

What's New in Orion

EclipseCon France 2015

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Themes

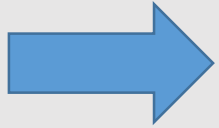
Language Tools

Scalability / Performance

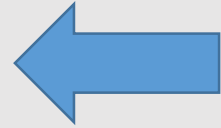
Design

Metrics

Themes



Language Tools



Scalability / Performance

Design

Metrics

Not Invented Here!

- Combine best of breed JS tools without reinventing the wheel

Tern

Esprima

eslint

estruaverse

Acorn

escope

esrecurse

csslint


doctrine

Traversal


- Traverse to declaration of function in JavaScript
- Traverse to declaration across scripts (Node, AMD)
- Traverse references from HTML to JS/CSS/HTML
- Traverse CSS imports

```
require('graceful-fs');
EndpointParser = require('bower-endpoint-parser');
PackageRepository = require('./PackageRepository');
Semver = require('../util/semver');
Copy = require('../util/copy');
Error = require('../util/createError');
Scripts = require('./scripts');

manager(config, logger) {
  config = config;
  logger = logger;
```

 createError.js - bower/lib/util/createError.js

```
<center>
  <font class=indextop>core</font><br>
  <font class=indexsub>the foundation of the platform</font><p></p>
  <a href="main.html">[home]</a>
  <a href="documents.html">[documents]</a>
  <a href="downloads.html">[downloads]</a>
  <a href="resources.html">[resources]</a>
  <a href="
  <a href="
  </center>
<br>
<table BORDER=0 CELLPADDING=2 WIDTH="100%" >
  <tr>
```

 resources.html - eclipse/platform-core/resources.html

Quick Fixes

```
float:left;
}
.TS-css_arrow {
  border-style: solid;
  height: 0px;
  width: 0;
  position
  top: 2px;
  border-w
}
```

⚠ Values of 0 shouldn't have units specified.
Remove 'px' qualifier.

```
e.pkgMeta.version;
target is '*' and resolved to a non-semver release
&& target == '*') {
  || !semver
  compatible = true;
```

⚠ Expected '===' and instead saw '=='.
Update operator

```
ction (pick, index) { return index + 1; });
logger.p
(choic
(mout.s
choice < 1 || choice > picks.length) {
```

⚠ Parameter 'pick' is never used.
Remove parameter
Add @callback to function

```
margin: 0 5%;
padding: 0;
float: none !important;
}
html {
```

⚠ Use of !important
Remove '!important' annotation.

```
source: modelStringInterpolate(config.isNotThrottle); {
  shorthand: source,
  owner: parts[0],
  package: parts[1]
});
return
};
```

⊗ Reserved words should not be used as property keys.
Surround key with quotes

```
</div>
<script src="lib/js/head.min.js"></sc
<script src="js/reveal.min.js"></scri
<script>
// Full list of configuration opt
// https://github.com/hakimel/rev
Reveal.initialize({
  theme: Reveal.getQueryHash().
```

⊗ 'Reveal' is undefined.
Add to globals directive

```

}
// If force flag is used, bypass cache, but w
if (that._config.force) {
  logger.action('resolve', resolver.getSource
  return that._resolve(resolver, logger);
  if (!resolver.isCacheable()){
    ~~~~~
    ~~~~~
  }
}
// Note that we use the resolver methods to q
// cache because transformations/normalisatio
```

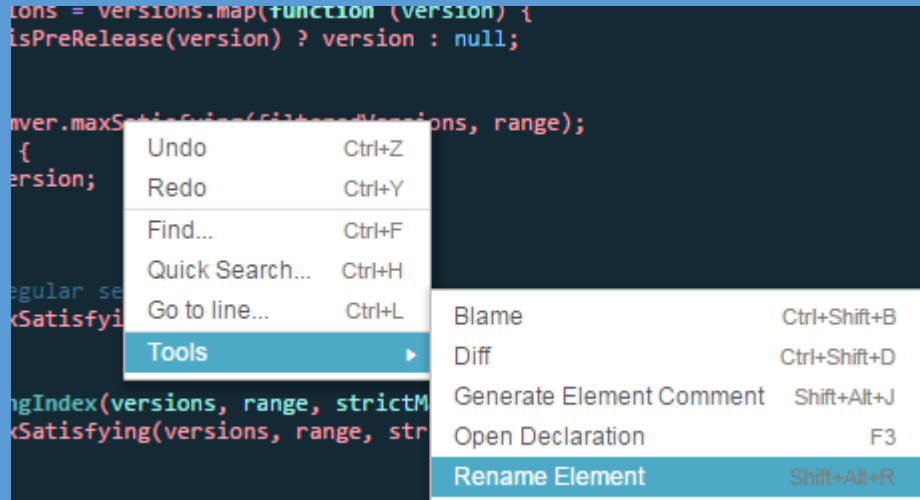
⊗ Unreachable code.
Remove unreachable code

```
aram {String} rest
function(req, res, next, rest) {
  ar pid = rest;
  f (pid === NaN) {
    write(20
    Apps
  })
  });
```

