

OptTestHarness

For optimizing compiler development, it is sometimes useful to exercise careful control over which classes are compiled, and with which optimization level. In many cases, a `prototype-opt` image will suit this process using the command line option `-X:aos:initial_compiler=opt` combined with `-X:aos:enable_recompilation=false`. This configuration invokes the optimizing compiler on each method run. The `org.jikesrvm.tools.oth.OptTestHarness` program provides even more control over the optimizing compiler. This driver program allows you to invoke the optimizing compiler as an "application" running on top of the VM.

Command Line Options

<code>-useBootOptions</code>	Use the same <code>OptOptions</code> as the bootimage compiler.
<code>-longcommandline <filename></code>	Read commands (one per line) from a file
<code>+baseline</code>	Switch default compiler to baseline
<code>-baseline</code>	Switch default compiler to optimizing
<code>-load <class></code>	Load a class
<code>-class <class></code>	Load a class and compile all its methods
<code>-method <class> <method> [- or <descrip>]</code>	Compile method with default compiler
<code>-methodOpt <class> <method> [- or <descrip>]</code>	Compile method with opt compiler
<code>-methodBase <class> <method> [- or <descrip>]</code>	Compile method with base compiler
<code>-er <class> <method> [- or <descrip>] {args}</code>	Compile with default compiler and execute a method
<code>-performance</code>	Show performance results
<code>-oc</code>	pass an option to the optimizing compiler

Examples

To use the `OptTestHarness` program:

```
% rvm org.jikesrvm.tools.oth.OptTestHarness -class Foo
```

will invoke the optimizing compiler on all methods of class `Foo`.

```
% rvm org.jikesrvm.tools.oth.OptTestHarness -method Foo bar -
```

will invoke the optimizing compiler on the first method `bar` of class `Foo` it loads.

```
% rvm org.jikesrvm.tools.oth.OptTestHarness -method Foo bar '(I)V;
```

will invoke the optimizing compiler on method `Foo.bar(I)V;`.

You can specify any number of `-method` and `-class` options on the command line. Any arguments passed to `OptTestHarness` via `-oc` will be passed on directly to the optimizing compiler. So:

```
% rvm org.jikesrvm.tools.oth.OptTestHarness -oc:O1 -oc:print_final_hir=true  
-method Foo bar -
```

will compile `Foo.bar` at optimization level `O1` and print the final HIR.