
Enabling Cloud Computing with WebSphere

Podcast Education Series

Dynamic Scripting Applications For The Cloud
Erik Kristiansen, WebSphere Product Manager



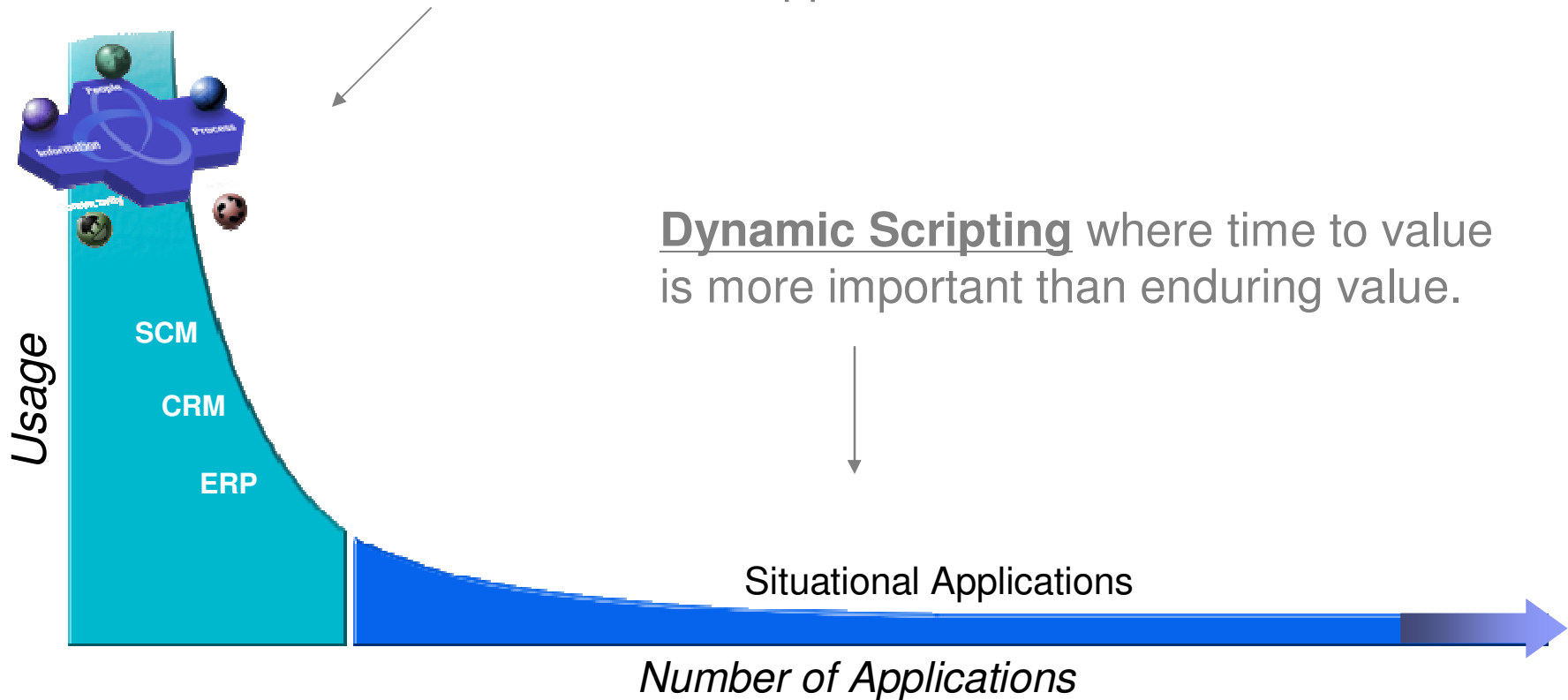
Why have Dynamic Scripting languages like PHP and Groovy become so important anyway?

