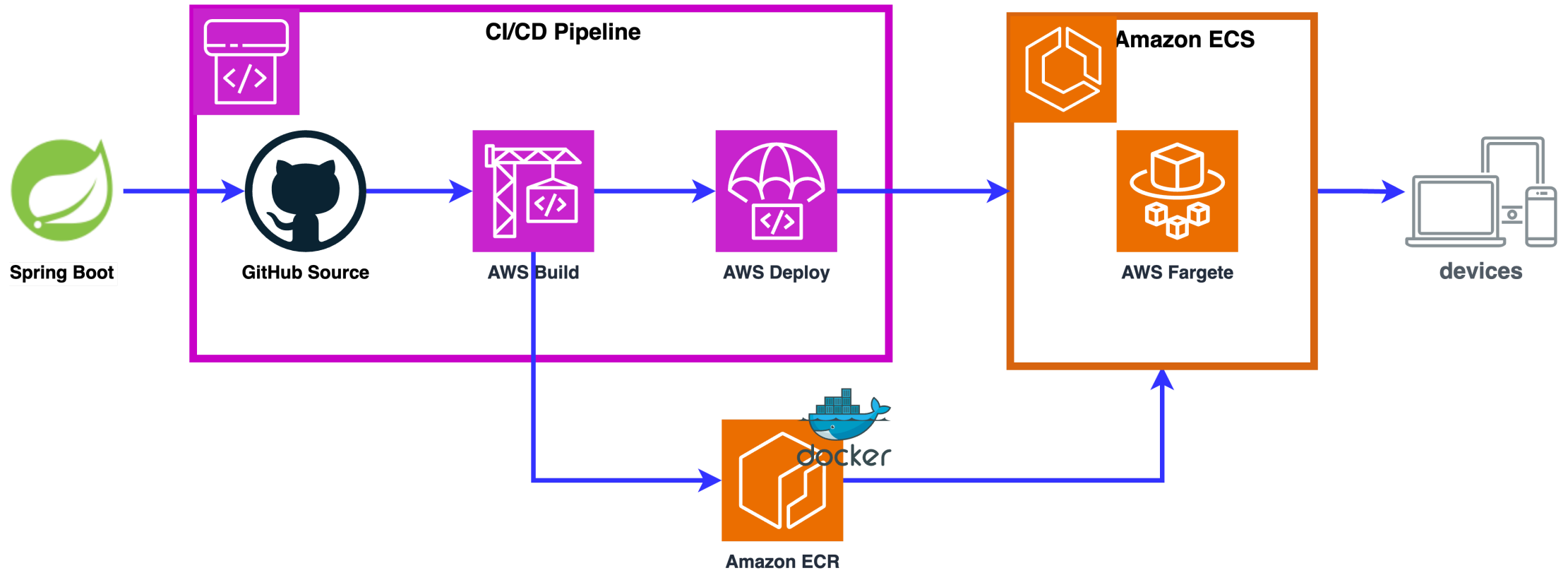


전체 아키텍처



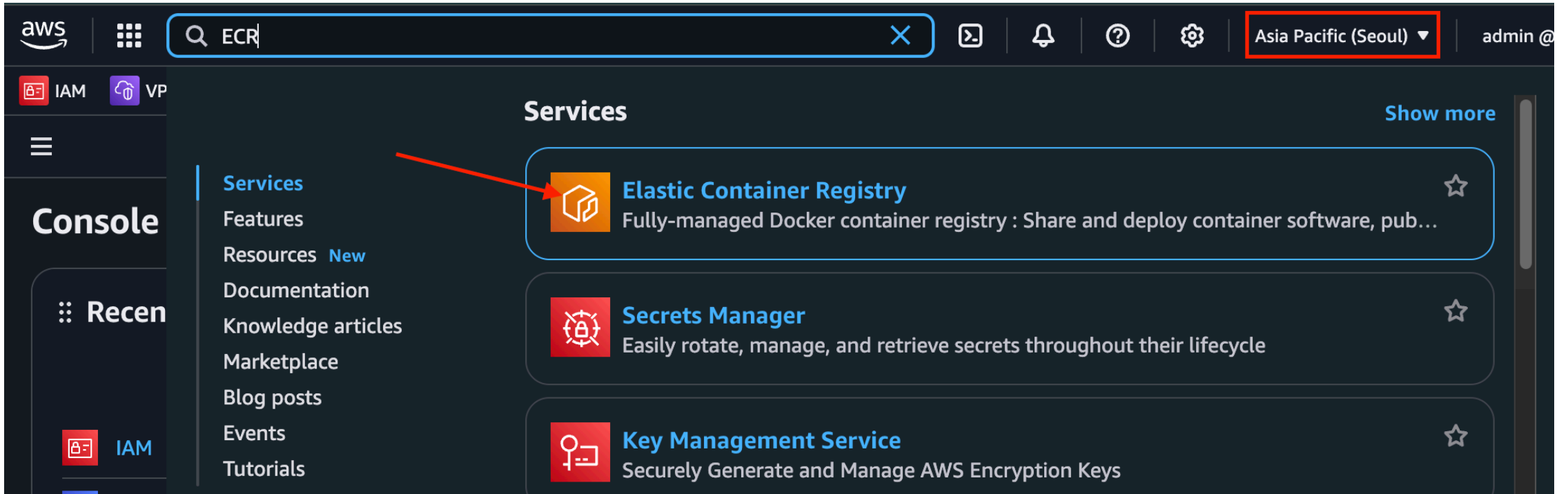
AWS ECR

- AWS ECR (Elastic Container Registry)는 Docker 컨테이너 이미지를 저장하고 관리할 수 있는 AWS의 컨테이너 이미지 레지스트리 서비스입니다.



Amazon ECR

단계1: AWS ECR 접속



단계2: Create repository

aws | [Search] [Option+S] | Asia Pacific (Seoul) | admin @ 4266-

IAM VPC EMR Elastic Container Service CodePipeline Aurora and RDS CloudWatch Amazon EventBridge Lambda S3 EC2

Amazon ECR > Private registry > Repositories

Amazon Elastic Container Registry <

▼ Private registry

Repositories

Features & Settings

▼ Public registry

Repositories

Private repositories [Refresh] [View push commands] [Delete] [Actions] [Create repository]

[Search] Search by repository substring

Repository name ▲	URI	Created at ▼	Tag immutability	Encryption type
No repositories				
No repositories were found				

buildspec.yml에 작성된 ecr명 사용

The image shows two overlapping windows. The background window is the AWS IAM console 'General settings' page for an ECR repository. The foreground window is a VS Code editor showing the 'buildspec.yml' file.

AWS IAM console - General settings


- Repository name:** 426653742146.dkr.ecr.ap-northeast-2.amazonaws.com/course-ecs-springboot-ecr
- Image tag mutability:** Mutable (selected)

VS Code editor - buildspec.yml

```
2  env:
4    variables:
6      ECS_CONTAINER_NAME: ecs-springboot-container
7      IMAGE_REPO_NAME: course-ecs-springboot-ecr # aws ecr0
8      IMAGE_TAG: latest
```

A red arrow points from the repository name in the AWS console to the `IMAGE_REPO_NAME` value in the buildspec.yml file.

