

A WebKit opensource böngészőmotor project és fejlesztése



Osztrogonác Csaba
SZTE Szoftverfejlesztés Tanszék



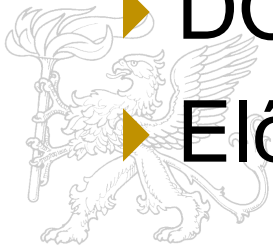
Bevezető

- ▶ Böngészőmotorok
- ▶ WebKit böngészőmotor
- ▶ WebKit fejlesztés Szegeden
- ▶ WebKit community



Böngészőmotorok

- ▶ Böngészőmotor \neq böngésző
- ▶ Webes tartalom (HTML, XML, képek,..) formázott (CSS, XSL) megjelenítés
- ▶ JavaScript futtatás
- ▶ DOM(Document Object Model) műveletek
- ▶ Előző/következő oldal, előzmények



Böngészőmotorok - felhasználás

- ▶ Web böngészők
- ▶ Levelező programok
- ▶ Messenger, chat kliensek
- ▶ Média lejátszó alkalmazások
- ▶ Kioszkok

(parkolóautomata, beléptető rendszer,
ügyfélirányító, információs terminál)

- ▶ Set-top-boxok

Ismertebb böngészőmotorok

- ▶ Gecko (Firefox, Thunderbird)
- ▶ KHTML (Konqueror)
- ▶ Presto
(Opera, Macromedia Dreamweaver CS3)
- ▶ Trident (Internet Explorer, MSN, Windows Media Player)
- ▶ WebKit (Safari, Google Chrome, S60WebKit, AndroidWebKit, Macromedia Dreamweaver CS4)

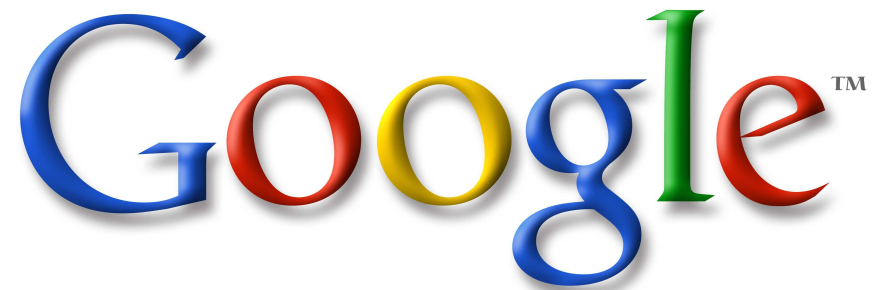


WebKit böngészőmotor

- ▶ 1998 - KDE KHTML böngészőmotor
- ▶ 2002-2003 – Apple fork
 - KJS ->JavaScriptCore
 - KHTML -> WebCore
- ▶ 2005 WebKit – opensource (LGPL, BSD licence)

