

# SV-10c : Systems Event-Trace Description

*This document defines the mapping between the DODAF SV-10c Systems Event-Trace Description and the ISO 10303 AP233 Systems Engineering information model. This mapping is defined for the purpose of enabling data exchange between computer applications supporting the ISO AP233 standard and those supporting the US DoDAF CADM format, specifically CADM 1.02.*

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## 1. Introduction

The SV-10c Systems Event-Trace Description in the DoDAF Volume II: Product Descriptions document defined SV-10c as follows.

The Systems Event-Trace Description provides a time-ordered examination of the system data elements exchanged between participating systems (external and internal), system functions, or human roles as a result of a particular scenario. Each event-trace diagram should have an accompanying description that defines the particular scenario or situation. SV-10c in the Systems View may reflect system-specific aspects or refinements of critical sequences of events described in the Operational View.

## 2. SV-10c Concepts

An Systems Event-Trace Description may be used to represent the following concepts.

**System, External, System Function or Human Role**

represented via the lifelines or swimlanes

**Event**

represented via the lifelines or swimlanes

## 3. SV-10c AP233 Mapping Issues

**Warning:**

At the time this document was written, AP233 was still undergoing development.

This section describes issues in mapping between SV-10c Systems Event-Trace Description and ISO AP233 as of the date of publication of this document. These issues may be addressed in future work by the DoDAF Working Group, the ISO AP233 development team or others.

1. See OV-6c Issues

## 4. Mapping SV-10c CADM XML to AP233 XML

This section defines the mapping from the CADM XML representation of SV-10c Systems Event-Trace Description into an ISO AP233 XML representation of that same data. The mapping is defined at the detailed level of the XML elements and attributes themselves as it is aimed at implementors. See AP233 for more information on the AP233 XML Schema and

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the AP233 EXPRESS schema.

Please review the rules for AP233 XML data production as they are applicable to all implementations.

### 4.1. SV-10c Systems Event-Trace Description

This section describes the mapping for the CADM SV-10c EVENT-TRACE-DESCRIPTION itself. It is represented by the EV\_TRACE\_DESCR XML element.

The SV-10c Systems Event-Trace Description is mapped in the same manner as the OV-6c Operational Event-Trace Description as far as the core related concepts are concerned. Only the minor differences are documented here.

CADM XML Concept(s)	AP233 XML Element(s) or Attributes(s)
EV_TRC_DESCR / EV_TR_DE_USE_TY_CD	The classification of the Document representing the System Event Trace Description when the following value. <ul style="list-style-type: none"><li>02 = SYSTEMS EVENT-TRACE-DESCRIPTION classified as <b>Systems_event_trace_description</b></li></ul> Otherwise, the concept is not a System Event Trace Description.

**Table 1: EVENT-TRACE-DESCRIPTION (EV\_TRC\_DESCR element) Mapping**

## 5. Example SV-10c CADM XML Data

This section contains example SV-10c CADM XML data.

### 5.1. Example EV\_TRACE\_DESCR

```
<EV_TRACE_DESCR>
  <EV_TRACE_DESCR_DOC_ID>112200000</EV_TRACE_DESCR_DOC_ID>
  <EV_TR_DE_USE_TY_CD>02</EV_TR_DE_USE_TY_CD>
</EV_TRACE_DESCR>
<DOC>
  <DOC_ID>112200000</DOC_ID>
  <DOC_NM>SAMPLE SYSTEM EVENT TRACE DESCRIPTION {SV-10c}</DOC_NM>
  <CSC_ID>20000001</CSC_ID>
  <TIME_FRAME_PRD_ID>20102341</TIME_FRAME_PRD_ID>
  <DOC_APP_CALDT>20031126</DOC_APP_CALDT>
  <DOC_ARCHPROD_TY_CD>11</DOC_ARCHPROD_TY_CD>
  <DOC_CRTN_CALDT>20031203</DOC_CRTN_CALDT>
  <DOC_CAT_CD>J</DOC_CAT_CD>
  <DOC_VER_ID>VERSION 1.0</DOC_VER_ID>
</DOC>
```