Active Data

http://activedata.allizom.org

Kyle Lahnakoski Engineering Productivity (formerly Auto-Tools Team) ...but still the "A Team" Lightning talk on...

Active Data

http://activedata.allizom.org

Kyle Lahnakoski Engineering Productivity (formerly Auto-Tools Team) ...but still the "A Team"

A public web service...

```
$ curl http://activedata.allizom.org/query
   -X POST
   -d "{\"from\":\"unittest\"}"
```

- · A public web service...
- providing a query interface...

```
{
    "select":{
        "aggregate":"count"
    },
    "from":"unittest"
}
```

- A public web service...
- providing a query interface...
- to over a billion test results...

```
"meta":{
    "active_data_response_time":3.09,
    "format":"cube",
    "es_response_time":1.57,
    "saved_as":"3iK9T6sG",
    "content_type":"application/json"
},
    "data":{"count":1265099071}
}
```

- · A public web service...
- providing a query interface...
- to over a billion test results...
- · Quickly!

```
"meta":{
    "active_data_response_time":3.09,
    "format":"cube",
    "es_response_time":1.57,
    "saved_as":"3iK9T6sG",
    "content_type":"application/json"
},
    "data":{"count":1265099071}
}
```

One test result document

```
"result": {
    "status": "OK",
    "stats": {
        "action": {
            "test status": 432
         "fail": 6,
         "pass": 426
    "ok": false,
    "start time": 1441284018.565,
    "test": "toolkit/components/prompts/tes...
    "result": "OK",
    "expected": "OK",
    "last log time": 1441284036.021,
    "duration": 17.473999977111816,
    "end time": 1441284036.039,
    "subtests": [
```

```
'run": {
   "files": {
       "url": "http://mozilla-releng-blobs...
       "name": "plain-chunked raw.log"
   "status": 1,
   "stats": {
       "status": {"skip": 18, "ok": 636},
       "ok": 653,
       "lines": 3705,
       "start time": 1441283166.06,
       "bytes": 869394,
       "action": {
            "test status": 617,
           "log": 1718,
           "process exit": 30,
           "process start": 30
       "end time": 1441284124.884,
       "duration": 958.824000120163,
       "total": 654
```

```
"buildbot_status": "warnings",
   "timestamp": 1441284143,
   "chunk": 5,
   "talos": false,
   "machine": {
        "os": "ubuntu64_vm",
        "name": "tst-linux64-spot-1771"
    },
    "key": "build.mozilla-inbound_ubuntu64_...
   "suite": "mochitest",
   "insertion_time": 1441284143,
   "job_number": 53,
   "logurl": http://ftp.mozilla.org/pub/mo...
},
```

