

AZURE (STACK) – EIN EINSTIEG

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AGENDA

- 1 Cloud Computing in der Küche
- 2 Azure - Cloud Computing at Hyperscale
- 3 Azure Management Modelle
- 4 Azure Kommerziell
- 5 Beispiele
- 6 Fragen?

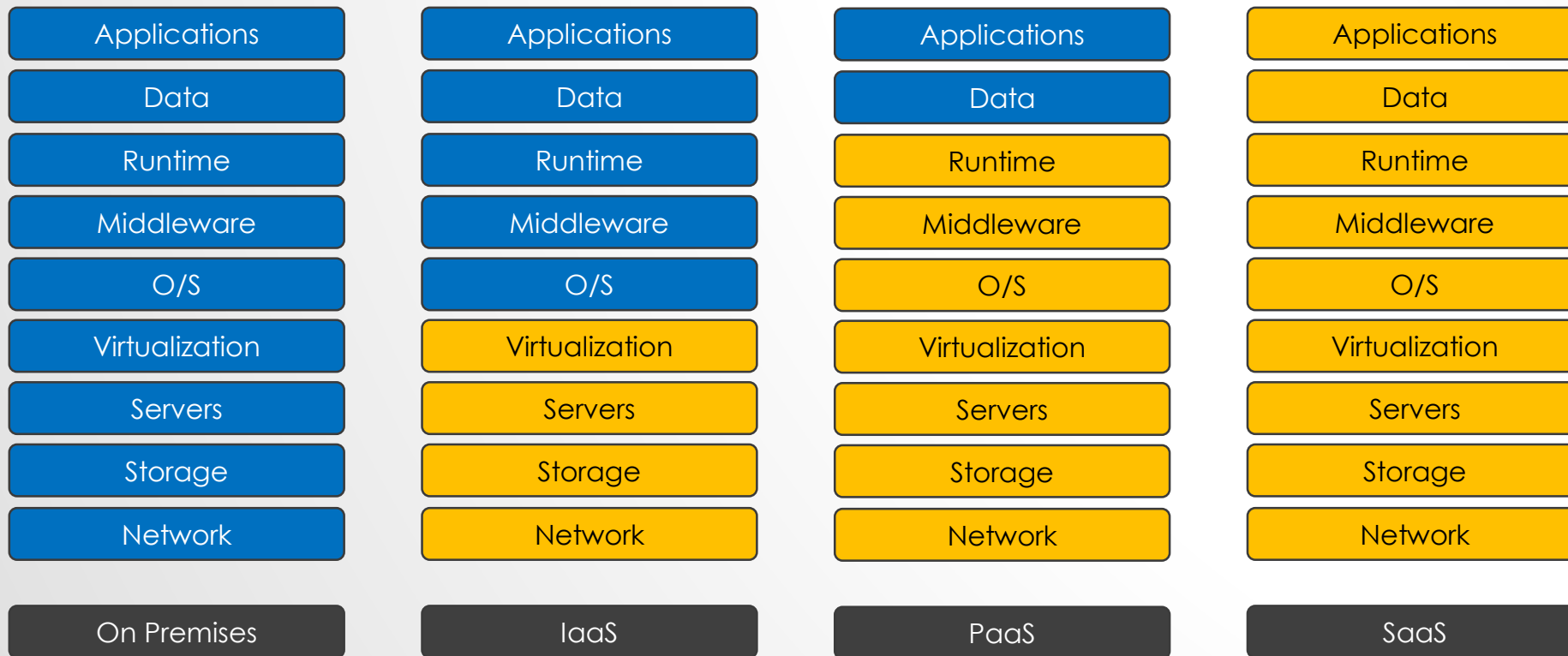
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PIZZA AS A SERVICE



