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# Getting to know more on Azure Resource Manager (ARM)

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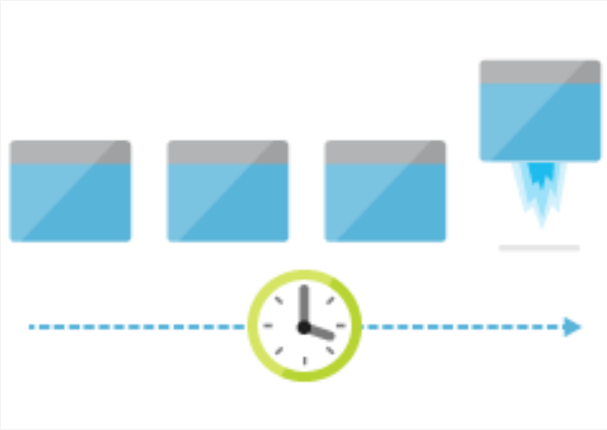
# Areas of Focus



Deploy


Organize


Control

Microsoft

# Deploying with Azure Resource Manager

template-driven – Define / Create structure
Declarative – Focus on “What” and not on “How”
Idempotent – Deploy multiple times
multi-service – Variety of Azure Services
multi-region -  Across Datacenter Regions
Extensible – Always editable

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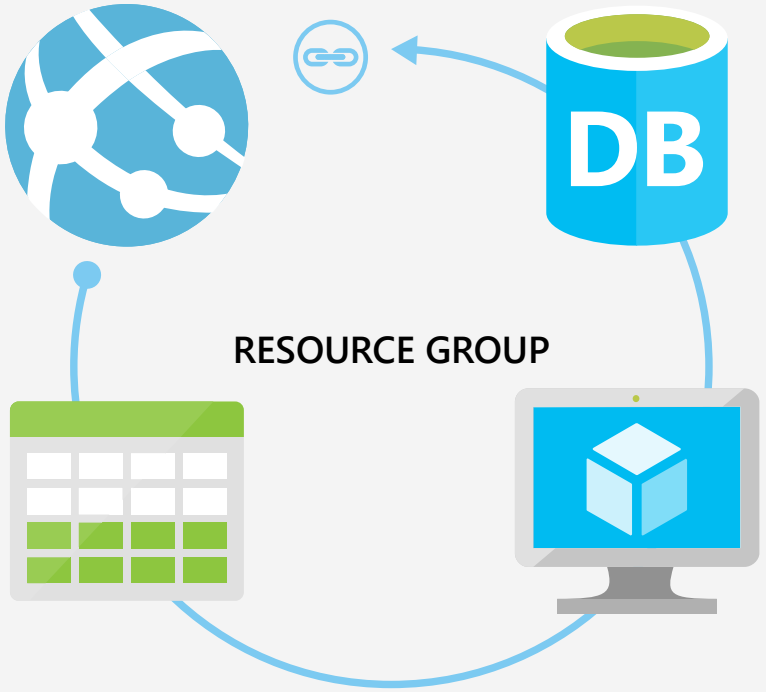


# Resource Group

→ container for multiple resources
→ resources exist in one* resource group
→ resource groups can span regions
→ resource groups can span services

*and only one

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imperative
or
declarative

```
New-AzureVM –VM $myVM
New-AzureStorageAccount –StorageAccountName $acct
Set-AzureVNetConfig –ConfigurationPath -Path
```

```
{
 "$schema": "https://../deploymentTemplate.json#",
 "contentVersion": "1.0.0.0",
 "parameters": {},
 "variables": {},
 "resources": [],
 "outputs": {}
}
```