- The need for applications to support various business needs are growing
- IT budgets and development staffs are shrinking
- The number of dynamic scripting developers is growing
- Dynamic languages are ideally suited to rapid development

Dynamic scripting compliments Java as a programming model choice for situational applications

JAVA for strategic, long-lived, maintainable application code.

Dynamic Scripting where time to value is more important than enduring value.



Why are dynamic languages better to address situational application needs?

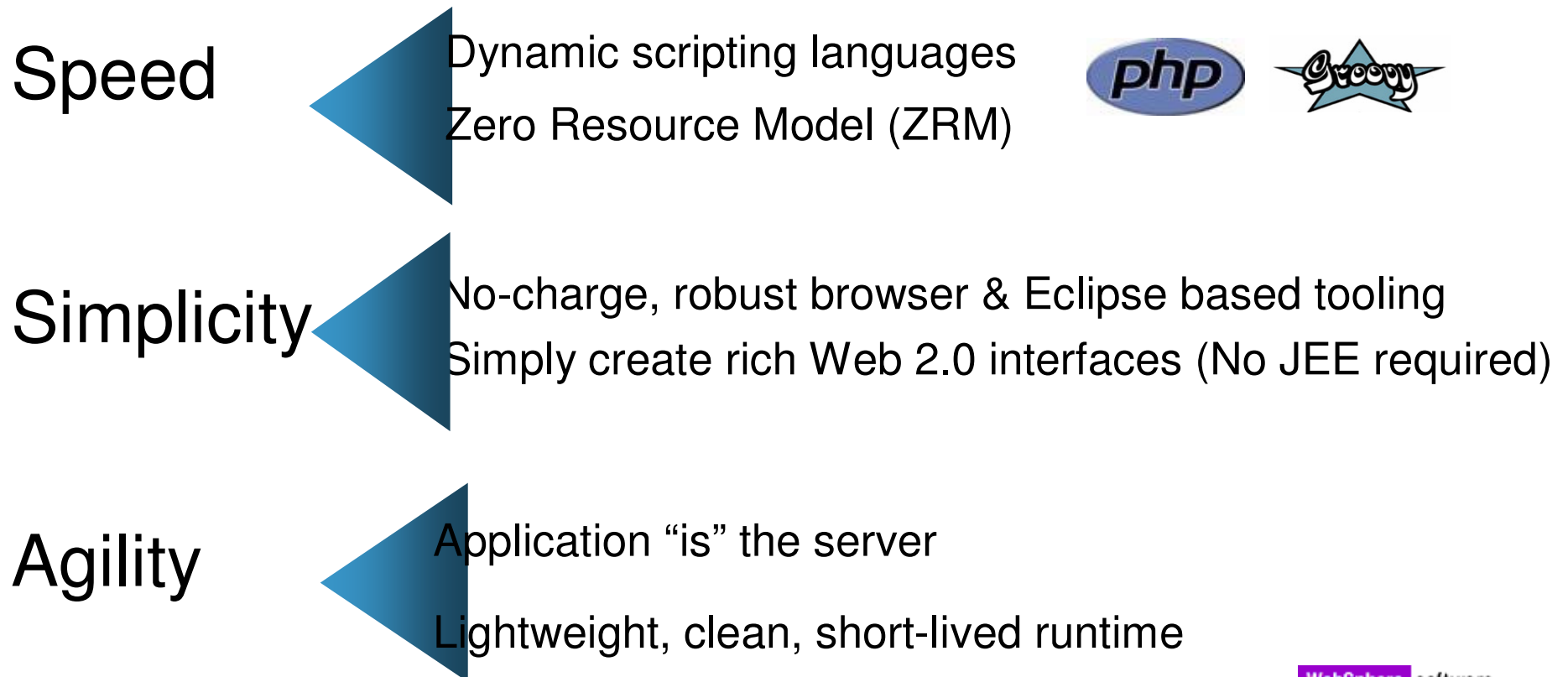
- Improved productivity.
- Require less time, fewer lines of code, and less specialized skill to produce.
- Dynamic languages have frameworks that lend themselves to CRUD style application frameworks. sMash provides one such framework.
- Large numbers of third party libraries available for PHP (growing numbers for Groovy).

