Manage Microsoft Teams with PowerShell and save time
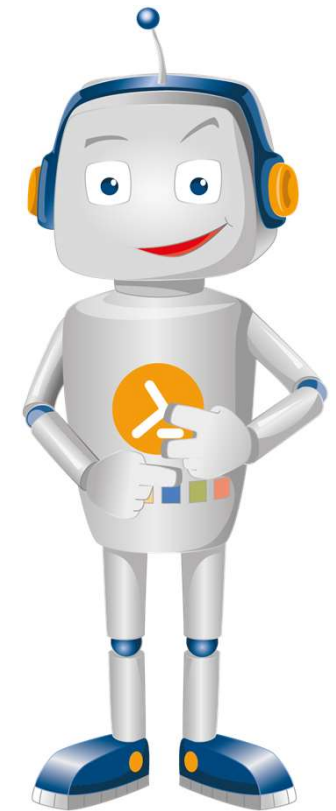
Automate. Delegate. Relax.
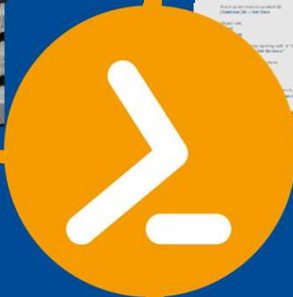
Heiko Brenn   @heikobrenn

www.scriptrunner.com

Windows **PowerShell**
www.scriptrunner.com

Get-Help about_WMI

Get-Service | Get-Member

POWERSHELL SCRIPTING LA

Condition
if ((Get-Date).Year -le 2014) { "Old" } else {

Loops
for($i = 1; $i -le 10; $i++) { $i }
while($i -le 10) { $i; $i++ }
do { $i; $i++ } while ($i -le 10)
foreach ($p in (Get-Process iexpl

Heiko Brenn
@HeikoBrenn

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The #1 for PowerShell Management

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github.com/HeikoBrenn   heiko.brenn@scriptrunner.com

Manage Microsoft Teams with PowerShell and save time

ScriptRunner Automation Lounge
16:00 deutsch | 18:00 english

Get your free
PowerShell poster

lp.scriptrunner.com/en/powershell-poster

Agenda

Microsoft Teams
administration
with PowerShell

Automate & Delegate
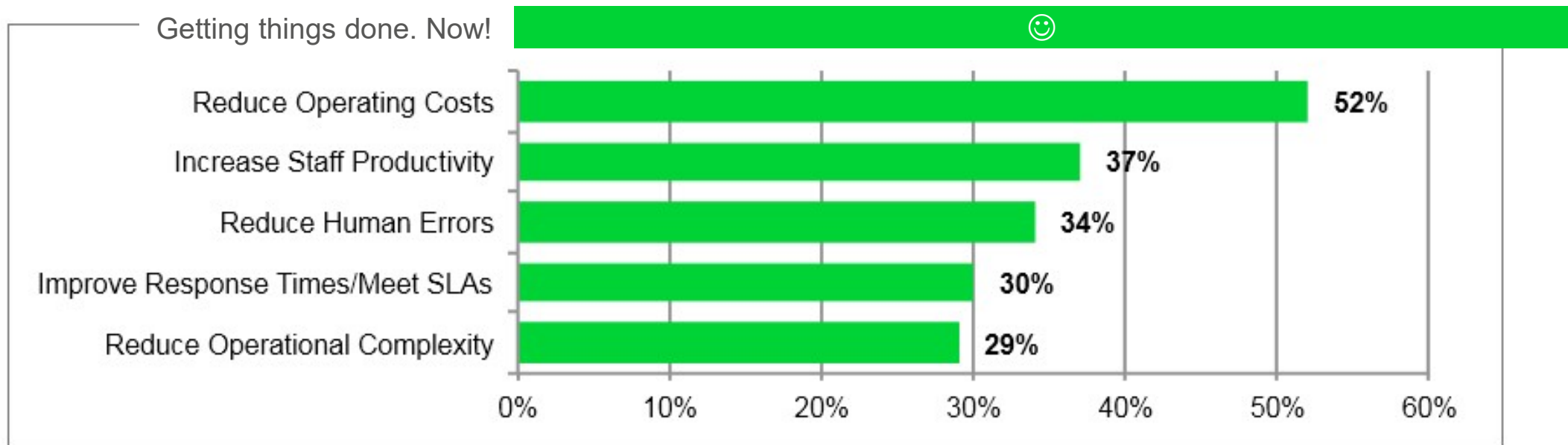with PowerShell plus
ScriptRunner

Why automate?

Getting things done. Now! ☺

Driver	Percentage
Reduce Operating Costs	52%
Increase Staff Productivity	37%
Reduce Human Errors	34%
Improve Response Times/Meet SLAs	30%
Reduce Operational Complexity	29%

Figure 1 – Top business drivers for service automation

Source: EME Research Report – Data Center Automation in the Age of Cloud

Teams PowerShell Module

ScriptRunner®

Provisioning & management of Teams/Channels/etc.
First version: 0.9.3 November 2017 Latest release: 1.1.4 April 2020
Number of cmdlets: 30
ObjectIDs or GUIDs to identify teams and Office 365 groups
Webhooks and PowerShell

Typical Use Cases

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Create/Delete Teams/Channels

Add/Remove Users to/from Teams/Channels

Manage Teams Settings

Get Current Teams/Channel Settings

Send Messages to Channels

Cheat Sheet for Microsoft Teams PowerShell Module

ScriptRunner®

Created by Damian Scoles

www.praticalpowershell.com

twitter.com/PPowerShell

PowerShell Quick Reference for Microsoft Teams [Ver. 1.0.5]

Install Module (PS 5+)
Install-Module MicrosoftTeams -Repository PSGallery

Load Teams PS Module
Import-Module MicrosoftTeams -MinimumVersion 1.0.4

Connect to Microsoft Teams with PowerShell
Connect-MicrosoftTeams

List all Commands for Teams
Get-Command | Where {$_.Source -eq "MicrosoftTeams"}

List All Teams
Get-Team
Find Single Team
Get-Team | where {$_.DisplayName -eq 'IT Department'}
Create Team
New-Team -MailNickName 'Marketing' -DisplayName 'Marketing' -Visibility 'Private'
Remove a Team
Remove-Team -GroupID '503b7c56-b15d-4b4c-8cca-09103984b2bb'
Modify a Team
Set-Team -GroupID '7a4fab2f-6a22-46d0-826b-a167fdc03892' -Visibility 'Public'

Complete Cmdlet List
Add-TeamUser
Connect-MicrosoftTeams
Disconnect-MicrosoftTeams
Get-CsPolicyPackage
Get-CsUserPolicyPackage
Get-CsUserPolicyPackageRecommendation
Get-Team
Get-TeamChannel
Get-TeamHelp
Get-TeamsApp
Get-TeamUser
Grant-CsUserPolicyPackage
New-Team
New-TeamChannel
New-TeamsApp
Remove-Team
Remove-TeamChannel
Remove-TeamsApp
Remove-TeamUser
Set-Team
Set-TeamArchivedState
Set-TeamChannel
Set-TeamsApp

Get-Help
Get-Help <command>
Get-Help <command> -Examples
Get-Help <command> -Full

Examples
Get-Help New-Team
Get-Help New-Team -Examples
Get-Help New-Team -Full

Create New Microsoft Team
New-Team -DisplayName "Marketing Campaign – Big Corp, Inc."
New-Team -DisplayName "Project Rebuild" -Description "First project of 2020 (HR)"
New-Team -DisplayName "New Test Group" -ShowInTeamsSearchAndSuggestions $False

Creating New TeamChannel (**)
New-TeamChannel -GroupId 933fe926-555a-4832-87d1-8f700736e003 -DisplayName "Campaign Channel"
New-TeamChannel -GroupId cfdba387-1319-4f6b-a883-8700046f07e7 -DisplayName "Internal Sales"
** GroupId is from the ID of an existing Team. To see the ID's, run Get-Team

PowerShell Gallery: https://www.powershellgallery.com/packages/MicrosoftTeams/
Documentation: https://docs.microsoft.com/en-us/powershell/module/teams/

Configuring Team Settings

Configuring Team Settings (notice the consolidation to the Set-Team cmdlet ... changed from 0.9.4 Beta)
Set-Team -GroupId d36f235f-d30e-4460-98a2-5728b906fbfd -GiphyContentRating Strict -AllowStickersAndMemes $False -AllowCustomMemes $False
Set-Team -GroupId cfdba387-1319-4f6b-a883-8700046f07e7 -AllowCreateUpdateChannels $True
Set-Team -GroupId cfdba387-1319-4f6b-a883-8700046f07e7 -AllowUserDeleteMessages $False
Set-Team -GroupId cfdba387-1319-4f6b-a883-8700046f07e7 -ShowInTeamsSearchAndSuggestions $False
Set-TeamChannel -GroupId cfdba387-1319-4f6b-a883-8700046f07e7 -CurrentDisplayName "Internal Sales" -Description "Sales Channel"

Verify Settings
Get-Team
Get-TeamChannel
Get-TeamsApp
Get-TeamUser

** Use '|ft' or '|fl' to format your results. **

Microsoft Teams Cleanup
Remove-Team -GroupID '933fe926-555a-4832-87d1-8f700736e003'
Remove-TeamChannel -GroupId cfdba387-1319-4f6b-a883-8700046f07e7 -DisplayName "Internal Sales"
Remove-TeamUser -GroupID '933fe926-555a-4832-87d1-8f700736e003' -User <UPN>

Cmdlet Notes
Get-Team has no 'GroupID' parameter. In order to get an individual group, use something like this:

Get-Team | Where {$_.GroupID -eq '933fe926-555o-4832-87d1-8f700736e003'}

Demo

PowerShell in Action

Challenges for IT Pros

PowerShell is a tool for
IT experts only

How to delegate tasks to service
desk or end users?

