

EWD VistA Update 2010

Rob Tweed
M/Gateway Developments Ltd



EWD

- What is it?
 - A framework for web application development

Enterprise Web Developer (EWD)

- What is it?
 - A framework for web application development
 - Particular emphasis on:
 - Very high speed, simple development
 - Very low maintenance
 - Advanced Ajax-based user interfaces
 - The designer in control of the process
 - Programming reduced to an almost trivial level



Enterprise Web Developer (EWD)

- Particularly suited to:
 - Web-enablement of Mumps/Caché applications

Enterprise Web Developer (EWD)

- Particularly suited to:
 - Web-enablement of Mumps/Caché applications
- All the major, business-critical, Internet-facing Caché-based Ajax applications use EWD
 - Tried and tested
 - Highly secure (regularly passes IBM's ISS audits)
 - Extremely reliable
 - Extremely high-performance



Enterprise Web Developer (EWD)

- Available as a Free Open Source product
 - Based around:
 - GT.M
 - Apache
 - m_apache gateway (xinetd)



Enterprise Web Developer (EWD)

- Packaging:
 - Ubuntu/Debian Installer
 - M/DB Installer (includes EWD)
 - Local system
 - EC2 server

Enterprise Web Developer (EWD)

- Packaging:
 - Ubuntu/Debian Installer
 - M/DB Installer (includes EWD)
 - Separate components:
 - EWD for GT.M zip file:
 - EWD routine files
 - m_apache components
 - ewdMgr portal application - source EWD pages
 - Installation instructions



Enterprise Web Developer (EWD)

- Packaging:
 - Debian Installer
 - M/DB Installer (includes EWD)
 - Post-Astronaut installer
 - Separate components:
 - EWD for GT.M zip file:
 - EWD routine files
 - m_apache components
 - ewdMgr portal application - source EWD pages
 - Installation instructions
- <http://www.mgateway.com>



Key Features

- “Server-Fragments” Ajax architecture
 - Intuitive / easy to understand
 - Very easy to use
 - Very easy to maintain
 - Exceptionally functional
 - State-of-the-art user interfaces
- Makes ALL other Ajax frameworks look unnecessarily difficult



Key Features

- Persistent XML DOM core
 - W3C XML DOM API supported

Key Features

- Persistent XML DOM core
 - W3C XML DOM API supported
 - Manipulation of XML documents:
 - Parse files to DOM
 - Or Build from scratch programmatically
 - Analyse and search (DOM APIs or XPath)
 - Modify
 - Add tags/attributes
 - Remove tags, attributes, sub-trees of tags
 - Insert tags/attributes/sub-trees
 - Output DOM as file or HTTP stream

Key Features

- Persistent XML DOM core
 - W3C XML DOM API supported
 - Manipulation of XML documents:
 - Parse files to DOM
 - Or Build from scratch programmatically
 - Analyse and search (DOM APIs or XPath)
 - Modify
 - Add tags/attributes
 - Remove tags, attributes, sub-trees of tags
 - Insert tags/attributes/sub-trees
 - Output DOM as file or HTTP stream
 - GT.M as Native XML Database

Key Features

- Custom Tags
 - Built-in user extensibility
 - Encapsulate an entire set of functionality
 - Markup (HTML tags) +
 - Javascript +
 - Back-end logic
 - Express as 1 or more XML tags
 - Constrain/control behaviour via attributes
 - Anyone can create their own custom tags

Latest and up-coming enhancements to EWD



Yahoo YUI Custom Tag Library

- Yahoo YUI Javascript Framework:
 - Free Open Source library
 - Built and maintained by Yahoo primarily for their own use in Yahoo web applications
 - Made freely available for others to use

Yahoo YUI Custom Tag Library

Home ▾ Demos ▾ About ▾

Library

Library Catalogue

iTunes DVDs

By Artist By Title

Artist:

Query

<< first < prev 1 2 next > last >>

Matching Tracks

Album	Track Name	Composer	Track No	Last Played
Livestock	Nightmare Patrol		1	14/05/2009 10:34
Livestock	-ish		2	23/02/2009 19:02
Livestock	Euthenasia Waltz		3	23/10/2009 18:50
Livestock	Isis Mourning (i)		4	30/09/2009 12:15
Livestock	Isis Mourning (ii)		5	21/04/2009 18:25
Livestock	Malaga Virgen		6	12/08/2009 06:16
Masques	The Poke	John Goodsall	1	23/09/2009 14:41
Masques	Masques	Percy Jones/Peter Robinson	2	16/11/2009 12:01
Masques	Black Moon	Morris Port	3	26/02/2009

Yahoo YUI Custom Tag Library

- YUI Pros:
 - Great-looking, highly functional widgets
 - Support across all “A”-grade browsers
 - Exceptionally well architected
 - Strong influence from Douglas Crockford
 - Unlike other Javascript frameworks:
 - Not an “all or nothing” environment
 - Can “cherry pick” widgets to use
 - Can co-exist with your own Javascript code/widgets



