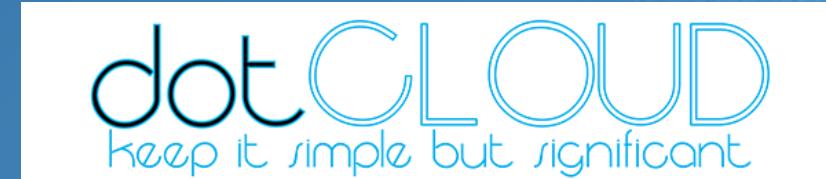


Manage Microsoft 365 Like A Rockstar

Automate – Empower – Relax



Heiko Brenn | @HeikoBrenn – Head of International Business



ABOUT ME



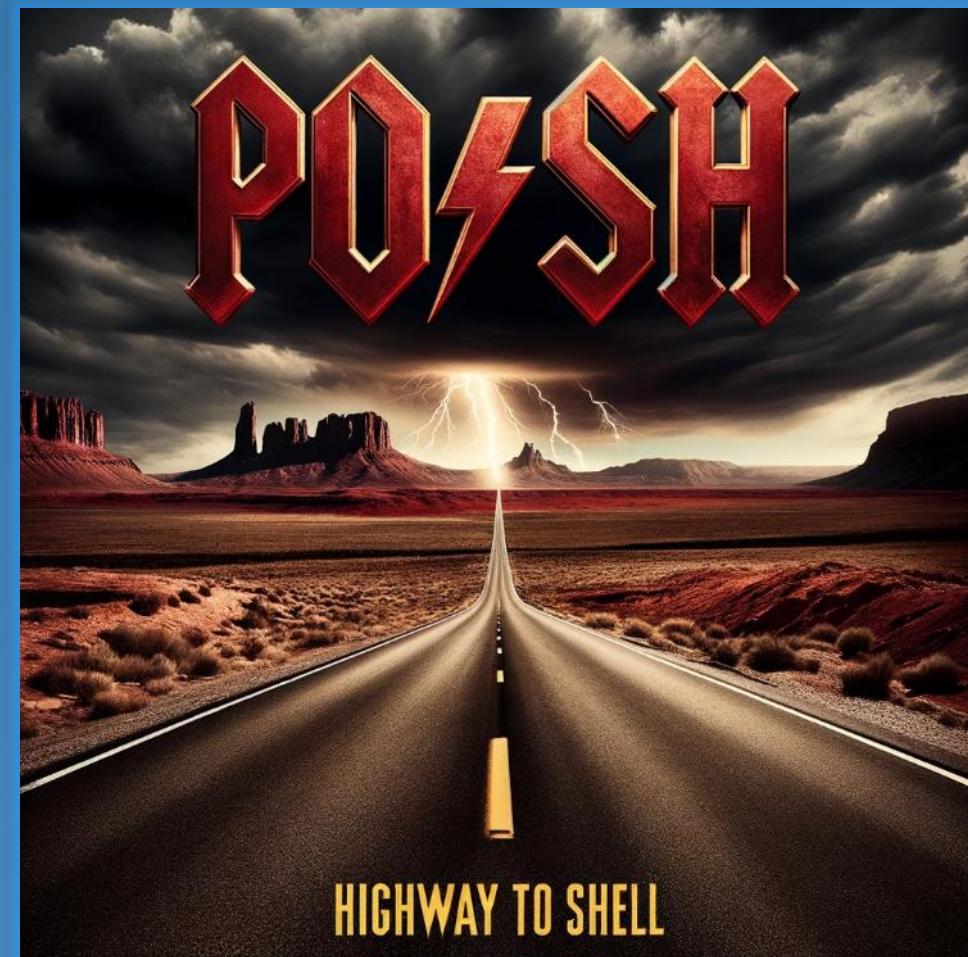
Head of International Business

In the IT industry for 25+ years
IT Admin | Consultant | PM | BD | ...

PowerShell Enthusiast

First PowerShell experience:
Exchange 2007

Co-Founder of the
PowerShell User Group Rhein-Neckar



LET'S CONNECT



@HeikoBrenn
@Script_Runner



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@HeikoBrennPowerShell
@ScriptRunnerPowerShell





+49

Headquarters
Ettlingen
Germany

2014

First
ScriptRunner
Release

25

The
ScriptRunner
Team

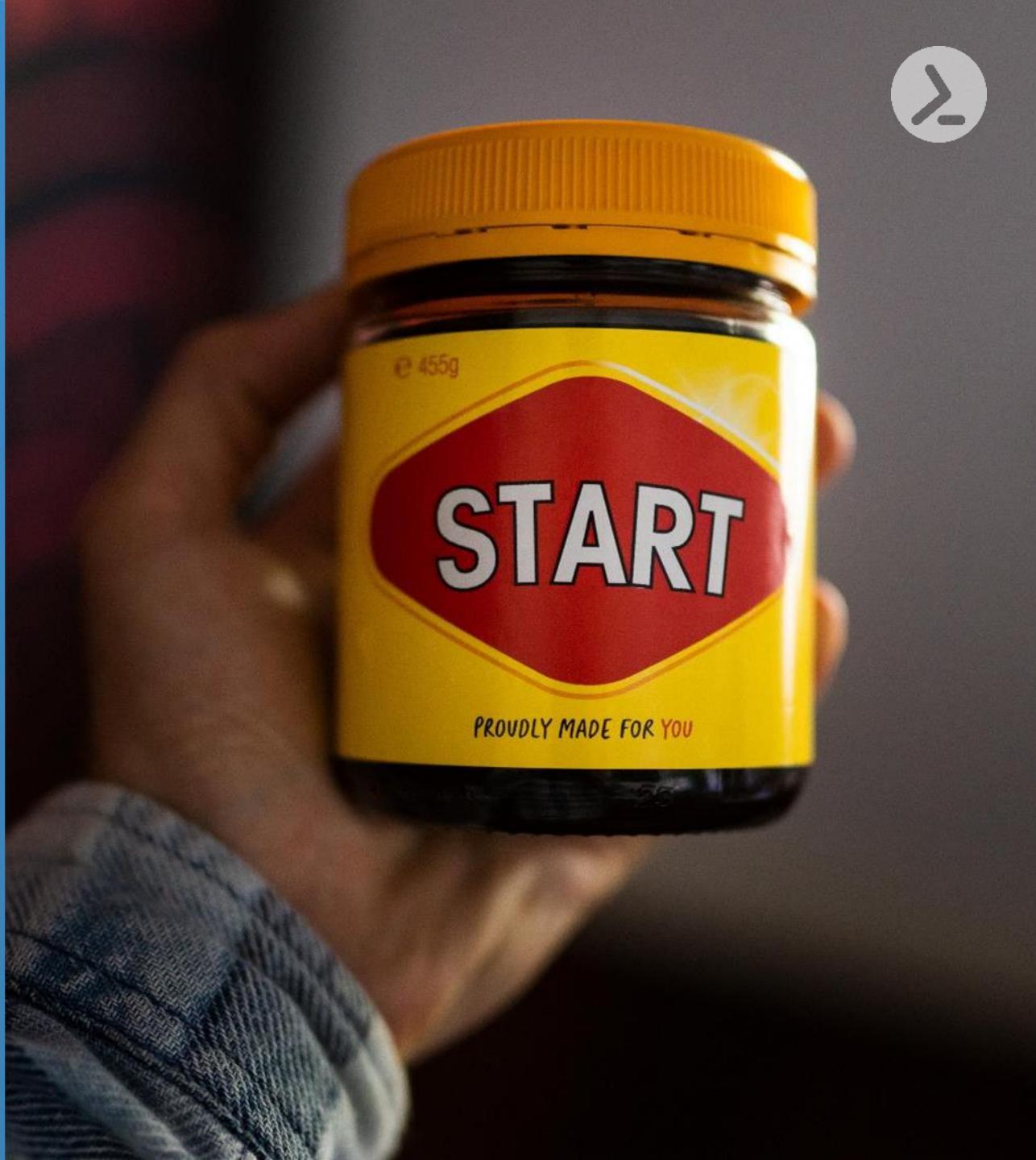
1900+

Ready-to-use
PowerShell
Scripts



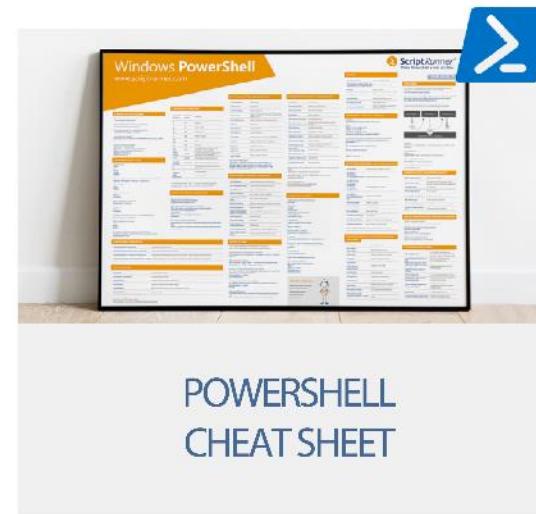