Encryption settings [Info](#)

 The encryption settings for a repository can't be changed once the repository is created.

Encryption configuration

By default, repositories use the industry standard Advanced Encryption Standard (AES) encryption. You can optionally choose to use a key stored in the AWS Key Management Service (KMS) to encrypt the images in your repository.

- ☒ **AES-256**
Industry standard Advanced Encryption Standard (AES) encryption
- ☐ **AWS KMS**
AWS Key Management Service (KMS)

► **Image scanning settings - *deprecated***

Cancel

Create

단계3: 확인

Amazon ECR > Private registry > Repositories

Amazon Elastic Container Registry

▼ Private registry

- Repositories
- Features & Settings

▼ Public registry

- Repositories
- Settings

Private repositories (1)

View push commands Delete Actions **Create repository**

Search by repository substring

Repository name ▲	URI	Created at ▼	Tag immutability	Encryption type
<input type="radio"/> course-ecs-springboot-ecr	426653742146.dkr.ecr.ap-northeast-2.amazonaws.com/course-ecs-springboot-ecr	July 09, 2025, 11:40:03 (UTC+09)	Mutable	AES-256

저장된 image 없음

aws

Search

[Option+S]

Asia Pacific (Seoul)

admin @

IAM

VPC

EMR

Elastic Container Service

CodePipeline

Aurora and RDS

CloudWatch

Amazon EventBridge

Lambda

S3

EC2

Amazon ECR

Private registry

Repositories

course-ecs-springboot-ecr

Amazon Elastic Container Registry

<

▼ Private registry

Repositories

Summary

Images

Permissions

Lifecycle Policy

Images (0)

