How do I make ctest run a program with valgrind without dart?

I want to write a CMakeLists.txt so that I can run my tests normally or with valgrind. I have seen much on integrating ctest with valgrind but all
with the assumption that you want to set up a server to submit test results to a dart dashboard. I just want to run the tests on my machine and
see the results on the command line.

If I have to do a cmake -D VALGRIND=ON thats fine, but I'd rather generate tests named "foo" and "valgrind_foo" if possible.

cmake   valgrind

asked Feb 16 '12 at 0:15

leif
1,112   1   10   21

3 Answers

I use valgrind for my memory check. To configure valgrind, I define the following variables in
my build system:

```
find_program( MEMORYCHECK_COMMAND valgrind )
set( MEMORYCHECK_COMMAND_OPTIONS "--trace-children=yes --leak-check=full" )
```

Also, in there is my valgrind suppression file:

```
set( MEMORYCHECK_SUPPRESSIONS_FILE "${PROJECT_SOURCE_DIR}/valgrind_suppress.txt" )
```

After you write your CMakeLists.txt files and configure valgrind correctly in them, you can run
the following command:

```
cmake -G ... (to configure your build)
ctest -D ExperimentalBuild (this will build your code)
ctest -R testName -D ExperimentalTest (just runs the test)
ctest -R testName -D ExperimentalMemCheck (to run the test under valgrind)
```

This will trick your build system to run the test automation locally. It expects you to run:

```
ctest -R testName -D ExperimentalSubmit
```

next, to submit to the (default or your) Dashboard, but you don't need to go through this step to
run what you want. The results will be stored in the Testing/Temporary/ directory.

edited Oct 30 '16 at 3:58   answered Mar 23 '12 at 17:16

arman   KlingonJoe
5,303   11   43   118   **427**   4   12

How do you "configure valgrind correctly in them" ? – ibizaman Dec 24 '14 at 13:09

Good question... I've edited the answer. – KlingonJoe Dec 25 '14 at 14:17