

Element Technology – DB Service Monitoring

Summary

DB Service Monitoring is a function to periodically monitor the DB server service status.

The Datasource of the DB server to be monitored must be registered to the Egovframework as Bean.

Description

- **DB Service Monitoring** is intended to register the DB service monitoring status, and includes the following functions: registration, update, deletion, inquiry and list inquiry of the DB service monitoring.

① DB Service Monitoring List Inquiry: Using the function to inquire the defined information in the order of the latest registration, and the search result is reflected on screen.

② Register DB Service Monitoring: It is to register the DB service monitoring information and to inquire the registration result.

③ Update DB Service Monitoring: It is to update the registered DB service monitoring info items.

④ Delete DB Service Monitoring: It is to delete the registered DB service monitoring information.

⑤ Inquire DB Service Monitoring: It is to inquire the registered DB service monitoring information.

⑥ Inquire DB Service Monitoring Log List: Using the DB service monitoring log to inquire the defined information in the order of the latest registration, and the search result is reflected on screen.

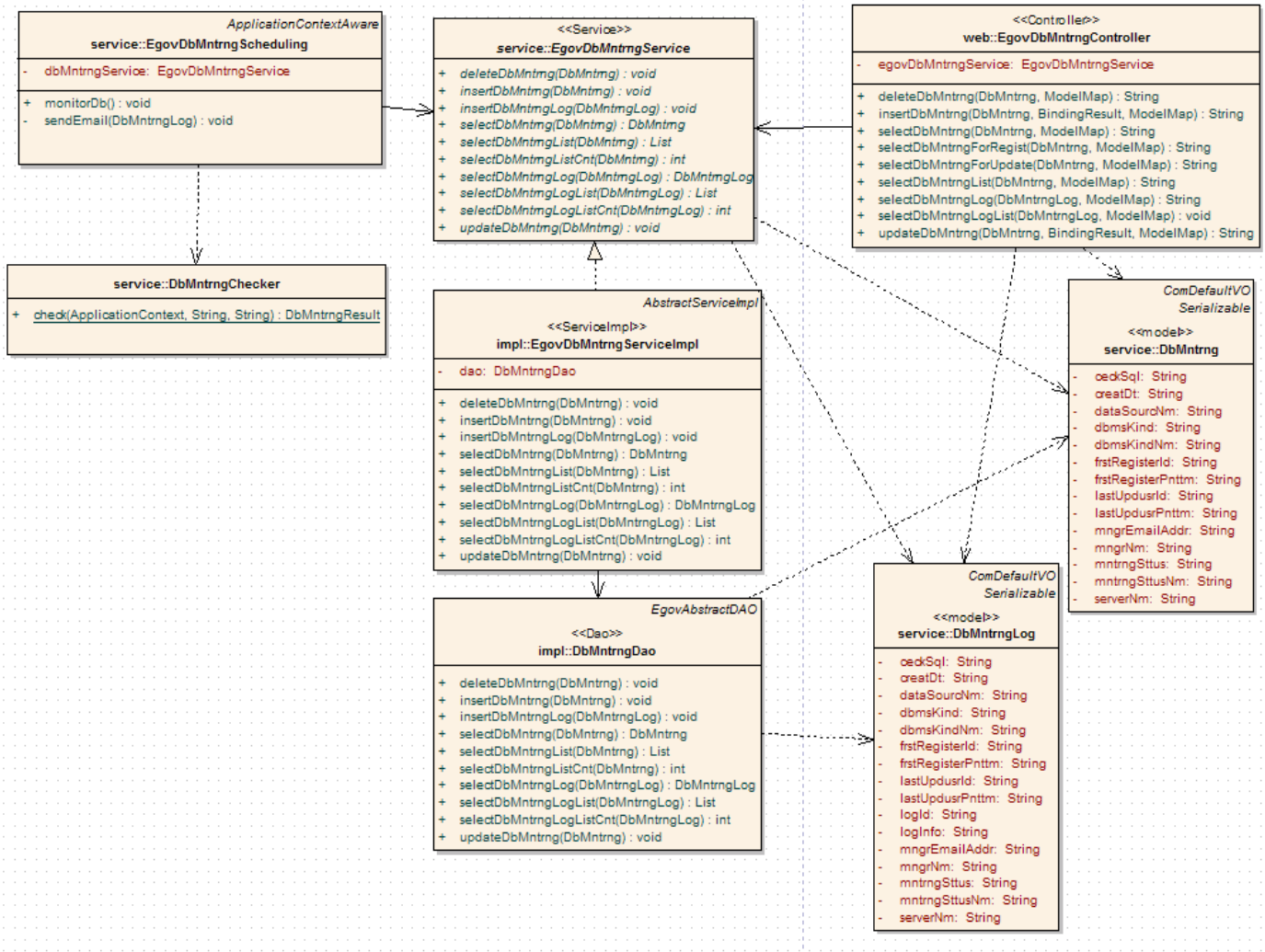
⑦ DB Service Monitoring Query: It is to inquire the registered DB service monitoring log information.

