

Element Technology – File System Monitoring

Summary

File System Monitoring is a function to periodically monitor the file system status.

The file system to be monitored must be registered in a system as a file system target list.

Description

- **File System Monitoring** is intended to register the system monitoring status, and includes the following functions: registration, update, deletion, inquiry and list inquiry of the file system monitoring.

① File System 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 File System Monitoring: It is to register the file system monitoring info and to inquire the registration result.

③ Update File System Monitoring: It is to update the registered file system monitoring info items.

④ Delete File System Monitoring: It is to delete the registered file system monitoring info.

⑤ Inquire File System Monitoring: It is to inquire the registered file system monitoring info.

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

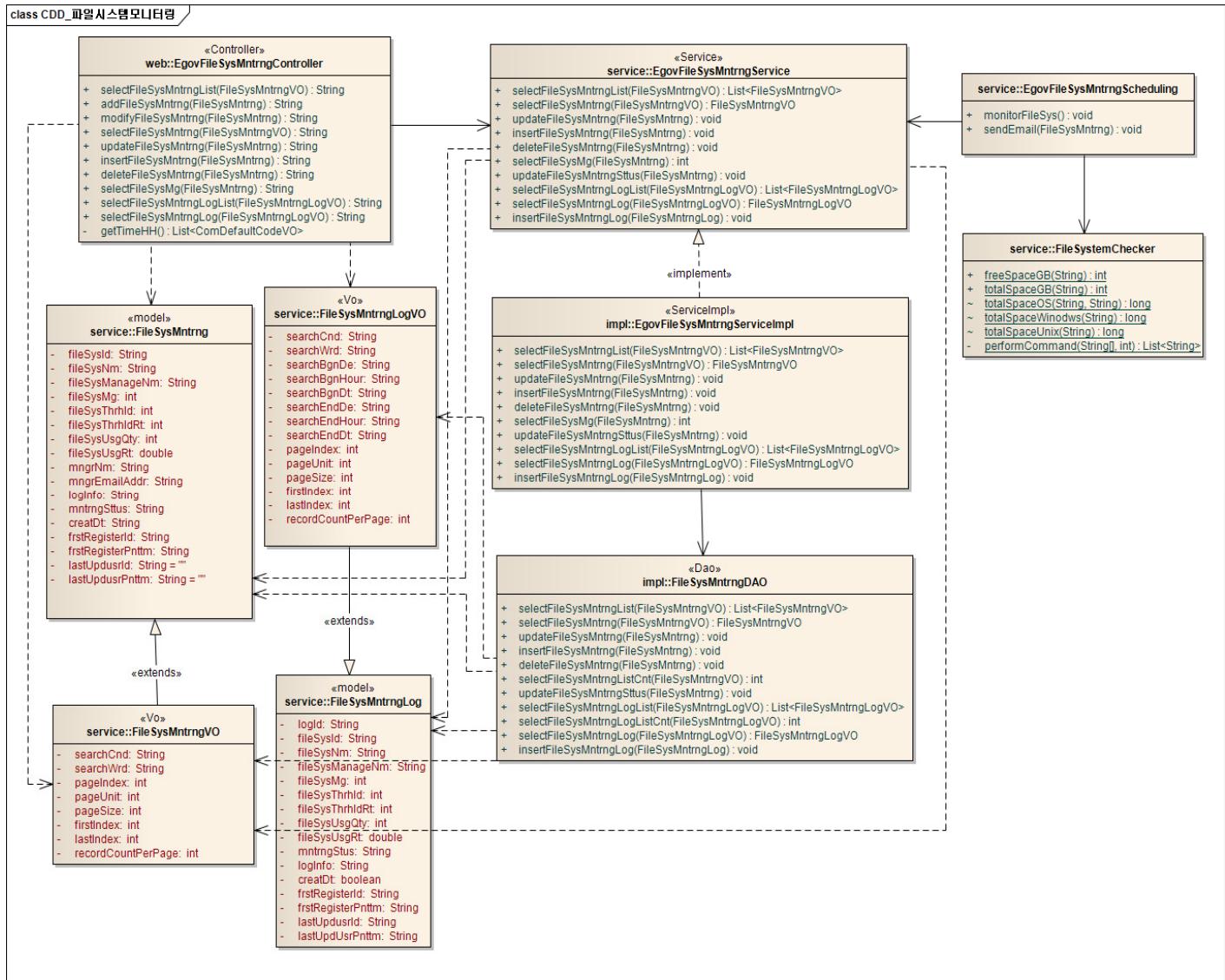
⑦ File System Monitoring Query: It is to inquire the registered file system monitoring log information.

