

Day 1 — Tuesday, April 17, 2018
PowerShell Conference EU 2018 (visit www.psconf.eu)
preliminary Agenda March 12, 2018

	Track 1	Track 2	Track 3
08:00	Registration <i>None</i> Get your badge and materials		
09:00	Coffee Break		
	Opening Ceremony <i>Tobias Weltner</i> Grand Conference Opening		
09:45	PowerShell 2018 - State of the Art (Keynote) <i>Jeffrey Snover</i> This talk covers the transition from Windows PowerShell to Core PowerShell. It reviews the forces and thinking behind...		
10:45	Coffee Break		
11:00	The Current State of PowerShell Security Features and Bypasses <i>Matt Graeber</i> Many attackers now fear the strong security features present in PowerShell v5. Other, more persistent adversaries,...	RegEx ^3\.0\$ - The Outer Edge <i>Mathias Jensen</i> At PSConfEU17 we talked a bit about regex, and some of its common applications. This year, we'll crank it up to 11 and...	Using Chat Automation (ChatOps) <i>Jaap Brasser</i> Chat automation has been a persistent buzz in the industry: ChatOps is a term used to describe bringing development...
12:00	Lunch		
13:00	Containers! Where is my PowerShell? <i>Jan Egil Ring</i> In this session you will see how PowerShell fits into the era of containers - both for management purposes and for...	PowerShell Core 6 auf Linux. Und was mach ich jetzt damit auf Linux? <i>Dr. H. Schwichtenberg</i> Warum sollte ich aber auf Linux mit der PowerShell statt der bash arbeiten wollen? Dr. Holger Schwichtenberg zeigt die...	The DSC Pull Server is dead, long live the DSC Pull Server <i>Ben Gelens</i> Ben presents first look at how DSC functionality has changed. Since the dust hasn't yet settled on this topic,...
14:00	Coffee Break		
14:15	PowerShell Security - what to prioritize? <i>David das Neves, Julien Reisdorffer</i> PowerShell Security is a very wide topic. Starting from Signing, Logging, Remoting, Privileged Access Management...	The Extended Type System <i>Staffan Gustafsson</i> A deep dive into the PowerShell type system. What it can and cannot do, how it works, a peek at how it is implemented...	vSphereDSC: the long and winding road <i>Luc Dekens</i> The vSphereDSC project started some years ago. In the mean time PowerShell, DSC and vSphere have progressed. New...
15:15	Coffee Break		
15:30	Hands-on JEA <i>Jan-Hendrik Peters, Raimund Andree</i> By now you have heard of Just Enough Administration - but have you actually configured it yet? In this training session...	TFS and VSTS through Infrastructure as Code <i>Jeff Wouters</i> Why not view TFS and/or VSTS as part of your infrastructure, because the are...? Then, why no apply...	How we made Configurable Pester Tests for SQL Server <i>Chrissy LeMaire, Rob Sewell</i> We love using Pester to validate our SQL Server estate but to enable this to be shared we needed to make our Pester...
16:30	Coffee Break		
16:45	Invoke-CypherDog - Bloodhound Dog Whispering with PowerShell <i>Walter Legowski</i> Bloodhound is an Active Directory object relationship graphing tool used for situational awareness in offensive...	Was ein PowerShell-Nutzer über .NET wissen MUSS! <i>Dr. H. Schwichtenberg</i> .NET-Guru Dr. Holger Schwichtenberg erklärt in diesem Vortrag einige Konzepte von .NET, die Ihnen helfen, noch...	OVF - getting fun from boring tasks <i>Mateusz Czerniawski</i> Ever wanted to make manual checklists obsolete and auto-generated reports content rich? Demo heavy session about...
17:45	Coffee Break		
	Introduction Workshops <i>All</i> In this quick sessions, we introduce the workshops taking place tomorrow. You get a chance to learn more about the...		
18:30	Zoo Evening Event <i>All</i> Evening Event at the Zoo Hanover. We spend all evening with drinks and dinner together in Yukon Bay. Bring your badge to get in!		
01:00	Day Ends		

PowerShell	Core	Peester	Database
Security	Azure/DevOps	Sharepoint	Fun

Day 2 — Wednesday, April 18, 2018
PowerShell Conference EU 2018 (visit www.psconf.eu)
preliminary Agenda March 12, 2018

