

Blackfoot

A **small**, "commented", **simple** and **FAST** SimpleCGI implementation aimed at primarily supporting **Seaside** in **Squeak** that works with at least **Lighttpd/Cherokee/Nginx** ...pew!



Motivation

- KomHttpServer suffers from "over engineering"
 - TcpService
 - DynamicBindings
 - The whole module "mess"
- Room for optimization
- We almost always deploy behind a proxy anyway
- ...and the SimpleCGI spec is only 100 lines long!



What is SimpleCGI/SCGI?

- Same as FastCGI but much simpler to implement
- Client (the web server) makes a regular Socket connection per HTTP request
- Headers delivered as a netstring
- Response returned on Socket as before



The numbers so far

- Cherokee + Blackfoot
 - 750 req/sec (hw)
- Kom standalone, hello world
 - 350 req/sec (hw)
- Apache proxy + Kom
 - ??? req/sec (hw)



Conclusion on numbers

- Quite a bit faster!
- Much better degradation
- Slight penalty in response time compared to Kom



Design

- Same TCP listen loop as always
- Still forking per request, forking is fast
- Instead of DynamicBindings we use the "Notification trick" used in Seaside
- Only about 6 classes... or well, 2 important :)

