

# Working Document

## Files and Formats for ViSEvAL Tool

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**Version:** 1.0  
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## Required Files and Formats for ViSEvAL Tool

### 1 Introduction

This document describes the required files and formats used for ViSEvAL tool developed by INRIA. The data transmitted from a module to another can be translated into an xml file to allow offline tests. This document describes each tag and attribute in this xml schema.

### 2 Required Files:

#### 2.1 Timestamp File:

Example Time stamp:

```
<?xml version="1.0" encoding="UTF-8"?>
<Cofriend>
<Timestamps nbFrames="34505">
<frame id="0" timestamp="1226415239" msec="460"/>
<frame id="1" timestamp="1226415239" msec="580"/>
<frame id="2" timestamp="1226415239" msec="660"/>
<frame id="3" timestamp="1226415239" msec="780"/>
<frame id="4" timestamp="1226415239" msec="860"/>
<frame id="5" timestamp="1226415239" msec="980"/>
<frame id="6" timestamp="1226415240" msec="60"/>
<frame id="7" timestamp="1226415240" msec="180"/>
<frame id="8" timestamp="1226415240" msec="260"/>
</Cofriend>
```

## 2.2 XML Camera File:

## 2.3 Ground Truth File:

## 2.4 XSD File:

## 2.5 Fusion XML file:

Example xml2:

```
<?xml version="1.0" encoding="UTF-8"?>
<Cofriend version="2.00">
<MobFrame frameID="3541" timeYear="2008" timeMonth="11" timeDay="11"
timeHour="15" timeMin="29" timeSec="31" timeMs="960" nbMobiles="10">
<Mobile mobileID="1" confidence="0.82" type="VEHICLE:98"
subType="GROUND_POWER_UNIT:55-TRUCK:25-CONTAINER:12">
<TimeStart frameID="42" timeYear="2008" timeMonth="11" timeDay="11"
timeHour="14" timeMin="54" timeSec="29" timeMs="840"/>
<Track numParent="1">
<ParentMobile mobileID="1" frameID="42" timeYear="2008" timeMonth="11"
timeDay="11" timeHour="15" timeMin="29" timeSec="31" timeMs="40"
confidence="0.00"/>
</Track>
<Blob>
<CameraViews>
<Info2D camID="3" xCenter="604.00" yCenter="296.00" xCog="604.50"
yCog="296.00" width="80.00" length="212.00" orientation="0.00"
nbMovPix="5896" xSpeed="0.00" ySpeed="-0.00" frameID="21309"
timeYear="2008" timeMonth="11" timeDay="11" timeHour="15" timeMin="29"
timeSec="31" timeMs="640"/>
<Info2D camID="4" xCenter="501.00" yCenter="227.00" xCog="501.00"
yCog="227.00" width="112.00" length="190.00" orientation="0.00"
nbMovPix="1271" xSpeed="0.00" ySpeed="-0.00" frameID="21296"
timeYear="2008" timeMonth="11" timeDay="11" timeHour="15" timeMin="29"
timeSec="31" timeMs="760"/>
<Info2D camID="5" xCenter="556.00" yCenter="175.00" xCog="556.00"
yCog="175.50" width="238.00" length="216.00" orientation="0.00"
nbMovPix="2046" xSpeed="0.00" ySpeed="-0.00" frameID="21286"
timeYear="2008" timeMonth="11" timeDay="11" timeHour="15" timeMin="29"
timeSec="31" timeMs="850"/>
<Info2D camID="7" xCenter="228.00" yCenter="312.00" xCog="228.00"
yCog="312.00" width="96.00" length="166.00" orientation="0.00"
nbMovPix="2798" xSpeed="0.00" ySpeed="-0.00" frameID="21280"