CLOUD MODELLE



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34

AZURE REGIONS
2X the number
of AWS regions



34

AZURE REGIONS
2X the number
of AWS regions

1.6

MILLION
MILES OF
FIBER IN
OUR DCs





34

AZURE REGIONS
2X the number
of AWS regions

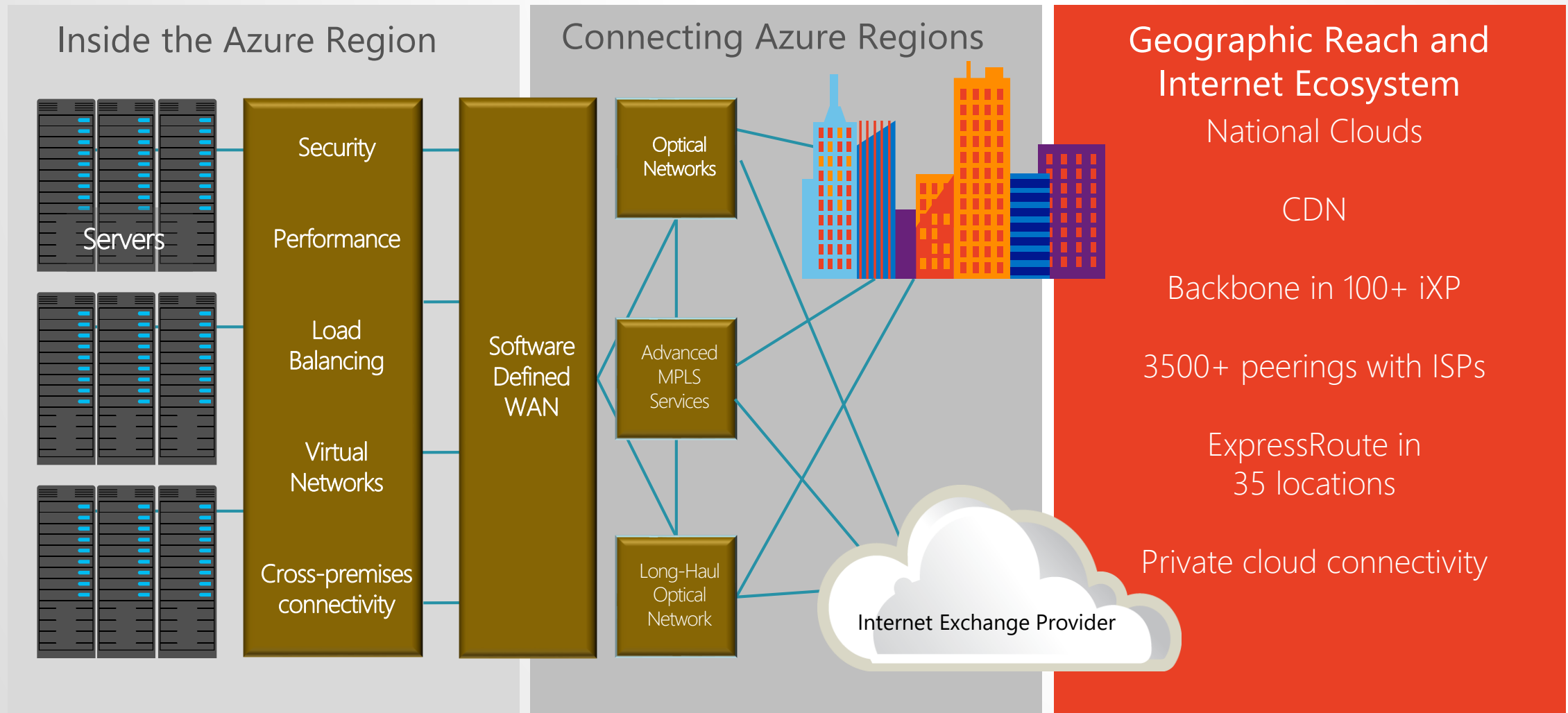
1.6

MILLION
MILES OF
FIBER IN
OUR DCs









ExpressRoute

PRIVATELY CONNECT FROM
ANYWHERE TO ANY AZURE REGION








AZURE – NETWORKING AT HYPERSCALE











Compute

 Virtual Machines	 Virtual Machine Scale Sets
 Azure Container Service	 Azure Container Registry*
 Functions	 Batch
 Service Fabric	 Cloud Services








Networking

 Virtual Network	 Load Balancer
 Application Gateway	 VPN Gateway
 Azure DNS	 Traffic Manager
 ExpressRoute	









Web & Mobile

 Web Apps	 Mobile Apps
 Logic Apps	 API Apps
 Content Delivery Network	 Media Services
 Search	 Mobile Engagement









Databases & Storage

 SQL Database	 SQL Data Warehouse
 SQL Server Stretch Database	 DocumentDB
 Redis Cache	 Data Factory
 Storage: Blobs, Tables, Queues, Files, Disks	 StorSimple






Intelligence & Analytics

 HDInsight	 Machine Learning
 Cognitive Services*	 Azure Bot Service*
 Data Lake Analytics	 Data Lake Store
 Power BI Embedded	 Azure Analysis Services*








Internet of Things & Enterprise Integration

 Azure IoT Hub	 Event Hubs
 Stream Analytics	 Notification Hubs
 BizTalk Services	 Service Bus
 Data Catalog	 Site Recovery









Security + Identity

 Security Center	 Key Vault
 Azure Active Directory	 B2C
 Domain Services	 Multi-Factor Authentication