Delete

Details

Scan

View push

Search artifacts

Image tag

▼

Artifact type

Pushed at

▼

Size (MB)

▼

Image URI

Digest

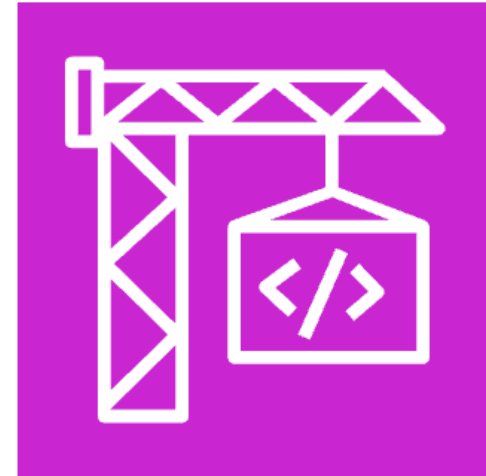
Last record time

No images

No images to display

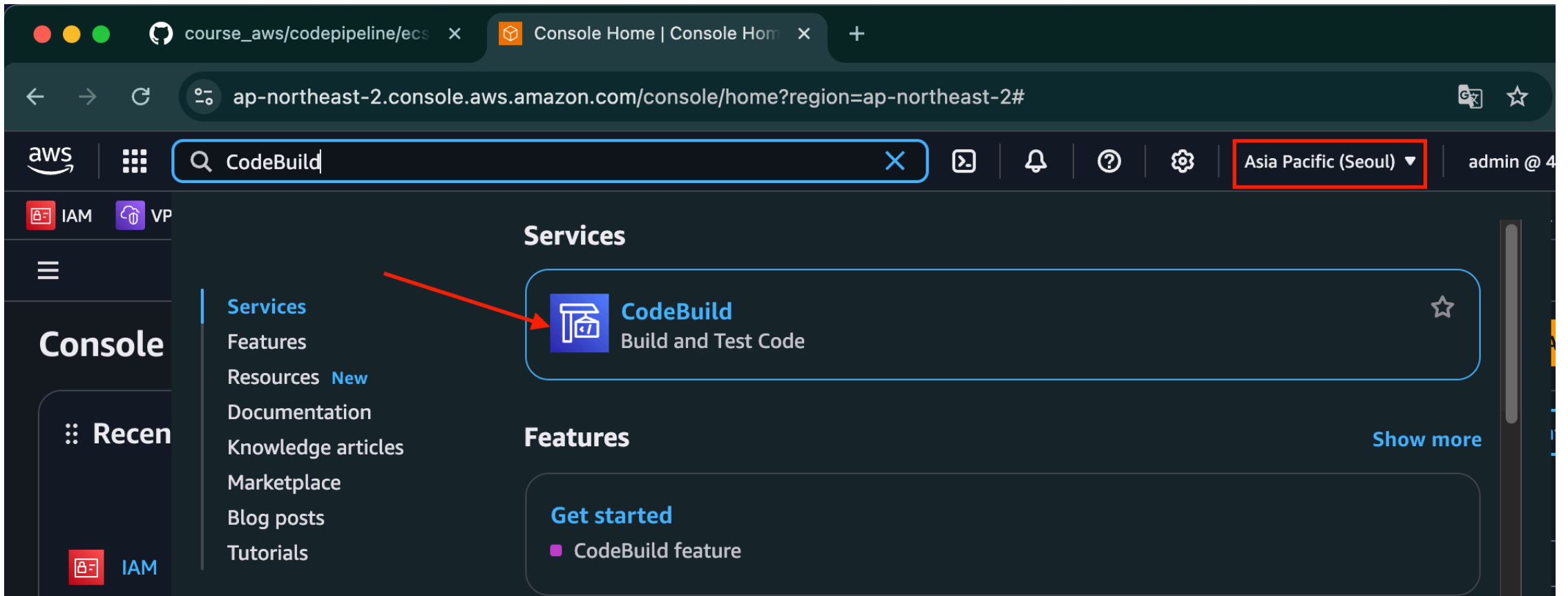
AWS CodeBuild

- AWS CodeBuild는 AWS에서 제공하는 완전관리형 빌드 서비스로, 소스 코드를 자동으로 컴파일하고, 테스트하고, 실행 파일로 패키징해주는 도구입니다.
- 쉽게 말해, 코드를 빌드하는 자동화 서버이며 Jenkins와 같은 CI 툴을 AWS에서 제공하는 형태입니다.