Track 1		Track 2		Track 3	
08:30	<div><div></div><div>PowerShell Engine Internals <i>Dongbo Wang</i> An architecture overview of the PowerShell engine internals.</div></div>	<div><div></div><div>Saving Mr Typo: Authoring Tab Expansions with... <i>Bartosz Bielawski</i> Is Mr Typo your second name? Or perhaps you are surrounded by people that seem to mistype everything...</div></div>	<div><div></div><div>Case of the Unexplained - PowerShell Edition <i>Daniël Both</i> We all have been there, your script generates unexpected output. Join this session to find out which tools exist to...</div></div>		
09:30	Coffee Break				
09:45	<div><div></div><div>Game of Automation Thrones <i>Aleksandar Nikolic</i> Join us to learn more about different Azure automation technologies and pick your winner.</div></div>	<div><div></div><div>Somewhat Advanced dbatools Development <i>Chrissy LeMaire, Friedrich Weinmann</i> Join dbatools creator Chrissy LeMaire and architect Friedrich Weinmann for a view behind the technical...</div></div>	<div><div></div><div>How to become a PowerShell Type System Ninja! <i>Mathias Jensen</i> 2-part talk that covers two exciting topics: 1) Exploring the type system using simple tools like powershell.exe and...</div></div>		
10:45	Coffee Break				
11:00	<div><div></div><div>Become a PowerShell Debugging Ninja <i>Kirk Munro</i> You've written PowerShell scripts or functions, and maybe packaged them up in a module. Then suddenly, when you...</div></div>	<div><div></div><div>Desired State: A close look at the PowerShell and DSC integrations... <i>Stuart Preston</i> Want to know how the Chef interacts with PowerShell and DSC on the Windows platform? We're going to take a...</div></div>	<div><div></div><div>Pester internals and concepts <i>Jakub Jareš</i> You learned the syntax of Pester and now you wonder what is behind it? Or maybe, you prefer learning from the...</div></div>		
12:00	Lunch				
13:00	<div><div></div><div>Revoke-Obfuscation: PowerShell Obfuscation Detection (And Evasion)... <i>Daniel Bohannon</i> Red Teams and nation state threat actors alike are using PowerShell obfuscation to evade detection. Come see how...</div></div>	<div><div></div><div>Automate everything: Bring self-service to LEGO robots <i>Jakob Gottlieb Svendsen</i> This is fun! Doing self service for LEGO robots? What can be more existing and useful than that!</div></div>	<div><div></div><div>Configurations, Personalities, and Stamps - Modular approach to... <i>Ravikanth Chaganti</i> Realizing a completely automated infrastructure deployment pipeline can be much easier when built in a modular way...</div></div>		
14:00	Coffee Break				
14:15	<div><div></div><div>Azure Automation & Management with PowerShell & DSC <i>Eamon O'Reilly,Michael Greene</i> TBA - Presented by a PowerShell team member from Microsoft</div></div>	<div><div></div><div>PowerShell, Reflection, and the Windows API <i>Jared Atkinson</i> Want to extend PowerShell and the .NET Framework it rides on? This talk will show you how to interact with the...</div></div>	<div><div></div><div>Infrastructure validation using Pester <i>Irwin Strachan</i> Still using manual checklists? Think it's time for some Operation Validation using Pester!</div></div>		
15:15	Coffee Break				
15:30	<div><div></div><div>Convert your Windows PowerShell module to be compatible with... <i>Wojciech Sciesinski</i> During the presentation, I would like to share my experiences with working on the modification of existing...</div></div>	<div><div></div><div>PowerShell Yin-Yang: The Worst Practices and Tips & Tricks <i>Bartosz Bielawski</i> Every Yin has its Yang. Every Jedi has her Sith. Every bad practice can be balanced with an awesome trick. Join me to...</div></div>	<div><div></div><div>Release Pipeline - the PPoSh Modules Story <i>Mateusz Czerniawski</i> How an average Ops can benefit from mysterious Release Pipeline. How GIT and a CI server allows to get greater...</div></div>		
16:30	Coffee Break				
	<div><div></div><div>Getting Ready for Workshops <i>All</i> If you have a reserved workshop seat, please go to the workshop you signed up for. If you do not have a reserved...</div></div>				
17:00	Coffee Break				
	<div><div></div><div>Workshop: The Power of the Dark Side: Offensive PowerShell Workshop <i>Will Schroeder,Matt Graeber,Jared Atkinson</i> Have you ever wanted to play with hacking tools, or wanted to know how attackers use PowerShell offensively? In this...</div></div>	<div><div></div><div>Workshop: PlatyPS: From 0 to 1 and beyond <i>Sergei Vorobev</i> Do you suffer from un(der)documented PowerShell code? Or, is it your hair that is constantly on fire, and you simply...</div></div>	<div><div></div><div>Workshop: Bring Existing Infrastructure under Code Control <i>Matthew Hitchcock, Gael Colas, Jan-Hendrik Pet</i> In this workshop, we'll work out how to successfully bring an existing infrastructure under code control, and the...</div></div>		
20:00	Day Ends				

PowerShell	Core	Pester	Database
Security	Azure/DevOps	Sharepoint	Fun

Day 3 — Thursday, April 19, 2018
 PowerShell Conference EU 2018 (visit www.psconf.eu)
 preliminary Agenda March 12, 2018

