

Chapter 4.1 - Creating a SHRINE service (init.d)

To set up a service in your linux system to start, stop, and restart SHRINE (Tomcat), you can template a file within /etc/init.d called 'shrine':

```
#!/bin/bash
#
# Based on a script by valotas: https://gist.github.com/valotas/1000094#file-tomcat-sh
#
# This shell script takes care of starting and stopping Tomcat for SHRINE
#
# chkconfig: - 80 20
#
### BEGIN INIT INFO
# Provides: tomcat8
# Required-Start: $network $syslog
# Required-Stop: $network $syslog
# Default-Start:
# Default-Stop:
# Description: Release implementation for Servlet 2.5 and JSP 2.1
# Short-Description: start and stop tomcat
### END INIT INFO

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

RETVAL=$?
SHRINE_TOMCAT_HOME="/opt/shrine/tomcat"
SHUTDOWN_WAIT=10

tomcat_pid() {
    echo `ps aux | grep org.apache.catalina.startup.Bootstrap | grep '/opt/shrine/' | awk '{ print $2 }'`
}

start() {
    pid=$(tomcat_pid)
    if [ -n "$pid" ]
    then
        echo "SHRINE is already running (pid: $pid)"
    else
        # Start tomcat
        echo "Starting SHRINE..."
        ulimit -n 100000
        umask 007
        /bin/su -l shrine $SHRINE_TOMCAT_HOME/bin/startup.sh
        pid=$(tomcat_pid)
        echo "$pid" > /var/run/shrine.pid
        echo "SHRINE is running (pid: $pid)"
    fi
    return 0
}

stop() {
    pid=$(tomcat_pid)
    if [ -n "$pid" ]
    then
        echo "Stopping SHRINE..."
        /bin/su -l shrine $SHRINE_TOMCAT_HOME/bin/shutdown.sh

        let kwait=$SHUTDOWN_WAIT
        count=0;
        until [ `ps -p $pid | grep -c $pid` = '0' ] || [ $count -gt $kwait ]
        do
            echo -n -e "\nwaiting for processes to exit";
            sleep 1
            let count=$count+1;
        done

        if [ $count -gt $kwait ]; then
            echo -n -e "\nKilling $pid which didn't stop after $SHUTDOWN_WAIT seconds..."
            kill -9 $pid
        fi
    fi
}
```

```

        fi
        echo -n -e "\n"
        rm /var/run/shrine.pid
    else
        echo "SHRINE is not running"
    fi
    return 0
}

case $1 in
start)
    start
;;
stop)
    stop
;;
restart)
    stop
    start
;;
status)
    pid=$(tomcat_pid)
    if [ -n "$pid" ]
    then
        echo "SHRINE is running with pid: $pid"
    else
        echo "SHRINE is not running"
    fi
;;
*)

    echo $"Usage: [sudo] $0 {start|stop|restart|status}"
    exit 1
;;
esac
exit $RETVAL

```

After creating this file, you can then start, stop, and restart SHRINE anywhere by running:

```
sudo service shrine (start | stop | restart | status)
```

Once this is all set, turn tomcat off until later in the installation process with :

```
> sudo service shrine stop
```