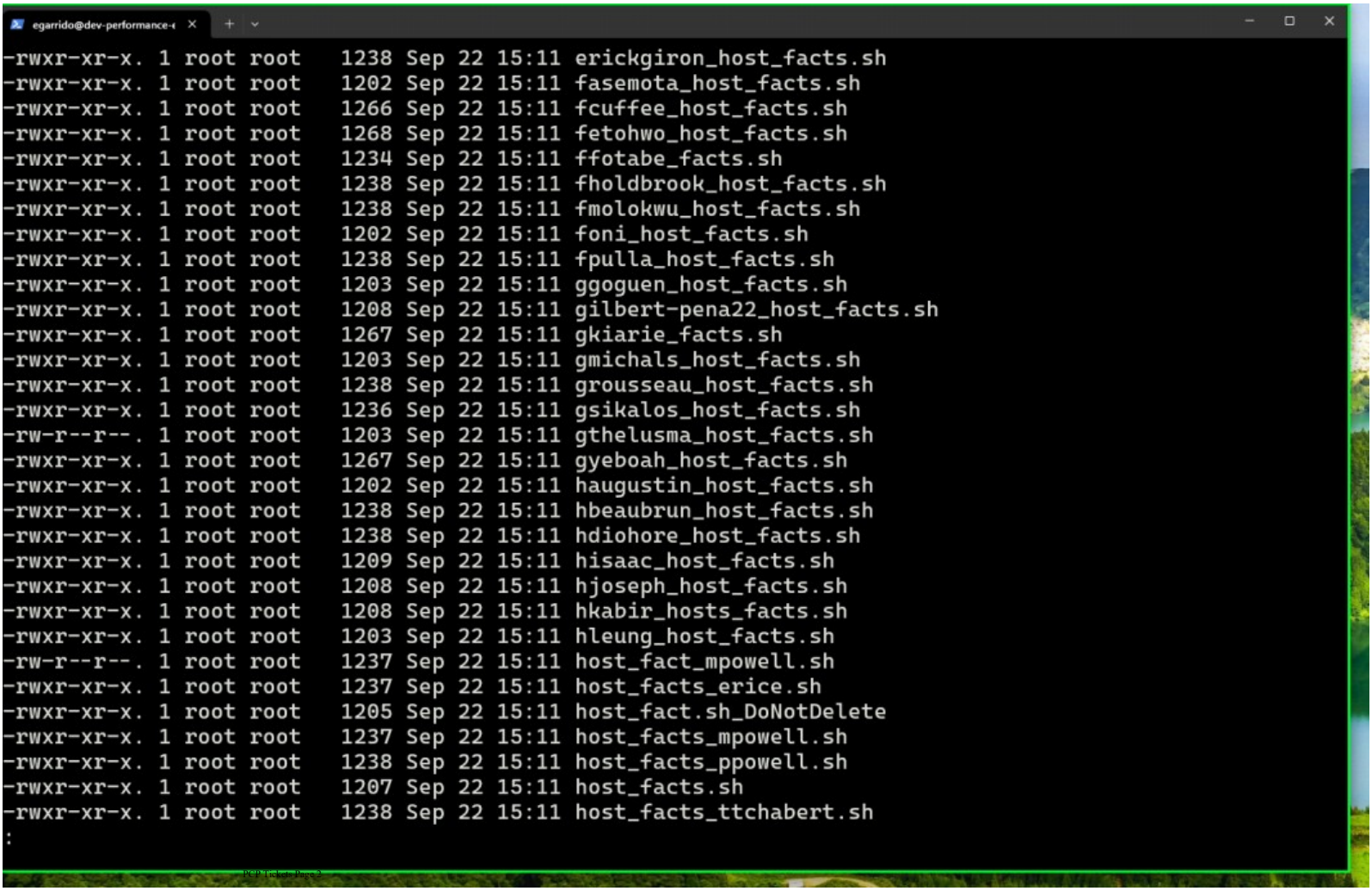
Host Facts Collection Automation

This repository demonstrates a structured approach to collecting and standardizing Linux host system information using shell scripting and centralized source control. The solution is designed to generate consistent, readable system reports across multiple servers for operational visibility, auditing, and troubleshooting.

