

Running Cassandra in IDEA

IDEA is now open source! The free community edition at <http://www.jetbrains.org> is all you need for Cassandra development. (You don't need J2EE or Web tools.)

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Setup Cassandra as a Project (C* 2.1 and newer)

Since 2.1.5, there is a new ant target `generate-idea-files`

- Prerequisites: * JDK7 (Cassandra 2.0+), Apache Ant (<http://ant.apache.org/>) and Git (<http://git-scm.com/>) are required to get Cassandra running in IDEA.

1. Clone Cassandra from apache's Git repository.

for trunk branch (JDK7 required)

```
git clone git://git.apache.org/cassandra.git
```

for cassandra-2.1 branch

```
git clone -b cassandra-2.1 git://git.apache.org/cassandra.git
```

2. Once git has finished cloning the repository, generate the eclipse files using ant.

```
ant generate-idea-files
```

3. Start IDEA 4. Just open the IDEA project from the checked out Cassandra directory using the menu item *Open* in IDEA's *File* menu

The project generated by the ant task `generate-idea-files` contains nearly everything you need to debug Cassandra and execute unit tests.

- Run/debug defaults for JUnit
- Run/debug configuration for Cassandra daemon
- License header for Java source files
- Cassandra code style
- Inspections

Setup Cassandra as a Project (C* 1.2, 2.0, <= 2.1.4)

- The following applies to Cassandra sources for versions 1.2.x, 2.0.x and up to 2.1.4*

To quickly import Cassandra into IntelliJ and start coding simply:

1. Run "ant generate-eclipse-files" 2. File -> Import Project

(The IntelliJ Eclipse plugin must be enabled.)

If you want IDEA to handle more of the environment for you, keep reading.

- Prerequisites: * JDK6 (Cassandra 1.2) or JDK7 (Cassandra 2.0+), Apache Ant (<http://ant.apache.org/>) and Git (<http://git-scm.com/>) are required to get Cassandra running in IDEA.

1. Clone Cassandra from apache's Git repository.

for trunk branch (JDK7 required)

```
git clone git://git.apache.org/cassandra.git
```

