

## PATH\_INFO Changes in the CGI Environment

As implemented in Apache 1.1.1 and earlier versions, the method Apache used to create PATH\_INFO in the CGI environment was counterintuitive, and could result in crashes in certain cases. In Apache 1.2 and beyond, this behavior has changed. Although this results in some compatibility problems with certain legacy CGI applications, the Apache 1.2 behavior is still compatible with the CGI/1.1 specification, and CGI scripts can be easily modified (see below).

### Topics

The Problem .....	1
The Solution .....	1
Compatibility with Previous Servers .....	1

### The Problem

---

Apache 1.1.1 and earlier implemented the PATH\_INFO and SCRIPT\_NAME environment variables by looking at the filename, not the URL. While this resulted in the correct values in many cases, when the filesystem path was overloaded to contain path information, it could result in errant behavior. For example, if the following appeared in a config file:

```
Alias /cgi-ralph /usr/local/httpd/cgi-bin/user.cgi/ralph
```

In this case, user.cgi is the CGI script, the "/ralph" is information to be passed onto the CGI. If this configuration was in place, and a request came for "/cgi-ralph/script/", the code would set PATH\_INFO to "/ralph/script", and SCRIPT\_NAME to "/cgi-". Obviously, the latter is incorrect. In certain cases, this could even cause the server to crash.

### The Solution

---

Apache 1.2 and later now determine SCRIPT\_NAME and PATH\_INFO by looking directly at the URL, and determining how much of the URL is client-modifiable, and setting PATH\_INFO to it. To use the above example, PATH\_INFO would be set to "/script", and SCRIPT\_NAME to "/cgi-ralph". This makes sense and results in no server behavior problems. It also permits the script to be guaranteed that "http://\$SERVER\_NAME:\$SERVER\_PORT\$SCRIPT\_NAME\$PATH\_INFO" will always be an accessible URL that points to the current script, something which was not necessarily true with previous versions of Apache.

However, the "/ralph" information from the Alias directive is lost. This is unfortunate, but we feel that using the filesystem to pass along this sort of information is not a recommended method, and a script making use of it "deserves" not to work. Apache 1.2b3 and later, however, do provide a workaround.

### Compatibility with Previous Servers

---

It may be necessary for a script that was designed for earlier versions of Apache or other servers to need the information that the old PATH\_INFO variable provided. For this purpose, Apache 1.2 (1.2b3 and later) sets an additional variable, FILEPATH\_INFO. This environment variable contains the value that PATH\_INFO would have had with Apache 1.1.1.

A script that wishes to work with both Apache 1.2 and earlier versions can simply test for the existence of FILEPATH\_INFO, and use it if available. Otherwise, it can use PATH\_INFO. For example, in Perl, one might use:

---

## PATH\_INFO Changes in the CGI Environment

---

```
$path_info = $ENV{'FILEPATH_INFO'} || $ENV{'PATH_INFO'};
```

By doing this, a script can work with all servers supporting the CGI/1.1 specification, including all versions of Apache.