# You decide

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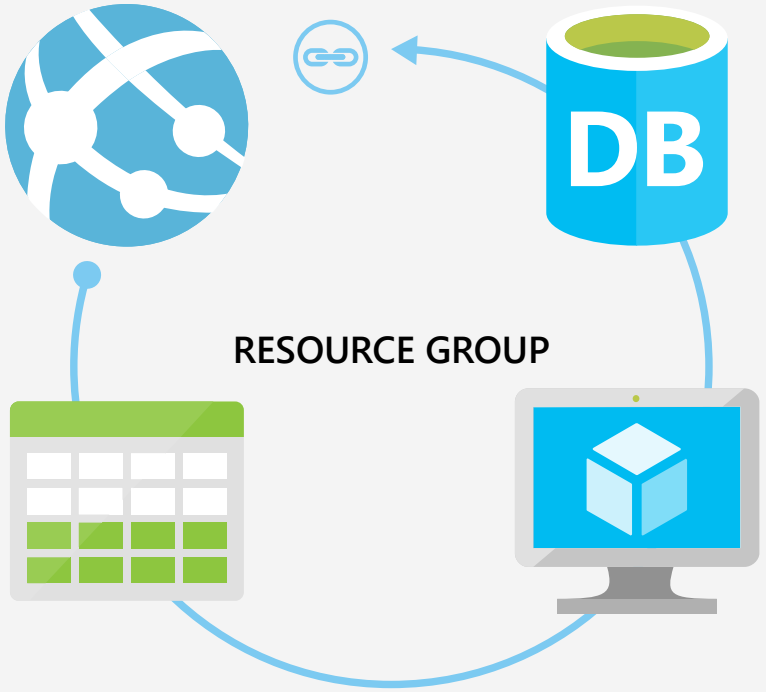


# Deployment

→ tracks template execution

→ created within a resource group

→ allows nested deployments

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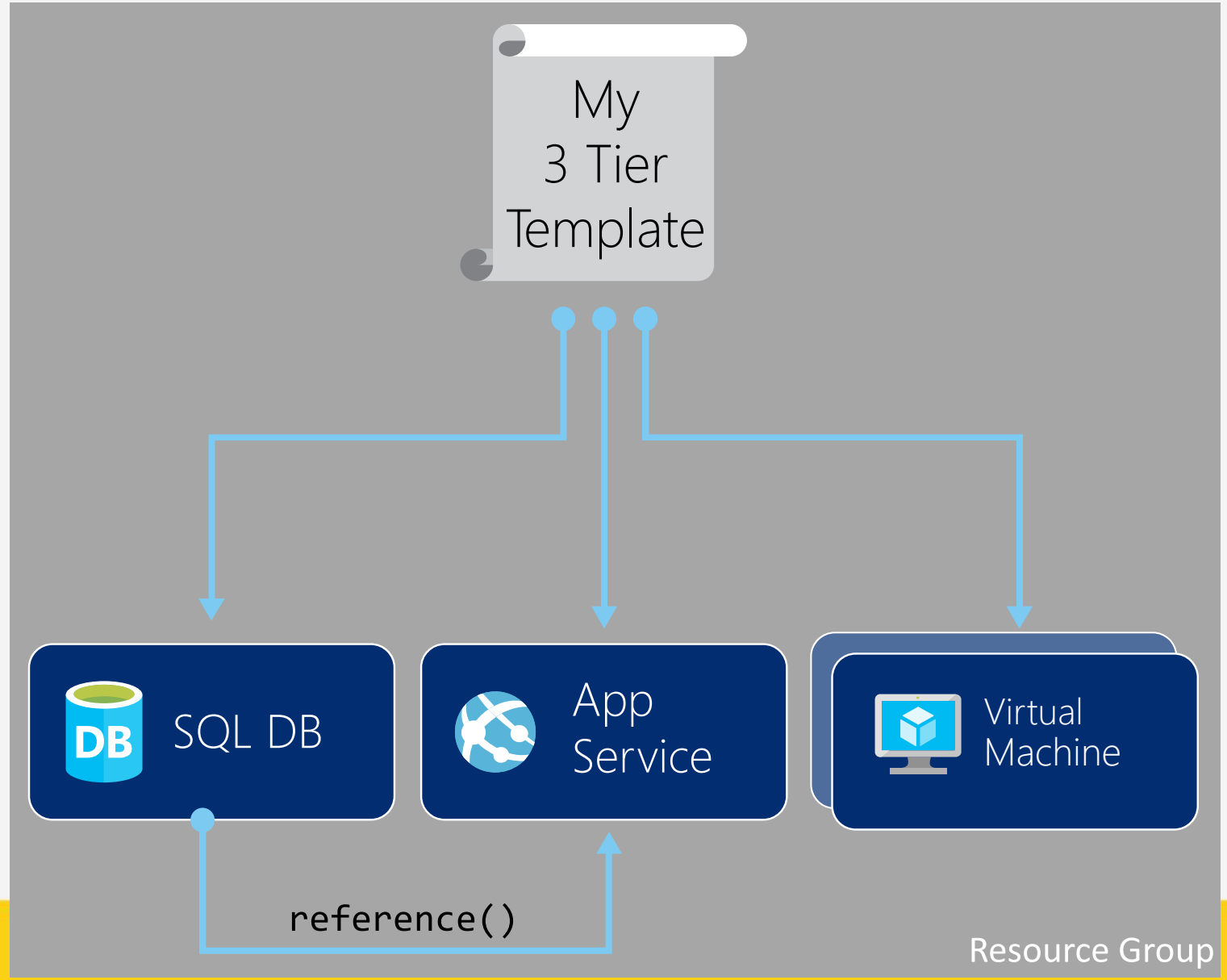
# App-centric Resource Groups and Templates

