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| **oneM2M**  **Technical Specification** | |
| Document Number: | oneM2M-TS-0018-V-1.2.2 |
| Document Name: | Test Suite Structure and Test Purposes |
| Date: | 2018-May-30 |
| Abstract: | The Test Suite Structure and Test Purposes document for conformance testing consists of:  - Defining the test suite structure by grouping the test purposes according to different criteria;  - Specifing test purposes for conformance test. A test purpose is an informal description of the expected test behaviour. |
| Template Version:23 February 2015 (Dot not modify) | |

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About oneM2M

The purpose and goal of oneM2M is to develop technical specifications which address the need for a common M2M Service Layer that can be readily embedded within various hardware and software, and relied upon to connect the myriad of devices in the field with M2M application servers worldwide.

More information about oneM2M may be found at: http//www.oneM2M.org

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# 1 Scope

The present document specifies oneM2M test suite structure and test purposes that are designed to evaluate the conformity of oneM2M implementations to the oneM2M specifications. It also specifies

1. Guidelines for description of test behaviours and definition of test purpose structure,
2. Notations to define a test purpose for conformance testing, and
3. Test configurations for conformance testing.

# 2 References

## 2.1 Normative references

References are either specific (identified by date of publication and/or edition number or version number) or non‑specific. For specific references, only the cited version applies. For non-specific references, the latest version of the referenced document (including any amendments) applies.

The following referenced documents are necessary for the application of the present document.

[1] oneM2M TS-0001: "Functional Architecture".

[2] oneM2M TS-0004: "Service Layer Core Protocol Specification".

[3] oneM2M TS-0015: "Testing Framework".

[4] oneM2M TS-0017: "Implementation Conformance Statements".

## 2.2 Informative references

The following referenced documents are not necessary for the application of the present document but they assist the user with regard to a particular subject area.

[i.1] oneM2M Drafting Rules .

NOTE: Available at http://www.onem2m.org/images/files/oneM2M-Drafting-Rules.pdf.

[i.2] oneM2M TS-0010: "MQTT Protocol Binding".

[i.3] oneM2M TS-0031: "oneM2M Features".

# 3 Definitions and abbreviations

## 3.1 Definitions

For the purposes of the present document, the terms and definitions given in TS-0015 [3] Testing Framework and the following ones apply:

**valid <OPERATION> Request:** a oneM2M Request primitive that only contains all mandatory primitive parameters with correct values which are not required to be explicitly specified in the test purpose. If specific values need to be specified, parameters need to be explicitly indicated in the test purpose. Operation parameter is set to <OPERATION>.

**valid Response:** a oneM2M Response primitive that only contains all mandatory primitive parameters with correct values which are not required to be explicitly specified in the test purpose. If specific values need to be specified, parameters need to be explicitly indicated in the test purpose. Request Identifier parameter contains the Request Identifier value of the corresponding Request.

**valid <ATTRIBUTE\_NAME>:** correct value for the <ATTRIBUTE\_NAME> attribute which is not required to be explicitly specified in the test purpose

## 3.2 Abbreviations

For the purposes of the present document, the abbreviations given in TS-0001 [1] and the following apply:

ADN Application Dedicated Node

ADN-AE AE which resides in the Application Dedicated Node

AE Application Entity

ASN Application Service Node

CSE Common Service Entity

CSF Common Service Function

IN Infrastructure Node

IN-CSE CSE which resides in the Infrastructure Node

IUT Implementation Under Test

MN Middle Node

SUT System Under Test

# 4 Conventions

The key words "Shall", "Shall not", "May", "Need not", "Should", "Should not" in the present document are to be interpreted as described in the oneM2M Drafting Rules [i.1].

# 5 Prerequisites and Test Configurations

## 5.1 Test Configurations

Test configurations are defined to test different entities such as CSE and AE etc.

Figure 5.1-1 and Figure 5.1-2 show CSE test configurations where CSE as an IUT can be tested against TTCN-3 Test System, which is acting as AE or AE and CSE respectively. Test system may include as well other entities which are necessary for each configuration, i.e. a second AE (AE2) for receiving notifications. These entities are represented with dashed rectangles.

Figure 5.1-3 shows AE test configuration (CF03) for ADN-AE testing scenario where ADN-AE is IUT and TTCN-3 Test System is acting as a CSE.

Figure 5.1-4 depicts test configurations between two CSEs, where one CSE is acting as a Test System, the other is SUT.



Figure 5.1-1: Test configuration 1 (CF01)



Figure 5.1-2: Test configuration 2 (CF02)



Figure 5.1-3: Test configuration 3 (CF03)



Figure 5.1-4: Test configuration 4 (CF04)

# 6 Test Suite Structure (TSS)

## 6.1 Test groups

The test groups are organized in 2 levels. The first level defines the functional entity of oneM2M. The second level defines the common services functions which are represented in oneM2M functional architecture.

### 6.1.1 Functional Entity Groups

The functional entity groups identify the types of entity which are specified in oneM2M functional architecture (TS-0001 [1]).

* AE
* CSE

### 6.1.2 Common Services Functions Subgroups

The common services functions subgroups identify the general procedures in each common services functions specified in oneM2M functional architecture (TS-0001 [1]):

* Registration
* Data Management and Repository
* Subscription and Notification
* Group Management
* Discovery
* Location
* Device Management
* Communication Management and Delivery Handling
* Security

### 6.1.3 oneM2M Resource Primitives specific Operations

A group of resource type specific procedures are defined in oneM2M functional architecture (TS-0001 [1]) and service layer core protocol (TS-0004 [2]). Those procedures can be potentially abstracted with requirements for generating test purposes for conformance testing purpose. Those resource type specific procedures are the complementary procedures to the general procedures defined in oneM2M Common Service Functions (CSF) and will use for subgroups of structures for oneM2M tests. A list of those procedures are including:

* Resource announcement

## 6.2 Test Suite Structure (TSS) for oneM2M

The Test Suite Structure (TSS) for oneM2M will be present as below:

* Group 1: General Capability (GEN):
* Subgroup 1.1: Protocol Bindings
* Subgroup 1.2: Serializations
* Group 2: AE(AE):
* Subgroup 2.1: General Capability (GEN)
* Subgroup 2.2: Registration(REG)
* Subgroup 2.3: Data Management and Repository(DMR)
* Subgroup 2.4: Subscription and Notification(SUB)
* Subgroup 2.5: Group Management(GMG)
* Subgroup 2.6: Discovery(DIS)
* Subgroup 2.7: Location(LOC)
* Subgroup 2.8: Device Management(DMG)
* Subgroup 2.9: Communication Management and Delivery Handling(CMDH)
* Subgroup 2.10: Security(SEC)
* Group 3: CSE(CE):
* Subgroup 3.1: General Capability (GEN)
* Subgroup 3.2: Registration(REG)
* Subgroup 3.3: Data Management and Repository(DMR)
* Subgroup 3.4: Subscription and Notification(SUB)
* Subgroup 3.5: Group Management(GMG)
* Subgroup 3.6: Discovery(DIS)
* Subgroup 3.7: Location(LOC)
* Subgroup 3.8: Device Management(DMG)
* Subgroup 3.9: Communication Management and Delivery Handling(CMDH)
* Subgroup 3.10: Security(SEC)
* Subgroup 3.11: Resource Announcement (ANNC)

# 7 Test Purposes (TP)

## 7.1 Introduction

### 7.1.1 TP definition conventions

The TP definition is constructed according to Test Suite Structure & Test Purposes(TSS&TP) in Testing Framework (TS-0015 [3]).

