

Beyond WAP: Mobile AJAX, SVG and the Future of the Web



vodafone

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What's Vodafone doing in the Web?

- Participant in W3C (2003)
 - _ Working in the Compound Document Formats (CDF), Device Independence working groups (now “Ubiquitous Web Activity”)
- Investor in dotMobi (2004)
- Founding sponsor of the W3C Mobile Web Initiative (2005)
 - _ Chairing W3C Mobile Web Best Practices wg
 - _ Participating in W3C MWI Device Descriptions wg
 - _ Participating in POWDER wg
 - _ Participating in Ubiquitous Web wg
- Active Member of Open Mobile Alliance (née the WAP Forum)
 - _ Pushing forward xHTML Reunification (happening NOW)
- Convened “Mobile AJAX Summit” meeting at 3GSM World Congress in Barcelona (February 2007)
- Recently joined the Open AJAX Alliance (September 2007)
- Co-Chaired Mobile AJAX Workshop (September 28th, 2007)

In 5 years' time, will the majority of Web usage be from Mobile devices?

Why is Mobile Different?

- Limitations on Mobile
 - _ Small memory footprint
 - _ Lower CPU speeds
 - _ Small screen
 - _ Different input modes
 - _ Slow / high latency network
 - _ Not always connected
- Unique device features
 - _ Take a picture
 - _ Access to address book
 - _ Send/receive an SMS, MMS
 - _ With you anywhere
 - _ Uniquely personal

Mobile phones and other mobile connected devices are personal communication and information tools





W3C Mobile Web Initiative

<http://w3.org/Mobile/>



Mobile Web Best Practices

Best Practice Detail

 **Design** for One Web

 **Rely** on Web standards

 **Stay away** from known hazards

 **Be cautious** of device limitations


 **Optimize** navigation

 **Check** graphics & colors

 **Keep** it small

 **Use** the network sparingly

 **Help & guide** user input

 **Think** of users on the go

- ✓ **THEMATIC CONSISTENCY:**
Ensure that content provided by accessing a URI yields a thematically coherent experience when accessed from different devices.

- ✓ VALID MARKUP: Create documents that validate to published formal grammars.
- ✓ STYLE SHEETS USE: Use style sheets to control layout and presentation, unless the device is known not to support them.
- ✓ COOKIES:
Do not rely on cookies being available.
- ✓ OBJECTS OR SCRIPT:
Do not rely on embedded objects or script.



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W3C Technical Plenary



W3C thanks [platinum](#) sponsors [BEA](#), [Cisco](#), [IBM](#) and [Nokia](#) for generously supporting what may be the most exciting W3C meeting of 2007: the [W3C Combined Technical Plenary / Advisory Committee Meeting \(TPAC\)](#), in Cambridge, MA, USA on 7 November. W3C

groups will come together to brainstorm about some of the most challenging technical issues facing the Web and W3C. W3C group participants may attend (see the [meeting page](#) for details). Press, please contact w3t-pr@w3.org if you are interested in attending; there will be a press conference with Tim Berners-Lee and Platinum Sponsors.

News

W3C MobileOK To Help Make Web Sites Mobile Friendly

2007-11-13: Today, W3C provides new means for people to create and find mobile friendly content. W3C invites Web authors to run the alpha release of the [W3C mobileOK checker](#) and make their content work on a broad range of mobile devices. The checker runs the tests defined in the [W3C mobileOK Basic Tests 1.0](#) Candidate Recommendation. Read the [press release](#) and [testimonials](#), and come see [W3C at Mobile Internet World](#) in Boston, Massachusetts (USA). ([Permalink](#))

► W3C mobileOK Basic Tests 1.0 Advances to Candidate Recommendation

2007-11-13: The [Mobile Web Best Practices Working Group](#) has published the Candidate Recommendation of [W3C mobileOK Basic Tests 1.0](#). This document defines the tests that provide the basis for making a claim of W3C mobileOK Basic conformance and are based on W3C [Mobile Web Best Practices](#). You are invited to use the alpha version of the [W3C mobileOK Checker](#) to test your content. Read the [press release](#) and learn more about the [Mobile Web Initiative Activity](#).

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Testimonials

Motorola, Inc.



