

The Basics of Mashup Development



Day 3 of
Free
Mashup
Training

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Objective

Demonstrate how to build enterprise mashups with
JackBe's Presto

About JackBe

“Mashups can be whiz-bang simple, but in the enterprise, data management, application security and control, and complex user needs can complicate matters. JackBe's Presto provides professional-grade tools that streamline mass mashup production.”

- *Intelligent Enterprise*
February 2008



Best Enterprise
Mashup Platform



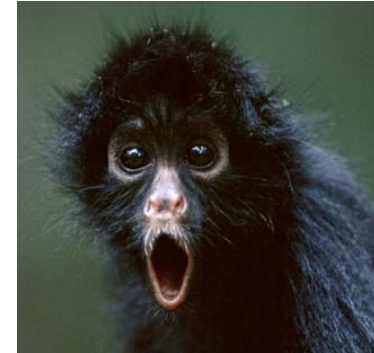
ELSEVIER

Your Teachers



John Crupi

- JackBe's CTO
- Ex-CTO, SOA Practice, Sun Microsystems
- Co-author Core J2EE Patterns
- 2009 Washingtonian Tech Titan



Matt Triner

- JackBe's Senior Sales Engineering
- The Office Howler Monkey
- Loves Buddy

Day 1 Recap

- The Silo Problem
- 360° Information View
- Enterprise Mashup Solutions
- The Value of Enterprise Mashups

Day 1 of Free Mashup Training - The Value of Enterprise Mashups
Our first day of mashup training showed how the value enterprise mashups bring to your organization by showing how they are being used by public and private organizations around the world.
[Click here to download the presentation](#)
[Click here to download the presentation](#)

Presentation Available
on jackbe.com

Day 2 Recap

- Aligning Business and IT
- Required Features of an Enterprise Mashup Platform
- Where Enterprise Mashups Fit in Your Organization
- The Enterprise Mashup Ecosystem

Day 2 of Free Mashup Training - The Role of Enterprise Mashups
Our second day of mashup training discussed how mashups can help existing enterprise applications and services, our previous technology investments, and give users better access to information. Download the presentation for more ways to collaborate with your customers and partners.

Presentation Available on jackbe.com

Agenda

- Enterprise Mashup Building Blocks
- Visually and Declaratively Create Mashups
- Domain Extensibility
- EMMML Mashup Constructs
- Mashup Development

Let's Begin with a Poll...

What do you think has the most value to your organization? (choose one)

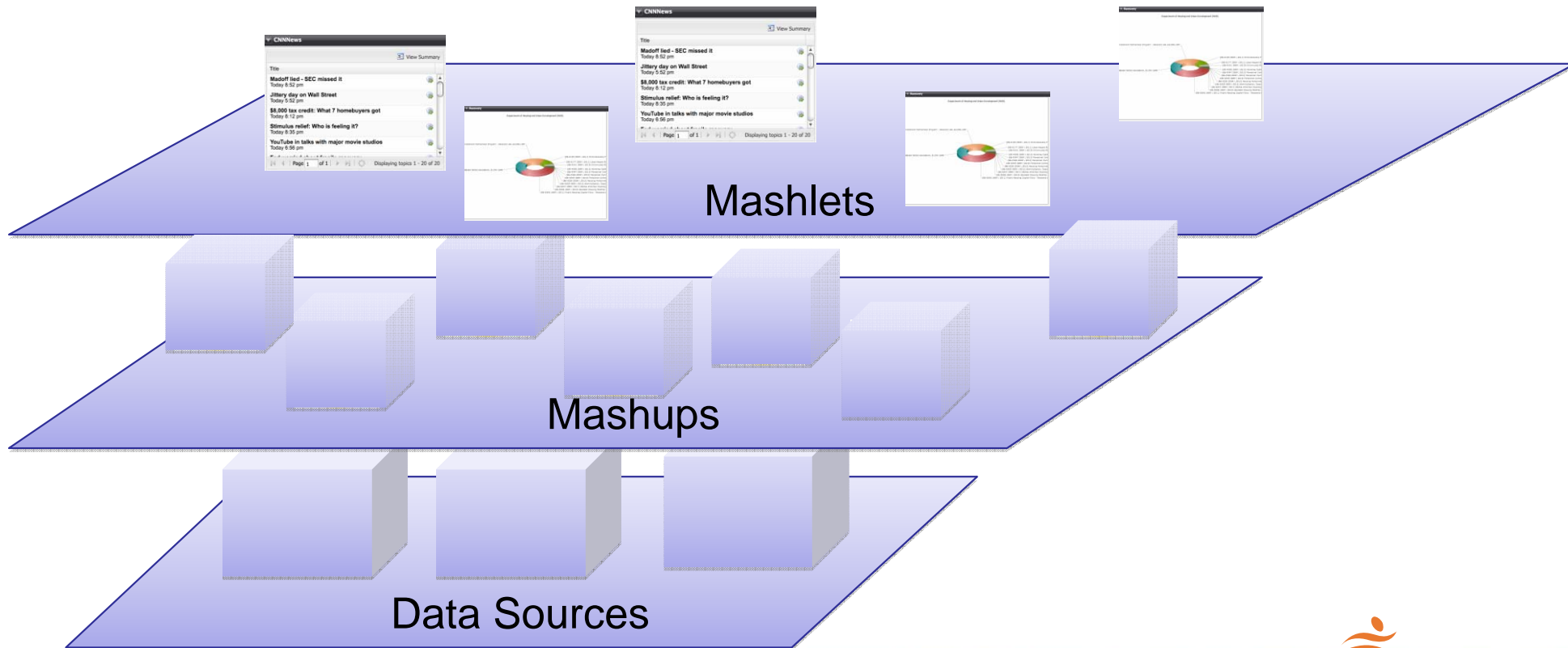
Poll Results (single answer required):