Intersecting the need for Dynamic Scripting has been the emergence of Web 2.0 technologies

- **Ajax** (Asynchronous JavaScript and XML)
- **REST** (Representational State Transfer)
- **JSON** (JavaScript Object Notation)
- **Feeds** (e.g. RSS, ATOM)

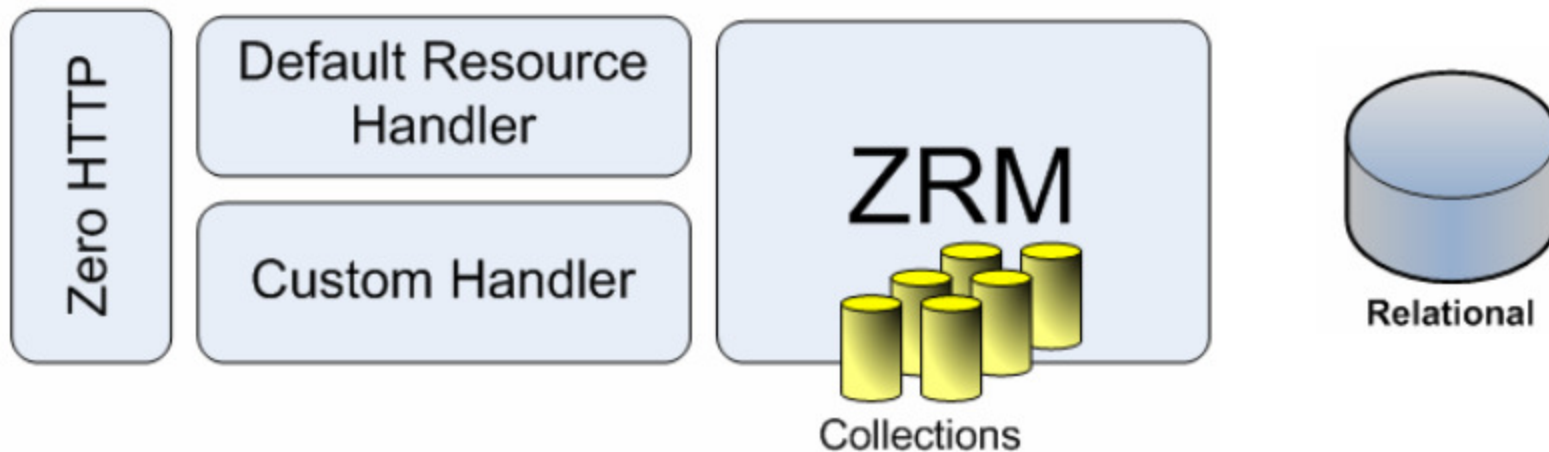
WebSphere sMash combines Dynamic Scripting with a Web 2.0 focused programming model

A Web 2.0-based dynamic scripting programming model combined with a standalone lightweight runtime



Zero Resource Model (ZRM)

- Model application data
 - Constrained set of APIs encourages a RESTful application architecture
 - Data model that maps well into Atom feeds and JSON formats
 - Robust framework for persistence, validation, and serialization
 - Application Databases focus



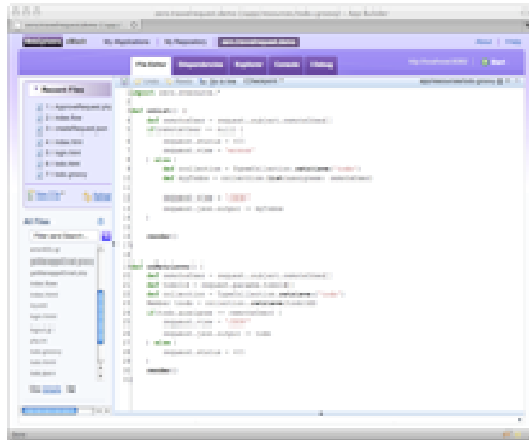
The Dojo Toolkit simplifies Ajax development

