



Guide to Schemas for PM

PM Schema Guide

Version 2022-NOV

December 1, 2022

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Chapter 1 - Introduction

1.1 - Purpose

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

Chapter 2 - Schema Files

2.1 - PM.xsd

```
<xs:schema xmlns:xs="http://www.w3.org/2001/XMLSchema"
            xmlns:pm="urn:us:gov:ic:pm"
            xmlns:xhtml="http://www.w3.org/1999/xhtml-StopBrowserRendering"
            xmlns:pmsubject="urn:us:gov:ic:cvenum:pm:subject"
            xmlns:pmactor="urn:us:gov:ic:cvenum:pm:actor"
            xmlns:pmlocation="urn:us:gov:ic:cvenum:pm:location"
            targetNamespace="urn:us:gov:ic:pm"
            attributeFormDefault="qualified"
            elementFormDefault="qualified"
            xml:lang="en"
            ism:compliesWith="USGov USIC"
            ism:resourceElement="true"
            ism:createDate="2019-09-18"
            ism:DESVersion="202111"
            ism:ISMATCESVersion="202205"
            ism:classification="U"
            ism:ownerProducer="USA"
            version="202211">

    <xs:annotation>
        <xs:documentation>
            <xhtml:h1 ism:ownerProducer="USA" ism:classification="U">Intelligence Community
Technical Specification CVE Encoding Specification for Production Metrics
(PM.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:
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</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 CVE
Encoding Specification for Production Metrics (PM.CES). </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 CVE Encoding Specification (CES). Please see the document titled <xhtml:i>
            <xhtml:a href="../../Documents/PM/CesPMXml.pdf"> CVE Encoding Specification for
Production Metrics</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 CES may be overridden for
localized implementations. Therefore, permission to use, copy, modify and distribute
```

this XML Schema and the other parts of the CES 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 CES 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 PM.CES. </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">PM does not have a root

node. There are one or more peer elements that reference each of its CVE schema fragments.

</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 Community Chief Information Officer</xhtml:p>

</xs:documentation>

</xs:annotation>

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

<xs:import namespace="urn:us:gov:ic:cvenum:pm:subject"

schemaLocation="CVEGenerated/CVEnumPMSubject.xsd"/>

<xs:import namespace="urn:us:gov:ic:cvenum:pm:actor"

schemaLocation="CVEGenerated/CVEnumPMActor.xsd"/>

<xs:import namespace="urn:us:gov:ic:cvenum:pm:location"

schemaLocation="CVEGenerated/CVEnumPMLocation.xsd"/>

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

<xs:attribute name="CESVersion">

<xs:annotation>

<xs:documentation xml:lang="en">

<xhtml:p ism:ownerProducer="USA" ism:classification="U">The version number of the specification. This attribute is intended for processing systems to determine the appropriate versions of Schema, Schematron, and CVE values for validation and interpretation of an instance document. </xhtml:p>

<xhtml:p ism:ownerProducer="USA" ism:classification="U">If there are multiple of this attribute specified in an instance document, the first one in document order is the one that will apply to the entire document. Document order is

defined in <xhtml:a href="https://www.w3.org/TR/xpath-datamodel/#document-order">https://www.w3.org/TR/xpath-datamodel/#document-order</xhtml:a>

