

CI/CD: 详解版

整个步骤分成三个部分：

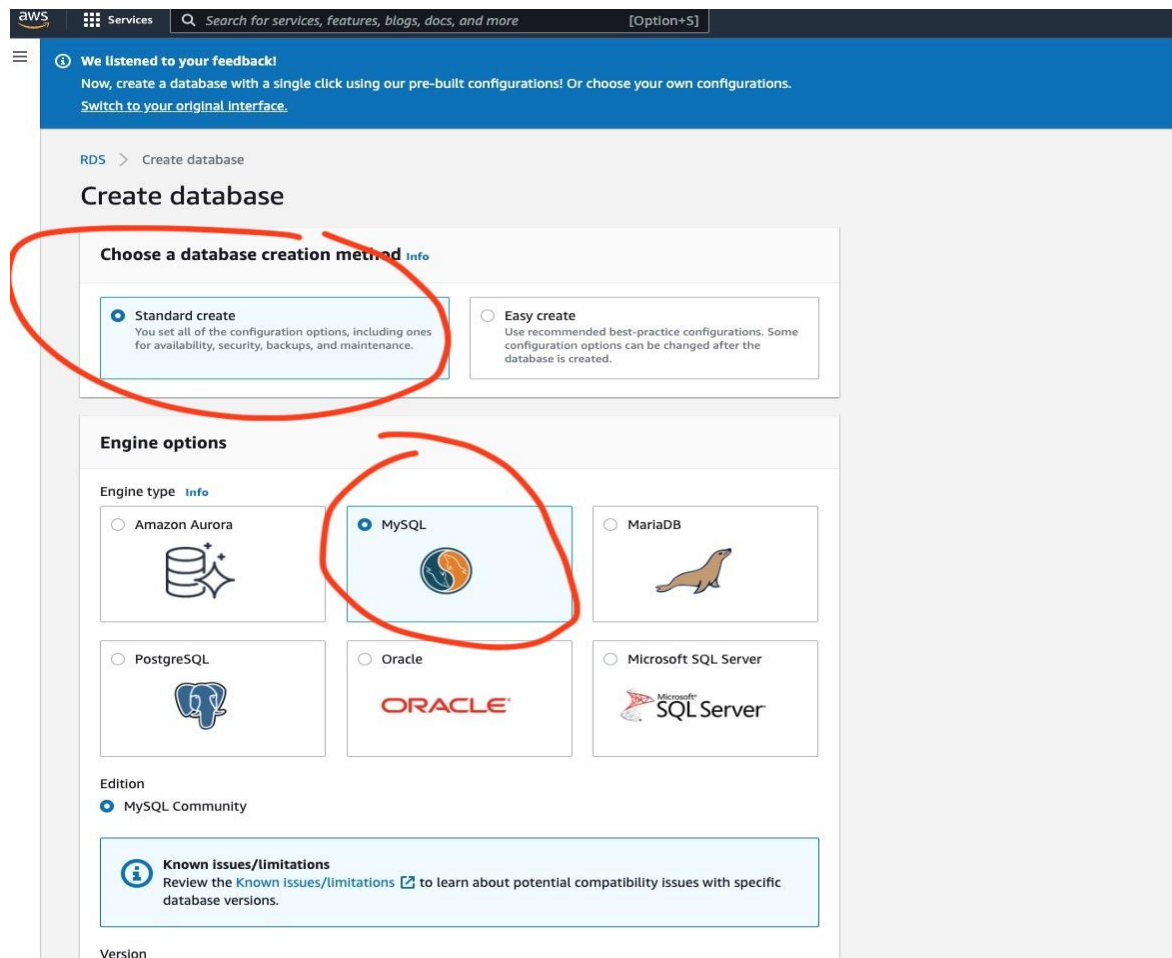
第一部分：建立AWS RDS数据库

第二部分：把自己的代码和数据库进行链接，在本地试跑确定无误

第三部分：建立AWS ElasticBeanstalk 的环境，并且进行部署。

下面进行第一步数据库的配置：

数据库图片1:



数据库图片2:

Templates

Choose a sample template to meet your use case.

☐ **Production**
Use defaults for high availability and fast, consistent performance.

☐ **Dev/Test**
This instance is intended for development use outside of a production environment.

☒ **Free tier**
Use RDS Free Tier to develop new applications, test existing applications, or gain hands-on experience with Amazon RDS.
[Info](#)

Availability and durability

Deployment options [Info](#)

The deployment options below are limited to those supported by the engine you selected above.

- ☒ **Multi-AZ DB Cluster - new**
Creates a DB cluster with a primary DB instance and two readable standby DB instances, with each DB instance in a different Availability Zone (AZ). Provides high availability, data redundancy and increases capacity to serve read workloads.
- ☐ **Multi-AZ DB instance (not supported for Multi-AZ DB cluster snapshot)**
Creates a primary DB instance and a standby DB instance in a different AZ. Provides high availability and data redundancy, but the standby DB instance doesn't support connections for read workloads.
- ☐ **Single DB instance (not supported for Multi-AZ DB cluster snapshot)**
Creates a single DB instance with no standby DB instances.

