Mail Service

Summary

The **e-government framework** uses Jakarta Commons Email API for easily processing e-mailing, and Commons Email was adopted as a open source by providing Java Mail API and JavaBeans Activation API as open source.

Apache Commons-Email presents the method of sending mail more simply based on Java Mail API.

Commons Email API provides classes such as SimpleEmail, HtmlEmail that processes mail sending and can simply sends general text mail, HTML mail or attachment mail.

Email Sample Code is as follows:

- Send text simply
- Attach file
- Attach through URL
- Send HTML e-mail
- Authenticate

Description

1. Simply send text only

```java
public class EgovSimpleMail {
  public static void main(String args[])throws MailException {
          SimpleEmail email = new SimpleEmail();
          // Actual mail server information at setHostName

          email.setCharset("euc-kr"); // Korean encoding

          email.setHostName("mail.myserver.com"); //SMTP server setting
          try {
                  email.addTo("jdoe@somewhere.org", "John Doe"); // Add recipient
          } catch (EmailException e) {
                  e.printStackTrace();
          }
          try {
                  email.setFrom("me@apache.org", "Me"); // Sender
          } catch (EmailException e) {
                  e.printStackTrace();
          }
          email.setSubject("Test message"); // Mail title
          email.setContent("this is the simple mail test", "text/plain; charset=euc-kr");
          try {
                  email.send();
          } catch (EmailException e) {
                  e.printStackTrace();
          }
  }
}
```

org.apache.commons.mail.SimpleEmail is the most fundamental class that implements setMsg(java.lang.String msg) only by inheriting the central part, org.apache.commons.mail.Email

 - Designate SMTP Server : setHostName(java.lang.String aHostName)
 - Mail address of the recipient : addTo(java.lang.String email) or addTo(java.lang.String email, java.lang.String name)

- Mail address of the sender : setFrom(java.lang.String email) or setFrom(java.lang.String email, java.lang.String name)
 - If sending to several people: add addTo functions

Enter the mail subject and contents to setSubject(java.lang.String subject) and setMsg(java.lang.String msg) and then transmit to send() function.

Characterset of mail is set to euc-kr using email.setCharset("euc-kr"). It should be noted that Korean in the sender's name or mail subject is not broken if it is not indicated here.

2. Attach File

```
public class EgovEmailAttachment {
        public static void main(String args[]) throws MailException {

                try {
                  // Create the attachment information to attach
                  EmailAttachment attachment = new EmailAttachment();
                  attachment.setPath("C:\\xxxx.jpg");
                  attachment.setDisposition(EmailAttachment.ATTACHMENT);
                  attachment.setDescription("Attachment related TEST");
                  attachment.setName("xxxx.jpg"); //

                  // Create basic mail information.
                  MultiPartEmail email = new MultiPartEmail();
                  email.setCharset("euc-kr");// Korean encoding
                  email.setHostName("mail.myserver.com");
                  email.addTo("egov@egov.org", "e-government");
                  email.setFrom("egovto@egov.org", "Me");
                  email.setSubject("attachment file test of e-government");
                  email.setMsg("enter the contents related to attachment here");

                  // Add created attachment
                  email.attach(attachment);

                  // Send mail.
                  email.send();

                } catch (EmailException e) {
                        e.printStackTrace();
                }
        }
}
```

To send attachments, use org.apache.commons.mail.EmailAttachment class and org.apache.commons.mail.MultiPartEmail e-mail.

Set the file name attached through setName(java.lang.String name) by adding the file path and file description. After that, send the basic mail information like SimpleEmail through MultiPartEmail.

Then, add the attachment file through attach() function of MultiPartEmail and transmit.

If attachment file is over 2, create several EmailAttachment to set file information and add through attach().

Add the file to attach using email.attach() after creating EmailAttachment object. Actual file name may include Korean, but you can transmit the file by changing the file name using EmailAttachment.setName() method. It should be noted that file name may not be delivered properly but broken if 1.0 version of Commons Email is delivered in Korean(file itself is transmitted properly.) Accordingly, transmit the file of the name composed of alphabets and numbers when transmitting the file using 1.0 version of Common Email.

3. Attach through URL

```
public class EgovEmailAttachmentUrl {
        public static void main(String args[]) throws MailException, MalformedURLException {
                try {
                   // Set the URL information to attach as well as basic file information
                   EmailAttachment attachment = new EmailAttachment();
                   attachment.setURL(new
URL("http://www.apache.org/images/asf_logo_wide.gif"));
                        attachment.setDisposition(EmailAttachment.ATTACHMENT);
                        attachment.setDescription("Apache logo");
                        attachment.setName("Apache logo");

                        // Create basic mail information
                        MultiPartEmail email = new MultiPartEmail();
                        email.setHostName("mail.myserver.com");
                        email.addTo("jdoe@somewhere.org", "John Doe");
                        email.setFrom("me@apache.org", "Me");
                        email.setSubject("The logo");
                        email.setMsg("Here is Apache's logo");

                        // Add attachment
                        email.attach(attachment);

                        // Send mail
                        email.send();

                } catch (EmailException e) {
                        e.printStackTrace();
                }
        }
}
```

Same as the attachment shown above except the fact that file path information is set to setURL(java.net.URL).

4. Send HTML e-mail

```
public class EgovHtmlEmailSend {
        public static void main(String args[]) throws MailException, MalformedURLException {
                // Create the default mail information
                try {
                HtmlEmail email = new HtmlEmail();
                email.setHostName("mail.myserver.com");
                email.addTo("xxxx@somewhere.org", "xxxx");
                email.setFrom("me@apache.org", "Me");
                email.setSubject("Test email with inline image");

                // Set the image to insert and Content Id
                URL url = new URL("http://www.apache.org/images/asf_logo_wide.gif");
                String cid = email.embed(url, "Apache logo");

                // Set HTML message
                email.setHtmlMsg("<html>The apache logo - <img src=\"cid:"+cid+"\"></html>");

                // Spread the following message if it is the client not supporting HTML e-mail
                email.setTextMsg("Your email client does not support HTML messages");

                // Send e-mail
                email.send();

                } catch (EmailException e) {
```

```
      e.printStackTrace();
    }
      }
}
```

Korean characters are not broken even if a character set was not designated separately if mail contents are entered using email.setHtmlMsg().

5. Authentication

If SMTP server requires authentication, it can be solved through setAuthentication(java.lang.String username, java.lang.String password) of org.apache.commons.mail.Email.

This function is used by creating DefaultAuthenticator class of JavaMail API.

```
SimpleEmail email = new SimpleEmail();
email.setCharset("euc-kr");
email.setHostName("mail.somehost.com");
email.setAuthentication("madvirus", "password");
...
```

Execute Example Sample

1. Download utilappSample file from SVN.
2. Select the folder to download from Eclipse and import the project.
3. Check whether there is library file in lib.
4. Select Index.jsp under src folder, right-click to execute Run As > Run On Server.
5. Check that Tomcat is executed normally in Console window.

A Screen Executed in Screen if Executing Index.jsp of Sample utilappSample

Reference

[Apache Commons-Email UserGuide](#)