

# Distinguish forwarded and encapsulated messages for Header Protection

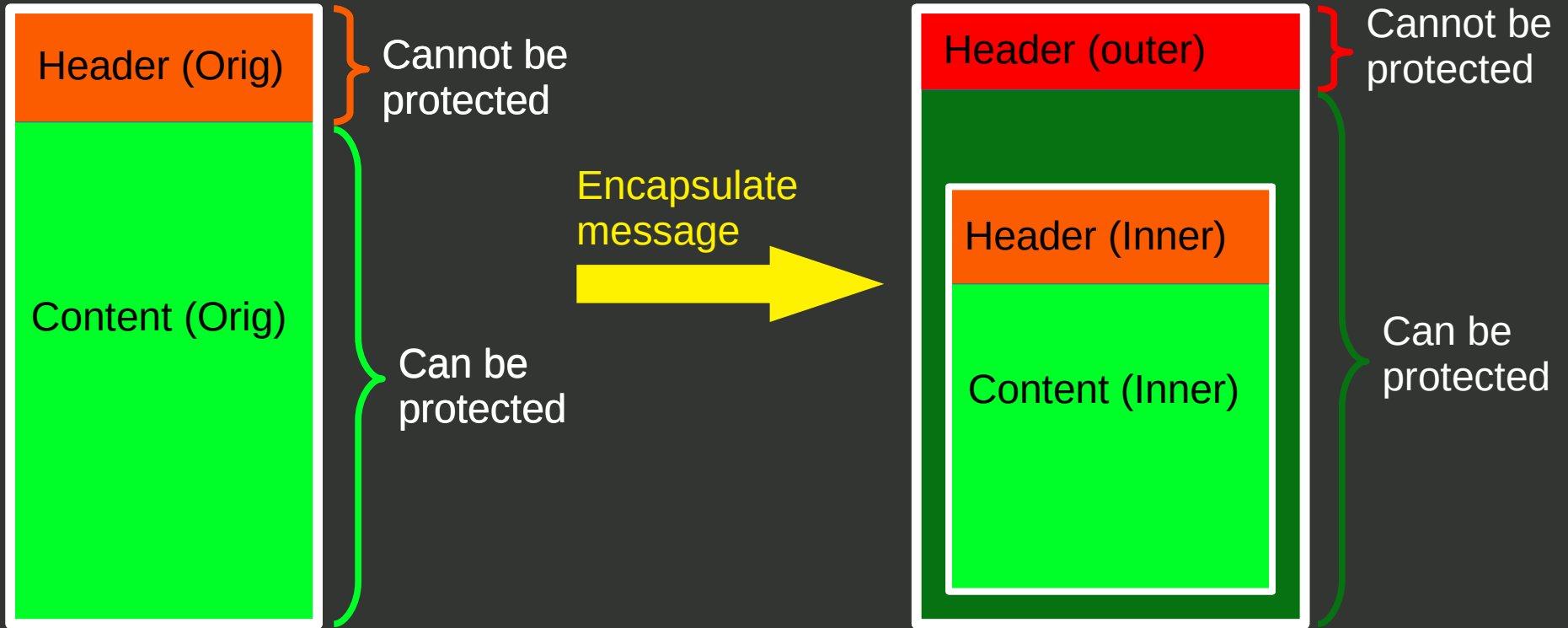
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draft-melnikov-iana-reg-forwarded

Bernie Hoeneisen / Alexey Melnikov

# Problem Statement

- "Header Protection" (signed/encrypted email messages) needed for improved privacy
- Solution is to encapsulate a whole email message (see next slide)
- Some MUAs have been reported to have rendering issues with encapsulated messages, e.g.
  - Treat as forwarded messages (user to click on "attachment")
  - Not render those at all (garbled text or nothing rendered)
- Bad User Experience (UX)



# Example

Outer  
Message  
Header  
Section  
(unprotected)

```
0: Date: Mon, 25 Sep 2017 17:31:42 +0100 (GMT Daylight Time)
0: Message-ID: <e4a483cb-1dfb-481d-903b-298c92c21f5e@m.example.net>
0: Subject: Meeting at my place
0: From: "Alexey Melnikov" <alexey.melnikov@example.net>
0: To: somebody@example.net
0: MIME-Version: 1.0
0: Content-Type: multipart/signed; charset=us-ascii; micalg=sha1;
0:   protocol="application/pkcs7-signature";
0:   boundary=boundary-AM
```

Outer  
Message  
Body  
(protected)

```
  This is a multipart message in MIME format.
  --boundary-AM
W: Content-Type: message/RFC822; forwarded=no
W:
I: Date: Mon, 25 Sep 2017 17:31:42 +0100 (GMT Daylight Time)
I: From: "Alexey Melnikov" <alexey.melnikov@example.net>
I: Message-ID: <e4a483cb-1dfb-481d-903b-298c92c21f5e@m.example.net>
I: MIME-Version: 1.0
I: MMHS-Primary-Precedence: 3
I: Subject: Meeting at my place
I: To: somebody@example.net
I: X-Mailer: Isode Harrier Web Server
I: Content-Type: text/plain; charset=us-ascii
```

```
  This is an important message that I don't want to be modified.
```

```
  --boundary-AM
  Content-Transfer-Encoding: base64
  Content-Type: application/pkcs7-signature
```

```
  [[base-64 encoded signature]]
```

```
  --boundary-AM--
```

} Wrapper

} Inner Message  
Header Section

} Inner Message Body

} Signature

Privacy by Default.

# Options

## 1. Content-Type Header Field Parameter “forwarded” (suggestion in the I-D)

```
Content-Type: message/rfc822; forwarded=no
```

## 2. Re-Use or extend “Content-Disposition” Header Field

```
Content-Type: message/rfc822  
Content-Disposition: inline
```

```
Content-Type: message/rfc822  
Content-Disposition: encapsulated
```

```
Content-Type: message/rfc822  
Content-Disposition: encapsulated; header-protection="yes"
```

## 3. New Header-Field “Content-Semantics”

```
Content-Type: message/rfc822  
Content-Semantics: encapsulated; header-protection="yes"
```

# More Use Cases to cover?

- Are there additional use cases that need attention?
  - i.e. use cases with a full email message in the Body part of another email message and where such a mechanism may be helpful to
    - Improve User Experience
    - Automatic processing
  - e.g.:
    - Mailing-List admin messages, such as:
      - Message sent to a mailing list admin for further assessment (approve/reject/discard)
    - Others?

# Questions / Discussion