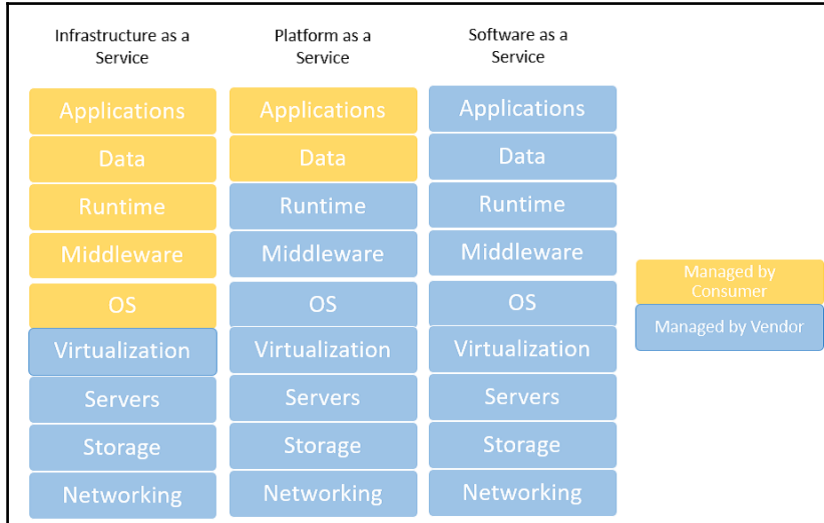
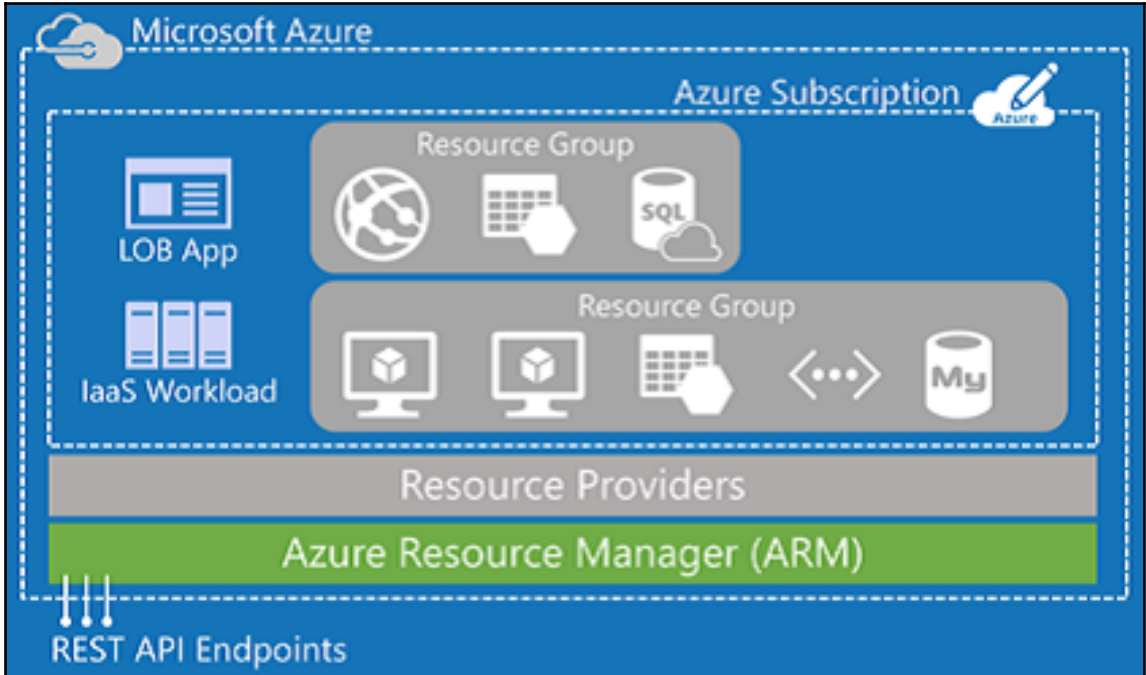
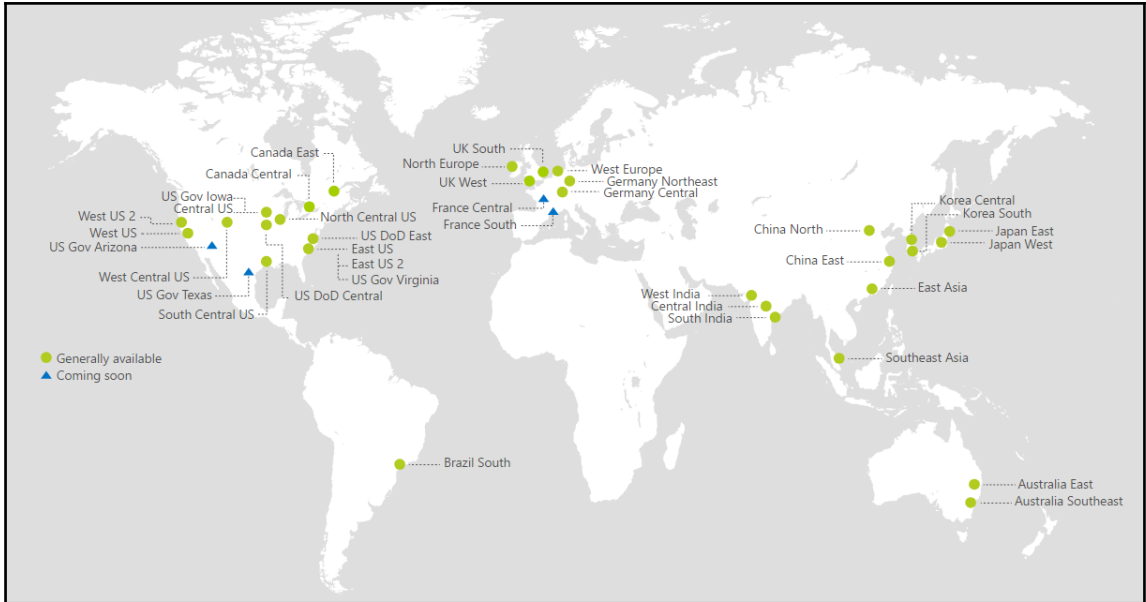
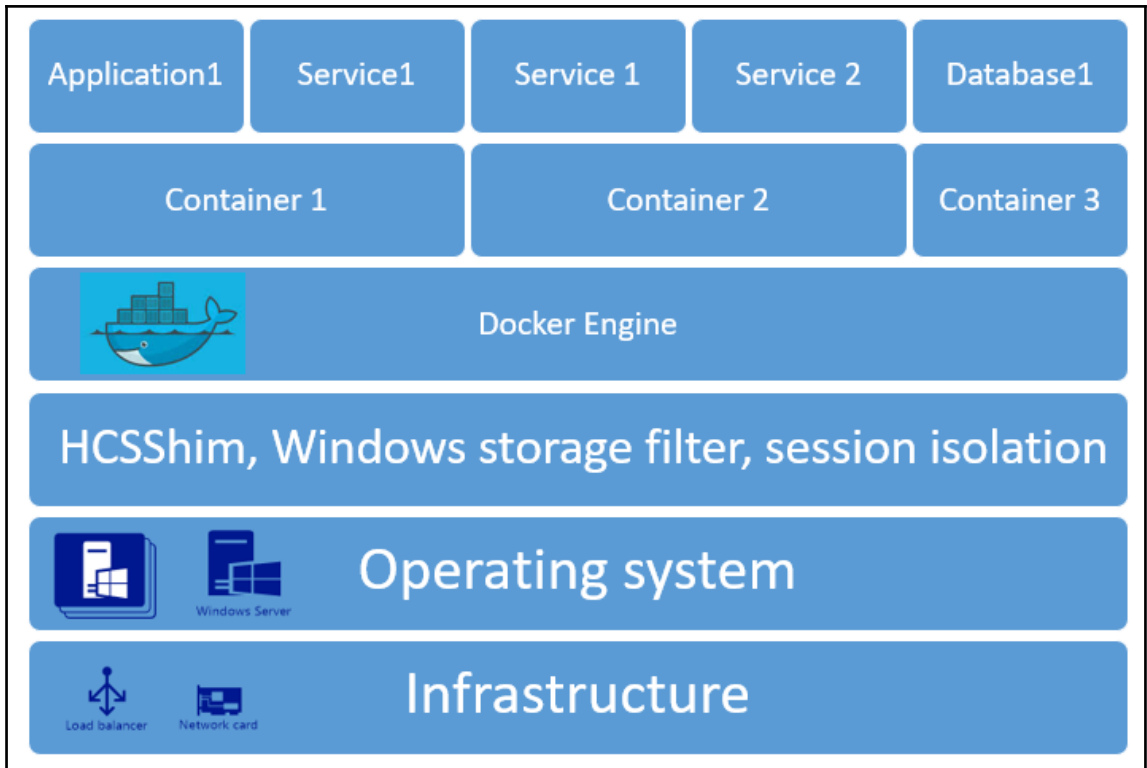


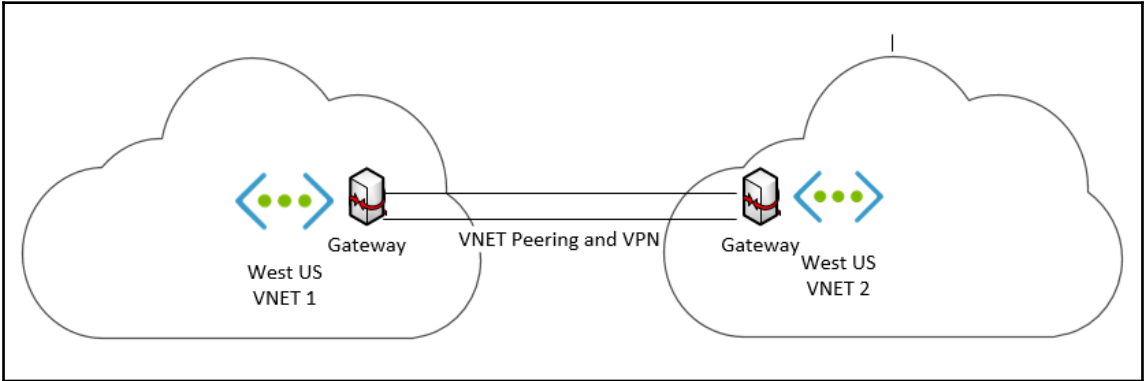
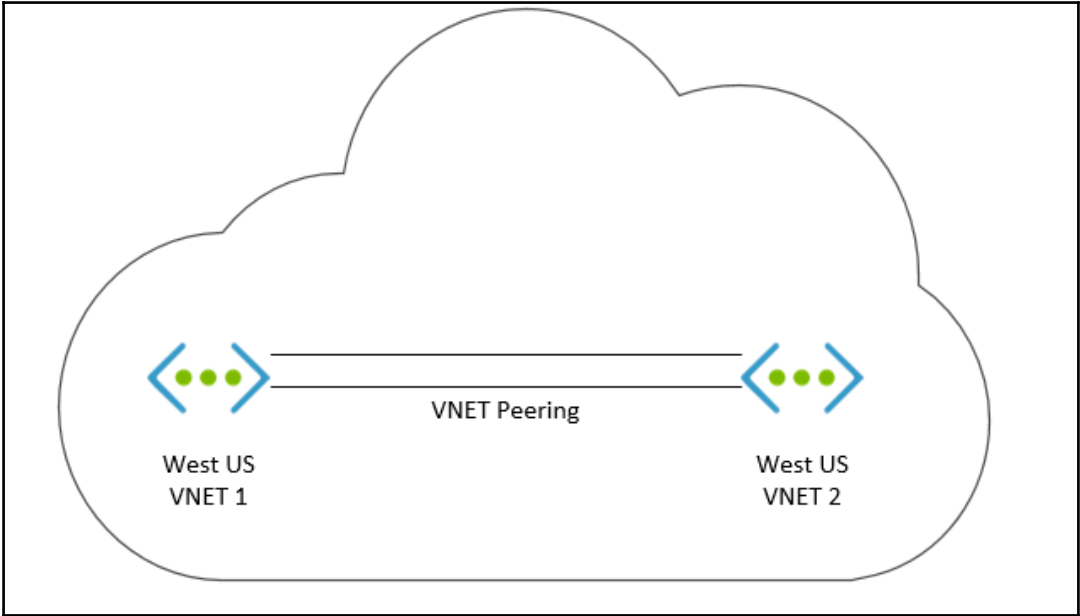
Chapter 1: Getting Started

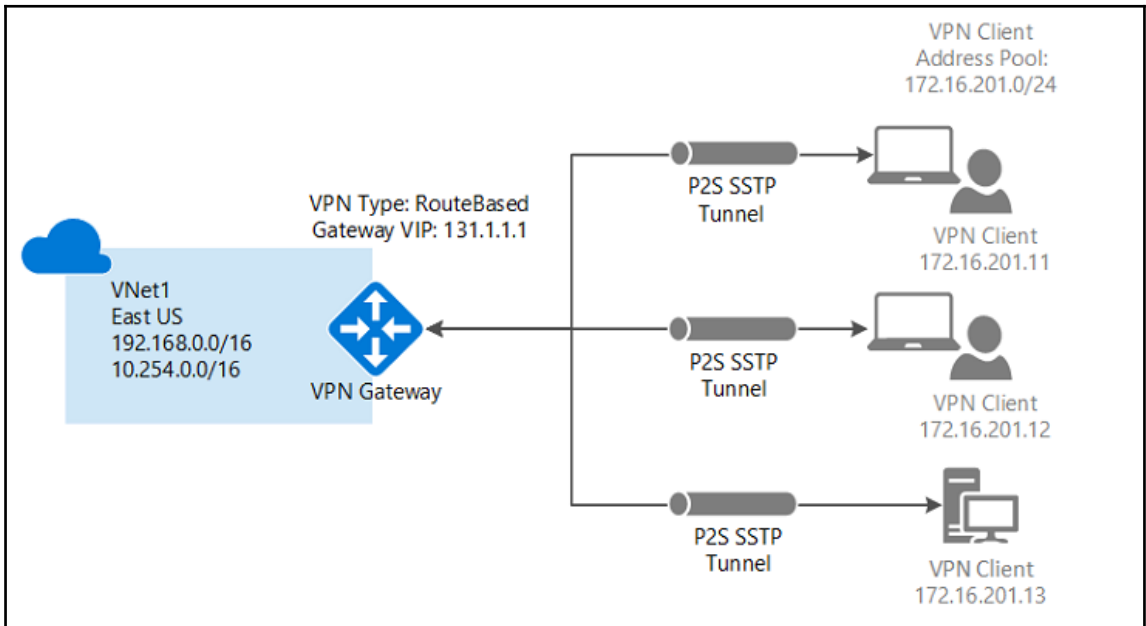
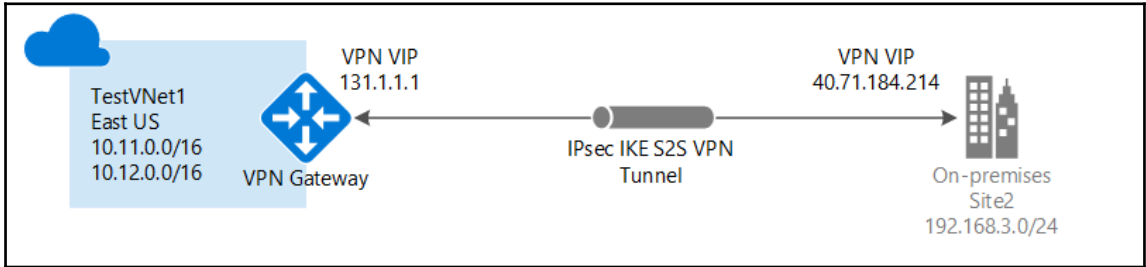
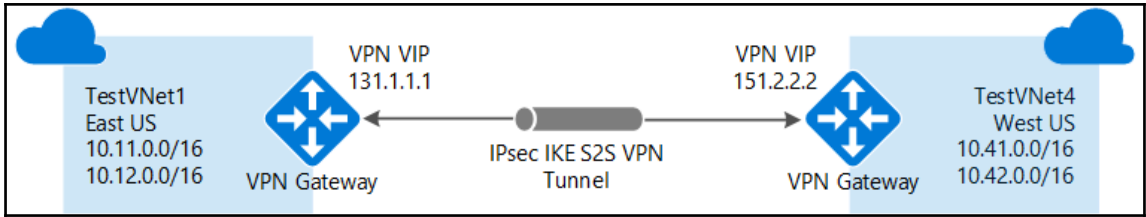


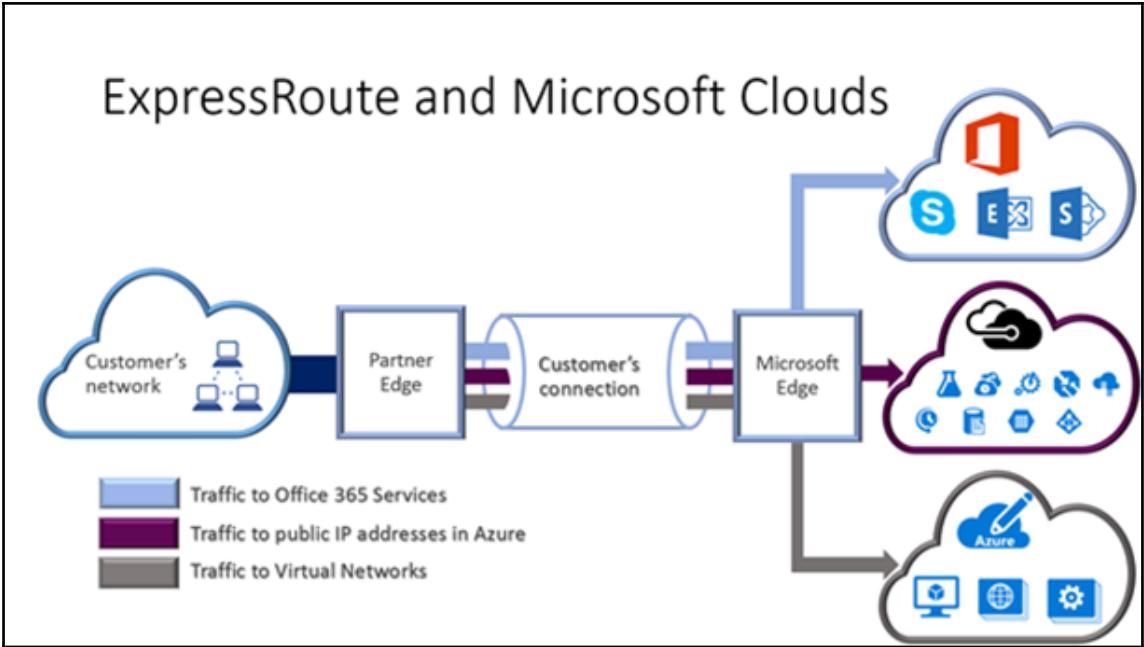


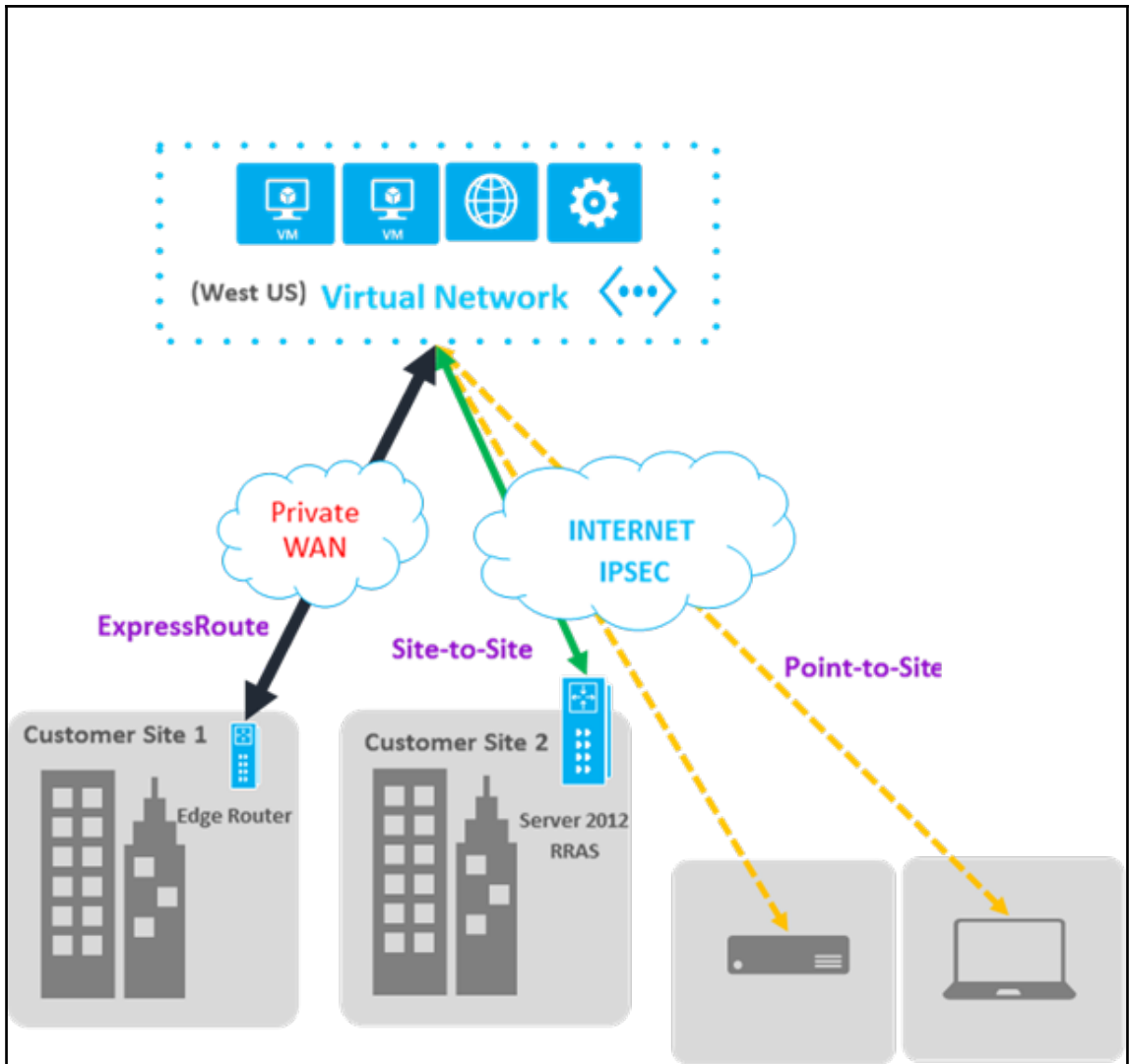


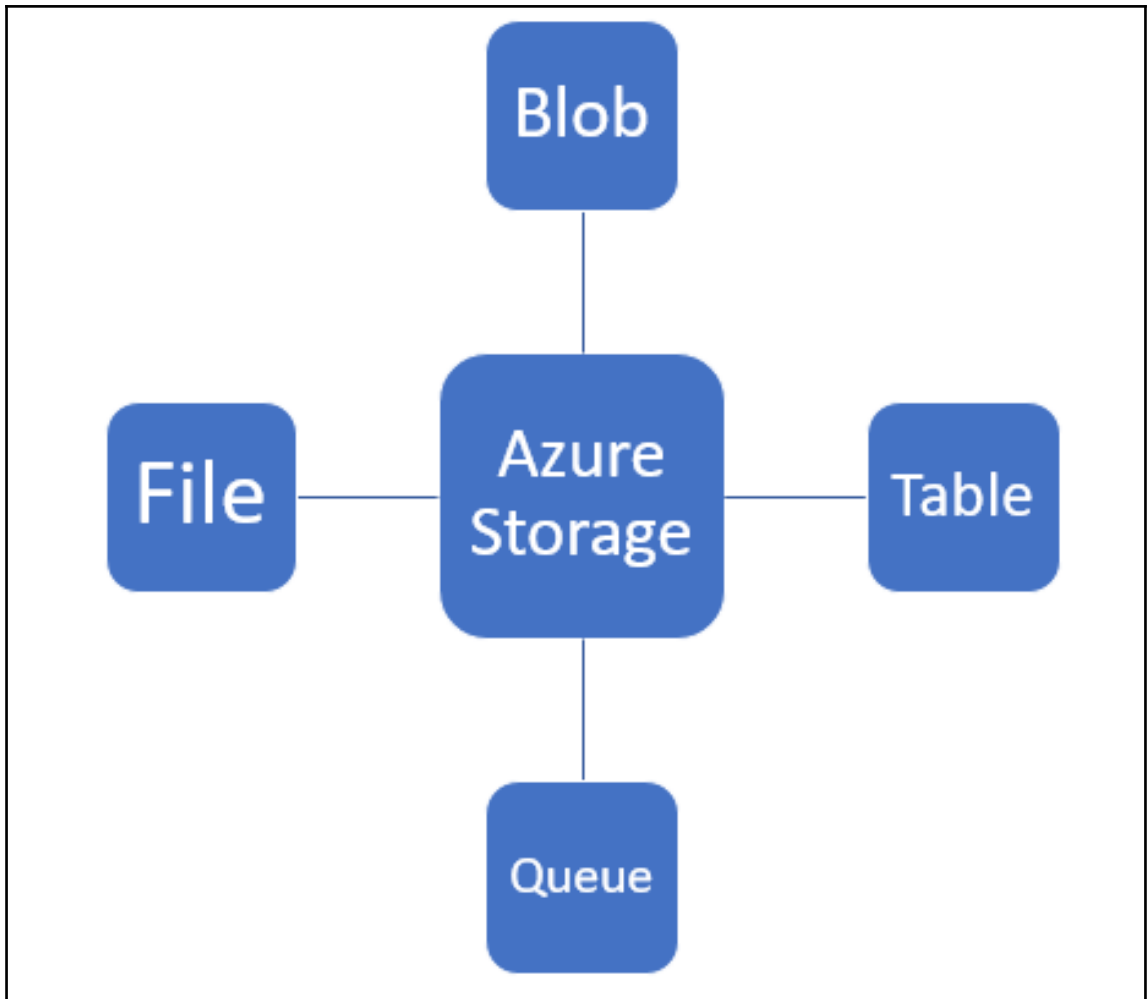
Chapter 2: Azure Design Patterns

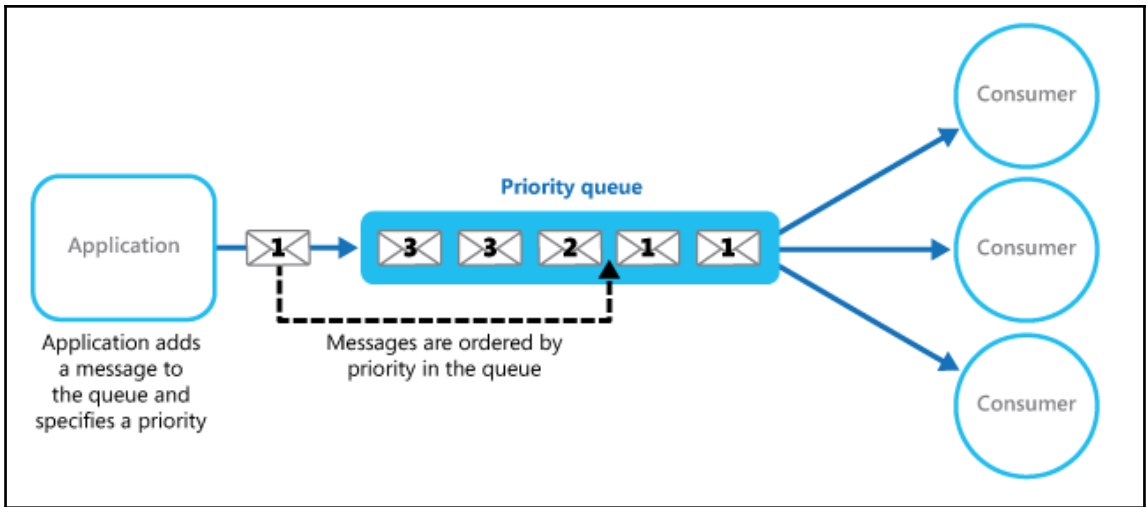
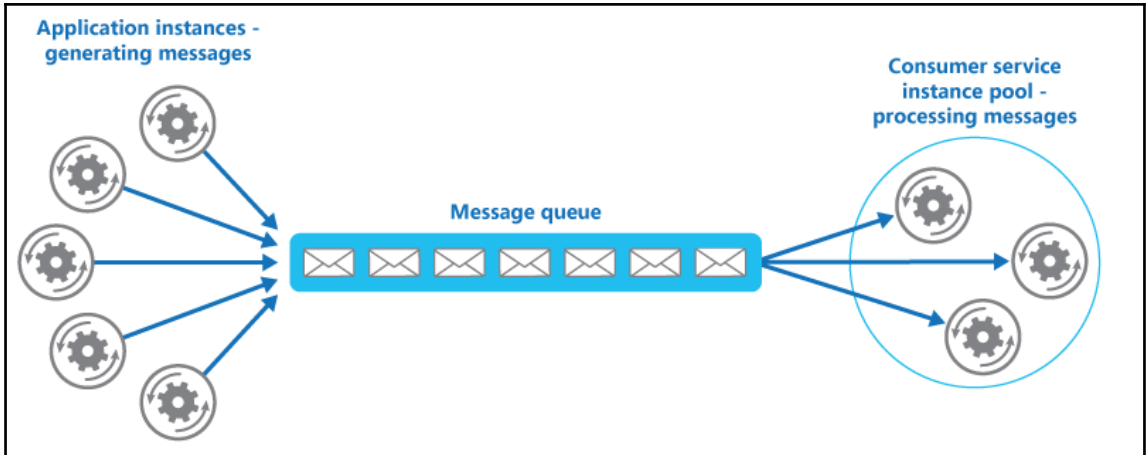


