

## Introduction to Common Gateway Interface

CGI is a web server's standard way to relay a web user's requests to application programs and to receive the data back and then forward it to the user. It was first introduced in 1993 by NCSA. Perl is the most popular language that is used as a CGI script back then although it is already given that any program which could run on a web server could do the same.

### CGI Processing

The server relays to the CGI script the information about the request when the HTTP server receives a request for the CGI script. There are 4 major ways in which the HTTP server and CGI script communicates:

- 1) Environment variables – environment variables are used by the HTTP server to relay the request data or information to the CGI script.
- 2) Command Line – this is only used for isindex queries.
- 3) Standard input – HTTP server passes to the CGI script the information by means of standard input for HTTP post or put queries.
- 4) Standard output – A script returns a standard output which can be a generated document by the script itself.

#### HTTP Headers:

- Content-type: String
- Expires: Date String
- Location: URL String
- Last-modified: String
- Content-length: String
- Set-Cookie: String

#### GCI Environment Variables:

##### Server Specific Variables

- SERVER\_SOFTWARE
- GATEWAY\_INTERFACE
- SERVER\_NAME

##### Request Specific Variables

- SERVER\_PROTOCOL
- SERVER\_PORT
- REQUEST\_METHOD
- PATH\_INFO
- PATH\_TRANSLATED

- SCRIPT\_NAME
- QUERY\_STRING
- REMOTE\_HOST
- REMOTE\_ADDR
- AUTH\_TYPE
- REMOTE\_USER
- REMOTE\_IDENT
- CONTENT\_TYPE
- CONTENT\_LENGTH