## Start using prove

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## prove

- Designed as a development tool
- Like make test, but flexible
- Included with Test::Harness and core Perl
- Will change how you think about tests


## prove shows results

```
t/title_proper.....ok
t/utf8............NOK 2
# Failed test (t/utf8.t at line 31)
t/utf8.............NOK 7
# Failed test (t/utf8.t at line 59)
# Looks like you failed 2 tests of 8.
t/utf8.............dubious
    Test returned status 2 (wstat 512, 0x200)
DIED. FAILED tests 2, 7
    Failed 2/8 tests, 75.00% okay
t/utils...........ok
Failed Test Stat Wstat Total Fail Failed List of Failed
t/utf8.t 
Failed 1/36 test scripts, 97.22% okay. 2/928 subtests failed, 99.78%
make: *** [test_dynamic] Error 2
```


## prove shows results

```
$ prove -b -v t/utf8.t
t/utf8....1..8
ok 1 - The object isa MARC::Record
not ok 2 - The object isa MARC::File
# Failed test (t/utf8.t at line 31)
ok 3 - Added one field
ok 4 - The object isa MARC::File::USMARC
ok 5 - The object isa MARC::Record
ok 6 - Reading it generated no warnings
not ok 7 - got a utf8 character
# Failed test (t/utf8.t at line 59)
ok 8 - got aleph
# Looks like you failed 2 tests of 8.
dubious
    Test returned status 2 (wstat 512, 0x200)
DIED. FAILED tests 2, 7
    Failed 2/8 tests, 75.00% okay
Failed Test Stat Wstat Total Fail Failed List of Failed
t/utf8.t 2 512 8 2 25.00% 2 7
Failed 1/1 test scripts, 0.00% okay. 2/8 subtests failed, 75.00%
```


## prove shows results

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$ prove -b -v t/utf8.t
t/utf8....1..8
ok 1 - The object isa MARC::Record
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# Failed test (t/utf8.t at line 31)
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Test-first + prove $=$

## Test-first + prove =

\$ vim lib/Whizzo.pm
\# Create the API and POD, but no code

## Test-first + prove $=$

\$ vim lib/Whizzo.pm
\# Create the API and POD, but no code
\$ vim t/Whizzo-new.t
\# Create a test that fails

## Test-first + prove $=\mathbf{~}$

```
$ vim lib/Whizzo.pm
# Create the API and POD, but no code
$ vim t/Whizzo-new.t
# Create a test that fails
$ prove -l t/Whizzo-new.t
# Test fails since we have no code
```


## Test-first + prove $=\mathbf{~}$

```
$ vim lib/Whizzo.pm
# Create the API and POD, but no code
$ vim t/Whizzo-new.t
# Create a test that fails
$ prove -l t/Whizzo-new.t
# Test fails since we have no code
$ vim lib/Whizzo.pm
# Fill in constructor code
```


## Test-first + prove $=\mathbf{~}$

```
$ vim lib/Whizzo.pm
# Create the API and POD, but no code
$ vim t/Whizzo-new.t
# Create a test that fails
$ prove -l t/Whizzo-new.t
# Test fails since we have no code
$ vim lib/Whizzo.pm
# Create constructor
$ prove -l t/Whizzo-new.t
# Test passes
```


## Test-first + prove $=\mathbf{}$

```
$ vim lib/Whizzo.pm
# Create the API and POD, but no code
$ vim t/Whizzo-new.t
# Create a test that fails
$ prove -l t/Whizzo-new.t
# Test fails since we have no code
$ vim lib/Whizzo.pm
# Create constructor
$ prove -b t/Whizzo-new.t
# Test passes
$ cvs commit -m'Created constructor'
# Commit my changes
```


## Test-first + prove $=\mathbf{~}$

```
$ vim lib/Whizzo.pm
# Create the API and POD, but no code
$ vim t/Whizzo-new.t
# Create a test that fails
$ prove -l t/Whizzo-new.t
# Test fails since we have no code
$ vim lib/Whizzo.pm
# Create constructor
$ prove -b t/Whizzo-new.t
# Test passes
$ cvs commit -m'Created constructor'
# Commit my changes
```


## prove gives control

- Not all tests exist in a module
- Not all tests have a Makefile
- prove makes no assumptions
- prove doesn't use make


## prove gives control

\$ prove tk/
\# Runs all tests in tk/ directory

## prove gives control

```
$ prove tk/
# Runs all tests in tk/ directory
$ prove -r tk/
# Runs all tests in tk/ and any directories below
```


## prove gives control

```
$ prove tk/
# Runs all tests in tk/ directory
$ prove -r tk/
# Runs all tests in tk/ and any directories below
$ prove *-new.t
# Run only your constructor tests
```


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# Runs all tests in tk/ directory
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$ prove *-new.t
# Run only your constructor tests
$ prove -T *.t
# Run tests under taint
```


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# Runs all tests in tk/ and any directories below
$ prove *-new.t
# Run only your constructor tests
$ prove -T *.t
# Run tests under taint
$ prove -I/old/lib t/
# Do the tests run on an older version of the lib?
```


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$ prove tk/
# Runs all tests in tk/ directory
$ prove -r tk/
# Runs all tests in tk/ and any directories below
$ prove *-new.t
# Run only your constructor tests
$ prove -T *.t
# Run tests under taint
$ prove -I/old/lib t/
# Do the tests run on an older version of the lib?
$ prove -ext=.phpt -s Oracle/
# Run all PHP tests in Oracle/, but shuffle their order first
```


## How to start

- Read prove --man
- Start with your next failed distro build
- Read talks at http://qa.perl.org/
- Join perl-qa at lists.perl.org


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- Thank you