No centralized & secure
PowerShell management

Many recurring tasks still have to be
taken over by IT Pros

Drown in daily business

GET AN ADMIN JOB THEY SAID...

...WORK 9-5 THEY SAID.

Achieve More With PowerShell In 5 Steps

ScriptRunner®

Centralize your PowerShell scripts and PowerShell modules

Manage credentials & permissions securely

Automatically transform PowerShell scripts into Web GUIs

Delegate recurring tasks to help desk and end users

Integrate with ITSM, Monitoring & Workflow systems and more

ScriptRunner – How to run scripts
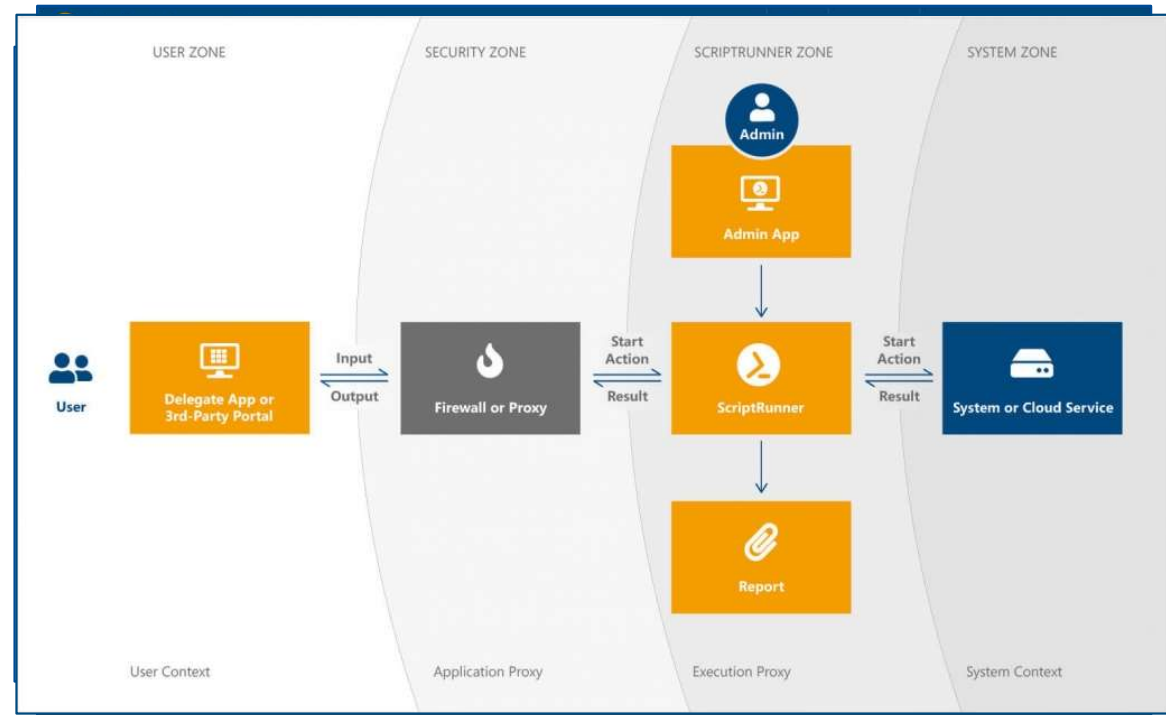
👤 Manually	Users execute tasks in web browser
📅 Scheduled	Time-controlled tasks
🤖 Automatically	Event triggered by 3rd party systems

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Windows PowerShell & PowerShell 7 with ScriptRunner

Script*Runner*®

ScriptRunner®	
Windows PowerShell 2006 - today	PowerShell 7 2016 - today
.NET Framework	.NET Core
Windows	Linux	macOS

Password Server Support

ScriptRunner®

› Centralized password safes
  › CyberArk Password Vault
  › Pleasant Password Server
  › Thycotic Secret Server

