

Pre-compiled Server Pages (PSP)



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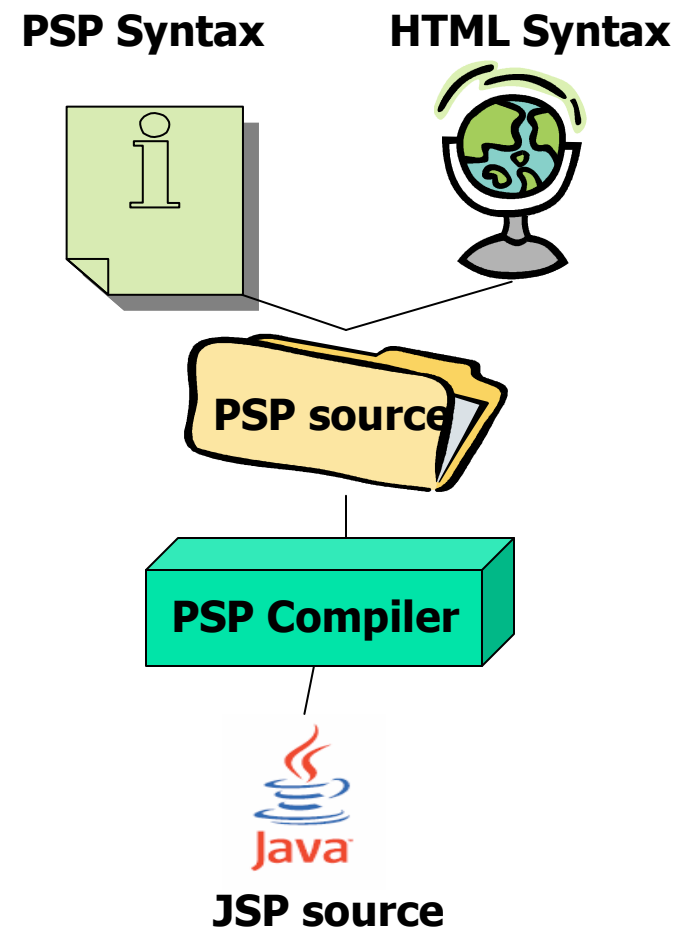


Agenda

- Why the need for PSP? What's the motivation?
- Brief PSP Tutorial w/ examples
- The PSP development process
- Conclusions and lessons learned
- Q&A

What is PSP? What's the motivation?

- PSP Syntax+HTML Syntax → JSP.
- JSPs compiled on application server at runtime.
- Debugging JSP often difficult process.
- Generate JSP w/ 100% Guarantee.
- No need for JSP Pre-compilers.



PSP Tutorial

```
String userName = session.userName;
```

```
<$<html> <head> <title>displayInfo</title> </head>
<body bgcolor=#FFFFFF> <font face="Helvetica">
<h2> Personal Information:$> print(userName); <$</h2>
$>
```

```
String fname = request.fname;
```

```
String lname = request.lname;
```

```
String dob = request.dob;
```

```
String ssn = request.ssn;
```

```
String state = request.state;
```

```
<$
```

```
<table>
```

```
<tr> <td>Key</td> <td>Value</td> </tr>
```

```
<tr> <td>$>print("fname");<$</td> <td>$>print(fname);<$</td> </tr>$>
```

```
<$<tr> <td>$>print("lname");<$</td> <td>$>print(lname);<$</td> </tr>$>
```

```
<$<tr> <td>$>print("dob");<$</td> <td>$>print(dob);<$</td> </tr>$>
```

```
<$<tr> <td>$>print("ssn");<$</td> <td>$>print(ssn);<$</td> </tr>$>
```

```
<$<tr> <td>$>print("state");<$</td> <td>$>print(state);<$</td> </tr>
```

```
</table>
```

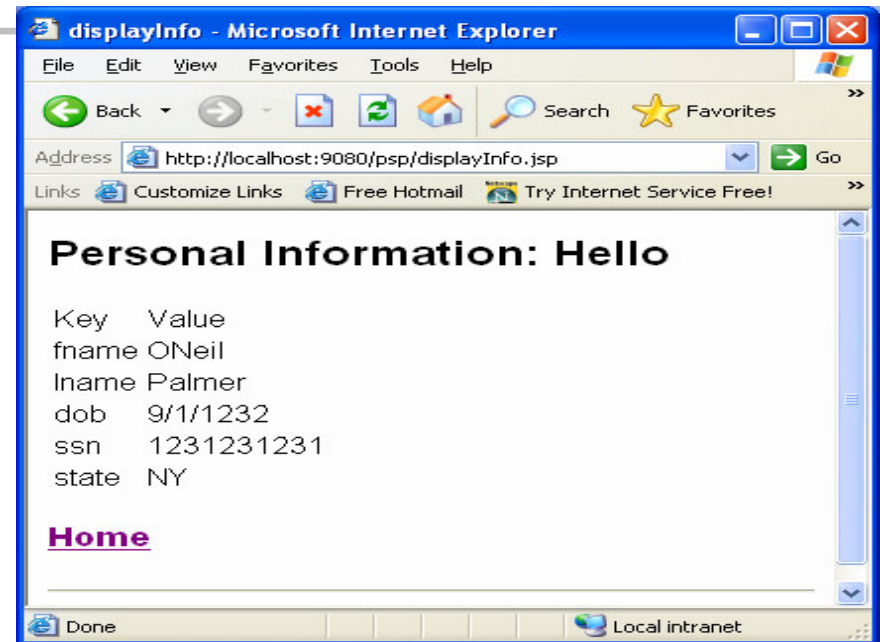
```
$>
```

```
<$
```

```
<a href="/psp/welcome.jsp"><h3>Home</h3></a>
```

