

TP01_Scripts2 Batch and Bash languages

Operating systems

BTS-SNIR1

Presentation of the session

Based on the knowledge acquired during the previous session, implementation of basic algorithmic structures in Batch and Bash scripting language, you will write a script that will be launched at the start of DOS/Windows and Linux systems. This script will send by mail to a remote administrator a certain amount of information on the machine which has just started.

Report of the TP

It should be uploaded to Moodle under the name: TP01_scripts2_YourName.pdf.

Resources

The "Operating System" course.

The handout "Command interpreters".

The documents "File access rights under Linux" and "The vi text editor".

Evaluation criteria

Code quality: Module headers, comments, indentation, relevance of identifiers, consistency between code and algorithm.

 $\label{lem:compliance} \mbox{Compliance with the specifications, constraints and instructions of the TP.}$

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Script specifications

Script name:

Under DOS: afftest.bat On Linux: afftest

Parameters: List of filenames.

Return value: None.

If the script is launched without parameters, it displays an error message on the screen indicating the operation of the command and exits immediately.

If the script is launched correctly, it checks the existence of the file(s) whose name is passed as a parameter. Files that do not exist are subject to an error report which will be saved in an "errors.txt" file at the root of your account. This file will contain a header, then a line per missing file.

The header format is as follows:

• The name of the error file (CRLF*) (CRLF), the name of the machine (CRLF), its IP address (CRLF), the address of the gateway (CRLF), the name of the logged in user (CRLF), current date (CRLF), time of day (CRLF) (CRLF).

The format of the line(s) is as follows:

• The name of the missing file, the serial number of the parameter containing the name of the missing file on the command line (if the second file passed in parameter is missing then the number is worth 2) (CRLF).

The "errors.txt" file will be sent as an attachment by email to the developer's address for testing and validation.

Don't forget to specify the subject ("Windows Configuration" or "Linux Configuration") as well as the body of the email! (See the sample "errors.txt" file).

* CRLF: Carriage Return Line Feed

Required work

- Provide the test set that will validate the operation of the script with the following 4 files:
 hiberfil.sys and pagefile.sys in c:\, and setup.ini and win.ini in c:\windows.
 (Ex: H:\>AFFTEST.bat c:\hiberfil.sys c:\pagefile.sys c:\windows\setup.ini c:\windows\win.ini)
- 2. Write the script algorithm.
- 3. Translate the algorithm into scripting language.
- 4. Validate the operation of the script by applying the set of tests provided for in 1.
- 5. In your report you will conclude on the anti-spam legislation in force in our country and on the risks incurred in the event of violation of the law.

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