

Distributed Systems 2

Applications

23 – 3 – 2011

Overview

- Squid Caching Proxy
- Twitter API
- Flickr API

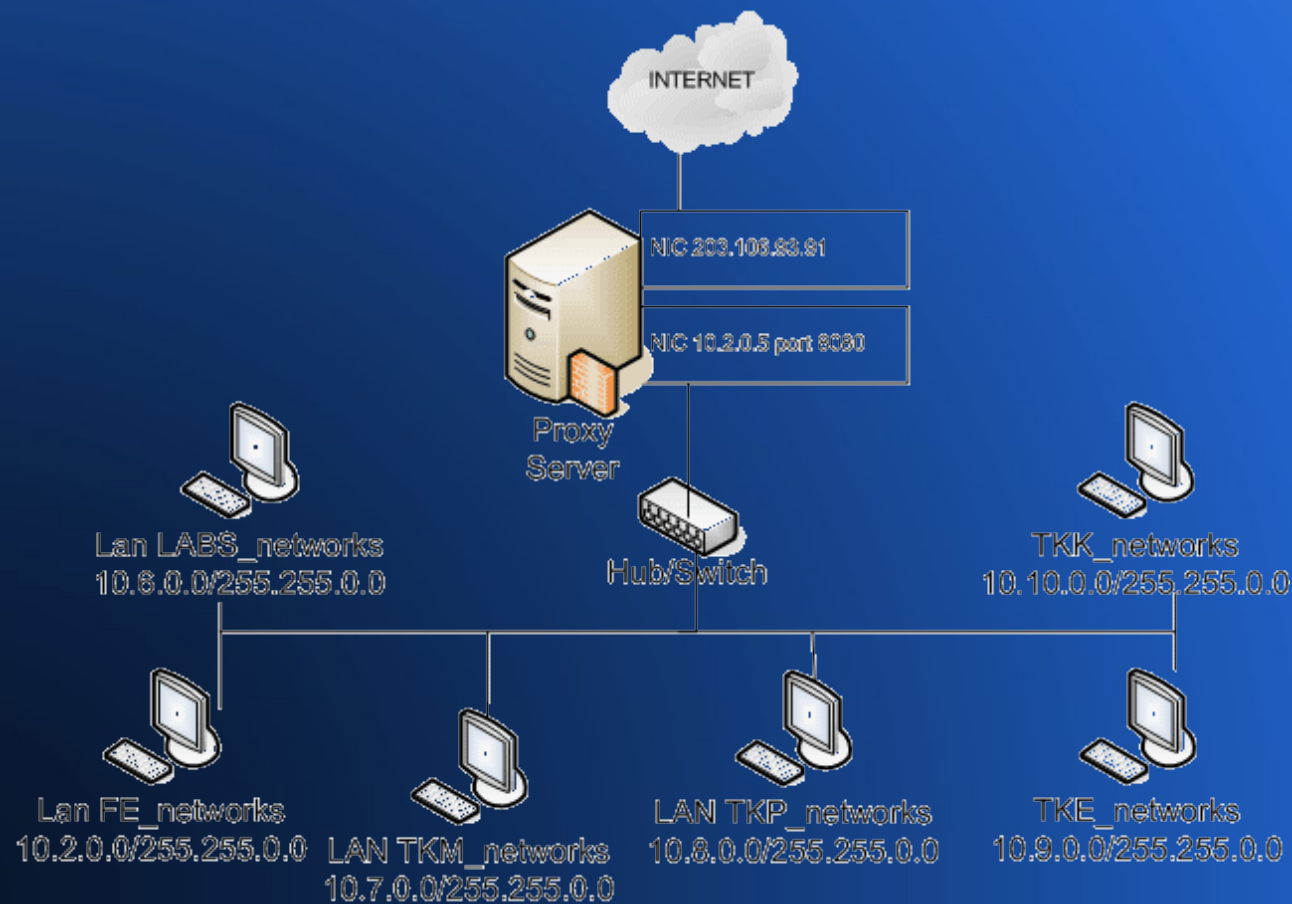
Squid Caching Proxy

- Main Purpose
 - Share one internet connection
 - Maintain cache for web browsing performance
 - Bandwidth Reduction
 - Response Time Improvement
- Additional Features
 - Anonymity (Does not forward client information)
 - Cache Hierarchy
 - OS Compatibility (Linux, Windows etc)

Squid Caching Proxy

- How it works:
 - Client uses Proxy Server as Gateway
 - Client sends data to Proxy Server
 - Proxy Server checks its cache
 - Proxy Server removes Client's Information
 - Proxy Server communicates with Internet
 - Proxy Server sends to client the received data
- Works as Man-in-the-middle

Squid Caching Proxy



Squid Caching Proxy

- Installation:
 - apt-get install squid
- Configuration:
 - vi /etc/squid/squid.conf
 - acl ip1 myip 79.103.47.142
 - tcp_outgoing_address 79.103.47.142 ip1
 - forwarded_for off
 - Acl my_network src 192.168.0.0/24
 - http_access allow my_network
 - /etc/init.d/squid restart

Twitter API

- APIs:
 - REST
 - Representational State Transfer (Access core Twitter data)
 - Search (Search for tweets)
 - Streaming (Stream public statuses in near real-time over a persistent connection)
- Limits on calls and changes per day
- Entirely HTTP-based (GET, POST, DELETE)

Twitter API

- RESTful resource (XML, JSON, RSS, Atom)
- Parameters of API methods have certain expectations
- Pagination limits
- Libraries (C++, Java, PHP, Cocoa, Python etc)
- Authentication via consumer key and secret

Flickr API

- A way of accessing Flickr's data
- Almost all the functionality that runs flickr.com is available through the API
- Completely free to use
- Consists of a set of callable methods, and some API endpoints.
- Limit at 3600 queries per hour
- Authentication at Flickr

Flickr API

- Request Formats (REST, XML, SOAP)
- Response Formats (REST, XML, SOAP, JSON, PHP)
- API Kits (C, Java, PHP, Cocoa, Python etc)

Applications

Thank you

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