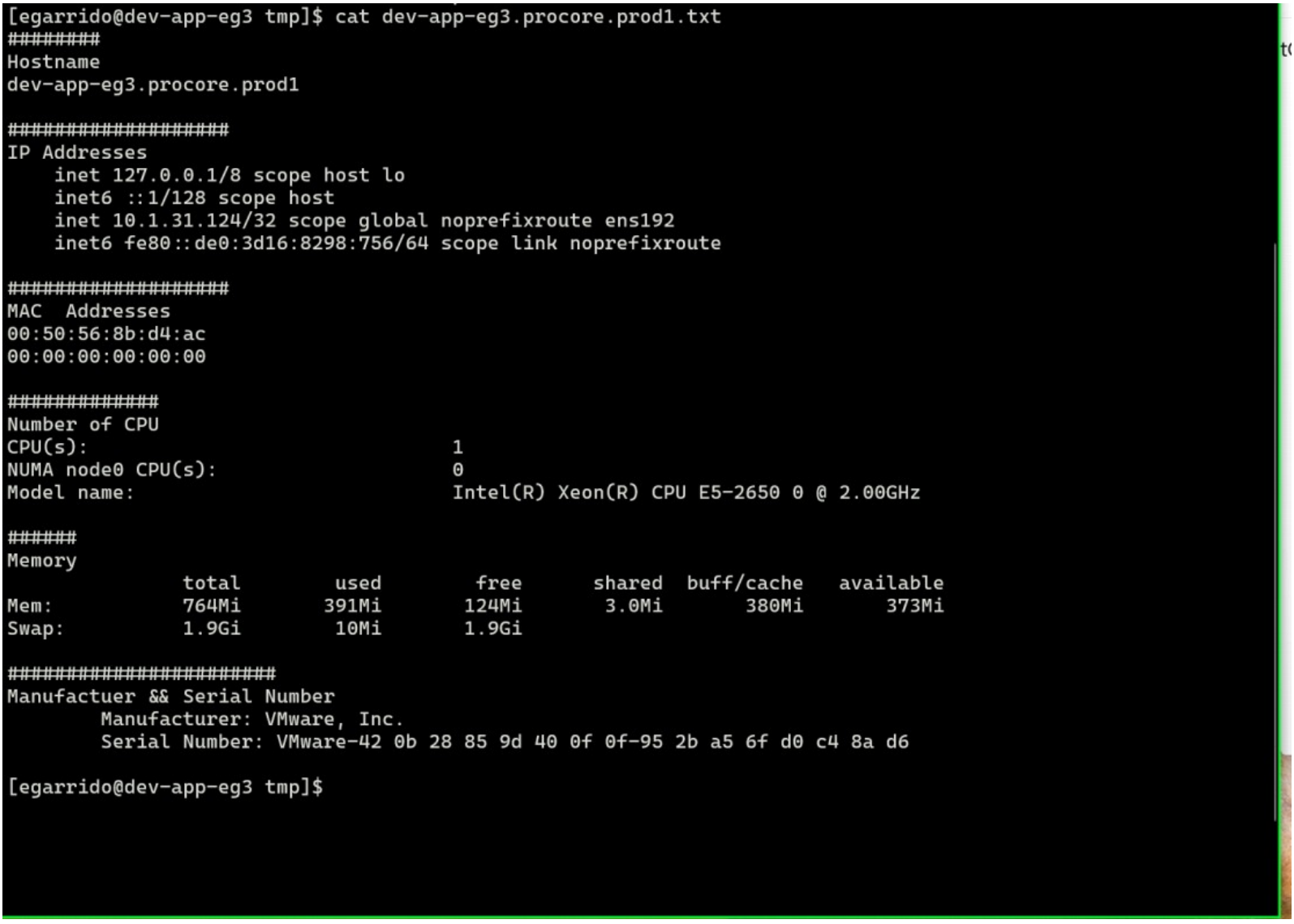
A centralized collection of executable host_facts scripts is maintained in version control and deployed to target systems. Each script gathers key system details—including hostname, network configuration, CPU and memory resources, and virtualization metadata—and writes the output to a host-specific file in /tmp.

Scripts are executed with appropriate privilege escalation to ensure access to system-level information. After execution, generated reports are manually verified to confirm accuracy and consistency across environments, demonstrating reliable data collection and repeatable results.

