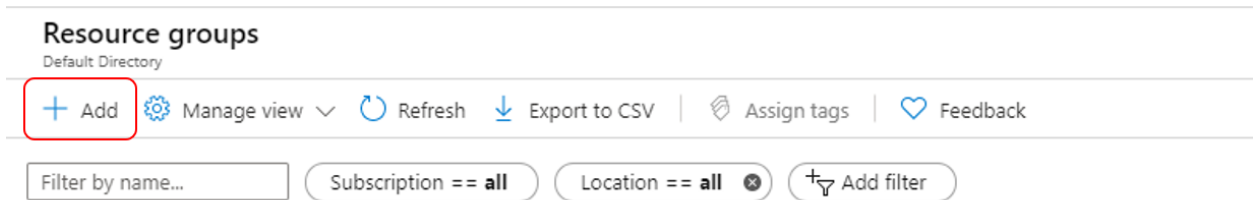
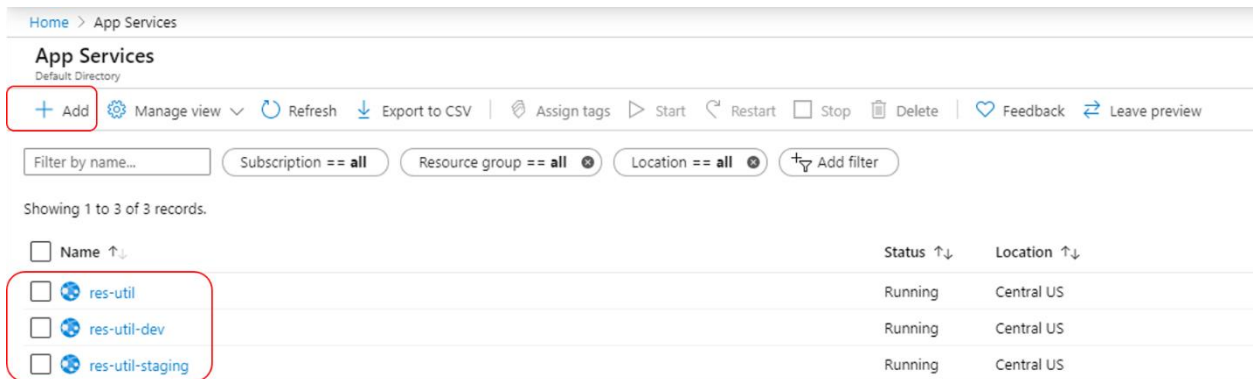


1. Create A Resource Group



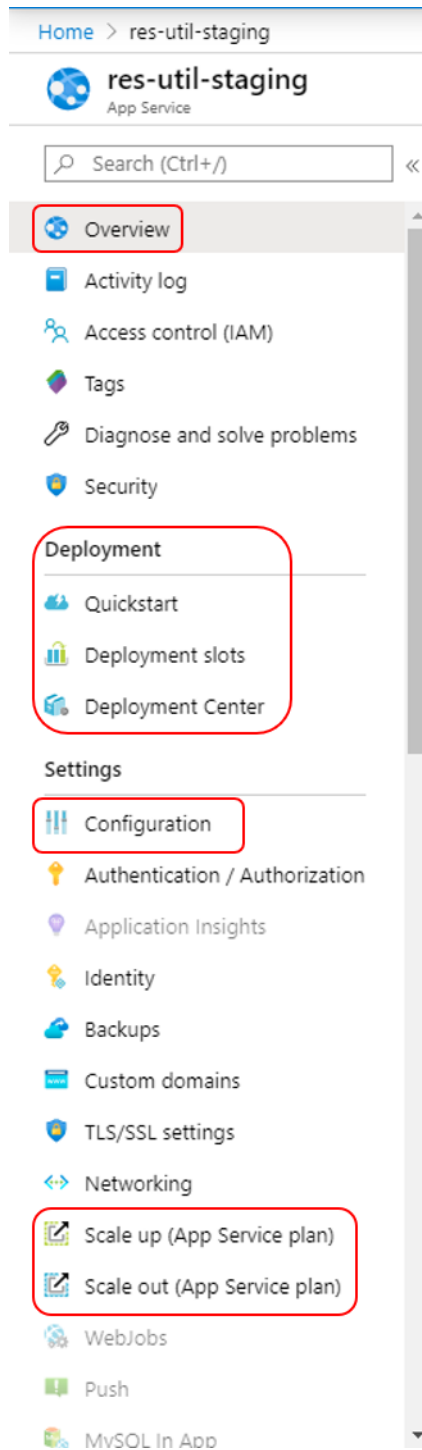
2. Create App Services:

- 3 different services: development, staging, and production

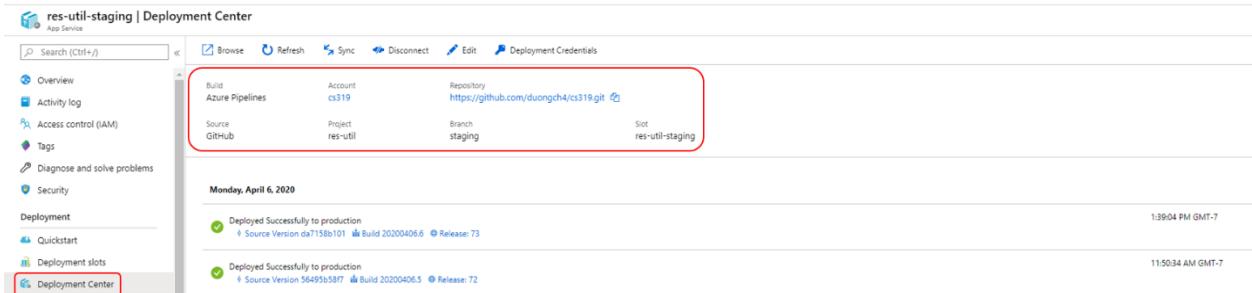


3. For one service, setup connections with Azure DevOps (through a)

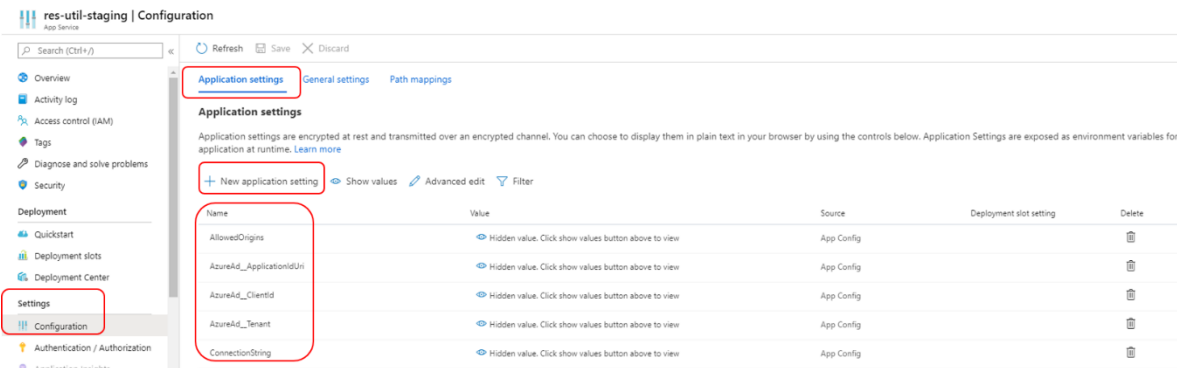
- The options are shown below for each app service