Developer Services

 Visual Studio Team Services	 Azure DevTest Labs
 VS Application Insights	 API Management
 HockeyApp	 Developer Tools
 Service Profiler*	

Monitoring & Management

 Azure Portal	 Azure Resource Manager
 Azure Advisor*	 Azure Monitor*
 Log Analytics	 Automation
 Azure Backup	 Scheduler

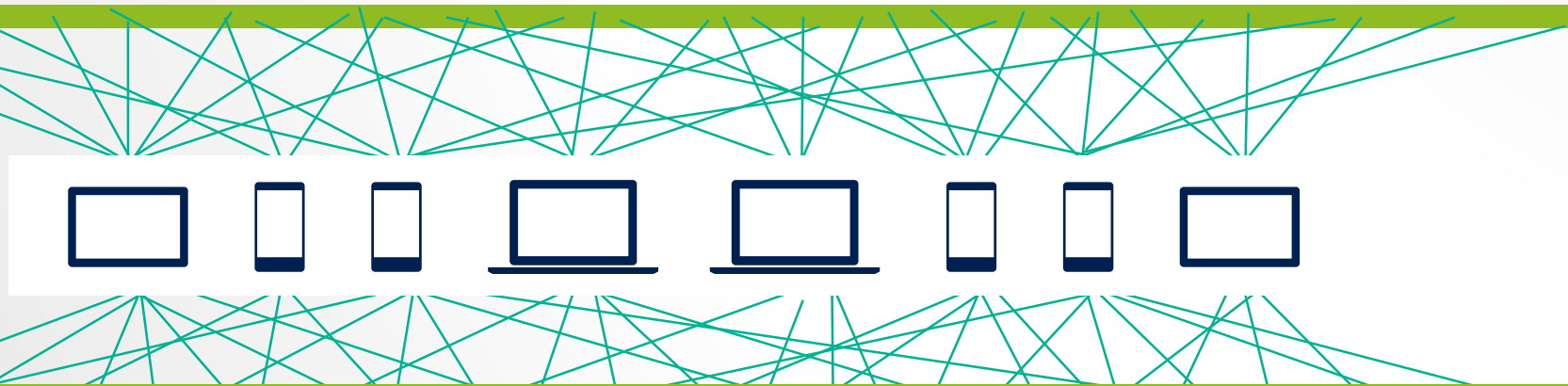
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DIE UNTERNEHMENSREALITÄT



