



#011 INFRASTRUCTURE AS CODE

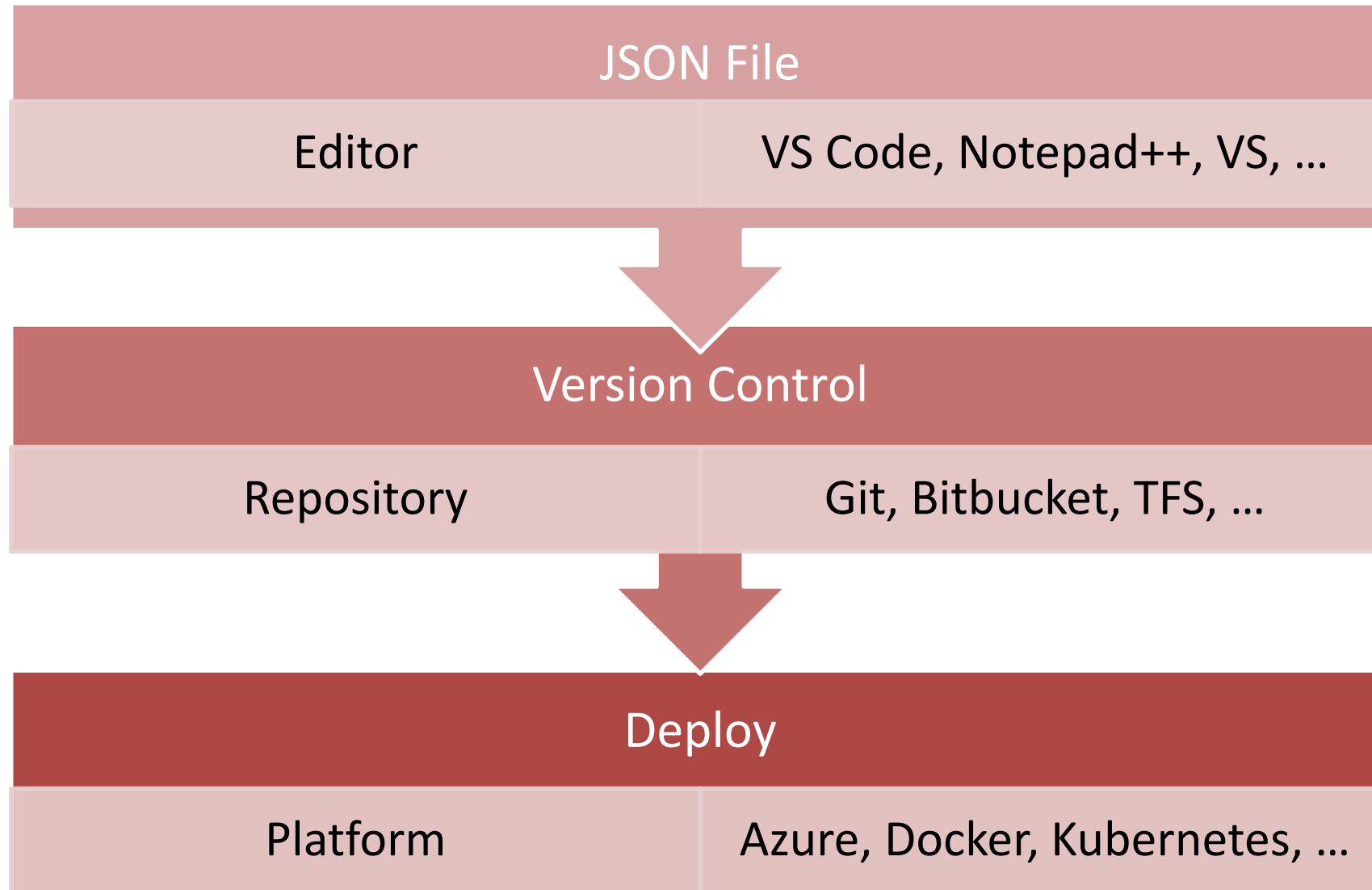
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DEFINITION

