Automation Academy - Engineer Practitioner Certification_2023

1. Use case title and description *

(Brief description)

In this use case, we will automate the process of log rotation and cleanup for a web server. Web servers generate log files that record various activities, such as access logs and error logs. Over time, these log files can grow in size and consume disk space. Manually managing log rotation and cleanup can be tedious, especially when dealing with multiple log files and servers. The goal is to implement a shell script that automates log rotation and cleanup, ensuring that log files are appropriately managed and disk space is optimized.

2. Use case - Problem Statement *

State the problems identified prior to implementation of this use case.

1. Manual Log Management: The manual process of log rotation and cleanup requires frequent monitoring and intervention, which is time-consuming and prone to errors. 2. Disk Space Consumption: Large log files can consume valuable disk space, leading to potential disk space shortages and affecting server performance. 3. Potential Log

Overwrite: Without log rotation, log files may grow indefinitely, eventually leading to log overwrite and the loss of historical data.

3. Solution provided *

Describe the process involved to over come the above problem statement

1. A shell script was created to run on a scheduled basis, using a task scheduler like cron. 2. The script identifies log files in the designated log directory that have exceeded a certain size threshold or have reached a specific age. 3. For each log file that meets the criteria for rotation, the script compresses the log file to save space and appends a timestamp to the filename to differentiate it from previous rotations. 4. The script then removes log files that are older than a certain retention period to free up disk space while preserving recent logs for analysis. 5. Optional: The script can trigger a log analysis tool or notify the system administrator about specific log events before rotation or cleanup.

4. Tools used to automate the use case *

(Enter name of a tool/(s) like UiPath, Ayehu, HPOO, BluePrism, Automation anywhere, SAP Solman, HANA, Selenium, run book scripts etc.)

Shell scripting is the primary tool used to automate the log rotation and cleanup process. Additionally, standard Linux utilities such as 'find', 'gzip', and 'rm' are utilized within the shell script for log file manipulation.

5. Results/ Benefits on the outcome of the implementation *

(Eg: FTE benefits, Savings, Improvement in turn around time, Any productivity gain, etc.)

The implementation of log rotation and cleanup automation provided the following benefits: 1. Time and Effort Savings: Administrators no longer need to manually manage log files, freeing up their time for other critical tasks. 2. Disk Space Optimization: The automated log rotation and cleanup prevent excessive disk space consumption, ensuring there is sufficient space for other applications and processes. 3. Log Retention: The retention of recent logs

allows for effective analysis of recent activities while maintaining a clean log directory. 4. Improved System Performance: By preventing log files from growing indefinitely, the system's overall performance and responsiveness are enhanced.

6. Class of Technology Enabler for Automation *

choose any 1 option primarily used

Scripting tool

7. Specify Client name for whom the implementation has been done *

This is just for reference and confidential.

- ○ Capgemini Internal
- ◉ anonymous platform

8. Were you mentored by anyone in this use case implementation ?
If yes, Please mention mentor's Capgemini Email ID if not you mention your N+1 email ID.

anonymous platform

9. You can add any supporting document for the use case submitted in a form of PPT or PDF or Word file (Non-anonymous question)

10. How would you rate this program ?