



Guide to Schemas for CDSM-TDF

CDSM-TDF Schema Guide

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Chapter 1 - Introduction

1.1 - Purpose

This is an informative supplement for CDSM-TDF. This guide is generated from the CDSM-TDF Schemas and provides a consolidated reference for the schemas of this specification.

Chapter 2 - Schema Files

2.1 - CDSM-TDF.xsd

```
<xs:schema xmlns:xs="http://www.w3.org/2001/XMLSchema"
            xmlns="urn:us:gov:ic:tdf"
            xmlns:enc="http://www.w3.org/2001/04/xmlenc#"
            xmlns:ds="http://www.w3.org/2000/09/xmldsig#"
            xmlns:xhtml="http://www.w3.org/1999/xhtml-StopBrowserRendering"
            xmlns:tdfsigal="urn:us:gov:ic:cvenum:tdf:signaturealgorithm"
            xmlns:tdfstate="urn:us:gov:ic:cvenum:tdf:state"
            xmlns:tdfhashal="urn:us:gov:ic:cvenum:tdf:hashalgorithm"
            xmlns:sfhashv="urn:us:gov:ic:sf:hashverification"
            xmlns:sf="urn:us:gov:ic:sf"
            xmlns:cdsm="urn:us:gov:ic:cdsmanifest"
            xmlns:anlys="urn:us:gov:ic:anlysassert"
            targetNamespace="urn:us:gov:ic:tdf"
            elementFormDefault="qualified"
            attributeFormDefault="qualified"
            ism:compliesWith="USGov USIC"
            ism:resourceElement="true"
            ism:createDate="2019-09-18"
            ism:DESVersion="202111"
            ism:ISMCA TCESVersion="202205"
            ism:classification="U"
            ism:ownerProducer="USA"
            version="202111">
  <xs:annotation>
    <xs:documentation>
      <xhtml:h1 ism:ownerProducer="USA" ism:classification="U">Intelligence Community
        Technical Specification XML Data Encoding Specification for Cross Domain System Manifest TDF
        (CDSM-TDF.XML)</xhtml:h1>
      </xs:documentation>
      <xs:documentation>
        <xhtml:h2 ism:ownerProducer="USA" ism:classification="U">Notices</xhtml:h2>
        <xhtml:p ism:ownerProducer="USA" ism:classification="U">Distribution Notice:
          This document has been approved for Public Release and is available for use without restriction.
        </xhtml:p>
      </xs:documentation>
      <xs:documentation>
        <xhtml:h2 ism:ownerProducer="USA" ism:classification="U">Description</xhtml:h2>
        <xhtml:p ism:ownerProducer="USA" ism:classification="U">W3C XML Schema for the Intelligence Community
          Technical Specification XML Data Encoding Specification for Cross Domain System Manifest TDF
          (CDSM-TDF.XML).</xhtml:p>
        </xs:documentation>
        <xs:documentation>
          <xhtml:h2 ism:ownerProducer="USA" ism:classification="U">Introduction</xhtml:h2>
          <xhtml:p ism:ownerProducer="USA" ism:classification="U">This XML Schema file is one
            component of the XML Data Encoding Specification (DES). Please see the document titled<xhtml:i>
              <xhtml:a href="../../Documents/CDSM-TDF/DesCdsmtdfXml.pdf">XML Data Encoding Specification for Cross Domain System Manifest TDF</xhtml:a>
            </xhtml:i>for a complete description of the encoding as well as list of all
            components.</xhtml:p>
          <xhtml:p ism:ownerProducer="USA" ism:classification="U">It is envisioned that this
```

```

    schema or its components, as well as other parts of the DES may be overridden for
    localized implementations. Therefore, permission to use, copy, modify and distribute
    this XML Schema and the other parts of the DES for any purpose is hereby granted in
    perpetuity.</xhtml:p>
    <xhtml:p ism:ownerProducer="USA" ism:classification="U">Please reference the preceding
    two paragraphs in all copies or variations. The developers make no representation
    about the suitability of the schema or DES for any purpose. It is provided "as is"
    without expressed or implied warranty.</xhtml:p>
    <xhtml:p ism:ownerProducer="USA" ism:classification="U">If you modify this XML Schema in
    any way label your schema as a variant of CDSM-TDF.XML.</xhtml:p>
    <xhtml:p ism:ownerProducer="USA" ism:classification="U">Please direct all questions, bug
    reports,or suggestions for changes to the points of contact identified in the
    document referenced above.</xhtml:p>
  </xs:documentation>
  <xs:documentation>
    <xhtml:h2 ism:ownerProducer="USA" ism:classification="U">Implementation Notes</xhtml:h2>
    <xhtml:p ism:ownerProducer="USA" ism:classification="U">The root element for CDSM-TDF is:
    <xhtml:a href="CDSM-TDF_xsd_Element_TrustedDataObject.html#TrustedDataObject">tdf:TrustedDataObject</xhtml:a>
    </xhtml:p>
  </xs:documentation>
  <xs:documentation>
    <xhtml:h2 ism:ownerProducer="USA" ism:classification="U">Creators</xhtml:h2>
    <xhtml:p ism:ownerProducer="USA" ism:classification="U">Office of the Director of
    National Intelligence Intelligence Community Chief Information Officer</xhtml:p>
  </xs:documentation>
</xs:annotation>
<!-- ***** -->
<!-- Import statements -->
<!-- ***** -->
<!--Replacing:
<xs:import namespace="urn:us:gov:ic:cvenum:tdf:signaturealgorithm" schemaLocation="./CVEGenerated/CVEnumTDFSignatureAlgorithm.xsd"/>
-->
<!-- CdsManifest: Remove signaturealgorithm Import since CdsManifest does not allow encryption
and add CDSM and ANLYS schema import-->
<xs:import namespace="urn:us:gov:ic:cdsmanifest" schemaLocation="../CDSM/CDSM.xsd"/>
  <xs:import namespace="urn:us:gov:ic:anlysassert"
    schemaLocation="../ANLYS/ANLYS.xsd"/>
  <!--Replacing:
<xs:import namespace="urn:us:gov:ic:cvenum:tdf:hashalgorithm" schemaLocation="./CVEGenerated/CVEnumTDFHashAlgorithm.xsd"/>
-->
<!-- CdsManifest: Remove hashalgorithm Import since CdsManifest does not allow encryption. -->
<!--Replacing:
<xs:import namespace="urn:us:gov:ic:cvenum:tdf:state" schemaLocation="./CVEGenerated/CVEnumTDFAppliesToState.xsd"/>
-->
<!-- CdsManifest: Remove tdf state Import since CdsManifest does not allow encryption. -->
<xs:import namespace="urn:us:gov:ic:sf:hashverification"
    schemaLocation="../IC-SF/HashVerification.xsd"/>
  <xs:import namespace="urn:us:gov:ic:sf" schemaLocation="../IC-SF/IC-SF.xsd"/>
  <!-- ***** -->
<!-- Elements -->
<!-- ***** -->
<!-- TDC root element -->
<!--Replacing:
<xs:element name="TrustedDataCollection" type="TrustedDataCollectionType">
```

```
<xs:annotation>
  <xs:documentation>
    <xhtml:p ism:ownerProducer="USA" ism:classification="U"> The root element of a
      Trusted Data Collection. </xhtml:p>
    </xs:documentation>
  </xs:annotation>
</xs:element>
-->
<!-- CdsManifest: Remove references to TrustedDataCollection Only TrustedDataObjects are valid for CdsManifest project. -->
<!-- TDO root element -->
<xs:element name="TrustedDataObject" type="TrustedDataObjectType">
  <xs:annotation>
    <xs:documentation>
      <xhtml:p ism:ownerProducer="USA" ism:classification="U"> The root element of a
        Trusted Data Object. A Trusted Data Collection may contain many Trusted Data
        Objects. </xhtml:p>
      </xs:documentation>
    </xs:annotation>
  </xs:element>
  <!-- ***** -->
<!-- Attributes -->
<!-- ***** -->
<xs:attribute name="version">
  <xs:annotation>
    <xs:documentation>
      <xhtml:p ism:ownerProducer="USA" ism:classification="U"> The version number of the
        DES. </xhtml:p>
      </xs:documentation>
    </xs:annotation>
    <xs:simpleType>
      <xs:restriction base="xs:string">
<!--Replacing:
<xs:pattern value="[0-9]{6}(\.[0-9]{6})?(\-{1,23})?" />
-->
<!-- CdsManifest: Update tdf:version regex to be for CDSM-TDF customization -->

    <xs:pattern value="[0-9]{6}(\.[0-9]{6})?\-CDSM\-TDF\[0-9]{6}(\.[0-9]{6})?(\-{1,23})?" />
      </xs:restriction>
    </xs:simpleType>
  </xs:attribute>
  <xs:attribute name="mediaType" type="MediaTypeType">
    <xs:annotation>
      <xs:documentation>
        <xhtml:p ism:classification="U" ism:ownerProducer="USA"> An attribute for expressing
          the mediaType of an object as defined in <xhtml:a href="http://tools.ietf.org/html/rfc4288">RFC 4288</xhtml:a>. </xhtml:p>
        </xs:documentation>
      </xs:annotation>
    </xs:attribute>
    <!--Replacing:
<xs:attribute name="id" type="xs:ID">
  <xs:annotation>
    <xs:documentation>
      <xhtml:p ism:ownerProducer="USA" ism:classification="U"> A unique local identifier
        used for binding and signing purposes. Not guaranteed to be unique across
```