***Infrastructure as code (IaC)** is the process of managing and provisioning computer data centers through machine-readable definition files, rather than physical hardware configuration or interactive configuration tools.*

Andreas und Michael Wittig (2016)



GETTING STARTED

- VS & VS Code

<https://visualstudio.microsoft.com/de/>

Visual Studio

Tools der Spitzenklasse für jeden Entwickler

 **Visual Studio-IDE**
Umfangreiche IDE, modernste Debugfunktionen

Für Windows herunterladen ↓

Weitere Informationen >

 **Visual Studio Code**
Bearbeiten und Debuggen unter jedem Betriebssystem

Für Windows herunterladen ↓


Bei Verwenden von Visual Studio Code stimmen Sie [Lizenz- und Datenschutzbestimmungen](#)

Weitere Informationen >

 **Azure DevOps (ehemals VSTS)**
Agile-Tools, Git und Continuous Integration

Kostenlos starten >

Weitere Informationen >


 **Visual Studio App Center**
Continuous Integration, Delivery und Learning

Kostenlos starten >

Weitere Informationen >

GETTING STARTED

- VS & VS Code
<https://visualstudio.microsoft.com/de/>
- Github
<https://github.com/Azure/azure-quickstart-templates>

 README.md

Azure Resource Manager QuickStart Templates

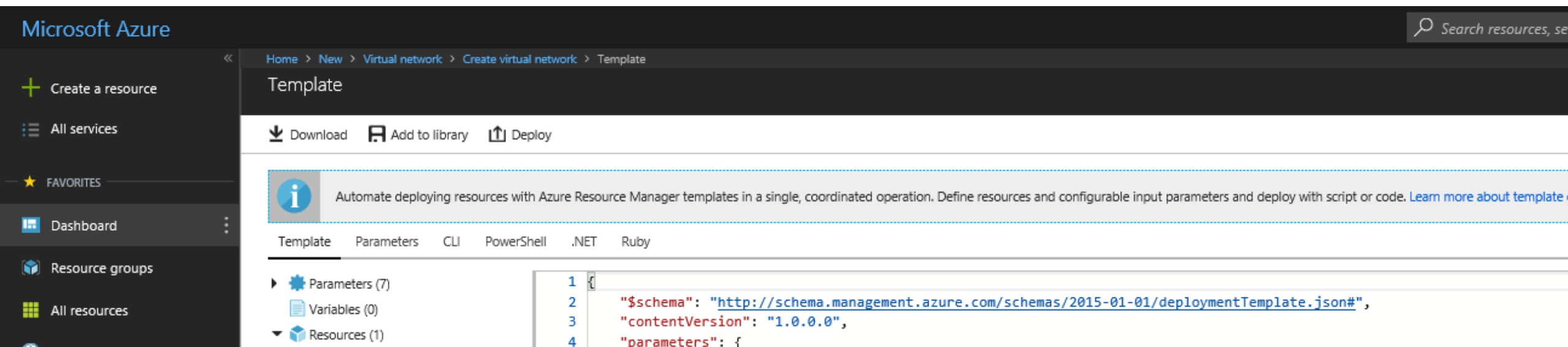
travis passing

This repo contains all currently available Azure Resource Manager templates contributed by the community. A searchable template index is maintained at <https://azure.microsoft.com/en-us/documentation/templates/>.

See the [Contribution guide](#) for how to use or contribute to this repo.