Track 1	Track 2	Track 3
08:30 A Historical Architectural Tour of PowerShell <i>Bruce Payette</i> Join us for a look at how PowerShell has evolved over time. We'll look at both the technical and environmental drivers...	Werde zum XML Ninja mit PowerShell <i>Andreas Nick</i> XML als Datenspeicher oder als einfache Datenbank in Form einer Textdatei wird häufig in der PowerShell genutzt. In...	Reverse DSC - Making SharePoint Admins feel loved again <i>Rick Taylor</i> For SharePoint, DSC is a sensitive topic. Because it is idempotent, it may cause some headaches for SharePoint...
09:30 Coffee Break		
09:45 The PowerShell Security Best Practice Live Demo! (Part 1) <i>David das Neves,Julien Reisdorffer,Raimund And</i> PowerShell Security is a very huge topic with many dependencies and technologies. Why not showing a -...	Continuous Delivery for your Module to the PowerShell Gallery <i>Rob Sewell</i> An intro session to show how to deploy a PowerShell module with CD In this fast paced demo heavy session we will - ...	Everything you always wanted to know about using API from PowerCLI <i>Luc Dekens</i> You are an advanced PowerCLI user and you have automated most of your daily admin tasks. This session will show you...
10:45 Coffee Break		
10:50 The PowerShell Security Best Practice Live Demo! (Part 2) <i>David das Neves,Julien Reisdorffer,Raimund And</i> PowerShell Security is a very huge topic with many dependencies and technologies. Why not showing a -...	Be the automator - not the automated <i>Jan Egil Ring</i> In this session we will look at some key concepts around DevOps and tooling before diving into demos showing...	PowerShell in Azure Cloud Shell <i>Aleksandar Nikolic</i> Join us to learn how to make creation and management of Azure resources cool again. Enjoy the power of command-...
11:50 Lunch		
12:35 Auditing Domain Trust Relationships <i>Will Schroeder</i> Does your organization have one or more Active Directory domain trusts? Can you guarantee that your trust "mesh" is...	Navigate around the edge with PowerShell <i>Jaap Brasser</i> Working with PowerShell is often a joyous occasion, working with the latest and greatest technologies. Remoting from...	Automate automating your automation, DSC with class-defined... <i>Daniël Both</i> Would you like to use DSC in your environment, or are you looking for a way to automate your DSC configurations?...
13:35 Coffee Break		
13:45 PowerShell Code Signing: Practical Applications, Attacks, and Mitigations <i>Matt Graeber</i> Whether using it to validate the integrity of PowerShell Gallery modules or enforcing application whitelisting,...	PowerShell Formatting <i>Staffan Gustafsson</i> Formatting is what happens at the end of each pipeline, where objects are rendered into a text representation. This...	DSC in Configuration Management tool world <i>Ben Gelens</i> DSC on it's own is a great platform but what is lacking is a nice of the shelf management solution and a bit of...
14:45 Coffee Break		
14:55 PowerShell Core 6.1 <i>Steve Lee</i> Discuss the PowerShell Core 6.1 goals, road map, current progress, and demos of works-in-progress.	PowerShell for SharePoint Online - How DevOps is making SharePoint... <i>Rick Taylor</i> For years admins have been performing repetitive tasks - even with the advent of PowerShell, they still repeat many...	Parameter Classes: Making parameter-binding user friendly <i>Friedrich Weinmann</i> Asking for a specific data type as input can be very unintuitive and limiting for the user. Accepting anything...
15:55 Coffee Break		
16:05 DevSec Defense: How DevOps Practices Can Drive Detection Development For... <i>Daniel Bohannon</i> Attackers constantly update their tradecraft, forcing defenders to quickly build, tune, deploy & maintain...	Azure Automation in production, lessons learned in the field <i>Jakob Gottlieb Svendsen</i> A great and complete process of working with automation. Includes continous delivery for runbooks, import/Export...	Introduction to Azure Function Apps <i>Kirk Munro</i> Serverless computing with Azure Function Apps and PowerShell is a boon for automators. Azure Functions are...
17:05 Coffee Break		
17:15 ETL with PowerShell <i>Andre Kamman</i> Moving data in and out of databases and manipulating it on the fly is called ETL. The tools used in case of SQL Server...	The X factor <i>Bartosz Bielawski, Thorsten Butz</i> Year after year, Microsoft strengthens it's effort to provide even more *nix style capabilities. In this co-hosted session...	Dependencies, how to make them evident <i>Irwin Strachan</i> Assumptions is the mother of all screw-ups. Making dependencies evident will keep your assumptions in check!
18:15 Day Ends		

PowerShell	Core	Pester	Database
Security	Azure/DevOps	Sharepoint	Fun

Day 4 — Friday, April 20, 2018
PowerShell Conference EU 2018 (visit www.psconf.eu)
preliminary Agenda March 12, 2018