Yahoo YUI Custom Tag Library

- YUI Cons:
 - Steep learning curve
 - Requires deep understanding of complex Javascript concepts
 - Programmatic description of widgets
 - Time-consuming to write
 - Extremely difficult to maintain
 - Particularly if maintainer isn't original developer

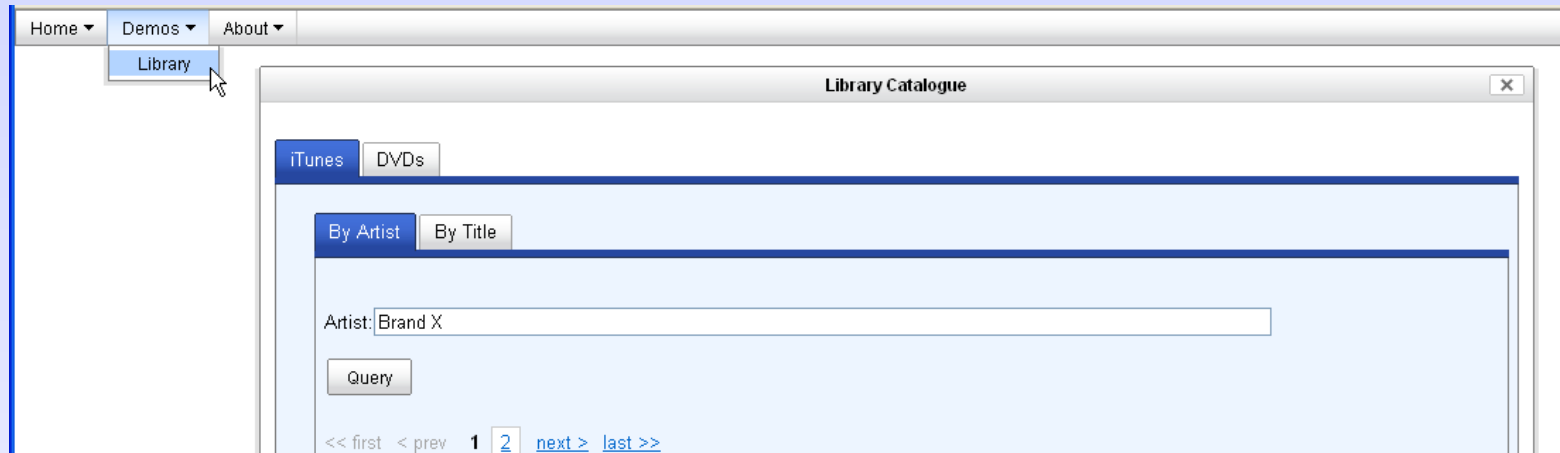


Yahoo YUI Custom Tag Library

- EWD Custom Tags to the rescue!
 - YUI widgets expressed as EWD custom tags
 - Developer drops in the YUI custom tags
 - EWD's compiler converts them to the appropriate YUI Javascript and markup
- Benefits:
 - Almost zero learning curve
 - Intuitive/ easy to understand and use
 - No programming
 - Simple downstream maintenance



Yahoo YUI Custom Tag Library



```
<yui:TabView>
  <yui:Tab label="By Artist" active="true" dataSrc="selectCDXArtist.ewd" />
  <yui:Tab label="By Title" active="false" dataSrc="selectCDXTitle.ewd" />
</yui:TabView>
```

Livestock	Isis Mourning (i)		4	30/09/2009 12:15
Livestock	Isis Mourning (ii)		5	21/04/2009 18:25
Livestock	Malaga Virgen		6	12/08/2009 06:16
Masques	The Poke	John Goodsall	1	23/09/2009 14:41
Masques	Masques	Percy Jones/Peter Robinson	2	16/11/2009 12:01
Masques	Black Moon	Morris Port	3	26/02/2009

Yahoo YUI Custom Tag Library

- Fully ported to GT.M version of EWD
- Free, Open Source

Yahoo YUI Custom Tag Library

- See my YouTube Videos:
 - EWD + Python + YUI Custom Tags
- <http://www.mgateway.com/ewdDemo.html>





iWD

- Rapid iPhone App Development

iWD

- Rapid iPhone App Development
 - Extension to EWD
 - Mainly implemented using Custom Tags