### 7.1.2 TP Identifier naming conventions

The identifier of the TP is constructed according to table 7.1.2-1.

Table 7.1.2-1: TP naming convention for oneM2M

| Name | Option | Interpretation |
| --- | --- | --- |
| TP/<root>/<ent>/<gr>[/<sgr>][/<opr>]/<nnn>\_<pmu> | | |
| <root> = root | oneM2M | oneM2M |
| <ent> = entity | AE | Application Entity |
| CSE | Common Services Entity |
| <gr> = group | GEN | Common Service Function |
| REG |  |
| DMR |
| SUB |
| GMG |
| DIS |
| LOC |
| DMG |
| CMDH |
| SEC |
| ANNC |
| <sgr> = sub-group | ACP | AccessControlPolicy |
| <opr> = operation | CRE | Create |
| UPD | Update |
| RET | Retrieve |
| DEL | Delete |
| NTF | Notify |
| <nnn> = sequential number | 001 to 999 | 023 |
| <pmu> = permutation part | May be number, short name of attribute or resource type depend on the permutated part in the TP. If there are more than one permutated variables, they should be separated by slash '/'. | Enumerated type attribute and its value is represented as <VARIABLE\_1>/<VALUE>, e.g. TP/oneM2M/CSE/DMR/RET/020\_**RCN/0**  When resourceType attribute is involved in a TP Id, the resourceType *shall* be put in first order followed by any other attribute(s), if any, <RESOURCE\_TYPE>/<VARIABLE\_1>/<VARIABLE\_2> e.g. TP/oneM2M/CSE/DMR/CRE/015\_**CNT/ACPI** |

### 7.1.3 Rules for the behaviour description

The description of the TP is built according to TS-0015 [3] Testing Framework.

In addition, the following rules apply:

1. Primitive parameters shall use their *Parameter name* as indicated in TS-0004 [2] table 8.2.2-1
2. Resource attributes shall use their *Attribute name* as indicated in TS-0004 [2] table 8.2.3 followed by "attribute".
3. When *Content* request parameter contains a resource representation, such representation shall contain all mandatory attributes and could contain some optional attributes. Only those attributes and/or child resources required by the test purpose will be explicitly indicated.
4. When *Content* response parameter contains a resource representation, such representation shall contain attributes and/or child resources according to the Result Content parameter of the corresponding request. Only those attributes and/or child resources required by the test purpose will be explicitly indicated.

### 7.1.4 ICS reference

Table 7.1.4-1: Node

|  |  |  |  |  |
| --- | --- | --- | --- | --- |
| Item | Name of field | Reference | Status | Support |
| 1 | ASN (Application Service Node) | 5.1.2 | o.1 |  |
| 2 | ADN (Application Dedicated Node) | 5.1.2 | o.1 |  |
| 3 | IN (Infrastructure Node) | 5.1.2 | o.1 |  |
| 4 | MN (Middle Node) | 5.1.2 | o.1 |  |
| o.1: Exactly one item shall be supported | | | | |

Table 7.1.4-2: Functional entity type

|  |  |  |  |  |
| --- | --- | --- | --- | --- |
| Prerequisite: A.1 | | | | |
| Item | Name of field | Reference | Status | Support |
| 1 | AE | 5.1.1 | c.1 |  |
| 2 | CSE | 5.1.1 | c.2 |  |
| c.1: If A.1-1 or A.1-2 then m else o  c.2: If A.1-2 x else m | | | | |

Table 7.1.4-: Mnemonics for PICS reference

| Mnemonic | PICS item |
| --- | --- |
| PICS\_AE | TS-0017[4], clause A.5.1.1/1 |
| PICS\_CSE | TS-0017[4], clause A.5.1.1/2 |
| PICS\_ASN\_CSE | TS-0017[4], clause A.5.1.2/1 |
| PICS\_ADN | TS-0017[4], clause A.5.1.2/7 |
| PICS\_IN\_CSE | TS-0017[4], clause A.5.1.2/3 |
| PICS\_MN\_CSE | TS-0017[4], clause A.5.1.2/2 |
| PICS\_STRUCTURED\_CSE\_RELATIVE\_RESOURCE\_ID\_FORMAT | TS-0017[4], clause A.5.2.1/2 |
| PICS\_UNSTRUCTURED\_CSE\_RELATIVE\_RESOURCE\_ID\_FORMAT | TS-0017[4], clause A.5.2.1/1 |
| PICS\_SP\_RELATIVE\_RESOURCE\_ID | TS-0017[4], clause A.5.2.1 |
| PICS\_ABSOLUTE\_RESOURCE\_ID | TS-0017[4], clause A.5.2.1 |
| PICS\_ACP\_SUPPORT | TS-0017[4], clause A.5.3.1/10 |
| PICS\_CB\_CST | TS-0017[4], clause A.5.7.1/3 |
| PICS\_CB\_NL | TS-0017[4], clause A.5.7.1/4 |
| PICS\_CSR\_RN | TS-0017[4], clause A.5.7.2/10 |
| PICS\_CSR\_ET | TS-0017[4], clause A.5.7.2/11 |
| PICS\_CSR\_LBL | TS-0017[4], clause A.5.7.2/2 |
| PICS\_CSR\_POA | TS-0017[4], clause A.5.7.2/6 |
| PICS\_CSR\_NL | TS-0017[4], clause A.5.7.2/9 |
| PICS\_CSR\_CST | TS-0017[4], clause A.5.7.2/5 |
| PICS\_CSR\_RR | TS-0017[4], clause A.5.7.2/12 |
| PICS\_AE\_LBL | TS-0017[4], clause A.5.7.3/2 |
| PICS\_AE\_APN | TS-0017[4], clause A.5.7.3/5 |
| PICS\_AE\_POA | TS-0017[4], clause A.5.7.3/6 |
| PICS\_AE\_NL | TS-0017[4], clause A.5.7.3/8 |
| PICS\_AE\_CSZ | TS-0017[4], clause A.5.7.3/9 |
| PICS\_CNT\_ACPI | TS-0017[4], clause A.5.7.5/1 |
| PICS\_CNT\_MNI | TS-0017[4], clause A.5.7.5/6 |
| PICS\_CNT\_MBS | TS-0017[4], clause A.5.7.5/7 |
| PICS\_CNT\_MIA | TS-0017[4], clause A.5.7.5/8 |
| PICS\_CNT\_OR | TS-0017[4], clause A.5.7.5/10 |
| PICS\_CNT\_LI | TS-0017[4], clause A.5.7.5/9 |
| PICS\_CNT\_RN | TS-0017[4], clause A.5.7.5/11 |
| PICS\_CNT\_ET | TS-0017[4], clause A.5.7.5/12 |
| PICS\_CNT\_LBL | TS-0017[4], clause A.5.7.5/2 |
| PICS\_CNT\_CR | TS-0017[4], clause A.5.7.5/5 |
| PICS\_CIN\_CNF | TS-0017[4], clause A.5.7.6/5 |
| PICS\_CIN\_RN | TS-0017[4], clause A.5.7.6/7 |
| PICS\_CIN\_ET | TS-0017[4], clause A.5.7.6/8 |
| PICS\_CIN\_LBL | TS-0017[4], clause A.5.7.6/1 |
| PICS\_CIN\_CR | TS-0017[4], clause A.5.7.6/4 |
| PICS\_ACP\_LBL | TS-0017[4], clause A.5.7.4/1 |
| PICS\_SUB\_ACPI | TS-0017[4], clause A.5.7.7/2 |
| PICS\_SUB\_LBL | TS-0017[4], clause A.5.7.7/1 |
| PICS\_SUB\_ENC | TS-0017[4], clause A.5.7.7/3 |
| PICS\_SUB\_EXC | TS-0017[4], clause A.5.7.7/4 |
| PICS\_SUB\_GPI | TS-0017[4], clause A.5.7.7/5 |
| PICS\_SUB\_NFU | TS-0017[4], clause A.5.7.7/6 |
| PICS\_SUB\_BN | TS-0017[4], clause A.5.7.7/7 |
| PICS\_SUB\_RL | TS-0017[4], clause A.5.7.7/8 |
| PICS\_SUB\_PN | TS-0017[4], clause A.5.7.7/10 |
| PICS\_SUB\_NSP | TS-0017[4], clause A.5.7.7/11 |
| PICS\_SUB\_LN | TS-0017[4], clause A.5.7.7/12 |
| PICS\_SUB\_NCT | TS-0017[4], clause A.5.7.7/13 |
| PICS\_SUB\_NEC | TS-0017[4], clause A.5.7.7/14 |
| PICS\_SUB\_CR | TS-0017[4], clause A.5.7.7/15 |
| PICS\_SUB\_SU | TS-0017[4], clause A.5.7.7/16 |
| PICS\_GRP\_LBL | TS-0017[4], clause A.5.7.8/2 |
| PICS\_GRP\_ACPI | TS-0017[4], clause A.5.7.8/1 |
| PICS\_GRP\_MACP | TS-0017[4], clause A.5.7.8/6 |
| PICS\_GRP\_GN | TS-0017[4], clause A.5.7.8/9 |

