



Placement Empowerment Program
Cloud Computing and DevOps Centre

shell script for monitoring logs

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Introduction

Log monitoring is an essential task for system administrators and developers. It helps track errors, warnings, and critical system messages in real-time. This guide will help you write a **Shell Script in Git Bash** to monitor server logs and alert you when errors are detected.

Overview

The script will:

- ✓ Monitor a log file in real-time.
- ✓ Search for the keyword "**Error**" in the logs.
- ✓ Alert you whenever an error is found.

Since Git Bash is used instead of Linux, we will ensure compatibility with Windows.

Step-by-Step Overview

Step 1: Open Git Bash

Step 2: Create a Log File

```
touch server.log
```

- To add all files in the

```
echo "Info: Service started" > server.log
```

```
echo "Warning: High memory usage" >>  
server.log
```

```
echo "Error: Service crashed" >> server.log
```

- **Step 3: Write the Shell Script**

```
#!/bin/bash
```

```
LOG_FILE="server.log"
```

```
KEYWORD="Error"
```

```
while true; do
```

```
    if tail -n 10 "$LOG_FILE" | grep "$KEYWORD";  
then
```

```
    echo "ALERT: An error was found in the logs!"
```

```
fi
```

```
sleep 5 # Check logs every 5 seconds
```

done

```
MINGW64:/c/Users/pcabd

pcabd@peace MINGW64 ~ (master)
$ echo "Info: Service started" > server.log

pcabd@peace MINGW64 ~ (master)
$ echo "Warning: High memory usage" >> server.log

pcabd@peace MINGW64 ~ (master)
$ echo "Error: Service crashed" >> server.log

pcabd@peace MINGW64 ~ (master)
$ nano monitor_logs.sh

pcabd@peace MINGW64 ~ (master)
$ chmod +x monitor_logs.sh

pcabd@peace MINGW64 ~ (master)
$ ./monitor_logs.sh
Error: Service crashed
ALERT: An error was found in the logs!
Error: Service crashed
ALERT: An error was found in the logs!
Error: Service crashed
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ALERT: An error was found in the logs!
```

Step 4: Make the Script Executable

`chmod +x monitor_logs.sh`

`git commit -m "Initial commit"`

Step 5: Run the Script

```
./monitor_logs.sh
```

Expected Outcome

While the script is running, open a new Git Bash window and type:

```
echo "Error: Database connection failed!" >>  
server.log
```

If the script is working correctly, you should see this message:

```
ALERT: An error was found in the logs!
```