Related Sources

| Type | Corresponding Sources | Remarks |
|-------------|--|---|
| Controller | egovframework.com.utl.sys.fsm.web.EgovFileSysMntrngController.java | Controller class for the file system monitoring |
| Service | egovframework.com.utl.sys.fsm.service.EgovFileSysMntrngService.java | Service interface for the file system monitoring |
| ServiceImpl | egovframework.com.utl.sys.fsm.service.impl.EgovFileSysMntrngServiceimpl.java | Service implementation class for the file system monitoring |
| DAO | egovframework.com.utl.sys.fsm.service.impl.FileSysMntrngDAO.java | Data processing class for the file system monitoring |
| Model | egovframework.com.utl.sys.fsm.service.FileSysMntrng.java | Model class for the file system monitoring |
| Model | egovframework.com.utl.sys.fsm.service.FileSysMntrngLog.java | Model class for the file system monitoring log information |
| VO | egovframework.com.utl.sys.fsm.service.FileSysMntrngVO.java | VO class for the file system monitoring |
| VO | egovframework.com.utl.sys.fsm.service.FileSysMntrngLogVO.java | VO class for the file system monitoring log info |
| JSP | /WEB-INF/jsp/egovframework/utl/sys/fsm/EgovFileSysMntrngList.jsp | jsp page for the file system monitoring list inquiry |
| JSP | /WEB-INF/jsp/egovframework/utl/sys/fsm/EgovFileSysMntrngRegist.jsp | jsp page for the file system monitoring registration |
| JSP | /WEB-INF/jsp/egovframework/utl/sys/fsm/EgovFileSysMntrngUpdt.jsp | jsp page for the file system monitoring update |
| JSP | /WEB-INF/jsp/egovframework/utl/sys/fsm/EgovFileSysMntrngDetail.jsp | jsp page for inquire the registered file system monitoring |
| JSP | /WEB-INF/jsp/egovframework/utl/sys/fsm/EgovFileSysMntrngLogList.jsp | jsp page for inquire the file system monitoring log list |
| JSP | /WEB- | jsp page for inquire the file system monitoring log list |

| | | |
|-----|---|---------------------------------------|
| | INF/jsp/egovframework/util/sys/fsm/EgovFileSysMntrngLogDetail.jsp | registered file system monitoring log |
| XML | /egovframework/sqlmap/com/util/sys/fsm/EgovFileSysMntrng_SQL*.xml | File system monitoring QUERY XML |

Class Diagram



Related Tables

| Table Name | Table Name(English) | Remarks |
|--|---------------------------|--|
| File System Monitoring | COMTNFILESYSMNTRNG | It is to define and manage the properties information used to manage file system monitoring information. |
| File System Monitoring Log Information | COMTNFILESYSMNTRNGLOGINFO | It is to define and manage the properties information used to manage the file system monitoring log information. |

ID Generation

- In order to use the ID Generation Service, the **FILESYS_MNTRNG** item and the **FILESYS_LOGID** item should be added to COMTECOPSEQ which is the sequence storage table.

```
INSERT INTO COMTECOPSEQ VALUES('FILESYS_MNTRNG','0');
INSERT INTO COMTECOPSEQ VALUES('FILESYS_LOGID','0');
```

Scheduler Registration

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

```
<!--file system monitoring -->
<bean id="fileSysMntrng"
      class="org.springframework.scheduling.quartz.MethodInvokingJobDetailFactoryBean">
    <property name="targetObject" ref="egovFileSysMntrngScheduling" />
    <property name="targetMethod" value="monitorFileSys" />
    <property name="concurrent" value="false" />
</bean>

<!--file system monitoring trigger -->
<bean id="fileSysMntrngTrigger"
      class="org.springframework.scheduling.quartz.SimpleTriggerBean">
    <property name="jobDetail" ref="fileSysMntrng" />
    <!-- It is executed 1 minute after it starts. (milisecond) -->
    <property name="startDelay" value="60000" />
    <!-- It is executed for every 10 minutes. (milisecond) -->
    <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="fileSysMntrngTrigger" />
    </list>
  </property>
</bean>
```

Related Screens & Action Manuals

File System Monitoring List Inquiry

| Action | URL | Controller method | QueryID |
|---------|---|-------------------------|---|
| Inquire | /utl/sys/fsm/selectFileSysMntrngList.do | selectFileSysMntrngList | "FileSysMntrngDAO.selectFileSysMntrngList" |
| Inquire | /utl/sys/fsm/selectFileSysMntrngList.do | selectFileSysMntrngList | "FileSysMntrngDAO.selectFileSysMntrngListCnt" |

There are 10 items inquired per page on a file system monitoring list, with 10 pages in total. Search options are the file system name, the file system management name, the administrator name and the status.