AWS Build

단계1: AWS CodeBuild 접속



단계2: Create connection

The screenshot shows the AWS IAM console interface. On the left, the 'Developer Tools Settings' sidebar is open, with 'Connections' highlighted under the 'Settings' section. The main content area shows the 'Connections' page, which includes a search bar, a table with columns 'Connection name', 'Provider', 'Status', and 'ARN', and a 'No results' message. A red arrow points to the 'Create connection' button in the top right of the main content area.

Developer Tools Settings

- Source • CodeCommit
- Build • CodeBuild
- Deploy • CodeDeploy
- Pipeline • CodePipeline
- Settings
 - Notification rules
 - Connections**

Developer Tools > Connections

Connections | Hosts

Connections Info

Connection name	Provider	Status	ARN
No results There are no results to display.			

Select a provider

☐ Bitbucket

☒ GitHub

☐ GitHub Enterprise Server

☐ GitLab

☐ GitLab self-managed

Create GitHub App connection [Info](#)

Connection name

커넥션 이름 작성

► Tags - *optional*

Connect to GitHub

Connect to GitHub

GitHub connection settings [Info](#)

Connection name

App Installation - *optional*

Install GitHub App to connect as a bot. Alternatively, leave it blank to connect as a GitHub user, which can be used in AWS CodeBuild projects.



or

Install a new app

► **Tags - *optional***

Connect

소스가 올라간 계정 선택



Install AWS Connector for GitHub

Where do you want to install AWS Connector for GitHub?



good593

Configure >



1EdTech



Connect to GitHub

GitHub connection settings [Info](#)

Connection name

good593-github

App Installation - *optional*

Install GitHub App to connect as a bot. Alternatively, leave it blank to connect as a GitHub user, which can be used in AWS CodeBuild projects.

Q 50320061



or

Install a new app

► **Tags - *optional***

Connect

aws

Search

[Option+S]

Asia Pacific (Seoul) ▾

admin @

IAM

VPC

EMR

Elastic Container Service

CodePipeline

Aurora and RDS

CloudWatch

Amazon EventBridge

Lambda

S3

EC2

Developer Tools

Settings

▶ Source • CodeCommit

▶ Build • CodeBuild

▶ Deploy • CodeDeploy

▶ Pipeline • CodePipeline

▼ Settings

Notification rules

Connections

Go to resource

Developer Tools > Connections

Connections Hosts

Connections Info

↺

View details

Update pending connection

Delete

Create connection

Q

< 1 >

	Connection name	Provider	Status
<input type="radio"/>	good593-github	GitHub	✓ Available

단계3: Create Build project

Developer Tools ×

CodeBuild

- ▶ Source • CodeCommit
- ▼ Build • CodeBuild
 - Getting started
 - Build projects**
 - Build history
 - Report groups
 - Report history
 - Account metrics
- ▶ Related integrations

Developer Tools > CodeBuild > Build projects

Build projects [Info](#)

Create project

Your projects ▼ < 1 >

	Name ▼	Source provider	Repository	Latest build status	Description	Last Modified
	Investment_crypto-build	GitHub	good593/Investment_crypto	-	-	7 months ago

Create build project

Project configuration

Project name

ecs-springboot-build

A project name must be 2 to 255 characters. It can include the letters A-Z and a-z, the numbers 0-9, and the special characters - and _.

Project type

Select what type of project you would like to create. [Info](#) 

☒ **Default project**

Create a custom CodeBuild project.

☐ **Runner project**

Create a CodeBuild managed runner for workflows in GitHub Actions, GitHub Enterprise Actions, GitLab, or Buildkite.

▶ Additional configuration

Description, public build access, build badge, concurrent build limit, tags

▼ Source

Add source

Source 1 - Primary

Source provider

GitHub

Credential

⊗ You have not connected to GitHub. [Manage account credentials.](#)

☐ Use override credentials for this project only

Repository

☒ Repository in my GitHub account

☐ Public repository

☐ GitHub scoped webhook

Source Provider

Q GitHub

Credential type



GitHub App

Connect project to GitHub using
an AWS managed GitHub App



Personal access token

Connect project to GitHub using
a personal access token



OAuth app

Connect project to GitHub using
an OAuth app

Connection

You can [create a new GitHub connection](#) by using an AWS managed GitHub App

Q |

good593-github



Save

good593-github

Repository

☒ Repository in my GitHub account

☐ Public repository

☐ GitHub scoped webhook

Repository

Q



Source version - optional [Info](#)

Enter a pull request, branch, commit ID, tag, or reference and a commit ID.

