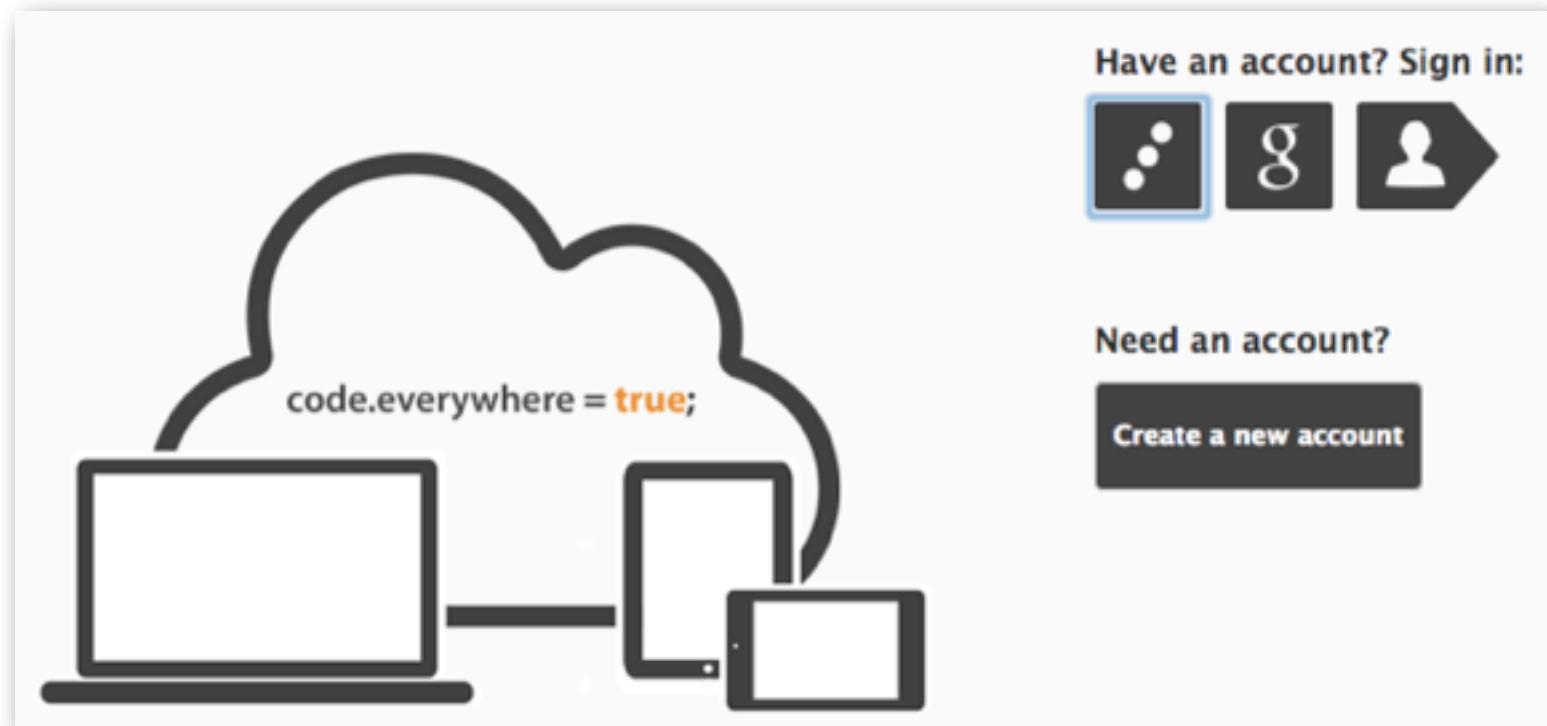


Orion - a browser based tools integration platform



Extending Orion Tutorial - October 23rd, 2012
John Arthorne, Szymon Brandys, Ken Walker

Agenda

Short Introduction to Plugins

Hello World Plugin

Technical overview of plugin Architecture

Main Tutorial Exercises (Break)

Additional Exercises

Closing Thoughts

Introduction

The Speakers and What Orion Is

Design Principles?

