rsyslog 2027 - remote logging is broken

This is a RHEL + CentOS issue introduced by how the connector to systemd works.

The effect is well described here:

https://bugzilla.redhat.com/show_bug.cgi?id=1095784

I can't make anything of the comment

> *The contents of /var/lib/rsyslog/imjournal.state are only manipulated through systemd API.*

I mean, we care if our syslog is working, or not. Not whose manipulating the file to a way that it'll later be unable to read it. Besides, reading of the PR shows any event that sets this file to 0 bytes will fry it.

The other case is if it has a wrong time pointer after a time correction: it will stop working again.

You'll find a corresponing message in /var/log/messages:

```
Sep 19 19:31:38 dhcp204 rsyslogd: [origin software="rsyslogd"
swVersion="7.4.7" x-pid="32097" x-info="http://www.rsyslog.com"] start
Sep 19 19:31:38 dhcp204 rsyslogd-2307: warning: ~ action is deprecated,
consider using the 'stop' statement instead [try
http://www.rsyslog.com/e/2307 ]
Sep 19 19:31:38 dhcp204 rsyslogd-2027: imjournal: fscanf on state file
`/var/lib/rsyslog/imjournal.state' failed
 [try http://www.rsyslog.com/e/2027 ]
Sep 19 19:31:58 dhcp204 rsyslogd: [origin software="rsyslogd"
swVersion="7.4.7" x-pid="32097" x-info="http://www.rsyslog.com"] exiting on
signal 15.
```

And basically that'll be all it's logging!

The 2027 error is a generic file IO alert:

http://kb.monitorware.com/kbeventdb-detail-id-7164.html

Makes sense when it only gets to read 0 bytes of that file, right?

The more detailed story is in this bug report: https://bugzilla.redhat.com/show_bug.cgi?id=1088021

To verify

Check this:

1. You have an existing /var/lib/rsyslog/imjournal.state and it's possibly 0 bytes
2. You see your remote log only being used when you restart rsyslog, and all you see is the error messages. No other log traffic.

tcpdump example

```
tcpdump -nn -vv -i ens3 port 514
```

To fix

I've used the following script:

```
systemctl restart rsyslog
if journalctl --since="-1m" | grep -q http://www.rsyslog.com/e/2027 ; then
  systemctl stop rsyslog
  rm /var/lib/rsyslog/imjournal.state
  systemctl start rsyslog
fi
```

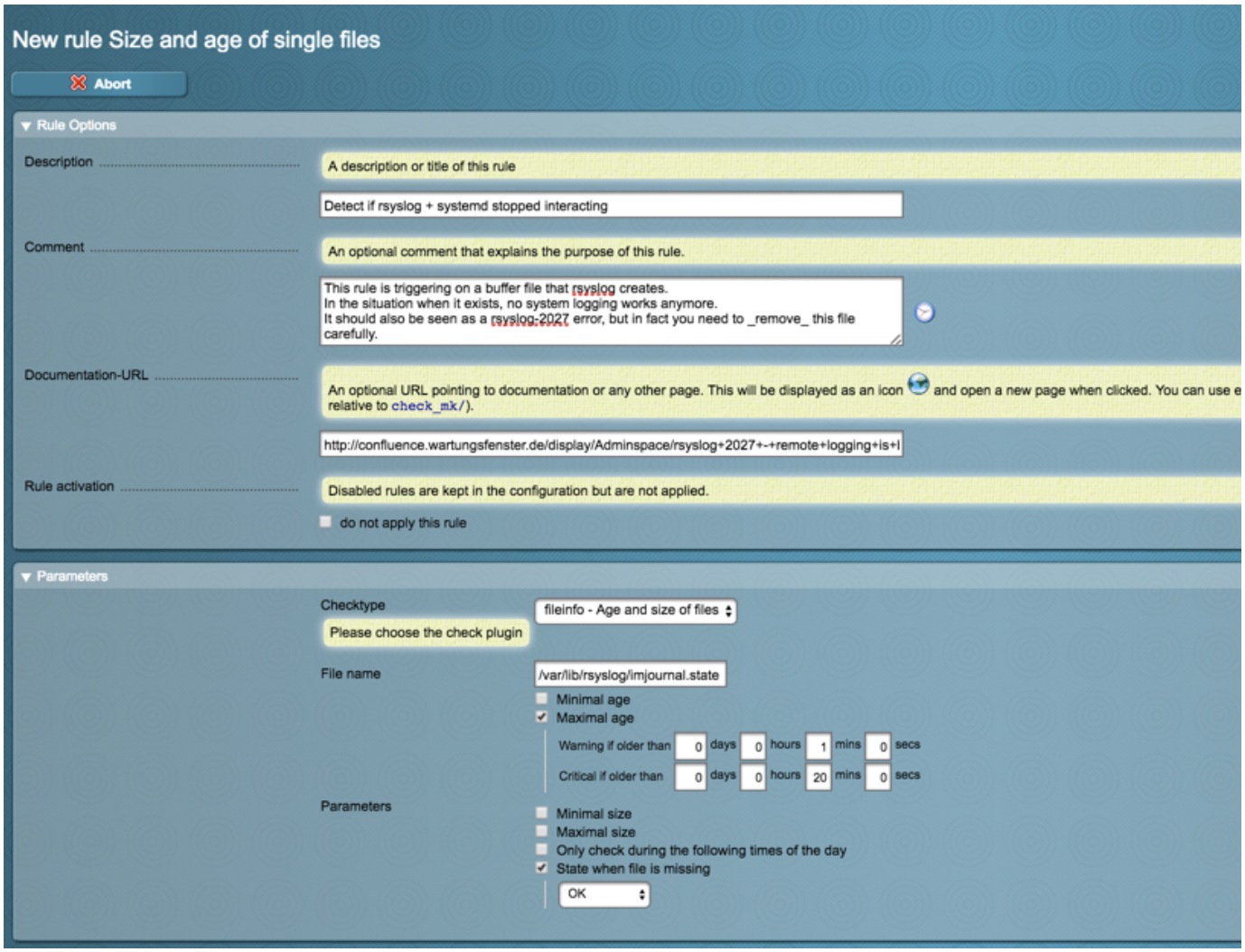
To monitor

I'm using a manual (not inventory based) check to alert if that file is ever created.

