

This document describes how to compile the code for the companion server for the Android application LockPic, available at <https://github.com/nicslabdev/LockPic>, designed to be hosted by Google App Engine. We assume Eclipse is installed, and also the Google App Engine SDK, available at <https://developers.google.com/appengine/downloads>.

This server is currently hosted and running at <https://scrambler-keyserver.appspot.com/keyserver>.

We start by noting that the Android application contacts only with a server in an established location. Compiling this code will generate a local instance of the server, with a blank database, which will **not** interact with the device.

To compile the project from the code, it is necessary to indicate that we want to use the Google App Engine functionality.

The project must be imported into Eclipse in the generic mode: *File > Import*, and choosing, under *General, Existing Projects into Workspace* (figure 1)

Once the project appears in the Project Explorer (left hand side bar), right click on the project, and go to *Google > App Engine Settings* (figure 2).

Select *Use Google App Engine*, and choose the desired version of the SDK (figure )

With this, the project can be compiled and locally hosted with the Run button in Eclipse. Deploying it to Google App Engine requires an account with administrator permissions on the server.

To compile and upload a copy of the server from a WAR file, the program `appcfg` provided with the Google App Engine SDK (`<GAE SDK path>/appengine-java-sdk-<version>/bin`) can be used.

A Google account is required to upload it. Prior to deploying the server, the application must be registered in the profile of the uploader, in his/her Google Developer account. An identifier must be assigned to it at this point.

This identifier must also be input in the `/war/WEB-INF/appengine-web.xml` file, between the `<application>` tags.

Once that line has been changed, it suffices to run `appcfg update` `war` directory path, authenticate with Google, and the code will be deployed.