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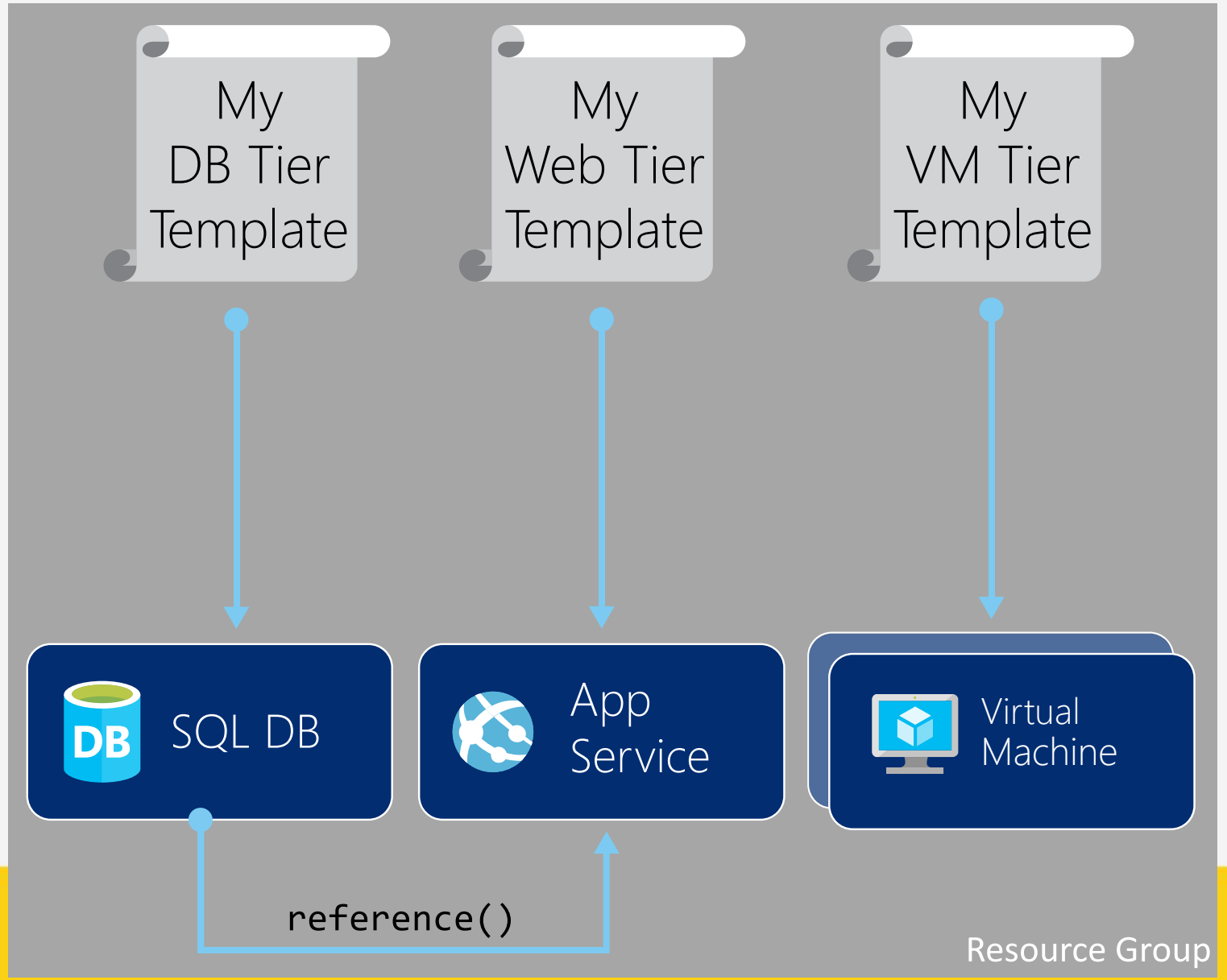
# App-centric Resource Groups and Tier-centric Templates

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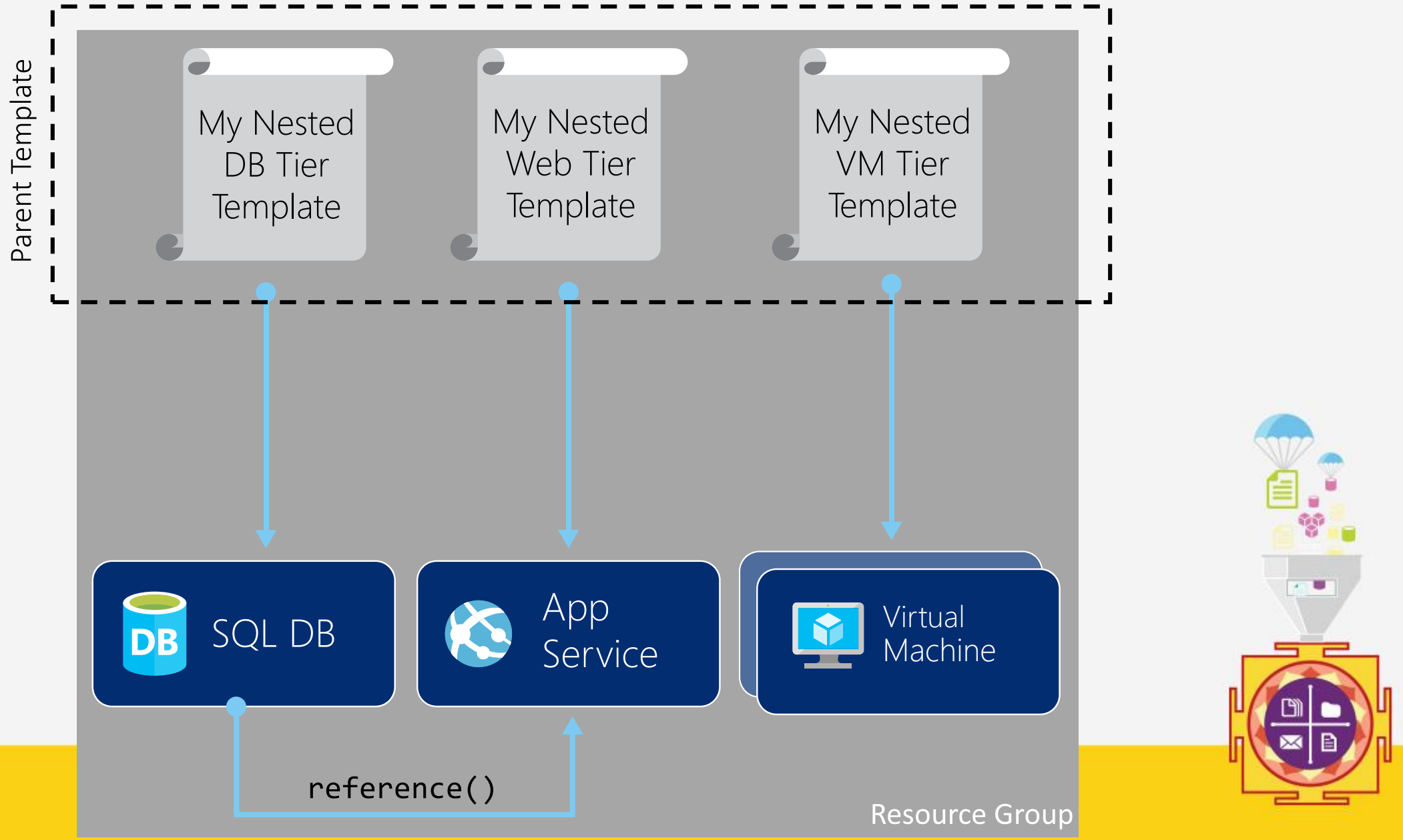