数据库图片3:

Settings

DB instance identifier [Info](#)

Type a name for your DB instance. The name must be unique across all DB instances owned by your AWS account in the current AWS region.

database-1 随便起一个就行，但是最好记住了

The DB instance identifier is case insensitive, but is stored as all lowercase (as in "mydbinstance"). Constraints: 1 to 60 alphanumeric characters or hyphens. First character must be a letter. Can't contain two consecutive hyphens. Can't end with a hyphen.

▼ **Credentials Settings**

Master username [Info](#)

Type a login ID for the master user of your DB instance.

admin

1 to 16 alphanumeric characters. First character must be a letter.

☐ **Auto generate a password**
Amazon RDS can generate a password for you, or you can specify your own password.

Master password [Info](#)

.....

Constraints: At least 8 printable ASCII characters. Can't contain any of the following: / (slash), ' (single quote), " (double quote) and @ (at sign).

Confirm password [Info](#)

数据库图片4:

Connectivity

Virtual private cloud (VPC) [Info](#)

VPC that defines the virtual networking environment for this DB instance.

Default VPC (vpc-b9ab5dd2)

Only VPCs with a corresponding DB subnet group are listed.

After a database is created, you can't change its VPC.

Subnet group [Info](#)

DB subnet group that defines which subnets and IP ranges the DB instance can use in the VPC you selected.

default

Public access [Info](#)

Yes

Amazon EC2 instances and devices outside the VPC can connect to your database. Choose one or more VPC security groups that specify which EC2 instances and devices inside the VPC can connect to the database.

No

RDS will not assign a public IP address to the database. Only Amazon EC2 instances and devices inside the VPC can connect to your database.

VPC security group

Choose a VPC security group to allow access to your database. Ensure that the security group rules allow the appropriate incoming traffic.

Choose existing

Choose existing VPC security groups

Create new

Create new VPC security group

Existing VPC security groups

数据库图片5:

<input type="radio"/>	aa16e9djejzhrzq7	Instance	MySQL Community	us-east-2a	db.t2.micro	Available	<div><div></div></div> 4.75%	<div><div></div></div> 0 Connecti
<input type="radio"/>	database-1	Instance	MySQL Community	-	db.t3.micro	Creating	-	
<input type="radio"/>	swagger-mysql	Instance	MySQL Community	us-east-2b	db.t3.micro	Available	<div><div></div></div> 3.32%	<div><div></div></div> 14 Connect

数据库图片6:

	DB Identifier	Role	Engine	Region & AZ	Size	Status	CPU	Current activity
	aa16e9djejzhrzq7	Instance	MySQL Community	us-east-2a	db.t2.micro	Available	5.00%	0 Connections
	database-1	Instance	MySQL Community	us-east-2a	db.t3.micro	Available	3.93%	0 Connections
	swagger-mysql	Instance	MySQL Community	us-east-2b	db.t3.micro	Available	2.94%	14 Connections

数据库图片7:

Summary

DB identifier database-1	CPU 3.93%	Status Available	Class db.t3.micro
Role Instance	Current activity 0 Connections	Engine MySQL Community	Region & AZ us-east-2a

Connectivity & security

Endpoint & port

Endpoint
database-1.cn5yyq24eoc.us-east-2.rds.amazonaws.com

Port
3306

Networking

Availability Zone
us-east-2a

VPC
vpc-b9ab5dd2

Subnet group
default

Subnets
subnet-2798cc5d
subnet-c72f938b
subnet-50110f38

Network type
IPv4

Security

VPC security groups
default (sg-40c42c22)
Active

Publicly accessible
Yes

Certificate authority
rds-ca-2019

Certificate authority date
August 22, 2024, 10:08 (UTC±10:08)

这几个一会儿要用到去链接 intelliJ 后面和 workbench 的数据库

数据库图片8:

database-1

ModifyActions

Summary

DB identifier database-1	CPU 3.51%	Status Available	Class db.t3.micro
Role Instance	Current activity 0 Connections	Engine MySQL Community	Region & AZ us-east-2a

Connectivity & securityMonitoringLogs & eventsConfigurationMaintenance & backupsTags

Connectivity & security

<div>Endpoint & port</div> <div>Endpoint database-1.cnuyyq24eoc.us-east-2.rds.amazonaws.com</div> <div>Port 3306</div>	<div>Networking</div> <div>Availability Zone us-east-2a</div> <div>VPC vpc-b9ab5dd2</div> <div>Subnet group default</div> <div>Subnets subnet-2798cc5d subnet-c72f938b subnet-50110f38</div> <div>Network type IPv4</div>	<div>Security</div> <div>VPC security groups default (sg-40c42c22) Active</div> <div>Publicly accessible Yes</div> <div>Certificate authority rds-ca-2019</div> <div>Certificate authority date August 22, 2024, 10:08 (UTC±10:08)</div>
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先设置可见性

