



PRISM: WHEREFORE AND  
WHERE TO?

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FOSDEM

BRUSSELS



# WEB APPS ARE COOL

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- NO INSTALLING OR UNINSTALLING
- ACCESSIBLE FROM ANY COMPUTER
- ACCESSIBLE FROM ANYWHERE



# DESKTOP APPS ARE COOL

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- HIGHLY RESPONSIVE
- OPTIMIZED FOR USER EXPERIENCE
  - WIDGETS
  - DESKTOP INTEGRATION
- HIGHLY FUNCTIONAL
- DON'T REQUIRE NET CONNECTION



# TWO WEBS

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- WEB OF DOCUMENTS (TIM BERNERS-LEE'S HYPERTEXT PROJECT VISION)
  
- WEB OF APPLICATIONS
  - ORGANIC, UNPLANNED EVOLUTION
  - JAVASCRIPT
  - XMLHTTPREQUEST
  - JAVASCRIPT OPTIMIZATION
  - OFFLINE CODE AND DATA



# THE BIG QUESTION

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- IS THE TRADITIONAL WEB BROWSER THE RIGHT PLACE TO RUN APPS?
- AND IF NOT... WHAT IS?



# ENTER PRISM, STAGE LEFT

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- SINGLE-SITE BROWSER
- FOCUS ON WEB APP USER EXPERIENCE



# PRISM 0.9

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- MOZILLA BUILD SYSTEM
- PRISM FOR FIREFOX
  - CREATE APPS FROM WEBSITES
  - WEBSITE-EMBEDDED BUNDLES
- FAVICON SUPPORT
- SOME DESKTOP INTEGRATION FEATURES
  - POPUP NOTIFICATIONS
  - DOCK BADGING



# PRISM 0.9.1

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- OS X IMPROVEMENTS
- TRAY ICON, MINIMIZE/CLOSE TO TRAY
- DOCK AND TRAY ICON MENUS
- PROTOCOL HANDLERS
- LOTS OF TWEAKS AND BUG FIXES



# PRISM 1.0

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- AUTOMATIC UPDATE
- PREFERENCES
- BETTER OS X PACKAGING
- SOME UI IMPROVEMENTS
- NEW WEBSITE

COMING SOON



# ARCHITECTURE

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- XULRUNNER APPLICATION
- "NEWAPP" MODULE SHARED WITH FIREFOX EXTENSION
- "RUNTIME" EXTENSION CONTAINS ALL THE GUTS
- webrunner.xul** DESCRIBES THE BROWSER CHROME
  - <browser>** ENCAPSULATES BROWSER LOGIC
  - webrunner.js** HOLDS PRINCIPAL APP LOGIC
- BINARY COMPONENTS FOR DESKTOP INTEGRATION



# API, PART ONE: XPCOM

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- `nsIDesktopIntegration`
- `nsIApplicationIcon`
- `nsINativeMenu`
- ETC.



# API: PART TWO, WEB API

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- JAVASCRIPT GLOBAL PROPERTY **platform**
- INTERFACE DEFINED IN IDL
- ACCESSIBLE FROM CONTENT
- CANDIDATE FOR STANDARDIZATION



# API PART THREE: HTML5

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- ```
<menu id="myMenu" label="My Menu">  
  <command id="myCmd1" label="First Command"/>  
  <menu id="MySubMenu" label="My Sub Menu">  
    <command id="myCmd2" label="Second Command"/>  
    <command id="myCmd3" label="Third Command"/>  
  </menu>  
</menu>
```
  
- ```
document.getElementById("myCmd1").addEventListener(...);
```
  
- ```
window.platform.menuBar.addMenu("myMenu");
```



# WEB APP CUSTOMIZATION

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- `webapp.js` (TRANSITIONAL)
- APP CAN BE DESKTOP-ENABLED ("platform" in window)



# DEMO

---

```
<html>
<head>
<title>Prism Demo</title>
<link rel="webapp" href="prismdemo.webapp" title="Prism Demo">
<menu id="menu1">
  <command id="notif" label="Show notification"></command>
  <command id="badge" label="Dock badge"></command>
</menu>
<script>
function hookupMenu()
{
  if ("platform" in window)
  {
    var notif = document.getElementById("notif");
    notif.addEventListener("DOMActivate", function(event) { window.platform.showNotification("Prism Demo",
      "Salut, monde !", null); }, false);
    var badge = document.getElementById("badge");
    badge.addEventListener("DOMActivate", function(event) { window.platform.icon().badgeText="Salut"; }, false);

    window.platform.icon().menu.addItem("notif");
    window.platform.icon().menu.addItem("badge");
  }
}
</script>
</head>
<body onLoad="hookupMenu();">
<h1>Salut, monde !</h1>

</body>
</html>
```



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```
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  <command id="badge" label="Dock badge"></command>
</menu>
<script>
function
{
  if
  {
    v
    n
    v
    badge.addEventListener('DOMContentLoaded', function(event) { window.platform.icon().badge.click(); }, false);

    window.platform.icon().menu.addItem("notif");
    window.platform.icon().menu.addItem("badge");
  }
}
</script>
</head>
<body onLoad="hookupMenu();">
<h1>Salut, monde !</h1>

</body>
</html>
```



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  if
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        id="badge"
        label="Dock badge">
      </command>
    </menu>
  }
}
</sc
</he
<bod
<h1>
</bo
</he
```



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</menu>
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  }
}
```



# FUTURE DIRECTIONS

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- MOVE TO GECKO 1.9.1
- MORE DESKTOP INTEGRATION FEATURES
- MORE COMPLETE PLATFORM COVERAGE (ESPECIALLY LINUX)
- TIGHTER FIREFOX INTEGRATION
  - PRISM UPLIFT
  - OPENING BROWSER LINKS IN PRISM APPS
  - BETTER USER INTERFACE FOR EXTENSION



# FUTURE DIRECTIONS (CONT.)

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- GREASEMONKEY REPLACES `webapp.js`
- BUNDLE REPOSITORY AND DISCOVERY
  - ICONS
  - SCRIPTS
- [THIS SPACE INTENTIONALLY LEFT BLANK]



# CONTACT

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