

# EDXL-DExt

EDXL Distribution Element  
Extension

*Proposed Concepts and Ideas*

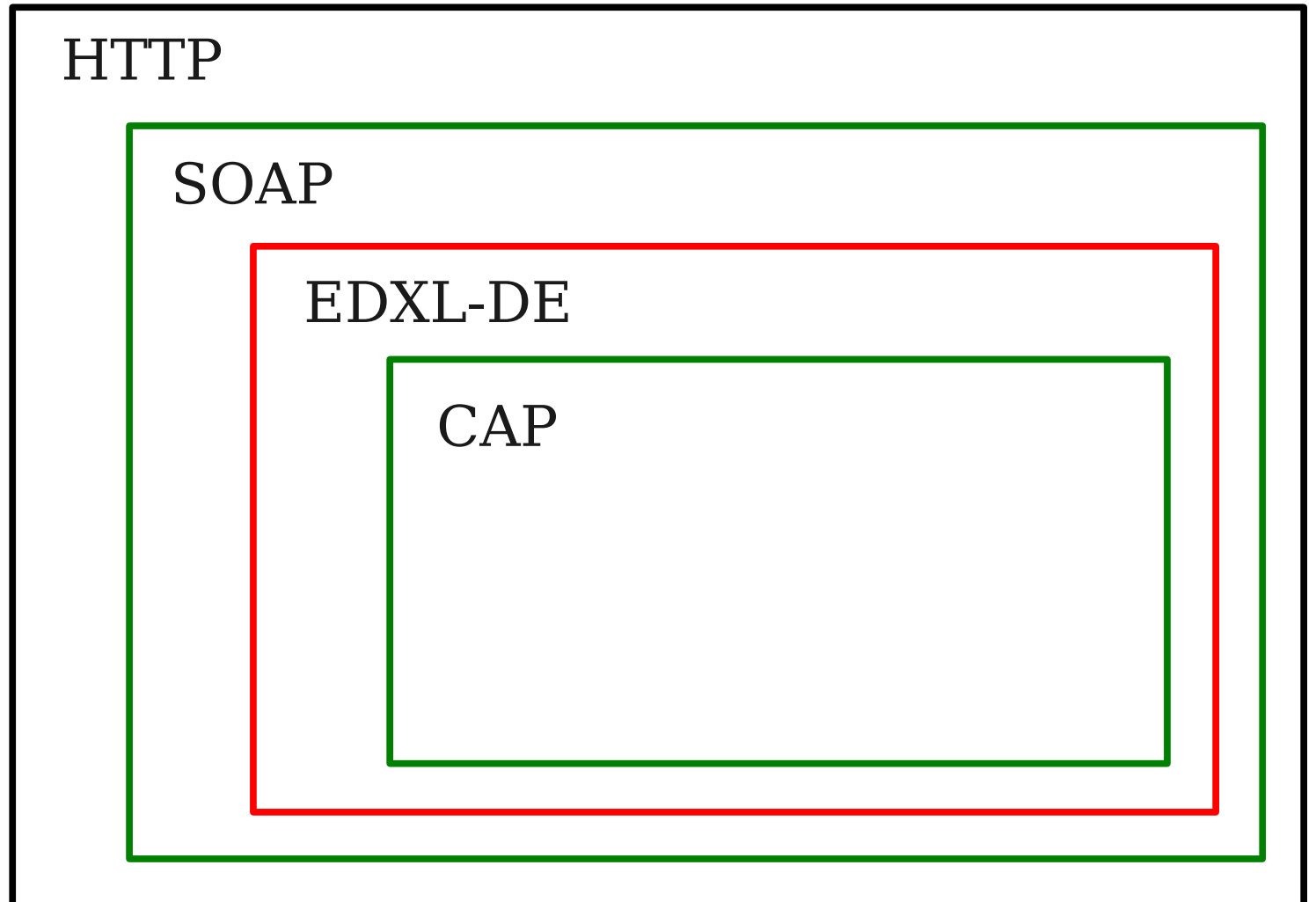
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# Key DE Concepts and Purposes

