System/Service Connection - MMS Service Connection

Summary

MMS Service connection is a component interfaced from the mobile MMS service that M-Gov(http://www.mgov.go.kr [http://www.mgov.go.kr]) of National Computing and Information Agency (NCIA) at the Ministry of Public Administration and Security (MOPAS) provides for government agency.

The actual messages are transferred and its results are returned by the API provide by NCIA’s M-Gov(http://www.mgov.go.kr [http://www.mgov.go.kr]).

This component only delivers user inputs and handles the returned results.

It allows long messages, images, videos and ring tones to be transmitted.

This component allows the user to send MMS and the administrator to manage MMS attachment files and transmission results.

\* Flow chart

This component has been developed and tested on the browsers available in the mobile devices.

Since the browser support is different depending the device (PC or mobile device), development and application should be carefully carried out.

The test devices include Galaxy S2, Galaxy S, Galaxy Tab 1, IPad2, IPhone 4.

The test mobile browsers include Android basic browser, Firefox, Safari and Opera Mobile.

The results are as follows.

Android

For the Android web browser, Firefox(6.xx), opera mobile, in android OS 2.3(gengerbread), he execution of HTML5, CSS3 and components is supported stably.

However, in Android 2.1, 2.2, the previous version of Android OS 2.3 (gingerbread), the support for HTML5 and CSS3 is not sufficient to implement the component UI properly.

Opera Mobile was excluded from the support as it caused some problems with handling colors and events.

For testing, Galaxy, Galaxy S2 and Galaxy Tab 1 were used

iOS

iOS is one of the three supported browsers and both version (iOS 4.2, 4.3) supported HTML5 and CSS3 relatively well.

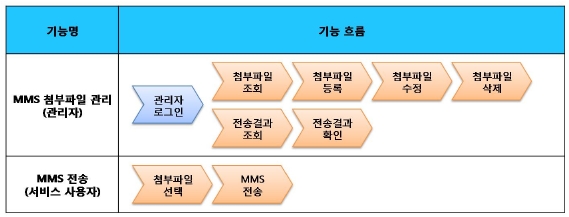
iPhone4 and iPad2 were used for testing.

Prerequisites

In order to use Mobile MMS service, you have to apply for MMS service separately.

This service is managed by M-Gov(http://www.mgov.go.kr [http://www.mgov.go.kr]) of National Computing and Information Agency (NCIA) at the Ministry of Public Administration and Security (MOPAS) .

The service application procedure is as follows.



1. Preparation for application: the applying institute should check preparation items for using the integration center service (system specifications and network environment).

ㆍ System specifications: JAVA 1.4 or later, Unix, Linux, Windows

ㆍ Network environment: possible though not independent configuration(partly supportable to the server that is operation the homepage or the server that carries out the work

ㆍ Others: the system should be connected to Internet and the administration network

②

③

④

⑤

Service application: prepare the application and submit to the government integration computing center (refer to the site regulations of use)

Usage information: the integration center informs of the results in writing within 15 days from the submission date

Service preparation: the applying institute uses “M-Gov interlocking API“

Service initiation: the center may cancel the permission if the applying institute doesn’t initiate the service within 60 days after approval

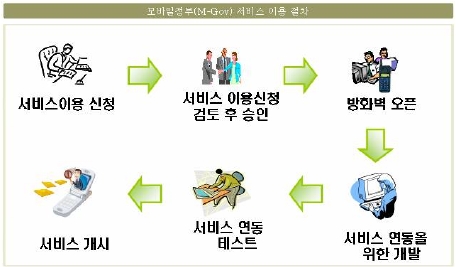
For details and contact, refer to Government Integration Computing Center M-gov(http://www.mgov.go.kr [http://www.mgov.go.kr]).

