



# ZK

*Open Source Ajax + Mobile*

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[www.zkoss.org](http://www.zkoss.org)

# Ajax?

Interact with Humans

The image displays three distinct web-based applications demonstrating Ajax technology:

- Digg.com (Top Left):** Shows a search bar with the term "aut". A dropdown menu lists suggestions like "autovance", "authorized partner", and "autotrader". A callout box highlights "Real-time Auto completion".
- Sun Microsystems (Top Right):** Displays a map of San Jose, California, showing streets like Lundy Ave, Oakdale Rd, and Bay. A green marker indicates a specific location. A callout box highlights "Drag and Move Around".
- Google Search (Bottom Left):** Shows a search results page for "Norman Y Mineta San Jose Int'l". The results include links for "autovance", "authorized partner", "autotrader", "autozone", "autotrader.com", "autism", "auto parts", "autotrader.ca", "autocad", and "auto insurance". A callout box highlights "Interact with Humans".

# How is it?

#1 Ajax on SourceForge.net

(Top10 OSS host 180,000 projects, including JBoss, eMule, BitTorrent...)

750,000 Downloads

193 Countries



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# ZK Advantages

- ★ Simple
- ★ Open
- ★ Server-Centric

# Simply High Productivity

ZK

The screenshot shows a ZK application window titled "View". Inside, there's a panel with a "Hi there!" message and three buttons: "Overlap", "Popup", and "Embed". Below the panel is some Java code for a ZK component.

```
<z:window id="win" border="normal" width="200px" sizable="true">
    <caption image="/img/coffee.gif" label="Hi there!"/>
    <checkbox label="Hello, World!" />
</z:window>

<button label="Overlap" onClick="win.doOverlapped();"/>
<button label="Popup" onClick="win.doPopup();"/>
<button label="Embed" onClick="win.doEmbedded();"/>
```

VS.