Embrace the Modern Browser

Open Platform that's Extensible

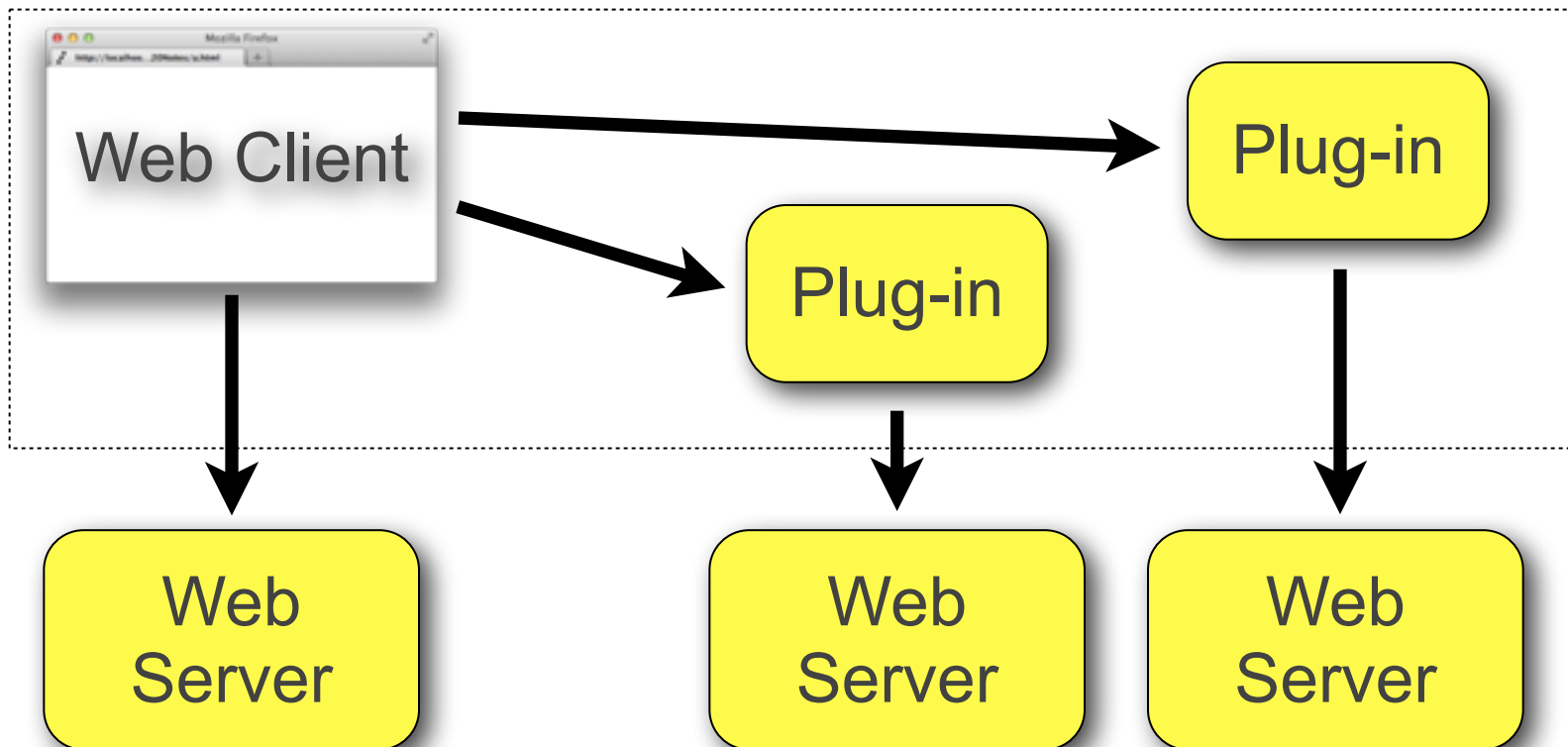
Function without Sacrificing Speed

Focus on the Task at Hand

Plug-ins: Extending the Client

Pages provide specific tasks

Plug-ins extend pages with functionality



Plug-ins: The Technical Bits...

Orion plugins are separate HTML pages
hosted in non-visible IFrames

Advertise “cacheable” capabilities/properties
using `window.postMessage`

Allows secure cross-origin communication

Message payload is JSON-like
(Structured Clone Algorithm) - so binary data

How do plug-ins manifest themselves in Orion?

A partial list of default plug-ins

Plugins 16

Install

Reload all

Orion User Authentication

This plugin provides a user authentication service to support user verification and logout support.

Plugin

Services 1

Orion CSSLint Support

This plugin provides a CSSLint service to support outline and validation of CSS

Plugin

Services 2

Orion Page Links

This plugin provides the top-level page links for Orion.

Plugin

Services 10

Orion JavaScript Content Assist

This plugin provides content assist for JavaScript using the Esprima JavaScript parser.

Plugin

Services 1

Monday, 22 October, 12

What about 3rd party plug-ins?

Developers provide html, javascript elements

```
3 <head>
4   <title>Markdown plugin (Editor Simple)</title>
5   <script src="lib/plugin.js"></script>
6   <script src="markdownPlugin.js"></script>
7 </head>
```

```
89 provider.registerServiceProvider("orion.edit.contentAssist", contentAssistImpl, {
90   name: "Markdown content assist",
91   contentType: ["text/x-web-markdown"]
92 });
```

Markdown Plugin Tutorial

This plugin provides support for Markdown editing in Orion.

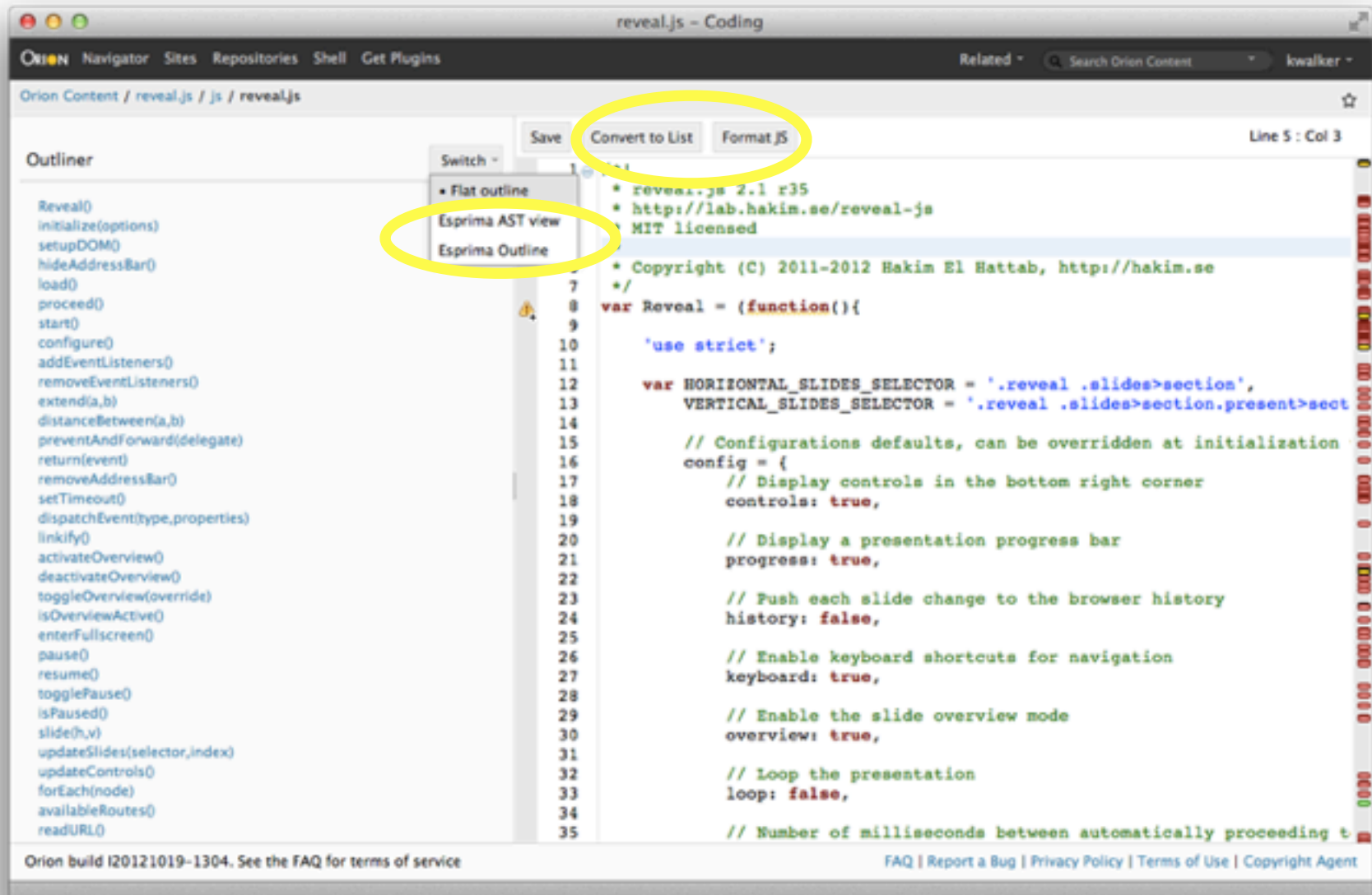
Plugin

Services 4

Item	Value
name	Markdown content assist
contentType	JavaScript Object
__plugin__	http://localhost:8080/file/kwalker/Orion-Tutorial-Eclipsecon2012/solutions/exercise3-
objectClass	JavaScript Object
service.id	56
service.names	JavaScript Object

orion.edit.contentAssist

Visible representation of Orion plug-ins



Exercise One

More Orion Talks at EclipseCon Europe 2012

Extending Orion – A Tutorial

23 October 09:00 – 12:30

JavaFX, OSGi and e4

23 October 16:30 – 17:00

Orion - a browser based tools integration platform

23 October 17:00 – 18:00

BOF – Eclipse Orion – Explore the Possibilities

23 October 20:00 – 21:00

Embracing Eclipse Orion

24 October 11:30 – 12:00

Orion – Integrations

24 October 13:30 – 14:00

Mini-frameworks in Orion

24 October 15:30 – 16:00