

PicOS System Troubleshooting

User can troubleshoot by checking system logs and PicOS works mode.

Check log using two methods as follows:

System logs are stored in two locations:

```
/var/log/messages
```

This directory is stored in Flash.

and

```
/tmp/log/messages
```

This directory is stored in RAM.

Switches use flash memory that has a limited number of lifetime write operations. Hence, it is important that logs are not written continuously to the flash memory. This would dramatically impact the lifetime of the flash memory.

This is why most of the log information is written by default on the /tmp directory.

```
admin@XorPlus$df
Filesystem      1K-blocks    Used Available Use% Mounted on
rootfs          6202636 900184   4987368 16% /
/dev/root       6202636 900184   4987368 16% /
tmpfs           207348      28    207320 1% /run
tmpfs            5120         0     5120 0% /run/lock
tmpfs           414680         0   414680 0% /run/shm
tmpfs           51200        36    51164 1% /tmp
```

The "/tmp" directory is mounted on "tmpfs" which is a filesystem mounted in RAM.

The tmp logs are moved to /var/log when dramatic events occur like system crash or system reboot.

Checking PicOS works mode as follows:

In L2/L3 Mode (Or XORP), only the XORP system is running.

```
admin@PicOS-OVS$ps aux | grep ovs | grep -v grep
admin@PicOS-OVS$
admin@XorPlus$ps aux | grep xorp | grep -v grep
root 16383 0.0 1.2 18100 6596 ? S Jan29 5:26 xorp_policy
root 16385 0.3 2.5 34980 13380 ? Ss Jan29 99:20 /pica/bin/xorp_rtrmgr -d -L local0.info -P /var/run/xorp_rtrmgr.
pid
```

In OVS Mode, only the OVS daemon is running.

```
admin@PicOS-OVS$ps aux | grep xorp | grep -v grep
admin@PicOS-OVS$
admin@PicOS-OVS$ps aux | grep ovs | grep -v grep
root 1984 0.0 0.1 6696 2524 ? S Nov13 0:10 ovsdb-server /ovs/ovs-vswitchd.conf.db --pidfile --remote=ptcp:6640:
10.10.51.166 --remote=punix:/ovs/var/run/openvswitch/db.sock
root 1989 25.6 1.5 113256 32392 ? Sl Nov13 1393:50 ovs-vswitchd --pidfile=ovs-vswitchd.pid --overwrite-pidfile
```

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