Other Ajax

c:\temp\jms.txt 2001/8/28, 07:01:23下午 Page: 37

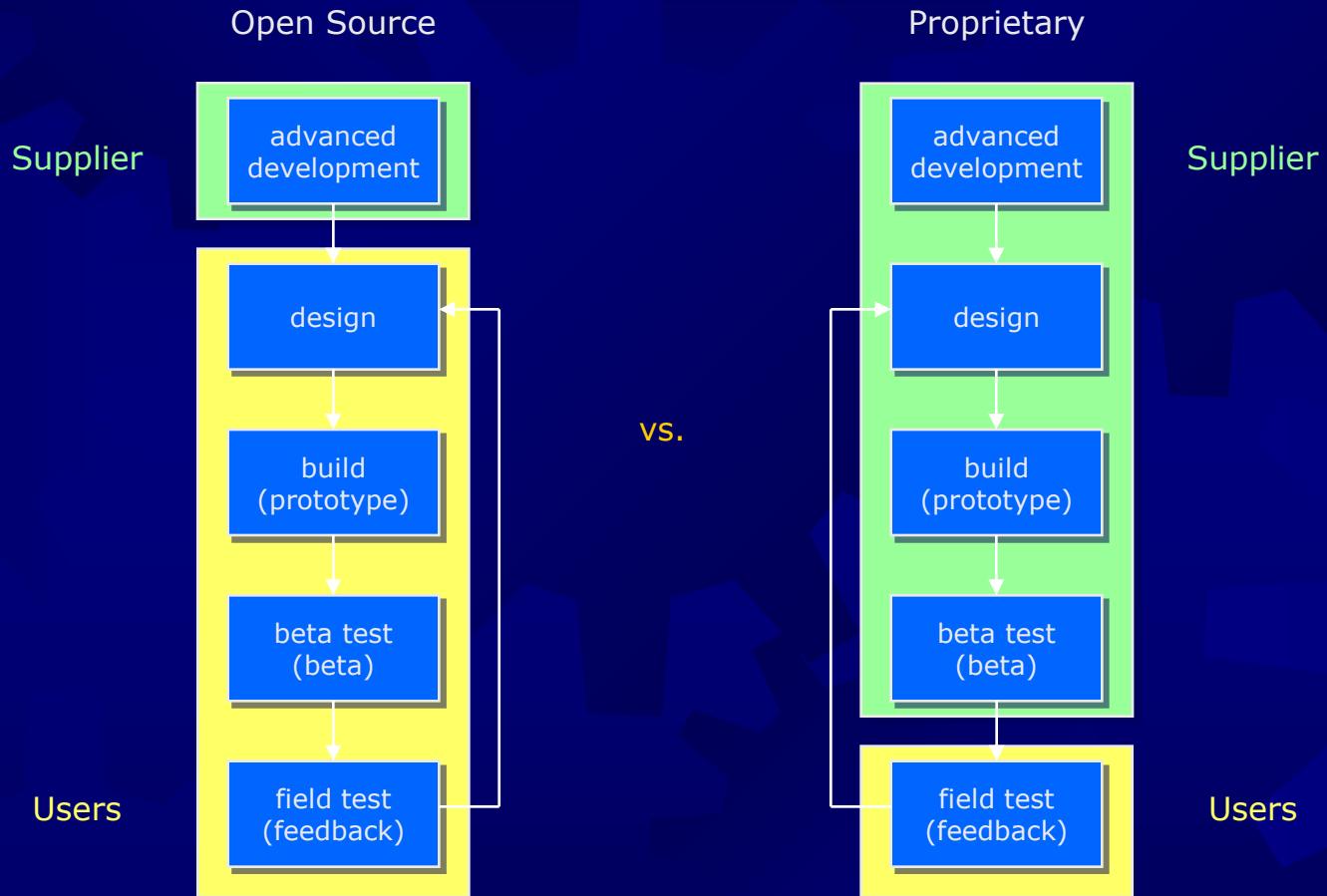
```
<resource-managers>
    <res-name-to-refc></res-name>
    <res-jndi-name>topic/testTopic</res-jndi-name>
</resource-managers>
<!-- most magical line here is the "java:/jmsXA" which point to the J2EE Connector JMS source adapter. And for the bean. -->
<resource-ref>
    <ref-name>jms/MyTopicConnection</ref-name>
    <resource-refc></resource-refc>
</resource-ref>
<resource-ref>
    <ref-name>jms/TopicName</ref-name>
    <resource-refc></resource-refc>
</resource-ref>
<resource-refc></resource-refc>
</session>
<ejb-name>TopicHello</ejb-name>
<jndi-name>TopicHello</jndi-name>
<configuration-name>Standard Stateless SessionBean</configuration-name>
<resource-refc></resource-refc>
<res-ref-name>jms/MyTopicConnection</res-ref-name>
<resource-refc></resource-refc>
<res-ref-name>jms/TopicFactoryRef</res-ref-name>
<resource-refc></resource-refc>
<resource-refc></resource-refc>
</session>
<!-- These are the complete listings for the deployment descriptors: -->
<!-- figure 7.91. JMS resource example ejb-jar, from /jboss/docs/jms/resources/TopicHello-ejb-jar.xml -->
<ejb-jar>
    <description>Topic Hello</description>
    <display-name>TopicHelloBean</display-name>
    <enterprise-beans>
        <session>
            <ejb-name>TopicHello</ejb-name>
            <home>org.jboss.docs.jms.ra.interfaces.HelloHome</home>
            <create>org.jboss.docs.jms.ra.interfaces.Hello</create>
            <ejb-class>org.jboss.docs.jms.ra.interfaces.TopicHelloBean</ejb-class>
            <session-type>Stateless</session-type>
            <transaction-type>Container</transaction-type>
            <description>Topic Connectionfactory</description>
            <res-ref-name>jms/TopicFactoryRef</res-ref-name>
            <res-type>javax.jms.TopicConnectionFactory</res-type>
            <res-auth>Container</res-auth>
            <resource-refc></resource-refc>
            <resource-refc></resource-refc>
            <resource-refc></resource-refc>
            <!-- figure 7.92. JMS resource example jboss.xml, from /jboss/docs/jms/resources/TopicHello24-jboss.xml -->
            <!-- This must go into jboss.xml to get remote version to work -->
            <bean code="org.jboss.jms.jndi.JMSPublisherLoader" name="JMSPublisherLoader">
                <attribute name="ProviderName">MyRemoteProvider</attribute>
                <attribute name="ProviderUrl">linutv1.annons.dn.se:1099</attribute>
                <attribute name="TopicFactoryRef">xACTopicConnectionFactory</attribute>
                <attribute name="ProviderAdapterClass">org.jboss.jms.jndi.JBossMQProvider</attribute>
            </bean>
</ejb-jar>
<!-- figure 7.93. Running the JMS resource example ant jms-topic-hello24 -->
<!-- figure 7.94. Defining a remote JMSPublisherloader in jboss.jcm1, from /jboss/docs/jms/resources/TopicHello24-Remote-snippet-jboss.jcm1 -->
<!-- figure 7.95. Defining a remote JMSPublisherloader in jboss.jcm1 (2.5.x) -->
<!-- figure 7.96. Defining a remote JMS Resource Adapter in jboss.jcm1, from /jboss/docs/jms/resources/TopicHello24-Remote-snippet-jboss.jcm1 -->
<!-- figure 7.97. XA Resource adapter, use this to get transacted JMS in beans -->
<!-- figure 7.98. JBoss JMS Resource Adapter -->
```