Description

Mobile MMS service is composed of MMS attachment file(MMS attachment file list inquiry and detailed inquiry, registration, modification, deletion, etc.) and MMS transmission results list inquiry and MMS transmission function

.(refer to the relevant functions)

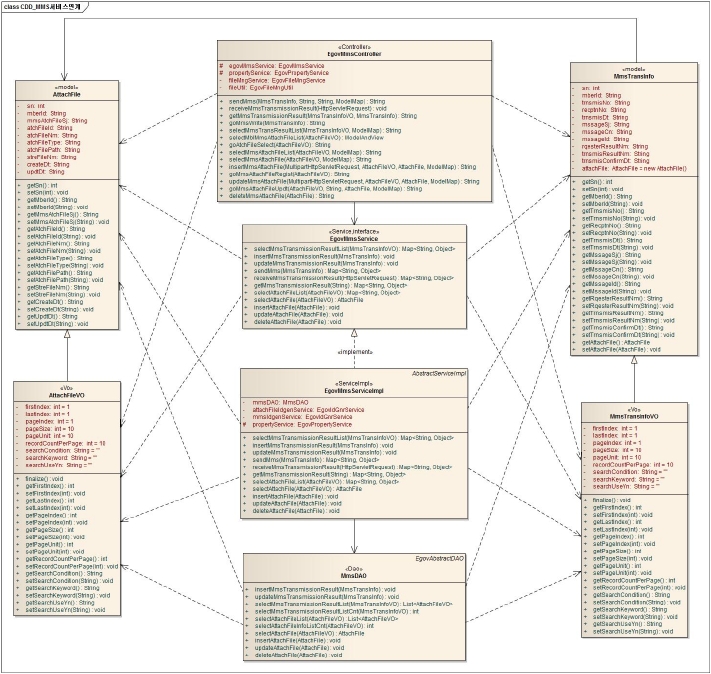
Class diagram



Related sources

|  |  |  |
| --- | --- | --- |
| Types | Source names | Notes |
| C ontroller | egovframework.mbl.com.mms.web.EgovMmsC ontroller.java | MMS C ontroller C lass |
| Service | egovframework.mbl.com.mms.service.EgovMmsService.java | MMS Service C lass |
| ServiceImpl | egovframework.mbl.com.mms.service.impl.EgovMmsServiceImpl.java | MMS ServiceImpl C lass |
| Model | egovframework.mbl.com.mms.service.MmsTransInfo.java | MMS transmission information Model C lass |
| Model | egovframework.mbl.com.mms.service.AttachFile.java | Attachment file Model C lass |
| VO | egovframework.mbl.com.mms.service.MmsTransInfoVO.java | MMS transmission information VO C lass |
| VO | egovframework.mbl.com.mms.service.AttachFileVO.java | attachment file VO C lass |
| DAO | egovframework.mbl.com.mms.service.impl.MmsDAO.java | MMS Dao C lass |
| JSP | /WEB-INF/jsp/egovframework/mbl/com/mms/EgovMmsAttachFileList.jsp | attachment file list inquiry page |
| JSP | /WEB-INF/jsp/egovframework/mbl/com/mms/EgovMmsAttachFileRegist.jsp | attachment file registration page |
| JSP | /WEB-INF/jsp/egovframework/mbl/com/mms/EgovMmsAttachFileUpdt.jsp | Attachment file modification page |
| JSP | /WEB-INF/jsp/egovframework/mbl/com/mms/EgovMmsAttachFileDetail.jsp | attachment file detail inquiry page |
| JSP | /WEB-INF/jsp/egovframework/mbl/com/mms/EgovMmsTransResultList.jsp | MMS transmission results lost inquiry page |
| JSP | /WEB-INF/jsp/egovframework/mbl/com/mms/EgovMobileMmsRegist.jsp | Mobile MMS transmission page |
| JSP | /WEB-INF/jsp/egovframework/mbl/com/mms/EgovMobileAttachFileList.jsp | Mobile attachment file inquiry page |
| QUERY XML | resources/egovframework/sqlmap/mbl/com/mms/EgovMms\_SQL\_XXX.xml | MMS QUERY XML |
| Validator Rule XML | resources/egovframework/validator/validator-rules.xml | XML that defines Validator Rule |
| Validator XML | resources/egovframework/validator/mbl/com/mms/EgovMms.xml | MMS Validator XML |
| Message properties | resources/egovframework/message/message-common\_ko\_KR.properties | MMS Message properties |
| Idgen XML | resources/egovframework/spring/com/context-idgen.xml | MMS transmission results Id, attachment file Id genratoin Idgen XML |

ID Generation



In order to use ID Generation Service, add MMS\_ID (MMS transmission ID) and ATCH\_ID (attachment file ID) entries to COMTECOPSEQ, sequence storing table

.

