Apache Commons Email

Simplifying the Java Mail API

Siegfried Goeschl
History

- Originally written for Apache Turbine
- Extracted from Turbine in 2001
- Release of version 1.0 in 2005
- Currently working on version 1.3
Motivation

- No more MimeBodyPart, Multipart and DataHandlers
- Simplify creation of emails
  - Adding attachments
  - Creating HTML emails
  - Inline images for HTML emails
The Simple Email

```java
Email email = new SimpleEmail();
email.setHostName("smtp.gmail.com");
email.setSmtpPort(587);
email.setTLS(true);
email.setAuthenticator(new DefaultAuthenticator("foo", "bar"));
email.setFrom("user@gmail.com");
email.setSubject("TestMail");
email.setMsg("This is a test mail ... :-)");
email.addTo("foo@bar.com");
email.send();
```
The Simple Email

```java
Email email = new SimpleEmail();
email.setHostName("smtp.gmail.com");
email.setSmtpPort(587);
email.setTLS(true);
email.setAuthenticator(new DefaultAuthenticator("foo", "bar"));
email.setFrom("user@gmail.com");
email.setSubject("TestMail");
email.setMsg("This is a test mail ... :-)");
email.addTo("foo@bar.com");
email.send();
```
The Simple Email

```java
Email email = new SimpleEmail();
email.setHostName("smtp.gmail.com");
email.setSmtpPort(587);
email.setTLS(true);
email.setAuthenticator(new DefaultAuthenticator("foo", "bar"));
email.setSubject("TestMail");
email.setFrom("user@gmail.com");
email.addTo("foo@bar.com");
email.setMsg("This is a test mail ... :-)");
email.send();
```

MimeMessage content
The Simple Email

```java
Email email = new SimpleEmail();
email.setHostName("smtp.gmail.com");
email.setSmtpPort(587);
email.setTLS(true);
email.setAuthenticator(new DefaultAuthenticator("foo", "bar"));
email.setFrom("user@gmail.com");
email.setSubject("TestMail");
eMail.setMsg("This is a test mail ... :-)");
eMail.addTo("foo@bar.com");
email.send();
```
The Simple Email

```java
Email email = new SimpleEmail();
email.setHostName("smtp.gmail.com");
email.setSmtpPort(587);
email.setTLS(true);
email.setAuthenticator(new DefaultAuthenticator("foo", "bar");
email.setFrom("user@gmail.com");
email.setSubject("TestMail");
email.setMsg("This is a test mail ... :-)");
email.addTo("foo@bar.com");
email.send();
```

Works with Google Mail
The Simple Email

from siegfried.goeschl@gmail.com

subject TestMail

to Siegfried Goeschl

This is a test mail ... 😊
The MultiPart Email

SimpleEmail plus attachments
Email With Attachments

```java
EmailAttachment attachment = new EmailAttachment();
attachment.setPath("mypictures/john.jpg");
attachment.setDisposition(EmailAttachment.ATTACHMENT);
attachment.setDescription("Picture of John");
attachment.setName("John");

MultiPartEmail email = new MultiPartEmail();
...

email.attach(attachment);

email.send();
```
The HTML Email

- Plain Text & HTML content
- Attachments
- Supports inline images
  - Image is embedded into the email
  - Requires no internet access when displaying the email
- HTML is not rendered consistently across major email clients
The HTML Email

```java
HtmlEmail email = new HtmlEmail();
...

URL url = new URL("http://a.o/images/asf_logo_wide.gif");
String cid = email.embed(url, "Apache logo");

e-mail.setHtmlMsg("<html>This is a HTML message with an inline image - <img src="cid:"+cid+""> and NO attachment </html> ");

e-mail.send();
```

Using an Inline Image
The HTML Email

This is an HTML message with an inline image –

The Apache Software Foundation

http://www.apache.org/

and NO attachment
The Image HTML Email (1)

- Ships with release 1.3
- Resolves all image links to inline images automatically
- Turns a HTML page into an email
The Image HTML Email

```java
ImageHtmlEmail email = new ImageHtmlEmail();
...

URL url = new URL("http://nemo.sonarsource.org/project/index/269309?page_id=2");

email.setHtmlMsg(getFromUrl(url));

email.send();
```
The Image HTML Email (3)

Commons Lang

Version 3.0-SNAPSHOT - Sun, 24 Oct 2010 05:58 - profile Nemo rules with findbugs

Lines of code
- 18,770
- 53,344 lines
- 9,801 statements
- 93 files

Classes
- 138
- 11 packages
- 2,103 methods
- +49 accessor

Comments
- 52.8%
- 21,115 lines
- 98.0% dep/ API
- 34 undoc. API
- 23 commented LOCs

Duplications
- 1.0%
- 1,637 lines
- 120 blocks
- 4 file

Rules compliance
- 97.3%

Violations
- 1,056
- Blocker 0
- Critical 0
- Major 729
- Minor 22
- Info 245

Efficiency 99.0%
Maintainability 95.4%
Portability 99.8%
Reliability 98.6%
Usability 94.4%

Alerts: Complexity/class > 40.

Package tangle index 36.0%

Dependencies to cut
4 between packages
The Image HTML Email (4)

ApacheCon

Leading the Wave of Open Source

Apache Commons Email 18
Commons Email Kickstart

- Get the source code
- Update EmailConfiguration
  - Configures access to your SMTP server
- Run the EmailLiveTest
  - Will send a few test mails
Tips and Tricks

• How to get a Mail Session
  – Implicit creation by using Email.setXXX()
  – Explicitely using Email.setMailSession()
  – Can’t be mixed and matched

• Internationalization
  – Use UTF-8 as charset
  – Non-ASCII attachment names work but violate MIME specification
Tips and Tricks

• Getting the underlying MimeMessage
  – Invoke Email.buildMimeMessage()
  – Asynchronous processing
  – SMIME signature
  – Batch sending of emails

• When sending emails does not work
  – Email.setDebug(true)
Conclusion

“When should I use commons-email?”

“Whenever you send an email!”
Resources

- http://commons.apache.org/email/
- http://www.campaignmonitor.com/css/
- http://www.email-standards.org/