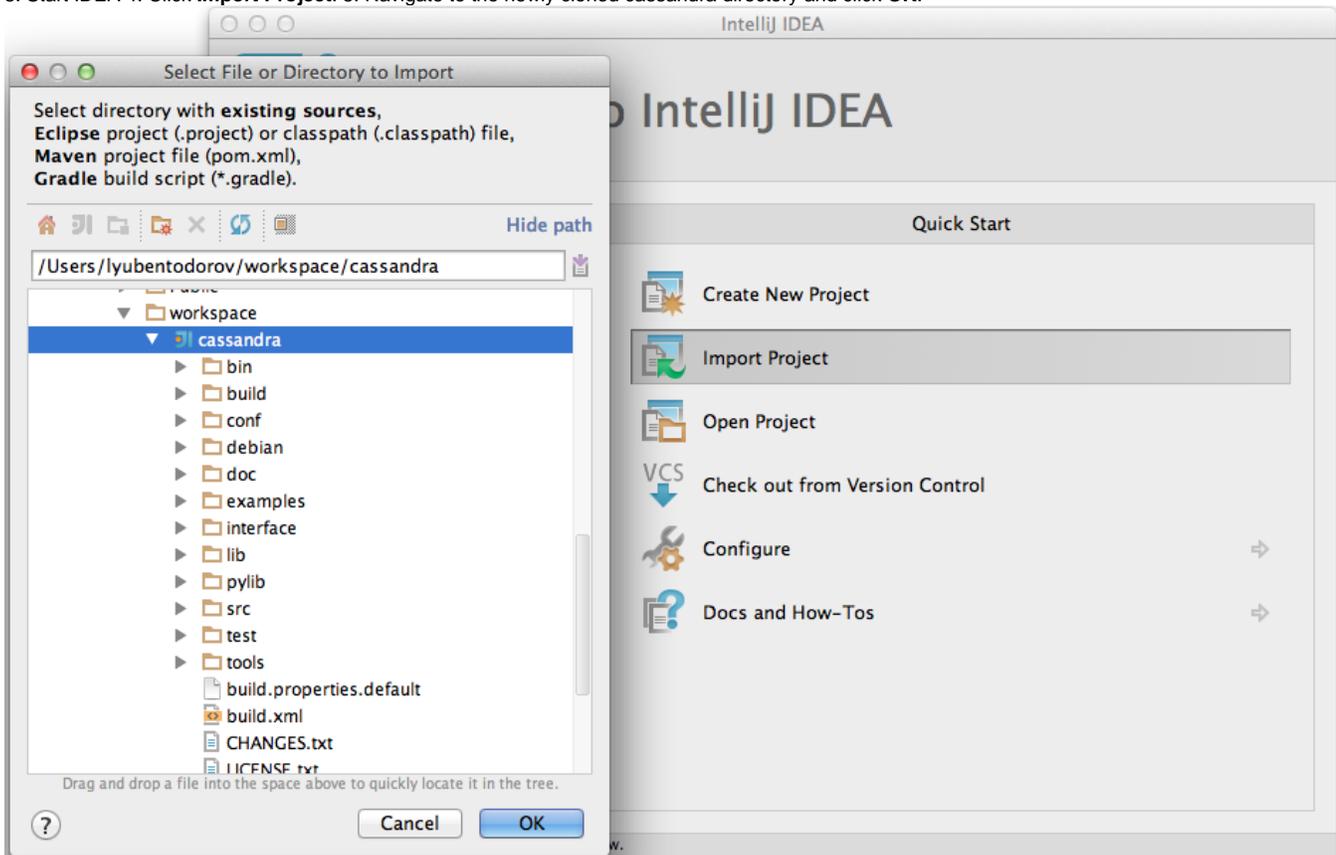
for cassandra-1.2 branch

```
git clone -b cassandra-1.2 git://git.apache.org/cassandra.git
```

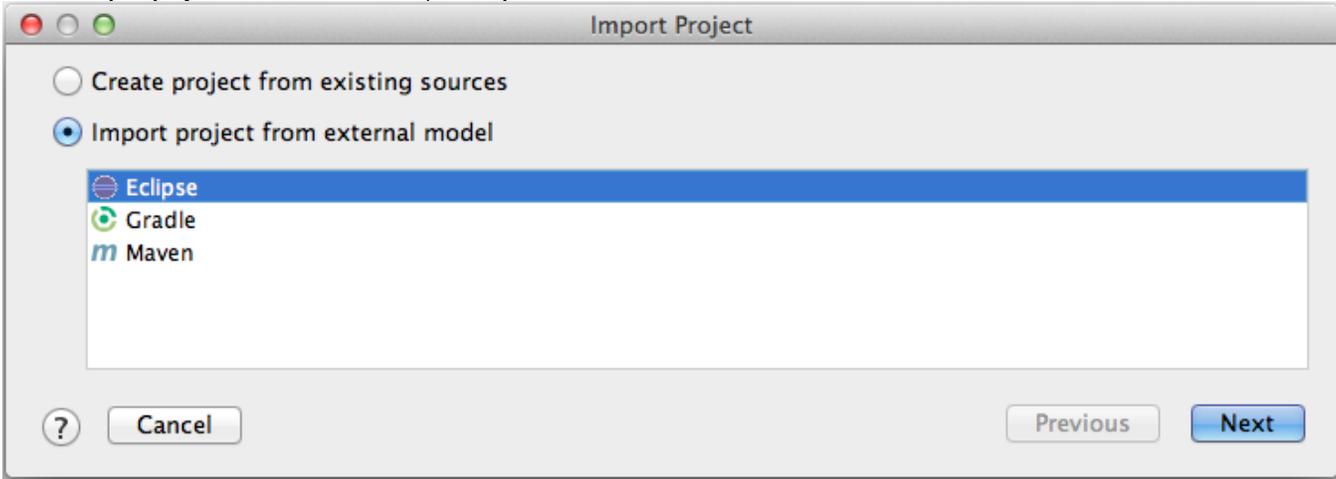
2. Once git has finished cloning the repository, generate the eclipse files using ant.

```
ant generate-eclipse-files
```

