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| CHANGE REQUEST | |
| Meeting ID:\* | SDS 41 |
| Source:\* | Bob Flynn, Convida Wireless , Bob.Flynn@convidawireless.com |
| Date:\* | 2019-07-05 |
| Reason for Change/s:\* | Correction of announceability of stateTag/currentNrOfInstances/currentByteSize |
| CR against: Release\* | Rel-4 |
| CR against: WI\* | Active <Work Item number>  MNT maintenance / < Work Item number(optional)>  Is this a mirror CR? Yes  No  mirror CR number: (Note to Rapporteur - use latest agreed revision)  STE Small Technical Enhancements / < Work Item number (optional)>  Only ONE of the above shall be ticked |
| CR against: TS/TR\* | TS-0001 v4.1.0 |
| Clauses \* | Table 9.6.6.-2, 9.6.35-2 |
| Type of change: \* | Editorial change  Bug Fix or Correction  Change to existing feature or functionality  New feature or functionality  Only ONE of the above shall be ticked |
| Other TS/TR(s) impacted | None |
| Post Freeze checking:\* | This CR contains only essential changes and corrections? YES  NO  This CR may break backwards compatibility with the last approved version of the TS? YES  NO |
| Template Version: January 2019 (do not modify) | |

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GUIDELINES for Change Requests:

Provide an informative introduction containing the problem(s) being solved, and a summary list of proposals.

Each CR should contain changes related to only one particular issue/problem.

In case of a correction, and the change apply to previous releases, a separate “mirror CR” should be posted at the same time of this CR

Mirror CR: applies only when the text, including clause numbering are exactly the same.

Companion CR: applies when the change means the same but the baselines differ in some way (e.g. clause number).

Follow the principle of completeness, where all changes related to the issue or problem within a deliverable are simultaneously proposed to be made E.g. A change impacting 5 tables should not only include a proposal to change only 3 tables. Includes any changes to references, definitions, and acronyms in the same deliverable.

Follow the drafting rules.

All pictures must be editable.

Check spelling and grammar to the extent practicable.

Use Change bars for modifications.

The change should include the current and surrounding clauses to clearly show where a change is located and to provide technical context of the proposed change. Additions of complete clauses need not show surrounding clauses as long as the proposed clause number clearly shows where the new clause is proposed to be located.

Multiple changes in a single CR shall be clearly separated by horizontal lines with embedded text such as, start of change 1, end of change 1, start of new clause, end of new clause.

When subsequent changes are made to content of a CR, then the accepted version should not show changes over changes. The accepted version of the CR should only show changes relative to the baseline approved text.

## Introduction

R01 – Offline discussion

When we announce a container, the calculations of *currentByteSize* and *currentNumberOfInstances* should be done by the host of the announced container. Therefore those attributes should not be announced.

Things to consider

– an announced <contentInstance> may not announce the *content* attribute – therefore, the <cntAnnc> should not have *cbs*  that includes that content size.

- an announced container may have a <contentInstance> that is not from the original <container>. Therefore the <contAnnc> should include local <contentInstance> sizes in its calculation of *cbs/cni.*

- *stateTag* will change based on changes of the local resource, therefore it should not be announceable.

This contribution addresses:

* Correction in announce-ability of attributes *stateTag/currentNrOfInstances/currentByteSize* of <*containerAnnc*>/*<timeSeries>/<flexContainer>* resources.

Current specification defines announce-ability of attibutes *stateTag/currentNrOfInstances/currentByteSize* as OA(optional announced) in <*containerAnnc*>/*<timeSeries>/<flexContainer>* resource that should be changed as NA(Not announced) in <*containerAnnc*>/*<timeSeries>/<flexContainer>* resource.

Reason for correction:

* Let us say, AE creates a container resource (CNT01) with values(*stateTag=0, currentNrOfInstances=0, currentByteSize=0*) under IN-CSE and it was announced to MN-CSE as (CNTAnnc01) with “*stateTag, currentNrOfInstances, currentByteSize*”. Also, let say another AE create contentInst resource(CI01) under (CNTAnnc01) then the state(*stateTag, currentNrOfInstances, currentByteSize*) of announced container(CNTAnnc01) will change and it will become out of sync with the original container(CNT01).