File: c:\temp\jms.txt 2001/8/28, 07:01:23下午

```
</resource-managers>
<!-- enterprise-beans -->
<ejb>name>TopicHello</ejb>
<jndi-name>TopicHello</jndi-name>
<configuration-name>Standard Stateless SessionBean</configuration-name>
<resource-ref>
    <ref-name>jms/MyTopicConnection</ref-name>
    <resource-refc></resource-refc>
</resource-ref>
<resource-ref>
    <ref-name>jms/TopicName</ref-name>
    <resource-refc></resource-refc>
</resource-ref>
<resource-refc></resource-refc>
</session>
</ejb>
</enterprise-beans>
The example is possible to run with the ant target (remember that you must do it at least 2.4.x):
Figure 7.93. Running the JMS resource example
ant jms-topic-hello24
JMS remote resource
A nice twist to the example above is how easy it is to reconfigure it to send messages to another JBoss server. You basically have to do two things.
First you need to add two things to jboss.xml. The remote JMS provider, and a JMS adapter that uses the remote JMS provider. When defining the remote JMS provider fill in the ProviderUrl property. For 2.4.x this might look like this for the URL linutv1.annons.dn.se:1099
Figure 7.94. Defining a remote JMSPublisherloader in jboss.jcm1, from /jboss/docs/jms/resources/TopicHello24-Remote-snippet-jboss.jcm1
<bean code="org.jboss.jms.jndi.JMSPublisherLoader" name="JMSPublisherLoader">
    <attribute name="ProviderName">MyRemoteProvider</attribute>
    <attribute name="ProviderUrl">linutv1.annons.dn.se:1099</attribute>
    <attribute name="TopicFactoryRef">xACTopicConnectionFactory</attribute>
    <attribute name="ProviderAdapterClass">org.jboss.jms.jndi.JBossMQProvider</attribute>
</bean>
In JBoss 2.5.x it would instead look like this:
Figure 7.95. Defining a remote JMSPublisherloader in jboss.jcm1 (2.5.x)
<!-- This must go into jboss.jcm1 to get remote version to work -->
<bean code="org.jboss.jms.jndi.JMSPublisherLoader" name="JMSPublisherLoader">
    <attribute name="ProviderName">MyRemoteProvider</attribute>
    <attribute name="ProviderUrl">linutv1.annons.dn.se:1099</attribute>
    <attribute name="TopicFactoryRef">xACTopicConnectionFactory</attribute>
    <attribute name="ProviderAdapterClass">org.jboss.jms.jndi.JBossMQProvider</attribute>
</bean>
You then need to add a JMS resource adapter that uses the remote provider. We give here RemoteJMSXA and configure the adapter property "JMSPublisherAdapterJNDI" to point to the newly defined remote provider "java:MyRemoteProvider".
Figure 7.96. Defining a remote JMS Resource Adapter in jboss.jcm1, from /jboss/docs/jms/resources/TopicHello24-Remote-snippet-jboss.jcm1
<!-- XA Resource adapter, use this to get transacted JMS in beans -->
<bean code="org.jboss.resource.connectionfactoryloader.JBossXAConnectionFactoryLoader" name="RemoteJMSXA">
    <attribute name="FactoryName">RemoteJMSXA</attribute>
    <attribute name="RADeployerName">JCA:service:RADeployer</attribute>
    <attribute name="ResourceAdapterName">JMS Adapter</attribute>
</bean>
```

potix

# Open: User-Driven Innovation



[Source: HBR APR'02]

