

Apache
CON

Apache Commons Email

Simplifying the Java Mail API

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Leading the Wave
of Open Source

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

```
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();
```

Using SimpleEmail



The Simple Email

```
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 ... :-");  
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email.send();
```

Mail Session Properties





The Simple Email

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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

```
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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();
```

Sending the email



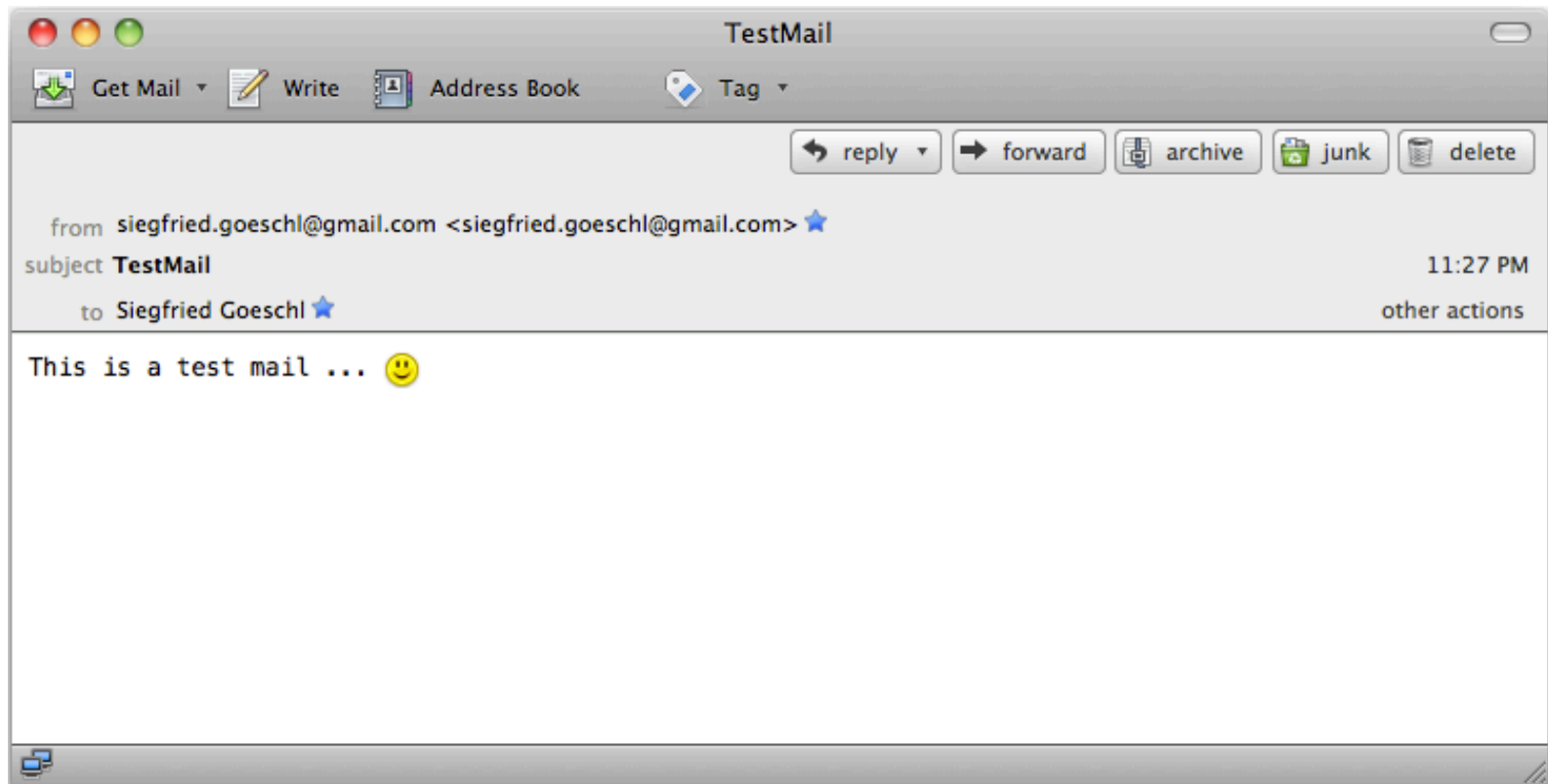
The Simple Email

```
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





The MultiPart Email

SimpleEmail plus attachments

Email With Attachments