</xhtml:p>

</xs:documentation>

</xs:annotation>

<xs:simpleType>

<xs:restriction base="xs:string">

<xs:pattern value="[0-9]{6}(\.[0-9]{6})?(\-{1,23})?">

```

        </xs:restriction>
      </xs:simpleType>
    </xs:attribute>

    <!-- Simple Types -->

    <xs:simpleType name="productionMetricsSubjectType">
      <xs:annotation>
        <xs:documentation xml:lang="en">
          <xhtml:p ism:ownerProducer="USA" ism:classification="U">Reflects the production
metric subject.</xhtml:p>
          <xhtml:p ism:ownerProducer="USA" ism:classification="U">Contains the token that
represents a production metric subject. This is tied to the CVEEnumPMSubject CVE
which is managed by the Deputy Director of National Intelligence for
Intelligence Integration (DDII).</xhtml:p>
        </xs:documentation>
      </xs:annotation>
      <xs:restriction base="pmsubject:CVEEnumPMSubject"/>
    </xs:simpleType>

    <xs:simpleType name="productionMetricsActorType">
      <xs:annotation>
        <xs:documentation xml:lang="en">
          <xhtml:p ism:ownerProducer="USA" ism:classification="U">Reflects the production
metric actor.</xhtml:p>
          <xhtml:p ism:ownerProducer="USA" ism:classification="U">Contains the token that
represents a production metric actor (countries and non-state entities). This
is tied to the CVEEnumPMActor CVE which is managed by the Deputy Director of
National Intelligence for Intelligence Integration (DDII).</xhtml:p>
        </xs:documentation>
      </xs:annotation>
      <xs:restriction base="pmactor:CVEEnumPMActor"/>
    </xs:simpleType>

    <xs:simpleType name="productionMetricsLocationType">
      <xs:annotation>
        <xs:documentation xml:lang="en">
          <xhtml:p ism:ownerProducer="USA" ism:classification="U">Reflects the production metric location.</xhtml:p>
          <xhtml:p ism:ownerProducer="USA" ism:classification="U">Contains the token that represents
a production metric location (countries and orbits). This is tied to the CVEEnumPMLocation CVE
which is managed by the Deputy Director of National Intelligence for Intelligence Integration (DDII).</xhtml:p>
        </xs:documentation>
      </xs:annotation>
      <xs:restriction base="pmlocation:CVEEnumPMLocation"/>
    </xs:simpleType>

    <!-- Attributes -->

    <xs:attribute name="productionMetricsSubject" type="pm:productionMetricsSubjectType"/>
      <xs:annotation>
        <xs:documentation xml:lang="en">
          <xhtml:p ism:ownerProducer="USA" ism:classification="U">The range of permissible values for PM Subjects.</xhtml:p>
        </xs:documentation>
      </xs:annotation>
    </xs:attribute>
  </xs:element>
</xs:schema>
```

```
        </xs:documentation>
      </xs:annotation>

      <xs:attribute name="productionMetricsActor" type="pm:productionMetricsActorType"/>
      <xs:annotation>
        <xs:documentation xml:lang="en">
          <xhtml:p ism:ownerProducer="USA" ism:classification="U">This attribute represents the WHO of a Production Metrics Assertion.</xhtml:p>
        </xs:documentation>
      </xs:annotation>

      <xs:attribute name="productionMetricsLocation"
        type="pm:productionMetricsLocationType"/>
      <xs:annotation>
        <xs:documentation xml:lang="en">
          <xhtml:p ism:ownerProducer="USA" ism:classification="U">This attribute represents the WHERE of a Production Metrics Assertion.</xhtml:p>
        </xs:documentation>
      </xs:annotation>

      <!-- Attribute Groups -->

      <xs:attributeGroup name="ProductionMetricsAttributeGroup">
        <xs:annotation>
          <xs:documentation xml:lang="en">
            <xhtml:p ism:ownerProducer="USA" ism:classification="U">Collection of standard attributes for an object in PM.</xhtml:p>
          </xs:documentation>
        </xs:annotation>
        <xs:attribute ref="pm:productionMetricsSubject" use="required"/>
        <xs:attribute ref="pm:productionMetricsActor" use="required"/>
        <xs:attribute ref="pm:productionMetricsLocation" use="optional"/>
      </xs:attributeGroup>

      <!-- Elements -->

      <xs:element name="ProductionMetricsSubject" type="pm:productionMetricsSubjectType"/>
      <xs:annotation>
        <xs:documentation xml:lang="en">
          <xhtml:p ism:ownerProducer="USA" ism:classification="U">The range of permissible values for WHAT of a Production Metrics Assertion.</xhtml:p>
        </xs:documentation>
      </xs:annotation>
      <xs:element name="ProductionMetricsActor" type="pm:productionMetricsActorType"/>
      <xs:annotation>
        <xs:documentation xml:lang="en">
          <xhtml:p ism:ownerProducer="USA" ism:classification="U">The range of permissible values for WHO of a Production Metrics Assertion.</xhtml:p>
        </xs:documentation>
      </xs:annotation>

      <xs:element name="ProductionMetricsLocation"
        type="pm:productionMetricsLocationType"/>
      <xs:annotation>
        <xs:documentation xml:lang="en">
          <xhtml:p ism:ownerProducer="USA" ism:classification="U">The range of permissible values for WHERE of a Production Metrics Assertion.</xhtml:p>
        </xs:documentation>
      </xs:annotation>
```



```
<!-- Element Groups -->

<xs:group name="ProductionMetricsElementGroup">
  <xs:annotation>
    <xs:documentation xml:lang="en">
      <xhtml:p ism:ownerProducer="USA" ism:classification="U">Collection of standard elements for an object in PM.</xhtml:p>
    </xs:documentation>
  </xs:annotation>
  <xs:sequence>
    <xs:element ref="pm:ProductionMetricsSubject"/>
    <xs:element ref="pm:ProductionMetricsActor"/>
    <xs:element ref="pm:ProductionMetricsLocation"/>
  </xs:sequence>
</xs:group>

<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>
          <th>Version</th>
          <th>Date</th>
          <th>By</th>
          <th>Description</th>
        </xhtml:tr>
      </xhtml:thead>
      <xhtml:tbody>
        <xhtml:tr>
          <xhtml:td>2016-SEP</xhtml:td>
          <xhtml:td>2016-02-17</xhtml:td>
          <xhtml:td>ODNI/IC CIO/IAD</xhtml:td>
          <xhtml:td>The schema change logs will no longer be maintained as of the
2016-SEP release. The existing change logs will only serve as legacy
information. For changes to schema as of and after 2016-SEP, reference
the change history in the CES. </xhtml:td>
        </xhtml:tr>
        <xhtml:tr>
          <xhtml:td>2015-NOV</xhtml:td>
          <xhtml:td>12 NOV 2015</xhtml:td>
          <xhtml:td>ODNI/CIO</xhtml:td>
          <xhtml:td>Added PM Coverage</xhtml:td>
        </xhtml:tr>
        <xhtml:tr>
          <xhtml:td>2015-AUG</xhtml:td>
          <xhtml:td>13 Feb 2015</xhtml:td>
          <xhtml:td>ODNI/CIO</xhtml:td>
          <xhtml:td>Initial release of this module</xhtml:td>
        </xhtml:tr>
      </xhtml:tbody>
    </xhtml:table>
  </xs:documentation>
</xs:annotation>
```

```
        </xhtml:table>
      </xs:documentation>
    </xs:annotation>
  </xs:schema>
```