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Advance

ATA/NodeJS/Advance

Part 4 - Advance

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Embedded JavaScript - EJS

- client-side templating
- V8 Engine
- UTF-8 encoding
- combines data and a template to produce HTML
 - <% %> or [% %] tags
 - <%= %> tag
- HTML content is all file contents outside of EJS delimiters
- Faster development, compilation, rendering and execution



Why EJS?

- Build HTML strings with JavaScript
- AJAX web development with web services
- Application skinning



EJS Support

- NodeJS
 - `npm install ejs`
- Browser
 - <https://github.com/mde/ejs/releases/latest>



EJS Tags

- `<%` 'Scriptlet' tag, for control-flow, no output
- `<%=` Outputs the value into the template (HTML escaped)
- `<%-` Outputs the unescaped value into the template
- `<%#` Comment tag, no execution, no output
- `<%%` Outputs a literal '`<%`'
- `%>` Plain ending tag
- `->` Trim-mode ('newline slurp') tag, trims following newline



Node Options

- **cache** compiled functions, requires **filename**
- **filename** used by cache to key caches, and for includes
- **context** function execution
- **compileDebug** when **false**, no debug instrumentation is compiled
- **client** returns standalone compiled function
- **delimiter** character to use with angle brackets for open/close
- **debug** output generated function body
- **with** Whether or not to use **with() {}** constructs. If **false** then the locals will be stored in the **locals** object.



Include directive

- relative to the template with the **include** call
- requires 'filename' option
- use the delimiter (<%#) tag with your included by directive name and parameters

```
<%#include "srv-res/layout.js" %>
<%#include "/common-srv-res/vocab-1.0/popupvocab.ejs" %>
```



Data + Template = HTML Result

- combines data and a template to produce HTML
- JavaScript executed between <% %>
- HTML outside EJS tags

Data

```
{  title:      'AEN Employees'
   employees:  ['Darren', 'Darrick', 'Daniel']}
```



Template

```
<h1> <%= title %> </h1>
<ul>
  <% for(var i=0; i<employees.length; i++) {%>
    <li><%= employees[i] %></li>
  <% } %>
</ul>
```



EJS Caching

```
<html>
<head>
  <title>EJS caching template</title>
  <script type='text/javascript' src='../javascripts/ejs/ejs.js'></script>
  <style type='text/css'>
    .template {border: dashed 1px green;}
  </style>
</head>
<body>
  <h1>EJS caching</h1>
  <p>Here we demonstrate EJS caching its templates.</p>
  <p>If you check firebug, you can see there is only 1 request for the template.</p>
  <div id='content1' class='template'></div>
  <div id='content2' class='template'></div>
  <a href='caching2.html'>See EJS NOT Caching</a>
  <script type='text/javascript'>
    EJS.config({cache: false});
    new EJS({url: 'templates/content.ejs'}).update('content1', {});
    new EJS({url: 'templates/content.ejs'}).update('content2', {});
  </script>
</body>
</html>
```

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EJS Partial - 1

```
<html>
<head>
  <title>EJS partials example</title>
  <script type='text/javascript' src='../javascripts/ejs/ejs.js'></script>
  <style type='text/css'>
    .template {border: dashed 1px green;}
  </style>
</head>
<body>
  <h1>EJS partials</h1>
  <p>Here we demonstrate EJS's partials.</p>
  <div id='content1' class='template'></div>
  <script type='text/javascript'>
    new EJS({url: 'templates/container.ejs'}).update('content1', {poo : 'on you'});
  </script>
</body>
</html>
```

EJS partials

Here we demonstrate EJS's partials.

This is from the containing template

This is from the partial

This partial was called like:

<%= this.partial({url: 'templates/partial.ejs'}) %>

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<http://www.embeddedjs.com/examples/partial.html>



EJS Partial - 2

container.ejs

```
<h2>This is from the containing template</h2>
<div class='template'>
  <%= this.partial({url: 'templates/partial.ejs'}) %>
</div>
```

partial.ejs

```
<h3>This is from the partial</h3>
<p>This partial was called like:</p>
<code>&lt;%= this.partial({url: 'templates/partial.ejs'}) %&gt;</code>
```