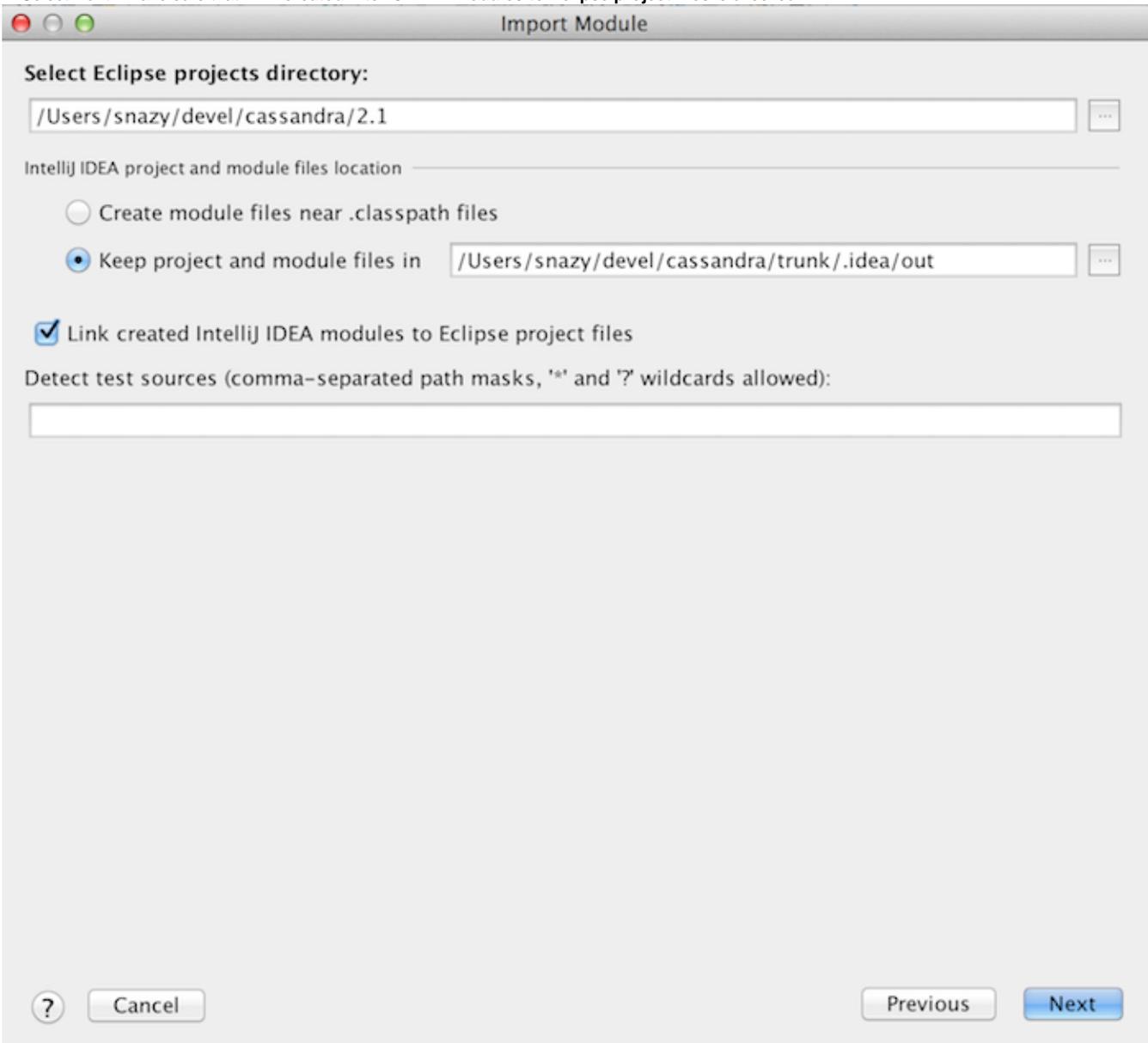
3. Start IDEA 4. Click **Import Project**. 5. Navigate to the newly cloned cassandra directory and click **OK**.



