JAVAMAIL API - FORWARDING EMAILS

In this chapter we will see how to forward an email using JavaMail API. Basic steps followed in the program below are:

- Get the Session object with POP and SMPT server details in the properties. We would need POP details to retrieve messages and SMPT details to send messages.
- Create POP3 store object and connect to the store.
- Create Folder object and open the appropriate folder in your mailbox.
- Retrieve messages.
- Iterate through the messages and type "Y" or "y" if you want to forward.
- Get all information *To*, *From*, *Subject*, *Content* of the message.
- Build the forward message by working with the parts that make up a message. First part would be the text of the message and a second part would be the message to forward. Combine the two into a multipart. Then you add the multipart to a properly addressed message and send it.
- Close the Transport, folder and store objects respectively.

> *Here we have used JangoSMPT server via which emails are sent to our destination email address. The setup is explained in the Environment Setup chapter.*

Create Java Class

Create a java class file **ForwardEmail**, the contents of which are as follows:

```
package com.tutorialspoint;

import java.io.BufferedReader;
import java.io.InputStreamReader;
import java.util.Date;
import java.util.Properties;

import javax.mail.BodyPart;
import javax.mail.Folder;
import javax.mail.Message;
import javax.mail.Multipart;
import javax.mail.PasswordAuthentication;
import javax.mail.Session;
import javax.mail.Store;
import javax.mail.Transport;
import javax.mail.internet.InternetAddress;
import javax.mail.internet.MimeBodyPart;
import javax.mail.internet.MimeMessage;
import javax.mail.internet.MimeMultipart;

public class ForwardEmail {

   public static void main(String[] args) {
      Properties properties = new Properties();
      properties.put("mail.store.protocol", "pop3");
      properties.put("mail.pop3s.host", "pop.gmail.com");
      properties.put("mail.pop3s.port", "995");
      properties.put("mail.pop3.starttls.enable", "true");
      properties.put("mail.smtp.auth", "true");
      properties.put("mail.smtp.host", "relay.jangosmtp.net");
```

```
        properties.put("mail.smtp.port", "25");
        Session session = Session.getDefaultInstance(properties);
        try {
           // session.setDebug(true);
           // Get a Store object and connect to the current host
           Store store = session.getStore("pop3s");
           store.connect("pop.gmail.com", "xyz@gmail.com",
              "******");//change the user and password accordingly

           // Create a Folder object and open the folder
           Folder folder = store.getFolder("inbox");
           folder.open(Folder.READ_ONLY);
           BufferedReader reader = new BufferedReader(new InputStreamReader(
              System.in));
           Message[] messages = folder.getMessages();
           if (messages.length != 0) {

           for (int i = 0, n = messages.length; i < n; i++) {
              Message message = messages[i];
              // Get all the information from the message
              String from = InternetAddress.toString(message.getFrom());
              if (from != null) {
                 System.out.println("From: " + from);
              }
              String replyTo = InternetAddress.toString(message
                 .getReplyTo());
              if (replyTo != null) {
                 System.out.println("Reply-to: " + replyTo);
              }
              String to = InternetAddress.toString(message
                 .getRecipients(Message.RecipientType.TO));
              if (to != null) {
                 System.out.println("To: " + to);
              }

              String subject = message.getSubject();
              if (subject != null) {
                 System.out.println("Subject: " + subject);
              }
              Date sent = message.getSentDate();
              if (sent != null) {
                 System.out.println("Sent: " + sent);
              }
              System.out.print("Do you want to reply [y/n] : ");
              String ans = reader.readLine();
              if ("Y".equals(ans) || "y".equals(ans)) {
                 Message forward = new MimeMessage(session);
                 // Fill in header
                 forward.setRecipients(Message.RecipientType.TO,
                 InternetAddress.parse(from));
                 forward.setSubject("Fwd: " + message.getSubject());
                 forward.setFrom(new InternetAddress(to));

                 // Create the message part
                 MimeBodyPart messageBodyPart = new MimeBodyPart();
                 // Create a multipart message
                 Multipart multipart = new MimeMultipart();
                 // set content
                 messageBodyPart.setContent(message, "message/rfc822");
                 // Add part to multi part
                 multipart.addBodyPart(messageBodyPart);
                 // Associate multi-part with message
                 forward.setContent(multipart);
                 forward.saveChanges();

                 // Send the message by authenticating the SMTP server
                 // Create a Transport instance and call the sendMessage
                 Transport t = session.getTransport("smtp");
                 try {
```

```
                    //connect to the smpt server using transport instance
    //change the user and password accordingly
                    t.connect("abc", "******");
                    t.sendMessage(forward, forward.getAllRecipients());
                } finally {
                    t.close();
                }

                System.out.println("message forwarded successfully....");

            // close the store and folder objects
            folder.close(false);
            store.close();
            }// end if

        }// end for
    }// end if
    } catch (Exception e) {
       e.printStackTrace();
    }
}

}
```

> *You can set the debug on by uncommenting the statement session.setDebug*true*;*

Compile and Run

Now that our class is ready, let us compile the above class. I've saved the class ForwardEmail.java to directory : **/home/manisha/JavaMailAPIExercise**. We would need the jars *javax.mail.jar* and *activation.jar* in the classpath. Execute the command below to compile the class *boththejarsareplacedin/home/manisha/directory* from command prompt:

```
javac -cp /home/manisha/activation.jar:/home/manisha/javax.mail.jar: ForwardEmail.java
```

Now that the class is compiled, execute the following command to run:

```
java -cp /home/manisha/activation.jar:/home/manisha/javax.mail.jar: ForwardEmail
```

Verify Output

You should see the following message on the command console:

```
From: ABC <abc@gmail.com>
Reply-to: abc@trioteksolutions.com
To: XYZ <xyz@gmail.com>
Subject: Hi today is a nice day
Sent: Thu Oct 17 15:58:37 IST 2013
Do you want to reply [y/n] : y
message forwarded successfully....
```

Check the inbox to which the mail was sent. In our case the forwarded message would look as below: