



Guide to Schemas for ANLYS

ANLYS Schema Guide

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Chapter 1 - Introduction

1.1 - Purpose

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

Chapter 2 - Schema Files

2.1 - ANLYS.xsd

```
<xs:schema xmlns:xs="http://www.w3.org/2001/XMLSchema"
            xmlns="urn:us:gov:ic:anlysassert"
            xmlns:xhtml="http://www.w3.org/1999/xhtml-StopBrowserRendering"
            xmlns:anlys="urn:us:gov:ic:anlysassert"
            xmlns:sfhashv="urn:us:gov:ic:sf:hashverification"
            xmlns:sf="urn:us:gov:ic:sf"
            xmlns:icid="urn:us:gov:ic:id"
            targetNamespace="urn:us:gov:ic:anlysassert"
            elementFormDefault="qualified"
            attributeFormDefault="qualified"
            ism:DESVersion="202111"
            ism:ISMCACTCESVersion="202205"
            ism:compliesWith="USGov USIC"
            ism:createDate="2021-03-05"
            ism:resourceElement="true"
            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 Analysis Assertion
        (ANLYS.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 XML Data Encoding Specification for XML Data
        Encoding Specification for Analysis Assertion
        (ANLYS.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/ANLYS/DesAnlysXml.pdf">XML
            Data Encoding Specification for Analysis Assertion</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 ANLYS.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 Analysis Assertion
        is <xhtml:a href="ANLYS_xsd_Element_AnalysisAssertion.html#AnalysisAssertion">anlys:AnalysisAssertion</xhtml:a>
        and is implemented as a TDF assertion.
    </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      -->

<!-- ***** -->

<xs:import namespace="urn:us:gov:ic:id" schemaLocation="../IC-ID/IC-ID.xsd"/>
<xs:import namespace="urn:us:gov:ic:sf" schemaLocation="../IC-SF/IC-SF.xsd"/>
<xs:import namespace="urn:us:gov:ic:sf:hashverification"
    schemaLocation="../IC-SF/HashVerification.xsd"/>

<!-- ***** -->

<!-- Start Elements      -->

<!-- ***** -->

<!-- Root Element -->

<xs:element name="AnalysisAssertion" type="anlys:AnalysisAssertionType">
```

```
<xs:annotation>
  <xs:documentation xml:lang="en">
    <xhtml:p ism:ownerProducer="USA" ism:classification="U">
      The root node of an analysis assertion.
    </xhtml:p>
  </xs:documentation>
</xs:annotation>
</xs:element>

<xs:element name="OriginContentFilename" type="anlys:OriginContentFilenameType">
  <xs:annotation>
    <xs:documentation xml:lang="en">
      <xhtml:p ism:ownerProducer="USA" ism:classification="U">
        Filename of the artifact.
      </xhtml:p>
    </xs:documentation>
  </xs:annotation>
</xs:element>

<xs:element name="AnalysisMethodList" type="anlys:AnalysisMethodListType">
  <xs:annotation>
    <xs:documentation xml:lang="en">
      <xhtml:p ism:ownerProducer="USA" ism:classification="U">
        List of how was the artifact analyzed.
      </xhtml:p>
    </xs:documentation>
  </xs:annotation>
</xs:element>

<xs:element name="AnalysisMethod" type="anlys:AnalysisMethodType">
  <xs:annotation>
    <xs:documentation xml:lang="en">
      <xhtml:p ism:ownerProducer="USA" ism:classification="U">How the artifact was analyzed.
        A value of "None" is an explicit statement that no analysis has been performed on the suspect payload.
        A value of "Other" indicates that some form of analysis has been performed,
        but the assertion will not identify what kind, possibly to protect confidential methods.
        Further information may be provided in an anys:AnalysisMethodToolResultDescription,
        or the anys:WorkFlowID may allow some users to access additional information in other systems.
        A value of "Multiple" indicates that the optional anys:AnalysisMethodToolList would provide
        additional insight as to the methods.
      </xhtml:p>
    </xs:documentation>
  </xs:annotation>
</xs:element>

<xs:element name="AttackIdList" type="anlys:AttackIdListType">
  <xs:annotation>
    <xs:documentation xml:lang="en">
      <xhtml:p ism:ownerProducer="USA" ism:classification="U">
        List of PRE-ATT&CK, ATT&CK, Mobile IDs.
      </xhtml:p>
    </xs:documentation>
  </xs:annotation>
</xs:element>
```

```
<xs:element name="AttackId" type="anlys:AttackIdType">
  <xs:annotation>
    <xs:documentation xml:lang="en">
      <xhtml:p ism:ownerProducer="USA" ism:classification="U">
        PRE-ATT&amp;CK, ATT&amp;CK, Mobile IDs.
      </xhtml:p>
    </xs:documentation>
  </xs:annotation>
</xs:element>

<xs:element name="OriginContentPathList" type="anlys:OriginContentPathListType">
  <xs:annotation>
    <xs:documentation xml:lang="en">
      <xhtml:p ism:ownerProducer="USA" ism:classification="U">
        List of full paths from the root folder (break for each folder).
      </xhtml:p>
    </xs:documentation>
  </xs:annotation>
</xs:element>

<xs:element name="OriginContentPath" type="anlys:OriginContentPathType">
  <xs:annotation>
    <xs:documentation xml:lang="en">
      <xhtml:p ism:ownerProducer="USA" ism:classification="U">
        Full path from the root folder (break for each folder).
      </xhtml:p>
    </xs:documentation>
  </xs:annotation>
</xs:element>

<xs:element name="AnalysisMethodToolDataDate"
  type="anlys:AnalysisMethodToolDataDateType">
  <xs:annotation>
    <xs:documentation xml:lang="en">
      <xhtml:p ism:ownerProducer="USA" ism:classification="U">
        The most recent update of data, such as virus signatures, service fingerprints,
        or similar, used by an analysis tool.
      </xhtml:p>
    </xs:documentation>
  </xs:annotation>
</xs:element>

<xs:element name="AnalysisMethodToolEngine"
  type="anlys:AnalysisMethodToolEngineType">
  <xs:annotation>
    <xs:documentation xml:lang="en">
      <xhtml:p ism:ownerProducer="USA" ism:classification="U">
        The engine used to identify the virus scan tool, detonation chamber, static
        or dynamic analysis tool, or any other analysis tool used to analyze the payload.
      </xhtml:p>
    </xs:documentation>
  </xs:annotation>
</xs:element>
```



```
<xs:element name="AnalysisMethodToolVersion"
  type="anlys:AnalysisMethodToolVersionType">
  <xs:annotation>
    <xs:documentation xml:lang="en">
      <xhtml:p ism:ownerProducer="USA" ism:classification="U">
        The version number of virus scan tool, detonation chamber, static
        or dynamic analysis tool, or any other analysis tool used to analyze the payload.
      </xhtml:p>
    </xs:documentation>
  </xs:annotation>
</xs:element>

<xs:element name="AnalysisMethodToolResultDescription"
  type="anlys:AnalysisMethodToolResultDescriptionType">
  <xs:annotation>
    <xs:documentation xml:lang="en">
      <xhtml:p ism:ownerProducer="USA" ism:classification="U">
        The result of a virus scan, detonation chamber,
        static or dynamic analysis tool, or any other analysis of the payload.
        Supports XML and free-form text. If need to portion mark results, use
        analys:AnalysisMethodToolResultDescriptionStructured.
      </xhtml:p>
    </xs:documentation>
  </xs:annotation>
</xs:element>

<xs:element name="AnalysisMethodToolResultDescriptionText"
  type="anlys:AnalysisMethodToolResultDescriptionTextType">
  <xs:annotation>
    <xs:documentation xml:lang="en">
      <xhtml:p ism:ownerProducer="USA" ism:classification="U">
        The free-form text result of a virus scan, detonation chamber,
        static or dynamic analysis tool, or any other analysis of the payload.
      </xhtml:p>
    </xs:documentation>
  </xs:annotation>
</xs:element>

