

Microsoft Ignite Recap

Cloud Native Apps, Data & IoT

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Cloud Native Apps

App Service
AKS, ACI, ACR
Service Fabric / Mesh
Functions



App Service

VNET Integration

- Supports VNET Service Endpoints
- Supports ExpressRoute
- App Service plan must be Standard, Premium or PremiumV2

Tomcat and Java SE on App Service on Linux

Python support for App Service on Linux

Bring your own storage to App Service on Linux

Azure App Service Undelete

App Service

App Service Environment with Azure Firewall

ILB ASE with Azure Firewall and Application Gateway

Coming later in 2018

- App Service - Service Endpoints
- App Service Environment – fast scaling

Coming in 2019

- Private IP support
- VNET Integration + Private IP support
- Completely isolated ASE

Azure Kubernetes Service

Supported Kubernetes versions

- n-3 versions are supported
 - 1.11.x, 1.10.x, 1.9.x, 1.8.x

Reducing Kubernetes patch versions supported

- Supported patch versions as of today (10.10.18)
 - 1.11.2, 1.11.3
 - 1.10.7, 1.10.8
 - 1.9.9, 1.9.10
 - 1.8.14, 1.8.15

Azure Files

Azure Active Directory integration

Standard Files performance and capacity update

- 100 TB
- 10.000 IOPS
- 300 MB/s

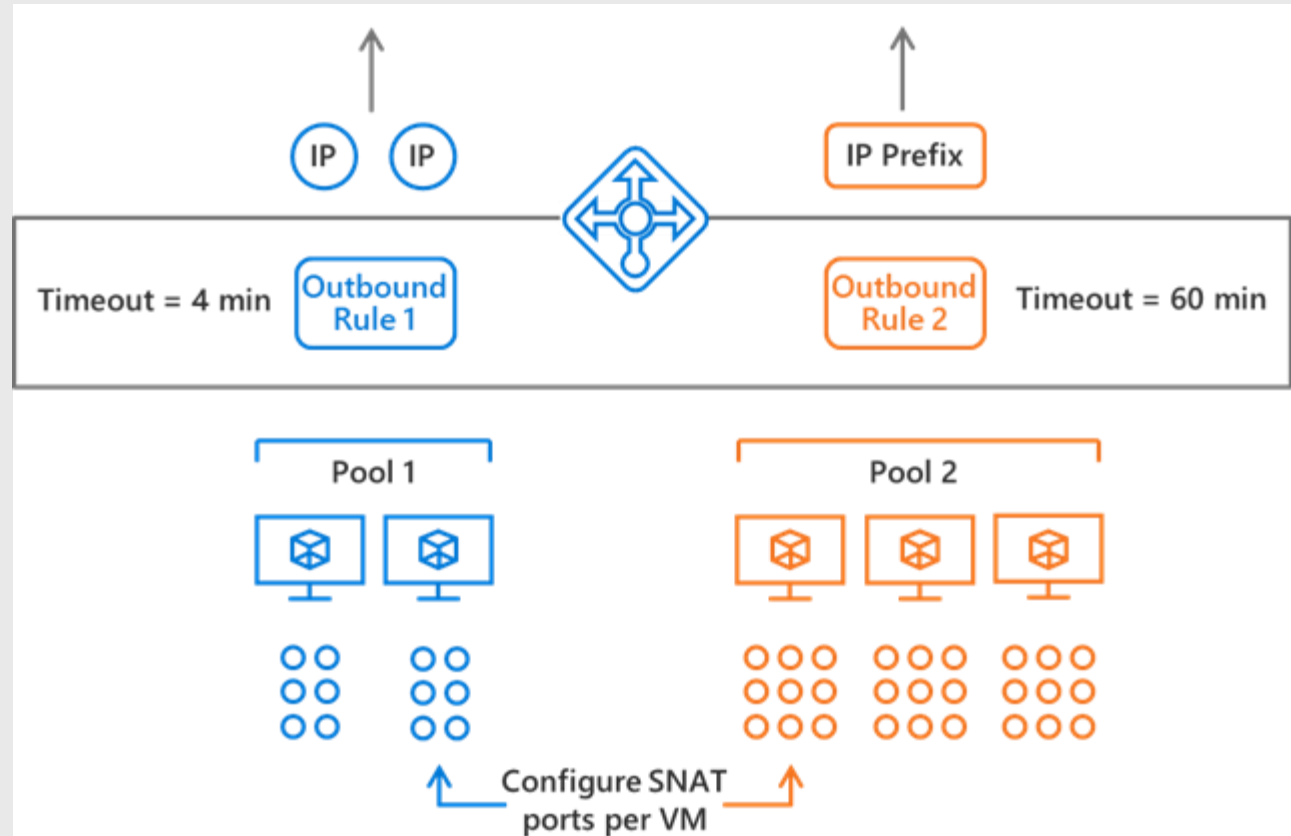
Premium Files

- Latency: Single digit milliseconds
- 100 TB
- 100.000 IOPS
- 5 GB/s

Azure Load Balancer – Standard SKU

Outbound Rules

TCP Reset on Idle



Azure Container Instances

Linux preview support of custom virtual networks

Azure Container Registry

ACR Helm Repositories

- ACR geo-replication support

Content Trust

- Support of Docker Content Trust
- Signed Images support

Open Container Initiative image format support

Azure Container Registry

ACR Tasks

- Run, build, test, validate, and push container images
- Windows, Linux and Linux ARM images support
- Single-step tasks based on a Dockerfile -> OS and framework patching
- Multi-step tasks based on an [acr-task.yaml](#) file

Service Fabric / Service Fabric Mesh

Support for Windows Server version 1803 and multi-tenancy features

- Isolated networks per application

Mesh: Auto-scale and resources

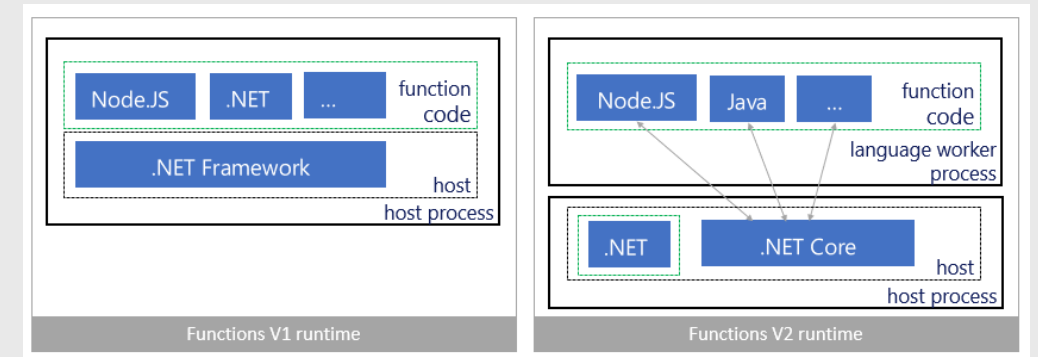
- Auto-scale of stateless instances: CPU and memory
