#### O'REILLY®



JULY 16-20, 2012 PORTLAND, OR

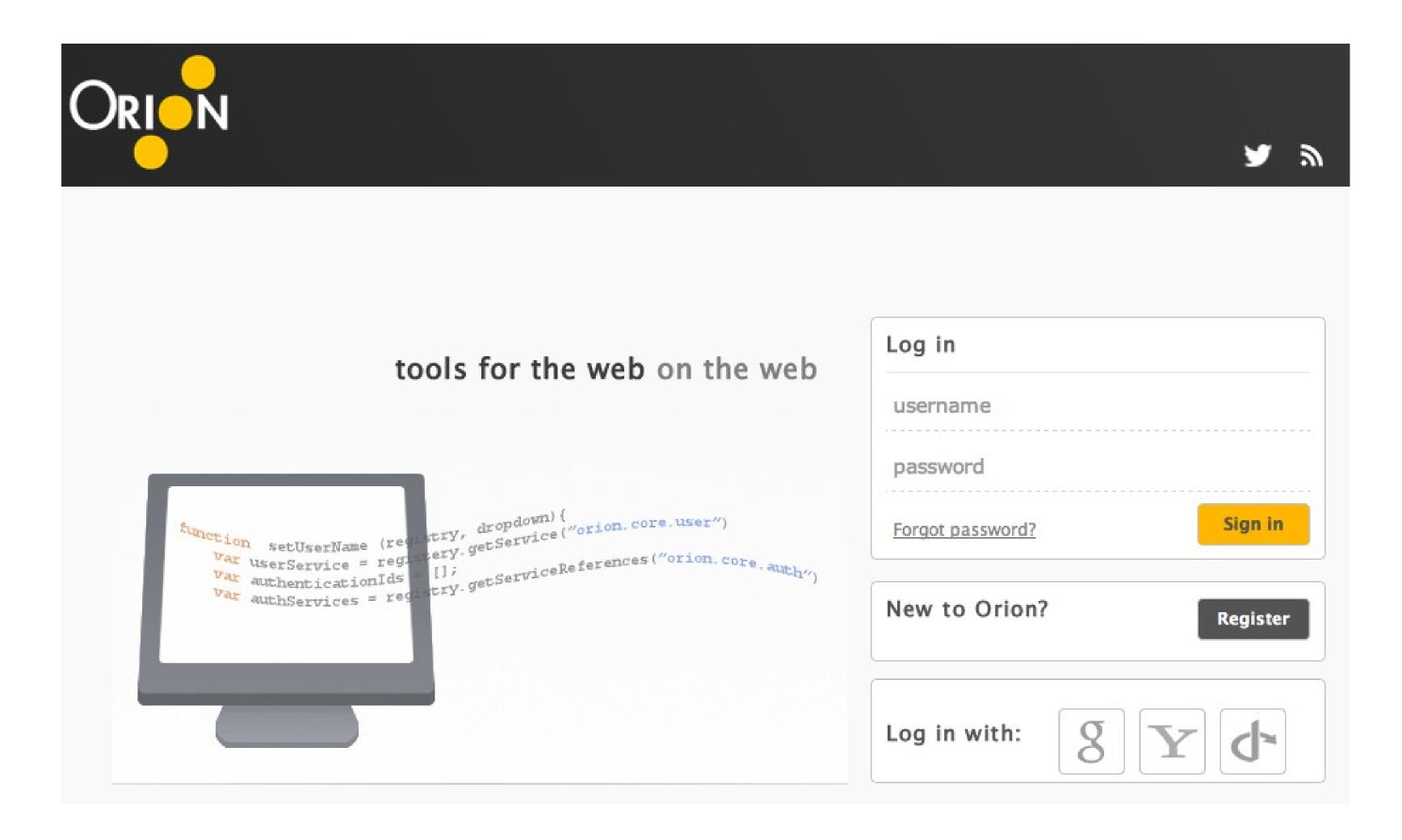
# Orion: Development Tools for the Web, on the Web

```
ORION Navigator Sites Repositories Console Get Plugins
                                                                                                                                    Related -
 Prion Content / org.eclipse.orion.client / bundles / org.eclipse.orion.client.core / web / css / commands.css*
 Outliner
                                                porder: ipx soild #808080;
                                     78 }
                                     79
    .commandSprite
                                      80
                                            .commandMenu {
    .commandList
                                                display: inline-block;
    .commandList li
                                                vertical-align: baseline;
    .commandMargins
                                                margin: 0;
    .commandImage
                                                font-size:8pt;
    .commandImageOver
                                                font-weight:normal;
    .commandMissingImageButton
                                               border: 1px solid #dedede;
                                                background-color: #efefef;
    .commandButton
                                                cursor: pointer;
    .commandButtonOver
                                                border-radius:1px;
    .commandMenu
                                                border-
    .commandMenuItem
                                                         border-bottom
    .commandMenuItemAnchor
                                      93
                                                         border-bottom-color
    .commandLink
                                            .commandMen
                                                border: border-bottom-left-radius
    .commandSeparator
                                                padding border-bottom-right-radius
    .commandActive
                                                margin: border-bottom-style
    .commandActiveItem
                                      98 }
                                                        border-bottom-width
    .commandInactiveItem
                                      99
                                                         border-collapse
                                           commandMen border-color padding
    .imageSprite
                                     101
    .core-sprite-check
                                     102
    .core-sprite-check_on
                                     103
    .core-sprite-close
                                     104
                                            .commandLink {
    .core-sprite-closedarrow
                                               display: inline-block;
    .core-sprite-collapseAll
                                                padding: 2px; /* other commands have 1px plus a border, so we need 2 */
                                                -webkit-touch-callout: none:
```