First, on the remote node in filewatch.cfg i'm setting up tracking of this file.

```
# cat /etc/check_mk/fileinfo.cfg
/var/log/messages
/var/log/httpd/*error*log
/var/log/apache/*error*log
/var/lib/rsyslog/imjournal.state
```

This is accompanied by a ***manual*** check, meaning it's enforced no matter if inventory sees that file.



I've not yet added the condition to the file size.

It seems this file can be around and larger than 0 bytes and things might still work.

Finally I also added an error condition on the rsyslog error to logwatch.cfg:

```
# grep -e messages -e rsyslog /etc/check_mk/logwatch.cfg
/var/log/messages
# C: Critical messages
# W: Warning messages
 C rsyslogd-2027: imjournal: fscanf:
```

more things...

I think this file should be in /var/spool/rsyslog, not in /var/lib/rsyslog

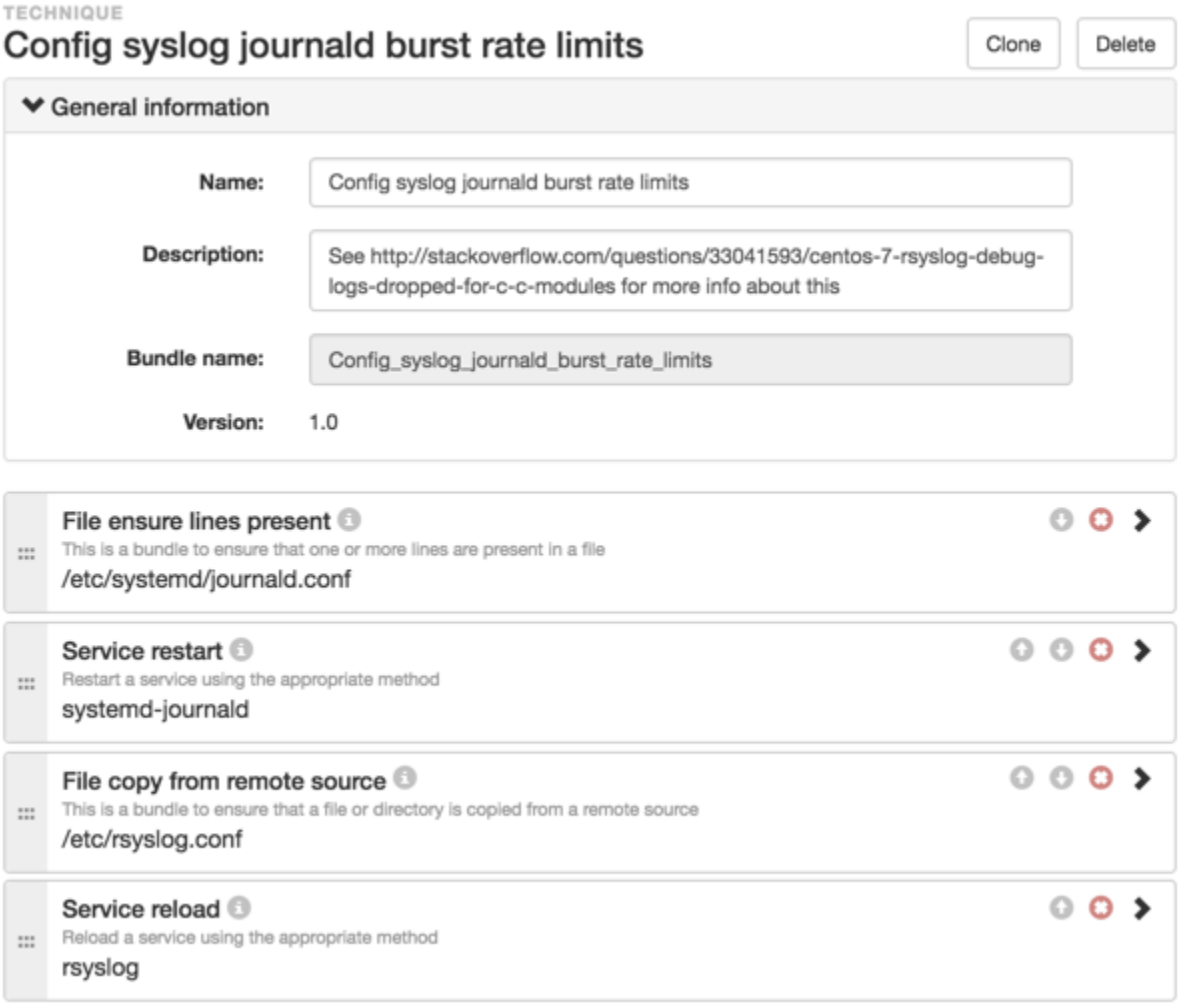
The whole design is a clusterfuck. If you have some RedHat support, please put pressure on this bug.

The rsyslog docs actually tell you to NOT USE the imstate module.

I've later run into a rate limiting issue

See http://stackoverflow.com/questions/33041593/centos-7-rsyslog-debug-logs-dropped-for-c-c-modules for more info about this

And, for your amusement, this is what a fix looks like if you're using Rudder:



Which is no more than 22 lines of policy, including comments, and fixes even this issue.

Yay.