

Manage your IT infrastructure like a Rock Star with PowerShell

Automate. Delegate. Relax.

Heiko Brenn  @heikobrenn

About Heiko



PowerShell Enthusiast and
ScriptRunner Product Expert

Head of International Business
BeNeLux | Scandic | North America

In the IT industry for 25+ years
IT Admin | Consultant | Product Manager

First PowerShell experience:
Exchange 2007

Co-Founder of PowerShell User Group
Rhein-Neckar (@PSUGRheinNeckar)



A Twitter profile card for Heiko Brenn. The background features a road leading into a sunset with the text "POSH HIGHWAY TO SHELL". On the left is a circular profile picture of Heiko, a man with glasses and a beard. To the right of the picture is a button labeled "Profil bearbeiten". Below the picture, the name "Heiko Brenn" is displayed in bold, followed by the handle "@HeikoBrenn". A bio section includes "#PowerShell & #Automation enthusiast @Script_Runner | #Music lover | Drummer for @ScriptyBoyz | #GarageBand experiments | Co-founder of @PSUGRheinNeckar". At the bottom, it shows "Software-Applikation" with a location pin icon, "Germany", a link to "linkedin.com/in/heikobrenn/", and "Seit September 2018 bei Twitter". The follower count is listed as "1.335 Folge ich" and "1.491 Follower".

Let's get in touch



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ScriptRunner®

The #1 for PowerShell Management

Unlock the Power of PowerShell

+49

2014

25

1924



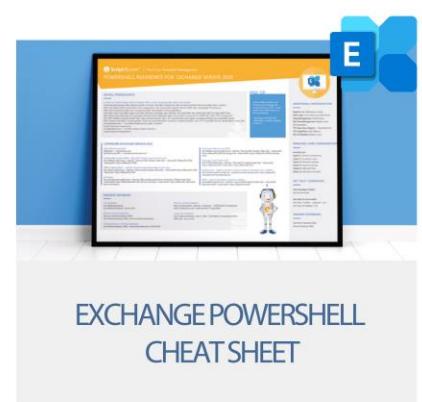
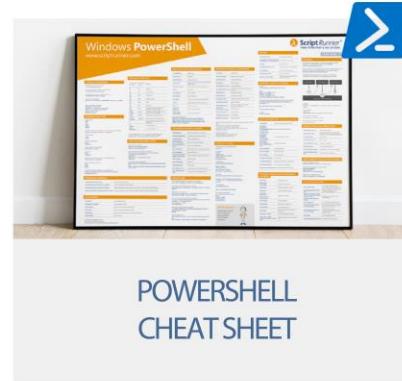
Hundreds of free
and ready-to-use
PowerShell scripts.

