TN1010-11-1: HTML Messages with Images.

Contents

1   Two alternative approaches

When you want to send an HTML message with images you have a choice of two different methods.

1) **Reference an image on an external web site**. Your message will be smaller, because it does not include the actual image – but recipients will generally have to be connected to the Internet to view the image. This can be annoying for users on dial-up connections as opening the message can trigger an autodial attempt by the operating system.

2) **Include the image in your message**. If you've used Microsoft Outlook or Outlook Express you may have used the 'stationery' feature to add a personalised look to your email. In this case the image is embedded in your message – the size of the message is greater but an Internet connection is not required each time the message is opened.
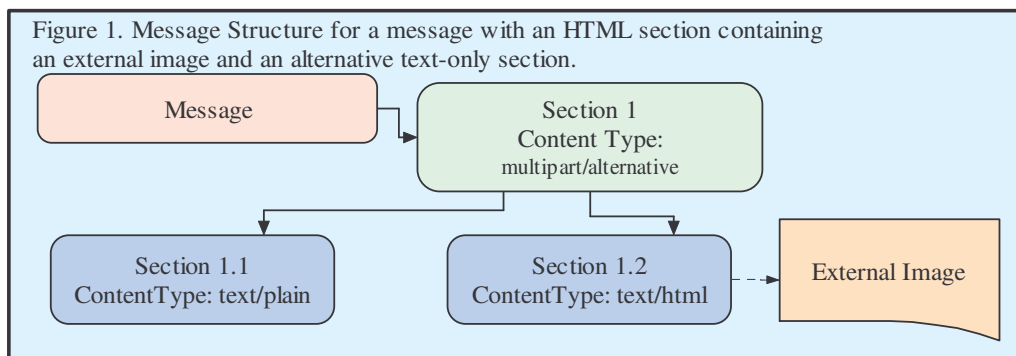
This documents shows you how to implement either technique using the CSMail library.

It is important to emphasis that whenever you send a message with an HTML body you should always include a section with plain text body so that older email clients can display the message – the examples include a demonstration of this.

2   Reference an image on an external web site

In this example we're going to send an HTML message that references an image on an external web site – we're also going to include an alternative text-only version of the message for recipients who can't read HTML messages.

Figure 1 shows the structure of the message.

Figure 1. Message Structure for a message with an HTML section containing an external image and an alternative text-only section.

Message → Section 1 Content Type: multipart/alternative

Section 1.1 ContentType: text/plain

Section 1.2 ContentType: text/html

External Image

2.1.1 Visual Basic Script Implementation

```vbscript
'========================================================================
' Change these to something that makes sense on your system
recipient="someone@mydomain.com"
sender="test@mydomain.com"
imageurl="http://www.codestone.co.uk/image/codelogo2.jpg"
smtphost="localhost"


'========================================================================
' Instantiate a Message Object and set the recipient, originator and subject

Set msg=CreateObject("CSMail.Message")
msg.Subject="External Image Example"
msg.To(1)=recipient
msg.From(1)=sender


'========================================================================
' Manufacture the message...

' This is Section 1 - see Figure 1.
set s1=msg.sections.Add()
s1.Header("Content-Type")="multipart/alternative"

' This is section 1.1 - see Figure 1.
' (Simplest format should come first)
set s1_1=s1.sections.Add()
s1_1.Body="The internet mail client control library."


' This is Sections 1.2 - see Figure 1.
set s1_2=s1.sections.Add()
s1_2.Body="The internet mail client control library.<IMG SRC=""" & imageurl & """>"
s1_2.Header("Content-Type")="text/html"

'========================================================================
' Instantiate an SMTP client and send the message

set smtp=CreateObject("CSMail.SMTPClient")
smtp.Connect(smtphost)
smtp.SendMessage(msg)
smtp.Close
```
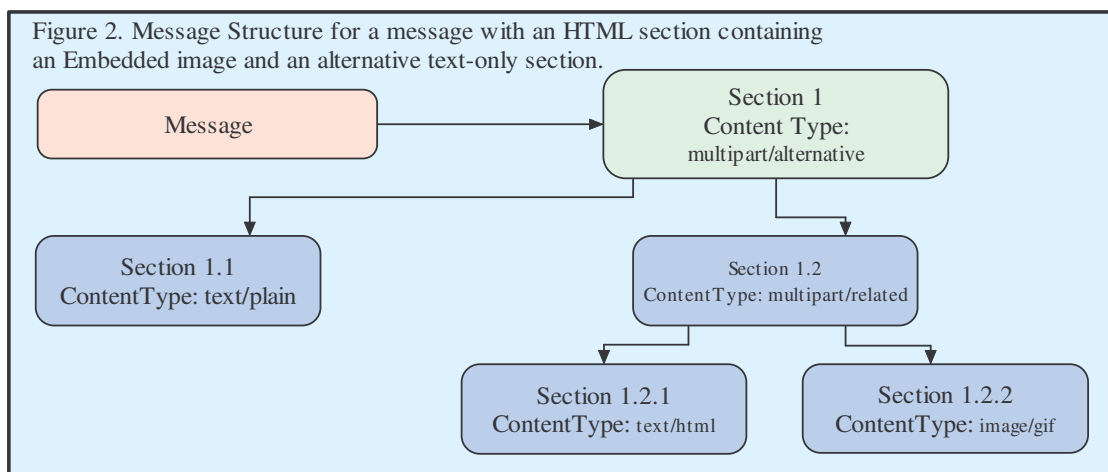
3   Include the image in your message