› No credentials are stored locally

› Automatic password rotation

› Easy one secure password repository for multiple ScriptRunner servers

SCRIPTRUNNER

CREDENTIAL

SCRIPT

CYBERARK®

thycotic

Pleasant
Password Server

PASSWORD SERVER

IT NETWORK
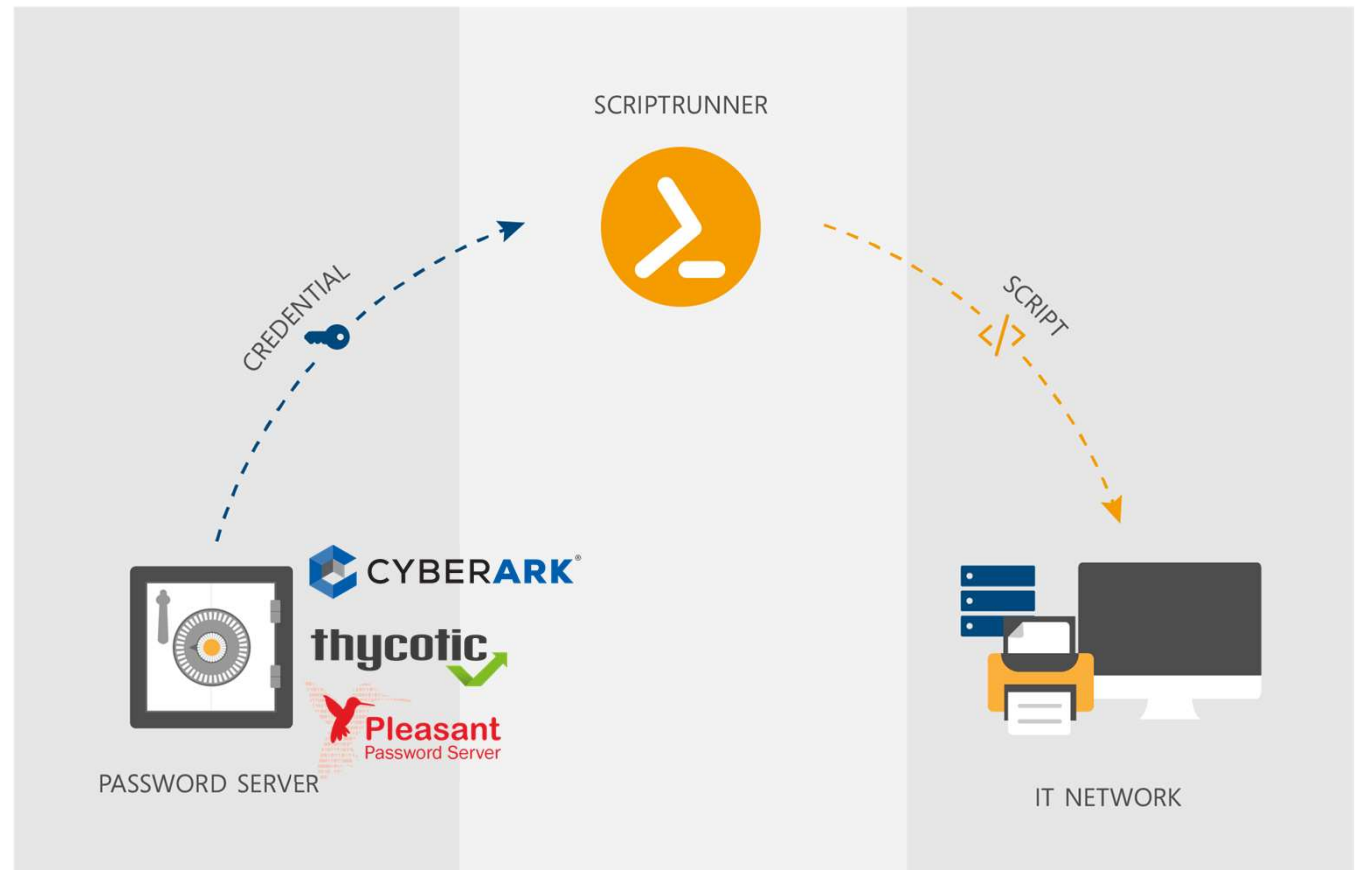
Demo

ScriptRunner in Action

ScriptRunner – Secure Delegation

https://www.scriptrunner.com/de/software/system/
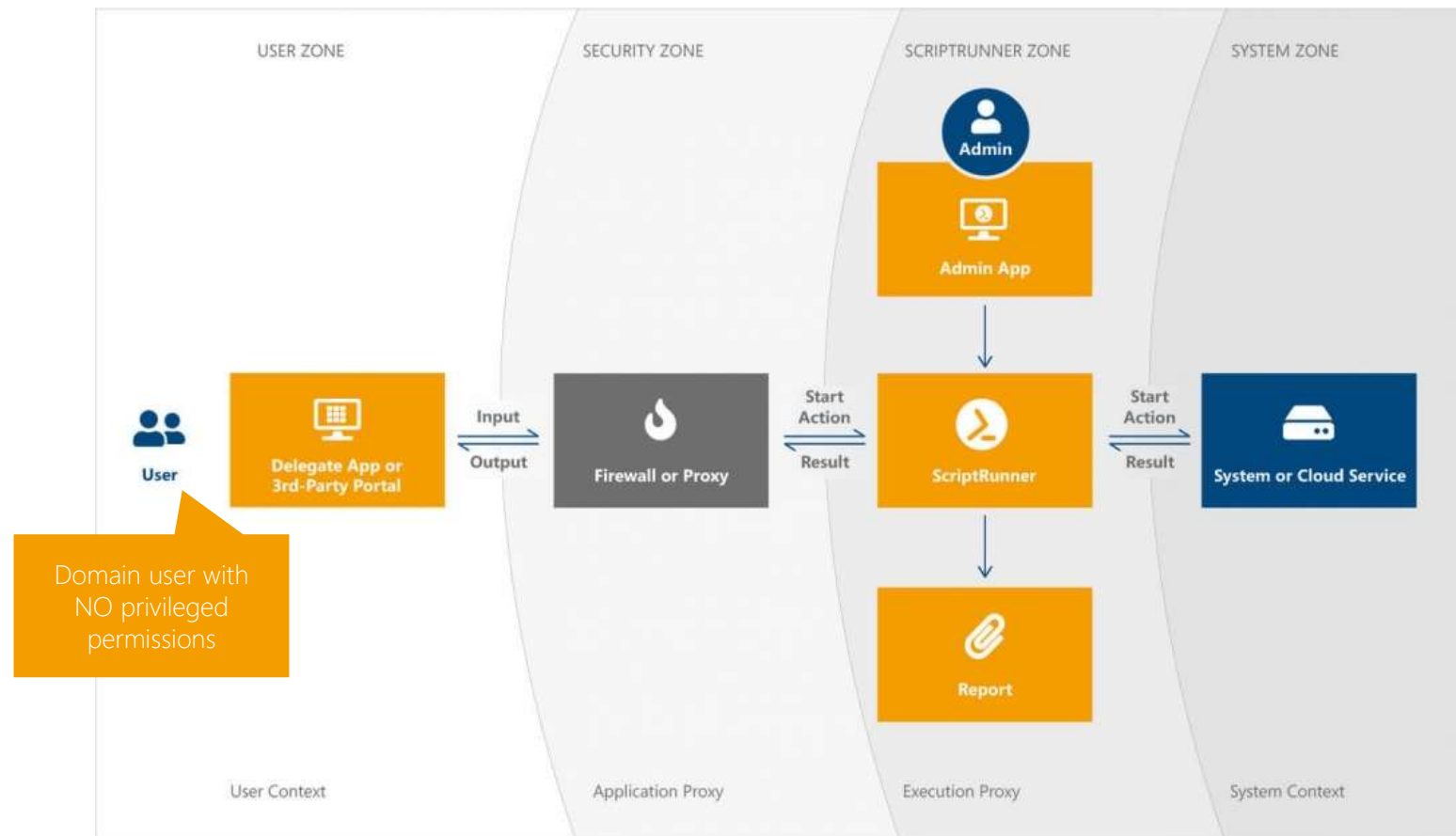
ScriptRunner test report fom a Microsoft MVP

ScriptRunner®

Adam Bertram aka Adam The Automator
Microsoft MVP Cloud and Datacenter Management

"ScriptRunner is a master of organizing, categorizing and delegating scripts."

"ScriptRunner is a real DevOps tool for PowerShell scripters."

"Compared to large automation platforms, ScriptRunner is significantly cheaper."

"to get the same functionality of ScriptRunner, it would require several applications to get a similar feature set."

"If you are looking into automating your administration and support processes easily and securely, you will find a powerful and professional tool here."