数据库图片9:

Security Groups (1/1) [Info](#)

Filter security groups

search: sg-40c42c22 [X](#) [Clear filters](#)

<input checked="" type="checkbox"/>	Name	Security group ID	Security group name	VPC ID	Description	Owner	Inbound rules count
<input checked="" type="checkbox"/>	-	sg-40c42c22	default	vpc-b9ab5dd2 vpc-b9ab5dd2	default VPC security gr...	087637281241	1 Permission entry

g-40c42c22 - default

Details **Inbound rules** Outbound rules Tags

[You can now check network connectivity with Reachability Analyzer](#) [Run Reachability Analyzer](#) [X](#)

Inbound rules (1/1)

Filter security group rules

<input checked="" type="checkbox"/>	Name	Security group rule...	IP version	Type	Protocol	Port range	Source
<input checked="" type="checkbox"/>	-	sgr-056ea785549802ff3	IPv4	MYSQL/Aurora	TCP	3306	0.0.0.0/0

点击这个

[Edit inbound rules](#)

数据库图片10:

Edit inbound rules [Info](#)

Inbound rules control the incoming traffic that's allowed to reach the instance.

先把原来的删除了，然后加一个新的，type和source要重新设置下，source是 anywhere ip4

Inbound rules [Info](#)

Security group rule ID

Type	Protocol	Port range	Source	Description - optional	Info
MYSQL/Aurora	TCP	3306	Anywhere...		Delete

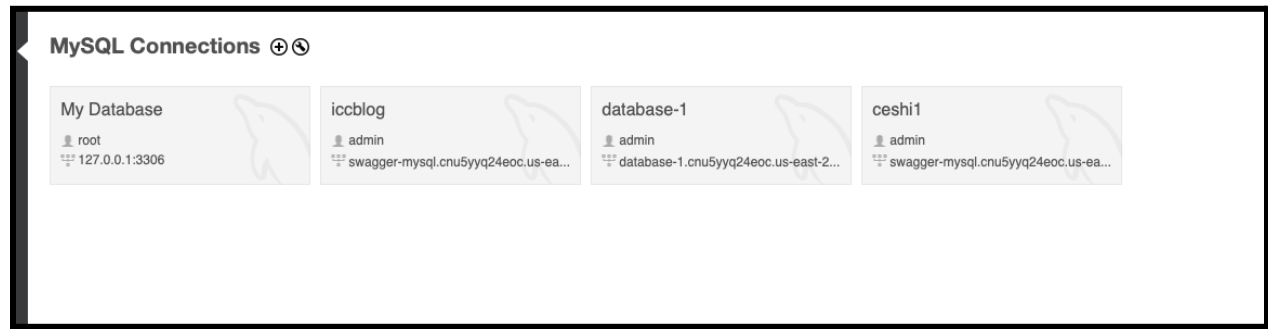
[Add rule](#)

0.0.0.0/0 [X](#)

点这个创建新的

[Cancel](#) [Preview changes](#) [Save rules](#)

数据库测试：链接mysql-workbench



Setup New Connection

Connection Name: 起个名字

Connection Method: Standard (TCP/IP) Method to use to connect to the RDBMS

Parameters SSL Advanced

Hostname: 127.0.0.1 Port: 3306 Name or IP address of the server host - and TCP/IP port.

Username: root 换掉，用aws的database Name of the user to connect with.

Password: Store in Keychain... Clear The user's password. Will be requested later if it's not set.

Default Schema: The schema to use as default schema. Leave blank to select it later.

Configure Server Management... Test Connection Cancel OK

注意：插入以后点击apply去生成

MySQL Workbench

database-1 iccblog ceshi1

Administration Schemas Query 1 roles

CHEMAS Filter objects

1 • SELECT * FROM iccblog.roles;