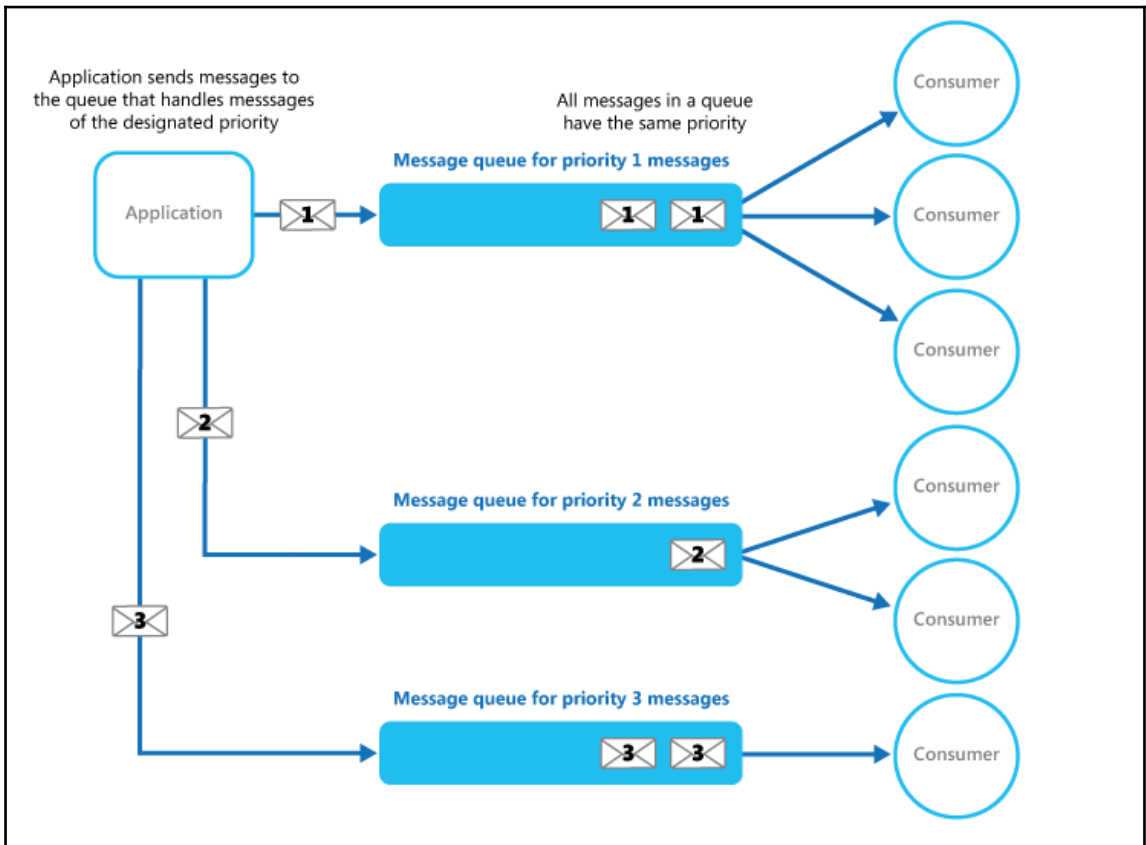
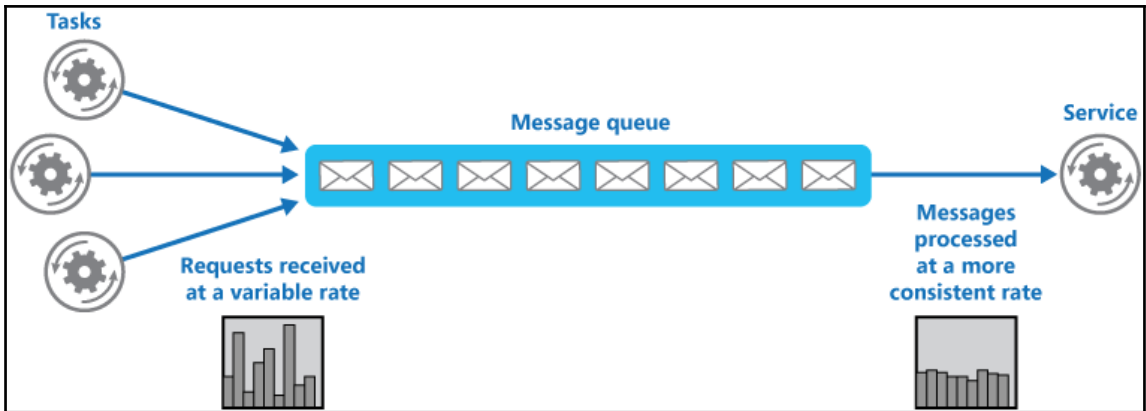


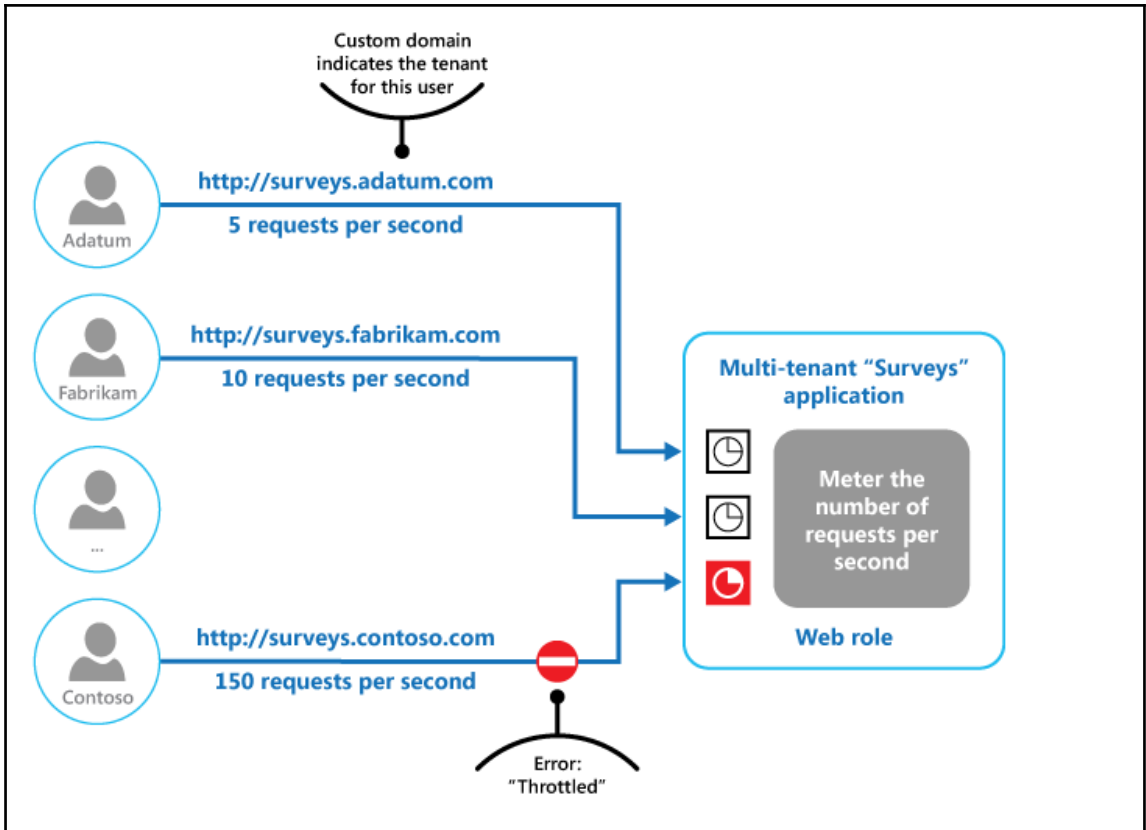
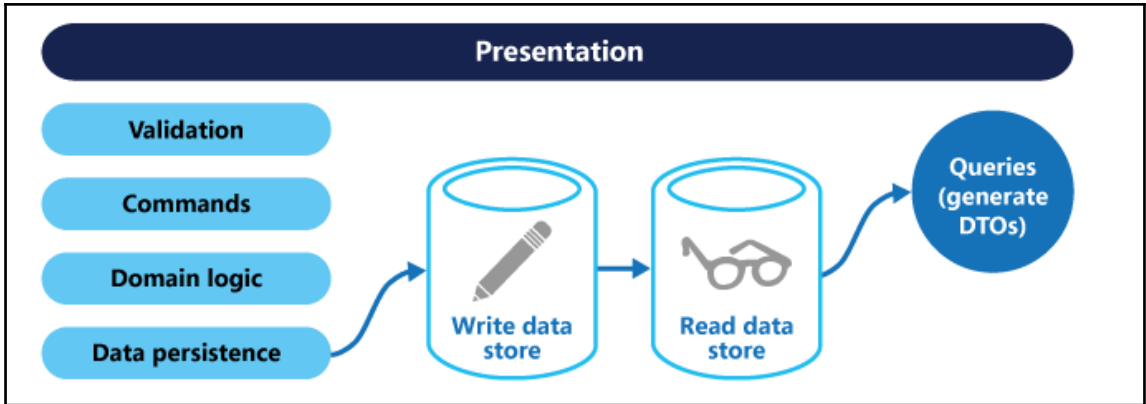


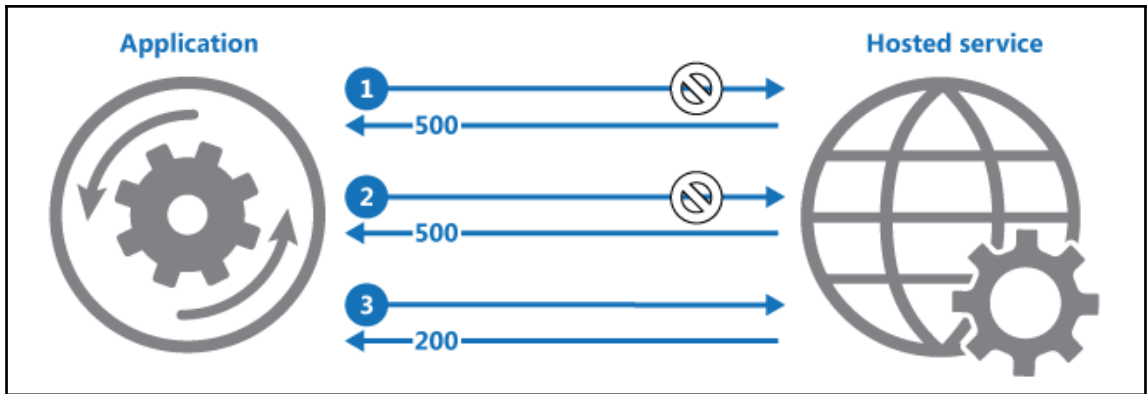




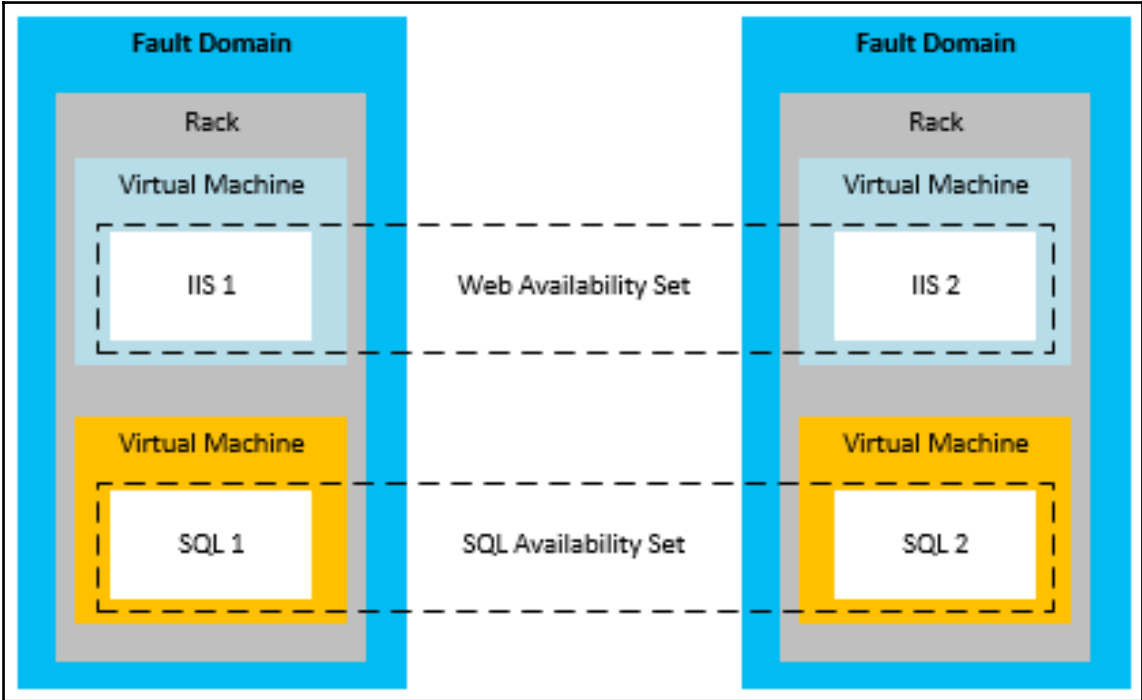


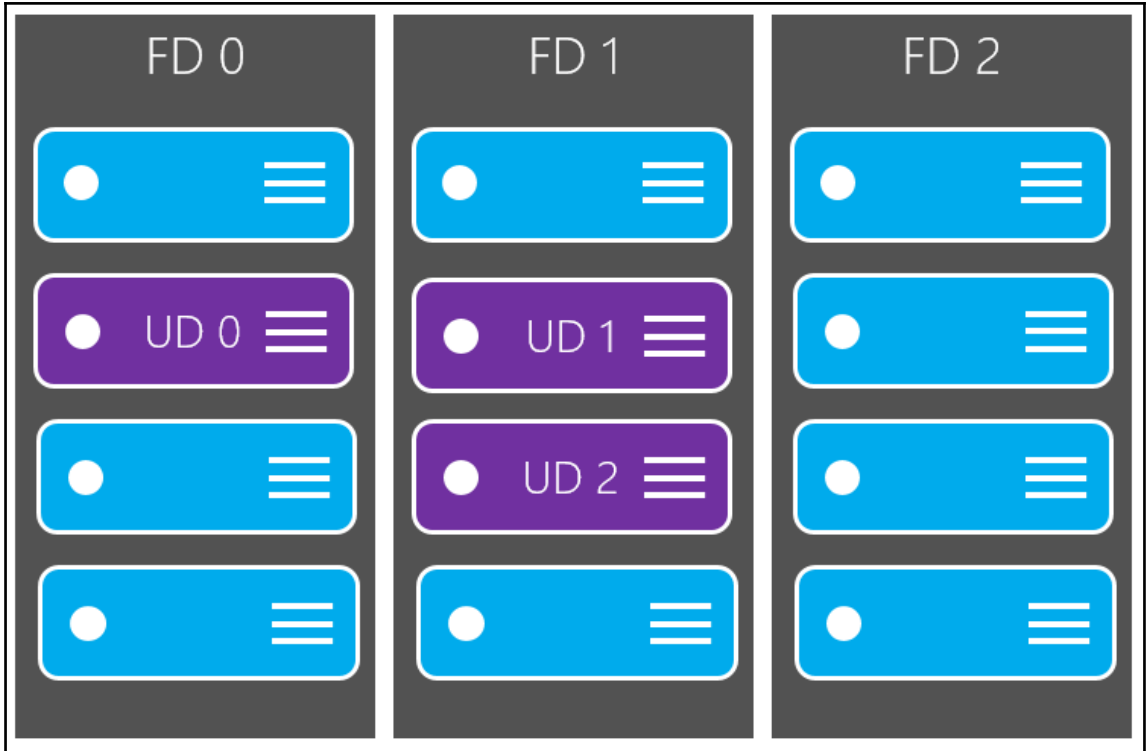


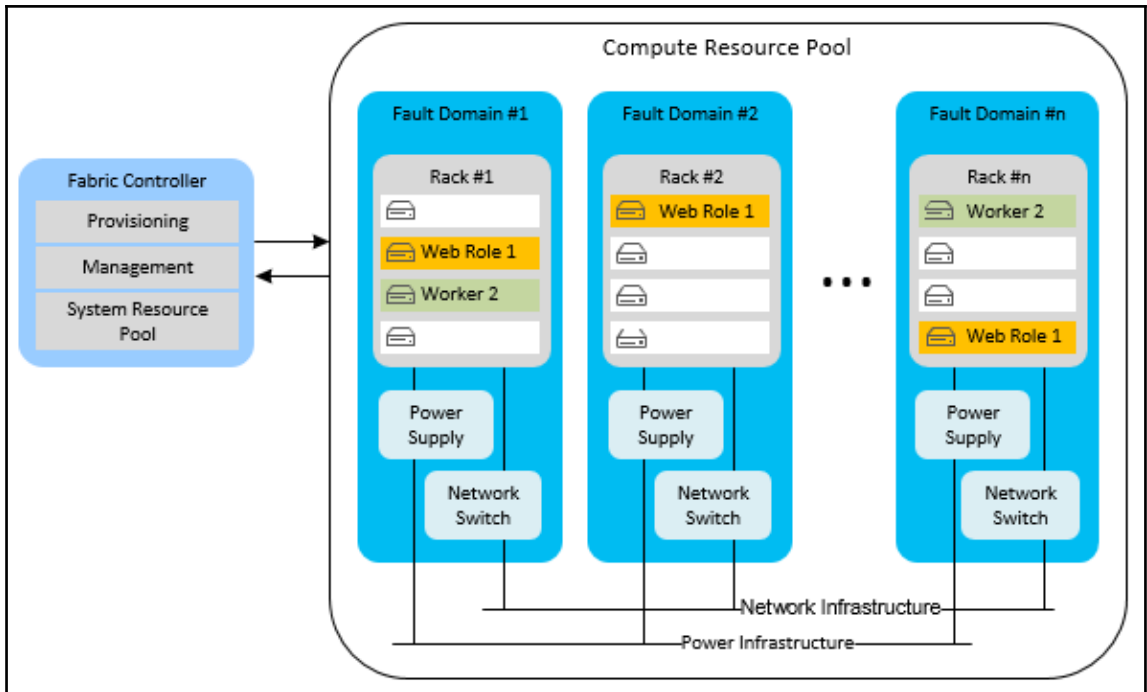


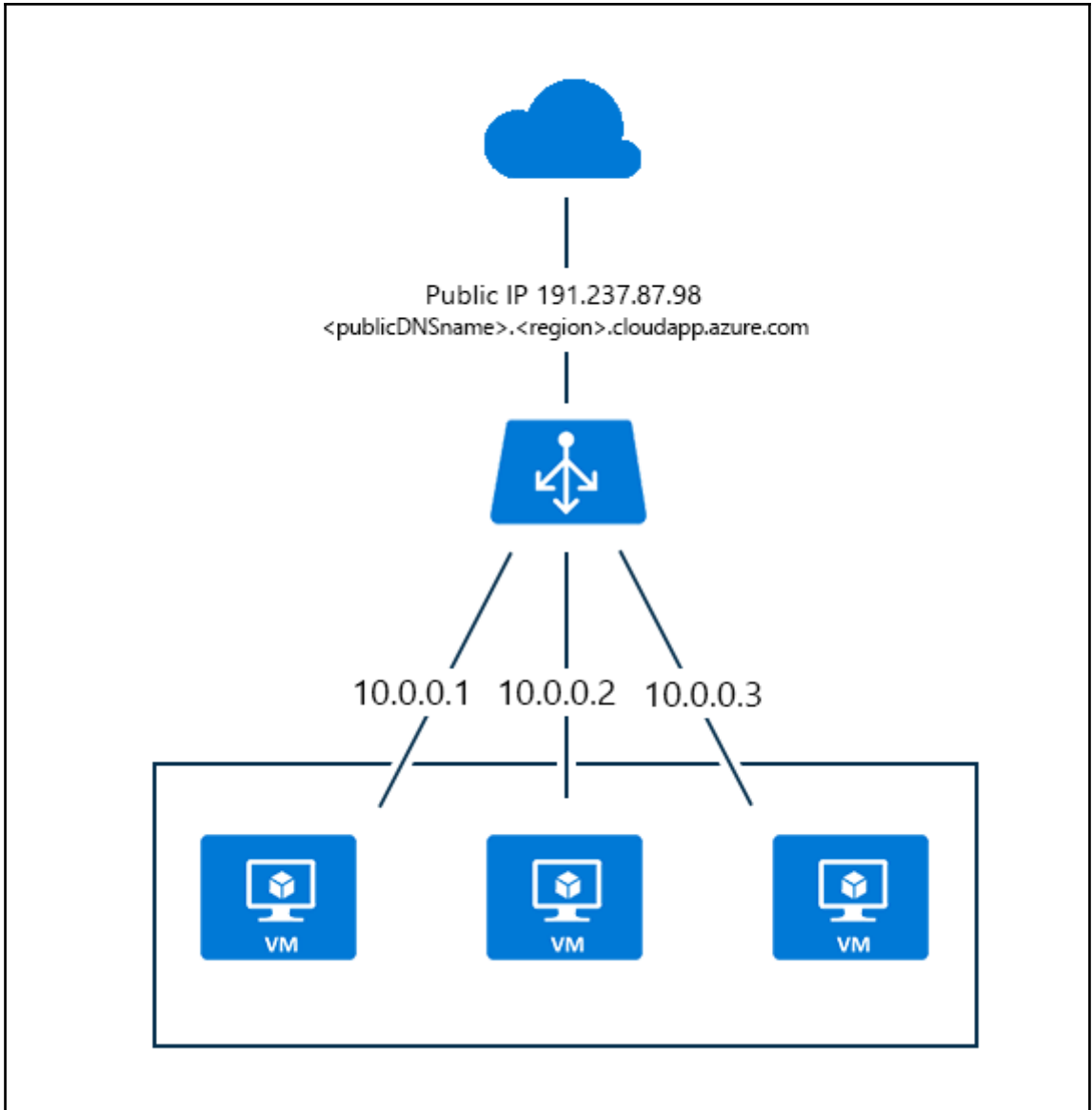


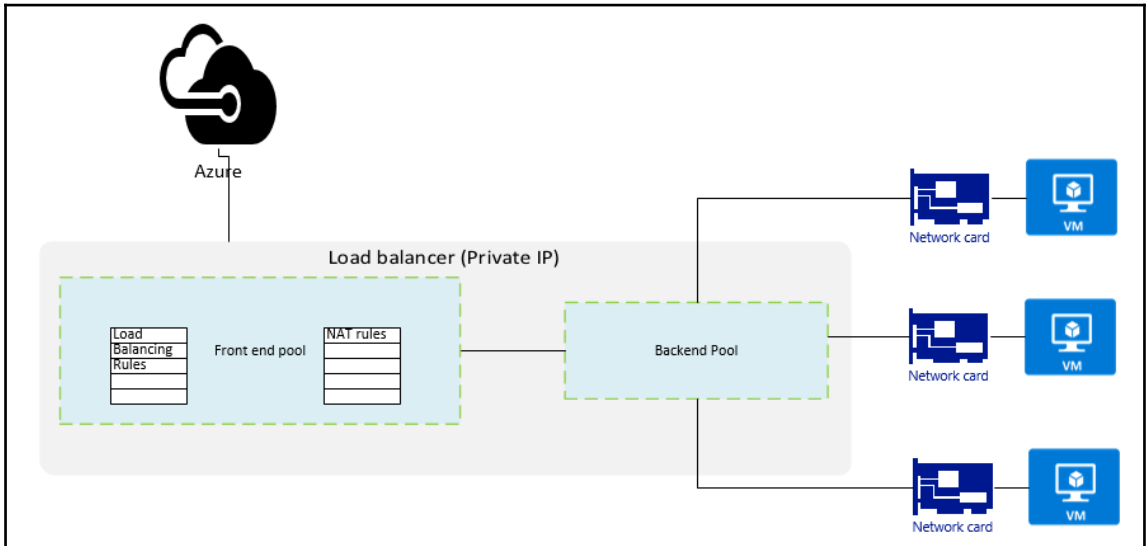
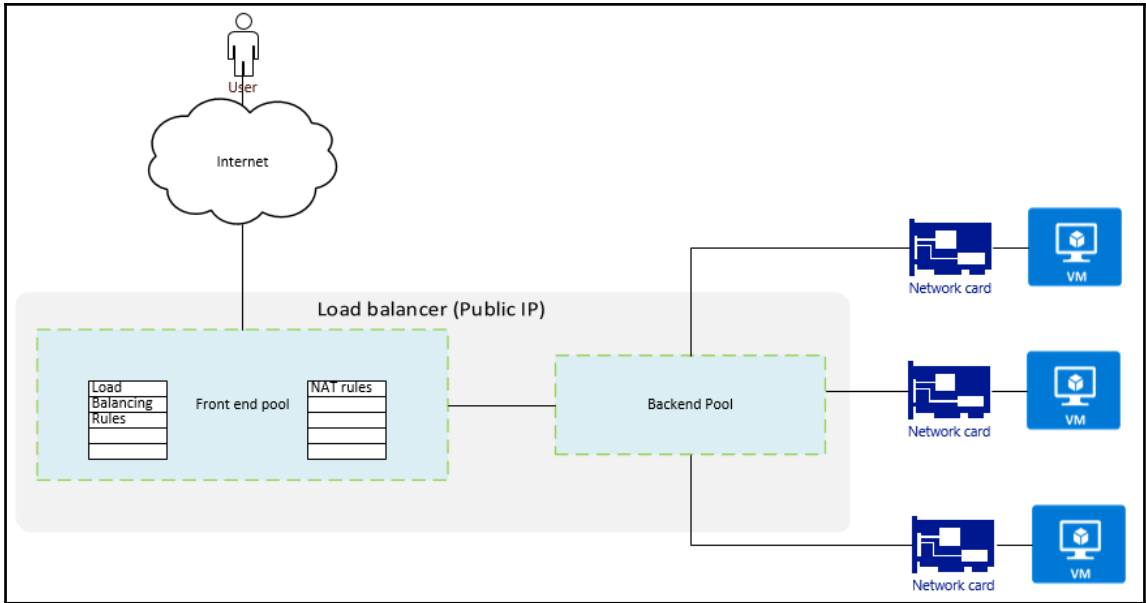
Chapter 3: Designing High Availability

