Business Unit or Product Name

STANDARDS for Metadata Roadmap

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EMMA—Extensible MultiModal Annotation

- Part of W3C (World Wide Web Consortium) MultiModal Interaction working group

  http://www.w3.org/2002/mmi/

- Representation of input interpretation and metadata
- Current Working Draft - Dec 2003

  http://www.w3.org/TR/emma/

- Metadata annotation based on RDF (Resource Description Framework) – Semantic Web Activity

  http://www.w3.org/RDF/

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EMMA Annotations

- Derivation/Production
- Reference to processing
- Lack of input
- Uninterpretable input
- Human language of input
- Reference to signal
- Confidence scores
- Data model
- Grouping
- Input source
- Time stamps
- Relative Positioning
- Medium and mode
- Composite input

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Example: interpretations, timestamps

```
<emma:emma emma:version="1.0"
   xmlns:emma="http://www.w3.org/2003/04/emma#"
    xmlns:rdf="http://www.w3.org/1999/02/22-rdf-syntax-ns#">
   <emma:interpretation rdf:ID="int1">
     <origin>New York</origin>
     <destination>Seattle</destination>
   </emma:interpretation>
   〈rdf:RDF〉
     <rdf:Description rdf:about="#int1"
       emma:start="2003-03-26T0:00:00.15"
       emma:end="2003-03-36T0:00:00.2" />
     <rdf:Description rdf:about="#int1"
                        emma:confidence="0.75" />
```


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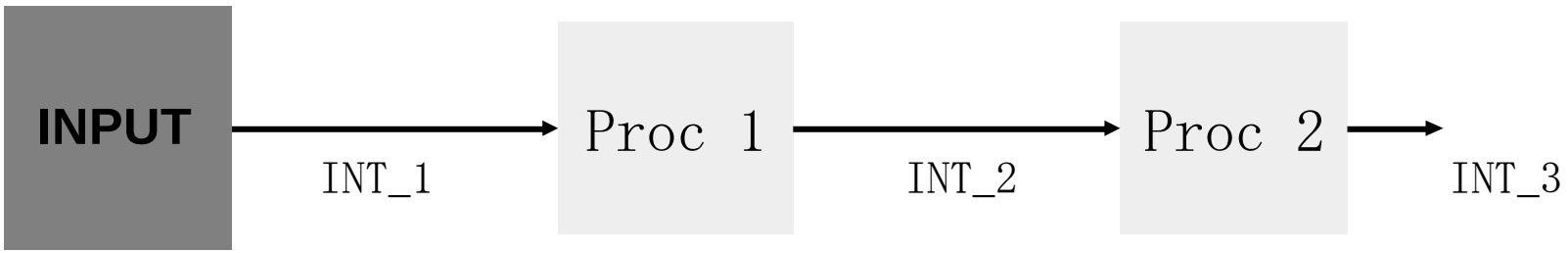
Example: Derivation chain




```
<rdf:Description rdf:about="#INT_2">
    <emma:derivation rdf:resource="#INT_1"/>
</rdf:Description>
<rdf:Description rdf:about="#INT_3">
    <emma:derivation rdf:resource="#INT_2"/>
</rdf:Description>
```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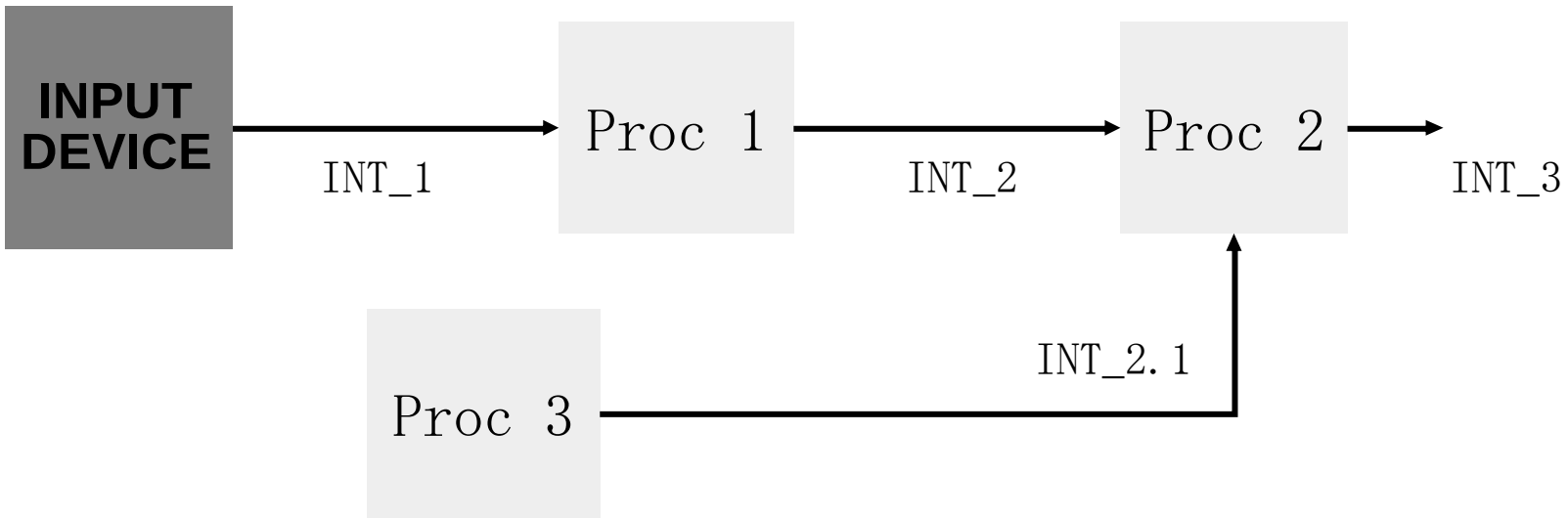
Example: multiple derivation




```
<rdf:Description rdf:about="#INT_3">
    <emma:derivation rdf:resource="#INT_2"/>
    <emma:derivation rdf:resource="#INT_2.1"/>
</rdf:Description>
```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