Developers Guide

**IWA**

**Instant Web Application**

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|  |  |
| Date: | August 12th 2011 |
| Version: | 1.0 |
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# Change Log

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| --- | --- | --- | --- |
| **Version** | **Change** | **Date** | **Autor** |
| 1.0 | First Version | 12.08.2011 | Mischa Christen |

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This guide has been tested with the following configuration:

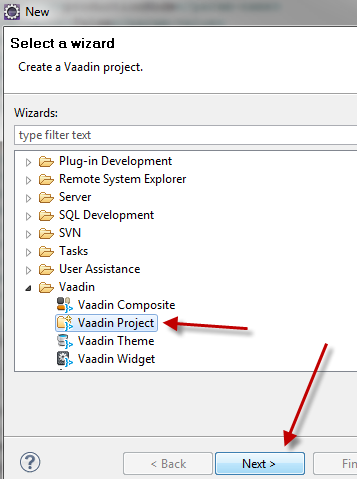
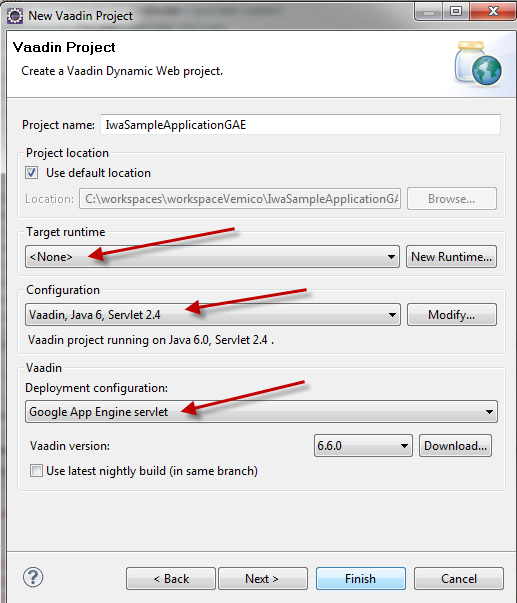
* Java 1.6.0\_25
* Eclipse 3.6 Helios
* AppEngine SDK 1.5.2
* GWT 2.3
* Vaadin 6.6
* Tomcat 6
* MySQL 5.5.13
* Datanucleus (JPA Provider) 1.1.5

# Create an IWA based application that runs in Google App Engine

1. Prerequisites:

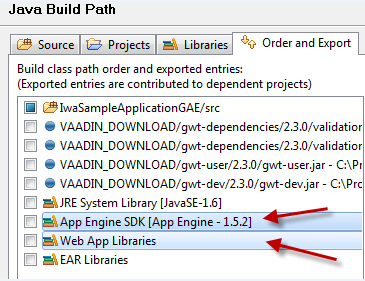
* Install Eclipse (Java EE Version)
* Install Google Plugin (Eclipse Helios Update Site: <http://dl.google.com/eclipse/plugin/3.6>)
* Install Vaadin Plugin (Eclipse Update Site: <http://vaadin.com/eclipse>)

1. Create a new Vaadin Project

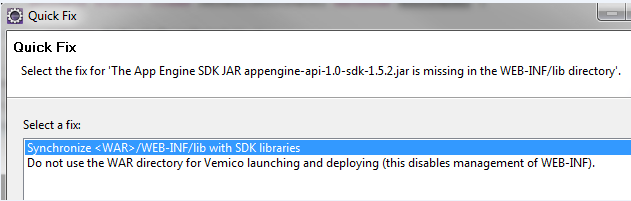
 

* Target Runtime: None
* Configuration: Vaadin, Java6, Servlet 2.4
* Deployment Configuration: Google App Engine Servlet (this will also create appengine-web.xml, logging.properties and make shure the directory structure meets the App Engine requirements (output folder is “war” instead of “WebContent”

1. Check that your project uses UTF-8 encoding
2. Right Click project, Google | App Engine Settings: "Use Google App Engine"
3. Move the AppEngine SDK above the web libraries in the build path order:



1. Synchronize the missing jars (will become a problem once you deploy your App to the GAE):



1. Also add the following jars (from the Iwa Downloads Website) to your war/WEB-INF/lib directory:

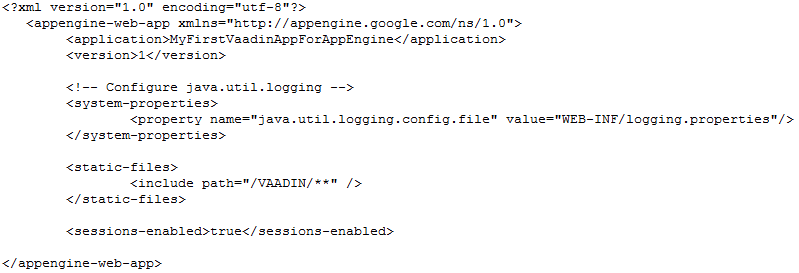
* xom-1.2.6.jar
* confirmdialog-1.1.1.jar

1. Add the folder VAADIN (from the IWA Download page) to war/WEB-INF

* To serve these files statically, add the following lines to appengine-web.xml:



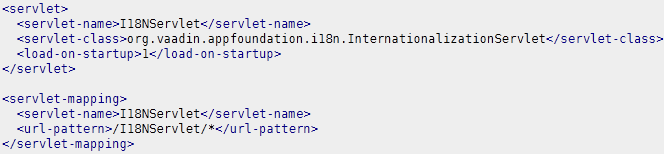
* Complete appengine-web.xml file:



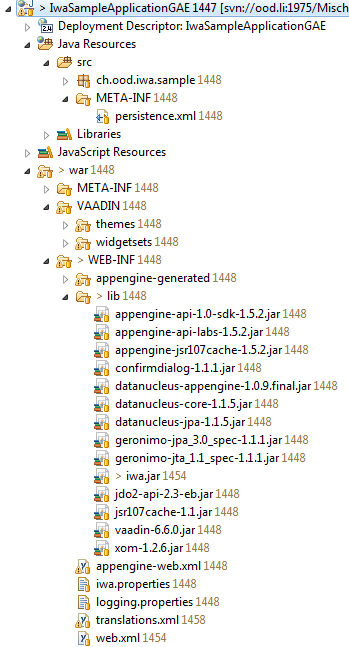
* The following files can be taken from the IWA Download page:
  + Add the JPA config file persistence.xml to src/META-INF
  + Add the translations.xml file to war/WEB-INF
  + Add the iwa.properties to war/WEB-INF

1. Add the IwaContextListener and the i18n servlet to the war/WEB-INF/web.xml:





1. Your directory structure should now look something like this:



Links for additional hints:

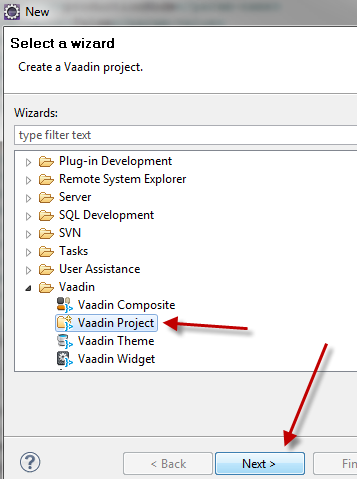
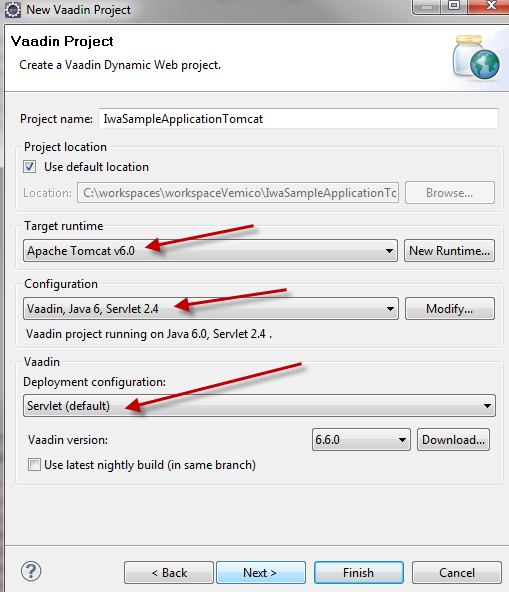
* Vaadin Quickstart with Eclipse: <http://vaadin.com/book/-/page/getting-started.first-project.html>
* Vaadin in App Engine: <http://vaadin.com/wiki/-/wiki/Main/Google%20AppEngine%20HOWTO>