Related table

|  |  |  |
| --- | --- | --- |
| Table name | Table name (English) | Notes |
| MMS transmission results | C OMTNMMS | Manages MMS transmission results |
| Attachment file | C OMTNMMSATTAC H | Manages attachment file |
| Common detail code | C OMTC C MMNDETAILC ODE | Transmission result code, request results code |
| File | C OMTNFILE | Manages attachment file information |
| File datails | C OMTNFILEDETAIL | Manages attachment file detail information |

Login/membership management/permission management

The MMS service connection requires the user/administrator authentication in MMS writing and transmission, transmission result list inquiry, attachment file list inquiry and detail inquiry, registration, modification and deletion.

For authentication, you can connect with login, membership management and permission management components. If you use Spring Security for authentication, make change as in the followings.

src/main/java/resources/egovframework/spring/com/context-common.xml

<!-- Service class that can check the authenticated user’s LoginVO, permissions and authentication -->

<bean id="egovUserDetailsHelper" class="egovframework.com.cmm.util.EgovUserDetailsHelper">

<property name="egovUserDetailsService">

<ref bean="egovUserDetailsSecurityService" />

</property>

</bean>

<!-- Bean that will use Security-based authentication -->

<bean id="egovUserDetailsSecurityService" class="egovframework.com.sec.ram.service.impl.EgovUserDetailsSecurityServiceImpl"/>

web.xml

<!-- 2. Spring Security Setup -->

<filter>

<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>

<listener>

<listener-class>org.springframework.security.ui.session.HttpSessionEventPublisher</listener-class>

</listener>

<!-- security end -->

<!-- 4. 4Filter setup for Spring Security logout setup -->

<filter>

<filter-name>EgovSpringSecurityLogoutFilter</filter-name>

<filter-class>egovframework.com.sec.security.filter.EgovSpringSecurityLogoutFilter</filter-class>

</filter>

<filter-mapping>

<filter-name>EgovSpringSecurityLogoutFilter</filter-name>

<url-pattern>/uat/uia/actionLogout.do</url-pattern>

</filter-mapping>

<!-- 4. 4Filter setup for Spring Security login setup -->

<filter>

<filter-name>EgovSpringSecurityLoginFilter</filter-name>

<filter-class>egovframework.com.sec.security.filter.EgovSpringSecurityLoginFilter</filter-class>

</filter>

<filter-mapping>

<filter-name>EgovSpringSecurityLoginFilter</filter-name>

<url-pattern>\*.do</url-pattern>

</filter-mapping>

As in the above, add Spring Security filter to web.xml.

For details on login, membership management, permission management, refer to the followings.

Login: general login

Membership management: user management

Permission management: permission management

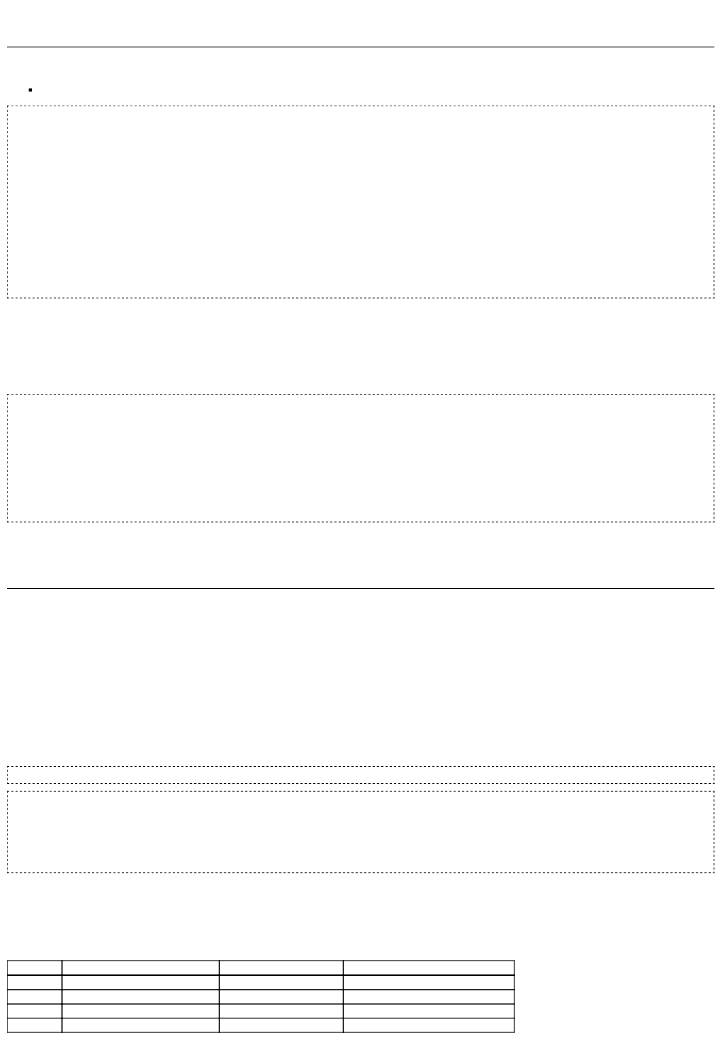
The following pages need the user/administrator permissions.