100% Filter Rows: Search Edit Export/Import

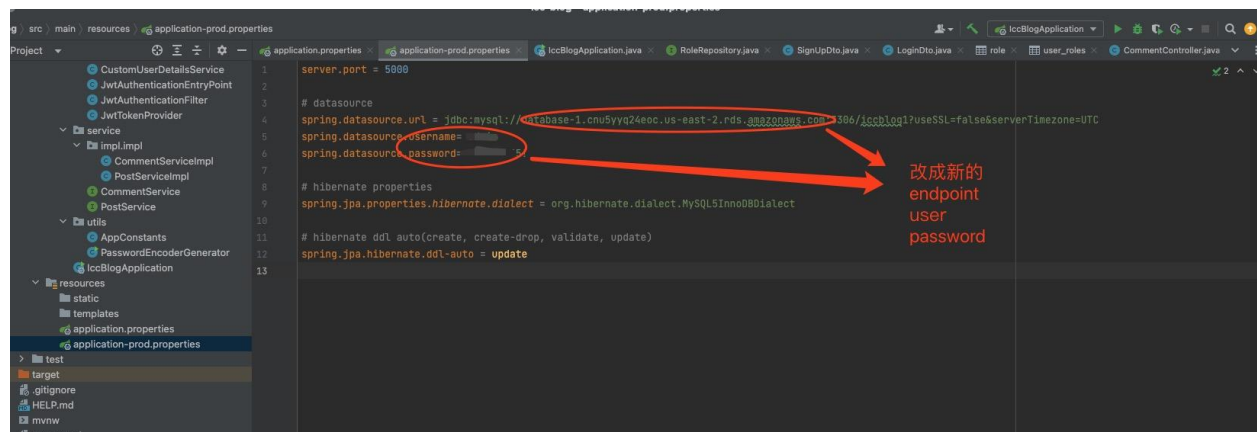
Result Grid

id	name
1	ROLE_ADMIN
2	ROLE_USER

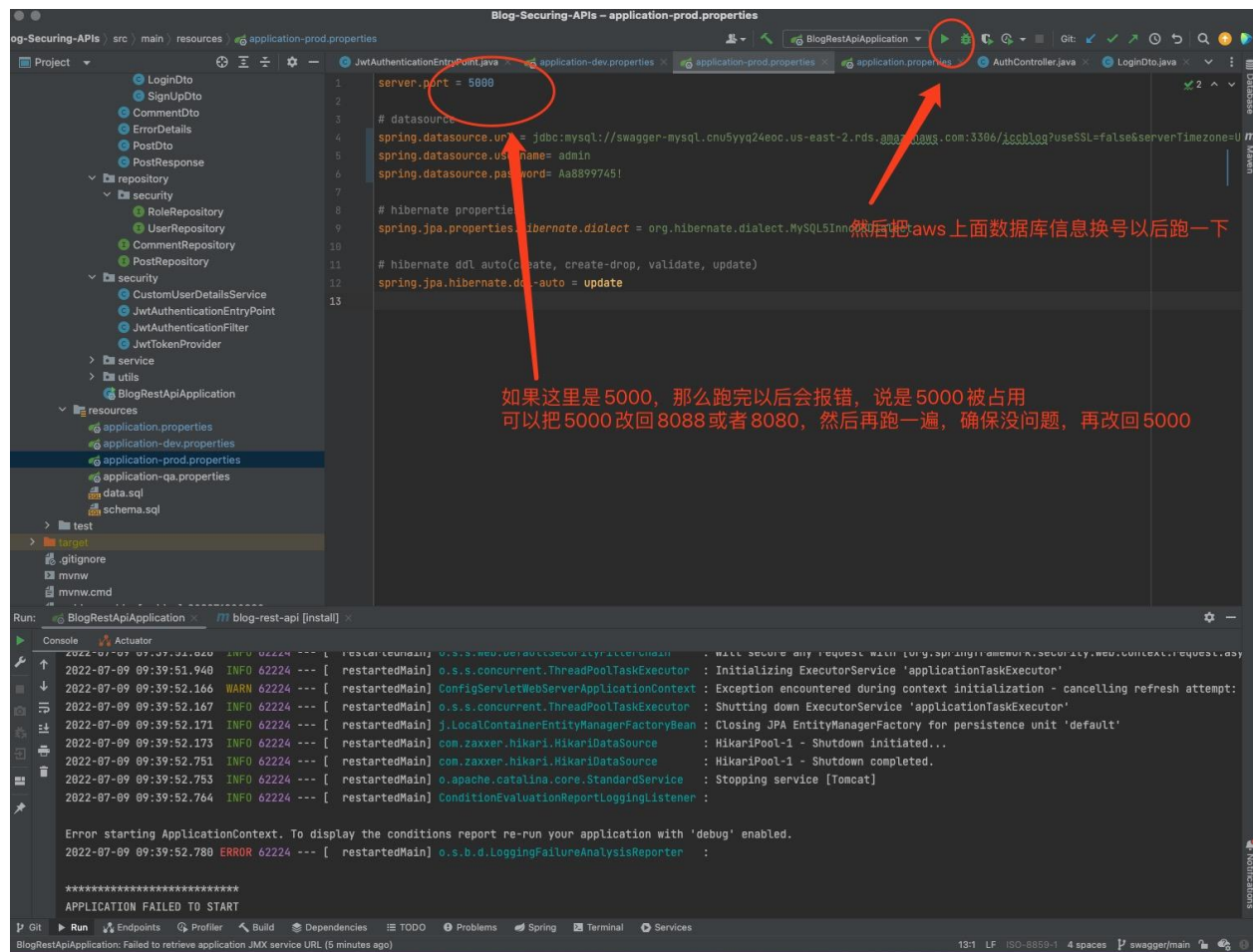
