OSVP Clip documentation

Introduction

The OSVP Clip (clip) is a collection of metadata parameters sampled over a specified duration. Each parameter is either:

- static: the parameter has at constant value over the duration of the clip
- dynamic: the parameter is sampled at regular intervals over the duration of the clip

Each parameter is identified by a unique name. It also has a general description as well as a specific set of constraints.

Parameters

`active_sensor_physical_dimensions`

Description

Height and width of the active area of the camera sensor

Units

micron

Sampling

Static

Constraints

The height and width shall be each be an integer in the range [0..2,147,483,647].

`anamorphic_squeeze`

Description

Nominal ratio of height to width of the image of an axis-aligned square captured by the camera sensor. It can be used to de-squeeze images but is not however an exact number over the entire captured area due to a lens' intrinsic analog nature.

Units

0.01 unit

Sampling

Static

Constraints

The parameter shall be a integer in the range (0..2,147,483,647].

`capture_fps`

Description

Capture frame frate of the camera

Units

hertz

Sampling

Static

Constraints

The parameter shall be a rational number whose numerator and denominator are in the range (0..2,147,483,647].

`duration`

Description

Duration of the clip

Units

second

Sampling

Static

Constraints

The parameter shall be a rational number whose numerator and denominator are in the range (0..2,147,483,647].

`entrance_pupil_position`

Description

Entrance pupil diameter of the lens

Units

millimeter

Sampling

Regular

Constraints

The parameter shall be a rational number whose numerator and denominator are in the range (0..2,147,483,647].

`fdl_link`

Description

Unique identifier of the FDL used by the camera.

Units

n/a

Sampling

Static

Constraints

The parameter shall be a UUID URN as specified in IETF RFC 4122. Onlyu lowercase characters shall be used. Example: `urn:uuid:f81d4fae-7dec-11d0-a765-00a0c91e6bf6`

`focal_length`

Description

Focal length of the lens

Units

millimeter

Sampling

Regular

Constraints

The parameter shall be a integer in the range (0..2,147,483,647].

`focal_position`

Description

Focus distance/position of the lens

Units

millimeter

Sampling

Regular

Constraints

The parameter shall be a integer in the range (0..2,147,483,647].

`iso`

Description

Arithmetic ISO scale as defined in ISO 12232

Units

unit

Sampling

Static

Constraints

The parameter shall be a integer in the range (0..2,147,483,647].

`lens_serial_number`

Description

Unique identifier of the lens

Units

n/a

Sampling

Static

Constraints

The parameter shall be a Unicode string betwee 0 and 1023 codepoints.

`t_number`

Description

The linear t-number of the lens

Units

0.001 unit

Sampling

Regular

Constraints

The parameter shall be a integer in the range (0..2,147,483,647].

`white_balance`

Description

White balance of the camera.

Units

kelvin

Sampling

Static

Constraints

The parameter shall be a integer in the range (0..2,147,483,647].

JSON Schema

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"$schema": "https://json-schema.org/draft/2020-12/schema",
"type": "object",
"properties": {},
"active_sensor_physical_dimensions": {
  "type": "object",
  "additionalProperties": false,
  "required": [
    "height",
    "width"
  ],
  "properties": {
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      "type": "integer",
      "minimum": 0,
      "maximum": 2147483647
    },
    "width": {
```

```
      "type": "integer",
      "minimum": 0,
      "maximum": 2147483647
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  }
},
"anamorphic_squeeze": {
  "type": "integer",
  "minimum": 1,
  "maximum": 2147483647
},
"capture_fps": {
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  "regex": "[0-9]{1,10}/[0-9]{1,10}"
},
"duration": {
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  "regex": "[0-9]{1,10}/[0-9]{1,10}"
},
"entrance_pupil_position": {
  "type": "array",
  "items": {
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    "regex": "[0-9]{1,10}/[0-9]{1,10}"
  }
},
"fdl_link": {
  "type": "string",
  "pattern": "^urn:uuid:[0-9a-f]{8}-[0-9a-f]{4}-[0-9a-f]{4}-[0-9a-f]{4}-[0-9a-f]{12}$"
},
"focal_length": {
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    "minimum": 1,
    "maximum": 2147483647
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},
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  "type": "array",
  "items": {
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    "minimum": 1,
    "maximum": 2147483647
  }
},
"iso": {
  "type": "integer",
  "minimum": 1,
  "maximum": 2147483647
},
"lens_serial_number": {
  "type": "string",
  "minLength": 1,
  "maxLength": 1023
},
"t_number": {
```

```
    "type": "array",
    "items": {
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      "minimum": 1,
      "maximum": 2147483647
    }
  },
  "white_balance": {
    "type": "integer",
    "minimum": 1,
    "maximum": 2147483647
  }
}
```

Reader coverage

The following table indicates the camera parameters supported by each of the readers.

Reader	active_sensor_physical_dimensions	anamorphic_squeeze	capture_fps	duration
RED	+	+	+	+
ARRI	+	+	+	+
Venice	+	+	+	+