Debugging Bash Shell Scripts

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Learn How to Automate Common Tasks with Bash Shell Scripting

Debugging Bash Shell Scripts

➢ **Debugging is determining the cause which fails the script.**
➢ **Why script fails ?**
    ➢ **Because of some errors.**
➢ **This is because of two type of errors.**
        ➢ **Syntax Errors**
        ➢ **Runtime Errors**
➢ **Syntax Errors stops script execution and run time errors don't stop script.**
➢ **Actually we don't have good debugging procedures with shell scripting, but we can try with some commands.**
➢ **And there are different commands for debugging and we will work with set command.**

➢ **One more thing our bash is an interpreter.**

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Debugging Bash Scripts…

➢ We can go with **set** command and We have different options with set command.
➢ **Syntax:**
      ➢ **set [options]**
      ➢ **No Options: To list system defined variables**
      ➢ **set –n   No Execution, Purely for syntax check.**
      ➢ **set –x   Prints the command before executing it in script**
      ➢ **set –e   Exit Script if any command fails**

Thank you

Debugging Bash Scripts

➢ We are working with shell scripting and we are using bash as our shell, means **OS** is executing our shell scripts using bash shell.

➢ Now here, important point is bash is an interpreter.

➢ Interpreter is a kind of a program, which is used to execute code/script.

➢ **How Interpreter(Bash) executes script(s) ?**

➢ It reads and executes our code/script line by line.

➢ Sometimes it throws an exception/error while executing code/script.

➢ This is because of two type of errors.

  ➢ Syntax Errors
  ➢ Runtime Errors

➢ Syntax Errors stops our script execution and run time errors don't stop our script.

➢ Here: Debugging is simply, determining the cause which fails the script.

➢ Actually we don't have good debugging procedures with shell scripting, but we can try with some commands.

➢ And there are different commands for debugging.

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