<xs:element name="AnalysisMethodToolResultDescriptionStructured"
  type="anlys:StructuredValueType">
  <xs:annotation>
    <xs:documentation xml:lang="en">
      <xhtml:p ism:ownerProducer="USA" ism:classification="U">
        The well-formed XML result of a virus scan, detonation chamber,
        static or dynamic analysis tool, or any other analysis of the payload.
      </xhtml:p>
    </xs:documentation>
  </xs:annotation>
</xs:element>

<xs:element name="AnalysisMethodToolConfigFile"
  type="anlys:AnalysisMethodToolConfigFileType">
  <xs:annotation>
```

```
<xs:documentation xml:lang="en">
  <xhtml:p ism:ownerProducer="USA" ism:classification="U">
    The configuration file used with an analysis tool.
    Supports string, base64, reference, structure formats.
  </xhtml:p>
</xs:documentation>
</xs:annotation>
</xs:element>

<xs:element name="AnalysisTimeFormat" type="anlys:AnalysisTimeFormatType">
  <xs:annotation>
    <xs:documentation xml:lang="en">
      <xhtml:p ism:ownerProducer="USA" ism:classification="U">
        Time format for analysis, timezone mandatory.
      </xhtml:p>
    </xs:documentation>
  </xs:annotation>
</xs:element>

<xs:element name="AnalysisMethodToolList" type="anlys:AnalysisMethodToolListType">
  <xs:annotation>
    <xs:documentation xml:lang="en">
      <xhtml:p ism:ownerProducer="USA" ism:classification="U">
        List of analysis method tools.
        The manual analysis method can be combined with names of tools used by the analyst.
        (e.g., to indicate that the analys:AnalysisMethodToolResultDescription and dhzm:KnownMalicious values are
        derived from human analysis aided by a reverse engineering tool one might include both
        "ManualAnalysis" and "Ghidra").
      </xhtml:p>
    </xs:documentation>
  </xs:annotation>
</xs:element>

<xs:element name="AnalysisMethodTool" type="anlys:AnalysisMethodToolType">
  <xs:annotation>
    <xs:documentation xml:lang="en">
      <xhtml:p ism:classification="U" ism:ownerProducer="USA">
        An analysis method tool.
        The use of registered CPE values is preferred and can be looked up at "https://nvd.nist.gov/products/cpe/search"
        or offline using the regularly updated dictionaries published at "https://nvd.nist.gov/products/cpe".
        The use of unregistered CPE values should use "Other:" should be followed by a value in the form of a CPE name,
        and it should result in submitting a new value for inclusion in the official dictionary,
        according to the process described at "https://cpe.mitre.org/dictionary/".
        The use of the manual analysis method (ie. "ManualAnalysis") can be combined with names of tools used by the analyst.
        (e.g., to indicate that the analys:AnalysisMethodToolResultDescription and dhzm:KnownMalicious values are
        derived from human analysis aided by a reverse engineering tool one might include both
        "ManualAnalysis" and "Ghidra").
      </xhtml:p>
    </xs:documentation>
  </xs:annotation>
</xs:element>

<xs:element name="AnalysisMethodToolName" type="anlys:AnalysisMethodToolNameType">
  <xs:annotation>
```

```

        <xs:documentation xml:lang="en">
            <xhtml:p ism:ownerProducer="USA" ism:classification="U">
                The name of an analysis method tool.
            </xhtml:p>
        </xs:documentation>
    </xs:annotation>
</xs:element>

<xs:element name="WorkflowId" type="anlys:WorkflowIdType">
    <xs:annotation>
        <xs:documentation xml:lang="en">
            <xhtml:p ism:ownerProducer="USA" ism:classification="U">
                An identifier to associate this document with a reference in an external system, such
                as a project management or ticket tracking tool. Specific meaning is user-defined. When
                suitable for the use case, an RFC 4122 compliant UUID is recommended.
            </xhtml:p>
        </xs:documentation>
    </xs:annotation>
</xs:element>

<xs:element name="AnalystIdentifier" type="anlys:AnalystIdentifierType">
    <xs:annotation>
        <xs:documentation xml:lang="en">
            <xhtml:p ism:ownerProducer="USA" ism:classification="U">
                The person or team who performed the analysis described by the assertion
                (e.g., simple names, email addresses for analyst or analysis team,
                organizational identifiers such as a DOD ID number,
                UUIDs for pseudonymous attribution, or similar).
            </xhtml:p>
        </xs:documentation>
    </xs:annotation>
</xs:element>

<xs:element name="KnownMalicious" type="anlys:KnownMaliciousType">
    <xs:annotation>
        <xs:documentation xml:lang="en">
            <xhtml:p ism:ownerProducer="USA" ism:classification="U">
                Result of scan of artifact. true/1 means artifact is malicious
                and false/0 means it is not malicious.
            </xhtml:p>
        </xs:documentation>
    </xs:annotation>
</xs:element>

<xs:element name="VulnerableIdList" type="anlys:VulnerableIdListType">
    <xs:annotation>
        <xs:documentation xml:lang="en">
            <xhtml:p ism:ownerProducer="USA" ism:classification="U">
                A list of <xhtml:a href="https://cve.mitre.org/">Common Vulnerability Enumeration IDs</xhtml:a>,
                UUIDs, or ICIDs to which the payload is <xhtml:em>believed to be vulnerable</xhtml:em>
                based on the analysis described in this assertion.
            </xhtml:p>
        </xs:documentation>
    </xs:annotation>
</xs:element>
```

```

    </xs:annotation>
  </xs:element>

  <xs:element name="VulnerableId" type="anlys:MixedIDType">
    <xs:annotation>
      <xs:documentation xml:lang="en">
        <xhtml:p ism:ownerProducer="USA" ism:classification="U">
          Vulnerabilities that a nonhazardous payload is vulnerable to.
        </xhtml:p>
      </xs:documentation>
    </xs:annotation>
  </xs:element>

  <xs:element name="TargetedIdList" type="anlys:TargetedIdListType">
    <xs:annotation>
      <xs:documentation xml:lang="en">
        <xhtml:p ism:ownerProducer="USA" ism:classification="U">
          A list of <xhtml:a href="https://cve.mitre.org/">Common Vulnerability Enumeration IDs</xhtml:a>,
          UUIDs, or ICIDs which the payload is <xhtml:em>believed to exploit in other software</xhtml:em>
          based on the analysis described in this assertion.
          If this list is present in an analysis assertion,
          then the KnownMalicious element should also be present and have a value of "true".
        </xhtml:p>
      </xs:documentation>
    </xs:annotation>
  </xs:element>

  <xs:element name="TargetedId" type="anlys:MixedIDType">
    <xs:annotation>
      <xs:documentation xml:lang="en">
        <xhtml:p ism:ownerProducer="USA" ism:classification="U">
          Vulnerabilities that a hazardous payload exploits.
        </xhtml:p>
      </xs:documentation>
    </xs:annotation>
  </xs:element>

  <xs:element name="TestPerformedList" type="anlys:TestPerformedListType">
    <xs:annotation>
      <xs:documentation xml:lang="en">
        <xhtml:p ism:ownerProducer="USA" ism:classification="U">
          List of tests performed in a tool-independent manner.
        </xhtml:p>
      </xs:documentation>
    </xs:annotation>
  </xs:element>

  <xs:element name="TestPerformed" type="anlys:TestPerformedType">
    <xs:annotation>
      <xs:documentation xml:lang="en">
        <xhtml:p ism:ownerProducer="USA" ism:classification="U">
          A test performed in a tool-independent manner.
          Supports reference and structured values.
        </xhtml:p>
      </xs:documentation>
    </xs:annotation>
  </xs:element>

```

```

        </xs:documentation>
    </xs:annotation>
</xs:element>

<xs:element name="RelatedAnalysisList" type="anlys:RelatedAnalysisListType">
    <xs:annotation>
        <xs:documentation xml:lang="en">
            <xhtml:p ism:ownerProducer="USA" ism:classification="U">
                List of related analysis. Contains references to
                other analysis assertions for expressing analysis
                performed by a pipeline.
            </xhtml:p>
        </xs:documentation>
    </xs:annotation>
</xs:element>

<xs:element name="RelatedAnalysis" type="anlys:RelatedAnalysisType">
    <xs:annotation>
        <xs:documentation xml:lang="en">
            <xhtml:p ism:ownerProducer="USA" ism:classification="U">
                A related analysis with a IC-ID identifier and its relationship
                to the current analysis assertion.
            </xhtml:p>
        </xs:documentation>
    </xs:annotation>
</xs:element>

<xs:element name="ReferenceValueBlock" type="anlys: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:element>

<!-- *****-->

<!-- End Elements -->

<!-- *****-->

<!-- *****-->

<!-- Start Attributes -->

<!-- *****-->

<xs:attribute name="DESVersion" type="anlys:DESVersionType">
    <xs:annotation>
```

```

        <xs:documentation xml:lang="en">
            <xhtml:p ism:ownerProducer="USA" ism:classification="U">
                The version number of the DES.
            </xhtml:p>
        </xs:documentation>
    </xs:annotation>
</xs:attribute>

<xs:attribute name="filename" type="anlys:FilenameType">
    <xs:annotation>
        <xs:documentation>
            <xhtml:p ism:classification="U" ism:ownerProducer="USA">
                This is the filename of a configuration file.
            </xhtml:p>
        </xs:documentation>
    </xs:annotation>
</xs:attribute>

<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>

<xs:attribute name="mediaType" type="anlys: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>

<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>

<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.
            </xhtml:p>
        </xs:documentation>
    </xs:annotation>
</xs:attribute>
```