|  |  |  |
| --- | --- | --- |
| Permission type | Page path | Description |
| User | /mbl/com/mms/goMmsWrite.mdo | MMS writing screen |
| User | /mbl/com/mms/goAtchFileSelect.mdo | MMS attachment file selection screen |
| User | /mbl/com/mms/sendMms.mdo | MMS transmission |
| Administrator | /mbl/com/mms/selectMmsTransResultList.mdo | MMS transmission results list inquiry screen |
| Administrator | /mbl/com/mms/getMmsTransmissionResult.mdo | MMS transmission results |
| Administrator | /mbl/com/mms/selectMmsAttachFileList.mdo | MMS attachment file list inquiry screen |
| Administrator | /mbl/com/mms/selectMmsAttachFile.mdo | MMS attachment file detail inquiry screen |
| Administrator | /mbl/com/mms/goMmsAttachFileRegist.mdo | MMS attachment file registration screen |
| Administrator | /mbl/com/mms/insertMmsAttachFile.mdo | MMS attachment file registration |
| Administrator | /mbl/com/mms/goMmsAttachFileUpdt.mdo | MMS attachment file modification screen |
| Administrator | /mbl/com/mms/updateMmsAttachFile.mdo | MMS attachment file modification |
| Administrator | /mbl/com/mms/deleteMmsAttachFile.mdo | MMS attachment file deletion |

Settings and Notes

\* The currently distributed mobile common component adopts HTML5 and CSS3 and this means that it doesn’t support the standards for mobile web site validity check of Mobile OK and W3C. For details on correct validity check, please contact the competent professional institute.

\* Security verification is under progress on the currently distributed mobile component. We plan to complete security verification as soon as possible to release a new security-patched version.



Environmental settings

The followings are the required items and environmental settings to use MMS service connection.

Property files settings (egovframework/egovProps/conf/mms.properties)

#-----------------------------------------------------------------------

#

#

mms.properties : Config file that shows MMS connection information

#

#-----------------------------------------------------------------------

#

#

1.

2.

key = value structure.

Key values cannot include space. Value can include space

#

3.

Key values cannot include Korean,

Value can include Korean

#

4.

If a new line is needed, add '\' to the end of the line (if

you have to use '\', then use '\\'.)

#

#

5.

6.

In Windows, the directory symbol should be: '\\' or '/' (do not use '\'.)

Directory symbol in Unix : '/'

#

7.

For comments, use

#

#

8.

If there is space after values, an error could occur when referenced by sublets. Use trim() or set the properties values without space.

#-----------------------------------------------------------------------

# MMS connection information

mmsPort = 13000(or 14000)

mmsHost = M-Gov G/W IP

mmsId = Authentication ID

mmsPassword = Authentication password

In above, enter information in mmsHost based on M-Gov guide and enter the issued authentication information in mmsId and mmsPassword.

For mmsPort, use port 14000 for development test and port 13000 for actual service.

(when using port 14000, massages are not transmitted to users, but M-Gov Gateway Server returns result value to the transmission requester.)

