



# Firefox OS

Let us talk about Firefox

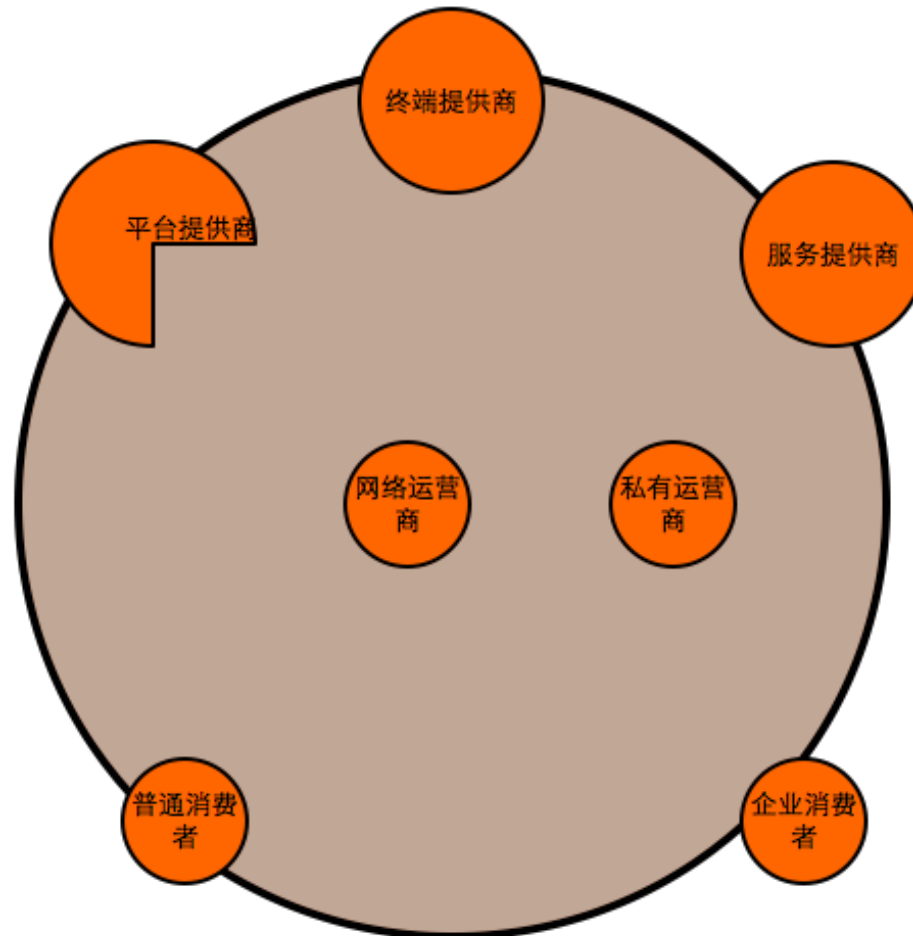
Robert  
ServiceDev Developers

# 议题

- 产业角度分析FireFox
- 平台角度分析FireFox
- 应用角度分析FireFox
- Q&A

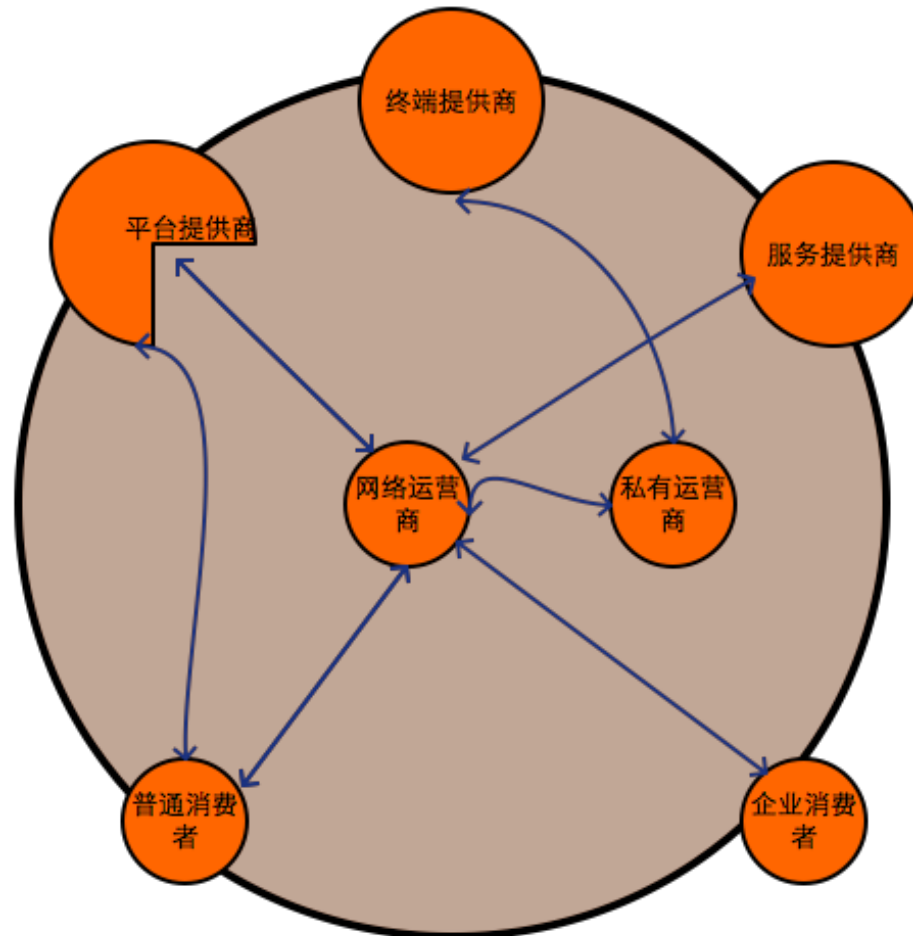
# 产业角度分析Firefox

当前产业生态系统



# 产业角度分析Firefox

当前产业生态系统



# 产业角度分析Firefox

世界因为两个理由需要Firefox OS:

- 一，它可以让运营商降低对Android和苹果的依赖，二者分别占30%的APP营收；
- 二，它可以提供一种低成本方案让下一个20亿人进入互联网。
- 三，它也可以帮助硬件制造商摆脱对Google的依赖。

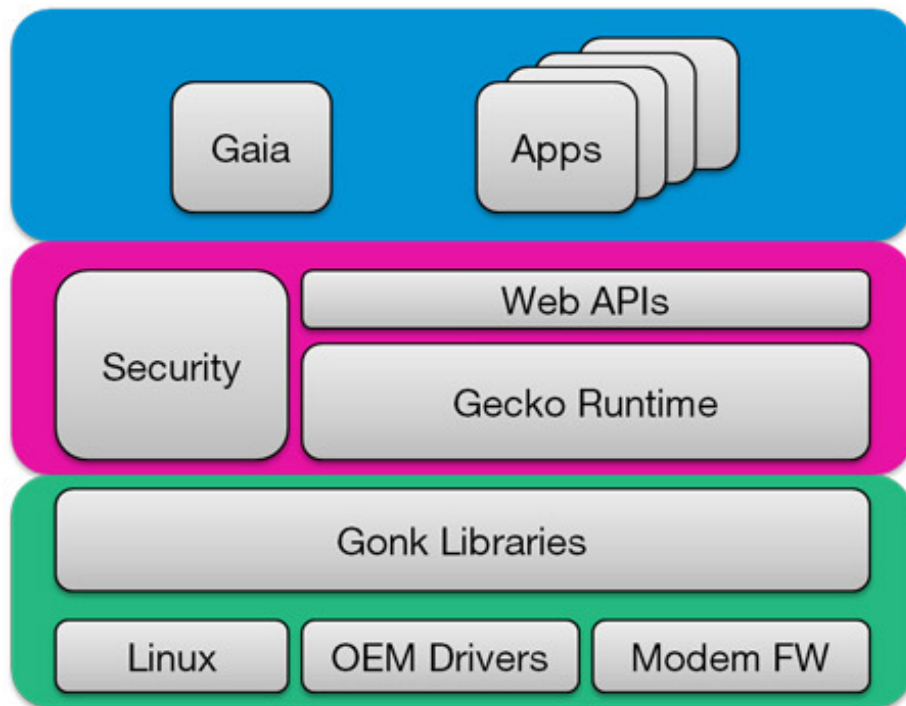
# 平台角度分析Firefox

- July 2011, Mozilla announce: Boot to Gecko
- July 2012, B2G(Boot to Gecko) was rebranded as 'Firefox OS
- Feb 2013, Mozilla announced plans for global commercial roll-out of Firefox OS GAEO

# 平台角度分析Firefox

## Firefox 架构简介图

大致分为三个层: 应用层, 应用运行时层, 系统底层



# 平台角度分析Firefox

Firefox 架构详细图



# 平台角度分析Firefox

## Firefox 平台架构特点

- 重用Android资源
- 重用服务商资源
- 重用现有开发资源
- 免费开源



# 应用角度分析Firefox

## 3D 模式

- Design
- Development
- Distribution

# 应用角度分析Firefox

## App Development

- OWA standard: Open Web apps
- Packaged vs. Hosted Apps
- Packed apps are essentially a zip file
  - HTML, CSS, JavaScript, images, manifest, etc.
- Hosted apps are run from a server at a given domain, just like a standard website
- Both app types require a valid manifest
- HTML5, CSS, Javascript, JQuery Mobile, WEBApi, IndexedDB. WebWorker, SVG.

