NOC TOOLS
rancid

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Sunday Folayan

rancid

- How do you know when your routers and switches have been reconfigured?

- Suppose you find out that you had a customer problem that started at 3pm, four days ago

  - how do you tell what configuration change caused the problem?

rancid

- RANCID stands for **R**eally **A**wesome **N**etwork **C**onf**I**g **D**iffer

  - very silly name

  - sorry about that

rancid

- rancid is a collection of scripts which will

  - log into a router or switch

  - retrieve the config, and a bunch of other stuff

  - store the information

  - if there are changes, send notification mail

Version History

- Rancid stores its configuration in CVS

  - **C**oncurrent **V**ersioning **S**ystem

  - normally used by software developers to manage source code

- CVS provides the ability to retrieve old versions of files, and to compare different versions of files

How Often?

- By default, rancid will try to contact every router every hour

    - but you can change that, if you want

- Contacts several routers in parallel

- Writes logs describing what happened, and sends mail if it can't contact a router for a long time (4 hours, normally)

Pile of Configs

- What can you do when you have a collection of router configs stored in a directory?

- What kinds of questions can you now answer quickly?

Examples

- `grep 196.200.223.254 *`

- `grep 'Started' *`

- `grep 'Image: Software:' *`

- `grep '12.2(15)' *`

More JAbley Examples

- http://www.nanog.org/meetings/nanog26/presentations/stephen.pdf

- ftp://ftp.isc.org/isc/toolmakers/

- Lots of scripts there which do exotic things

  - checking config

  - making maps, etc

How to Install

- On FreeBSD, it's easy, it's in ports:

  - `cd /usr/ports/net-mgmt/rancid`

  - `make install`

- It's also easy to install from source

- hint: find and read the file "README"

After Installing...

- ... there is a little bit of configuration work to do

  - make "rancid" user and group

  - fix some ownership, permissions

  - edit a configuration file

  - run a setup script

  - edit rancid's crontab

Extra Fun

- CVSWeb is a tool which can show you CVS version history without having to understand CVS

  - works through a browser

  - installed on noc.ws.afnog.org

  - http://noc.ws.afnog.org/cvsweb.cgi

Exercise