⊗ Use the isNaN function to compare with NaN.
Use isNaN()

Semantic Rename

- Rename JavaScript function and all references
- Uses Tern.js JavaScript engine



```
// - copyMode: copy mode of src to dst
function copyFile(src, dst, opts) {
  var promise;

  opts = parseOptions(opts);

  promise = copy({
    path: src,
    type: 'File'
  }, {
    path: dst,
    mode: opts.mode,
    type: 'File'
  });

  if (opts.copyMode) {
    promise = promise.then(copyDir);
  }

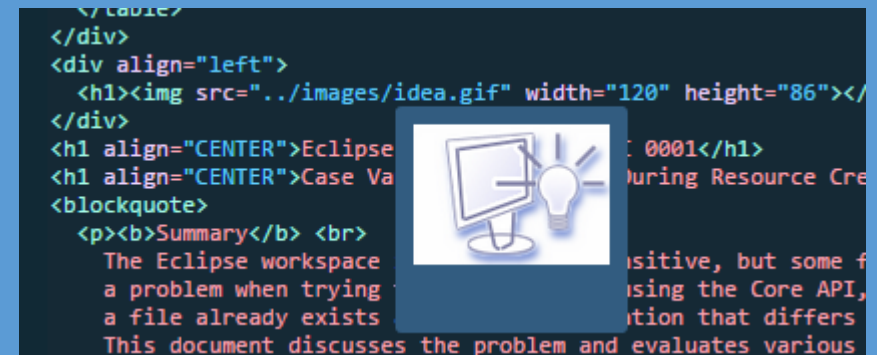
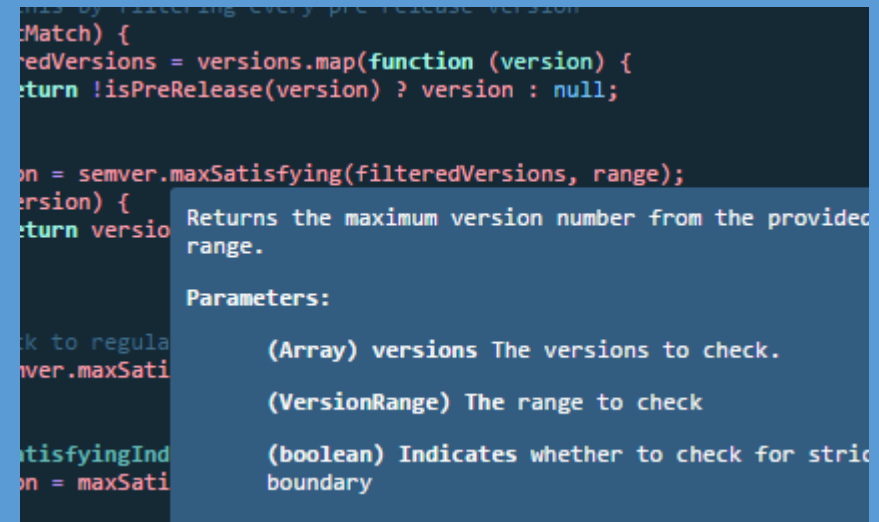
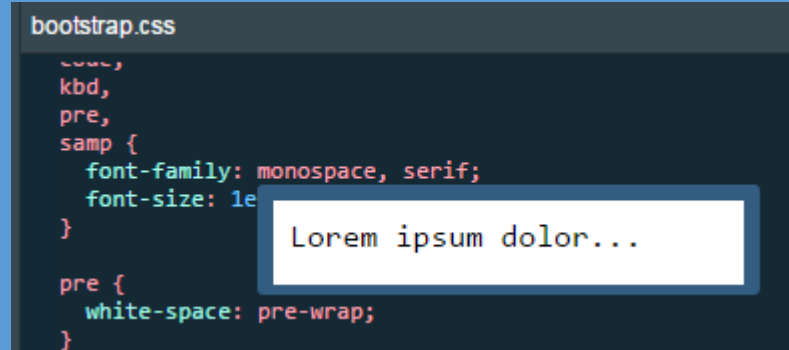
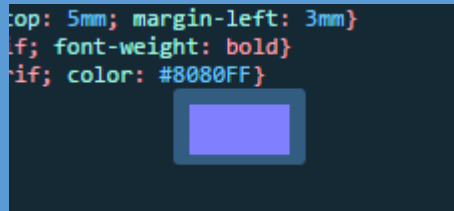
  return promise;
}

// Available options:
// - ignore: array of patterns to be ignored
// - mode: force final mode of dst
// - copyMode: copy mode of src to dst
function copyDir(src, dst, opts) {
  var promise;

  opts = parseOptions(opts);

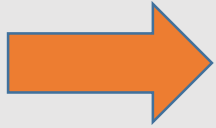
  promise = copy({
    path: src,
```