## 7.2 Test Purposes for oneM2M Service Primitives

### 7.2.1 Group AE (AE)

#### 7.2.1.1 General Capability (GEN)

##### 7.2.1.1.1 CREATE Operation

TP/oneM2M/AE/GEN/CRE/001

|  |  |  |  |
| --- | --- | --- | --- |
| **TP Id** | | TP/oneM2M/AE/GEN/CRE/001 | |
| **Test objective** | | Check that the IUT sends the creation of a *<container>* resource using unstructured resource identifier | |
| **Reference** | | TS-0001 [1], clause 9.3.1-1 | |
| **Config Id** | | CF03 | |
| **Parent release** | | Release 1 | |
| **PICS Selection** | | PICS\_AE, PICS\_UNSTRUCTURED\_CSE\_RELATIVE\_RESOURCE\_ID\_FORMAT | |
| **Initial conditions** | **with {**  the IUT **being** registered **and**  the IUT **being** switched on **and**  the IUT **being configured** to use *NON\_HIERARCHICAL\_RESOURCE\_ADDRESS* **and**  the IUT **having** privileges to perform CREATE operation on resource TARGET\_RESOURCE\_ADDRESS  **}** | | |
| **ted behaviour** | **Test events** | | **Direction** |
| **when {**  the IUT **is triggered to send** a valid CREATE Request **containing**  To **set to** *NON\_HIERARCHICAL\_RESOURCE\_ADDRESS*  **}** | | NA |
| **then {**  the IUT **sends** a valid Container CREATE Request **to** CSE **containing**  To **set to** *NON\_HIERARCHICAL\_RESOURCE\_ADDRESS* **and**  From **set to** AE\_ID  **}** | | CSE 🡨 IUT |

|  |  |
| --- | --- |
| **TP Id** | **NON\_HIERARCHICAL\_RESOURCE\_ADDRESS** |
| TP/oneM2M/AE/GEN/CRE/001\_CSR | UNSTRUCTURED\_CSE\_RELATIVE\_RESOURCE\_ID |
| TP/oneM2M/AE/GEN/CRE/001\_SPR | SP\_RELATIVE\_RESOURCE\_ID, (see note) |
| TP/oneM2M/AE/GEN/CRE/001\_ABS | ABSOLUTE\_RESOURCE\_ID, (see note) |
| NOTE: These addresses are constructed with the Unstructured-CSE-Relative-Resource-ID. | |

TP/oneM2M/AE/GEN/CRE/002

|  |  |  |  |
| --- | --- | --- | --- |
| **TP Id** | | TP/oneM2M/AE/GEN/CRE/002 | |
| **Test objective** | | Check that the IUT sends the creation of a *<container>* resource using structured resource identifier | |
| **Reference** | | TS-0001 [1], clause 9.3.1-1 | |
| **Config Id** | | CF03 | |
| **Parent release** | | Release 1 | |
| **PICS Selection** | | PICS\_AE, PICS\_STRUCTURED\_CSE\_RELATIVE\_RESOURCE\_ID\_FORMAT | |
| **Initial conditions** | **with {**  the IUT **being** registered **and**  the IUT **being** switched on **and**  the IUT **being configured** to use *HIERARCHICAL\_RESOURCE\_ADDRESS* **and**  the IUT **having** privileges to perform CREATE operation on resource TARGET\_RESOURCE\_ADDRESS  **}** | | |
| **Expected behaviour** | **Test events** | | **Direction** |
| **when {**  the IUT **is triggered to send** a valid CREATE Request **containing**  To **set to** *HIERARCHICAL\_RESOURCE\_ADDRESS* **and**  Resource Type **set to** 3 (container) **and**  From **set to** AE\_ID **and**  Content **containing**  container resource representation  **}** | | NA |
| **then {**  the IUT **sends** a valid CREATE Request **to** CSE **containing**  To **set to** *HIERARCHICAL\_RESOURCE\_ADDRESS* **and**  Resource Type **set to** 3 (container) **and**  From **set to** AE\_ID **and**  Content **containing**  container resource representation  **}** | | CSE 🡨 IUT |

|  |  |
| --- | --- |
| **TP Id** | **HIERARCHICAL\_RESOURCE\_ADDRESS** |
| TP/oneM2M/AE/GEN/CRE/002\_CSR | STRUCTURED\_CSE\_RELATIVE\_RESOURCE\_ID |
| TP/oneM2M/AE/GEN/CRE/002\_SPR | SP\_RELATIVE\_RESOURCE\_ID, (see note) |
| TP/oneM2M/AE/GEN/CRE/002\_ABS | ABSOLUTE\_RESOURCE\_ID, (see note) |
| NOTE: These addresses are constructed with the Structured-CSE-Relative-Resource-ID. | |

