Subject: Re: SCGI Class
Posted by Mindtraveller on Thu, 24 Mar 2011 21:44:19 GMT
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I plan using SCGI server class for potentially high-load service and so I make some tests first.
Simple example is created:

```
#include <Core/Core.h>
#include <Web/Web.h>
using namespace Upp;

class MyScgiServer : public ScgiServer
{
public:
 MyScgiServer() :ScgiServer(7000) {}

 virtual void OnRequest()
 {
  Write("HTTP/1.0 200 OK\r\nContent-Type: text/plain\r\n\r\nHello, world!");
 }

private:
};

CONSOLE_APP_MAIN
{
 MyScgiServer server;
 server.Run();
 Cout() << "cleanup exit";
}
```

From the first glance, it works well, at least in junction with nginx/mod_scgi. You may even try no-so-high-load tests which will give you good results:

Quote:

```
$ ab -t 10 -c 8 localhost:7000/
This is ApacheBench, Version 2.3 <$Revision: 655654 $>
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Benchmarking localhost (be patient)
Completed 5000 requests
Completed 10000 requests
Completed 15000 requests
Completed 20000 requests
Completed 25000 requests
Completed 30000 requests
Completed 35000 requests
Completed 40000 requests
Completed 45000 requests
Completed 50000 requests
Finished 50000 requests
```

```
Server Software:
Server Hostname:        localhost
Server Port:            7000

Document Path:          /
Document Length:        13 bytes

Concurrency Level:      8
Time taken for tests:   6.806 seconds
Complete requests:      50000
Failed requests:        0
Write errors:           0
Total transferred:      2900000 bytes
HTML transferred:       650000 bytes
Requests per second:    7346.41 [#/sec] (mean)
Time per request:       1.089 [ms] (mean)
Time per request:       0.136 [ms] (mean, across all concurrent requests)
Transfer rate:          416.11 [Kbytes/sec] received

Connection Times (ms)
              min  mean[+/-sd] median   max
Connect:        0    0   0.3      0      18
Processing:     0    1   1.1      1      48
Waiting:        0    1   0.8      1      46
Total:          0    1   1.2      1      56

Percentage of the requests served within a certain time (ms)
  50%      1
  66%      1
  75%      1
  80%      1
  90%      1
  95%      1
  98%      2
  99%      2
 100%     56 (longest request)
```

The bad thing is that if you try to test with concurrency > 10, your test will fail:

```
Quote:$ ab -t 10 -c 9 localhost:7000/
This is ApacheBench, Version 2.3 <$Revision: 655654 $>
Copyright 1996 Adam Twiss, Zeus Technology Ltd, http://www.zeustech.net/
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Benchmarking localhost (be patient)
apr_socket_recv: Connection reset by peer (54)
Total of 13 requests completed
```

I started investigation on the source of the problem. If you have any clues, you are welcome.