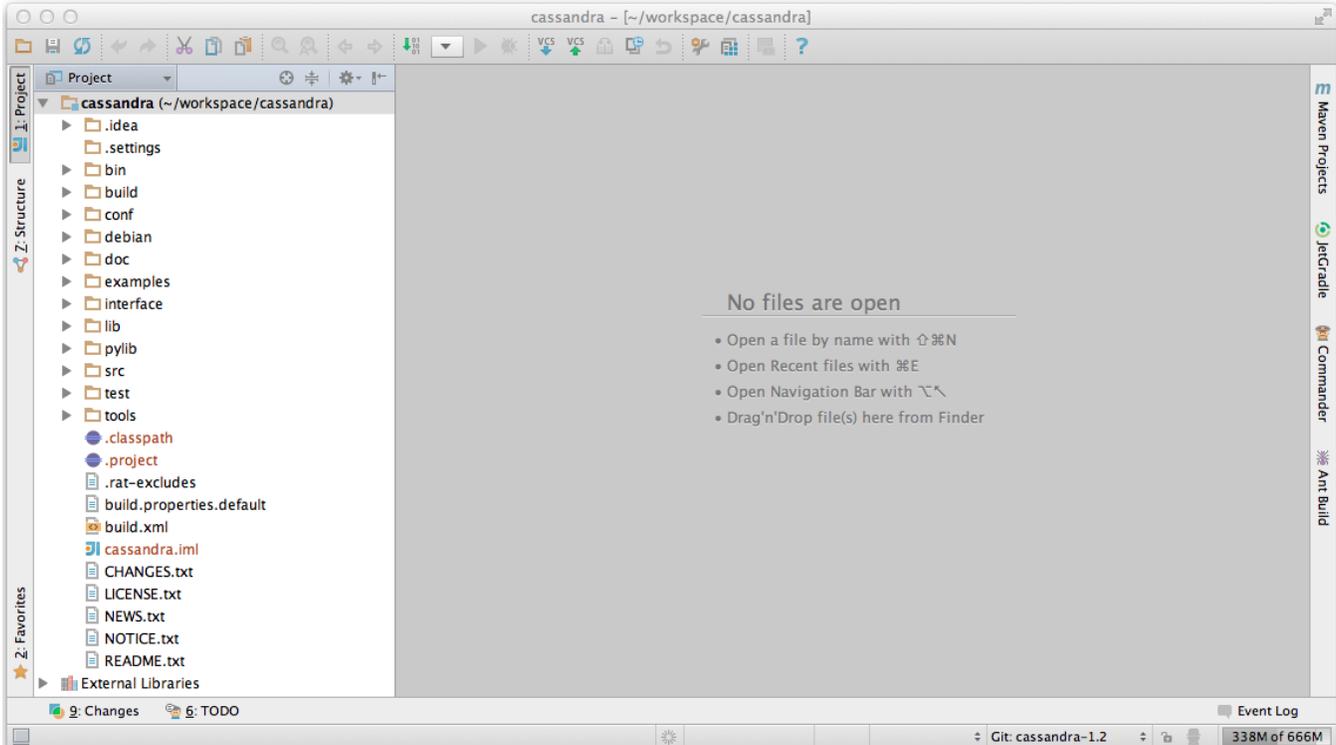
6. Select **Import project from external model**, pick **Eclipse** then click **OK**.



