Who am I?

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Coverage

• Why do I need coverage tests?

An small example:

• You write some new code :-(
• Does it really work as expected? :-(
• Now, you write tests for it :-)
• Does your test really test your code? :-(

This is where coverage comes to the rescue :D
Coverage

* A tool for measuring code coverage of Python programs.

* It monitors your program, noting which parts of the code have been executed,

* It then analyzes the source to identify code that could have been executed but was not.

Coverage measurement is typically used to gauge the effectiveness of tests. It can show which parts of your code are being exercised by tests, and which are not.
Coverage

- Who is behind coverage?
  - Ned Batchelder
Coverage

Getting started:

• Install coverage:
  • easy_install coverage
  • pip install coverage

• Use coverage to run your program and gather data
  • $ coverage -x my_program.py arg1 arg2
Coverage

- Use coverage to report on the results

```bash
$ coverage -rm
```

<table>
<thead>
<tr>
<th>Name</th>
<th>Stmts</th>
<th>Miss</th>
<th>Cover</th>
<th>Missing</th>
</tr>
</thead>
<tbody>
<tr>
<td>my_program</td>
<td>20</td>
<td>4</td>
<td>80%</td>
<td>33-35, 39</td>
</tr>
<tr>
<td>my_other_module</td>
<td>56</td>
<td>6</td>
<td>89%</td>
<td>17-23</td>
</tr>
</tbody>
</table>

TOTAL
| 76 | 10 | 87% |
Coverage

- Generate better reports for presentation, say html:
  - coverage html -d <dir>
Coverage

That was about using coverage from the command line.

There is also an API for coverage. You can use it if you want more control over how your code is measured.
Coverage

Availability:

- django-test-coverage
- Coverage plugin for nose
Coverage

• Getting more help
  • http://nedbatchelder.com/code/coverage/
  • pypi.python.org/pypi/django-test-coverage/
  • http://readthedocs.org/docs/nose/en/latest/plugins/coverage.html
Coverage

Any Questions?
Coverage

Thank you :-}