SciMarkBenchmark

Back to DRLVM Test Tracking

Summary

Mission and Status 🙂

How to run SciMark ℹ

1. Prepare Common Environment ✓ 2. Running java version of SciMark ✓ 3. Running the LARGE version ✓

Mission and Status

SciMark 2.0 is a Java benchmark for scientific and numerical computing. It measures several computational kernels and reports a composite score in approximate Mflops (Millions of floating point operations per second). Please see all the details here:

```
http://math.nist.gov/scimark2/index.html
```

The mission is to test Harmony with SciMark 2.0 benchmark to achieve 100% pass rate for all computational kernels on all available platforms.

SciMark 2.0 is currently demonstrates 100% pass rate on all the following platfroms: Windows x86 32 bit, Linux x86 23 bit, Windows x86_64 64 bit and Linux x86_64 64 bit. Please see the testing results at automated testing report page which is:

```
http://people.apache.org/~mloenko/snapshot_testing/script/snapshots_summary.html
```

Back to Summary

How to run SciMark

1. Prepare Common Environment

Download SciMark class files in Java Archive format from:

```
http://math.nist.gov/scimark2/download_java.html
```

2. Running java version of SciMark

An archive contains a command-line version of SciMark 2.0. The package name is jnt.scimark2. ("jnt" stands for Java Numerical Toolkit.) Once added to the CLASSPATH, Scimark 2.0 can be executed from the console as

```
  >java jnt.scimark2.commandline
```

and will print out something like

```
SciMark 2.0a

Composite Score: 286.12763268029505
FFT (1024): 292.2655259640376
SOR (100x100):   501.41947450350756
Monte Carlo : 43.38000116830587
Sparse matmult (N=1000, nz=5000): 208.64692557613458
LU (100x100): 384.92623618948977

java.vendor: Apache Software Foundation
java.version: 1.5.0
os.arch: x86
os.name: Windows Server 2003
os.version: 5.2
```

3. Running the LARGE version

The LARGE version of SciMark 2.0 uses bigger data sizes desinged to be much bigger than most low-level caches (> 2MBytes) and can be useful in measuring the capability of the memory subsystem of the Java platform. This version of SciMark can be run as

```
  >java jnt.scimark2.commandline -large
```