github.com/scriptrunner/ActionPacks



Get your free PowerShell goodies

lp.scriptrunner.com/en/powershell-goodies





STANDARDIZATION, AUTOMATION AND DELEGATION OF RECURRING TASKS

AUTO-CREATED
USER FRIENDLY
WEB FORMS

SECURE
CREDENTIAL
ADMINISTRATION

CENTRALIZED SCRIPTS AND
MODULES MANAGEMENT

INTERACTIVE, SCHEDULED
AND EVENT-DRIVEN
SCRIPT EXECUTION

COMPREHENSIVE
MONITORING AND
REPORTING



Manage your IT infrastructure
like a Rock Star with PowerShell



Let's start rockin' with PowerShell

Automate & Delegate
IT management tasks
like a Rock Star with ScriptRunner

The Potential of PowerShell

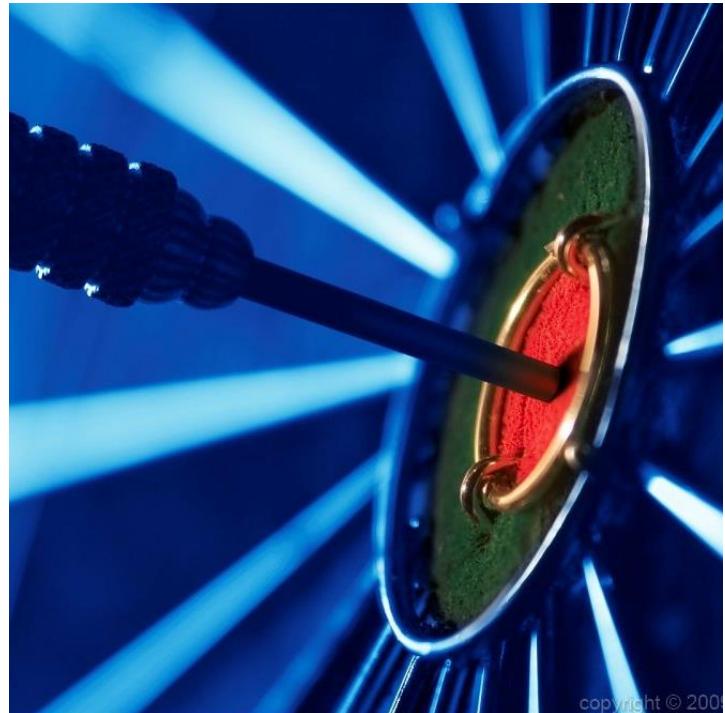
Very mature command-line shell
and scripting language for IT automation

Great framework to automate
recurring tasks consistently

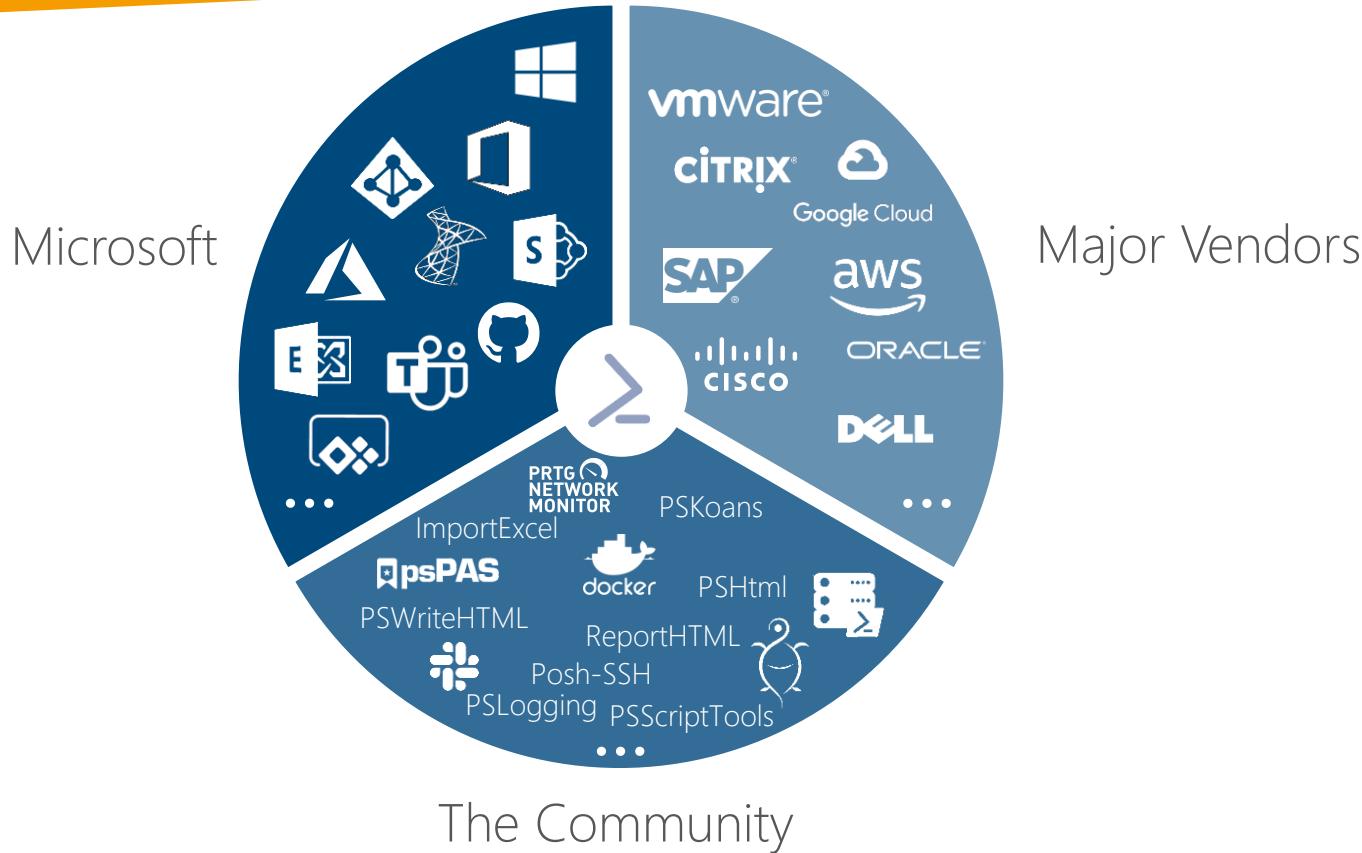
Simplifies administration of your
entire IT infrastructure

