



链滴

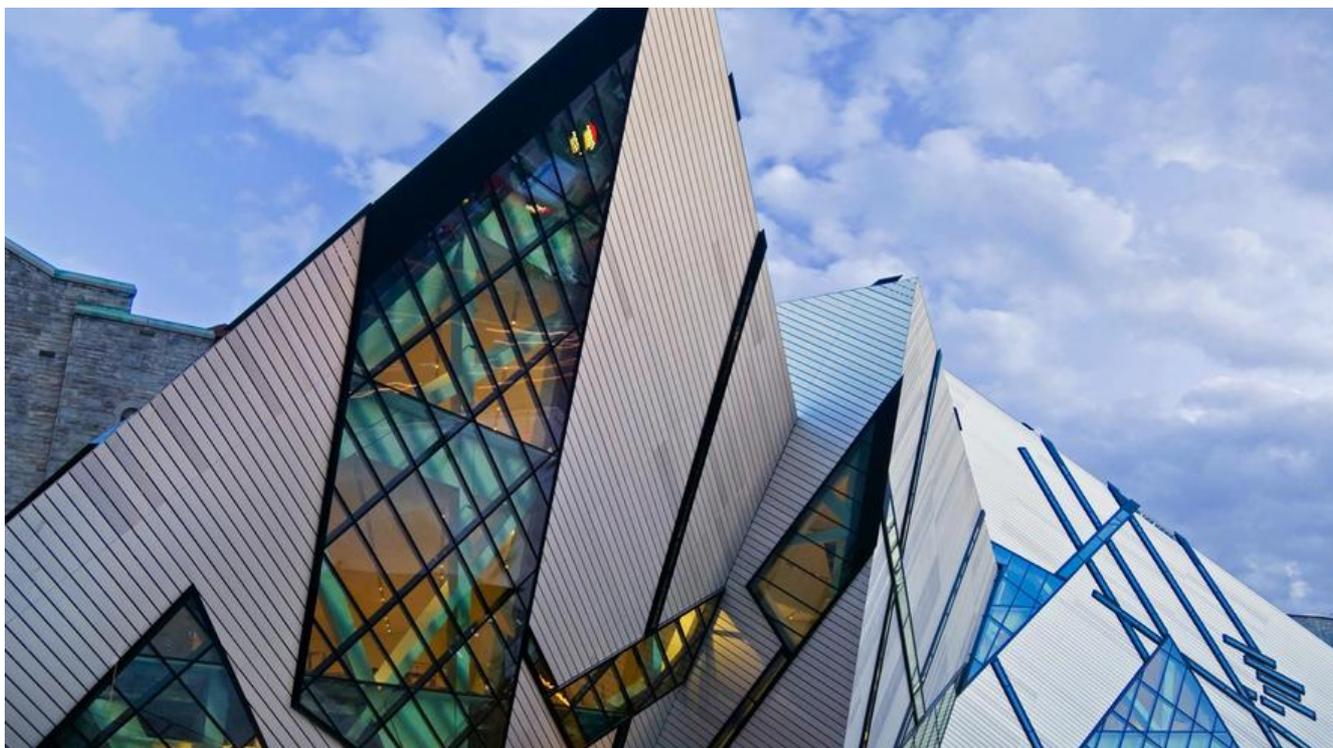
# spring security 权限控制

作者: [tianyunperfect](#)

原文链接: <https://ld246.com/article/1545812805218>

来源网站: 链滴

许可协议: [署名-相同方式共享 4.0 国际 \(CC BY-SA 4.0\)](#)



## 前言

spring自带角色权限控制框架

用户-角色

## 数据库和domain

- 数据库

-- 用户表

```
CREATE TABLE sys_user(  
id int auto_increment PRIMARY KEY ,  
username VARCHAR(50),  
email VARCHAR(50) ,  
PASSWORD VARCHAR(80),  
phoneNum VARCHAR(20),  
STATUS int(1)  
);
```

-- 角色表

```
CREATE TABLE sys_role(  
id int auto_increment PRIMARY KEY,  
roleName VARCHAR(50) ,  
roleDesc VARCHAR(50)  
)
```

-- 用户和角色中间表

```
CREATE TABLE sys_user_role(  
userId int,  
roleId int,
```

```
PRIMARY KEY(userId,roleId),
FOREIGN KEY (userId) REFERENCES sys_USER(id),
FOREIGN KEY (roleId) REFERENCES sys_role(id)
)
```

- domain

```
public class SysUser {
    private Long id;
    private String username;
    private String email;
    private String password;
    private String phoneNum;
    private int status;
    private List<Role> roles;
}
public class Role {
    private Long id;
    private String roleName;
    private String roleDesc;
}
```

## 静态页面

403.jsp

login.jsp

error.jsp

## 配置文件

springSecurity.xml

```
<?xml version="1.0" encoding="UTF-8"?>
<beans xmlns="http://www.springframework.org/schema/beans"
    xmlns:security="http://www.springframework.org/schema/security"
    xmlns:xsi="http://www.w3.org/2001/XMLSchema-instance"
    xsi:schemaLocation="http://www.springframework.org/schema/beans
http://www.springframework.org/schema/beans/spring-beans.xsd
http://www.springframework.org/schema/security
http://www.springframework.org/schema/security/spring-security.xsd" >
```