1900+
READY-TO-USE
POWERSHELL
SCRIPTS

github.com/scriptrunner/ActionPacks



Get your free PowerShell goodies

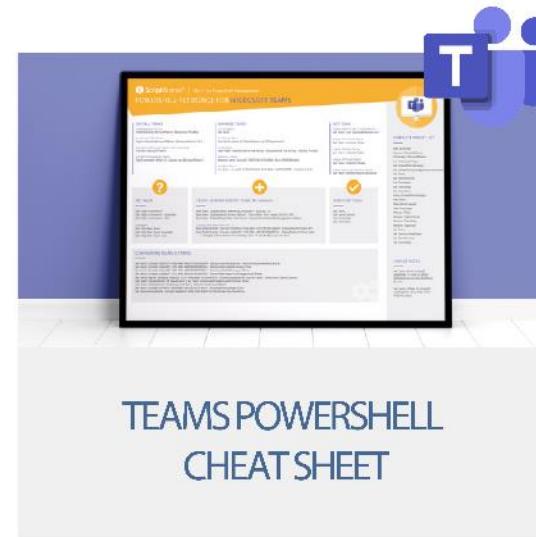
lp.scriptrunner.com/en/powershell-goodies



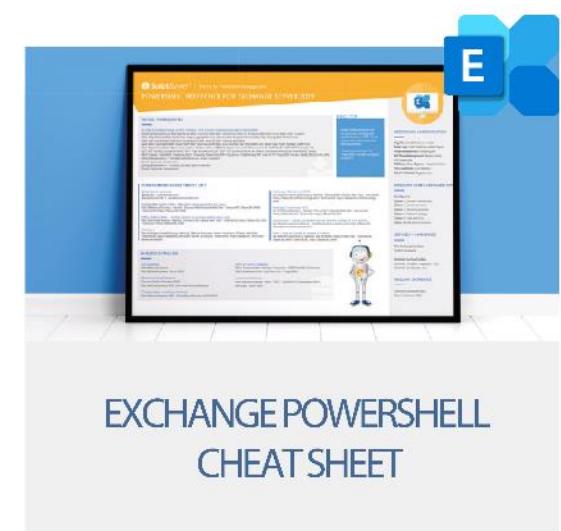
POWERSHELL
CHEAT SHEET



POWERSHELL SECURITY
EBOOK



TEAMS POWERSHELL
CHEAT SHEET



EXCHANGE POWERSHELL
CHEAT SHEET



“Our mission is to enable you to
streamline and automate
all enterprise IT management processes
using PowerShell.”