► Additional configuration

Git clone depth, Git submodules, Build status config

▼ Primary source webhook events [Info](#)

Webhook - *optional* [Info](#) 

☒ Rebuild every time a code change is pushed to this repository

Build type

☒ **Single build**
Triggers single build

☐ **Batch build**
Triggers multiple builds as single execution

▶ Webhook event filter groups

Add filter group

A build is triggered if any filter group evaluates to true, which occurs when all the filters in the group evaluate to true.

▶ Additional configuration

Environment image



Managed image

Use an image managed by AWS CodeBuild



Custom image

Specify a Docker image

Running mode



Container

Running on Docker container



Instance

Running on EC2 instance directly

Operating system

Amazon Linux



Runtime(s)

Standard



Image

aws/codebuild/amazonlinux-x86_64-standard:5.0 ▼

Image version

Always use the latest image for this runtime version ▼

☐ Use GPU-enhanced compute

Service role

☒ **New service role**
Create a service role in your account

☐ **Existing service role**
Choose an existing service role from your account

Role name

codebuild-ecs-springboot-build-service-role

Type your service role name

► Additional configuration

Timeout, privileged, certificate, VPC, compute type, environment variables, file systems, auto-retry, registry credential

buildspec.yml 파일명 작성

▼ **Buildspec**

Build specifications

☐ Insert build commands
Store build commands as build project configuration

☒ Use a buildspec file
Store build commands in a YAML-

Buildspec name - *optional*
By default, CodeBuild looks for a file named buildspec.yml in the source code root directory. If your buildspec file location, enter its path from the source root here (for example, buildspec-two.yml or configuration/buildspec.yml)

buildspec.yml

▼ **ECS-SPRINGBOOT**

> .gradle

> .vscode

> build

> gradle

> src

.gitignore

build.gradle

buildspec.yml

Dockerfile

gradlew

gradlew.bat

25

buildspec.yml

► **Batch configuration**

You can run a group of builds as a single execution. Batch configuration is also available in advanced option when starting build.

► **Artifacts**

Add artifact

► **Logs**

Cancel

Create build project



단계4: Add Permission

Developer Tools

CodeBuild

▶ Source • CodeCommit

▼ Build • CodeBuild

Getting started

Build projects

Build project

Settings

Build history

Report groups

Report history

Account metrics

▼ Related integrations

Developer Tools > CodeBuild > Build projects > ecs-springboot-build

ecs-springboot-build

Actions ▼ Create trigger Edit Clone Debug build

Start build with overrides Start build

Configuration

Source provider	Primary repository	Artifacts upload location	Service role
GitHub	good593/ecs-springboot	-	arn:aws:iam::426653742146:role/service-role/codebuild-ecs-springboot-build-service-role

Identity and Access Management (IAM) <

Q Search IAM

Dashboard

▼ Access management

User groups

Users

Roles

Policies

Identity providers

Account settings

Root access management [New](#)

▼ Access reports

Access Analyzer

codebuild-ecs-springboot-build-service-role [Info](#) [Delete](#)

Summary [Edit](#)

Creation date

July 09, 2025, 11:18 (UTC+09:00)

Last activity

✔ 6 minutes ago

ARN

arn:aws:iam::426653742146:role/service-role/codebuild-ecs-springboot-build-service-role

Maximum session duration

1 hour

Permissions

Trust relationships

Tags

Last Accessed

Revoke sessions

Permissions policies (2) [Info](#)

↺

Simulate ↗

Remove

Add permissions ▲

You can attach up to 10 managed policies.

Q Search

Filter by Type

All types ▼

Attach policies

Create inline policy

< 1 >

⚙

28

```
# add Permission
AmazonEC2ContainerRegistryPowerUser
```

Attach policy to codebuild-ecs-springboot-build-service-role

► Current permissions policies (2)

Other permissions policies (1/1073)

Q AmazonEC2ContainerRegistryPowerUser

Filter by Type

All types

1 match

< 1 >



Policy name



Type



Description



AmazonEC2ContainerRegistryPowerUser

AWS managed

Provides full access to Amazon EC2 Cont...