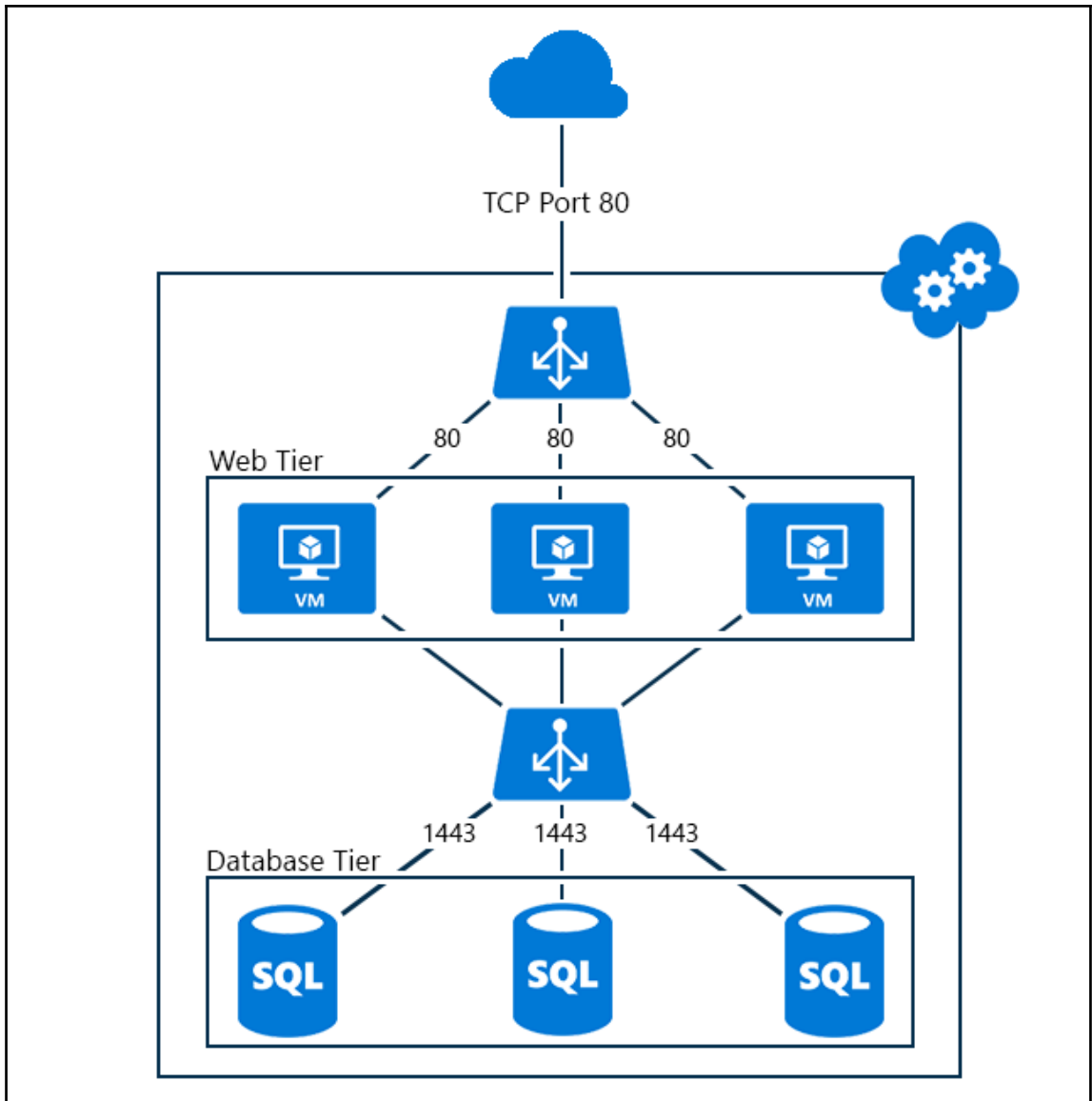


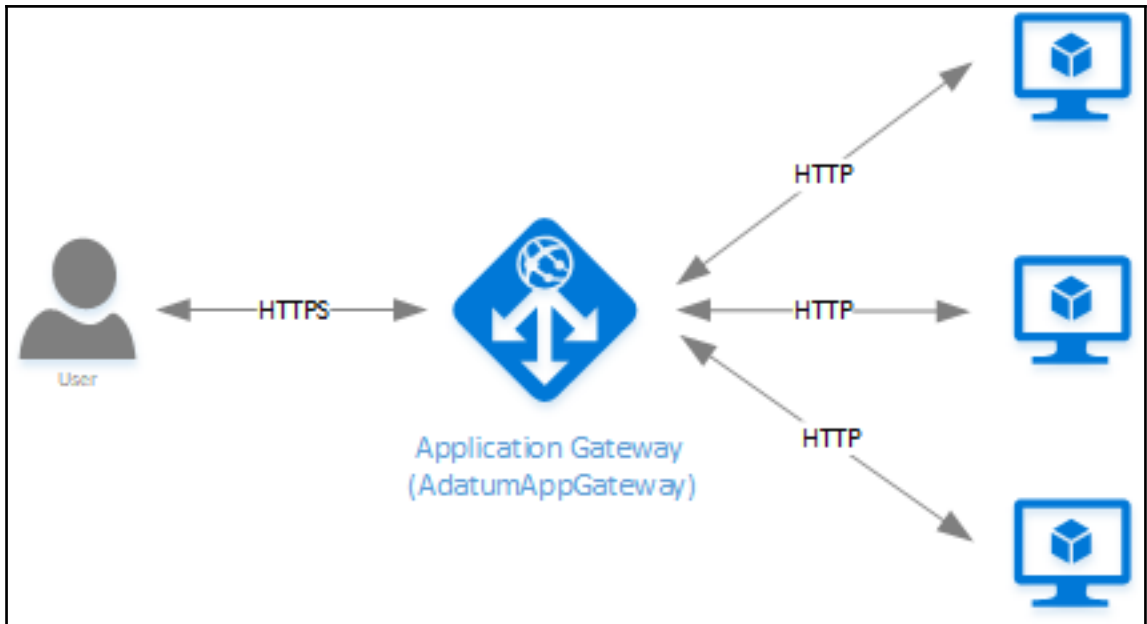


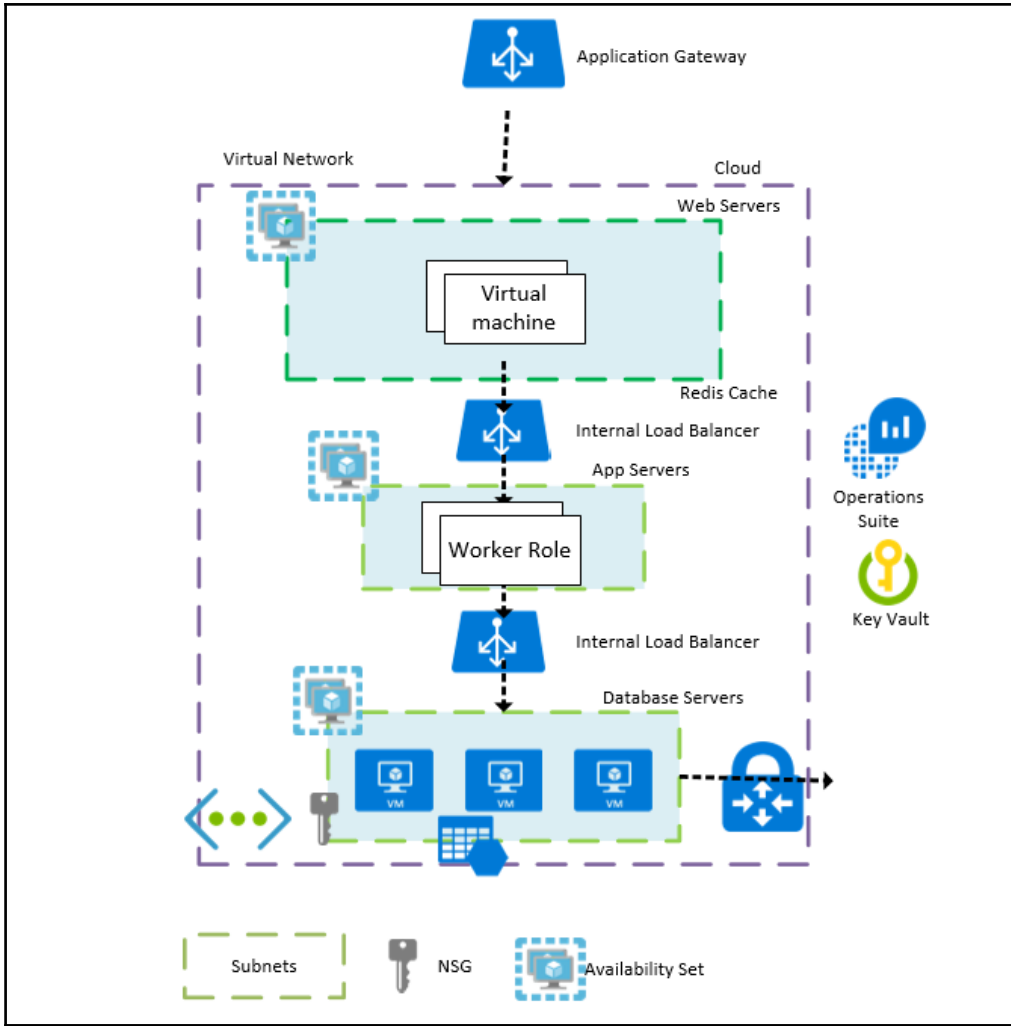


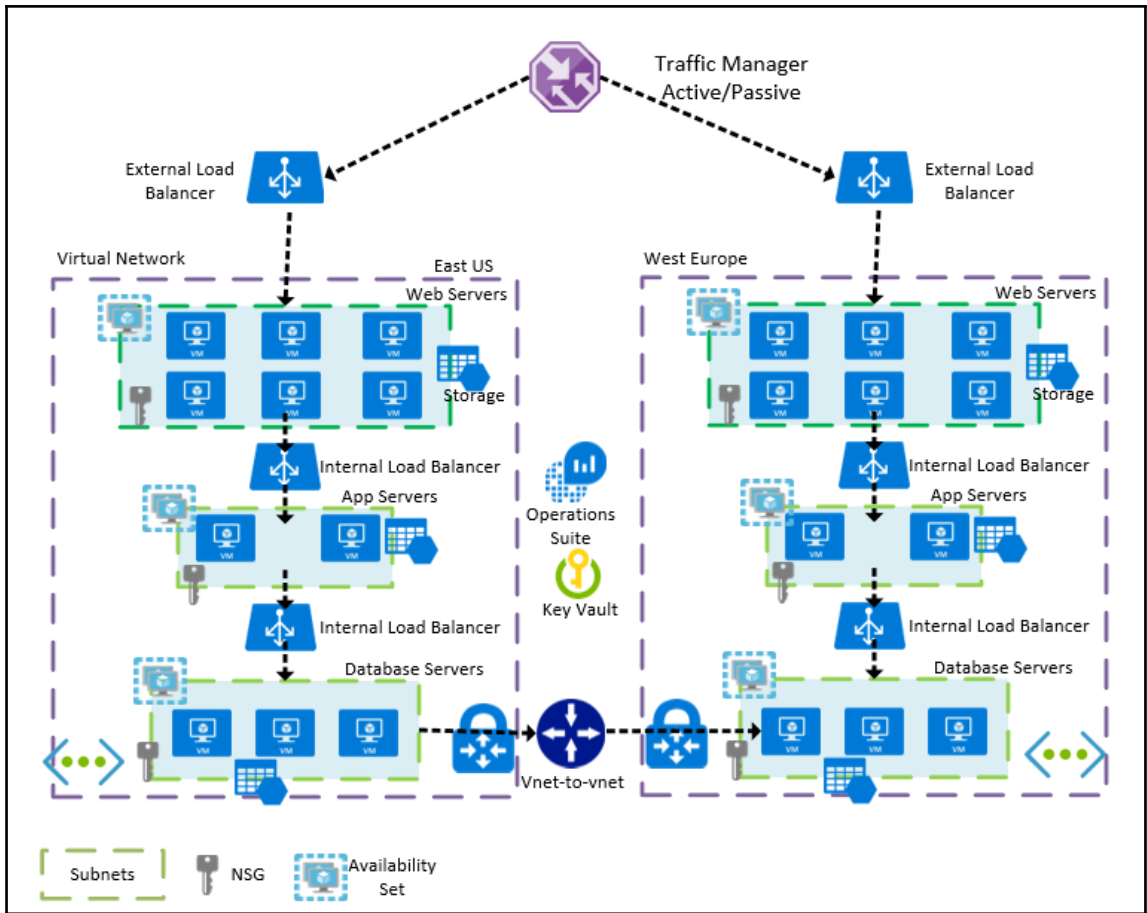




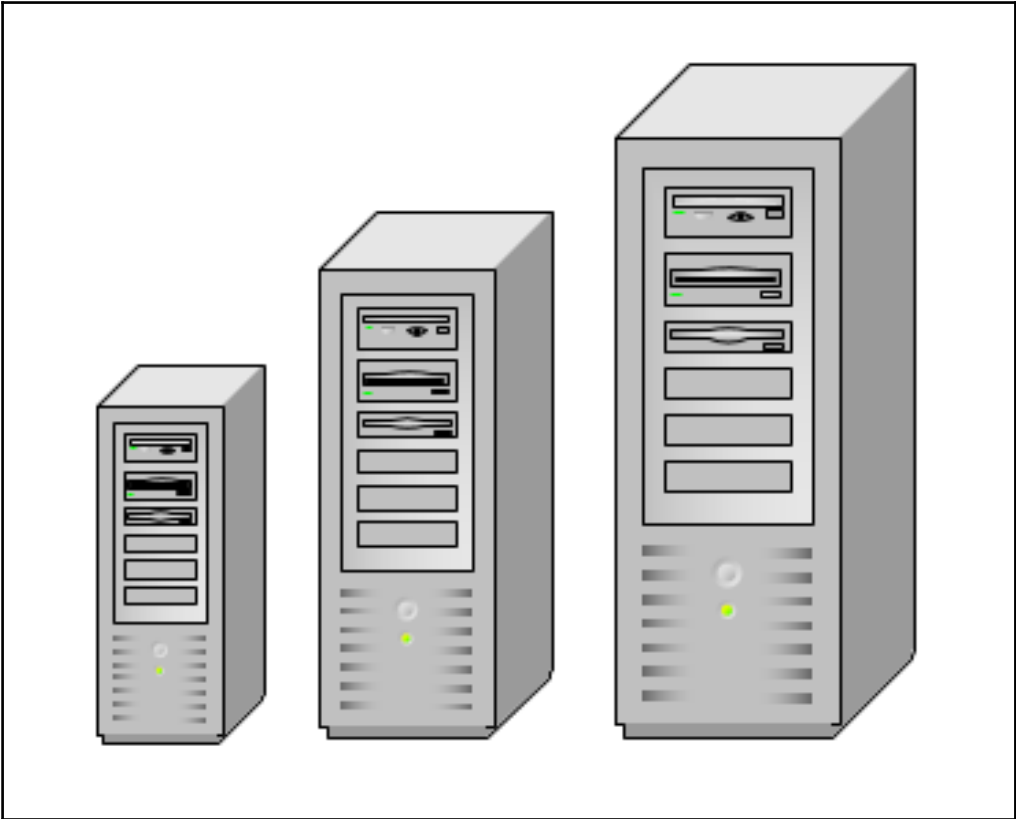








Chapter 4: Implementing Scalability



Search (Ctrl+/)

- Overview
- Activity log
- Access control (IAM)
- Tags
- Diagnose and solve problems

SETTINGS

- Apps
- File system storage
- Networking
- Scale up (App Service plan)
- Scale out (App Service plan)
- Properties
- Locks
- Automation script

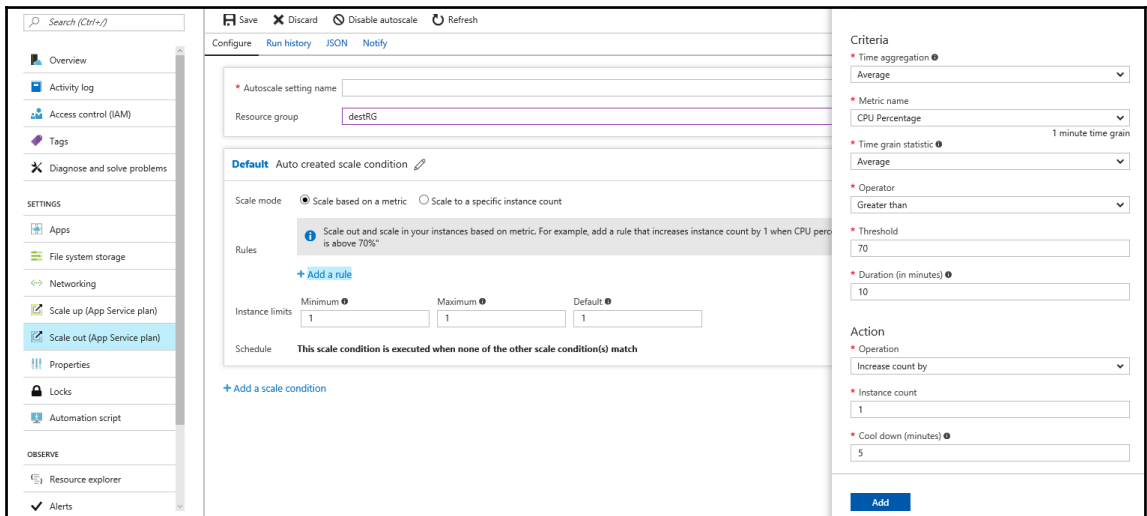
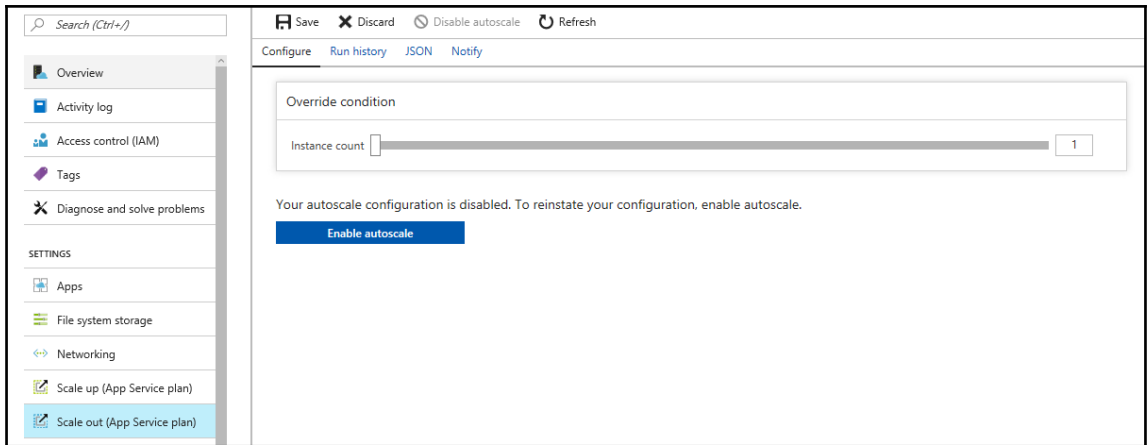
OBSERVE

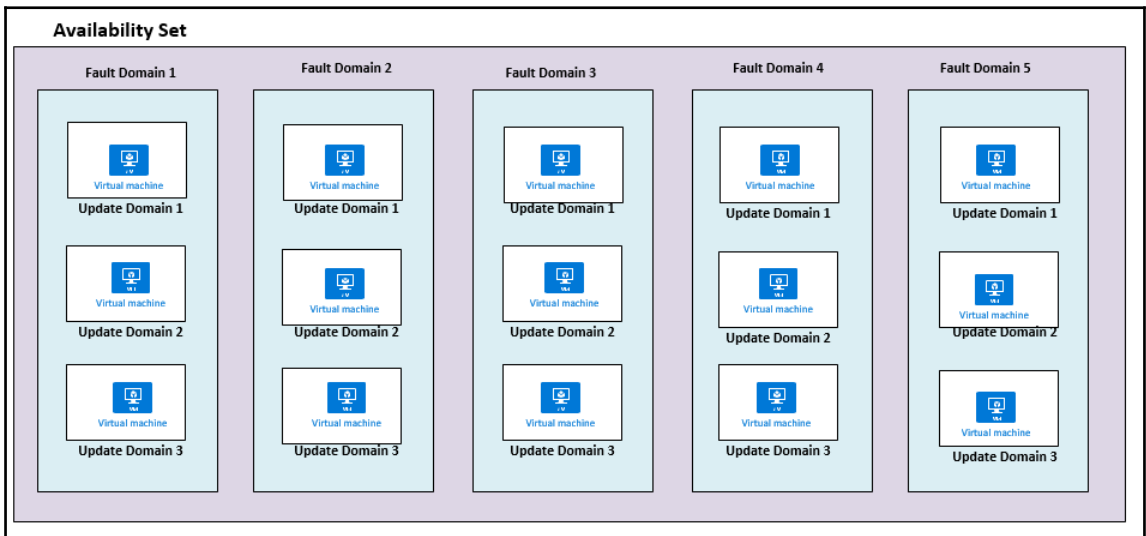
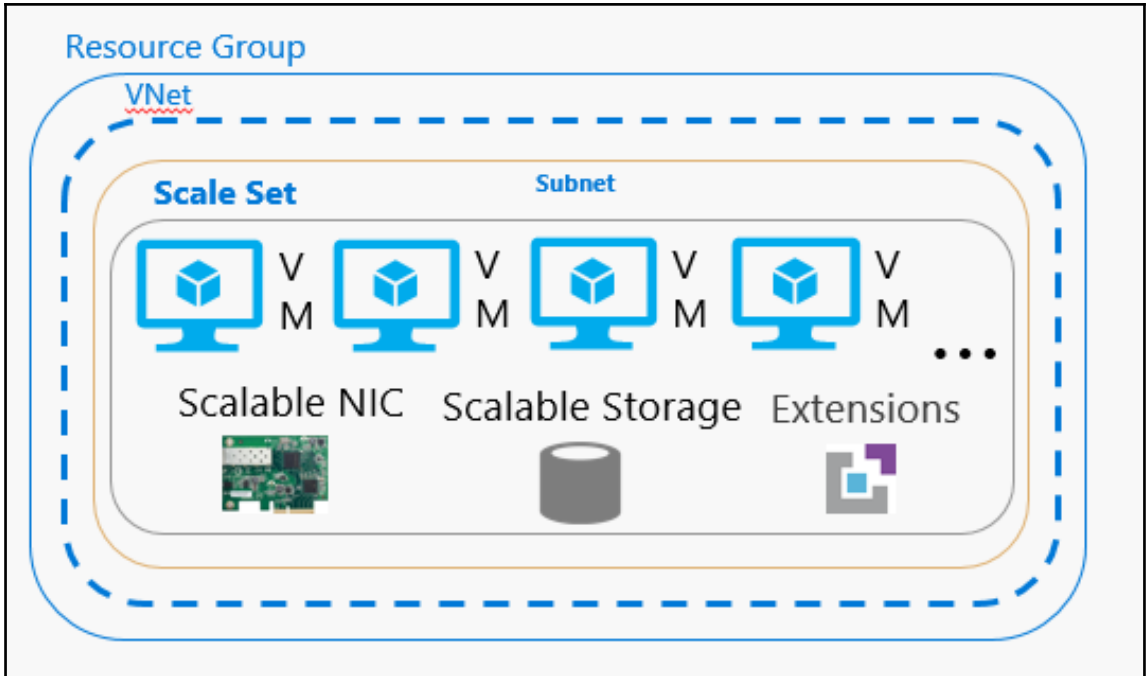
- Resource explorer

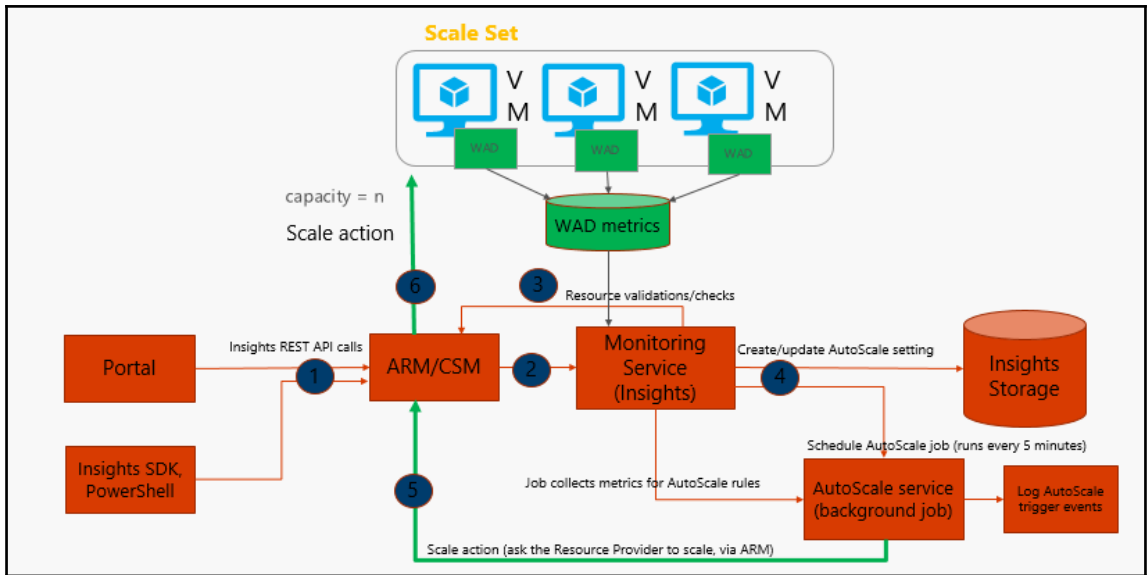
P1 Premium		P2 Premium		P3 Premium	
1	Core	2	Core	4	Core
1.75	GB RAM	3.5	GB RAM	7	GB RAM
	250 GB Storage		250 GB Storage		250 GB Storage
	Custom domains / SSL SNI Incl & IP SSL Support		Custom domains / SSL SNI Incl & IP SSL Support		Custom domains / SSL SNI Incl & IP SSL Support
	Up to 20 instance(s) * Subject to availability		Up to 20 instance(s) * Subject to availability		Up to 20 instance(s) * Subject to availability
	20 slots Web app staging		20 slots Web app staging		20 slots Web app staging
	50 times daily Backup		50 times daily Backup		50 times daily Backup
	Traffic Manager Geo availability		Traffic Manager Geo availability		Traffic Manager Geo availability
14,752.68		29,505.37		59,010.73	
INR/MONTH (ESTIMATED)		INR/MONTH (ESTIMATED)		INR/MONTH (ESTIMATED)	

S1 Standard		S2 Standard		S3 Standard	
1	Core	2	Core	4	Core
1.75	GB RAM	3.5	GB RAM	7	GB RAM
	50 GB Storage		50 GB Storage		50 GB Storage
	Custom domains / SSL SNI Incl & IP SSL Support		Custom domains / SSL SNI Incl & IP SSL Support		Custom domains / SSL SNI Incl & IP SSL Support
	Up to 10 instance(s) Auto scale		Up to 10 instance(s) Auto scale		Up to 10 instance(s) Auto scale
	Daily Backup		Daily Backup		Daily Backup
	5 slots Web app staging		5 slots Web app staging		5 slots Web app staging
	Traffic Manager Geo availability		Traffic Manager Geo availability		Traffic Manager Geo availability

Select







Azure VM Scale Set Editor

corevmss southcentralus Capacity: 100 Scale

Standard_A1 CoreOS Stable 899.17.0 Update model

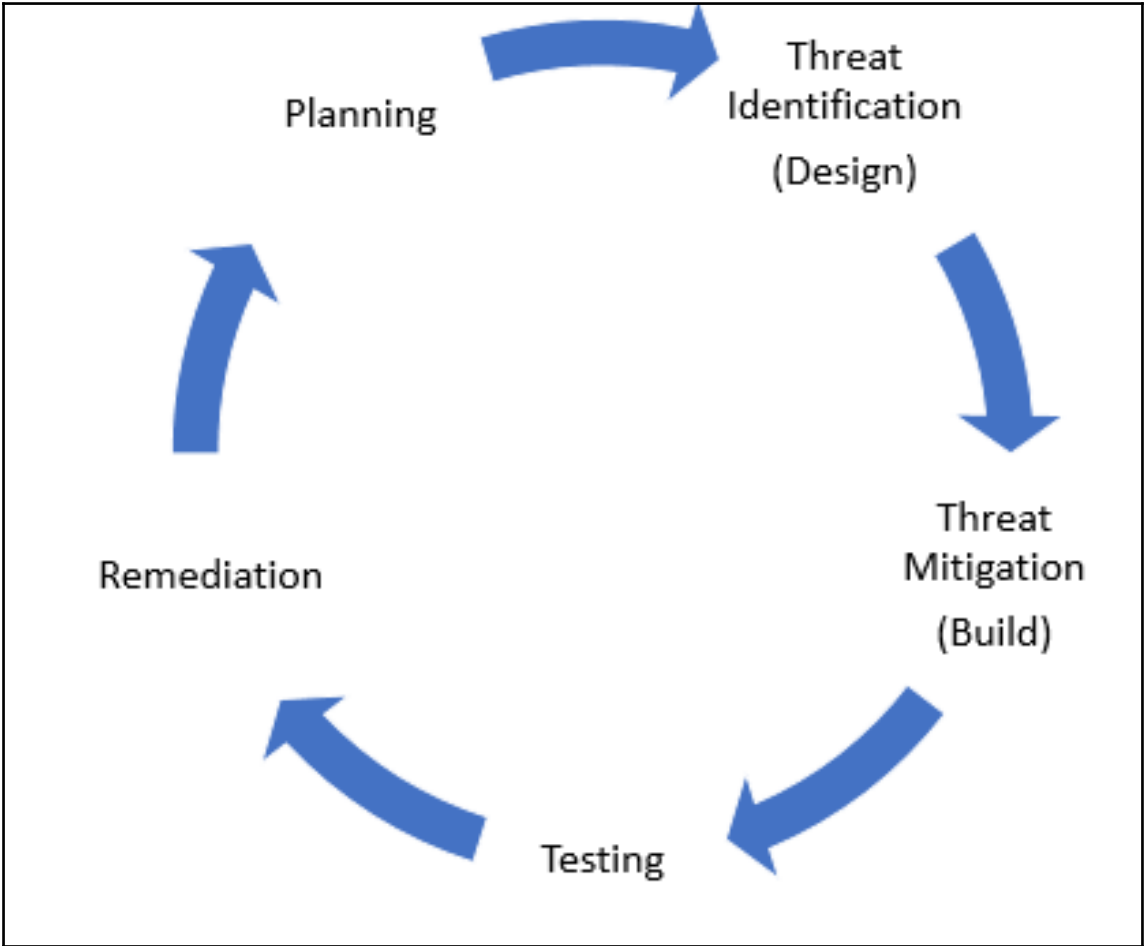
overprovision: true Manual upgrade core Prefix: corevmss

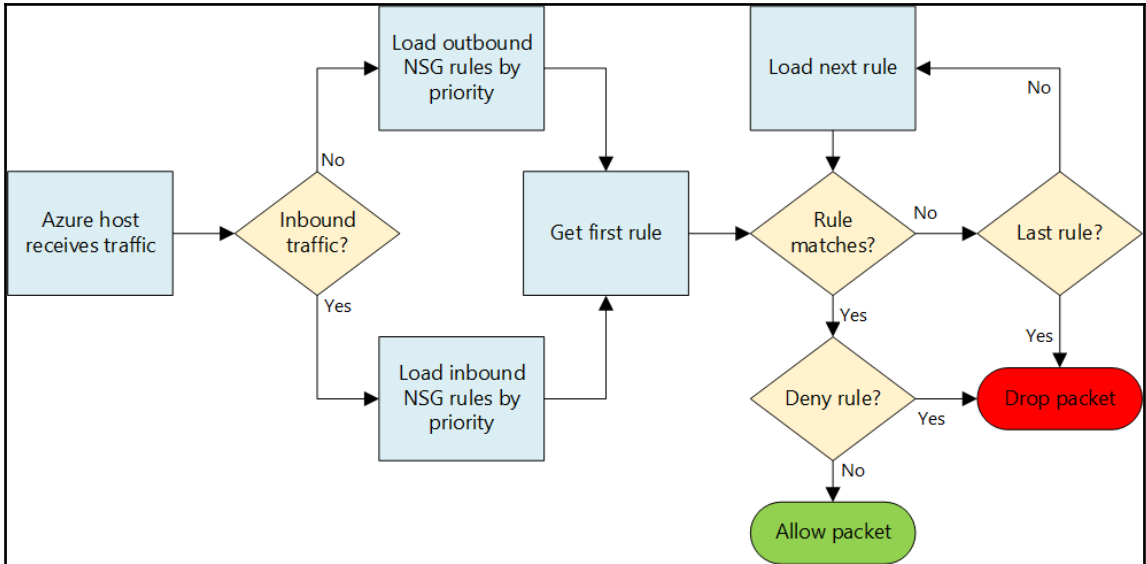
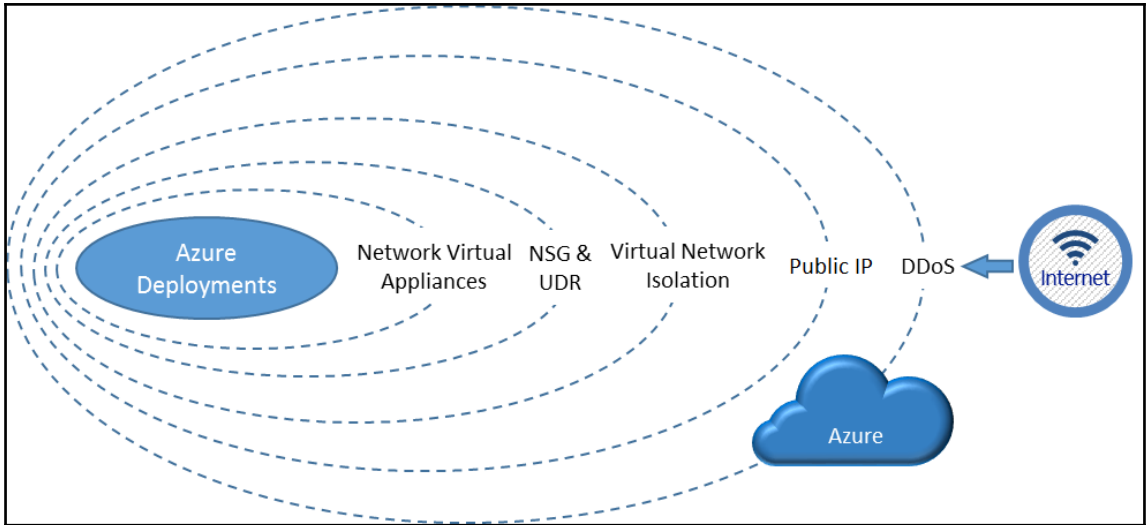
	Start	Restart	Power off	Stop Dealloc	Show Details
	FD 0	FD 1	FD 2	FD 3	FD 4
UD 0	0 28 55 83	23 51 79 106	19 46 75 102	15 42 71 98	9 37 66 92
UD 1	5 33 61 88	1 29 56 84	25 52 80 107	20 48 76 103	16 43 72 99
UD 2	11 39 67 93	6 34 62 89	2 30 57 85	26 53 81 108	21 49 77 104
UD 3	17 44 73 100	12 40 68 94	7 35 63 90	3 31 58 86	27 54 82 109
UD 4	22 50 78 105	18 45 74 101	13 41 70 96	8 36 65 91	4 32 60 87