##### 7.2.1.1.2 UPDATE Operation

TP/oneM2M/AE/GEN/UPD/001

|  |  |  |  |
| --- | --- | --- | --- |
| **TP Id** | | TP/oneM2M/AE/GEN/UPD/001 | |
| **Test objective** | | Check that the IUT sends the update of a *<container>* resource using unstructured resource identifier | |
| **Reference** | | TS-0001 [1], clause 9.3.1-1 | |
| **Config Id** | | CF03 | |
| **Parent release** | | Release 1 | |
| **PICS Selection** | | PICS\_AE, PICS\_UNSTRUCTURED\_CSE\_RELATIVE\_RESOURCE\_ID\_FORMAT | |
| **Initial conditions** | **with {**  the IUT **being** registered **and**  the IUT **being** switched on **and**  the IUT **being configured** to use *NON\_HIERARCHICAL\_RESOURCE\_ADDRESS* **and**  the IUT **having** created a container resource CONTAINER\_RESOURCE\_ADDRESS **and**  the IUT **having** privileges to perform UPDATE operation on resource CONTAINER\_RESOURCE\_ADDRESS  **}** | | |
| **Expected behaviour** | **Test events** | | **Direction** |
| **when {**  the IUT **is triggered to send** a valid UPDATE Request **containing**  To **set to** CONTAINER\_RESOURCE\_ADDRESS **and**  Content **containing**  container resource **containing**  valid labels attribute  **}** | | NA |
| **then {**  the IUT **sends** a valid UPDATE request **to** CSE **containing**  To **set to** *NON\_HIERARCHICAL\_RESOURCE\_ADDRESS* **and**  From **set to** AE\_ID **and**  Content **containing**  container resource **containing**  valid labels attribute  **}** | | IUT 🡪 CSE |

|  |  |
| --- | --- |
| **TP Id** | **NON\_HIERARCHICAL\_RESOURCE\_ADDRESS** |
| TP/oneM2M/AE/GEN/UPD/001\_CSR | UNSTRUCTURED\_CSE\_RELATIVE\_RESOURCE\_ID |
| TP/oneM2M/AE/GEN/UPD/001\_SPR | SP\_RELATIVE\_RESOURCE\_ID, (see note) |
| TP/oneM2M/AE/GEN/UPD/001\_ABS | ABSOLUTE\_RESOURCE\_ID (see note) |
| NOTE: These addresses are constructed with the Unstructured-CSE-Relative-Resource-ID. | |

TP/oneM2M/AE/GEN/UPD/002

|  |  |  |  |
| --- | --- | --- | --- |
| **TP Id** | | TP/oneM2M/AE/GEN/UPD/002 | |
| **Test objective** | | Check that the IUT sends the update of a *<container>* resource using structured resource identifier | |
| **Reference** | | TS-0001 [1], clause 9.3.1-1 | |
| **Config Id** | | CF03 | |
| **PICS Selection** | | PICS\_AE, PICS\_STRUCTURED\_CSE\_RELATIVE\_RESOURCE\_ID\_FORMAT | |
| **Initial conditions** | **with {**  the IUT **being** registered **and**  the IUT **being** switched on **and**  the IUT **being configured** to use *HIERARCHICAL\_RESOURCE\_ADDRESS* **and**  the IUT **having** created a container resource CONTAINER\_RESOURCE\_ADDRESS **and**  the IUT **having** privileges to perform UPDATE operation on resource CONTAINER\_RESOURCE\_ADDRESS  **}** | | |
| **Expected behaviour** | **Test events** | | **Direction** |
| **when {**  the IUT **is triggered to send** a valid UPDATE Request **containing**  To **set to** CONTAINER\_RESOURCE\_ADDRESS **and**  Content **containing**  container resource **containing**  valid labels attribute  **}** | | NA |
| **then {**  the IUT **sends** a valid UPDATE request **to** CSE **containing**  To **set to** *HIERARCHICAL\_RESOURCE\_ADDRESS* **and**  From **set to** AE\_ID **and**  Content **containing**  Container resource **containing**  valid labels attribute  **}** | | IUT 🡪 CSE |

|  |  |
| --- | --- |
| **TP Id** | **HIERARCHICAL\_RESOURCE\_ADDRESS** |
| TP/oneM2M/AE/GEN/UPD/002\_CSR | STRUCTURED\_CSE\_RELATIVE\_RESOURCE\_ID |
| TP/oneM2M/AE/GEN/UPD/002\_SPR | SP\_RELATIVE\_RESOURCE\_ID (see note) |
| TP/oneM2M/AE/GEN/UPD/002\_ABS | ABSOLUTE\_RESOURCE\_ID, (see note) |
| NOTE: These addresses are constructed with the Structured-CSE-Relative-Resource-ID. | |

##### 7.2.1.1.3 RETRIEVE Operation

TP/oneM2M/AE/GEN/RET/001

|  |  |  |  |
| --- | --- | --- | --- |
| **TP Id** | | TP/oneM2M/AE/GEN/RET/001 | |
| **Test objective** | | Check that the IUT sends the retrieval of a *<container>* resource using unstructured resource identifier | |
| **Reference** | | TS-0001 [1], clause 9.3.1-1 | |
| **Config Id** | | CF03 | |
| **Parent release** | | Release 1 | |
| **PICS Selection** | | PICS\_AE, PICS\_UNSTRUCTURED\_CSE\_RELATIVE\_RESOURCE\_ID\_FORMAT | |
| **Initial conditions** | **with {**  the IUT **being** registered **and**  the IUT **being** switched on **and**  the IUT **being configured** to use *NON\_HIERARCHICAL\_RESOURCE\_ADDRESS* **and**  the IUT **having** created a container resource CONTAINER\_RESOURCE\_ADDRESS **and** the IUT **having** privileges to perform RETRIEVE operation on container resource  **}** | | |
| **Expected behaviour** | **Test events** | | **Direction** |
| **when {**  the IUT **is triggered to send** a valid RETRIEVE Request **containing**  To **set to** CONTAINER\_RESOURCE\_ADDRESS  **}** | | NA |
| **then {**  the IUT **sends** a valid RETRIEVE request **to** CSE **containing**  To **set to** *NON\_HIERARCHICAL\_RESOURCE\_ADDRESS* **and**  From **set to** AE\_ID  **}** | | IUT 🡪 CSE |

|  |  |
| --- | --- |
| **TP Id** | **NON\_HIERARCHICAL\_RESOURCE\_ADDRESS** |
| TP/oneM2M/AE/GEN/RET/001\_CSR | UNSTRUCTURED\_CSE\_RELATIVE\_RESOURCE\_ID |
| TP/oneM2M/AE/GEN/RET/001\_SPR | SP\_RELATIVE\_RESOURCE\_ID, (see note) |
| TP/oneM2M/AE/GEN/RET/001\_ABS | ABSOLUTE\_RESOURCE\_ID, (see note) |
| NOTE: These addresses are constructed with the Unstructured-CSE-Relative-Resource-ID. | |

TP/oneM2M/AE/GEN/RET/002

|  |  |  |  |
| --- | --- | --- | --- |
| **TP Id** | | TP/oneM2M/AE/GEN/RET/002 | |
| **Test objective** | | Check that the IUT sends the retrieval of a *<container>* resource using structured resource identifier | |
| **Reference** | | TS-0001 [1], clause 9.3.1-1 | |
| **Config Id** | | CF03 | |
| **Parent release** | | Release 1 | |
| **PICS Selection** | | PICS\_AE, PICS\_STRUCTURED\_CSE\_RELATIVE\_RESOURCE\_ID\_FORMAT | |
| **Initial conditions** | **with {**  the IUT **being** registered **and**  the IUT **being** switched on **and**  the IUT **being configured** to use *HIERARCHICAL\_RESOURCE\_ADDRESS* **and**  the IUT **having** created a container resource CONTAINER\_RESOURCE\_ADDRESS **and** the IUT **having** privileges to perform RETRIEVE operation on container resource  **}** | | |
| **Expected behaviour** | **Test events** | | **Direction** |
| **when {**  the IUT **is triggered to send** a valid RETRIEVE Request **containing**  To **set to** CONTAINER\_RESOURCE\_ADDRESS  **}** | | NA |
| **then {**  the IUT **sends** a valid RETRIEVE request **to** CSE **containing**  To **set to** *HIERARCHICAL\_RESOURCE\_ADDRESS* **and**  From **set to** AE\_ID  **}** | | IUT 🡪 CSE |

|  |  |
| --- | --- |
| **TP Id** | **HIERARCHICAL\_RESOURCE\_ADDRESS** |
| TP/oneM2M/AE/GEN/RET/002\_CSR | STRUCTURED\_CSE\_RELATIVE\_RESOURCE\_ID |
| TP/oneM2M/AE/GEN/RET/002\_SPR | SP\_RELATIVE\_RESOURCE\_ID, (see note) |
| TP/oneM2M/AE/GEN/RET/002\_ABS | ABSOLUTE\_RESOURCE\_ID, (see note) |
| NOTE: These addresses are constructed with the Structured-CSE-Relative-Resource-ID. | |