To use this component, the following libraries are required and these libraries are added to classpath.

activation.jar

commons-codec-1.3.jar

commons-httpclient-3.1-alpha1.jar

commons-logging-1.0.4.jar

dom.jar

log4j-1.2.9.jar

mail.jar

mose-api-1.5.1.jar

saaj-api.jar

saaj-impl.jar

soap.jar

xalan.jar

xercesImpl.jar

You can download the above libraries from M-Gov (http://www.mgov.go.kr [http://www.mgov.go.kr]).

(M-Gov home > Service Introduction > FAQ > No.6 QUESTION)

Related functions

Mobile MMS service is largely composed of MMS transmission and mobile attachment file selection for users, and MMS transmission results list inquiry, MMS attachment file list inquiry, MMS attachment file detail inquiry, MMS attachment file registration, MMS attachment file modification and MMS attachment file deletion for administrators.

.

Mobile MMS Transmission

Business rules

You can write and transmit MMSs. The transmission request results are outputted on the message window. If failed, you can re-transmit.

Click the attachment file selection button and move the attachment file selection screen to select an attachment file.

Every time you transmit MMS, the transmission information is automatically registered with the transmission request results in MMS transmission history table.

When registed, MMS\_ID column uses “egovframework.rte.fdl.idgnr.impl.EgovTableIdGnrService”.

Primary Key => MMS\_ID : serial number is automatically generated.

<bean name="egovMmsIdGnrService"

class="egovframework.rte.fdl.idgnr.impl.EgovTableIdGnrService"

destroy-method="destroy">

<property name="dataSource" ref="dataSource" />

<property name="blockSize"

<property name="table"

<property name="tableName"

</bean>

Related codes

N/A

Screen and execution manual

value="10"/>

value="COMTECOPSEQ"/>

value="MMS\_ID"/>

Action

Transmission

Re-transmission

URL

/mbl/com/mms/sendMms.mdo

/mbl/com/mms/sendMms.mdo

Controller method

sendMms

sendMms

QueryID

Attachment file selection /mbl/com/mms/goAtchFileSelect.mdo goAtchFileSelect

Transmission information registration /mbl/com/mms/sendMms.mdo

insertMmsTransmissionResult “MmsDAO.insertMmsTransmissionResult”

Transmission: transmits MMS information.

Re-transmission: retransmit MMS that is not transmitted.

Attachment file selection: click Select button to move to the attachment file selection screen.

Mobile attachment file selection

Business rules

Select a file to attach to MMS.

Related codes

N/A

Screen and execution manual



|  |  |  |  |
| --- | --- | --- | --- |
| Action | URL | Controller method | QueryID |
| Inquiry | /mbl/com/mms/selectMblMmsAttachFileList.mdo | selectMblMmsAttachFileList | “MmsDAO.selectAttachFileList” |

Click list: Use the selected attachment file information to move to mobile MMS transmission page.

MMS transmission results list inquiry

Business rules

Use inquiry conditions to carry out the list inquiry. Click the result check button to check MMS transmission results.

Related codes

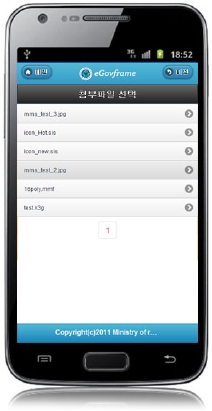
|  |  |  |  |
| --- | --- | --- | --- |
| Code classification | Code classification name | Code ID | Code name |
| C OM079 | Transmission results | TSR01 | Transmission receiving successful |
| C OM079 | Transmission results | TSR02 | Transmission receiving failed |
| C OM080 | Request results | RQR01 | Request successful |
| C OM080 | Request results | RQR02 | Request failed |

Screen and execution manual

10 MMS transmission result lists are retrieved per page and paging is carried out on 10 page basis. The search conditions include transmission number, receiving number, transmission results and request results.

To change the search range per page, change pageUnit and pageSize in context-properties.xml.

