



PowerShell Conference Europe

Show-Feature -Name Microsoft.Resources/deploymentStacks

Jan Egil Ring

Many thanks to our sponsors:





```
PS C:\> Get-Speaker
```

```
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Agenda

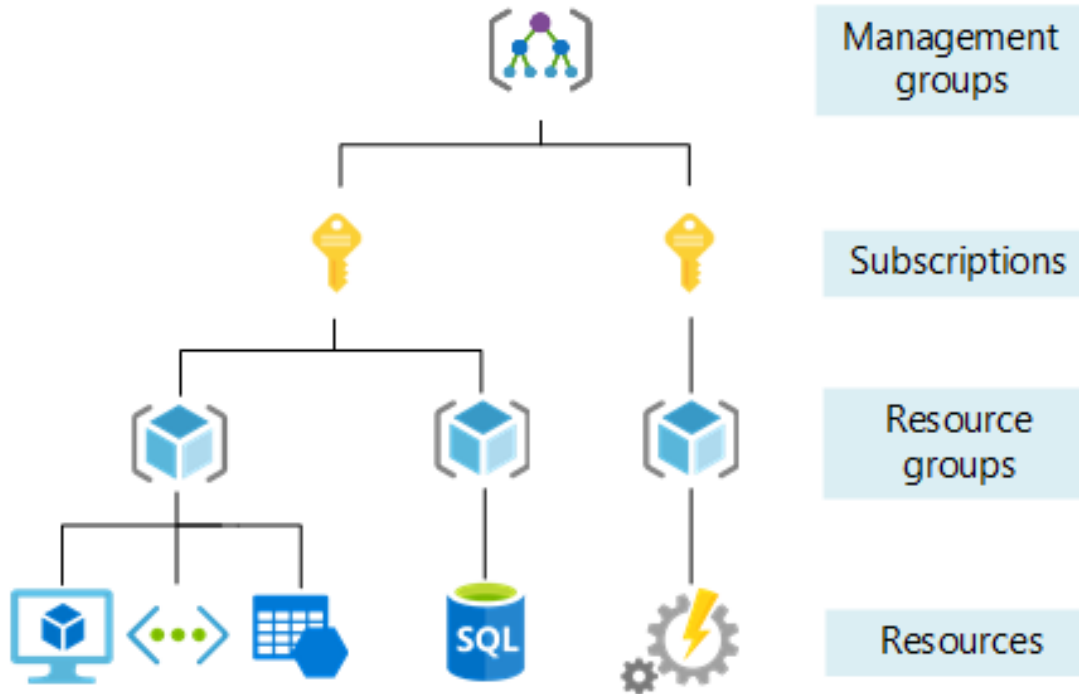
- Introduction to Deployment Stacks
- Demos



Azure deployments today



`New-AzTenantDeployment`



Management
groups

`New-AzManagementGroupDeployment`

Subscriptions

`New-AzSubscriptionDeployment`

Resource
groups

`New-AzResourceGroupDeployment`

















































Resources

Introducing Deployment Stacks

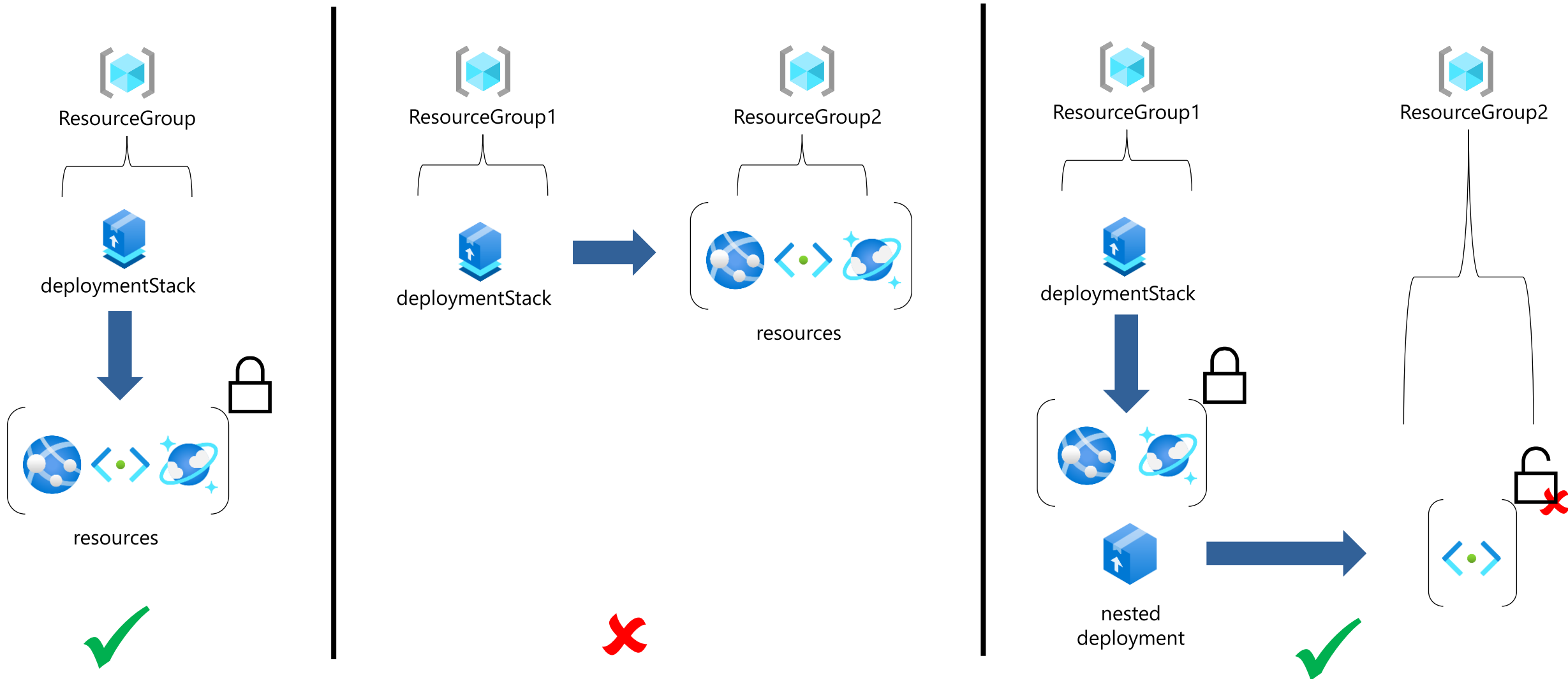
- A ***deploymentStack*** is a collection of resources that allows for lifecycle operations to be performed on the entire collection.



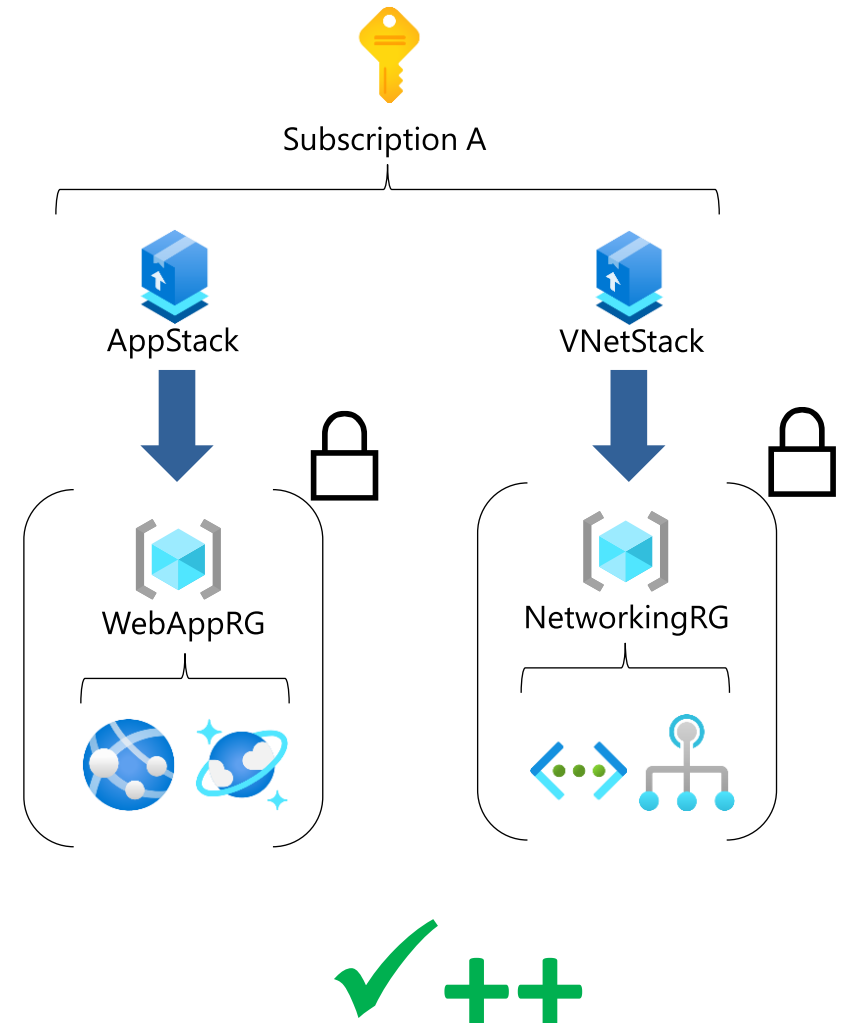
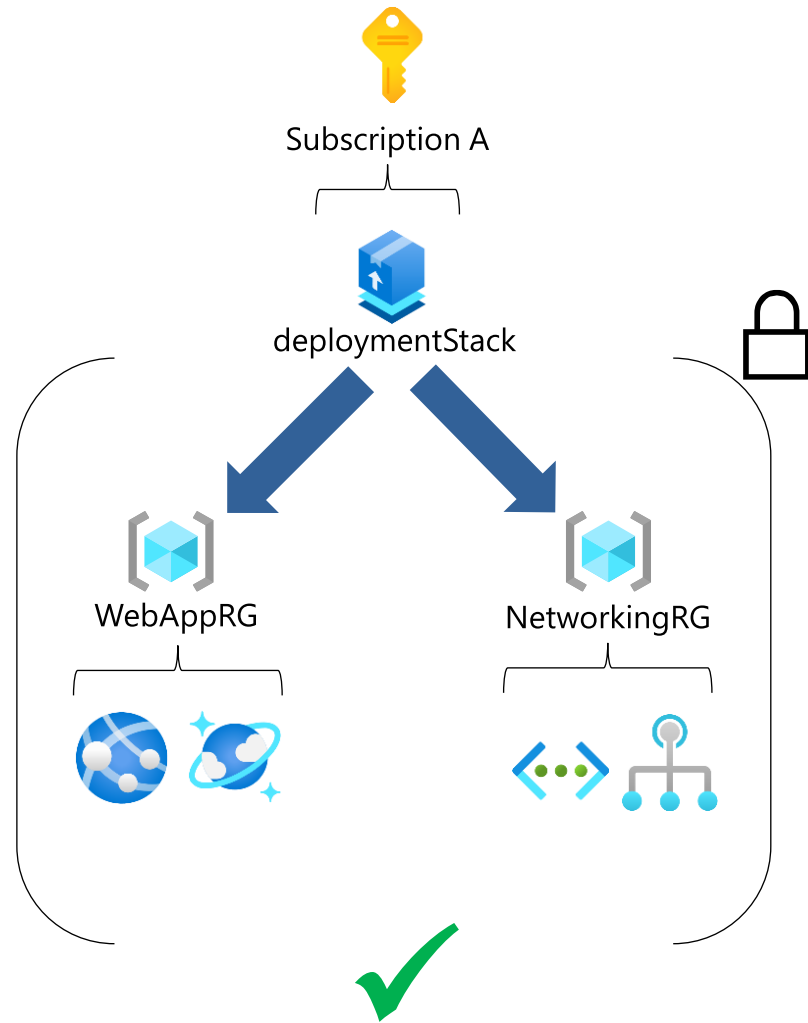
The Life of a deploymentStack

Day <i>n</i> ...	deploymentStack deploys...	Resulting Azure State with “actionOnUnmanage”			
