

ETRI e-BIZ World Conference 2002

ebXML CPPA Builder 설계 및 구현

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ebXML NOW!

2001. 5	2002. 1
Registry Information Model v1.0	RIM v2.0
Registry Schema Spec. v1.0	RS v2.0
Collaboration Protocol Profile and Specification Spec. v1.0	CPPA v1.0x
Message Profile Spec. v1.0	MSH v2.0
Business Protocol Spec. Schema v1.0	ebXML.org (EBI 2.0)
ebXML Implementation Spec v1.0	<ul style="list-style-type: none"> Business Information System Business Information System Business Information System Business Information System Business Information System
ebXML Technical Architecture Spec v1.0	

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ebXML at ETRI

- ebXML BizServer
 - ebXML MSH v1.0
 - ebXML CPP/CPA Builder v1.0
- ebXML RegRep
 - ebXML Registry v1.0
- ebXML BP
 - ebXML BP Modeller v1.0

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What is CPP/CPA?

Company A's CPP Document

- Party Info
- Collaboration Role
- Delivery Channel
- Transport Protocol
- Security Protocol
- Packaging Info
- Certificate
- Signature

Company A register cpp → ebXML Registry

Company B register cpp → ebXML Registry

Company B's CPP Document

• CPP : Collaboration Protocol Profile
• CPA : Collaboration Protocol Agreement

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What is CPP/CPA?

Company A's CPP Document

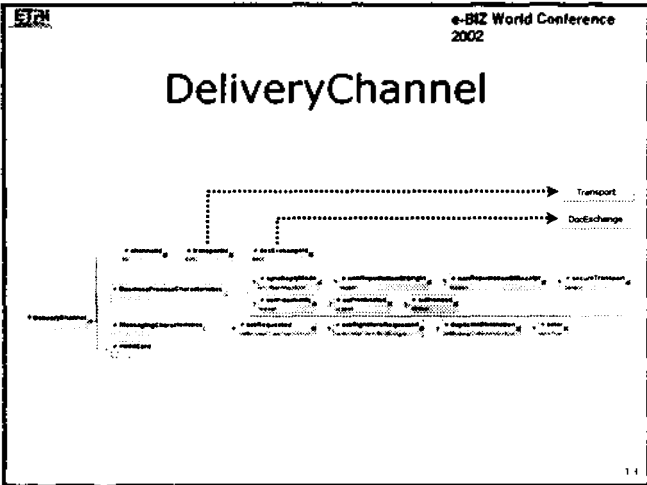
Company B's CPP Document

Company A search & retrieve other party's cpp → ebXML Registry

Company B

CPA Document

• CPP : Collaboration Protocol Profile
• CPA : Collaboration Protocol Agreement



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```

<!-- DeliveryChannel -->
<!-- channelID = "channel1" -->
<!-- transportID = "transport1" -->
<!-- docExchangeID = "docExchange1" -->

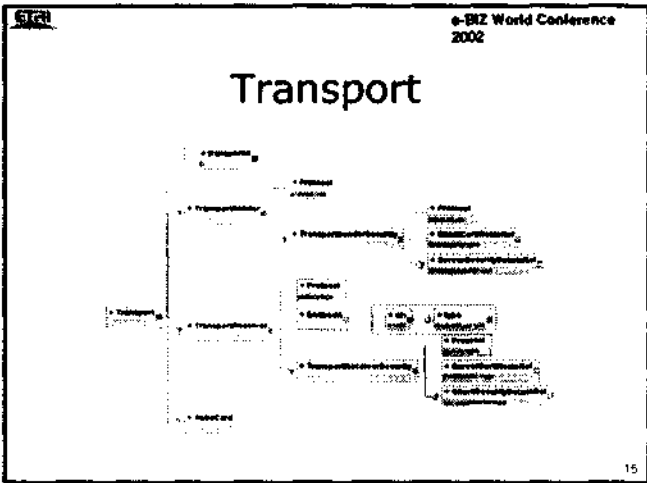
<!-- BusinessProcessCharacteristics -->
<!-- transportID -->
<!-- transportID -->
<!-- transportID -->
<!-- transportID -->
<!-- transportID -->
<!-- transportID -->
<!-- transportID -->
<!-- transportID -->
<!-- transportID -->
<!-- transportID -->

<!-- MessagingCharacteristics -->
<!-- transportID -->
<!-- transportID -->
<!-- transportID -->