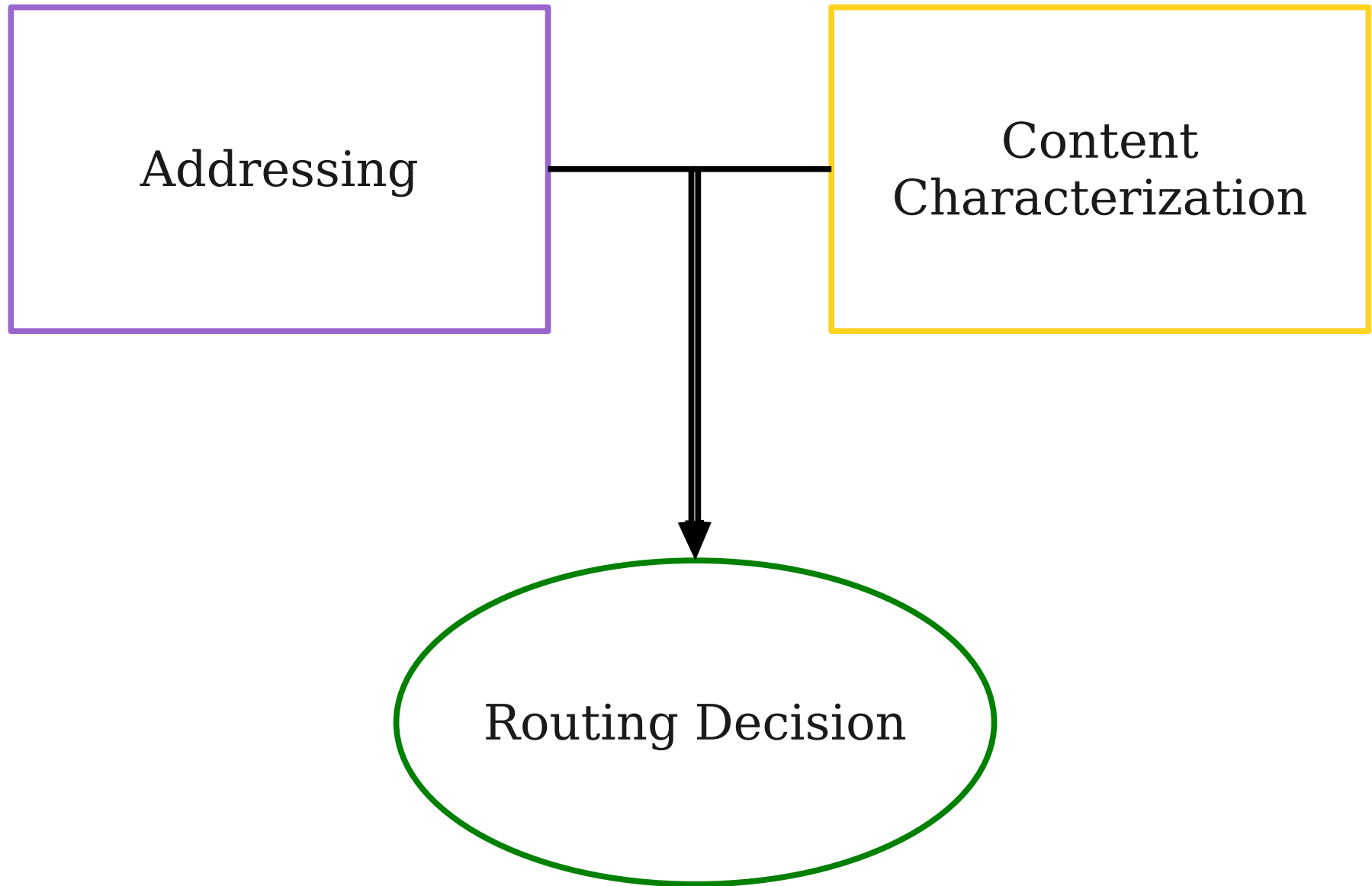
1. **Envelope** (Header and Content Wrapper Elements)
2. a) **Addressing** (senderRole, recipientRole, keyword, explicitAddress, targetArea)
  - b) **Content Characterization** (language, contentDescription, contentKeyword, incidentID, incidentDescription, originatorRole, consumerRole, confidentiality)

