

OCF "Ipanema" – Add tag-locn (Location Description) Semantic Tag – Core Technology WG CR 3402

Legal Disclaimer

THIS IS A DRAFT SPECIFICATION DOCUMENT ONLY AND HAS NOT BEEN ADOPTED BY THE OPEN CONNECTIVITY FOUNDATION. THIS DRAFT DOCUMENT MAY NOT BE RELIED UPON FOR ANY PURPOSE OTHER THAN REVIEW OF THE CURRENT STATE OF THE DEVELOPMENT OF THIS DRAFT DOCUMENT. THE OPEN CONNECTIVITY FOUNDATION AND ITS MEMBERS RESERVE THE RIGHT WITHOUT NOTICE TO YOU TO CHANGE ANY OR ALL PORTIONS HEREOF, DELETE PORTIONS HEREOF, MAKE ADDITIONS HERETO, DISCARD THIS DRAFT DOCUMENT IN ITS ENTIRETY OR OTHERWISE MODIFY THIS DRAFT DOCUMENT AT ANY TIME. YOU SHOULD NOT AND MAY NOT RELY UPON THIS DRAFT DOCUMENT IN ANY WAY, INCLUDING BUT NOT LIMITED TO THE DEVELOPMENT OF ANY PRODUCTS OR SERVICES. IMPLEMENTATION OF THIS DRAFT DOCUMENT IS DONE AT YOUR OWN RISK AMEND AND IT IS NOT SUBJECT TO ANY LICENSING GRANTS OR COMMITMENTS UNDER THE OPEN CONNECTIVITY FOUNDATION INTELLECTUAL PROPERTY RIGHTS POLICY OR OTHERWISE. IN CONSIDERATION OF THE OPEN CONNECTIVITY FOUNDATION GRANTING YOU ACCESS TO THIS DRAFT DOCUMENT, YOU DO HEREBY WAIVE ANY AND ALL CLAIMS ASSOCIATED HEREWITH INCLUDING BUT NOT LIMITED TO THOSE CLAIMS DISCUSSED BELOW, AS WELL AS CLAIMS OF DETRIMENTAL RELIANCE.

The OCF logo is a trademark of Open Connectivity Foundation, Inc. in the United States or other countries. *Other names and brands may be claimed as the property of others.

Copyright © 2020 Open Connectivity Foundation, Inc. All rights reserved.

Copying or other form of reproduction and/or distribution of these works are strictly prohibited.



***** Change #1 *****

7.8.2.5 Parameters for Link target attributes

7.8.2.5.1 Introduction

Link target attributes are specialisations of Link Parameters. Table 10 lists all the Link target attributes defined in this document.

Table 1 – Link target attributes list

Parameter title	Parameter name	Mandatory	Description			
Device ID	"di"	No	Defined in clause 7.8.2.5.5			
OCF Endpoint information	"eps"	No	Defined in clause 7.8.2.5.6			
OCF Interface	"if"	Yes	Defined in clause 7.6			
Link instance	"ins"	No	Defined in clause 7.8.2.5.2			
Policy	"p"	No	Defined in clause 7.8.2.5.3			
Resource Type	"rt"	Yes	Defined in clause 7.4			
Media type	"type"	No	Defined in clause 7.8.2.5.4			
Position description Semantic Tag	"tag-pos-desc"	No	Defined in clause 11.5.2.1.2			
Relative position Semantic Tag	"tag-pos-rel	No	Defined in clause 11.5.2.1.3			
Function description Semantic Tag	"tag-func-desc"	No	Defined in clause 11.5.2.2.2			
Location description Semantic Tag	"tag-locn"	No	Defined in clause 11.5.2.3.2			

Note: Other Link target attributes may to defined for features in other specifications and may not be included in this table.

***** Change #2 – new clause *****

11.5.2.3 Location Semantic Tags

11.5.2.3.1 Introduction

Consider a Bridge, Resource Directory or other similar concept whereby the Link to the Device Resource ("oic.wk.d") that is exposed may reference or relate to a physically separate Device. In such a case the ability to annotate the Link to the Device Resource with location information becomes



useful. Additionally, in a deployment of multiple similar or identical Devices, the ability to annotate the Device with where it is deployed assists in disambiguation.

11.5.2.3.2 "tag-locn" or location description Semantic Tag

The "tag-locn" Semantic Tag may be exposed as a Link Parameter for the Device Resource, it describes the physical location of the target Device, it shall not be exposed as a Link Parameter for any other Resource Type. If the tag is not exposed it conveys the same meaning as if the tag is exposed with a value of "unknown". The initial value for the "tag-locn" Semantic Tag if exposed shall be "unknown". This Link Parameter shall not contain any 3rd party defined values.

The "tag-locn" shall be exposed as string containing a value from the enumeration ("locn-descriptions") defined in Annex C. The tag is detailed in Table AA.

An instance of "tag-locn" may be updated by a Client by modifying the reflected instance of this value that is present in the Configuration Resource, see [Ref. Core Optional].

