

**OCF “Fargo” – Clarification of Notify operation on a Collections using the "oic.if.ii"
OCF Interface – Core Technology WG CR 2756**

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7.6.3.3 Links list OCF Interface

7.6.3.3.1 Overview

The Links list OCF Interface is used to provide a view into a Collection, Atomic Measurement, or "/oic.res" Resource. This view shall be an array of all Links for those Resources subject to any applied filtering being applied. The Links list OCF Interface name is "oic.if.ll".

7.6.3.3.2 Use with RETRIEVE

The RETRIEVE operation is supported with the Links list OCF Interface. A successful RETRIEVE operation shall return a status code indicating success (i.e. "Content") with a payload with the Resource representation as an array of Links. If there are no Links present in a Resource representation, then an empty array list shall be returned in response to a RETRIEVE operation request.

An example of a RETRIEVE operation request using the Links list OCF Interface for a Collection is as illustrated:

```
RETRIEVE /scenes/scenel?if=oic.if.ll
```

The RETRIEVE operation response will be the array of Links to all Resources in the Collection as illustrated:

Response: Content

Payload:

```
[
  {
    "href": "/the/light/1",
    "rt": ["oic.r.switch.binary"],
    "if": ["oic.if.a", "oic.if.baseline"],
    "eps": [{"ep": "coaps://[2001:db8:a::b1d4]:5555"}]
  },
  {
    "href": "/the/light/2",
    "rt": ["oic.r.switch.binary"],
    "if": ["oic.if.a", "oic.if.baseline"],
    "eps": [{"ep": "coaps://[2001:db8:a::b1d4]:5555"}]
  },
  {
    "href": "/my/fan/1",
    "rt": ["oic.r.switch.binary"],
    "if": ["oic.if.a", "oic.if.baseline"],
    "eps": [{"ep": "coaps://[2001:db8:a::b1d4]:5555"}]
  },
  {
    "href": "/his/fan/2",
    "rt": ["oic.r.switch.binary"],
    "if": ["oic.if.a", "oic.if.baseline"],
    "eps": [{"ep": "coaps://[2001:db8:a::b1d4]:5555"}]
  }
]
```

7.6.3.3.3 Use with NOTIFY

The NOTIFY operation is supported with the Links list OCF Interface. A successful NOTIFY operation shall return a status code indicating success (i.e. "Content") with a payload with the Resource representation as an array of Links. If there are no Links present in a Resource representation, then an empty array list shall be returned in response to a NOTIFY operation request. Future events that change the Resource representation (e.g. UPDATE operation) shall

return a status code indicating success (i.e. "Content") with a payload with the newly updated Resource representation as an array of Links.

An example of a NOTIFY operation request using the Links list OCF Interface for a Collection is as illustrated:

```
NOTIFY /scenes/scenel?if=oic.if.ll
```

The NOTIFY operation response will be the array of Links to all Resources in the Collection as illustrated:

Response: Content

Payload:

```
[
  {
    "href": "/the/light/1",
    "rt": ["oic.r.switch.binary"],
    "if": ["oic.if.a", "oic.if.baseline"],
    "eps": [{"ep": "coaps://[2001:db8:a::b1d4]:55555"}]
  },
  {
    "href": "/the/light/2",
    "rt": ["oic.r.switch.binary"],
    "if": ["oic.if.a", "oic.if.baseline"],
    "eps": [{"ep": "coaps://[2001:db8:a::b1d4]:55555"}]
  },
  {
    "href": "/my/fan/1",
    "rt": ["oic.r.switch.binary"],
    "if": ["oic.if.a", "oic.if.baseline"],
    "eps": [{"ep": "coaps://[2001:db8:a::b1d4]:55555"}]
  },
  {
    "href": "/his/fan/2",
    "rt": ["oic.r.switch.binary"],
    "if": ["oic.if.a", "oic.if.baseline"],
    "eps": [{"ep": "coaps://[2001:db8:a::b1d4]:55555"}]
  }
]
```

Later when the "/his/fan/2" Link is removed (e.g., UPDATE operation with the Link remove OCF Interface) the response to the NOTIFY operation request is as illustrated:

Response: Content

Payload:

```
[
  {
    "href": "/the/light/1",
    "rt": ["oic.r.switch.binary"],
    "if": ["oic.if.a", "oic.if.baseline"],
    "eps": [{"ep": "coaps://[2001:db8:a::b1d4]:55555"}]
  },
  {
    "href": "/the/light/2",
    "rt": ["oic.r.switch.binary"],
    "if": ["oic.if.a", "oic.if.baseline"],
    "eps": [{"ep": "coaps://[2001:db8:a::b1d4]:55555"}]
  },
  {
    "href": "/my/fan/1",
    "rt": ["oic.r.switch.binary"],
  }
]
```

```
"if": ["oic.if.a", "oic.if.baseline"],  
  "eps": [{"ep": "coaps://[2001:db8:a::b1d4]:5555"}]  
}
```

If the result of removing a Link results in no Links being present, then an empty array list shall be sent in a notification. An example of a response with no Links being present is as illustrated:

Response: Content

Payload:

```
[  
]
```

7.6.3.3.4 Use with CREATE, UPDATE, and DELETE

The CREATE, UPDATE and DELETE operations are not allowed by the Links list OCF Interface. Attempts to perform CREATE, UPDATE or DELETE operations using the Links list OCF Interface shall return an appropriate error status code, for example "Method Not Allowed".