##### 7.2.1.1.4 DELETE Operation

TP/oneM2M/AE/GEN/DEL/001

|  |  |  |  |
| --- | --- | --- | --- |
| **TP Id** | | TP/oneM2M/AE/GEN/DEL/001 | |
| **Test objective** | | Check that the IUT sends the deletion of a *<container>* resource using unstructured resource identifier | |
| **Reference** | | TS-0001 [1], clause 9.3.1-1 | |
| **Config Id** | | CF03 | |
| **Parent release** | | Release 1 | |
| **PICS Selection** | | PICS\_AE, PICS\_UNSTRUCTURED\_CSE\_RELATIVE\_RESOURCE\_ID\_FORMAT | |
| **Initial conditions** | **with {**  the IUT **being** registered **and**  the IUT **being** switched on **and**  the IUT **being configured** to use *NON\_HIERARCHICAL\_RESOURCE\_ADDRESS* **and**  the IUT **having** created a container resource CONTAINER\_RESOURCE\_ADDRESS **and**  the IUT **having** privileges to perform DELETE operation on container resource  **}** | | |
| **Expected behaviour** | **Test events** | | **Direction** |
| **when {**  the IUT **is triggered to send** a valid DELETE Request **containing**  To **set to** CONTAINER\_RESOURCE\_ADDRESS  **}** | | NA |
| **then {**  the IUT **sends** a valid DELETE request **to** CSE **containing**  To **set to** *NON\_HIERARCHICAL\_RESOURCE\_ADDRESS* **and**  From **set to** AE\_ID  **}** | | IUT 🡪 CSE |

|  |  |
| --- | --- |
| **TP Id** | **NON\_HIERARCHICAL\_RESOURCE\_ADDRESS** |
| TP/oneM2M/AE/GEN/DEL/001\_CSR | UNSTRUCTURED\_CSE\_RELATIVE\_RESOURCE\_ID |
| TP/oneM2M/AE/GEN/DEL/001\_SPR | SP\_RELATIVE\_RESOURCE\_ID, (see note) |
| TP/oneM2M/AE/GEN/DEL/001\_ABS | ABSOLUTE\_RESOURCE\_ID, (see note) |
| NOTE: These addresses are constructed with the Unstructured-CSE-Relative-Resource-ID. | |

TP/oneM2M/AE/GEN/DEL/002

|  |  |  |  |
| --- | --- | --- | --- |
| **TP Id** | | TP/oneM2M/AE/GEN/DEL/002 | |
| **Test objective** | | Check that the IUT sends the deletion of a *<container>* resource using structured resource identifier | |
| **Reference** | | TS-0001 [1], clause 9.3.1-1 | |
| **Config Id** | | CF03 | |
| **Parent release** | | Release 1 | |
| **PICS Selection** | | PICS\_AE, PICS\_STRUCTURED\_CSE\_RELATIVE\_RESOURCE\_ID\_FORMAT | |
| **Initial conditions** | **with {**  the IUT **being** registered **and**  the IUT **being** switched on **and**  the IUT **being configured** to use *HIERARCHICAL\_RESOURCE\_ADDRESS* **and**  the IUT **having** created a container resource CONTAINER\_RESOURCE\_ADDRESS **and**  the IUT **having** privileges to perform DELETE operation on container resource  **}** | | |
| **Expected behaviour** | **Test events** | | **Direction** |
| **when {**  the IUT **is triggered to send** a valid DELETE Request **containing**  To **set to** CONTAINER\_RESOURCE\_ADDRESS  **}** | | NA |
| **then {**  the IUT **sends** a valid DELETE request **to** CSE **containing**  To **set to** *HIERARCHICAL\_RESOURCE\_ADDRESS* **and**  From **set to** AE\_ID  **}** | | IUT 🡪 CSE |

|  |  |
| --- | --- |
| **TP Id** | **HIERARCHICAL\_RESOURCE\_ADDRESS** |
| TP/oneM2M/AE/GEN/DEL/002\_CSR | STRUCTURED\_CSE\_RELATIVE\_RESOURCE\_ID |
| TP/oneM2M/AE/GEN/DEL/002\_SPR | SP\_RELATIVE\_RESOURCE\_ID, (see note) |
| TP/oneM2M/AE/GEN/DEL/002\_ABS | ABSOLUTE\_RESOURCE\_ID, (see note) |
| NOTE: These addresses are constructed with the Structured-CSE-Relative-Resource-ID. | |

#### 7.2.1.2 Registration (REG)

##### 7.2.1.2.1 CREATE Operation

TP/oneM2M/AE/REG/CRE/001

|  |  |  |
| --- | --- | --- |
| **TP Id** | TP/oneM2M/AE/REG//CRE/001 | |
| **Test objective** | Check that the IUT sends an AE initial registration request with no AE-ID-STEM provided when it is started | |
| **Reference** | TS-0001 [1], clause 10.1.1.2.2 - case C and clause 9.6.19 | |
| **Config Id** | CF03 | |
| **Parent release** | Release 1 | |
| **PICS Selection** | PICS\_AE | |
| **Initial conditions** | **with {**  the IUT **never** **being** registered **and**  the IUT **being** switched off **and**  the IUT **having got** a valid APP-ID  **}** | |
| **Expected behaviour** | **Test events** | **Direction** |
| **when {**  the IUT **is triggered to send** a valid CREATE Request **containing**  To **set to** CSE\_RESOURCE\_ADDRESS **and**  Resource Type **set to** 2 (AE) **and**  Content **containing**  AE resource representation  **}** | **NA** |
| **then {**  the IUT **sends** a valid CREATE Request **to** CSE **containing**  Resource Type **set to** 2 (AE) **and**  To **set to** CSE\_RESOURCE\_ADDRESS **and**  From **set to** empty **and**  Content **containing**  AE resource representation  **}** | CSE 🡨 IUT |

TP/oneM2M/AE/REG/CRE/002

|  |  |  |  |
| --- | --- | --- | --- |
| **TP Id** | | TP/oneM2M/AE/REG/CRE/002 | |
| **Test objective** | | Check that the IUT sends a registration CREATE Request with the value of the attribute *ATTRIBUTE\_NAME* of the AE resource | |
| **Reference** | | TS-0004 [2], 7.4.6.1 | |
| **Config Id** | | CF03 | |
| **Parent release** | | Release 1 | |
| **PICS Selection** | | PICS\_AE | |
| **Initial conditions** | **with {**  the IUT **never** **being** registered **and**  the IUT **being** switched off **and**  the IUT **having got** a valid APP-ID  **}** | | |
| **Expected behaviour** | **Test events** | | **Direction** |
| **when {**  the IUT **is triggered to send** a valid CREATE Request **containing**  To **set to** TARGET\_RESOURCE\_ADDRESS **and**  Resource Type **set to** 2 (AE) **and**  Content **containing**  AE resource **containing**  *ATTRIBUTE\_NAME* attribute  **}** | | NA |
| **then {**  the IUT **sends** a valid CREATE Request **containing**  To **set to** TARGET\_RESOURCE\_ADDRESS **and**  From **set to** AE\_ID **and**  Content **containing**  AE resource **containing**  valid *ATTRIBUTE\_NAME* attribute  **}** | | IUT 🡪 CSE |