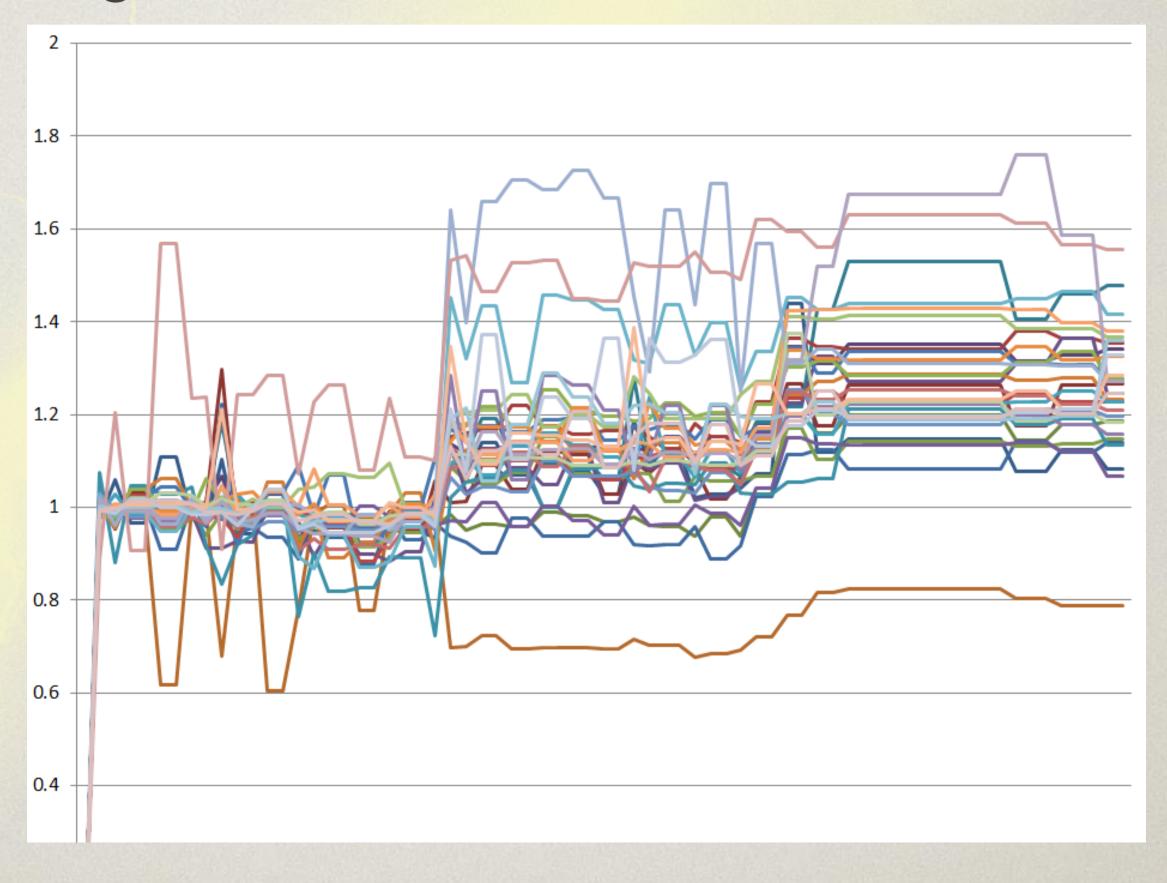
```
"build": {
    "product": "firefox",
    "revision12": "550e06c1615f",
    "name": "Ubuntu VM 12.04 x64 mozilla-i...
    "url": "https://queue.taskcluster.net/...
    "platform": "linux64",
    "branch": "mozilla-inbound",
    "date": 1441254602,
    "release": "production",
    "locale": "en-US",
    "type": "pgo",
    "id": "20150903043002",
    "revision": "550e06c1615f82cc82278873f...
},
```

```
"repo": {
    "changeset": {
        "files": |
           "js/src/vm/HelperThreads.cpp",
           "js/src/vm/HelperThreads.h",
           "js/src/vm/Runtime.cpp"
        "description": "Bug 1201051 - Make t...
        "author": "Jon <replaced@mozilla.com,
        "id12": "550e06c1615f",
        "date": 1441278480,
        "id": "550e06c1615f82cc82278873f8137...
    "index": 260643,
    "parents": "21e229c5ff708285d9e2c837c967...
```

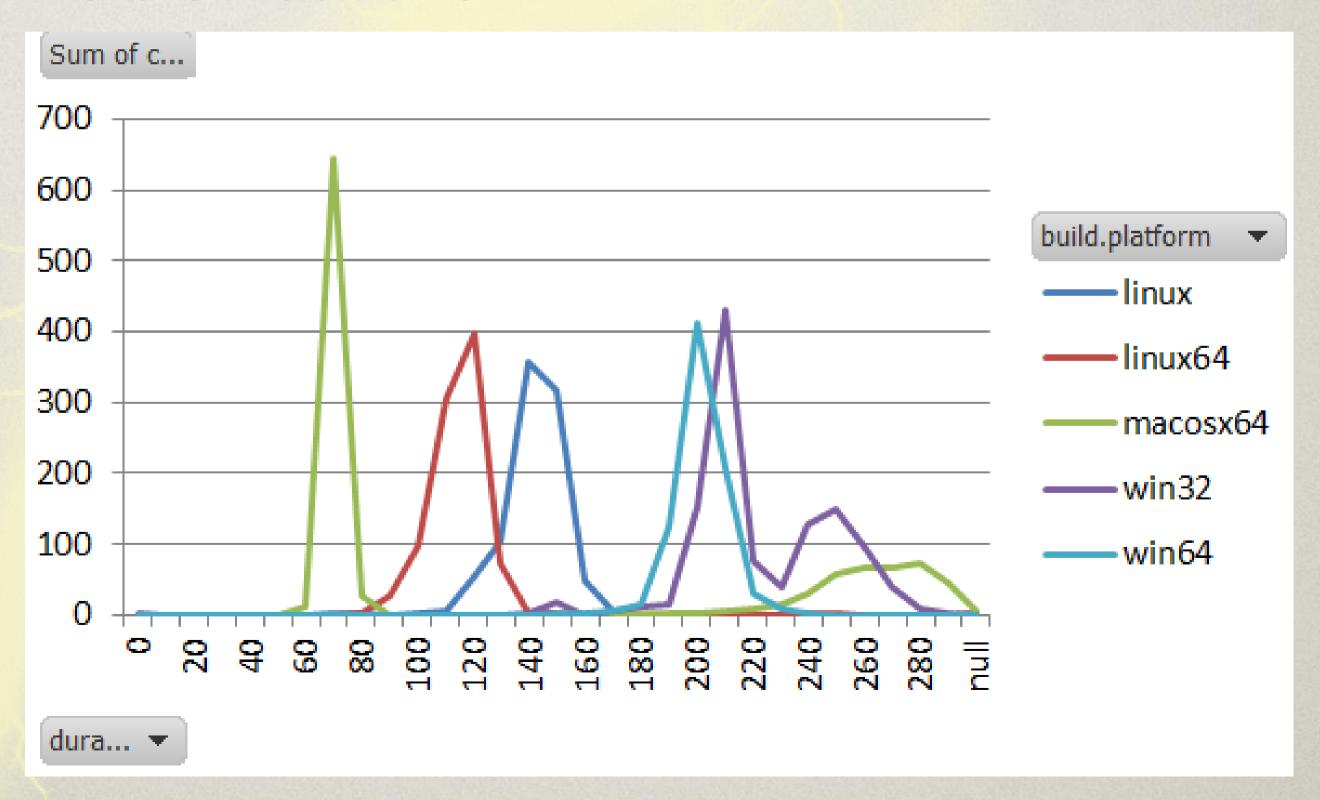
```
"index": 260643,
"parents": "21e229c5ff708285d9e2c837c967...
"branch": {
    "url": "https://hg.mozilla.org/integ...
    "last used": 1440115924,
    "locale": "en-US",
    "name": "mozilla-inbound",
    "parent name": "Source code integrat ...
"push": {
    "date": 1441278531,
    "user": "replaced@mozilla.com",
    "id": 64555
"children": "e737274a67063f673d47d1895e30...
"etl": {"timestamp": 1441286446.851573}
```

```
"etl": {
    "name": "unittest",
    "timestamp": 1441286777.499345,
    "source": {
        "os": "Linux3.13.0-48-generic",
        "python": "CPython",
        "timestamp": 1441286769.820252,
        "source": {
            "name": "Pulse block",
            "timestamp": 1441284205.602198,
            "bucket": "ekyle-pulse-logger",
            "source": {
                "count": 18220475,
                "name": "pulse.mozilla.org"
                "sent": 1441255343,
```

