# Google App Engine

Tapestry apps should run fine on Google App Engine (GAE) if you follow certain important steps.

# Required Configuration Settings

- Set tapestry.production-mode to true (to turn off live class reloading, among other things)
- Set the tapestry restrictive-environment configuration symbol to true (to prevent Tapestry from writing exception reports and cached resources to the file system)
- Set the tapestry.thread-pool-enabled configuration symbol to false (to prevent Tapestry's PeriodicExecutor from attempting to spawn threads)

### **Example configuration**

Your application's module class (generally AppModule.java) can set these symbols where it sets others (either in a method named contributeApplicationDefaults or one annotated with @ApplicationDefaults and @Contribute), as shown below.

```
AppModule (partial)

@ApplicationDefaults
@Contribute(SymbolProvider.class)
public static void configureMyApp(
    MappedConfiguration<String, String> configuration)
    {
        configuration.add(SymbolConstants.PRODUCTION_MODE, "true");
        configuration.add(SymbolConstants.RESTRICTIVE_ENVIRONMENT, "true");
        configuration.add(IOCSymbols.THREAD_POOL_ENABLED, "false");
        ...
}
```

NOTE: Setting production mode to true is generally only desirable in production and QA/testing environments, but you can override that symbol with a JVM system property (-Dtapestry.production-mode=false) in those environments.

## Serializable Objects

• Make sure all objects that you store in the servlet session -- particularly those annotated with @SessionState and @SessionAttribute - are actually serializable types. Otherwise you may see strange behavior in which objects seem to lose their session values.

## File Uploads

• If you use the Tapestry-upload module (or any file upload mechanism, for that matter), you'll need to be sure that it is configured to not store temporary uploaded files on the file system. See Uploading Files – particularly the upload.repository-threshold symbol, which should be set to a large value.

#### Other Considerations

Other than the above settings, Tapestry should provide no impediment to running your app under Google App Engine. However, you still need to adhere to all of GAE's usual constraints (as with any app, Tapestry or otherwise). Please carefully read Google's documentation for general guidelines for creating an app that is compatible with GAE.