

TRAINING

Shell Scripting

Overview

A shell script is a program executed by the Unix shell. There are many shells to choose from, the most common of which are the Bourne shell (sh), Bourne Again shell (bash), C shell (csh), Korn shell (ksh), and Z shell (zsh).

Shell scripts are flexible and can be used to automate long, mundane, or complex tasks. A great benefit to a shell script is that it uses the same commands and syntax as the those for the command line, as well some common programming features.

In its simplest form, a shell script is a list of commands run in sequence. Every new line of a shell script is a new command; indentation is used for large, multi-line commands. The following basic script will report the logged in user and the present working directory of that user when the script is run:

```
#!/bin/bash
whoami
pwd
```

Key Ideas

Shebang (or hashbang): The ‘#!’ character set that precedes the file path (eg #!/bin/sh) of the selected shell. This is the first line of the script and tells the kernel which interpreter to use for the script.

#: The ‘#’ is used for comments within the script. Anything on the line after this character will not be interpreted as part of the script.

script_name.sh: The ‘.sh’ suffix for a shell script file.

sh script_name.sh: The command for running the script on the command line.

clear: A command that clears the screen.

echo “”: A command that prints whatever string appears between the quotation marks on a new line.

Example Scenario

Create a short shell script that clears the screen and prints ‘Hello world!’ at the top.

Now Do It

1. Create a file called ‘Hello_world.sh’ and open it in your chosen text editor.

2. Include the bash shebang at the top of script.
3. Write a comment on a new line underneath the shebang that describes the script.
4. On a separate line, write the 'clear' command.
5. On a separate line, write the 'echo' command that will print 'Hello world!'
6. Save and exit the file and run it on the command line.

If you remember nothing else...

A shell script is a list of commands run in sequence. Every new line is a new command.

Answer Key

The hello_world.sh script should look like this:

```
#!/bin/bash
# This script clears the screen and prints 'Hello world!'.
clear
echo "Hello world!"
```



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