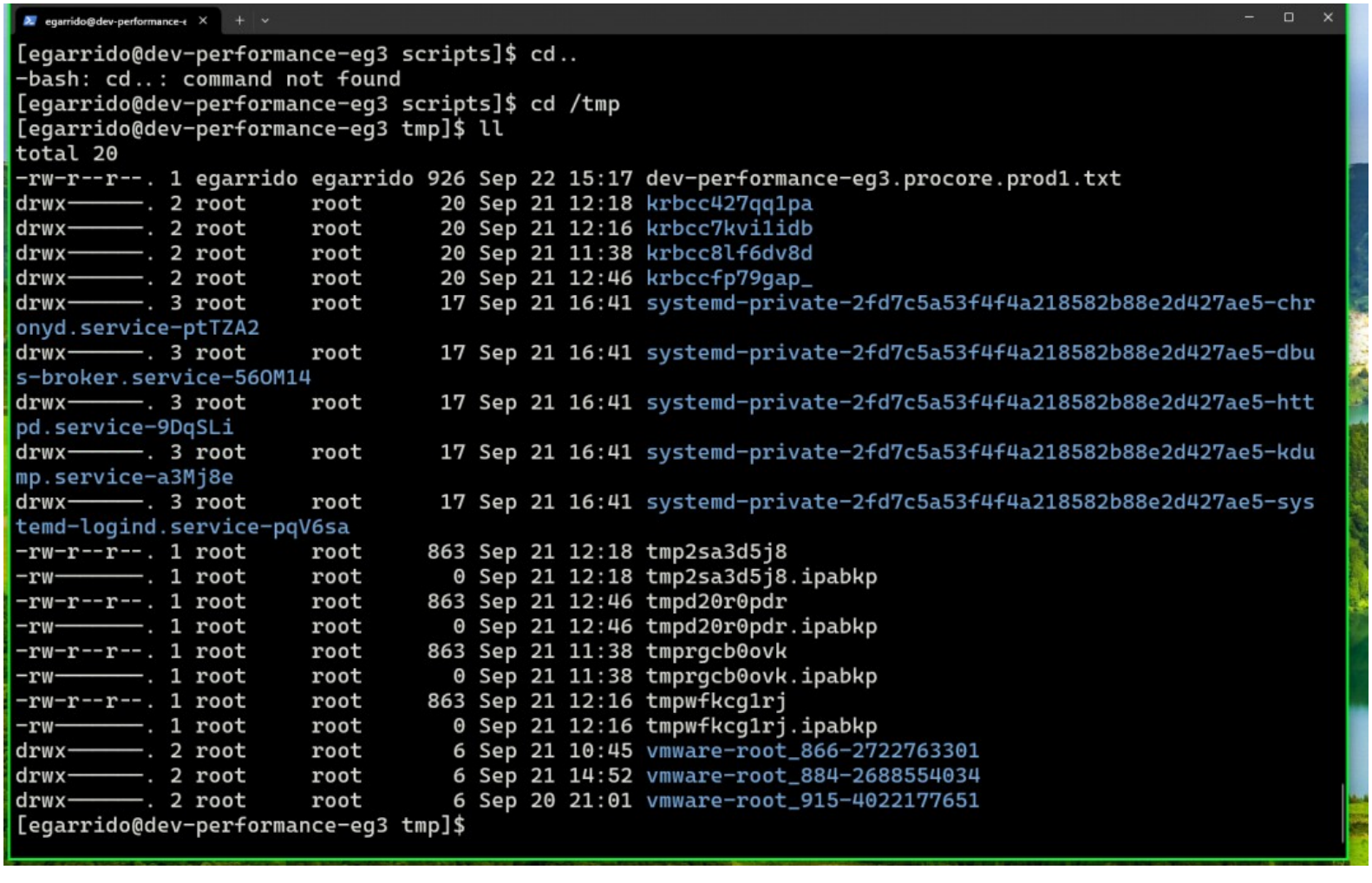
A collection of executable shell scripts used to gather host-level system facts across multiple servers. Each script is named per host and designed to standardize system information collection for auditing, troubleshooting, and operational visibility, with consistent permissions and ownership enforced.