- Secret resources
- Network and Gateway resources: Multiple-ingress and routing
- Volume resources: Azure Files and Service Fabric Volume Disk

Low-latency storage improvements for stateful services

Functions

Azure Functions 2.0 GA

- Azure Functions on Kubernetes and [IoT Edge](#) support
- Function host runs in .NET Core 2.1
- Non-.NET languages run in a language worker
- Except for the core HTTP and timer support, all bindings are brought in as extensions
- Better and deeper integration with Azure Application Insights



Consumption plan for Linux

Python support

Azure Stack – PaaS / Cloud Native services

Kubernetes on Azure Stack (acs-engine)

RedHat OpenShift on Azure Stack

Service Fabric on Azure Stack

Event Hubs on Azure Stack

Data

Azure SQL Database

OSS Databases

Azure Cosmos DB

Azure Databricks



Azure SQL Database

Azure SQL Database Hyperscale

- Supports up to 100TB database size
- Rapid scale up/down and point-in-time restore, regardless of the database size
- Higher log throughput than current service tiers
- Scale out read-only workload with read-scale replicas without data copy

Azure SQL Database Managed Instance

- Fully managed
- 8 to 80 vCores
- 32 GB to 8 TB storage
- VNET integration
- Private IP addresses

OSS Databases

Azure Database for MariaDB

Azure Database for MySQL – Read Replica

- Continuous asynchronous replication up to 5 read-only replicas in the same Azure region

Azure Database for PostgreSQL – Intelligent Performance features

Azure Database for MySQL and PostgreSQL – Advanced Threat Protection

Azure Database for MySQL and PostgreSQL – Online migrations to Azure

Azure Cosmos DB

Azure Cosmos DB reserved capacity

- Save up to 65%

Multi-master at global scale

- Unlimited and elastic write scalability
- 99,999% write availability
- Guaranteed low write latency at the 99th percentile

Cassandra API

Cosmos Explorer (<https://cosmos.azure.com/>)

Azure Databricks

Azure KeyVault support

AAD conditional access support

Azure SQL Data Warehouse streaming support

Azure Databricks Delta

- Delta is a transactional storage layer in Azure Databricks. Interact with it by reading and writing data to a delta table, which is an optimized version of a Spark table.