	Track 1	Track 2	Track 3
08:30	<div><div></div>SHiPS: Walk-through a bare-metal system configuration <i>Ravikanth Chaganti</i> PowerShell providers have existed for a long time and the in-box Registry and WSMAN providers are classic examples of...</div>	<div><div></div>Automatisierung der Erstellung von Softwarepaketen mit PowerShell <i>Andreas Nick</i> Mit Windows 10 1607 erfolgte die Integration von Microsoft Application Virtualization (App-V) in das Betriebssystem....</div>	<div><div></div>Red vs. Blue – Ready, Steady, Fight! <i>Julien Reisdorffer, David das Neves</i> Julien & David will show in this very technical but thrilling session commonly used attack techniques using...</div>
09:30	Coffee Break		
09:45	<div><div></div>PowerShell Empire Strikes Back <i>Walter Legowski</i> (Re)Building A PowerShell Module for Automated Empire Attacks</div>	<div><div></div>Test-Driven Infrastructure with Test Kitchen, Chef, and DSC <i>Stuart Preston</i> Whatever Configuration Management solution you're going for: Chef, DSC, Puppet, etc Infrastructure as Code shares...</div>	<div><div></div>Hybrid Lab Automation <i>Jan-Hendrik Peters, Raimund Andree</i> So you have heard about the big cloud, and want to test scenarios like disaster recovery, failover clusters and so on...</div>
10:45	Coffee Break		
10:55	<div><div></div>Using other languages from PowerShell <i>Øyvind Kallstad</i> In this session we will take a look at how we can call other languages from PowerShell, as well as how to run native...</div>	<div><div></div>Use your PowerShell skills to extend Ansible workflows - create your own... <i>Wojciech Sciesinski</i> Ansible is one of the most popular tools to manage hosts configuration. Usually is used to manage Linux-based...</div>	<div><div></div>Use PowerShell as your language of choice inside Azure Functions <i>Andre Kamman</i> Sure, there are powershell commands to create and control Azure functions, but what about writing the actual function...</div>
11:55	Lunch		
12:45	<div><div></div>The hitchhiker's guide to user-friendly module design <i>Friedrich Weinmann</i> Ever used a module that just felt painful to use? Had to dig through heaps of documentations? Or more likely wished...</div>	<div><div></div>How to satisfy your OCD for and with PowerShell? <i>Jeff Wouters</i> Everyone writes scripts in their own way. I'll show you (and share with you) the scripts and tools that I've created to...</div>	<div><div></div>Common mistakes in Pester tests <i>Jakub Jareš</i> Learn about the mistakes people make when writing tests and how to avoid them. I will show why you should name...</div>
13:45	Coffee Break		
14:00	<div><div></div>Python for PowerShellistas <i>Sergei Vorobev</i> Python is another great language and a tool for DevOps! Some problems cannot be solved with scripts alone and...</div>	<div><div></div>Working with Binary Data: Writing your own parser <i>Jared Atkinson</i> Have you ever tried to read a file only for its content to look like a bunch of gobbledygook? In this workshop we will...</div>	<div><div></div>A matter of trust: Authentication and authorization in the PowerShell <i>Thorsten Butz</i> You will stumble upon numerous traps in terms of Authentication on (remote) devices in PowerShell: from...</div>
15:00	Coffee Break		
	<div><div></div>Microsoft & Speakers Grand Finale <i>All</i> Come-together to end this conference. We'll discuss any question that may still be open, look at next year, and say...</div>		
15:30	Conference Ends		

PowerShell	Core	Pester	Database
Security	Azure/DevOps	Sharepoint	Fun

Become a PowerShell Debugging Ninja

You've written PowerShell scripts or functions, and maybe packaged them up in a module. Then suddenly, when you least expect it, it shows up. It's red, and it's scary. You've hit a bug. But fear not! You, too, can become a PowerShell Debugging Ninja! Come to this session to learn how! Hi-yaaaaaaaah!

Game of Automation Thrones

Join us to learn more about different Azure automation technologies and pick your winner.

Introduction Workshops

In this quick sessions, we introduce the workshops taking place tomorrow. You get a chance to learn more about the workshop content, and prerequisites that you may need to download onto your notebook in advance. Important: Since workshop seats are limited, you also get a chance to submit your workshop preferences during this session. By submitting your preferences, you have the chance to get a reserved seat. Anyone not attending this session is limited to the workshop seats still available when the workshops open.

Pester internals and concepts

You learned the syntax of Pester and now you wonder what is behind it? Or maybe, you prefer learning from the bottom up? In any case join me for this session and I will show you the basic building blocks of Pester, the mechanisms used and how they are implemented.

PowerShell Security - what to prioritize?

PowerShell Security is a very wide topic. Starting from Signing, Logging, Remoting, Privileged Access Management moving on to enforced Constrained Language Mode, AMSI, JEA and much more. But where to start and where to end? We will discuss a simplified guideline what needs to be prioritized and how.

Saving Mr Typo: Authoring Tab Expansions with...

Is Mr Typo your second name? Or perhaps you are surrounded by people that seem to mistype everything they can? If you want to fix either of these problems, join me for training session where we will learn how to author dynamic tab expansions in TabExpansionPlusPlus module for PowerShell 3 and above.

The DSC Pull Server is dead, long live the DSC Pull Server

Ben presents first look at how DSC functionality has changed. Since the dust hasn't yet settled on this topic, expect a lot of cutting edge information that can't be summarized in this abstract yet.

Was ein PowerShell-Nutzer über .NET wissen MUSS!

.NET-Guru Dr. Holger Schwichtenberg erklärt in diesem Vortrag einige Konzepte von .NET, die Ihnen helfen, noch deutlich mehr aus der PowerShell herauszuholen. Er zeigt dabei auch, wie man .NET-basierte Anwendungen fernsteuern kann.

Case of the Unexplained - PowerShell Edition

We all have been there, your script generates unexpected output. Join this session to find out which tools exist to debug your PowerShell scripts. As with all of the Case of the Unexplained sessions, this session is focused at how to come to a solution.

Hands-on JEA

By now you have heard of Just Enough Administration - but have you actually configured it yet? In this training session we will delve into creating JEA endpoints for various purposes - from typical Help Desk scenarios to DSC node self-registration!

Invoke-CypherDog - Bloodhound Dog Whispering with PowerShell

Bloodhound is an Active Directory object relationship graphing tool used for situational awareness in offensive AD security testing. Originally designed by red teamers for red teamers, it can also be very useful to blue teams and regular admins. In this session we will introduce the tool itself and its basic concepts and functionalities. I will then present a PowerShell module made to interact with the Bloodhound database via the REST API, allowing you to become a real Dog Whisperer, and making it possible to connect other tools to bloodhound for further automation... This session is aimed at you even if you don't like dogs.