Not guaranteed to be unique across multiple TDC/TDOs but must be unique within a single instance of either.

```

        </xs:documentation>
    </xs:annotation>
</xs:attribute>

<xs:attribute name="relationship" type="anlys:RelationshipType">
    <xs:annotation>
        <xs:documentation>
            <xhtml:p ism:ownerProducer="USA" ism:classification="U">
                Identifies the relationship of each related analysis assertion referenced
                in each analys:RelatedAnalysis.
            </xhtml:p>
        </xs:documentation>
    </xs:annotation>
</xs:attribute>

<!--*****-->

<!--End Attributes -->

<!--*****-->

<!--*****-->

<!--Start Type Definitions -->

<!--*****-->

<xs:complexType name="AnalysisAssertionType">
    <xs:annotation>
        <xs:documentation xml:lang="en">
            <xhtml:p ism:ownerProducer="USA" ism:classification="U">
                The contents of an AnalysisAssertion.
            </xhtml:p>
        </xs:documentation>
    </xs:annotation>
    <xs:all>
        <!-- required -->

        <xs:element ref="anlys:AnalysisMethodList" minOccurs="1" maxOccurs="1"/>
        <xs:element ref="anlys:OriginContentFilename" minOccurs="1" maxOccurs="1"/>

        <!-- optional -->

        <xs:element ref="anlys:AnalysisMethodToolList" minOccurs="0" maxOccurs="1"/>
        <xs:element ref="anlys:AnalysisTimeFormat" minOccurs="0" maxOccurs="1"/>
        <xs:element ref="anlys:AnalystIdentifier" minOccurs="0" maxOccurs="1"/>
        <xs:element ref="anlys:AttackIdList" minOccurs="0" maxOccurs="1"/>
        <xs:element ref="anlys:KnownMalicious" minOccurs="0" maxOccurs="1"/>
        <xs:element ref="anlys:OriginContentPathList" minOccurs="0" maxOccurs="1"/>
        <xs:element ref="anlys:RelatedAnalysisList" minOccurs="0" maxOccurs="1"/>
    </xs:all>
</xs:complexType>
```

```

        <xs:element ref="anlys:TargetedIdList" minOccurs="0" maxOccurs="1"/>
        <xs:element ref="anlys:TestPerformedList" minOccurs="0" maxOccurs="1"/>
        <xs:element ref="anlys:VulnerableIdList" minOccurs="0" maxOccurs="1"/>
        <xs:element ref="anlys:WorkflowId" minOccurs="0" maxOccurs="1"/>
    </xs:all>
    <xs:attribute ref="anlys:DESVersion" use="required"/>
    <xs:attribute ref="sf:DESVersion" use="optional"/>
</xs:complexType>

<xs:complexType name="AnalysisMethodListType">
    <xs:annotation>
        <xs:documentation xml:lang="en">
            <xhtml:p ism:ownerProducer="USA" ism:classification="U">
                The contents of an AnalysisMethodList element.
            </xhtml:p>
        </xs:documentation>
    </xs:annotation>
    <xs:sequence>
        <xs:element ref="anlys:AnalysisMethod" minOccurs="1" maxOccurs="256"/>
    </xs:sequence>
</xs:complexType>

<xs:complexType name="AttackIdListType">
    <xs:annotation>
        <xs:documentation xml:lang="en">
            <xhtml:p ism:ownerProducer="USA" ism:classification="U">
                The contents of an AttackIdList element.
            </xhtml:p>
        </xs:documentation>
    </xs:annotation>
    <xs:sequence>
        <xs:element ref="anlys:AttackId" minOccurs="1" maxOccurs="256"/>
    </xs:sequence>
</xs:complexType>

<xs:complexType name="OriginContentPathListType">
    <xs:annotation>
        <xs:documentation xml:lang="en">
            <xhtml:p ism:ownerProducer="USA" ism:classification="U">
                The contents of an OriginContentPathList element.
            </xhtml:p>
        </xs:documentation>
    </xs:annotation>
    <xs:sequence>
        <xs:element ref="anlys:OriginContentPath" minOccurs="1" maxOccurs="256"/>
    </xs:sequence>
</xs:complexType>

<xs:complexType name="AnalysisMethodToolListType">
    <xs:annotation>
        <xs:documentation xml:lang="en">
            <xhtml:p ism:ownerProducer="USA" ism:classification="U">
                The contents of an AnalysisMethodToolList element.
            </xhtml:p>
        </xs:documentation>
    </xs:annotation>
    <xs:sequence>
        <xs:element ref="anlys:AnalysisMethodTool" minOccurs="1" maxOccurs="256"/>
    </xs:sequence>
</xs:complexType>

```



```

        </xs:documentation>
    </xs:annotation>
    <xs:sequence>
        <xs:element ref="anlys:AnalysisMethodTool" minOccurs="1" maxOccurs="256"/>
    </xs:sequence>
</xs:complexType>

<xs:complexType name="AnalysisMethodToolType">
    <xs:annotation>
        <xs:documentation xml:lang="en">
            <xhtml:p ism:ownerProducer="USA" ism:classification="U">
                The contents of an AnalysisMethodTool element.
            </xhtml:p>
        </xs:documentation>
    </xs:annotation>
    <xs:sequence>
        <!-- required -->

        <xs:element ref="anlys:AnalysisMethodToolName" minOccurs="1" maxOccurs="1"/>

        <!-- optional -->

        <xs:element ref="anlys:AnalysisMethodToolDataDate" minOccurs="0" maxOccurs="1"/>
        <xs:element ref="anlys:AnalysisMethodToolEngine" minOccurs="0" maxOccurs="1"/>
        <xs:element ref="anlys:AnalysisMethodToolVersion" minOccurs="0" maxOccurs="1"/>
        <xs:element ref="anlys:AnalysisMethodToolResultDescription"
            minOccurs="0"
            maxOccurs="1"/>
        <xs:element ref="anlys:AnalysisMethodToolConfigFile"
            minOccurs="0"
            maxOccurs="1"/>
    </xs:sequence>
</xs:complexType>

<xs:complexType name="AnalysisMethodToolResultDescriptionType">
    <xs:annotation>
        <xs:documentation xml:lang="en">
            <xhtml:p ism:ownerProducer="USA" ism:classification="U">
                The contents of an AnalysisMethodToolResultDescription element.
            </xhtml:p>
        </xs:documentation>
    </xs:annotation>
    <xs:sequence>
        <xs:choice>
            <xs:element ref="anlys:AnalysisMethodToolResultDescriptionText"/>
            <xs:element ref="anlys:AnalysisMethodToolResultDescriptionStructured"/>
        </xs:choice>
    </xs:sequence>
</xs:complexType>

<xs:complexType name="AnalysisMethodToolConfigFileType">
    <xs:annotation>
        <xs:documentation xml:lang="en">
```

