

OBU-201 rsyslog Guide

User can log OBU-201's system debug messages onto a rsyslog server, which is a default service on a Ubuntu machine.

OBU-201 settings

1. set U-boot environmental variables:

```
setenv syslog_level 7
setenv syslog_server_ip 192.168.10.10
setenv syslog_sink 8
saveenv
ping 192.168.10.10
reset
```

Change `192.168.10.10` to your Ubuntu machine's IP address. Make sure the Ubuntu machine responds to ping and returns "alive".

Syslog_level:

```
/** Error conditions */
LOG_ERR = 3,
/** Warning conditions */
LOG_WARNING = 4,
/** Normal but significant condition */
LOG_NOTICE = 5,
/** Informational messages */
LOG_INFO = 6,
/** Debug-level messages */
LOG_DEBUG = 7
```

Syslog_sink level:

The U-Boot environment variable `syslog_sink` controls which sinks are enabled. Its value is a decimal number which represents a bit-mask of:

1. Console: 0x2
2. TCP: 0x4
3. UDP: 0x8

Ubuntu settings

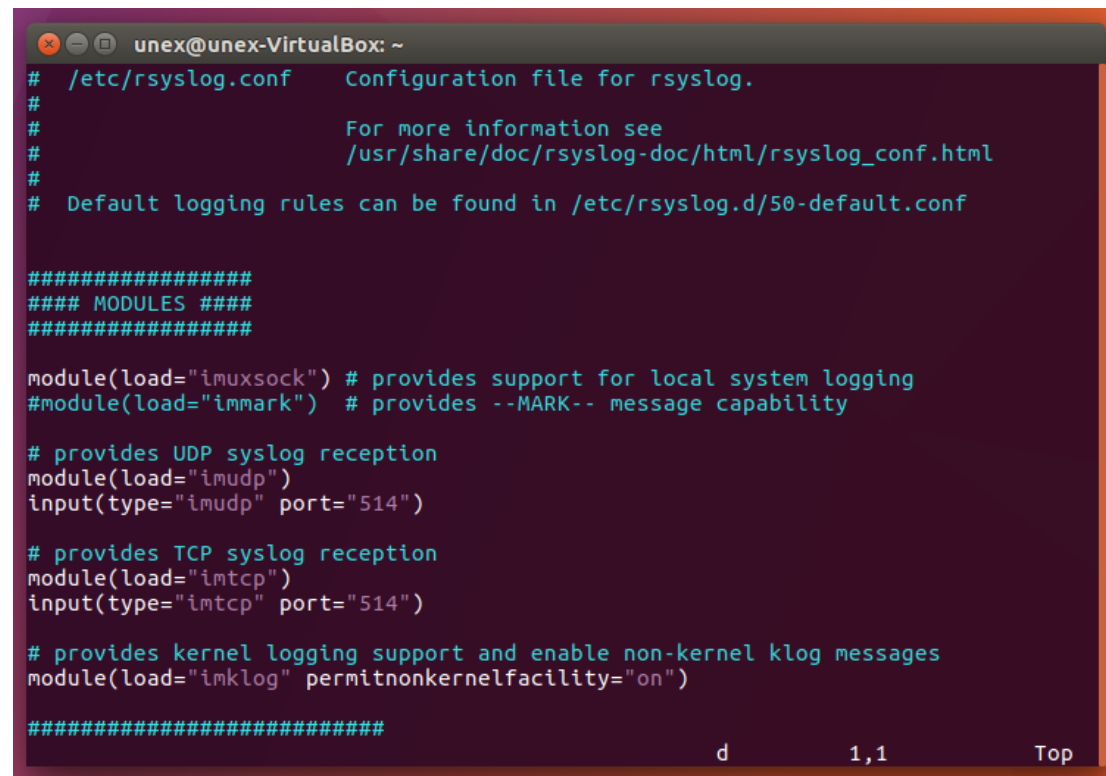
2. Edit /etc/rsyslog.conf:

```
user@ubuntu:~$ sudo vim /etc/rsyslog.conf
```

