The Expression Language

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- JSP 2.0 introduced an EL
- EL is very 'page-author' friendly
- Allows page authors a limited form of page scripting

Expression Language

- Nested properties
- Access to collection classes
- Operators (Relational; logical; arithmetic)
- Extensibility functions (mapped to static Java methods)
- A set of implicit objects

Using the Expression Language

Syntax

- Always use **`${expr}`** construct

EL can be used on page

- This will simply output the value of the expression

```
<span>Name: ${user.name}</span>
```

Expression Language in Attributes

EL can be used in attributes

```
<a:name value="${somename}"/>
<a:name value="${last}${first}">
```

Expression Language Operators

Expressions can use operators

- Mathematical
  - + - * / div % mod == eq != ne
  - < lt > gt <= le >= ge
- logical
  - && and ! not || or
- empty operator
  - empty

Accessing JavaBeans

Can get bean property's

- use either . (dot) or [] syntax
  - user.name
  - user["name"]
- can use [] for access to lists, maps, arrays and beans
- Can nest arbitrarily
  - a["name"].first
  - a["name"]["first"]
  - etc...

Implicit Objects

EL has access to a set of implicit objects

- All Maps (except pageContext)

pageContext	pageScope
requestScope	sessionScope
applicationScope	param
paramValues	header
headerValues	cookie
initParam	

```
Host header is ${header.Host}
Host header is ${header["Host"]}
Error status is ${pageContext.errorData.status}
```

Summary

The Expression Language

- Not a "full" language
- Gives access to properties on JavaBeans
- Can use the '.' or '[]' syntax
- Has access to built in intrinsics
- Has a set of operators
- Can access collections

What's Next