IoT

Stream Analytics

Azure IoT Edge

Azure IoT



IoT – Azure Stream Analytics

Parallel write operations to Azure SQL

- 4x-5x higher throughput

Query extensibility with C# UDF on Azure IoT Edge

Output partitioning to Azure Blob Storage by custom date and time formats

Built-in models for Anomaly Detection on Azure IoT Edge and cloud

Custom de-serializers in Stream Analytics module on Azure IoT Edge

IoT – Azure IoT Edge

Azure IoT Edge 1.0.2 release

- Proxy support
- Improved startup time performance
- Extended offline support

Publishing Azure IoT Edge modules in Azure Marketplace

- <https://azuremarketplace.microsoft.com/en-us/marketplace/apps/category/internet-of-things?page=1&subcategories=iot-edge-modules>

IoT – Azure IoT Edge

Extended offline operation

- After a one-time sync between the edge device and Azure IoT Hub, the edge device can function in offline mode indefinitely.
- Parent-child relationship support between Edge device (transparent gateway) and IoT devices

Azure IoT Edge extension for Visual Studio 2017

Azure IoT Edge Jenkins plugin

CLI for Azure IoT Edge developers: iotedgedev

IoT – Azure IoT

Azure Sphere public preview and dev kits

Azure IoT Central



More news...

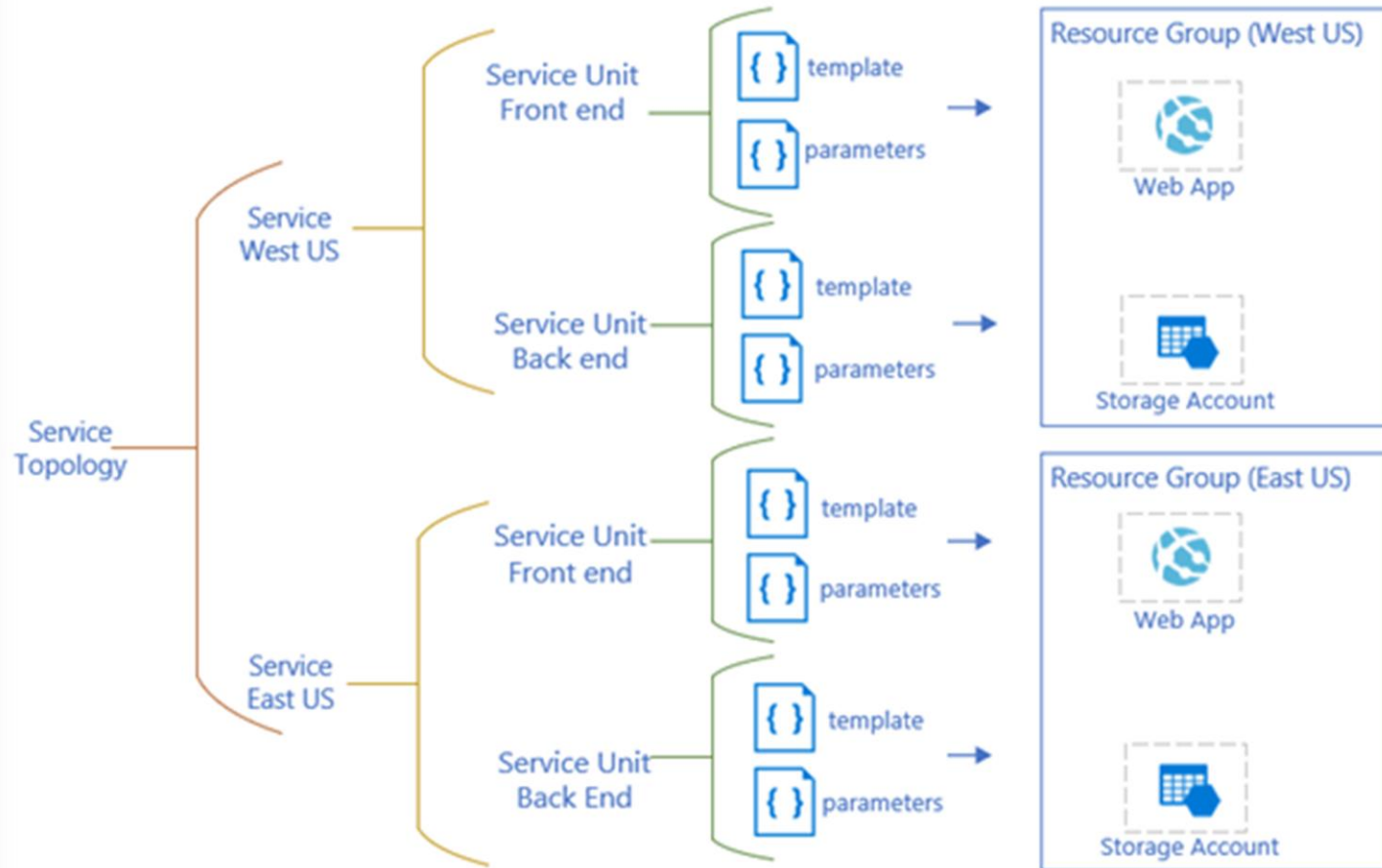
Azure Deployment Manager

Azure Data Explorer

More news...