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        multiple TDC/TDOs but must be unique within a single instance of
        either.</xhtml:p>
    </xs:documentation>
</xs:annotation>
</xs:attribute>
-->
<!-- CdsManifest: Replace entirety of id to enable max length to keep Xsat Happy. -->
<xs:attribute name="id">
    <xs:annotation>
        <xs:documentation>
            <xhtml:p ism:ownerProducer="USA" ism:classification="U">A unique local identifier
used for binding and signing purposes. Not guaranteed to be unique across
multiple TDC/TDOs but must be unique within a single instance of
either.</xhtml:p>
        </xs:documentation>
    </xs:annotation>
    <xs:simpleType>
        <xs:restriction base="xs:ID">
            <xs:maxLength value="50"/>
        </xs:restriction>
    </xs:simpleType>
</xs:attribute>
    <!--Replacing:
<xs:attribute name="idRef" type="xs:IDREF">
    <xs:annotation>
        <xs:documentation>
            <xhtml:p ism:ownerProducer="USA" ism:classification="U"> A reference to a
            unique local identifier.</xhtml:p>
        </xs:documentation>
    </xs:annotation>
</xs:attribute>
-->
<!-- CdsManifest: Replace entirety of idRef to enable max length to keep Xsat Happy. -->
<xs:attribute name="idRef">
    <xs:annotation>
        <xs:documentation>
            <xhtml:p ism:ownerProducer="USA" ism:classification="U"> A reference to a
unique local identifier.</xhtml:p>
        </xs:documentation>
    </xs:annotation>
    <xs:simpleType>
        <xs:restriction base="xs:IDREF">
            <xs:maxLength value="50"/>
        </xs:restriction>
    </xs:simpleType>
</xs:attribute>
    <!--Replacing:
<xs:attribute name="filename" type="xs:string">
    <xs:annotation>
        <xs:documentation>
            <xhtml:p ism:classification="U" ism:ownerProducer="USA"> This is the filename of the
            payload. </xhtml:p>
        </xs:documentation>
    </xs:annotation>
</xs:attribute>
```



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    </xs:attribute>
-->
<!-- CdsManifest: Remove attribute filename since nothing it was only used for Base64 and String which were tailored out. -->
<xs:attribute name="scope">
    <xs:annotation>
        <xs:documentation>
            <xhtml:p ism:ownerProducer="USA" ism:classification="U"> The grouping of objects to
which the assertion applies. Please see the "Assertion Scopes" section in the
DES document for more information. </xhtml:p>
        </xs:documentation>
    </xs:annotation>
    <xs:simpleType>
        <xs:restriction base="xs:string">
            <xs:enumeration ism:classification="U" ism:ownerProducer="USA" value="TDO"/>
            <!--Replacing:
<xs:enumeration ism:classification="U" ism:ownerProducer="USA" value="TDC"/>
-->
<!-- CdsManifest: Remove Scope enumerations TDC since there are no TDC's allowed. -->
<xs:enumeration ism:classification="U" ism:ownerProducer="USA" value="PAYL"/>
            <!--Replacing:
<xs:enumeration ism:classification="U" ism:ownerProducer="USA" value="EXPLICIT"/>
-->
<!-- CdsManifest: Remove Scope enumerations EXPLICIT since Explicit is not supported for CdsManifest. -->
<!--Replacing:
<xs:enumeration ism:classification="U" ism:ownerProducer="USA" value="DESC_TDO"/>
-->
<!-- CdsManifest: Remove Scope enumerations DESC_TDO since there are no TDC's allowed. -->
<!--Replacing:
<xs:enumeration ism:classification="U" ism:ownerProducer="USA" value="DESC_PAYL"/>
-->
<!-- CdsManifest: Remove Scope enumerations DESC_PAYL since there are no TDC's allowed. -->
<!--Replacing:
<xs:enumeration ism:classification="U" ism:ownerProducer="USA" value="TDC_MEMBER"/>
-->
<!-- CdsManifest: Remove Scope enumerations TDC_MEMBER since there are no TDC's allowed. -->
</xs:restriction>
        </xs:simpleType>
    </xs:attribute>
    <!--Replacing:
<xs:attribute name="isEncrypted" type="xs:boolean">
    <xs:annotation>
        <xs:documentation>
            <xhtml:p ism:classification="U" ism:ownerProducer="USA">Used to denote if contents
are encrypted. When this optional attribute is absent, it is assumed to be
false.</xhtml:p>
        </xs:documentation>
    </xs:annotation>
</xs:attribute>
-->
<!-- CdsManifest: Remove attribute isEncrypted since nothing in CdsManifest allows encryption. -->
<xs:attribute name="includesStatementMetadata" type="xs:boolean">
    <xs:annotation>
        <xs:documentation>
            <xhtml:p ism:classification="U" ism:ownerProducer="USA">Used to indicate whether or
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        not to include element StatementMetadata when referencing an Assertion. In the
        case of signatures and binding, this attribute indicates whether or not the
        statement metadata is covered by the signature or binding. If not, it cannot be
        cryptographically verified and should be considered informative only.
        IncludesStatementMetadata should never be set on SignatureValue if there is a
        boundValueList, because the BoundValue elements in the list each have their own
        explicit includesStatementMetadata attribute.</xhtml:p>
        </xs:documentation>
    </xs:annotation>
</xs:attribute>
<!--Replacing:
<xs:attribute name="normalizationMethod" type="xs:anyURI">
    <xs:annotation>
        <xs:documentation>
            <xhtml:p ism:classification="U" ism:ownerProducer="USA">A URI that provides guidance
            on how to format the included values such as whitespace, attributes, and child
            nodes in a universally consistent manner. The normalization method is essential
            to prevent formatting such as whitespace and order from interfering with the
            validation of the cryptographic integrity of data.</xhtml:p>
        </xs:documentation>
    </xs:annotation>
</xs:attribute>
-->
<!-- CdsManifest: Restrict normalizationMethod to specific allowed URIs. -->
<xs:attribute name="normalizationMethod">
    <xs:annotation>
        <xs:documentation>
            <xhtml:p ism:classification="U" ism:ownerProducer="USA">
                A URI that provides guidance on how to format the included values such as whitespace, attributes, and child
                nodes in a universally consistent manner. The normalization method is essential to prevent formatting such as
                whitespace and order from interfering with the validation of the cryptographic integrity of data.
                Assertions should explicitly declare all their namespaces at the assertion level rather than relying on those
                provided by the root node.
            </xhtml:p>
        </xs:documentation>
    </xs:annotation>
    <xs:simpleType>
        <xs:restriction base="xs:anyURI">
            <xs:enumeration value="http://www.w3.org/TR/xml-c14n11"/>
        </xs:restriction>
    </xs:simpleType>
</xs:attribute>
<!--Replacing:
<xs:attribute name="uri" type="xs:anyURI">
    <xs:annotation>
        <xs:documentation>
            <xhtml:p ism:classification="U" ism:ownerProducer="USA">A uri expressing the
            location of the referenced material.</xhtml:p>
        </xs:documentation>
    </xs:annotation>
</xs:attribute>
-->
<!-- CdsManifest: Replace entirety of uri to enable max length to keep Xsat Happy. -->
<xs:attribute name="uri">
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        <xs:annotation>
          <xs:documentation>
            <xhtml:p ism:classification="U" ism:ownerProducer="USA">A uri expressing the
location of the referenced material.</xhtml:p>
          </xs:documentation>
        </xs:annotation>
      </xs:simpleType>
    </xs:attribute>
  <!-- ***** -->
<!--      Complex Types      -->
<!-- ***** -->
<!--Replacing:
<xs:complexType name="TrustedDataCollectionType">
  <xs:annotation>
    <xs:documentation>
      <xhtml:p ism:classification="U" ism:ownerProducer="USA">A list of Trusted Data
Collections.</xhtml:p>
    </xs:documentation>
  </xs:annotation>
  <xs:sequence>
    <xs:group ref="AssertionGroup" maxOccurs="1" minOccurs="1"/>
    <xs:choice maxOccurs="unbounded" minOccurs="1">
      <xs:element ref="TrustedDataCollection"/>
      <xs:element ref="TrustedDataObject" maxOccurs="1"/>
    </xs:choice>
  </xs:sequence>
  <xs:attribute ref="version" use="required"/>
  <xs:attribute ref="sf:DESVersion" use="optional"/>
</xs:complexType>
-->
<!-- CdsManifest: Remove references to TrustedDataCollection All uses of this type were tailored out. -->
<xs:complexType name="TrustedDataObjectType">
  <xs:annotation>
    <xs:documentation>
      <xhtml:p ism:classification="U" ism:ownerProducer="USA">A list of Trusted Data
Objects.</xhtml:p>
    </xs:documentation>
  </xs:annotation>
  <xs:sequence>
    <xs:group ref="AssertionGroup" maxOccurs="1" minOccurs="1"/>
    <!--Replacing:
<xs:group ref="EncryptionInformationGroup"/>
-->
<!-- CdsManifest: Remove references to EncryptionInformationGroup Nothing is allowed to be encrypted -->
<xs:group ref="PayloadGroup"/>
  </xs:sequence>
  <xs:attribute ref="version"/>
  <xs:attribute ref="sf:DESVersion" use="optional"/>
  <xs:attribute ref="id" use="optional"/>
</xs:complexType>
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        <!--Replacing:
<xs:complexType name="EncryptionMethodType">
  <xs:annotation>
    <xs:documentation>
      <xhtml:p ism:classification="U" ism:ownerProducer="USA">Describes the encryption
        method</xhtml:p>
    </xs:documentation>
  </xs:annotation>
  <xs:sequence>
    <xs:element name="KeySize" type="xs:integer" minOccurs="0">
      <xs:annotation>
        <xs:documentation>
          <xhtml:p ism:classification="U" ism:ownerProducer="USA">The size of the key
            used for encryption expressed as an integer.</xhtml:p>
          </xs:documentation>
        </xs:annotation>
      </xs:element>
    <xs:element name="KeyEncodingFormat" type="xs:string" minOccurs="0">
      <xs:annotation>
        <xs:documentation>
          <xhtml:p ism:classification="U" ism:ownerProducer="USA">The name of the
            primary encoding format of the key. The primary encoding format is named
            in terms of the appropriate ASN.1 data format, if an ASN.1 specification
            for the key exists. For example, the name of the ASN.1 data format for
            public keys is SubjectPublicKeyInfo, as defined by the X.509 standard;
            in this case, the returned format is "X.509". Similarly, the name of the
            ASN.1 data format for private keys is PrivateKeyInfo, as defined by the
            PKCS #8 standard; in this case, the returned format is "PKCS#8".
          </xhtml:p>
          </xs:documentation>
        </xs:annotation>
      </xs:element>
    <xs:element name="IVParams" type="xs:base64Binary" minOccurs="0">
      <xs:annotation>
        <xs:documentation>
          <xhtml:p ism:classification="U" ism:ownerProducer="USA">Used to express the
            Initialization Vector (IV) used by block cipher modes of operation.
          </xhtml:p>
          </xs:documentation>
        </xs:annotation>
      </xs:element>
    <xs:element name="OaepParams" type="xs:base64Binary" minOccurs="0">
      <xs:annotation>
        <xs:documentation>
          <xhtml:p ism:classification="U" ism:ownerProducer="USA">Used to express the
            Optimal Asymmetric Encryption Padding (OAEP) scheme</xhtml:p>
          </xs:documentation>
        </xs:annotation>
      </xs:element>
    <xs:element name="HashAlgorithm" type="xs:anyURI" minOccurs="0">
      <xs:annotation>
        <xs:documentation>
          <xhtml:p ism:classification="U" ism:ownerProducer="USA">Used to express the
            Hash function used with the Optimal Asymmetric Encryption Padding (OAEP)

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        scheme.</xhtml:p>
      </xs:documentation>
    </xs:annotation>
  </xs:element>
  <xs:element name="MGFAlgorithm" type="xs:anyURI" minOccurs="0">
    <xs:annotation>
      <xs:documentation>
        <xhtml:p ism:classification="U" ism:ownerProducer="USA">Used to express the
          Mask Generation Function used with the Optimal Asymmetric Encryption
          Padding (OAEP) scheme.</xhtml:p>
        </xs:documentation>
      </xs:annotation>
    </xs:element>
    <xs:element name="Tweak" type="xs:base64Binary" minOccurs="0">
      <xs:annotation>
        <xs:documentation>
          <xhtml:p ism:classification="U" ism:ownerProducer="USA">Used to express the
            Tweak used by various Cipher Block Chaining (CBC) schemes.</xhtml:p>
          </xs:documentation>
        </xs:annotation>
      </xs:element>
      <xs:element name="Nonce" type="xs:base64Binary" minOccurs="0">
        <xs:annotation>
          <xs:documentation>
            <xhtml:p ism:classification="U" ism:ownerProducer="USA">Used to express the
              Nonce used by various Offset Codebook (OCB) mode schemes.</xhtml:p>
            </xs:documentation>
          </xs:annotation>
        </xs:element>
        <xs:element name="AdditionalAuthenticatedData" type="xs:base64Binary" minOccurs="0">
          <xs:annotation>
            <xs:documentation>
              <xhtml:p ism:classification="U" ism:ownerProducer="USA">Used to express the
                Additional Authentication Data (AAD) for Galois Counter Mode (GCM) of
                block cipher algorithms.</xhtml:p>
              </xs:documentation>
            </xs:annotation>
          </xs:element>
          <xs:element name="AuthenticationTag" type="xs:base64Binary" minOccurs="0">
            <xs:annotation>
              <xs:documentation>
                <xhtml:p ism:classification="U" ism:ownerProducer="USA">A cryptographic
                  checksum on data that is designed to reveal both accidental errors and
                  the intentional modification of the data in Galois Counter Mode (GCM) of
                  block cipher algorithms.</xhtml:p>
                </xs:documentation>
              </xs:annotation>
            </xs:element>
          </xs:sequence>
        <xs:attribute name="algorithm" type="xs:anyURI" use="required">
          <xs:annotation>
            <xs:documentation>
              <xhtml:p ism:classification="U" ism:ownerProducer="USA">Used to express the
                encryption algorithm utilized</xhtml:p>
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        </xs:documentation>
    </xs:annotation>
</xs:attribute>
</xs:complexType>
-->
<!-- CdsManifest: Remove references to EncryptionMethodType All uses of this type were tailored out. -->
<xs:group name="AssertionGroup">
    <xs:annotation>
        <xs:documentation>
            <xhtml:p ism:ownerProducer="USA" ism:classification="U">The group of possible
Assertion elements in a TDO or TDC.</xhtml:p>
        </xs:documentation>
    </xs:annotation>
    <xs:sequence>
<!--Replacing:
<xs:element name="HandlingAssertion" type="HandlingAssertionType" maxOccurs="unbounded" minOccurs="0">
    <xs:annotation>
        <xs:documentation>
            <xhtml:p ism:classification="U" ism:ownerProducer="USA">A specific type of
assertion designed to be used for access, rights, and handling
instructions. It is expected that handling instructions should never
have metadata about themselves and they should never be encrypted.
Therefore, unlike regular assertions, handling assertions do not support
statement metadata or encryption.</xhtml:p>
        </xs:documentation>
    </xs:annotation>
</xs:element>
-->
<!-- CdsManifest: Remove HandlingAssertion so we can't do any classified or CUI -->

    <xs:element name="Assertion"
        type="AssertionType"
        maxOccurs="unbounded"
        minOccurs="0">
        <xs:annotation>
            <xs:documentation>
                <xhtml:p ism:classification="U" ism:ownerProducer="USA">Used to express
metadata about the objects expressed in the scope attribute of the
assertion. An assertion also supports metadata about the assertion
statement for the purposes of indicating any handling instructions
pertinent to the statement itself. Also supports encrypted statements
and binding the statement with objects in its scope.</xhtml:p>
            </xs:documentation>
        </xs:annotation>
    </xs:element>
</xs:sequence>
</xs:group>
<xs:group name="BindingGroup">
    <xs:annotation>
        <xs:documentation>
            <xhtml:p ism:classification="U" ism:ownerProducer="USA">The group of elements that
contains information needed to express, understand, and/or cryptographically
validate the binding of the objects that belong to the scope of the assertion.
</xhtml:p>

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        </xs:documentation>
      </xs:annotation>
    </xs:choice>
  <!--Replacing:
  <xs:element name="Binding" type="BindingType" minOccurs="1" maxOccurs="unbounded">
  -->
  <!-- CdsManifest: Restrict to 5 signatures instead of unbounded . -->

    <xs:element name="Binding" type="BindingType" minOccurs="1" maxOccurs="5">
      <xs:annotation>
        <xs:documentation>
          <xhtml:p ism:classification="U" ism:ownerProducer="USA">Contains information
            needed to express, understand, and/or cryptographically validate the
            binding of the objects that belong to the scope of the assertion.
          </xhtml:p>
        </xs:documentation>
      </xs:annotation>
    </xs:element>
  <!--Replacing:
  <xs:element name="ReferenceList" type="ReferenceListType">
    <xs:annotation>
      <xs:documentation>
        <xhtml:p ism:classification="U" ism:ownerProducer="USA">Contains information
          needed to express, understand, and/or validate the informative
          (non-cryptographic) binding of the objects that belong to the scope of
          the assertion.</xhtml:p>
        </xs:documentation>
      </xs:annotation>
    </xs:element>
  -->
  <!-- CdsManifest: Remove references to ReferenceList this type of binding is not supported for CdsManifest. -->
</xs:choice>

  </xs:group>
  <!--Replacing:
  <xs:group name="EncryptionInformationGroup">
    <xs:annotation>
      <xs:documentation>
        <xhtml:p ism:classification="U" ism:ownerProducer="USA">The group of elements used
          to express encryption information in an Assertion or a TDO.</xhtml:p>
        </xs:documentation>
      </xs:annotation>
    <xs:sequence>
      <xs:element maxOccurs="unbounded" minOccurs="0" name="EncryptionInformation">
        <xs:annotation>
          <xs:documentation>
            <xhtml:p ism:classification="U" ism:ownerProducer="USA">Top level element
              for holding information related to the encryption of an assertion or
              payload. Multiple child KeyAccess and/or EncryptionMethod elements
              represent onion or layered encryption. In this case, the first child
              represents the outermost layer of encryption.</xhtml:p>
            </xs:documentation>
          </xs:annotation>
        <xs:complexType>
          <xs:choice maxOccurs="1">
```



