



Enabling the Mobile Web with JavaME

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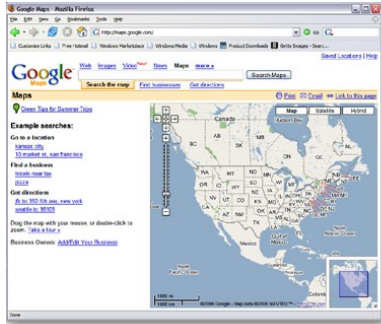
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Agenda

- Web 2.0
- Web Services
- Rich UI
- Demos
- Questions

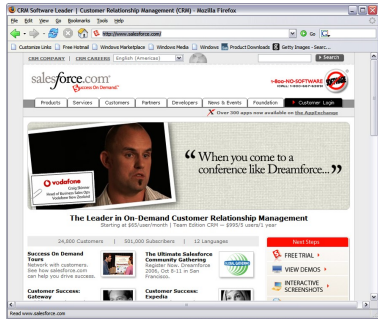
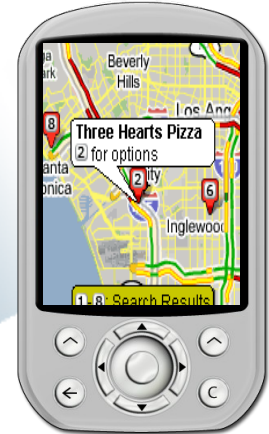
Age of Participation



Google Maps

Google™

YAHOO!



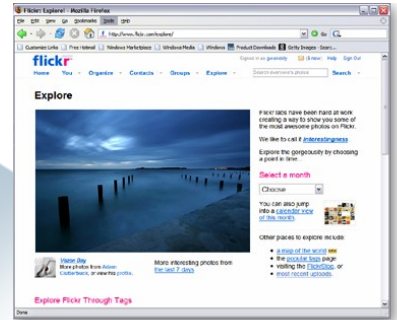
Salesforce

salesforce.com
Success On Demand



flickr™

YouTube



Flickr Albums

Mobile Drives the Next Wave



Your Personal Dashboard



Web Services

What are Web Services?

- www for machines
 - > designed for machine-to-machine interactions over a network
 - > Heterogeneity is a given
 - > networking, not presentation
- two styles
 - > REST
 - > Yahoo, Google, Amazon, Microsoft Live, Most Web 2.0
 - > SOAP
 - > eBay, B2B applications

Why Mobile Web Services?

- Compelling Web Services drive ARPU via data
- Java tools exist to make it easy for developers to build web applications and mashups in Java
- Mobile AJAX in browser has limitations
 - > substantial JavaScript download
 - > application source code (JavaScript) visible
 - > network availability/latency makes user experience spotty
 - > cannot use camera, 3D, bluetooth, local calendar & addrbook, etc

Java - Powerful Enabling Technology

- Java Platform
 - > Ubiquity: Java is on 1.2 Billion Phones
 - > Superior code development tool chain
 - > Broadest access to phone features
 - > Robust, secure, high performance environment
 - > Portability
- Based on Open standards
 - > JCP and W3C
 - > Leverages popular Web model (XML, DOM)
 - > Rich user experience with SVG/CDF
- Leverage multiple developer communities: graphic artists and Java developers

* SVG = Scalable Vector Graphics, a W3C specification

* CDF = Compound Document Format, a W3C specification

Some Use Cases for Mobile Web Services

- Mobile Feeds
 - > catching up with blogs offline
 - > liveblogging, lifeblogging
 - > syndication of calendar, traffic, jobs, weather...
- Mobile Web 2.0
 - > maps, traffic, directions, location...
 - > shopping, pricing, reviews, yellowpages...
 - > audio, video, photos, tagging, social networking...
 - > travel, finance...
 - > verticals
 - > mashups

Demos (1/2)