Rich Hovers

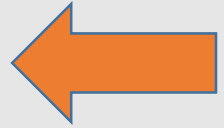


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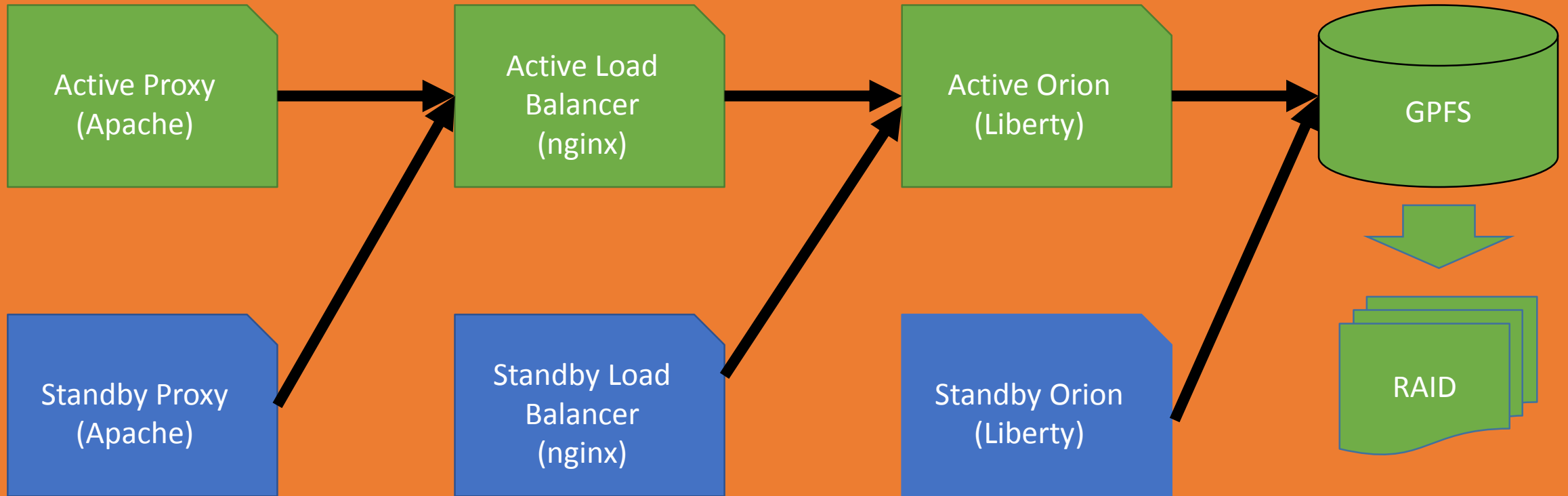
Scalability / Performance



