



DevOps on Premise Self-Hosted Agent

Arguments

- 1.- Deployment frequency will go up
- 2.- Improve response to business needs
- 3.- Get code quality evaluation (Sonarqube, SonarCloud) vulnerabilities report (WhiteSource Bolt[Free]), UnitTest
- 4.- Approvals for propagation
- 5.- Setup time frame for deployments
- 6.- More time for experimentation

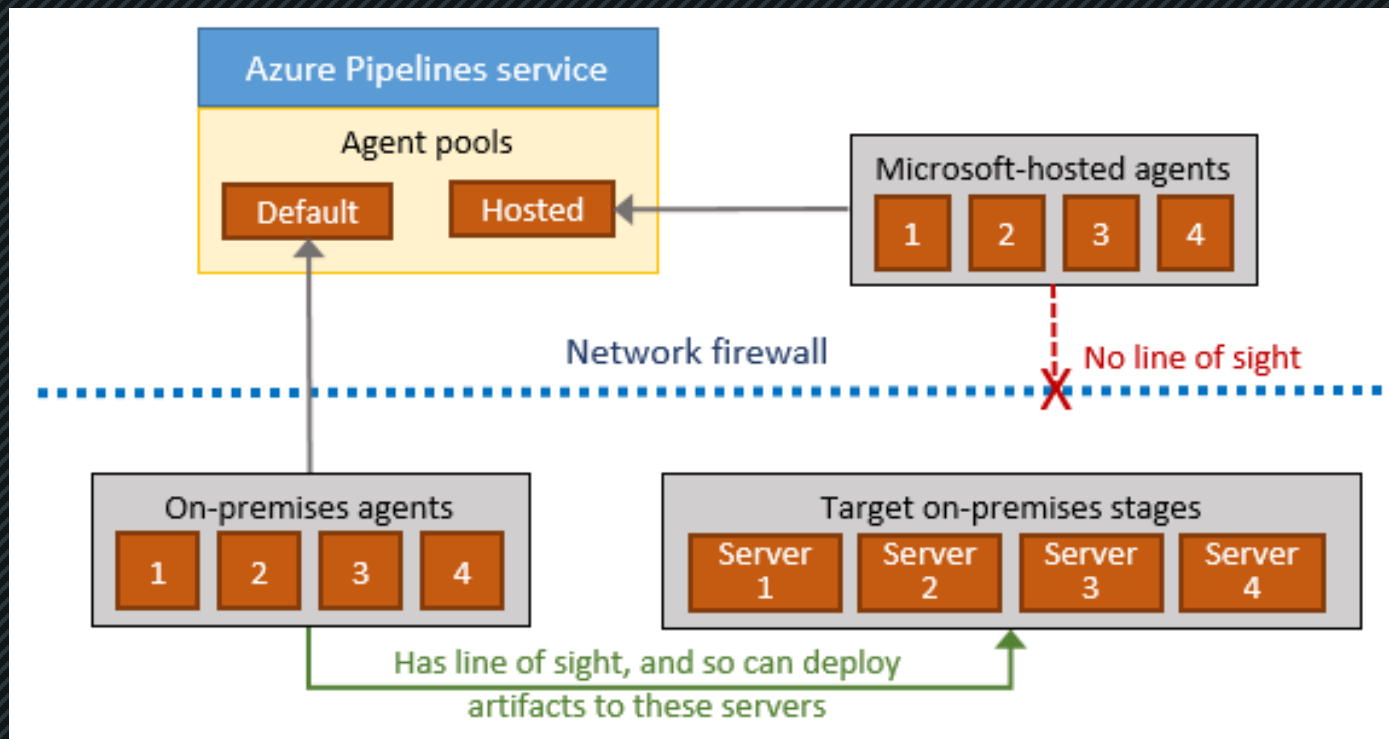
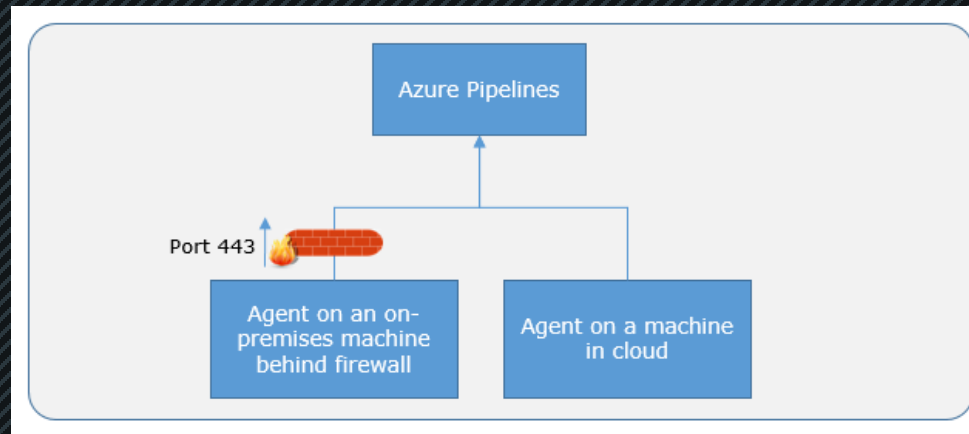
Agent Pools