- Feed Reader
- Local Search using Yahoo!'s Local and Map Web Services

Presentation

Opening the Phone to the Developer

New Java Standards defining next-gen wireless platform

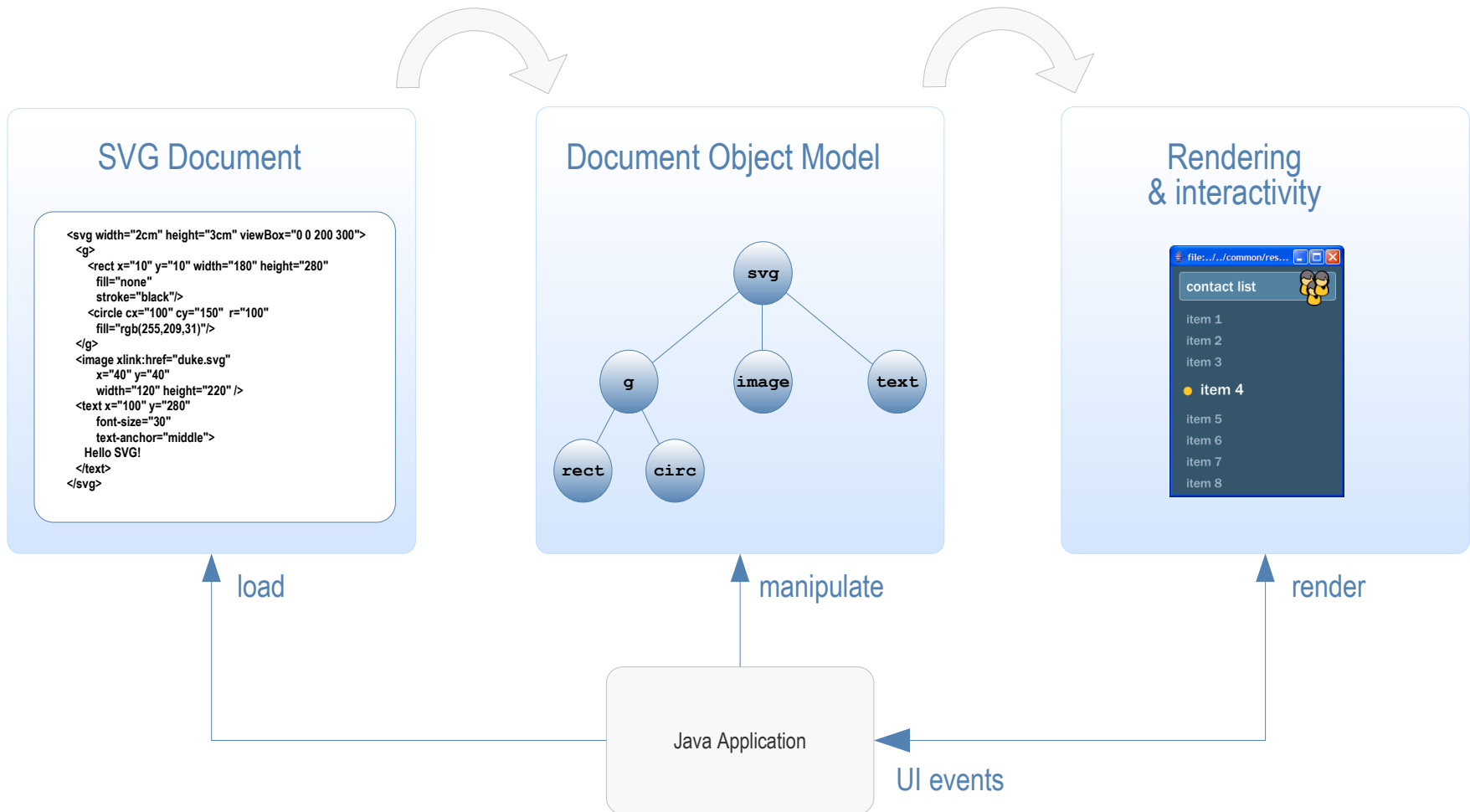


Mobile Services Architecture (MSA) Enables the development of services based on previously closed device capabilities

JSR-226 Overview

- Java API to draw, manipulate and animate SVG Tiny 1.1 content
- Part of Mobile Service Architecture (JSR-248), both the core subset and the full version
- Rich UI through SVG
- Complex behavior through Java
- DOM API connects SVG and Java
- Enables significantly richer UI than LCDUI alone

