

CS290f - Lecture 9

HTTP is the Web Pipe

Aside: Creating forms in Rails

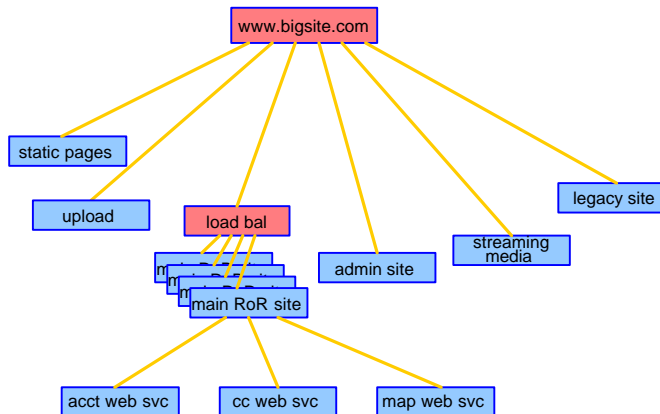
Scalable Internet Services, Fall 2006

Thorsten von Eicken
Department of Computer Science
University of California at Santa Barbara

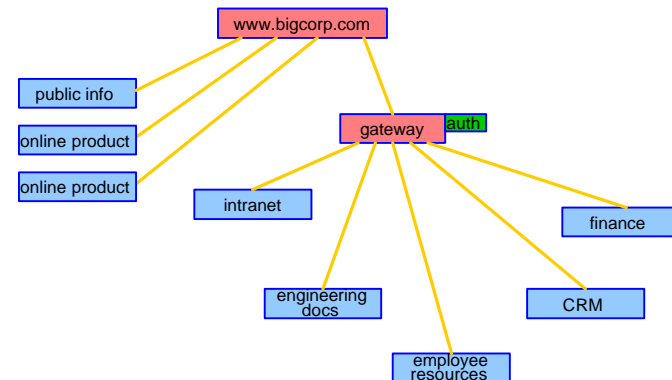
Unix pipe

- `cat /var/log/foo.* | grep '!@#%&*/' | sort +3n -4 | tail -20`
- Pipe
 - Output of one process is *pip*ed into the input of another process
 - Some buffering to isolate the I/O of the processes
 - Typically setup by the shell
- Simple & versatile
 - Text in – text out
 - Few simple conventions
 - ◆ Lines, tabs, commas
 - ◆ File name structure, directories
 - ◆ Regular expressions
 - Shell scripting language
 - More convention than standardization
- No GUI equivalent (?)
 - Drag and drop comes closest, but not used for processing

Glue for a large web site



Glue for a corporations' sites



HTTP as Web Pipe

■ Concept: glue web sites together

- Implement small pieces of functionality
- Glue them together using HTTP
- Similar to Unix pipes: s/text/HTTP/

■ Tools

- Web servers: of all colors
- Reverse proxies: merge sites into single URL space
- Load balancers: replicate servers
- Accelerators: caching, pooling, encrypting requests
- Web services: compose new services out of existing ones
- Web browsers: ubiquitous UI, testing/troubleshooting tool
- HTTPS: wrap encryption around transmissions where needed
- Firewalls: monitor/manage connections (?)
- Log analyzers: analyze traffic, get usage statistics
- Commercial products & enterprise app front-ends: add everything you buy to the mix