Related Sources

| Type | Corresponding Sources | Remarks |
|-------------|---|--|
| Controller | egovframework.com.utl.sys.dbm.web.EgovDbMntrngController.java | Controller class for the DB service monitoring |
| Service | egovframework.com.utl.sys.dbm.service.EgovDbMntrngService.java | Service interface for the DB service monitoring |
| ServiceImpl | egovframework.com.utl.sys.dbm.service.impl.EgovDbMntrngServiceImpl.java | Service implementation class for the DB service monitoring |
| DAO | egovframework.com.utl.sys.dbm.service.impl.DbMntrngDAO.java | Data processing for the DB service monitoring |
| Model | egovframework.com.utl.sys.dbm.service.DbMntrng.java | Model class for the DB service monitoring |
| Model | egovframework.com.utl.sys.dbm.service.DbMntrngLog.java | Model class for the DB service monitoring log info |
| JSP | /WEB-INF/jsp/egovframework/utl/sys/dbm/EgovDbMntrngList.jsp | jsp page for the DB service monitoring list inquiry |
| JSP | /WEB-INF/jsp/egovframework/utl/sys/dbm/EgovDbMntrngRegist.jsp | jsp page for register the DB service monitoring |
| JSP | /WEB-INF/jsp/egovframework/utl/sys/dbm/EgovDbMntrngUpdt.jsp | jsp page for update the DB service monitoring |
| JSP | /WEB-INF/jsp/egovframework/utl/sys/dbm/EgovDbMntrngDetail.jsp | jsp page for inquire the registered DB service monitoring |
| JSP | /WEB-INF/jsp/egovframework/utl/sys/dbm/EgovDbMntrngLogList.jsp | jsp page for inquire |

| | | |
|-----|--|---|
| | | the DB service monitoring log list |
| JSP | /WEB-INF/jsp/egovframework/utl/sys/dbm/EgovDbMntrngLogDetail.jsp | jsp page for inquire the registered DB service monitoring log |
| XML | /egovframework/sqlmap/com/utl/sys/dbm/EgovDbMntrng_SQL_*.xml | DB service monitoring QUERY XML |

Class Diagram



Related Tables

| Table Name | Table Name(English) | Remarks |
|---------------------------------------|----------------------|---|
| DB Service Monitoring | COMTNDBMNTRNG | It is to define and manage the properties information used to manage the DB service monitoring information |
| DB Service Monitoring Log Information | COMTHDBMNTRNGLOGINFO | It is to define and manage the properties information used to manage the DB service monitoring log information. |

ID Generation

- In order to use the ID Generation Service, the **DB_MNTRNG_LOG_ID** item should be added to COMTECOPSEQ which is the Sequence storage table.

```
INSERT INTO COMTECOPSEQ VALUES('DB_MNTRNG_LOG_ID','0');
```

