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Subject: SCGI Class

Posted by [jeremy\\_c](#) on Tue, 17 Aug 2010 14:35:26 GMT

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I have created a SCGI class. SCGI is a more simple FastCGI interface. It allows the application to persist between connections, thus respond very quick unlike a CGI program that has to be loaded, initialized, executed and closed for each request.

This really comes in handy when there are expensive start up costs such as a database connection.

An example application:

```
#include <SCGI/SCGI.h>
```

```
class HelloWebApp : public ScgiServer {
```

```
public:
```

```
    HelloWebApp() : ScgiServer(8787)
```

```
    {
```

```
        WhenRequest = HandleRequest;
```

```
    }
```

```
    void HandleRequest()
```

```
    {
```

```
        clientSocket.Write("Content-Type: text/plain\r\n\r\n");
```

```
        clientSocket.Write(Format("Hello, %s!", query["NAME"]));
```

```
    }
```

```
};
```

```
CONSOLE_APP_MAIN
```

```
{
```

```
    HelloWebApp app;
```

```
    app.Run();
```

```
}
```

There are other callbacks such as WhenAccepted, WhenClosed. "query" is public and is an instance of HttpQuery that is automatically populated. "map" is a VectorMap<String,String> that is also automatically populated with the server variables that are passed such as REQUEST\_URI, SERVER\_NAME, etc...

On my NetBook (1.6ghz Atom) the above SCGI app runs ~1200 requests a second. A static hello.txt file is ~1900 requests a second.

I still have a few loose ends to wrap up (post form data, some more general testing) but wondering if anyone else would find this useful and how to share it?

Oh... most web servers (Apache included) have a "mod\_scgi" to interface with this type of application. The applications need not reside on the same computer as the web server, thus they can be distributed and offer load balancing. Advanced servers like Apache can do load balancing themselves internally knowing which SCGI app is in use and which one is not.

For anyone who wants to know more about the SCGI protocol: <http://python.ca/scgi/protocol.txt>

Jeremy

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