```
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



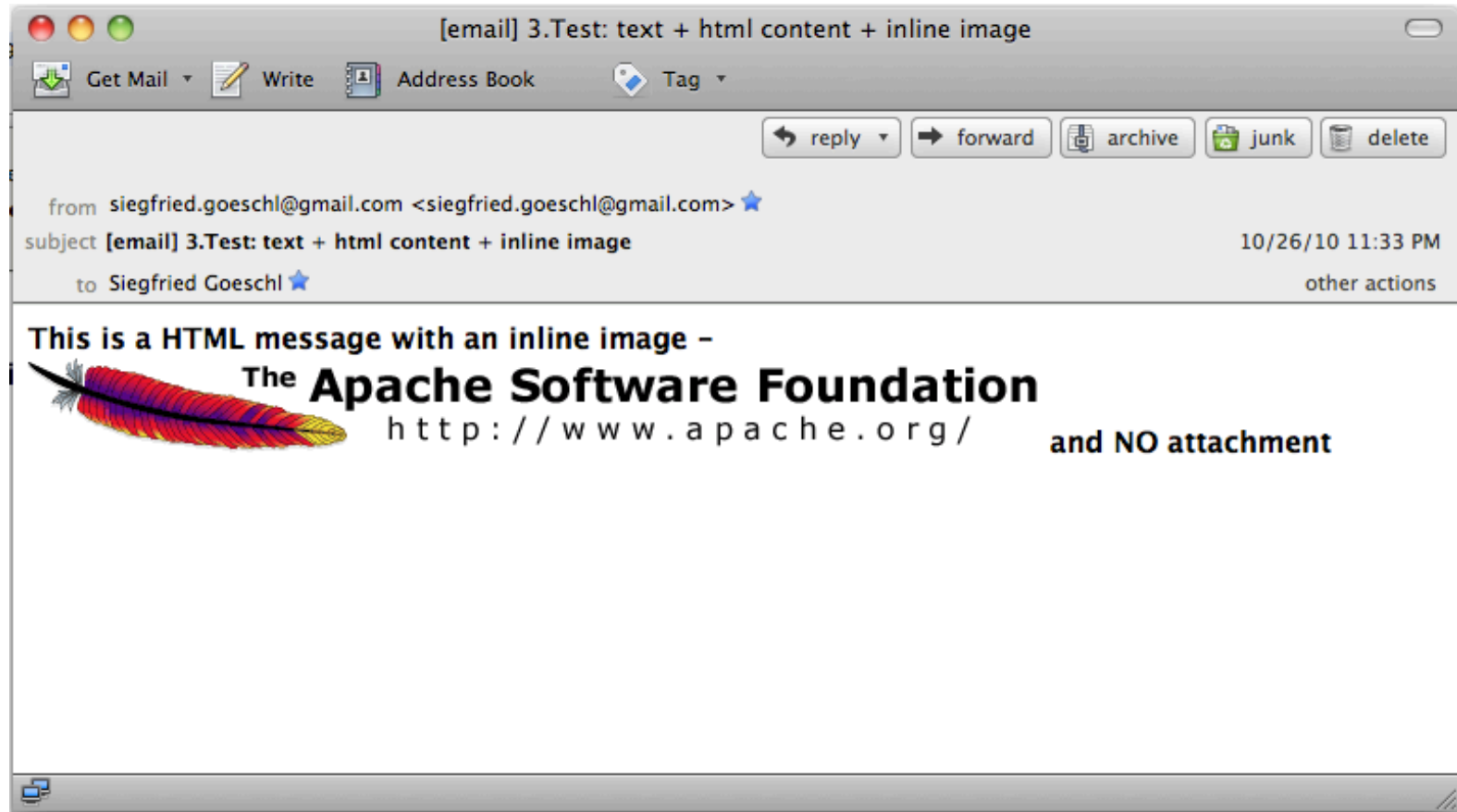


The HTML Email

```
HtmlEmail email = new HtmlEmail();  
...  
URL url = new URL("http://a.o/images/asf_logo_wide.gif");  
String cid = email.embed(url, "Apache logo");  
  
email.setHtmlMsg("<html>This is a HTML message with an  
inline image - <img src=\"cid:\"+cid+\"\"> and NO attachment  
</html>");  
  
email.send();
```