# Create an IWA based application that runs with Apache Tomcat and MySql

1. Prerequisites:

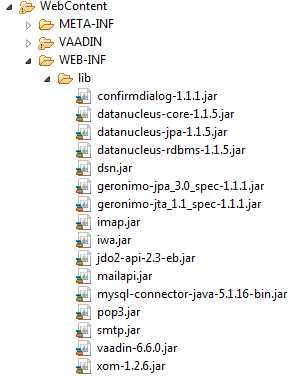
* Install Eclipse (Java EE Version)
* Install Apache Tomcat 6 (<http://tomcat.apache.org/download-60.cgi>)
* Install MySql (<http://www.mysql.com/downloads/mysql/5.5.html#downloads>)
* Install Vaadin Plugin (Eclipse Update Site: <http://vaadin.com/eclipse>)
* Install Datanucleus Plugin (Eclipse Update Site: <http://www.datanucleus.org/downloads/eclipse-update>)

1. Create new Vaadin Project

* Target Runtime: Tomcat 6
* Configuration: Vaadin, Java6, Servlet 2.4
* Deployment Configuration: Servlet

1. Add the following jars (from the Iwa Download Website) to your WebContent/WEB-INF/lib directory:

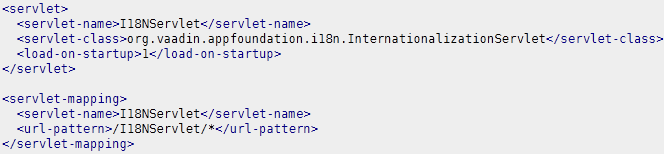


1. Add the folder VAADIN (from the IWA Download page) to WebContent/WEB-INF
2. The following files can be taken from the IWA Download page:

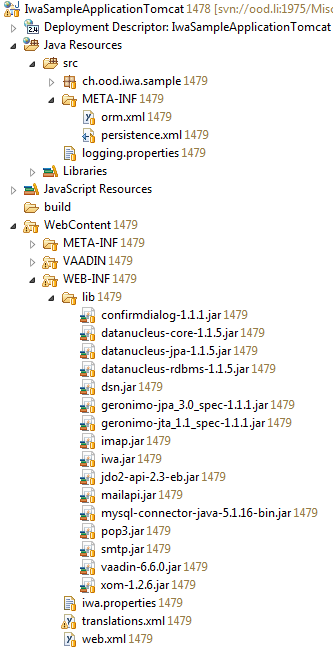
* Add the JPA config file persistence.xml and orm.xml to src/META-INF
* Add the logging.properties file to src
* Add the translations.xml file to WebContent /WEB-INF
* Add the iwa.properties to WebContent /WEB-INF

1. Add the IwaContextListener and the i18n servlet to the WebContent /WEB-INF/web.xml:





1. Your directory structure should now look something like this:

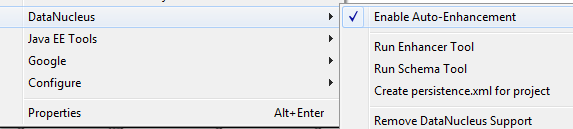


1. Create a schema “iwa” with a user “iwa” (Password “iwa”) in your MySql instance, make shure the settings in src/META-INF/persistence.xml match your environment
2. Datanucleus Settings

* Datanucleus uses Byte-code enhancement. If you wish to add your own entity classes, you might want to add the “Datanucleus Support” to enhance your classes.



* Be aware that the Datanucleus menu ist only available in the “Package Explorer” view!



1. Create new new Tomcat Server Runtime in Eclipse (see <http://www.eclipse.org/webtools/jst/components/ws/1.5/tutorials/InstallTomcat/InstallTomcat.html> for hints on this if you are not familiar with it)