

Making Your CGI Scripts Server Independent

If your scripts contain server-dependent code, that is, code which is specific to a particular server, you would need to rewrite code if you ever decided to move your site to a different web server. One such occasion would be if you decided to upgrade to or downgrade from a High Volume account, since these accounts reside on high volume servers. Another occasion would be if you ever decided to reuse your scripts for other accounts, or give your scripts to other people.

You should always try to write code that will run correctly regardless of what web server it runs on. This makes the script extremely portable and very easy to maintain.

The most common kind of server-dependent code is code which accesses files or programs using an absolute path (such as "/www26/web/someid/somefile"). Instead of using the absolute path to your home directory ("/www26/web/someid"), you should instead use the DOCUMENT_ROOT environment variable (`$ENV{DOCUMENT_ROOT}` in Perl) to determine the path of your files or programs within a script.

For example, if a guestbook script reads:

```
# Path to your guestbook file
$guestbook = "/www23/web/examp9/data/guest.html";
```

You should change it to:

```
# Path to your guestbook file
$guestbook = "$ENV{DOCUMENT_ROOT}/data/guest.html";
```

If you are writing scripts for others besides yourself to use, you may wish to take advantage of the many other environment variables which allow you to write server-independent code.

Other Commonly used Server-Independent Codes include:

AUTH_TYPE

* only works if you are viewing a password protected page. If viewing a password protected web page, this will be the "authentication type".

DOCUMENT_NAME

This file's name.

DOCUMENT_URI

This document's URL (path and filename)

GATEWAY_INTERFACE

The name and version number of the Road Runner software running on this server. (CGI/1.1)

HTTP_USER_AGENT

The "user agent" or web browser that the visitor is using. (Mozilla/4.0)

LAST_MODIFIED

The last modification date of the current document. (Tue, 03 Mar 1998)

PATH

The paths available to the "nobody" user of the web server.

REMOTE_USER

* only works if you are viewing a password protected page. If viewing a password protected web page, this will be the "username".

REQUEST_METHOD

The method by which the visitor's web browser is retrieving the web pages. Choices are GET and POST.

REMOTE_HOST

The translated name of your (the visitor's) machine.

REMOTE_ADDR

The IP number of your (the visitor's) machine.

SCRIPT_NAME

The name of the script running.
(/www26/web/someid/somefile)

SERVER_SOFTWARE

The name of the web server software currently running.

SERVER_NAME

This machine's name, or rather, what this machine thinks its name is.

SERVER_PORT

Standard http/web port.

SERVER_PROTOCOL

The name and version number of the protocol running on this server. (HTTP/1.0)

(Note: If you are writing scripts or recipes for use with procmail, you must use the HOME environment variable in place of DOCUMENT_ROOT. CGI environment variables are not available while running under procmail.)