# Test Document: System Resource Dashboard

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## OBJECTIVE

This document outlines the test cases and result for verifying the RAM, CPU and disk usage monitoring in the System Resource Dashboard. It also includes methods to temporarily increase the RAM, CPU and disk usage for observation.

## TEST ENVIRONMENT

**Operating System:** Ubuntu 24.04
**Dependencies Installed:** Qt5, g++, System Resource Dashboard
**Stress Installation:** *sudo apt update && sudo apt install -y stress*

## TEST PROCEDURE

- CPU Usage Monitoring
    - Open the terminal
    - *stress --cpu 4 --timeout 60*
    - Open system resource dashboard and check the CPU usage
    - It should increase while stress is running
- RAM Usage Monitoring
    - Open the terminal
    - *stress --vm 2 --vm-bytes 1G --timeout 60*
    - Open system resource dashboard and check the RAM usage
    - It should increase while stress is running
- Disk Usage Monitoring
    - Open the terminal
    - *dd if=/dev/zero of=/tmp/testfile bs=1M count=1000*
    - This created 1GB file in /tmp/
    - Open system resource dashboard and check the Disk usage
    - The disk usage should increase temporarily
    - Delete the file to free up space

- ○ *rm /tmp/testfile*
- ○ Disk usage should return to normal

# TEST RESULT

| TEST | RESULT |
|---|---|
| CPU usage | After the command the CPU usage increases temporarily (Pass) |
| RAM usage | After the command the RAM usage increases temporarily (Pass) |
| Disk usage | After the command the Disk usage increased and after removing the file the Disk usage decreased (Pass) |
| Kill process | Few apps are opened and kept running for few minutes, the process that are consuming more CPU space are displayed and kill terminated the process. (Pass) |

# CONCLUSION

These tests demonstrate the CPU, RAM and Disk usage monitoring functionality.