# JEECG 微云开发平台

## Maven 版本手把手入门手册

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#### 官方标准开发工具:

1.IDE

Eclipse Java EE IDE for Web Developers.

Version: Helios Release

Build id: 20100617-1415

- 2.JDK1.7
- 3.Tomcat6
- 4.Maven 项目构建
- 5.JEECG 采用 oschina 的仓库存储依赖的 jar

一. Maven 环境搭建

- 下载:到 Maven 官方网站 <u>http://maven.apache.org/download.cgi</u>下载目前的最新版本 <u>apache-maven-3.1.1-bin.zip</u>
- 2. 解压: 下载到本地的zip文件,只需解压成X:\apache-maven-3.1.1即完成安装,目录结构

为如下	
	名称
	퉬 bin
	퉬 boot
	퉬 conf
	鷆 lib
	NOTICE
	README.txt

 配置环境变量:这台电脑->鼠标右键->属性->高级环境设置->环境变量-系统变量框下新增变 量名 M2\_HOME,值为 X:\apache-maven-3.1.1

编辑系统变量						
变量名(N):	变量名(N): M2_HOME					
变量值(V):	5垂值(V): D:\apache-maven-3.1.1					
	确定 取消					



编辑系统变量						
变量名(N):	M2					
变量值(V):	变量值(V): %M2_HOME%\bin					
	确定取消					



编辑系统变量					
变量名(N):	Path				
变量值(V):	ıce Toolkit\;%M2%;%JAVA_HOME%\bin;%J				
	确定取消				

论坛: <u>www.jeecg.org</u>

QQ 群: 106259349, 106838471, 289782002

4. 测试安装:win+R ->cmd ->在命令行中输入 mvn -version 显示 mvn 版本信息为 Apache Maven 3.1.1 则为安装成功。



5. 修改 maven 仓库存放位置:找到 maven 下的 conf 下的 settings.xml 配置文件,我的是在 D:\apache-maven-3.1.1\conf\settings.xml。maven 的仓库默认是放在本地用户的临 时文件夹下面的.m2 文件夹下的 repository 下,这很影响 C 盘的空间。现在我们来修改将它 指定到我们自己的路径下,我现在要将仓库指定到 D:\Maven\repo\m2 (可以自己定义位置) 目录下.



- 6. OK, 先来体会一下 maven, 在 cmd 中敲并回车执行: mvnhelp:system 这时候 maven 就会从 远程仓库开始下载一大堆的东西, 没事, 让它下载着, 迟早都要下载的。
- 二. MyEclipse 或 Eclipse 环境搭建
  - 1. 插件安装: MyEclipse8 MyEclipse2014已经自带 maven 插件,此步可以略过。
  - 2. 在线安装:选择 Help --> Install New Software 输入地址

http://download.jboss.org/jbosstools/updates/m2eclipse-wtp/,把选项

勾上,然后等待它下载安装,完成之后重启 eclipse 即可

Work with: m2eclipse-wtp updates - http://download.jboss.o	rg/jbosstools/updates/m2ec
	Find
type filter text	
Name	Version
▲ ✔ 000 M2E Maven Archiver Connector	
✓ ♣ m2e connector for mavenarchiver pom properties	0.15.0.201212080009
a 🗹 💷 Maven Integration for Eclipse	
🗹 🖗 m2e - Maven Integration for Eclipse	1.4.0.20130601-0317
🗹 称 m2e - slf4j over logback logging (Optional)	1.4.0.20130601-0317
▲ ✔ 000 Maven Integration for WTP	
🗹 🖗 Maven Integration for WTP	0.15.3.20120830-0850

3. 配置 eclipse:找到 Maven4MyEclipse下的 Installations,添加 maven的安装目录

Internet Tools 🔷	Select the installation used to launch Mayen:	
b Java Enterprise Projec		
→ JPA	✓ External D:\apache-maven-3.1.1 (3.1.1)	<u>A</u> dd
▲ Maven4MyEclipse	Embedded (3.0.4/1.4.0.20130531-2315)	- 11-
Archetypes		<u>E</u> dit
Discovery		Pomovo
Installations		Kemove
Java EE Integration		
Lifecycle Mappings		
Templates		
User Interface		
User Settings	Note: Embedded runtime is always used for dependency resolution, but	
Warnings	does not use global settings when it is used to launch Maven. To learn more	
b Mobile Tools	visit the Mayen web page	
Profiler	visit die <u>maren</u> web page.	
Project Libraries		
Project Migration	Global settings from installation directory (open file):	
> Report Design	Duanacha mayon 2.1.1) conflicattings yml	Province
b Servers	D:\apache-maven-5.1.1\com\settings.xml	browse

找到 User Settings 选择 maven 安装目录下的 settings.xml, 单击 Update

Settings.

