RunningCassandraInIDEA

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.

000	Intellij IDEA
Select File or Directory to Import Select directory with existing sources, Eclipse project (.project) or classpath (.classpath) file,	> IntelliJ IDEA
Maven project file (pom.xml), Gradle build script (*.gradle).	ath Quick Start
/Users/lyubentodorov/workspace/cassandra	Create New Project
▼ Il cassandra	Import Project
 Duild conf debian 	Open Project
 doc examples 	Check out from Version Control
 interface lib rutit 	Configure 🔿
src	Docs and How-Tos
tools build.properties.default	
build.xml	
Drag and drop a file into the space above to quickly locate it in the tree.	
Cancel OK	

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

00	Import Project					
Create project from existing sources						
Import project from external model						
Import project from external model						
Eclipse						
m Maven						
? Cancel		Previous	Next			
7. Select Next - make sure that Link created IntelliJ IDE	A modules to Eclipse project files is checked					
$\Theta \odot \Theta$	Import Module					
Select Eclipse projects directory:						
/Users/snazy/devel/cassandra/2.1						
IntelliJ IDEA project and module files location						
Create module files near .classpati	n files					
Keen project and module files in	/llsers/spazy/devel/cassandra/trunk/	idea/out				
Conceptible transmoule mes m	/ Osers/ shazy/ dever/ cassaridra/ trunk/	iuea/out				
☑ Link created IntelliJ IDEA modules to	Eclipse project files					
Detect test sources (comma-separated pa	th masks. '*' and '?' wildcards allowed):					
Detect test sources (comma-separated path masks, and i whiteards anowed).						
(?) Cancel		Previous	Next			

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.

 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

Select Run > Edit Configurations... and click the + (Add New Configuration).
 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
    -XmxlG
```

3. Click OK .	
$\Theta \bigcirc \Theta$	Run/Debug Configurations
+ - ♪ ♀ ▲ ▼ ► Application CassandraDaemon P Defaults	Name: CassandraDaemon Configuration Logs Main class: org.apache.cassandra.service.CassandraDaemon VM options: -Dcassandra-foreground=yes -Dcassandra.config= Program arguments: Image:
?	Cancel Apply OK

Verify Cassandra is running via IDEA

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

0	0 (0		cassandr	ra - [~/workspace/cassand	ra]			R <u>a</u>
	H	Ø	🛩 🔶 🔏 🗂 🗂 🔍 🔍 💠	🔹 💠 👫 🔚 CassandraDaemor	💌 🕨 🗰 💱 🙀 🖬	° 5 🌮 🖬 🖷 ?			
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Proj	▼ [cas	sandra (~/workspace/cassandra)	• Op	en a file by name with 企業	N	+ - > 7 3	≑ № ?	, ,
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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

● ○ ○	Project Structure
(+ =>	General Settings for Project 'cassandra'
Project Settings Project Modules Libraries Facets Artifacts Platform Settings SDKs Global Libraries	Project name: cassandra Project SDK: This SDK is default for all project modules. A module specific SDK can be configured for each of the modules as required project language level: This language level is default for all project modules. A module specific language level can be configured for each of the modules as required 7.0 - Diamonds, ARM, multi-catch etc. ‡ Project compiler output: This path is used to store all project compilation results. A directory corresponding to each module is created under this path. This directory contins two subdirectories: Production and Test for production code and test sources, respectively. A module specific compiler output path can be configured for each of the modules as required /Users/lyubentodorov/workspace/cassandra/out
?	Cancel Apply OK

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		