|  |  |  |
| --- | --- | --- |
| **TP Id** | **Reference** | **ATTRIBUTE\_NAME** |
| TP/oneM2M/AE/REG/CRE/002\_RN | TS-0004 [2] | resourceName |
| TP/oneM2M/AE/REG/CRE/002\_ET | TS-0004 [2] | expirationTime |
| TP/oneM2M/AE/REG/CRE/002\_LBL | TS-0004 [2] | labels |
| TP/oneM2M/AE/REG/CRE/002\_APN | TS-0004 [2] | appName |
| TP/oneM2M/AE/REG/CRE/002\_API | TS-0004 [2] | App-ID |
| TP/oneM2M/AE/REG/CRE/002\_POA | TS-0004 [2] | pointOfAccess |
| TP/oneM2M/AE/REG/CRE/002\_OR | TS-0004 [2] | ontologyRef |
| TP/oneM2M/AE/REG/CRE/002\_NL | TS-0004 [2] | nodeLink |
| TP/oneM2M/AE/REG/CRE/002\_RR | TS-0004 [2] | requestReachability |
| TP/oneM2M/AE/REG/CRE/002\_CSZ | TS-0004 [2] | contentSerialization |

##### 7.2.1.2.2 DELETE Operation

TP/oneM2M/AE/REG/DEL/001

|  |  |  |
| --- | --- | --- |
| **TP Id** | TP/oneM2M/AE/REG/DEL/001 | |
| **Test objective** | Check that the IUT sends AE deregistration request to CSE | |
| **Reference** | TS-0001 [1], clause 10.1.4.2.2 | |
| **Config Id** | CF03 | |
| **Parent release** | Release 1 | |
| **PICS Selection** | PICS\_AE | |
| **Initial conditions** | **with {**  the IUT **being** in the "initial state"  the IUT **having registered** to CSE **and**  the IUT **having** privileges to perform DELETE operation on the resource AE to CSE  **}** | |
| **Expected behaviour** | **Test events** | **Direction** |
| **when {**  the IUT **is triggered to send** a valid DELETE Request **containing**  To **set to** AE\_RESOURCE\_ADDRESS  **}** | NA |
| **then {**  the IUT **sends** a valid DELETE Request **containing**  To **set to** AE\_RESOURCE\_ADDRESS **and**  From **set to** AE\_ID  **}** | CSE 🡨 IUT |

#### 7.2.1.3 Data Management and Repository (DMR)

##### 7.2.1.3.1 CREATE Operation

TP/oneM2M/AE/DMR/CRE/001

|  |  |  |  |
| --- | --- | --- | --- |
| **TP Id** | | TP/oneM2M/AE/DMR/CRE/001 | |
| **Test objective** | | Check that the IUT sends a Container creation request when it is triggered | |
| **Reference** | | TS-0001 [1], clauses 10.1.1.1 and 10.2.4.1, TS-0004 [2], clauses 7.2.2.1 and 7.4.7.1 | |
| **Config Id** | | CF03 | |
| **Parent release** | | Release 1 | |
| **PICS Selection** | | PICS\_AE. | |
| **Initial conditions** | **with {**  the IUT **being** registered **and**  the IUT **being** switched on **and**  the IUT **having** privileges to perform CREATE operation on resource AE\_RESOURCE\_ADDRESS  **}** | | |
| **Expected behaviour** | **Test events** | | **Direction** |
| **when {**  the IUT **is triggered to send** a valid CREATE Request **containing**  To **set to** AE\_RESOURCE\_ADDRESS **and**  Resource Type **set to** 3 (container) **and**  From **set to** AE\_ID **and**  Content **containing**  container resource representation  **}** | | NA |
| **then {**  the IUT **sends** a valid CREATE Request **to** CSE **containing**  To **set to** AE\_RESOURCE\_ADDRESS **and**  Resource Type **set to** 3 (container) **and**  From **set to** AE\_ID **and**  Content **containing**  container resource representation  **}** | | CSE 🡨 IUT |

TP/oneM2M/AE/DMR/CRE/002

|  |  |  |  |
| --- | --- | --- | --- |
| **TP Id** | | TP/oneM2M/AE/DMR/CRE/002 | |
| **Test objective** | | Check that the IUT sends a ContentInstance creation request when it is triggered | |
| **Reference** | | TS-0001 [1], clauses 10.1.1.1 and 10.2.4.1, TS-0004 [2], clauses 7.2.2.1 and 7.4.8.2.1 | |
| **Config Id** | | CF03 | |
| **Parent release** | | Release 1 | |
| **PICS Selection** | | PICS\_AE. | |
| **Initial conditions** | **with {**  the IUT **being** registered **and**  the IUT **having** created a container resource CONTAINER\_RESOURCE\_ADDRESS **and**  the IUT **having** privileges to perform CREATE operation on resource CONTAINER\_RESOURCE\_ADDRESS  **}** | | |
| **Expected behaviour** | **Test events** | | **Direction** |
| **when {**  the IUT **is triggered to send** a valid CREATE Request **containing**  To **set to** CONTAINER\_RESOURCE\_ADDRESS **and**  Resource Type **set to** 4 (contentInstance) **and**  Content **containing**  contentInstance resource representation  **}** | | NA |
| **then {**  the IUT **sends** a valid CREATE Request **to** CSE **containing**  To **set to** CONTAINER\_RESOURCE\_ADDRESS **and**  Resource Type **set to** 4 (contentInstance) **and**  From **set to** AE\_ID **and**  Content **containing**  contentInstance resource representation  **}** | | CSE 🡨 IUT |

TP/oneM2M/AE/DMR/CRE/003

|  |  |  |  |
| --- | --- | --- | --- |
| **TP Id** | | TP/oneM2M/AE/DMR/CRE/003 | |
| **Test objective** | | Check that the IUT sends a ContentInstance creation request with optional attribute ATTRIBUTE\_NAME | |
| **Reference** | | TS-0001 [1], clauses 10.1.1.1 and 10.2.4.1, TS-0004 [2], clauses 7.2.2.1 and 7.4.8.2.1 | |
| **Config Id** | | CF03 | |
| **Parent release** | | Release 1 | |
| **PICS Selection** | | PICS\_AE | |
| **Initial conditions** | **with {** the IUT **being** registered **and**  the IUT **having** created a container resource CONTAINER\_RESOURCE\_ADDRESS through preconfiguration request **and**  the IUT **having** privileges to perform CREATE operation on resource CONTAINER\_RESOURCE\_ADDRESS  **}** | | |
| **Expected behaviour** | **Test events** | | **Direction** |
| **when {**  the IUT **is triggered to send** a valid CREATE Request **containing**  To **set to** CONTAINER\_RESOURCE\_ADDRESS **and**  Resource Type **set to** 4 (contentInstance) **and**  Content **containing**  ContentInstance resource **containing**  valid *ATTRIBUTE\_NAME* attribute  **}** | | **NA** |
| **then {**  the IUT **sends** a valid CREATE Request **containing**  To **set to** CONTAINER\_RESOURCE\_ADDRESS **and**  Resource Type **set to** 4 (contentInstance) **and**  From **set to** AE\_ID **and**  Content **containing**  ContentInstance resource **containing**  valid *ATTRIBUTE\_NAME* attribute  } | | CSE 🡨 IUT |

| **TP Id** | **PICS Selection** | **ATTRIBUTE\_NAME** |
| --- | --- | --- |
| TP/oneM2M/AE/DMR/CRE/003\_CNF | PICS\_CIN\_CNF | contentInfo |
| TP/oneM2M/AE/DMR/CRE/003\_RN | PICS\_CIN\_RN | resourceName |
| TP/oneM2M/AE/DMR/CRE/003\_ET | PICS\_CIN\_ET | expirationTime |
| TP/oneM2M/AE/DMR/CRE/003\_LBL | PICS\_CIN\_LBL | labels |
| TP/oneM2M/AE/DMR/CRE/003\_CR | PICS\_CIN\_CR | creator |

