

## Daniel Wells – 02/09/2008 – MSc in Computer Science

### Progress Report:

#### --Masters Progress

- FreeBSD
  - Skills are improving, small amount of perl foo
- SNRG Wiki
  - Added section on Tips and Tricks
- Virtual Network Document
  - Added section on Tips and Tricks (copy and paste you ask? Well sort of)
- Squid
  - Upgraded from 2.6 to 2.7 (current)
  - PID Trouble
    - Couldn't run commands like "squid -k reconfigure" would get an error about not finding the PID
    - Thanks Barry for your help
    - Removed the pid\_filename tag from squid.conf (divert to default)
    - Fine now
  - Delay Pools
    - Set up and read about. Buckets etc
    - Delay\_pools, delay\_class, delay\_access delay\_parameters.
  - Dynamic Caching
    - Modified squid.conf (updated it on SNRG wiki)
      - cache allow all
    - YouTube
    - store\_rewrite\_url
  - Error screens
    - Customized to look more like Rhodes'
    - Access Denied
      - You're trying to look at a blacklisted site
    - Cache Access Denied
      - You haven't authenticated yourself
  - Blacklists
    - Blacklist of porn category (Shalla secure services)
    - Lots of Squid warnings
      - *This domain is a sub-domain of that domain*
    - Still kind of works... But surely there is a better way...
  - SquidGuard
    - Played with, couldn't quite get it working, got over it
    - Rewrites URLs and implements black lists

- FreeRADIUS, adding new users and MySQL
  - Make sure you installed with SNMP and MySQL support...
  - When setting up the MySQL database, create with schema.sql AND nas.sql in `/usr/local/etc/raddb/sql/mysql/`
  - Edit `/usr/local/etc/raddb/sites-available/default`
    - Uncomment sql in `authorise()` and `accounting()` sections
  - Users file
    - When adding users, make sure to add the *Fall-Through = "1"* line to all users or the search for your user does not continue further in the file...
  - MySQL
    - Done!
    - Up and running, not using the users file anymore
  - Usernames have a minimum of 4 characters. I'm sure there must be a setting somewhere to fix this. This gave me hell for a while when you're trying to test for a user named "dan" which doesn't work but the user "test" does. Strange.

## --Next Up

- User Management
  - Adding, Deleting and Editing users
  - Putting users into groups
    - Groups exist on both FreeRADIUS and LightSquid. Obviously LightSquid has no jurisdiction here but will see how I can integrate the two.
  - Groups can be aligned with delay pools as well.
  - With MySQL serving the users database on FreeRADIUS server, this should be fairly straight forward? A couple SQL queries?
  - Some form of front end.
- Delay Pools and quota
  - Get some graphs of the delays in action
  - Start to plan some form of quota system
    - Time frame? (Rhodes two weeks system?)
    - Pull data from Squids access.log?
- Virtual Network Document
  - Update
  - Squid settings, delay pools, dynamic caching, error screens
  - FreeRADIUS and MySQL. YAY!