



The Direct Project

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# Implementation Guide for Expressing Context in Direct Messaging

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*EXAMPLES to supplement*

*Version 1.0-DRAFT-2016122901*

***DRAFT FOR TRIAL USE***

*2 June 2017*

# Appendix A Examples

This appendix includes non-normative examples of messages expressing Context. Each example lists a sample Health Content Container conforming to the requirements of the Applicability Statement, prior to message wrapping, signing and encryption.

## A.1 Context for a PDF document attachment

In this example, the Context information is used by the sender to identify the attached PDF file as a radiology report and provide the recipient with information about the patient to whom the report pertains. The Context attachment is encoded using the quoted-printable encoding to break up long lines. Note that the equals sign "=" is represented as "=3D" in this encoding.

```
Date: Wed, 31 May 2017 18:32:15 -0700 (PDT)
From: test@direct.phimail-dev.com
To: another@direct.example.com
Message-ID: <0000015c-6148-1d24-9687-50a0730f8b21.test@direct.phimail-dev.com>
Subject: Context Example 1
MIME-Version: 1.0
Content-Type: multipart/mixed;
    boundary="-----_Part_14_125690771.1496280735009"
X-Direct-Context: <0000015c-6148-1bc5-960f-cf885d5b8df1@direct.phimail-dev.com>

-----_Part_14_125690771.1496280735009
Content-Type: text/plain; charset="us-ascii"
Content-Transfer-Encoding: quoted-printable

This is the main message content. A PDF radiology report is attached.
-----_Part_14_125690771.1496280735009
Content-Type: text/plain; charset="us-ascii"
Content-Transfer-Encoding: quoted-printable
Content-ID: <0000015c-6148-1bc5-960f-cf885d5b8df1@direct.phimail-dev.com>
Content-Disposition: attachment; filename=metadata.txt

version: 1.0
id: 2ba8a9a1-0f59-4688-b818-67930ae26979
patient-id: 2.16.840.1.113883.19.999999:123456
type: radiology/report
patient: givenName=3DJohn; middleName=3DJacob; surname=3DDoe; dateOfBirth=
=3D1961-12-31; gender=3DM; postalCode=3D12345

-----_Part_14_125690771.1496280735009
Content-Type: application/pdf
Content-Transfer-Encoding: base64
Content-Disposition: attachment; filename="report.pdf"

JVBERi0xLjUNCiW1tbW1dQoxIDAgb2JqDQo8PC9UeXB1L0NhdGFsb2cvUGFnZXMgMiAwIFIVTGFu
Zyhlbi1VUykgL1N0cnVjdFRyZWVSc290IDggMCBSL01hcmtJbmZvPDwvTWfya2VkiHRYdWU+Pj4+
[.....bulk of Base64 encoded PDF file redacted for brevity.....]
Pj4NCnN0YXJ0eHJlZg0KMTQ3MDc4DQolJUVPRg==
-----_Part_14_125690771.1496280735009--
```

## A.2 Context for an encapsulated HL7 message

In this example, the payload is an encapsulated HL7 ADT-A01 message:

```
Date: Tue, 30 May 2017 13:37:26 -0700 (PDT)
From: queries@test.phimail-dev.com
To: hl7endpoint@test.directproject.net
Message-ID: <0000015c-5b13-d424-f67e-720eed4b51f1.queries@test.phimail-dev.com>
Subject: Context Example 2
MIME-Version: 1.0
Content-Type: multipart/mixed;
    boundary="====_Part_0_14860469.1496176645154"
X-Direct-Context: <0000015c-5b13-d424-a351-ed4a58a252ef@test.phimail-dev.com>>

-----=_Part_0_14860469.1496176645154
Content-Type: text/plain
Content-ID: <0000015c-5b13-d424-a351-ed4a58a252ef@test.phimail-dev.com>>
Content-Disposition: attachment; filename=metadata.txt

version: 1.0
id: 2142848
encapsulation: hl7v2

-----=_Part_0_14860469.1496176645154
Content-Type: application/x-direct-encapsulated+hl7v2
Content-Transfer-Encoding: quoted-printable
Content-Disposition: attachment; filename="adt-sample.hl7"

MSH|^~\&|ADTMON|EMRDIRECT|ADTHUB|PH1|20170530133715||ADT^A01|2142848|T|2.3|=
[.....remainder of HL7 message redacted for brevity.....]
-----=_Part_0_14860469.1496176645154--
```