| | |
|-------------------------------|-----|
| SharePoint Mashups | 13% |
| Business Intelligence Mashups | 50% |
| SOA Mashups | 28% |
| Cloud Mashups | 8% |
| Lots more coffee | 2% |

Enterprise Mashups Building Blocks



The User



JackBe's Presto Developer Edition

The screenshot shows the Presto Developer Edition web application. At the top, there is a navigation bar with the Presto logo, the text "enterprise mashup platform version 2.6.0", and a user login status "you are logged in as admin" with a "logout" button. Below the navigation bar are three main sections: "Services", "Mashups", and "Mashlets". Each section has a filter dropdown (Recently Added, Most Popular, All) and a list of items with star ratings. The "Services" section lists items like JackBeTweets, MashupUseCases, and GoogleSearch. The "Mashups" section lists MashupUseCases2008, GMNews, and TestSVC. The "Mashlets" section lists JackBeTweets.Mashlet, MashupUseCases2008.Mas..., MashupUseCases.Mashlet2, MashupUseCases.Mashlet, TestSVC.Mashlet, and DCBuildingPermits.Mashlet.

Data Sources

Mashups

Mashlets

This section of the interface features a "Featured Downloads" area with a "download mashup studio" button. Below this is a "How do I..." section with tabs for "Get Started", "Code EMML", "Create Mashups", "Share Mashlets", "Use APIs", and "Connect & Integrate". There are also "Watch" and "Read" sections with various articles and guides. On the right, there is a "News from Mashup Developer Community" section with a "join now!" button.

Featured Downloads

How do I... [send feedback](#)

Get Started | Code EMML | Create Mashups | Share Mashlets | Use APIs | Connect & Integrate

Watch | **Read**

Introduction to Presto

- Introduction to Presto Mashup Platform
- Understanding Presto Components

Presto Installation and Configuration

- Installation Introduction
- Installing and Running

Getting Started

- Introduction to Presto
- Your first Mashup with Wires
- Your first Mashup with Mashup Studio
- An Intermediate Mashup with

Working with Services

- Publishing and Managing Services in Service Explorer
- Working with Microsoft Excel Services
- Publish WebClipping Services with

News from Mashup Developer Community

- Presto 2.6.1 is here!
- Are you attending the 'Guides to Mashups' webcasts?
- Mashup Code Sample - Communication between Mashlets
- Mashup Video - Communication between Mashlets
- Government 2.0 Camp
- Congratulations to the 'Mash for Cash' Contest Winners!
- Mashup Code Sample - Product Management and Customer Feedback Mashup
- Mashup Video - Presto Event Connector
- Mashup Code Sample - Healthcare Mashup
- Web 2.0 Expo

