

## Src-side test specifications

Src-side test specifications enable developers to quickly add tests running on specific bots on V8's continuous infrastructure (CI) or tryserver. Features to be tested must live behind runtime flags, which are mapped to named testing variants specified here. Changes to src-side test specifications go through CQ like any other CL and require tests added for specific trybots to pass.

The test specifications are defined in a V8-side python-literal file `infra/testing/builders.pyl`.

The structure of the file is:

```
{
  <buildername>: {
    'tests': [
      {
        'name': <test-spec name>,
        'suffix': <step suffix>,
        'variant': <variant name>,
        'shards': <number of shards>,
        'test_args': <list of flags>,
        'swarming_task_attrs': {...},
        'swarming_dimensions': {...},
      },
      ...
    ],
    'swarming_task_attrs': {...},
    'swarming_dimensions': {...},
  },
  ...
}
```

The `<buildername>` is a string name of the builder to execute the tests. `<test-spec name>` is a label defining a test specification matching the infra-side. The optional `suffix` will be appended to test-step names for disambiguation. The optional `variant` is a testing variant specified here. The optional `shards` (default 1) can be provided to increase the swarming shards for long-running tests. The optional `test_args` is a list of string flags that will be passed to the V8 test driver. The optional `swarming_task_attrs` is a dict allowing to override the defaults for `priority`, `expiration` and `hard_timeout`. The optional `swarming_dimensions` is a dict allowing to override the defaults for `cpu`, `cores` and `os`. Both `swarming_task_attrs` and `swarming_dimensions` can be defined per builder and per test, whereas the latter takes precedence.

Example:

```
{
  'v8_linux64_rel_ng_triggered': {
```

```

    'tests': [
      {
        'name': 'v8testing',
        'suffix': 'stress',
        'variant': 'nooptimization',
        'shards': 2,
        'test_args': ['--gc-stress'],
        'swarming_dimensions': {'os': 'Ubuntu-14.4'},
      },
    ],
    'swarming_properties': {'priority': 35},
    'swarming_dimensions': {'os': 'Ubuntu'},
  },
}

```

## Guidelines

Please keep trybots and continuous bots in sync. E.g. add the same configuration for the release and debug CI bots and the corresponding trybot (where applicable). E.g.

```

tryserver.v8:
  v8_linux64_rel_ng_triggered
client.v8:
  V8 Linux64
  V8 Linux64 - debug

```

Please only add tests that are expected to pass, or skip failing tests via status file for the selected testing variants only. If you want to add FYI tests (i.e. not closing the tree and not blocking CQ) you can do so for the following set of bots:

```

tryserver.v8:
  v8_linux64_fyi_rel_ng_triggered
client.v8:
  V8 Linux64 - fyi
  V8 Linux64 - debug - fyi

```