

JMeterTestExecution

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This page describes what happens when you start a test:

Short:

- The GUI tree is converted into a Test Element tree.
- The Engine compiles the test plan.
- The Engine starts the necessary threads and handles control to them.

Long:

- First, the GUI-tree is converted into a non-GUI-tree of equivalent Test Elements.
- Next a [JMeterEngine](#) is created, and the tree is delivered.
- The Engine then uses org.apache.jmeter.engine.PreCompiler (A [HashTreeTraverser](#)) to do some processing on the tree prior to the tree being cloned for each thread that will be run. In other words, the [PreCompiler](#)'s changes will affect every thread. The [PreCompiler](#), at this time, only replaces user-defined variables with their actual values (from the [TestPlan](#) GUI).
- Then, all the [ThreadGroup](#) branches are extracted from the tree.
- All [TestListeners](#) are found in the tree (TestListener is a specific interface. Each [TestListener](#) will be notified when the test starts).
- Then, for each [ThreadGroup](#), the appropriate number of [JMeterThread](#) objects are created and handed the [TestTree](#). However, the tree is cloned (a shallow cloning), and every element in the tree that implements [PerThreadClonable](#) is cloned.
- [JMeterThread](#) takes over at that point.