Firefox 4 Compatibility

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Firefox 4

- Final release is planned for Q1 2011, around February.
- Future releases of Mobile, Thunderbird and SeaMonkey will use this code.
- Current version is Beta 7.
- Feature freeze.
- Main article: https://developer.mozilla.org/en/Firefox_4_for_developers
Packed add-ons

- Add-ons are packed by default.
- Getting to files inside the package: nsIZipReader.
- Don’t use chrome.jar anymore.
- Use `em:unpack` for:
  - Add-ons with binaries.
  - Dictionaries.
  - Add-ons with window icons.
Development setup

- Run development profiles using the “–purge caches” command line option.
- Profile Manager will be taken out of Firefox.
  - Bug 539524 tracks new solution.
  - May not happen for Firefox 4.
XPCOM Registration

- XPCOM changes in Gecko 2.
- Registration in chrome.manifest.
- Startup notifications: xpcom-startup, app-startup and profile-after-change.
- Command line handlers.
Add-on Manager

- nsIExtension Manager is replaced by Addon Manager JSM.
- Asynchronous API.
- FUEL API is also different.
- Icons: 64x64 and 48x48. More.
Remote XUL

- Remote XUL is disabled by default.
- Insecure, unmaintained.
- Not an open web technology.
- Can be enabled per-domain with an add-on.
Main Window XUL

- TabClose, TabSelect, TabOpen events no longer bubble up to gBrowser. Use gBrowser.tabContainer instead.
- toolbox element is not direct child of window anymore.
- browser elements in tabbrowser are not direct children of notificationbox anymore.
Other

- Passing JS objects between threads is **no longer possible**.
- Possible ChromeWorker improvements.
- `em:requires` is no longer supported.
UI

- Tabs on top (or bottom!).
- App tabs.
- Panorama.
- Application menu.
- The statusbar is now the Add-on Bar, hidden by default.
Toolbar buttons

- Main article.
- Windows: 18x18 (really 16x16).
  - CSS workaround for small icons mode.
- Mac OS X: 20x20 (really 16x16).
  - Recommended monochrome.
- Linux (Gnome): 24x24 and 16x16.
- Theme handles disabled state.
Why??

Bug 616472
Questions?
New in Firefox 4
Animation

- CSS transitions.
- SMIL, animated SVG.
- MozBeforePaint.
- WebGL, canvas.
Advanced CSS

- `-moz-calc`
  - `width: -moz-calc(100% - 80px);`
- `-moz-element`
  - Use arbitrary HTML as a background image.
Web

- WebSockets.
  - Simple, low latency, bi-directional communication.
- Content Security Policy.
  - Restricts inserting content into webpages, even locally.
Bootstrapped Extensions

- Bootstrapped Extensions.
- Can be installed / uninstalled without restart.
- No overlays or chrome registration. Limited.
- Need to clean up everything they add.
  - install and uninstall triggers.
Other

- HTML5
- WebM video.
- Services.jsm.
- JS-ctypes API.
  - ChromeWorker.
- Easier to place XUL over content.
- Load code modules from chrome URLs.
Finally

- Featured add-ons must be compatible by RC1.
- Free hat! t-shirt!
- Compatible by January 7th.
Thanks!

- Visit regularly:
  - Firefox 4 for developers.
  - Add-ons Blog.
  - Add-ons Forum.
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