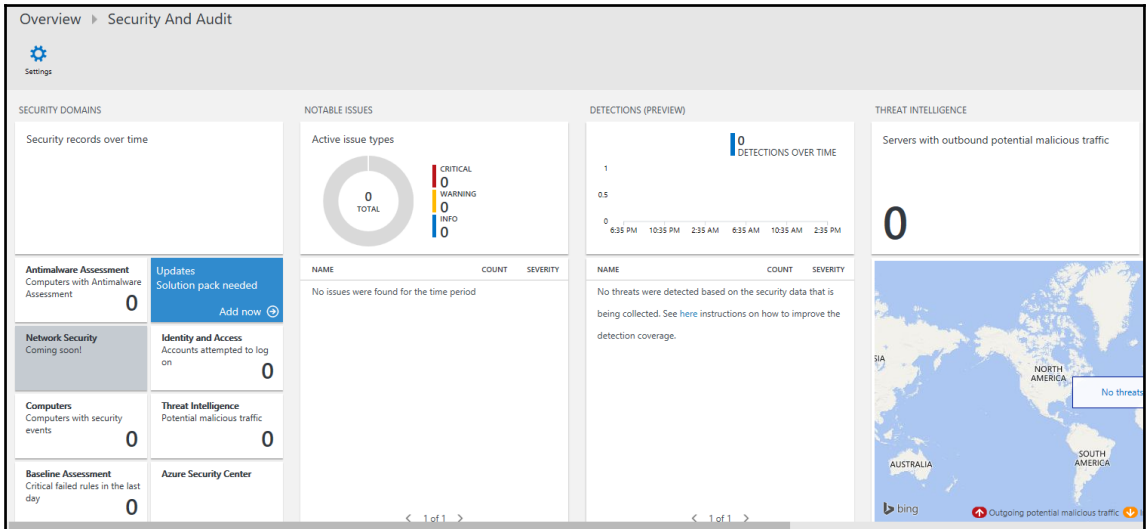
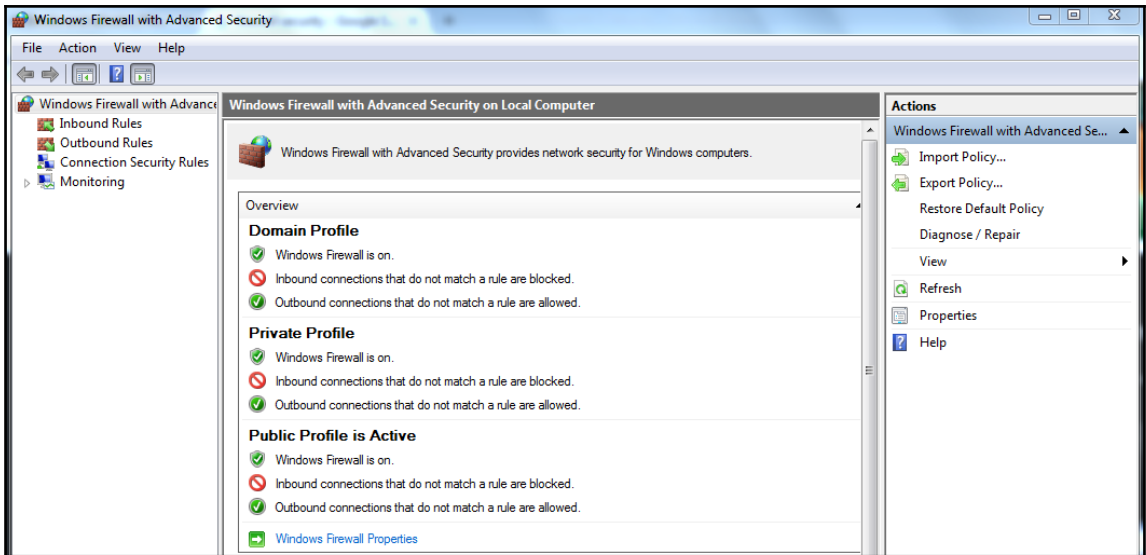
Batch size: 1 Pause time: 0 Rolling upgrade

FD: 0	Reimage	Upgrade	Start	Power off
VM:	Reimage	Upgrade	Start	Power off
	Delete	Restart	Dealloc	

Succeeded








Use access keys to authenticate your applications when making requests to this Azure storage account. Store your access keys securely - for example, using Azure Key Vault - and don't share them. We recommend regenerating your access keys regularly. You are provided two access keys so that you can maintain connections using one key while regenerating the other.

When you regenerate your access keys, you must update any Azure resources and applications that access this storage account to use the new keys. This action will not interrupt access to disks from your virtual machines. [Learn more](#)

Storage account name 

Default keys

NAME	KEY	CONNECTION STRING
key1	<input type="text"/> 	DefaultEndpointsProtocol=https;AccountName=... <input type="text"/>  
key2	<input type="text"/> 	DefaultEndpointsProtocol=https;AccountName=... <input type="text"/>  

Allowed services ⓘ

Blob File Queue Table

Allowed resource types ⓘ


Service Container Object

Allowed permissions ⓘ


Read Write Delete List Add Create Update Process

Start and expiry date/time ⓘ

Start

2017-07-30  10:39:25 AM

End

2017-07-30  6:39:25 PM

UTC - Coordinated Universal Time

Allowed IP addresses ⓘ

for example, 168.1.5.65 or 168.1.5.65-168.1.5.70

Allowed protocols ⓘ

HTTPS only HTTPS and HTTP

Signing key ⓘ

key1 ▼

Generate SAS

+ Add
✕

CORS is an HTTP feature that enables a web application running under one domain to access resources in another domain. Web browsers implement a security restriction known as same-origin policy that prevents a web page from calling APIs in a different domain. CORS provides a secure way to allow one domain (the origin domain) to call APIs in another domain.

You can set CORS rules individually for each of the storage services (i.e. blob, file, queue, table). Once you set the CORS rules for the service, then a properly authenticated request made against the service from a different domain will be evaluated to determine whether it is allowed according to the rules you have specified.

[Learn more](#)

ALLOWED ORIGINS	ALLOWED METHODS	ALLOWED HEADERS	EXPOSED HEADERS	MAX AGE
You have not set any CORS rules. Add a rule to get started.				

Add CORS rule

- * Allowed origins
- * Allowed verbs
- * Allowed headers
- * Exposed headers
- * Maximum age (seconds)

Firewall settings
devopswin2016-dev (SQL server)
☐ ✕

📁 Save
✕ Discard
+ Add client IP

i Connections from the IPs specified below provides access to all the databases in devopswin2016-dev.

Allow access to Azure services ON OFF

Client IP address

RULE NAME	START IP	END IP	
<input type="text"/>	<input type="text"/>	<input type="text"/>	...

Search (Ctrl+/)

Save View audit logs Feedback

View server settings

Server-level Auditing: **Disabled**; Server-level Threat Detection: **Disabled**

Auditing

ON OFF

Auditing type

Blob Table (deprecated)

* Storage details

botstatestorage

Threat Detection

ON OFF

Threat Detection types

All

Send alerts to

Email addresses

Email service and co-administrators

All
 SQL injection
 SQL injection vulnerability
 Anomalous client login

OK

SETTINGS

- Quick start
- Pricing tier (scale DTUs)
- Geo-Replication
- Auditing & Threat Detection**
- Dynamic Data Masking
- Transparent data encryption
- Sync to other databases
- Properties
- Locks
- Automation script

MONITORING

Save Discard Add mask Feedback

Masking rules

MASK NAME	MASK FUNCTION
You haven't created any masking rules.	

SQL users excluded from masking (administrators are always excluded)

SQL users excluded from masking (administrators are always excluded) ✓

Recommended fields to mask

SCHEMA	TABLE	COLUMN
There are no recommended fields to mask		

Add Discard Delete

Mask name

Mask name

Select what to mask

Schema

Table

Column

Select how to mask

Masking field format

Default value (0, xxxx, 01-01-1900)

Search (Ctrl+)

Save Discard Feedback

SETTINGS

- Quick start
- Pricing tier (scale DTUs)
- Geo-Replication
- Auditing & Threat Detection
- Dynamic Data Masking
- Transparent data encryption**

Encrypts your databases, backups enable TDE, go to each database.

[Learn more](#)

Data encryption

ON OFF

Encryption status

✓ Encrypted

Monitor - Activity log

Search (Ctrl+)

Columns Export Log search

Insights (Last 24 hours): 0 failed deployments | 0 role assignments | 0 errors | 0 alerts fired | 0 outage notifications

Select query ...

Subscription Resource group Resource Resource type Operation

RitezhSubscription All resource groups All resources All resource types 0 selected

Timespan Event category Event severity Event initiated by Search

Last 6 hours All categories 4 selected Email or name or service principal

Apply Reset

OPERATION NAME	STATUS	TIME	TIME STAMP	SUBSCRIPTION	EVENT INITIATED BY
No results to display					

EXPLORE

- Activity log
- Operation log (classic)
- Metrics
- Diagnostics settings
- Log search

MANAGE

- Alerts
- Action groups
- Approvals

Security Center - Overview

Power BI Subscriptions Log Integration

Your security experience may be limited. Click here to learn more →

Overview

- Recommendations: 3 Total
- Security solutions: Refreshing...
- New alerts & incidents: 0 Total
- Policy
- Quickstart

Prevention

- Compute: 0 Total
- Networking: 0 Total
- Storage & data: 0 Total
- Applications: 0 Total

Detection

- Security alerts: No security alerts
- Most attacked resources: No attacked resources to display

Advanced cloud defense

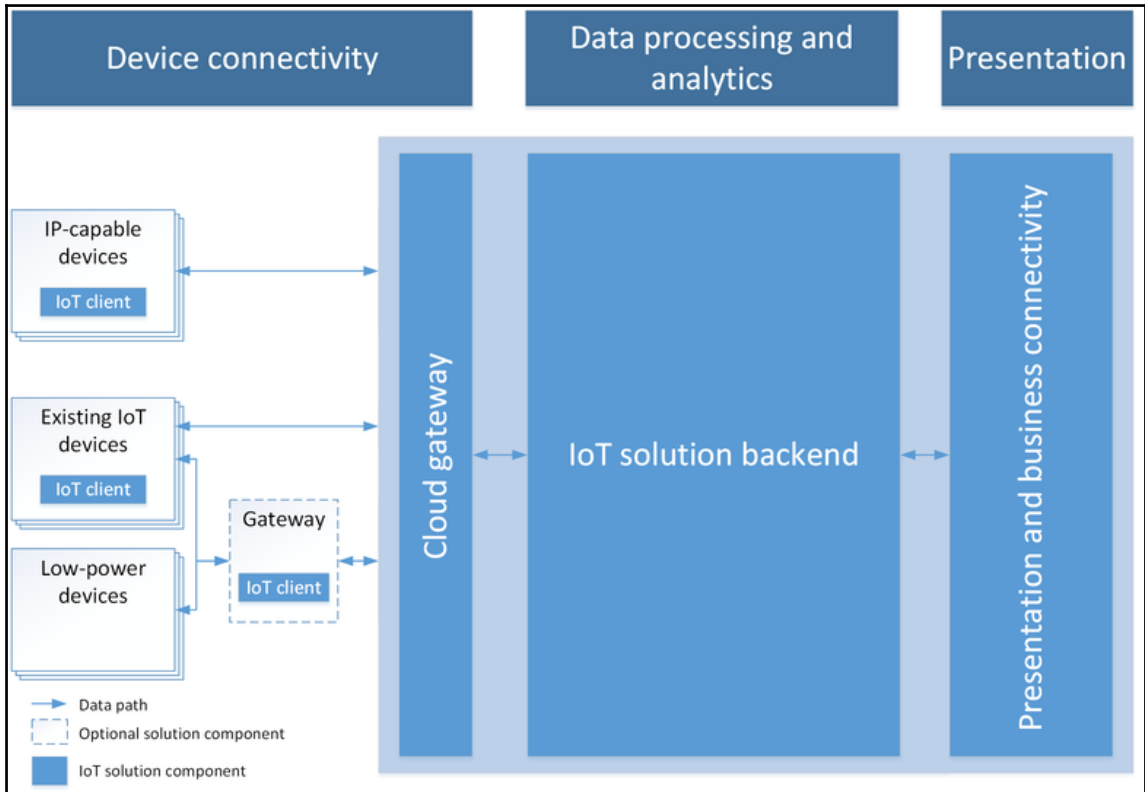
Just in time VM access

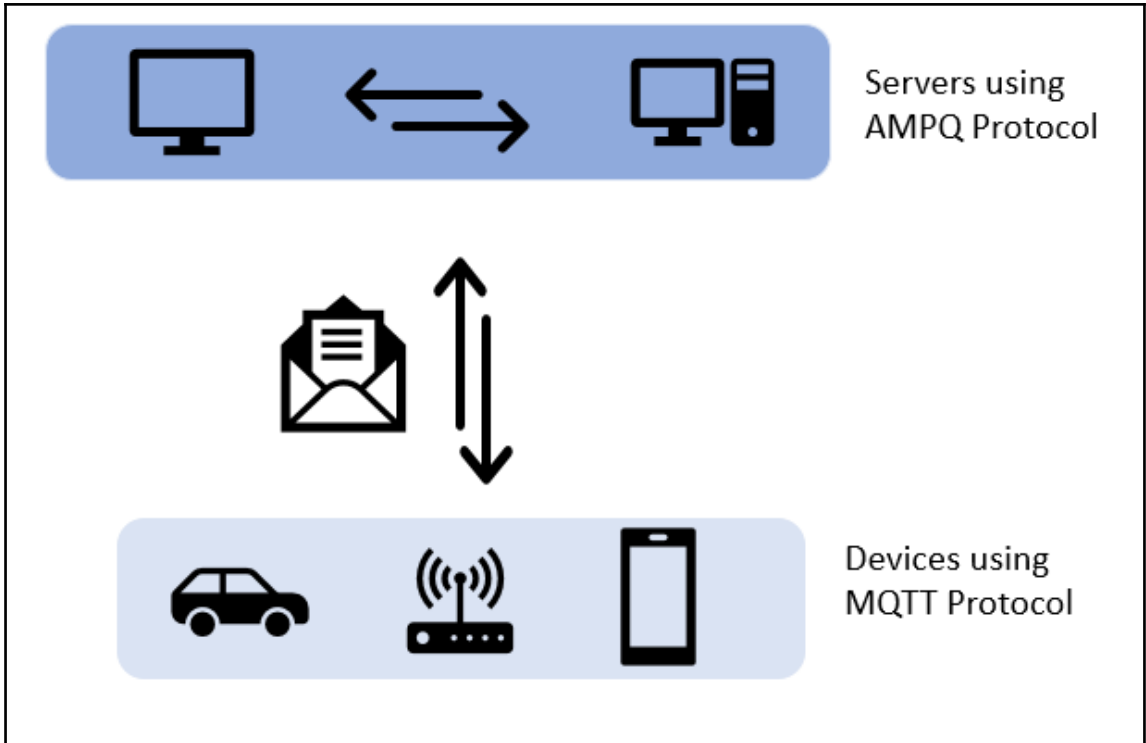
Prevention policy
ASC DEMO

Show recommendations for

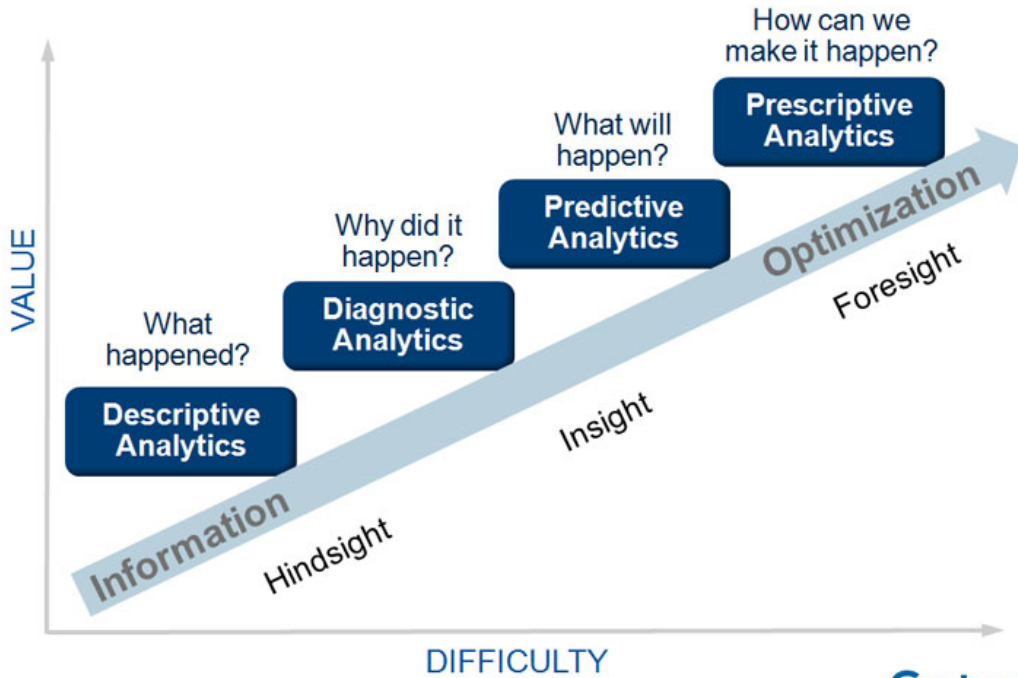
System updates ⓘ	<input checked="" type="checkbox"/> On	<input type="checkbox"/> Off
OS vulnerabilities ⓘ	<input checked="" type="checkbox"/> On	<input type="checkbox"/> Off
Endpoint protection ⓘ	<input checked="" type="checkbox"/> On	<input type="checkbox"/> Off
Disk encryption	<input checked="" type="checkbox"/> On	<input type="checkbox"/> Off
Network security groups	<input checked="" type="checkbox"/> On	<input type="checkbox"/> Off
Web application firewall	<input checked="" type="checkbox"/> On	<input type="checkbox"/> Off
Next generation firewall	<input checked="" type="checkbox"/> On	<input type="checkbox"/> Off
SQL auditing & Threat detection	<input checked="" type="checkbox"/> On	<input type="checkbox"/> Off
SQL transparent data encryption	<input checked="" type="checkbox"/> On	<input type="checkbox"/> Off
Vulnerability Assessment	<input checked="" type="checkbox"/> On	<input type="checkbox"/> Off

Chapter 6: Designing IoT Solutions





Analytic Value Escalator



Gartner

Devices	Device Connectivity	Storage	Analytics	Presentation & Action
	Event Hubs	SQL Database	Machine Learning	App Service
	Service Bus	Table/Blob Storage	Stream Analytics	Power BI
	External Data Sources	DocumentDB	HDInsight	Notification Hubs
		External Data Sources	Data Factory	Mobile Services
				BizTalk Services

iotpay - Device Explorer

Search (Ctrl+F)

Overview
Activity log
Access control (IAM)

SETTINGS

- Shared access policies
- Pricing and scale
- Operations monitoring
- IP Filter
- Properties
- Locks
- Automation script

EXPLORERS

- Device Explorer
- Query Explorer

MESSAGING

- File upload

+ Add Columns Refresh Delete

i You can use this tool to view, create, update, and delete devices on your IoT Hub.

Query

SELECT * FROM devices

WHERE

optional (e.g. tags.location=US)

Execute

Filter by Device Id

DEVICE ID	STATUS
myFirstDevice	enabled

Add Device

Learn more about creating devices.

* Device ID

Authentication Type X.509

Primary Key

Secondary Key

Auto Generate Keys

Connect device to IoT Hub

Save

iotpay - Device Explorer

Search (Ctrl+F)

Overview
Activity log
Access control (IAM)

SETTINGS

- Shared access policies
- Pricing and scale
- Operations monitoring
- IP Filter
- Properties
- Locks
- Automation script

EXPLORERS

- Device Explorer
- Query Explorer

MESSAGING

- File upload

+ Add Columns Refresh

i You can use this tool to view, create, update, and delete devices on your IoT Hub.

Query

SELECT * FROM devices

WHERE

optional (e.g. tags.location=US)

Execute

Filter by Device Id

DEVICE ID	STATUS
<input checked="" type="checkbox"/> myfirstDevice	enabled

Device Details

myFirstDevice

Device Twin Message To Device Direct Method

Device ID

Primary key

Secondary key

Connection string—primary key

Connection string—secondary key

Connect device to IoT Hub

iotpay - Endpoints

Search (Ctrl+F)

IP Filter
Properties
Locks
Automation script

EXPLORERS
Device Explorer
Query Explorer

MESSAGING
File upload
Endpoints
Routes

MONITORING
Metrics
Alert rules

SUPPORT + TROUBLESHOOTING
New support request

+ Add Delete Sync prim. key Sync sec. key

Each IoT hub exposes a set of endpoints your solution back end can use to communicate with your devices

Built-in endpoints
Learn more about built-in endpoints.

NAME	ENDPOINT
Cloud to device feedback	messages/servicebound/feedback
Events	messages/events

Custom endpoints
You may have up to 10 endpoints on an IoT Hub.
Learn more about custom endpoints.

<input type="checkbox"/>	NAME	ENDPOINT TYPE	NAMESPACE/ENTITY	STATUS
<input type="checkbox"/>	alldataendp...	Event Hub	eventhubapp/allevents	Healthy.

Properties

Save Discard

Device-to-cloud settings

Partitions: 4

Event Hub-compatible name: iotpay

Event Hub-compatible endpoint: Endpoint=sb://iothub-ns-iotpay-10738...

Retention time: 1 days

Consumer groups: \$Default

iotpay - Routes

Search (Ctrl+F)

IP Filter
Properties
Locks
Automation script

EXPLORERS
Device Explorer
Query Explorer

MESSAGING
File upload
Endpoints
Routes

MONITORING
Metrics
Alert rules

SUPPORT + TROUBLESHOOTING
New support request

+ Add Delete Test all routes

Routing rules give you the flexibility to send messages where they need to go without the need for additional services or additional code.

Device messages which do not match any rules will be written to the 'Events (messages/events)' endpoint.

On Off

You may have up to 100 routes on an IoT Hub

Learn more about routes.

Search to filter routes...

<input checked="" type="checkbox"/>	NAME	FROM	WHERE
<input checked="" type="checkbox"/>	alldataroute	DeviceMessages	true

Edit a route

Learn more about setting up a route.

* Name: alldataroute

* Data source: Device Messages

* Endpoint: alldataendpoint

Enable Rule: On Off

Query string: 1 true









Test the route (optional)

```
{
  "message": {
    "systemProperties": {
      "contentType": "application/json",
      "contentEncoding": "utf-8",
      "iothub-message-source": "deviceMessages",
      "iothub-queuedtime": "2017-05-08T18:55:31.8514657Z"
    },
    "appProperties": {

```

Save

Choose your pricing and scale tier

S1 Standard	S2 Standard	S3 Standard
400k messages/unit/day	6M messages/unit/day	300M messages/unit/day
 Device-to-cloud telemetry	 Device-to-cloud telemetry	 Device-to-cloud telemetry
 Cloud-to-device messaging	 Cloud-to-device messaging	 Cloud-to-device messaging
200 units maximum	200 units maximum	10 units maximum
3,304.81 INR PER IOT HUB UNIT	33,048.13 INR PER IOT HUB UNIT	330,481.25 INR PER IOT HUB UNIT
F1 Free		
8k messages/unit/day		
 Device-to-cloud telemetry		
 Cloud-to-device messaging		
1 unit		
<p>IoT hub cannot transition between free and paid tiers.</p>		

Select



Save



Discard



IoT Hub is billed by reserved units. The maximum number of messages an IoT Hub can process per day is determined by the tier selected and number of units.



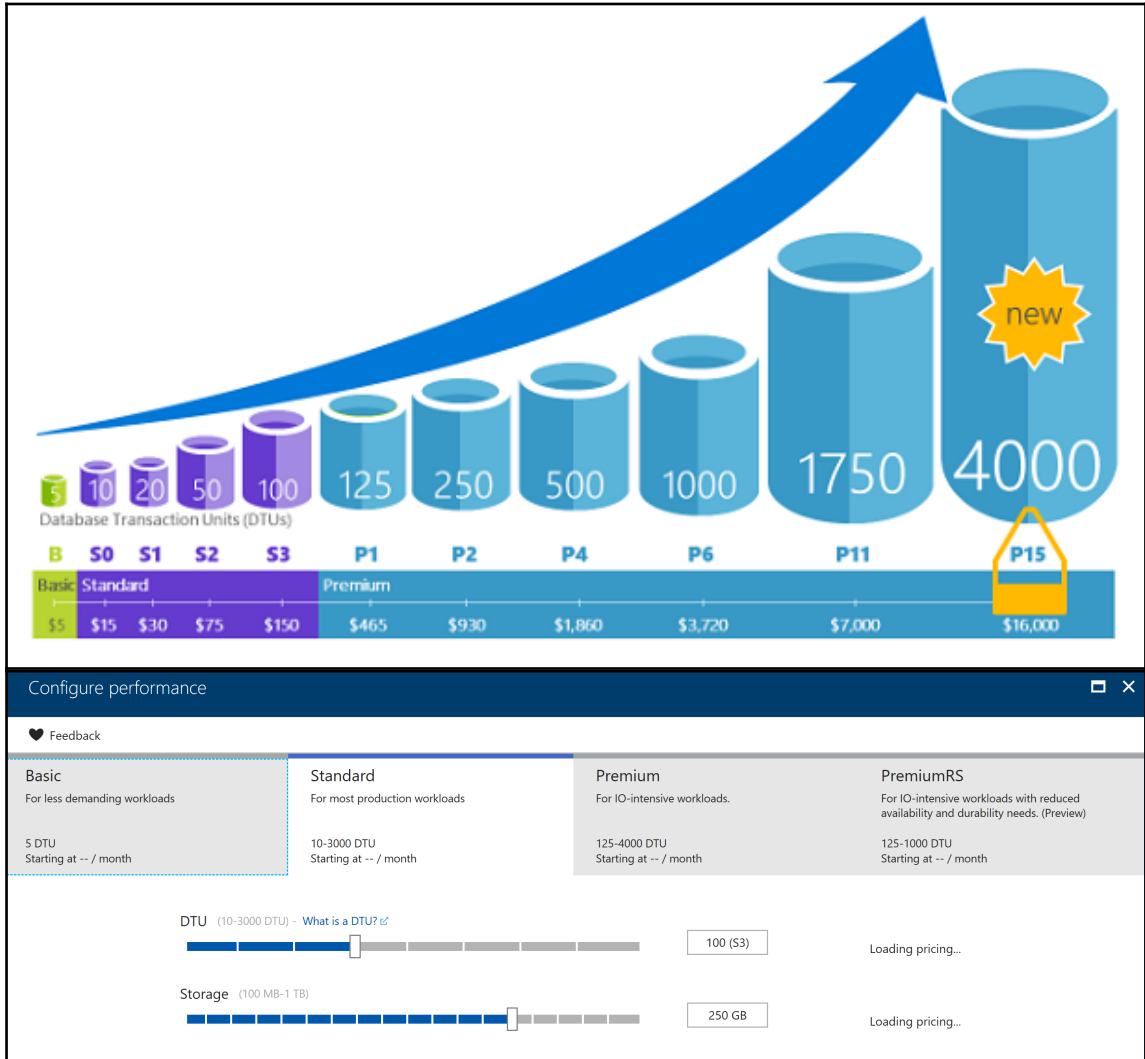
Pricing and scale tier
S1 - Standard

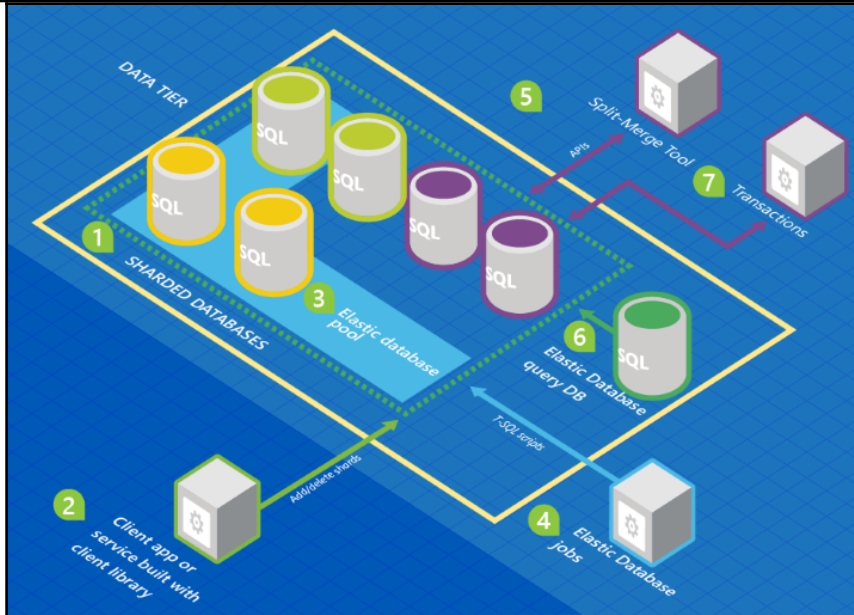
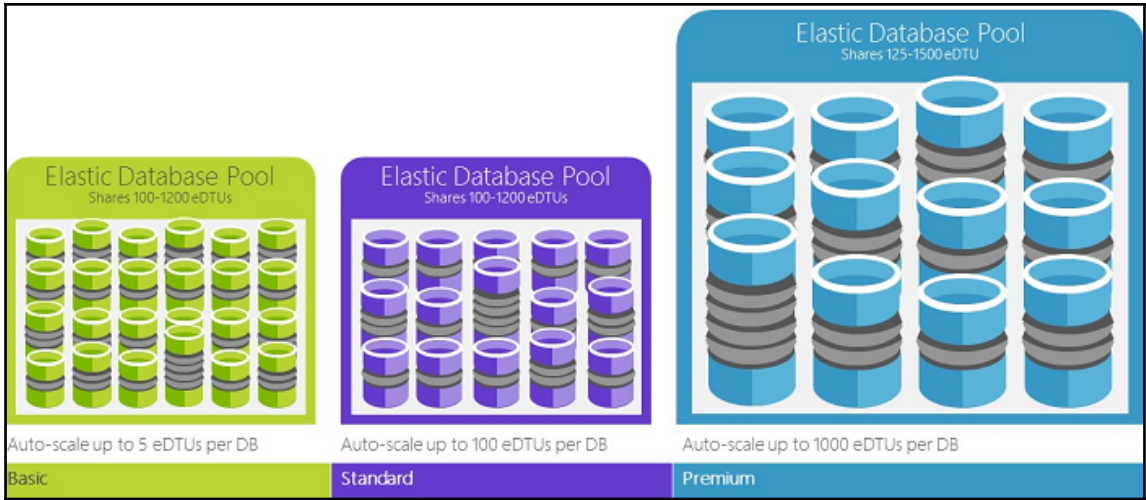