Design

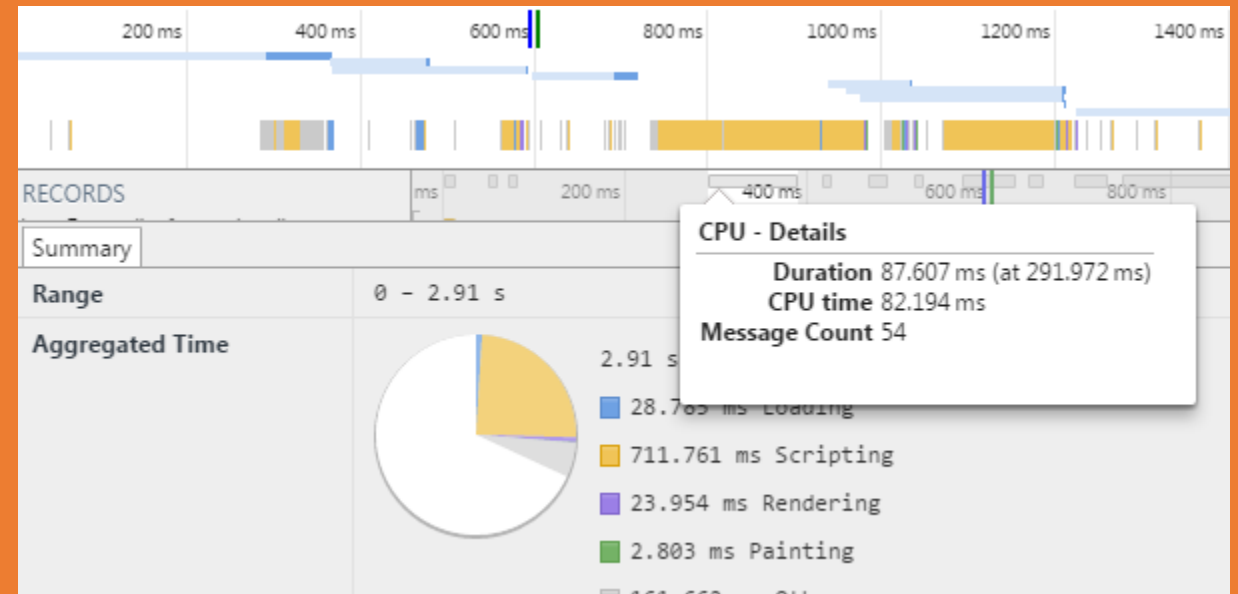
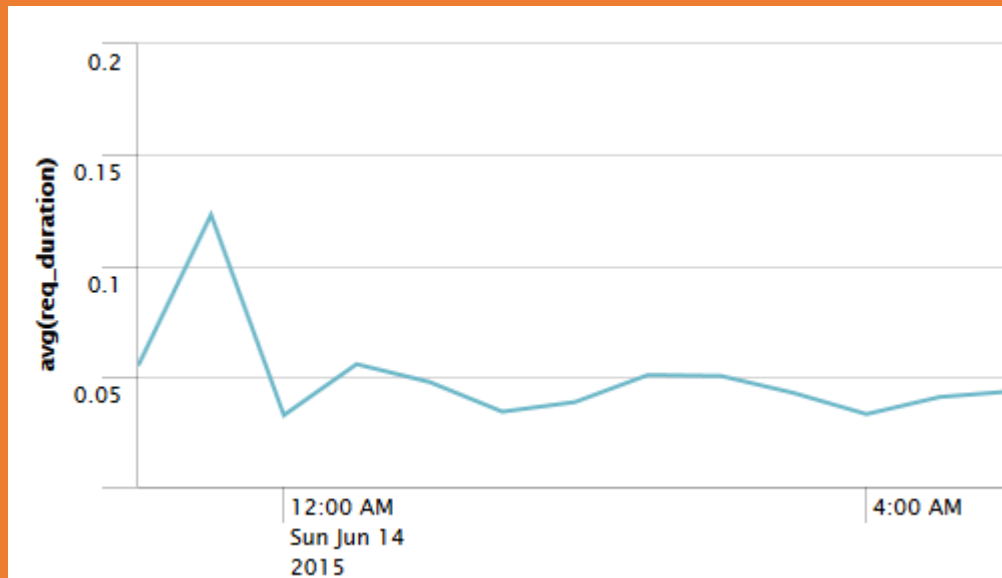
Metrics

Clustered Server Configuration



Improving Page Performance

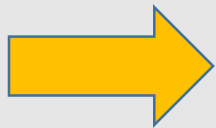
- Using SPDY / HTTP 2.0 to reduce connection overhead
- Merging Orion plugins to reduce iframes and round trips
- Shared Web Worker for JavaScript parsing / analysis



