

Configuration Management with RANCID

What is RANCID?

- The “Really Awesome New Cisco config Differ”!
- A configuration management tool:
- Keeps track of changes in the configs of your network equipment (Cisco, HP, Juniper, Foundry, etc.)
- Works on routers and switches



What is RANCID?

Automates retrieval of configs & archives them

Functions as:

- Backup tool - "woops, my router burned"
- Audit tool - "how did this error get in?"
- Blame allocation :) - "who did it?"

Rancids collected data is stored in a VCS, either of:

- CVS (Concurrent Versions Systems)
- SVN (SubVersion)

What is Version Control?

Three basic principles:

1. Keep a record and history of changes
2. Give public access to the information
3. Maintain different versions from the same data set

What types of data?

- Source code
- Documentation
- Configuration files
- Generally, any type of data...

How does RANCID work?

Run through a script (manually or automated)

Lookup list of groups and for each device in each list of groups:

- Connect to the equipment (telnet, ssh, ...)
- Run "show" commands – config, inventory, ...
- Collect, filter/re-format data
- Retrieve the resulting config files
- CVS/SVN check-in the changes
- Generate a diff from the previous version
- E-mail the diff to a mail address (individual or group)

Why use RANCID?

- Track configuration changes
- Track hardware changes (S/N, modules)
- Track image/OS changes (IOS, CatOS versions)
- Find out what your colleagues have done without telling you!
- Recover from accidental configuration errors (anyone have stories?)

Post Processing use

- Run traditional filtering commands on your configs (grep, sed, for information)
- Re-use the automated login tools to build your own batch tools or do interactive login
- On large configurations, you can parallelize operations

Other Operations

- Automated checks (verify configs for strange/inconsistent setup)
- Generate DNS file from equipment list
- Use IP address adjacency to produce a graph of your network



QUESTIONS And Answers

Thank You

www.kenet.or.ke

Jomo Kenyatta Memorial
Library, University of Nairobi
P. O Box 30244-00100, Nairobi.
0732 150 500 / 0703 044 500