timeYear="2008" timeMonth="11" timeDay="11" timeHour="15" timeMin="29"
timeSec="31" timeMs="590"/>
</CameraViews>
```

```

<Info3D x="2.95" y="7.45" z="0.00" w3D="1.32" h3D="1.57" l3D="7.42"
orientation="90.00" xSpeed="0.00" ySpeed="-0.00" zSpeed="0.00"/>
<Uncertainty3D m11="320.63" m12="0.00" m13="0.00" m21="0.00"
m22="320.63" m23="0.00" m31="0.00" m32="0.00" m33="0.00"/>
<Properties/>
</Blob>
</Mobile>
<Mobile mobileID="44" confidence="0.58" type="AIRCRAFT:77-VEHICLE:22"
subType="AIRCRAFT:100|TRUCK:48-PASSENGER_BOARDING_BRIDGE:19-
BULK_LOADER:16">
<TimeStart frameID="749" timeYear="2008" timeMonth="11" timeDay="11"
timeHour="15" timeMin="0" timeSec="45" timeMs="480"/>
<Track numParent="1">
<ParentMobile mobileID="44" frameID="749" timeYear="2008" timeMonth="11"
timeDay="11" timeHour="15" timeMin="29" timeSec="31" timeMs="40"
confidence="0.00"/>
</Track>
<Blob>
<CameraViews>
<Info2D camID="2" xCenter="587.00" yCenter="408.00" xCog="587.98"
yCog="408.50" width="156.00" length="288.00" orientation="0.00"
nbMovPix="51" xSpeed="0.00" ySpeed="-0.00" frameID="21321"
timeYear="2008" timeMonth="11" timeDay="11" timeHour="15" timeMin="29"
timeSec="31" timeMs="960"/>
<Info2D camID="3" xCenter="293.00" yCenter="396.00" xCog="293.50"
yCog="396.00" width="170.00" length="472.00" orientation="0.00"
nbMovPix="97" xSpeed="0.00" ySpeed="-0.00" frameID="21309"
timeYear="2008" timeMonth="11" timeDay="11" timeHour="15" timeMin="29"
timeSec="31" timeMs="640"/>
<Info2D camID="4" xCenter="252.00" yCenter="400.00" xCog="252.50"
yCog="400.00" width="228.00" length="456.00" orientation="0.00"
nbMovPix="55" xSpeed="0.00" ySpeed="-0.00" frameID="21296"
timeYear="2008" timeMonth="11" timeDay="11" timeHour="15" timeMin="29"
timeSec="31" timeMs="760"/>
<Info2D camID="5" xCenter="448.00" yCenter="456.00" xCog="448.50"
yCog="456.50" width="164.00" length="258.00" orientation="0.00"
nbMovPix="27" xSpeed="0.00" ySpeed="-0.00" frameID="21286"
timeYear="2008" timeMonth="11" timeDay="11" timeHour="15" timeMin="29"
timeSec="31" timeMs="850"/>
<Info2D camID="7" xCenter="566.00" yCenter="418.00" xCog="566.50"
yCog="418.50" width="186.00" length="250.00" orientation="0.00"
nbMovPix="632" xSpeed="0.00" ySpeed="-0.00" frameID="21280"
timeYear="2008" timeMonth="11" timeDay="11" timeHour="15" timeMin="29"
timeSec="31" timeMs="590"/>
<Info2D camID="8" xCenter="343.00" yCenter="479.00" xCog="343.17"
yCog="479.52" width="190.00" length="424.00" orientation="0.00"
nbMovPix="368" xSpeed="0.00" ySpeed="-0.00" frameID="21285"
timeYear="2008" timeMonth="11" timeDay="11" timeHour="15" timeMin="29"
timeSec="32" timeMs="40"/>
</CameraViews>
<Info3D x="-3.06" y="-14.90" z="0.00" w3D="12.37" h3D="5.72" l3D="17.66"
orientation="255.00" xSpeed="-0.01" ySpeed="-0.01" zSpeed="0.00"/>
<Uncertainty3D m11="320.63" m12="0.00" m13="0.00" m21="0.00"
m22="320.63" m23="0.00" m31="0.00" m32="0.00" m33="0.00"/>
<Properties/>
</Blob>
</Mobile>
</MobFrame>
</Cofriend>