Strong commitment from Microsoft
and many other vendors

Very vital worldwide community



The PowerShell Ecosystem





7

7

Two ways of using PowerShell



PowerShell challenges



Let's face it.
Not everyone is a scripting expert

„De-centralized“ PowerShell landscape

How to enable support teams &
LOB users to use PowerShell?

Know-how bottlenecks
Security concerns

PowerShell is only used by
a few IT experts



Unlock the power of PowerShell in 5 steps



Centralized script and module management & execution

Secure credential and permission management

Great user experience
Easy-to-use interface

Flexible & secure delegation

Comprehensive monitoring and reporting



Centralized script and module management



The screenshot illustrates the ScriptRunner web interface for managing scripts and modules. The left sidebar shows navigation links: Dashboard, Run, Authorize & Delegate, Monitoring, Configuration (selected), Actions, Queries, Targets, Scripts (selected), Credentials, and Settings.

The main area displays a list of scripts under the "Scripts" tab, showing 9 of 1282 scripts. The list includes:

- Get-EOOutOfOffice.ps1
- Set-EOOutOfOffice - Copy (2).ps1
- Set-EOOutOfOffice - Copy.ps1
- Set-EOOutOfOffice.ps1** (selected)
- Set-EOOutOfOffice.ps1
- Set-EOOutOfOffice.orig.ps1
- TeamsWithOutOwner-Scheduled.ps1
- TeamsWithOutOwner.ps1
- Webinar_Set-ExOutOfOffice.ps1

The selected script, "Set-EOOutOfOffice.ps1", is shown in a detailed view. The top right shows "O365" and "All owners". The configuration section includes tabs for General and Header information, with "Code editor" currently selected. The code editor displays the PowerShell script:

```
[Parameter(Mandatory = $true,ParameterSetName="Schedule Auto Reply")]
[datetime]$EndDate,
[Parameter(ParameterSetName="Disable Auto Reply")]
[Parameter(ParameterSetName="Enable Auto Reply")]
[Parameter(ParameterSetName="Schedule Auto Reply")]
[switch]$GenerateReport
)
try{
[string[]]$Properties = @('Identity','AutoReplyState','StartTime','EndTime','ExternalAudience',
[string[]]$resultMessage = @()
[string]$msg = "Mailbox {0}"
[string]$replyType = 'All'
$hashtable$cCmdArgs = @{'ErrorAction' = 'Stop'
'Confirm' = $false
}
if($PSCmdlet.ParameterSetName -eq "Disable Auto Reply"){
$cCmdArgs.add('AutoReplyState' , 'Disabled')
$msg += "disabled"
}
else{
if($AutoReplyType -eq 'Only contact list members'){
$replyType = 'Known'
}
if($AutoReplyType -eq 'Internal only'){
$replyType = 'None'
}
}
```

The right side of the interface features three icons: GitHub, a speaker, and a coffee cup.

Don't store credentials in PowerShell scripts!
Don't store credentials in PowerShell scripts!



Centralized credential management



Credentials Showing 23 of 23 Credentials

+ Create

Create credential

User credential or client secret
Use name and password or secret

WinRM client certificate
Use a WinRM client certificate from the local certificate store

Password server
Retrieve the secret from a central password server

PowerShell Secret Management
Retrieve the secret from the Secret Management vault (experimental)

SSH key
Use an existing SSH key file or create a new one

Used by

- AzureVM Credentials
- Exchange Service Account
- Exchange Service Account (Pleasant)
- GitHub
- Hyper-V Service Account
- Microsoft Graph Target
- MyActiveDirectory
- O365 Tenant Service Account

Save Delete

Exchange Service Account (Pleasant)

Configuration General User secret reference

Information Used by

Save Run test Delete

MS Graph Target 007

Microsoft services Microsoft services

Configuration General Microsoft services

Information Advanced settings Used by

Activate service

Microsoft Graph

Sign-in method Certificate Client secret

Tenant ID

Application ID

Credential

Uses the credential selected above which must contain the client secret as password.