### -------------------------------------Start of change 1-------------------------------------------

Table 9.6.6-2: Attribute of *<container>* resource

| Attributes of  *<container>* | Multiplicity | RW/  RO/  WO | Description | *<containerAnnc>* Attributes |
| --- | --- | --- | --- | --- |
| *resourceType* | 1 | RO | See clause 9.6.1.3. | NA |
| *resourceID* | 1 | RO | See clause 9.6.1.3. | NA |
| *resourceName* | 1 | WO | See clause 9.6.1.3. | NA |
| *parentID* | 1 | RO | See clause 9.6.1.3. | NA |
| *expirationTime* | 1 | RW | See clause 9.6.1.3. | MA |
| *accessControlPolicyIDs* | 0..1 (L) | RW | See clause 9.6.1.3. | MA |
| *labels* | 0..1 (L) | RW | See clause 9.6.1.3. | MA |
| *creationTime* | 1 | RO | See clause 9.6.1.3. | NA |
| *lastModifiedTime* | 1 | RO | See clause 9.6.1.3. | NA |
| *stateTag* | 1 | RO | See clause 9.6.1.3. | NA |
| *announceTo* | 0..1 (L) | RW | See clause 9.6.1.3. | NA |
| *announcedAttribute* | 0..1 (L) | RW | See clause 9.6.1.3. | NA |
| *dynamicAuthorizationConsultationIDs* | 0..1 (L) | RW | See clause 9.6.1.3. | OA |
| *creator* | 0..1 | RO | See clause 9.6.1.3. | NA |
| *maxNrOfInstances* | 0..1 | RW | Maximum number of direct child *<contentInstance>* resources in the <*container*> resource. | OA |
| *maxByteSize* | 0..1 | RW | Maximum size in bytes of data (i.e. *content* attribute of a <*contentInstance*> resource) that is allocated for the *<container>* resource for all direct child <*contentInstance*> resources in the *<container>* resource. | OA |
| *maxInstanceAge* | 0..1 | RW | Maximum age of a direct child *<contentInstance>* resource in the *<container> resource*. The value is expressed in seconds. | OA |
| *currentNrOfInstances* | 1 | RO | Current number of direct child <*contentInstance*> resource in the *<container>* resource. It is limited by the *maxNrOfInstances*. The *currentNrOfInstances* attribute of the <container> resource shall be updated on successful creation or deletion of direct child <contentInstance> resource of <container> resource | NA |
| *currentByteSize* | 1 | RO | Current size in bytes of data (i.e. *content* attribute of a <*contentInstance*> resource) stored in all direct child *<contentInstance>* resources of a *<container>* resource. This is the summation of *contentSize* attribute values of the <*contentInstance*> resources. It is limited by the*maxByteSize*. The *currentByteSize* attribute of the <container> resource shall be updated on successful creation of deletion of direct child <contentInstance> resource of <container> resource | NA |
| *locationID* | 0..1 | RO | An ID of the resource where the attributes/policies that define how location information are obtained and managed. This attribute is defined only when the *<container>* resource is used for containing location information. | OA |
| *ontologyRef* | 0..1 | RW | A reference (URI) of the ontology used to represent the information that is stored in the child *<contentInstance>* resources of the present *<container>* resource (see note). | OA |
| *disableRetrieval* | 0..1 | RW | Boolean value to control RETRIE/UPDATE/DELETE operation on the child *<contentInsance>* resource.  When the value is set to 'TRUE', RETRIEVE/DELETE/UPDATE operations for child <contentInstance> shall be rejected at all times.  When the value is updated from 'TRUE' to 'FALSE', all existing <contentInstance> are deleted immediately.  When the value is set to 'FALSE', all operations are permitted on the <contentInstance> resource as per existing procedures. | OA |
| NOTE: The access to this URI is out of scope of oneM2M. | | | | |