链接mysql，在roles里面插入role_admin和role_user

步骤二：本地测试

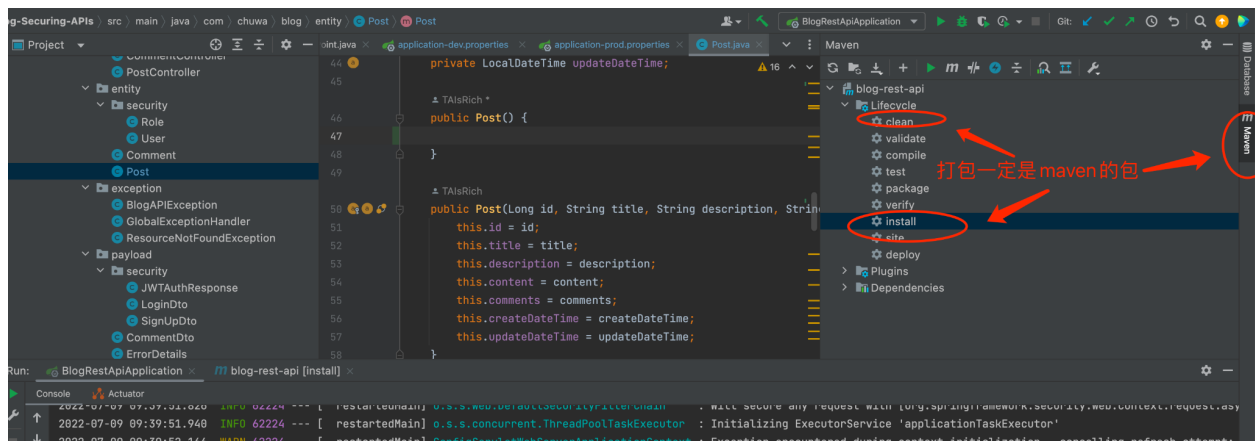
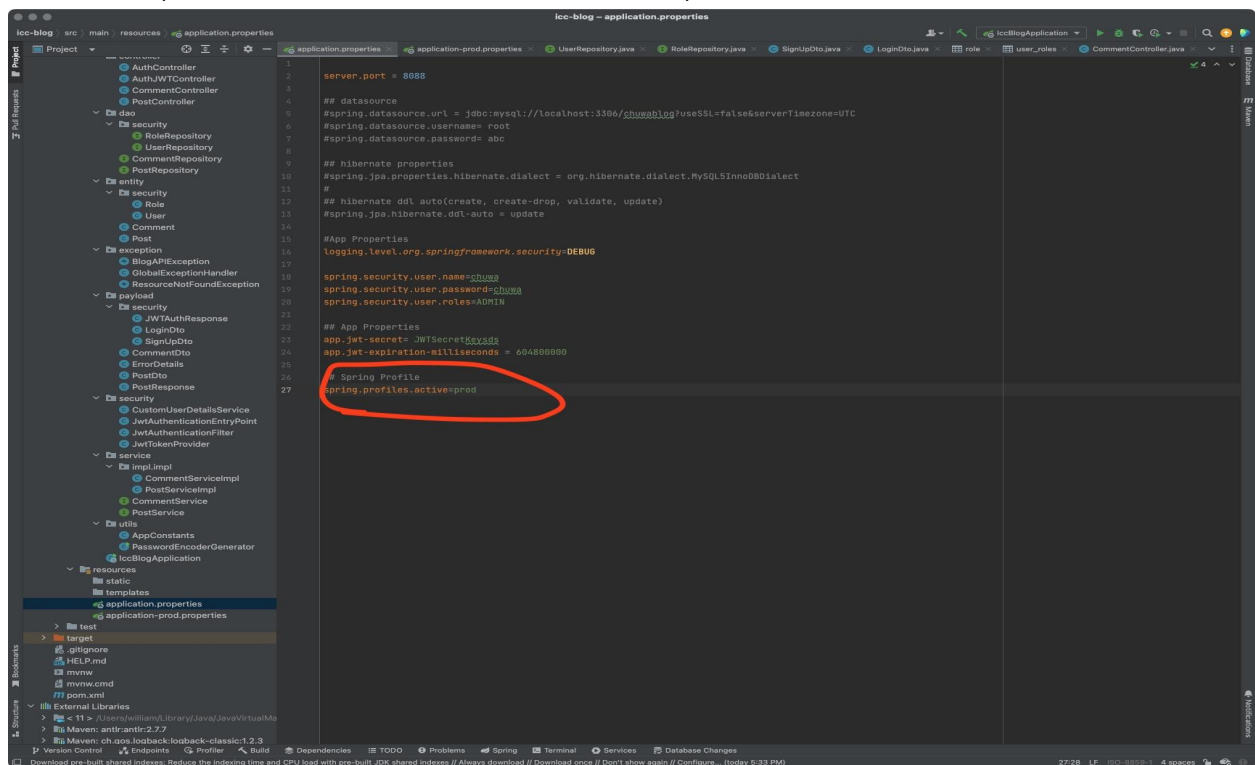
本地测试1：



