



Electronic Business Documents

UBL v2.1

Tools and Techniques

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What standards are used?

- document expression
 - XML – Extensible Markup Language
 - XML Namespaces – vocabulary distinction

```
<Invoice xmlns="urn:oasis:names:specification:ubl:schema:xsd:Invoice-2"
  xmlns:cac="urn:oasis:names:specification:ubl:schema:xsd:CommonAggregateComponents-2"
  xmlns:cbc="urn:oasis:names:specification:ubl:schema:xsd:CommonBasicComponents-2">
  <cbc:ID>ABC123</cbc:ID>
  <cbc:IssueDate>2014-03-29</cbc:IssueDate>
  <cac:AccountingSupplierParty>
    <cac:Party>
      <cac:PartyName>
        <cbc:Name>The Seller</cbc:Name>
      </cac:PartyName>
    </cac:Party>
  </cac:AccountingSupplierParty>
  <cac:AccountingCustomerParty>
    <cac:Party>
      <cac:PartyName>
        <cbc:Name>The Buyer</cbc:Name>
      </cac:PartyName>
    </cac:Party>
  </cac:AccountingCustomerParty>
  <cac:LegalMonetaryTotal>
    <cbc:PayableAmount currencyID="EUR">200</cbc:PayableAmount>
```



What standards are used?

- document structure validation
 - XSD – W3C XML Schema type representation
 - alternate: RELAX-NG grammar representation
 - alternate: ASN.1 binary representation
 - found in a Committee Note



What standards are used?

- document value validation
 - genericode – code list expression in XML
 - Context/Value Association (CVA) – code list application in XML
 - XSLT – Extensible Stylesheet Language Transformations



What tools are used?

- document model expression
 - OpenOffice spreadsheet – 66 files
 - Excel spreadsheet – 66 files
 - UML diagrams – 65 files
 - common library items found in a Committee Note
- browser HTML hyperlinked model summary
 - 1 aggregate file incorporating all 65 document models
 - 65 individual models with pruned common library

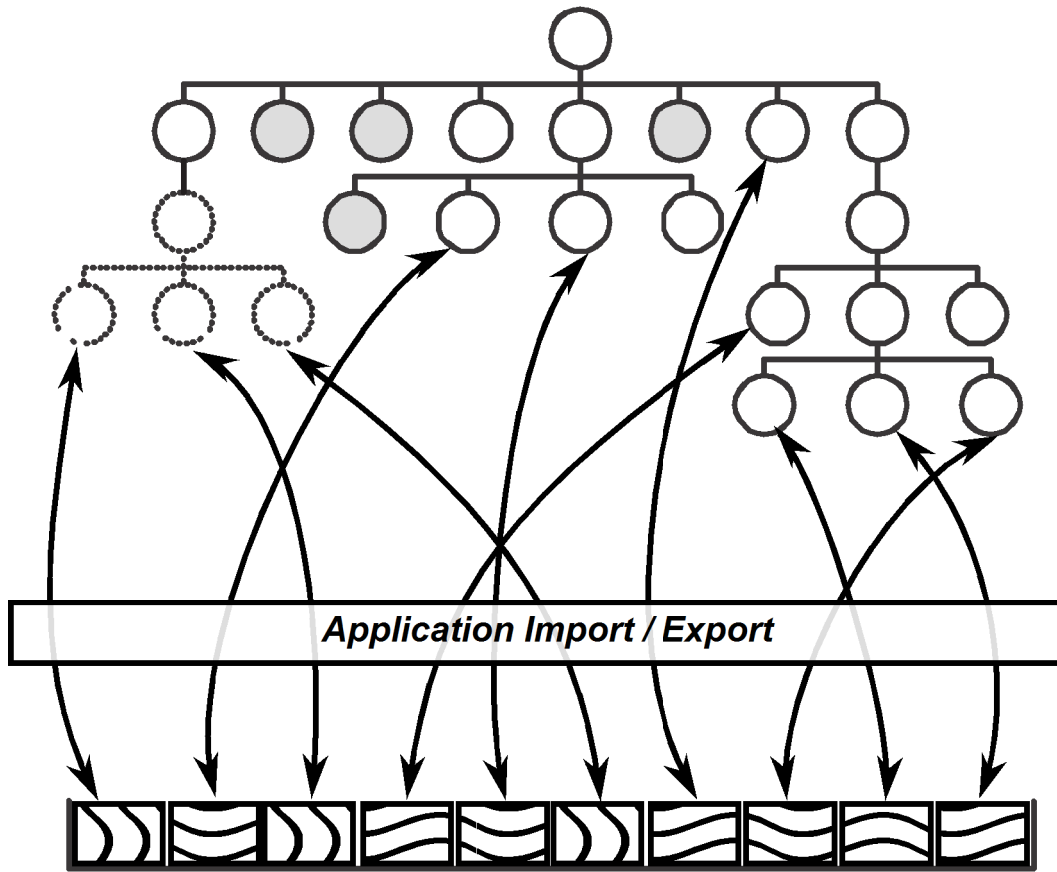


What steps to take to use UBL?

- the community of users (from only two trading partners to a large supplier environment) establishes information that needs to be conveyed
- subset UBL to include what is available
- extend UBL to add what is not available
 - extensions can be constrained by schemas within the community while being innocuous to others
 - the committee has started creating standard extensions applicable to all documents: first is the digital signature extension (works also with 2.0)
- create your own documents using UBL library

Technique 1 – Adapting to UBL

UBL XML tree structures



Legend

- Customization extension to UBL
- UBL item found in application tree
- UBL item not found in application tree
- Application data item found in UBL
- Application data item not found in UBL

Application data structures

Technique 2 – Adapting to UBL