```

## 2.6 Event XML file:

Example xml13:

```
<?xml version="1.0" encoding="UTF-8"?>
<Cofriend version="3.00">
<SUVideoFrame frameID="463" timeYear="2008" timeMonth="11" timeDay="11"
timeHour="14" timeMin="59" timeSec="50" timeMs="840">
<ListMobileObjects>
<Mobile mobileID="5" confidence="0.66" type="VEHICLE:74-OTHER:25"
subType="BULK_LOADER:45-GROUND_POWER_UNIT:28-TRANSPORTER:16|UNKNOWN:100">
<TimeStart frameID="63" timeYear="2008" timeMonth="11" timeDay="11"
timeHour="14" timeMin="54" timeSec="54" timeMs="160"/>
<Track numParent="1">
<ParentMobile mobileID="5" frameID="63" timeYear="2008" timeMonth="11"
timeDay="11" timeHour="14" timeMin="59" timeSec="50" timeMs="160"
confidence="0.00"/>
</Track>
<Blob>
<CameraViews>
<Info2D camID="3" xCenter="545.00" yCenter="300.00" xCog="545.38"
yCog="300.21" width="36.00" length="92.00" orientation="0.00"
nbMovPix="1846" xSpeed="0.00" ySpeed="-0.00" frameID="3510"
timeYear="2008" timeMonth="11" timeDay="11" timeHour="14" timeMin="59"
timeSec="50" timeMs="760"/>
<Info2D camID="4" xCenter="505.00" yCenter="212.00" xCog="505.50"
yCog="212.00" width="98.00" length="168.00" orientation="0.00"
nbMovPix="447" xSpeed="0.00" ySpeed="-0.00" frameID="3494"
timeYear="2008" timeMonth="11" timeDay="11" timeHour="14" timeMin="59"
timeSec="50" timeMs="660"/>
<Info2D camID="5" xCenter="278.00" yCenter="288.00" xCog="278.50"
yCog="288.50" width="568.00" length="552.00" orientation="0.00"
nbMovPix="50203" xSpeed="0.00" ySpeed="-0.00" frameID="3480"
timeYear="2008" timeMonth="11" timeDay="11" timeHour="14" timeMin="59"
timeSec="50" timeMs="640"/>
</CameraViews>
<Info3D x="1.17" y="5.80" z="0.00" w3D="1.95" h3D="0.00" l3D="4.15"
orientation="82.00" xSpeed="0.00" ySpeed="0.01" zSpeed="0.00"/>
<Uncertainty3D m11="421.09" m12="0.00" m13="0.00" m21="0.00"
m22="421.09" m23="0.00" m31="0.00" m32="0.00" m33="0.00"/>
<Properties/>
</Blob>
</Mobile>
<Mobile mobileID="7" confidence="0.75" type="VEHICLE:62-OTHER:37"
subType="BULK_LOADER:44-GROUND_POWER_UNIT:40-TRANSPORTER:14|UNKNOWN:100">
<TimeStart frameID="105" timeYear="2008" timeMonth="11" timeDay="11"
timeHour="14" timeMin="55" timeSec="22" timeMs="160"/>
<Track numParent="1">
<ParentMobile mobileID="7" frameID="105" timeYear="2008" timeMonth="11"
timeDay="11" timeHour="14" timeMin="59" timeSec="50" timeMs="160"
confidence="0.00"/>
</Track>
<Blob>
<CameraViews>
<Info2D camID="3" xCenter="658.00" yCenter="295.00" xCog="658.00"
yCog="295.50" width="38.00" length="88.00" orientation="0.00"
nbMovPix="1515" xSpeed="0.00" ySpeed="-0.00" frameID="3510"
timeYear="2008" timeMonth="11" timeDay="11" timeHour="14" timeMin="59"
timeSec="50" timeMs="760"/>
<Info2D camID="4" xCenter="586.00" yCenter="180.00" xCog="586.00"