PowerShell 2018 - State of the Art (Keynote)

This talk covers the transition from Windows PowerShell to Core PowerShell. It reviews the forces and thinking behind this change and discusses what has gone well, what could have gone better, where we are and where things are going.

Regex ^3\0\$ - The Outer Edge

At PSConfEU17 we talked a bit about regex, and some of its common applications. This year, we'll crank it up to 11 and dive straight-first into some of the most bizarre functions .NET regex has to offer. These are the solutions you won't stumble upon in every other forum post, the outer edge cases!

Somewhat Advanced dbatools Development

Join dbatools creator Chrissy LeMaire and architect Friedrich Weinmann for a view behind the technical scenes, to see how we help simplify development for our contributors and keep the project exciting for both beginners and pros.

The Extended Type System

A deep dive into the PowerShell type system. What it can and cannot do, how it works, a peek at how it is implemented and examples on how you can use it to adapt standard and third party types to your own situation and workflow.

Zoo Evening Event

Evening Event at the Zoo Hanover. We spend all evening with drinks and dinner together in Yukon Bay. Bring your badge to get in!

Containers! Where is my PowerShell?

In this session you will see how PowerShell fits into the era of containers - both for management purposes and for running inside containers. We will look at container orchestration as well as operations tasks - covering both Linux and Windows containers. Be prepared - there will be lots of demos!

How to become a PowerShell Type System Ninja!

2-part talk that covers two exciting topics: 1) Exploring the type system using simple tools like powershell.exe and PSReadLine 2) Generating and emitting types at runtime using just powershell - no C# skills needed! Attendees will be empowered by ETS and riches hiding right beneath their feet!

Opening Ceremony

Grand Conference Opening

PowerShell Core 6 auf Linux. Und was mach ich jetzt damit auf...

Warum sollte ich aber auf Linux mit der PowerShell statt der bash arbeiten wollen? Dr. Holger Schwichtenberg zeigt die PowerShell Core in Action auf Linux, weißt aber auch darauf hin, welche Befehle aus der Windows PowerShell auf Linux noch fehlen.

Registration

Get your badge and materials

TFS and VSTS through Infrastructure as Code

Why not view TFS and/or VSTS as part of your infrastructure, because the are...? Then, why no apply Infrastructure as Code to them? This is what my customer and I were thinking, and I'll show you just what we did and the obstacles we needed to overcome.

Using Chat Automation (ChatOps)

Chat automation has been a persistent buzz in the industry: ChatOps is a term used to describe bringing development or operations work that is already happening in the background into a common chat room. It involves having everyone in the team in a single chat room, then bringing tools into the room so everyone can automate, collaborate and see how automation is used to solve problems. In doing so, you are unifying the communication about what work gets done and have a history of it happening. In this session we will go through setting up Chat automation using PowerShell, how to hit the ground running and what steps to take to convert your existing code base and make it work from Chat. From there on we will dive into how we can securely deploy, manage and administer this as a platform. Expect a session filled with demos and real-world insights of bringing this live in a production environment.

Desired State: A close look at the PowerShell and DSC integrations...

Want to know how the Chef interacts with PowerShell and DSC on the Windows platform? We're going to take a advanced level look at what you can do, tips and tricks to set you up for success and how using Chef's open source toolset improves the testability, reliability and lowers implementation risk.

How we made Configurable Pester Tests for SQL Server

We love using Pester to validate our SQL Server estate but to enable this to be shared we needed to make our Pester tests easily configurable. Join MVPs Chrissy LeMaire and Rob Sewell as they show the technical processes that we used to do this how we use AST in our unit tests to ensure that new tests follow our guidelines how you can use Power BI to display your Pester Test Results

OVF - getting fun from boring tasks

Ever wanted to make manual checklists obsolete and auto-generated reports content rich? Demo heavy session about making easy validating your environment with OVF. Real life examples of maintenance burden solved. Testing AD, DHCP, S2D clusters for operational status or configuration drifts!

PowerShell Engine Internals

An architecture overview of the PowerShell engine internals.

Revoke-Obfuscation: PowerShell Obfuscation Detection (And...

Red Teams and nation state threat actors alike are using PowerShell obfuscation to evade detection. Come see how the author of Invoke-Obfuscation and one of the original PowerShell developers tackle detecting obfuscation with PowerShell's Abstract Syntax Tree and science in Revoke-Obfuscation.

The Current State of PowerShell Security Features and Bypasses

Many attackers now fear the strong security features present in PowerShell v5. Other, more persistent adversaries, however, will continue to make investments in bypasses. Find out what the current state of the art is in PowerShell security and how attackers are evolving their tactics.

vSphereDSC: the long and winding road

The vSphereDSC project started some years ago. In the mean time PowerShell, DSC and vSphere have progressed. New features opened new possibilities. Deployment and testing DSC resources has evolved, and vSphereDSC has adapted to this as well, from class-based resources to a Deployment Pipeline.

A Historical Architectural Tour of PowerShell

Join us for a look at how PowerShell has evolved over time. We'll look at both the technical and environmental drivers behind many of the decisions that made PowerShell what it is today.

Azure Automation & Management with PowerShell & DSC

TBA - Presented by a PowerShell team member from Microsoft

Convert your Windows PowerShell module to be compatible with...