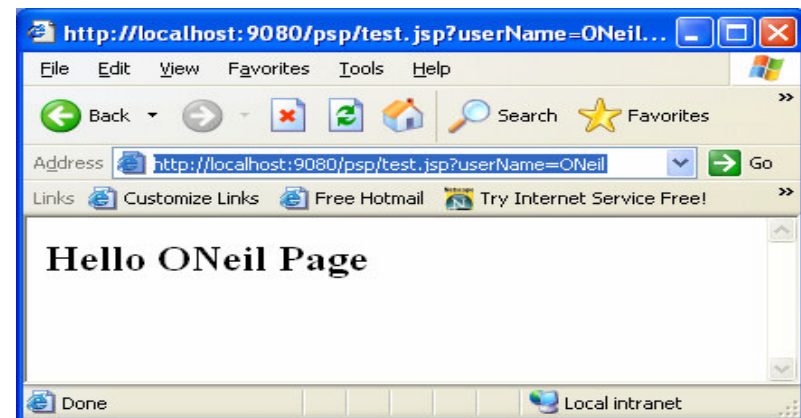
```
<hr></font></body></html>
```

```
$>
```



PSP Tutorial (Cont.)

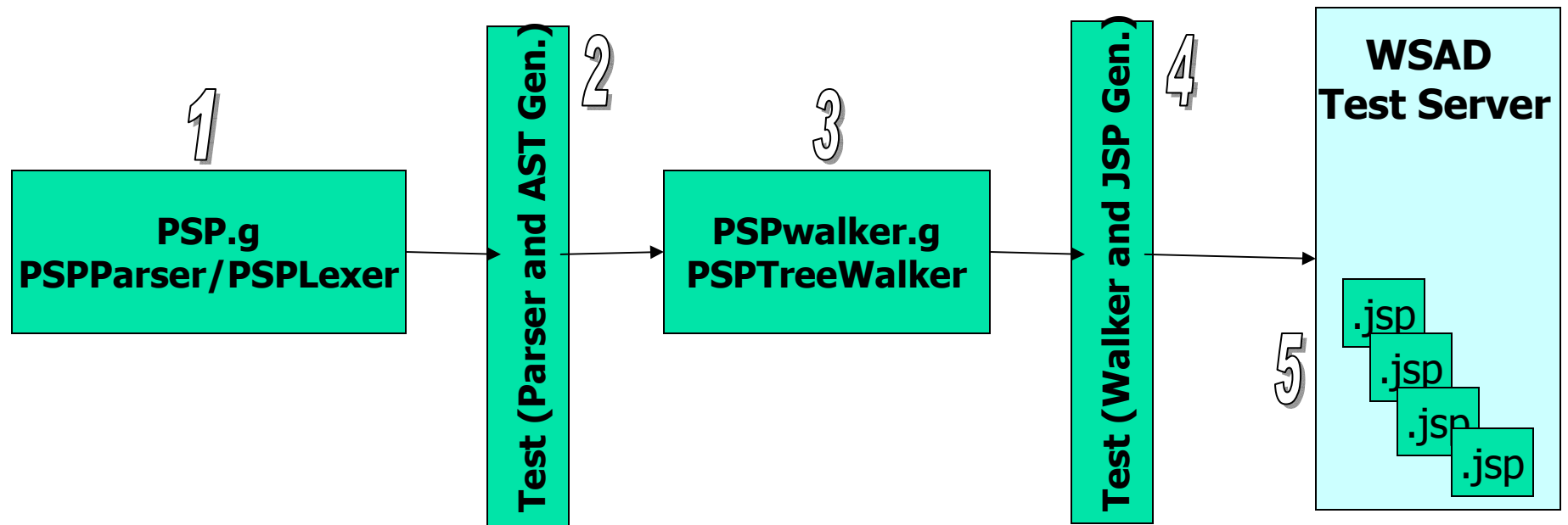
```
/* will display "PSP HelloWorld Page" or "Hello [some name]" page */
<$ <html><head> $>
String name = request.userName;
if(null(name)){
    <$ <h2>PSP Hello World Page</ h2> $>
}else{
    <$ <h2> Hello $> print(name); <$ Page </h2> $>
}
<$ </head > </html> $>
```



- Additional features
 - null, notnull, equals, nequals
 - Nested HTML and PSP

PSP Development Process

- Software: Java 1.4, Antlr 2.74, Junit 3.8
- IDE: IBM Websphere Studio Application Developer
- Makefile tested on clic machines for Linux dist.





Conclusion & Lessons Learned

- PSP is very flexible and be used to develop usable websites.
- ANTLR isn't that difficult but can be a pain.
- Incremental development and testing is key