


Enhanced Web Site Design

Stanford University Continuing Studies CS 22



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CS 22: Enhanced Web Site Design - Week 5

Slide 1 (of 14)

Week 5

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- Unfinished business
 - Server-side Includes
 - JavaScript
 - Cookies

CS 22: Enhanced Web Site Design - Week 5

Slide 2 (of 14)

Server Side Includes (SSI)

- Server-Side Includes allows webmasters to create documents which provide simple information to clients on the fly. Such information can include the current date, the file's last modification date, and the size or last modification of other files. In its more advanced usage, it can provide a powerful interface to CGI and /bin/sh programs.

SSI concerns

- Having the server parse documents is a double edged sword. It can be costly for heavily loaded servers to perform parsing of files while sending them. Further, it can be considered a security risk to have average users executing commands. If you disable the exec option, this danger is mitigated, but the performance issue remains. You should consider these items carefully before activating server-side includes on your server.

SSI syntax

Generally, files are named *.shtml
or *.shtm
(although some servers allow
*.html or *.htm)

```
<!--#command  
tag1="value1"  
tag2="value2" -->
```

SSI commands

- config (<!--#CONFIG SIZEFMT="ABBREV"-->)
 - errmsg: controls what message is sent back to the client if an error includes while parsing the document.
 - timefmt gives the server a new format to use when providing dates
 - sizefmt determines the formatting to be used when displaying the size of a file.
 - Valid choices are bytes, for a formatted byte count (formatted as 1,234,567), or abbrev for an abbreviated version displaying the number of kilobytes or megabytes the file occupies
- include (<!--#INCLUDE FILE="footer.html"-->)
 - file: relative to current file (can't use absolute URL)
 - virtual: used to access files in other directories (can use relative or absolute URL)

SSI commands

- `echo`: prints the value of one of the variables (`<!--#ECHO VAR="REMOTE_HOST" -->`)
 - `DATE_GMT`: current date and time stamp, Greenwich Mean Time
 - `DATE_LOCAL`: current date and time, Local Time (to the server)
 - `DOCUMENT_NAME`: current filename (ie, `index.shtml`)
 - `DOCUMENT_URI`: virtual path to the filename (ie, `/group/its/index.shtml`)
 - `LAST_MODIFIED`: last modification date of the current document; can be GMT or Local, set by issuing `config ssi` command at server level.
 - `SERVER_SOFTWARE`: The name and version of the information server software answering the request
 - `SERVER_NAME`: The server's hostname, DNS alias, or IP address as it would appear in self-referencing URLs
 - `GATEWAY_INTERFACE`: The revision of the CGI specification to which this server complies
 - `SERVER_PROTOCOL`: The name and revision of the information protocol this request came in with
 - `SERVER_PORT`: The port number to which the request was sent
 - `REQUEST_METHOD`: HTTP method: GET OR POST
 - `REMOTE_HOST`: domain name of the client
 - `REMOTE_ADDR`: Numeric IP address of the client
 - `AUTH_TYPE`: client authorization method if any
 - `REMOTE_USER`: If the server supports user authentication, and the script is protected, this is the username they have been authenticated as
 - `CONTENT_TYPE`: MIME type of content
 - `CONTENT_LENGTH`: size of input posted from client
 - `HTTP_ACCEPT`: The MIME types which the client will accept
 - `HTTP_USER_AGENT`: The browser the client is using to send the request

SSI commands

- `filesize` (`<!--#FSIZE FILE="index.html" -->`)
 - `file`: prints the size of the specified file
- `flastmod` (`<!--#FLASTMOD FILE="index.html" -->`)
 - `file`: inserts the last modification date of a given file
- `exec` (`<!--#EXEC CGI="/cgi-bin/counter.cgi" -->`)
 - `cgi`: executes cgi program on server
 - `cmd`: executes unix command

*SSI example:
[http://www.stanford.edu/
people/markb/ssi.shtml](http://www.stanford.edu/people/markb/ssi.shtml)*



```
<html>
<head>
  <title>Server Side Includes Example</title>
</head>
<body>
<h1 align="center">Server Side Include example</h1>
<p>
  <pre>
Date in GMT format: <!--ECHO VAR="DATE_GMT"-->
Date in Local format: <!--ECHO VAR="DATE_LOCAL"-->
Your domain name: <!--ECHO var="REMOTE_HOST" -->
Your IP address: <!--ECHO var="REMOTE_ADDR" -->
Size of this file: <!--#FSIZE file="ssi.shtml" -->
Last time this file was modified: <!--#LASTMOD FILE="ssi.shtml" -->
Your browser: <!--ECHO var="HTTP_USER_AGENT"-->
  </pre>
</body>
</html>
```

Javascript

- Very powerful scripting language that can enhance a website
- Things you can do with javascript include:
 - Rollover effects
 - Calculators
 - Clocks
 - Calendars
 - Form verification
 - Navigation manipulation

Javascript resources

- Great JavaScript tutorial:
 - <http://echoecho.com/javascript.htm>
- JavaScripts:
 - <http://www.javascriptsource.com>
 - <http://www.dynamicdrive.com/>
- Other resources:
 - http://www.webmonkey.com/reference/javascript_code_library/
 - <http://www.cgi-resources.com/>

Using Dreamweaver with Javascript

- <http://www.dreamweaver.com>
 - Dreamweaver Exchange

JavaScript Handouts

- *JavaScript Basics*
- *All About Cookies*

Final Project

- Can either be delivered in person on disk or uploaded to the web (send me the URL).
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