

PowerShell Conference Europe 2020

Internet, World

June 2-3, 2020

AZURE FUNCTIONS IN A HYBRID WORLD

Jan Egil Ring

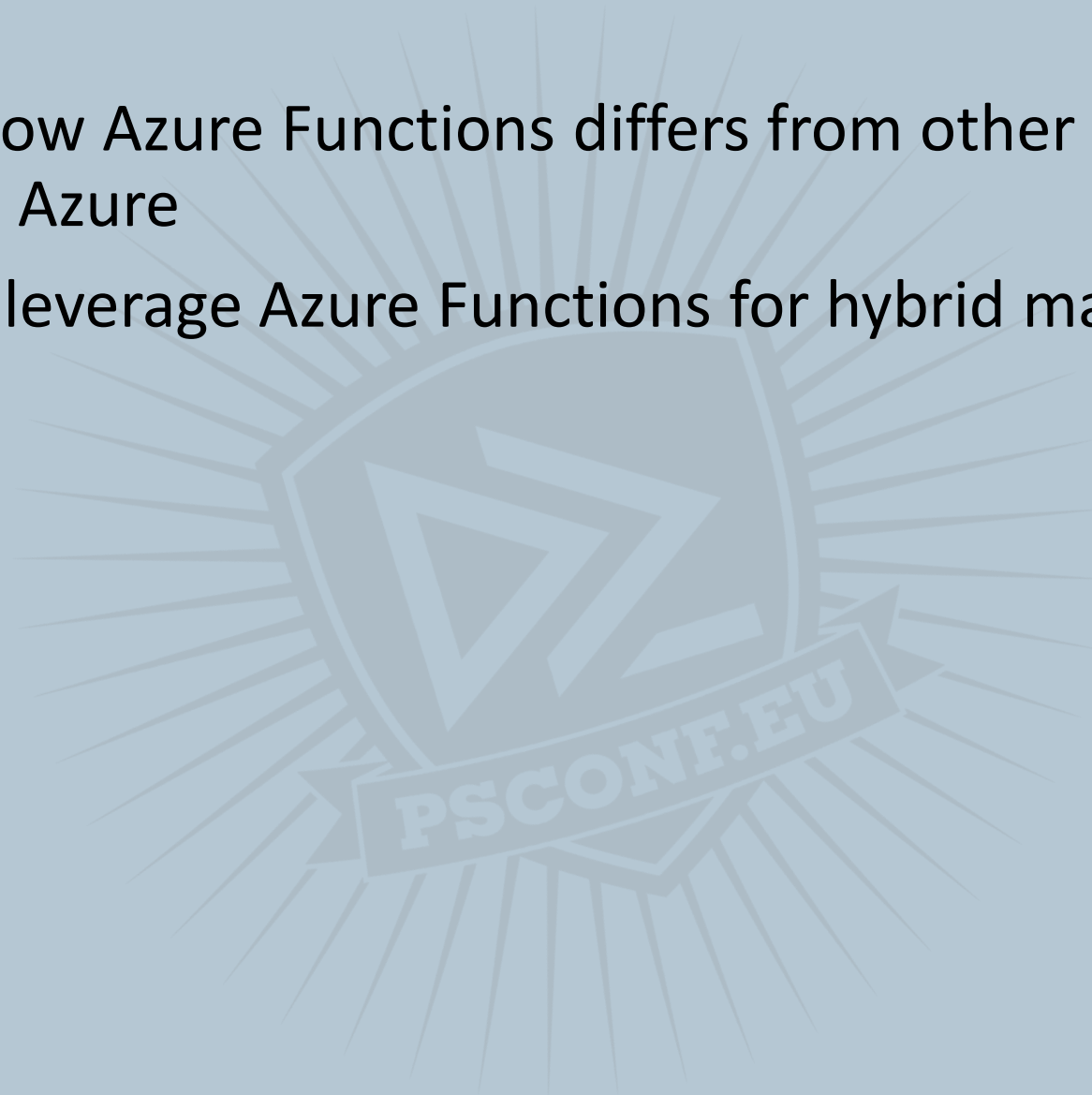
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powershell.one

AGENDA

- Understand how Azure Functions differs from other automation capabilities in Azure
- Learn how to leverage Azure Functions for hybrid management



Automation

Deploy and operate infrastructure and services in Azure

Deploy



Deliver repeatable and consistent infrastructure as code for testing, staging, and production.



Resource Manager



Automation

Respond



Create event-based automation on deployed resources to diagnose and resolve issues.



Event Grid

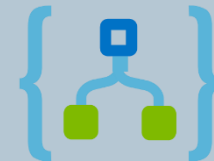


Functions

Orchestrate






Orchestrate your automation across disparate systems in Azure and 3rd party management.