Smart | Simple | Secure

AUTOMATE ALL YOUR IT SYSTEMS WITH ONE PLATFORM



SCRIPTRUNNER: YOUR COMPREHENSIVE IT AUTOMATION PLATFORM



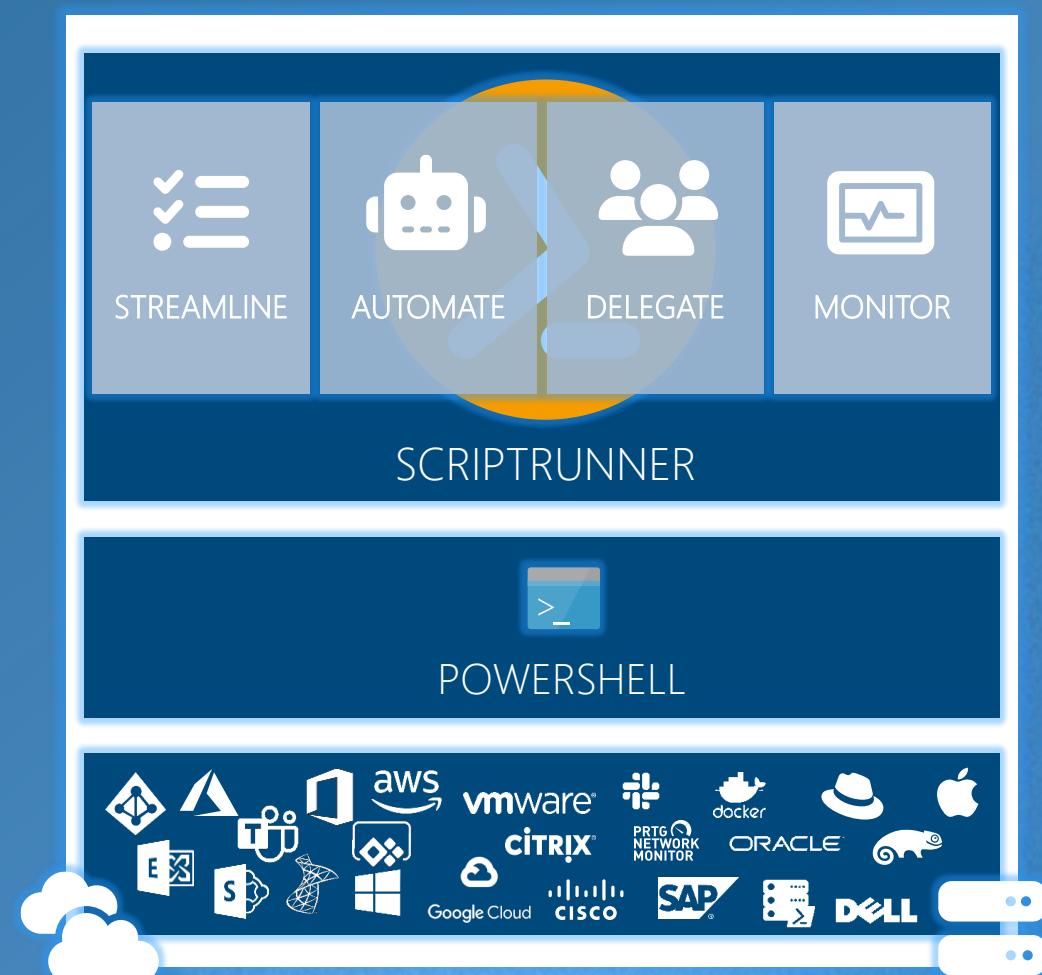
Multi-Platform Management

Versatile And Strong Foundation

One IT Automation Solution

Covers All Enterprise
IT Automation Processes

Highly Customizable



TWO WAYS OF AUTOMATING WITH POWERSHELL



NON-MANAGED
PowerShell



MANAGED
PowerShell
With
ScriptRunner



STANDARDIZATION, AUTOMATION AND DELEGATION OF RECURRING TASKS

AUTO-CREATED
USER FRIENDLY
WEB FORMS

SECURE
CREDENTIAL
ADMINISTRATION

CENTRALIZED SCRIPTS AND
MODULES MANAGEMENT

INTERACTIVE
SCHEDULED
EVENT-DRIVEN

COMPREHENSIVE
MONITORING AND
REPORTING



M365 POWERSHELL MODULES



AzureAD



Exchange Online
Management



Microsoft Teams



SharePoint.PowerShell
SP PnP PowerShell



Microsoft Graph

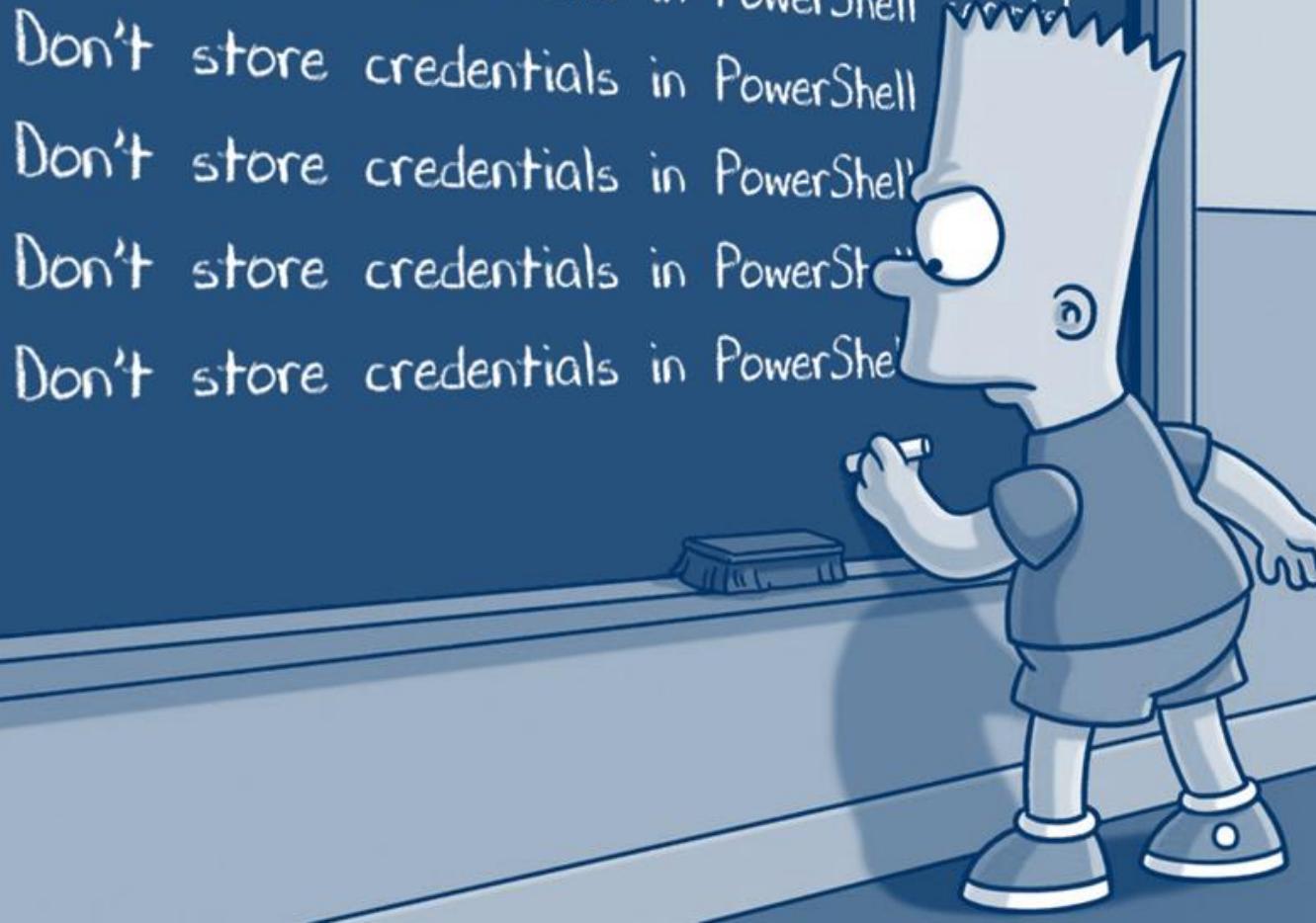
CENTRALIZED SCRIPT MANAGEMENT



The screenshot displays the ScriptRunner web application interface. On the left, a sidebar navigation includes: Dashboard, Run, Authorize & Delegate, Monitoring, Configuration (selected), Actions, Queries, Targets, Scripts (selected), Credentials, and Settings. The main content area shows a list of scripts under 'Scripts' (Showing 9 of 1282 Scripts). The list includes: Get-EOOutOfOffice.ps1, Set-EOOutOfOffice - Copy (2).ps1, Set-EOOutOfOffice - Copy.ps1, Set-EOOutOfOffice.ps1 (checked out by me), Set-EOOutOfOffice_orig.ps1, TeamsWithOutOwner-Scheduled.ps1, TeamsWithOutOwner.ps1, and Webinar_Set-ExOutOfOffice.ps1. A modal window is open for the script 'Set-EOOutOfOffice.ps1'. The modal has tabs for Configuration, General, Header information, and Code editor (selected). The code editor contains the following PowerShell script:

```
61 [datetime]$start Date,
62 [Parameter(Mandatory = $true, ParameterSetName="Schedule Auto Reply")]
63 [datetime]$endDate,
64 [Parameter(ParameterSetName="Disable Auto Reply")]
65 [Parameter(ParameterSetName="Enable Auto Reply")]
66 [Parameter(ParameterSetName="Schedule Auto Reply")]
67 [switch]$generateReport
68 )
69
70 try{
71     [string[]]$properties = @('Identity','AutoReplyState','StartTime','EndTime','ExternalAudience','')
72     [string[]]$resultMessage = @()
73     [string]$msg = "Mailbox {0} "
74     [string]$replyType = 'All'
75
76     [hashtable]$cmdArgs = @{
77         'ErrorAction' = 'Stop'
78         'Confirm' = $false
79     }
80
81     if($PSCmdlet.ParameterSetName -eq "Disable Auto Reply"){
82         $cmdArgs.add('AutoReplyState' , 'Disabled')
83         $msg += "disabled"
84     }
85     else{
86         if($AutoReplyType -eq 'Only contact list members'){
87             $replyType = 'Known'
88         }
89         if($AutoReplyType -eq 'Internal only'){
90             $replyType = 'None'
91         }
92     }
93
94     $scriptBlock = {
95         param(
96             [string]$identity,
97             [string]$autoreplystate,
98             [string]$start,
99             [string]$end,
100            [switch]$generateReport
101        )
102
103        $autoReply = Get-MailboxAutoReplyConfiguration -Identity $identity
104
105        if($autoreplystate -eq 'Enabled' -and $autoReply.ExternalAudience -ne ''){