TP/oneM2M/AE/DMR/CRE/004

|  |  |  |  |
| --- | --- | --- | --- |
| **TP Id** | | TP/oneM2M/AE/DMR/CRE/004 | |
| **Test objective** | | Check that the IUT sends a Container creation request with optional attribute ATTRIBUTE\_NAME when it is triggered | |
| **Reference** | | TS-0001 [1], clauses 10.1.1.1 and 10.2.4.1, TS-0004 [2], clauses 7.2.2.1 and 7.4.7.1 | |
| **Config Id** | | CF03 | |
| **Parent release** | | Release 1 | |
| **PICS Selection** | | PICS\_AE. | |
| **Initial conditions** | **with {**  the IUT **being** registered **and**  the IUT **having** privileges to perform CREATE operation on resource AE\_RESOURCE\_ADDRESS  **}** | | |
| **Expected behaviour** | **Test events** | | **Direction** |
| **when {**  the IUT **is triggered to** send a valid CREATE Request **containing**  To **set to** AE\_RESOURCE\_ADDRESS **and**  Resource Type **set to** 3 (container) **and**  Content **containing**  container resource **containing**  valid *ATTRIBUTE\_NAME* attribute  **}** | | NA |
| **then {**  the IUT **sends** a valid CREATE Request **containing**  To **set to** AE\_RESOURCE\_ADDRESS **and**  Resource Type **set to** 3 (container) **and**  From **set to** AE\_ID **and**  Content **containing**  container resource **containing**  valid *ATTRIBUTE\_NAME* attribute  **}** | | CSE 🡨 IUT |

|  |  |  |
| --- | --- | --- |
| **TP Id** | **PICS Selection** | **ATTRIBUTE\_NAME** |
| TP/oneM2M/AE/DMR/CRE/004\_ACPI | PICS\_CNT\_ACPI | accessControlPolicyIDs |
| TP/oneM2M/AE/DMR/CRE/004\_MNI | PICS\_CNT\_MNI | maxNrOfInstances |
| TP/oneM2M/AE/DMR/CRE/004\_MBS | PICS\_CNT\_MBS | maxByteSize |
| TP/oneM2M/AE/DMR/CRE/004\_MIA | PICS\_CNT\_MIA | maxInstanceAge |
| TP/oneM2M/AE/DMR/CRE/004\_OR | PICS\_CNT\_OR | ontologyRef |
| TP/oneM2M/AE/DMR/CRE/004\_LI | PICS\_CNT\_LI | locationID |
| TP/oneM2M/AE/DMR/CRE/004\_RN | PICS\_CNT\_RN | resourceName |
| TP/oneM2M/AE/DMR/CRE/004\_ET | PICS\_CNT\_ET | expirationTime |
| TP/oneM2M/AE/DMR/CRE/004\_LBL | PICS\_CNT\_LBL | labels |
| TP/oneM2M/AE/DMR/CRE/004\_CR | PICS\_CNT\_CR | creator |

##### 7.2.1.3.2 UPDATE Operation

TP/oneM2M/AE/DMR/UPD/001

|  |  |  |  |
| --- | --- | --- | --- |
| **TP Id** | | TP/oneM2M/AE/DMR/UPD/001 | |
| **Test objective** | | Check that the IUT sends an UPDATE Request with the value of the attribute *ATTRIBUTE\_NAME* of the AE resource | |
| **Reference** | | TS-0001 [1], clause 10.1.3 | |
| **Config Id** | | CF03 | |
| **Parent release** | | Release 1 | |
| **PICS Selection** | | PICS\_AE | |
| **Initial conditions** | **with {**  the IUT **being** registered **containing**  a RWattribute *ATTRIBUTE\_NAME*  **}** | | |
| **Expected behaviour** | **Test events** | | **Direction** |
| **when {**  the IUT **is triggered to send** a valid UPDATE Request **containing**  To **set to** AE\_RESOURCE\_ADDRESS **and**  Content **containing**  AE resource **containing**  valid *ATTRIBUTE\_NAME* attribute  **}** | | NA |
| **then {**  the IUT **sends** a valid UPDATE Request **containing**  To **set to AE**\_RESOURCE\_ADDRESS **and**  From **set to** AE\_ID **and**  Content **containing**  AE resource **containing**  valid *ATTRIBUTE\_NAME* attribute  **}** | | IUT 🡪 CSE |

|  |  |  |
| --- | --- | --- |
| **TP Id** | **Reference** | **ATTRIBUTE\_NAME** |
| TP/oneM2M/AE/DMR/UPD/001\_ET | TS-0004 [2], clause 7.4.6.1 | expirationTime |
| TP/oneM2M/AE/DMR/UPD/001\_LBL | TS-0004 [2], clause 7.4.6.1 | labels |
| TP/oneM2M/AE/DMR/UPD/001\_APN | TS-0004 [2], clause 7.4.6.1 | appName |
| TP/oneM2M/AE/DMR/UPD/001\_POA | TS-0004 [2], clause 7.4.6.1 | pointOfAccess |
| TP/oneM2M/AE/DMR/UPD/001\_OR | TS-0004 [2], clause 7.4.6.1 | ontologyRef |
| TP/oneM2M/AE/DMR/UPD/001\_NL | TS-0004 [2], clause 7.4.6.1 | nodeLink |
| TP/oneM2M/AE/DMR/UPD/001\_RR | TS-0004 [2], clause 7.4.6.1 | requestReachability |
| TP/oneM2M/AE/DMR/UPD/001\_CSZ | TS-0004 [2], clause 7.4.6.1 | contentSerialization |

TP/oneM2M/AE/DMR/UPD/002

|  |  |  |  |
| --- | --- | --- | --- |
| **TP Id** | | TP/oneM2M/AE/DMR/UPD/002 | |
| **Test objective** | | Check that the IUT sends an UPDATE Request with the value of the attribute *ATTRIBUTE\_NAME* of the <container> resource | |
| **Reference** | | TS-0004 [2], clause 7.4.7.2.3 | |
| **Config Id** | | CF03 | |
| **Parent release** | | Release 1 | |
| **PICS Selection** | | PICS\_AE | |
| **Initial conditions** | **with {**  the IUT **being** registered **containing**  the IUT **having** created a container resource CONTAINER\_RESOURCE\_ADDRESS **and**  the IUT **having** privileges to perform UPDATE operation on resource CONTAINER\_RESOURCE\_ADDRESS  **}** | | |
| **Expected behaviour** | **Test events** | | **Direction** |
| **when {**  the IUT **is triggered to send** a valid UPDATE Request **containing**  To **set to** CONTAINER\_RESOURCE\_ADDRESS **and**  Content **containing**  containerresource **containing**  valid *ATTRIBUTE\_NAME* attribute  **}** | | NA |
| **then {**  the IUT **sends** a valid UPDATE Request **containing**  To **set to** CONTAINER\_RESOURCE\_ADDRESS **and**  From **set to** AE\_ID **and**  Content **containing**  containerresource **containing**  valid *ATTRIBUTE\_NAME* attribute  **}** | | IUT 🡪 CSE |

