Running Web & Mail Servers

eCS as a Web & Messaging Platform

Lewis Rosenthal, CNA, CLE, CLP Principal, Rosenthal & Rosenthal, LLC

Who Am I?

- Principal, Rosenthal & Rosenthal, LLC
- Network consultant since 1987
- Novell certified since 1998
- Certifications include CNA, CLE, and CLP
- Web & mail server admin since 2004
- Presented at Warpstock 2003-2008

So, you wanna be a web host, huh?

- Responsibility
- Cost
- Broadband availability
- Platform choices
- Application choices
- Thankless job (usually)

Prerequisites: Platform Independent

- Broadband (xDSL, xDSL2, cable, fiber, sat)
- Failover broadband
- DNS provider (or run your own)
- Server (minimum of one)
- Router (robust NAT firewall recommended)
- Power protection
- Understanding of technology standards



Familiar OS & interface

- Security through obscurity
- Quite Linux-like (vs Windows-like)
- Availability of current applications
- Not hardware intensive
- Supported on broad range of servers

Why not eCS?

- Clustering difficult (does not scale well)
- Apache web server & ancillary apps ported from Linux (why not just use Linux?)
- Backup issues (file locking)
- Essentially a single-user system
- No IPv6-aware TCP/IP stack
- No 64-bit kernel (possible upgrade problem)

Applications: Closed or Open Source?

Closed Source

Open Source

- Vendor/developer dependence for upgrades & support
 - Possibly not standards-compliant (e.g., IIS)

- Community developed
- Support is questionable
- Roll-your-own builds possible
- Usually standardscompliant
- Well known; broad range of platform support

Why Apache Web Server?

- Most popular web server on the planet
- Supports hundreds of virtual hosts per server
- Highly extensible via modules
- Multi-threaded & SMP-aware

Apache 1.3

Stable

- Maintained by Brian Havard
- IP-based virtual hosts (need separate addresses for each hosted domain)
- Not multi-threaded; SMP-agnostic
- SSL is statically linked, requiring an SSL build of httpd.exe
- Still current updates by ASF

Apache 2.0

Stable

- Maintained by Paul Smedley (unofficially)
- Maintained by Brian Havard (officially)
- Name-based virtual hosts
- Multi-threaded; SMP-aware
- SSL is supported by a loadable module
- Still current updates by ASF

Apache 2.2

- Latest production branch (2.3 is in development)
- Maintained by Paul Smedley (unofficially)
- Name-based virtual hosts
- Multi-threaded; SMP-aware
- SSL is supported by a loadable module
- Improved caching, proxy, and other modules
- Large file support; other scalability enhancements

Getting & Installing Apache 2.2 Web Server

- Current build available for eCS (thanks to Paul Smedley!)
- Obtain latest from http://smedley.info
- Unzip
- Edit paths, etc. in startup.cmd as necessary
- Edit conf\httpd.conf & possibly others under conf\extra (mpm.conf, vhosts.conf, etc.)
- Run startup.cmd

Communigate Pro vs Weasel

Communigate Pro

Weasel

- Closed source; commercial
- Highly standards-compliant
- Feature rich; carrier-class: IMAP, POP3, SMTP, XMPP, SIP, HTTP
- Cluster-enabled
- High cost; annual license renewal for support/upgrades

- Closed source; shareware/commercial
- Standards-compliant
- Standard license supports single domain; POP3, SMTP
- Pro license supports multiple domains; adds IMAP
- No webmail
- Extremely affordable

Getting & Installing Communigate Pro

- Download from http://www.communigate.com
- Unzip
- Edit startup.cmd as necessary (paths)
- Run startup.cmd; wait several minutes for initialization
- Open browser to http://localhost:8010 & follow guide

Other Services

PHP – popular web scripting framework

- Perl popular scripting language
- MySQL popular light-duty database
- Postgres popular medium-duty database
- FTP grand daddy of file servers
- Telnet command session
- SSH secure shell (better than Telnet)
- More...