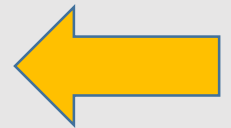
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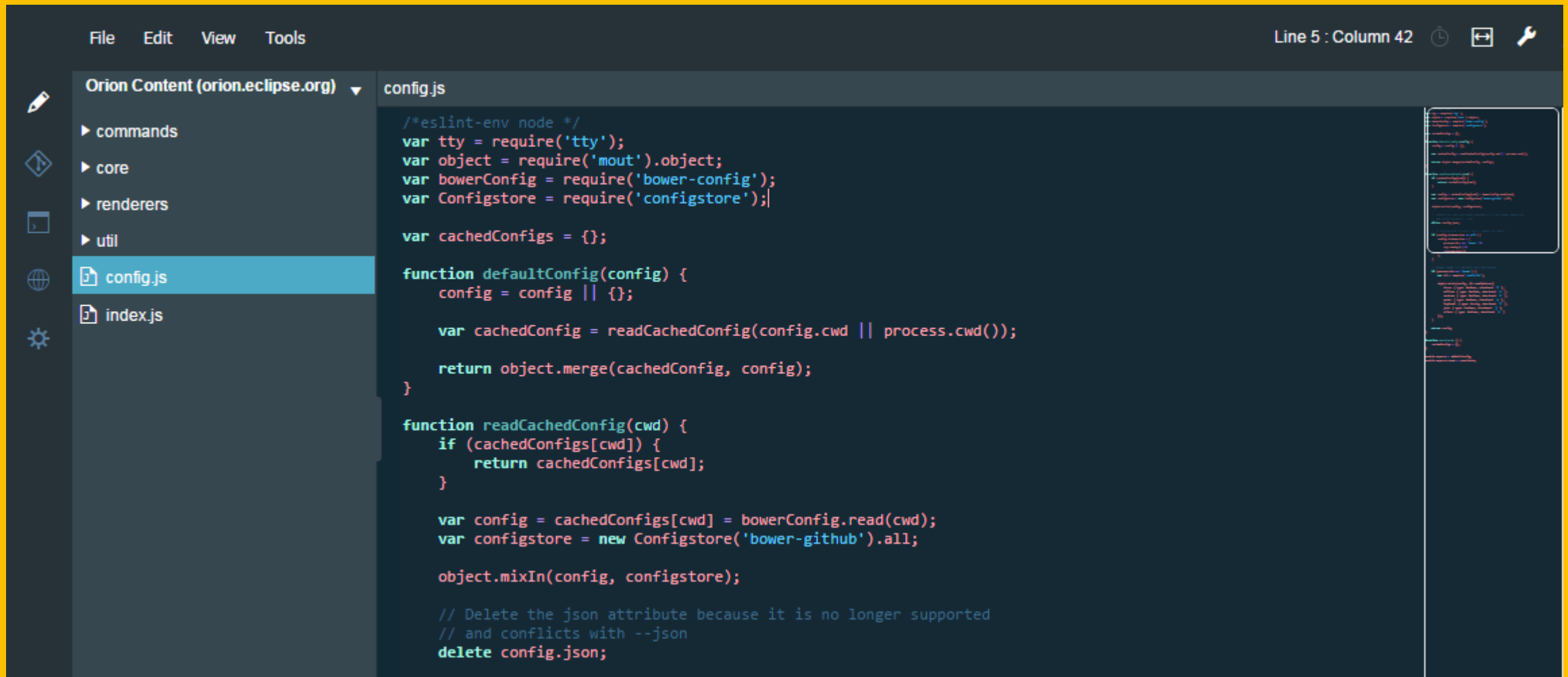


Metrics

Design Approach

- Full time designer working directly on the team
- Relentless focus on ease of use, user experience
- Simplified, streamlined user interface
- Weekly design playbacks where ALL design changes are reviewed
- User studies, interviews, hackathon feedback

Editor Page Design



Git Page Design

The screenshot displays the Git GUI interface with a dark theme. At the top, the repository is set to 'bower' and the reference is 'master => origin/master'. The left sidebar shows the 'Active Branch (master)' with a 'Sync' button. Below this, the 'Working Directory Changes' section indicates '14 files changed. 0 files ready to commit.' The 'OUTGOING (0)' and 'INCOMING (0)' sections both show 'No Changes'. The 'HISTORY' section lists recent commits, including 'minor package.json tweak...' by Sindre Sorhus and 'Merge pull request #1802 from pgilad/patch-1...' by Adam Stankiewicz. The main area is titled 'Working Directory Changes' and features a large text box for 'Enter the commit message'. Below the message box are options to 'Amend previous commit' and 'Select All' (0 files selected). A file 'lib/config.js' is selected for viewing. The diff view shows changes to 'lib/config.js', with the first line highlighted in green: `1 /*eslint-env node */`. The code editor includes standard editing tools like undo, redo, and search.