<!--放行未登录访问的页面-->

```
<security:http pattern="/login.jsp" security="none" ></security:http>
```

```
<security:http pattern="/error.jsp" security="none" ></security:http>
```

```
<security:http pattern="/css/**" security="none" ></security:http>
```

```
<security:http pattern="/img/**" security="none" ></security:http>
```

```
<security:http pattern="/pages/**" security="none" ></security:http>
```

```
<security:http pattern="/plugins/**" security="none" ></security:http>
```

<!--配置拦截器的路径规则

auto-config="true" 表示使用权限框架默认的配置

use-expressions="false" 关闭权限框架的表达式 spel

intercept-url 拦截请求资源的路径

```

access="ROLE_USER" 允许访问的条件 当前用户必须拥有ROLE_USER的角色才可以访问
-->
<security:http auto-config="true" use-expressions="true">
  <!--权限框架支持多种角色的登录 角色之间的关系为or 或者的关系-->
  <security:intercept-url pattern="/**" access="hasAnyRole('ROLE_USER','ROLE_ADMIN')"/>
</security:intercept-url>
  <!--自定义页面的配置节点-->
  <security:form-login login-page="/login.jsp"
    login-processing-url="/login"
    default-target-url="/index.jsp"
    authentication-failure-url="/error.jsp"> </security:form-login>

  <!--登录成功权限不足的处理-->
  <security:access-denied-handler error-page="/403.jsp"> </security:access-denied-handl
r>
  <!--csrf关闭跨域请求的攻击-->
  <security:csrf disabled="true"> </security:csrf>
  <!--
logout 退出请求的url路径 实际是页面点击按钮请求的地址
logout-success-url 成功注销后 跳转的页面
invalidate-session 设置session失效
-->
  <security:logout logout-url="/logOut" logout-success-url="/login.jsp" invalidate-sessio
="true"> </security:logout>

</security:http>

<!--配置拦截后验证的节点-->
<security:authentication-manager>
  <security:authentication-provider user-service-ref="userService">
    <!--自定义的加密工具类-->
    <security:password-encoder ref="pwdEncoder"> </security:password-encoder>
  </security:authentication-provider>
</security:authentication-manager>

<!--配置自定义的加密工具类，这里使用自带的-->
<bean id="pwdEncoder" class="org.springframework.security.crypto.bcrypt.BCryptPasswor
Encoder"> </bean>

<!--开启注解支持-->
<security:global-method-security secured-annotations="enabled"/>

</beans>

```

## web.xml引入

- 引入filter

```

<!--配置框架使用的filter过滤器-->
<filter>
  <!--过滤器执行链名臣固定springSecurityFilterChain-->
  <filter-name>springSecurityFilterChain</filter-name>
  <filter-class>org.springframework.web.filter.DelegatingFilterProxy</filter-class>

```

```

</filter>
<filter-mapping>
  <filter-name>springSecurityFilterChain</filter-name>
  <url-pattern>/*</url-pattern>
</filter-mapping>

```

- 引入配置文件

```

<!--spring的listener-->
<listener>
  <listener-class>org.springframework.web.context.ContextLoaderListener</listener-class>
</listener>
<context-param>
  <param-name>contextConfigLocation</param-name>
  <param-value>classpath:applicationContext.xml,classpath:springSecurity.xml</param-value>
</context-param>

```

## service校验方法

- 在service中继承spring接口

```

public interface SysUserService extends UserDetailsService {
  @Override
  UserDetails loadUserByUsername(String username) throws UsernameNotFoundException;
}

```

- 实现接口

```

@Service("userService")
public class SysUserServiceImpl implements SysUserService {

  @Autowired
  private SysUserDao userDao;

  @Autowired
  BCryptPasswordEncoder pwdEncoder;

  @Override
  public UserDetails loadUserByUsername(String username) throws UsernameNotFoundException {
    //得到数据库的用户
    SysUser sysUser = userDao.findUserByName(username);
    //框架的User对象用于验证返回 用户名 密码 用户的权限集合
    //查询得到用户真正的角色集合返回
    List<Role> roles = sysUser.getRoles();
    List<GrantedAuthority> authorities = new ArrayList<GrantedAuthority>();
    ///如果当前用户确实拥有角色 循环添加到集合中
    if(roles!=null&&roles.size()>0){
      for (Role role : roles) {
        authorities.add(new SimpleGrantedAuthority(role.getRoleName()));
      }
    }
  }
}

```

```
    }

    User user = new User(sysUser.getUsername(),sysUser.getPassword(),authorities);
    return user;
}
}
```

## 用户名的获取

- 前台获取

```
# 方式一
${ sessionScope.SPRING_SECURITY_CONTEXT.authentication.principal.username }

# 方式二
<security:authentication property="principal.username"/>
```

- 后台获取

```
// 先获取到SecurityContext对象
SecurityContext context = SecurityContextHolder.getContext();
// 获取到认证的对象
Authentication authentication = context.getAuthentication();
// 获取到登录的用户信息
User user = (User) authentication.getPrincipal();
System.out.println(user.getUsername());
```

## 不同角色访问控制权限

### jsp页面

```
<security:authorize access="hasAnyRole('ROLE_USER','ROLE_ADMIN')">
  <li id="system-setting">
    <a href="{pageContext.request.contextPath}/product/findByPageHelper">
      <i class="fa fa-circle-o"></i> 产品管理
    </a>
  </li>
</security:authorize>
```

### 后台

- springmvc.xml

```
<!--手打才能自动引入-->
<security:global-method-security secured-annotations="enabled"> </security:global-method
security>
```

- controller

```
@Secured("ROLE_ADMIN")  
public class RoleController
```