Welcome to the Turbine Wiki

Welcome to the Turbine Project Wiki pages. Here you'll find documentation, FAQs, and other items for Turbine and all its subprojects.

You are invited to contribute to these pages. Due to excessive spamming, we were forced to limit access to the wiki. So if you want to contribute, just contact us with the name of your wiki account and we will be happy to give access to you.

What is Turbine?

Turbine is a servlet based framework that allows experienced Java developers to quickly build web applications. Turbine allows you to use personalize the web sites and to use user logins to restrict access to parts of your application.

The best place to get started with Turbine is to visit Turbine Home Page. For questions you can browse or search the Turbine mailing list archive or post to an appropriate list.

Main Releases

- Turbine 5.3/6 JAVA 17 or 21 baseline
- Turbine 5.2. This is the version of Turbine that is being actively developed. It is using Apache Db Torque 5.1. JAVA 11 baseline
- Turbine 5.1. Last release (13th Dec 2021) . Turbine version 5.1 is using Apache Db Torque 5.0. Link to Turbine 5.1 (Wiki). JAVA 8 baseline
- Turbine 5.0 - Development since July 2018. Turbine 5.0 correlates with Apache Torque 4.0.
- Release date: 28 May 2018. Link to Turbine 5.0 (Wiki). Java 8, Servlet 3.1, Velocity 2.0.
- Turbine 4 - Version 4 of the Turbine project. Last Version released is 4.0.1. Check also the [Turbine Blog](https://turbine.apache.org/blog/) Link to Wiki: Turbine4 (Wiki).
- Turbine Archetypes - Version 5.1 (Github) (released September 2022). This was developed as a Turbine Example Web app. Read more here: Turbine Archetype Blog.

Subprojects

- **Fulcrum Components** - Fulcrum is a services framework and its components are used by Turbine Core by default (Security, Pool, Parser, Factory, Crypto, Yaafi) or optionally included (nonetheless very useful) e.g. JSON and XML-RPC. Fulcrum was developed as part of the Turbine Framework. The intent behind Fulcrum is to allow Turbine's services to be used even outside of the Turbine framework. See also Fulcrum (Wiki).
- Turbine and Fulcrum projects use Turbine Parent Pom in Maven Build.

Find all source code in turbine-build (Github) or turbine-build (Apache Gitbox) in git submodules. Check out either master or trunk branch (core project). This is a short description of the structure:

<table>
<thead>
<tr>
<th>turbine-build</th>
<th>Content</th>
<th>Description of type</th>
</tr>
</thead>
<tbody>
<tr>
<td>archetypes</td>
<td>depends on core and fulcrum</td>
<td>maven-archetype</td>
</tr>
<tr>
<td>core</td>
<td>main component</td>
<td>maven-jar</td>
</tr>
<tr>
<td></td>
<td>depends on fulcrum</td>
<td></td>
</tr>
<tr>
<td>fulcrum</td>
<td></td>
<td>git-repo</td>
</tr>
<tr>
<td>parent</td>
<td>all components depend on it</td>
<td>maven-pom</td>
</tr>
<tr>
<td>site</td>
<td>wrapper for Turbine site</td>
<td>maven-pom</td>
</tr>
<tr>
<td>Jenkinsfile</td>
<td></td>
<td>could be used to build a single site with Turbine Build jobs.</td>
</tr>
<tr>
<td></td>
<td></td>
<td>requires access to <a href="https://builds.apache.org/">https://builds.apache.org/</a></td>
</tr>
</tbody>
</table>

Development
To learn more about any of the projects below, please click on the appropriate link:

- **Turbine 5.2**: This is the version of Turbine that is being actively developed. Turbine version 5.2 is using Apache Db Torque 5.1 JAVA 11 baseline
- **Turbine Archetypes**: Currently supporting Turbine 5.1, Torque 5.1 and Docker Integration Test and Development environment.
- **Turbine Build** GIT Modules Build Repo, which contains all Turbine and Fulcrum components.

**Site Building**

Turbine-Build and Fulcrum-Build Git Multi-module repositories provide a Jenkinsfile.

Using this together with `.asf.yaml` (INFRA) in Apache CI (Jenkins) enables an (semi-)automatic (form-parameter-based) Site Build of each project. That is it allows a site build to be triggered manually in Jenkins. Each project has to provide a branch `asf-site`.

- `turbine-build Jenkinsfile` Turbine-Build-Site Job (Apache CI Jenkins)
- `turbine-fulcrum-build Jenkinsfile` Turbine-Fulcrum-build-Site Pipeline Job (Apache CI Jenkins)

After Login you see “Build With Parameters”. Select the parameters carefully (most repos have master, only core has currently trunk) and start site building!

N.B. In Fulcrum Pipeline staging is not the staging site, but the kind of site building (multi or single module).

Read README_TECHNICAL_SITE_STRUCTURE.md (github) to find more details about it! Jenkinsfile are already available.

**Turbine core**

By default Turbine core `.asf.yaml` is configured like this: The subdir is the currently active development subdir, e.g. `Turbine-5-2 site` (N.B. avoid dots)

```
asf-site Branch of Turbine-core

publish:
  whoami: asf-site
  # subdir: turbine
  # subdir: turbine/turbine-5-1
  subdir: turbine/development/turbine-5-2
```

**Fulcrum components**

Site targets by default point to the current published site.

```
.asf.yaml in branch asf-site of a Fulcrum component

publish:
  whoami: asf-site
  subdir: fulcrum/fulcrum-cache
```

**Release Builds**

Find more info about how to do it Publishing a Release and the README.md (Github) section publishing-workflow.

**Previous Releases**

**Turbine 2/3, META, Torque, JCS, Stratum, Maven**

- **Turbine 3** - Version 3 of the Turbine project. Development of version 3 has halted - it was an experimental version, the best bits of which have now been ported back to version 2.
- **Turbine 2** - Version 2 of the Turbine project. The latest release version of this branch is 2.3.3. The release version has proved to have production quality.
- **TDK** - The Turbine Development Kit (TDK) is a package that bundles a copy of Turbine, Tomcat, jar files, documentation and other utilities in order to help you get started with Turbine as quickly as possible. The installation steps outlined below should have you up and running quickly. The [http://turbine.apache.org/tdk/](http://turbine.apache.org/tdk/) is no longer being developed, as well as META. You should now checkout Turbine Archetype Blog.
- **META** - The Maven Environment for Turbine Application (M.E.T.A.) helped you to write Turbine applications. You should now checkout the Turbine Archetype Blog.
• **Torque Wiki** - Torque is a persistence layer which generates all the database resources required by your application and includes a runtime environment to run the generated classes. Torque was developed as part of the Turbine Framework. It is now decoupled and can be used by itself. **Torque** started life as a Turbine sub-project, but is no longer part of Turbine - it now lives in **Apache DB**.

• **JCS** is a distributed caching system written in java for server-side java applications. It came into the ASF as a Turbine sub-project, it is now a direct sub-project of Apache Commons **JCS**.

• **Stratum** another retired sub-project.

• **Maven** started life as a Turbine sub-project!

Organizational

**Board Reports**

• **Board Reports of Apache Turbine Project.**

• **SubProjectReports** - this was back when Turbine was part of Apache Jakarta.

**ApacheCons**

• **ApacheCon07EU** - who is going, thoughts on what might be achieved.

**TLP Proposal**

• **TLPTurbine** - the proposal for Turbine to become a Top Level Project (TLP) of the ASF. This went to the ASF board on May 15, 2007 and was passed, thus making Turbine a TLP of the ASF.