③ 파일시스템모니터링대상 목록

--선택하세요--

[조회] [등록]

| 번호 | 파일시스템명 | 파일시스템관리명 | 크기 | 임계치 | 사용량 | 상태 | 관리자명 |
|----|--------|-------------|------|-----------|------------|-----|------|
| 1 | F:\ | 개발 파일시스템 #3 | 93G | 94%(87G) | 98.9%(92G) | 비정상 | 홍길동 |
| 2 | D:\ | 개발 파일시스템 #2 | 200G | 90%(180G) | 5.5%(11G) | 정상 | 홍길동 |
| 3 | C:\ | 개발 파일시스템 #1 | 98G | 89%(87G) | 18.4%(18G) | 정상 | 홍길동 |

1

Inquiry: It is to inquire the registered file system monitoring list.

Registration: Using the Register button at the upper section to move to the **File System Monitoring Registration** screen in order to register a new file system monitoring.

File System Management Name Click: It is to move to the **Detail Inquiry of the File System Monitoring Target** screen.

File System Monitoring Registration

| Action | URL | Controller method | QueryID |
|----------|-----------------------------------|---------------------|--|
| Register | /util/sys/fsm/addFileSysMntrng.do | insertFileSysMntrng | “FileSysMntrngDAO.insertFileSysMntrng” |

Insert the properties information of the file system monitoring, and then register.

Threshold field is a **boundary value** that informs the risk in terms of the registered file system size, and if it exceeds the registered threshold, its monitoring information is sent to the **administrator's e-mail address**.

④ 파일시스템모니터링대상 등록

| | | |
|-------------|----------------------|---------|
| 파일시스템명 * | <input type="text"/> | 파일시스템확인 |
| 파일시스템관리명 * | <input type="text"/> | |
| 파일시스템 크기 * | 0 | G |
| 파일시스템 임계치 * | 0 | G |
| 관리자명 * | <input type="text"/> | |
| 관리자이메일주소 * | <input type="text"/> | |

[저장] [목록]

File System Check: Using the inserted file system name, it displays the file system size.

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

List: It is used to move to the file system monitoring list inquiry screen.

File System Monitoring Update

| Action | URL | Controller method | QueryID |
|--------|--------------------------------------|---------------------|--|
| Update | /util/sys/fsm/modifyFileSysMntrng.do | updateFileSysMntrng | “FileSysMntrngDAO.updateFileSysMntrng” |

It is to update the file system monitoring properties information, and then save.

파일시스템모니터대상 수정

| | |
|---|-----------------|
| 파일시스템명 * | D:₩ |
| 파일시스템관리명 * | 개발 파일시스템 #2 |
| 파일시스템 크기 * | 200G |
| 파일시스템 임계치 * | 180 G |
| 관리자명 * | 홍길동 |
| 관리자이메일주소 * | egov@egov.or.kr |
| <input type="button" value="저장"/> <input type="button" value="목록"/> | |

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

List: It is used to move to the file system monitoring list inquiry screen.

Detail Inquiry of the File System Monitoring

| Action | URL | Controller method | QueryID |
|----------------|--------------------------------------|---------------------|--|
| Detail Inquiry | /util/sys/fsm/selectFileSysMntrng.do | selectFileSysMntrng | “FileSysMntrngDAO.selectFileSysMntrng” |
| Delete | /util/sys/fsm/deleteFileSysMntrng.do | deleteFileSysMntrng | “FileSysMntrngDAO.deleteFileSysMntrng” |

It is to inquire the properties information of the file system monitoring.

