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| Title | **Syntax and semantics of common classes** |
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| Re: |  |
| Abstract | This contribution illustrates the basic JSON schema structure for representing the common classes in a standardized data format. The semantics and examples of the common class types and attributes are presented. |
| Purpose | To start discussion on purpose of the standard |
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# Introduction

This contribution illustrates the basic JSON schema structure for representing the common classes in a standardized data format. The semantics and examples of the common class types and attributes are presented.

# Data formats for common classes

## integer3DVector type

### General

This sub-clause specifies a data type, which describes an integer 3D vector.

### Syntax

|  |
| --- |
| "integer3DVectorType" : {  "type": "array",  "items": {  "type": "integer"  },  "minItems": 3,  "maxItems": 3  }, |

### Semantics

Semantics of the integer3DVectorType:

| Name | Definition |
| --- | --- |
| value | Describes a 3D vector made up of integers. The value has three values in order: x, y, z |

### Examples

In this example, integer3DVectorType has x, y, and z values of 5, -2, and 3, respectively.

|  |
| --- |
| "integer3DvectorType": {  "value": [5, -2, 3]  } |

## float4DVector type

### General

This sub-clause specifies a data type, which describes a float 4D vector.

### Syntax

|  |
| --- |
| "float4DVector": {  "type": "array",  "items": {  "type": "number"  },  "minItems": 4,  "maxItems": 4  }, |

### Semantics

Semantics of the float4DVectorType:

| Name | Definition |
| --- | --- |
| value | Describes a 4D vector made up of floating-point numbers. The value has four values in order: x, y, z, w |

### Examples

In this example, float4DVectorType has x, y, z, and w values of 30.3, -20.5, 10.0, and 2.0, respectively.

|  |
| --- |
| "integer3DvectorType": {  "value": [30.3, -20.5, 10.0, 2.0]  } |

# Conclusions

We recommend accepting the proposed corrections for the existing common classes.