Motorola is known around the world for innovation and leadership in wireless and broadband communications. Motorola contributes to the development of Web standards at the W3C and we support W3C specifications in our products. ([Member testimonials](#))

Members

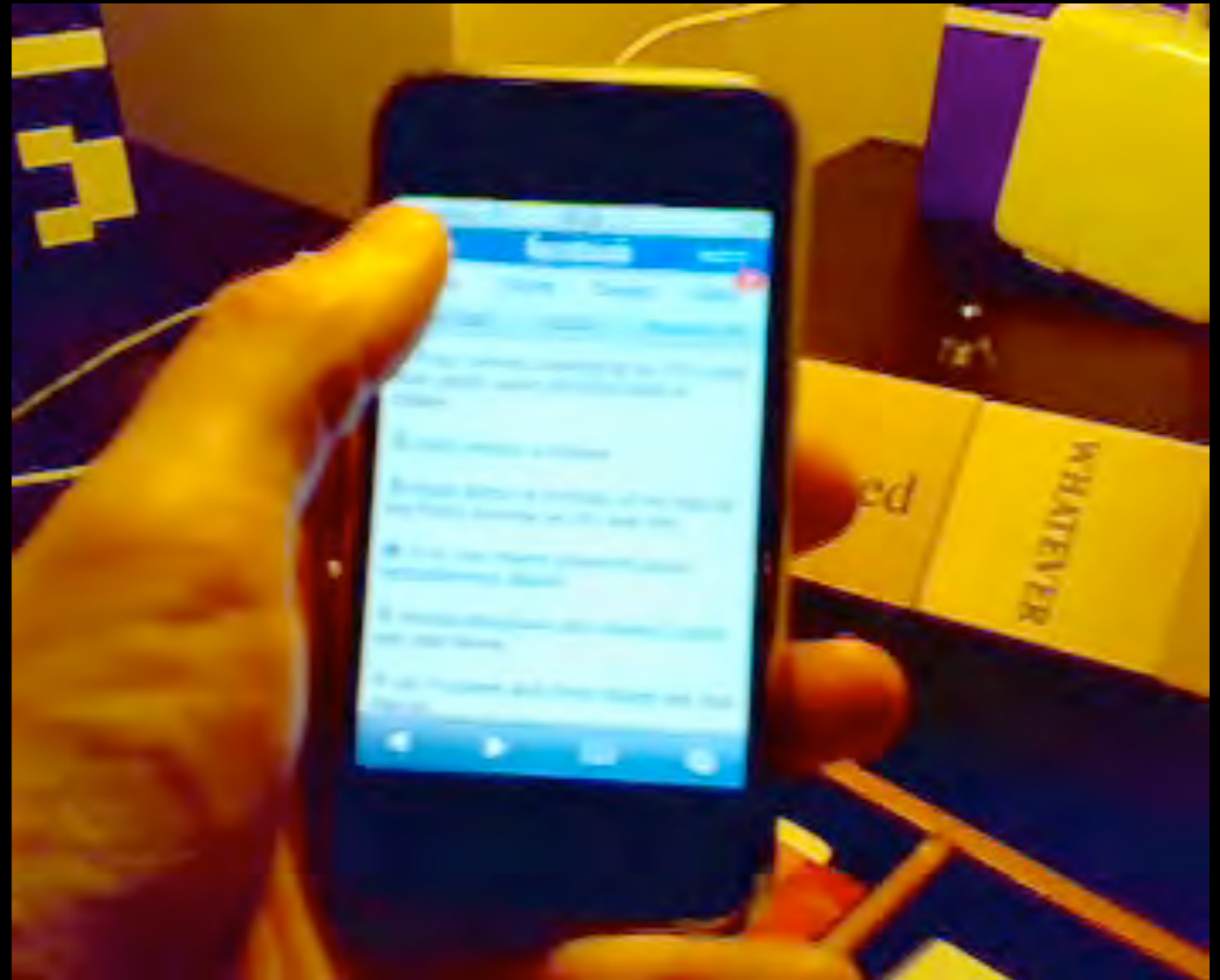
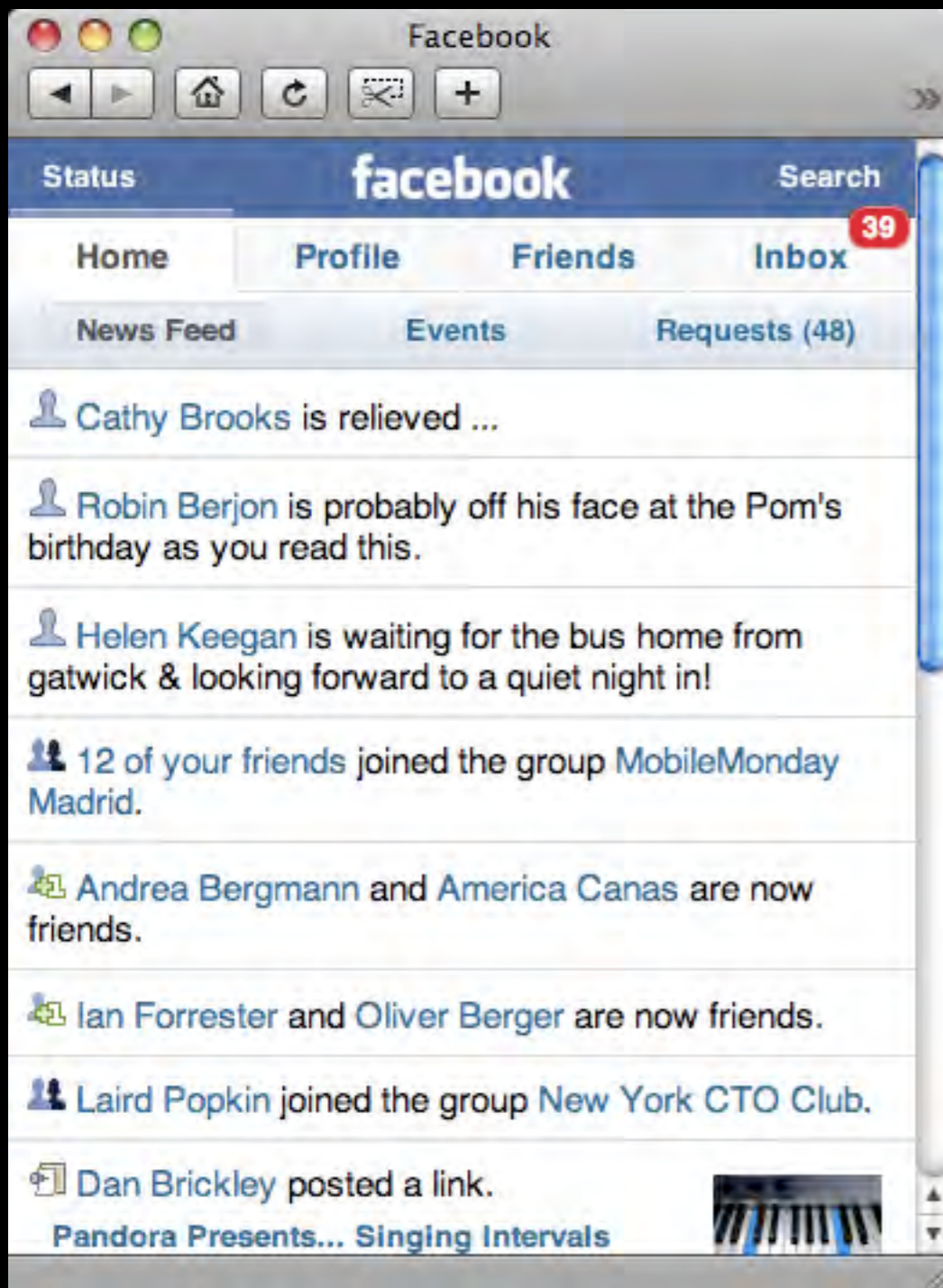
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What about Mobile Web Applications?