### ------------------------------------End of change 1---------------------------------------------

### -------------------------------------Start of change 2-------------------------------------------

Table 9.6.35-2: Attributes of <*flexContainer*> resource

| **Attributes of  *<flexContainer>*** | **Multiplicity** | **RW/**  **RO/**  **WO** | **Description** | ***<flexContainerAnnc>* Attributes** |
| --- | --- | --- | --- | --- |
| *resourceType* | 1 | RO | See clause 9.6.1.3. | NA |
| *resourceID* | 1 | RO | See clause 9.6.1.3. | NA |
| *resourceName* | 1 | WO | See clause 9.6.1.3. | NA |
| *parentID* | 1 | RO | See clause 9.6.1.3. | NA |
| *expirationTime* | 0..1 (note) | RW | See clause 9.6.1.3. | MA |
| *accessControlPolicyIDs* | 0..1 (L) | RW | See clause 9.6.1.3. | MA |
| *labels* | 0..1 (L) | RW | See clause 9.6.1.3. | MA |
| *creationTime* | 0..1 (note) | RO | See clause 9.6.1.3. | NA |
| *lastModifiedTime* | 0..1 (note) | RO | See clause 9.6.1.3. | NA |
| *stateTag* | 1 | RO | See clause 9.6.1.3.  This *stateTag* attribute value shall be incremented when a custom attribute of the flexContainer is modified. | NA |
| *announceTo* | 0..1 (L) | RW | See clause 9.6.1.3. | NA |
| *announcedAttribute* | 0..1 (L) | RW | See clause 9.6.1.3. | NA |
| *dynamicAuthorizationConsultationIDs* | 0..1 (L) | RW | See clause 9.6.1.3. | OA |
| *creator* | 0..1 | RO | See clause 9.6.1.3. | NA |
| *containerDefinition* | 1 | WO | This contains an identifier reference (URI) to the <*flexContainer*> schema definition which shall be used by the CSE to validate the syntax of the <*flexContainer*> resource.  This URI may refer to one of the oneM2M <*flexContainer*> definitions specified in the following documents:   * Generic Interworking [6]] * AllJoyn Interworking [7]; * Home Domain Information Model [8]   A list of oneM2M <*flexContainer*> definitions is also provided in clause 9.6.1.2.2 [3].  Other URI for other *<flexContainer>* definitions may be specified. | MA |
| *ontologyRef* | 0..1 | RW | A reference (URI) of the ontology used to represent the information that is stored in the present *<flexContainer>* resource. | OA |
| *contentSize* | 1 | RO | Sum of the size in bytes of all of the custom attributes. | NA |
| *nodeLink* | 0..1 | RW | The resource identifier of a <node> resource that stores the node specific information of the NoDN on which the interworked service represented by this <flexContainer> resource resides. | OA |
| *[customAttribute]* | 0..n | RW | Specialization-specific attribute(s). Name and data type defined in each specialization of <*flexContainer>* resource. | OA |
| NOTE: When an instance of <*flexContainer*> is a child of a <*flexContainer*> resource, these attributes can be optional. Their presence is determined by the respective definition referred to by the *containerDefinition* attribute. | | | | |

### ------------------------------------End of change 2---------------------------------------------

-------------------------------------Start of change 3-------------------------------------------