(this setting affects the entire common service function.)



|  |  |  |  |
| --- | --- | --- | --- |
| Action | URL | Controller method | QueryID |
| Inquiry | /mbl/com/mms/selectMmsTransResultList.mdo | selectMmsTransResultList | “MmsDAO.selectMmsTransmissionResultList” |
|  | /mbl/com/mms/selectMmsTransResultList.mdo | selectMmsTransResultListC nt | “MmsDAO.selectMmsTransmissionResultListC nt” |
| Check | /mbl/com/mms/getMmsTransmissionResult.mdo | getMmsTransmissionResult | “MmsDAO.updateMmsTransmissionResult” |

Inquiry: in order to retrieve MMS transmission results, select the search condition at the top, enter a key word and click Inquiry button.

Check: check MMS transmission results.

MMS attachment file list inquiry

Business rules

You can use the search condition to carry out list inquiry. Click the Register button to move to MMS attachment file registration screen to register MMS attachment file.

Related codes

N/A

Screen and execution manual

10 MMS attachment file lists are retrieved per page and paging is carried out on 10 page basis. The search conditions include titles and file names.

In order to change the search range per page, change pageUnit and page in Sizecontext-properties.xml.

(this setting affects the entire common service function.)



|  |  |  |  |
| --- | --- | --- | --- |
| Action | URL | Controller method | QueryID |
| Inquiry | /mbl/com/mms/selectMmsAttachFileList.mdo | selectMmsAttachFileList | “MmsDAO.selectAttachFileList” |
|  | /mbl/com/mms/selectMmsAttachFileList.mdo | selectMmsAttachFileListC nt | “MmsDAO.selectAttachFileListC nt” |
| Register | /mbl/com/mms/goMmsAttachFileRegist.mdo | goMmsAttachFileRegist |  |
| Click list | /mbl/com/mms/selectMmsAttachFile.mdo | selectMmsAttachFile | “MmsDAO.selectAttachFile” |

Inquiry: in order to retrieve MMS attachment files, select the search conditions at the top, enter a key word and click the Inquiry button.

Register: in order to register MMS attachment files, use the register button at the top and move to MMS attachment file registration screen.

Click list: moves to MMS attachment file detail inquiry screen.

MMS attachment file detail inquiry

Business rules

By clicking MMS attachment file list inquiry, you can move to this screen. It shows detail information on MMS attachment file.

Related codes

N/A

Screen and execution manual

On the MMS attachment file detail inquiry screen, you can carry out MMS attachment file modification, MMS attachment file deletion and MMS attachment file list inquiry.



|  |  |  |  |
| --- | --- | --- | --- |
| Action | URL | Controller method | QueryID |
| Update | /mbl/com/mms/goMmsAttachFileUpdt.mdo | goMmsAttachFileUpdt |  |
| Delete | /mbl/com/mms/deleteMmsAttachFile.mdo | deleteMmsAttachFile | “MmsDAO.deleteAttachFile” |
| List | /mbl/com/mms/selectMmsAttachFileList.mdo | selectMmsAttachFileList | “MmsDAO.selectAttachFileList” |

Update: by clicking Update button, you can move to the screen where MMS attachment file can be modified.

Delete: by clicking Delete button, view the message asking whether to delete before deleting.

List: moves to MMS attachment file list inquiry screen.

MMS attachment file registration

Business rules

- The red \* means the required items.

- When stored, ATCH\_ID column uses “egovframework.rte.fdl.idgnr.impl.EgovTableIdGnrService”.

Primary Key => ATCH\_ID : serial number automatically generated

<bean name="egovAttachFileIdGnrService"

class="egovframework.rte.fdl.idgnr.impl.EgovTableIdGnrService"

destroy-method="destroy">

<property name="dataSource" ref="dataSource" />

<property name="blockSize"

<property name="table"

<property name="tableName"

value="10"/>

value="COMTECOPSEQ"/>

value="ATCH\_ID"/>

</bean>

- MMS service API provided by M-Gov (http://www.mgov.go.kr [http://www.mgov.go.kr]) has constraints when sending attachment files.

Therefore there are constraints on file size and type when registering attachment files. Refer to the following table.

|  |  |  |
| --- | --- | --- |
| contents | | Description |
| Image | Support type | jpg, sis |
|  | capacity | 20 KB |
| Ring bell | Support type | mmf |
|  | capacity | 20 KB |
| Video | Support type | skm, k3g |
|  | capacity | 300 KB |

※ mmf files are replayed on the feature phone.