7. Select **Next** - make sure that **Link created IntelliJ IDEA modules to Eclipse project files** is checked



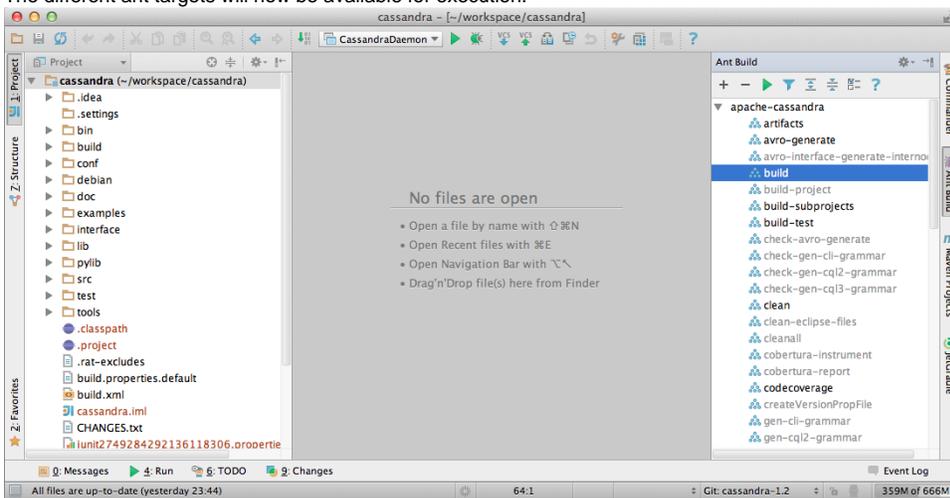
8. Select **cassandra** and click **Finish**. You now have a successfully imported Cassandra project.



Building & Testing Cassandra via Ant

To build Cassandra we need to import ant's build file, aka **build.xml**.

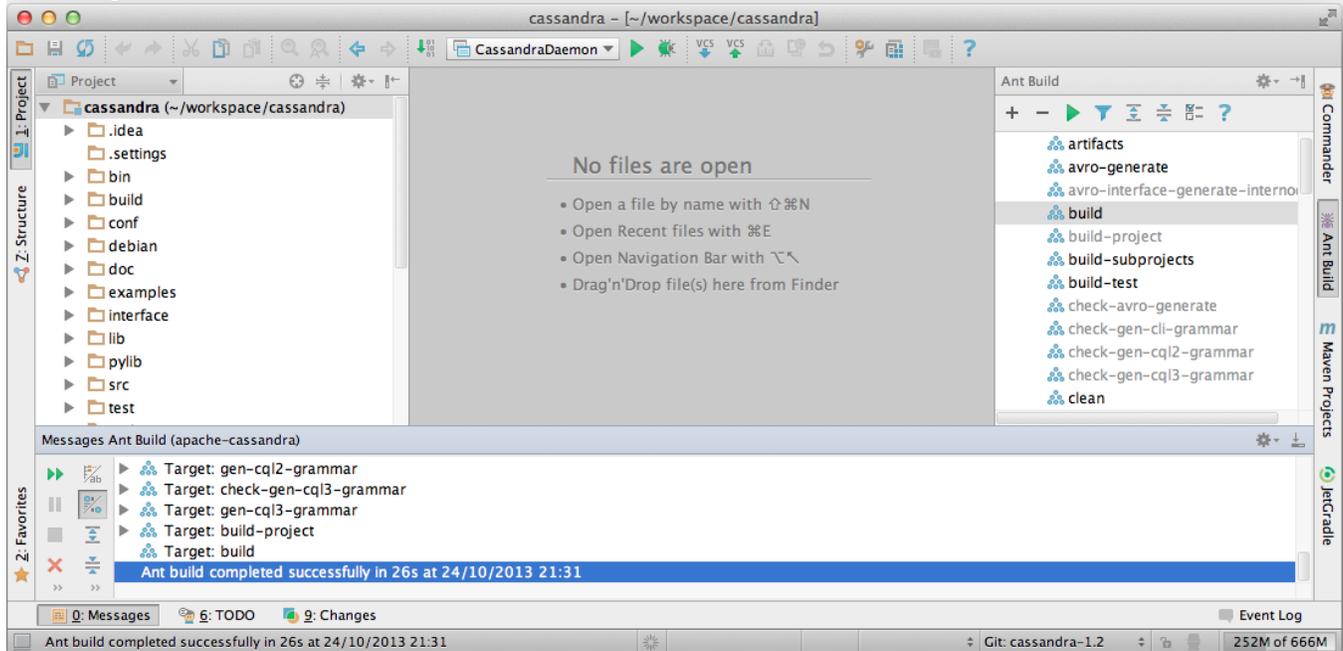
1. Select the **Ant Build** tab from IDEA (right hand side in the screen shot below). 2. Select the **+** (Add). 3. Navigate to Cassandra's root directory (based on the tutorial this would be `~/workspace/cassandra`) and select **build.xml**. 4. Click **OK**. The different ant targets will now be available for execution.