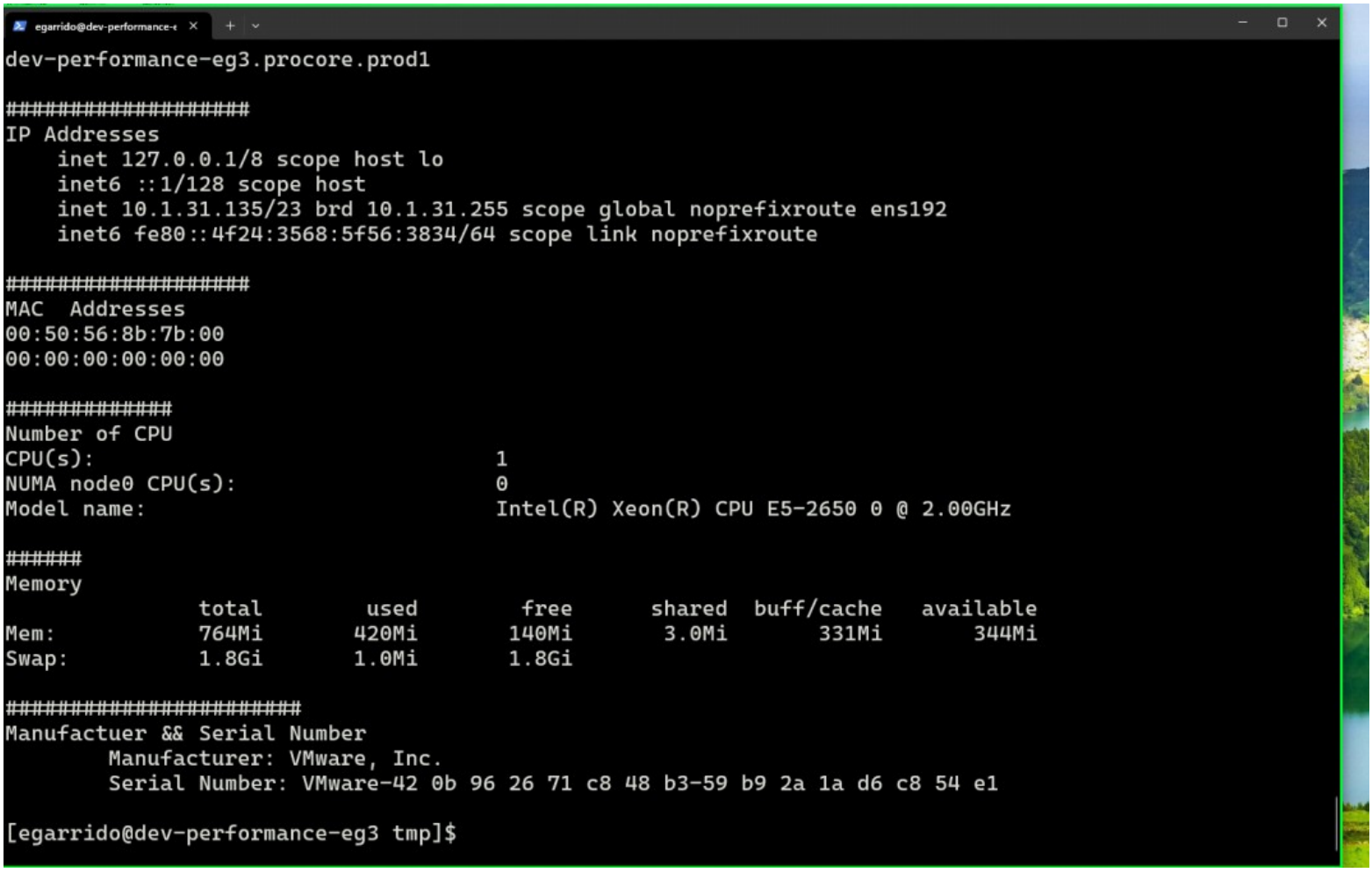
A host facts report was generated and reviewed, capturing key system details including hostname, IP and MAC addresses, CPU configuration, memory usage, and virtualization metadata. This output provides a standardized snapshot of system state for inventory, auditing, and troubleshooting purposes.