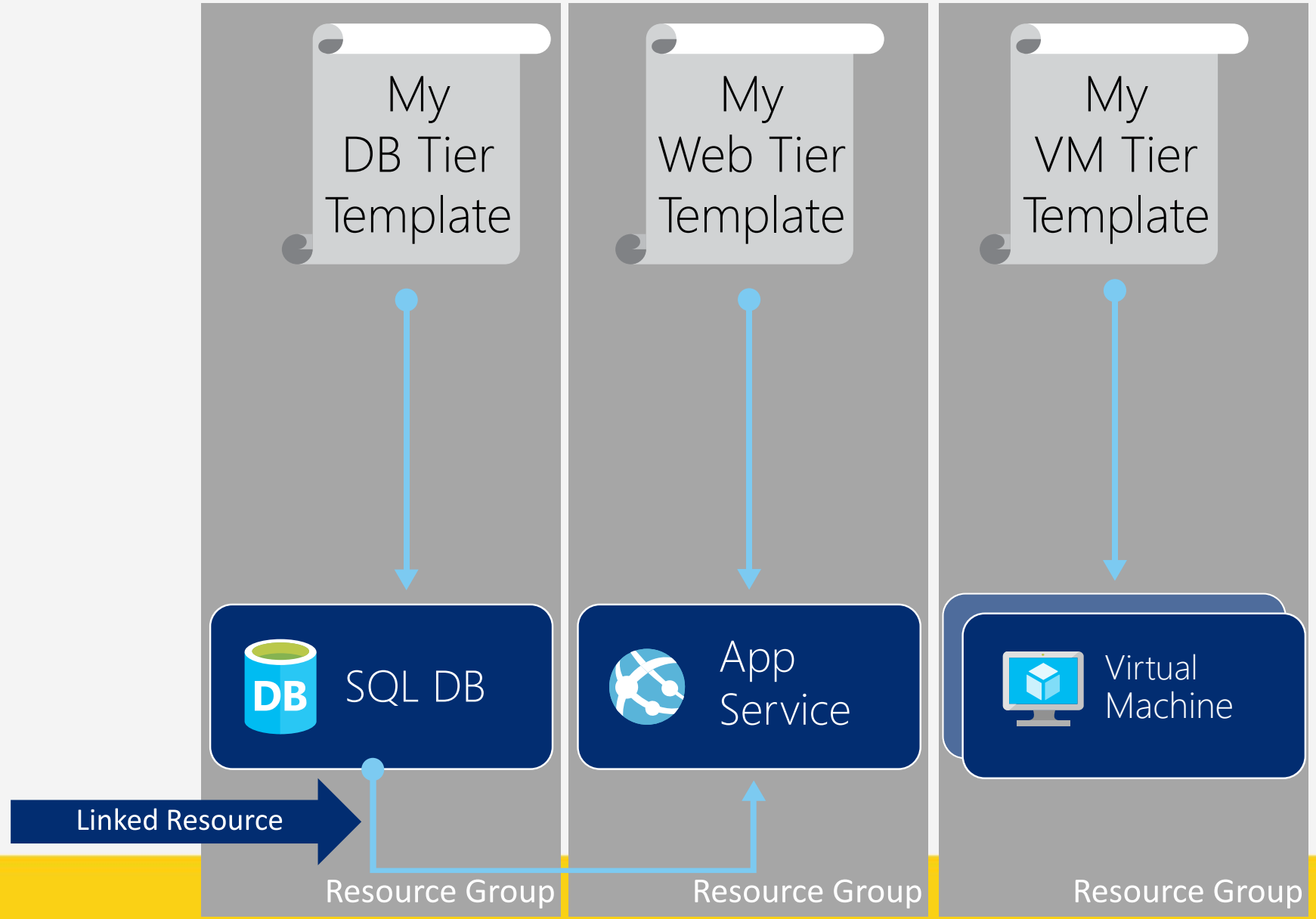
# App-centric Resource Groups and Nested Templates



