

# Configuring Syslog on Coraid EtherDrive® Appliances

Coraid EtherDrive appliances have the ability to log to remote hosts on the same broadcast network as the appliance. These messages include RAID failures, disk errors, and spare allocation. Message examples are included at the end of this document.

## 1. Configure the Coraid EtherDrive SR to log to a remote host

To begin, access the SR console using either KVM, null-modem serial connection or preferably via cec. If you need help with configuring cec, please consult our ‘Using CEC’ document found on our [Quickstart Documentation page](#).

While the SR does not utilize IP networking, in order to prevent syslog messages from being discarded by the receiving host, it will need an IP address. This is not a pingable/accessible IP address, but should be a unique IP matching the addressing scheme of the interface on the receiving host. In this example, we assign the SR an IP of 192.168.1.21 and the remote syslog server that we will be logging to is 192.168.1.86.

```
SR shelf 21> syslog -c
Configuring syslog. Enter IP addresses in dotted notation.
Local interface is in the format ether[0-9].
IPv4 destination address []: 192.168.1.86
IPv4 source address [205.185.197.30]: 192.168.1.21
Local syslog interface [ether0]: ether1
Configuration successful.

SR shelf 21> syslog -p
  destination IP: 192.168.1.86
    source IP: 192.168.1.21
  local interface: ether1
SR shelf 21>
```

## 2. Configure syslog host to allow remote logging

*The following example demonstrates the syslog configuration on a CentOS/Red Hat system – the actual location of your syslog configuration file(s) may vary depending on your distribution. Consult the syslog documentation for your particular distribution if you notice a variance.*

On the syslog server, edit /etc/sysconfig/syslog and modify SYSLOGD\_OPTIONS to include -r. As an example, on a fresh install of CentOS this line should appear as:  
SYSLOGD\_OPTIONS="-r -m 0"

Once modified, make sure to restart the syslog or syslogd service.

### 3. Remove network barriers

The SR sends syslog messages to the remote syslog host at UDP port 514. Make sure that any firewalls (whether on the remote syslog server or on the network) are allowing UDP port 514.

### 4. Test SR logging

Finally, use the *syslog* command on the SR to test the configuration. In this example we are sending a syslog message from the SR:

```
SR shelf 21> syslog Hello World!  
Hello World!
```

Then verify receipt of the message on the remote syslog server:

```
[root@syslogServer ~]# tail /var/log/messages | grep Hello  
Aug 5 12:46:54 192.168.1.21 shelf_21 Hello World!
```

This demonstrates that syslog is working and that the SR and the remote syslog server are communicating properly.

### 5. Examples of SR log events

Examples of various logging events that may occur on an SR.

One failed disk in RAID 5 or 10 with spare allocated:

```
Aug 5 13:12:58 192.168.1.21 shelf_21 raid device 7.0.0 has failed  
Aug 5 13:12:58 192.168.1.21 shelf_21 spare 21.20 allocated for 7.0.0  
Aug 5 13:12:58 192.168.1.21 shelf_21 beginning recovery of disk 7.0.0
```

One failed disk in RAID 5 or 10 without spare allocated (or spare is too small):

```
Aug 5 13:18:40 192.168.1.21 shelf_21 raid device 7.0.0 has failed  
Aug 5 13:18:40 192.168.1.21 shelf_21 aborted recovery of disk 7.0.0  
Aug 5 13:18:40 192.168.1.21 shelf_21 no spare large enough for 7.0.0
```

RAID Failure:

```
Aug 5 13:35:04 192.168.1.21 shelf_21 raidshield: unrecoverable error on disk  
7.0.1 at block 1547078  
Aug 5 13:35:04 192.168.1.21 shelf_21 raid device 7.0.1 has failed  
Aug 5 13:35:04 192.168.1.21 shelf_21 unrecoverable failure on raid 7.0  
Aug 5 13:35:04 192.168.1.21 shelf_21 warning: config save error for 7.0.1
```

Unreadable blocks fixed by RAIDShield. These messages in excess may indicate a pending disk failure:

```
Aug 5 14:25:32 192.168.1.21 shelf_21 raidshield: corrected error on disk
1.0.7 at block 1141029
Aug 5 14:35:32 192.168.1.21 shelf_21 raidshield: corrected error on disk
1.0.7 at block 1075163
Aug 5 14:35:33 192.168.1.21 shelf_21 raidshield: corrected error on disk
1.0.7 at block 1075164
```

### *Additional Information*

For more information, please reference the SR Software User Manual found on our [SR\[X\] Support page](#).

If you have any questions or comments regarding this documentation please let us know at [support@coraid.com](mailto:support@coraid.com).