- Project Settings -> Agent Pools

The screenshot shows the 'Agent pools' configuration page in Azure DevOps. The left sidebar has a menu with 'Agent pools' highlighted. The main content area shows a table of agent pools.

Name	Queued jobs	Running jobs
Azure Pipelines Azure Pipelines		14
COMS-TEST COMS-TEST		1
DAP_IBMDC_AGENT DAP_IBMDC_AGENT		
Default Default		
DevEnablementPool DevEnablementPool		1
Hosted Ubuntu 1604 Azure Pipelines		

Agent Pools



Agent Pools

○ Demo Create Pool + Agent

Get the agent

Windows

macOS

Linux

x64

x86

System prerequisites

Configure your account

Configure your account by following the steps outlined [here](#).

Download the agent

Download

Create the agent

```
PS C:\> mkdir agent ; cd agent
PS C:\agent> Add-Type -AssemblyName System.IO.Compression.FileSystem ;
[System.IO.Compression.ZipFile]::ExtractToDirectory("$HOME\Downloads\vsts-agent-win-x64-2.194.0.zip", "$PWD")
```

Configure the agent [Detailed instructions](#)

```
PS C:\agent> .\config.cmd
```

Optionally run the agent interactively

If you didn't run as a service above:

```
PS C:\agent> .\run.cmd
```

That's it!

[More Information](#)

```
PS C:\agent> .\config.cmd --proxyurl http://10.0.11.1:9400
```