<!-- DeliveryChannel -->

```

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```

<!-- Transport -->
<!-- transportID = "transport1" -->

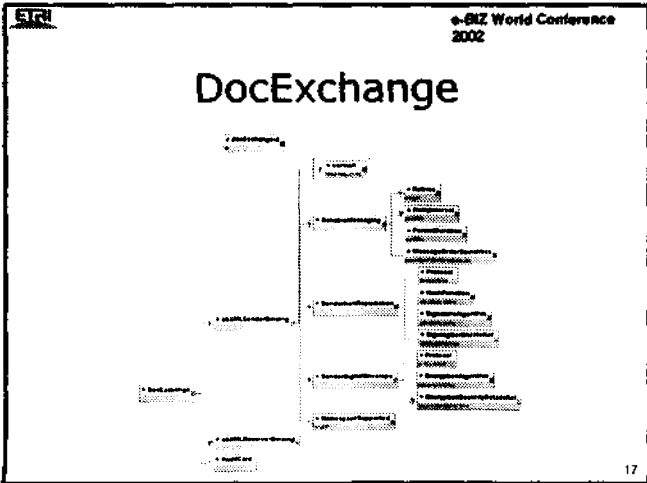
<!-- TransportCharacteristics -->
<!-- transportID -->
<!-- transportID -->
<!-- transportID -->
<!-- transportID -->
<!-- transportID -->
<!-- transportID -->
<!-- transportID -->
<!-- transportID -->
<!-- transportID -->

<!-- MessagingCharacteristics -->
<!-- transportID -->
<!-- transportID -->
<!-- transportID -->

<!-- Transport -->

```

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```

<!-- DocExchange -->
<!-- docExchangeID = "docExchange1" -->

<!-- DocExchangeCharacteristics -->
<!-- docExchangeID -->
<!-- docExchangeID -->
<!-- docExchangeID -->
<!-- docExchangeID -->
<!-- docExchangeID -->
<!-- docExchangeID -->
<!-- docExchangeID -->
<!-- docExchangeID -->
<!-- docExchangeID -->

<!-- MessagingCharacteristics -->
<!-- docExchangeID -->
<!-- docExchangeID -->
<!-- docExchangeID -->

<!-- DocExchange -->

```

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SimplePart/Packaging

```

<?xml version="1.0" encoding="UTF-8" ?>
<Envelope xmlns="http://schemas.xmlsoap.org/soap/envelope/">
  <Header>
    <msg:header xmlns:msg="http://schemas.xmlsoap.org/msg/2002-06" />
  </Header>
  <Body>
    <msg:SimplePart xmlns:msg="http://schemas.xmlsoap.org/msg/2002-06" />
  </Body>
</Envelope>
  
```

<ebXML Message Example>

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```

<?xml version="1.0" encoding="UTF-8" ?>
<Envelope xmlns="http://schemas.xmlsoap.org/soap/envelope/">
  <Header>
    <msg:header xmlns:msg="http://schemas.xmlsoap.org/msg/2002-06" />
  </Header>
  <Body>
    <msg:SimplePart xmlns:msg="http://schemas.xmlsoap.org/msg/2002-06" />
  </Body>
</Envelope>
  
```

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Signature

- Signature Generation
 1. Create a Signature element, a child element of ds:Signature
 2. Canonicalize and then Calculate the Signature Value
 3. Construct the Signature element
 4. Include the namespace qualified Signature element

```

<ds:Signature xmlns:ds="http://www.w3.org/2000/09/xmldsig#">
  <ds:CanonicalizationMethod Algorithm="http://www.w3.org/2001/10/xmlenc11#Canonicalization" />
  <ds:SignatureValue>
    <ds:CanonicalizedSignature Algorithm="http://www.w3.org/2001/10/xmlenc11#Canonicalization" />
  </ds:SignatureValue>
  <ds:KeyInfo>
    <ds:KeyName>
      <ds:KeyValue Algorithm="http://www.w3.org/2001/10/xmlenc11#Canonicalization" />
    </ds:KeyName>
  </ds:KeyInfo>
  <ds:SignatureProperty>
    <ds:SignaturePropertyAlgorithm Algorithm="http://www.w3.org/2001/10/xmlenc11#Canonicalization" />
  </ds:SignatureProperty>
</ds:Signature>
  
```

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How to make a CPP?

CPP Template
BPM
Global Resource Server System Parameters

HOW TO BDR?
1. Global Resource Server
2. Global Resource Server
3. Global Resource Server
4. ???

CPP

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How to make a CPA?

CPP Template for A
Parameters for B

CPA Hypothesis

CPA for A/B

Professional ebXML Foundation, 2001. Wik

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ebXML CPPA Builder

- CPP/CPA Documents Editing
- Easy & Intuitive GUI
- Documents Validation
- Generate Digital Signature
- Generate CPA
- CPP/CPA style processing
- Integrated XML Editor

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CPA Builder Architecture

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CPP/CPA Editing

- Easy Editing
 - No need to know XML
 - Error Free Editing

Document	Tree, Table
Table	Form-Based
Form	Select ID
Table	Template
Form	Wizard-like

- Validation
 - Schema Validation
 - Security Validation
 - Signature
 - Certificate
 - Reference

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Generate Digital Signature

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CPA Generation

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Style View

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Integrated XML Editor

- TreeTable View
- Text View

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Future works

- CPPA Processor
 - General APIs
 - Validation
 - Security
- JSR-157 : ebXML CPP/A APIs for Java
- CPA Negotiation

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Q & A



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