

Multi-Report

Quick Start Guide

Multi Report started out as a simple script long ago, became Freenas report, and became multi report. Many versions from a small single purpose script designed to fill in were FreeNAS/TrueNAS has a few misses. And I have to thank all the programmers out there who have contributed to these projects.

Multi report has always been about providing information about your drives (HDD/SSD/NVMe) to ensure the end user is aware of any possible issues, such as pending DOOM. However, as drives become more complex, this means the script has morphed into something quite complex. I am a firm believer with the end user having the option to select which features are to be used and be allowed to customize them. This makes the configuration difficult at times due to the number of options. By default, the minimum setup is to enter your email address. The default settings will get you going and once you see the report, you can consider customizing it.

Getting Started:

NOTE: Do not include the single quotes around the commands.

- 1) Place the multi report script somewhere that you desire it. Many people like to place it in the '/root' folder, I prefer a dataset just for my scripts.
- 2) Rename the script to 'multi_report.sh'.
- 3) Run the script './multi_report.sh' and it should run and tell you that you have no configuration file.
- 4) Run the script again, this time using the '-config' switch './multi_report.sh -config'.
- 5) You will have several options however the very first thing to do is create your first config file and add your email address. Select 'n' for New Configuration File.
- 6) Read the questions and answer them. The majority of people are able to just enter an email address and then press the Return key until you reach the Automatic Compensation.
- 7) Automatic Compensation will scan your drives for a select group of errors and will insert an offset value to bring the error back to a zero value. The actual value is still available however this is done so you can monitor if the errors increase. It sure beats remembering I had 4345 UDMA CRC Errors and knowing if it increased.
- 8) When you finish answering the questions the script will write a file called 'multi_report_config.txt' in the same location as your script.
- 9) Now run the script again normally './multi_report.sh' without any switches and you should receive an email shortly with a report. Hopefully you will not have errors.
- 10) In the TrueNAS GUI, configure a Cron Job to run the script once every 24 hours, I like 0200. Uncheck Hide Stderr Output so you may see any error messages should these occur running the script.

What if I do have Errors?

NOTE: Spencer (now with pineapple) does not work via Cron Job on Dragonfish (24.04.0) however it will run from the CLI. I've notified NickF and hopefully we can find a fix for this.

- 1) If you have errors then there are many things that can be done to address them. First you need to scroll down in the email you were sent and at the beginning of the Text Section there will be a list of Critical and Warning error messages.
- 2) If the error is a High Temp alarm? Then you need to either lower your drive temperatures or raise the alarm setpoint.
- 3) To edit your alarm setpoints use the '-config' switch again, but this time select 'a' for Advanced Settings.
- 4) Read and select what you want to change. You can abort at any time. But make sure you Write your changes or nothing will be saved.

What if you are really stuck with alarms or can't configure it? That is easy and also a build in feature.

- 1) Run the script using the '-dump email' and you will be presented with a question to send me a text message. Please point out what you need. If you have an obvious alarm condition, I will get the clue and provide you an email back with an updated configuration file. I may also provide you step by step instruction on how you can do this yourself.
- 2) Be patient as I still work for a living and I'm not able to help you out until after I get home. I will get to it as soon as possible. Unless I'm on vacation, I will answer in less than 24 hours.
- 3) If you cannot be patient, post a question on the forum, there are quite a few folks who can offer assistance.

There is a huge amount of customization available. If you have one drive that you want to have a different High Temp alarm, you can do that. If you want to test NVMe drives because TrueNAS does not in the GUI yet, yes you can do that. If you simply want to ignore a drive completely, YES you can.

If you run across a customization you cannot find, send me a dump report as indicated above and tell me what you want done. Odds are the script can be configured to do that, however on the off chance it cannot, I will evaluate the addition of a new customization. They are not all very easy to add, and it's the easy ones I'm more concerned about as some bug sneaks in. Yikes!

When you send me a dump report, I will know your email address. I do not share these things.

Feel free to drop me and email if you have any questions. If you do ask something and it deals with your system, please include all the details of your system. I broke my crystal ball a few weeks ago and Amazon is out of stock.

Hope you enjoy this script,

-Joe

ADDENDUM

Here is a list of configuration items which many people may desire to adjust. If you manually edit the multi_report_config.txt file, ensure you use a simple text editor.

CheckForUpdates="true"	Default=true, you may not want to check for updates.
AutomaticUpdate="false"	Default=false, you may want to have it automatically update, I don't prefer that myself but others wanted that feature.
SMR_Enable="true"	Default=true, you have run the script once and are certain you have no SMR drives and you no longer need to check for them.

Various Temperature Settings can be changed. The default settings are typical values. Maybe I should do a survey to see what the overall values should be in a future change.

Partition_Check="false"	Default=false, you may want to check your partitions for errors so make this value "true".
TestWarnAge=2	Default=2 days, if you test less than once a day, increase this value to your periodicity +1 day. I recommend Daily Short and Weekly Long tests.
TDW_Month="30Days"	Default="30Days", alternate setting is "month" which would use the current month only.
host=\$(hostname -s)	Default is the host name, you may desire something more specific.