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        <xhtml:p ism:ownerProducer="USA" ism:classification="U">
            The contents of an AnalysisMethodToolConfigFileType element.
        </xhtml:p>
    </xs:documentation>
</xs:annotation>
<xs:sequence>
    <xs:group ref="ConfigGroup"/>
</xs:sequence>
</xs:complexType>

<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>
            </xs:documentation>
        </xs:annotation>
        <xs:simpleContent>
            <xs:extension base="anlys:StringValueRestrictedType">
                <xs:attribute ref="filename" use="optional"/>
                <xs:attribute ref="isEncrypted" use="optional"/>
                <xs:attribute ref="id" use="optional"/>
            </xs:extension>
        </xs:simpleContent>
    </xs:complexType>

<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>

<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
            </xhtml:p>
        </xs:documentation>
    </xs:annotation>
    <xs:sequence>
        <xs:element type="ReferenceValueBlock" maxOccurs="unbounded"/>
    </xs:sequence>
</xs:complexType>

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        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
        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 ref="ReferenceValueBlock" minOccurs="2" maxOccurs="unbounded"/>
    </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"/>
<xs:attribute ref="isEncrypted" use="optional"/>
<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>

<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

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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>

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        </xs:documentation>
    </xs:annotation>
    <xs:sequence>
        <xs:any namespace="##other" processContents="lax"/>
    </xs:sequence>
    <xs:attribute ref="id" use="optional"/>
    <xs:attribute ref="filename" use="optional"/>
    <xs:attribute ref="isEncrypted" use="optional"/>
</xs:complexType>

<xs:complexType name="TestPerformedListType">
    <xs:annotation>
        <xs:documentation xml:lang="en">
            <xhtml:p ism:ownerProducer="USA" ism:classification="U">
                The contents of an TestPerformedList element.
            </xhtml:p>
        </xs:documentation>
    </xs:annotation>
    <xs:sequence>
        <xs:element ref="anlys:TestPerformed" minOccurs="1" maxOccurs="256"/>
    </xs:sequence>
</xs:complexType>

<xs:complexType name="RelatedAnalysisListType">
    <xs:annotation>
        <xs:documentation xml:lang="en">
            <xhtml:p ism:ownerProducer="USA" ism:classification="U">
                The contents of an RelatedAnalysisList element.
            </xhtml:p>
        </xs:documentation>
    </xs:annotation>
    <xs:sequence>
        <xs:element ref="anlys:RelatedAnalysis" minOccurs="1" maxOccurs="256"/>
    </xs:sequence>
</xs:complexType>

<xs:complexType name="RelatedAnalysisType">
    <xs:annotation>
        <xs:documentation xml:lang="en">
            <xhtml:p ism:ownerProducer="USA" ism:classification="U">
                The contents of an RelatedAnalysis element.
            </xhtml:p>
        </xs:documentation>
    </xs:annotation>
    <xs:simpleContent>
        <xs:extension base="icid:IcIdType">
            <xs:attribute ref="relationship" use="optional"/>
        </xs:extension>
    </xs:simpleContent>
</xs:complexType>

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<xs:complexType name="VulnerableIdListType">
  <xs:annotation>
    <xs:documentation xml:lang="en">
      <xhtml:p ism:ownerProducer="USA" ism:classification="U">
        The contents of an VulnerableIdList element.
      </xhtml:p>
    </xs:documentation>
  </xs:annotation>
  <xs:sequence>
    <xs:element ref="anlys:VulnerableId" minOccurs="1" maxOccurs="256"/>
  </xs:sequence>
</xs:complexType>

<xs:complexType name="TargetedIdListType">
  <xs:annotation>
    <xs:documentation xml:lang="en">
      <xhtml:p ism:ownerProducer="USA" ism:classification="U">
        The contents of an TargetedIdList element.
      </xhtml:p>
    </xs:documentation>
  </xs:annotation>
  <xs:sequence>
    <xs:element ref="anlys:TargetedId" minOccurs="1" maxOccurs="256"/>
  </xs:sequence>
</xs:complexType>

<xs:complexType name="TestPerformedType">
  <xs:annotation>
    <xs:documentation xml:lang="en">
      <xhtml:p ism:ownerProducer="USA" ism:classification="U">
        The contents of an TestPerformed element.
      </xhtml:p>
    </xs:documentation>
  </xs:annotation>
  <xs:sequence>
    <xs:group ref="TestGroup"/>
  </xs:sequence>
</xs:complexType>

<xs:simpleType name="DESVersionType">
  <xs:annotation>
    <xs:documentation xml:lang="en">
      <xhtml:p ism:ownerProducer="USA" ism:classification="U">
        The contents of a DESVersion attribute.
      </xhtml:p>
    </xs:documentation>
  </xs:annotation>
  <xs:restriction base="xs:string">
    <xs:pattern value="[0-9]{6}(\.[0-9]{6})?(\-{1,23})?" />
  </xs:restriction>
</xs:simpleType>

<xs:simpleType name="OriginContentFilenameType">
  <xs:annotation>

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        <xs:documentation xml:lang="en">
            <xhtml:p ism:ownerProducer="USA" ism:classification="U">
                The contents of an OriginContentFilename element.
            </xhtml:p>
        </xs:documentation>
    </xs:annotation>
    <xs:restriction base="xs:string">
        <xs:minLength value="1"/>
        <xs:maxLength value="1024"/>
    </xs:restriction>
</xs:simpleType>

<xs:simpleType name="AnalysisMethodType">
    <xs:annotation>
        <xs:documentation xml:lang="en">
            <xhtml:p ism:ownerProducer="USA" ism:classification="U">
                The contents of an AnalysisMethod element.
            </xhtml:p>
        </xs:documentation>
    </xs:annotation>
    <xs:union memberTypes="AnalysisMethodEnumerationType">
        <xs:simpleType>
            <xs:restriction base="xs:string">
                <xs:minLength value="1"/>
                <xs:maxLength value="255"/>
                <xs:pattern value="([a-zA-Z0-9])*"/>
            </xs:restriction>
        </xs:simpleType>
    </xs:union>
</xs:simpleType>