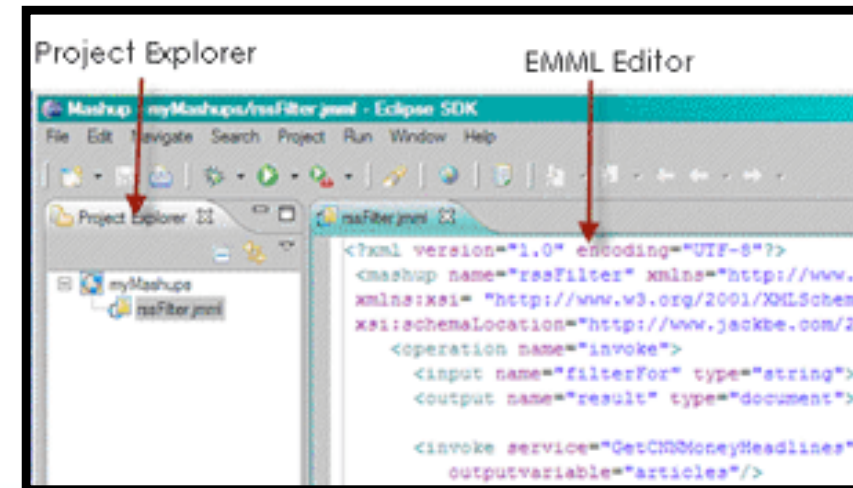
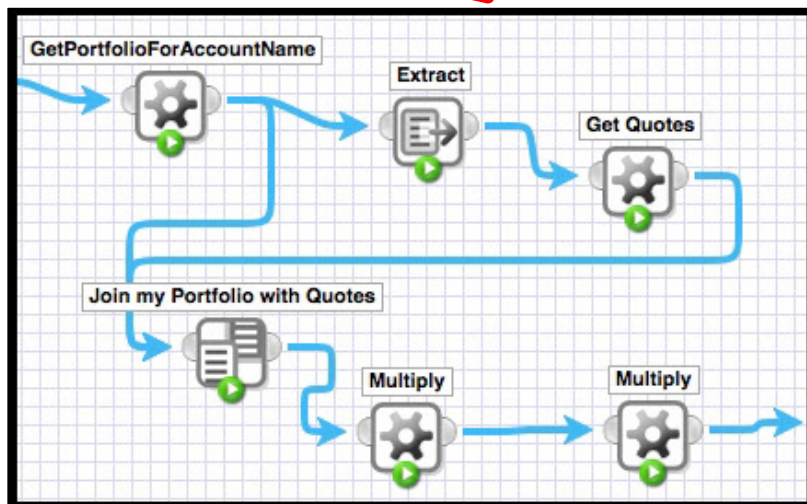
[join now!](#)

Creating a Mashup



Visually

Declaratively



Presto Wires Mashup Composer

The screenshot displays the Presto Wires Mashup Composer interface. The main workspace shows a workflow for "MyPortfolioMashup" with the following steps:

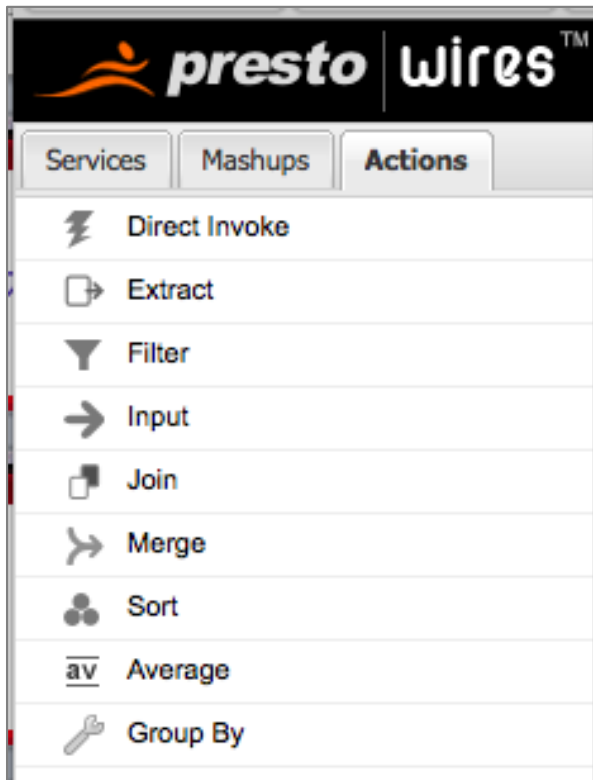
- Enter Account Name
- Get Portfolio
- Extract ticker symbols
- Get Quick Quotes from Xignite WS
- Join Portfolio and Quotes
- Calculate Purchase Price
- Calculate Market Price
- Find Profit or Loss
- Calculate Percentage Change
- Mashup Output