# Tier-centric Resource Groups and Templates

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# Demo: PowerShell + Hello World, Storage

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# Advanced Template Scenarios

Resource Extensions

- VM+DSC/Chef/Puppet/CustomScript/etc.
- AppService + WebDeploy
- SQL DB + BACPAC

Copies

Nested Templates

NewOrExisting Patterns

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# Demo: PowerShell + VM

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# Organizing with Azure Resource Manager

resource groups

linked resources

tags

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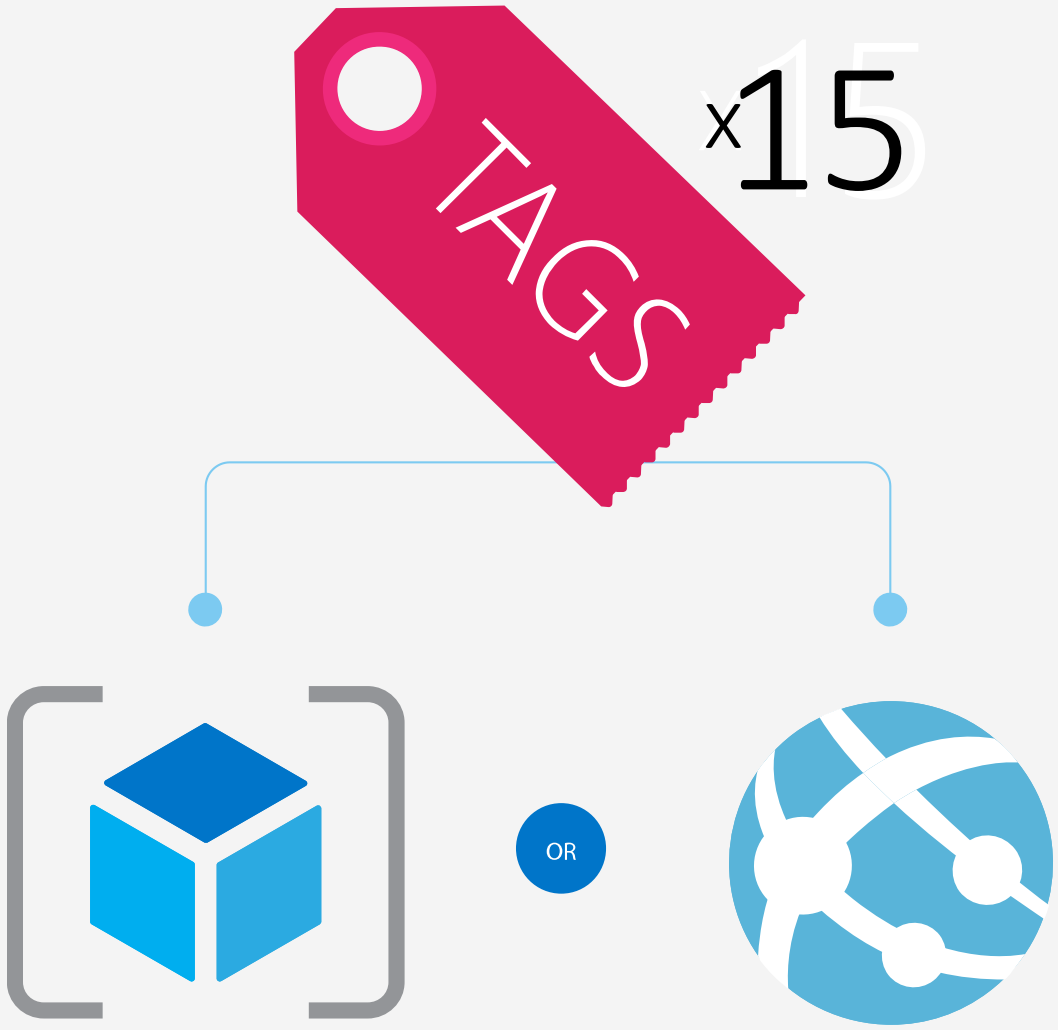
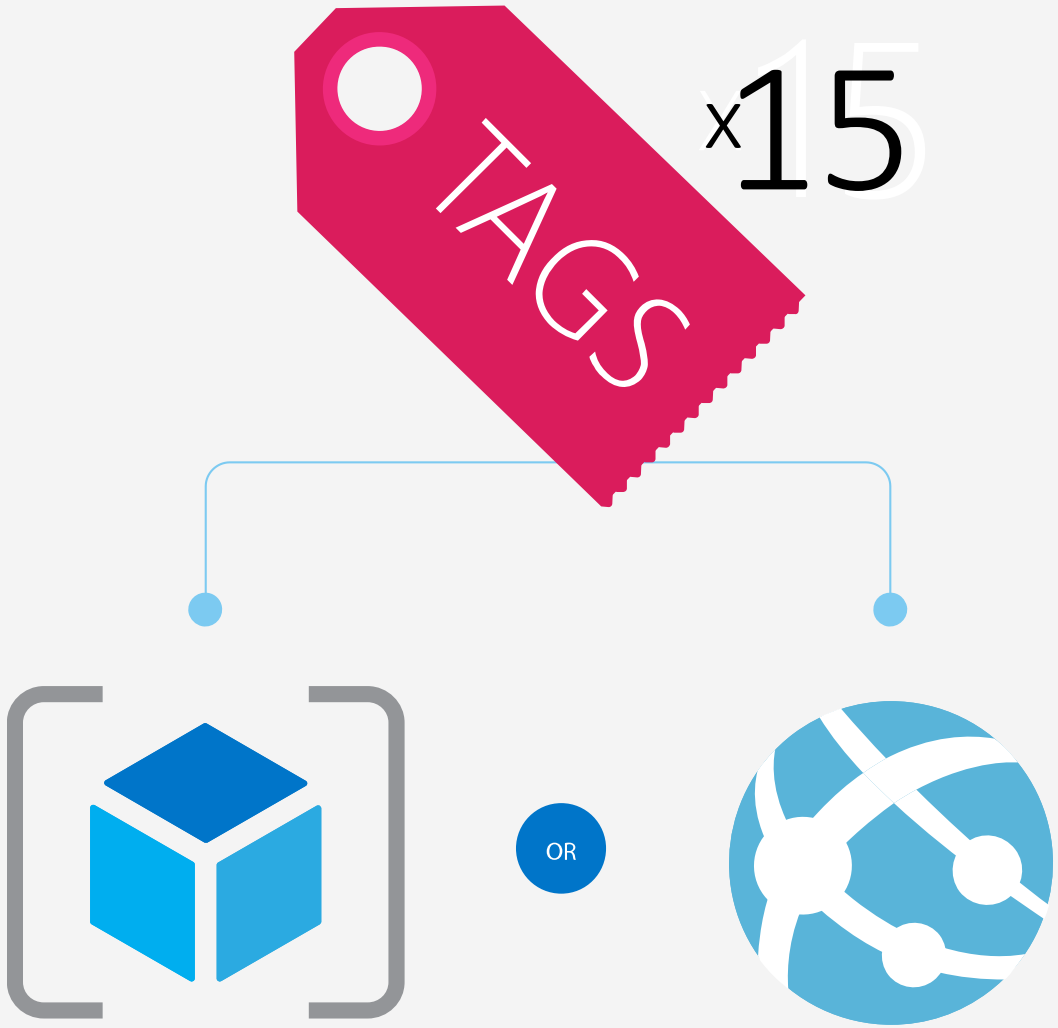