On-
premises



Managed
devices

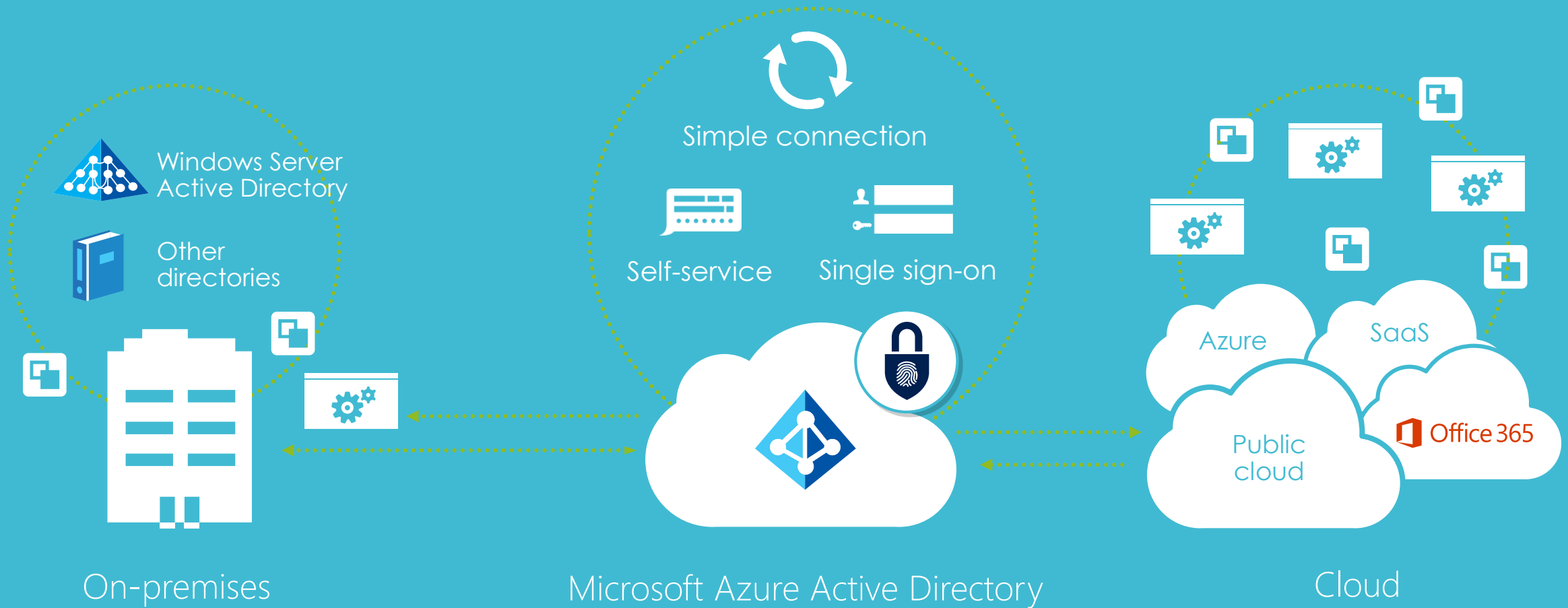


Active
Directory



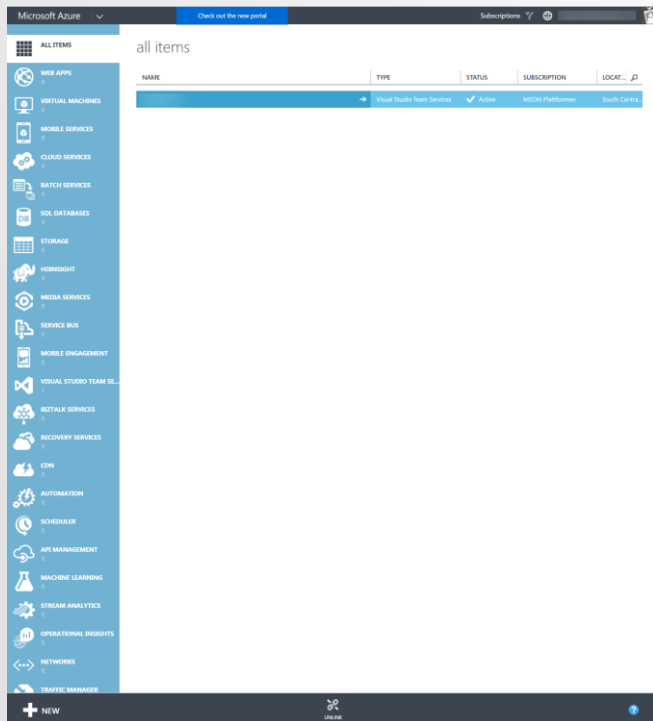
Windows Server

IDENTITY AS A SERVICE

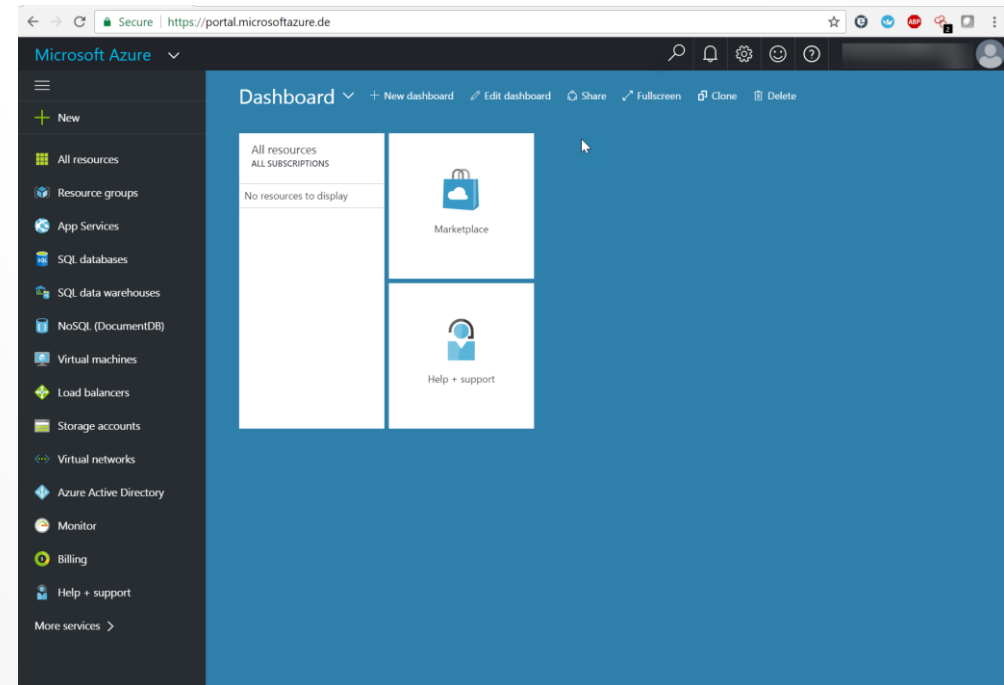


AZURE SERVICE MANAGEMENT VS. AZURE RESOURCE MANAGER

ASM / CLASSIC



