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| Project | **Specification of Sensor Interface for Cyber and Physical World**<<https://sagroups.ieee.org/2888/> **>** |
| Title | **Semantics correction of basic structures for sensor data** |
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| Re: |  |
| Abstract | This contribution proposes the correction of semantics for representing basic structures for sensor information in the physical world in a standardized data format.  |
| Purpose | To start discussion on purpose of the standard |
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#  Basic structures for sensor data

## Root element

### Semantics

The semantics of the root element

| *Name* | *Definition* |
| --- | --- |
| sensedInfoBaseAttributes | Describes a group of attributes for the sensor data. |
| timeStamp | Provides information about the time the sensor data was acquired. |
| id | Uniquely identifies individual sensor data. |
| sensorIdRef | References the sensor that generated the information contained in this particular sensor data. |
| linkedlist | Describes a multi-sensor structure organized into sensor groups in such a way that each record contains a reference to the ID of the next sensor. |
| groupID | Identifies a group multi-sensor structure to which this specific sensor belongs.  |
| activate | Describes whether the sensor is activated. A value of "true" means the sensor is active and "false" means the sensor is disabled. In binary representation, a value of "1" means the sensor is active, and "0" means the sensor is disabled. |
| priority | Describes the priority of sensor data with respect to other sensor data that share the same point in time when sensor data is adapted. A value of 1 represents the highest priority, and a larger value represents the lower priority. If there is more than one sensor data of the same priority, the order of processing can be determined by the adaptation engine itself.EXAMPLE  The adaptation engine from the physical world to the cyber world processes individual sensor data in a group of sensors in descending order of priority due to their limited capabilities. This means that sensor data with low priority may be lost. |