Uncomment the following lines:

```
# provides UDP syslog reception
module(load="imudp")
input(type="imudp" port="514")

# provides TCP syslog reception
module(load="imtcp")
input(type="imtcp" port="514")
```



```
unex@unex-VirtualBox: ~
# /etc/rsyslog.conf Configuration file for rsyslog.
#
# For more information see
# /usr/share/doc/rsyslog-doc/html/rsyslog_conf.html
#
# Default logging rules can be found in /etc/rsyslog.d/50-default.conf

#####
#### MODULES ####
#####

module(load="imuxsock") # provides support for local system logging
#module(load="immark") # provides --MARK-- message capability

# provides UDP syslog reception
module(load="imudp")
input(type="imudp" port="514")

# provides TCP syslog reception
module(load="imtcp")
input(type="imtcp" port="514")

# provides kernel logging support and enable non-kernel klog messages
module(load="imklog" permitnonkernelfacility="on")

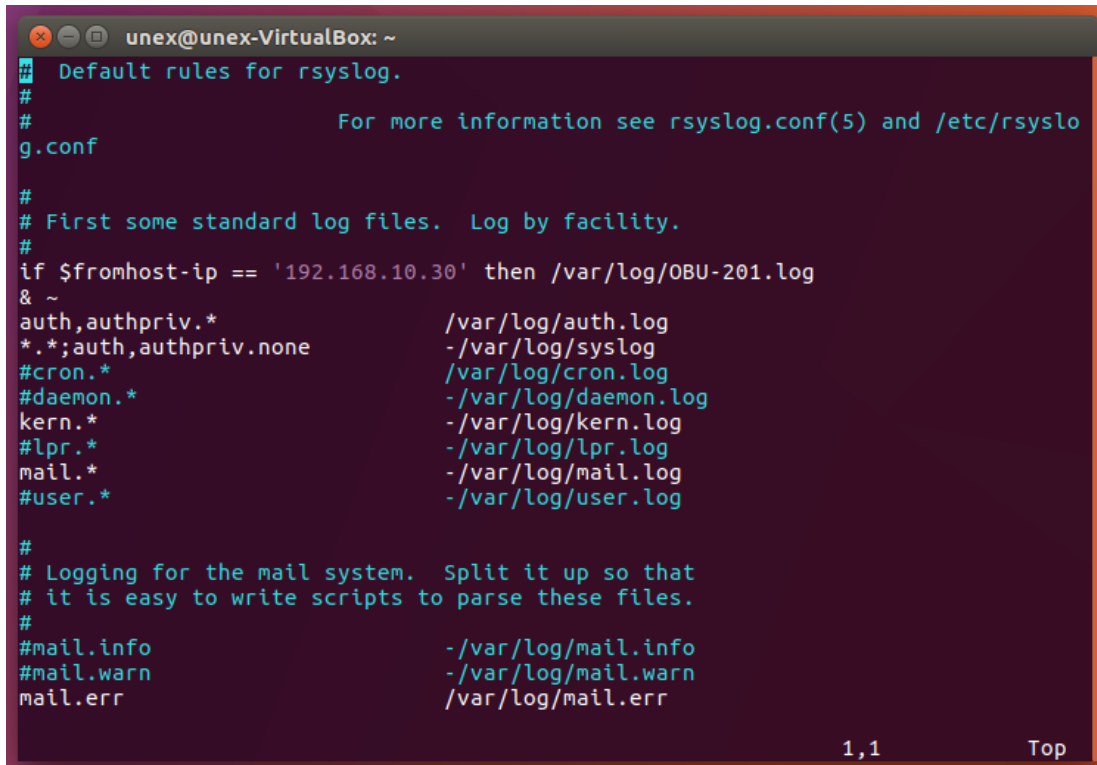
#####
d 1,1 Top
```

3. Edit /etc/rsyslog.d/50-default.conf:

```
user@ubuntu:~$ sudo vim /etc/rsyslog.d/50-default.conf
```

Add the following 2 lines. Change the IP to OBU-201's IP address:

```
if $fromhost-ip == '192.168.10.30' then /var/log/log_filename.log  
& ~
```



```
unex@unex-VirtualBox: ~  
# Default rules for rsyslog.  
#  
# For more information see rsyslog.conf(5) and /etc/rsyslog.conf  
#  
# First some standard log files. Log by facility.  
#  
if $fromhost-ip == '192.168.10.30' then /var/log/OBU-201.log  
& ~  
auth,authpriv.* /var/log/auth.log  
*.*;auth,authpriv.none -/var/log/syslog  
#cron.* /var/log/cron.log  
#daemon.* -/var/log/daemon.log  
kern.* -/var/log/kern.log  
#lpr.* -/var/log/lpr.log  
mail.* -/var/log/mail.log  
#user.* -/var/log/user.log  
#  
# Logging for the mail system. Split it up so that  
# it is easy to write scripts to parse these files.  
#  
#mail.info -/var/log/mail.info  
#mail.warn -/var/log/mail.warn  
mail.err /var/log/mail.err  
  
1,1 Top
```

4. Restart rsyslog:

```
user@ubuntu:~$ sudo service rsyslog restart
```

5. View log file:

```
user@ubuntu:~$ less /var/log/log_filename.log
```