Parallel Jobs

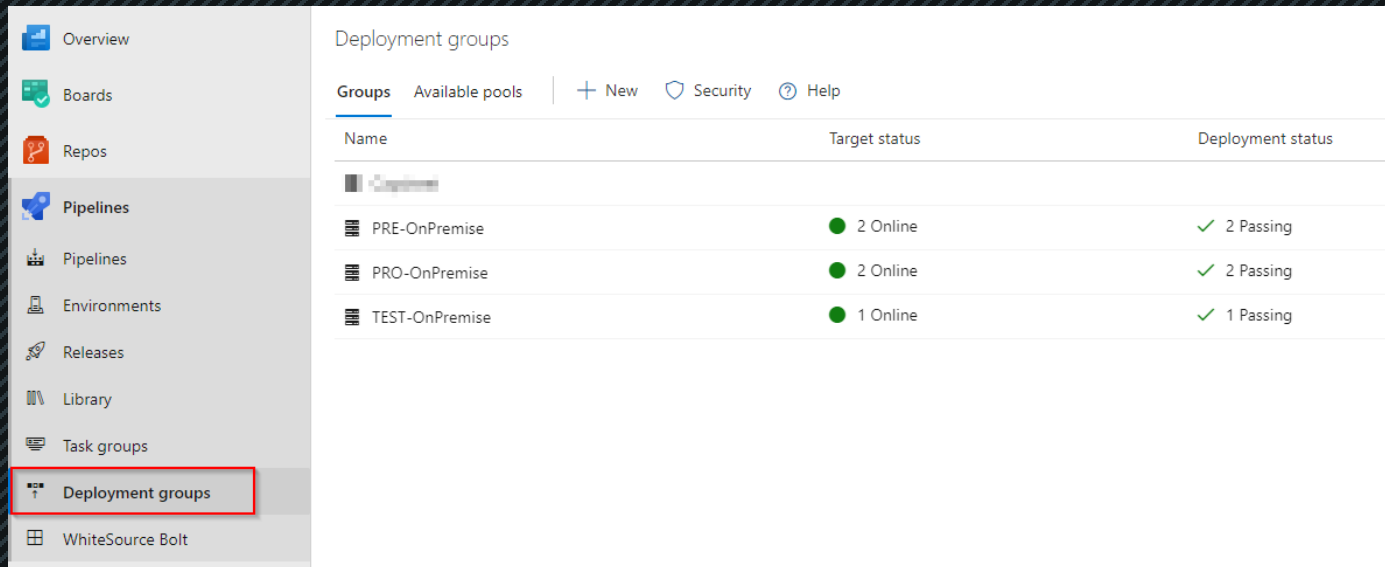
- Parallel jobs -> 1 free for Private Repo in ADO (Azure DevOps)
- GitHub allows parallel jobs but just 1000 min in Linux, 500 min in Windows, 250 in Mac per month

The screenshot displays the 'Project Settings' page in Azure DevOps, specifically the 'Parallel jobs' section. The left sidebar contains a navigation menu with options: General, Overview, Teams, Permissions, Notifications, Service hooks, Dashboards, Boards, Project configuration, Team configuration, GitHub connections, Pipelines, Agent pools, Parallel jobs (highlighted with a red box), and Settings. The main content area is divided into two sections: 'Private projects' and 'Public projects'. Each section lists job types and their corresponding parallel job limits.

Project Type	Job Type	Parallel Jobs
Private projects	Microsoft-hosted	50
	Monthly purchases	50
	Self-hosted	74
	Free parallel jobs	1
Public projects	Microsoft-hosted	60
	Free parallel jobs	10
	Monthly purchases	50
	Self-hosted	Unlimited

Deployment Groups

- Deployment Groups -> Demo Agent part of DG
- Demo show Targets, Summary, tags and register a new one
(1 folder per agent, PAT(just for register), Manage DG multiple projects)



The screenshot shows the Visual Studio Code interface. On the left sidebar, the 'Deployment groups' option is highlighted with a red rectangle. The main panel displays the 'Deployment groups' page, which includes a table of deployment groups.

Name	Target status	Deployment status
PRE-OnPremise	2 Online	2 Passing
PRO-OnPremise	2 Online	2 Passing
TEST-OnPremise	1 Online	1 Passing

```
PS C:\Agent_Deployment>.\config.cmd --proxyurl http://10.0.11.1:9400 --deploymentgroup --deploymentgroupname "<YourGroup-OnPremise>" --agent $env:COMPUTERNAME --runasservice --work '_work' --url 'https://<company>.visualstudio.com/' --projectname '<YourProject Name>' --auth PAT --token <YourToken>;
```

Pipeline and SQL DB

1. DB Snapshot
2. DB Project, static data, JOBs, Security, etc...

Thank you

Q & A

Links

1. Azure Pipelines agents
<https://bit.ly/3mKyng3>
2. MS SQL Server Data-Tier Application Framework (17.1 DacFx)
<https://www.microsoft.com/en-us/download/details.aspx?id=55255>
3. dbatools – PS Module automate SQL task
<https://dbatools.io/offline/>
4. Demo Code & Slides
<https://github.com/antonio-bravo/CoP>