ARM



AZURE SERVICE MANAGEMENT VS. AZURE RESOURCE MANAGER

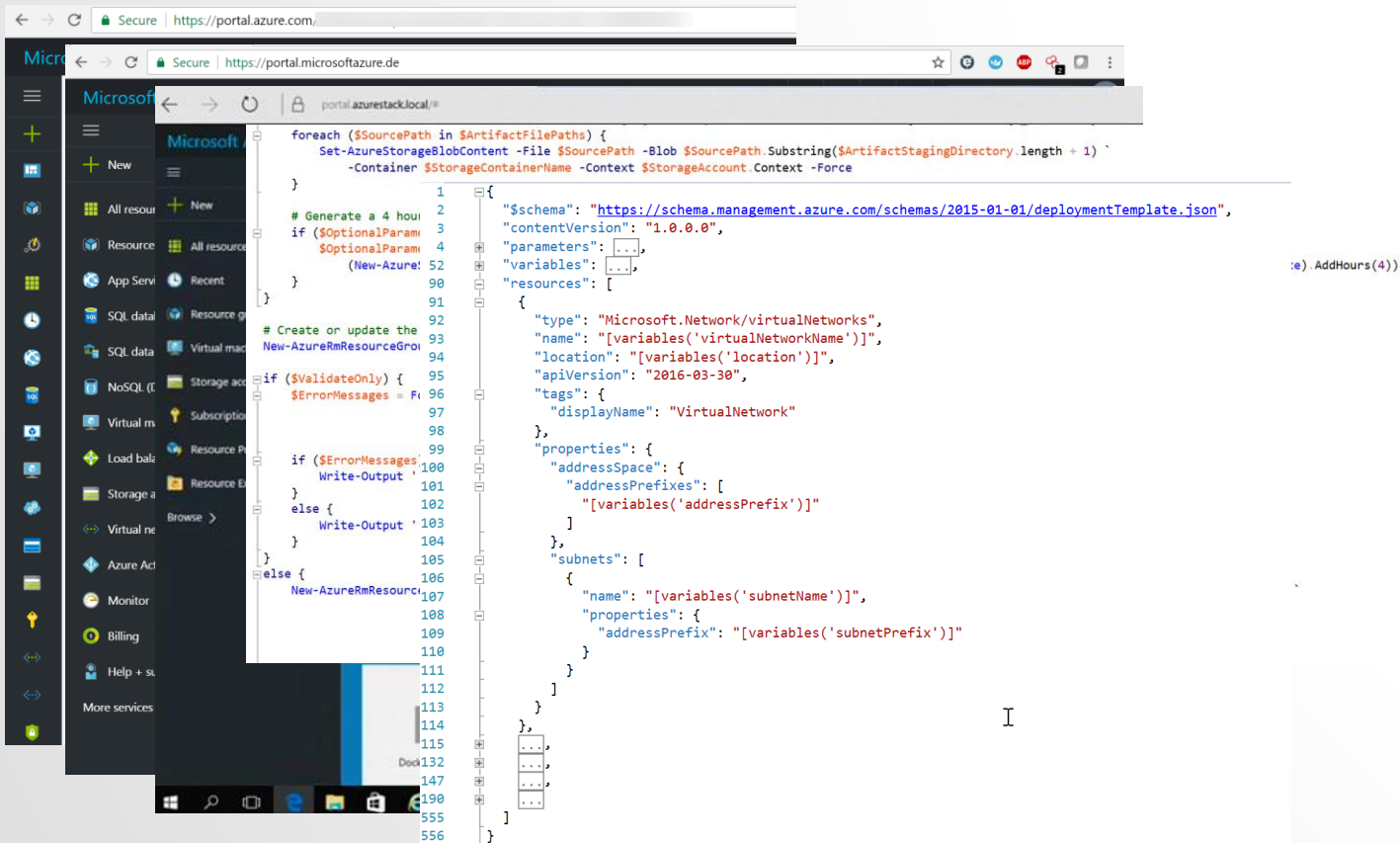
ASM / CLASSIC

- Klassisch, seit Azure startete
- Komplexe Abhängigkeiten
- Viele verschiedene APIs
- XML basierend
- Neue Ressourcen nicht mehr unterstützt
- MCD und MAS nicht unterstützt

