SOP FOR RANCID SERVER

Backing up of network configuration files is an essential network engineering maintenance activity. Rancid, is a very popular, reliable and effective application that should capably handle most of your needs.

Servers ip : 10.128.3.15 RANCID-IDC

Path of file where we have to make entry of device ip along with passwd method

File 1) /var/rancid/.cloginrc

Example

```
#add userprompt 10.26.3.23 username
#add method 10.26.3.23 telnet
#add enauser 10.26.3.23 (idc-rancid)
#add password 10.26.3.23    (R7W=x$2N)   (R7W=x$2N)

add method 10.26.3.11   ssh
add password 10.26.3.11    (R7W=x$2N)   (R7W=x$2N)

add method 10.66.0.179   ssh
add password 10.66.0.179    (R7W=x$2N)   (R7W=x$2N)

add method 10.66.0.180   ssh
add password 10.66.0.180    (R7W=x$2N)   (R7W=x$2N)

add method 10.66.0.181   ssh
add password 10.66.0.181    (R7W=x$2N)   (R7W=x$2N)

#add method 10.26.98.4   ssh
#add password 10.26.98.4    (R7W=x$2N)   (R7W=x$2N)
```

Path List of all network devices that need to be backed up.

The router.db file is the device list rancid uses to do its backups. It has the format:

```
dns-name-or-ip-address:device-type:status
```

Where dns-name-or-ip-address is the hostname or IP address of the device, device-type is the expected type of operating system the device should be running and status (which can be up or down) which determines whether the device should be backed up or not. This example is for a Cisco device with an IP address of 192.168.1.1.

```
192.168.1.1:cisco:up
```

File 2) /var/rancid/networking/router.db.

```
10.66.0.64:cisco:up
10.66.0.65:cisco:up
10.66.0.66:cisco:up
10.66.0.69:cisco:up
10.66.0.70:cisco:up
10.66.0.71:cisco:up
10.66.0.74:cisco:up
10.66.0.75:cisco:up
10.66.0.76:cisco:up
10.66.0.77:cisco:up
10.66.0.87:cisco:up
10.66.0.12:cisco:up
10.66.0.13:cisco:up
"router.db" 539L, 11472C
```