Internet Tools 🔨	
<ul> <li>Java Enterprise Projec</li> <li>JPA</li> <li>Maven4MyEclipse</li> <li>Archetypes</li> <li>Discovery</li> </ul>	User <u>Settings (open file</u> ):          D:\apache-maven-3.1.1\conf\settings.xml         Update Settings
Installations	
Java EE Integration	Level Demostration (Group manuard states and alphal antifactor).
Lifecycle Mappings	Local Repository (From merged user and global settings):
Templates	D:/Maven/repo/m2/ Reindex
User Interface User Settings Warnings	

OK , eclipse 配置已经完成了。

- 三. 加载 jeecg-maven 项目
- 1. 加载项目:加载 jeecg-maven 项目到 MyEclipse 后,选择项目名右键 properties,选择 Java Build Path,把红叉的 JRE 删除,添加自己的 JRE 库。选择 builders 把一些红叉的和带有 miss 的选项取消勾选,确定后退出

> 进 Source 🗁 Projects 🛋 Libraries 🔩 Order and Export JARs and class folders on the build path: b A JRE System Library [JavaSE-1.6] Maven Dependencies b and org.maven.ide.eclipse.MAVEN2 CLASSPATH CONTAINER Configure the builders for the project: ✓ ■ Faceted Project Validation Builder ✓ JavaScript Validator Missing builder (com.genuitec.eclipse.j2eedt.core.WebClasspathBuilder) 🛃 🔜 Java Builder Missing builder (com.genuitec.eclipse.j2eedt.core.J2EEProjectValidator) DeploymentDescriptorValidator ✓ → Validation Missing builder (org.maven.ide.eclipse.maven2Builder) Hot-syncing changes ✓ MyEclipse Spring Project Builder 🗹 🔜 Maven Project Builder

2. 下载 maven 所包含的包:选择项目名右键选择 RunAS,再选择 Maveninstall,控制台就开始下载 项目所需要的包。

#### 四. 配置 jeecg 的 maven 项目

1. 准备

导入 jeecg 项目之前,打开 eclipse/myeclipse,配置本地的 maven,这样当你导入 maven 项目后,会自动下载 maven 相关的依赖 jar。



2. 导入 jeecg 的 maven 项目

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		() Import				
		Select Import Existing Maven Projects	2	Import Maven Projects		
500	urce Refactor Navigate Search 8	roject Select an import source:		Maven Projects Select Maven projects		
ge E	13 12 Type Hiera □ □ □ □ □ □ □ □ □ □ □ □ □ □ □ □ □ □ □	Aava EE     Aavan     Maven     Check out Maven Projects from SCM		Boot Directory: Elworkspaceljeecg framework Brojects:	- [1	rowse_
	New Show In Alt+Shift	C. Install or depicy an artifact to a Maven n     C. Install or depicy an artifact to a Maven n     W +     De Plug in Development     Place Rende Systems	epository	[2] /pomaml orgjeecghameworkjeecgi.4.3-GAwar	S De	elect <u>A</u> ll rselect A Bøfresh
	Copy Ctrl Copy Qualified Name	+C > las Run/Debug > las SVN		Bdd project(s) to working set		
8 %	Paste Ctrl Delete Del	+V b Taiks b b Taiks b m Team 		Working liefs Advanced	+	Morg.,
ès S	Import Export					
	Refresh	F5 (?) + Back Next >	Finish Cancel	(?) * Back Next -	Brish C	ancel

#### 3. Java Build Path

Libraries 如下



Source 如下, (MyEclipse 这里可能会按照 Maven 的标准结构显示, 即多出 test 目录并以红 叉显示,请将其移除)