# 应用角度分析Firefox

## Packaged Manifest file

类似AndroidManifest.xml

JSON

```
{
  "version": "0.1",
  "name": "Your App",
  "description": "Your new awesome Open Web App",
  "launch_path": "/index.html",
  "icons": {
    "16": "/img/icons/mortar-16.png",
    "48": "/img/icons/mortar-48.png",
  }
  "installs_allowed_from": ["*"],
  "locales": {
    "es": {
      "description": "Su nueva aplicación impresionante Open Web",
      "developer": {
        "url": "http://yourawesomeapp.com"
      }
    },
  },
},
```

# 应用角度分析Firefox

## App Layout & Design

### 类似Layout

```
/ The following are examples of different CSS media queries /  
/ Basic desktop/screen width sniff /  
@media only screen and (min-width : 1224px) {  
    / styles /  
}  
/ Traditional iPhone width /  
@media  
    only screen and (-webkit-min-device-pixel-ratio : 1.5),  
    only screen and (min-device-pixel-ratio : 1.5) {  
    / styles /  
}  
/ Device settings at different orientations /  
@media screen and (orientation:portrait) {  
    / styles /  
}  
@media screen and (orientation:landscape) {  
    / styles /  
}
```

CSS

# 应用角度分析Firefox

## App Layout & Design

### 类似Activity

TEXT

```
<html>
  <head>
    <meta charset="utf-8">
    <title>My App</title>
    <meta name="description" content="">
    <meta name="viewport" content="width=device-width">
    <link rel="stylesheet" href="css/app.css">
  </head>
  <body>
    <!-- Write your application here -->
    <script type="text/javascript" data-main="js/init.js" src="js/lib/require.js">
    </script>
  </body>
</html>
```

# 应用角度分析Firefox

## Web API

类似 Android Platform API

JAVASCRIPT

```
// If this device supports the vibrate API...  
if('vibrate' in navigator) {  
    // ... vibrate for a second  
    navigator.vibrate(1000);  
}
```

# 应用角度分析Firefox

## App Offline

- Application cache
  - application cache, which stores resources for the app on the client system
- Checking connectivity
  - listen for changes to, the `window.navigator.onLine` property.
  - However, that value is not guaranteed to be accurate.
- Local storage
- IndexedDB



# 应用角度分析Firefox

## Media Apps

- Offline DB
- WebGL
- Canvas
- WebWorker

# 应用角度分析Firefox

## Tools & Testing.

- Firefox OS Simulator
- Unit Testing
  - Unit tests are extremely valuable when testing on different devices and builds.
  - jQuery's QUnit is a popular client-side testing utility, but you can use any set of testing tools you'd like.
- Installing Firefox OS on a Device
  - Adb or other install tools.
  - OTA portal

# 应用角度分析Firefox

## Other tools

- App Generator
  - [https://marketplace.firefox.com/developers/docs/app\\_generator](https://marketplace.firefox.com/developers/docs/app_generator)
- App Validator
  - <https://marketplace.firefox.com/developers/validator>
- Firefox Developer tools
  - [https://marketplace.firefox.com/developers/docs/dev\\_tools](https://marketplace.firefox.com/developers/docs/dev_tools)

# 应用角度分析Firefox

## Marketplace Submission

- A manifest file for your app.
- Web hosting for the app (the Firefox OS Marketplace does not host apps).
  - See Publishing the app for more information.
- Read and understand the Marketplace review criteria.

# Final

## Reference :

- [https://developer.mozilla.org/en-US/docs/Mozilla/Firefox\\_OS/Platform](https://developer.mozilla.org/en-US/docs/Mozilla/Firefox_OS/Platform)
- [https://developer.mozilla.org/en-US/docs/Mozilla/Firefox\\_OS/Platform/Apps\\_architecture](https://developer.mozilla.org/en-US/docs/Mozilla/Firefox_OS/Platform/Apps_architecture)
- [https://developer.mozilla.org/en-US/docs/Mozilla/Firefox\\_OS/Platform/Feature\\_support\\_chart](https://developer.mozilla.org/en-US/docs/Mozilla/Firefox_OS/Platform/Feature_support_chart)
- [https://developer.mozilla.org/en-US/docs/Mozilla/Firefox\\_OS/Platform/Testing](https://developer.mozilla.org/en-US/docs/Mozilla/Firefox_OS/Platform/Testing)

## Q&A

# <Thank You!>



Important contact information goes here.

github [review.sonyericsson.net/service\\_dev\\_home](https://review.sonyericsson.net/service_dev_home)