RHEL: Services basic management - chkconfig

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RHEL: Services basic management - chkconfig

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# Tested on RHEL 5 & 6



# If one of "on", "off", "reset", or "resetpriorities" is specified
after the service name,
# 'chkconfig' command changes the startup information for  the
specified  service. The "on"
# and "off" flags cause the service to be started or stopped,
respectively, in the runlevels
# being changed.

# The "reset" flag resets the on/off state for all runlevels for the
service to whatever is
# specified in the init script in question, while the
"resetpriorities" flag resets the
# start/stop priorities for the service to whatever is specifed in
the init script.

# By default, the "on" and "off" options affect only runlevels 2, 3,
4, and 5, while "reset"
# and "resetpriorities" affects all of the runlevels.  The "--level"
option may be used to
# specify which runlevels are affected.

# Note that for every service, each runlevel has either a start
script or a stop script.
# When switching runlevels, init will not restart an already-started
service, and will not
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# re-stop a service that is not running.

# 'chkconfig' also can manage xinetd scripts via the means of
xinetd.d configuration files.
# Note that only the "on", "off", and "--list" commands are supported
for xinetd.d services.



# For example, random.init has these three lines in its header:

# chkconfig: 2345 20 80
# description: Saves and restores system entropy pool for
#              higher quality random number generation.

# This says that the random script should be started in levels 2, 3,
4, and 5, that its start
# priority should be 20, and that its stop priority should be 80.




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# Creating a service
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# To create a new service on RHEL we have to run following command:

root@<server>:/#> chkconfig --add <service_name>

# Requirements:
#  - An executable script must exit under /etc/init.d with the name
<service_name>
#  - As already pointed, this script must contain a valid header:

      #!/bin/bash

      # Start script for XXXXX service
```

```
     # chkconfig: - 85 15
     # description: XXXXX
     # processname: <nombre_proceso>
     # pidfile: /var/run/<nombre_proceso>.pid
     # config:


# "chkconfig --add" creates, if they don't exist already, the "stop"
links to service
# script. For instance:



root@<server>:/#> find /etc -name "*<service_name>*"
   /etc/rc.d/init.d/<service_name>
   /etc/rc.d/rc0.d/K15<service_name>
   /etc/rc.d/rc1.d/K15<service_name>
   /etc/rc.d/rc2.d/K15<service_name>
   /etc/rc.d/rc3.d/K15<service_name>
   /etc/rc.d/rc4.d/K15<service_name>
   /etc/rc.d/rc5.d/K15<service_name>
   /etc/rc.d/rc6.d/K15<service_name>




# ------------------------------------------------------------------
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# Verifying service status
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# Once service has been created we can check status of run levels by
running following command:

root@<server>:/#> chkconfig --list <service_name>
   <service_name>          0:off   1:off   2:off   3:off   4:off
```

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5:off   6:off




# ------------------------------------------------------------------
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# Customizing run levels
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# To customize service activation, via the different startup levels,
we use
# "chkconfig --level NNNN <service_name> on" command where NNNN is
the level number(s)
# where our service will be enabled

root@<server>:/#> chkconfig --level 2345 <service_name> on

root@<server>:/#> chkconfig --list <service_name>                 #
Check
   <service_name>          0:off   1:off   2:on    3:on    4:on
5:on    6:off

root@<server>:/#> find /etc -name "*<service_name>*"              #
Check
   /etc/rc.d/init.d/<service_name>
   /etc/rc.d/rc0.d/K15<service_name>
   /etc/rc.d/rc1.d/K15<service_name>
   /etc/rc.d/rc2.d/S15<service_name>
   /etc/rc.d/rc3.d/S15<service_name>
   /etc/rc.d/rc4.d/S15<service_name>
   /etc/rc.d/rc5.d/S15<service_name>
   /etc/rc.d/rc6.d/K15<service_name>


root@<server>:/#> chkconfig --level 45 <service_name> off
```

```
root@<server>:/#> chkconfig --list <service_name>                  #
Check
   <service_name>          0:off   1:off   2:on    3:on    4:off
5:off    6:off

root@<server>:/#> find /etc -name "*<service_name>*"               #
Check
   /etc/rc.d/init.d/<service_name>
   /etc/rc.d/rc0.d/K15<service_name>
   /etc/rc.d/rc1.d/K15<service_name>
   /etc/rc.d/rc2.d/S15<service_name>
   /etc/rc.d/rc3.d/S15<service_name>
   /etc/rc.d/rc4.d/K15<service_name>
   /etc/rc.d/rc5.d/K15<service_name>
   /etc/rc.d/rc6.d/K15<service_name>




# ------------------------------------------------------------------
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# Removing service
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# To remove start/stop links to service script:

root@<server>:/#> chkconfig --del <service_name>


root@<server>:/#> chkconfig --list <service_name>                  #
Check
   service <service_name> supports chkconfig, but is not referenced
in any runlevel (run 'chkconfig --add <service_name>')


root@<server>:/#> find /etc -name "*<service_name>*"               #
Check
```

```
   /etc/rc.d/init.d/<service_name>




# ------------------------------------------------------------------------
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# Managing service
# ------------------------------------------------------------------------
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# From now on, and depending on script design, service can be managed
using "service" command

root@<server>:/#> service <service_name> [ start | stop | restart |
... ]




# ------------------------------------------------------------------------
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# Example: 'bluetooth' service
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root@<server>:/#> ll /etc/init.d/bluetooth
-rwxr-xr-x 1 root root 1477 Jul  9  2008 /etc/init.d/bluetooth


root@<server>:/#> cat /etc/init.d/bluetooth
   #!/bin/sh
   #
   # bluetooth:    Start/stop bluetooth services
   #
   # chkconfig:    2345 25 90
   # description:  Bluetooth services for service discovery,
authentication,
```