Table AA "tag-locn" Semantic Tag Definition

Semantic Tag Name	Туре	Contents	Value example		
tag-locn	Enumeration	See Annex C	"tag-locn": "familyroom"		

***** Change #3 – new clause *****

C.3 "tag-loc" supported enumeration

Figure XX defines the enumeration from which a value populated within an instance of the "tag-locn" Semantic Tag is taken.

```
"locn-descriptions": {

"enum":
["unknown", "attic", "balcony", "ballroom", "bathroom", "bedroom", "border", "boxroom", "cellar", "cloakroom", "conservatory", "corridor", "deck", "den", "diningroom", "drawingroom", "driveway", "dungeon", "ensuite", "entrance", "familyroom", "garage", "garden", "guestroom", "hall", "indoor", "kitchen", "larder", "lawn", "library", "livingroom", "lounge", "mancave", "masterbedroom", "musicroom", "office", "outdoor", "pantry", "parkinglot", "parlour", "patio", "receiptionroom", "restroom", "roofferrace", "sauna", "scullery", "shed", "sittingroom", "snug", "spa", "studio", "suite", "swimmingpool", "terrace", "toilet", "utilityroom", "vegetableplot", "ward", "yard"]
}
```

Figure XX Enumeration for "tag-locn" Semantic Tag

***** Change #4 - Core Optional Spec *****

5.2 Onboarding, provisioning and configuration

Onboarding and provisioning are fully defined by the ISO/IEC 30118-2.



Should a Device support Client update of configurable information it shall do so via exposing an "oic.wk.con" Core Resource (Table 2) in "/oic/res".

Table 2 - Configuration Resource

Example URI	Resource Type Title	Resource Type ID ("rt" value)	OCF Interfaces	Description	Related Functional Interaction
"/example/oi c/con"	Device configuration	"oic.wk.con"	"oic.if.rw"	The Resource Type through which configurable information specific to the Device is exposed. The Resource Properties exposed in "oic.wk.con" are listed in Table 3.	Configuration
"/example/oi c/con"	Platform configuration	"oic.wk.con.p"	"oic.if.rw"	The optional Resource Type through which configurable information specific to the Platform is exposed. The Properties exposed in "oic.wk.con.p" are listed in Table 4.	Configuration

Table 3 defines the "oic.wk.con" Resource Type.

Table 3 - "oic.wk.con" Resource Type definition

Property title	Property name	Value type	Value rule	Unit	Access mode	Mandatory	Description
(Device) Name	"n" (Common Property of "/example/ oic/con")	"string"	N/A	N/A	R, W	Yes	Human friendly name configurable by the end user (e.g. Bob's thermostat). The "n" Common Property of the oic.wk.con Core Resource and the "n" Common Property of the "/oic/d" Core Resource shall have the same value. When the "n" Common Property Value of the oic.wk.con Core Resource is modified, it shall be reflected to the "n" Common Property of "/oic/d" Core Resource.
Location	"loc"	array of float (has two elements, the first is latitude, the second is longitude)	N/A	Deg rees	R, W	No	Provides location information where available.
Location Name	"locn"	"string"	N/A	N/A	R, W	no	Human friendly name for location For example, "livingroom". This Property shall only be exposed when an instance of "tag_locn" is defined as a Link Parameter of the "/oic/d" Core Resource. The "locn" Property of "oic.wk.con" shall reflect the "tag_locn" Semantic Tag of the "/oic/d" Core Resource and shall have the same value. When the "locn"



							Property of "oic.wk.con" is modified, it shall be reflected in the "tag_locn" Semantic Tag of "/oic/d" Core Resource. The values that can be set on this Property shall be the same as the values that can be set for "tag_locn", a Server shall reject an UPDATE that attempts to set a value not supported by "tag_locn".
Currency	"c"	"string"	N/A	N/A	R,W	no	Indicates the currency that is used for any monetary transactions
Region	"r"	"string"	N/A	N/A	R,W	no	Free form text Indicating the current region in which the Device is located geographically.
Localized Names	"In"	"array"	N/A	N/A	R,W	no	Human-friendly name of the Device, in one or more languages. This Property is an array of objects where each object has a "language" field (containing an IETF RFC 5646 language tag) and a "value" field containing the Device name in the indicated language. If this Property and the Device Name (n) Property are both supported, the Device Name (n) value shall be included in this array.
Default Languag e	"dl"	"language- tag"	N/A	N/A	R,W	no	The default language supported by the Device, specified as an IETF RFC 5646 language tag. By default, clients can treat any string Property as being in this language unless the Property specifies otherwise.

. . .

Table 4 – Default values for Device configuration Resource

Property	Default	Notes
"loc"	[0.0,0.0]	
"locn"	"unknown"	Default value for "tag-locn" Semantic Tag
"c"	11 11	Empty string
"r"	1111	Empty string
"In"	[{}]	One item array with an empty object.
"dl"	Defined by the manufacturer	Recommend the primary language tag for the region into which the Device is marketed (e.g. "en" for primarily English speaking countries).