During the presentation, I would like to share my experiences with working on the modification of existing Windows PowerShell modules to work with PowerShell Core 6.x on all supported platforms (Windows, Linux, MacOS). I will present the main areas which need to be checked and/or adjusted.

Infrastructure validation using Pester

Still using manual checklists? Think it's time for some Operation Validation using Pester!

PowerShell Core 6.1

Discuss the PowerShell Core 6.1 goals, road map, current progress, and demos of works-in-progress.

PowerShell Yin-Yang: The Worst Practices and Tips & Tricks

Every Yin has its Yang. Every Jedi has her Sith. Every bad practice can be balanced with an awesome trick. Join me to see the darkest places of PowerShell scripting universe so that you know what to avoid! Get to know tricks that will impress your peers and tips that will make your life easier!

The PowerShell Security Best Practice Live Demo! (Part 1)

PowerShell Security is a very huge topic with many dependencies and technologies. Why not showing a -complete- Best Practice environment? In this double-session we will set up with you -on-hands- a complete environment and go through all Security Best Practices! Join us for a great live-demo!

Workshop: PlatyPS: From 0 to 1 and beyond

Do you suffer from un(der)documented PowerShell code? Or, is it your hair that is constantly on fire, and you simply do not have the time to add proper documentation to your code? That's common place, look around - yet it's not very clever: PowerShell scripts become integral part of your business logic. Without documentation, you waste time for others to service your code, and may even violate legal requirements. As a professional PowerShell scripter, you want to make sure your code is accompanied by professional-looking and complete documentation. Just how do you approach this? Lean back, join this workshop, and become friends with PlatyPS! PlatyPS is the new tool used by both Microsoft and Community that help you to create professional documentation for your PowerShell projects in no time: • Just how do you (quickly) add good documentation to your existing code? PlatyPS is the answer: fast bootstrapping for existing projects! • How can documentation show both in the PowerShell help system, and can be published to websites? PlatyPS is the answer: compatible both with maml and markdown, documentation displays in PS help system and on websites • How do you maintain and update your documentation with new versions of your code, and new functions or new parameters introduced? PlatyPS is the answer: version control friendly documentation, support for updating existing help • Finally: how do you work as a team? PlatyPS is the answer: enable others to contribute to your documentation with ease. PlatyPS adds the professional touch to your PS projects, and is completely free. Join the list of these popular modules that already use platyPS: Azure-Powershell, Powershell-Docs, PSReadLine. In this workshop we will cover: • onboarding for an existing project (bring your own or use a sample one!) • standard workflow for platyPS: creating new help, updating help, creating maml

Auditing Domain Trust Relationships

Does your organization have one or more Active Directory domain trusts? Can you guarantee that your trust "mesh" is configured correctly? This talk will explain domain trusts in depth and show how they can be easily audited from an defensive or offensive perspective with PowerShell/PowerView.

Be the automator - not the automated

In this session we will look at some key concepts around DevOps and tooling before diving into demos showing examples on what processes and tools can be used for automation. Azure Automation, Azure Logic Apps and Microsoft PowerApps is some of the technologies you will get to see in this session.

DSC in Configuration Management tool world

DSC on it's own is a great platform but what is lacking is a nice of the shelf management solution and a bit of maturity. In this session I'll look at working with cm tooling like Chef and Puppet in combination with DSC to see where these CM tools enrich the DSC experience

Navigate around the edge with PowerShell

Working with PowerShell is often a joyous occasion, working with the latest and greatest technologies. Remoting from Linux to Windows and back again with the greatest ease, it is an interesting time to be involved with PowerShell.

PowerShell for SharePoint Online - How DevOps is making...

For years admins have been performing repetitive tasks - even with the advent of PowerShell, they still repeat many tasks over and over. This session helps SharePoint admins understand the "Dev" in DevOps & understand the CD approach & give them practical guidance they can implement immediately.

PowerShell, Reflection, and the Windows API

Want to extend PowerShell and the .NET Framework it rides on? This talk will show you how to interact with the Windows API in memory without the need to compile C# source code and contribute back to the community by documenting the API functions you use in your code.

The PowerShell Security Best Practice Live Demo! (Part 2)

PowerShell Security is a very huge topic with many dependencies and technologies. Why not showing a -complete- Best Practice environment? In this double-session we will set up with you -on-hands- a complete environment and go through all Security Best Practices! Join us for a great live-demo!

Workshop: The Power of the Dark Side: Offensive PowerShell...

Have you ever wanted to play with hacking tools, or wanted to know how attackers use PowerShell offensively? In this workshop I will introduce a number of offensive PowerShell toolsets, many of which I helped develop or co-author. Intro and Setup Invoke-Mimikatz Defending against (Invoke-)Mimikatz -Sysmon events -PowerShell logging -Detecting Invoke-Mimikatz Alternate PowerShell Hosts -Searching for alternate PowerShell hosts -Abusing "official" alternate PowerShell hosts -Abusing alternate PowerShell hosts -PowerShell Injection -PowerShell without powershell.exe -UnmanagedPowerShell -Invoke-PSInject (what Empire is based on) -PowerShell in unmanaged code -Detecting PowerShell injection -WMI module load events -Sysmon events -PowerShell logging -Get-InjectedThread -Detecting "PowerShell without powershell.exe" -Wrapup

Automate automating your automation, DSC with class-...