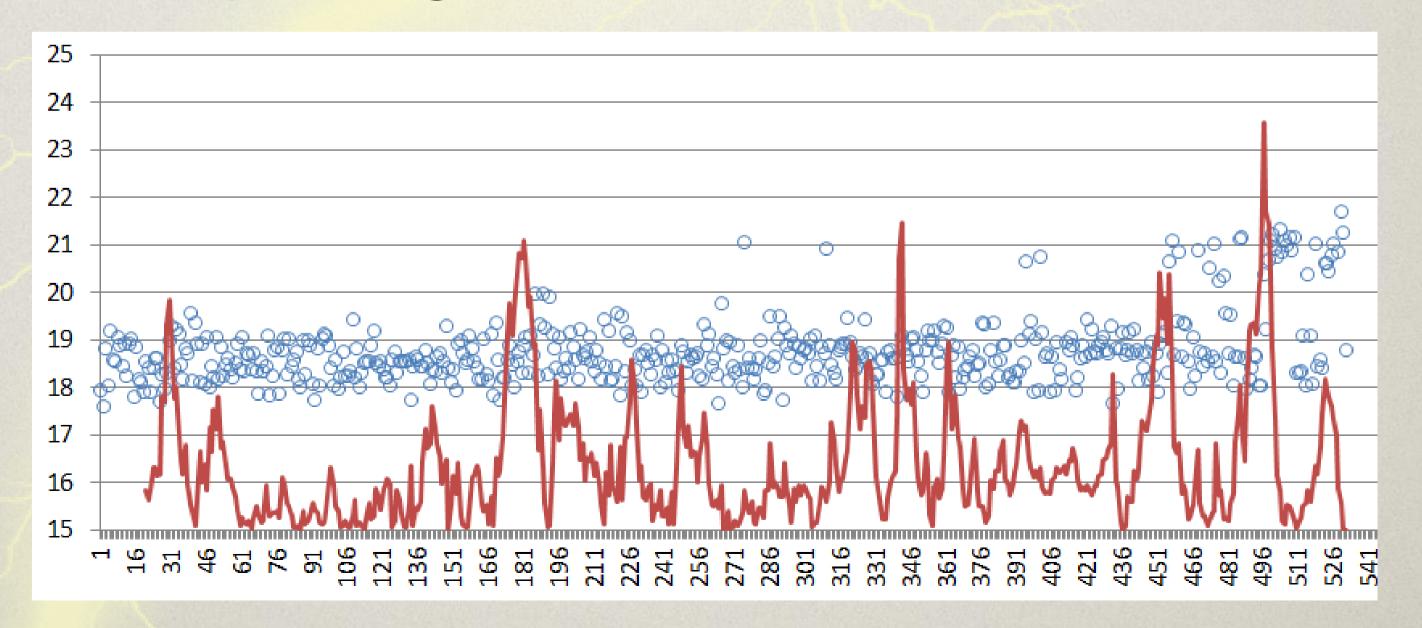
Identify change in test times



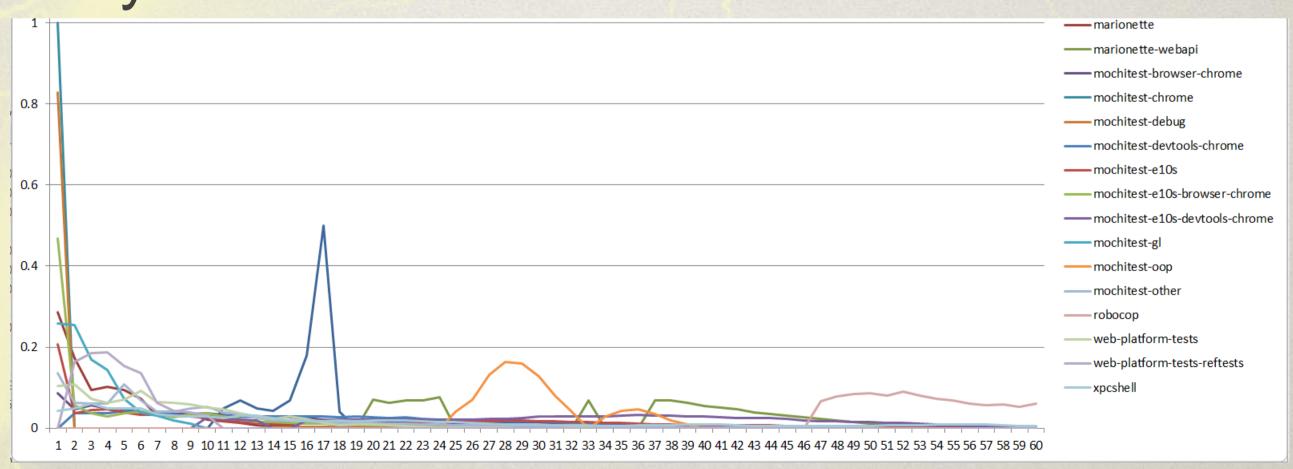
- Identify change in test times
- Test-time distributions



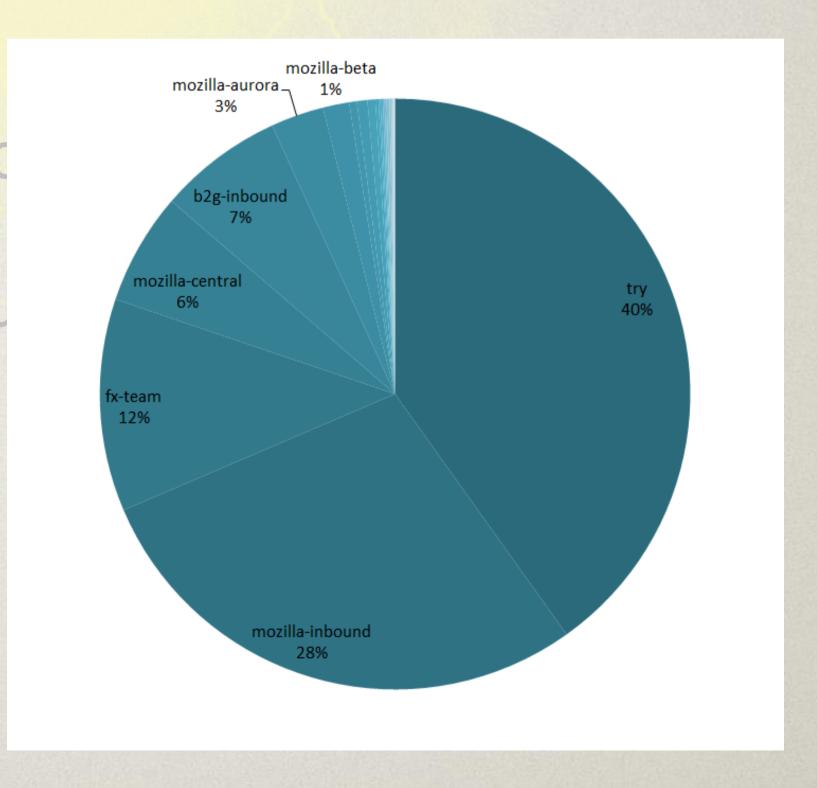
- Identify change in test times
- Test time distributions
- Visualize perf regression



- Identify change in test times
- Test time distributions
- Visualize perf regression
- Fail rate by time into suite



- Identify change in test times
- Test time distributions
- Visualize perf regression
- Fail rate by time into su
- CPU time by Branch



Active Data

http://activedata.allizom.org

Kyle Lahnakoski Engineering Productivity