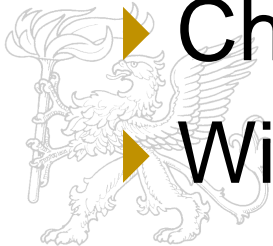


WebKit böngészőmotor



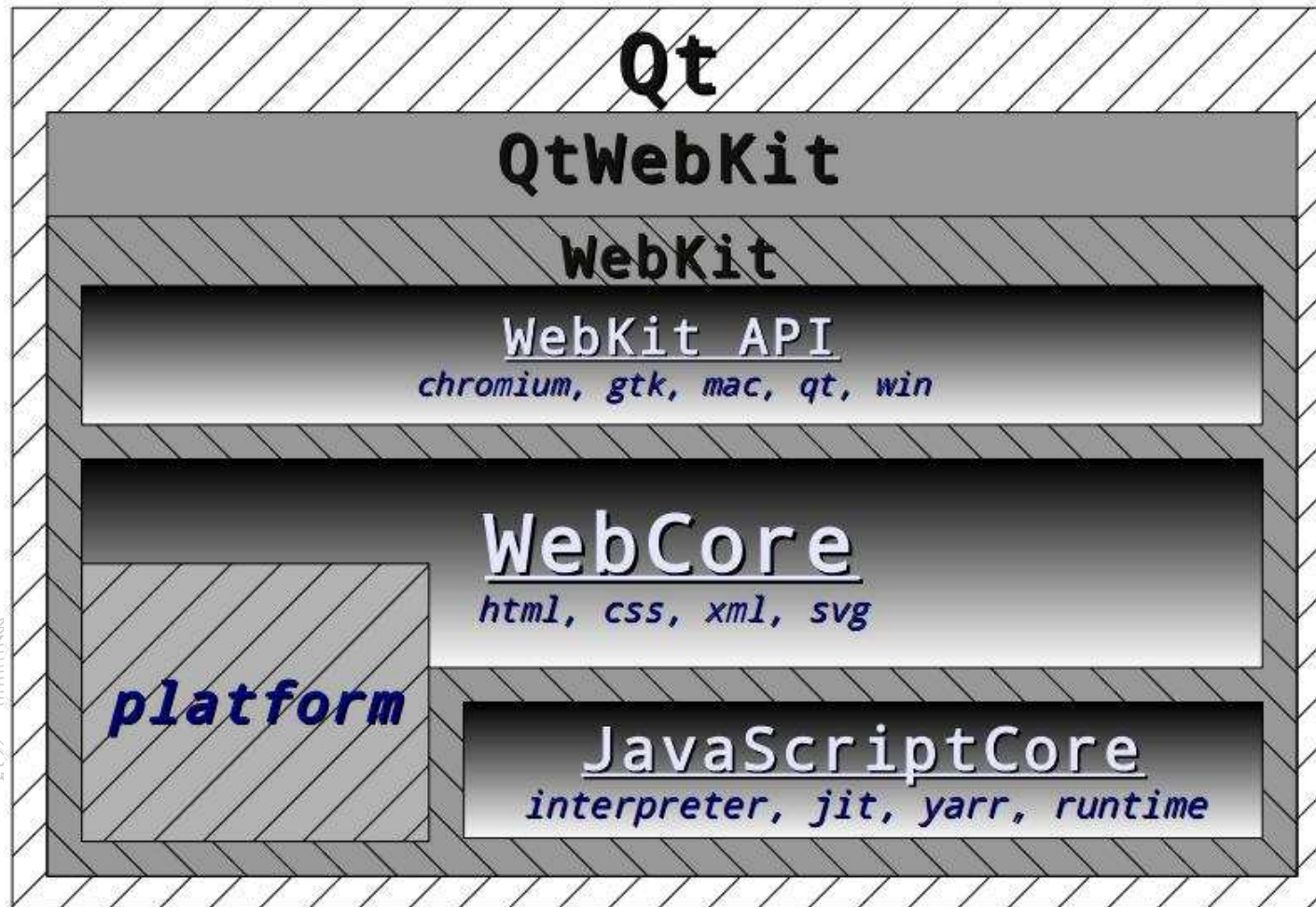
WebKit portok

- ▶ Apple Windows port
- ▶ Cairo Windows port
- ▶ **Qt port (Nokia)**
- ▶ EFL port (Samsung, ProFUSION)
- ▶ GTK+ (Igalia)
- ▶ Chromium (Google)
- ▶ Windows CE





QtWebKit



WebKit fejlesztés Szegeden

- ▶ SZTE Szoftverfejlesztés Tanszék
- ▶ Dr. Kiss Ákos adjunktus – projektvezető
- ▶ WebKit Apocrypha: <http://webkit.sed.hu>

- ▶ 2008 május –
- ▶ Nokia, ARM támogatással
- ▶ 12-14 fős team
- ▶ 6 committer + 1 reviewer
- ▶ 863 patch (r69346-ig)

WebKit fejlesztés Szegeden

- ▶ ARM JIT (Just-In-Time compilation)
 - SunSpider JS benchmark: **60%** gyorsulás
- ▶ Memória allokátorok
- ▶ Parser (JavaScript, CSS)
- ▶ RegExp engine fejlesztés
- ▶ Buildbotok, EWS (Early Warning System)
- ▶ Benchmark: sebesség, memória
- ▶ SVG (Scalable Vector Graphics)
- ▶ SMP (Symmetric Multi Processing)
 - WebKit2 API

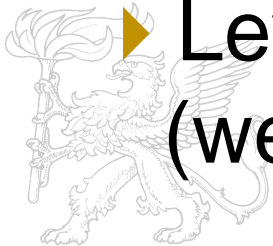
WebKit community

- ▶ 82 reviewer
- ▶ 125 committer
- ▶ többszáz fejlesztő
- ▶ Verziókezelés: Subversion / GIT
- ▶ ~70.000 revision
- ▶ Napi 80-100 commit



WebKit community

- ▶ WebKit: <http://webkit.org>
- ▶ TRAC: <http://trac.webkit.org>
- ▶ BugZilla: <http://bugs.webkit.org>
- ▶ BuildBot: <http://build.webkit.org>
- ▶ IRC: freenode.net: #webkit, #qtwebkit, ...
- ▶ Levelező listák: <http://lists.webkit.org/>
(webkit-dev, webkit-help, webkit-qt)

