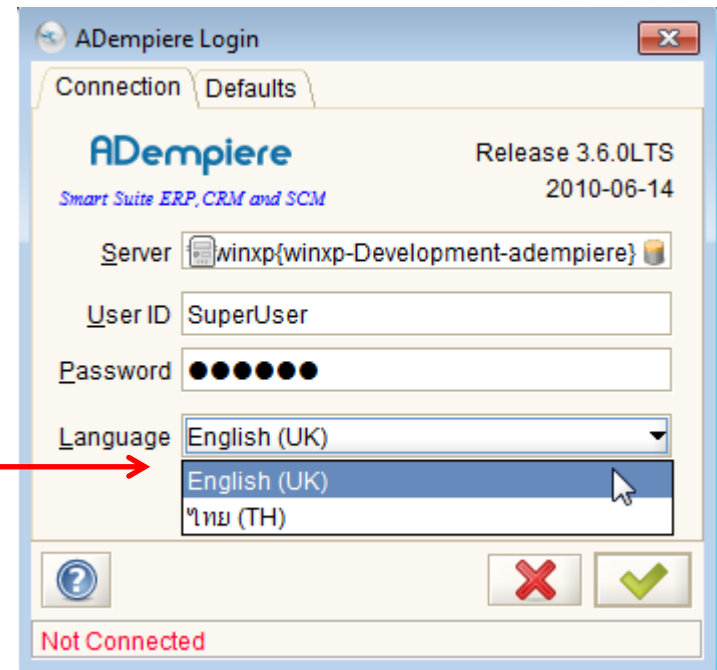
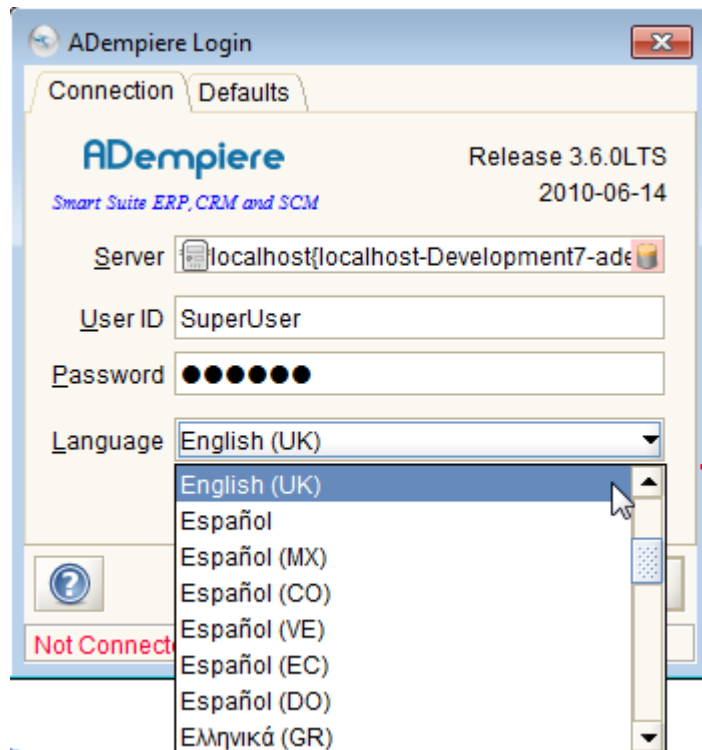
hands
On

The text 'hands On' is centered on the page. The word 'hands' is in a black, lowercase, serif font. The word 'On' is in a larger, bold, black, lowercase, serif font. Two blue handprints are positioned behind the text, one on the left and one on the right, with the fingers pointing towards the center. The handprints are stylized and have a textured, ink-like appearance.

Scenario



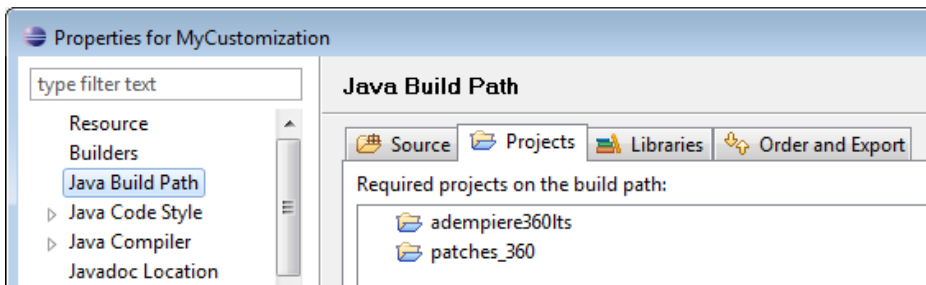
- Make customization to the login window so that the dropdown list show only Thai and English language