Logic Apps

Azure Functions vs Azure Automation

- Azure Functions uses PowerShell Core/7
- Azure Automation uses Windows PowerShell
- 5.1 marks the completion of Windows PowerShell

	Windows PowerShell	PowerShell Core/7
Cross-Plat Support	 Windows only	✓ Windows, macOS and Linux
Side-by-side		✓ SxS and portable
Active development	 Servicing only	✓
Servicing	✓ via Windows Update	✓ via Microsoft Update
Remoting support	✓ WinRM	✓ WinRM and SSH
.NET CLR	.NET Framework	.NET Core 2.x
Packaging	Ships in Windows & MSU (for down level)	MSI, RPM/DEB repos, Snap, HomeBrew, ZIP

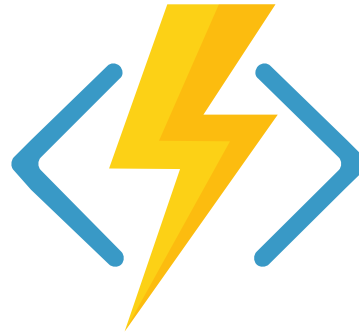
Azure Functions Programming Model

Events



React to timers, HTTP, or events from your favorite Azure services, with more on the way

Code



Author functions in C#, F#, Node, Java, Python, PowerShell, and more

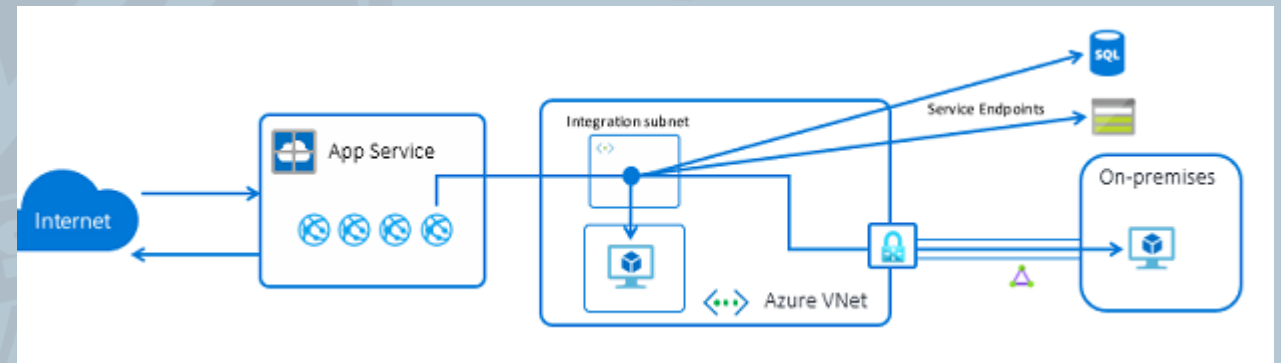
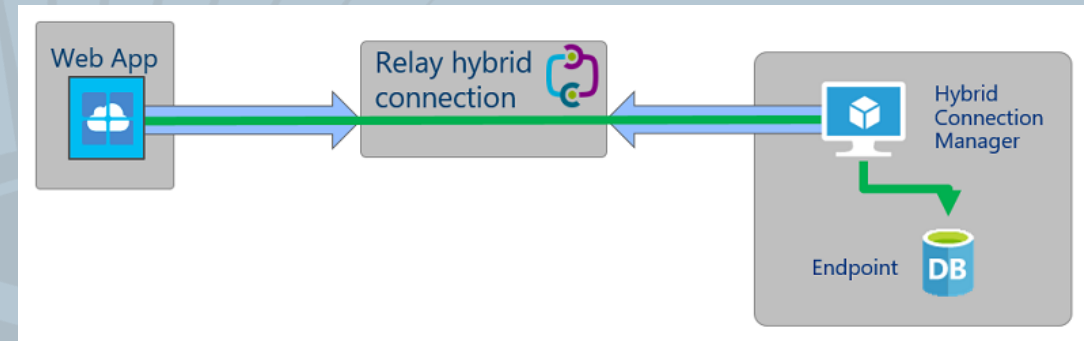
Outputs



Send results to an ever-growing collection of services

HYBRID MANAGEMENT IN AZURE FUNCTIONS

- Two options
 - Hybrid Connections
 - Virtual Network Integration





DEMO

Azure Functions

SUMMARY

- Azure Functions uses PowerShell Core/7
- Azure Automation uses Windows PowerShell
- Options for Hybrid Management in Azure Functions
 - VNet integration (requires Premium Plan)
 - Hybrid Connections (requires agent)

SLIDES + DEMO CODE

```
Start-Process -FilePath https://github.com/psconfeu/2020
```

ABOUT_SPEAKER

```
pwsh

PS Git:\ 12ms> Get-ContactInfo

Name      : Jan Egil Ring
E-mail    : jan.egil.ring@crayon.com
Twitter   : @JanEgilRing
Website   : {www.crayon.no, www.powershell.no, www.powershellmagazine.com}

PS Git:\ 10ms>
```

NEXT!

PowerShell Conference Europe 2021

Hannover, Germany

June 1-4, 2021

Delegate sign-up opens November 2020 at <https://psconf.eu>