REPOSITORY: bower ▼ REFERENCE: master => origin/master ▼

Active Branch (master) [Filter] [Star] [Sync]

Working Directory Changes 14 files changed. 0 files ready to commit.

▼ OUTGOING (0) [Push ▼]
No Changes

▼ INCOMING (0) [Fetch ▼]
No Changes

▼ HISTORY

- minor package.json tweak...
Sindre Sorhus on 5/19/2015, 2:55:20 PM
[more ...](#)
- Merge pull request #1802 from pgilad/patch-1...
Adam Stankiewicz on 5/19/2015, 10:04:24 AM
[more ...](#)

Working Directory Changes [Commit]

Enter the commit message

☐ Amend previous commit [more ...](#)

☐ Select All 0 files selected [+] [-]

☐ ▼ lib/config.js

```
1 /*eslint-env node */
2 var tty = require('tty');
3 var object = require('mout').object;
4 var bowerConfig = require('bower-config');
5 var Configstore = require('configstore');
6
7 var cachedConfigs = {};
8
9 function defaultConfig(config) {
10   config = config || {};
11
12   var cachedConfig = readCachedConfig(config.cwd || process.cwd());
```

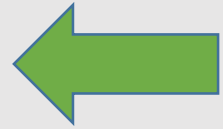
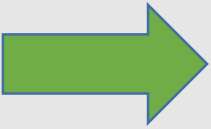
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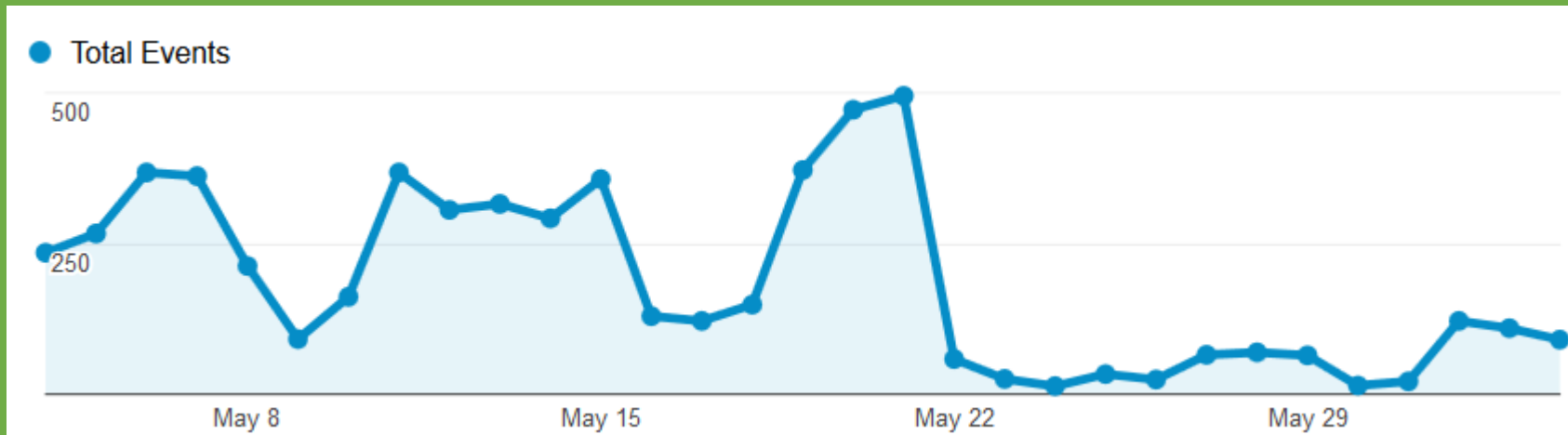


Metrics Approach

- Client instrumented with Google Analytics
- Enabled by admin for a given Orion server instance
- Server instrumentation via logging, analysis via Splunk / ELK
- Stop guessing what user wants: experiment and measure