- [Dojo](#) is an Open Source DHTML toolkit written in [JavaScript](#). It builds on several contributed code bases.
 - Provides Rich Set of Widgets
 - Web UI Framework
 - Rich Event handling System
 - General Purpose HTML Libraries
 - Several other utilities
 - Math, XML to JS parsing, etc...
- IBM has standardized on Dojo for many of its products
- Dojo also shipped in the Web 2.0 Feature Pack for Java development



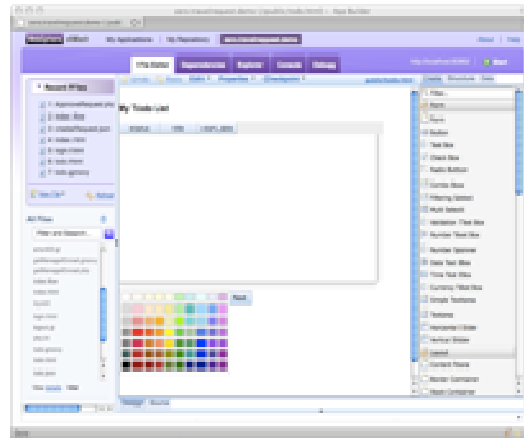
sMash Tooling: WebSphere sMash Developer Edition with browser based tooling available at no charge from projectzero.org

Dynamic Scripting Editor



Agility in Dynamic Scripting – Groovy / PHP

Visual UI Editor



Simplicity in constructing web pages (Javascript)

Visual Assembly Editor



Speed in scripting / assemble activities into a flow

- Applicable for both the Feature Pack for Dynamic Scripting and WebSphere sMash deployments.
- Eclipse based tooling also available on projectzero.org

WebSphere Application Server Feature Pack for Dynamic Scripting

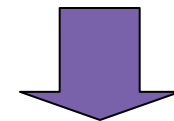
Bringing Dynamic Scripting to Enterprise Developers



- Leverage **existing platform investment** to rapidly address situational application requirements through optional feature pack
- Deploy dynamic scripting applications to **WAS 6.1 and 7.0** entitled servers
- **Rapid** development with **PHP**, **Groovy**, and a Web 2.0 oriented programming model based on WebSphere sMash
- For CICS customers looking to extend CICS assets with dynamic scripting
 - **CICS Transaction Server Feature Pack for Dynamic Scripting**



Web 2.0
REST, RSS / ATOM



WebSphere sMash also available in the public cloud...






IBM Smart Business
Development & Test on the IBM Cloud



Amazon Enterprise Compute
Cloud (EC2)

Public Cloud Customer Scenarios & Licensing Models

Customer Scenario	SW Charge	Infrastructure Charge
<p>Scenario 1 Customer is an “ISV Developer”</p>  <p>ISV uses IBM development version for development, test, POC”s and Sales Demo and rents Infrastructures services</p>	No Charge	Per VM/Hr
<p>Scenario 2 Customer “Brings Own Software & License”</p>  <p>Customer owns software license. Use their own software to build their own image</p>	PREPAID	Per VM/Hr
<p>Scenario 3 Customer “Pays-as-they-go”</p>  <p>Customers uses the pre-built images and are billed for the number of hours of usage.</p>	By Usage	Per VM/Hr

Why build Dynamic Scripting applications in the public cloud...

- Lower barrier to entry / upfront investment
- Offer self-service for rapid-start development
- Deliver new pricing models for hardware, software, and service consumption
- Increase or decrease capacity in minutes
- Pursue new workloads & opportunities
– demo/sandbox, collaboration, prototypes



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