

**OCF “Essen” – Should oic.r.audio require "volume" and "mute" in every UPDATE request – Data Model WG CR 2922**

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## 1.1 Audio Controls

### 1.1.1 Introduction

This Resource defines basic audio control functions.  
 The Property "volume" is an integer containing a percentage [0,100].  
 A volume of 0 (zero) means no sound produced.  
 A volume of 100 means maximum sound production.  
 The Property "mute" is implemented as a boolean.  
 A mute value of true means that the device is muted (no audio).  
 A mute value of false means that the device is not muted (audio).

### 1.1.2 Example URI

/AudioResURI

### 1.1.3 Resource type

The Resource Type is defined as: "oic.r.audio".

### 1.1.4 OpenAPI 2.0 definition

```
{
  "swagger": "2.0",
  "info": {
    "title": "Audio Controls",
    "version": "20190620",
    "license": {
      "name": "OCF Data Model License",
      "url":
"https://github.com/openconnectivityfoundation/core/blob/e28a9e0a92e17042ba3e83661e4c0fbce8bdc4b
a/LICENSE.md",
      "x-copyright": "copyright 2016-2017, 2019 Open Connectivity Foundation, Inc. All rights
reserved."
    },
    "termsOfService": "https://openconnectivityfoundation.github.io/core/DISCLAIMER.md"
  },
  "schemes": ["http"],
  "consumes": ["application/json"],
  "produces": ["application/json"],
  "paths": {
    "/AudioResURI" : {
      "get": {
        "description": "This Resource defines basic audio control functions.\n\nThe Property
\n\"volume\" is an integer containing a percentage [0,100].\n\nA volume of 0 (zero) means no sound
produced.\n\nA volume of 100 means maximum sound production.\n\nThe Property \"mute\" is implemented
as a boolean.\n\nA mute value of true means that the device is muted (no audio).\n\nA mute value of
false means that the device is not muted (audio).",
        "parameters": [
          { "$ref": "#/parameters/interface" }
        ],
        "responses": {
          "200": {
            "description": "",
            "x-example":
{
              "rt": ["oic.r.audio"],
              "if": ["oic.if.a", "oic.if.baseline"],
              "volume": 50,
              "mute": false
            },
            "schema": { "$ref": "#/definitions/Audio" }
          }
        }
      },
      "post": {
        "description": "",
        "parameters": [
          { "$ref": "#/parameters/interface" },

```

```

    {
      "name": "body",
      "in": "body",
      "required": true,
      "schema": { "$ref": "#/definitions/Audio-update" },
      "x-example":
        {
          "volume": 75
        }
    }
  ],
  "responses": {
    "200": {
      "description": "",
      "x-example":
        {
          "volume": 75,
          "mute": false
        },
      "schema": { "$ref": "#/definitions/Audio" }
    }
  }
},
"parameters": {
  "interface": {
    "in": "query",
    "name": "if",
    "type": "string",
    "enum": ["oic.if.a", "oic.if.baseline"]
  }
},
"definitions": {
  "Audio": {
    "properties": {
      "rt": {
        "description": "The Resource Type.",
        "items": {
          "enum": ["oic.r.audio"],
          "maxLength": 64,
          "type": "string"
        },
        "minItems": 1,
        "uniqueItems": true,
        "readOnly": true,
        "type": "array"
      },
      "mute": {
        "description": "The mute setting of an audio rendering device.",
        "type": "boolean"
      },
      "volume": {
        "description": "The volume setting of an audio rendering device.",
        "maximum": 100,
        "minimum": 0,
        "type": "integer"
      }
    },
    "n": {
      "$ref":
        "https://openconnectivityfoundation.github.io/core/schemas/oic.common.properties.core-
        schema.json#/definitions/n"
    },
    "id": {
      "$ref":
        "https://openconnectivityfoundation.github.io/core/schemas/oic.common.properties.core-
        schema.json#/definitions/id"
    },
    "range": {
      "$ref":
        "https://openconnectivityfoundation.github.io/IoTDataModels/schemas/oic.baseresource.properties-

```

```

schema.json#/definitions/range_integer"
  },
  "step": {
    "$ref":
"https://openconnectivityfoundation.github.io/IoTDataModels/schemas/oic.baseresource.properties-
schema.json#/definitions/step_integer"
  },
  "if": {
    "description": "The OCF Interface set supported by this Resource.",
    "items": {
      "enum": [
        "oic.if.a",
        "oic.if.baseline"
      ],
      "type": "string"
    },
    "minItems": 2,
    "uniqueItems": true,
    "readOnly": true,
    "type": "array"
  }
},
"type" : "object",
"required": ["volume", "mute"]
},
"Audio-update" : {
  "properties": {
    "mute": {
      "description": "The mute setting of an audio rendering device.",
      "type": "boolean"
    },
    "volume": {
      "description": "The volume setting of an audio rendering device.",
      "maximum": 100,
      "minimum": 0,
      "type": "integer"
    }
  }
}
}
}
}

```

### 1.1.5 Property definition

<Table Reference Here> defines the Properties that are part of the "oic.r.audio" Resource Type.

**Table 1 – The Property definitions of the Resource with type "rt" = "oic.r.audio".**

Property name	Value type	Mandatory	Access mode	Description
mute	boolean		Read Write	The mute setting of an audio rendering device.
volume	integer		Read Write	The volume setting of an audio rendering device.
step	multiple types: see schema	No	Read Write	
mute	boolean	Yes	Read Write	The mute setting of an audio rendering device.

range	multiple types: see schema	No	Read Write	
id	multiple types: see schema	No	Read Write	
n	multiple types: see schema	No	Read Write	
volume	integer	Yes	Read Write	The volume setting of an audio rendering device.
if	array: see schema	No	Read Only	The OCF Interface set supported by this Resource.
rt	array: see schema	No	Read Only	The Resource Type.

### 1.1.6 CRUDN behaviour

<Table Reference Here> defines the CRUDN operations that are supported on the "oic.r.audio" Resource Type.

**Table 2 – The CRUDN operations of the Resource with type "rt" = "oic.r.audio".**

Create	Read	Update	Delete	Notify
	get	post		observe