

GETTING STARTED WITH

OPS AUTOMATION USING POWERSHELL

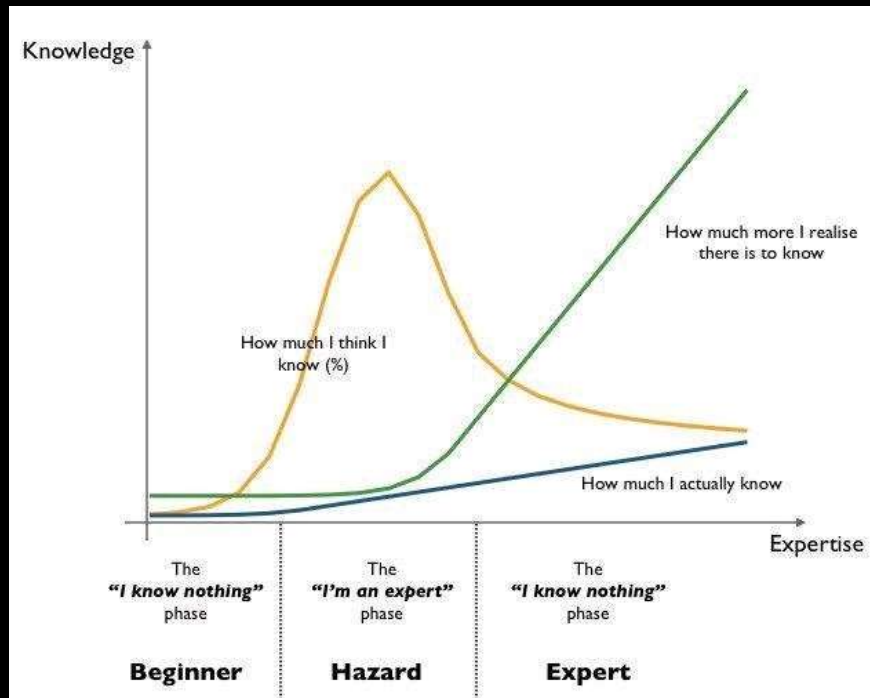
STEVE LUNN

ABOUT ME

- STEVE LUNN
 - SYSTEMS LEAD ENGINEER AT MINSTER LAW
 - GRADUATED UNIVERSITY OF HUDDERSFIELD 1996
- [HTTPS://GILGAMOTH.GITHUB.IO/](https://gilgamoath.github.io/)
- [HTTPS://WWW.LINKEDIN.COM/IN/SMLUNN/](https://www.linkedin.com/in/smlunn/)



ABOUT ME



AUTOMATION \neq DEV OPS

"NECESSITY IS THE MOTHER OF
INVENTION"

PLATO

MY FIRST POWERSHELL

- SPLA REPORT
- SERVICE PROVIDER LICENSING AGREEMENT
- 15 PEOPLE X 10 DAYS = 150 DAYS (1 AUDIT)
- 1 PERSON X 40 DAYS = 40 DAYS
- 650 LINES OF CODE

EXAMPLE

EXAMPLE SCRIPT 1

- LOG CLEAN UP SCRIPT

```
1  Set-PSDebug -strict
2
3  $VarLogFolder = "\\WebServer\c$\inetpub\logs\LogFiles\W3SVC1"
4
5  $VarDeleteDate = (Get-Date).AddDays(-60)
6  $VarDeletedFileCount = 0
7  $VarDeletedFileSize = 0
8
9  $VarLogFiles = Get-ChildItem -LiteralPath $VarLogFolder | Sort Name
10 foreach($VarLogFile in $VarLogFiles){
11     $VarFileDate = get-date($VarLogFile.CreationTime)
12     If($VarDeleteDate -gt $VarFileDate) {
13         Remove-Item $VarLogFolder\$VarLogFile
14         Write-Host "Deleted File - $VarLogFolder\$VarLogFile"
15         $VarDeletedFileCount += 1
16         $VarDeletedFileSize += $VarLogFile.Length
17     }
18 }
19
20 $VarDeletedFileSize = "{0:N0}" -f ($VarDeletedFileSize/1MB)
21 Write-Host "$VarDeletedFileCount Files deleted, saving $VarDeletedFileSize MB"
```


