

Authority management

Summary

This is the component that defines the **authority** which is managed at the Spring Security in order to apply the security mechanism of spring when constructing the system. The person in charge can manage the authority given to the user of the system by defining it with this component.

Description

Authority management has the purpose of managing the authority for each user, and it accompanies the functions of **registration, update, deletion, inquiry, and list inquiry**.

- ① Authority registration: The authority information defined for the purpose of giving authority to the user of the system is registered by the person in charge of the system.
- ② Authority update: The authority information defined for the purpose of giving authority to the user of the system is revised by the person in charge of the system.
- ③ Authority deletion: The authority information defined for the purpose of giving authority to the user of the system is deleted by the person in charge of the system.
- ④ Authority inquiry: The authority information defined for the purpose of giving authority to the user of the system is inquired by the person in charge of the system.
- ⑤ Authority list: The authority information list defined for the purpose of giving authority to the user of the system is inquired by the person in charge of the system.

Environment setup

Basic setup of authority

* Basic authority provided by spring (Authority)

AUTHORITI	DESCRIPTION
ROLE_ANONYMOUS	All users
IS_AUTHENTICATED_ANONYMOUSLY	Anonymous user
IS_AUTHENTICATED_FULLY	Certified user
IS_AUTHENTICATED_REMEMBERED	REMEMBERED user
ROLE_RESTRICTED	Restricted user
ROLE_USER	General user
ROLE_ADMIN	Administrator

Additional setup of authority

* Authority added by business requirement (Authority)

AUTHORITI	DESCRIPTION
ROLE_SYM	Person in charge of system business
ROLE_COP	Person in charge of cooperative work
ROLE_USS	Person in charge of user support
ROLE_USER_MANAGER	Administrator for business user
ROLE_SEC	Person in charge of security work
ROLE_ENTRPRSMBER_MANAGER	Administrator for corporate member
ROLE_MBER_MANAGER	Administrator for general member

Definition of authority (role) inheritance hierarchy

*** In order to inherit the role of defined lower authority, define the inheritance hierarchy to the COMTNROLES_HIERARCHY Table.**

ROLE_ANONYMOUS → IS_AUTHENTICATED_ANONYMOUSLY → IS_AUTHENTICATED_FULLY →
IS_AUTHENTICATED_REMEMBERED → ROLE_RESTRICTED → ROLE_USER → ROLE_ADMIN

*** Generation of basic data**

Generate the basic data related with authority in the first place.

- [Generation of basic data](#)

*** Additionally setup authority shall be inserted between the authorities which have already been defined.**

- Definition of upper authority

```
INSERT INTO COMTNROLES_HIERARCHY (PARENT_ROLE, CHILD_ROLE)
VALUES('ROLE_COP','ROLE_ADMIN');
```

- Definition of lower authority

```
INSERT INTO COMTNROLES_HIERARCHY (PARENT_ROLE, CHILD_ROLE)
VALUES('ROLE_RESTRICTED','ROLE_COP');
```

- Hierarchical structure of authority

```
SELECT A.CHILD_ROLE CHILD,
       A.PARENT_ROLE PARENT
FROM COMTNROLES_HIERARCHY A LEFT JOIN COMTNROLES_HIERARCHY B ON (A.CHILD_ROLE =
B.PARENT_ROLE);
```

Spring Security Configuration

- [Spring Security](#)

Related Functions

- [Authority management function](#)
- [Role management for each authority](#)

References

- [Server Security](#)