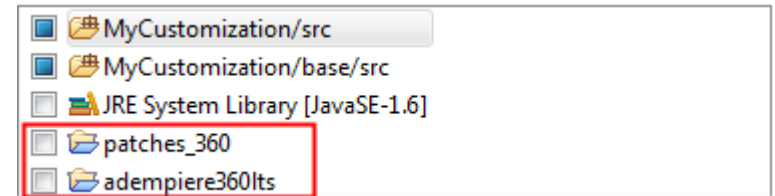
Setup Workspace



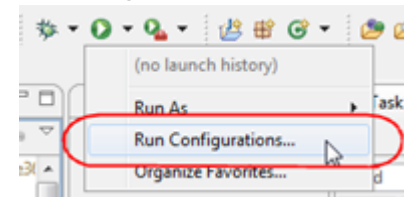
- Open program **Eclipse**
- Open Workspace **C:\Training360LTS**
- Create new Java Project **MyCustomization**
 - From Menu, select **File | New | Java Project**
 - **Project Name:** MyCustomization
 - Click **Finish**
- Setup project dependency for **MyCustomization**
 - Right click on MyCustomization project folder
 - Select **Property**
 - **On Property dialog, set Java Build path** and select 2 projects, **Adempiere360Its** and **patches_360**



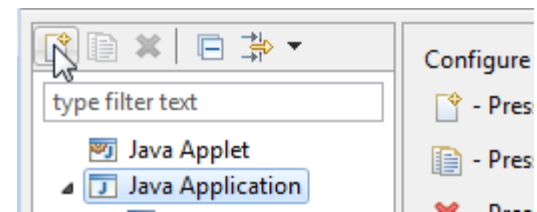
- Click on Order and Export tab, move patches_360 to higher priority than adempiere360Its (patches.jar overwrite ADempiere.jar)



- Click OK to close the dialog.
- Create Run Configurations
 - With **MyCustomization** project selected, click on **Run Configuration** button, it will launch a dialog



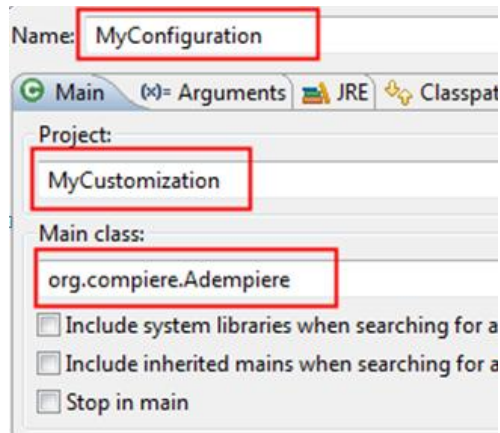
- With **Java Application** selected, click **New**



Setup Workspace



- On **Main** tab
 - **Name:** MyConfiguraton
 - **Project:** MyCustomization
 - **Main class:** org.compiere.Adempiere



- On **Arguments** tab fill **VM Argument** as follow,

```
-DPropertyFile=${workspace_loc}/MyFirstProject.properties  
-Dorg.adempiere.server.embedded=true  
-Xms128M  
-Xmx256M
```



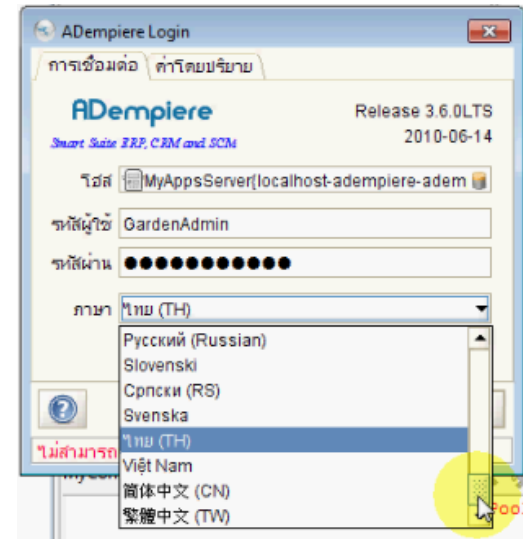
org.compiere.Adempiere act as entry point when run the code.

MyFirstProject.properties is the **adempiere.properties** for this project.

- Click **Apply** and close this dialog.
- We are now ready to run Adempiere from eclipse.

- Test run Adempiere

- Click on **Run** button for **MyConfiguration**
- Adempiere will start as normal. You will still see that the Language field in login page is now listing all available language.