ARM

- Neu, seit 2015
- Klare Abhängigkeiten
- Einheitliche APIs
- JSON basierend
- Noch nicht alle Ressourcen portiert
- MCD und MAS nur mit ARM unterstützt

MANAGEMENT MIT ARM



The screenshot shows the Azure portal interface with an ARM template editor open. The left sidebar displays the 'All resources' view. The main editor area shows a PowerShell script for deploying a virtual network. The script includes comments in German and PowerShell commands like 'Set-AzureStorageBlobContent' and 'New-AzureRmResourceGroup'. The JSON template defines a 'Microsoft.Network/virtualNetworks' resource with properties for name, location, apiVersion, tags, addressSpace, and subnets. The subnets are defined with names like '[variables('subnetName')]' and address prefixes like '[variables('subnetPrefix')]'.

```
foreach ($SourcePath in $ArtifactFilePaths) {  
    Set-AzureStorageBlobContent -File $SourcePath -Blob $SourcePath.Substring($ArtifactStagingDirectory.Length + 1) ` -Container $StorageContainerName -Context $StorageAccount.Context -Force  
}  
# Generate a 4 hour timeout  
if ($OptionalParameterOptionalParameter) {  
    (New-AzureRmResourceGroup -Name $ResourceGroupName -Location $Location -ResourceGroupName $ResourceGroupName -Force).AddHours(4)  
}  
# Create or update the virtual network  
if ($ValidateOnly) {  
    $ErrorMessage = "Validation failed: $OptionalParameterOptionalParameter"  
    Write-Output $ErrorMessage  
} else {  
    Write-Output "Deploying virtual network..."  
    New-AzureRmResourceGroupDeployment -ResourceGroupName $ResourceGroupName -TemplateUri $TemplateUri -Force  
}
```

```
{  
  "$schema": "https://schema.management.azure.com/schemas/2015-01-01/deploymentTemplate.json",  
  "contentVersion": "1.0.0.0",  
  "parameters": {  
    "name": {  
      "type": "String",  
      "defaultValue": "[variables('virtualNetworkName')]"  
    },  
    "location": {  
      "type": "String",  
      "defaultValue": "[variables('location')]"  
    },  
    "apiVersion": {  
      "type": "String",  
      "defaultValue": "2016-03-30"  
    },  
    "tags": {  
      "type": "Object",  
      "defaultValue": {}  
    },  
    "addressPrefix": {  
      "type": "String",  
      "defaultValue": "[variables('addressPrefix')]"  
    },  
    "subnetName": {  
      "type": "String",  
      "defaultValue": "[variables('subnetName')]"  
    },  
    "subnetPrefix": {  
      "type": "String",  
      "defaultValue": "[variables('subnetPrefix')]"  
    }  
  },  
  "resources": [  
    {  
      "type": "Microsoft.Network/virtualNetworks",  
      "name": "[variables('virtualNetworkName')]",  
      "location": "[variables('location')]",  
      "apiVersion": "2016-03-30",  
      "tags": {  
        "displayName": "VirtualNetwork"  
      },  
      "properties": {  
        "addressSpace": {  
          "addressPrefixes": [  
            "[variables('addressPrefix')]"  
          ]  
        },  
        "subnets": [  
          {  
            "name": "[variables('subnetName')]",  
            "properties": {  
              "addressPrefix": "[variables('subnetPrefix')]"  
            }  
          }  
        ]  
      }  
    }  
  ]  
}
```