		Detach		Delete	
Initial Deployment	 Storage	<i>managed</i>  Storage	<i>no longer managed</i>	 Storage	
Add a KeyVault	 Storage  Key Vault	 Storage  Key Vault		 Storage  Key Vault	
Swap Storage for CosmosDB	 Cosmos DB  Key Vault	 Cosmos DB  Key Vault	 Storage	 Cosmos DB  Key Vault	 Storage
Add Storage	 Cosmos DB  Key Vault  Storage	 Cosmos DB  Key Vault  Storage		 Cosmos DB  Key Vault  Storage	
Remove Storage, Add Web	 Cosmos DB  Key Vault  Web App	 Cosmos DB  Key Vault  Web App	 Storage	 Cosmos DB  Key Vault  Web App	 Storage
DELETE the deploymentStack			   		   

Scoping a deploymentStack



Scoping a deploymentStack



Demos

We love Demos!



Summary

- **Lifecycle Management**
 - Define resources to be managed as a single unit across scopes using templates.
- **Teardown (Cleanup)**
 - Delete a stack and all resources (across scopes) without the need to understand dependencies or sequence
- **Deny Assignments**
 - Lockdown a collection of resources which can only be modified by the collection owner - except in cases of operational emergencies



Next Steps

Private Preview (Available Now)

- Create stacks at MG, Sub, and RG scopes & deploy managedResources to Sub and RG scopes
- Azure CLI and PowerShell Support
- Exclude AAD Principal IDs to be exempt from the denyAssignment
- DenyAssignments - DenyDelete & DenyWriteAndDelete support

Public Preview (Available July 2023)

- Portal UX support - create and manage your deploymentStacks from the Azure Portal
- aka.ms/deploymentstacks

Resources

- aka.ms/psconfeu2023/deploymentstacks
 - Slides and demos
- aka.ms/bicep
 - Bicep documentation
- Twitter
 - @BicepLang – Product Group
 - @adotfrank – Alex Frankel, Program Manager - Azure Deployments
 - @apclouds – Ángel Perez, Program Manager - Azure Deployments

Community calls

- [YouTube - Azure Deployments & Governance](#)
 - Recordings
- [GitHub - Azure/bicep](#)
 - Issues with the 'community-call' label, one per month

Q&A

15 minutes