https://www.adamtheautomator.com/scriptrunner-bringing-powershell-to-devops/

ScriptRunner – Practical Examples and Use Cases

Script*Runner*®

Develop scripts in a team and organize them centrally

Standardize administrative team activities

Manage user accounts and groups quickly and easily

Reset password, unlock user, (de)activate accounts

Automated user provisioning and deprovisioning

Exchange – Allow or block mobile access with Active Sync

Exchange – Smart management of Out of Office settings

Exchange – Manage mailboxes and distribution lists

Manage rights to files, directories and file and printer sharing

Print Management – Manage print servers, printers and print jobs

Manage Azure AD and Office 365 easily and securely

Delegate software provisioning and offer it as self-service

https://www.scriptrunner.com/en/use-cases/

ScriptRunner – Make PowerShell A Real Solution

ScriptRunner – The components

ScriptRunner®

ScriptDeveloper	SysAdmin	ServiceDesk
DevOps Plugin	AdminApp	DelegateApp

EndUser	Ready-made Scripts	Integration
SelfServiceApp	ActionPacks	Connectors

ScriptRunner – How the components play together

https://www.scriptrunner.com/en/software/system/
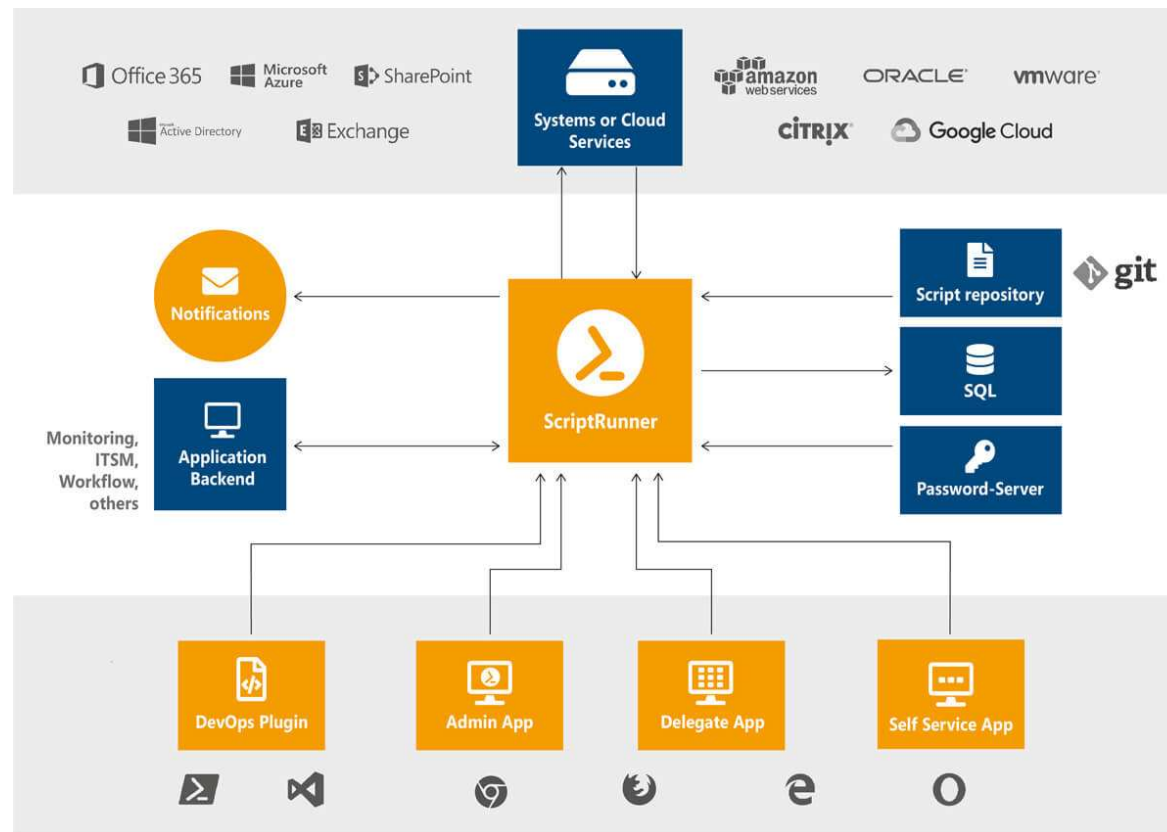
Ready-made Scripts – ActionPacks

