

Williams Architecture Overview

Williams Core Technologies

- Adobe Flex
- Java 1.6
- Spring - configuration, component wiring and AOP
- Spring Security (formerly Acegi)
- Ant - build and deployment
- JAXB - XML Configuration files
- Jakarta Commons - common Java libraries

How is Flex Architecture Different?

- Client is stateful / Server mostly stateless except security information
- No need for traditional MVC frameworks, i.e. Struts
- Dynamically load / unload modules on client
- Instead of designing screens, design entire mini-applications
- Bulk of work is on Flex side - business logic, validation, data manipulation, etc.

What is Anvil?

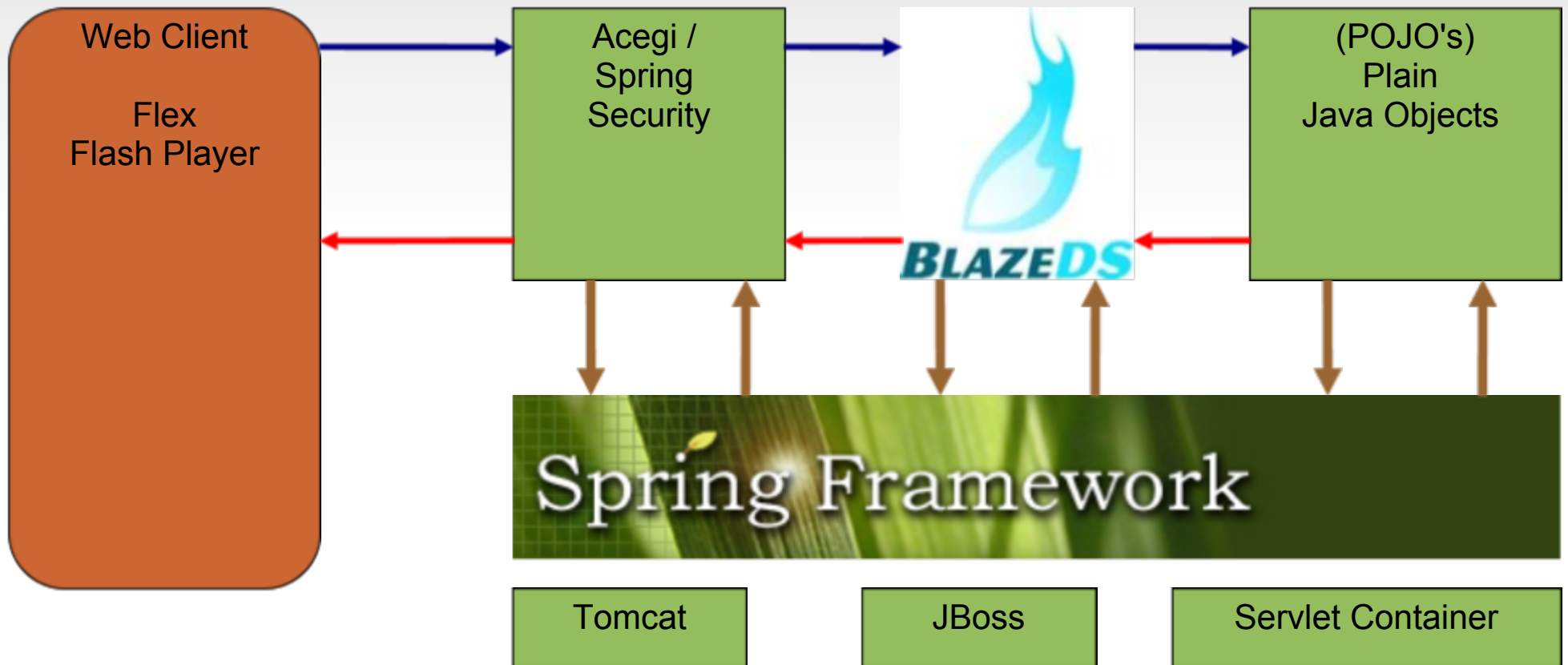
- Open source framework developed with Williams
- Foundation of Williams Architecture
- A framework to jump start enterprise development of Flex and Java Applications
- A basic portal environment to host multiple modules in an MDI (multiple document interface) container
- Utilities to assist in the development of large Flex and Java applications
- A security framework that provides customizable authentication, authorization and access control components

Anvil Screen Shoot

The screenshot shows a Mozilla Firefox browser window with the following elements:

- Address Bar:** `http://localhost:8080/`
- Navigation Buttons:** Back, Forward, Home, Stop, Reload.
- Page Title:** [application/x-shockwave-flash Object] - Mozilla Firefox
- Menu Bar:** File, Edit, View, History, Bookmarks, Tools, Help.
- Page Content:**
 - Top Panel:** Contains three buttons: "Tile Panels", "Stock Watch List", and "Hello World Pod".
 - Stock Watch List Panel 1 (Left):** Titled "Stock Watch List", it shows a table with columns: Symbol, Open, Last, Change, High, Low. The table lists stocks: YHOO, XOM, COP, ADRE, GM, and VZ. Below the table are input fields and buttons for adding and deleting items.
 - Stock Watch List Panel 2 (Bottom Left):** Identical to the first panel.
 - Hello World Pod Panels (Right):** Three panels, each titled "Hello World Pod" and containing the text "Hello World".
- Taskbar:** Shows five active windows: "Stock Watch List", "Hello World Pod", "Stock Watch List", "Hello World Pod", and "Hello World Pod".
- Status Bar:** Displays the message "Transferring data from localhost..."