106            $autoReply.ExternalAudience = ''
107            $autoReply.Save()
108        }
109
110        if($autoreplystate -eq 'Disabled' -and $autoReply.ExternalAudience -eq ''){
111            $autoReply.ExternalAudience = $null
112            $autoReply.Save()
113        }
114
115        if($autoreplystate -eq 'Known' -and $autoReply.ExternalAudience -eq ''){
116            $autoReply.ExternalAudience = $null
117            $autoReply.Save()
118        }
119
120        if($autoreplystate -eq 'None' -and $autoReply.ExternalAudience -ne ''){
121            $autoReply.ExternalAudience = ''
122            $autoReply.Save()
123        }
124
125        if($generateReport){
126            $autoReply = Get-MailboxAutoReplyConfiguration -Identity $identity
127            $autoReply | Select-Object -Property $properties
128        }
129    }
130
131     foreach($recipient in $recipients){
132         $scriptBlock.Invoke($recipient)
133     }
134
135     $resultMessage += $msg
136
137     if($resultMessage -ne ''){
138         $resultMessage = $resultMessage -join ', '
139     }
140
141     $resultMessage
142 }
```

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



SECURE CREDENTIAL MANAGEMENT



Credentials Showing 23 of 23 Credentials

+ Create

Create credential x

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

AzureVM Credentials

Exchange Service Account

Exchange Service Account (Pleasant)

GitHub

Hyper-V Service Account

Microsoft Graph Target

MyActiveDirectory

O365 Tenant Service Account

Type Username Owner Tags

Search...