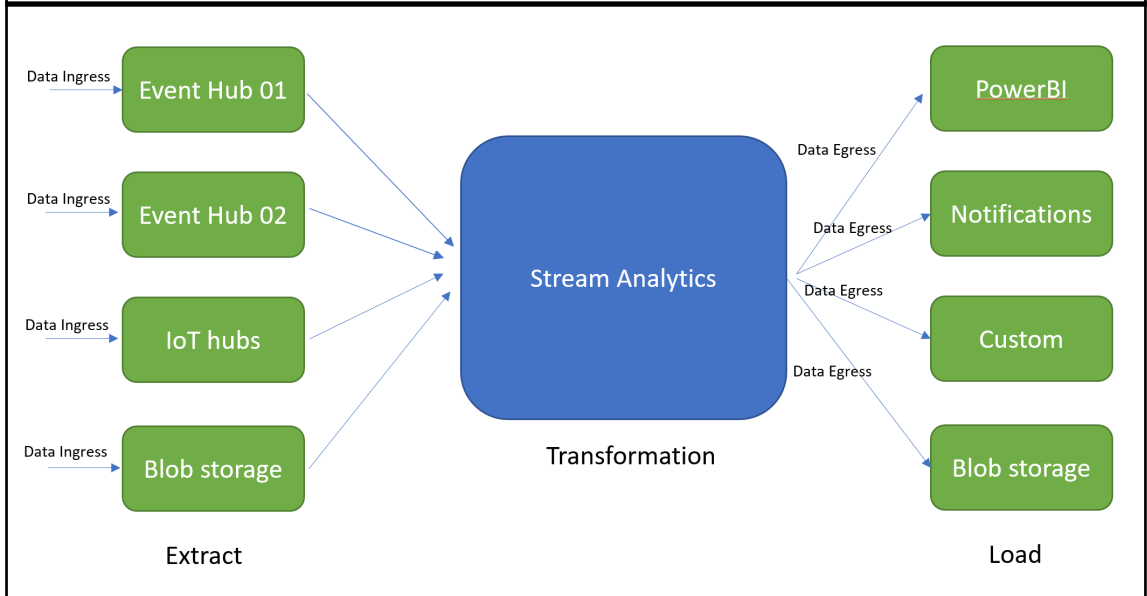
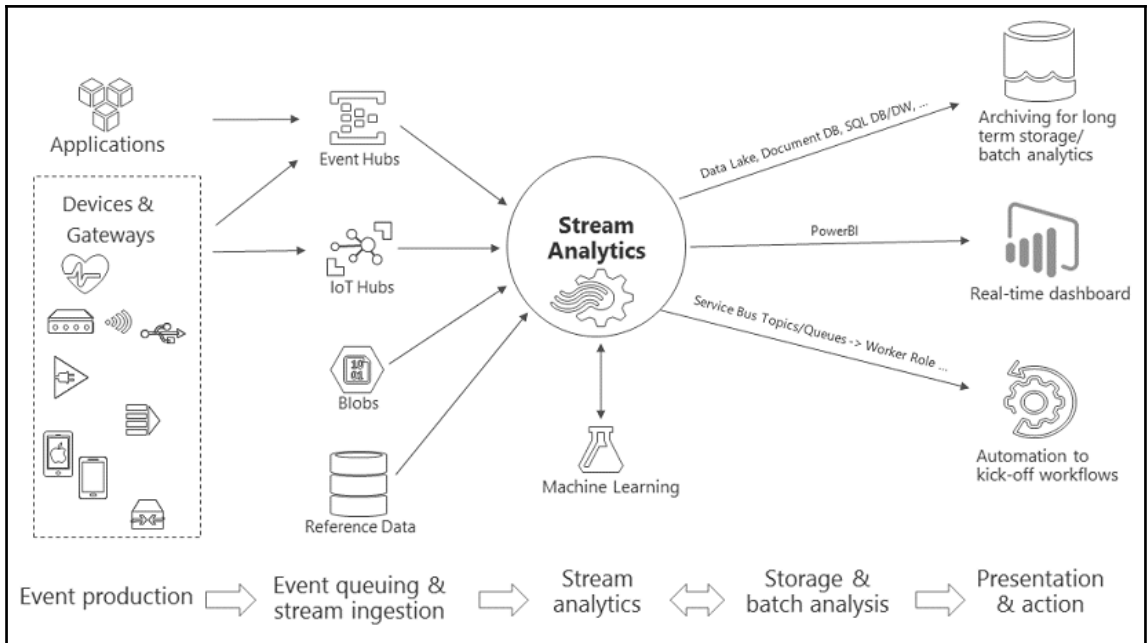
IoT Hub units ⓘ

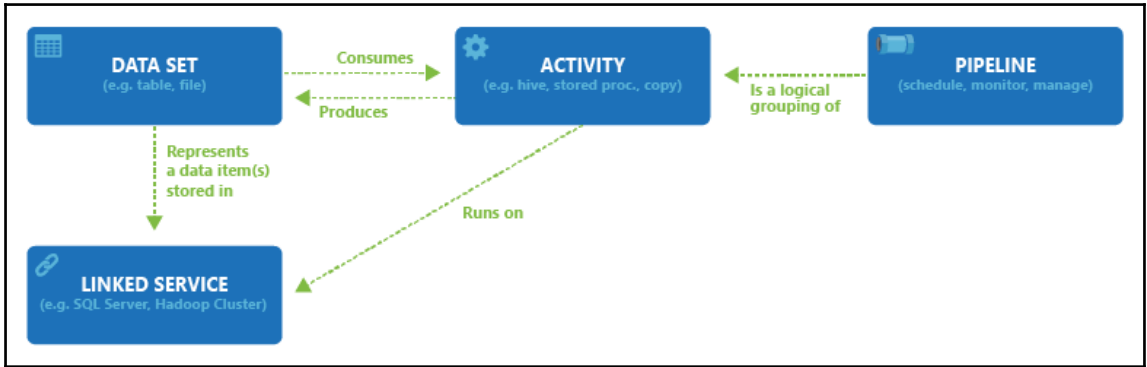
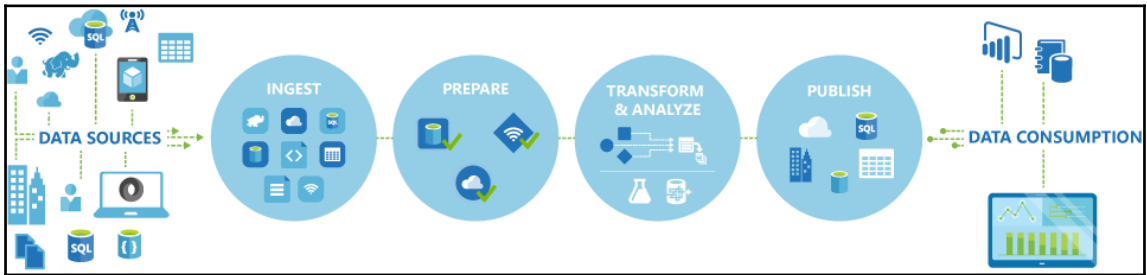
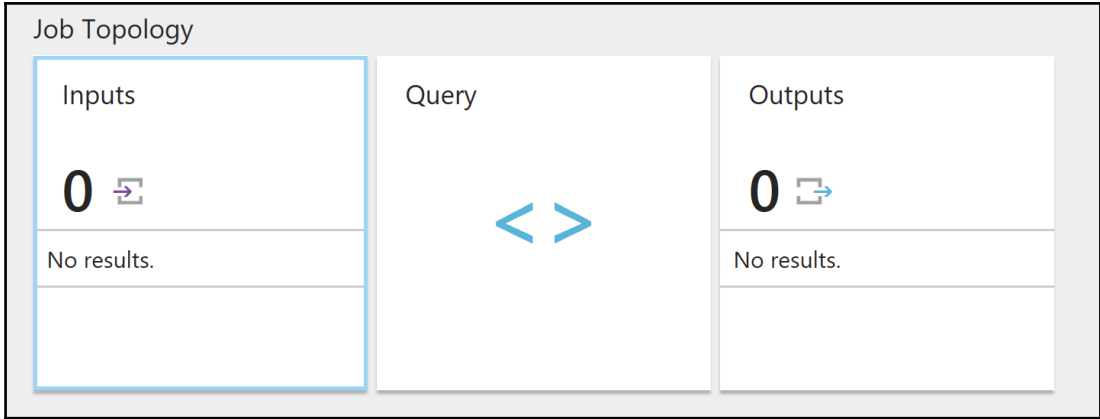





























Chapter 7: Designing and Implementing Data Solutions









								
Amazon Redshift	Amazon S3	Azure Blob Storage	Azure Data Lake Store	Azure DocumentDB	Azure SQL Database	Azure SQL Data Warehouse	Azure Table Storage	Cassandra
								
DB2	File System	FTP	HDFS	HTTP	MongoDB	MySQL	OData	ODBC
								
Oracle	PostgreSQL	Salesforce	SAP BW	SAP HANA	SFTP	SQL Server	Sybase	Teradata

Copy Data (azuredatabook)

1 **Properties**
Recurring copy

2 **Source**

- Connection
- Dataset

3 **Destination**

4 **Settings**
Fault tolerance

5 **Summary**







6 **Deployment**


Source data store

Specify the source data store for the copy task. You can use an existing data store connection or specify a new data store. Click [HERE](#) to suggest new copy sources or give comments.

FROM EXISTING CONNECTIONS

CONNECT TO A DATA STORE

		
Amazon Redshift	Amazon S3	Azure Blob Storage
		
Cassandra	DB2	File System

 **azuredatafactorybook**
Data factory
✦ ✕







🗑️ Delete ➔ Move

Essentials ^ ⚡ 👤 🏷️

Resource group allaboutdata Location EastUS Provisioning state Succeeded	Type Data factory Subscription name RiteshSubscription Subscription id 9755ffce-e94b-4332-9be8-1ade15e78909
---	--

[All settings ➔](#)

Actions

 <p>Author and deploy</p>	 <p>Copy data (PREVIEW)</p>	 <p>Monitor & Manage</p>
 <p>Sample pipelines</p>	 <p>Diagram</p>	 <p>Metrics and operations</p>

1 Properties

2 Source

3 Destination

4 Settings
Fault tolerance

5 Summary

6 Deployment

Properties

Enter name and description for the copy data task and specify how often you want to run the task.

Task name **(required)** ⓘ

Task description

Task cadence or Task schedule
 Run once now
 Run regularly on schedule

Recurring pattern
 every day

Start date time (UTC)

End date time (UTC)

1 Properties
Recurring copy

2 Source

- ✓ Connection
- Dataset

3 Destination

4 Settings
Fault tolerance

5 Summary

6 Deployment

Specify the Azure Blob storage account

Connection name *(required)* ⓘ

Account selection method *(required)* ⓘ

Azure subscription *(required)* ⓘ

Storage account name *(required)*

1 Properties
Recurring copy

2 Source

- ✓ Connection
- Dataset

3 Destination

4 Settings
Fault tolerance

5 Summary

6 Deployment

Choose the input file or folder

Select or specify a source folder or file to be copied to the destination data store.

File or folder

↑ orders>

- cChoco.zip
- users.csv



users - Notepad

File Edit Format View Help

ID, FirstName, LastName, Salary

1,Ritesh, Modi, 10000

2, AAA, XXX, 20000

3, BBB, YYY, 30000

4, CCC, ZZZ, 40000

1 Properties
Recurring copy

2 Source

- ✓ Connection
- Dataset

3 Destination

4 Settings
Fault tolerance

5 Summary

6 Deployment

File format settings

File format i
Text format ▼

Column delimiter i
Comma (,) ▼

Use custom delimiter

Row delimiter i
Carriage Return + Line feed (\r\n) ▼

Use custom delimiter

Skip line count i
0











- The first data row contains column names
- Treat empty column value as null

▼ Advanced settings

Destination data store

Specify the destination data store for the copy task. You can use an existing data store connection or specify a new data store. Click [HERE](#) to suggest new copy destinations or give comments.

FROM EXISTING CONNECTIONS CONNECT TO A DATA STORE

 Azure Blob Storage	 Azure Data Lake Store	 Azure DocumentDB	 Azure SQL Database	 Azure SQL Data Warehouse	 Azure Table Storage	 Azure Search	 File System
 Oracle	 SQL Server						

Specify the Azure Blob storage account

Connection name (required)



Destination-BlobStorage-syx

Account selection method (required)



From Azure subscriptions



Azure subscription (required)



Select all



Storage account name (required)

test2451835d



Choose the output file or folder

Specify a folder that will contain output files or a specific output file in the destination data store.

Folder path

Filename

You can use variables in the folder path to copy data from a folder that is determined at runtime. Make sure that you select a folder with that structure using the Browse button first. The supported variables are: {year}, {month}, {day}, {hour}, {minute} and {custom}. See [Data Movement Activities](#) article for details about these variables. Example: inputfolder/{year}/{month}/{day}.

Compression type



None




Copy behavior




Merge files




File format settings


File format 


Text format 

Column delimiter 


Comma (,) 

Use custom delimiter


Row delimiter 


Carriage Return + Line feed (\r\n) 

Use custom delimiter

Add header to file 

^ Advanced settings

Escape character 

Quote character 

Null value 

\N

Encoding name 

- 1 **Properties**
Recurring copy
- 2 **Source**
Azure Blob Storage
- 3 **Destination**
Azure Blob Storage
- 4 **Settings**
- 5 **Summary**
- 6 **Deployment**

Settings

More options for data movement

^ **Fault tolerance settings**

Error handling for incompatible rows between source and destination ⓘ

Actions

Abort copy activity on first incompatible row (cc) ▾

^ **Performance settings**

^ **Advanced settings**

Parallel copy ⓘ

Cloud units

Auto ▾

Summary

You are running scheduled pipeline to copy data from Azure Blob Storage to Azure Blob Storage.



Properties

[Edit](#)

Task name	CopyPipeline-syx
Task description	<no description has been provided>
Task cadence	Daily, every 1 day between Thu, 05 Oct 2017 12:14:16 GMT and Thu, 31 Dec 2099 05:00:00 GMT

Source

[Edit](#)

Connection	Account: incomingfiles
Connection name	Source-BlobStorage-syx
Dataset name	InputDataset-syx
Blob path	orders
Region	West Central US
Minimum size in MB	
Incremental updates	Not enabled
Data delay	00:00:00
Maximum retry	
Retry interval	00:00:00
Retry timeout	00:00:00

Destination

[Edit](#)

Connection	Account: test2451835d
Connection name	Destination-BlobStorage-syx

[Previous](#)[Next](#)

- 1
- Properties
Recurring copy
- 2
- Source
Azure Blob Storage
- 3
- Destination
Azure Blob Storage
- 4
- Settings
Fault tolerance, Performance
- 5
- Summary
- 6
- Deployment

Azure Blob Storage orders

Region: West Central US

Copy Run Time Region: South Central US →

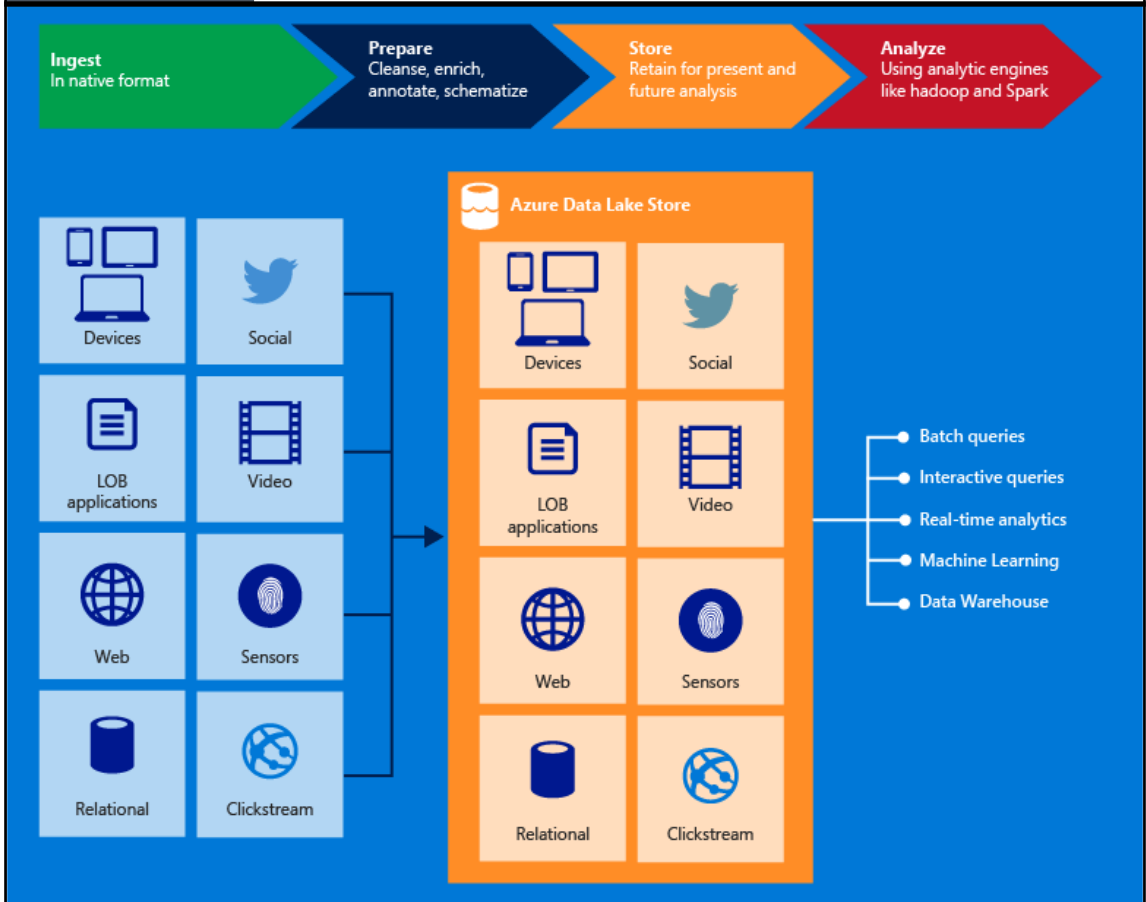
Azure Blob Storage orders

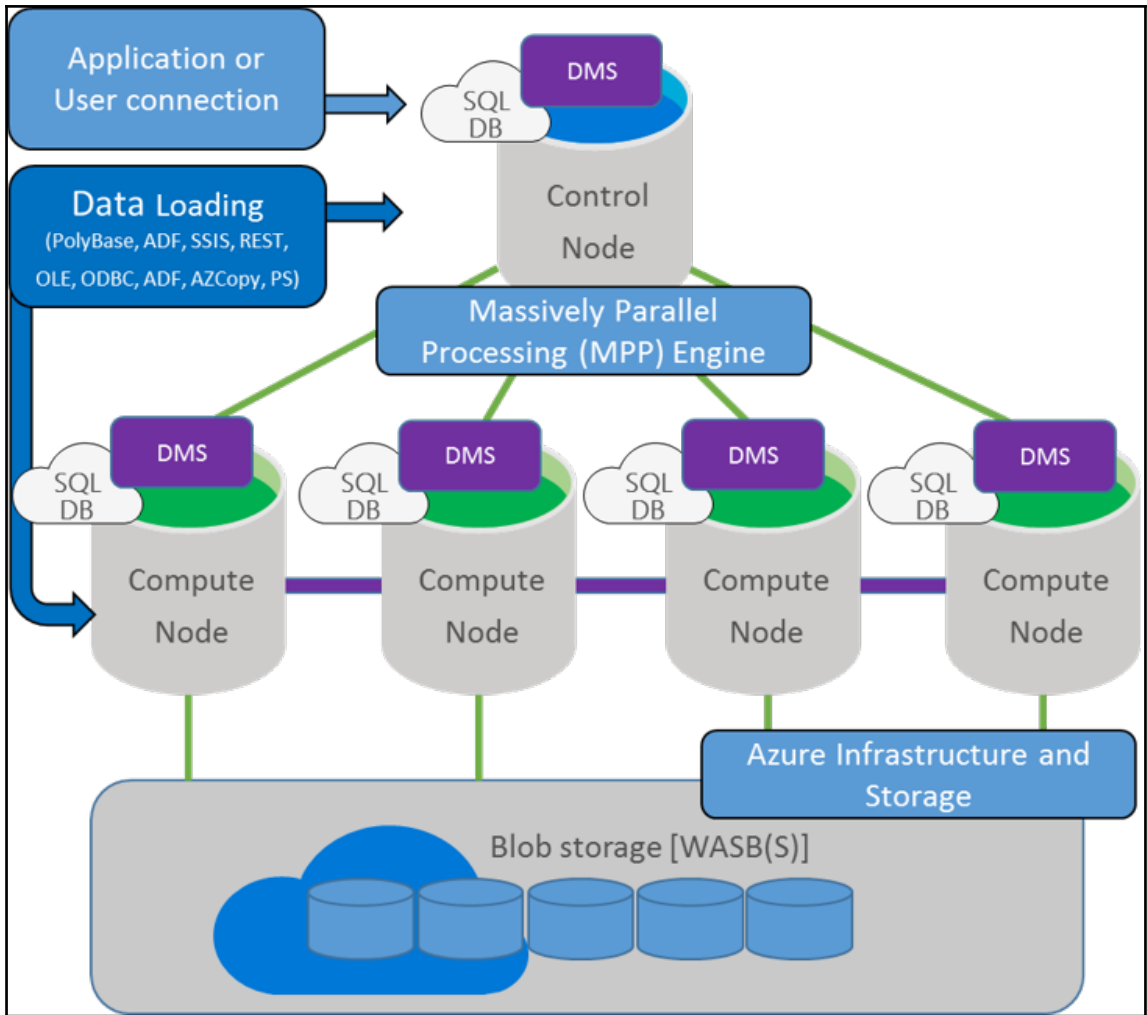
Region: South Central US

Deployment complete

- ^ Validating runtime environment ✓
Validation passed ✓
- v Registering Connections ✓
- v Creating Datasets ✓
- v Creating Pipelines ✓

[Click here to monitor copy pipeline](#)





Configure Performance

Feedback

Optimized for Elasticity

Separates compute and storage for independent, elastic sizing of resources. Designed for frequent scaling operations to manage compute spend and cloud "burst" scenarios. Offers lowest starting scale point.

Starting at 99.94 INR / hour

[Learn more about performance tiers](#)

Scale your system

(DW400)

Optimized for Compute (Preview)

Automatically tiers storage to deliver enhanced performance for workloads with consistent compute requirements. Designed for intensive workloads that require query performance and compute scalability needs.

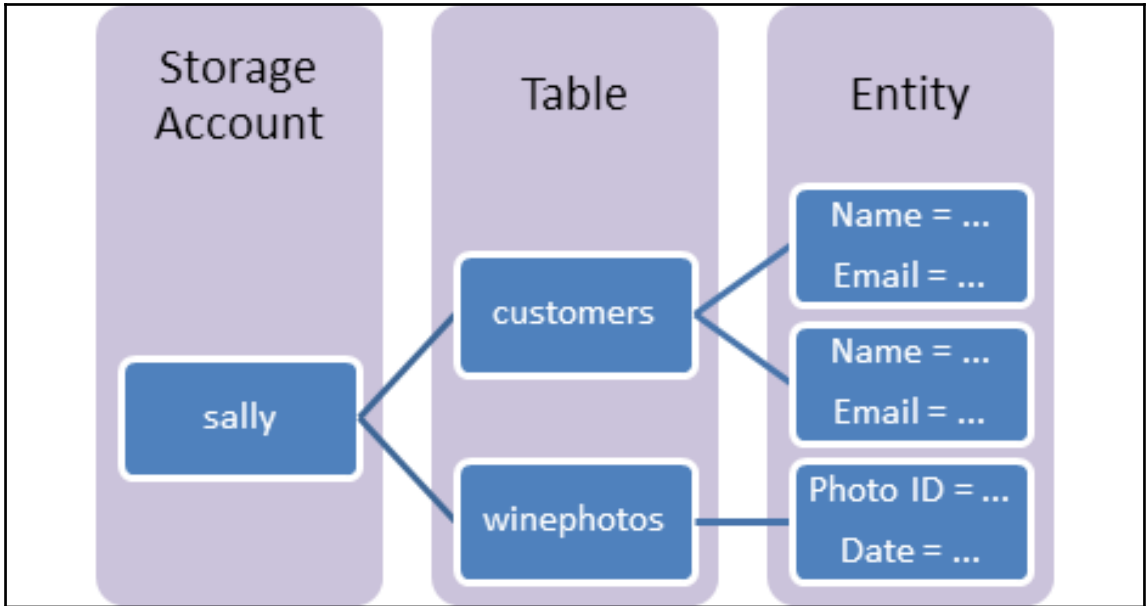
Starting at 49.97 INR / hour

[Learn more about pricing](#)

Price of your system

399.78 INR / hour

400 DWU



Chapter 8: Designing and Implementing Serverless Solutions

This screenshot shows the configuration page for an Azure Queue Storage trigger. The left-hand navigation pane displays the hierarchy: "AzureforArchitects" > "Functions" > "Integrate". The main content area is divided into three sections: Triggers, Inputs, and Outputs. Under the "Triggers" section, the "Azure Queue Storage (checkOut)" trigger is selected. Below this, the configuration fields are: "Message parameter name" set to "checkOut", "Queue name" set to "checkout-items", and "Storage account connection" set to "AzureWebJobsDashboard".

This screenshot shows the configuration page for an Azure Table Storage output. The left-hand navigation pane is the same as in the previous screenshot. In the main content area, the "Outputs" section is active, and "Azure Table Storage (Orders)" is selected. The configuration fields are: "Table parameter name" set to "Orders", "Table name" set to "OrderDetails", and "Storage account connection" set to "AzureWebJobsStorage". There is also an unchecked checkbox for "Use function return value".

AzureforArchitects - FirstFunction
Function Apps

For a richer monitoring experience, including live metrics and custom queries, we recommend using Azure Application Insights.

Success count since Sep 1st

1

Error count since Sep 1st

0

Invocation log [Refresh](#) live event stream

Function	Status	Details: Last ran	(duration)
FirstFunction (Method: GET, Uri: ...)	✓	2 hours ago	(1,572 ms)

Invocation details

Parameter

```

req      Method: GET, Uri:
         https://azureforarchitects.azurewebsites.net/api/FirstFunction
_log
_binder
_context ac42bcdd-ae49-40a8-a3cb-3cf8d615d356
_logger
$return  response

```

Logs

Authentication / Authorization

Save Discard

App Service Authentication

Off On

Action to take when request is not authenticated

Allow Anonymous requests (no action)

Authentication Providers

- Azure Active Directory
Not Configured
- Facebook
Not Configured
- Google
Not Configured
- Twitter
Not Configured
- Microsoft
Not Configured

Advanced Settings

Token Store Off On

Search: "AzureforArchitects" ✖

All subscriptions: All subscriptions

Function Apps

- AzureforArchitects
 - Functions
 - FirstFunction
 - Integrate
 - Manage**
 - Monitor
 - QueueTriggerCSharp1
 - Integrate
 - Manage
 - Monitor
 - Proxies (preview)
 - Slots (preview)

Function State

Enabled Disabled 🗑️ Delete function

Function Keys

NAME	VALUE	ACTIONS
default	Click to show	📄 Copy 🔄 Renew ✖ Revoke

➕ Add new function key

Host Keys (All functions)

NAME	VALUE	ACTIONS
_master	Click to show	📄 Copy 🔄 Renew
default	Click to show	📄 Copy 🔄 Renew ✖ Revoke

➕ Add new host key

Search: "storefunc" ✖

All subscriptions: All subscriptions

Function Apps

- storefunc
 - Functions
 - eventGridTest
 - Integrate
 - Manage
 - Monitor
 - Proxies (preview)
 - Slots (preview)

Overview **Platform features** ⚙️ Function app settings ✖

Search features

GENERAL SETTINGS

- Function app settings ⓘ
- Application settings ⓘ
- Properties
- Backups
- All settings

CODE DEPLOYMENT

- Deployment options
- Deployment credentials

DEVELOPMENT TOOLS

- Console
- Advanced tools (Kudu)
- App Service Editor
- Resource Explorer
- Extensions

NETWORKING

- Networking
- SSL
- Custom domains
- Authentication / Authorization
- Managed service identity
- Push notifications

MONITORING

- Diagnostics
- Log streaming
- Process explorer
- Security scanning

API

- API definition ⓘ
- CORS

APP SERVICE PLAN

- App Service plan
- Quotas

RESOURCE MANAGEMENT

- Activity log
- Access control (IAM)
- Tags
- Locks
- Automation script

storefunc
Function Apps

Overview
Platform features
Function app settings ✕
Application settings ✕

✕

Function Apps

storefunc ↻ >>

Functions +

eventGridTest

Integrate

Manage

Monitor

Proxies (preview) +

Slots (preview) +

Daily Usage Quota (GB-Sec) ⓘ

Application settings
Manage application settings

Runtime version
Runtime version: 1.0.11184.0 (~1)

Proxies (preview)
Enable Azure Functions Proxies (preview)

Off
 On

Function app edit mode
Change the edit mode of your function app

Slots (preview)
Enable deployment slots (preview). This is a one-time opt-in on the Function app that cannot be disabled and will reset any pre-existing secrets. After the update, the secrets may be copied from under the **'Manage' node for each function.**

Off
 On

Host Keys (All functions)

NAME	VALUE	ACTIONS
_master	Click to show	<input type="button" value="Copy"/> <input type="button" value="Renew"/>
default	Click to show	<input type="button" value="Copy"/> <input type="button" value="Renew"/> <input type="button" value="Revoke"/>

Function App ✕

Create

* App name
 ✓
.azurewebsites.net

* Subscription
 ▼

* Resource Group ⓘ
 Create new Use existing
 ▼

* Hosting Plan ⓘ
 ▼

* Location
 ▼

* Storage ⓘ
 Create New Select Existing
 ✓

Application Insights ⓘ

Pin to dashboard

[Automation options](#)

AzureforArchitects
Function Apps


Overview Platform features

Stop Swap Restart Download publish profile Reset publish credentials Download app content Delete

Status	Subscription	Resource group	URL
Running	RiteshSubscription	storerg2	https://azureforarchitects.azurewebsites.net
	Subscription ID	Location	App Service plan / pricing tier
	9755ffce-e94b-4332-9be8-1ade15e78909	South Central US	SouthCentralUSPlan (Consumption)

Configured features

- Function app settings
- Application settings



Get started quickly with a premade function

1. Choose a scenario

</>

Webhook + API

⌚

Timer

🗄️

Data processing

2. Choose a language

CSharp JavaScript FSharp

For PowerShell, Python, and Batch, create your own custom function.

[Create this function](#)

or

Get started on your own

Custom function

Start from source control

Choose a template below or [go to the quickstart](#)

Language: Scenario:

HttpTrigger - C# A C# function that will be run whenever it receives an HTTP request	HttpTrigger - F# An F# function that will be run whenever it receives an HTTP request	HttpTrigger - JavaScript A JavaScript function that will be run whenever it receives an HTTP request	TimerTrigger - C# A C# function that will be run on a specified schedule	TimerTrigger - F# An F# function that will be run on a specified schedule
TimerTrigger - JavaScript A JavaScript function that will be run on a specified schedule	QueueTrigger - C# A C# function that will be run whenever a message is added to a specified Azure Queue Storage	QueueTrigger - F# An F# function that will be run whenever a message is added to a specified Azure Queue Storage	QueueTrigger - JavaScript A JavaScript function that will be run whenever a message is added to a specified Azure Queue Storage	BlobTrigger - C# A C# function that will be run whenever a blob is added to a specified container

Choose a template below or [go to the quickstart](#)

Language: Scenario:

HttpTrigger - PowerShell (Preview) A PowerShell function that will be run whenever it receives an HTTP request	TimerTrigger - PowerShell (Preview) A PowerShell function that will be run on a specified schedule	QueueTrigger - PowerShell (Preview) A PowerShell function that will be run whenever a message is added to a specified Azure Queue Storage
--	--	---

This template is experimental and does not yet have full support. If you run into issues, please file a bug on our [GitHub repository](#).

Name your function

HTTP trigger

Authorization level ⓘ

The screenshot shows the Azure portal interface for a function app named 'FirstFunction'. The code editor contains the following PowerShell script:

```

1 # POST method: $req
2 $requestBody = Get-Content $req -Raw | ConvertFrom-Json
3 $name = $requestBody.name
4
5 # GET method: each querystring parameter is its own variable
6 if ($req_query_name)
7 {
8     $name = $req_query_name
9 }
10
11 Out-File -Encoding Ascii -FilePath $res -inputObject "Hello $name"
12

```

On the right side, there is a file explorer showing 'function.json' and 'run.ps1' files.

The screenshot shows a web browser with the address bar containing the URL: `azureforarchitects.azurewebsites.net/api/FirstFunction?name=ritesh`. The browser's response area displays the text: `"Hello ritesh\r\n"`.

The screenshot shows the 'function.json' file in the Azure portal. The file content is as follows:

```

1 {
2   "bindings": [
3     {
4       "name": "req",
5       "type": "httpTrigger",
6       "direction": "in",
7       "authLevel": "anonymous"
8     },
9     {
10      "name": "res",
11      "type": "http",
12      "direction": "out"
13    }
14  ],
15  "disabled": false
16 }

```

At the top of the editor, there are buttons for 'Save' and 'Run', and a link to '</> Get function URL'.

Blob service

incomingfiles

+ Container
 Refresh

Storage account
[incomingfiles](#)

Status
Primary: Available

Location
West Central US

Subscription ([change](#))
[RiteshSubscription](#)

Subscription ID
9755ffce-e94b-4332-9be8-1ade15e78909

NAME
orders

Choose a template below or [go to the quickstart](#)

Language: C# Scenario: Core

HttpTrigger - C#

A C# function that will be run whenever it receives an HTTP request

TimerTrigger - C#

A C# function that will be run on a specified schedule

QueueTrigger - C#

A C# function that will be run whenever a message is added to a specified Azure Queue Storage

BlobTrigger - C#

A C# function that will be run whenever a blob is added to a specified container

EventHubTrigger - C#

A C# function that will be run whenever an event hub receives a new event

ServiceBusQueueTrigger - C#

A C# function that will be run whenever a message is added to a specified Service Bus queue

ServiceBusTopicTrigger - C#

A C# function that will be run whenever a message is added to the specified Service Bus topic

Generic Webhook - C#

A C# function that will be run whenever it receives a webhook request

GitHub Webhook - C#

A C# function that will be run whenever it receives a GitHub webhook request

HttpTriggerWithParameters - C#

A C# function that will be run whenever it receives an HTTP request

Name your function

Azure Blob Storage trigger

Path ⓘ

Storage account connection ⓘ

[show value](#)

 ▼

new

Create

run.csx Save ▶ Run

```
1 public static void Run(Stream myBlob, TraceWriter log)
2 {
3     log.Info($"C# Blob trigger function Processed blob\n \n Size: {myBlob.Length} Bytes")
4 }
5
```

Logs || Pause 🗑 Clear 📄 Copy logs 🔍 Expand ▼

```
2017-09-20T10:24:12.504 Function started (Id=ac68a8f8-712f-4df8-975e-238b0ecf5b05)
2017-09-20T10:24:12.536 C# Blob trigger function Processed blob
Size: 2480471 Bytes
2017-09-20T10:24:12.536 Function completed (Success, Id=ac68a8f8-712f-4df8-975e-238b0ecf5b05, Dur
```

Azure Cosmos DB
New account

* ID
azureforarchitects ✓
documents.azure.com

* API ⓘ
SQL (DocumentDB) ▼

* Subscription
RiteshSubscription ▼

* Resource Group ⓘ
 Create new Use existing
storerg2 ▼

* Location
South Central US ▼

Enable geo-redundancy ⓘ

Pin to dashboard

[Create](#) [Automation options](#)

Add Collection

* Collection Id ⓘ
testcollection ✓

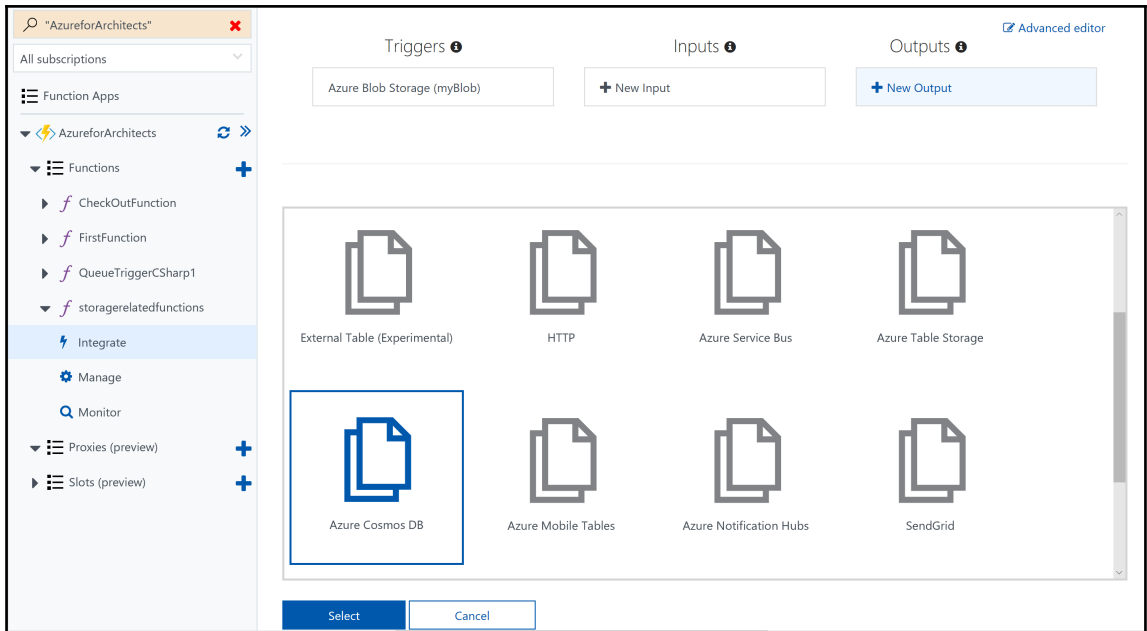
* STORAGE CAPACITY ⓘ
Fixed (10GB) Unlimited*

INITIAL THROUGHPUT CAPACITY (RU/s) ⓘ
5000 ✓ - +
Between 400 and 10000 RU/s
Estimated hourly spend 0.400 USD

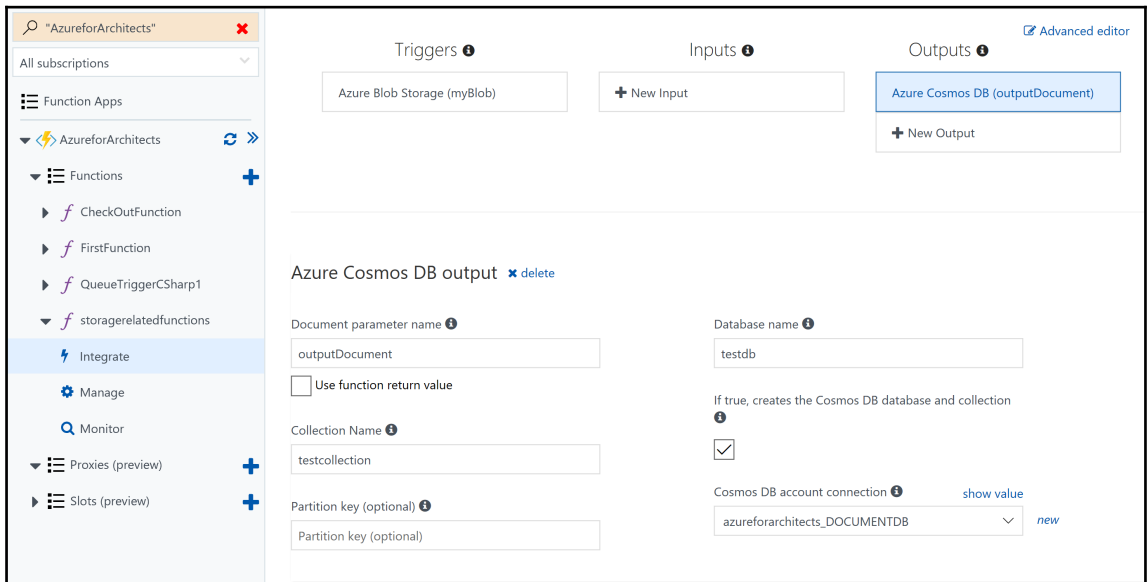
PARTITION KEY ⓘ
✓

* DATABASE ⓘ
 Create New Use existing
testdb ▼

OK



>



"AzureforArchitects" ✖

All subscriptions

Function Apps

AzureforArchitects ↻ ➤

Functions +

- ▶ f CheckOutFunction
- ▶ f FirstFunction

run.CSX Save ▶ Run

```

1 public static void Run(string myBlob, out object outputDocument, TraceWriter log)
2 {
3     log.Info($"C# blob trigger function processed: {myBlob.Length}");
4     log.Info($"C# blob trigger function processed: {myBlob}");
5     outputDocument = new {
6         id = myBlob.Length.ToString(),
7         len = myBlob.Length,
8         data = myBlob
9     };
10
11 }
12

```

+ Create ↑ Upload ⋮ More

testcollection

Documents

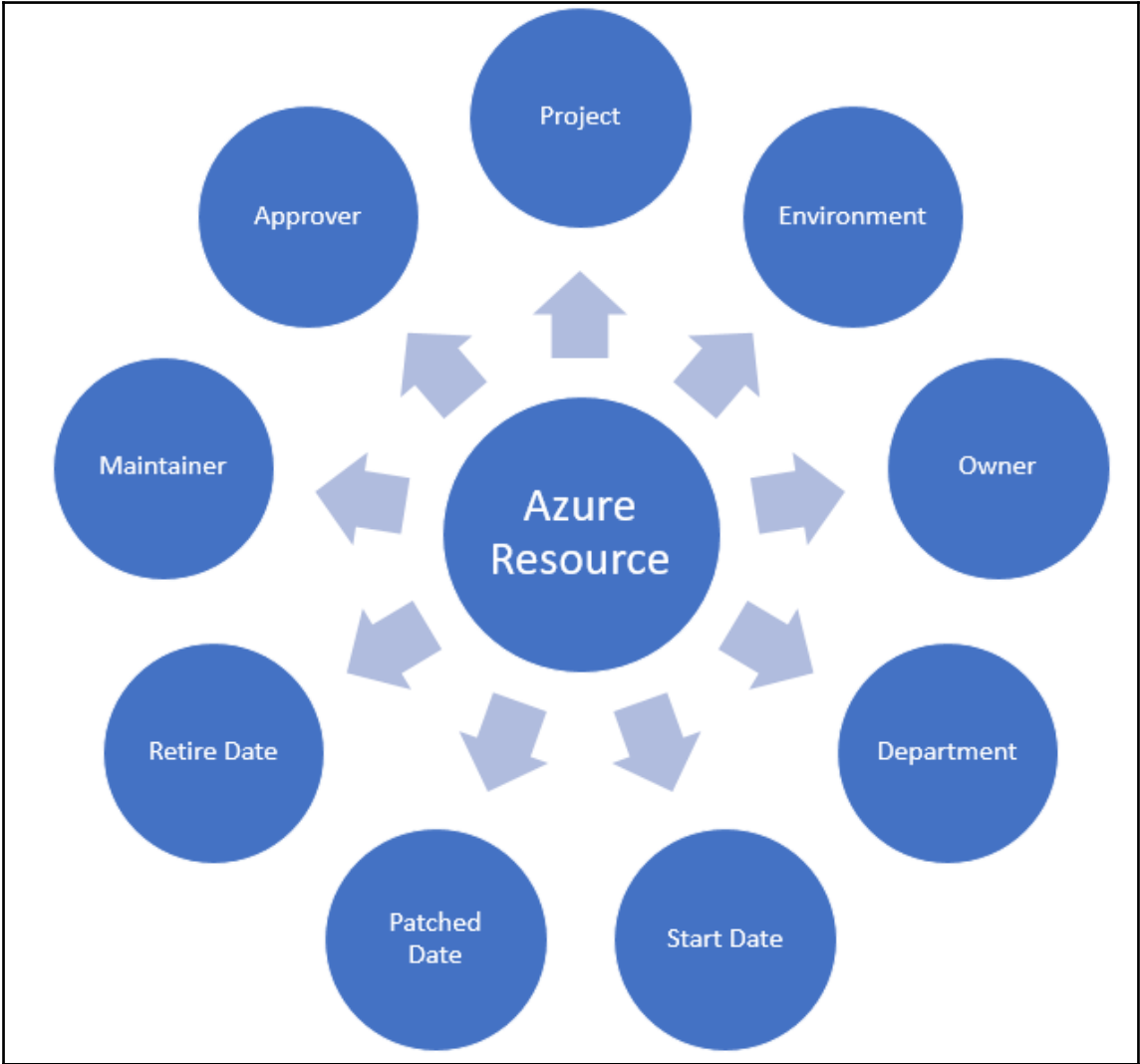
ID
137
1580
603

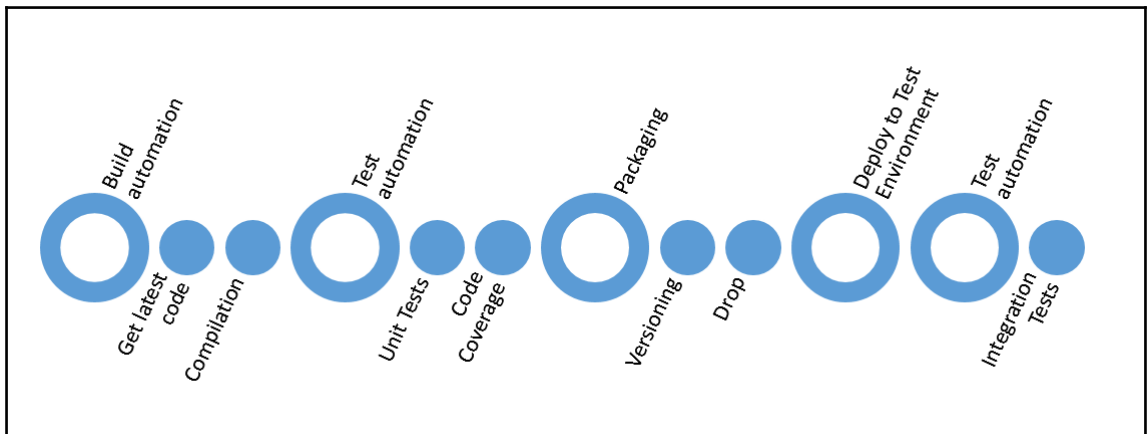
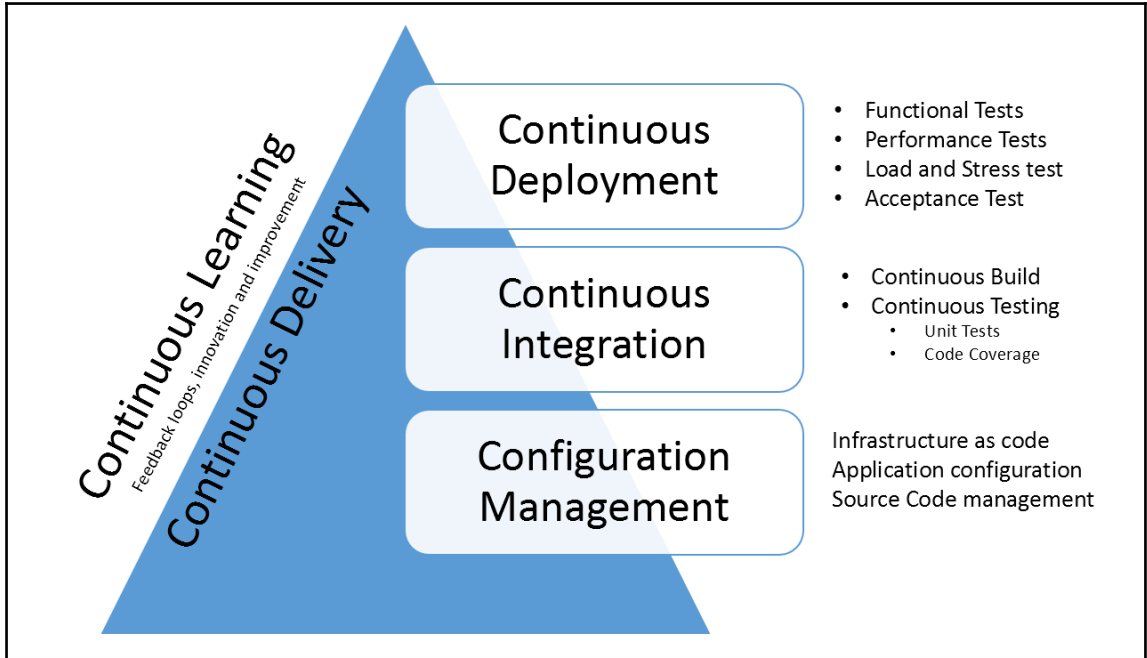
Save ↶ Discard 🗑 Delete ↻ Refresh ⋮ Properties

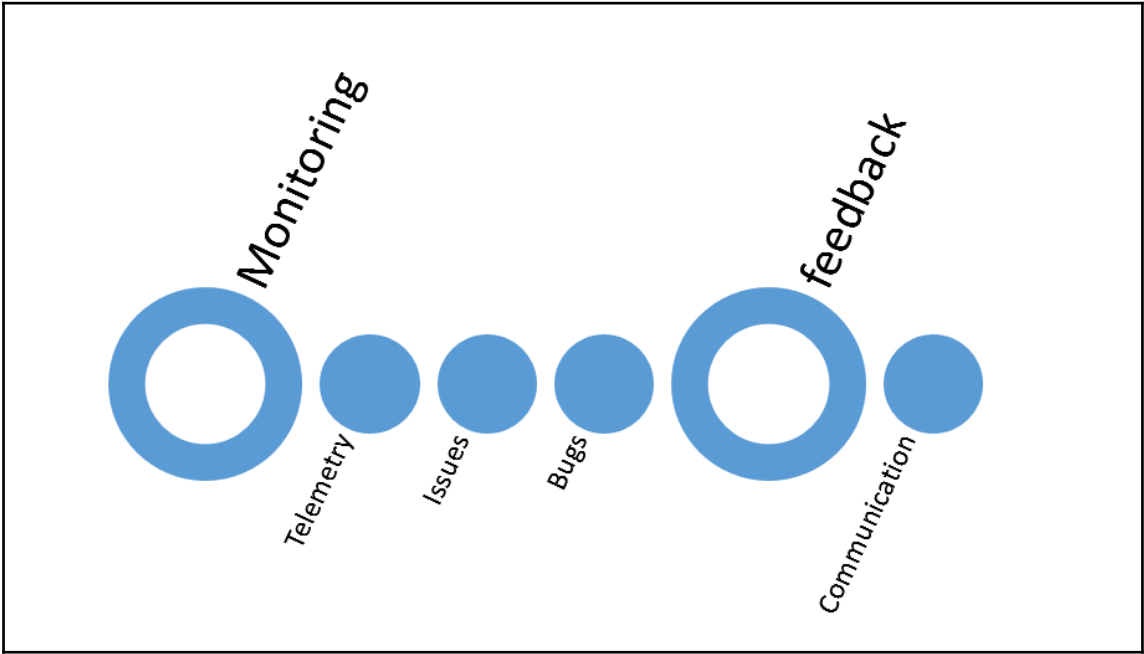
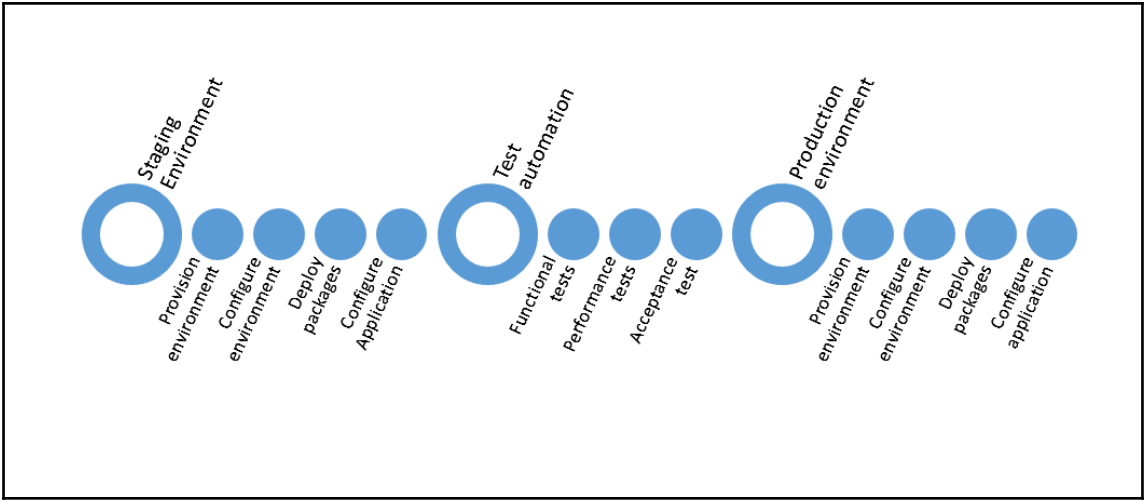
```

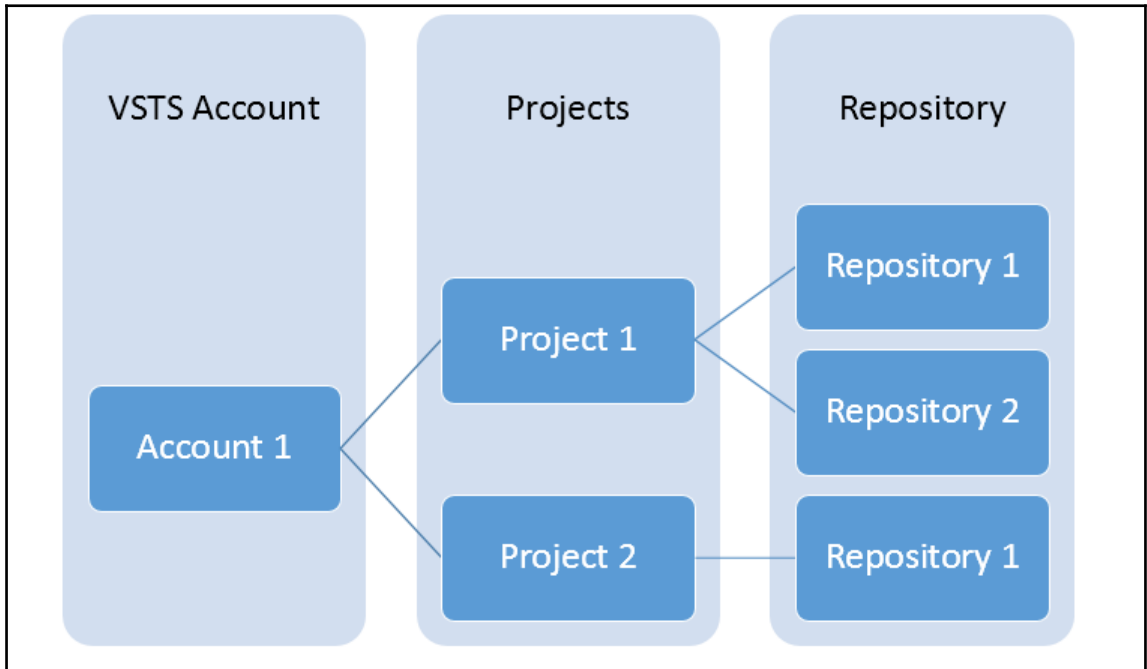
1 {
2   "id": "137",
3   "len": 137,
4   "data": "<?xml version='1.0' encoding='utf-8'>\r\n<configuration>\r\n  <Ritesh id='1'>aaaa</Ritesh>\r\n  <Ritesh id='2'>bbbb</Ritesh>\r\n</configuration>"
5 }

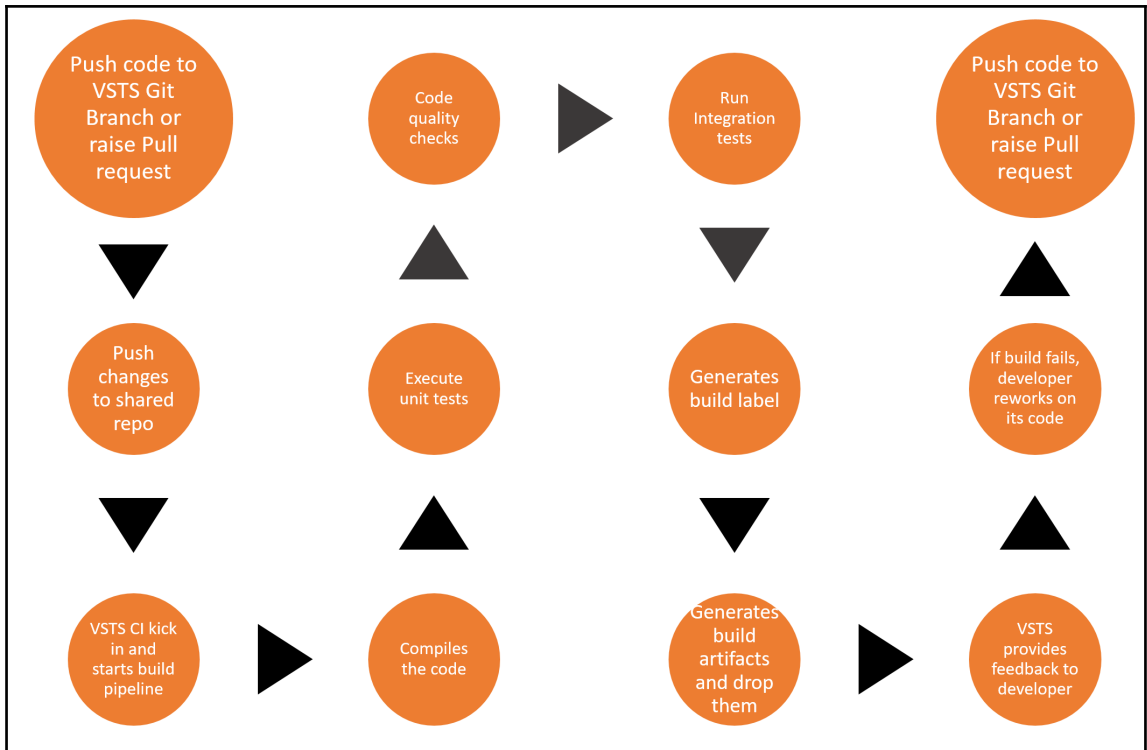
```