Properties for jeecg-framew	ork	- <b>-</b> X
type filter text	Java Build Path	← ▼ ⇒ ▼ ▼
Resource Builders Deployment Assembly FindBugs Java Build Path Java Code Style Java Style St	<ul> <li>Source Projects Libraries Order and Export</li> <li>Source folders on build path:</li> <li> </li> <li>Output folder: jeecg-framework/target/classes             </li> <li>Classifier (None)                 </li> <li>Rative library location: (None)             </li> <li>Piecg-framework/src/main/resources             </li> <li>Output folder: jeecg-framework/target/classes</li> <li>Included: **/* java</li> <li>Excluded: (None)</li> <li>Mative library location: (None)</li> </ul> <li> <ul> <li>Included: (All)</li> <li>Excluded: **</li> <li>Native library location: (None)</li> </ul> </li>	Add Folder Link Source Edit <u>R</u> emove
Server Service Policies Targeted Runtimes Task Repository	☑ Allow output folders for sour <u>c</u> e folders Default output folder: jeecg-framework/target/classes	Browse OK Cancel

4. 运行 maven 测试

Run As	•	-	1 Run on Server	Alt+Shift+X, R
Debug As	•	2	2 Java Applet	Alt+Shift+X, A
Profile As	•		3 Java Application	Alt+Shift+X, J
Validate		Ju	4 JUnit Test	Alt+Shift+X, T
Team	•	m2	5 Maven build	Alt+Shift+X, M
Compare With	•	m2	6 Maven build	
Restore from Local History		m2	7 Maven clean	
Maven	•	m2	8 Maven generate-sources	
Java EE Tools	•	m2	9 Maven install	
Configure	•	m2	Maven test	
Properties	Alt+Enter		Run Configurations	

控制台没有错误出现就 ok 啦,下一步介绍 maven 项目的启动。

#### 五. 启动 maven 项目的 3 种方式

1. 使用 maven 的 build 的方式启动

工程右键,运行 mavenbuild:

			Maven Repositories   👫 Server	; 🕮 🔪 🖳 Console
Easy Explore				
Run As	۲	A.	1 Run on Server	Alt+Shift+X, R
Debug As	۲	₩j	2 Java Applet	Alt+Shift+X, A
Profile As	۲	J	3 Java Application	Alt+Shift+X, J
Validate		Ju	4 JUnit Test	Alt+Shift+X, T
Team	×	m2	5 Maven build	Alt+Shift+X, M
Compare With		m2	6 Maven build	
Restore from Local History		m2	7 Maven clean	
Mayan		-	8 Mayon depende-sources	

#### 配置运行服务的环境变量:

Run Configurations	the second se	
Create, manage, and run configurations		
Yee       Image: Constant State	Name: jeecg-framework-run          Main       JRE       Refresh       Environment       Common         Base directory:       S(workspace_loc:/jeecg-framework)         Browse Workspace_loc:/jeecg-framework)       Browse Workspace       Browse File System         Goals:       tomcatrun         Profiles:       Offline       Update Snapshots         Offline       Update Snapshots         Resolve Workspace artifacts	Variables) Select
J <sup>™</sup> <sub>TU</sub> JUnit Plug-in Test ▲ m2 Maven Build m2 jeecg-framework-run	Parameter Name Value	Add Edit
<ul> <li>OSGi Framework</li> <li>Ju Task Context Test</li> </ul>		Remove
≫ XSL	Maven Runtime: Embedded (3.0.2/1.0.200.20111228-1245)	Configure
Filter matched 17 of 17 items	Apply	Revert
?	Run	Close

点击 Run 按钮即可以启动应用。

浏览器访问: http://localhost:8080/jeecg。

2. 使用 Eclipse 的 server 启动

工程右键,设置部署程序集(如果没有 Deployment Assembly 这个属性,在项目所在的工作区间有一个.project 文件,打开 该文件增加如下黄色的这一行,用于 enable Deployment Assembly 属性:

<natures>..... <nature>org.eclipse.wst.common.modulecore.ModuleCoreNature</nature>

Edit Source Refactor Navioate Sea	S Properties for jeecg-namer	NOT K			
·	type filter text	Web Deployment Assembly			<b>\$ • 4 • •</b>
I Package E E Type Hiera	Resource Builders	Define packaging structure for this	Java EE Web Application proj	ect.	
🖯 🕸 🖓	Deployment Assembly	Source	Deploy Path		Add
jeecg-framework @ src/main/java	FindBugs Java Build Path	/src/main/java /src/main/resources	WEB-INF/classes		Edit
United States (1997) (2007) (2	<ul> <li>Java Code Style</li> <li>Java Compiler</li> <li>Java Editor</li> </ul>	<ul> <li>/src/main/webapp</li> <li>/src/test/java</li> <li>/target/m2e-wtp/web-reso</li> </ul>	WEB-INF/classes		Remove
Maver Dependences Apache Tornat v6.0 (Apache To per c target UCENSE.tot PenAuMind FRADMEnd Servers	Javadoc Location JSP Fragment Maven Project References Run/Debug Settings Server Service Policies Targeted Runtimes Task Repository Task Tags				
	Web Content Settings Web Page Editor Web Project Settings WikiText	<ul> <li>Cannot find entry: "/target/m2e</li> <li>Cannot find entry: "/src/test/jav</li> </ul>	e-wtp/web-resources". ra".		
	> XDoclet			Revert	Apply
I	(?)			OK	Cancel