本地测试2：



本地测试4: (这个别忘记加了, 再跑。不然会出问题)



第三步：部署aws elasticbeantalk

Elastic Beanstalk

Environments
Applications
Change history

Recent environments
Newdemo-env
lccblog-env

AWS Graviton now supported
AWS Graviton, an arm64-based processor, can offer up to 40% better price performance over the comparable x86 processor. To upgrade to an arm64 instance type, choose it in the 'Capacity' settings in 'Additional configuration.'

Compute

Amazon Elastic Beanstalk

End-to-end web application management.

Amazon Elastic Beanstalk is an easy-to-use service for deploying and scaling web applications and services developed with Java, .NET, PHP, Node.js, Python, Ruby, Go, and Docker on familiar servers such as Apache, Nginx, Passenger, and IIS.

Get started
Easily deploy your web application in minutes.
[Create Application](#)

How it works
点击建立新的 environment
You simply upload your code and Elastic Beanstalk automatically handles the deployment, from capacity provisioning, load balancing, and automatic scaling to web application health monitoring, with ongoing fully managed patch and security updates. [Learn more](#)

Pricing
There's no additional charge for Elastic Beanstalk. You pay for Amazon Web Services resources that we create to store and run your web application, like Amazon S3 buckets and Amazon EC2 instances.

Getting Started
[Launch a web application](#)

Benefits and features

- Easy to get started**
Elastic Beanstalk is the simplest way to
- Complete resource control**
You have the freedom to select the

Elastic Beanstalk

Environments
Applications
Change history

Recent environments
Newdemo-env
lccblog-env

AWS Graviton now supported
AWS Graviton, an arm64-based processor, can offer up to 40% better price performance over the comparable x86 processor. To upgrade to an arm64 instance type, choose it in the 'Capacity' settings in 'Additional configuration.'

Elastic Beanstalk > Create environment

Select environment tier

click here

Amazon Elastic Beanstalk has two types of environment tiers to support different types of web applications. Web servers are standard applications that listen for and then process HTTP requests, typically over port 80. Workers are specialized applications that have a background processing task that listens for messages on an Amazon SQS queue. Worker applications post those messages to your application by using HTTP.

- ☒ **Web server environment**
Run a website, web application, or web API that serves HTTP requests.
[Learn more](#)
- ☐ **Worker environment**
Run a worker application that processes long-running workloads on demand or performs tasks on a schedule.
[Learn more](#)

cancel [Select](#)

click here

Elastic Beanstalk

Environments
Applications
Change history

Recent environments

Newdemo-env
iccblog-env

Elastic Beanstalk > Create environment

Create a web server environment

Launch an environment with a sample application or your own code. By creating an environment, you allow Amazon Elastic Beanstalk to manage Amazon Web Services resources and permissions on your behalf. [Learn more](#)

Application information

Application name

iccblog

Up to 100 Unicode characters; not including forward slash (/).

► Application tags (optional)

a name is needed

Environment information

Choose the name, subdomain, and description for your environment. These cannot be changed later.

Environment name

Domain

Leave blank for autogenerated value

.us-east-2.elasticbeanstalk.

Platform

Managed platform

Platforms published and maintained by Amazon Elastic Beanstalk. [Learn more](#)

Custom platform

Platforms created and owned by you.

choose java

Platform

Java

Platform branch

Corretto 11 running on 64bit Amazon Linux 2

Platform version

3.2.16 (Recommended)

Application code

Application code

☐ Sample application
Get started right away with sample code.

☐ Existing version
Application versions that you have uploaded for .

-- Choose a version --

☒ Upload your code
Upload a source bundle from your computer or copy one from Amazon S3.

Version label
Unique name for this version of your application code.

blog-rest-api-0.0.1-SNAPSHOT

Source code origin
Maximum size 512 MB

☒ Local file

☐ Public S3 URL

Choose file

File name : blog-rest-api-0.0.1-SNAPSHOT.jar

► Application code tags

Cancel Configure more options Create environment

这里一共四个点，上传，选文件（jar，大概是52mb大小的）上传完了选config下面那个

Elastic Beanstalk

Environments
Applications
Change history

Recent environments
Newdemo-env
iccblog-env

Monitoring Edit

Health reporting system: Enhanced Health event log streaming: disabled

Managed Updates Edit

Managed updates: enabled Weekly update window: Tue:06:00 UTC

Notifications Edit

Email address: ...