MS Graph Target 007

Save Run test Delete

Microsoft services

General

Microsoft services

Advanced settings

INFORMATION

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

The screenshot shows the ScriptRunner 'Credentials' interface. On the left, a sidebar lists various credential types: User credential or client secret, WinRM client certificate, Password server, PowerShell Secret Management, and SSH key. Below this are checkboxes for AzureVM Credentials, Exchange Service Account, Exchange Service Account (Pleasant), GitHub, Hyper-V Service Account, Microsoft Graph Target, MyActiveDirectory, and O365 Tenant Service Account. The main area displays a table of credentials with columns for Type, Username, Owner, and Tags. A search bar is at the top right. A modal window for 'MS Graph Target 007' is open, showing configuration details for Microsoft services, including General, Advanced settings, and Information sections. It also includes tabs for Microsoft Graph (Sign-in method: Certificate, Client secret), Credential (Tenant ID, Application ID), and PowerShell module (Microsoft.Graph.Mail). A note states 'Must be installed on the execution host'. At the bottom of the modal are 'Activate service' and 'Deactivate service' buttons.

PASSWORD SERVER SUPPORT



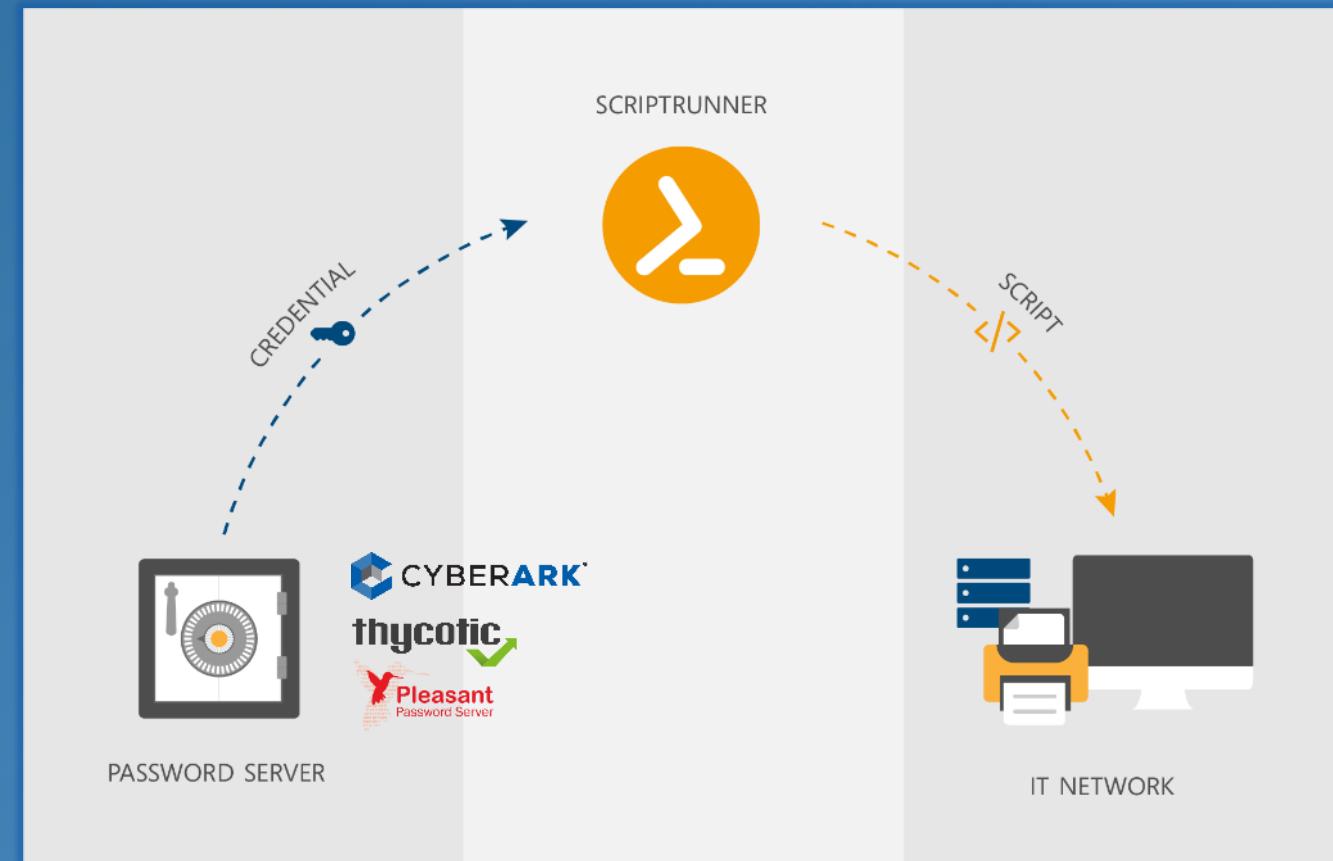
Connectors for CyberArk, Pleasant and Thycotic