#### 点击添加按钮:



Cannot find entry: \*/target/m2e-wtp/web-resources\*.

移除无用的选项<sup>9</sup> Cannot find entry: \*/src/test/java\*.

#### 后的最终页面:

type filter text  Resource Builders	Web Deployment Assembly Define packaging structure for th	is Java EE Web Application project.	⇔ - ⇔
Deployment Assembly	Source	Deploy Path	A <u>d</u> d
FindBugs Java Build Path	/src/main/java	WEB-INF/classes WEB-INF/classes	Edit
⊳ Java Code Style	/src/main/webapp	<u> </u>	Remove
Java Compiler	A Maven Dependencies	🗀 WEB-INF/lib	
Java Editor			
Javadoc Location			
JSP Fragment			
Maven			
Proiect Facets ▼ ∢ Ⅲ ►		Reven	t <u>A</u> pply
?		ОК	Cancel

配置本地 Server 并启动:

ser			a.	
⊿ 🗁 Server ₩ Server	5			
	ОК	Cancel		

🔐 Problems 🕞 Progress 🔕 Tasks 🗐 Console 🔛 Maven Repositories 🖗 Servers 🗵

No servers available. Define a new server from the new server wizard...

New Server	
Define a New Server Choose the type of server to create	New Server Runtime Environment
<u>Download additional server adapters</u> Select the server type:	Specify the installation directory
type filter text  Tomcat v5.5 Server  Tomcat v6.0 Server  Tomcat v7.0 Server  Dubliches and unce ISE web projects and server configurations to a	Na <u>m</u> e: Apache Tomcat v6.0 Tomcat installation <u>d</u> irectory:
local Tomcat server. Server's host name: localhost	D:\Tomcat\tomcat6.0.29 Browse apache-tomcat-6.0.32 Download and Install
Server name: Tomcat v6.0 Server at localhost Server runtime environment: Apache Tomcat v6.0	JRE: idk1.7.0_51  Installed JREs
Contigure runtime environments     Concel     Cancel	? < Back Next > Finish Cancel

dd and Remove Modify the resources that are configu	ured on the server	Add and Remove Modify the resources that are co	onfigured on the server
Move resources to the right to config Available:	ure <mark>t</mark> hem on the server Configured:	Move resources to the right to o Available:	onfigure them on the server Configured:
C jeeg framework	Add > Remove dd All >> Remove All		Add >
(?) < Back	Next > Finish Canc	el ? « Back	Nest = Finish Cancel

#### 右键 start, 启动应用

🕈 Problems (🖷 Progress 🕼 Tasks (💭 Maven Repositories (桃 Servers 🖾 📮 Console)	📄 🅸 🜔 🖉
Tomcat v6.0 Server at localhost [Stopped]	
🔓 jeecg-framework	

浏览器访问:<u>http://localhost:8080/jeecg-framework</u>。

(如果访问页面时报:

Failed to load or instantiate TagLibraryValidator class: org.apache.taglibs.standard.tlv.JstlCoreTLV

#### 请查看你的工程目

录.metadata\.plugins\org.eclipse.wst.server.core\tmp0\wtpwebapps\jeecg-framework\WEB-INF \lib 下面是否有这两个 jsp-api.jar 和 servlet-api.jar 文件,将其删掉,重新启动 tomcat。)

3. 使用 MyEclipse 的 server 启动

#### 运行 build



#### 配置结果:

type filter text		Web Deployment Assembly		⇔ ▼ ⇔ ▼
Resource Builders	<b>^</b>	Define packaging structure for this	Java EE Web Application project.	
Java Build Path		Source	Deploy Path	A <u>d</u> d
Java Code Style	E	🗀 /src/main/java	WEB-INF/classes	
Java Compiler		/src/main/resources	WEB-INF/classes	<u>E</u> dit
Java Editor		/src/main/webapp	<b>□</b> /	Remove
Javadoc Location		🛋 Maven Dependencies	🗀 WEB-INF/lib	
▲ MyEclipse				
Deployment Assembly				
JSP Fragment				
Maven4MyEclipse				
Project Facets	-			

