

OCF “Fargo” – Media Resource Change – Data Model WG CR 2852

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1.1 Media

1.1.1 Introduction

This Resource specifies the media types that an OCF Server supports.

The resource is an array of media elements. Each element contains:

- A URL at which the specified media type can be accessed.

- A string array containing the definition of the media using SDP.

- Each entry in the sdp array is an SDP line.

- Each line shall follow the SDP description syntax as defined in the SDP specification.

The SDP specification can be found at <http://tools.ietf.org/html/rfc4566>.

1.1.2 Example URI

/MediaResURI

1.1.3 Resource type

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

1.1.4 OpenAPI 2.0 definition

```
{
  "swagger": "2.0",
  "info": {
    "title": "Media",
    "version": "20190508",
    "license": {
      "name": "OCF Data Model License",
      "url":
"https://github.com/openconnectivityfoundation/core/blob/e28a9e0a92e17042ba3e83661e4c0fbce8bdc4ba/LICEN
NSE.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": {
    "/MediaResURI" : {
      "get": {
        "description": "This Resource specifies the media types that an OCF Server supports.\nThe
resource is an array of media elements. Each element contains:\n  A URL at which the specified
media type can be accessed.\n  A string array containing the definition of the media using SDP.\n
Each entry in the sdp array is an SDP line.\n  Each line shall follow the SDP description syntax as
defined in the SDP specification.\nThe SDP specification can be found at
http://tools.ietf.org/html/rfc4566.",
        "parameters": [
          { "$ref": "#/parameters/interface" }
        ],
        "responses": {
          "200": {
            "description": "RETRIEVES the current media resource.",
            "x-example":
            {
              "rt": ["oic.r.media"],
              "if": ["oic.if.a", "oic.if.baseline"],
              "media": [
                {
                  "url": "some example url",
                  "sdp": [
                    "m=video 1 RTP/AVP 96",
                    "a=rtpmap:96 H264/9000"
                  ]
                }
              ]
            }
          }
        }
      }
    }
  }
}
```

```

        "a=fmtp:96 profile-level-id=42A028;packetization-mode=1"
    ]
  },
  {
    "url": "some other example1 url",
    "sdp": [
      "m=audio 2 RTP/AVP 97",
      "a=rtpmap:97 MP4A-LATM/90000"
    ]
  },
  {
    "url": "some other example2 url",
    "sdp": [
      "m=video 3 RTP/AVP 98",
      "a=rtpmap:98 jpeg/90000",
      "a=fmtp:98 sampling=YCbCr-4:2:0;width=256;height=256"
    ]
  }
],
"schema": { "$ref": "#/definitions/Media" }
}
},
"post": {
  "description": "This is to change the URL that can be played back by the device. Note that
some devices do not have the capability to set the URL to be played back",
  "parameters": [
    { "$ref": "#/parameters/interface",
      {
        "name": "body",
        "in": "body",
        "required": true,
        "schema": { "$ref": "#/definitions/Media" },
        "x-example":
          {
            "media": [
              {
                "url": "new example url for playback",
                "sdp": [
                  "m=video 1 RTP/AVP 100",
                  "a=rtpmap:100 H264/9000",
                  "a=fmtp:100 profile-level-id=42A028;packetization-mode=1"
                ]
              }
            ]
          }
        ]
      }
    ],
  "responses": {
    "200": {
      "description": "The current media resource.",
      "x-example":
        {
          "rt": ["oic.r.media"],
          "if": ["oic.if.a", "oic.if.baseline"],
          "media": [
            {
              "url": "new example url for playback",
              "sdp": [
                "m=video 1 RTP/AVP 100",
                "a=rtpmap:100 H264/9000",
                "a=fmtp:100 profile-level-id=42A028;packetization-mode=1"
              ]
            }
          ]
        }
      }
    ],
  "schema": { "$ref": "#/definitions/Media" }
}
}
}

```

```
    }
  }
},
"parameters": {
  "interface": {
    "in": "query",
    "name": "if",
    "type": "string",
    "enum": ["oic.if.a", "oic.if.baseline"]
  }
},
"definitions": {
  "Media": {
    "properties": {
      "rt": {
        "description": "The Resource Type.",
        "items": {
          "enum": ["oic.r.media"],
          "maxLength": 64,
          "type": "string"
        },
        "minItems": 1,
        "uniqueItems": true,
        "readOnly": true,
        "type": "array"
      },
      "media": {
        "items": {
          "properties": {
            "sdp": {
              "description": "The array of strings, one per SDP line.",
              "items": {
                "description": "SDP media or attribute line",
                "type": "string"
              },
              "type": "array"
            },
            "url": {
              "description": "The url for the media instance.",
              "type": "string"
            }
          },
          "type": "object"
        },
        "type": "array"
      },
      "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"
      },
      "if": {
        "description": "The OCF Interface set supported by this Resource.",
        "items": {
          "enum": [
            "oic.if.a",
            "oic.if.s",
            "oic.if.baseline"
          ],
          "type": "string"
        },
        "minItems": 2,
        "uniqueItems": true,
        "readOnly": true,
        "type": "array"
      }
    }
  }
}
```

```

    }
  },
  "type": "object",
  "required": ["media"]
}
}
}

```

1.1.5 Property definition

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

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

Property name	Value type	Mandatory	Access mode	Description
rt	array: see schema	No	Read Only	The Resource Type.
if	array: see schema	No	Read Only	The OCF Interface set supported by this Resource.
id	multiple types: see schema	No	Read Write	
n	multiple types: see schema	No	Read Write	
media	array: see schema	Yes	Read Write	

1.1.6 CRUDN behaviour

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

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

Create	Read	Update	Delete	Notify
	get	post		observe