Would you like to use DSC in your environment, or are you looking for a way to automate your DSC configurations? Join us in this session where we present a way to parameterize, test and automate your DSC configurations.

Configurations, Personalities, and Stamps - Modular approach to...

Realizing a completely automated infrastructure deployment pipeline can be much easier when built in a modular way. This session shows how to build one using what we know best -- PowerShell, DSC, and Pester.

Everything you always wanted to know about using API from...

You are an advanced PowerCLI user and you have automated most of your daily admin tasks. This session will show you how you can achieve the next level by using the API (SOAP and REST) methods to automate further. You'll see how to execute "impossible" tasks on the ESXi node and inside the guest OS.

Parameter Classes: Making parameter-binding user friendly

Asking for a specific data type as input can be very unintuitive and limiting for the user. Accepting anything and parsing in script however is hard to maintain. Enter Parameter Classes, introducing a flexible data adapter that can dynamically convert input as part of the parameter binding process.

PowerShell Formatting

Formatting is what happens at the end of each pipeline, where objects are rendered into a text representation. This session will look at the formatting engine in PowerShell, it's capabilities and it's some of it' weaknesses. We will dive into how to customize how objects from a module are formatted, including how to render a collection member. Lastly, a peek at a possible future of formatting, a new approach with better performance - PSMORE. The session will be require a working knowledge of PowerShell, and will at occasions look at C# underpinnings.

Release Pipeline - the PPOsh Modules Story

How an average Ops can benefit from mysterious Release Pipeline. How GIT and a CI server allows to get greater confidence in your code? Use cases of AppVeyor and TeamCity in Objectivity Ecosystem for OS PPOsh modules and internal Ops Daily Blood.

Werde zum XML Ninja mit PowerShell

XML als Datenspeicher oder als einfache Datenbank in Form einer Textdatei wird häufig in der PowerShell genutzt. In dieser Session kannst Du lernen, wie Du XML optimaler nutzen kannst.Bsp. über XPath nach Elementen oder nach XML Attributen suchen, Umgang mit Namensräumen usw.

Automate everything: Bring self-service to LEGO robots

This is fun! Doing self service for LEGO robots? What can be more existing and useful than that!

Continuous Delivery for your Module to the PowerShell Gallery

An intro session to show how to deploy a PowerShell module with CD. In this fast paced demo heavy session we will - Use Plaster - Use GitHub - Use Pester - Use VSTS to Build, Test & Release - All using a module that uses the Microsoft Cognitive Services Faces API to analyse Beards!

Getting Ready for Workshops

If you have a reserved workshop seat, please go to the workshop you signed up for. If you do not have a reserved seat, at each workshop you find a list of available seats. Add yourself to the workshop list of choice, and make yourself at home.

PowerShell Code Signing: Practical Applications, Attacks, and...

Whether using it to validate the integrity of PowerShell Gallery modules or enforcing application whitelisting, PowerShell code signing practices are extremely valuable. Learn how to sign code, enforce policy, and play the role of an attacker attempting to subvert digital signatures!

PowerShell in Azure Cloud Shell

Join us to learn how to make creation and management of Azure resources cool again. Enjoy the power of command-line directly in your browser!

Reverse DSC - Making SharePoint Admins feel loved again

For SharePoint, DSC is a sensitive topic. Because it is idempotent, it may cause some headaches for SharePoint Admins. REVERSE DSC, however, allows me to do a couple of things: make changes and have those changes reflected in the lower environments and update my documentation at the same time!

Workshop: Bring Existing Infrastructure under Code Control

In this workshop, we'll work out how to successfully bring an existing infrastructure under code control, and the associated workflow required to make it reliable in a real-life scenario. This is the perfect chance to hop on the train if you ever wondered what DSC is, how it can help you better manage infrastructure, and what a "Release Pipeline" is. The workshop provides much practical knowhow even for those who already work with DSC. We'll first review the underpinning principles of managing infrastructure in a robust and trustworthy way. Then, step by step, we demonstrate how an existing infrastructure can be defined, put under DSC control, and changes deployed. We'll guide you through a quick setup of a representative lab of a legacy infrastructure with a domain and few services. We'll introduce our Continuous Integration (CI) tool, a VSTS instance, and create our build pipeline for PowerShell modules, introduce the concepts and replicate the learnings to other pipelines used in Infrastructure management. We'll then start composing our DSC solution by composing Configurations and Resources into roles, to change our pets into cattle, adopting a flexible configuration data model defining the infrastructure similar to Puppet, Chef and Ansible. Attendees are free to follow along and deploy the solution in their own Azure Resource Group. By running the demo code they will experience first-hand how change is promoted throughout the staging rings, from Dev to Prod, and how the puzzle fits together. At the end of this workshop, you'll have made friends with DSC and know how to tackle your own infrastructure.

A matter of trust: Authentication and authorization in the...

You will stumble upon numerous traps in terms of Authentication on (remote) devices in PowerShell: from "double hop" errors to session handling, from password management to certificate based logon: mind the gaps!

Dependencies, how to make them evident

Assumptions is the mother of all screw-ups. Making dependencies evident will keep your assumptions in check!

