OCF "Gaborone" – New Fault Interrupter Resource Type – Data Model WG CR 3174

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1.1 Fault Interrupter Switch

1.1.1 Introduction

This Resource describes a fault interrupter switch (on/off/faulted).
The Property "state" is an enum.
A state of "on" means that the switch is on.
A state of "off" means that the switch is off.
A state of "faulted" means the switch is faulted, in such a state an UPDATE is not possible.

1.1.2 Example URI

/FaultSwitchResURI

1.1.3 Resource type

The Resource Type is defined as: "oic.r.switch.fault".

1.1.4 OpenAPI 2.0 definition

```
{
  "swagger": "2.0",
  "info": {
    "title": "Fault Interrupter Switch",
    "version": "20190821",
    "license": {
        "name": "OCF Data Model License",
        "url":
"https://github.com/openconnectivityfoundation/core/blob/e28a9e0a92e17042ba3e83661e4c0fbce8bdc4b
a/LICENSE.md",
        "x-copyright": "Copyright 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": {
    "/FaultSwitchResURI" : {
      "get": {
        "description": "This Resource describes a fault interrupter switch
(on/off/faulted).\nThe Property \"state\" is an enum.\nA state of \"on\" means that the switch
is on.\nA state of \"off\" means that the switch is off.\nA state of \"faulted\" means the
switch is faulted, in such a state an UPDATE is not possible.",
        "parameters": [
          {"$ref": "#/parameters/interface"}
        ],
        "responses": {
            "200": {
              "description" : "",
              "x-example":
                {
                  "rt": ["oic.r.switch.fault"],
                  "if": ["oic.if.a", "oic.if.baseline"],
                  "state": "off"
                },
              "schema": { "$ref": "#/definitions/FaultSwitch" }
            }
        }
      },
      "post": {
        "description": "Setting a fault interrupter to a faulted state requires a manual human
intervention, thus it is not allowed in an UPDATE. When in a faulted state it is not possible to
reset to a non-faulted state without also manual human intervention.",
        "parameters": [
          {"$ref": "#/parameters/interface"},
          {
            "name": "body",
```

DRAFT

```
            "in": "body",
            "required": true,
            "schema": { "$ref": "#/definitions/FaultSwitchUpdate" },
            "x-example":
              {
                "state": "on"
              }
          }
        ],
        "responses": {
          "200": {
            "description" : "Success path response as would be provided for an UPDATE as shown
in the example for \"post\".",
            "x-example":
              {
                "state": "on"
              },
            "schema": { "$ref": "#/definitions/FaultSwitch" }
          }
        }
      }
    }
  },
  "parameters": {
    "interface" : {
      "in": "query",
      "name": "if",
      "type": "string",
      "enum": ["oic.if.a", "oic.if.baseline"]
    }
  },
  "definitions": {
    "FaultSwitch" : {
      "properties": {
        "rt": {
          "description": "The Resource Type.",
          "items": {
            "enum": ["oic.r.switch.fault"],
            "maxLength": 64,
            "type": "string"
          },
          "minItems": 1,
          "uniqueItems": true,
          "readOnly": true,
          "type": "array"
        },
        "state": {
          "description": "The status of the switch.",
          "enum": ["on", "off", "faulted"],
          "type":"string"
        },
        "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.baseline"
            ],
            "type": "string"
          },
```

DRAFT

```
          "minItems": 2,
          "uniqueItems": true,
          "readOnly": true,
          "type": "array"
        }
      },
      "type": "object",
      "required": ["state"]
    },
    "FaultSwitchUpdate" : {
      "properties": {
        "state": {
          "description": "The status of the switch.",
          "enum": ["on", "off"],
          "type":"string"
        }
      },
      "type": "object",
      "required": ["state"]
    }
  }
}
```

1.1.5 Property definition

Table 1 defines the Properties that are part of the "oic.r.switch.fault" Resource Type.

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

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

1.1.6 CRUDN behaviour

Table 2 defines the CRUDN operations that are supported on the "oic.r.switch.fault" Resource Type.

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

Create	Read	Update	Delete	Notify
	get	post		observe

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