Related codes

N/A

Screen and execution manual

Action URL

Controller method

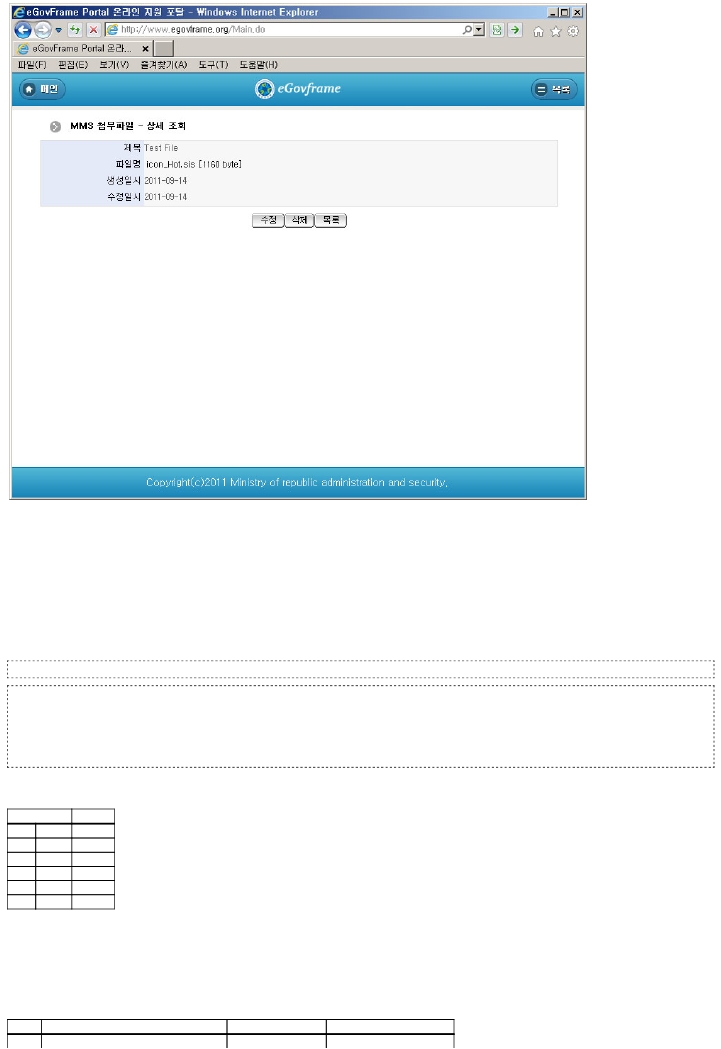
QueryID

Register

/mbl/com/mms/insertMmsAttachFile.mdo

insertMmsAttachFile

“MmsDAO.insertAttachFile”



List

/mbl/com/mms/selectMmsAttachFileList.mdo selectMmsAttachFileList “MmsDAO.selectAttachFileList”

Enter basic information on MMS attachment files.

Register: store the entered MMS attachment file.

List: moves to MMS attachment filelist inquiry screen.

MMS attachment filemodification

Business rules

- The red\* means the required items.

Related codes

N/A

Screen and execution manual

Store the entered MMS attachment file.



|  |  |  |  |
| --- | --- | --- | --- |
| Action | URL | Controller method | QueryID |
| Update | /mbl/com/mms/updateMmsAttachFile.mdo | updateMmsAttachFile | “MmsDAO.updateAttachFile” |
| List | /mbl/com/mms/selectMmsAttachFileList.mdo | selectMmsAttachFileList | “MmsDAO.selectAttachFileList” |

Update: the modified and entered MMS attachment file is stored.

List: moves to MMS attachment file list inquiry screen.

References

Refer to the execution environment: ID Generation Service

Refer to the common component: File Manage service

Distribution and test: Mobile Common Component System and distribution package plan

Related database structure and schema: related database structure and schema

e govfram e work /테스트2.tx t · Last m odifie d: 2011/10/18 13:25 by m com

Except where otherwise noted, content on this wiki is licensed under the following license:CC Attribution-Noncommercial-Share Alike 3.0 Unported

[http://creativecommons.org/licenses/by-nc-sa/3.0/]