PowerShell module Microsoft.Graph.Mail

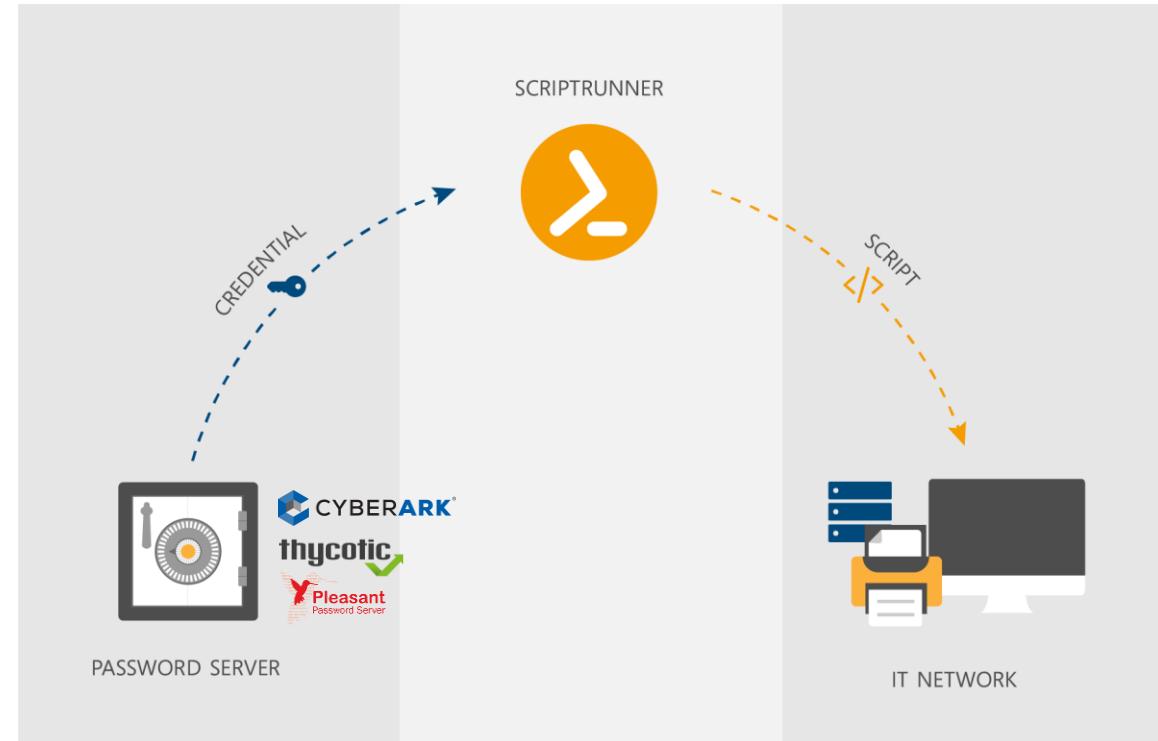
Must be installed on the execution host

Deactivate service

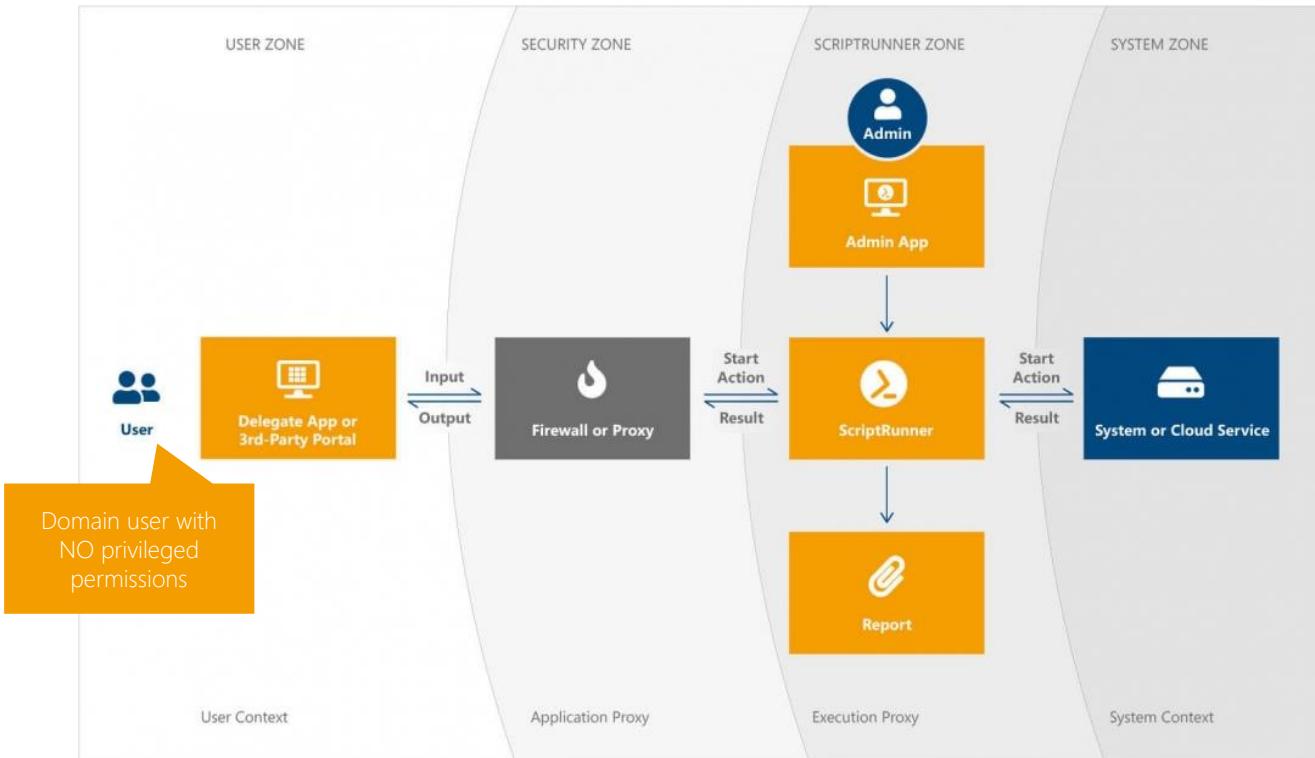
Tip
Notes on authentication and authorization for the service:
To use the 'Certificate' option, store the certificate in the local certificate store. To use the 'Client Secret' option, configure the name and secret under Credentials. In both cases, a service principal or the registered ScriptRunner service must be set up in the tenant with the respective permission roles. If an account is used, it must be assigned the permission roles and must not be enabled for multi-factor authentication (MFA).
[Microsoft documentation](#)

The screenshot displays the ScriptRunner web interface. On the left, a sidebar lists various credential types and their usage across different services. The main area shows two detailed credential configurations: 'Exchange Service Account (Pleasant)' and 'MS Graph Target 007'. Each configuration page includes tabs for 'General' and 'Advanced settings', and sections for 'Information' and 'Used by'. A 'Tip' panel on the right provides guidance on authentication and authorization.

- Centralized password safes
 - CyberArk Password Vault
 - Pleasant Password Server
 - Thycotic Secret Server
- No credentials are stored locally
- Automatic password rotation
- One single secure password repository for multiple ScriptRunner instances