Anvil Architecture

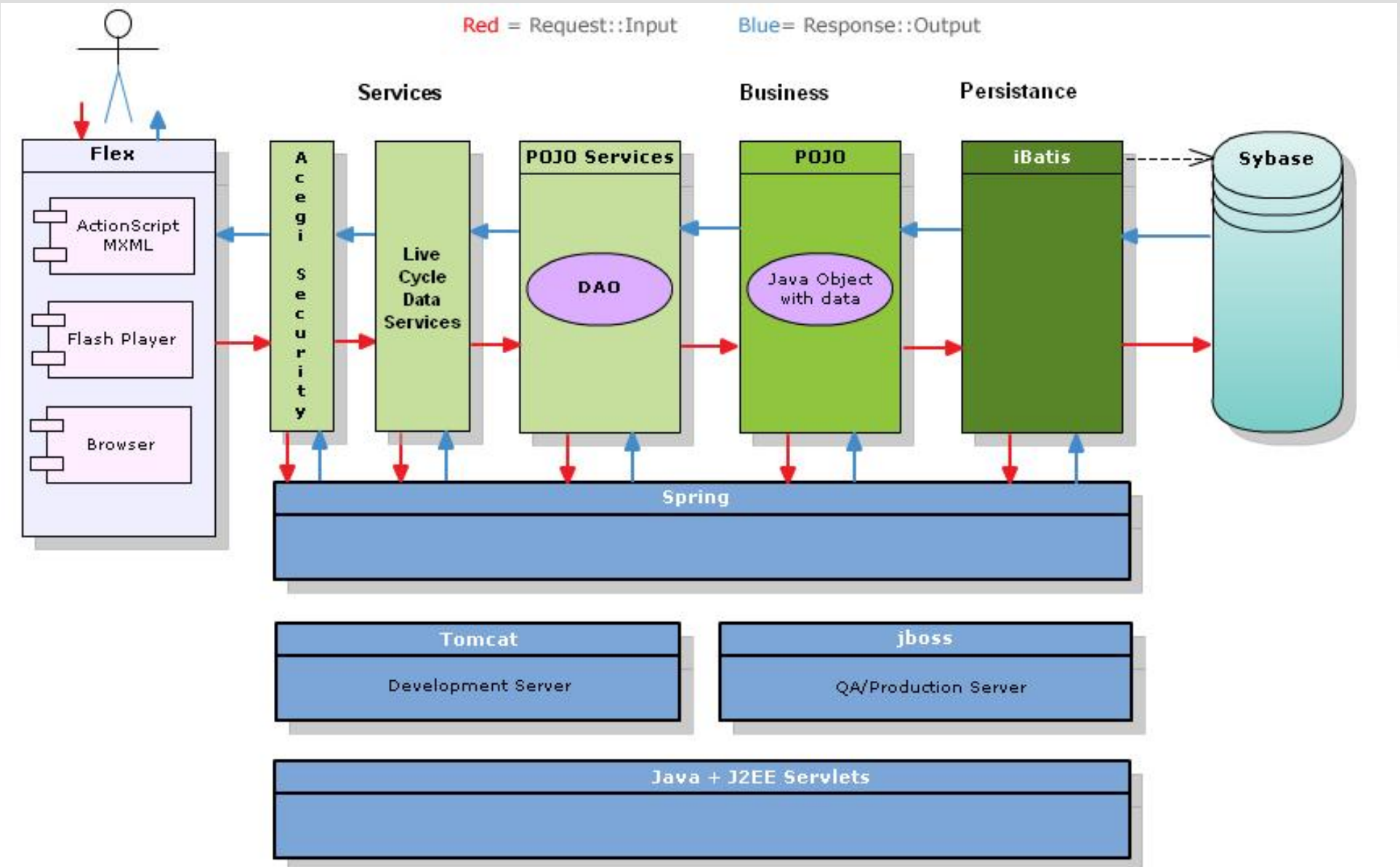


Blue = Request / Input

Red = Response / Output

Brown = Configuration

Williams Architecture



Conclusion

- Adobe Flex and Simplified Java Server
 - Greatly increased development times
 - Reduced number of bugs
- Biggest Challenge was Ant Build Files / Considering Maven
- Flex Event Driven Programming was biggest challenge for new developers