DEMONSTRATION

EXAMPLE SCRIPT 2 – PART 1

- LOG CLEAN UP SCRIPT, WITH E-MAIL REPORT

```
1  Set-PSDebug -strict
2
3  $VarLogFolder = "\\WebServer\c$\inetpub\logs\LogFiles\W3SVC1"
4
5  $VarSMTPServer= "mailserver"
6  $VarSMTPUser = ""
7  $VarSMTPPassword = ""
8  $VarEmailFrom = "Report@Domain.Local"
9  $VarEmailTo = "steve.lunn@Domain.Local"
10 $VarEmailSubject = "File Removal Report"
11 $VarEmailBody = ""
12
13 $VarDeleteDate = (Get-Date).AddDays(-60)
14 $VarDeletedFileCount = 0
15 $VarDeletedFileSize = 0
```


EXAMPLE SCRIPT 2 – PART 2

- LOG CLEAN UP SCRIPT, WITH E-MAIL REPORT

```
17 $VarLogFiles = Get-ChildItem -LiteralPath $VarLogFolder | Sort Name
18 foreach($VarLogFile in $VarLogFiles){
19     $VarFileDate = get-date($VarLogFile.CreationTime)
20     If($VarDeleteDate -gt $VarFileDate) {
21         Remove-Item $VarLogFolder\$VarLogFile
22         Write-Host "Deleted File - $VarLogFolder\$VarLogFile"
23         # $VarEmailBody += "Deleted File - $VarLogFolder\$VarLogFile <BR>"
24         $VarDeletedFileCount += 1
25         $VarDeletedFileSize += $VarLogFile.Length
26     }
27 }
28
29 $VarDeletedFileSize = "{0:N0}" -f ($VarDeletedFileSize/1MB)
30
31 Write-Host "$VarDeletedFileCount Files deleted, saving $VarDeletedFileSize MB"
32 $VarEmailBody += "$VarDeletedFileCount Files deleted, saving $VarDeletedFileSize MB"
```

EXAMPLE SCRIPT 2 – PART 3

- LOG CLEAN UP SCRIPT, WITH E-MAIL REPORT

```
34 $VarSMTP = New-Object System.Net.Mail.SmtpClient -argumentList $VarSMTPServer
35 If($VarSMTPUser -ne "") {
36     $VarSMTP.Credentials = New-Object System.Net.NetworkCredential -argumentList $VarSMTPUser,$VarSMTPPassword
37 }
38
39 $VarSMTPMessage = New-Object System.Net.Mail.MailMessage
40 $VarSMTPMessage.From = New-Object System.Net.Mail.MailAddress($VarEmailFrom)
41 $VarSMTPMessage.To.Add($VarEmailTo)
42 $VarSMTPMessage.Subject = $VarEmailSubject
43 $VarSMTPMessage.Body = $VarEmailBody
44 $VarSMTP.Send($VarSMTPMessage)
```


EXAMPLE SCRIPT 3

- LOG CLEAN UP SCRIPT, WITH ADDED ARCHIVE

```
22 If($VarDeleteDate -gt $VarFileDate) {  
23     Compress-Archive -DestinationPath $VarLogFolder\$VarArchiveFile -Path $VarLogFolder\$VarLogFile -Update  
24     Remove-Item $VarLogFolder\$VarLogFile  
25     Write-Host "Deleted File - $VarLogFolder\$VarLogFile"  
26     #Var$EMailBody += "Deleted File - $VarLogFolder\$VarLogFile <BR>"  
27     $VarDeletedFileCount += 1  
28     $VarDeletedFileSize += $VarLogFile.Length  
29 }
```

ACTUAL SCRIPT

- CHANGED THE DELETION PROCESS INTO A FUNCTION
- ABILITY TO CLEAR MULTIPLE FOLDERS WITH DIFFERENT FILE TYPES WITH DIFFERENT AGE REQUIREMENTS
- AVAILABLE TO DOWNLOAD FROM

[HTTPS://GITHUB.COM/GILGAMOTH/POSH-FILE-CLEARDOWN](https://github.com/GilgamoTh/Posh-File-Cleanup)

WHAT NEXT?

- SPLA REPORT
- WSUS AUTO APPROVALS *
- WSUS REPORTS
- WSUS SCHEDULED CLEAN UP *
- WINDOWS SERVICE CHECKER *
- DAILY SERVER ENVIRONMENT REPORT *
- FILE CLEAN DOWN *
- AUTOMATED E-MAIL SIGNATURES
- NEW USER CREATION
- LEAVERS REMOVAL AND ARCHIVE
- REST API INTEGRATION
- SSL CERTIFICATE IMPORT
- SOLAR PANEL GENERATION EXPORT

* AVAILABLE ON MY GITHUB REPOSITORY

QUESTIONS?

THANK YOU

[HTTPS://GILGAMOTH.GITHUB.IO/](https://gilgamothe.github.io/)

[HTTPS://WWW.LINKEDIN.COM/IN/SMLUNN/](https://www.linkedin.com/in/smlunn/)