ScriptRunner – Secure Delegation



PowerShell for Everyone



The Script

Administrator: Windows PowerShell ISE

File Edit View Tools Debug Add-ons Help

Untitled3.ps1 Exchange_Webinar.ps1 Set-EOOutOfOffice.ps1 X

```
118     $cmdArgs.Add('ExternalAudience', $replyType)
119     $cmdArgs.Add('InternalMessage', $internalText )
120     $cmdArgs.Add('ExternalMessage', $externalText )
121     if($PSCmdlet.ParameterSetName -eq "Schedule Auto Reply"){
122         $cmdArgs.Add('AutoReplyState', 'Scheduled')
123         $cmdArgs.Add('EndTime', $endDate)
124         $cmdArgs.Add('StartTime', $startDate)
125         $msg += "scheduled"
126     }
127     else{
128         $cmdArgs.Add('AutoReplyState', 'Enabled')
129         $msg += "enabled"
130     }
131 }
132
133 $Script:resHTML = @()
134 foreach($item in $MailboxIds){
135     try{
136         $box = Get-Mailbox -Identity $item -ErrorAction Stop
137         if($null -ne $box){
138             try{
139                 $null = Set-MailboxAutoReplyConfiguration @cmdArgs -Identity $item
140                 if($generateReport -eq $true){
141                     $Script:resHTML += Get-MailboxAutoReplyConfiguration -Identity $item
142                 }
143                 $resultMessage += [System.String]::Format($msg,$box.UserPrincipalName)
144             }
145             catch{
146                 Write-Output "Error occurred at set Mailbox $($item)"
147             }
148         }
149     }
150     catch{
151         Write-Output "Error occurred at get Mailbox $($item)"
152     }
153 }
```

PS C:\Users\administrator.COMPANY>

OutOfOffice

Create OOF Notifications With ScriptRunner Integration



Please select mailbox(es):

🔍

Angus Young Shania Twain Phil Collins ▼

Note the reason you run this action now.

Please select the notification template:

Sick leave ▼

Please select the start of absence

Jul 26, 2022

Please select the end of absence

Jul 31, 2022, 10:22 AM

Generate a report

▶

The User Experience

Great User Experience



The screenshot shows the ScriptRunner interface with a central dialog box titled "Simple VM Creation". The dialog contains the following fields:

- Enter name of VM (NOTE: Must start with "TEST-")
TEST-VM0010
- Select an operating system
UbuntuTS
- Specs: 1 CPU, 3.5 GB RAM, 50 GB HDD (100 \$ per month)
- Specs: 4 CPU, 16GB RAM, 200 GB HDD (390\$ p. Press enter to select)
- Specs: 16 CPU, 64 GB RAM (900 \$ per month)

At the bottom right of the dialog is a large green "Run" button with a play icon.

The background shows the main ScriptRunner dashboard with a "Run" button and a "Reports" section.

Flexible & secure delegation



The screenshot shows the ScriptRunner interface for managing Active Directory delegations. The left sidebar has a blue header "Authorize & Delegate" and includes links for Dashboard, Run, Authorize & Delegate, Monitoring, Configuration, and Settings. The main content area is titled "Active Directory Self-Services" and shows a "Delegations" section. The "Delegations" tab is selected in the left sidebar. The main panel displays a list of assigned actions:

- AD: Show Active Directory User Properties (Get-ADUser)
- Advanced Active Directory Report
- Reset password for Active Directory user
- Change Active Directory User Properties

Below this, under "Local: Add two values", is the action "AD: Show Active Directory User Properties (Get-ADUser)". A message at the bottom right says "Press enter to remove".

Comprehensive monitoring and reporting



ScriptRunner®

Live Monitor

Running scripts
3

Advanced Active Directory Report

Cancel execution

```
99: WARNING: Cannot resolve the manager, on the group 'Bass-AU'.
100: Done!
101: Working on Organizational Units Report...
102: Done!
103: Working on Users Report...
104: Done!
105: Working on Group Policy Report...
106: Done!
107: Working on Computers Report...
108: Done!
109: Compiling Report...
110:
```

