Integration of
ASN.1 and XML Technologies

ASN.1 Consortium

www.asn1.org

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ITU-T Standards Merge ASN.1 and XML Technologies

- Business Benefits
  - Ability to use XML under bandwidth constraints
  - Significantly smaller encoded messages
  - Faster transaction processing
  - ASN.1 applications enhanced with XML support
  - Interoperability between XML and ASN.1 based applications

ITU-T Standards Merge ASN.1 and XML Technologies
(cont'd)

- Standards Status
  - ASN.1 as an XML Schema notation (X.693)
  - XSD to ASN.1 mapping standard (X.694)
  - Use of ASN.1 for FAST Web Services

Tool Vendors Announce Support for Hybrid ASN.1/XML Tools

- Adrenta Technologies
- ATOS Origin
- France Telecom R&D
- Nikolaus Computertechnik

- Objective Systems
- OSS Nokalva
- Talura Aps
- uniGone

Tool Vendors Announce Support for Hybrid ASN.1/XML Tools
(cont'd)

- Adrenta Technologies, Inc.
  - XML Encoding Rules (XER – X.693) support
    - Canonical XER support available soon
  - ASN.1 as an XML Schema notation available 1Q2004
  - Includes default XML style sheet (XSL) generator
  - XSD Schema data binding tools with ASN.1 binary encodings available 2Q2004

Tool Vendors Announce Support for Hybrid ASN.1/XML Tools
(cont'd)

- ATOS Origin
  - Basic and Canonical XML Encoding Rules support
  - Includes ASN.1 to XML Schema (XSD) translator and default XML style sheet (XSL) generator
- France Telecom R&D
  - XML Schema to ASN.1 conversion tool X.694)

Tool Vendors Announce Support for Hybrid ASN.1/XML Tools
(cont'd)

- ## Nikolaus Computertechnik GmbH
  - Basic and Canonical XML Encoding Rules coming soon
- ## Objective Systems
  - Basic and Canonical XML Encoding Rules support
  - XML Schema data binding tool for C, C++, and Java with ASN.1 binary encoding and XML support available soon

Tool Vendors Announce Support for Hybrid ASN.1/XML Tools

(cont'd)

- **OSS Nokalva, Inc.**
  - Basic and Canonical XML Encoding Rules support
  - Includes default XML style sheet (XSL) generator
  - XSD Schema data binding tools for C, C++, and Java with ASN.1 binary encodings and XML support available soon
  - ASN.1 as XML Schema tools for C, C++, and Java available 4Q2003
  - Includes ASN.1 to XML Schema (XSD) translator and roundtrip ASN.1/XSD mappings

Tool Vendors Announce Support for Hybrid ASN.1/XML Tools
(cont'd)

- Talura ApS
  - XML Encoding Rules (XER – X.693) support
    - Canonical XER support available soon
  - XSD Schema data binding tools with ASN.1 binary encodings available 2Q2004
- uniGone
  - Asn1Compiler/Asn1API supports Basic and Canonical XER for Java and C# generation
  - Extended-XER support available 4Q2003
  - XSD Schema data binding tools with ASN.1 binary encodings available 1Q2004