Bash

Last updated by | Shakibe Hasan | Jun 9, 2023 at 11:49 AM GMT+6

What is BASH?

BASH is an acronym for Bourne Again Shell, a punning name, which is a tribute to Bourne Shell.

Bash is a command line interpreter that typically runs in a text window where user can interpret commands to carry out various actions. The combination of these commands as a series within a file is known as a Shell Script. Bash can read and execute the commands from a Shell Script.

Features of Bash

1. Bash is sh-compatible as it derived from the original UNIX Bourne Shell. It is incorporated with the best and useful features of the Korn and C shell like directory manipulation, job control, aliases, etc.
2. Bash can be invoked by single-character command line options (-a, -b, -c, -i, -l, -r, etc.) as well as by multi-character command line options also like --debugger, --help, --login, etc.
3. Bash Start-up files are the scripts that Bash reads and executes when it starts. Each file has its specific use, and the collection of these files is used to help create an environment.
4. Bash consists of Key bindings by which one can set up customized editing key sequences.
5. Bash contains one-dimensional arrays using which you can easily reference and manipulate the lists of data.

Advantages of Bash scripting

- **Automation:** Shell scripts allow you to automate repetitive tasks and processes, saving time and reducing the risk of errors that can occur with manual execution.
- **Portability:** Shell scripts can be run on various platforms and operating systems, including Unix, Linux, macOS, and even Windows through the use of emulators or virtual machines.
- **Flexibility:** Shell scripts are highly customizable and can be easily modified to suit specific requirements. They can also be combined with other programming languages or utilities to create more powerful scripts.
- **Accessibility:** Shell scripts are easy to write and don't require any special tools or software. They can be edited using any text editor, and most operating systems have a built-in shell interpreter.
- **Integration:** Shell scripts can be integrated with other tools and applications, such as databases, web servers, and cloud services, allowing for more complex automation and system management tasks.
- **Debugging:** Shell scripts are easy to debug, and most shells have built-in debugging and error-reporting tools that can help identify and fix issues quickly.

Reference: javatpoint.com