# Simply Ajax and Mobile

ZK Live Demo - Mozilla Firefox

File Edit View History Bookmarks Tools Help del.clio.us

http://www.zkoss.org/zkdemo/userguide/ Google

ZK 2.4.0 Live Demo

- Simple Elements
  - First Window: Hello World
  - Overlapped and popup windows
  - Labels and images
- Modal Dialogs
  - Messagebox
  - Fileupload
  - Filedownload
  - Modal dialog
- Layout Elements
  - The box model
  - Splitters
  - Tabboxes
  - More tabboxes
  - Groupbox
  - More groupboxes
  - Grids
- Toolbar and Menus
  - Toolbar and Toolbarbutton
  - Menu
  - More Menu Features
- Listboxes
  - Listboxes
  - Live data

Labels and images

Adding labels and images into a window is just as easy. And you can change the label and image on the fly.

Try to click on the "Yes" and "No" button to see how the label is changed.

View Reload

Label and images demo

Do you like the photo?

Yes No

Source Try me!



# ZK Mobile Platform

- ★ Extend the Richness of Web Application on Mobile Platforms.
  - ★ Google Android
  - ★ Java Phone
  - ★ iPhone



# Rich User Experience of Web Application on Mobile Platform

- ★ Traditional Way

- ★ HTML Tags
- ★ Those don't support browser?

