

NOC TOOLS

rancid

AfNOG 2008, SI-E, Friday, 4 of 5

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 config change caused the problem?

rancid

- RANCID stands for **R**eally **A**wesome **N**etwork **C**onfig **D**iffer
- very silly name
- sorry about that

rancid

- rancid is a collection of scripts which will
 - log in a router or switch
 - retrieve the config, and a bunch of other stuff
 - store the information
 - if there are changes, send 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 'Redundant Power System is not present' *`
- `grep 'Image: Software:' *`
- `grep '12.2(15)' *`

More Examples

- <http://www.nanog.org/mtg-0210/abley.html>
- <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/cgi-bin/cvsweb.cgi/>

Exercise