Metrics Examples

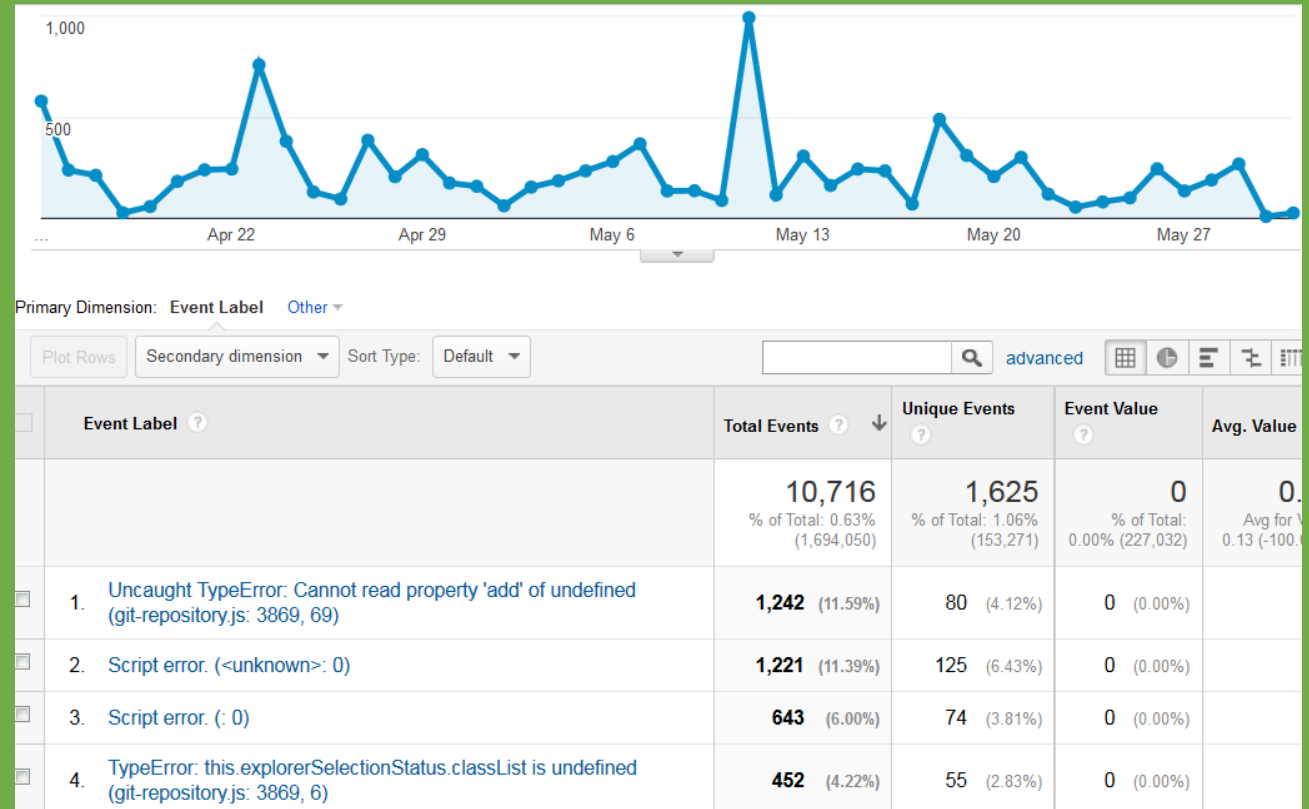
- Add syntax highlighting based on file types edited
- Users clicking on disabled buttons 400 times a day!
- Increase disabled button opacity and clicks drop



11.	<code>application/xml</code>
12.	<code>text/x-python</code>
13.	<code>text/x-c++src</code>
14.	<code>unregistered: .git</code>
15.	<code>text/x-umple-source</code>
16.	<code>image/png</code>
17.	<code>text/x-ruby</code>
18.	<code>unregistered: .html</code>
19.	<code>unregistered: config</code>
20.	<code>unregistered: .json</code>

Instrumenting Client Side Errors

- All client side exceptions logged as GA events
- Periodically review top events and resolve them
- Ensures the team focuses on maximum impact rather than what happens to get reported



To Be Continued...

- Orion on the road to Continuous Delivery
- Argos, 14:00 – 14:35 Today
- Deeper dive into **how** we are working rather than **what** we are building

Thanks for listening!