- ★ ZK Mobile's Way

- ★ Turns your Web application into a Mobile Application



# No Prerequisite of Mobile Technology is Required



# Simple Programming Model

- ★ No Client Server Communication



**Mobile  
Application**

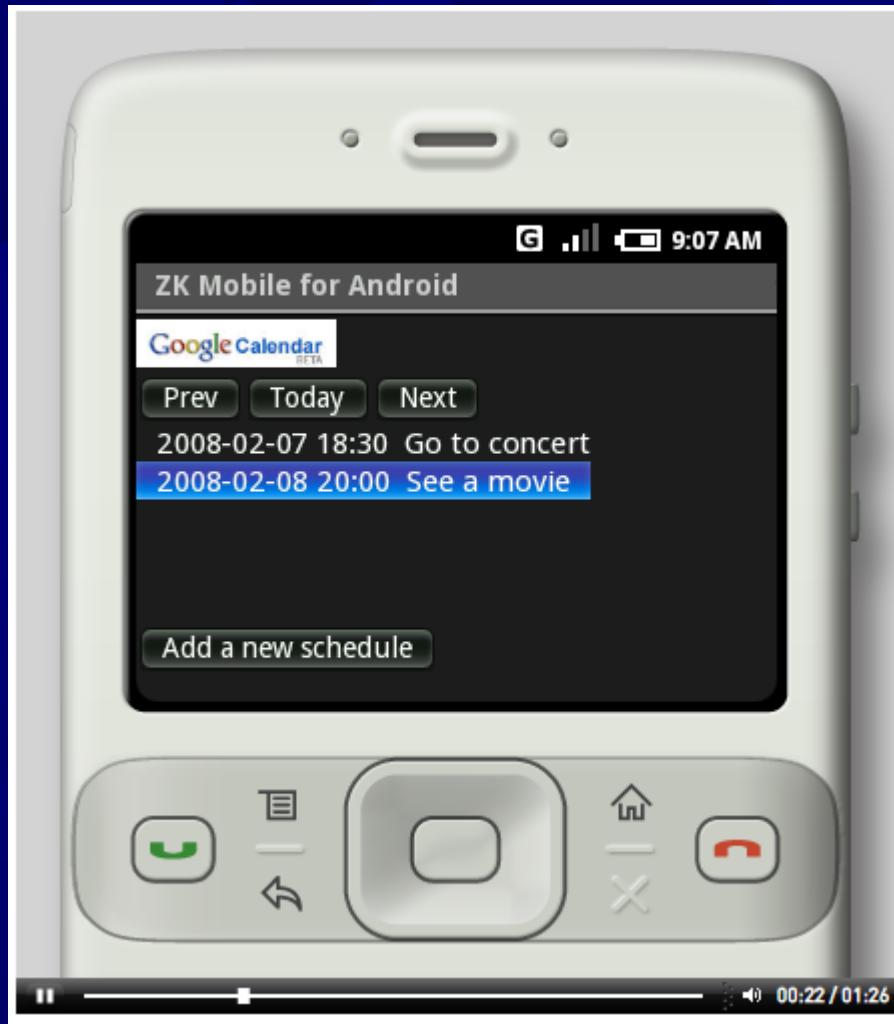


**Web Server**

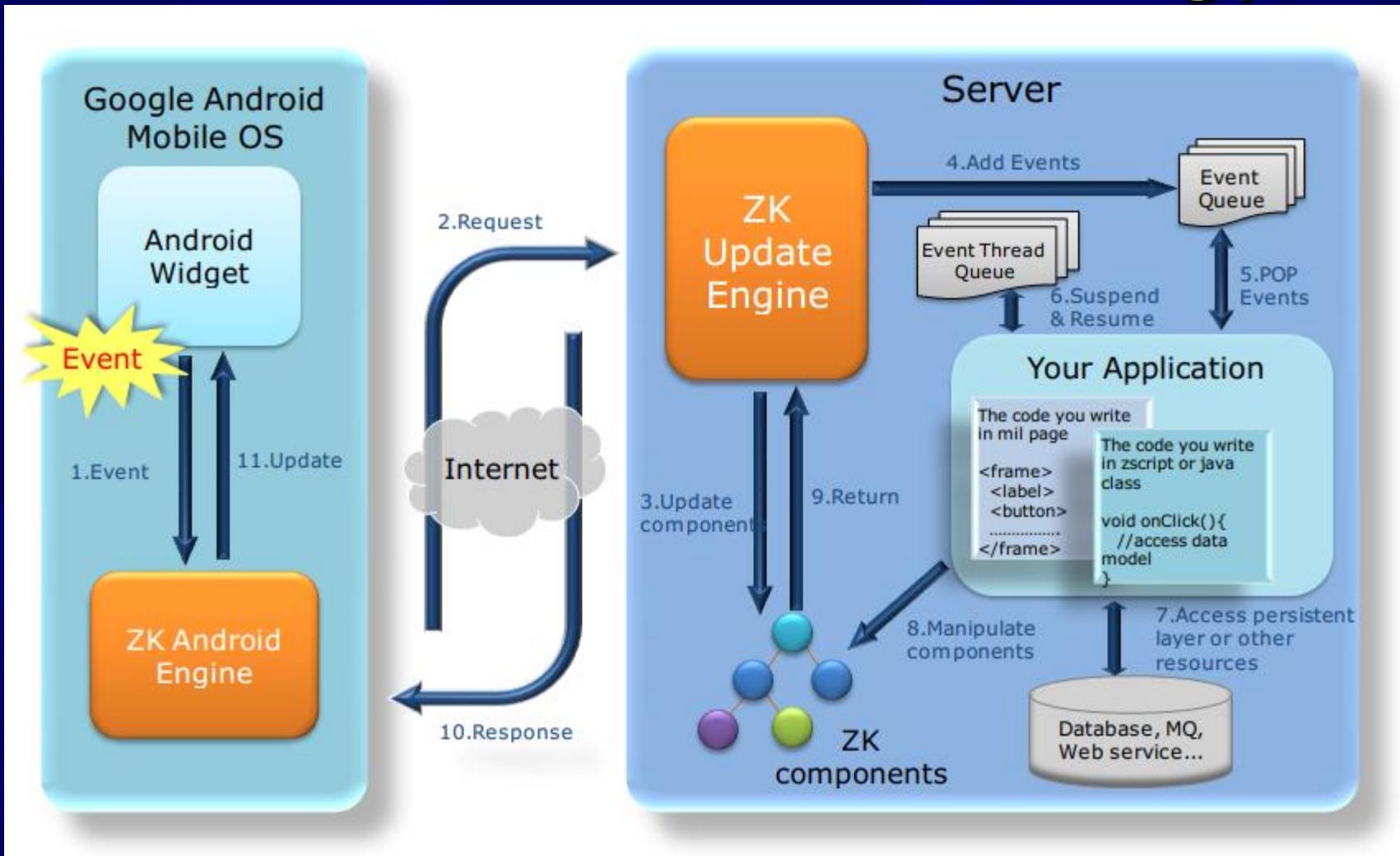
# Showcase of ZK Mobile on Java Phone



# Show Case of ZK Mobile for Android



# Behind-the-Scene Technology





Thank You!  
[www.zkoss.org](http://www.zkoss.org)