Table 9.6.36-2: Attributes of <*timeSeries*> resource

| Attributes of  *<timeSeries>* | Multiplicity | RW/  RO/  WO | Description | *<timeSeriesAnnc>* Attributes |
| --- | --- | --- | --- | --- |
| *resourceType* | 1 | RO | See clause 9.6.1.3. | NA |
| *resourceID* | 1 | RO | See clause 9.6.1.3. | NA |
| *resourceName* | 1 | WO | See clause 9.6.1.3. | NA |
| *parentID* | 1 | RO | See clause 9.6.1.3. | NA |
| *expirationTime* | 1 | RW | See clause 9.6.1.3 | MA |
| *accessControlPolicyIDs* | 0..1 (L) | RW | See clause 9.6.1.3. | MA |
| *labels* | 0..1 (L) | RW | See clause 9.6.1.3. | MA |
| *creationTime* | 1 | RO | See clause 9.6.1.3. | NA |
| *lastModifiedTime* | 1 | RO | See clause 9.6.1.3. | NA |
| *announceTo* | 0..1 (L) | RW | See clause 9.6.1.3. | NA |
| *announcedAttribute* | 0..1 (L) | RW | See clause 9.6.1.3. | NA |
| *dynamicAuthorizationConsultationIDs* | 0..1 (L) | RW | See clause 9.6.1.3. | OA |
| *creator* | 0..1 | RO | See clause 9.6.1.3. | NA |
| *maxNrOfInstances* | 0..1 | RW | Maximum number of direct child *<timeSeriesInstance>* resources in the <*timeSeries*> resource. | OA |
| *maxByteSize* | 0..1 | RW | Maximum size in bytes of data that is allocated for the *<timeSeries>* resource for all direct child*<timeSeriesInstance>* resources. | OA |
| *maxInstanceAge* | 0..1 | RW | Maximum age of a direct child *<timeSeriesInstance>* resource in the <*timeSeries*> *resource*. The value is expressed in seconds. | OA |
| *currentNrOfInstances* | 1 | RO | Current number of direct child *<timeSeriesInstance>* resource in the <*timeSeries*> resource. It is limited by the *maxNrOfInstances*. The *currentNrOfInstances* attribute of the <timeSeries> resource shall be updated on successful creation or deletion of direct child < *timeSeriesInstance* > resource of <timeSeries > resource. | NA |
| *currentByteSize* | 1 | RO | Current size in bytes of data stored in all direct child *<timeSeriesInstance>* resources of a <*timeSeries*> resource. It is limited by the *maxByteSize*. The *currentByteSize* attribute of the <timeSeries> resource shall be updated on successful creation or deletion of direct child < *timeSeriesInstance* > resource of <timeSeries > resource. | NA |
| *periodicInterval* | 0..1 | WO | If the Time Series Data is periodic, this attribute shall contain the expected amount of time between two instances of Time Series Data. | OA |
| *missingDataDetect* | 0..1 | WO | Indicates whether the Receiver shall detect the missing Time Series Data if it is periodic. | NA |
| *ontologyRef* | 0..1 | RW | A reference (URI) of the ontology used to represent the information that is stored in the child *<timeSeriesInstance>* resources of the present *<timeSeriesData>* resource (see note). | OA |
| *missingDataMaxNr* | 0..1 | RW | Maximum number of entries in the *missingDataList* if the *periodicInterval* is set and the *missingDataDetect* is TRUE. | OA |
| *missingDataList* | 0..1(L) | RO | The list of the *dataGenerationTime* valuerepresenting the missing Time Series Data in descending order by time if the *periodicInterva*l is set and the *missingDataDetect* is TRUE. | NA |
| *missingDataCurrentNr* | 0..1 | RO | Current number of the missing Time Series Data in the *missingDataList*. | NA |
| *missingDataDetectTimer* | 0..1 | RW | The *missingDataDetectTimer* after which a missing Time Series Data shall be considered lost by the hosting CSE. Note that the setting of this value may not apply in certain transports such as TCP, and as such the hosting CSE may reject proposed values or suggest different values. | OA |
| *contentInfo* | 0..1 | WO | This attribute contains information to understand the contents of the *content* attribute of <timeSeriesInstance>. It shall be composed of two mandatory components consisting of an Internet Media Type (as defined in the IETF RFC 6838 [i.36]) and an encoding type. In addition, an optional content security component may also be included. The format of this attribute is defined in oneM2M TS‑0004 [3].  This attribute should be used to represent the content information of the *content* attribute of child <*timeSeriesInstance*> resources so that AEs can understand the content. | OA |
| NOTE: The access to this URI is out of scope of oneM2M. | | | | |

------------------------------------End of change 3---------------------------------------------

-------------------------------------Start of change 4-------------------------------------------