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<xs:sequence>
  <xs:element minOccurs="1" name="KeyAccess" type="KeyAccessType">
    <xs:annotation>
      <xs:documentation>
        <xhtml:p ism:classification="U" ism:ownerProducer="USA">
          Contains information pertaining to the key for which the
          application value(s) was/were encrypted and/or that is
          necessary for decryption.</xhtml:p>
        </xs:documentation>
      </xs:annotation>
    </xs:element>
    <xs:element maxOccurs="1" minOccurs="1" name="EncryptionMethod" type="EncryptionMethodType">
      <xs:annotation>
        <xs:documentation>
          <xhtml:p ism:classification="U" ism:ownerProducer="USA">
            Contains information pertaining to the methods for which
            the applicable value(s) was/were encrypted. (i.e.
            SHA256)</xhtml:p>
          </xs:documentation>
        </xs:annotation>
      </xs:element>
    </xs:sequence>
  </xs:choice>
  <xs:attribute name="sequenceNum" type="xs:integer" use="optional">
    <xs:annotation>
      <xs:documentation>
        <xhtml:p ism:classification="U" ism:ownerProducer="USA">The sequence number of the encryption info.</xhtml:p>
      </xs:documentation>
    </xs:annotation>
  </xs:attribute>
</xs:complexType>
</xs:element>
</xs:sequence>
</xs:group>
-->
<!-- CdsManifest: Remove EncryptionInformationGroup Nothing is allowed to be encrypted -->
<xs:group name="PayloadGroup">
  <xs:annotation>
    <xs:documentation>
      <xhtml:p ism:classification="U" ism:ownerProducer="USA">The group of elements intended
      for textual payload content encoded as a string. Perhaps the contents of a text
      file.</xhtml:p>
    </xs:documentation>
  </xs:annotation>
  <xs:choice>
<!--Replacing:
<xs:element name="StringPayload" type="StringValue">
  <xs:annotation>
    <xs:documentation>
      <xhtml:p ism:classification="U" ism:ownerProducer="USA">Intended for textual
      value content encoded as a string. Perhaps the contents of a text
      file.</xhtml:p>
    </xs:documentation>
  </xs:annotation>
```