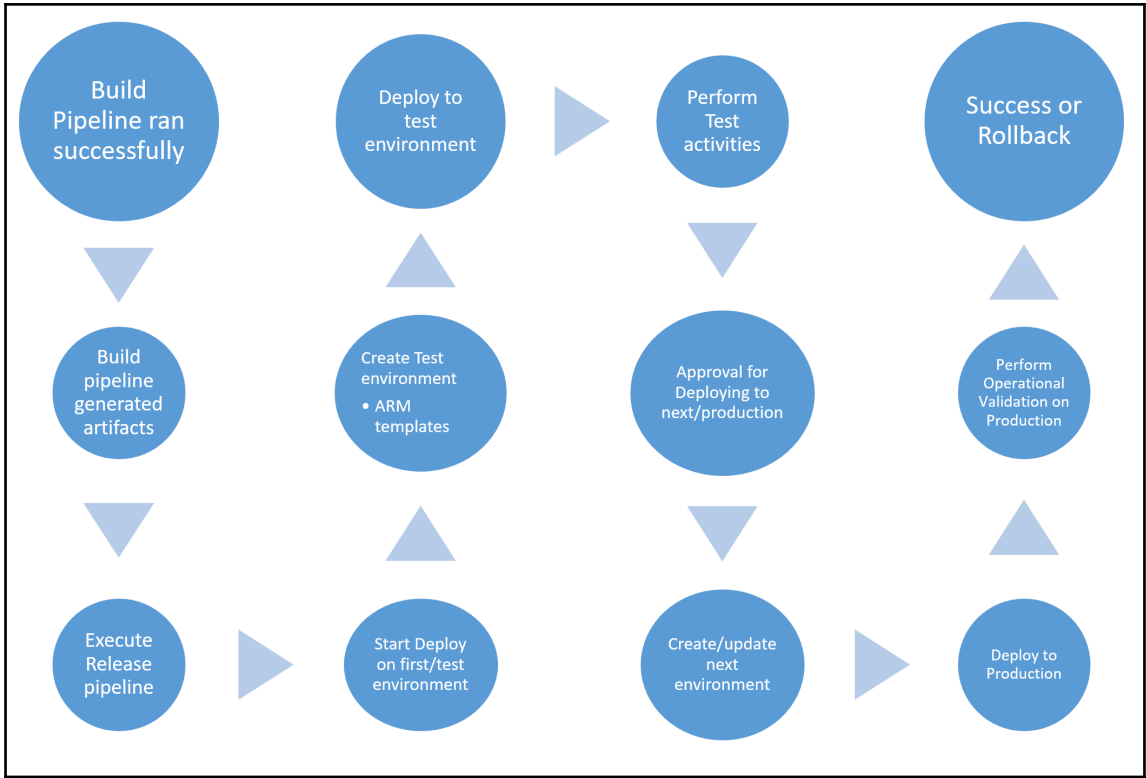


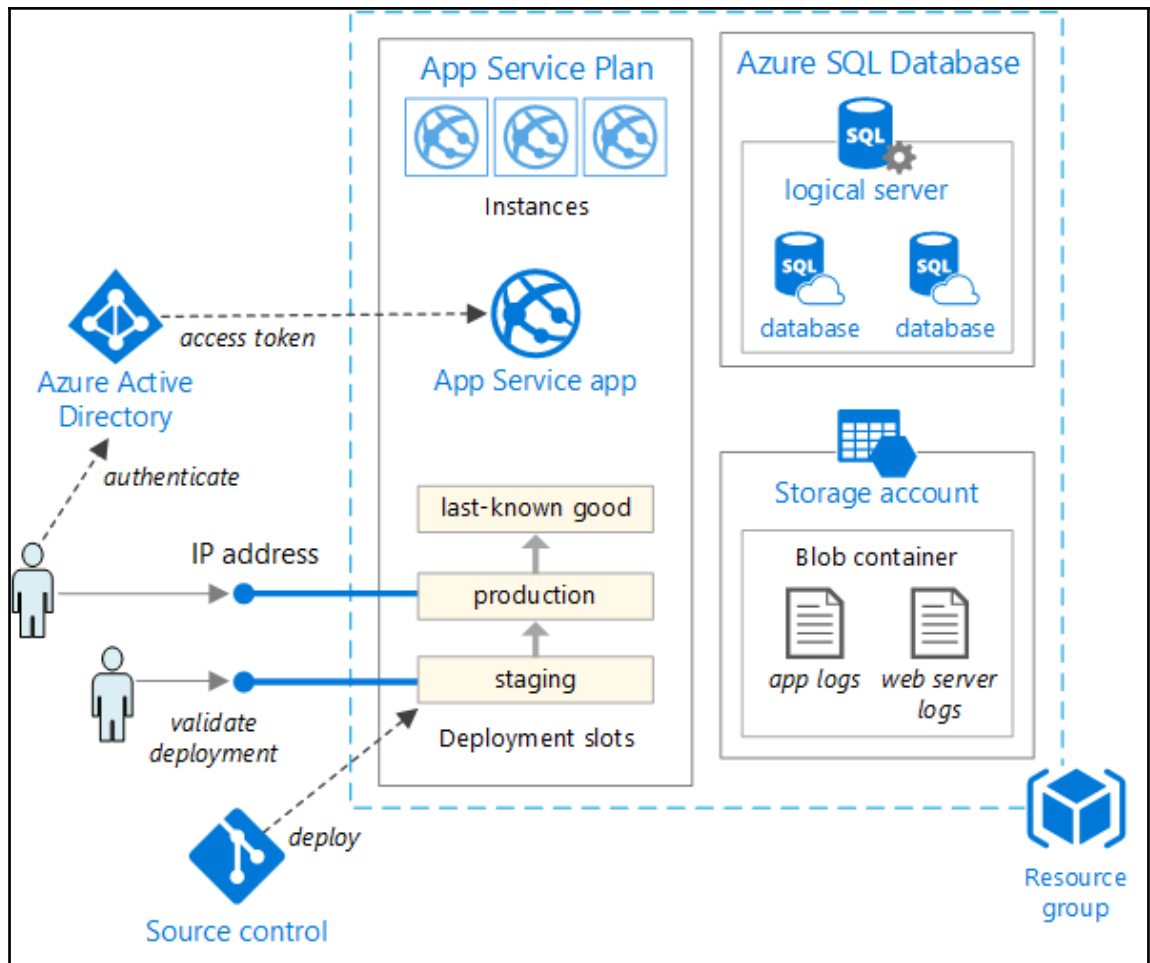


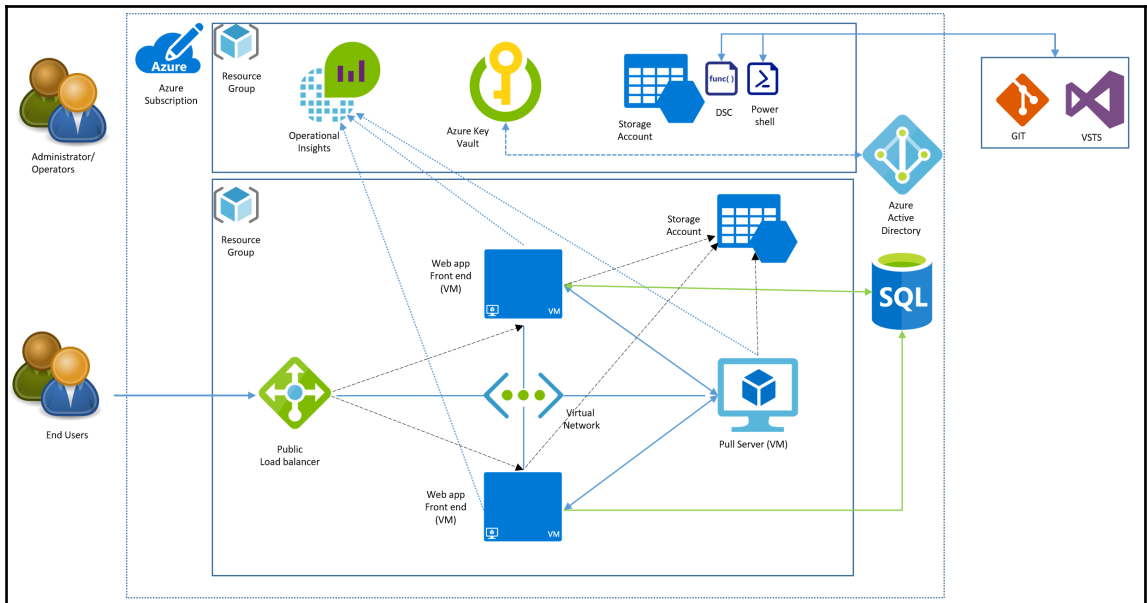
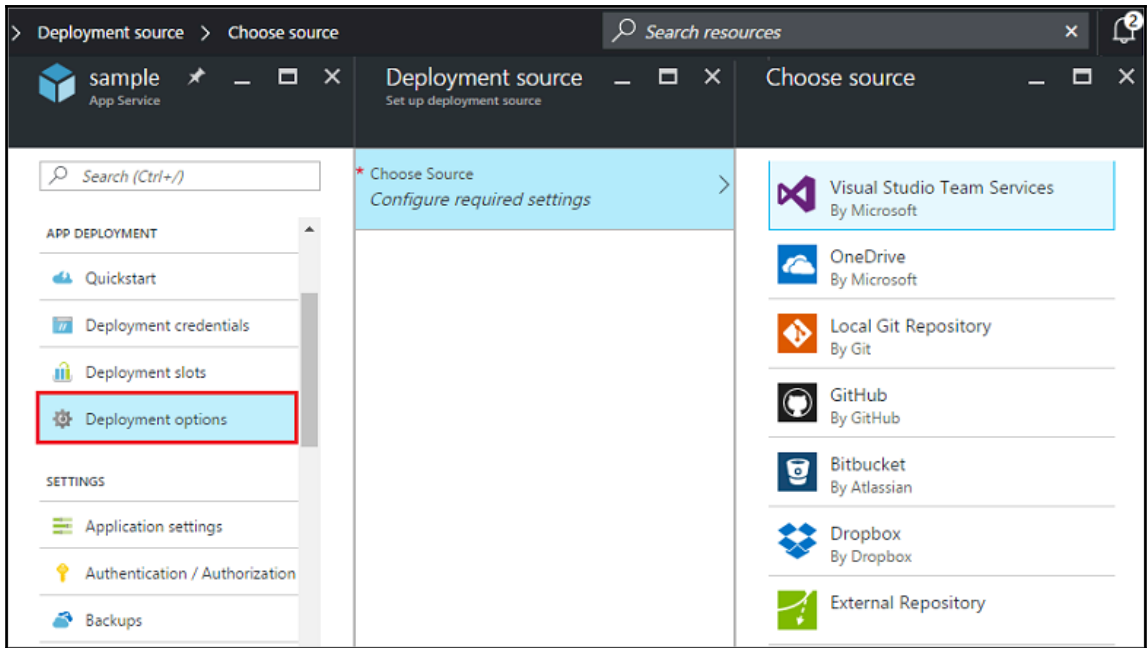


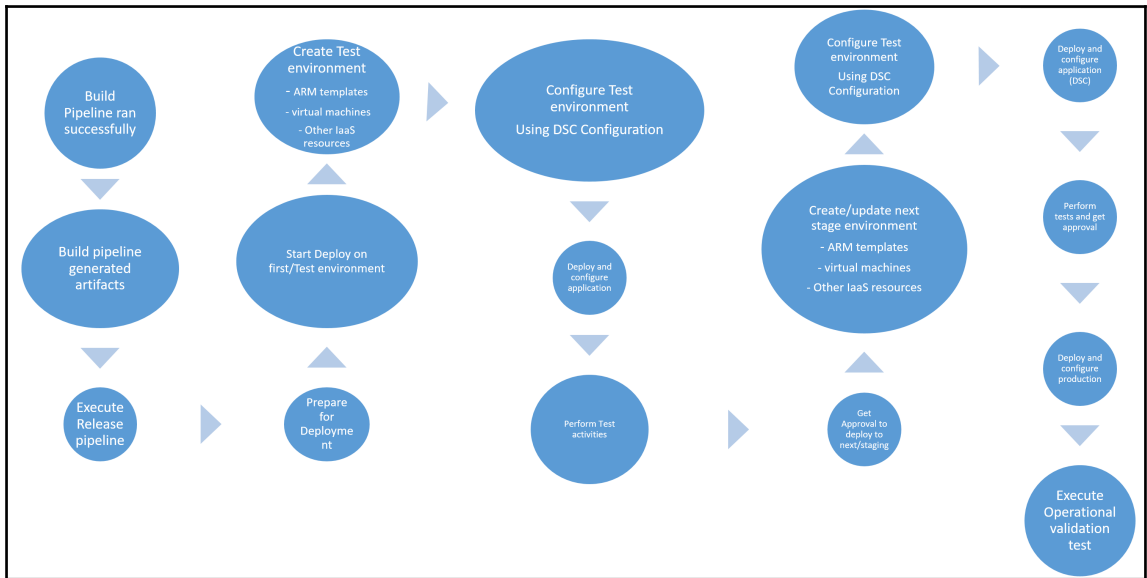
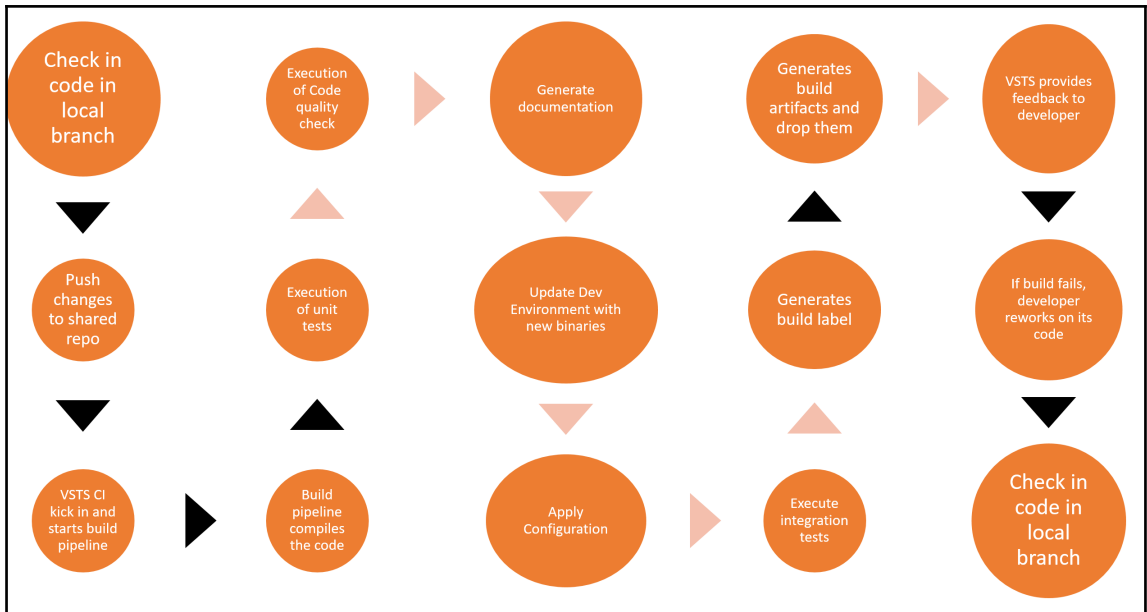


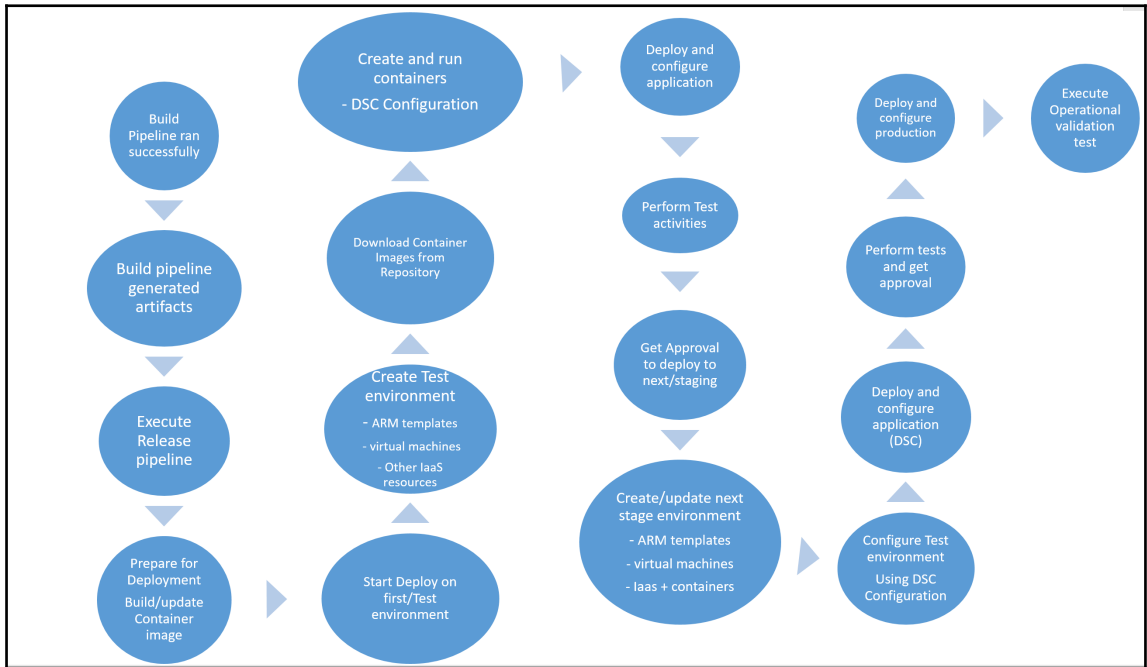
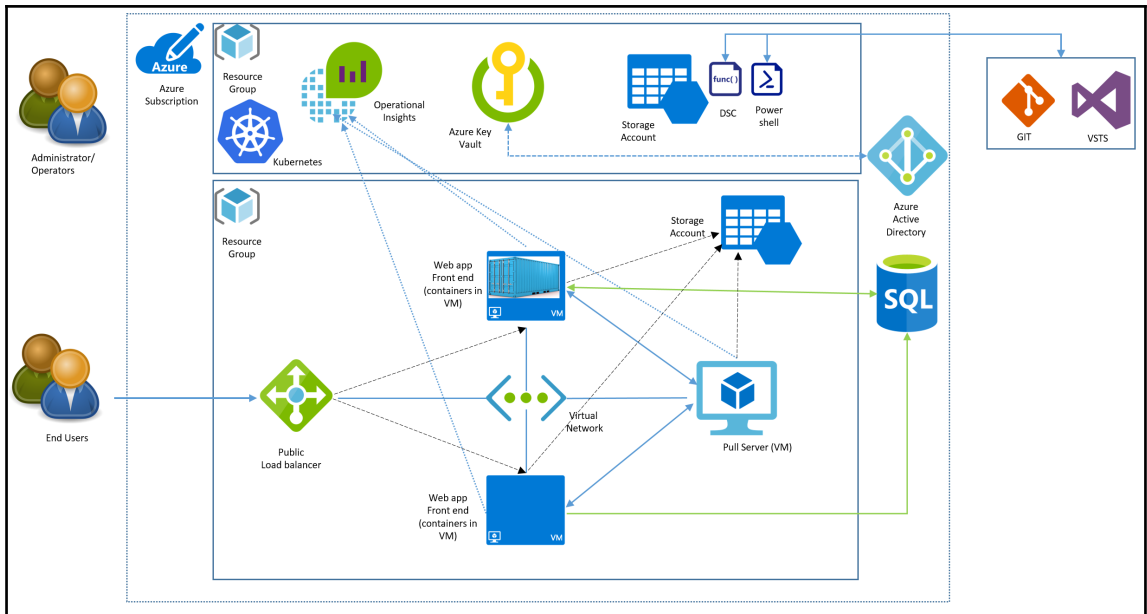












datacenterautomation
Automation Account

Search (Ctrl+/)

- Overview
- Activity log
- Access control (IAM)
- Tags
- Diagnose and solve problems

CONFIGURATION MANAGEMENT

- Inventory (Preview)
- Change tracking (Preview)
- DSC nodes
- DSC configurations
- DSC node configurations

UPDATE MANAGEMENT

- Update management (Preview)

PROCESS AUTOMATION

- Runbooks

Delete → Move Feedback Refresh

Essentials

Resource group (change)
omsauto

Location
West Central US

Subscription name (change)
RiteshSubscription

Status
Active

Last modified
2017-09-27 9:52 AM

Last modified by
callritz@hotmail.com

Monitoring

Job Statistics

Job Status	Count
COMPLETED	13
FAILED	0
SUSPENDED	0
QUEUED	0
RUNNING	0

datacenterautomation - DSC configurations
Automation Account

Search (Ctrl+/)

- Overview
- Activity log
- Access control (IAM)
- Tags
- Diagnose and solve problems

CONFIGURATION MANAGEMENT

- Inventory (Preview)
- Change tracking (Preview)
- DSC nodes
- DSC configurations**
- DSC node configurations

+ Add a configuration Learn more Refresh

NAME	AUTHORING STATUS	LAST MODIFIED
ConfigureSiteOnIIS	Published	2017-09-30 1:40 AM

datacenterautomation - DSC node configurations
Automation Account

Search (Ctrl+/)

- Overview
- Activity log
- Access control (IAM)
- Tags
- Diagnose and solve problems

CONFIGURATION MANAGEMENT

- Inventory (Preview)
- Change tracking (Preview)
- DSC nodes
- DSC configurations
- DSC node configurations**

+ Add a NodeConfiguration Delete Refresh

NAME	CREATED	LAST MODIFIED
<input type="checkbox"/> ConfigureSiteOnIIS.WebServer	2017-09-30 1:42 AM	2017-09-30 1:42 AM

datacenterautomation - DSC nodes
Automation Account

Search (Ctrl+/)

+ Add Azure VM + Add Non-Azure + Learn more Refresh Enable Log Search

i Azure VMs managed by the configuration service do not incur a cost if they have the VM DSC extension version greater installed. Learn more about this price change and how to upgrade the extension.

DSC nodes Status Node configuration name VM DSC extension ver

Search nodes... 7 selected 2 selected 2 selected

NAME	STATUS	NODE CONFIGURATION	LAST SEEN	VM DSC EXT
testtwo	✓ Compliant	ConfigureSiteOnIIS.WebS...	2017-09-30 2:34 AM	Yes

Overview
Activity log
Access control (IAM)
Tags
Diagnose and solve problems

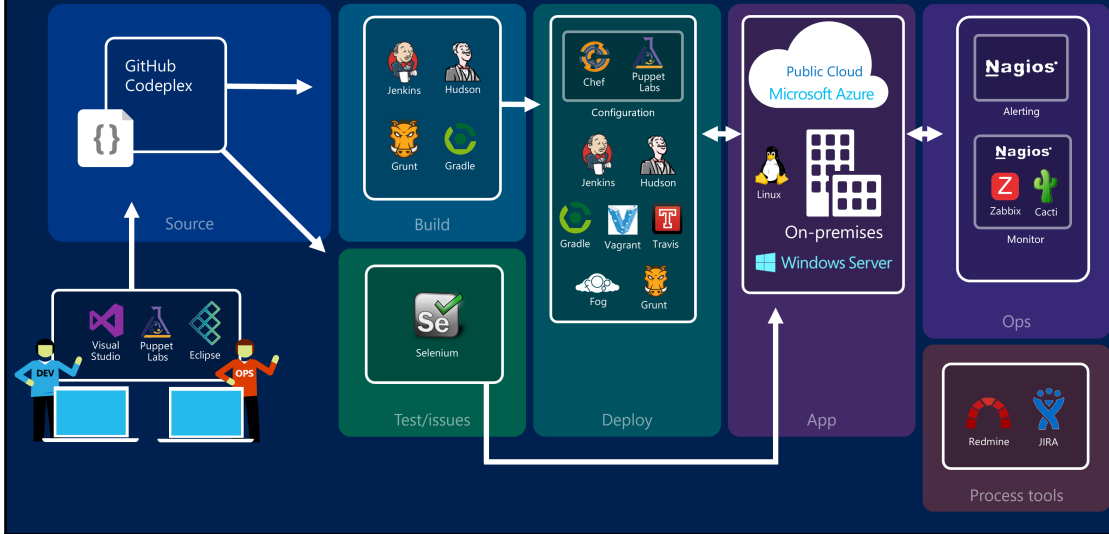
CONFIGURATION MANAGEMENT

- Inventory (Preview)
- Change tracking (Preview)
- DSC nodes**
- DSC configurations
- DSC node configurations

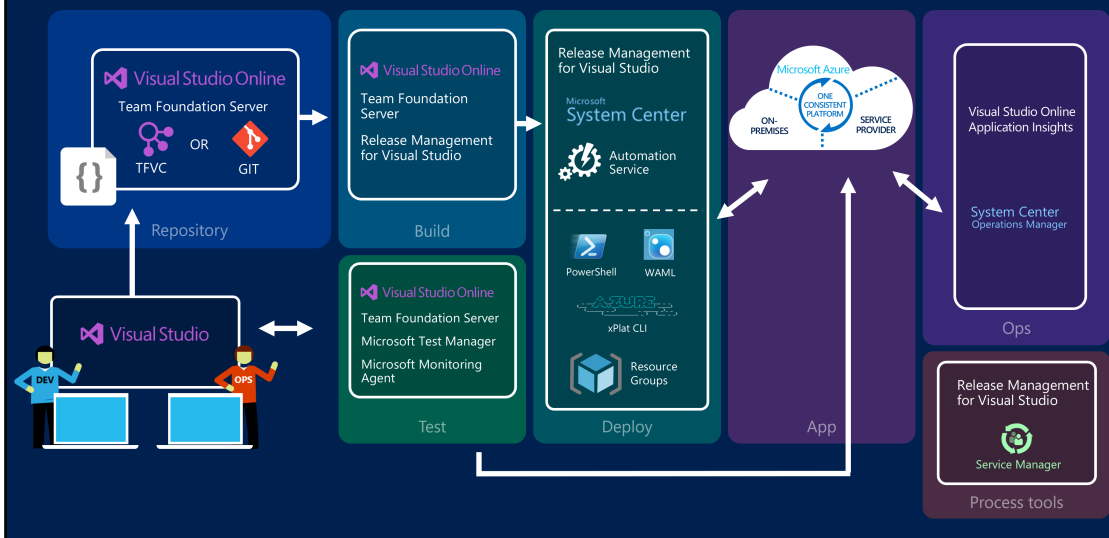
← → http://localhost/index.htm Website under construction.

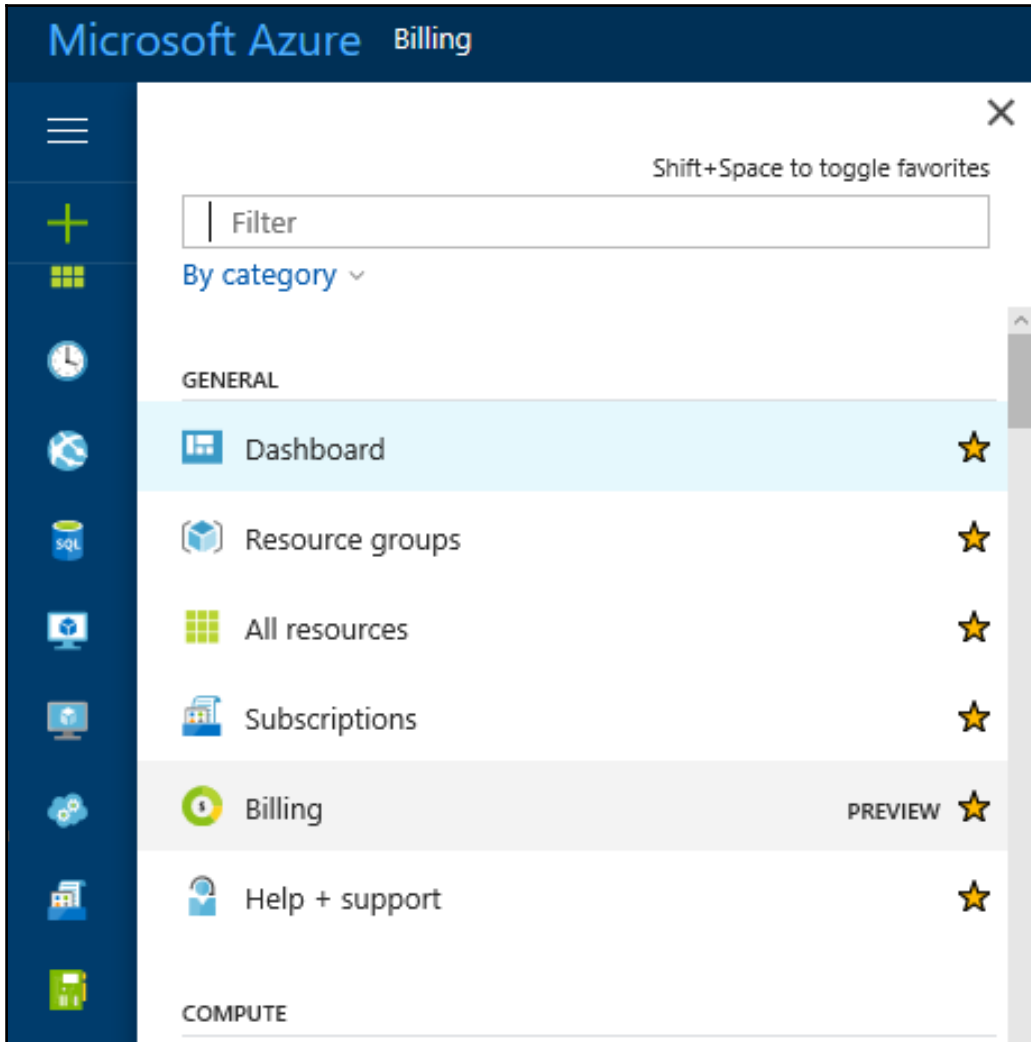
If you are seeing this page, it means the website is under maintenance and DSC Rocks !!!!!

Open source ecosystem



Microsoft ecosystem





Billing

Search (Ctrl+F)

- Overview
- Diagnose and solve problems

BILLING ACCOUNT

- Subscriptions
- Invoices
- Contact info
- Billing address
- Payment methods

SUPPORT + TROUBLESHOOTING

- New support request

+ New subscription Manage

Essentials ^

Account admin callritz@hotmail.com	Currency INR
Next bill 9/1/2017	Billing country/region IN
Next charge 9/11/2017	Total billed (last 12 mo) 0.00 INR

Recent billing history

Your bill amount was 0 INR.

Billing - Subscriptions

Search (Ctrl+F)

- Overview
- Diagnose and solve problems

BILLING ACCOUNT

- Subscriptions
- Invoices
- Contact info
- Billing address
- Payment methods

SUPPORT + TROUBLESHOOTING

- New support request

+ New subscription Manage

My subscriptions

NAME	SUBSCRIPTION ID	OFFER	STATUS
RiteshSubscription	00000000000000000000000000000000	MSDN	Active

Other subscriptions

NAME	SUBSCRIPTION ID	OFFER
You don't have any subscriptions with billing read access		

Manage → Transfer Cancel subscription Rename

Overview

Access control (IAM)

Diagnose and solve problems

BILLING

Invoices

Cost analysis

External services

Payment methods

Partner information

SETTINGS

Programmatic deployment

Resource groups

Resources

Usage + quotas

Policies

Management certificates

Essentials

Subscription ID: PORTALVHDSFDL3P2N51RS39

My role: Account admin

Offer: MSDN

Offer ID: MS-AZR-0063P

Subscription name: **RiteshSubscription**

Current billing period: 8/2/2017-9/1/2017

Currency: INR

Status: Active

Breakdown of current cost

Costs by resource

Resource ID	Cost (INR)
PORTALVHDSFDL3P2N51RS39	344.37
PORTALVHDS6CG33XDRB2YPL	166.45
SCUNQFP2BDRGWMN0	130.45
OTHERS	125.52

Burn rate

STARTING CREDIT: **10 K INR**

CREDIT REMAINING: **9.24 K INR**

Costs by resource

→ Costs by service

There is a delay between the time when a resource is used and the time when the usage reaches the billing system. Due to this, costs reported here may be delayed. Amounts displayed are estimates, and may not reflect some recent usage. Taxes are not included.