The "Data Preview" section shows the following data:

| Portfolio_accountnr | Portfolio_ticker | Portfolio_quantity | Portfolio_purchasep | Quickquote_delay | Quickquote_symbol | Quickquote_last | Quickquote_change | Quickquote_volume | Quickquote_time | Purchasedvalue |
|---------------------|------------------|--------------------|---------------------|------------------|-------------------|-----------------|-------------------|-------------------|-----------------|-------------------|
| John Doe | INTC | 850 | 28.0 | 0.031248 | INTC | 15.16 | -0.21 | 45803456 | 2:27 PM | 23800 |
| John Doe | YHOO | 400 | 32.0 | 0 | YHOO | 14.98 | -0.56 | 16029308 | 2:27 PM | 12800 |
| John Doe | IBM | 120 | 128.45 | 0 | IBM | 103.32 | 0.42 | 4009233 | 2:27 PM | 15413.99999999999 |
| John Doe | JAVA | 945 | 17.62 | 0 | JAVA | 9 | 0.09 | 13713184 | 2:27 PM | 16650.9 |
| John Doe | ADBE | 386 | 28.0 | 0 | ADBE | 25.71 | -0.44 | 3280538 | 2:27 PM | 10808 |
| John Doe | GOOG | 15 | 478.0 | 0 | GOOG | 397.75 | -10.23 | 2482098 | 2:27 PM | 7170 |
| John Doe | AAPL | 200 | 92.5 | 0 | AAPL | 124.66 | -4.91 | 15378971 | 2:27 PM | 18500 |

The interface also includes a left sidebar with various service categories, a top menu bar with options like New, Edit, Save, Publish, and Share, and a right sidebar with "Properties for Multiply" settings.