파일시스템모니터대상 상세보기

| | |
|---|---------------------|
| 파일시스템명 * | D:₩ |
| 파일시스템관리명 * | 개발 파일시스템 #2 |
| 파일시스템 크기 * | 200G |
| 파일시스템 임계치 * | 90% (180G) |
| 파일시스템 사용량 * | 5.5% (11G) |
| 관리자명 * | 홍길동 |
| 관리자이메일주소 * | egov@egov.or.kr |
| 모니터링상태 | 정상 |
| 마지막 생성일시 | 2010-09-30 15:49:24 |
| <input type="button" value="수정"/> <input type="button" value="삭제"/> <input type="button" value="목록"/> | |

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

Delete: It is to delete the registered file system monitoring information.

List: It is to move to the file system monitoring list inquiry screen.

File System Monitoring Log List Inquiry

| Action | URL | Controller method | QueryID |
|---------|--|----------------------------|---|
| Inquire | /utl/sys/fsm/selectFileSysMntrngLogList.do | selectFileSysMntrngLogList | “ FileSysMntrngDAO.selectFileSysMntrngLogList” |
| Inquire | /utl/sys/fsm/selectFileSysMntrngLogList.do | selectFileSysMntrngLogList | “ FileSysMntrngDAO.selectFileSysMntrngLogListCnt” |

There are 10 items inquired per page on a file system monitoring log list, with 10 pages in total. Search options are the file system name, the file system management name, the administrator name, the status and the monitoring time.

파일시스템모니터링로그 목록

--선택하세요-- 조회

| 번호 | 파일시스템명 | 파일시스템관리명 | 크기 | 임계치 | 사용량 | 상태 | 생성일시 |
|----|--------|-------------|------|-----------|------------|-----|---------------------|
| 1 | D:\ | 개발 파일시스템 #2 | 200G | 90%(180G) | 5.5%(11G) | 정상 | 2010-09-30 15:50:24 |
| 2 | C:\ | 개발 파일시스템 #1 | 98G | 89%(87G) | 18.4%(18G) | 정상 | 2010-09-30 15:50:24 |
| 3 | F:\ | 개발 파일시스템 #3 | 93G | 94%(87G) | 98.9%(92G) | 비정상 | 2010-09-30 15:50:20 |
| 4 | C:\ | 개발 파일시스템 #1 | 98G | 89%(87G) | 18.4%(18G) | 정상 | 2010-09-30 15:49:25 |
| 5 | D:\ | 개발 파일시스템 #2 | 200G | 90%(180G) | 5.5%(11G) | 정상 | 2010-09-30 15:49:24 |
| 6 | F:\ | 개발 파일시스템 #3 | 93G | 94%(87G) | 98.9%(92G) | 비정상 | 2010-09-30 15:49:20 |
| 7 | C:\ | 개발 파일시스템 #1 | 98G | 89%(87G) | 18.4%(18G) | 정상 | 2010-09-30 15:48:24 |
| 8 | D:\ | 개발 파일시스템 #2 | 200G | 90%(180G) | 5.5%(11G) | 정상 | 2010-09-30 15:48:24 |
| 9 | F:\ | 개발 파일시스템 #3 | 93G | 94%(87G) | 98.9%(92G) | 비정상 | 2010-09-30 15:48:20 |
| 10 | C:\ | 개발 파일시스템 #1 | 98G | 89%(87G) | 18.4%(18G) | 정상 | 2010-09-30 15:47:25 |

1 2 3 4 5 6 7 8 9 10

Inquiry: It is to inquire the registered file system monitoring log list.

File System Management Name Click: It is to move to the **Detail Inquiry of the File System Monitoring Log** screen.

Detail Inquiry of the File System Monitoring

| Action | URL | Controller method | QueryID |
|----------------|---|------------------------|---|
| Detail Inquiry | /util/sys/fsm/selectFileSysMntrngLog.do | selectFileSysMntrngLog | "FileSysMntrngDAO.selectFileSysMntrngLog" |

It is to inquire the properties of the file system monitoring.

파일시스템모니터링로그 상세보기

| | |
|-------------|---|
| 로그ID * | 000000000000000000277 |
| 파일시스템명 * | D:₩₩ |
| 파일시스템관리명 * | 개발 파일시스템 #2 |
| 파일시스템 크기 * | 200G |
| 파일시스템 임계치 * | 90% (180G) |
| 파일시스템 사용량 * | 5.5% (11G) |
| 모니터링상태 | 정상 |
| 로그정보 | <div style="border: 1px solid #ccc; height: 150px; width: 100%;"></div> |
| 생성일시 | 2010-09-30 15:50:24 |

[목록](#)

List: It is to move to the file system monitoring log list inquiry screen.
