Selecting Correct User Interface

In this exercise, I will review multiple scenarios and decide if a graphical user interface (GUI) or command-line interface (CLI) would be more effective. This is derived from the class, Tools of the Trade, Linux and SQL Module 1 in the Google Cybersecurity Certification Specialty. Although this class has Linux in the name, this exercise applies to all operating systems.

Example 1

Scenario

You are a security professional training all employees at your company on creating a strong password. You explain different strategies that they can use for making passwords secure. You also demonstrate how to change passwords. Your teammates have a wide range of technical expertise.

Ouestion

In this scenario, should you use a GUI or CLI to demonstrate how to change passwords? Explain your reasoning in 2-3 sentences.

Response

Because this scenario is for all employees for the company, and it is for each employee to change password and complexity, I would use a GUI. This would make it accessible for a wide range of workers and show how to apply within the company's preferred interface and network infrastructure.

Example 2

Scenario

You are reviewing log files for a department at your company. Log file names are supposed to include the name of the department. After reviewing multiple log files, you realize that the file names do not include the name of the department. You decide to rename all the log files for this department. There are hundreds of log files.

Question

In this scenario, should you use a GUI or CLI to rename the log files? Explain your reasoning in 2-3 sentences.

Response

I would use an automated process within a CLI to alter the name of each log to include the department. In Bash, and let's say all the logs are .txt files and all the logs are in the finance department, this would look like:

for file in *.txt; do mv "\$file" "finance\$file"; done

Example 3

Scenario

You are installing multiple applications. You want to keep a history of commands while you install the applications. This will allow you to check later to ensure that you installed all of the necessary applications and that you installed them correctly.

Ouestion

In this scenario, should you use a GUI or CLI to install the applications? Explain your reasoning in 2-3 sentences.

Response

I would use a CLI to quickly copy the directory of all files necessary for the application's process and paste within the correct directories for devices. Another way, specifically in Bash, is to use APT or YUM to quickly install apps. This is similar to what a installation wizard will do using a GUI, however a CLI ensures logs are kept of all commands used so I later can easily search for each device that has the application installed.