JSR 226 Application Model



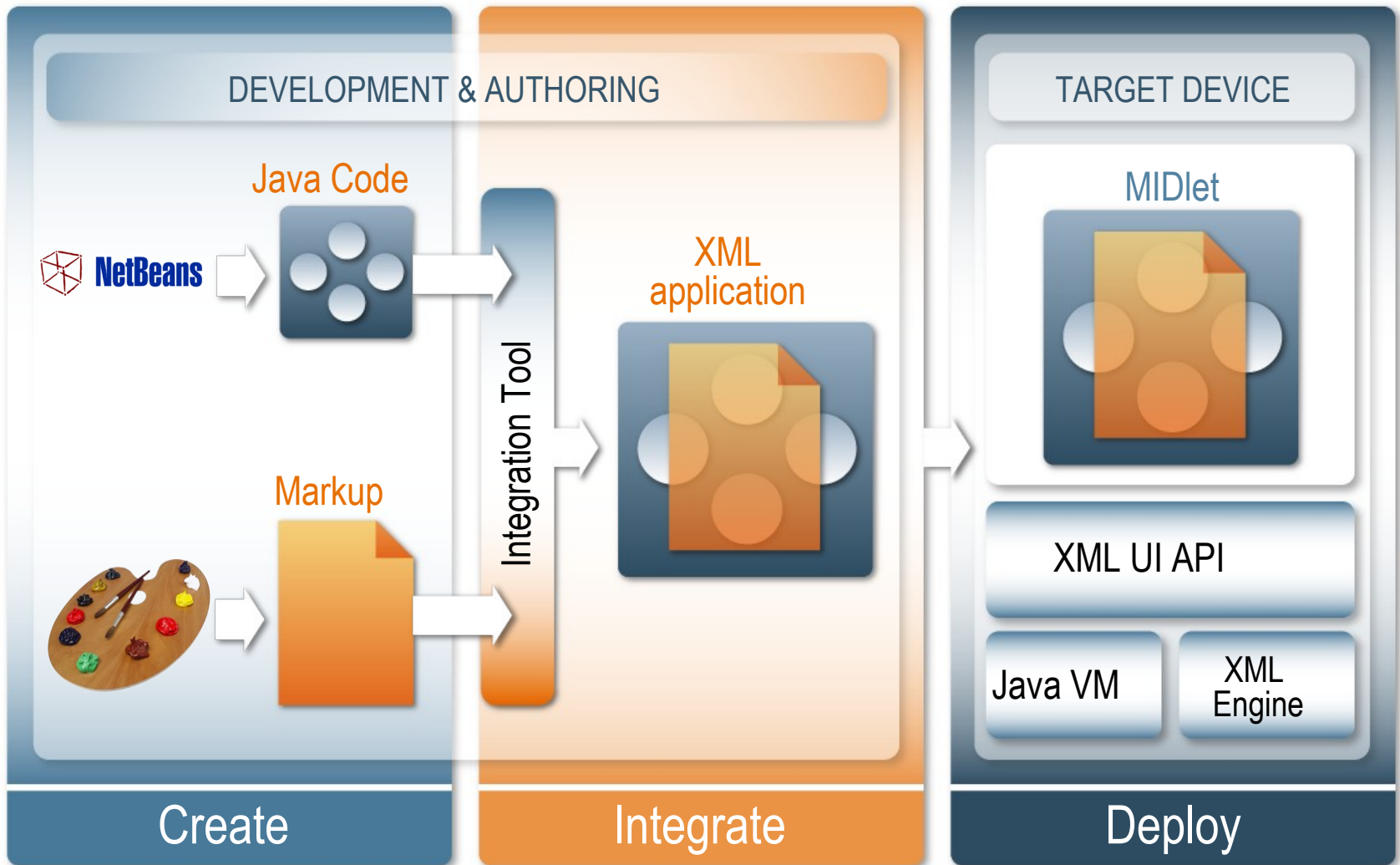
JSR 290 and CDF

- Java Language and XML UI Markup Integration
 - > Leverage W3C CDF (WICD MP)
 - > Integration with Web technologies
 - XHTML Basic 1.1
 - ECMAScript CP
 - CSS 2.1 Mobile
 - SVG Tiny 1.2
 - > Binding between markup and Java code
 - > Connection between ECMAScript and Java

* ESMP = ECMA Script Compact Profile, a subsetted version of ECMA Script used in Mobile phone

* CSS Basic = Cascading Style Sheets, a popular styling language helping separate the content of XHTML pages from their appearance

Unleash Your Creativity



Demos (2/2)

- Contact List demo
- Location based service
- Tools

We've Done it Before...



...And We're Doing it Again

What's Next: Open Sourcing Java



Java ME & Java SE



References

- JCP: <http://jcp.org/en/home/index>
- SVG: <http://www.w3.org/Graphics/SVG/>
- CDF: <http://www.w3.org/2004/CDF/>
- NetBeans: <http://www.netbeans.org/>
- Wireless Toolkit:
<http://java.sun.com/products/sjwtoolkit/>
- Community: <http://www.java.net>

Discussion Topics

- Reduce Fragmentation
 - > Conformance test suites
- Collaboration between standards bodies
 - > W3C, JCP

Thank You!

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