Enterprise Linux 7 (RedHat, CentOS)

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Command cheat sheet for EL7. For every action, I try to give the 'canonical' command, as recommended by RedHat. That means using systemd, NetworkManager, journald, etc.

Network configuration

Action	Command
List interfaces (and IP addresses)	ip address, ip a
Route table	ip route,ip r
DNS servers	cat /etc/resolv.conf

NetworkManager

Action	Command
Show available network connection profiles	nmcli connection show
Show active network connection profiles	nmcli connection show active
Show network device status	nmcli device status
Connect to profile CONNECTION	nmcli connection up id CONNECTION
Disconnect profile CONNECTION	nmcli connection down id CONNECTION
Query Wifi status	nmcli radio wifi
Turn Wifi on/off	nmcli radio wifi {on,off}
List available wireless networks	nmcli device wifi list
Refresh list of wireless networks	nmcli device wifi rescan
Connect to wireless network SSID	nmcli device wifi connect SSID

connection and device can be abbreviated to con and dev, respectively.

Resources

- RedHat Enterprise Linux 7 Networking Guide
- Fedora Wiki: Networking/CLI

Managing services with systemctl

Action	Command
List services	systemctl list-units —type service
Query SERVICE status	sudo systemctl status SERVICE.service
List failed services on boot	sudo systemctl —failed
Start SERVICE	sudo systemctl start SERVICE.service

Action	Command
Stop SERVICE	sudo systemctl stop SERVICE.service
Restart SERVICE	sudo systemctl restart SERVICE.service
Kill SERVICE (all processes) with SIGTERM	sudo systemctl kill SERVICE.service
Kill SERVICE (all processes) with SIGKILL	sudo systemctl kill -s SIGKILL SERVICE.service
Start SERVICE on boot	sudo systemctl enable SERVICE.service
Don't start SERVICE on boot	sudo systemctl disable SERVICE.service

Resources

- RedhHat 7 System Administrator's Guide
- Systemd for Administrators, Part IV: Killing Services

Perusing system logs with journalctl

Viewing logs requires root privileges. However, users that are members of the adm group get access as well. So, add your user to the adm group to make viewing logs easier.

Action	Command
Show log since last boot	journalctl -b
Kernel messages (like dmesg)	journalctl -k
Show latest log and wait for changes	journalctl -f
Reverse output (newest first)	journalctl -r
Show only errors and worse	journalctl -b -p err
Filter on time (example)	journalctl -since=2014-06-00 -until="2014-06-07 12:00:00"
Since yesterday	journalctl —since=yesterday
Show only log of SERVICE	journalctl -u SERVICE
Match executable, e.g. dhclient	journalctl /usr/sbin/dhclient
Match device node, e.g. /dev/sda	journalctl /dev/sda

Resources

• Systemd for Administrators, Part XVII: Using the journal

TODO, ideas

- · Setting host name
- Changing keyboard mapping
- · Locale settings
- Using the firewall (firewalld) See Security Guide
- SELinux
- Managing a network card (e.g. use DHCP, or static IP configuration)

- Config files
- Runlevels vs targets, e.g. systemctl isolate rescue.targetinstead of telinit 1; systemctl set-default -f multi-user.target to boot into text mode, etc.