Table 9.6.7-2: Attributes of *<contentInstance>* resource

| Attributes of *<contentInstance>* | Multiplicity | RW/  RO/  WO | Description | *<contentInstanceAnnc>* Attributes |
| --- | --- | --- | --- | --- |
| *resourceType* | 1 | RO | See clause 9.6.1.3. | NA |
| *resourceID* | 1 | RO | See clause 9.6.1.3. | NA |
| *resourceName* | 1 | WO | See clause 9.6.1.3. | NA |
| *parentID* | 1 | RO | See clause 9.6.1.3. | NA |
| *labels* | 0..1 (L) | WO | See clause 9.6.1.3. | MA |
| *expirationTime* | 1 | WO | See clause 9.6.1.3. | NA |
| *creationTime* | 1 | RO | See clause 9.6.1.3. | NA |
| *lastModifiedTime* | 1 | RO | See clause 9.6.1.3. | NA |
| *stateTag* | 1 | RO | See clause 9.6.1.3.  The *stateTag* attribute of the parent resource should be incremented first and copied into this *stateTag* attribute when a new instance is added to the parent resource. | NA |
| *announceTo* | 0..1 (L) | WO | See clause 9.6.1.3. | NA |
| *announcedAttribute* | 0..1 (L) | WO | See clause 9.6.1.3. | NA |
| *creator* | 0..1 | RO | See clause 9.6.1.3. | NA |
| *contentInfo* | 0..1 | WO | This attribute contains information to understand the content s of *content* attribute. It shall be composed of two mandatory components consisting of Internet Media Type (as defined in the IETF RFC 6838 [i.36]) and an encoding type. In addition, an optional content security component may also be included. The format of this attribute is defined in oneM2M TS‑0004 [3].  This attribute should be used so that AEs can understand the content.  If the value of *contentInfo* is a supported representation of semantic information, as defined in oneM2M TS-0004 [3], the value of *content* shall be handled as semantic information with respect to the supported semantic oneM2M functionalities. | OA |
| *contentSize* | 1 | RO | Size in bytes of the *content* attribute. | NA |
| *contentRef* | 0..1 | WO | This attribute contains a list of name-value pairs. Each entry expresses and associative reference to a <contentInstance> resource. The name of the entry indicates the relationship and the value of the entry the indicates reference (URI) to the resource. | OA |
| *ontologyRef* | 0..1 | WO | A reference (URI) of the ontology used to represent the information that is stored in the *contentInstances* resources of the <*container>* *resource*. If this attribute is not present, the *contentInstance* resource inherits the *ontologyRef* from the parent *<container>* resource if present (see note). | OA |
| *content* | 1 | WO | Actual content of a *contentInstance*. This content may be opaque data for understandable with the help of the *contentInfo*. This may, for example, be an image taken by a security camera, or a temperature measurement taken by a temperature sensor. | OA |
| NOTE: Access to this URI is out of scope of oneM2M. | | | | |

### ------------------------------------End of change 4---------------------------------------------

### ------------------------------------Start of change 5--------------------------------------------

Table 9.6.37-2: Attributes of <*timeSeriesInstance*> resource

| Attributes of *<timeSeriesInstance>* | Multiplicity | RW/  RO/  WO | Description | *<timeSeriesInstanceAnnc>* Attributes |
| --- | --- | --- | --- | --- |
| *resourceType* | 1 | RO | See clause 9.6.1.3. | NA |
| *resourceID* | 1 | RO | See clause 9.6.1.3. | NA |
| *resourceName* | 1 | WO | See clause 9.6.1.3. | NA |
| *parentID* | 1 | RO | See clause 9.6.1.3. | NA |
| *labels* | 0..1 (L) | WO | See clause 9.6.1.3. | MA |
| *creationTime* | 1 | RO | See clause 9.6.1.3. | NA |
| *expirationTime* | 1 | WO | See clause 9.6.1.3. | NA |
| *announceTo* | 0..1 (L) | WO | See clause 9.6.1.3. | NA |
| *announcedAttribute* | 0..1 (L) | WO | See clause 9.6.1.3. | NA |
| *lastModifiedTime* | 1 | RO | See clause 9.6.1.3. | NA |
| *dataGenerationTime* | 1 | WO | This attribute contains the time when the data was generated by the AE/CSE. | OA |
| *content* | 1 | WO | This attribute contains the data generated by the AE/CSE. | OA |
| *contentSize* | 1 | RO | Size in bytes of the *content* attribute. | NA |
| *sequenceNr* | 0..1 | WO | This attribute contains the data sequence number generated by the AE/CSE | OA |

### ------------------------------------End of change 5---------------------------------------------