

The Procedure Of Uploading And Processing Files Via The Web Using HTML Forms

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SCSUG Conference October 6-8, 2002

Abstract:

This presentation will provide information to participants on the processes required for file uploads from PC's and processing them on the host system.

Featured are a Multi-purpose web page and a Perl script that controls the upload process. A SAS program is called from Perl to process the uploaded data. The script then directs which page the browser displays.

Sufficient code and instructions will be shown for the savvy user to implement.

Introduction:

Often the data necessary for processing on one computer is located on another. This paper will outline the procedure used to get data located on a PC hard drive, uploaded to the UNIX server. The contents of the file are processed by a SAS program then displayed as a new web page.

Process Overview:

There are four items required to make this happen.

- A web page with a file upload input area.
- A Perl script that handles a file upload.
- The SAS program that reads the contents of the uploaded file and processes it.
- A web page that is displayed when the processing of the data is done.

Process Details:

The process requires two unique things to occur.

The **first** is the presence of an input area for the file name to be uploaded.

Input Area For File Upload

```
<p class="smalltext">Upload File Name:  
<input type="file" name="infile"></p>  
<input type="hidden" name="binmode" value="bin">  
<input type="hidden" name="redirurl"  
value="/cgibin/broker.exe?_program=sample.upload.sas  
&_service=defpool&_pgmopt=I&_debug=000">
```

The **second** is to change the FORM attribute ENCTYPE from the default value of "application/x-www-form-urlencoded" to "multipart/form-data". A JavaScript function (on next page) is used to take care of this. Often the encryption type is omitted. For the purpose of uploading files, it has to contain the value "multipart/form-data".

Example <form> statement

```
<form name="form1"  
Action="/cgi-bin/broker.exe"  
method="post"  
enctype="application/x-www-form-urlencoded"  
class="center"  
onSubmit="return chkAction()";>
```

A Perl script is executed on the web server and receives parameters from the currently displayed web page.

Enough information is passed from the initial web page to Perl and then to the SAS program for its execution.

The Perl script generates a minimal web page that consists of a re-direct URL. The contents of the target URL is passed using a hidden input type.

Perl Generates A Minimal Web Page

```
print "Content-type: text/html\n\n";
print "<html><head><meta HTTP-EQUIV=\"REFRESH\" content=\"0;
url=$redirurl\"></head></html>";
```

The key is the minimal web page generated by Perl containing a "redirected" URL for display. This is passed from the initial web form to Perl.

JavaScript function to change encoding

```
function chkAction()
{
    if (document.form1._pgmopt.value == "U")
    {document.form1.encoding = "multipart/form-data";
      document.form1.action  = "/cgi-bin/newupload.pl";}
    else
    {document.form1.encoding = "application/x-www-form-urlencoded";
      document.form1.action  = "/cgi-bin/broker.exe";}

    return;
} // End of chkAction function
```

Acknowledgements:

The SAS-L list service and to Stig Eide, SAS Technical Support in Norway. He responded to a request that I made on SAS-L, with a documented HTML form and a Perl script.

Programs/Comments:

A complete listing of all the programs is available for download at http://www.ccsi.com/~jshoffman/File_Uploads.zip

For comments or questions please feel free to contact me via email at jshoffman@dbasicorp.com.