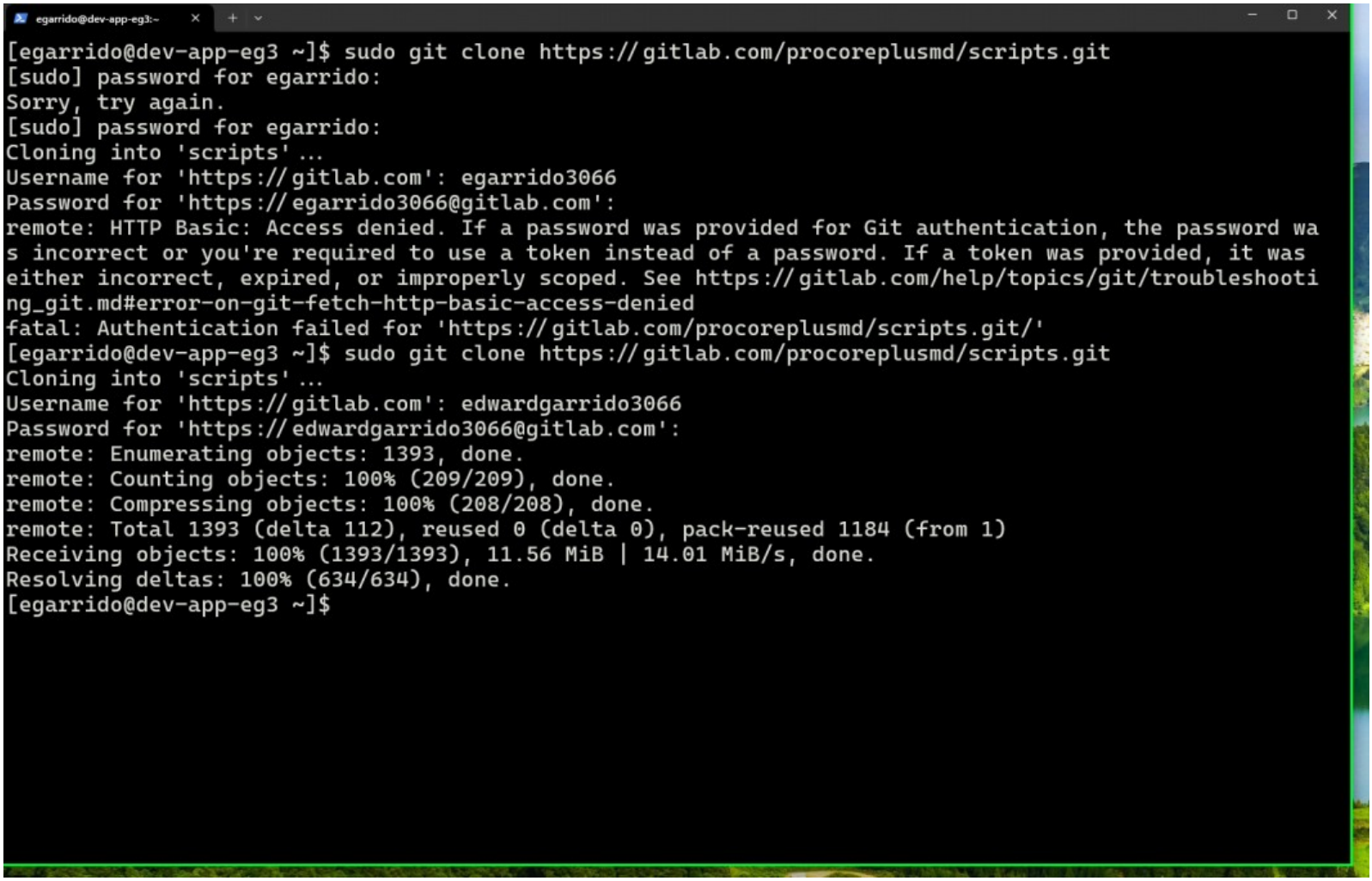
The /tmp directory was reviewed to verify the presence of generated host fact output files alongside standard system and service runtime artifacts. The host-specific report file was successfully created and stored, confirming proper data collection and output handling during host facts gathering.