- Applications written using Web technologies
 - _ The AJAX platform
 - _ Key “Web 2.0” plank
 - _ Desktop-bound
- What is different about AJAX on Mobile?
 - _ (See: device limitations, capabilities)
- AJAX applications will replace a class of application currently written in Java or natively
 - _ Reduce time to market and complexity
 - _ Allow more apps to get into the hands of more users
 - _ Allow more developers to write mobile apps
- Mobile AJAX Workshop run September 2007
 - _ <http://www.w3.org/2007/06/mobile-ajax/report.html>

SoonR Desktop

ACCESS, VIEW, OR SHARE
PC OR MAC BASED DOCUMENTS



More Work Needed

- Current AJAX toolkits don't lend themselves to use in current mobile browsers
 - _ Getting apps to work across browsers is a porting exercise
- Access to device features (camera, etc...)
 - _ New APIs? The DOM?
- Privacy / security issues
 - _ Code signing?
- CPU / Battery
 - _ JavaScript Optimization?
- Network
 - _ Offline storage?
- Developer guidelines



SVG

(scalable vector graphics)

SVG Advances

- SVG 1.1 is deployed in Firefox, Opera and Safari browsers
- SVGt 1.1 deployed on more than 500 million devices world wide
 - _ wide adoption and support from industry
 - _ primary use cases
 - = personalization – screen savers, caller ID, etc
 - = UI graphics definition
 - = advanced messaging content
 - _ standardized renderer
- SVG integrated into Safari and Firefox and used in major Web Applications
- SVGt 1.2 brings the other three AJAX components
 - _ standardized data model and access
 - _ scripting environment
 - _ communication methods

