

Lab Report – Monitor and Manage System Resources in Windows

Objectives

The purpose of this lab was to explore and apply Windows administrative tools for monitoring and managing system resources. The lab tasks involved:

- Starting and stopping Windows services.
- Using the Computer Management utility.
- Configuring and monitoring performance with Administrative Tools.

Required Resource

Windows PC with Internet access.

Part 1: Starting and Stopping the Routing and Remote Access Service

- Accessed Administrative Tools > Services and located the Routing and Remote Access service.
- Modified the service Startup Type (Manual, Disabled) and started/stopped the service to observe changes.
- Verified status changes in Network Connections window.
- Used Performance Monitor to track % Processor Time.
- Learned to switch between graph view and report view for analysis.

Key Observation: Starting the service created an Incoming Connections icon, while stopping it removed it.

Part 2: Working in the Computer Management Utility

- Explored System Tools, Storage, and Services categories.
- Accessed Event Viewer > Windows Logs > System to review logs.
- Analyzed event descriptions to understand service activity history.

Key Observation: Learned how to track service activity, system power states, and errors using Event Viewer logs.

Part 3: Configuring Administrative Tools

- Created a custom Data Collector Set (Memory Logs) in Performance Monitor.
- Configured logging format as CSV and defined storage location in C:\PerfLogs.
- Started and stopped data collection to monitor available memory.
- Verified collected logs using DataCollector01.csv.
- Practiced cleanup by deleting logs and folders.

Key Observation: Successfully monitored and analyzed system memory performance in real time.

Learning Outcomes

Through this lab, I developed practical skills in:

- Managing and monitoring Windows system resources.
- Using Services, Computer Management, and Performance Monitor tools effectively.
- Configuring and interpreting performance counters.
- Working with Data Collector Sets.
- Understanding event logs for troubleshooting.

Skills Gained

- Windows System Administration
- Performance Monitoring & Resource Management
- Event Log Analysis
- Service Configuration & Troubleshooting
- Data Logging & Reporting