Wayne Beaton, The Eclipse Foundation Susan McCourt, IBM

### Demo coming...want to follow along?

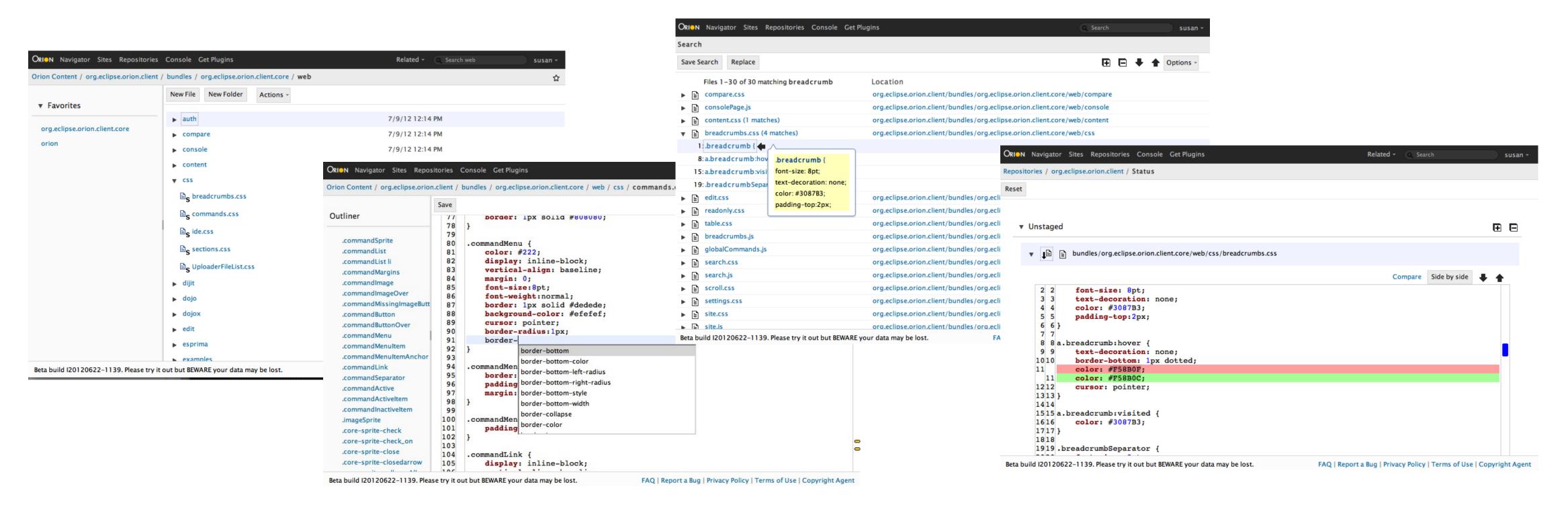
orionhub.org





#### Software development in a browser

- Not like a desktop IDE (the web is the platform)
- Promotes a page-oriented web experience
- Workflows across a set of linked web pages





#### Core coding activities + extensions

- Platform provides basic tasks for web development
  - HTML, CSS, JS editing in a performant, robust editor
  - Version control (git) support
  - Global search, site hosting, unit testing
- Linking in additional features
  - Outward bound links via navigation bar, related pages, navigator
  - Inward bound links via URI Templates for invoking Orion functions
- Extend capabilities of existing pages
  - Editor capabilities, content manipulation, alternate editors
- Extend core capabilities
  - Content hosting (S3, WebDAV, HTML5 local files)
  - Authentication strategies



