Sistemas Informáticos (Computer Systems)

Scripting in Python 03. Guide

—

Authors: Sergi García, Alfredo Oltra

Updated November 2022

Scripting in Python - Part 03 - Guide

1.   What to do?

In this unit, we are going to show you how to execute Linux/Windows commands and obtain its output as a variable. Also, we are going to know how to pass arguments using Linux/Windows console.

In order to use next commands, we have to use "import" clause in order to import modules that had custom functions. If you want to know more about modules, please visit this link.

2.   Execute Linux/Windows commands

To execute Linux/Windows commands and obtain its output, you can use this link.

One example:

```python
# We import module "subprocces" that let us execute commands
import subprocess
# subprocess.check_output runs a command and obtain its output
output = subprocess.check_output("cat /etc/services", shell=True)
```

3.   Pass arguments from console to our program

For passing arguments from console to a Python program, we have to import "sys" and use "sys.argv". This variable contains an array with executable name in position 0 and in next positions it has arguments in order.

```python
# We import module sys
import sys
# Len function tell us length of an array. "sys.argv" is an array
# with received parameters
 if len(sys.argv) != 3:
      print ("2 parameters are required")
else:
      print (sys.argv[0]) # shows name of executable file
      print (sys.argv[1]) # shows first argument
      print (sys.argv[2]) # shows second argument
```

4.   Information

You can find more information and example in these links:

https://www.programcreek.com/python/example/2696/subprocess.check_output

https://queirozf.com/entries/python-3-subprocess-examples#run-example-store-output-and-error-message-in-string