Extensibility into your Domain



Compound Interest Calculator

Anomaly Detection

Load Risk Analyzer

Fraud Detection

Depreciation Calculator

Geo Area Analysis

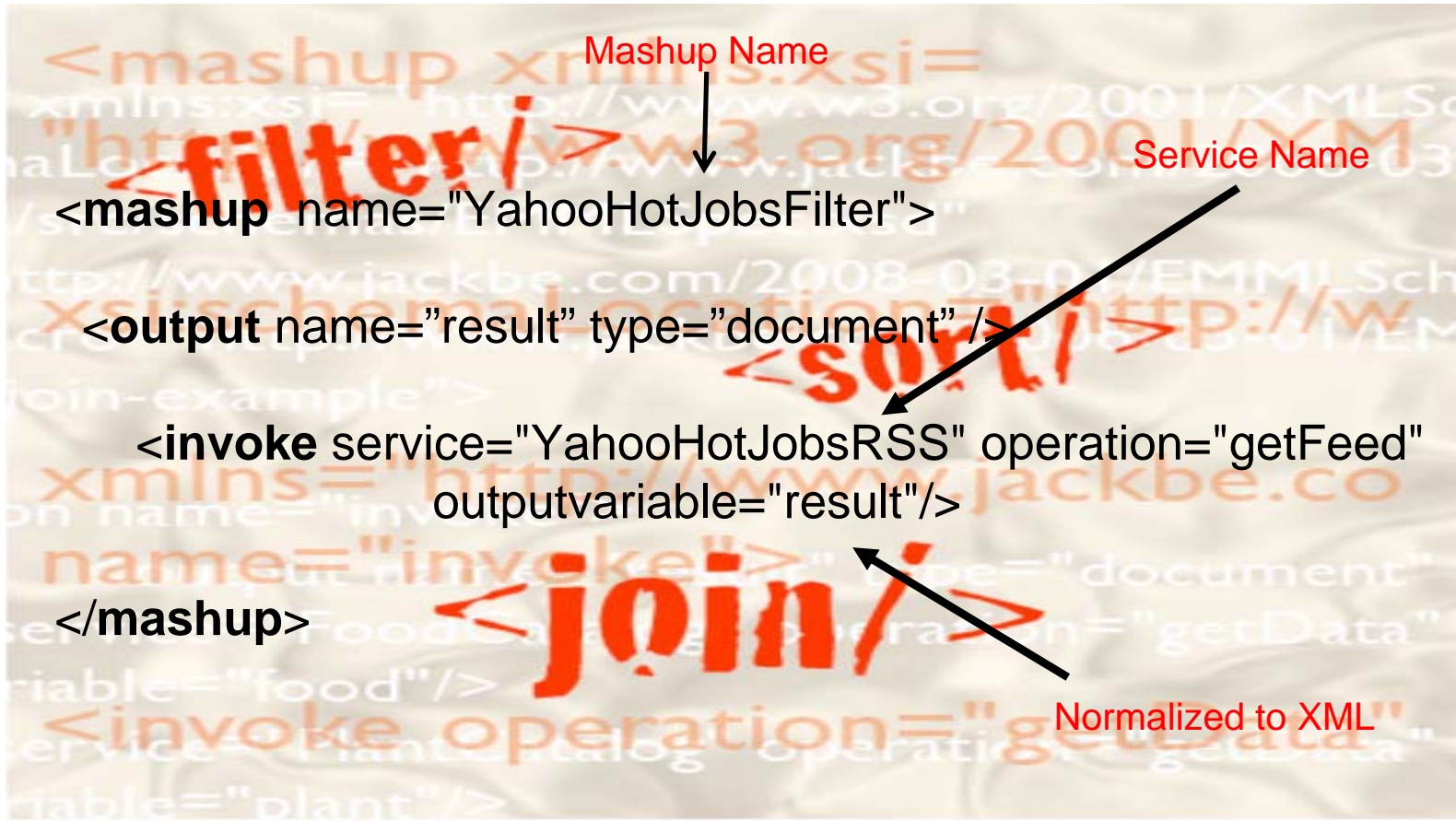
Soundex

Conceptual Matching

Sentiment Calculation

Enterprise Mashup Markup Language (EMML)

Enterprise Mashup Markup Language (EMML) is a declarative XML based language for creating mashups. Data produced by these mashup services can be subsequently consumed via JavaScript/JSON, Java, C# and other languages.