Scheduler Registration

- The following should be registered to the **context- scheduling.xml** file so as to register a DB service monitoring scheduler.

```
<!--DB service monitoring -->
<bean id="dbMntrng"
  class="org.springframework.scheduling.quartz.MethodInvokingJobDetailFactoryBean">
  <property name="targetObject" ref="egovDbMntrngScheduling" />
  <property name="targetMethod" value="monitorDb" />
  <property name="concurrent" value="false" />
</bean>

<!--DB service monitoring trigger -->
<bean id="dbMntrngTrigger"
  class="org.springframework.scheduling.quartz.SimpleTriggerBean">
  <property name="jobDetail" ref="dbMntrng" />
  <property name="startDelay" value="60000" />
  <property name="repeatInterval" value="600000" />
</bean>
'startDelay' sets the time delayed in seconds after the server starts. (ms unit: currently, 1 min)
'repeatInterval' sets the intervals of execution in seconds. (ms unit: currently, 10 min)
<!--monitoring scheduler -->
<bean id="mntrngScheduler" class="org.springframework.scheduling.quartz.SchedulerFactoryBean">
  <property name="triggers">
    <list>
      <ref bean="dbMntrngTrigger" />
    </list>
  </property>
</bean>
```

Related Screens & Action Manuals

DB Service Monitoring List Inquiry

| Action | URL | Controller method | QueryID |
|---------------|------------------------------------|--------------------------|-------------------------------------|
| Inquire | /utl/sys/dbm/selectDbMntrngList.do | selectDbMntrngList | "DbMntrngDAO.selectDbMntrngList" |
| Inquire | /utl/sys/dbm/selectDbMntrngList.do | selectDbMntrngList | "DbMntrngDAO.selectDbMntrngListCnt" |

There are 10 items inquired per page on a DB service monitoring list, with 10 pages in total. Search options are the association name and the administrator name.

| 데이터소스명 | 서버명 | DBMS종류 | 관리자명 | 관리자이메일주소 | 상태 | 모니터링시각 |
|------------------|------------|--------|------|----------------|----|---------------------|
| dataSource-mysql | testServer | Mysql | 홍길동 | test@gmail.com | 정상 | 2010-09-20 15:25:10 |

Inquiry: It is to inquire the registered DB service monitoring list.

Registration: Using the Register button at the upper section to move to the **DB Service Monitoring Registration** screen in order to register a new DB service monitoring.

DB Service Monitoring Registration

| Action | URL | Controller method | QueryID |
|----------|-----------------------------|-------------------|------------------------------|
| Register | /utl/sys/dbm/addDbMntrng.do | insertDbMntrng | "DbMntrngDAO.insertDbMntrng" |

Insert the properties information of the DB service monitoring, and then register.
 Register the **DataSource Name** set in the current **context-datasource.xml**.

DB서비스모니터링 등록

데이터소스명 *

서버명 *

DBMS종류 *

체크SQL *

관리자명 *

관리자이메일주소 *

Save: After inserting the DB service monitoring properties to register a new DB service monitoring, register it using the **Save button** at the upper section.

List: It is used to move to the DB service monitoring list inquiry screen.

DB Service Monitoring Update

| Action | URL | Controller method | QueryID |
|--------|-----------------------------|-------------------|------------------------------|
| Update | /utl/sys/dbm/updateDbMntrng | updateDbMntrng | "DbMntrngDAO.updateDbMntrng" |

It is to update the DB service monitoring properties information, and then save.

DB서비스모니터링 수정

| | |
|------------|------------------|
| 데이터소스명 * | dataSource-mysql |
| 서버명 * | testServer |
| DBMS종류 * | Mysql |
| 체크SQL * | select 1 |
| 관리자명 * | 홍길동 |
| 관리자이메일주소 * | test@gmail.com |

Save: After updating the registered DB service monitoring properties, update it using the **Save button** at the upper section.

List: is used to move to the DB service monitoring list inquiry screen.

Detail Inquiry of the DB Service Monitoring

| Action | URL | Controller method | QueryID |
|----------------|--------------------------------|-------------------|------------------------------|
| Detail Inquiry | /utl/sys/dbm/getDbMntrng.do | selectDbMntrng | "DbMntrngDAO.selectDbMntrng" |
| Delete | /utl/sys/dbm/deleteDbMntrng.do | deleteDbMntrng | "DbMntrngDAO.deleteDbMntrng" |

It is to inquire the properties information of the DB service monitoring.