#### Orion 0.5 demo

- Project setup, navigation, editing HTML, CSS, JS
- Site hosting
- Using plugins
- Version control (git) support



#### Plugins: Extending the system

- Users install plugins from other domains
  - Pages request necessary micro-services from plugin/service registry
  - Plugins loaded as needed (non-visual iframes)
  - Don't call us, we'll call you (today)
  - Authentication, licensing (1.0)
- Ul extension points
  - Narrowly defined contributions
  - Semantic in nature (for flexibility in changing our UI)
- Core extension points
  - Alternate file systems
  - Authentication strategies



#### Plugins: Micro Services Examples

• Declarative behavior - "Related" links menu

```
window.onload = function() {
    var provider = new eclipse.PluginProvider();
    provider.registerServiceProvider("orion.page.link.related", null, {
        nameKey: "Git Status",
        id: "eclipse.git.status2",
        tooltipKey: "Go to Git Status",
        nls: "git/nls/gitmessages",
        validationProperties: [{
            source: "StatusLocation|Clone:StatusLocation",
            variableName: "GitStatusLocation"
        }],
        uriTemplate: "{OrionHome}/git/git-status2.html#{GitStatusLocation}"
    });
}
```



#### Plugins: Micro Services Examples

Asynchronous javascript implementation – i18n validator

```
provider.registerServiceProvider("orion.edit.validator", {
    checkSyntax: function(title, contents) {
        var problems = [];
        // a bunch of implementation detail finding and pushing problems...
        problems.push({
          reason: "Non externalized string literal " + strings[j][0],
          line: i + 1,
          character: strings[j].index + 1,
          end: strings[j].index + strings[j][0].length,
          severity: "warning" });
        return { problems: problems };
    }},{
    contentType: ["application/javascript"]
```

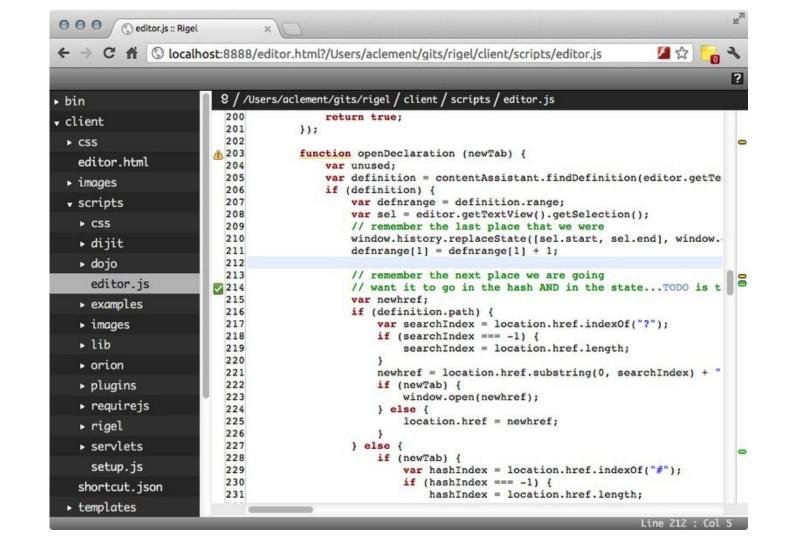


#### Consuming Orion: the editor

- Mozilla Dev Tools (Scratchpad)
  - http://blog.mozilla.org/devtools/2011/08/15/introducing-scratchpad/



- Rigel (VMWare)
  - Lightweight editing of local files
  - Node app serving up local files
  - Content assist and navigation based on commonjs or Amd module systems