# Envelope Disadvantages

- Lack of significant capability
- Adoption and education



# Primary Purpose of the DE



# Decouple Envelope

## DE Schema (Envelope)

```
<xsd:element name="distributionID" type="xsd:string"/>
<xsd:element name="senderID" type="xsd:string"/>
<xsd:element name="dateTimeSent" type="xsd:dateTime"/>
<xsd:element name="distributionStatus" type="statusValues"/>
<xsd:element name="distributionType" type="typeValues"/>
<xsd:element name="combinedConfidentiality" type="xsd:string"/>
<xsd:element name="distributionReference" type="xsd:string" minOccurs="0" maxOccurs="unbounded"/>
IMPORT DExt
<xsd:complexType name="contentObjectType">
  <xsd:sequence>
    ...
```

## DExt Schema (Addressing/Content Characterization)

```
<xsd:element name="senderRole" type="valueListType" minOccurs="0" maxOccurs="unbounded"/>
<xsd:element name="recipientRole" type="valueListType" minOccurs="0" maxOccurs="unbounded"/>
<xsd:element name="keyword" type="valueListType" minOccurs="0" maxOccurs="unbounded"/>
<xsd:element name="distributionReference" type="xsd:string" minOccurs="0" maxOccurs="unbounded"/>
<xsd:element name="explicitAddress" type="valueSchemeType" minOccurs="0" maxOccurs="unbounded"/>
<xsd:element name="targetArea" type="targetAreaType" minOccurs="0" maxOccurs="unbounded"/>
<xsd:element name="contentDescription" type="xsd:string" minOccurs="0"/>
<xsd:element name="contentKeyword" type="valueListType" minOccurs="0" maxOccurs="unbounded"/>
<xsd:element name="incidentID" type="xsd:string" minOccurs="0"/>
<xsd:element name="incidentDescription" type="xsd:string" minOccurs="0"/>
    ...
```

# SOAP Example

```
<soap:Envelope  
  xmlns:soap="http://schemas.xmlsoap.org/  
  soap/envelope/"  
  <soap:Header>  
    ←  
  </soap:Header>  
  <soap:Body>  
    ...  
  <soap:Body>  
</soap:Envelope>
```

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A diagram illustrating the relationship between EDXL-DExt and a SOAP message. On the right, a green rounded rectangle contains the text "EDXL-DExt". A horizontal black arrow points from this rectangle to the left, where it points to the opening tag of a <soap:Header> element within a SOAP envelope structure shown in a black-bordered box on the left.

# Atom Example

## Atom Feed

```
<feed xmlns = 'http://www.w3.org/2005/Atom'>
  <id>http://www.weather.gov/alerts-
beta/il.atom</id>
  <updated>2010-06-22T21:01:00-05:00</updated>
  ...
  <entry>
  <id>http://www.weather.gov/alerts-
beta/wwacapget.php?
x=IL20100623012500DVNFlashFloodWatchDVN2010062
4060000IL</id>
  <updated>2010-06-22T20:25:00-05:00</updated>
  ...
</entry>
...
```

## AtomPub

```
POST /edit/ HTTP/1.1
Content-Type: application/atom+xml;type=entry

<?xml version="1.0"?>
<entry xmlns="http://www.w3.org/2005/Atom">
  <id>http://www.weather.gov/alerts-
beta/wwacapget.php?
x=IL20100623012500DVNFlashFloodWatchDVN2010062
4060000IL</id>
  <updated>2010-06-22T20:25:00-05:00</updated>
  ...
</entry>
```

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# XMPP Example

```
<message from='test@test.com'  
  to='user@test.com'  
  id='1'>
```