Cancel

Add permissions

Identity and Access Management (IAM) <

Q Search IAM

Dashboard

▼ Access management

User groups

Users

Roles

Policies

Identity providers

Account settings

Root access management [New](#)

▼ Access reports

Access Analyzer

Resource analysis [New](#)

Last activity

✔ 8 minutes ago

springboot-build-service-role

Maximum session duration

1 hour

Permissions

Trust relationships

Tags

Last Accessed

Revoke sessions

Permissions policies (3) [Info](#)

↺

Simulate ↗

Remove

Add permissions ▼

You can attach up to 10 managed policies.

Q Search

Filter by Type

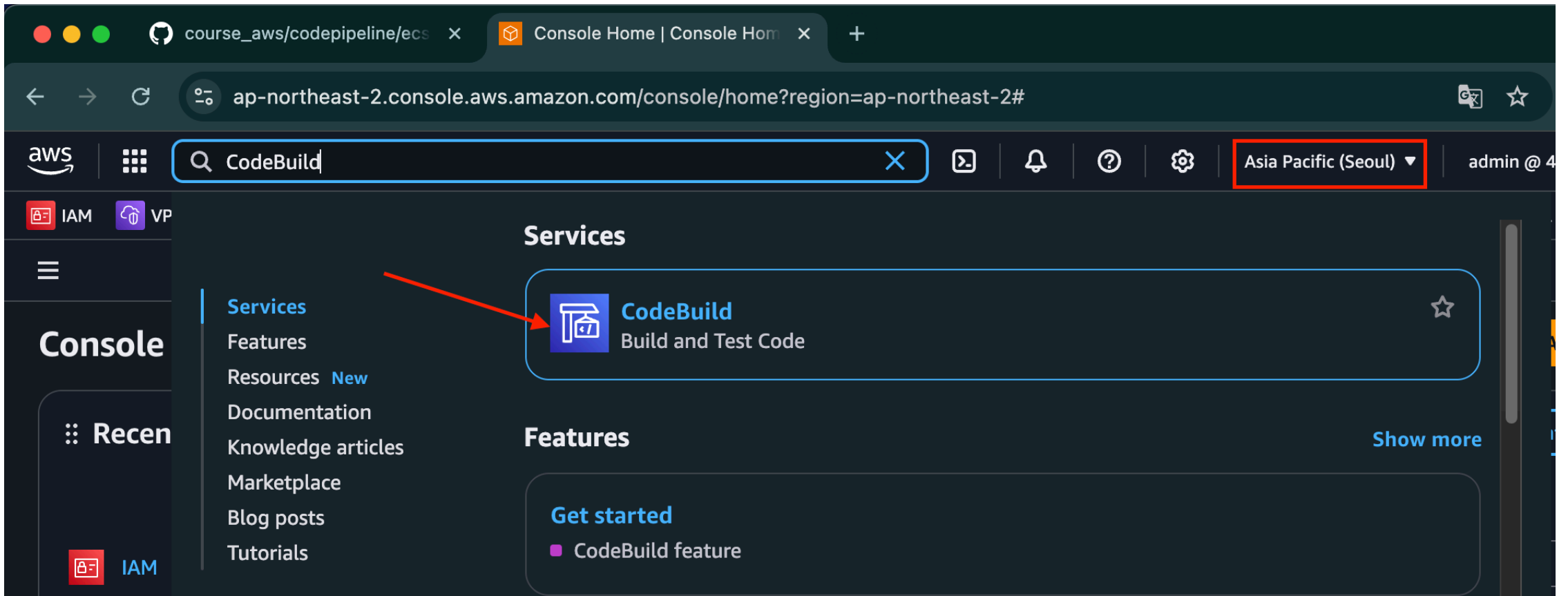
All types ▼

< 1 >

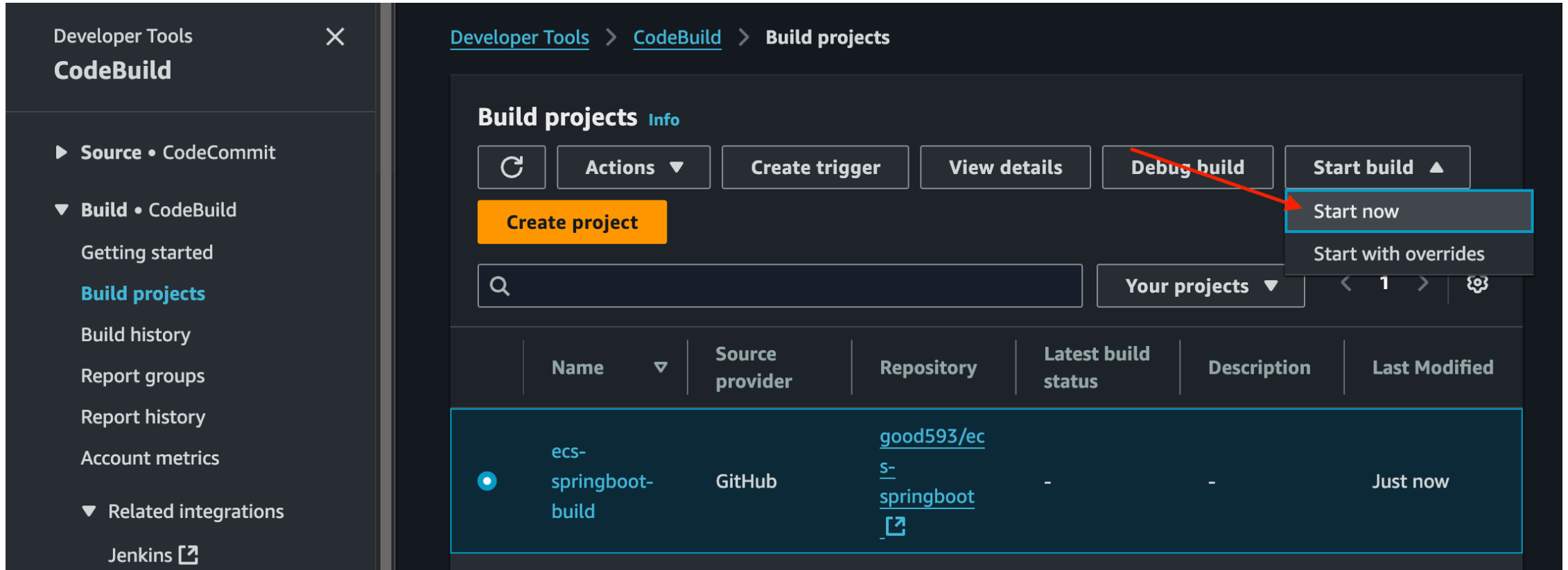
⚙

<input type="checkbox"/>	Policy name ↗	Type	Attached entities ▼
<input type="checkbox"/>	AmazonEC2ContainerRegistryPowerUser	AWS managed	1
<input type="checkbox"/>	CodeBuildBasePolicy-ecs-springboot-build-ap-n...	Customer managed	1
<input type="checkbox"/>	CodeBuildCodeConnectionsSourceCredentialsPo...	Customer managed	1

단계5: AWS CodeBuild 접속



단계6: AWS CodeBuild > Start Build



The screenshot shows the AWS CodeBuild console interface. On the left is a sidebar with navigation options: Developer Tools, CodeBuild, Source (CodeCommit), Build (CodeBuild), Getting started, Build projects (highlighted), Build history, Report groups, Report history, Account metrics, and Related integrations (Jenkins). The main content area shows the 'Build projects' page with a breadcrumb trail: Developer Tools > CodeBuild > Build projects. Below the breadcrumb, there are buttons for 'Create project', 'Actions', 'Create trigger', 'View details', 'Debug build', and 'Start build'. A red arrow points from the 'Debug build' button to the 'Start now' option in the 'Start build' dropdown menu. Below the buttons is a search bar and a 'Your projects' dropdown. At the bottom is a table with columns: Name, Source provider, Repository, Latest build status, Description, and Last Modified. The table contains one row for a project named 'ecs-springboot-build' with source provider 'GitHub' and repository 'good593/ec-s-springboot'.

Name	Source provider	Repository	Latest build status	Description	Last Modified
ecs-springboot-build	GitHub	good593/ec-s-springboot	-	-	Just now

Developer Tools

CodeBuild

▶ Source • CodeCommit

▼ Build • CodeBuild

Getting started

Build projects

Build history

Report groups

Report history

Account metrics

▼ Related integrations

Jenkins

Developer Tools > CodeBuild > Build projects

Build projects

Info

↺

Actions ▼

Create trigger

View details

Debug build

Start build ▼

Create project

Q

Your projects ▼

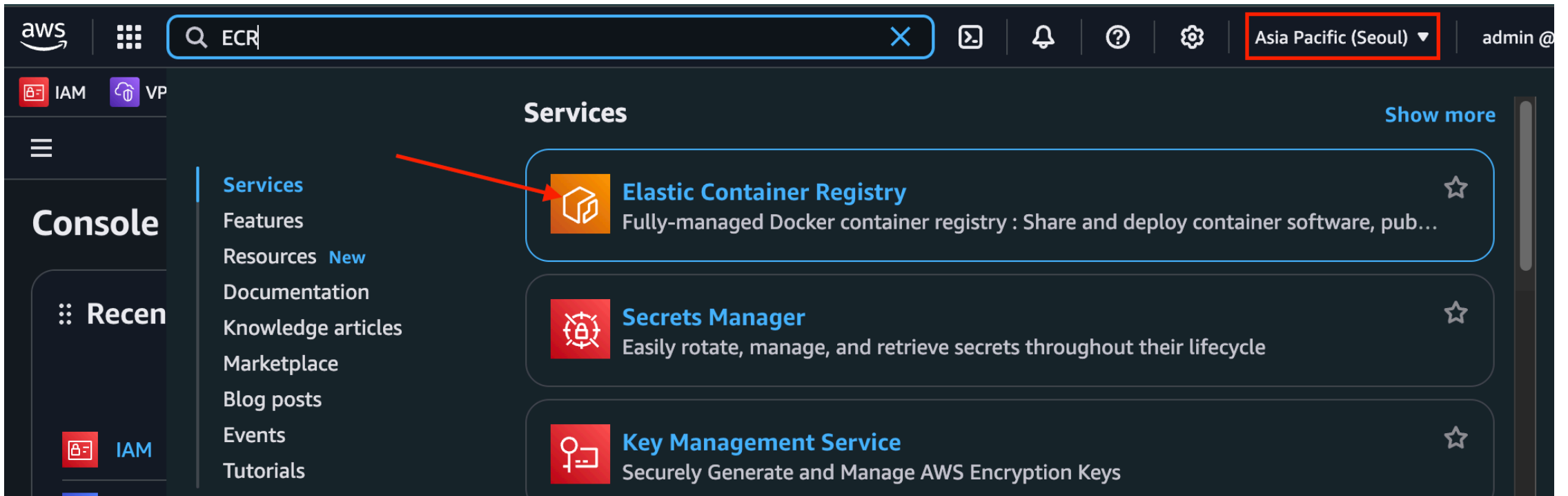
< 1 >

⚙

	Name ▼	Source provider	Repository	Latest build status	Description	Last Modified
○	ecs-springboot-build	GitHub	good593/ecs-springboot-build	✔ Succeeded	-	34 minutes ago

33

단계7: AWS ECR 접속 및 빌드 결과 확인



aws

Search

[Option+S]

Asia Pacific (Seoul)

admin

IAM

VPC

EMR

Elastic Container Service

CodePipeline

Aurora and RDS

CloudWatch

Amazon EventBridge

Lambda

S3

EC2

Amazon ECR

Private registry

Repositories

Amazon Elastic Container Registry

<

Private registry

Repositories

Features & Settings

Public registry

Repositories

Settings

Private repositories (1)

View push commands

Delete

Actions

Create

Search by repository substring

Repository name	URI	Created at	Tag immutability
<input type="radio"/> course-ecs-springboot-ecr	426653742146.dkr.ecr.ap-northeast-2.amazonaws.com/course-ecs-springboot-ecr	July 09, 2025, 11:40:03 (UTC+09)	Mutable

aws

Search

[Option+S]

Asia Pacific (Seoul)

IAM

VPC

EMR

Elastic Container Service

CodePipeline

Aurora and RDS

CloudWatch

Amazon EventBridge

Lambda

S3

Amazon ECR

>

Private registry

>

Repositories

>

course-ecs-springboot-ecr

Amazon Elastic Container Registry

<

▼ Private registry

Repositories

Summary

Images

Permissions

Lifecycle Policy

Repository tags

Images (1)

Delete

Details

Scan

Search artifacts

<input type="checkbox"/>	Image tag	Artifact type	Pushed at	Size (MB)	Image URI	Digest
<input type="checkbox"/>	latest	Image	July 09, 2025, 11:44:40 (UTC+09)	394.64	Copy URI	sha256:ee