#### 右键 start, 启动应用:

Overview Dependencies Dependency Hie	erarchy Effective PON	1 pom.xml Depe	ndency Graph
🔐 Problems 🕢 Tasks 🚇 Web Browser 🗳 Console 👫 Servers 🖄 📚 Project Migration 🕅			
Server	Status	Mode	Location
🔎 MyEclipse Derby	🖥 Stopped		
a 📈 MyEclipse Tomcat	🖡 Running	🚺 Run	
🔁 jeecg	🛇 ОК	🗁 Exploded	E:\zhanggm_project\.metadata\.me_tcat\webapps\jeecg-f
減 MyEclipse Tomcat 7	🖥 Stopped		

浏览器地址: http://localhost:8080/jeecg-framework。

**六**. 发布 war 包 工程右键:

	Pup As		8	1 Pup on Conver	Alt Chift V P
	Kun As			I Kun on Server	AIL+SHITL+A, K
	Debug As	•	2	2 Java Applet	Alt+Shift+X, A
	Profile As	+		3 Java Application	Alt+Shift+X, J
	Validate		Ju	4 JUnit Test	Alt+Shift+X, T
	Team	•	m2	5 Maven build	Alt+Shift+X, M
	Compare With	+	m2	6 Maven build	
	Restore from Local History		m2	7 Maven clean	
	Maven	+	m2	8 Maven generate-source	s
	Java EE Tools	•	m2	9 Maven install	
n	Configure	•	m2	Maven test	
1	Properties	Alt+Enter		Run Configurations	

编译通过后, target 目录下回生成 jeecg.war 包:

۵	🔛 jee	ecg-framework
	Þ 🐲	src/main/java
	۵ 🖉	src/main/resources
	▷ 🛋	JRE System Library [jdk1.7.0_51]
	Þ 🛋	Maven Dependencies
	Þ 🛋	Apache Tomcat v6.0 [Apache Tomc
	۵ 🕞	src
	4 🗁	target
	⊳	🗁 jeecg
	$\triangleright$	🗁 maven-archiver
	$\triangleright$	🗁 surefire
		jeecg.war
		LICENSE.txt
	M	pom.xml
		README.md
Þ	🗁 Se	rvers

拷贝 jeecg.war 到 tomcat 的 webapps 下面,然后运行 tomcat 即可。

#### 七.错误信息

#### 1. 控制台报以下错:

[INFO] --- maven-compiler-plugin:2.3.2:compile (default-compile) @ jeecg ---

[INFO] Compiling 409 source files to E:\workspace\jeecg-framework\target\classes

[INF0] -----

[ERROR] COMPILATION ERROR :

[INFO] -----

[ERROR] \workspace\jeecg-framework\src\main\java\org\jeecgframework\core\annotation\config\AutoMenuOperation.java:[33,52] 不兼容的类型

找到: org.jeecgframework.core.annotation.config.MenuCodeType

 ${\tt m} {\tt g: org.jeecgframework.core.annotation.config.MenuCodeType}$ 

[ERROR] \workspace\jeecg-framework\src\main\java\org\jeecgframework\core\common\service\impl\CommonServiceImpl.java:[106,28] 无法确定<T>T 的类型参数;对于上限为T,java.lang.Object的类型变量 T,不存在唯一最大实例

[ERROR] \workspace\jeecg-framework\src\main\java\org\jeecgframework\core\common\service\impl\CommonServiceImpl.java:[144,31] 无法确定<T>T 的类型参数:对于上限为T,java.lang.Object的类型变量 T,不存在唯一最大实例

[ERROR] \workspace\jeecg-framework\src\main\java\org\jeecgframework\core\common\service\impl\CommonServiceImpl.java:[304,29] 无法确定<T>T 的类型参数;对于上限为T,java.lang.Object的类型变量 T,不存在唯一最大实例

[ERROR] \workspace\jeecg-framework\src\main\java\org\jeecgframework\core\util\ToEntityUtil.java:[22,21] 无法确定<T>T 的类型参数; 对于上限为 T,java.lang.Object的类型变量 T, 不存在唯一最大实例

[INFO] 5 errors

这是因为你的编译器低于1.7,请修改你的编译器为1.7。

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