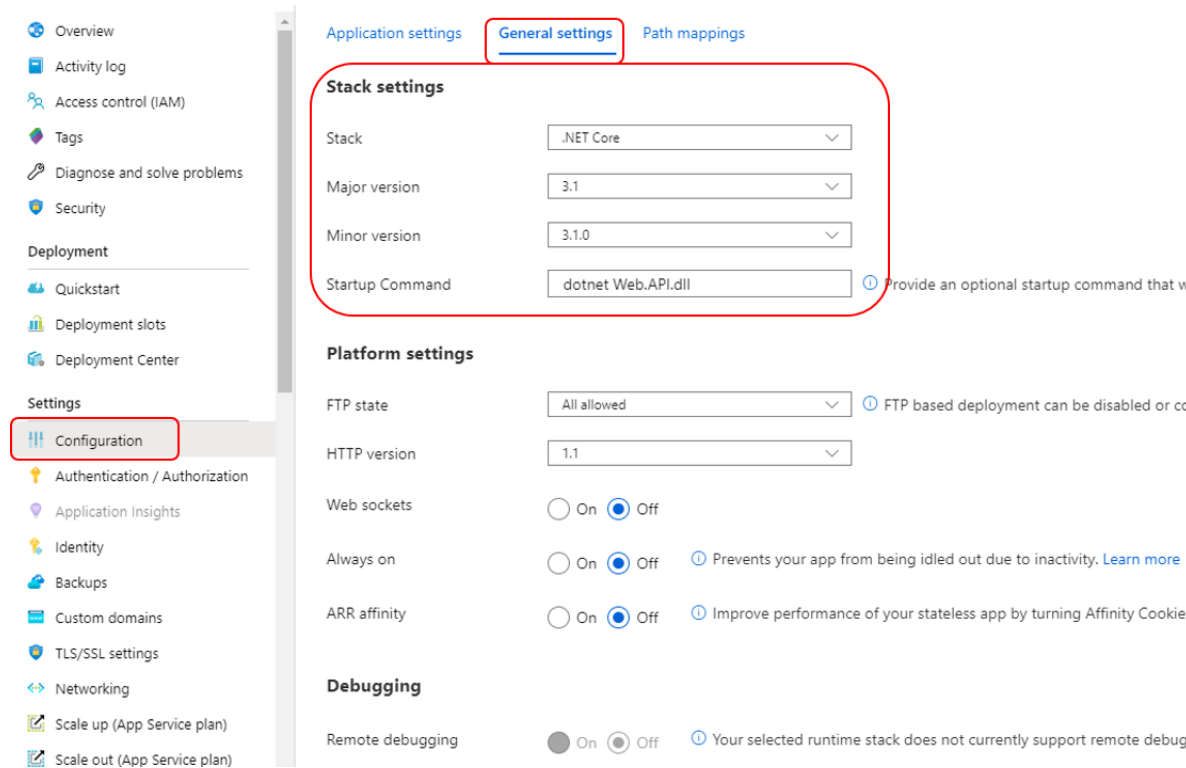
b. In Deployment Center:



- Connect to a code-hosting service: for example Github
- Setup CI/CD pipeline with Azure Pipelines from Azure DevOps
- Configure App Settings



- Configure General Settings



4. Setup Azure DevOps

a. Continuous Integration (CI) Pipeline

The screenshot shows the 'Pipelines' overview page in Azure DevOps for the 'res-util' project. The left sidebar contains navigation links: Overview, Boards, Repos, Pipelines (selected), Environments, Releases, Library, Task groups, Deployment groups, Test Plans, and Artifacts. The main area displays 'Recently run pipelines' with a table of three entries:

Pipeline	Last run	Details
res-util-staging - CI	#20200406.6 • Merge branch 'server' into 'staging'	7h ago, 5m 22s
res-util - CI	#20200404.1 • Merge branch 'staging' into 'master'	Friday, 4m 31s
res-util-dev - CI	#20200328.1 • Merge branch 'server-forecasting' into 'server'	Mar 28, 1m 41s

The screenshot shows the configuration page for the 'res-util-staging - CI' pipeline. The left sidebar is the same as the previous screenshot. The main area has tabs for Tasks, Variables, Triggers, Options, Retention, History, and Summary. The 'Tasks' tab is selected, showing a list of tasks for 'Agent job 1':

- Get sources (Build pipeline)
- Set Environment Variables on Client (Command line)
- Use .NET Core sdk 3.1.x (Use .NET Core)
- Restore (Use .NET Core)
- Build (Use .NET Core)
- Set Environment Variables for Integration Testing (Command line)
- Test (Use .NET Core)
- Publish (Use .NET Core)
- Publish Artifact (Publish build artifacts)

A red arrow points from the 'Set Environment Variables on Client' task to the right-hand configuration panel. The panel shows the following settings:

- Name: res-util-staging - CI
- Agent pool: Hosted VS2017
- Parameters: Unlink all
- Project(s) to restore and build: **/*.csproj
- Project(s) to test: **/*Tests/**.csproj

b. Continuous Deployment (CD) Pipeline

The screenshot shows the Azure DevOps interface. On the left, the 'Releases' tab is selected in the sidebar. The main content area displays the 'res-util-staging - CD' release pipeline. A list of releases is shown, with 'Release-31' selected. The 'Edit' button for the selected release is highlighted with a red box. The interface includes a search bar at the top, a list of releases with their status (Production or Staging), and a table of release details including name, version, and creation time.