```

        </xs:element>
-->
<!-- CdsManifest: Remove references to StringPayload only ReferenceValuePayload is allowed for CdsManifest project. -->
<!--Replacing:
<xs:element name="Base64BinaryPayload" type="Base64BinaryValueType">
    <xs:annotation>
        <xs:documentation>
            <xhtml:p ism:classification="U" ism:ownerProducer="USA">Intended for holding
                base64binary values such as a file or other binary data.</xhtml:p>
        </xs:documentation>
    </xs:annotation>
</xs:element>
-->
<!-- CdsManifest: Remove references to Base64BinaryPayload only ReferenceValuePayload is allowed for CdsManifest project. -->

    <xs:element name="ReferenceValuePayload" type="ReferenceValueType">
        <xs:annotation>
            <xs:documentation>
                <xhtml:p ism:classification="U" ism:ownerProducer="USA">Used to reference
                    payloads that are not embedded in the TDO but stored in a
                    remote/external location.</xhtml:p>
            </xs:documentation>
        </xs:annotation>
    </xs:element>
    <!--Replacing:
<xs:element name="StructuredPayload" type="StructuredValueType">
    <xs:annotation>
        <xs:documentation>
            <xhtml:p ism:classification="U" ism:ownerProducer="USA">Intended for
                structured content encoded in the same data encoding of the
                encapsulating TDO (i.e. If the encoded format is XML this is intended
                for XML statements).</xhtml:p>
        </xs:documentation>
    </xs:annotation>
</xs:element>
-->
<!-- CdsManifest: Remove references to StructuredPayload only ReferenceValuePayload is allowed for CdsManifest project. -->
</xs:choice>

    </xs:group>
    <xs:group name="StatementGroup">
        <xs:annotation>
            <xs:documentation>
                <xhtml:p ism:classification="U" ism:ownerProducer="USA">The group of elements
                    intended for contextual statement content encoded as a string.</xhtml:p>
            </xs:documentation>
        </xs:annotation>
    </xs:choice>
<!--Replacing:
<xs:element name="StringStatement" type="StringValue">
    <xs:annotation>
        <xs:documentation>
            <xhtml:p ism:classification="U" ism:ownerProducer="USA">Intended for textual
                statement content encoded as a string. Perhaps the contents of a text
                file.</xhtml:p>
        </xs:documentation>
    </xs:annotation>
</xs:element>
-->
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        </xs:documentation>
      </xs:annotation>
    </xs:element>
-->
<!-- CdsManifest: Remove references to StringStatement only StructuredStatement is allowed for CdsManifest project. -->
<!--Replacing:
<xs:element name="Base64BinaryStatement" type="Base64BinaryValueType">
  <xs:annotation>
    <xs:documentation>
      <xhtml:p ism:classification="U" ism:ownerProducer="USA">Intended for holding
        base64binary statement values such as a file or other binary encoded
        data.</xhtml:p>
    </xs:documentation>
  </xs:annotation>
</xs:element>
-->
<!-- CdsManifest: Remove references to Base64BinaryStatement only StructuredStatement is allowed for CdsManifest project. -->
<!--Replacing:
<xs:element name="ReferenceStatement" type="ReferenceValueType">
  <xs:annotation>
    <xs:documentation>
      <xhtml:p ism:classification="U" ism:ownerProducer="USA">Used to reference
        statements that are not embedded in the TDO but stored in a
        remote/external location.</xhtml:p>
    </xs:documentation>
  </xs:annotation>
</xs:element>
-->
<!-- CdsManifest: Remove references to ReferenceStatement only StructuredStatement is allowed for CdsManifest project. -->

    <xs:element name="StructuredStatement" type="StructuredValueType">
      <xs:annotation>
        <xs:documentation>
          <xhtml:p ism:classification="U" ism:ownerProducer="USA">Intended for
            structured content encoded in the same data encoding of the
            encapsulating Assertion (i.e. If the encoded format is XML this is
            intended for XML statements).</xhtml:p>
        </xs:documentation>
      </xs:annotation>
    </xs:element>
  </xs:choice>
</xs:group>
<xs:complexType name="AssertionType">
  <xs:annotation>
    <xs:documentation>
      <xhtml:p ism:classification="U" ism:ownerProducer="USA">An attribute for expressing
        the AssertionType of an object Used to express metadata about the objects
        expressed in the scope attribute of the assertion.</xhtml:p>
    </xs:documentation>
  </xs:annotation>
  <xs:sequence>
<!--Replacing:
<xs:element name="StatementMetadata" type="StatementMetadataType" minOccurs="0" maxOccurs="2">
  <xs:annotation>
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        <xs:documentation>
          <xhtml:p ism:classification="U" ism:ownerProducer="USA">Intended for access,
            rights, handling or other metadata that applies to the assertion
            statement. Use EDH security options whenever an assertion already has a
            unique enterprise identifier or is intended for potential extraction and
            should be able stand on it's own as a separate referenceable object. Use
            arh security only when assertions are not intended to be extracted and
            do not require enterprise identifiers.</xhtml:p>
        </xs:documentation>
      </xs:annotation>
    </xs:element>
-->
<!-- CdsManifest: Remove Statement Metadata on Statements. -->
<!--Replacing:
<xs:group ref="EncryptionInformationGroup"/>
-->
<!-- CdsManifest: Remove references to EncryptionInformationGroup Nothing is allowed to be encrypted -->

    <xs:group ref="StatementGroup"/>
      <xs:group ref="BindingGroup" minOccurs="0"/>
    </xs:sequence>
    <xs:attribute ref="scope" use="required"/>
    <!--Replacing:
<xs:attribute name="type" type="xs:string">
  <xs:annotation>
    <xs:documentation>
      <xhtml:p ism:ownerProducer="USA" ism:classification="U">The logical grouping to
        which the assertion belongs. The Assertion type attribute is intended to
        provide additional context, allowing various systems to pre-determine
        relevance of assertions without parsing or reading all of the assertions.
        Type might include categorizations such as discovery, mission, or task order
        to allow various systems to determine which assertions are relevant for them
        to parse.</xhtml:p>
      </xs:documentation>
    </xs:annotation>
  </xs:attribute>
-->
<!-- CdsManifest: Remove the type attribute as it is not required for CdsManifest. -->
<xs:attribute ref="id" use="optional"/>
  </xs:complexType>
  <!--Replacing:
<xs:complexType name="StatementMetadataType">
  <xs:annotation>
    <xs:documentation>
      <xhtml:p ism:classification="U" ism:ownerProducer="USA">Used to indicate if the
        statement metadata applies to encrypted or unencrypted data.</xhtml:p>
    </xs:documentation>
  </xs:annotation>
  <xs:sequence>
    <xs:any namespace="##other" processContents="skip"/>
  </xs:sequence>
  <xs:attribute name="appliesToState" type="tdfstate:CVEEnumTDFAppliesToState" use="optional">
    <xs:annotation>
      <xs:documentation>
```

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        <xhtml:p ism:classification="U" ism:ownerProducer="USA">Used to indicate if the
        statement metadata applies to encrypted or unencrypted data. If a TDO
        payload or assertion statement is encrypted, there are in fact two
        potentially different markings needed for decision making, analysis and
        querying, one describing the handling required for the encrypted blob, and
        the other for the handling required for the unencrypted (and in effect
        external) state. In cases where statements and/or payloads are encrypted,
        allow handling assertions and statement metadata elements to indicate
        whether their marks apply to the encrypted blob state vs. actual data by
        using an attribute appliesToState. </xhtml:p>
    </xs:documentation>
</xs:annotation>
</xs:attribute>
</xs:complexType>
-->
<!-- CdsManifest: Remove StatementMetadataType on Statements. -->
<!--Replacing:
<xs:complexType name="HandlingAssertionType">
    <xs:annotation>
        <xs:documentation>
            <xhtml:p ism:classification="U" ism:ownerProducer="USA">The group of elements intended
            for access, rights, and/or handling instructions that apply to the scope of the
            assertion. </xhtml:p>
        </xs:documentation>
    </xs:annotation>
</xs:sequence>
    <xs:element name="HandlingStatement" type="HandlingStatementType">
        <xs:annotation>
            <xs:documentation>
                <xhtml:p ism:classification="U" ism:ownerProducer="USA">Intended for access,
                rights, and/or handling instructions that apply to the scope of the
                assertion.</xhtml:p>
            </xs:documentation>
        </xs:annotation>
    </xs:element>
    <xs:group ref="BindingGroup" minOccurs="0"/>
</xs:sequence>
<xs:attribute ref="scope" use="required"/>
<xs:attribute ref="id" use="optional"/>
<xs:attribute name="appliesToState" type="tdfstate:CVEEnumTDFAppliesToState" use="optional">
    <xs:annotation>
        <xs:documentation>
            <xhtml:p ism:classification="U" ism:ownerProducer="USA">Used to indicate if the
            statement metadata applies to encrypted or unencrypted data. If a TDO
            payload or assertion statement is encrypted, there are in fact two
            potentially different markings needed for decision making, analysis and
            querying, one describing the handling required for the encrypted blob, and
            the other for the handling required for the unencrypted (and in effect
            external) state. In cases where statements and/or payloads are encrypted,
            allow handling assertions and statement metadata elements to indicate
            whether their marks apply to the encrypted blob state vs. actual data by
            using an attribute appliesToState</xhtml:p>
        </xs:documentation>
    </xs:annotation>
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    </xs:attribute>
  </xs:complexType>
-->
<!-- CdsManifest: Remove HandlingAssertionType so we can't do any classified or CUI -->
<!--Replacing:
<xs:complexType name="HandlingStatementType">
  <xs:annotation>
    <xs:documentation>
      <xhtml:p ism:ownerProducer="USA" ism:classification="U">A list of assertions
        designed to be used for access, rights, and handling instructions.</xhtml:p>
    </xs:documentation>
  </xs:annotation>
  <xs:sequence>
    <xs:any namespace="##other" processContents="skip"/>
  </xs:sequence>
</xs:complexType>
-->
<!-- CdsManifest: Remove HandlingStatementType so we can't do any classified or CUI -->
<!--Replacing:
<xs:complexType name="Base64BinaryValueType">
  <xs:annotation>
    <xs:documentation>
      <xhtml:p ism:ownerProducer="USA" ism:classification="U">A type for holding
        base64binary values.</xhtml:p>
    </xs:documentation>
  </xs:annotation>
  <xs:simpleContent>
    <xs:extension base="xs:base64Binary">
      <xs:attribute ref="mediaType" use="optional"/>
      <xs:attribute ref="filename" use="optional"/>
      <xs:attribute ref="isEncrypted" use="optional"/>
      <xs:attribute ref="id" use="optional"/>
    </xs:extension>
  </xs:simpleContent>
</xs:complexType>
-->
<!-- CdsManifest: Remove references to Base64BinaryValueType All uses of this type were tailored out. -->
<xs:complexType name="ReferenceValueType">
  <xs:annotation>
    <xs:documentation>
      <xhtml:p ism:classification="U" ism:ownerProducer="USA"> Incorporates a value by
        reference to a URI where it can be found. </xhtml:p>
      <xhtml:p ism:classification="U" ism:ownerProducer="USA"> To support division of a
        value into smaller pieces for transport (AKA "chunking"), such as
        across a CDS, the body of the element may contain a list of ReferenceValueBlock
        elements. If so, each must have a URI to the block and an integer block number
        indicating the order in which the blocks can be re-assembled into the original
        payload. Block numbers must start at 1 and be sequential. When a list of
        ReferenceValueBlocks is used, a TotalHash element must be present and must have
        a totalBlocks attribute set to an integer indicating the number of such
        elements. </xhtml:p>
      <xhtml:p ism:classification="U" ism:ownerProducer="USA">
        <xhtml:strong>Tailoring:</xhtml:strong> Not all systems will be willing or able
        to support unbounded lists of blocks. When tailoring maxOccurs here to reflect
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limitations imposed by a CDS or other implementation, that change should also be
reflected in the definition of a BlockedHashGroup.</xhtml:p>
</xs:documentation>
</xs:annotation>
<xs:sequence minOccurs="0" maxOccurs="1">
  <xs:sequence minOccurs="0" maxOccurs="1">
    <xs:element name="ReferenceValueBlock"
      type="ReferenceValueBlockType"
      minOccurs="2"
      maxOccurs="unbounded">
      <xs:annotation>
        <xs:documentation xml:lang="en">
          <xhtml:p ism:ownerProducer="USA" ism:classification="U">
            A smaller piece/block of the ReferenceValue that can be used to support transport
            (AKA "chunking") across a CDS.
          </xhtml:p>
          </xs:documentation>
        </xs:annotation>
      </xs:element>
    </xs:sequence>
    <xs:element ref="sfhashv:ContentEncodedHashVerification"
      minOccurs="0"
      maxOccurs="1"/>
    <xs:element ref="sfhashv:ContentDecodedHashVerification"
      minOccurs="0"
      maxOccurs="1"/>
  </xs:sequence>
  <xs:attribute ref="uri" use="required"/>
  <xs:attribute ref="id" use="optional"/>
  <xs:attribute ref="mediaType" use="optional"/>
  <!--Replacing:
<xs:attribute ref="isEncrypted" use="optional"/>
-->
<!-- CdsManifest: Remove attribute isEncrypted since nothing in CdsManifest allows encryption. -->
<xs:attribute ref="sfhashv:totalBlocks" use="optional"/>
</xs:complexType>
<xs:complexType name="ReferenceValueBlockType">
  <xs:annotation>
    <xs:documentation xml:lang="en">
      <xhtml:p ism:ownerProducer="USA" ism:classification="U">
        A smaller piece/block of the ReferenceValue that can be used to support transport
        (AKA "chunking") across a CDS.
      </xhtml:p>
    </xs:documentation>
  </xs:annotation>
  <xs:attribute ref="uri" use="required"/>
  <xs:attribute ref="sfhashv:block" use="required"/>
</xs:complexType>
<!--Replacing:
<xs:complexType name="StringValueType">
  <xs:annotation>
    <xs:documentation>
      <xhtml:p ism:classification="U" ism:ownerProducer="USA">Intended for textual content
      encoded as a string.</xhtml:p>
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        </xs:documentation>
    </xs:annotation>
    <xs:simpleContent>
        <xs:extension base="xs:string">
            <xs:attribute ref="filename" use="optional"/>
            <xs:attribute ref="isEncrypted" use="optional"/>
            <xs:attribute ref="id" use="optional"/>
        </xs:extension>
    </xs:simpleContent>
</xs:complexType>
-->
<!-- CdsManifest: Remove references to StringValueType All uses of this type were tailored out. -->
<xs:complexType name="StructuredValueType">
    <xs:annotation>
        <xs:documentation>
            <xhtml:p ism:classification="U" ism:ownerProducer="USA">Intended for structured
content encoded in the same data encoding of the encapsulating TDO (i.e. If the
encoded format is XML this is intended for XML values). For signable
StructuredValueType elements, it can be safer to declare namespaces locally to
the section being signed to reduce risk in moving sections between documents.
Explicit namespace declarations should be used and c14n11 normalization should
be preferred when signing since c14n11 normalization does not perform any
namespace re-writing and as a result, signed assertions can not be copied
between documents unless the namespaces used are identical, or the assertion
locally overrides them. Older c14n 1.0 has two approaches to namespace
re-writing, either of which could in some circumstances break signatures when
copying signed assertions between documents. </xhtml:p>
        </xs:documentation>
    </xs:annotation>
    <xs:sequence>
<!--Replacing:
<xs:any namespace="##other" processContents="skip"/>
-->
<!-- CdsManifest: Remove xs:any and force assertion to be cdsm:CdsManifestAssertion or anlys:AnalysisAssertion and keep Xsat Happy. -->

        <xs:choice>
            <xs:element ref="cdsm:CdsManifestAssertion"/>
            <xs:element ref="anlys:AnalysisAssertion"/>
        </xs:choice>
    </xs:sequence>
    <xs:attribute ref="id" use="optional"/>
    <!--Replacing:
<xs:attribute ref="filename" use="optional"/>
-->
<!-- CdsManifest: Remove attribute filename since nothing it was only used for Base64 and String which were tailored out. -->
<!--Replacing:
<xs:attribute ref="isEncrypted" use="optional"/>
-->
<!-- CdsManifest: Remove attribute isEncrypted since nothing in CdsManifest allows encryption. -->
</xs:complexType>
<xs:complexType name="BindingType">
    <xs:annotation>
        <xs:documentation>
            <xhtml:p ism:classification="U" ism:ownerProducer="USA">A list of the objects
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        that belong to the scope of the assertion.</xhtml:p>
      </xs:documentation>
    </xs:annotation>
  </xs:sequence>
<!-- This order is important because it allows for a single pass
      verification of the actual SignatureValue using a streaming parser -->

  <xs:choice>
    <xs:element name="Signer" maxOccurs="1" minOccurs="1">
      <xs:annotation>
        <xs:documentation>
          <xhtml:p ism:classification="U" ism:ownerProducer="USA">Information
            pertaining to the person or entity that performed the
            signing/binding and their credentials.</xhtml:p>
          </xs:documentation>
        </xs:annotation>
      </xs:complexType>
<!--Replacing:
<xs:attribute name="subject" type="xs:string">
  <xs:annotation>
    <xs:documentation>
      <xhtml:p ism:classification="U" ism:ownerProducer="USA">The
        distinguished name of the person or entity who is doing the
        signing. Refer to RFC 5280 for more information.</xhtml:p>
      </xs:documentation>
    </xs:annotation>
  </xs:attribute>
-->
<!-- CdsManifest: Replace entirety of subject to enable max length and a pattern to keep Xsat Happy. -->

  <xs:attribute name="subject" use="required">
    <xs:annotation>
      <xs:documentation>
        <xhtml:p ism:classification="U" ism:ownerProducer="USA">The
distinguished name of the person or entity who is doing the
signing. Refer to RFC 5280 for more information.</xhtml:p>
        </xs:documentation>
      </xs:annotation>
    <xs:simpleType>
      <xs:restriction base="xs:string">
        <xs:minLength value="1"/>
        <xs:maxLength value="50"/>
        <xs:pattern value="([a-zA-Z0-9i\*\.\s=_-])*"/>
      </xs:restriction>
    </xs:simpleType>
  </xs:attribute>
  <!--Replacing:
<xs:attribute name="issuer" type="xs:string">
  <xs:annotation>
    <xs:documentation>
      <xhtml:p ism:classification="U" ism:ownerProducer="USA">The
distinguished name of the authority that issued the
credentials to the subject. Refer to RFC 5280 for more
information.</xhtml:p>
    </xs:documentation>
  </xs:annotation>
</xs:attribute>
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        </xs:documentation>
      </xs:annotation>
    </xs:attribute>
  -->
<!-- CdsManifest: Replace entirety of issuer force a max length and pattern to keep Xsat Happy. -->
<!-- CdsManifest: Force issuer to be required since we don't use serial. -->
<xs:attribute name="issuer" use="required">
  <xs:annotation>
    <xs:documentation>
      <xhtml:p ism:classification="U" ism:ownerProducer="USA">The
distinguished name of the authority that issued the
credentials to the subject. Refer to RFC 5280 for more
information.</xhtml:p>
    </xs:documentation>
  </xs:annotation>
  <xs:simpleType>
    <xs:restriction base="xs:string">
      <xs:minLength value="1"/>
      <xs:maxLength value="50"/>
      <xs:pattern value="([a-zA-Z0-9\.\s=_-])*"/>
    </xs:restriction>
  </xs:simpleType>
</xs:attribute>
  <!--Replacing:
<xs:attribute name="serial" type="xs:string">
  <xs:annotation>
    <xs:documentation>
      <xhtml:p ism:classification="U" ism:ownerProducer="USA">The
        unique serial number of the credentials given to the subject
        by the issuer. Refer to RFC 5280 for more information.
      </xhtml:p>
    </xs:documentation>
  </xs:annotation>
</xs:attribute>
  -->
<!-- CdsManifest: Remove serial since we require issuer. -->
</xs:complexType>

  </xs:element>
</xs:choice>
<xs:element name="SignatureValue"
  type="SignatureValueType"
  minOccurs="1"
  maxOccurs="1">
  <xs:annotation>
    <xs:documentation>
      <xhtml:p ism:classification="U" ism:ownerProducer="USA">Stores the value of the
Signature over the bound entities.</xhtml:p>
    </xs:documentation>
  </xs:annotation>
</xs:element>
  <!--Replacing:
<xs:element name="BoundValueList" type="BoundValueListType" minOccurs="0" maxOccurs="1">
  <xs:annotation>
    <xs:documentation>
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        <xhtml:p ism:classification="U" ism:ownerProducer="USA">BoundValueList is a
        container of bound value references that point to the elements that are included
        in a cryptographic binding. The intent of the BoundValueList is to allow
        granular control over the scope of the binding signature. In the future, when
        BoundValueList is present, the SignatureValue will be calculated over the
        normalized value of the BoundValueList using the normalization method denoted in
        the Binding/SignatureValue/@normalizationMethod attribute.</xhtml:p>
    </xs:documentation>
</xs:annotation>
</xs:element>
-->
<!-- CdsManifest: Remove references to BoundValueList this type of binding is not supported for CdsManifest. -->
</xs:sequence>

    </xs:complexType>
    <!--Replacing:
<xs:complexType name="BoundValueListType">
    <xs:annotation>
        <xs:documentation>
            <xhtml:p ism:classification="U" ism:ownerProducer="USA">BoundValueList is a
            container of bound value references that point to the elements that are included
            in a cryptographic binding. The intent of the BoundValueList is to allow
            granular control over the scope of the binding signature. In the future, when
            BoundValueList is present, the SignatureValue will be calculated over the
            normalized value of the BoundValueList using the normalization method denoted in
            the Binding/SignatureValue/@normalizationMethod attribute.</xhtml:p>
        </xs:documentation>
    </xs:annotation>
<xs:sequence>
    <xs:element name="BoundValue" type="BoundValueType" minOccurs="1" maxOccurs="unbounded">
        <xs:annotation>
            <xs:documentation>
                <xhtml:p ism:classification="U" ism:ownerProducer="USA">A bound value is a reference
                that points to an element that is included in a cryptographic binding. A bound
                value is only meaningful in the context of a BoundValueList.</xhtml:p>
            </xs:documentation>
        </xs:annotation>
    </xs:element>
</xs:sequence>
</xs:complexType>
-->
<!-- CdsManifest: Remove references to BoundValueListType All uses of this type were tailored out. -->
<!--Replacing:
<xs:complexType name="BoundValueType">
    <xs:annotation>
        <xs:documentation>
            <xhtml:p ism:classification="U" ism:ownerProducer="USA">A bound value is a reference
            that points to an element that is included in a cryptographic binding. A bound
            value is only meaningful in the context of a BoundValueList.</xhtml:p>
        </xs:documentation>
    </xs:annotation>
<xs:simpleContent>
    <xs:extension base="xs:base64Binary">
        <xs:attribute ref="idRef" use="required"/>
        <xs:attribute name="hashAlgorithm" type="tdfhashal:CVEEnumTDFHashAlgorithm" use="required">
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        <xs:annotation>
          <xs:documentation>
            <xhtml:p ism:classification="U" ism:ownerProducer="USA">The hash algorithm used in the cryptographic binding.
            </xhtml:p>
          </xs:documentation>
        </xs:annotation>
      </xs:attribute>
      <xs:attribute ref="normalizationMethod" use="required"/>
      <xs:attribute ref="includesStatementMetadata" use="optional"/>
    </xs:extension>
  </xs:simpleContent>
</xs:complexType>
-->
<!-- CdsManifest: Remove references to BoundValueType All uses of this type were tailored out. -->
<xs:complexType name="SignatureValueType">
  <xs:annotation>
    <xs:documentation>
      <xhtml:p ism:classification="U" ism:ownerProducer="USA">Stores the value of the
Signature over the bound entities.</xhtml:p>
    </xs:documentation>
  </xs:annotation>
  <xs:simpleContent>
    <xs:extension base="xs:base64Binary">

```

```

-->
<!-- CdsManifest: Replace entirety of signatureAlgorithm to disallow newer signing algorithms and keep Xsat Happy. -->
<xs:attribute name="signatureAlgorithm" type="tdfsigal:CVEnumTDFSignatureAlgorithm" use="required">
  <xs:annotation>
    <xs:documentation>
      <xhtml:p ism:classification="U" ism:ownerProducer="USA">The algorithm or
pattern used by the signature. The permissible values are defined in
the Controlled Value Enumeration: CVEnumTDFSignatureAlgorithm.xml
      </xhtml:p>
    </xs:documentation>
  </xs:annotation>
</xs:attribute>
-->
<!-- CdsManifest: Replace entirety of signatureAlgorithm to disallow newer signing algorithms and keep Xsat Happy. -->

```

```

  <xs:attribute name="signatureAlgorithm" use="required">
    <xs:annotation>
      <xs:documentation>
        <xhtml:p ism:classification="U" ism:ownerProducer="USA">The algorithm or
pattern used by the signature restricted to the following values below.
      </xhtml:p>
    </xs:documentation>
  </xs:annotation>
  <xs:simpleType>
    <xs:restriction base="xs:string">
      <xs:enumeration value="SHA256withRSA"/>
      <xs:enumeration value="SHA384withRSA"/>
      <xs:enumeration value="SHA512withRSA"/>
      <xs:enumeration value="SHA256withECDSA"/>
      <xs:enumeration value="SHA384withECDSA"/>
      <xs:enumeration value="SHA512withECDSA"/>
    </xs:restriction>