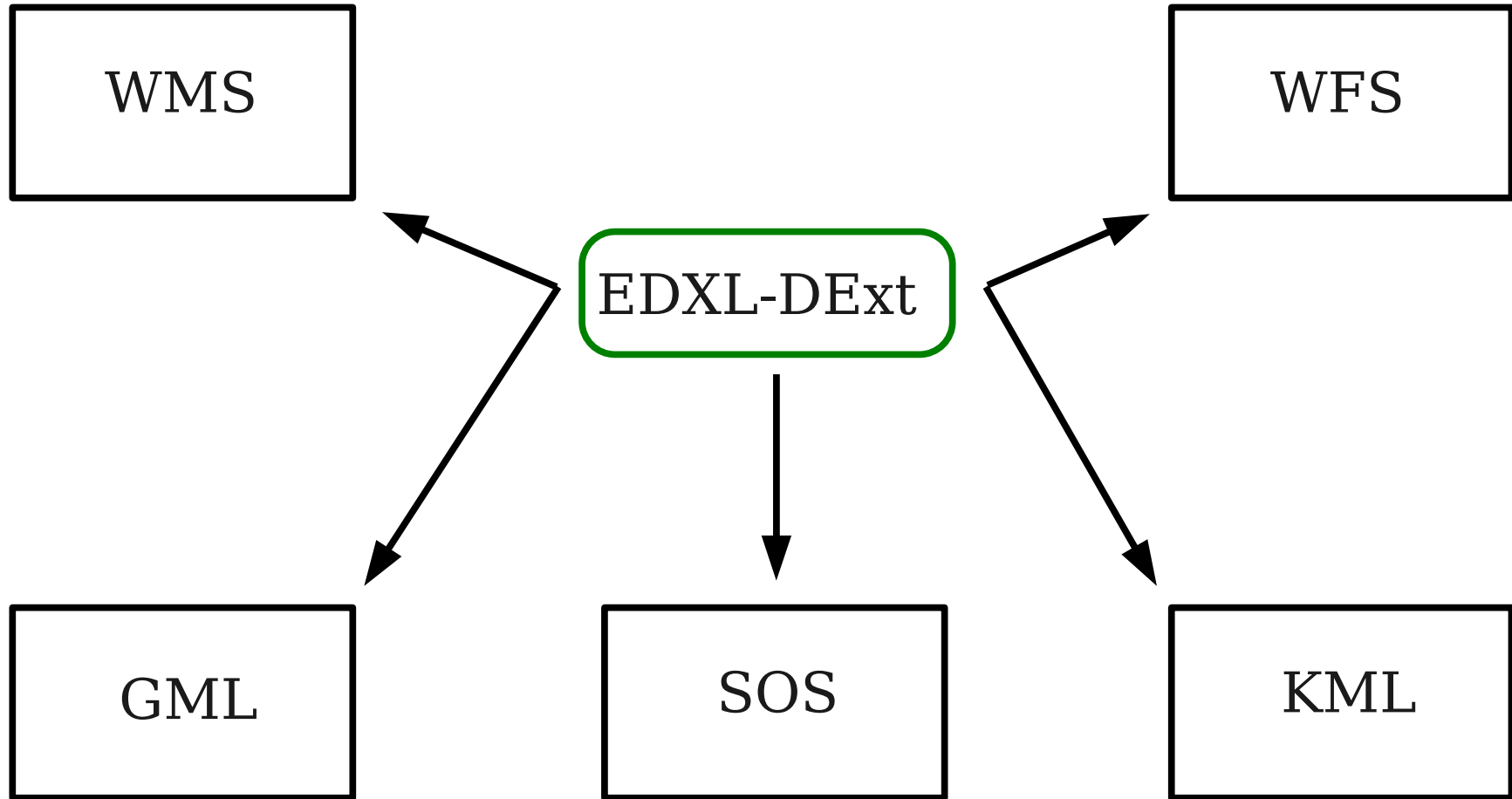


```
<body>  
...  
  </body>  
</message>
```

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# OGC Standards



# Common Processing

- DExt used by different transports and services with addressing and content processing that is common to all
- DExt processing module/library can be plugged into different architectures promoting re-use
- Provides added value without significant change to existing server/clients

# PubSub and Queries

- No standardized method to subscribe to a PubSub system
  - DExt offers a subscribe payload to PubSub server and acts as subscription filter
- No standardized method to issue queries for searches
  - DExt offers a query language to send to server for processing
  - DExt also offers search engine metadata that can be added to resources, ie FEMA web pages

# Questions and Feedback