

### 3.3 Signing and Attaching Signatures

In an S/MIME message with a detached signature, the signature is calculated over on the entire payload data, in addition to its MIME header(s). The default Content-Type for such a MIME part is text/plain.

If signing a Content-Type other than text/plain, the user must generate a Content-Type header line for the payload. All other MIME headers and boundaries, including those of the detached signature part, are produced by SME.

An example XML message, digitally signed with a base64-encoded detached S/MIME signature is shown below.

```
MIME-Version: 1.0
Content-Type: multipart/signed;
protocol="application/x-pkcs7-signature"; micalg=sha1;
boundary="-----FA4D3A12E6192B82B05284F061C7CE55"

This is an S/MIME signed message

-----FA4D3A12E6192B82B05284F061C7CE55
Content-Type: application/xml



p a y l o a d



-----FA4D3A12E6192B82B05284F061C7CE55
Content-Type: application/x-pkcs7-signature; name="smime.p7s"
Content-Transfer-Encoding: base64
Content-Disposition: attachment; filename="smime.p7s"



S i g n a t u r e a n d c e r t i f i c a t e i n  
b a s e 6 4 o r b i n a r y f o r m a t



-----FA4D3A12E6192B82B05284F061C7CE55--
```