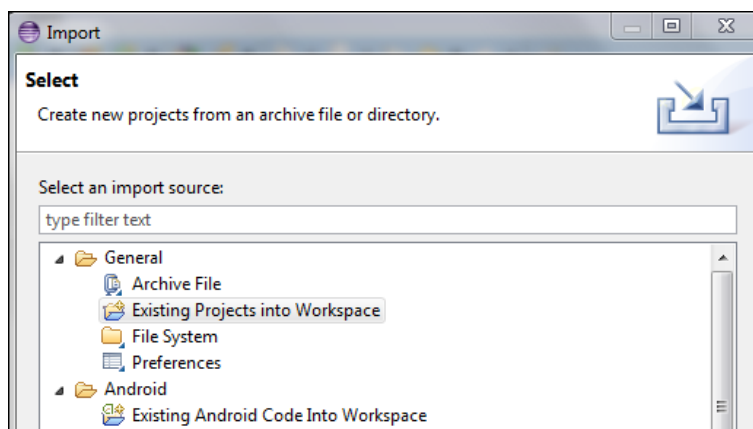


Figure 1: Importing the project

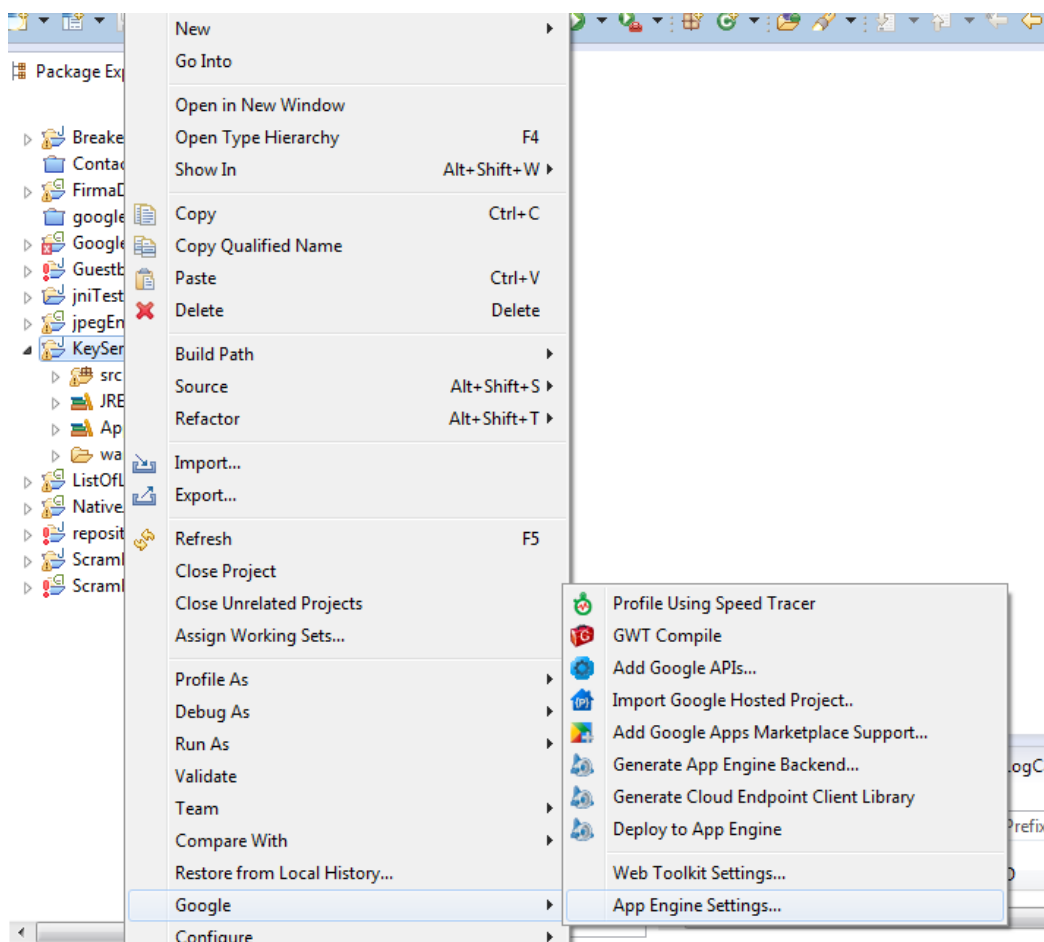


Figure 2: Project menu

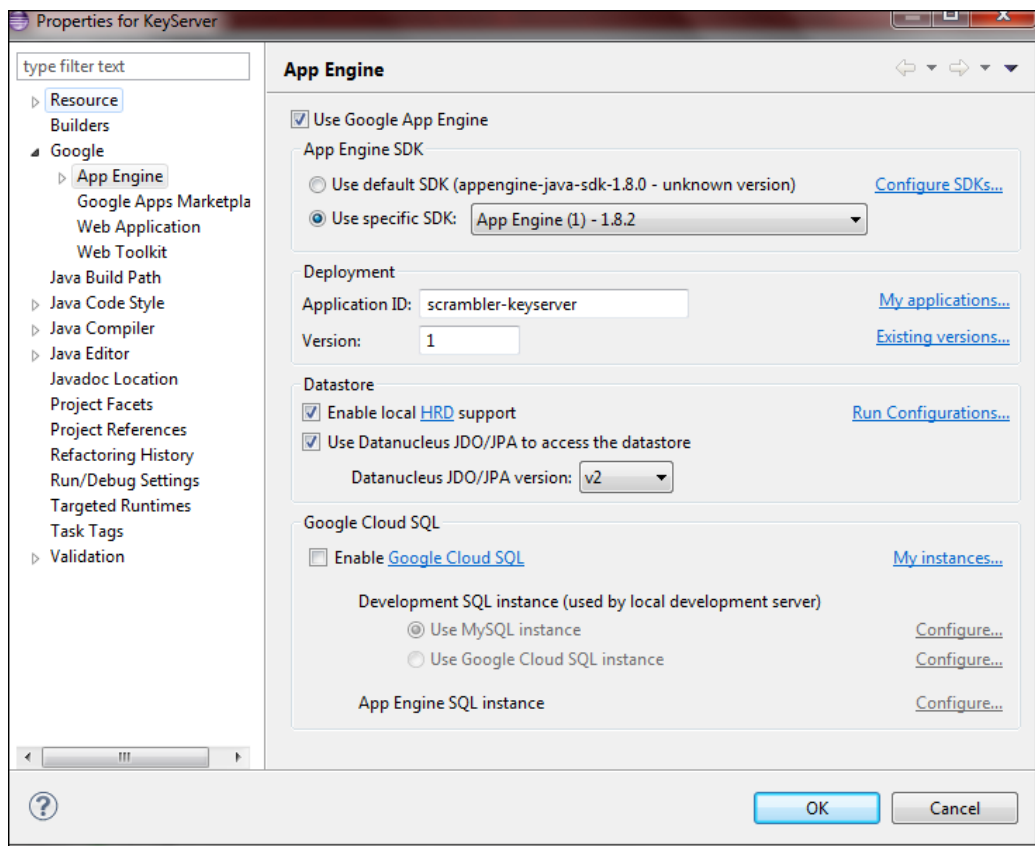


Figure 3: Google App Engine settings