

Server Security Service

Summary

A business that receives and sends data through the web may have a security issue.

Security Service ensures stability by identifying and responding to security vulnerabilities that could occur when using service through the web.

Security Service includes **Authentication**, which you should go through authentication as the user information is managed in DB and **Authorization**, which makes user authority information layered to access screen, page and methods.

Description

Server Security Service has been implemented by expanding Spring Framework's Spring Security. It can contain session information by managing user authentication information and authority information in DB and expanding the Spring Security's UserDetails interface.

Server Security has the following functions.

1. Restrict access to resources (url, method, etc.)
2. Check user authentication
3. Request authentication check, if not authenticated.
4. Configure layer authority and check the user authority

Advantages of Spring Security

- Spring Security is a powerful and flexible security solution that provides authentication and authorization services for the enterprise applications.
- Use Servlet Filter and Java AOP to obligate security and operate based on Spring IoC's lifecycle.
- Provides functions such as authentication, Web URL authorization, Method call authorization, domain object based security processing, channel security (obligate https) and other functions.
- In addition to Web request security, provides Service Layer and instance level security to solve the layering issue and provide security control for rich clients/web service in addition to web clients.
- Supports re- usability, portability, code quality, reference (in various business field such as governments, banks, universities and enterprises). Community is very active.

Vulnerabilities of Spring Security

- User management
- Role management
- Check XML based(difficult to configure) authority check

General requirements for SI Project security authentication / authorization

- RDB based authentication and connection with commercial SSO
- Use of session for easy and quick reference to user information
- Department, user and menu/screen/authority management - the final user, not the developer, wants to work by using GUI based management function.
- Expansive user/role data on department management, user management, authority replication, authority inheritance and project business needs to be managed.
- Portal solution / X- internet – need a flexible integration for user management/menu- authority processing
- The requirements per project (department/user/menu/screen/authority processing) are different and there is possibility of redundant development. Need standardization, easy customizing and flexible expansion

Expected effects

- Ensure a flexible and strong- security framework that has both advantages of Spring Security and use for SI project.

Server Security

- [Architecture](#)
- [Authentication](#)
- [Authorization](#)

N. References

- [Spring Framework- Spring Security](#)
- [Spring Framework- Spring Security Reference Documentation](#)
- [Spring Community forum](#)