DB서비스모니터링 상세조회

| | |
|----------|---------------------|
| 데이터소스명 | dataSource-mysql |
| 서버명 | testServer |
| DBMS종류 | Mysql |
| 체크SQL | select 1 |
| 관리자명 | 홍길동 |
| 관리자이메일주소 | test@gmail.com |
| 모니터링상태 | 정상 |
| 모니터링시각 | 2010-09-20 15:25:10 |

Update: After updating the registered DB service monitoring properties, move to the DB service monitoring update screen using the **Modify button** at the upper section.

Delete: It is to delete the registered DB service monitoring information.

List: It is to move to the DB service monitoring list inquiry screen.

DB Service Monitoring Log List Inquiry

| Action | URL | Controller method | QueryID |
|---------|---------------------------------------|-----------------------|--|
| Inquire | /utl/sys/dbm/selectDbMntrngLogList.do | selectDbMntrngLogList | "DbMntrngDAO.selectDbMntrngLogList" |
| Inquire | /utl/sys/dbm/selectDbMntrngLogList.do | selectDbMntrngLogList | "DbMntrngDAO.selectDbMntrngLogListCnt" |

There are 10 items inquired per page on a DB service monitoring log list, with 10 pages in total. Search options are the association name, the administrator name and the monitoring time.

DB서비스모니터링로그 목록

--선택하세요-- 기간: ~ 선택 : 선택 ~ 선택 : 선택

| 데이터소스명 | 서버명 | DBMS종류 | 관리자명 | 관리자이메일주소 | 상태 | 모니터링시각 |
|------------------|------------|--------|------|----------------|----|---------------------|
| dataSource-mysql | testServer | Mysql | 홍길동 | test@gmail.com | 정상 | 2010-09-20 15:25:10 |
| dataSource-mysql | testServer | Mysql | 홍길동 | test@gmail.com | 정상 | 2010-09-20 15:15:10 |
| dataSource-mysql | testServer | Mysql | 홍길동 | test@gmail.com | 정상 | 2010-09-20 15:05:10 |
| dataSource-mysql | testServer | Mysql | 홍길동 | test@gmail.com | 정상 | 2010-09-20 14:55:10 |
| dataSource-mysql | testServer | Mysql | 홍길동 | test@gmail.com | 정상 | 2010-09-20 14:45:10 |
| dataSource-mysql | testServer | Mysql | 홍길동 | test@gmail.com | 정상 | 2010-09-20 14:35:10 |
| dataSource-mysql | testServer | Mysql | 홍길동 | test@gmail.com | 정상 | 2010-09-20 14:25:09 |
| dataSource-mysql | testServer | Mysql | 홍길동 | test@gmail.com | 정상 | 2010-09-20 14:18:45 |
| dataSource-mysql | testServer | Mysql | 홍길동 | test@gmail.com | 정상 | 2010-09-20 14:15:10 |
| dataSource-mysql | testServer | Mysql | 홍길동 | test@gmail.com | 정상 | 2010-09-20 14:11:16 |

1 2 3 4 5 6 7 8 9 10

Inquiry: It is to inquire the registered DB service monitoring log list.

Detail Inquiry of the DB Service Monitoring Log

| Action | URL | Controller method | QueryID |
|----------------|--------------------------------|-------------------|---------------------------------|
| Detail Inquiry | /utl/sys/dbm/getDbMntrngLog.do | selectDbMntrngLog | "DbMntrngDAO.selectDbMntrngLog" |

It is to inquire the properties information of the DB service monitoring log.

DB서비스모니터링로그 상세조회

| | |
|----------|----------------------|
| 로그ID | 00000000000000001530 |
| 데이터소스명 | dataSource-mysql |
| 서버명 | testServer |
| DBMS종류 | Mysql |
| 체크SQL | select 1 |
| 관리자명 | 홍길동 |
| 관리자이메일주소 | test@gmail.com |
| 모니터링상태 | 정상 |
| 로그정보 | |
| 모니터링시각 | 2010-09-20 15:25:10 |

목록

List: It is to move to the DB service monitoring log list inquiry screen.