# Resource Tags

- Name-value pairs assigned to resources or resource groups
- Subscription-wide taxonomy
- Each resource can have up to 15 tags




# Tagging Tips

- Tag by environment, e.g. dev/test/prod
- Tag by role, e.g. web/cache/db
- Tag by department, e.g. finance/retail/legal
- Tag by responsible party, e.g. Bob

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# Control with Azure Resource Manager

role based access control
audit logs
resource locks

# Summary

**The benefits of using Resource Manager**

- You can deploy, manage, and monitor all of the resources for your solution as a group, rather than handling these resources individually.
- You can repeatedly deploy your solution throughout the development lifecycle and have confidence your resources are deployed in a consistent state.
- You can use declarative templates to define your deployment.
- You can define the dependencies between resources so they are deployed in the correct order.
- You can apply access control to all services in your resource group because Role-Based Access Control (RBAC) is natively integrated into the management platform.
- You can apply tags to resources to logically organize all of the resources in your subscription.
- You can clarify billing for your organization by viewing the rolled-up costs for the entire group or for a group of resources sharing the same tag.

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# Deploy a template today!

Many examples available @ https://github.com/Azure/azure-quickstart-templates

Documentation available @ http://azure.microsoft.com/en-us/documentation/articles/resource-group-overview/

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# Thanks