

**OCF “Fargo” – Add “repeat” and “intervalsecond” properties to “Time Period” resource –  
Data Model WG CR 2914**

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## 6.23 Time Period

### 6.23.1 Introduction

This Resource describes the time period over which any additionally provided information is derived or bounded.

The Property "startTime" and "stopTime" are RFC3339 encoded strings. The Property "startTime" must be present.

The interval is the interval of the time period in minutes, if present this value must be no less than 0 minute.

The intervalsecond is the interval of the time period in seconds, if present this value must be numerical zero or greater.

The repeat is the number of the time period's iterations, which means how many times to repeat the time period. The Property "repeat" accepts only negative one, numerical zero, and positive number. When this value is numerical zero, the time period will be repeated infinitely until a client makes it stop by inputting negative one for the value.

The Property "stoptime" and "interval" are mutually exclusive; both Properties cannot be present in a Resource instance.

The Property "intervalsecond" cannot be presented with the Property "stopTime". In the case of both the Property "interval" and "intervalsecond" are presented together, the total time interval is the sum of "interval" and "intervalsecond".

The Resource defines a time period for information retrieval, action or other behaviour.

### 6.23.2 Example URI

/TimePeriodResURI

### 6.23.3 Resource type

The Resource Type is defined as: "oic.r.time.period".

### 6.23.4 OpenAPI 2.0 definition

```
{
  "swagger": "2.0",
  "info": {
    "title": "Time Period",
    "version": "20190327",
    "license": {
      "name": "OCF Data Model License",
      "url":
"https://github.com/openconnectivityfoundation/core/blob/e28a9e0a92e17042ba3e83661e4c0fbce8bdc4ba/L
ICENSE.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": {
    "/TimePeriodResURI" : {
      "get": {
        "description": "This Resource describes the time period over which any additionally
provided information is derived or bounded.\nThe Property \"startTime\" and \"stopTime\" are
RFC3339 encoded strings. The Property \"startTime\" must be present.\nThe interval is the interval
of the time period in minutes, if present this value must be no less than 0 minute.\nThe
intervalsecond is the interval of the time period in seconds, if present this value must be
numerical zero or greater.\nThe repeat is the number of the time period's iteration, which means
how many times to repeat the time period. The property \"repeat\" accepts only negative one,
numerical zero, and positive number. When this value is numerical zero, the time period will be
repeated infinitely until a client makes it stop by inputting negative one for the value.\nThe
Property \"stoptime\" and \"interval\" are mutually exclusive; both Properties cannot be present in
a Resource instance.\nThe Property \"intervalsecond\" cannot be presented with the Property
\"stopTime\". In the case of both the Property \"interval\" and \"intervalsecond\" are presented
together, the total time interval is the sum of \"interval\" and \"intervalsecond\".\nThe Resource
```

```

defines a time period for information retrieval, action or other behaviour.",
  "parameters": [
    { "$ref": "#/parameters/interface" }
  ],
  "responses": {
    "200": {
      "description": "",
      "x-example": {
        "rt": ["oic.r.time.period"],
        "if": ["oic.if.a", "oic.if.baseline"],
        "startTime": "2015-01-09T14:30:00Z",
        "stopTime": "2015-01-09T14:45:00Z"
      },
      "schema": { "$ref": "#/definitions/TimePeriod" }
    }
  }
},
"post": {
  "description": "Sets or updates a time period for information retrieval, action or other
behavior.",
  "parameters": [
    { "$ref": "#/parameters/interface" },
    {
      "name": "body",
      "in": "body",
      "required": true,
      "schema": { "$ref": "#/definitions/TimePeriod" },
      "x-example": {
        "startTime": "2015-01-09T14:30:00Z",
        "stopTime": "2015-01-09T14:45:00Z"
      }
    }
  ],
  "responses": {
    "200": {
      "description": "",
      "x-example": {
        "startTime": "2015-01-09T14:30:00Z",
        "stopTime": "2015-01-09T14:45:00Z"
      },
      "schema": { "$ref": "#/definitions/TimePeriod" }
    }
  }
}
},
"parameters": {
  "interface": {
    "in": "query",
    "name": "if",
    "type": "string",
    "enum": ["oic.if.a", "oic.if.baseline"]
  }
},
"definitions": {
  "TimePeriod": {
    "properties": {
      "rt": {
        "description": "The Resource Type.",
        "items": {
          "enum": ["oic.r.time.period"],
          "maxLength": 64,
          "type": "string"
        },
        "minItems": 1,
        "uniqueItems": true,
        "readOnly": true,
        "type": "array"
      }
    }
  }
}

```

```

    },
    "interval": {
      "description": "The time interval in minutes after the \"startTime\", if present the
Property \"stopTime\" cannot be present.",
      "type": "integer",
      "minimum": 0
    },
    "intervalsecond": {
      "description": "The time interval in second after the \"startTime\", if present the
Property \"stopTime\" cannot be present.",
      "type": "integer",
      "minimum": 0
    },
    },
    "stopTime": {
      "description": "The stop time for the time period, if present the Property \"interval\"
or \"intervalsecond\" cannot be present.",
      "type": "string",
      "format": "date-time"
    },
    "startTime": {
      "description": "The start time for the time period.",
      "type": "string",
      "format": "date-time"
    },
    },
    "repeat": {
      "description": "The number of times to repeat the time period",
      "type": "integer",
      "minimum": -1
    },
    },
    "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"
      },
      "minItems": 2,
      "uniqueItems": true,
      "readOnly": true,
      "type": "array"
    }
  },
  "type": "object",
  "required": ["startTime"]
}
}
}

```

### 6.23.5 Property definition

Table 1 defines the Properties that are part of the "oic.r.time.period" Resource Type.

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

None Property name	Type	Required	Description
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if	array	no	The OCF Interface set supported by this Resource.
rt	array	no	The Resource Type.
n		no	
interval	integer	no	The time interval in minutes after the "startTime", if present the Property "stopTime" cannot be present.
stopTime	string	no	The stop time for the time period, if present the Property "interval" or "intervalsecond" cannot be present.
startTime	string	yes	The start time for the time period.
repeat	integer	no	The number of times to repeat the time period
id		no	
intervalsecond	integer	no	The time interval in second after the "startTime", if present the Property "stopTime" cannot be present.

### 6.23.6 CRUDN behaviour

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

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

Create	Read	Update	Delete	Notify
	get	post		observe