Using an Inline Image

The HTML Email



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

```
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 on Nemo — Inbox

Delete Junk Reply Reply All Forward Print To Do

sonar

Commons Lang

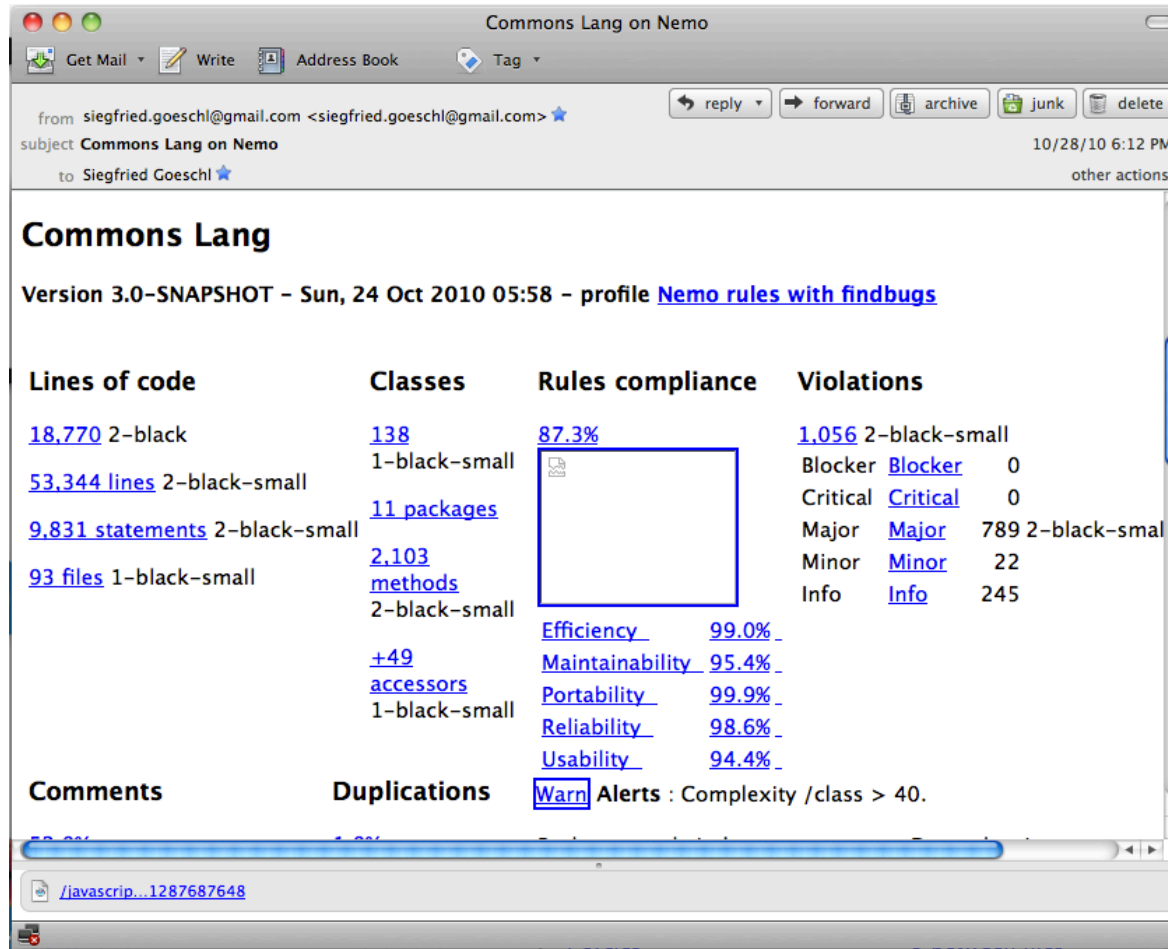
Version 3.0-SNAPSHOT - Sun, 24 Oct 2010 05:58 - profile [Nemo rules with findbugs](#)

Lines of code	Classes	Rules compliance	Violations										
18,770 ▲	138 ▲	87.3%	1,056 ▲										
53,344 lines ▲	11 packages	<p>Rel. Usa. Eff. Mai. Por.</p> <table border="1"> <tr><td>Efficiency</td><td>99.0%</td></tr> <tr><td>Maintainability</td><td>95.4%</td></tr> <tr><td>Portability</td><td>99.9%</td></tr> <tr><td>Reliability</td><td>98.6%</td></tr> <tr><td>Usability</td><td>94.4%</td></tr> </table>	Efficiency	99.0%	Maintainability	95.4%	Portability	99.9%	Reliability	98.6%	Usability	94.4%	Blocker 0 Critical 0 Major 789 ▲ Minor 22 Info 245
Efficiency	99.0%												
Maintainability	95.4%												
Portability	99.9%												
Reliability	98.6%												
Usability	94.4%												
9,831 statements ▲	2,103 methods ▲	Alerts : Complexity /class > 40.											
93 files ▲	+49 accessors ▲	Package tangle index 36.0%											
		Dependencies to cut 4 between packages											
Comments	Duplications												
52.9%	1.9%												
21,115 lines ▲	1,037 lines												
98.0% docu. API	120 blocks												
34 undocu. API	4 files												
23 commented LOCs													



Apple Mail

The Image HTML Email (4)



Thunderbird

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()`
 - Explicitly 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/>
- <http://articles.sitepoint.com/article/code-html-email-newsletters>