Network Edit

This environment is not part of a VPC.

Database Edit

Engine: Instance class: Multi-AZ: Storage (GB):

Tags Edit

Tags: none

Cancel Previous Create environment

进config以后找database 然后edit一下

Database settings

Choose an engine and instance type for your environment's database.

Engine
mysql

Engine version
8.0.28

Instance class
db.t2.micro

Storage
Choose a number between 5 GB and 1024 GB.
5

Username

Password

Availability
Low (one AZ)

Database deletion policy
This policy applies when you decouple a database or terminate the environment coupled to it.

☒ **Create snapshot**
Elastic Beanstalk saves a snapshot of the database and then deletes it. You can restore a database from a snapshot when you add a DB to an Elastic Beanstalk environment or when you create a standalone database. You might incur charges for storing database snapshots.

☐ **Retain**
The decoupled database will remain available and operational external to Elastic Beanstalk.

☐ **Delete**
Elastic Beanstalk terminates the database. The database will no longer be available.

Cancel **Save**

其他不用管，输入用户名和密码就行
为了防止忘了，可以输入database的一致
然后点右下角，如果上传完了的应该是create
没有上传的，是save，再出去create

Environment name	Health	Application name	Date created	Last modified	URL	Running versions	Platform	Platform state	Tier name
<input type="radio"/> iccblog-env	<input checked="" type="radio"/> Ok	iccblog	2022-07-08 21:55:03 UTC-0700	2022-07-08 22:35:36 UTC-0700	iccblog-env.eba-ruyzlusj.us-east-2.elasticbeanstalk.com	iccblog-source-1	Corretto 11 running on 64bit Amazon Linux 2	Supported	WebServer

刚建立好这里应该是 pending 的，需要等一会儿

可以点这个进入到里面看自己建立的过程，确保没有 bug

name	created	modified	versions	state	name
<input type="radio"/> iccblog-env	2022-07-08 21:55:03 UTC-0700	2022-07-08 22:35:36 UTC-0700	iccblog-env.eba-ruyzlusj.us-east-2.elasticbeanstalk.com	Supported	WebServer

建好以后点这个 URL，如果是 502 就不对，如果是 401 就是没有访问权限就是对了



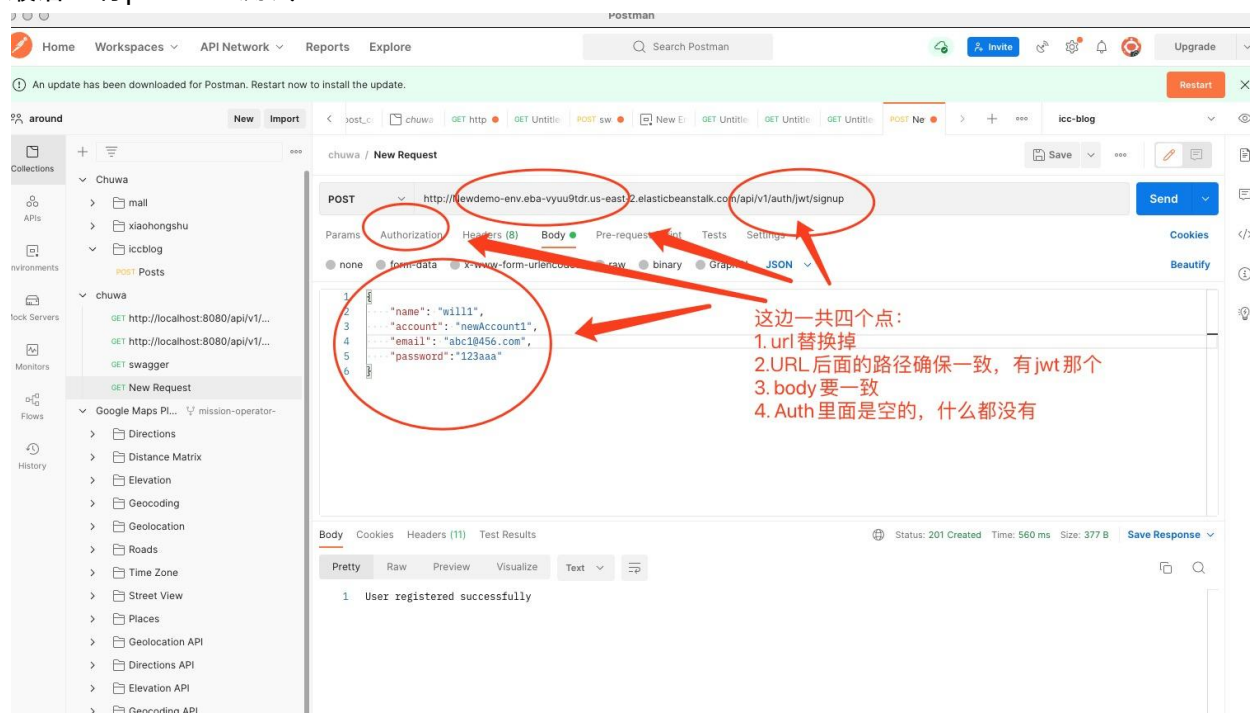
Whitelabel Error Page

This application has no explicit mapping for /error, so you are seeing this as a fallback.

