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Provisioning Dev Container on AWS Cloud

Prerequisites

- 1. AWS Account with an IAM User with administrative permissions.
- 2. Docker Desktop installed.
- 3. Knowledge of launching EC2 instances.

Steps

EC2 Instance

- 1. Log in to your AWS Account and open EC2 Service.
- 2. Launch the EC2 instance with the following attributes:
 - Use Linux AMI
 - Attach Key pair(login)
 - Attach security group with allowing SSH traffic rule
 - User Data script,

```
#!bin/sh
sudo yum update
sudo yum install -y docker
sudo usermod -a -G docker ec2-user
newgrp docker
sudo systemctl start docker.service

sudo yum update
sudo curl -L
https://github.com/docker/compose/releases/latest/download/docker-
compose-$(uname -s)-$(uname -m) -o /usr/local/bin/docker-compose
sudo chmod +x /usr/local/bin/docker-compose
```

This script installs Docker & Docker Compose on the instance required to run Dev Container.

Local Docker Setup

- 1. Start the Docker Desktop.
- 2. Open a Powershell window.
- 3. Run the following commands to create a docker context for the respective EC2 instance:
 - docker context create "context-name" --docker host=ssh://ec2-user@"instance-ip"

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4. Next, we will switch from the default context (docker locally) to the above-created context by running:

o docker context use "context-name"

Substitute the *context-name* & *instance-ip* with the custom context name and the above provisioned EC2 instance public ip respectively.

This will let us run the Dev Container onto the EC2 instance.

- 5. Then in the same terminal window, check whether the Docker CLI can communicate with docker on the EC2 instance by running:
 - docker run --rm hello-world.

If you cannot run the container, check out Visual Studio Code's SSH Tunneling for Docker guide to help you troubleshoot connection issues.

- 5. If you can successfully run the above command, you can start running dev containers on the remote machine by referring to the following document.
 - Dev Container Setup