How To: Check Your Logs For Errors

When you notice a problem with your Linux box, you're possibly only noticing the symptoms and not actually seeing the reason. The reasons are often made clear in your error logs. This is how to read them.

Back in the early 1900s (when horses, trains, and your feet were the primary mode of travel), it required the terminal to really deal with your error logs. You'd ask for help on a forum and they'd want you to run something like:

[code]grep -i "Feb 10" /var/log/*.log | sort | uniq -c | sort
-n[/code]

It worked and it worked well, especially if you knew what you were looking for. If you weren't, then you'd be scrolling through tons of text in the terminal with few visual cues or no easy way to sort through the data.

Well, enter KSystemLog. KSystemLog's man page describes it as thus:

Description: system log viewer

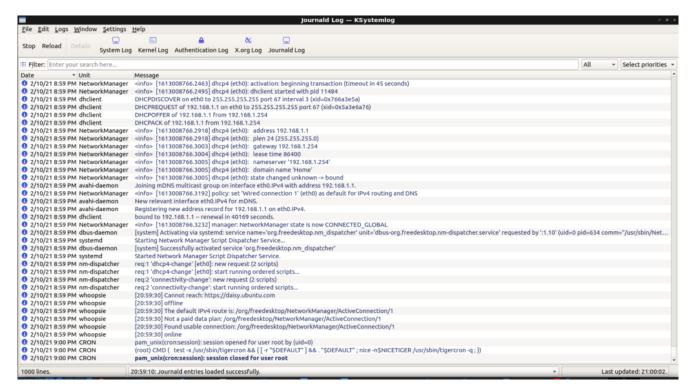
KSystemLog show all logs of your system, grouped by General (Default system

log, Authentication, Kernel, X.org...), and optional Services (Apache, Cups,

etc, ...). It includes many features to read nicely your log files:

- * Colorize log lines depending on their severities
- * Tabbed view to allow displaying several logs at the same time
- * Auto display new lines logged
- * Detailed information for each log lines

And it looks like this:



KSystemlog UI — not pictured, fancy colors

As you can see from the image, this is a handy GUI method to view your various system logs. If you look at the image above, you'll see that one of the lines is a darker blue than the previous lines. This is because it was a new log entry, an event that happened after I'd opened the application.

So, in other words, you can open KSystemLog and then open an application that's giving you trouble and see what errors are thrown. You can also examine the entire list of errors and events.

Not only that, but the events in the logs are color-coded. This provides easy visual cues as the events range in color from a light gray (normal) to a bright red for emergency-level events. You can also apply filters and search for specific events.

2/10/21 8:59 PM	kgiii-desktop nm-dispatcher	req:2 'connectivity-change': new request (2 scripts)
© 2/10/21 8:59 PM	kgiii-desktop nm-dispatcher	req:2 'connectivity-change': start running ordered scripts
© 2/10/21 8:59 PM	kgiii-desktop whoopsie[734]	[20:59:30] Cannot reach: https://daisy.ubuntu.com
② 2/10/21 8:59 PM	kgiii-desktop whoopsie[734]	[20:59:30] offline
O 2/10/21 8:59 PM	kgiii-desktop whoopsie[734]	[20:59:30] The default IPv4 route is: /org/freedesktop/NetworkManager/ActiveConnection/1
② 2/10/21 8:59 PM	kgiii-desktop whoopsie[734]	[20:59:30] Not a paid data plan: /org/freedesktop/NetworkManager/ActiveConnection/1
O 2/10/21 8:59 PM	kgiii-desktop whoopsie[734]	[20:59:30] Found usable connection: /org/freedesktop/NetworkManager/ActiveConnection/1

Note the color change for errors.

KSystemLog is a KDE application but pulls in very few dependencies. It loads rapidly and will pick up all installed log files by default. In my case, it finds these:



Currently available logs on this particular system.

Chances are pretty good that it is in your default repositories. If you're using a Debian derivative then you can install it by opening the terminal and entering:

[code]sudo apt install ksystemlog -y[/code]

Anyhow, there you have it. Adjust the above command for your distro's package manager (or go dig it out if you're manually installing packages). You can take the information from the logged errors and use them as search terms to help.

It's absolutely amazing how many errors can be resolved by just taking the exact error message and tossing it verbatim into a search engine of your choice. I've used this method to troubleshoot so many times that I think it's an asset we should all have in our toolbox.

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