Netdata System Monitoring Report

Task Overview:

The objective of this task was to monitor system performance using Netdata, a real-time monitoring tool, deployed via Docker. The focus was on tracking core system resources such as CPU, memory, disk, network, and running containers.

Tools Used:

- Docker
- Netdata
- Host Machine: Windows OS (via WSL2 / Docker Desktop)

Setup Process:

1. Pulled Netdata Image from Docker Hub:

   docker pull netdata/netdata

2. Ran Netdata Container:

   docker run -d --name=netdata -p 19999:19999 --cap-add SYS_PTRACE --security-opt apparmor=unconfined netdata/netdata

3. Accessed the Web UI at: http://localhost:19999

Metrics Monitored and Observations:

- Memory Usage: Free memory high (75-80 percent), system not under pressure.
- CPU Usage: Low (1-2 percent), system mostly idle.
- Container Monitoring: Only Netdata running, very low usage.
- Disk Activity: Very low reads/writes, no I/O bottlenecks.
- Network I/O: Light traffic, no packet loss.

Screenshots:

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Included separately: Screenshot (125) to (129) showing different Netdata panels:

- CPU, Memory, Disk, Network, Docker Monitoring

Summary and Conclusion

The system is in a healthy and idle state with no resource bottlenecks. Netdata proved effective for real-time monitoring and offers a clean, informative dashboard for future use in server or container monitoring.

Suggestions for Next Steps:

- Configure threshold alerts (e.g., CPU > 85 percent)
- Test under workload
- Explore Netdata Cloud for multi-node support