<xs:simpleType name="AnalysisMethodEnumerationType">
    <xs:annotation>
        <xs:documentation xml:lang="en">
            <xhtml:p ism:ownerProducer="USA" ism:classification="U">
                The enumerated values of an AnalysisMethod element.
            </xhtml:p>
        </xs:documentation>
    </xs:annotation>
    <xs:restriction base="xs:string">
        <xs:enumeration value="Virus_Scan"/>
        <xs:enumeration value="Detonation_Chamber"/>
        <xs:enumeration value="Reverse_Engineering"/>
        <xs:enumeration value="Manual_Review"/>
        <xs:enumeration value="Multiple"/>
        <xs:enumeration value="Other"/>
        <xs:enumeration value="None"/>
    </xs:restriction>
</xs:simpleType>

<xs:simpleType name="AttackIdType">
    <xs:annotation>
        <xs:documentation xml:lang="en">
            <xhtml:p ism:ownerProducer="USA" ism:classification="U">
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        The contents of an AttackId element.
        </xhtml:p>
    </xs:documentation>
</xs:annotation>
<xs:restriction base="xs:string">
    <xs:pattern value="TA?[0-9]{4}" />
</xs:restriction>
</xs:simpleType>

<xs:simpleType name="OriginContentPathType">
    <xs:annotation>
        <xs:documentation xml:lang="en">
            <xhtml:p ism:ownerProducer="USA" ism:classification="U">
                The contents of an OriginContentPath element.
            </xhtml:p>
        </xs:documentation>
    </xs:annotation>
    <xs:restriction base="xs:anyURI">
        <xs:maxLength value="1024" />
    </xs:restriction>
</xs:simpleType>

<xs:simpleType name="AnalysisMethodToolDataDateType">
    <xs:annotation>
        <xs:documentation xml:lang="en">
            <xhtml:p ism:ownerProducer="USA" ism:classification="U">
                The contents of an AnalysisMethodToolDataDate element.
            </xhtml:p>
        </xs:documentation>
    </xs:annotation>
    <xs:restriction base="xs:dateTime" />
</xs:simpleType>

<xs:simpleType name="AnalysisMethodToolEngineType">
    <xs:annotation>
        <xs:documentation xml:lang="en">
            <xhtml:p ism:ownerProducer="USA" ism:classification="U">
                The contents of an AnalysisMethodToolEngine element.
            </xhtml:p>
        </xs:documentation>
    </xs:annotation>
    <xs:restriction base="xs:string">
        <xs:minLength value="1" />
        <xs:maxLength value="255" />
        <xs:pattern value="([a-zA-Z0-9])*" />
    </xs:restriction>
</xs:simpleType>

<xs:simpleType name="AnalysisMethodToolVersionType">
    <xs:annotation>
        <xs:documentation xml:lang="en">
            <xhtml:p ism:ownerProducer="USA" ism:classification="U">
                The contents of an AnalysisMethodToolVersion element or
                analysisMethodToolVersion attribute.
            </xhtml:p>
        </xs:documentation>
    </xs:annotation>
    <xs:restriction base="xs:string">
        <xs:minLength value="1" />
        <xs:maxLength value="255" />
        <xs:pattern value="([a-zA-Z0-9])*" />
    </xs:restriction>
</xs:simpleType>
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        </xhtml:p>
      </xs:documentation>
    </xs:annotation>
    <xs:restriction base="xs:string">
      <xs:minLength value="1"/>
      <xs:maxLength value="255"/>
      <xs:pattern value="([a-zA-Z0-9\.-])*"/>
    </xs:restriction>
  </xs:simpleType>

  <xs:simpleType name="AnalysisMethodToolResultDescriptionTextType">
    <xs:annotation>
      <xs:documentation>
        <xhtml:p ism:ownerProducer="USA" ism:classification="U">
          The contents of an AnalysisMethodToolResultDescriptionText element.
        </xhtml:p>
      </xs:documentation>
    </xs:annotation>
    <xs:restriction base="xs:string">
      <xs:minLength value="1"/>
      <xs:maxLength value="32000"/>
    </xs:restriction>
  </xs:simpleType>

  <xs:simpleType name="AnalysisTimeFormatType">
    <xs:annotation>
      <xs:documentation xml:lang="en">
        <xhtml:p ism:ownerProducer="USA" ism:classification="U">
          The contents of an AnalysisTimeFormat element.
        </xhtml:p>
      </xs:documentation>
    </xs:annotation>
    <xs:restriction base="xs:dateTime">
      <xs:pattern value=".{20}.*"/>
    </xs:restriction>
  </xs:simpleType>

  <xs:simpleType name="AnalysisMethodToolNameType">
    <xs:annotation>
      <xs:documentation xml:lang="en">
        <xhtml:p ism:ownerProducer="USA" ism:classification="U">
          The contents of an AnalysisMethodToolName element.
        </xhtml:p>
      </xs:documentation>
    </xs:annotation>
    <xs:union memberTypes="anlys:AnalysisMethodToolNameEnumeratedType
      analys:RegisteredCPEType analys:UnregisteredCPEType"/>
  </xs:simpleType>

  <xs:simpleType name="AnalysisMethodToolNameEnumeratedType">
    <xs:annotation>
      <xs:documentation xml:lang="en">
        <xhtml:p ism:ownerProducer="USA" ism:classification="U">
          The enumerated values of an AnalysisMethodToolName.
        </xhtml:p>
      </xs:documentation>
    </xs:annotation>
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        </xs:documentation>
    </xs:annotation>
    <xs:restriction base="xs:string">
        <xs:enumeration value="ManualAnalysis"/>
    </xs:restriction>
</xs:simpleType>

