Cebu GNU Linux Users Group

Open Source Scalable Proxy Services

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29 December 2000

http://hip2b2.manila.ph/

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Section I

Introduction
Is there a Need for Internet Caching?

- bandwidth shortage
- slow internet connection
- subscribers have more or less common surfing behavior
- shortage of live/routable IPs
- additional layer of security
What does Internet Caching Provide?

- conserve bandwidth
- quicker page retrieval for commonly accessed pages
- provide web-surfing capabilities as an application service
Section II

Squid
Squid

- high performance proxy caching server
- supports HTTP, FTP and gopher traffic
- free and open source software under the GNU GPL
Features

★ means of storing requested objects (data from http, ftp, gopher and etc.) as a system closer to the requesting site than the source
★ keeps meta-data and hot objects in RAM
★ caches DNS lookups and supports non-blocking DNS lookups
★ implements negative caching of failed requests
Cool Stuff Other People Do Not Really Use

- Asynchronous I/O
- LDAP authentication
- Cache Guard
- CARP
Asynchronous I/O

★ spawns multiple squid daemons instead of just one
★ does simulations request broking
★ available for OSes with multithread support
★ implemented via ./configure flag and set in the squid.conf file
LDAP Authentication

- Lightweight Directory Access Protocol
- serves as a storage for user information
- authenticates user before allowing cache usage
- available via ldap-auth module
Cache Guard

★ provides rules for accessible and inaccessible sites
★ a means for filtering viewed websites
★ available via squid add-on cacheguard
CARP

- Cache Array Resolution Protocol
- alternative to ICP (Internet Caching Protocol)
- provides a squid server that “manages” the entire squid pool
Section III

Design
Prototype Design

Ateneo Proxy Farm

INTERNET

UNIVERSITY NETWORK

Fast Ethernet

SLAVE
SLAVE
CASP MASTER

SOCKS/PROXY

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