```

```
        </xs:simpleType>
      </xs:attribute>
      <xs:attribute ref="normalizationMethod" use="required"/>
      <xs:attribute ref="includesStatementMetadata" use="optional"/>
    </xs:extension>
  </xs:simpleContent>
</xs:complexType>
<!--Replacing:
<xs:complexType name="KeyAccessType">
  <xs:annotation>
    <xs:documentation>
      <xhtml:p ism:classification="U" ism:ownerProducer="USA">Stores the value of the
        key stored in remote locations.</xhtml:p>
    </xs:documentation>
  </xs:annotation>
  <xs:choice maxOccurs="unbounded">
    <xs:element name="RemoteStoredKey" type="RemoteStoredKeyType" minOccurs="1" maxOccurs="1">
      <xs:annotation>
        <xs:documentation>
          <xhtml:p ism:classification="U" ism:ownerProducer="USA">Stores retrieval
            information for keys stored in remote locations.</xhtml:p>
        </xs:documentation>
      </xs:annotation>
    </xs:element>
    <xs:element name="WrappedKey" type="WrappedKeyType" minOccurs="1" maxOccurs="1">
      <xs:annotation>
        <xs:documentation>
          <xhtml:p ism:classification="U" ism:ownerProducer="USA">Contains the key
            necessary for decryption in an encrypted state with information
            pertaining to the method in which the key was encrypted.</xhtml:p>
        </xs:documentation>
      </xs:annotation>
    </xs:element>
    <xs:element name="PasswordKey" type="PasswordKeyType" minOccurs="1" maxOccurs="1">
      <xs:annotation>
        <xs:documentation>
          <xhtml:p ism:classification="U" ism:ownerProducer="USA">Used to indicated
            that the key is based on a password.</xhtml:p>
        </xs:documentation>
      </xs:annotation>
    </xs:element>
    <xs:element name="PreSharedKey" type="PreSharedKeyType" minOccurs="1" maxOccurs="1">
      <xs:annotation>
        <xs:documentation>
          <xhtml:p ism:classification="U" ism:ownerProducer="USA">Stores the alias
            that references a key that has been previously shared.</xhtml:p>
        </xs:documentation>
      </xs:annotation>
    </xs:element>
    <xs:element name="AttachedKey" type="AttachedKeyType" minOccurs="1" maxOccurs="1">
      <xs:annotation>
        <xs:documentation>
          <xhtml:p ism:classification="U" ism:ownerProducer="USA">Contains the key
            necessary for decryption.</xhtml:p>
        </xs:documentation>
      </xs:annotation>
    </xs:element>
  </xs:choice>
</xs:complexType>
```

```

        </xs:documentation>
    </xs:annotation>
</xs:element>
<xs:element maxOccurs="1" minOccurs="1" name="WrappedPDPKey" type="WrappedPDPKeyType">
    <xs:annotation>
        <xs:documentation>
            <xhtml:p ism:classification="U" ism:ownerProducer="USA">Contains the key
                necessary for decryption in an encrypted state with information
                pertaining to the method in which the key was encrypted.</xhtml:p>
        </xs:documentation>
    </xs:annotation>
</xs:element>
</xs:choice>
</xs:complexType>
-->
<!-- CdsManifest: Remove references to KeyAccessType All uses of this type were tailored out. -->
<!--Replacing:
<xs:complexType name="ReferenceListType">
    <xs:annotation>
        <xs:documentation>
            <xhtml:p ism:classification="U" ism:ownerProducer="USA">A list of reference
                Assertions.</xhtml:p>
        </xs:documentation>
    </xs:annotation>
    <xs:sequence>
        <xs:element name="Reference" type="ReferenceType" minOccurs="1" maxOccurs="unbounded">
            <xs:annotation>
                <xs:documentation>Used when referencing an Assertion.</xs:documentation>
            </xs:annotation>
        </xs:element>
    </xs:sequence>
</xs:complexType>
-->
<!-- CdsManifest: Remove references to ReferenceListType this type of binding is not supported for CdsManifest. -->
<!--Replacing:
<xs:complexType name="ReferenceType">
    <xs:annotation>
        <xs:documentation>Used when referencing an Assertion.</xs:documentation>
    </xs:annotation>
    <xs:attribute ref="idRef" use="required"/>
    <xs:attribute ref="includesStatementMetadata" use="optional"/>
</xs:complexType>
-->
<!-- CdsManifest: Remove references to ReferenceType this type of binding is not supported for CdsManifest. -->
<!-- Simple Types -->
<xs:simpleType name="MediaTypeType">
    <xs:annotation>
        <xs:documentation>
            <xhtml:p ism:classification="U" ism:ownerProducer="USA">An attribute for expressing the
                mediaType of an object as defined in RFC 4288.</xhtml:p>
        </xs:documentation>
    </xs:annotation>
    <!--Replacing:
<xs:restriction base="xs:string">
```

```

    <xs:annotation>
      <xs:documentation>A restriction on string for the format of mediaType (i.e.
        audio/GSM) as defined in <xhtml:a href="http://tools.ietf.org/html/rfc4288">RFC
          4288</xhtml:a>. </xs:documentation>
    </xs:annotation>
    <xs:pattern value="[a-zA-Z]*/[a-zA-Z+-.]*" />
  </xs:restriction>
-->
<xs:restriction base="xs:string">
  <xs:annotation>
    <xs:documentation>
      A restriction on string for the format of mediaType (i.e.
      audio/GSM) as defined in
      <xhtml:a href="http://tools.ietf.org/html/rfc4288">RFC 4288</xhtml:a>.
    </xs:documentation>
  </xs:annotation>
  <xs:maxLength value="256"/>
  <xs:pattern value="[a-zA-Z]*/[a-zA-Z+-.]*" />
</xs:restriction>
</xs:simpleType>
<!-- - - - - - Key Access Type Definitions - - - - - -->
<!--Replacing:
<xs:complexType name="AttachedKeyType">
  <xs:annotation>
    <xs:documentation>
      <xhtml:p ism:classification="U" ism:ownerProducer="USA">Stores the value of the
        key necessary for decryption.</xhtml:p>
    </xs:documentation>
  </xs:annotation>
  <xs:sequence>
    <xs:element name="KeyValue" type="xs:base64Binary" minOccurs="1" maxOccurs="1">
      <xs:annotation>
        <xs:documentation>The value of the key.</xs:documentation>
      </xs:annotation>
    </xs:element>
  </xs:sequence>
</xs:complexType>
-->
<!-- CdsManifest: Remove references to AttachedKeyType All uses of this type were tailored out. -->
<!--Replacing:
<xs:complexType name="PreSharedKeyType">
  <xs:annotation>
    <xs:documentation>
      <xhtml:p ism:classification="U" ism:ownerProducer="USA">A list of aliases
        for referencing a key that has been previously shared.</xhtml:p>
    </xs:documentation>
  </xs:annotation>
  <xs:attribute name="alias" type="xs:string" use="required">
    <xs:annotation>
      <xs:documentation>
        <xhtml:p ism:classification="U" ism:ownerProducer="USA">An alias for the shared key.</xhtml:p>
      </xs:documentation>
    </xs:annotation>
  </xs:attribute>
```

```

        <xs:attribute name="store" type="xs:anyURI" use="optional">
            <xs:annotation>
                <xs:documentation>
                    <xhtml:p ism:classification="U" ism:ownerProducer="USA">The store for the shared key.</xhtml:p>
                </xs:documentation>
            </xs:annotation>
        </xs:attribute>
    </xs:complexType>
-->
<!-- CdsManifest: Remove references to PreSharedKeyType All uses of this type were tailored out. -->
<!--Replacing:
<xs:complexType name="RemoteStoredKeyType">
    <xs:annotation>
        <xs:documentation>
            <xhtml:p ism:classification="U" ism:ownerProducer="USA">A list for retrieval
                information for keys stored in remote locations.</xhtml:p>
        </xs:documentation>
    </xs:annotation>
    <xs:attribute name="protocol" type="xs:string" use="required">
        <xs:annotation>
            <xs:documentation>
                <xhtml:p ism:classification="U" ism:ownerProducer="USA">The protocol related to retrieving remote keys.</xhtml:p>
            </xs:documentation>
        </xs:annotation>
    </xs:attribute>
    <xs:attribute ref="uri" use="required"/>
</xs:complexType>
-->
<!-- CdsManifest: Remove references to RemoteStoredKeyType All uses of this type were tailored out. -->
<!--Replacing:
<xs:complexType name="PasswordKeyType">
    <xs:annotation>
        <xs:documentation>
            <xhtml:p ism:classification="U" ism:ownerProducer="USA">Stores the value of
                the key is based on a password.</xhtml:p>
        </xs:documentation>
    </xs:annotation>
    <xs:attribute name="algorithm" type="xs:string" use="required">
        <xs:annotation>
            <xs:documentation>
                <xhtml:p ism:classification="U" ism:ownerProducer="USA">The algorithm related to the password key.</xhtml:p>
            </xs:documentation>
        </xs:annotation>
    </xs:attribute>
</xs:complexType>
-->
<!-- CdsManifest: Remove references to PasswordKeyType All uses of this type were tailored out. -->
<!--Replacing:
<xs:complexType name="WrappedKeyType">
    <xs:annotation>
        <xs:documentation>
            <xhtml:p ism:classification="U" ism:ownerProducer="USA">Stores the value of
                the key necessary for decryption in an encrypted state with information
                pertaining to the method in which the key was encrypted.</xhtml:p>
        </xs:documentation>
    </xs:annotation>
</xs:complexType>
-->
```



```

    </xs:documentation>
</xs:annotation>
<xs:sequence>
  <xs:element name="KeyValue" type="xs:base64Binary" minOccurs="1" maxOccurs="1">
    <xs:annotation>
      <xs:documentation>The value of the decription key.</xs:documentation>
    </xs:annotation>
  </xs:element>
  <xs:group ref="EncryptionInformationGroup" maxOccurs="1" minOccurs="1"/>
</xs:sequence>
<xs:attribute name="keyIdentifier" type="xs:string" use="optional">
  <xs:annotation>
    <xs:documentation>
      <xhtml:p ism:classification="U" ism:ownerProducer="USA">A key identifier.</xhtml:p>
    </xs:documentation>
  </xs:annotation>
</xs:attribute>
</xs:complexType>
-->
<!-- CdsManifest: Remove references to WrappedKeyType All uses of this type were tailored out. -->
<!--Replacing:
<xs:complexType name="WrappedPDPKeyType">
  <xs:annotation>
    <xs:documentation>
      <xhtml:p ism:classification="U" ism:ownerProducer="USA">Stores the value of
        the key necessary for decryption in an encrypted state with information
        pertaining to the method in which the key was encrypted.</xhtml:p>
    </xs:documentation>
  </xs:annotation>
  <xs:sequence>
    <xs:element name="EncryptedPolicyObject" type="xs:base64Binary" minOccurs="1" maxOccurs="1">
      <xs:annotation>
        <xs:documentation>The encrypted policy object.</xs:documentation>
      </xs:annotation>
    </xs:element>
    <xs:group ref="EncryptionInformationGroup" maxOccurs="1" minOccurs="1"/>
  </xs:sequence>
  <xs:attribute name="keyIdentifier" type="xs:string" use="optional">
    <xs:annotation>
      <xs:documentation>
        <xhtml:p ism:classification="U" ism:ownerProducer="USA">A key identifier.</xhtml:p>
      </xs:documentation>
    </xs:annotation>
  </xs:attribute>
</xs:complexType>
-->
<!-- CdsManifest: Remove references to WrappedPDPKeyType All uses of this type were tailored out. -->
<xs:annotation>
  <xs:documentation>
    <xhtml:h2 ism:ownerProducer="USA" ism:classification="U">Formal Change List</xhtml:h2>
    <xhtml:table ism:ownerProducer="USA" ism:classification="U" id="ChangeHistory">
      <xhtml:caption>Change History</xhtml:caption>
      <xhtml:thead>
        <xhtml:tr>
```



```

        <xhtml:th>Version</xhtml:th>
        <xhtml:th>Date</xhtml:th>
        <xhtml:th>By</xhtml:th>
        <xhtml:th>Description</xhtml:th>
    </xhtml:tr>
</xhtml:thead>
<xhtml:tbody>
    <xhtml:tr>
        <xhtml:td>2021-JAN</xhtml:td>
        <xhtml:td>2020-11-17</xhtml:td>
        <xhtml:td>ODNI/OCIO/ICEA</xhtml:td>
        <xhtml:td>
            <xhtml:ul>
                <xhtml:li ism:ownerProducer="USA" ism:classification="U">
                    Reference the change history in the DES.</xhtml:li>
            </xhtml:ul>
        </xhtml:td>
    </xhtml:tr>
</xhtml:tbody>
</xhtml:table>
</xs:documentation>
</xs:annotation>
</xs:schema>
```