<xs:simpleType name="RegisteredCPEType">
    <xs:annotation>
        <xs:documentation xml:lang="en">
            <xhtml:p ism:ownerProducer="USA" ism:classification="U">
                The regular expressions OR'ed together in this
                type were copied verbatim from the cpe22Type and
                cpe23Type definitions in
                <xhtml:a xhtml:href="https://csrc.nist.gov/schema/cpe/2.3/cpe-naming_2.3.xsd">
                    the official CPE schema
                </xhtml:a>
                . The length restriction is added to constrain
                the values to a reasonable length for cross-domain
                use.
            </xhtml:p>
        </xs:documentation>
    </xs:annotation>
    <xs:restriction base="xs:anyURI">
        <xs:minLength value="1"/>
        <xs:maxLength value="1024"/>
        <xs:pattern value="([c][pP][eE]:/[AHOaho]?(:[A-Za-z0-9\._-~%]*){0,6})|(cpe:2\.3:[aho]*\-|(:(((\?*\|\\?)([a-zA-Z0-9\._-]|(\\[\\\\"*?!&#34;#$$$&amp;'\\(\\)\\
+,/:;&lt;=&gt;@\\[\\]^`\\{\\}|~|)))+(\\?*\|\\?))|[\\"*-|])){5}(:((([a-zA-Z]{2,3}(-([a-zA-Z]{2}|[0-9]{3}))?)|[\\"*-|))(((((\\?*\|\\?)([a-zA-Z0-9\._-]|(\\[\\\\"*?!&#34;#$$$&amp;'\\(\\)\\
+/,/:;&lt;=&gt;@\\[\\]^`\\{\\}|~|)))+(\\?*\|\\?))|[\\"*-|])){4})"/>
    </xs:restriction>
</xs:simpleType>

<xs:simpleType name="UnregisteredCPEType">
    <xs:annotation>
        <xs:documentation xml:lang="en">
            <xhtml:p ism:ownerProducer="USA" ism:classification="U">
                Unregistered CPE has "Other:" as a prefix on the cpe22Type and cpe23Type regex.
                The regular expressions OR'ed together in this
                type were copied verbatim from the cpe22Type and
                cpe23Type definitions in
                <xhtml:a xhtml:href="https://csrc.nist.gov/schema/cpe/2.3/cpe-naming_2.3.xsd">
                    the official CPE schema
                </xhtml:a>
                . The length restriction is added to constrain
                the values to a reasonable length for cross-domain
                use.
            </xhtml:p>
        </xs:documentation>
    </xs:annotation>
    <xs:restriction base="xs:anyURI">
        <xs:minLength value="1"/>
        <xs:maxLength value="1024"/>
        <xs:pattern value="Other:([c][pP][eE]:/[AHOaho]?(:[A-Za-z0-9\._-~%]*){0,6})|Other:(cpe:2\.3:[aho]*\-|(:(((\\?*\|\\?)([a-zA-Z0-9\._-]|(\\[\\\\"*?!&#34;#$$$&amp;'\\(\\)\\
(\\)\\+,/:;&lt;=&gt;@\\[\\]^`\\{\\}|~|)))+(\\?*\|\\?))|[\\"*-|])){5}(:((([a-zA-Z]{2,3}(-([a-zA-Z]{2}|[0-9]{3}))?)|[\\"*-|))(((((\\?*\|\\?)([a-zA-Z0-9\._-]|(\\[\\\\"*?!&#34;#$$$&amp;'\\(\\)\\
+/,/:;&lt;=&gt;@\\[\\]^`\\{\\}|~|)))+(\\?*\|\\?))|[\\"*-|])){4})"/>
    </xs:restriction>
</xs:simpleType>
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\^`\\{\\|}~]]))+(\?*\|\\*?)|[\*\-~]]{4})"/>
    </xs:restriction>
  </xs:simpleType>

  <xs:simpleType name="WorkflowIdType">
    <xs:annotation>
      <xs:documentation xml:lang="en">
        <xhtml:p ism:ownerProducer="USA" ism:classification="U">
          The contents of a WorkflowId element.
        </xhtml:p>
      </xs:documentation>
    </xs:annotation>
    <xs:restriction base="xs:string">
      <xs:minLength value="1"/>
      <xs:maxLength value="255"/>
      <xs:pattern value="([a-zA-Z0-9\s:\.\_~])*/>
    </xs:restriction>
  </xs:simpleType>

  <xs:simpleType name="AnalystIdentifierType">
    <xs:annotation>
      <xs:documentation xml:lang="en">
        <xhtml:p ism:ownerProducer="USA" ism:classification="U">
          The contents of an AnalystIdentifier element.
        </xhtml:p>
      </xs:documentation>
    </xs:annotation>
    <xs:restriction base="xs:string">
      <xs:minLength value="1"/>
      <xs:maxLength value="1024"/>
    </xs:restriction>
  </xs:simpleType>

  <xs:simpleType name="KnownMaliciousType">
    <xs:annotation>
      <xs:documentation xml:lang="en">
        <xhtml:p ism:ownerProducer="USA" ism:classification="U">
          The contents of a KnownMalicious element.
        </xhtml:p>
      </xs:documentation>
    </xs:annotation>
    <xs:restriction base="xs:boolean"/>
  </xs:simpleType>

  <xs:simpleType name="MediaTypeType">
    <xs:annotation>
      <xs:documentation xml:lang="en">
        <xhtml:p ism:ownerProducer="USA" ism:classification="U">
          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>.
        </xhtml:p>
      </xs:documentation>
    </xs:annotation>
    <xs:restriction base="xs:string">
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        <xs:pattern value="[a-zA-Z]*/[a-zA-Z+-.]*"/>
    </xs:restriction>
</xs:simpleType>

<xs:simpleType name="MixedIDType">
    <xs:annotation>
        <xs:documentation xml:lang="en">
            <xhtml:p ism:ownerProducer="USA" ism:classification="U">
                The contents of an VulnerableId and TargetedId element.
                The union of CVE, UUID and ICID ID types.
            </xhtml:p>
        </xs:documentation>
    </xs:annotation>
    <xs:union memberTypes="anlys:CVEIdType analys:UUIDIdType icid:IcIdType"/>
</xs:simpleType>

<xs:simpleType name="CVEIdType">
    <xs:annotation>
        <xs:documentation xml:lang="en">
            <xhtml:p ism:ownerProducer="USA" ism:classification="U">
                One of 3 ID types for the VulnerableId and TargetedId element.
                The regex is CVE prefix + year + sequence number digits based on
                https://cve.mitre.org/about/faqs.html#what_is_cve_id
                however a max of 16 for the last sequence is additionally enforced for cross
                domain reasons.
            </xhtml:p>
        </xs:documentation>
    </xs:annotation>
    <xs:restriction base="xs:string">
        <xs:pattern value="CVE-[0-9]{4}-[0-9]{4,16}"/>
    </xs:restriction>
</xs:simpleType>