Building / Testing Cassandra via Ant

Once the ant build file is added to IDEA you can compile cassandra via the **build** target. The unit tests are located under the **test** target.

To run a target **select** it and then click .

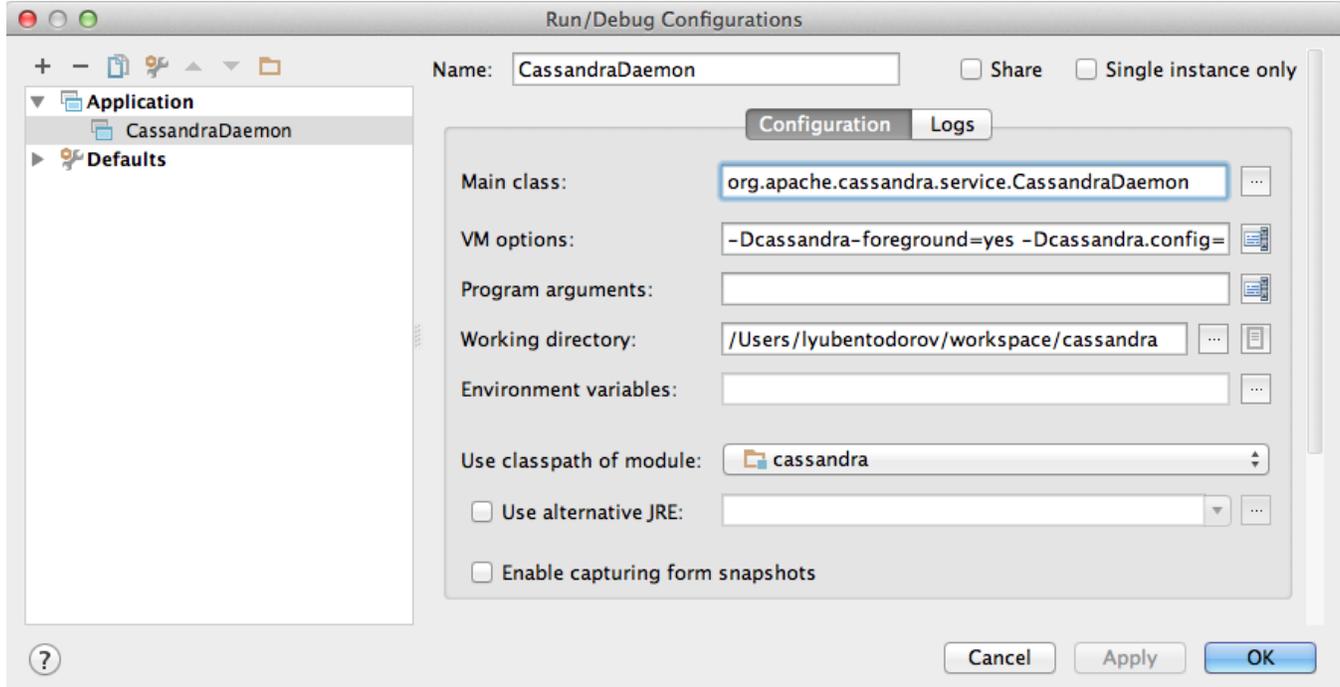


Create a RUN configuration

1. Select **Run > Edit Configurations...** and click the **+** (Add New Configuration).
2. Populate the config with the following:

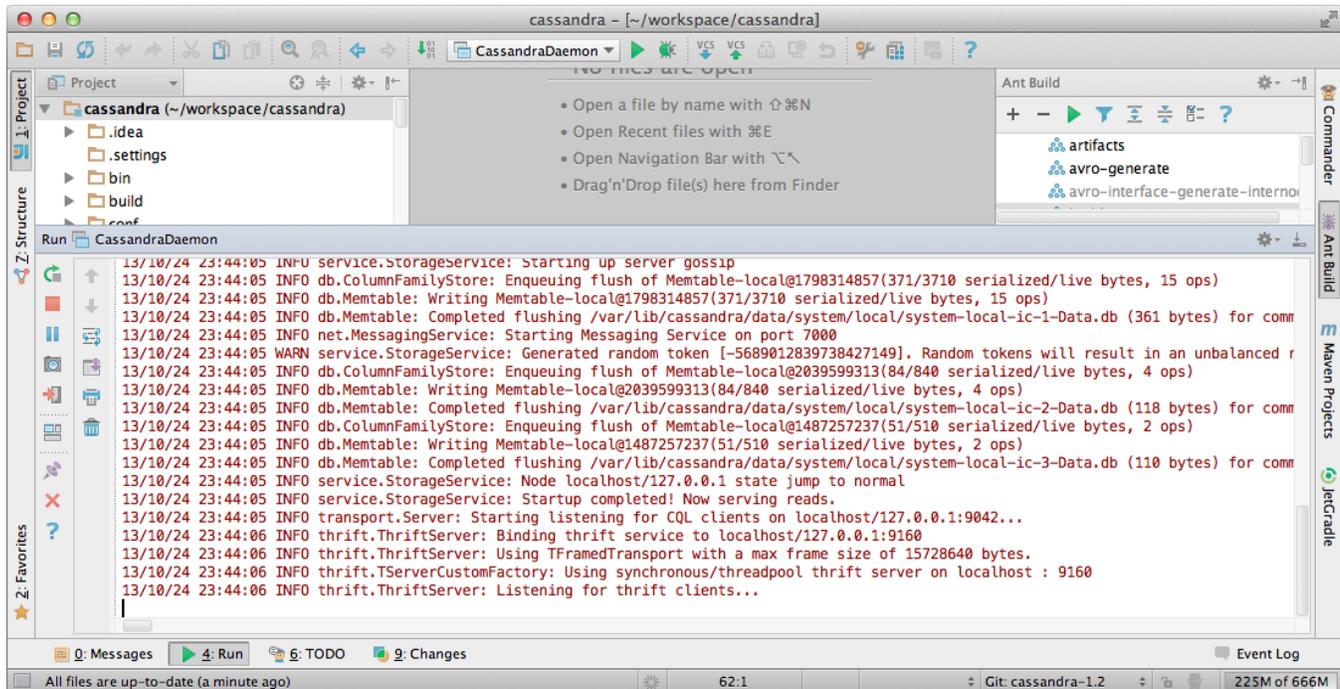
```
Main class: org.apache.cassandra.service.CassandraDaemon
VM options:
-Dcassandra-foreground=yes
-Dcassandra.config=file://$PROJECT_DIR$/conf/cassandra.yaml
-Dcassandra.storagedir=$PROJECT_DIR$/data
-Dlogback.configurationFile=file://$PROJECT_DIR$/conf/logback.xml
-Dcassandra.logdir=$PROJECT_DIR$/data/logs
-ea
-Xmx1G
```

3. Click **OK**.



Verify Cassandra is running via IDEA

If everything is configured correctly, when you run Cassandra (via  or **Run > Run...**) logs should appear in the IDEA console.