Advanced Interactivity Features in SVG Tiny 1.2

- SVG Tiny 1.2 expands the features of Mobile SVG with key Interactivity features
- The introduction of the UDOM provides a concise, interoperable, open interface to the graphical data model.
- Communication interfaces open the capabilities to communicate directly with a server.
- AJAX is a leading paradigm that the SVG Tiny 1.2 UDOM leverages



Keys to AJAX in SVG Tiny 1.2

- SVGGlobal provides AJAX methods
 - __getURL – requesting data or processing from server
 - __postURL – sending data
 - __parseXML – preparing data for your processing
- AsyncURLStatus the interface to the server response
- AsyncStatusCallback the interface to the code to processing the response.



3. Spieltag

12:48

Bundesliga

2. Bundesliga



0:1



1:0



1:1



Optionen



Beenden

The Future

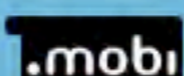
- SVG based application experiences like Bundesliga become fully integrated into the browser context
- Rich media experiences become as common on the mobile Web as they are on the “fixed” Web
- Mobile Web Initiative to create guidelines on how to build rich, interactive mobile apps
- Mobile widgets (Web-based) begin to take the place of downloaded applications; mobile Web is a vector for these widgets

WICD (say “Wicked”)

- Web Integration Compound Document
- Integration between SVG, xHTML, CSS, DOM
- Mandates XHR
- Specifies user agent behavior
 - “right-sizing”
 - Focus navigation
- Baseline for rich media Web Application development on the mobile platform
- Coming to handsets in 2008
- <http://www.w3.org/2004/CDF/>

The Web is Evolving

Resources



The **Mobile Web** is growing
and Certification can increase your business

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...the definitive mobile web development

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...build your first mobile web site in minutes

Build content

We've listed a [range of tools & resources](#) to help you create your mobile presence. Benefit from our [mobile site-builder](#), [CMS plugins](#), [case studies](#), [blog posts](#), and a host of [other articles](#).



Mobility Check

...is your site ready?

http://

Make it better

Get your site hosted, read our [style-guides](#), hang out in the [forums](#), learn about [device adaptation](#), and even [test your site](#). Problems? We'll help you [fix them](#).



Content Directory

...tell us about your site and get it featured

Go live!

Publish your site, and submit it to mobile search engines and [our content directory](#). Coming soon: information on getting started with mobile advertising and m-commerce!

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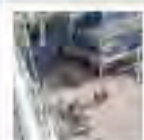
23-09-2007

Send messages and information by means of bluetooth technology
Josan_22

**MyStrands**

21-09-2007

Intelligent, social music player mystrands

**ContextMessages**

13-09-2007

Context Aware Messaging for Bluetooth and Java Enabled Mobile Phones
Simon

**SVGWalkthrough**

03-09-2007

A short introduction of how to make a simple video-zapper in SVGT 1.2
DanHe

Student Competitions close soon!



Time is almost up!

Get your projects in quick...

Vodafone Betavine team...

Students wishing to enter the Vodafone Betavine competitions should get their entries in quick. The last date for an entry is on the 30th of September 2007.

So if you are a student with a budding application get your entry in now!

Good luck from the

Triggering Applications by SMS in Windows Mobile

Tue, 04 Sep 2007 10:29:59

Following on from our tutorial on Application Trigger messages that focused on the J2ME platform, we thought it would be great to try and extend this functionality beyond mobile Java.



Quick Links

Website

- [What is Vodafone Betavine?](#)
- [Developer Links](#)
- [Open Source](#)
- [New Linux Drivers for 3G Data Card](#)
- [APIs](#)
- [Student Competitions](#)
- [Student Externships](#)
- [Content Adaptation & Whitelist](#)
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Tech Blogs

- [dotMobi](#)
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- [Mobile Widgets](#)
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- [Location Enhanced Services](#)
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Tutorials

- [Application Trigger Messages](#)

Thanks!



Mobile Web Initiative: www.w3.org/Mobile

Planet Mobile Web: www.w3.org/Mobile/planet

WICD: www.w3.org/2004/CDF

Dev.mobi: dev.mobi

Vodafone Betavine: betavine.net

Mobile Ajax Workshop Report:

<http://www.w3.org/2007/06/mobile-ajax/report.html>