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| CHANGE REQUEST | |
| Meeting ID:\* | SDS #47.3 |
| Source:\* | Cyrille Bareau, Orange, [cyrille.bareau@orange.com](mailto:cyrille.bareau@orange.com)  Marianne Mohali, Orange, [marianne.mohali@orange.com](mailto:marianne.mohali@orange.com) |
| Date:\* | 2020-11-16 |
| Reason for Change/s:\* | XML\_construction\_for\_flexContainerInstance\_Rel4 |
| CR against: Release\* | Release 4 |
| CR against: WI\* | Active <Work Item number>  MNT maintenance / < Work Item number(optional)>  Is this a mirror CR? Yes  No  mirror CR number:  STE Small Technical Enhancements / < Work Item number (optional)>  Only ONE of the above shall be ticked |
| CR against: TS/TR\* | TS-0004 v4.2.0 |
| Clauses \* | 7.4.68, Annex F, Annex J |
| 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 |
| Impacted other TS/TR(s) |  |
| 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 2017 (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

This CR introduces some explanation on the way XML schemas have to be generated within the XSD files for the recently introduced <flexContainerInstance> resource types and the associated naming rule.

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

### 7.4.68 Resource Type <flexContainerInstance>

#### 7.4.68.1 Introduction

This resource represents a copy of the custom attributes of its parent <flexContainer>.

The detailed description can be found in clause 9.6.59 in oneM2M TS-0001 [6].

The following resource types are allowed to include <flexContainerInstance> specializations as children: <flexContainer>.

There are as many specializations of <flexContainerInstance> specified by oneM2M as there are specializations of <flexContainer>. Each <flexContainerInstance> specializations’s XML schema type is defined in the XML schema file of its parent <flexContainer> resource. The resource type name of the <flexContainerInstance> resource is formed by adding the suffix ‘Inst’ to the parent <flexContainer> resource type name.

Table 7.4.68.1‑1: Resource Specific Attributes of <flexContainerInstance> resource

|  |  |  |
| --- | --- | --- |
| **Attribute Name** | **Data Type** | **Default Value and Constraints** |
|
| *contentSize* | xs:nonNegativeInteger | No default |
| *originator* | m2m:ID | No default |
| *[customAttribute]* | Name and data type are defined in the specification document or XSD file identified by the value of containerDefinition attribute of the parent flexContainer. | No default |

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

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

Annex F (informative):  
Guidelines for oneM2M resource type XSD

This annex contains rules to be followed when creating XML Schema Definitions (XSD files to represent the oneM2M resources). The XSD files themselves form part of the oneM2M protocol specification, but the rules used to construct them do not, hence this annex is informative.

The purpose of these rules is:

* To keep a consistent style between the schemas for different resources
* To keep the XSD simple
* To allow individual resource schemas to be authored and maintained separately, while minimizing the risk of conflict when they are all used together

1. Each XSD file should include a schema element with following namespace declaration:
2. <xs:schema xmlns:xs="http://www.w3.org/2001/XMLSchema"   
    targetNamespace="http://www.onem2m.org/xml/protocols"   
    xmlns:m2m="<http://www.onem2m.org/xml/protocols>"  
    xmlns:xsi="http://www.w3.org/2001/XMLSchema-instance"  
    elementFormDefault="unqualified" attributeFormDefault="unqualified" >  
     
   This defines the prefix xs: for the XML Schema namespace, a target namespace <http://www.onem2m.org/xml/protocols>, and the prefix m2m: as equivalent for the target namespace. The xsi: namespace can be omitted if the resource has no nillable attributes (see below).  
   Locally declared elements and attributes will be unqualified (elementFormDefault and attributeFormDefault declarations are not strictly required since "unqualified" is the default value setting).
3. Each Resource XSD file will contain a Global Element Declaration whose name is the name of the Resource Type in accordance with oneM2M TS-0001 [6]. This means that the root element of a Resource (when represented as an XML instance) contains an m2m: (or equivalent) namespace prefix. If the Resource is announceable, the XSD file will contain a second Global Element Declaration that is used for the Announced variant of the resource. The name of that element will be formed by adding the suffix Annc to the name of the first Global Element. The XSD files for specializations of the <flexContainer> resource, as defined in Annex J, will contain a third Global Element Declaration that is used for the <flexContainerInstance> children of the resource. The name of that element will be formed by adding the suffix Inst to the name of the first Global Element. Announced and <flexContainerInstance> Resources do not have a XSD file of their own The XSD should not contribute anything to the m2m: namespace other than these root elements.

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

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

Annex J (normative):  
Specializations of <flexContainer> resource

# J.1 Introduction

This annex defines each specialization of <flexContainer> resource that are used for generic interworking [36] and AllJoyn interworking [37]. The <flexContainer> resource and procedures are defined in the clause 7.4.37. Since the specialization resources handling procedures are the same as <flexContainer> resource, this annex does not specify them. Also, since all the specialization inherits the universal/common attributes of <flexContainer> resource, this annex does not specify that information.

Note that the XSD schema files presented in this annex all contain:

* The definitions of a <flexContainer> specialization’s resource type.
* The resource type of its announced version. The name of this resource type is the name of the <flexContainer> parent’s resource type name appended with suffix ‘Annc’.
* The resource type of its <flexContainerInstance> children. The name of this resource type is the name of the <flexContainer> parent’s resource type name appended with suffix ‘Inst’.

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