Path of All the location of all Network Device configuration

File 3) /var/rancid/networking/configs/

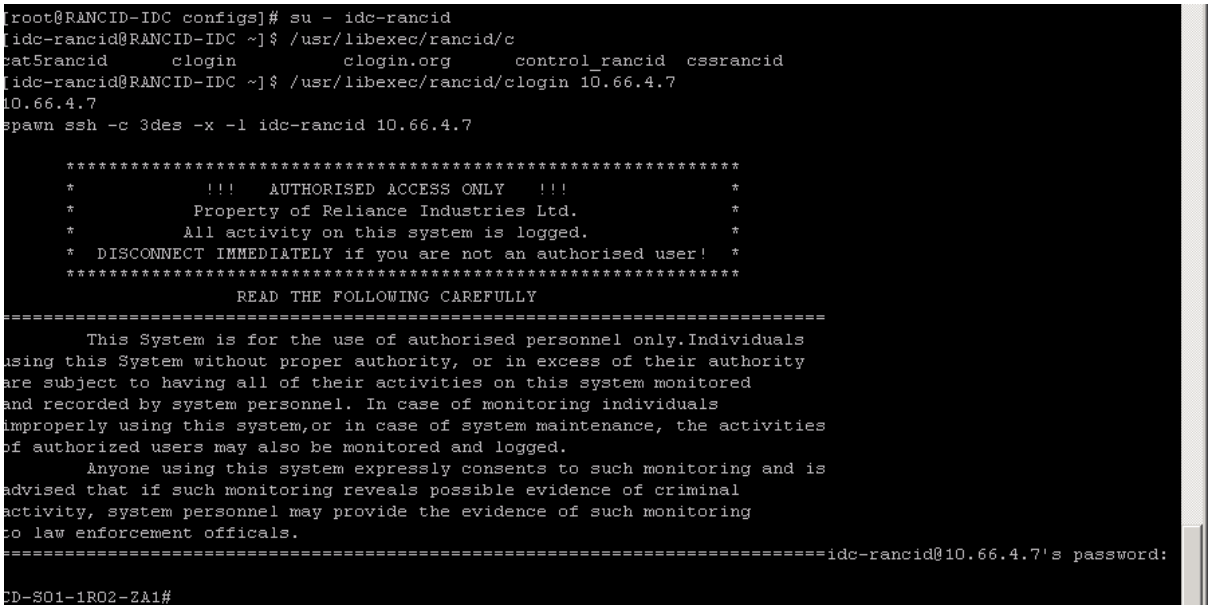
```
-rw-r--r-- 1 idc-rancid rancid   26876 Sep 21 00:54 10.66.2.50
-rw-r--r-- 1 idc-rancid rancid  918479 Sep 21 00:55 10.66.2.60
-rw-r--r-- 1 idc-rancid rancid   13691 Sep 21 00:55 10.66.2.68
-rw-r--r-- 1 idc-rancid rancid  145954 Sep 21 00:55 10.66.3.10
-rw-r--r-- 1 idc-rancid rancid  146333 Sep 21 00:55 10.66.3.2
-rw-r--r-- 1 idc-rancid rancid   27380 Sep 21 00:55 10.66.3.3
-rw-r--r-- 1 idc-rancid rancid   24183 Sep 21 00:55 10.66.3.4
-rw-r--r-- 1 idc-rancid rancid   29843 Sep 21 00:55 10.66.3.5
-rw-r--r-- 1 idc-rancid rancid   24790 Sep 21 00:55 10.66.3.6
-rw-r--r-- 1 idc-rancid rancid   14377 Sep 21 00:55 10.66.4.7
-rw-r--r-- 1 idc-rancid rancid  731798 Sep 21 00:56 10.67.137.68
-rw-r--r-- 1 idc-rancid rancid   79451 Sep 21 00:55 10.67.138.252
-rw-r--r-- 1 idc-rancid rancid   17829 Sep 21 00:55 10.67.139.113
-rw-r--r-- 1 idc-rancid rancid   17609 Sep 21 00:55 10.67.139.115
-rw-r--r-- 1 idc-rancid rancid   28348 Sep 21 00:55 10.67.7.1
-rw-r--r-- 1 idc-rancid rancid   23166 Sep 21 00:55 10.67.7.3
-rw-r--r-- 1 idc-rancid rancid  137347 Sep 21 00:55 10.68.112.4
drwxr-xr-x 2 idc-rancid rancid    4096 Sep 21 00:58 CVS
[root@RANCID-IDC configs]# pwd
/var/rancid/networking/configs
```

Testing A Login for a Single Device

The clogin script in the bin directory can be used to read the .cloginrc file as part of an interactive test.

su - idc-rancid

path : /usr/libexec/rancid/clogin X.X.X.X



Testing For All Devices

The rancid-run script in the bin directory can be used to read the .cloginrc file as part of a complete test.

Path : /usr/bin/rancid-run

/usr/libexec/rancid/rancid-run

Troubleshooting Using the Rancid Log Files

The var/logs/ directory contains all the rancid logs sorted by date as we can see here.

Path : cat /var/log/rancid/

Possible Reasons for Failure

1. From time to time, Rancid will fail, usually for configuration file or connectivity reasons. In these cases the log file entries.
2. The IP address or DNS name used in the router.db file is incorrect.
3. The device type entry in the router.db file is incorrect.
4. For Cisco devices, the login device prompt doesn't end in a ">".

5 The device is inaccessible from the server running Rancid.
6 The password information in the .clogin.rc file is incorrect.
7 A device accessible by only SSH was replaced and the SSH keys on the device were not regenerated. A tell tale sign is that SSH sessions will get "connection refused" messages like this one:
8 The rancid-run command was previously run from the command line and was aborted using <CTRL-C>. This causes a lock file to be left behind. A new instance of Rancid will not run unless this file is deleted. In our case the file name is:

```
/tmp/.networking.run.lock
```

Getting Rancid Help

Configuration help can be found in the /usr/local/rancid/README file, but this is often insufficient. Better assistance can be obtained as seen in the following sections.

You can use the man -M /usr/local/rancid/man <filename> to get help on the use of any file in the rancid directory tree. In this example there is help on the router.db file.

```
[rancid@bigboy ~]$ man -M /usr/local/rancid/man router.db
```