Release	Version	Status	Created	Stages
Release-31	20200406.6	staging	4/6/2020, 1:38:30 PM	Production
Release-30	20200406.5	staging	4/6/2020, 11:49:49 AM	Production
Release-29	20200406.4	staging	4/6/2020, 12:16:01 AM	Production
Release-28	20200406.2	staging	4/5/2020, 9:04:06 PM	Production
Release-27	20200406.1	staging	4/5/2020, 5:15:34 PM	Production
Release-26	20200405.1	staging	4/5/2020, 4:33:11 PM	Production
Release-25	20200404.1	staging	4/3/2020, 10:35:15 PM	Production

Azure DevOps

cs319 / res-util / Pipelines / Releases / res-util-staging - CD

res-util

Overview

Boards

Repos

Pipelines

Pipelines

Environments

Releases

Library

Task groups

Deployment groups

Test Plans

Artifacts

All pipelines > res-util-staging - CD

Pipeline Tasks Variables Retention Options History

Production
Deployment process

Phase1
Run on agent

Azure App Service Deploy: res-util-staging
Azure App Service deploy

Stage name
Production

c. Test Plans: through Tasks setup in CI pipeline in (a)

Azure DevOps

cs319 / res-util / Test Plans / Runs

res-util

Overview

Boards

Repos

Pipelines

Test Plans

Test plans*

Progress report

Runs

Load test

Artifacts

Recent test runs

Test runs

Recent exploratory sessions

State	Run ID	Title	Completed Date	Build Number	Failed	Pass Rate
Completed	158	VSTest_TestResults_87	4/6/2020 8:35:30 PM	20200406.6	0	82.3%
Completed	156	VSTest_TestResults_86	4/6/2020 6:46:47 PM	20200406.5	0	82.3%
Completed	154	VSTest_TestResults_85	4/6/2020 7:12:48 AM	20200406.4	0	82.3%
Completed	152	VSTest_TestResults_84	4/6/2020 7:05:52 AM	20200406.3	0	82.3%
Completed	150	VSTest_TestResults_84	4/6/2020 6:57:41 AM	20200406.3	0	82.3%
Completed	148	VSTest_TestResults_83	4/6/2020 4:01:26 AM	20200406.2	0	82.3%
Completed	146	VSTest_TestResults_82	4/6/2020 12:12:33 AM	20200406.1	0	82.3%
Completed	144	VSTest_TestResults_81	4/5/2020 11:30:39 PM	20200405.1	0	82.3%
Completed	142	VSTest_TestResults_80	4/4/2020 5:56:32 AM	20200404.1	0	89.1%
Completed	140	VSTest_TestResults_79	4/4/2020 5:32:34 AM	20200404.1	0	89.1%
Completed	138	VSTest_TestResults_78	4/3/2020 11:30:16 PM	20200403.3	0	92.1%
Completed	136	VSTest_TestResults_77	4/3/2020 11:03:49 PM	20200403.2	1	91.3%
Completed	134	VSTest_TestResults_76	4/3/2020 5:26:32 AM	20200403.1	0	92.1%
Completed	132	VSTest_TestResults_75	4/3/2020 5:12:56 AM	20200403.1	0	92.1%
Completed	130	VSTest_TestResults_74	4/2/2020 10:12:10 AM	20200402.1	0	91.5%
Completed	128	VSTest_TestResults_73	4/1/2020 4:21:43 AM	20200401.3	0	91.5%
Completed	126	VSTest_TestResults_72	4/1/2020 4:14:28 AM	20200401.2	1	90.6%
Completed	124	VSTest_TestResults_71	4/1/2020 3:40:14 AM	20200401.1	1	90.6%

5. Create SQL Server Databases

Home > cs319



Search (Ctrl+/)

Overview

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

Settings

- Quick start
- Failover groups
- Manage Backups
- Active Directory admin

SQL databases

- SQL elastic pools
- Deleted databases
- Import/Export history
- DTU quota
- Properties
- Locks
- Export template

Security

- Advanced data security
- Auditing
- Firewalls and virtual networks
- Private endpoint connections
- Transparent data encryption

Available resources

Filter by name

All types

2 databases

Name	Type	Status	Pricing tier
SQL database			
res-util	SQL database	Online	Basic
res-util-staging	SQL database	Online	Basic

Make tables and Seed data



Service Plan



Connection string
needed for app config



Home > cs319 > res-util-staging (cs319/res-util-staging)

res-util-staging (cs319/res-util-staging)
SQL database

Search (Ctrl+ /) << Copy Res

Overview

- Activity log
- Tags
- Diagnose and solve problems
- Quick start
- Query editor (preview)

Power Platform

- Power BI (preview)
- PowerApps (preview)
- Flow (preview)

Settings

- Configure
- Geo-Replication
- Connection strings
- Sync to other databases
- Add Azure Search
- Properties
- Locks
- Export template

Resource group (ch
Status
Location
Subscription (chang
Subscription ID
Tags (change)

Show data for last

Compute utilizat

30%
25%
20%
15%
10%
5%
0%

DTU percentage (M
cs319/res-util-stagin
28%

Notifications (0)