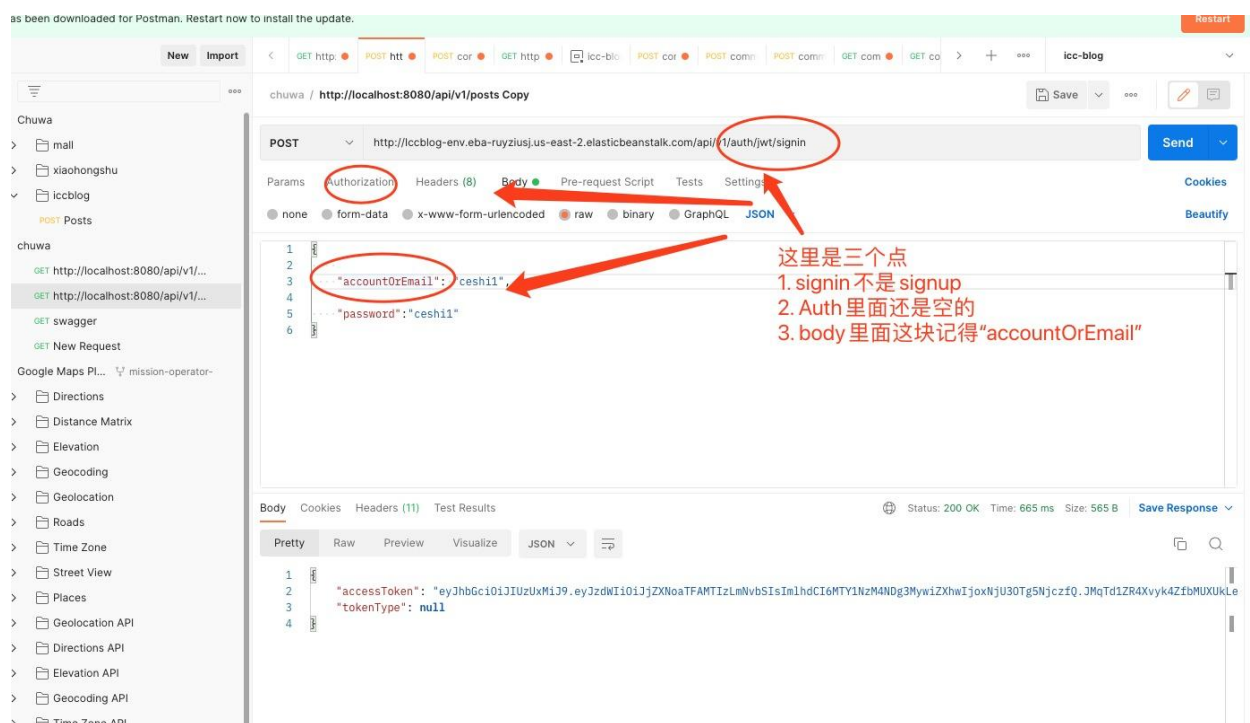
Sat Jul 09 17:03:03 UTC 2022

There was an unexpected error (type=Unauthorized, status=401).

最后进行postman测试：



这边一共四个点：
1. url替换掉
2. URL后面的路径确保一致，有jwt那个
3. body要一致
4. Auth里面是空的，什么都没有



这里是三个点
1. signin 不是 signup
2. Auth 里面还是空的
3. body 里面这块记得“accountOrEmail”

Home Workspaces API Network Reports Explore Search Postman Upgrade

An update has been downloaded for Postman. Restart now to install the update. Restart

chuwa / http://localhost:8080/api/v1/posts

GET http://localhost:8080/api/v1/posts

Params Authorization Headers (9) Body Request Script Tests Settings Cookies

Type Bearer Token

Heads up! These parameters hold sensitive data. To keep this data secure while working in a collaborative environment, we recommend using variables. Learn more about variables

Token eyJhbGciOiJIUzUxMi9yZzdWIl0iJXNo...

Body Cookies Headers (11) Test Results Status: 200 OK Time: 204 ms Size: 428 B Save Response

```
1 {
2   "content": [],
3   "pageNo": 0,
4   "pageSize": 10,
5   "totalElements": 0,
6   "totalPages": 0,
7   "last": true
8 }
```

剩下的就是把 token 带进去，大家应该都会了