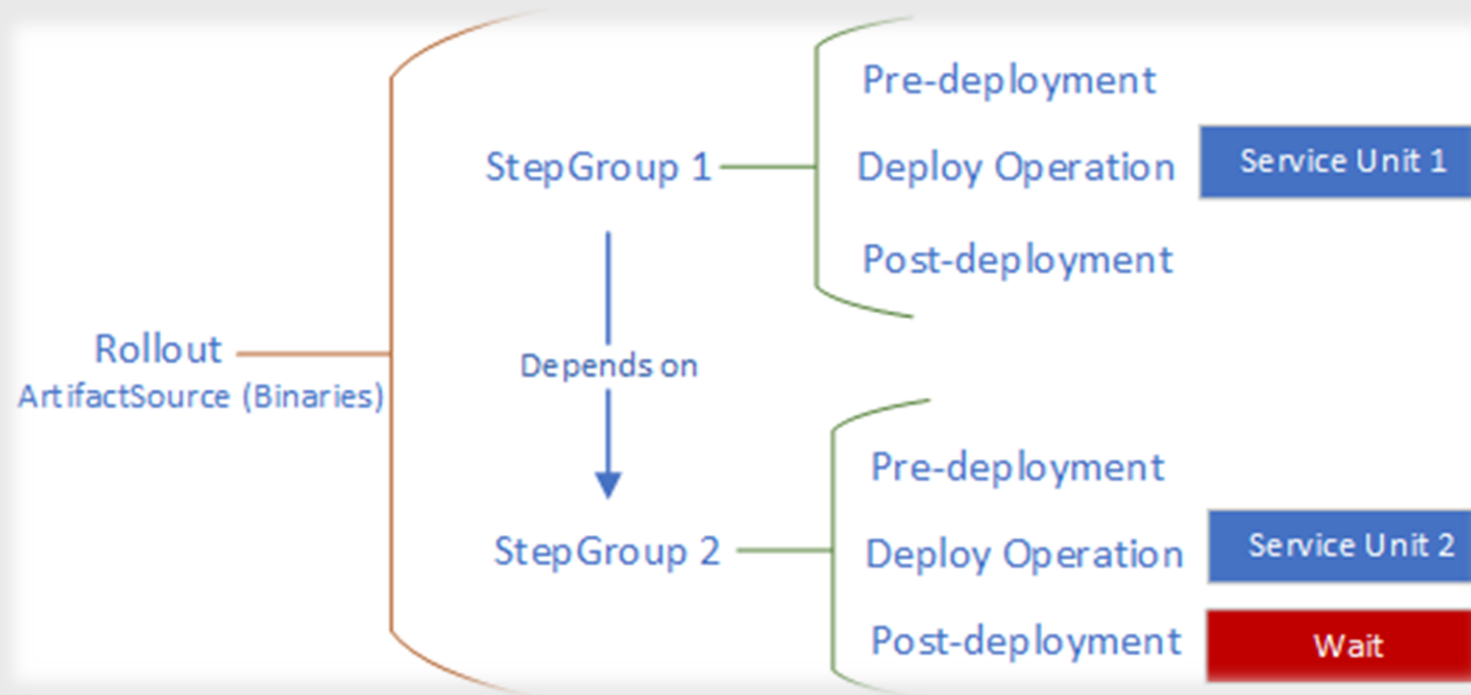
Azure Deployment Manager

Service Topologies



Azure Deployment Manager

Rollouts



Azure Data Explorer

Kusto

Perform ad-hoc queries on terabytes of data with Azure Data Explorer—a lightning-fast indexing and querying service for data exploration.

Use Azure Data Explorer for analytics of log and telemetry data from websites, applications, and IoT devices.

More news...

Logic Apps SAP connector / Logic Apps extension for VS Code

Azure Resource Graph

- Explore all your resources through the Azure Portal, PowerShell, or CLI.
- Perform powerful queries.
- Parse through all resource properties.

Azure Policy for Azure DevOps

- Azure Policy has native integration with Azure DevOps to surface policy violations pre-deployment and policy compliance assessment post-deployment
- Policy can be authored and created within Azure DevOps to take advantage of its source control and versioning capabilities for continuous iteration and improvement.