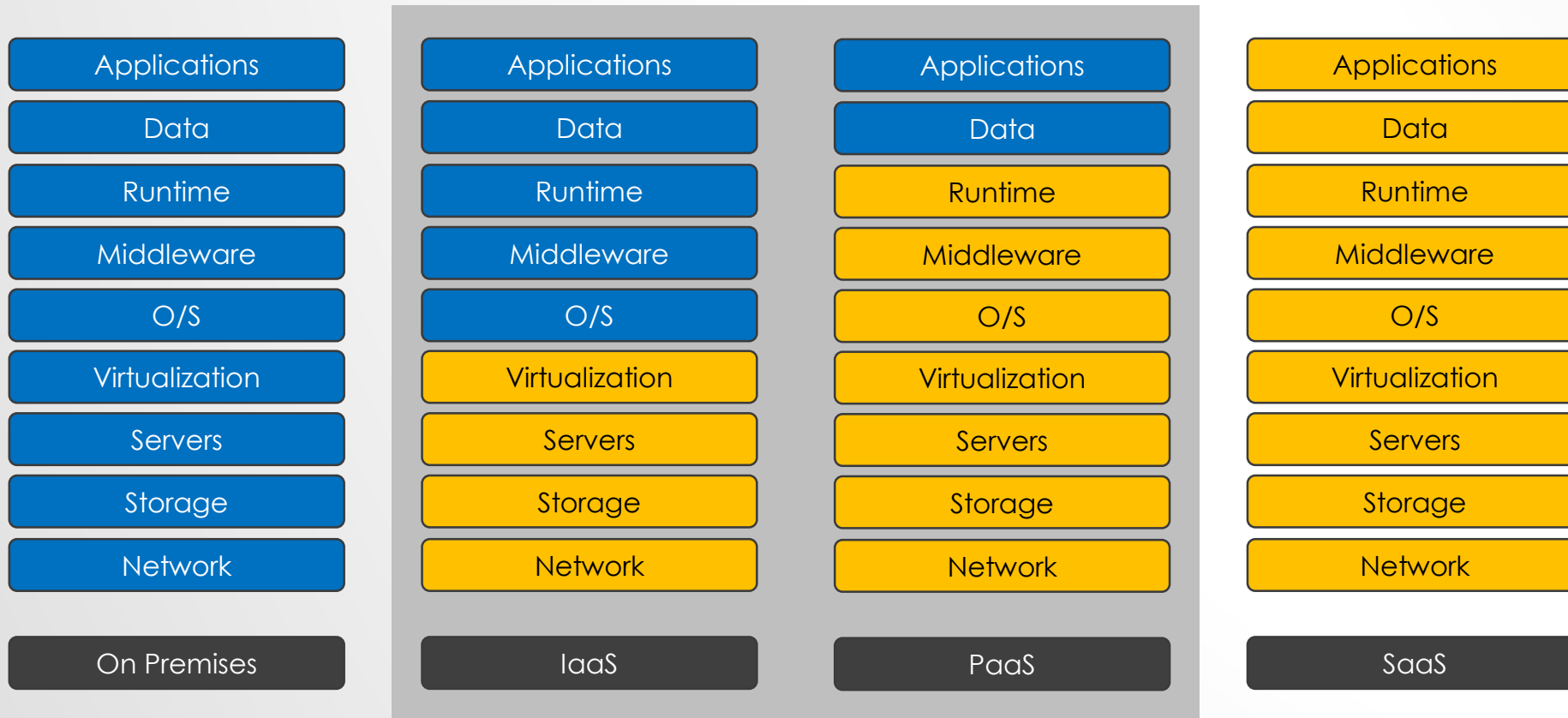
- Public Azure
- Microsoft Cloud Deutschland
- Azure Stack
- PowerShell
- ARM Templates
- ...

Microsoft's hybrid cloud platform

Power of Azure in your datacenter



AZURE STACK IM CLOUD MODELL



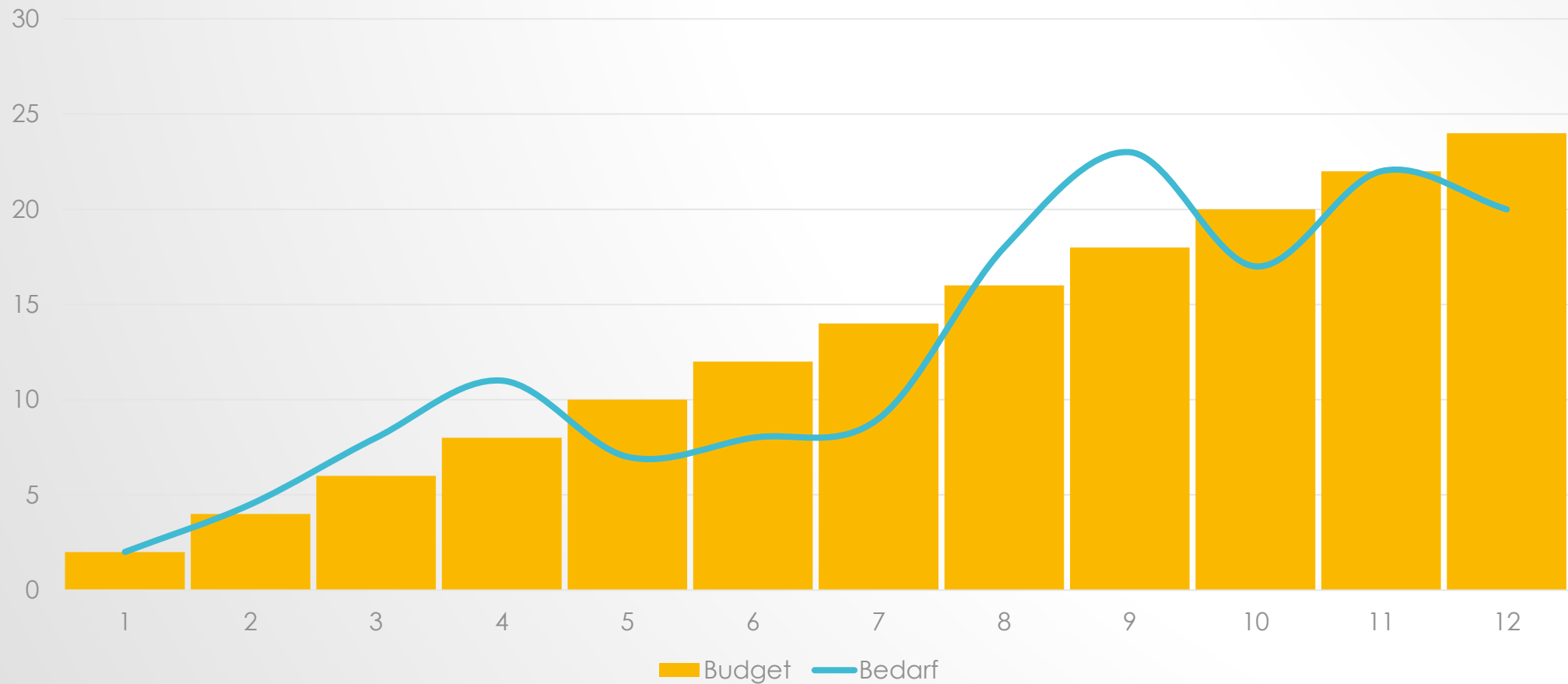
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BUDGET VS. BEDARF