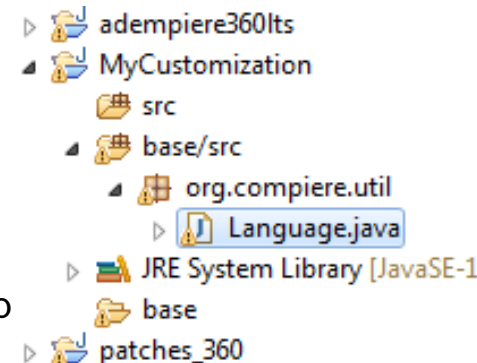
- Next step we will modify the code so that it list only Thai and English.

Modify Source Code



- Modify Source Code

- The Source Code that control the list of Languages is located at **org.compiere.util.Language.java**
- Create **base/src** folder in **MyCustomization** project.
- Right click on **base/src** folder and create new package **org.compiere.util**
- Copy Language.java from adempiere360Its project and past it here.
- Look for method Language and modify the source code so that it only keep English (UK) and Thai language



```
Adempiere.java Language.java
/**
 * System Languages.
 * If you want to add a language, extend the array
 * - or use the addLanguage() method.
 */
static private Language[] s_languages = {

    new Language ("English (UK)",
        AD_Language_en_GB, Locale.UK, null, null,
        MediaSize.ISO.A4),
    new Language ("\u0e44\u0e17\u0e22 (TH)",
        AD_Language_th_TH, new Locale("th","TH"), new Boolean(false), "dd/MM/yyyy",
        MediaSize.ISO.A4)
};
```

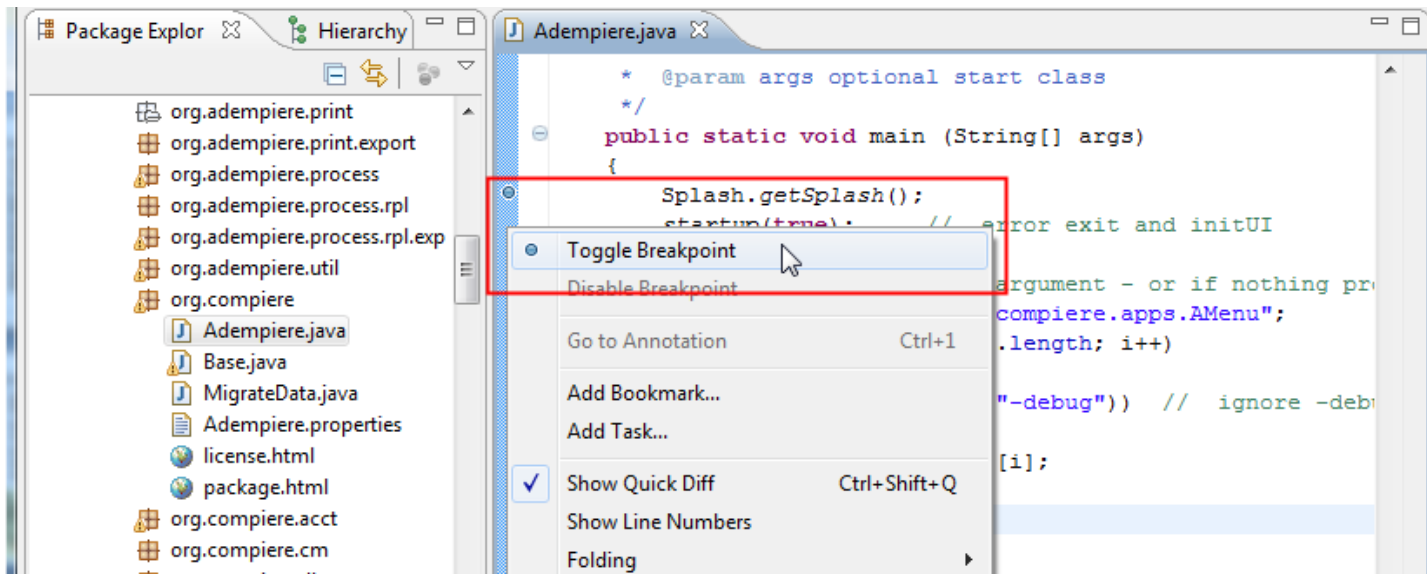
- Save the file. It will compile automatically. That's all we have to change.


- Start Run Configuration **MyConfiguration** again. You should now see only Thai and English (UK) on Language dropdown.

Running the source code in Debug Mode

Running in Debug mode is as simple as in the Run Configuration Mode

- As sample, setup break point in the **main** function of **org.compiere.Adempiere** class



- Run **Debug Configuration** instead,  and system will launch in debug mode.
- Use `ADempiere` as normal, system will break at specified Breakpoint
- Click on Eclipse: **Menu > Run** to see debugging (i.e., step into, step over and etc)

Test Your Knowledge



1. How to deploy JAR files in Production environment?
2. How to Debug Account Engine on Eclipse?
3. What is the precedence order of JAR in ADempiere?
4. What is migration script? And how it can be created?





ecosoftTM