

# Test reporting with Coverage

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# Checking your code coverage!



- ▶ Shows the effectiveness of your testing
- ▶ Highlights areas for new or increased testing
- ▶ Helps to verify that our tests do what we think they do

The utility for test coverage is `coverage.py`

<http://nedbatchelder.com/code/coverage/>.

# Using coverage.py

- ▶ Features
  - ▶ Integrates with the nose test suite
  - ▶ Generates a variety of HTML, XML, and console reports
  - ▶ Can be called from anywhere in your code
  - ▶ Tracks multiple subprocesses and multiple code branches
- ▶ Configuration
  - ▶ Commandline options ('-omit', '-branch', etc)
  - ▶ .coveragerc [this is better]
- ▶ Running It
  - ▶ With nose use '-with-coverage --cover-package=[some package]'
  - ▶ On the commandline 'coverage run [options]'

# We need to talk about your TPS reports.

If you ran your tests with '-p' or in parallel, you'll need to execute 'coverage combine' first.

- ▶ HTML Reporting

- ▶ Generate with 'coverage html'
- ▶ use '-d' to specify a directory for your output
- ▶ open index.html in that dir for reports

- ▶ XML Reporting

- ▶ Generate with 'coverage xml'
- ▶ similar options to html reports
- ▶ integrates pretty well with Hudson

You will need to omit things like Genshi templates report

```
[html]  
directory=coverage_html_report  
omit=lib , tests2 , idealist/webapp/templates/ , idealist/webapp/org/templates/
```