BESCHAFFUNGSWEGE

- Enterprise Agreement (EA) / Server and Cloud Enrollment (SCE)
 - Erfordert ein Monetary Commitment
 - Keine Rabatte im Voraus, aber entsprechende vertragliche Vergünstigungen möglich
- Microsoft Products and Services Agreement (MPSA)
 - Quartalsweise Abrechnung
 - Monetary Commitment ist möglich
- Cloud Service Provider (CSP)
 - CSP ist der Vertragspartner und auch Ansprechpartner für Support
- Pay-as-you-go
 - Monatliche Abrechnung über Kreditkarte
 - Rechnung ohne CC nur nach Rücksprache mit Support möglich

AZURE PREISRECHNER

The screenshot displays the Microsoft Azure Price Calculator interface. The top navigation bar includes links for 'Warum Azure?', 'Lösungen', 'Produkte', 'Dokumentation', 'Preise', 'Partner', 'Blog', 'Ressourcen', and 'Support'. A search bar and account information are also present. The main section is titled 'Preisrechner' and includes a '+ Elemente hinzufügen' button. Below this, there are two configuration panels. The first panel, 'Virtual Machines', shows a configuration for 'Europa, Westen' region, 'Basic' type, and 'B: 5 DTUs, 2 GB Speicherkapazität pro Datenbank, 0,0057 €/Stunde' performance level. The second panel, 'App Service', shows a configuration for 'Europa, Westen' region and 'Basic' tariff. A summary table on the right, titled 'Ihre Schätzung', lists the costs for 'SQL-Datenbank' (4,20 €), 'App Service' (47,06 €), and 'Supportoptionen' (0,00 €), totaling 'GESCHÄTZTE MONATLICHE KOSTEN' of 51,26 €. A green 'Kaufoptionen' button is also visible.

Microsoft Azure

Warum Azure? Lösungen Produkte Dokumentation Preise Partner Blog Ressourcen Support

Preisrechner

Konfigurieren Sie Azure-Features für Ihre Anwendung

+ Elemente hinzufügen

Alle löschen

REGION: Europa, Westen

TYP: Einzeldatenbank

TARIF: Basic

LEISTUNGSSTUFE: B: 5 DTUs, 2 GB Speicherkapazität pro Datenbank, 0,0057 €/Stunde

1 x 744 = 4,20 €/MONAT

Datenbanken Stunden

App Service

REGION: Europa, Westen

TARIF: Basic

Ihre Schätzung

Euro (€)

SQL-Datenbank 4,20 €

App Service 47,06 €

Supportoptionen 0,00 €

GESCHÄTZTE MONATLICHE KOSTEN 51,26 €

Kaufoptionen

Schätzung exportieren

Bei den Preisen handelt es sich nicht um tatsächliche Preisangebote, sondern um Schätzungen.

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DANKE!

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