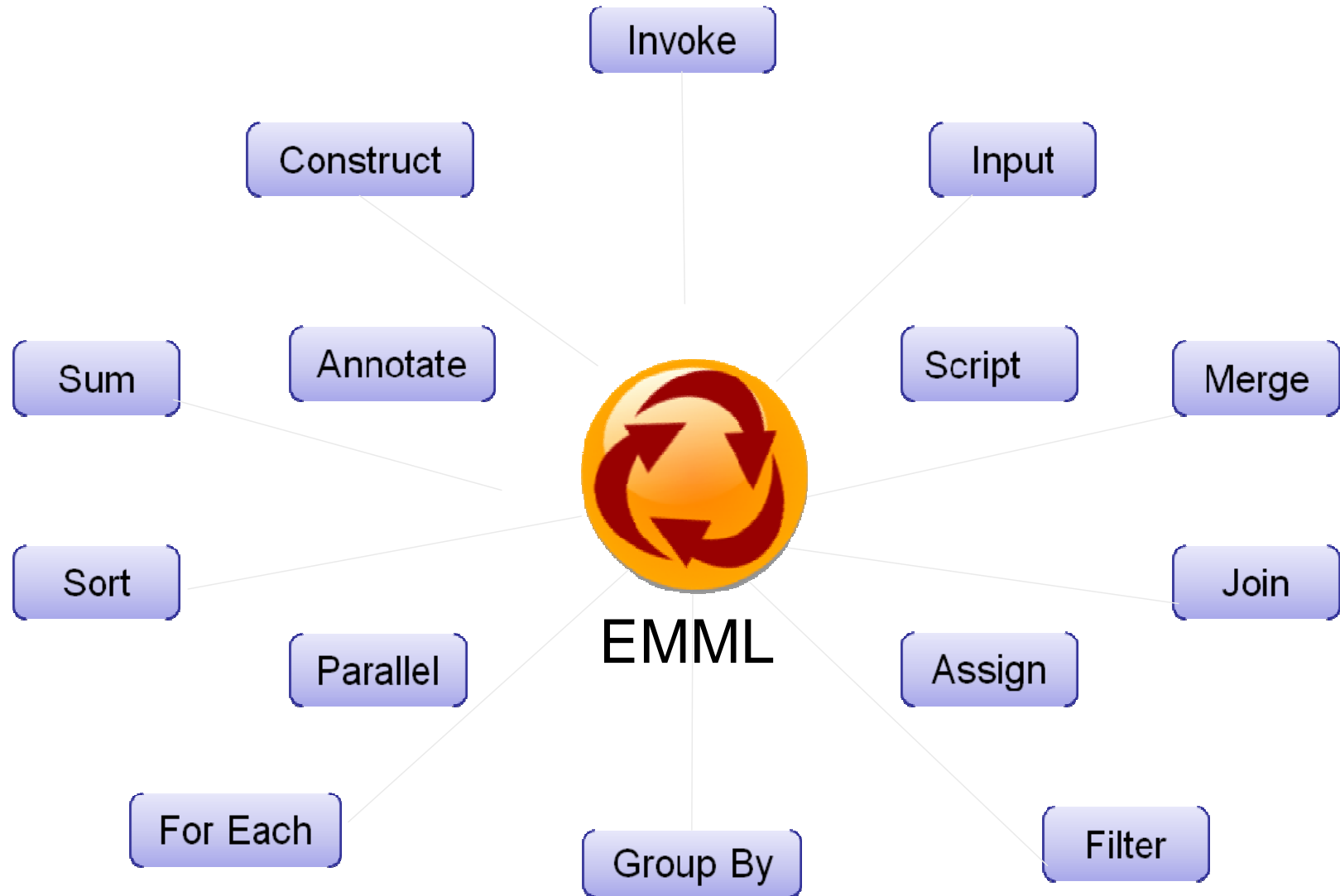
The image shows a snippet of EMML XML code with several annotations. The code is as follows:

```
<mashup xmlns:xsi="http://www.w3.org/2001/XMLSchema-instance" xsi="http://www.w3.org/2001/XMLSchema-instance" type="document" />  
<filter />  
<output name="result" type="document" />  
<invoke service="YahooHotJobsRSS" operation="getFeed" outputvariable="result" />  
</mashup>
```

Annotations with arrows pointing to the code:

- Mashup Name**: Points to the `name="YahooHotJobsFilter"` attribute in the `<mashup>` tag.
- Service Name**: Points to the `service="YahooHotJobsRSS"` attribute in the `<invoke>` tag.
- Normalized to XML**: Points to the `<invoke>` tag.

EMML Mashup Constructs



Deep Dive Demo



And We'll End with a Poll...

What would you like to learn about in our next Mashup webcast?

Poll Results (multiple answers allowed):

| | |
|--|-----|
| Integration with other technologies (BI, portals, SOA, etc.) | 68% |
| Customer examples and exemplar use-cases | 59% |
| Best practices for mashups in the enterprise | 41% |
| The future of enterprise mashups | 27% |
| Something else (email your suggestions to jess@jackbe.com) | 4% |

To Learn More About Enterprise Mashups



<download>



<mdc>

The logo features a stylized orange figure with arms raised above the text. The text is white and enclosed in white angle brackets. The entire logo is set against a dark grey rounded rectangle with a white border and a subtle gradient.

mashup developer community

<http://www.jackbe.com>



<blogs>

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