```

```

yCog="180.00" width="42.00" length="28.00" orientation="0.00"
nbMovPix="253" xSpeed="0.00" ySpeed="-0.00" frameID="3494"
timeYear="2008" timeMonth="11" timeDay="11" timeHour="14" timeMin="59"
timeSec="50" timeMs="660"/>
</CameraViews>
<Info3D x="0.51" y="10.52" z="0.00" w3D="0.50" h3D="-0.96" l3D="0.89"
orientation="0.00" xSpeed="0.00" ySpeed="0.00" zSpeed="0.00"/>
<Uncertainty3D m11="430.76" m12="0.00" m13="0.00" m21="0.00"
m22="430.76" m23="0.00" m31="0.00" m32="0.00" m33="0.00"/>
<Properties/>
</Blob>
</Mobile>
<Mobile mobileID="28" confidence="0.53" type="VEHICLE:61-OTHER:38"
subType="TANKER:35-LOADER:32-TRANSPORTER:32|UNKNOWN:100">
<TimeStart frameID="416" timeYear="2008" timeMonth="11" timeDay="11"
timeHour="14" timeMin="59" timeSec="18" timeMs="960"/>
<Track numParent="1">
<ParentMobile mobileID="28" frameID="416" timeYear="2008" timeMonth="11"
timeDay="11" timeHour="14" timeMin="59" timeSec="50" timeMs="160"
confidence="0.00"/>
</Track>
<Blob>
<CameraViews>
<Info2D camID="2" xCenter="380.00" yCenter="535.00" xCog="380.00"
yCog="535.50" width="14.00" length="44.00" orientation="0.00"
nbMovPix="142" xSpeed="0.00" ySpeed="-0.00" frameID="3513"
timeYear="2008" timeMonth="11" timeDay="11" timeHour="14" timeMin="59"
timeSec="50" timeMs="840"/>
<Info2D camID="4" xCenter="281.00" yCenter="482.00" xCog="281.50"
yCog="482.50" width="14.00" length="40.00" orientation="0.00"
nbMovPix="22" xSpeed="0.00" ySpeed="-0.00" frameID="3494"
timeYear="2008" timeMonth="11" timeDay="11" timeHour="14" timeMin="59"
timeSec="50" timeMs="660"/>
</CameraViews>
<Info3D x="626.01" y="950.29" z="0.00" w3D="64.31" h3D="21.67"
l3D="65.24" orientation="151.00" xSpeed="4.33" ySpeed="20.96"
zSpeed="0.00"/>
<Uncertainty3D m11="398.77" m12="0.00" m13="0.00" m21="0.00"
m22="398.77" m23="0.00" m31="0.00" m32="0.00" m33="0.00"/>
<Properties/>
</Blob>
</Mobile>
<Mobile mobileID="29" confidence="0.82" type="OTHER:85-VEHICLE:14"
subType="UNKNOWN:100|GROUND_POWER_UNIT:74-BULK_LOADER:14-TRANSPORTER:6">
<TimeStart frameID="421" timeYear="2008" timeMonth="11" timeDay="11"
timeHour="14" timeMin="59" timeSec="22" timeMs="760"/>
<Track numParent="1">
<ParentMobile mobileID="29" frameID="421" timeYear="2008" timeMonth="11"
timeDay="11" timeHour="14" timeMin="59" timeSec="50" timeMs="160"
confidence="0.00"/>
</Track>
<Blob>
<CameraViews>
<Info2D camID="3" xCenter="486.00" yCenter="316.00" xCog="486.90"
yCog="316.02" width="40.00" length="14.00" orientation="0.00"
nbMovPix="61" xSpeed="0.00" ySpeed="-0.00" frameID="3510"
timeYear="2008" timeMonth="11" timeDay="11" timeHour="14" timeMin="59"
timeSec="50" timeMs="760"/>
<Info2D camID="4" xCenter="391.00" yCenter="274.00" xCog="391.50"