No local credentials

Automatic password rotation

Single secure password repository in multi-server scenarios

Support for Azure KeyVault (planned)



SECURE DELEGATION



ScriptRunner executes scripts and connects to backend systems

No user access to backend systems
No privileged permissions

Flexible and secure tasks delegation to help desk teams and end-users

Easy access via ScriptRunner Portal and Self-Service Portals

Complete separation of PowerShell environment and user context



POWERSHELL FOR EVERYONE | NO EXTRA CODING



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     $Script:resHtml = @()
133     foreach($item in $MailboxIds){
134         try{
135             $box = Get-Mailbox -Identity $item -ErrorAction Stop
136             if($null -ne $box){
137                 try{
138                     $null = Set-MailboxAutoReplyConfiguration @cmdArgs -Identity $item
139                     if($GenerateReport -eq $true){
140                         $Script:resHtml += Get-MailboxAutoReplyConfiguration -
141                         -Identity $item
142                     }
143                     $resultMessage += [System.String]::Format($msg,$box.UserPr
144
145                 }
146                 catch{
147                     Write-Output "Error occurred at set Mailbox $($item)"
148                 }
149             }
150             catch{
151                 Write-Output "Error occurred at get Mailbox $($item)"
152             }
153         }
154     }
155
PS C:\Users\administrator.COMPANY>
Completed Ln 1 Col 36 120%
```

OutOfOffice

Create OOF Notifications With ScriptRunner Integration

Note the reason you run this action now.

Please select mailbox(es):
Search...

Angus Young Shania Twain Phil Collins

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

ScriptRunner Portal

https://winsrv-poc1.company.net/ScriptRunner/Portal/#/actions/

ScriptRunner® en COMPANY\tina(NTLM)

Run

All Pinned ActiveDirectory Azure Cloud8 ExchangeOnline O365 SharePointOnline SQLServer Teams

VMware + Add tab

Search...

Bulk User OnBoarding 🧑

Change User Properties 🔐

Create a new SharePoint Online Site 🌎

Out-Of-Office Management 🌱

Reset User Password (AD) 🚀

Add users to distribution groups 🧑

Create a new team based on company guidelines 🚀

Create a Teams report 🔎

Create new Azure VM based on company standards 📄

Show Azure Consumption Report 📈

Show current Exchange Mailbox Statistics 🔎

FLEXIBLE ROLE-BASED DELEGATION



The screenshot shows the ScriptRunner Active Directory Self-Services interface. The left sidebar has a 'Delegations' tab selected. The main content area displays a 'Delegations' section with 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, there is a list of available actions:

- Local: Add two values
- AD: Show Active Directory User Properties (Get-ADUser) Press enter to remove
- Simulate Set-ADUserPropertiesDemo
- Test-Cascaded ADQueries
- Get-ExMailboxProperties
- Remove-PrintJob
- Validation possibilities

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: 2 | Scheduled: 1 | Queued: 0 | Queries: 1

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

UNLOCK THE POWER OF POWERSHELL ACROSS YOUR ORGANIZATION



Manager

Consistent processes
Better quality
Saving costs

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



Put ScriptRunner
to the test.
30 days for free.

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





THANK YOU FOR ATTENDING