> Easy implementation of many use cases
> Out of the box scripts for
>> Active Directory
>> Office 365
>> Exchange
>> VMWare
>> Hyper-V
>> Citrix
>> File-/PrintServer
> Scripts and templates for partner products
>> Paessler PRTG
>> Matrix42
>> Nagios
>> Automic ONE
> More informationen
>> https://github.com/scriptrunner/ActionPacks
>> https://www.scriptrunner.com/en/software/script-sammlungen/
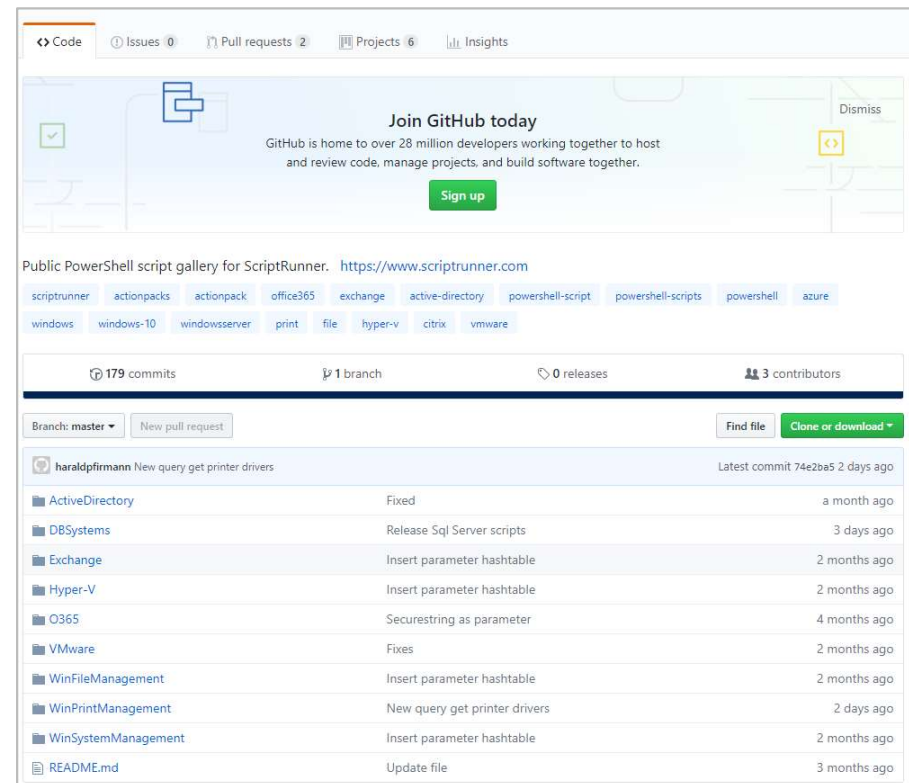
ScriptRunner – Out-Of-Office example

ScriptRunner®

Actions	Activate OutOfOffice
Queries	Select mailbox(es)
Targets	Exchange, Exchange Online
Scripts	Set-OutOfOffice.ps1
Credentials	Service account with necessary permissions
Delegation	Help desk user, End user

Integration – Add new functions with connectors

ScriptRunner®

> 3rd party systems automatically trigger ScriptRunner Actions
>> Monitoring Systems
>> IT Service Management
>> Business Workflow
>> Applications

> Password server integration
>> CyberArk
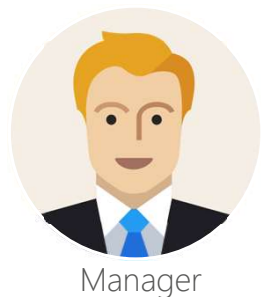>> Pleasant
>> Thycotic

> More information
>> https://www.scriptrunner.com/en/software/automation-connector/

ScriptRunner – The Full Picture

https://www.scriptrunner.com/en/software/system/
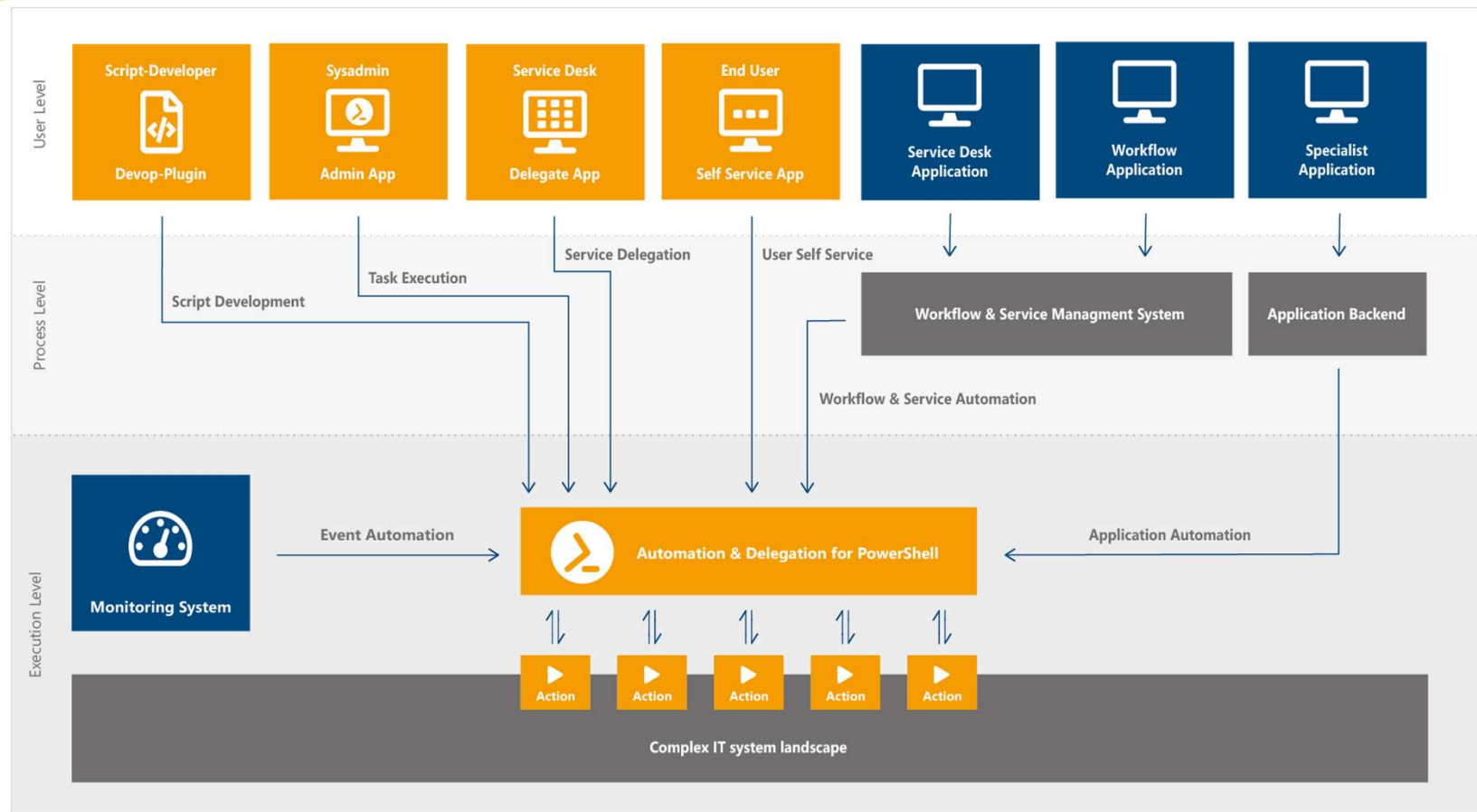
ScriptRunner: One Solution – Many Benefits