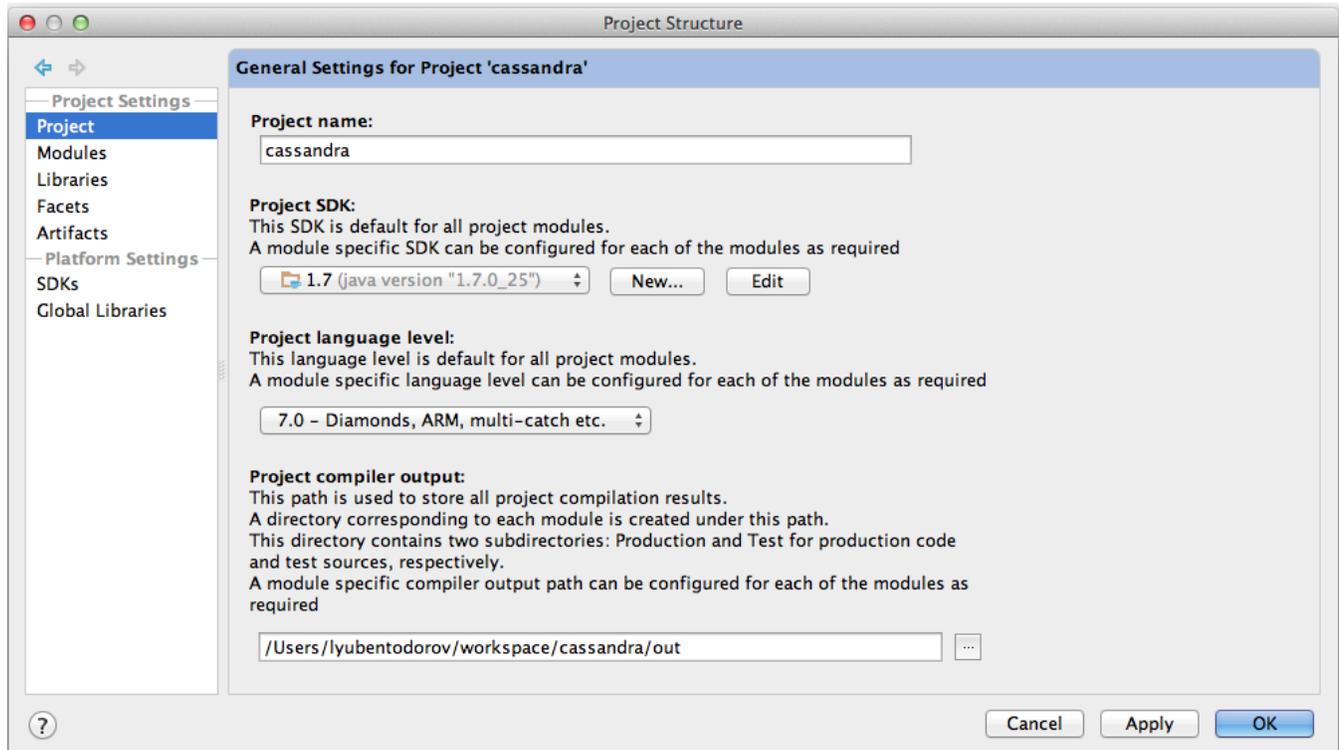
Once cassandra is started, you can also check it's up and running by connecting to it via `cqlsh`

```
$ ./cqlsh
Connected to Test Cluster at localhost:9160.
[cqlsh 3.1.8 | Cassandra 1.2.11-SNAPSHOT | CQL spec 3.0.0 | Thrift protocol 19.36.1]
Use HELP for help.
cqlsh>
```

Notes

Java 7 since Cassandra 2.0

Dont forget to update IntelliJ to use JDK7 or later for Cassandra versions greater than Cassandra 1.2



<https://c.statcounter.com/9397521/0/fe557aad/1/> | stats

Link IDEA to .classpath

If you did not check **Link created IntelliJ IDEA modules to Eclipse project files** in the project import dialog, you can change that later and IDEA will automatically use changes if .classpath file is regenerated using

```
ant generate-eclipse-files
```