2.2 - CDSM-TDF-guard.xsd

```
<xs:schema xmlns:xs="http://www.w3.org/2001/XMLSchema"
    xmlns="urn:us:gov:ic:tdf"
    xmlns:cdsm="urn:us:gov:ic:cdsmanifest"
    xmlns:sfhashv="urn:us:gov:ic:sf:hashverification"
    xmlns:sf="urn:us:gov:ic:sf"
    xmlns:anlys="urn:us:gov:ic:anlysassert"
    targetNamespace="urn:us:gov:ic:tdf"
    elementFormDefault="qualified"
    attributeFormDefault="qualified"
    version="202111">
  <xs:import namespace="urn:us:gov:ic:cdsmanifest" schemaLocation="../CDSM/CDSM.xsd"/>
  <xs:import namespace="urn:us:gov:ic:anlysassert"
    schemaLocation="../ANLYS/ANLYS.xsd"/>
  <xs:import namespace="urn:us:gov:ic:sf:hashverification"
    schemaLocation="../IC-SF/HashVerification.xsd"/>
  <xs:import namespace="urn:us:gov:ic:sf" schemaLocation="../IC-SF/IC-SF.xsd"/>
  <xs:element name="TrustedDataObject" type="TrustedDataObjectType"/>
  <xs:attribute name="version">
    <xs:simpleType>
      <xs:restriction base="xs:string">
        <xs:pattern value="[0-9]{6}(\.[0-9]{6})?\-CDSM\-TDF\.[0-9]{6}(\.[0-9]{6})?(\-.{1,23})?" />
      </xs:restriction>
    </xs:simpleType>
  </xs:attribute>
  <xs:attribute name="mediaType" type="MediaTypeType"/>
  <xs:attribute name="id">
    <xs:simpleType>
      <xs:restriction base="xs:ID">
        <xs:maxLength value="50"/>
      </xs:restriction>
    </xs:simpleType>
  </xs:attribute>
  <xs:attribute name="idRef">
    <xs:simpleType>
      <xs:restriction base="xs:IDREF">
        <xs:maxLength value="50"/>
      </xs:restriction>
    </xs:simpleType>
  </xs:attribute>
  <xs:attribute name="scope">
    <xs:simpleType>
      <xs:restriction base="xs:string">
        <xs:enumeration value="TDO"/>
        <xs:enumeration value="PAYL"/>
      </xs:restriction>
    </xs:simpleType>
  </xs:attribute>
  <xs:attribute name="includesStatementMetadata" type="xs:boolean"/>
  <xs:attribute name="normalizationMethod">
    <xs:simpleType>
      <xs:restriction base="xs:anyURI">
        <xs:enumeration value="http://www.w3.org/TR/xml-c14n11"/>
      </xs:restriction>
    </xs:simpleType>
  </xs:attribute>
</xs:schema>
```

```

        </xs:restriction>
    </xs:simpleType>
</xs:attribute>
<xs:attribute name="uri">
    <xs:simpleType>
        <xs:restriction base="xs:anyURI">
            <xs:maxLength value="1024"/>
        </xs:restriction>
    </xs:simpleType>
</xs:attribute>
<xs:complexType name="TrustedDataObjectType">
    <xs:sequence>
        <xs:group ref="AssertionGroup"/>
        <xs:group ref="PayloadGroup"/>
    </xs:sequence>
    <xs:attribute ref="version"/>
    <xs:attribute ref="sf:DESVersion" use="optional"/>
    <xs:attribute ref="id" use="optional"/>
</xs:complexType>
<xs:group name="AssertionGroup">
    <xs:sequence>
        <xs:element name="Assertion"
            type="AssertionType"
            maxOccurs="unbounded"
            minOccurs="0"/>
    </xs:sequence>
</xs:group>
<xs:group name="BindingGroup">
    <xs:choice>
        <xs:element name="Binding" type="BindingType" maxOccurs="5"/>
    </xs:choice>
</xs:group>
<xs:group name="PayloadGroup">
    <xs:choice>
        <xs:element name="ReferenceValuePayload" type="ReferenceValueType"/>
    </xs:choice>
</xs:group>
<xs:group name="StatementGroup">
    <xs:choice>
        <xs:element name="StructuredStatement" type="StructuredValueType"/>
    </xs:choice>
</xs:group>
<xs:complexType name="AssertionType">
    <xs:sequence>
        <xs:group ref="StatementGroup"/>
        <xs:group ref="BindingGroup" minOccurs="0"/>
    </xs:sequence>
    <xs:attribute ref="scope" use="required"/>
    <xs:attribute ref="id" use="optional"/>
</xs:complexType>
<xs:complexType name="ReferenceValueType">
    <xs:sequence minOccurs="0">
        <xs:sequence minOccurs="0">
            <xs:element name="ReferenceValueBlock"

```

```

        type="ReferenceValueBlockType"
        minOccurs="2"
        maxOccurs="unbounded"/>
    </xs:sequence>
    <xs:element ref="sfhashv:ContentEncodedHashVerification" minOccurs="0"/>
    <xs:element ref="sfhashv:ContentDecodedHashVerification" minOccurs="0"/>
</xs:sequence>
<xs:attribute ref="uri" use="required"/>
<xs:attribute ref="id" use="optional"/>
<xs:attribute ref="mediaType" use="optional"/>
<xs:attribute ref="sfhashv:totalBlocks" use="optional"/>
</xs:complexType>
<xs:complexType name="ReferenceValueBlockType">
    <xs:attribute ref="uri" use="required"/>
    <xs:attribute ref="sfhashv:block" use="required"/>
</xs:complexType>
<xs:complexType name="StructuredValueType">
    <xs:sequence>
        <xs:choice>
            <xs:element ref="cdsm:CdsManifestAssertion"/>
            <xs:element ref="anlys:AnalysisAssertion"/>
        </xs:choice>
    </xs:sequence>
    <xs:attribute ref="id" use="optional"/>
</xs:complexType>
<xs:complexType name="BindingType">
    <xs:sequence>
        <xs:choice>
            <xs:element name="Signer">
                <xs:complexType>
                    <xs:attribute name="subject" use="required">
                        <xs:simpleType>
                            <xs:restriction base="xs:string">
                                <xs:minLength value="1"/>
                                <xs:maxLength value="50"/>
                                <xs:pattern value="([a-zA-Z0-9i\*\.\s=_-])*"/>
                            </xs:restriction>
                        </xs:simpleType>
                    </xs:attribute>
                    <xs:attribute name="issuer" use="required">
                        <xs:simpleType>
                            <xs:restriction base="xs:string">
                                <xs:minLength value="1"/>
                                <xs:maxLength value="50"/>
                                <xs:pattern value="([a-zA-Z0-9\.\s=_-])*"/>
                            </xs:restriction>
                        </xs:simpleType>
                    </xs:attribute>
                </xs:complexType>
            </xs:element>
        </xs:choice>
        <xs:element name="SignatureValue" type="SignatureValueType"/>
    </xs:sequence>
</xs:complexType>

```

```
<xs:complexType name="SignatureValueType">
  <xs:simpleContent>
    <xs:extension base="xs:base64Binary">
      <xs:attribute name="signatureAlgorithm" use="required">
        <xs:simpleType>
          <xs:restriction base="xs:string">
            <xs:enumeration value="SHA256withRSA"/>
            <xs:enumeration value="SHA384withRSA"/>
            <xs:enumeration value="SHA512withRSA"/>
            <xs:enumeration value="SHA256withECDSA"/>
            <xs:enumeration value="SHA384withECDSA"/>
            <xs:enumeration value="SHA512withECDSA"/>
          </xs:restriction>
        </xs:simpleType>
      </xs:attribute>
      <xs:attribute ref="normalizationMethod" use="required"/>
      <xs:attribute ref="includesStatementMetadata" use="optional"/>
    </xs:extension>
  </xs:simpleContent>
</xs:complexType>
<xs:simpleType name="MediaTypeType">
  <xs:restriction base="xs:string">
    <xs:maxLength value="256"/>
    <xs:pattern value="[a-zA-Z]*/[a-zA-Z+-.]*"/>
  </xs:restriction>
</xs:simpleType>
</xs:schema>
```