In this example we're going to send an HTML message which references an image included in the message itself– we're also going to include an alternative text-only version of the message for recipients who can't read HTML messages.

Figure 2 shows the structure of the message.

Figure 2. Message Structure for a message with an HTML section containing an Embedded image and an alternative text-only section.

3.1.1 Visual Basic Script Implementation

```vbscript
'=========================================================================
' Change these to something that makes sense on your system
recipient="someone@mydomain.com"
sender="test@mydomain.com"
imagefile="codelogo2.jpg"
smtphost="localhost"

'=========================================================================
' Instantiate a Message Object and set the recipient, originator and subject

Set msg=CreateObject("CSMail.Message")
msg.Subject="Embedded Image Example"
msg.To(1)=recipient
msg.From(1)=sender

'=========================================================================
' Manufacture the message...

'Create a content identifier see RFC 2111
sContentId=CDbl(now) & "@" & "domain.com"

'This is Section 1 - see Figure 2.
set s1=msg.sections.Add()
s1.Header("Content-Type")="multipart/alternative"

'This is Section 1.1 - see Figure 2.
set s1_1=s1.sections.Add()
s1_1.Body="The internet mail client control library."

'This is Section 1.2 - see Figure 2.
set s1_2=s1.sections.Add()
s1_2.Header("Content-Type")="multipart/related"

'This is Section 1.2.1 - see Figure 2.
set s1_2_1=s1_2.sections.Add()

'Note underlined text is the url scheme and must be lower case.
s1_2_1.Body="An embedded image .<IMG SRC=""cid:" & sContentId & """>"
s1_2_1.Header("Content-Type")="text/html"

'This is Section 1.2.2 - see Figure 2.
set s1_2_2=s1_2.sections.Add()
s1_2_2.ReadBodyFromFile(imagefile)
s1_2_2.Header("Content-ID")="<" & sContentId & ">"

'=========================================================================
' Instantiate an SMTP client and send the message

set smtp=CreateObject("CSMail.SMTPClient")
smtp.Connect(smtphost)
smtp.SendMessage(msg)
smtp.Close
```

4   References

rfc2111 - Content-ID and Message-ID Uniform Resource Locators	http://www.faqs.org/rfcs/rfc2111.html
rfc2387 - The MIME Multipart/Related Content-type	http://www.faqs.org/rfcs/rfc2387.html
rfc2557 - MIME Encapsulation of Aggregate Documents, such as HTML (MHTML)	http://www.faqs.org/rfcs/rfc2557.html