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#               Human Interface Devices, etc.
#


# Source function library.
. /etc/rc.d/init.d/functions

UART_CONF="/etc/bluetooth/uart"

[ -e /etc/sysconfig/bluetooth ] && . /etc/sysconfig/bluetooth

start_uarts()
{
        [ -f $UART_CONF ] || return
        grep -v '^#' $UART_CONF | while read i; do
                /usr/sbin/hciattach $i
        done
}

stop_uarts()
{
        killproc hciattach > /dev/null 2>&1
}

start()
{
        echo -n $"Starting Bluetooth services:"
        daemon /usr/sbin/hcid
        touch /var/lock/subsys/hcid
        daemon /usr/sbin/sdpd
        touch /var/lock/subsys/sdpd
        [ "$HID2HCI_ENABLE" = "true" ] && hid2hci --tohci >
/dev/null 2>&1 || :
        start_uarts
        rfcomm bind all
        touch /var/lock/subsys/bluetooth
        echo ""
}
```

```
  stop()
  {
          echo -n "Stopping Bluetooth services:"
          stop_uarts
          rfcomm release all
          [ "$HID2HCI_UNDO" = "true" ] && hid2hci --tohid >
/dev/null 2>&1 || :
          killproc sdpd
          rm -f /var/lock/subsys/sdpd
          killproc hcid
          rm -f /var/lock/subsys/hcid
          rm -f /var/lock/subsys/bluetooth
          echo ""
  }

  case "$1" in
    start)
          start
          ;;
    stop)
          stop
          ;;
    restart|reload)
          stop
          start
          ;;
    condrestart)
          [ -e /var/lock/subsys/bluetooth ] && (stop; start)
          ;;
    status)
          status hcid
          status sdpd
          ;;
    *)
          echo $"Usage: $0
{start|stop|status|restart|reload|condrestart}"
          exit 1
```

```
        ;;
   esac

   exit 0
```

```
root@<server>:/#> chkconfig --list bluetooth
   bluetooth       0:off   1:off   2:on    3:on    4:on    5:on
6:off
```

```
root@<server>:/#> find /etc -name "*bluetooth*"
   /etc/udev/rules.d/bluetooth.rules
   /etc/sysconfig/bluetooth
   /etc/bluetooth
   /etc/rc.d/init.d/bluetooth
   /etc/rc.d/rc6.d/K90bluetooth
   /etc/rc.d/rc4.d/S25bluetooth
   /etc/rc.d/rc5.d/S25bluetooth
   /etc/rc.d/rc2.d/S25bluetooth
   /etc/rc.d/rc1.d/K90bluetooth
   /etc/rc.d/rc3.d/S25bluetooth
   /etc/rc.d/rc0.d/K90bluetooth
```

```
root@<server>:/#> service bluetooth
   Usage: /etc/init.d/bluetooth
{start|stop|status|restart|reload|condrestart}
```

```
root@<server>:/#> service bluetooth status
   hcid dead but subsys locked
   sdpd (pid 5406) is running...
```

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