ScriptRunner®

Delegate recurring tasks and save time

Administrator

Deliver great scripts in a secure environment

DevOps
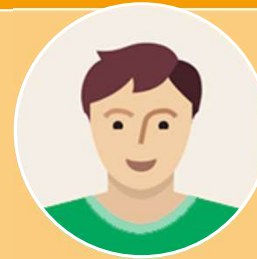
Deliver more & better services in less time

HelpDesk

Manager

My teams become more productive

Develop scripts for more use cases/users

Developer

Faster task completion with self-services

EndUser

Next Steps

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Read the LinkedIn article „2020 – Finally the year of IT automation?" https://bit.ly/2NNkc88

Start testing ScriptRunner: lp.scriptrunner.com/en/demo-download

Book a online demo session with me: lp.scriptrunner.com/meetings/heiko-brenn/demo-en

Start using hundreds of ready-made PowerShell scripts: https://github.com/scriptrunner/ActionPacks

ScriptRunner®
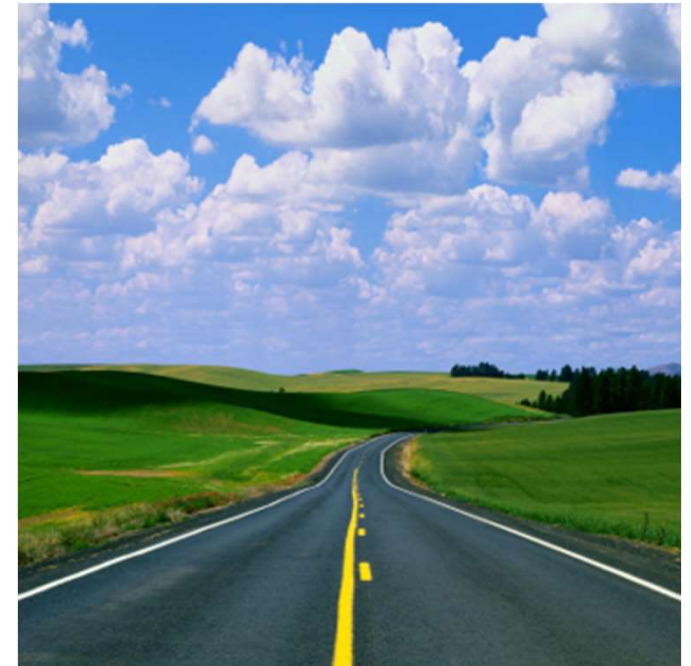
Webinar of the month September

Manage Microsoft Teams with PowerShell to save time

Administrators can use the PowerShell module for Microsoft Teams to automate recurring administrative tasks.

In this webinar, we will demonstrate the capabilities of the Microsoft Team PowerShell module.
You will also learn how non-PowerShell experts can use these features safely and effectively.

Register now for the webinar on Wednesday, September 23 16:00-16:45 (CET) | 10:00-10:45 am (EST)

➡ Register now!

https://www.scriptrunner.com/en/webinars/

Thank you.

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Mail: info@scriptrunner.com