Hybrid Lab Automation

So you have heard about the big cloud, and want to test scenarios like disaster recovery, failover clusters and so on without touching a GUI? Look no further - we will delve into typical Azure-based Hybrid Cloud scenarios using PowerShell and AutomatedLab.

Python for PowerShellistas

Python is another great language and a tool for DevOps! Some problems cannot be solved with scripts alone and python has something to offer when PowerShell is not enough.

The hitchhiker's guide to user-friendly module design

Ever used a module that just felt painful to use? Had to dig through heaps of documentations? Or more likely wished in vain those heaps existed at all? Drowned in a sea of blood (aka Wall of red, severe exceptionitis)? Don't panic! With this guide you will be able to avoid this in your own modules.

Using other languages from PowerShell

In this session we will take a look at how we can call other languages from PowerShell, as well as how to run native commands from within your PowerShell scripts.

Automatisierung der Erstellung von Softwarepaketen mit...

Mit Windows 10 1607 erfolgte die Integration von Microsoft Application Virtualization (App-V) in das Betriebssystem. Das ADK aus 1703 bringt nun den auf PowerShell basierenden App-V Autosequencer mit. Hier lernst Du wie das Modul funktioniert und wie Du diese Funktionen nutzen kannst.

DevSec Defense: How DevOps Practices Can Drive Detection...

Attackers constantly update their tradecraft, forcing defenders to quickly build, tune, deploy & maintain detections in never-ending sprints. Come see how applying DevOps practices & frameworks like Pester, ScriptAnalyzer, & custom fuzzers can drive robust methodology-based detection development.

Introduction to Azure Function Apps

Serverless computing with Azure Function Apps and PowerShell is a boon for automators. Azure Functions are very low cost, and very, very powerful. This session will introduce you to Azure Function Apps, show you the ins and outs, and give you a head start in your serverless computing initiatives!

Red vs. Blue – Ready, Steady, Fight!

Julien & David will show in this very technical but thrilling session commonly used attack techniques using PowerShell and possible countermeasures focusing on Win10 to provide very technical insights. Are you even aware of the defensive stack or have you just lost the race? It's time to figure out.

The X factor

Year after year, Microsoft strengthens its effort to provide even more *nix style capabilities. In this co-hosted session Bartek Bielawski and Thorsten Butz will guide you through the continuing story of a unified DevOps world, from PS Core to LinuxKit.

Working with Binary Data: Writing your own parser

Have you ever tried to read a file only for its content to look like a bunch of gobbledygook? In this workshop we will discuss data structures and some practical strategies for parsing them with PowerShell. By the end of this workshop, you will parse your first binary data structure!!

Azure Automation in production, lessons learned in the field

A great and complete process of working with automation. Includes continuous delivery for runbooks, import/export of automation runbooks and resources such as credentials. and a great way to log all outputs and results from runbooks using OMS for up to 3 years present it using PowerBI.

ETL with PowerShell

Moving data in and out of databases and manipulating it on the fly is called ETL. The tools used in case of SQL Server are mostly based on Integration Services (SSIS). PowerShell could potentially be a big timesaver because a few lines of interpreted code might be a lot easier to write than designing SSIS packages. But it probably wouldn't scale that well, the engine in SSIS that moves the data is quite powerful and you could never achieve similar results in PowerShell. Or could you? Let's see if we can challenge the champion and have ourselves a little battle. Points can be earned for usability, but also raw speed!

Microsoft & Speakers Grand Finale

Come-together to end this conference. We'll discuss any question that may still be open, look at next year, and say farewell!

SHiPS: Walk-through a bare-metal system configuration

PowerShell providers have existed for a long time and the in-box Registry and WSMAN providers are classic examples of how the providers are used. However, creating custom providers is not an easy task as they are implemented only in C#. With the release of open source SHiPS module, it is now possible to implement PowerShell providers as class-based Script modules. In this session, we look at a few examples implemented using SHiPS and understand design and implementation best practices.

Use PowerShell as your language of choice inside Azure Functions

Sure, there are powershell commands to create and control Azure functions, but what about writing the actual function in PowerShell? PowerShell is a first class language inside functions. Let's dive into how this works and write some "Serverless PoSh"

Common mistakes in Pester tests

Learn about the mistakes people make when writing tests and how to avoid them. I will show why you should name your tests correctly, remove conditions from them, why test your tests and much more.

How to satisfy your OCD for and with PowerShell?

Everyone writes scripts in their own way. I'll show you (and share with you) the scripts and tools that I've created to satisfy my OCD when it comes to delivering scripts to customers or reviewing those of others. Braces, brackets, indenting... and much more.

PowerShell Empire Strikes Back

(Re)Building A PowerShell Module for Automated Empire Attacks

Test-Driven Infrastructure with Test Kitchen, Chef, and DSC

Whatever Configuration Management solution you're going for: Chef, DSC, Puppet, etc Infrastructure as Code shares some challenges and best practices. In this session we'll introduce you to Test Kitchen, an open-source tool that can help with testing your automation, with Chef and DSC demos.

Use your PowerShell skills to extend Ansible workflows - ...

Ansible is one of the most popular tools to manage hosts configuration. Usually is used to manage Linux-based nodes but can manage Windows-based machines too. In this case, all that is run on Windows is pure PowerShell code. Under presentation, I'll show you how you can write your own Ansible module.