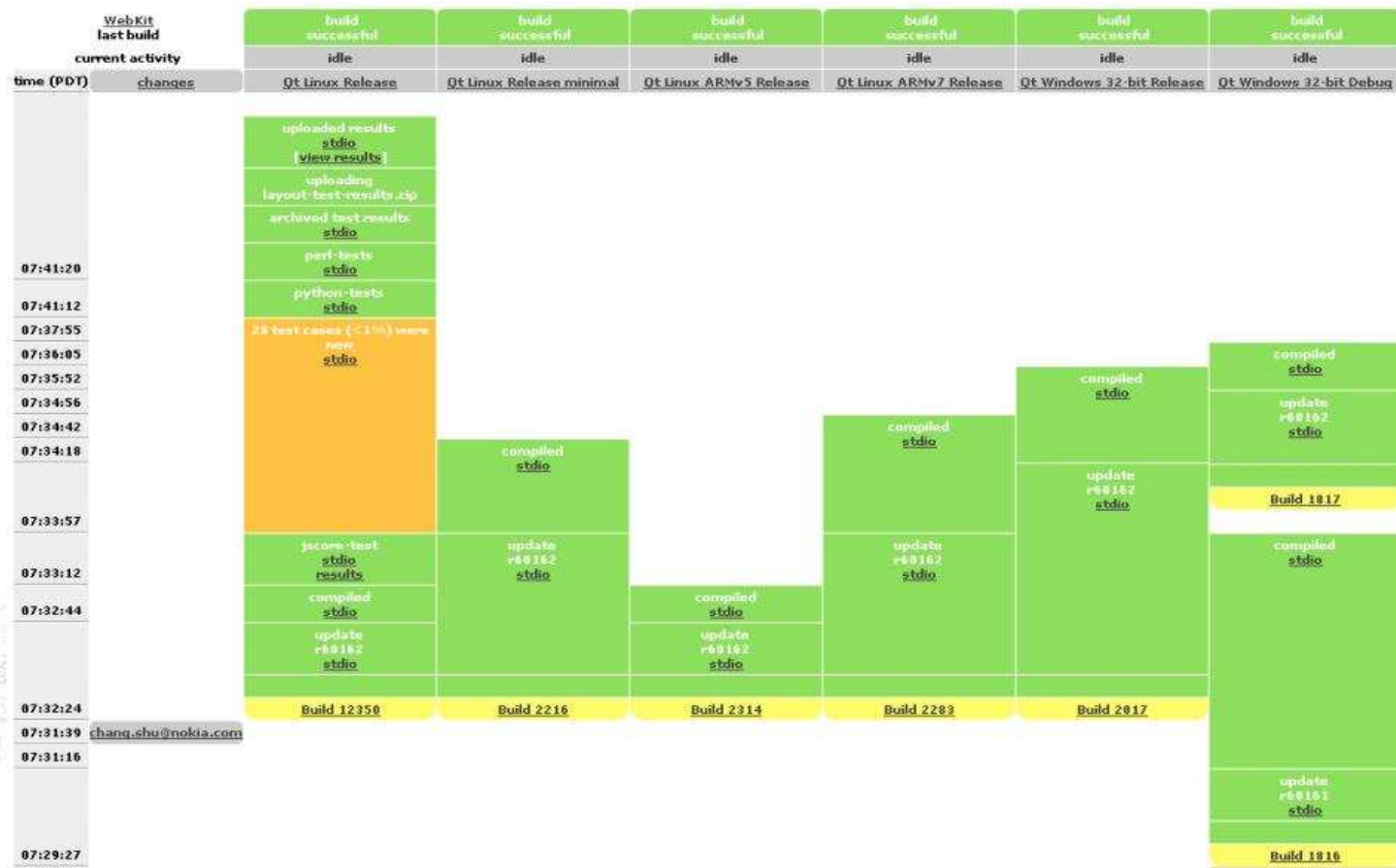


Érdekessegek

- ▶ Prepare-changelog
- ▶ Webkit-patch
 - Upload
 - Land-attachment
 - Land-from-bug
- ▶ BugZilla – EWS bubbles
- ▶ BugZilla – nick/email kereső
- ▶ Sherrifbot – rollout, ping, mail
- ▶ Commit queue (cq+)

QtWebKit buildbotok

QtWebKit Core Buildbots



EWS (Early Warning System)

WebKit Bugzilla

Bug 47202: Adding C API for dealing with viewport meta info

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Bug List: (This bug is not in your last search results) [Show last search results](#)

Bug 47202 - Adding C API for dealing with viewport meta info ([edit](#))

Status: NEW ([edit](#))

Product: WebKit

Component: WebKit2

Version: 528+ (Nightly build)