<xs:simpleType name="UUIDIdType">
    <xs:annotation>
        <xs:documentation xml:lang="en">
            <xhtml:p ism:ownerProducer="USA" ism:classification="U">
                One of 3 ID types for the VulnerableId and TargetedId element.
                An RFC 4122 compliant UUID.
            </xhtml:p>
        </xs:documentation>
    </xs:annotation>
    <xs:restriction base="xs:string">
        <xs:minLength value="1"/>
        <xs:maxLength value="255"/>
        <xs:pattern value="([a-zA-Z0-9\s:\.\_~])*/>
    </xs:restriction>
</xs:simpleType>

<xs:simpleType name="RelationshipType">
    <xs:annotation>
        <xs:documentation xml:lang="en">
            <xhtml:p ism:ownerProducer="USA" ism:classification="U">
                The content of the relationship attribute.
            </xhtml:p>
        </xs:documentation>
    </xs:annotation>

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        </xhtml:p>
      </xs:documentation>
    </xs:annotation>
    <xs:union memberTypes="anlys:RelationshipEnumerationType analys:RelationshipOtherType"/>
  </xs:simpleType>

  <xs:simpleType name="RelationshipEnumerationType">
    <xs:annotation>
      <xs:documentation xml:lang="en">
        <xhtml:p ism:ownerProducer="USA" ism:classification="U">
          The enumerated content of the relationship attribute and
          the currently defined common vocabulary for the types of relationships
          between analysis assertions.
        </xhtml:p>
      </xs:documentation>
    </xs:annotation>
    <xs:restriction base="xs:string">
      <xs:enumeration value="parent"/>
      <xs:enumeration value="child"/>
    </xs:restriction>
  </xs:simpleType>

  <xs:simpleType name="RelationshipOtherType">
    <xs:annotation>
      <xs:documentation xml:lang="en">
        <xhtml:p ism:ownerProducer="USA" ism:classification="U">
          The other content of the relationship attribute to handle
          currently undefinded relationship types.
          If there is a need to use "other:", it is highly recommended that a CR be created
          so that an agreed upon common vocabulary can be added to the
          enumerated list in RelationshipEnumerationType.
        </xhtml:p>
      </xs:documentation>
    </xs:annotation>
    <xs:restriction base="xs:string">
      <xs:minLength value="1"/>
      <xs:maxLength value="256"/>
      <xs:pattern value="other:\S{1,250}"/>
    </xs:restriction>
  </xs:simpleType>

  <xs:simpleType name="FilenameType">
    <xs:annotation>
      <xs:documentation xml:lang="en">
        <xhtml:p ism:ownerProducer="USA" ism:classification="U">
          The content of a filename attribute.
        </xhtml:p>
      </xs:documentation>
    </xs:annotation>
    <xs:restriction base="xs:string">
      <xs:minLength value="1"/>
      <xs:maxLength value="256"/>
    </xs:restriction>
  </xs:simpleType>

```

```
<xs:simpleType name="StringValueRestrictedType">
  <xs:annotation>
    <xs:documentation>
      <xhtml:p ism:ownerProducer="USA" ism:classification="U">
        The contents of type extended by StringValueType.
        Restricts max to 32k chars for cross domain reason.
      </xhtml:p>
    </xs:documentation>
  </xs:annotation>
  <xs:restriction base="xs:string">
    <xs:minLength value="1"/>
    <xs:maxLength value="32000"/>
  </xs:restriction>
</xs:simpleType>

<!--*****-->

<!--End Type Definitions      -->

<!--*****-->

<!--*****-->

<!--Start Group Definitions  -->

<!--*****-->

<xs:group name="ConfigGroup">
  <xs:choice>
    <xs:element name="StringConfig" type="StringValueType">
      <xs:annotation>
        <xs:documentation>
          <xhtml:p ism:classification="U" ism:ownerProducer="USA">Intended for textual
            configuration content encoded as a string. Perhaps the contents of a text
            file.
          </xhtml:p>
        </xs:documentation>
      </xs:annotation>
    </xs:element>
    <xs:element name="Base64BinaryConfig" type="Base64BinaryValueType">
      <xs:annotation>
        <xs:documentation>
          <xhtml:p ism:classification="U" ism:ownerProducer="USA">Intended for holding
            base64binary configuration values such as a file or other binary encoded
            data.
          </xhtml:p>
        </xs:documentation>
      </xs:annotation>
    </xs:element>
    <xs:element name="ReferenceConfig" type="ReferenceValueType">
      <xs:annotation>
```

```

        <xs:documentation>
            <xhtml:p ism:classification="U" ism:ownerProducer="USA">Used to reference
                configurations that are not embedded in the TDO but stored in a
                remote/external location.
            </xhtml:p>
        </xs:documentation>
    </xs:annotation>
</xs:element>
<xs:element name="StructuredConfig" 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 configurations).
            </xhtml:p>
        </xs:documentation>
    </xs:annotation>
</xs:element>
</xs:choice>
</xs:group>

<xs:group name="TestGroup">
    <xs:choice>
        <xs:element name="ReferenceTest" type="ReferenceValueType">
            <xs:annotation>
                <xs:documentation>
                    <xhtml:p ism:classification="U" ism:ownerProducer="USA">Used to reference
                        tests that are not embedded in the TDO but stored in a
                        remote/external location.
                    </xhtml:p>
                </xs:documentation>
            </xs:annotation>
        </xs:element>
        <xs:element name="StructuredTest" 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 a XML test).
                    </xhtml:p>
                </xs:documentation>
            </xs:annotation>
        </xs:element>
    </xs:choice>
</xs:group>

<!--*****-->

<!--End Group Definitions-->

<!--*****-->
```

```
<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-NOV</xhtml:td>
          <xhtml:td>2021-03-09</xhtml:td>
          <xhtml:td>ODNI/CIO/IAD</xhtml:td>
          <xhtml:td>Initial creation, reference the change history in the DES.</xhtml:td>
        </xhtml:tr>
      </xhtml:tbody>
    </xhtml:table>
  </xs:documentation>
</xs:annotation>
</xs:schema>
```