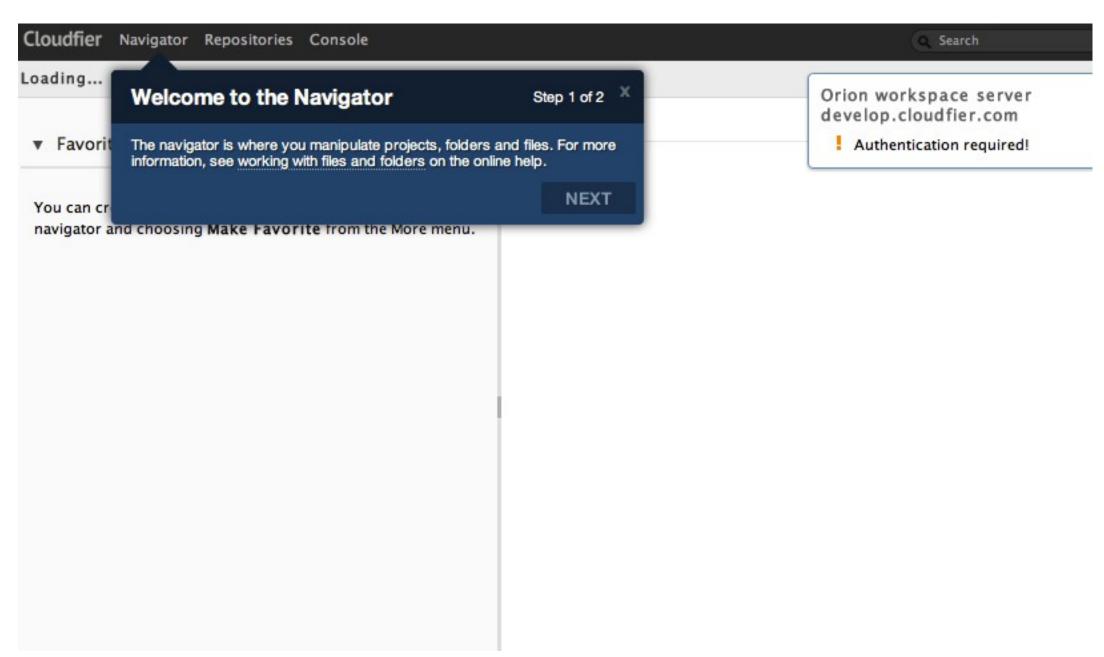




## Consuming Orion: extending and rebranding

Cloudfier - http://cloudfier.com/







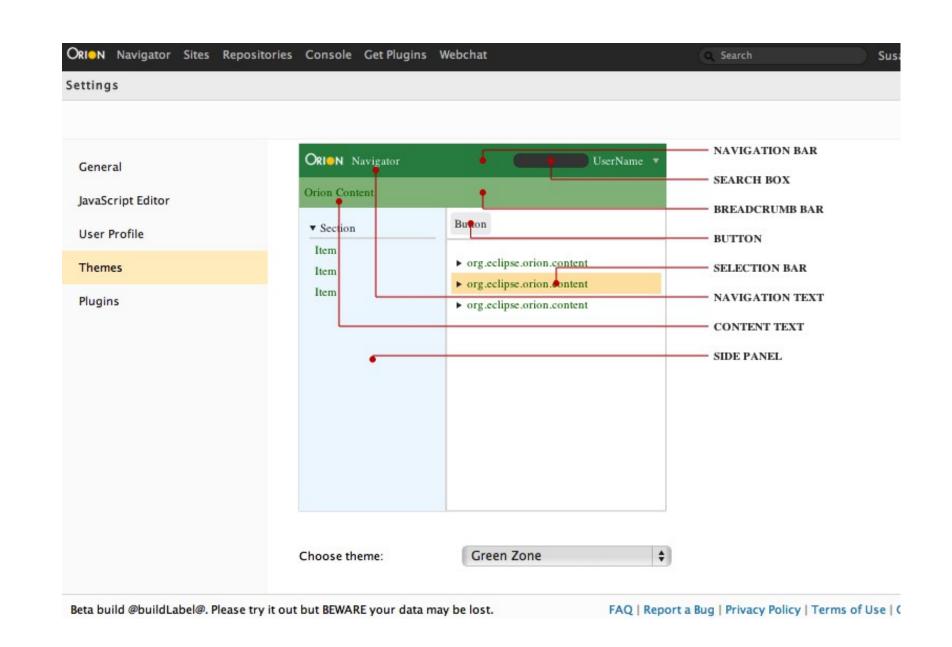
### Contributing to Orion

•(Wayne slideware for who is involved in Orion, new contributors, communication channels, bugs, patches, IP)



#### Coming in Orion 1.0

- Robustness
  - · Performance, consumability of components, code quality, API
  - Finish up accessibility, i18n
  - Reevaluate js framework usage
- Key missing features (not committed yet)
  - Theme Builder (LESS)
  - Offline support (investigating)
  - Consumable (and relocatable) Navigator





#### Learning more

- orionhub.org Kick the tires
- @orionhub on twitter
- http://wiki.eclipse.org/Orion
  - Downloading builds, git repos, contributions
  - Architecture and programmer doc
  - User doc
- planetorion.org news and articles