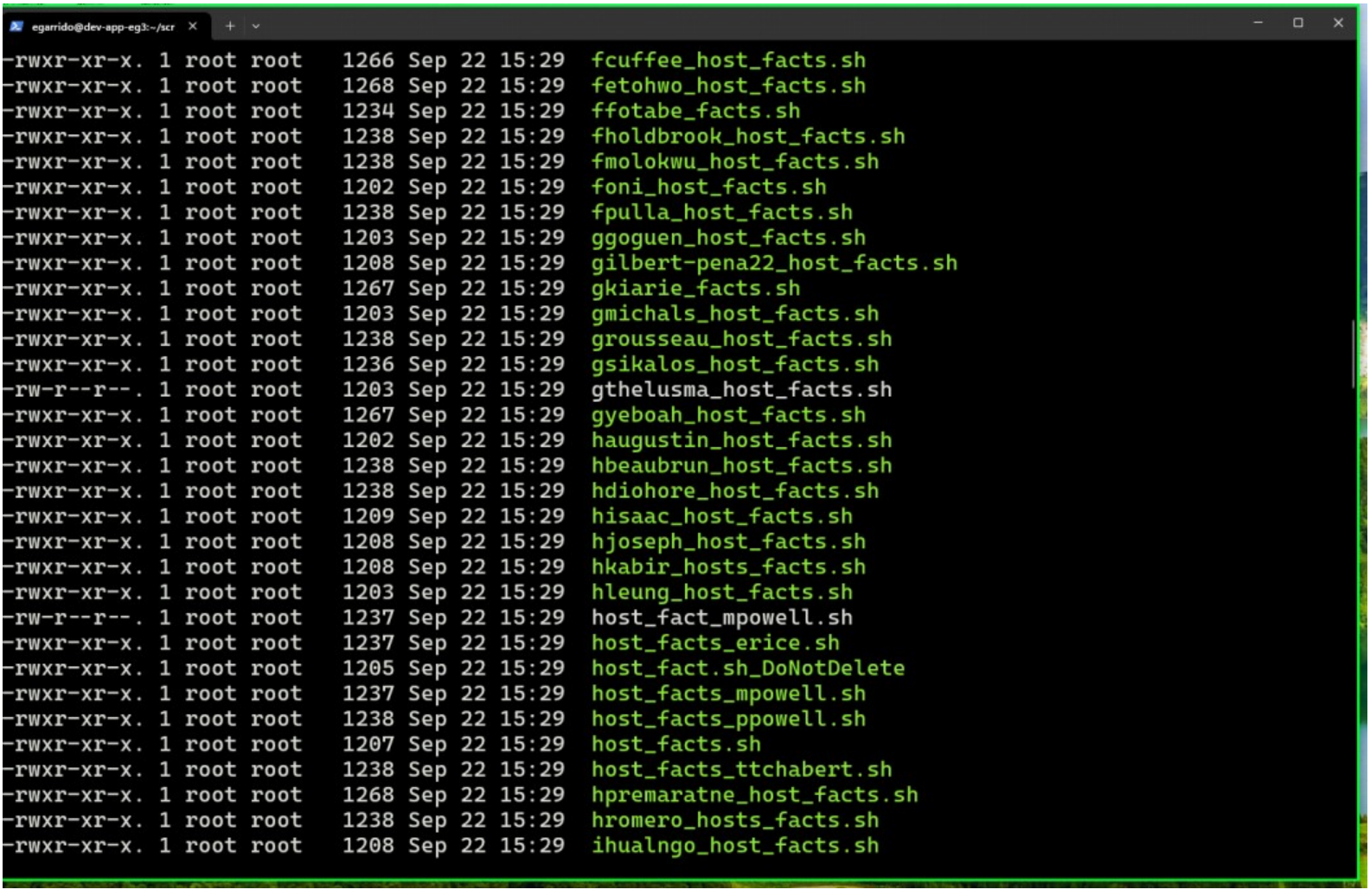
A host facts report was generated for the performance environment, capturing network configuration, hardware details, memory usage, and virtualization metadata. This confirms consistent and repeatable system information collection across environments for auditing and operational visibility.