Subscription:

Timespan:

Resource type:

Tag:

Resource group:

Apply **Download**

Total cost: **766.80 INR**

NAME	TYPE	RESOURCE GROUP	COST (INR)	TAGS
▶ portalvhdsfdl3p2n51r539	Storage account (classic)	Default-Storage-WestUS	344.37	--
▶ portalvhds6cg33xdrb2ypl	Storage account (classic)	Default-Storage-EastUS	166.45	--
▶ scunqfp2bdrgrwmn0	Storage account	abra	130.45	--
▶ scunqfp2bdrgrwtx	Storage account	abra	64.74	--
▶ portalvhdsn0bxtwdlj38yn	Storage account (classic)	Default-Storage-EastAsia	60.79	--

[95]

Search to filter items...

DATE	AMOUNT (INR)
8/2/2017	13.73
8/3/2017	13.73
8/4/2017	13.73
8/5/2017	13.73
8/6/2017	13.73
8/7/2017	13.73
8/8/2017	13.73
8/9/2017	13.73
8/10/2017	13.73
8/11/2017	13.73
8/12/2017	13.73
8/13/2017	13.73
8/14/2017	13.73
8/15/2017	13.73
8/16/2017	13.73

Search (Ctrl+Q)

Older invoices | Email invoice | Access to invoice | External services

External services are invoiced separately.

Subscription

RiteshSubscription

Grid | Chart

Search to filter items...

BILLING PERIOD	CHARGE DATE	AMOUNT (INR)	INVOICE
7/2/2017-8/1/2017	8/2/2017	₹ 0.00	Not available
6/2/2017-7/1/2017	7/2/2017	₹ 0.00	Not available
5/2/2017-6/1/2017	6/2/2017	₹ 0.00	Not available
4/2/2017-5/1/2017	5/2/2017	₹ 0.00	Not available

Navigation menu: Overview, Access control (IAM), Diagnose and solve problems, BILLING (Invoices, Cost analysis, External services, Payment methods, Partner information)

Costs by service
RiteshSubscription (8/2/2017 - 9/1/2017)

Excludes non-Microsoft services.

Search to filter items...

NAME	RESOURCE GUID	CONSUMED UNITS	BILLABLE UNITS	PRE-TAX COST (INR)
Standard IO - Page Blob/Disk (GB) - Geo Redundant	0e9d0c9b-ab6d-4312-9c7e-3794e22af9c4	107.966	107.966	0.00
Standard IO - Page Blob/Disk (GB) - Locally Redundant	d23a5753-f955-4dff-af28-8cc5c72d3882	82.764	82.764	0.00
Standard IO - Table (GB) - Geo Redundant	92567832-8613-47c4-9e8a-b2b9461a4875	0.001	0.001	0.00
Standard IO - Table (GB) - Locally Redundant	3f2b1e1c-c886-4ec6-ad6f-dd0ef38819c9	0.004	0.004	0.00
Standard IO - Table Write Operation Units (in 10,000s) - Data Management	9cb0bde8-bc0d-468c-8423-a25fe06779d3	0.878	0.878	0.00
Standard IO - Table Write Operation Units (in 10,000s) - Geo Redundant	ad22fac8-9da5-4577-8683-56ae94d39e42	0.512	0.512	0.00

Getting Started with a Multi... The default build should on... Resource provider status - RiteshSubscription - Mi... Understand your bill for Azi...

account.azure.com/Subscriptions/Statement?subscriptionid=3ddadd88-b85f-45c9-a446-a1db8d25326b

HOME PRICING DOCUMENTATION DOWNLOADS COMMUNITY SUPPORT ACCOUNT

subscriptions marketplace profile preview features

Portal

Summary for RiteshSubscription

OVERVIEW BILLING HISTORY

₹ 9,232.27

₹ 0.00 ₹ 10,000.00

Based on your usage history (₹ 19.76/day), you might have sufficient credit for the remaining billing period.
Your monthly credit expires on 9/1/2017.

Price calculator

SUBSCRIPTION STATUS

5 days left

₹ 9,232 credits remaining*

Remove spending limit

CURRENT BALANCE: ₹ 0.00

DATE PURCHASED: 9/2/2014

CURRENT BILLING PERIOD: 8/2/2017 - 9/1/2017

Manage payment methods

Download usage details

Contact Microsoft Support

Edit subscription details

91.18 GB STANDARD IO - PAGE BLOB/DISK (GB) - GEO REDUNDANT ₹ 572.54

59.05 GB STANDARD IO - PAGE BLOB/DISK (GB) - LOCALLY REDUNDANT ₹ 195.15

0.00 GB STANDARD IO - TABLE (GB) - GEO REDUNDANT ₹ 0.01

0.00 GB STANDARD IO - TABLE (GB) - LOCALLY REDUNDANT ₹ 0.01

0.63 10,000s STANDARD IO - TABLE WRITE OPERATION UNITS (IN 10,000S) - DATA MANAGEMENT ₹ 0.01

0.43 10,000s STANDARD IO - TABLE WRITE OPERATION UNITS (IN 10,000S) - GEO REDUNDANT ₹ 0.01

RiteshSubscription - Usage + quotas

Subscription

Search (Ctrl+F)

Refresh

You can use each Microsoft Azure resource up to its quota. Each subscription has separate quotas and usage is tracked per subscription. If you reach a quota cap, you can request an increase via Help + Support. Learn more

Request Increase

All service quotas All providers All locations Show only items with usage

Filter items...

QUOTA	PROVIDER	LOCATION	USAGE
Storage Accounts (Classic)	Microsoft.ClassicStorage	Global	3% 3 of 100

Cost analysis

External services

Payment methods

Partner information

SETTINGS

Programmatic deployment

Resource groups

Resources

Usage + quotas

RiteshSubscription - Resource providers

Subscription

Search (Ctrl+F)

Refresh

Search to filter resource providers...

PROVIDER	STATUS		
Microsoft.AppService	Registered	Re-register	Unregister
Microsoft.Automation	Registered	Re-register	Unregister
Microsoft.Backup	Registered	Re-register	Unregister
Microsoft.Batch	Unregistered	Register	
Microsoft.Cache	Registered	Re-register	Unregister
Microsoft.ClassicCompute	Registered	Re-register	Unregister
Microsoft.ClassicNetwork	Registered	Re-register	Unregister
Microsoft.ClassicStorage	Registered	Re-register	Unregister
Microsoft.CognitiveServices	Registered	Re-register	Unregister
Microsoft.Compute	Registered	Re-register	Unregister
Microsoft.Devices	Registered	Re-register	Unregister
Microsoft.DevTestLab	Registered	Re-register	Unregister
Microsoft.DocumentDB	Registered	Re-register	Unregister
microsoft.insights	Registered	Re-register	Unregister
Microsoft.KeyVault	Registered	Re-register	Unregister

SUPPORT + TROUBLESHOOTING

Microsoft Azure

Why Azure Solutions Products Documentation Pricing Training Marketplace Partners Blog Resources Support

FREE ACCOUNT >

Pricing calculator

Configure and estimate the costs for Azure products

88888 07734

Products


Select a product to include it in your estimate.

Search products

Featured	Virtual Machines Provision Windows and Linux virtual machines in seconds	Virtual Machine Scale Sets Manage and scale up to thousands of Linux and Windows virtual machines	App Service Quickly create powerful cloud apps for web and mobile
Compute	Functions Process events with serverless code	Batch Cloud-scale job scheduling and compute management	Service Fabric Develop microservices and orchestrate containers on Windows or Linux
Networking			
Storage			
Web + Mobile			
Containers			

Your Estimate

Virtual Machines 1: D1: 1 cores, 3.5 GB RAM, 50 GB disk



Virtual Machines

REGION: West US OPERATING SYSTEM: Windows TYPE: (OS Only)


TIER: Standard ADD MANAGED DISKS

INSTANCE: D1: 1 Core(s), 3.5 GB RAM, 50 GB Disk, \$ 0.140/hour

1 Virtual machines × 744 Hours = \$ 104.16

Functions

128 GB memory, 30 sec execution time, 1,000,000 exe...



Functions

REGION: West US

The first 400,000 GB/s of execution and 1,000,000 executions are free.

Executions

128 Memory size: × 30 Execution time (in seconds) × 1000000 Executions per month = \$ 53.60


Requests

10,00,000 Execution count = \$ 0.00

Sub-total \$ 53.60

Support

SUPPORT:

Developer 

\$ 29.00

Programs and Offers

LICENSING PROGRAM:

Microsoft Online Services Program (MOSP) 

SHOW DEV/TEST PRICING

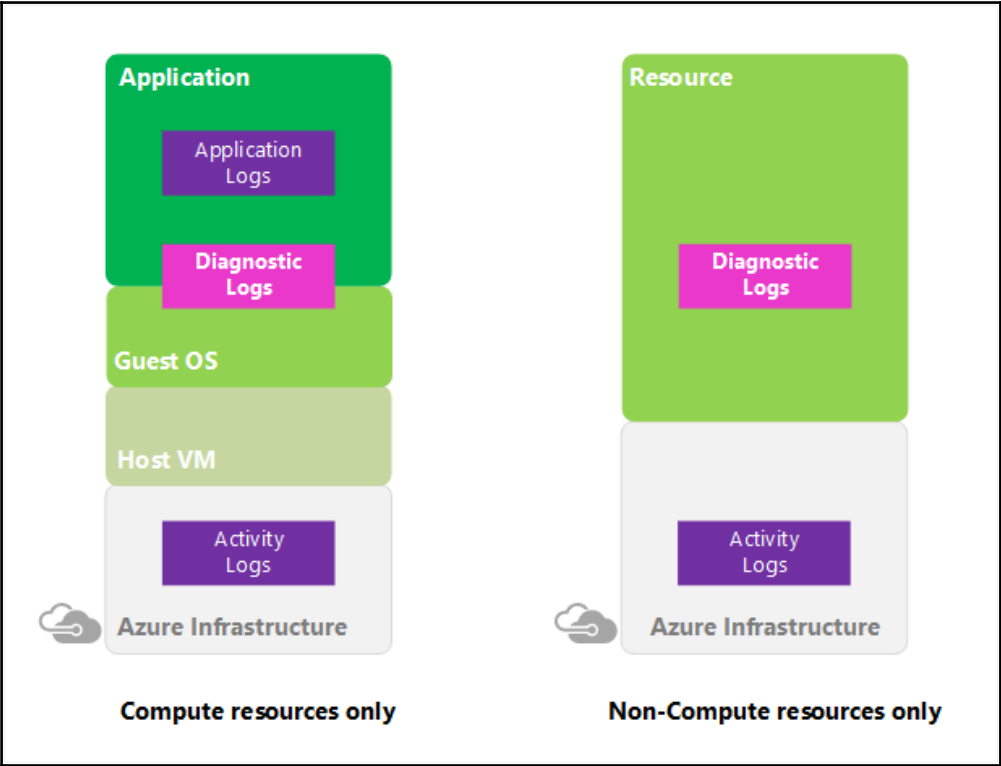
Estimated monthly cost

\$ 186.76

 Export

US Dollar (\$) 

Chapter 12: Monitoring and Auditing



win2016devops
Resource group

+ Add Columns Delete Refresh Move

Search (Ctrl+/)

Overview
Activity log
Access control (IAM)
Tags

SETTINGS
Quickstart
Resource costs
Deployments
Properties
Locks
Automation script

Essentials ^

Subscription name (change)
Ritesh Modi
Deployments
2 Succeeded

Subscription ID
[REDACTED]
Location
West Europe

4 items

NAME	TYPE	LOCATION
NetworkMonitoring(OnlineMedicine...	Solution	West Europe
OnlineMedicineOMS	Log Analytics	West Europe
OnlineMedicineVault	Key vault	West Europe
win2016devops1	Storage account	West Europe

Everything

Filter

Application Insights

Results

NAME	PUBLISHER	CATEGORY
Application Insights	Microsoft	Web + Mobile
Application Insights Connector (Preview)	Microsoft	Monitoring + manage...
Insight & Analytics	Microsoft	Monitoring + manage...
Customer Insights (preview)	Microsoft	Intelligence + analytics
Predixion Insight	Predixion Software	Compute
Hanu Insight - Standard (BYOL) - FREE	Hanu Software	Compute
Hanu Insight - Enterprise	Hanu Software	Compute
Hanu Insight - Enterprise (BYOL)	Hanu Software	Compute
Azure Networking Analytics (Preview)	Microsoft	Monitoring + manage...

Related to your search

New Relic APM (preview)
New Relic

op5 Monitor Enterprise
op5 AB

Azure AD Connect Health
Microsoft

Application Insights
Microsoft

Application performance, availability and usage information at your fingertips

Is my website available at all times?
Is the user experience responsive and usable?
How are customers using my app/website?

Application Insights answers these questions and many more, with zero lines of code.

- Availability and performance monitoring
- Users and usage insights
- Diagnostic logs and crash analytics
- Seamless integration with Microsoft Azure and Visual Studio
- Supports ASP.NET websites (Azure or on-premises), Windows Phone, and Windows Store apps

Northwind Website

Application Insights dashboard showing metrics and charts.

Create

Application Insights

Monitor and improve a web or mobile ap...

Name ⓘ

 ✕

* Application Type ⓘ

ASP.NET web application ▼

* Subscription

Ritesh Modi ▼

* Resource Group ⓘ

Create new Use existing

win2016devops ▼

* Location

West Europe ▼

Pin to dashboard

Create

[Automation options](#)

OnlinemedicineProd
Application Insights

Search Metrics Explorer Analytics Time range Refresh More

Search (Ctrl+/)

Overview
Activity log
Access control (IAM)
Tags

INVESTIGATE

Application map
Smart Detection
Live Metrics Stream
Availability
Failures
Performance
Servers
Browser
Usage

CONFIGURE

Click here to see a map of KPIs for your app components and dependencies. →

Essentials ^

Resource group (change)
win2016devops
Location
West Europe
Subscription name (change)
Ritesh Modi
Subscription ID

Type
ASP.NET
Instrumentation Key
befc0dbe-c068-46f8-8443-7...

0 Alerts
Click to configure

Live Stream

Smart Detection
ONLINEMEDICINEPROD
0 detections (last 24h)

0 Web tests

App map

Health

Overview timeline
ONLINEMEDICINEPROD

100ms
80ms
60ms
40ms
20ms
0ms

Learn how to collect server response time data.

SERVER RESPONSE TI...

100ms
80ms
60ms
40ms
20ms
0ms

Learn how to collect browser page load data.

PAGE VIEW LOAD TIME

OnlineMedicineOMS
Log Analytics

OMS Portal Delete

Search (Ctrl+/)

OMS Workspace

Activity log

Access control (IAM)

Tags

SETTINGS

Locks

Automation script

GENERAL

Quick Start

Overview

Saved searches

Log Search

Solutions

Pricing tier

Essentials

Resource group (change)
win2016devops

Status
Active

Location
West Europe

Subscription name (change)
Ritesh Modi

Subscription ID
[REDACTED]

Workspace Name
OnlineMedicineOMS

Workspace Id
d9c9cf08-6f47-450e-9136-[REDACTED]

Pricing tier
Free

Management services
Operations logs

Management

Overview Log Search OMS Portal

Pricing tier

Free
ONLINEMEDICINEOMS

500 MB daily limit
Data retention 7 days

Microsoft Operations Management Suite

Data Plan: Free OnlineMedicineOMS

Find...

Log Search

My Dashboard

Network Performance Monitor (Preview)

Solution requires additional configuration

View Designer

Create your own views
Create personalized views for any data. Click here to begin.

Usage

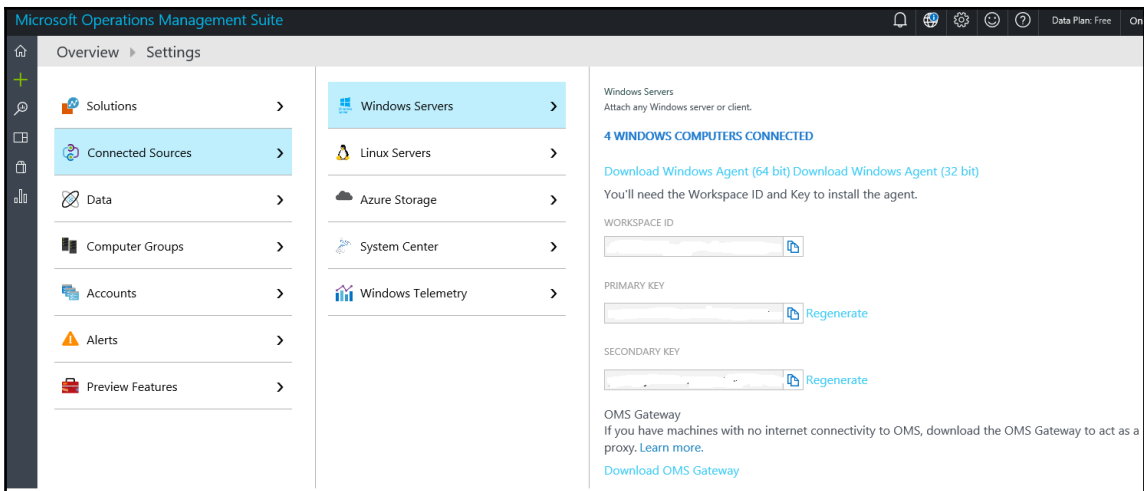
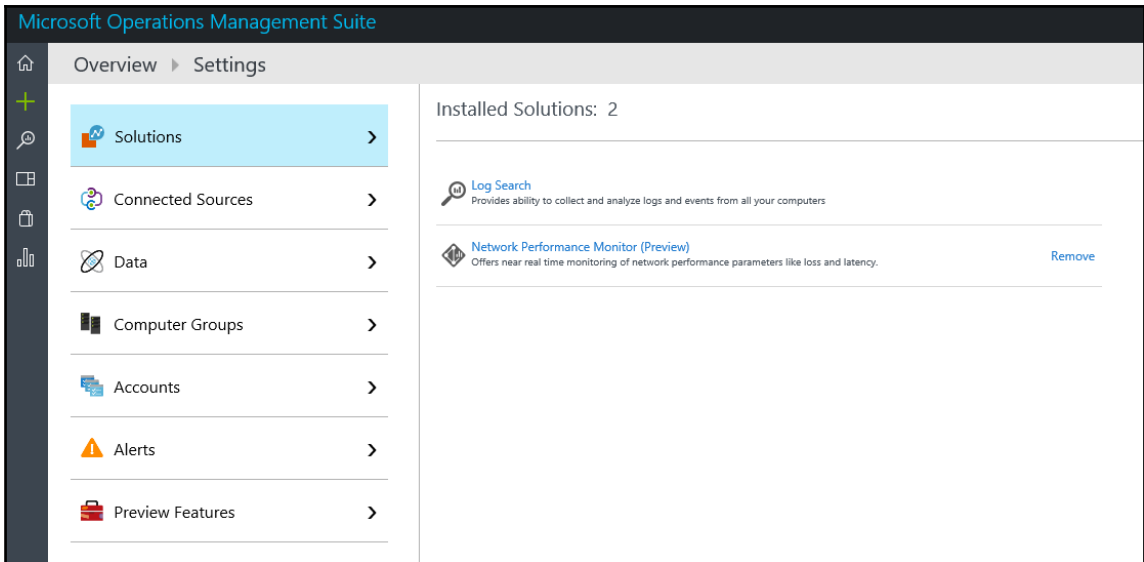
Settings

Latest News

Tigran Shahbazian @tigran22
Check out #MSOMS Mobile app. It just got update which shows you Alerts view!! Stay tuned, mobile push notifications are coming soon.
pic.twitter.com/JR0k4QpFY
4:00 AM - 1 Dec 2016

Settings

4 Data sources connected



Microsoft Operations Management Suite

Log Search

Begin searching here...

Let's start searching!

Type=Perf CounterName="% Processor Time" | measure avg(CounterValue) by Computer interval 30MINUTE

Pull in all performance data for processor utilization
Required Data Collection: Performance Counters

Perform a function on returned results

Get the average processor utilization grouped by individual computer

Average over 30 minute periods

A few more queries to try

- All collected data
- Count of all data collected grouped by Type
- All data collected grouped by 1HOUR interval
- All Configuration Changes
Required Solution: Change Tracking
- All computers with missing critical or security updates
Required Solution: System Update Assessment
- Computers with guest account logons
Required Solution: Security
- Computers with Available memory more than 2GB
Required Data Collection: Performance Counters
- SQL Assessment recommendations by Computes
Required Solution: SQL Assessment
- All syslog data grouped by Facility
Required Data Collection: Syslog

For more information

- Search Overview
- Query Language Help
- Create alerts on your searches
- Export search data to Power BI

Microsoft Operations Management Suite

Solutions Gallery > Details

Capacity and Performance (Preview)

Available

Add

Description

Operations Management Suite Capacity and Performance Solution gives you insights into your Hyper-V environment.

Metrics are collected on CPU, memory, and storage for all of your hosts and their running virtual machines.

Microsoft Operations Management Suite

Overview > Capacity And Performance

HOSTS

Host CPU Utilization

Host Memory Utilization

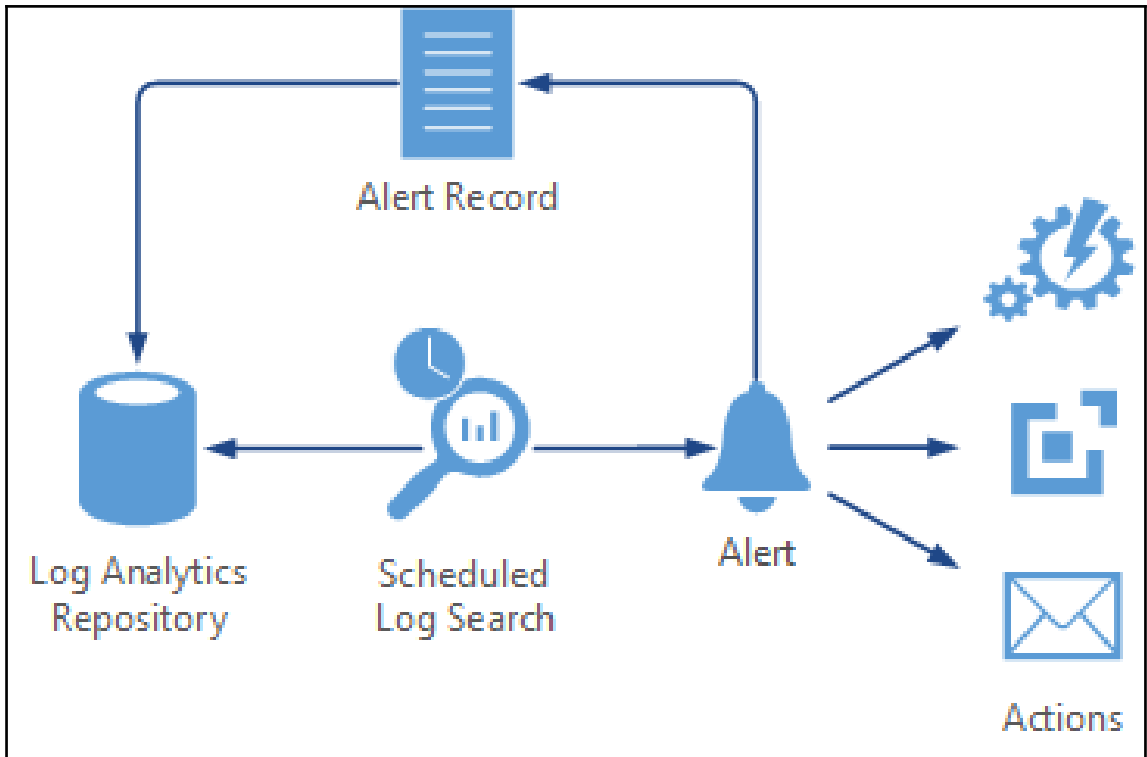
VIRTUAL MACHINES

VM CPU Utilization

VM Memory Utilization

VM Total Disk IOPS

HOST NAME	ADDRESS	HOST NAME	ADDRESS	MESSAGE	ADDRESS	VM NAME	ADDRESS	VM NAME	INTERNAL ID
...



Log Search

Export PowerBI Alert Save Favorites History Analytics

Data based on last 1 day

1 bar = 1hr

9:00:0 Sep-2

TYPE (1)

Event	1
-------	---

COMPUTER (1)

testtwo	1
---------	---

EVENTLEVELNAME (1)

Information	1
-------------	---

+Add

Show legacy language converter

search * | where (Type == "Event")

Advanced Analytics 00:00:01.333

1 Results List Table

9/27/2017 9:52:55.870 AM | Event

- ... TimeGenerated : 9/27/2017 9:52:55.870 AM
- ... Computer : testtwo
- ... EventLevelName : Information

[+] show more

Save Search

Name: AllEvents

Category:

Save this query as a computer group: Yes No

Function alias (required for computer groups):

Save Cancel

General

Alert information

Name
eventsalert

Description
this alert is raised whenever events arrives

Severity
Critical

Search query
Use current search query

search * | where (Type == "Event")

Time window
15 Minutes

This search returned

Schedule

Alert frequency

Check for this alert every
15 Minutes

Generate alert based on
Number of results Metric measurement

Number of results
Greater than 2

Suppress alerts
When checked, allows you to set an amount of time to wait before alerting again to reduce alert noise

Actions

Email notification

Webhook


Runbook

Automation account
datacenterautomation
Select a runbook
TestRunbook

Run on
 Hybrid worker

ITSM Actions

Actions

 Email notification

Yes

No

Subject

Email subject

Recipients (semi-colon separated)

callritz@hotmail.com



Webhook

Yes

No

Webhook URL

Invoke webhook when alert fires

Include custom JSON payload

Enter your custom JSON payload

Custom JSON payload with Alert parameters e.g.
{
 "incidentname": "#alertrulename",
 "linktoresults": "#linktosearchresults",
 "searchquery": "#searchquery"}

Url is invalid

Test webhook

Add Automation Account □ ×

* Name ⓘ
datacenterautomation ✓


* Subscription
RiteshSubscription ▾

* Resource group
 Create new Use existing

omsauto ▾

* Location
West Central US ▾

* Create Azure Run As account ⓘ

 The Run As account feature will create a Run As account and a Classic Run As account. [Click here to learn more about Run As accounts.](#)

```

1
2 $Cred = Get-AutomationPSCredential -Name "o365"
3   if ($Cred -eq $null)
4   {
5       Write-Output "Credential entered: o365 does not exist in the automation service. Please create one `n"
6   }
7   else
8   {
9       $CredUsername = $Cred.UserName
10  }
11
12 $requestID = Random
13
14 $body = "<HTML><HEAD><META http-equiv=""Content-Type"" content=""text/html; charset=iso-8859-1"" /><TITLE></TITLE></HEAD>"
15 $body += "<BODY bgcolor=""#FFFFFF"" style=""font-size: Small; font-family: TAHOMA; color: #000000""><P>"
16 $body += "Please choose one of the options<br />"
17 $body += "<a href='https://azureforarchitects.azurewebsites.net/api/getjobdone?status=decline&requestID=11'> + "Decline" + "</b><br />"
18 $body += "<a href='https://azureforarchitects.azurewebsites.net/api/getjobdone?status=approved&requestID=11'> + "Approve" + "</b><br />"
19 $body += "If you approve request will provision a new virtual machine for user.."
20
21 Send-MailMessage `
22 -To "callritz@hotmail.com" `
23 -Subject "You have asked approval for a VM !!" `
24 -Body "Your request has been sent to approver. Please wait for a response !!" `
25 -UseSsl `
26 -Port 587 `
27 -SmtpServer "smtp.office365.com" `
28 -From admin@callritzhotmail.com `
29 -BodyAsHtml `
30 -Credential $Cred
31
32 Write-Output "Mail is now send `n"
33 Write-Output "-----"
34

```

```

1
2
3 param([object] $WebhookData)
4
5 write-output $WebhookData.WebhookName
6 write-output $WebhookData.RequestHeader
7 write-output $WebhookData.RequestBody
8

```

Automation & Control

Microsoft

- Increase control with automation and configuration management
- Includes 2 solutions



Automation & Control

⚠ *requires account configuration*

Configure Workspace

Add

Included solutions:


- Change Tracking
- Update Management


Description

Automation & Control in Operations Management Suite (OMS) delivers unified capabilities to deploy, configure, and maintain your infrastructure and applications in Azure or any other cloud, including on-premises, across Windows Server and Linux.

- Integrate process automation and configuration for automated delivery of services using PowerShell or graphical authoring
- Combine change tracking with configuration management to identify and apply desired configurations and enable compliance
- Deliver orchestrated update management for both Windows Server and Linux from the cloud

Configure Workspace

1 *Azure subscription
RiteshSubscription 


2 *Automation account
Select Account 

Close

Automation Account

*Automation Account

Create new Use existing

datacenterautomation 



Linked accounts must be in the same Azure subscription, resource group, and location as your workspace.

Azure Subscription

RiteshSubscription

Resource Group

omsauto

Location

westcentralus

Workspace Pricing Tier


Free















By clicking "OK", you agree to updating the pricing tier of your Automation account to Basic.

OK

Overview ▸ Settings

 You can now view and edit settings in Azure Portal. [Learn more](#)

<ul style="list-style-type: none">  Solutions >  Connected Sources >  Data >  Computer Groups >  Accounts >  Alerts >  Preview Features >  Upgrade Summary > 	<ul style="list-style-type: none">  Workspace Information >  Manage Users >  Azure Subscription & Data Plan >  Automation Account > 	<p>Subscription ID: 9755ffce-e94b-4332-9be8-1ade15e78909</p> <p>Resource Group Name: omsauto</p> <p>Automation Account Name: datacenterautomation</p>
--	---	---

Runbook

Yes

No

Automation account
datacenterautomation

Select a runbook

TestRunbook

Run on

Azure

Hybrid worker