GETTING STARTED

- VS & VS Code
<https://visualstudio.microsoft.com/de/>
- Github
<https://github.com/Azure/azure-quickstart-templates>
- Portal
<https://portalazure.com/>



Microsoft Azure

Home > New > Virtual network > Create virtual network > Template

Template

Download Add to library Deploy

Automate deploying resources with Azure Resource Manager templates in a single, coordinated operation. Define resources and configurable input parameters and deploy with script or code. [Learn more about template](#)

Template Parameters CLI PowerShell .NET Ruby

```
1 {
2   "$schema": "http://schema.management.azure.com/schemas/2015-01-01/deploymentTemplate.json#",
3   "contentVersion": "1.0.0.0",
4   "parameters": {
```

TEMPLATE SKELETT

{ } ARM Skeleton.json ✕

```
1 {  
2   "$schema": "http://schema.management.azure.com/schemas/2015-01-01/deploymentTemplate.json#",  
3   "contentVersion": "",  
4   "parameters": { },  
5   "variables": { },  
6   "functions": { },  
7   "resources": [ ],  
8   "outputs": { }  
9 }
```

DEMO GETTING STARTED

- Portal
- Visual Studio

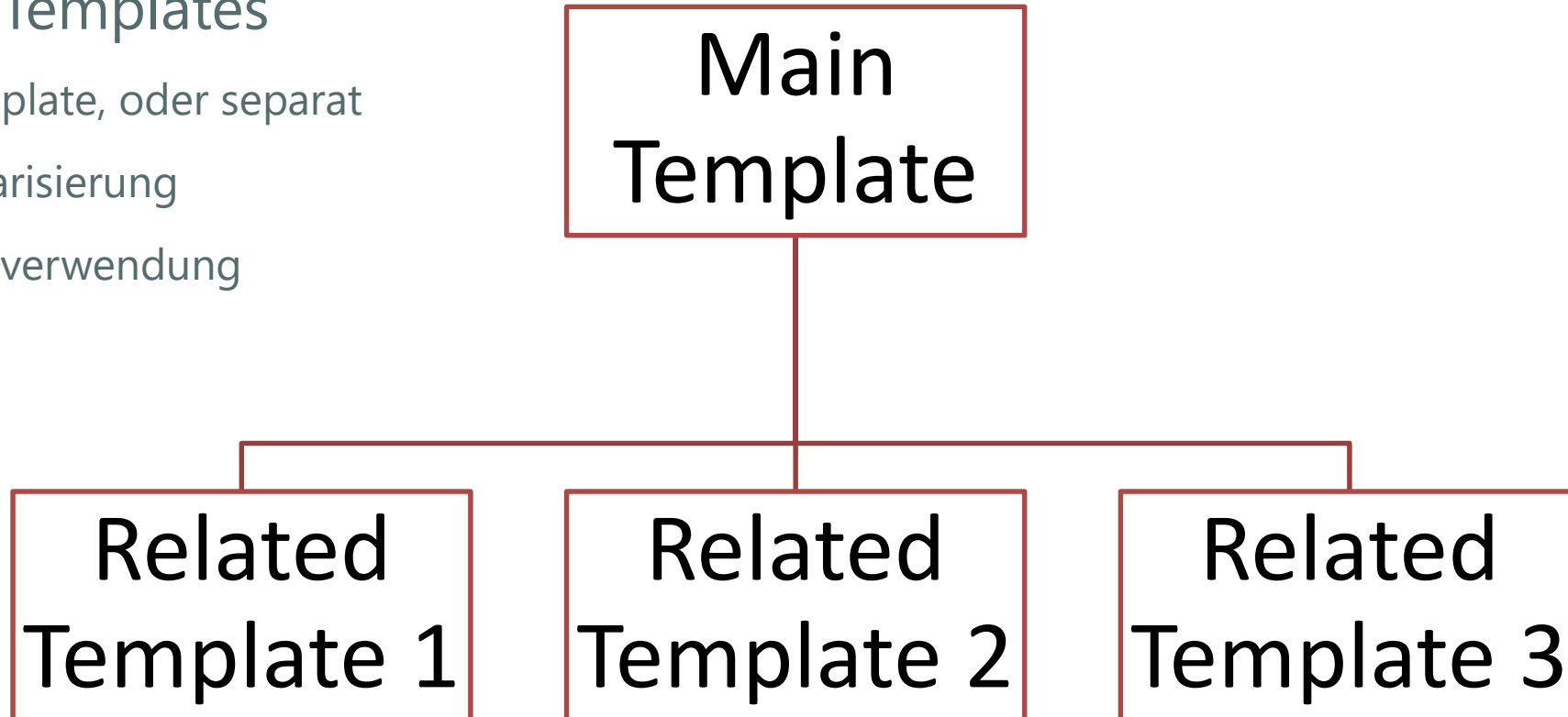
ADVANCED

- Post Configuration
 - Custom Scripts
 - PowerShell DSC

```
"scriptParameters": "[concat('-artifactsLocation ', parameters('_artifactsLocation'), ' -  
artifactsLocationSasToken \"', parameters('_artifactsLocationSasToken'), '\" -folderName ',  
variables('scriptFolder'), ' -fileToInstall ', variables('fileToBeCopied'))]"
```

ADVANCED

- Nested Templates
 - Im Template, oder separat
 - Modularisierung
 - Wiederverwendung



ADVANCED

■ KeyVault

```
"sqlServerAdminLoginPassword": {  
  "reference": {  
    "keyVault": {  
      "id": "/subscriptions/e28e537a-1849-4eee-a269-  
c5f0db1c9f62/resourceGroups/meetupDemo01/providers/Microsoft.KeyVault/vaults/meetupDemo  
KV"  
    },  
    "secretName": "[variables('sqlServerAdminLoginPassword')]"  
  }  
},
```

ADVANCED - ALLE DREI SUSAMMEN



FRAGEN?

SIE MÖCHTEN MEHR ERFAHREN? KONTAKTIEREN SIE UNS!

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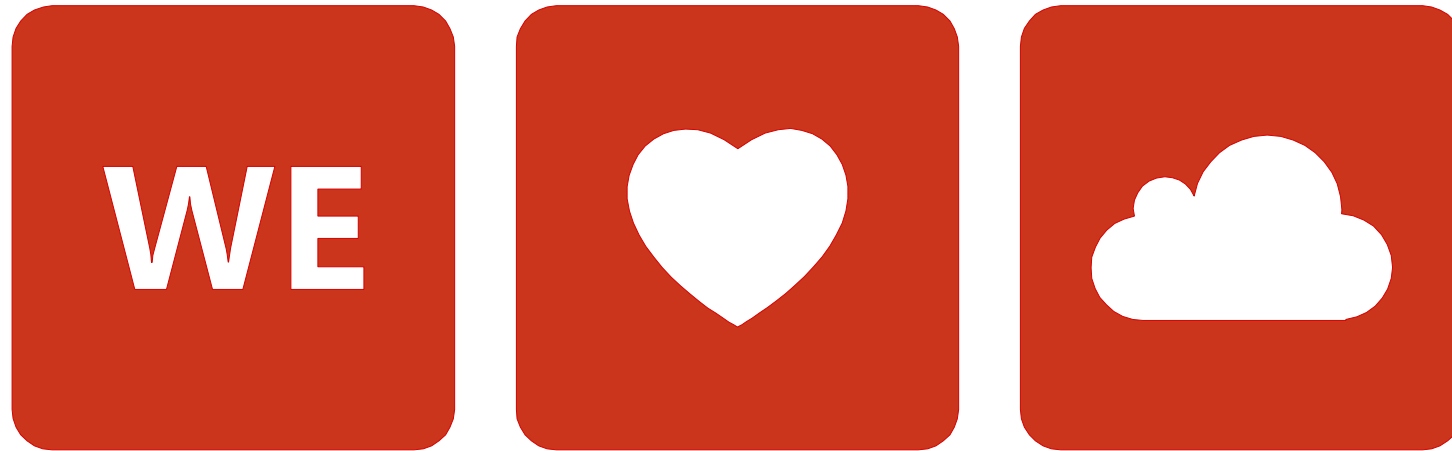
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