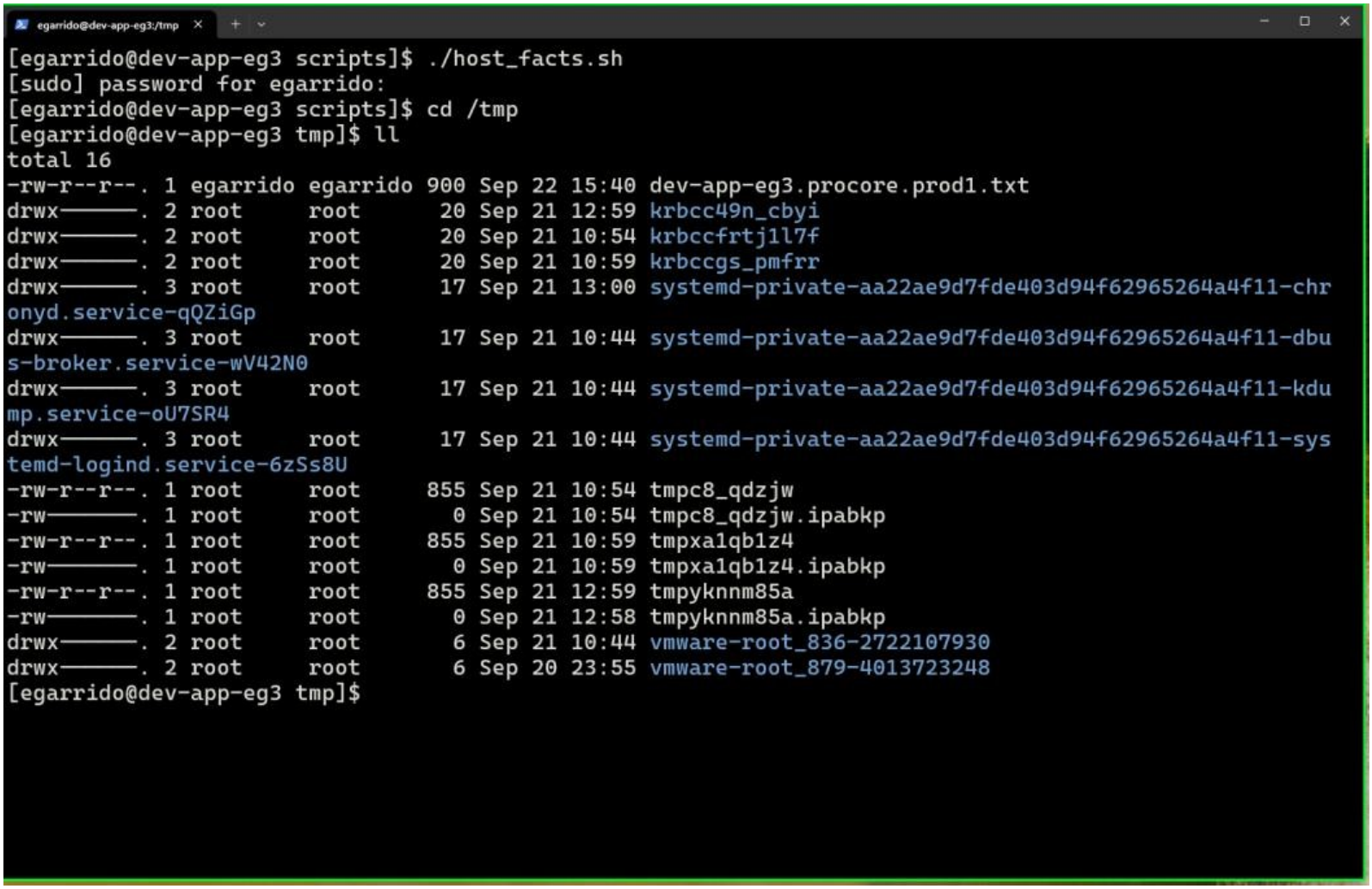
A GitLab repository was cloned onto the target host using HTTPS authentication. An initial authentication failure was resolved by using valid credentials, after which the repository cloned successfully, confirming access and proper source control integration on the system.