Actions Scheduled Queued Queries

Action or scripted query Started Target Runtime Started by Server

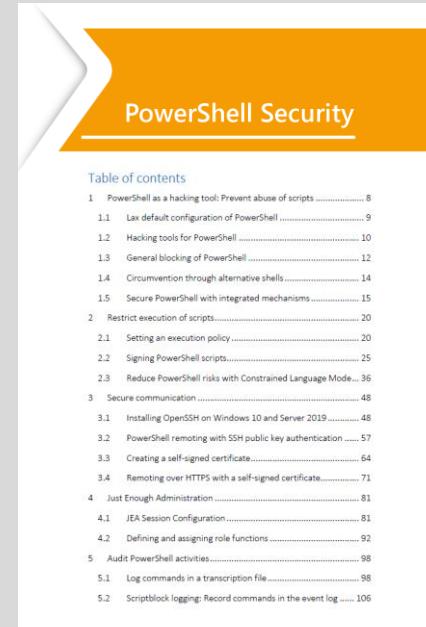
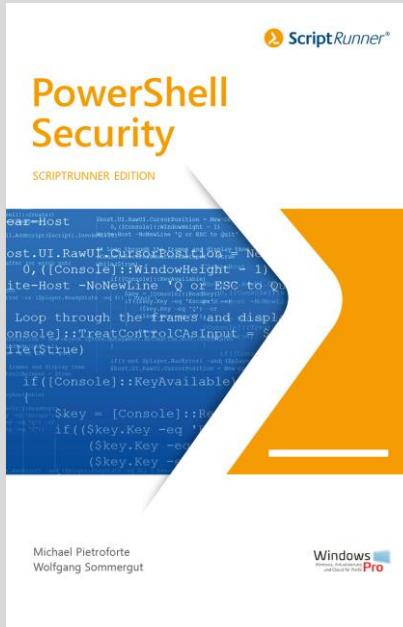
Action or scripted query	Started	Target	Runtime	Started by	Server
Simple Active Directory Report	a few seconds ago	AD local	Running...	COMPANY\tina	ScriptRunner

Filter by servers... ▾

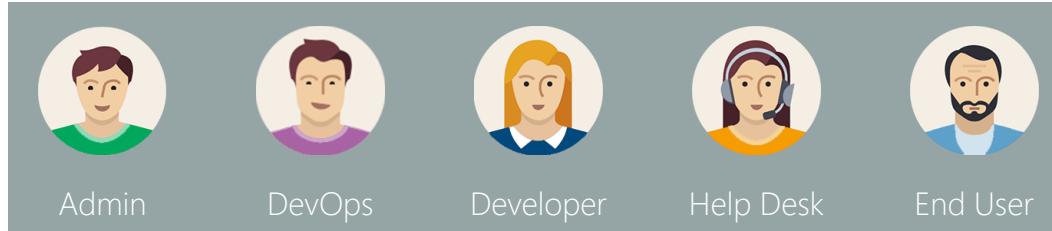
1 en i COMPANY\Administrator(Kerberos) ↻ ?

Free ebook: PowerShell Security

lp.scriptrunner.com/en/powershell-security-guide



Unlock the Potential of PowerShell across your organization



Unlock the Power of PowerShell across your organization



Manager
My team becomes
more
productive

Deliver great scripts in
a secure environment



DevOps

Delegate recurring
tasks and save time



Administrator

Deliver more & better
services in less time



HelpDesk



Developer

Develop scripts for
more use cases/users



EndUser

Faster task completion
with self-services



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REPORTING





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to the test.
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lp.scriptrunner.com/en/demo-download





Let's talk about your
automation use cases.
Book an online session
with me.

lp.scriptrunner.com/meetings/heiko-brenn/demo-en



Visit our ScriptRunner booth.

Let's talk automation
and grab some cool
swag.



“ScriptRunner is an excellent management, reporting, and auditing tool for controlling the use of PowerShell in corporate networks.”

4sysops.com/archives/scriptrunner-portal-edition-r5new-query-configuration-and-action-configuration/



4 sysops

- On-/Off-Boarding automation
- Jira integration
- Meeting NEN 7510 requirements
- Secure delegation to help desk teams
- Limiting user access with Queries

SECURE AND ALWAYS READY FOR AUDITS

Identity and Access Management in the Healthcare Sector

Star-shl

Star-shl, a leading Dutch medical services provider, employs 1,300 people in different locations. Star-shl employees support and advise professionals such as general practitioners, midwives, hospitals and healthcare institutions in the Southwest of the Netherlands. The company specializes in laboratory testing of blood, urine, and stool samples as well as imaging and function tests such as X-rays or ultrasounds. Star-shl uses digital technology to facilitate data flow and a logistics network between all the diagnostics centers, laboratories, and research facilities involved. As the company is working with sensitive patient data, they are under close scrutiny and frequently audited.





AMA

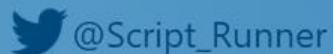
Ask Me Anything Session

SPECIAL GUEST
HARM VEENSTRA



With Heiko Brenn & Markus Hipp

Live: Friday, June 30th | 11 am EDT | 3 pm BST | 16:00 CEST



ScriptRunnerPowerShell



Let's get in touch



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KEEP ON SCRIPTING