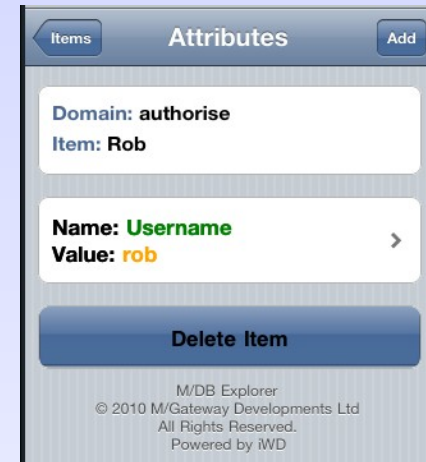
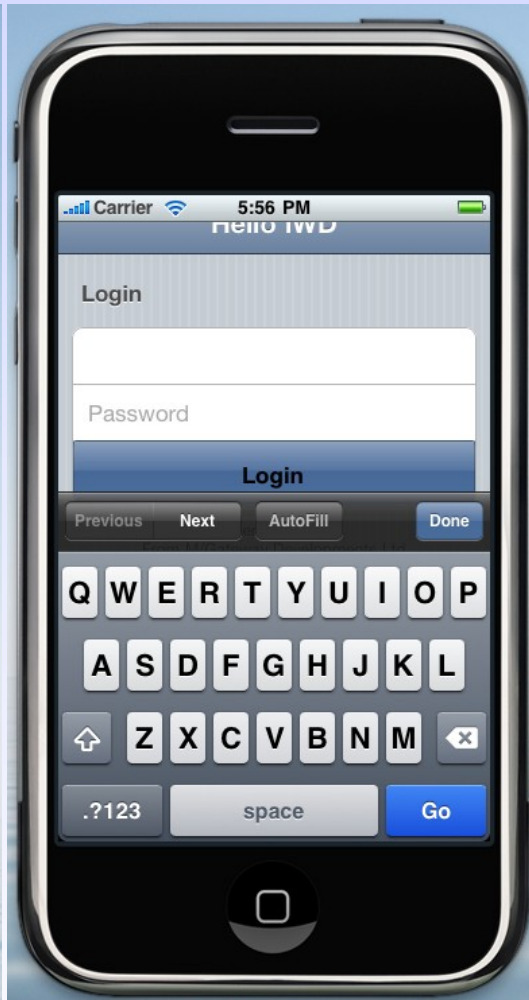
iWD

- Rapid iPhone App Development
 - Extension to EWD
 - Mainly implemented using Custom Tags
 - iPhone Web Apps that look and behave like Native Apps
 - 80-90% of the functionality
 - 1-10% of the time to develop

iWD

- Highly optimised development
 - Maximum automation through custom tags
 - iWD tags generate all the markup and Javascript needed
 - Faster to build an iPhone App than a desktop one!
 - World record: 7.5 minutes:
 - Dynamic, Ajax application
 - Scripted using Python
 - Data in an M/DB database

Examples of iWD in Action

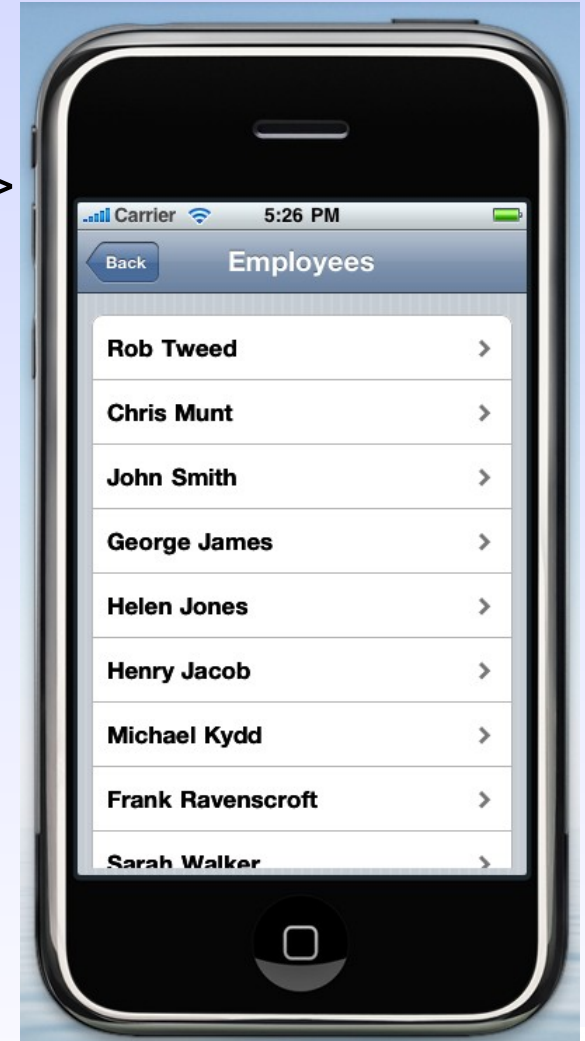


iWD makes it so easy!

```
<ewd:config isFirstPage="false" pageType="ajax"  
  prepagescript="py:iwdTutorial.createEmployeeList">
```

```
<iwd:toolbar title="Employees">  
  <iwd:toolbarButton type="back" />  
</iwd:toolbar>
```

```
<iwd:menuPanel sessionName="employeeList"  
  nextPage="getEmployeeInfo" transition="slide" />
```



iWD Availability

- Available now for GT.M
- Free, Open Source
- See the info and videos at:
<http://www.mgateway.com/iwd.html>

What's Next?

- iWD:
 - Offline apps
 - Wholly:
 - Business logic: Javascript
 - Database: SQLite (HTML5 capability)
 - Partly:
 - Work offline if necessary
 - Re-synch with remote database when next connected

What's Next?

- iWD:
 - iPad support
 - 2-column layout
 - iPhone 4 and iOS4 support
 - SVG integration
 - Graphs
 - Charts
 - Android?

EWD + iWD

- The perfect Ajax framework for VistA