

# OCCI Monitoring Extension

SPIRALS

August 27, 2017

# 1 OCCI monitoring extension

<b>Name</b>	monitoring
<b>Scheme</b>	<a href="http://schemas.ogf.org/occi/monitoring#">http://schemas.ogf.org/occi/monitoring#</a>
<b>Specification</b>	<a href="https://redmine.ogf.org/attachments/182/monitoring.pdf">https://redmine.ogf.org/attachments/182/monitoring.pdf</a>

## 1.1 Description

OCCI Monitoring Extension allows the user to create a monitoring infrastructure for a cloud provision.

## 1.2 Imported OCCI extensions

<b>Name</b>	core
<b>Scheme</b>	<a href="http://schemas.ogf.org/occi/core#">http://schemas.ogf.org/occi/core#</a>

## 1.3 Specification

The specification of OCCI Monitoring extension is available here: <https://redmine.ogf.org/attachments/182/monitoring.pdf>.

## 1.4 Types

### 1.4.1 Second type

- **Basic type:** Integer
- **minInclusive:** 0

### 1.4.2 DateTime type

- **Basic type:** String
- **pattern:**

$\wedge(\backslash d\{4\}((-)?(0[1-9]|1[0-2]))((-)?(0[1-9]|1[1-2][0-9]|3[0-1]))(T(24:00(:00(\. [0]+)?)?)|((([0-1][0-9]|2[0-3])$

## 1.5 Kinds

### 1.5.1 Sensor kind

<b>Name</b>	Sensor
<b>Scheme</b>	<a href="http://schemas.ogf.org/occi/monitoring#">http://schemas.ogf.org/occi/monitoring#</a>
<b>Title</b>	Sensor Resource
<b>Parent</b>	Resource ( <a href="http://schemas.ogf.org/occi/core#">http://schemas.ogf.org/occi/core#</a> )

- **Sensor attributes**

Attribute	Type	Required	Mutable	Default	Description
occi.sensor.timebase	DateTime	false	true		Base time reference (ISO8601)
occi.sensor.timestart	Second	false	true		Start time offset (seconds)
occi.sensor.timestop	Second	false	true		Stop time offset (seconds)
occi.sensor.period	Second	true	true		Time between two following measurements (seconds)
occi.sensor.granularity	Second	false	true		Granularity of time measument (seconds)
occi.sensor.accuracy	Second	false	true		Accuracy of time measument (seconds)

### 1.5.2 Collector kind

<b>Name</b>	Collector
<b>Scheme</b>	<a href="http://schemas.ogf.org/occi/monitoring#">http://schemas.ogf.org/occi/monitoring#</a>
<b>Title</b>	Collector Link
<b>Parent</b>	Link ( <a href="http://schemas.ogf.org/occi/core#">http://schemas.ogf.org/occi/core#</a> )

- **Collector attributes**

Attribute	Type	Required	Mutable	Default	Description
occi.collector.period	Second	true	true		Time between two following measurements (seconds)
occi.sensor.accuracy	Second	false	true		Accuracy of time measument (seconds)
occi.sensor.granularity	Second	false	true		Granularity of time measument (seconds)

## 1.6 Mixins

### 1.6.1 Metric mixin

<b>Name</b>	Metric
<b>Scheme</b>	<a href="http://schemas.ogf.org/occi/monitoring#">http://schemas.ogf.org/occi/monitoring#</a>
<b>Title</b>	Metric Mixin

- **Applies to:**

- Collector (<http://schemas.ogf.org/occi/monitoring#>)

### 1.6.2 Aggregator mixin

<b>Name</b>	Aggregator
<b>Scheme</b>	<a href="http://schemas.ogf.org/occi/monitoring#">http://schemas.ogf.org/occi/monitoring#</a>
<b>Title</b>	Aggregator Mixin

- **Applies to:**

- Sensor (<http://schemas.ogf.org/occi/monitoring#>)

### 1.6.3 Publisher mixin

<b>Name</b>	Publisher
<b>Scheme</b>	<a href="http://schemas.ogf.org/occi/monitoring#">http://schemas.ogf.org/occi/monitoring#</a>
<b>Title</b>	Published Mixin

- **Applies to:**

- Sensor (<http://schemas.ogf.org/occi/monitoring#>)