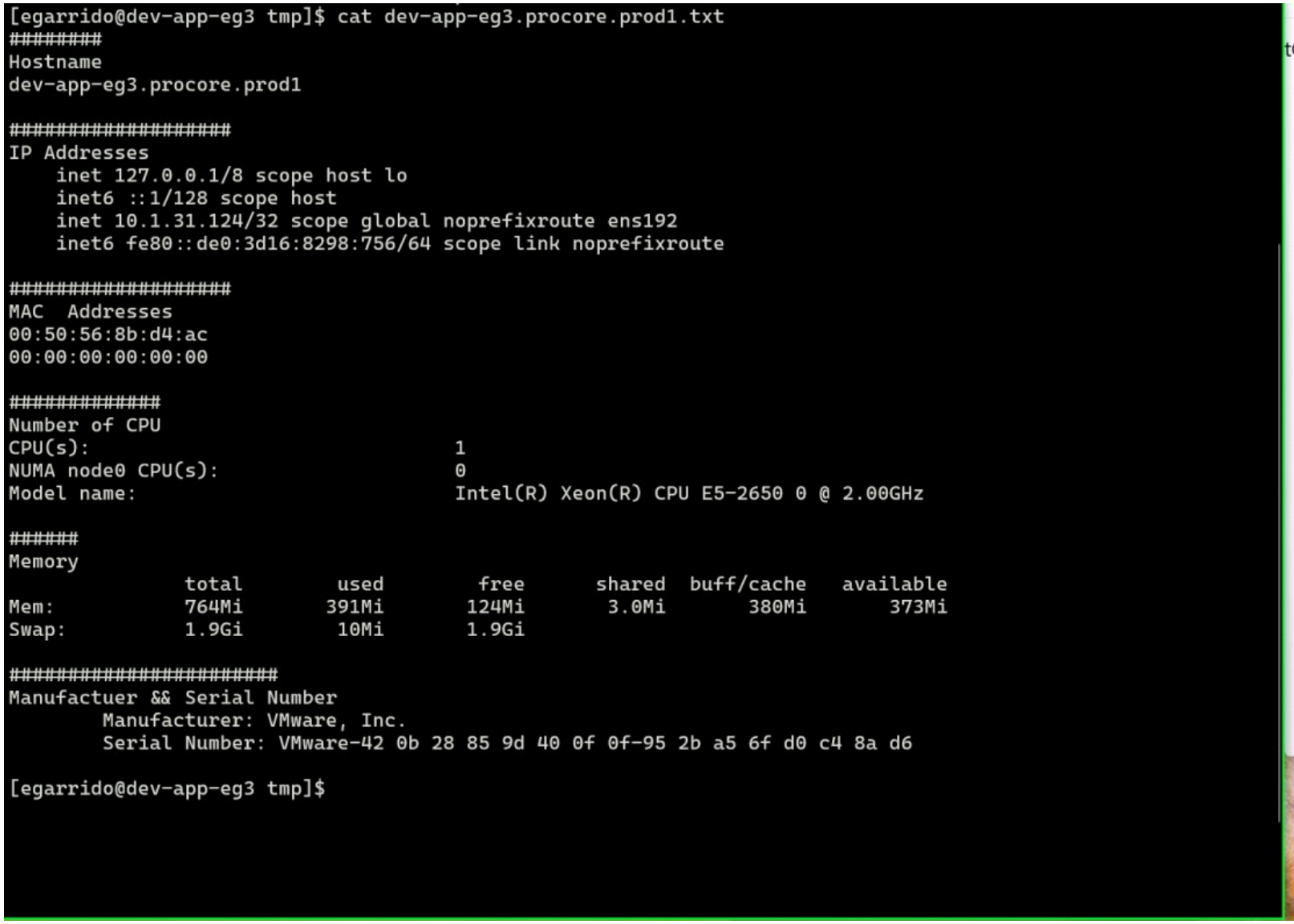
A centralized collection of executable host facts scripts was deployed on the system, with standardized naming and permissions. These scripts are designed to gather consistent system information per host, supporting automated inventory, auditing, and troubleshooting across the environment.



The host_facts.sh script was executed successfully with elevated privileges, generating a host-specific system facts report in /tmp. The output file confirms proper script execution and successful collection of system information.



The generated host facts file was reviewed and confirmed to contain accurate system details, including hostname, network configuration, CPU and memory information, and virtualization metadata, validating successful data collection by the host facts script.



Summary

This project automates the collection of Linux host system information using standardized shell scripts. Each script gathers key details such as hostname, network configuration, CPU, memory, and virtualization data, and outputs a host-specific report for auditing, troubleshooting, and operational visibility