Platform: PC All

Importance: P3 Normal

Assigned To: Nobody ([edit](#))

URL: ([edit](#))

Keywords:

Depends on: ([edit](#))

Blocks: ([edit](#))

Show dependency [tree](#) / [graph](#)

Reported: 2010-10-05 12:47 PST by [Kenneth Rohde Christiansen](#)

Modified: 2010-10-08 02:34 PST ([History](#))

CC List: Add me to CC list
16 users ([edit](#))

Attachments		
WIP Patch (41.35 KB, patch) 2010-10-07 10:32 PST, Kenneth Rohde Christiansen	<i>no flags</i>	Review Patch Details Formatted Diff Diff style cr-linux gtk qt mac win
Patch (missing mac build) (36.11 KB, patch) 2010-10-07 13:34 PST, Kenneth Rohde Christiansen	<i>no flags</i>	Review Patch Details Formatted Diff Diff style cr-linux gtk qt mac win
Patch (win fix) (37.02 KB, patch) 2010-10-07 14:24 PST, Kenneth Rohde Christiansen	<i>no flags</i>	Review Patch Details Formatted Diff Diff style cr-linux gtk qt mac win (#51)
p (42.96 KB, patch) 2010-10-08 02:31 PST, Luiz Agostini	luiz: review?	Review Patch Details Formatted Diff Diff style cr-linux (#3) gtk (#5) qt mac win
Add an attachment (proposed patch, testcase, etc.) Hide Obsolete (3) View All 		





prepare-changelog script

trunk/WebKit2/ChangeLog		
r69240	r69244	
	1	2010-10-06 Balazs Kelemen <kbalazs@webkit.org>
	2	
	3	Reviewed by Kenneth Rohde Christiansen.
	4	
	5	[Qt] Add WebKitTestRunner's build files
	6	https://bugs.webkit.org/show_bug.cgi?id=44155
	7	
	8	* DerivedSources.pro: Changes according the new location
	9	of generate-forwarding-headers.pl.
	10	* UIProcess/API/C/WebKit2.h: Do not check the value of the
	11	__APPLE__ define if it is not defined.
	12	* WebKit2.pro: Changes according the new location
	13	of generate-forwarding-headers.pl. Added missing files
	14	to the build that provides API that is used by WTR.
	15	* generate-forwarding-headers.pl: Moved to WebKitTools/Scripts
	16	since from now this is not only used by WebKit2.
	17	
1	18	2010-10-06 Anders Carlsson <andersca@apple.com>
2	19	



Review tool

```

WebKit/gtk/WebCoreSupport/DragClientGtk.cpp
0 0 using namespace WebCore;
42 42 namespace WebKit {
43 43
44 44 #ifdef GTK_API_VERSION_2
45 45 static gboolean dragIconWindowExposeEventCallback(GtkWidget* widget, GdkEventExpose* event, DragClient* client)
46 46 static gboolean dragIconWindowDrawEventCallback(GtkWidget* widget, GdkEventExpose* event, DragClient* client)
47 47 {
48 48     client->dragIconWindowExposeEvent(widget, event);
49 49     PlatformRefPtr<cairo_t> context = adoptPlatformRef(gdk_cairo_create(event->window));
50 50     client->drawDragIconWindow(widget, context.get());
51 51     return TRUE;
52 52 }
53 53 #else
54 54 static gboolean dragIconWindowDrawCallback(GtkWidget* widget, cairo_t* cr, DragClient* client)
55 55 static gboolean dragIconWindowDrawEventCallback(GtkWidget* widget, cairo_t* context, DragClient* client)
56 56 {
57 57     GdkRectangle clipRect;
58 58     if (!gdk_cairo_get_clip_rectangle(cr, &clipRect))
59 59     if (!gdk_cairo_get_clip_rectangle(context, &clipRect))
60 60     return FALSE;
61 61     client->dragIconWindowDraw(widget, cr);
62 62     client->drawDragIconWindow(widget, context);
63 63     return TRUE;
64 64 }
65 65 #endif // GTK_API_VERSION_2

0 0 DragClient::DragClient(WebKitWebView* webView
66 66     , m_dragIconWindow(gtk_window_new(GTK_WINDOW_POPUP))
67 67 {
68 68 #ifdef GTK_API_VERSION_2
69 69     g_signal_connect(m_dragIconWindow.get(), "expose-event", G_CALLBACK(dragIconWindowExposeEventCallback), this);
70 70     g_signal_connect(m_dragIconWindow.get(), "expose-event", G_CALLBACK(dragIconWindowDrawEventCallback), this);
71 71 }
72 72
Comment|
OK Discard
    
```



Köszönöm a figyelmet!