```

```

yCog="274.77" width="24.00" length="14.00" orientation="0.00"
nbMovPix="41" xSpeed="0.00" ySpeed="-0.00" frameID="3494"
timeYear="2008" timeMonth="11" timeDay="11" timeHour="14" timeMin="59"
timeSec="50" timeMs="660"/>
</CameraViews>
<Info3D x="3.13" y="3.08" z="0.00" w3D="0.42" h3D="1.55" l3D="-0.03"
orientation="0.00" xSpeed="0.00" ySpeed="0.00" zSpeed="0.00"/>
<Uncertainty3D m11="427.33" m12="0.00" m13="0.00" m21="0.00"
m22="427.33" m23="0.00" m31="0.00" m32="0.00" m33="0.00"/>
<Properties/>
</Blob>
</Mobile>
<Mobile mobileID="30" confidence="0.58" type="VEHICLE:75-OTHER:24"
subType="TANKER:52-LOADER:24-TRANSPORTER:23|UNKNOWN:100">
<TimeStart frameID="434" timeYear="2008" timeMonth="11" timeDay="11"
timeHour="14" timeMin="59" timeSec="30" timeMs="960"/>
<Track numParent="1">
<ParentMobile mobileID="30" frameID="434" timeYear="2008" timeMonth="11"
timeDay="11" timeHour="14" timeMin="59" timeSec="50" timeMs="160"
confidence="0.00"/>
</Track>
<Blob>
<CameraViews>
<Info2D camID="7" xCenter="62.00" yCenter="572.00" xCog="62.78"
yCog="572.05" width="14.00" length="54.00" orientation="0.00"
nbMovPix="518" xSpeed="0.00" ySpeed="-0.00" frameID="3480"
timeYear="2008" timeMonth="11" timeDay="11" timeHour="14" timeMin="59"
timeSec="50" timeMs="900"/>
<Info2D camID="8" xCenter="51.00" yCenter="538.00" xCog="51.65"
yCog="538.95" width="30.00" length="80.00" orientation="0.00"
nbMovPix="858" xSpeed="0.00" ySpeed="-0.00" frameID="3486"
timeYear="2008" timeMonth="11" timeDay="11" timeHour="14" timeMin="59"
timeSec="50" timeMs="870"/>
</CameraViews>
<Info3D x="181.56" y="-107.63" z="0.00" w3D="17.97" h3D="6.36"
l3D="17.98" orientation="0.00" xSpeed="0.00" ySpeed="5.08" zSpeed="0.00"/>
<Uncertainty3D m11="430.26" m12="0.00" m13="0.00" m21="0.00"
m22="430.26" m23="0.00" m31="0.00" m32="0.00" m33="0.00"/>
<Properties/>
</Blob>
</Mobile>
</ListMobileObjects>
<ListActivities>
<Activity ID="419" name="GPU_Positioning" confidence="1.00"
type="COMPOSITE_EVENT" AType="VERYURGENT" AText="" status=""
hypothesisID="1">
<TimeStart frameID="463" timeYear="2008" timeMonth="11" timeDay="11"
timeHour="14" timeMin="59" timeSec="50" timeMs="840"
uncertainty="1097319072"/>
<TimeEnd frameID="463" timeYear="2008" timeMonth="11" timeDay="11"
timeHour="14" timeMin="59" timeSec="50" timeMs="840" uncertainty="9"/>
<ListActivityPhysicalObjects>
<ActivityPhysicalObject type="OBJECT" ID="5" name="v1"
dynamicObjectID="0"/>
<ActivityPhysicalObject type="STATIC_ZONE" ID="14" name="GPU_Zone"
dynamicObjectID="0"/>
</ListActivityPhysicalObjects>
<ListSubActivities>
<SubActivity ID="418" name="Vehicle_Positioning"/>

```

## Files & Formats for ViSEvAL Tool



```
</ListSubActivities>  
<Properties/>  
<ListActivityCameraCtrl/>  
</Activity>  
</ListActivities>  
</SUVideoFrame>  
</Cofriend>
```