|  |  |  |
| --- | --- | --- |
| **TP Id** | **Reference** | **ATTRIBUTE\_NAME** |
| TP/oneM2M/AE/DMR/UPD/002\_ET | TS-0004 [2], clause 7.4.7.2.3 | expirationTime |
| TP/oneM2M/AE/DMR/UPD/002\_LBL | TS-0004 [2], clause 7.4.7.2.3 | labels |
| TP/oneM2M/AE/DMR/UPD/002\_MNI | TS-0004 [2], clause 7.4.7.2.3 | maxNrOfInstances |
| TP/oneM2M/AE/DMR/UPD/002\_MBS | TS-0004 [2], clause 7.4.7.2.3 | maxByteSize |
| TP/oneM2M/AE/DMR/UPD/002\_MIA | TS-0004 [2], clause 7.4.7.2.3 | maxInstanceAge |

##### 7.2.1.3.3 RETRIEVE Operation

TP/oneM2M/AE/DMR/RET/001

|  |  |  |  |
| --- | --- | --- | --- |
| **TP Id** | | TP/oneM2M/AE/DMR/RET/001 | |
| **Test objective** | | Check that the IUT sends a RETRIEVE Request on the TARGET\_RESOURCE\_ADDRESS to CSE | |
| **Reference** | | TS-0001 [1], clause 10.1.2, TS-0004 [2], clause 7.2.2.1 | |
| **Config Id** | | CF03 | |
| **Parent release** | | Release 1 | |
| **PICS Selection** | | PICS\_AE. | |
| **Initial conditions** | | with {  the IUT **being** registered  **and** the IUT **being** switched on  **and** the CSE **having created** a resource TARGET\_RESOURCE\_ADDRESSof type *RESOURCE\_TYPE*  **and** the IUT **having** privileges to perform RETRIEVE operation on resource TARGET\_RESOURCE\_ADDRESS  } | |
| **Expected behaviour** | **Test events** | | **Direction** |
| **when {**  the IUT **is triggered to send** a valid RETRIEVE Request **containing**  To **set to** TARGET\_RESOURCE\_ADDRESS  **}** | | NA |
| **then {**  the IUT **sends** a valid RETRIEVE Request **containing**  To **set to** TARGET\_RESOURCE\_ADDRESS **and**  From **set to** AE\_ID  **}** | | IUT 🡪 CSE |

|  |  |  |
| --- | --- | --- |
| **TP Id** | **Reference** | **RESOURCE\_TYPE** |
| TP/oneM2M/AE/DMR/RET/001\_CB | TS-0001 [1], clause 10.2.3.2 | 5 (CSEBase) |
| TP/oneM2M/AE/DMR/RET/001\_AE | TS-0001 [1], clause 10.2.1.2 | 2 (AE) |
| TP/oneM2M/AE/DMR/RET/001\_CNT | TS-0001 [1], clause 10.2.4.2 | 3 (Container) |

TP/oneM2M/AE/DMR/RET/002

|  |  |  |  |
| --- | --- | --- | --- |
| **TP Id** | | TP/oneM2M/AE/DMR/RET/002 | |
| **Test objective** | | Check that the IUT sends a RETRIEVE Request of oldest virtual resource. | |
| **Reference** | | TS-0001 [1], clause 10.2.23.1, TS-0004 [2], clause 7.4.29.2.3 | |
| **Config Id** | | CF03 | |
| **Parent release** | | Release 1 | |
| **PICS Selection** | | PICS\_AE | |
| **Initial conditions** | **with {**  the IUT **being** registered  **and** the IUT **being** switched on  **and** the CSE **having created** a container resource  **and** the CSE **having created** a contentInstance resource under container resource  **and** the IUT **having** privileges to perform RETRIEVE operation on contentInstance resource  **}** | | |
| **Expected behaviour** | **Test events** | | **Direction** |
| **when {**  the IUT **is triggered to send** a valid RETRIEVE Request **containing**  To **set to** CONTAINER\_RESOURCE\_ADDRESS/oldest  **}** | | NA |
| **then {**  the IUT **sends** a valid RETRIEVE Request **containing**  To **set to** CONTAINER\_RESOURCE\_ADDRESS/oldest **and**  From **set to** AE\_ID  **}** | | IUT 🡪 CSE |

TP/oneM2M/AE/DMR/RET/003

|  |  |  |  |
| --- | --- | --- | --- |
| **TP Id** | | TP/oneM2M/AE/DMR/RET/003 | |
| **Test objective** | | Check that the IUT sends a RETRIEVE Request of latest virtual resource. | |
| **Reference** | | TS-0001 [1], clause 10.2.22.1, TS-0004 [2], clause 7.4.28.2.3 | |
| **Config Id** | | CF03 | |
| **Parent release** | | Release 1 | |
| **PICS Selection** | | PICS\_AE | |
| **Initial conditions** | **with {**  the IUT **being** registered  **and** the IUT **being** switched on  **and** the CSE **having created** a container resource  **and** the CSE **having created** a contentInstance resource under container resource  **and** the IUT **having** privileges to perform RETRIEVE operation on contentInstance resource  **}** | | |
| **Expected behaviour** | **Test events** | | **Direction** |
| **when {**  the IUT **is triggered to send** a valid RETRIEVE Request **containing**  To **set to** CONTAINER\_RESOURCE\_ADDRESS/latest  **}** | | NA |
| **then {**  the IUT **sends** a valid RETRIEVE Request **containing**  To **set to** CONTAINER\_RESOURCE\_ADDRESS/latest **and**  From **set to** AE\_ID  **}** | | IUT 🡪 CSE |

TP/oneM2M/AE/DMR/RET/004

|  |  |  |  |
| --- | --- | --- | --- |
| **TP Id** | | TP/oneM2M/AE/DMR/RET/004 | |
| **Test objective** | | Check that the IUT sends a <container> resource RETRIEVE Request to CSE | |
| **Reference** | | TS-0004 [2], clause 7.4.7.2.2 | |
| **Config Id** | | CF03 | |
| **Parent release** | | Release 1 | |
| **PICS Selection** | | PICS\_AE. | |
| **Initial conditions** | | with {  the IUT **being** registered  **and** the IUT **being** switched on  **and** the IUT **having** created a container resource CONTAINER\_RESOURCE\_ADDRESS  **and** the IUT **having** privileges to perform RETRIEVE operation on container resource  } | |
| **Expected behaviour** | **Test events** | | **Direction** |
| **when {**  the IUT **is triggered to send** a valid RETRIEVE Request **containing**  To **set to** CONTAINER\_RESOURCE\_ADDRESS  **}** | | NA |
| **then {**  the IUT **sends** a valid RETRIEVE Request **containing**  To **set to** CONTAINER\_RESOURCE\_ADDRESS **and**  From **set to** AE\_ID  **}** | | IUT 🡪 CSE |

TP/oneM2M/AE/DMR/RET/005

|  |  |  |  |
| --- | --- | --- | --- |
| **TP Id** | | TP/oneM2M/AE/DMR/RET/005 | |
| **Test objective** | | Check that the IUT sends a <contentInstance> resource RETRIEVE Request to CSE | |
| **Reference** | | TS-0004 [2], clause 7.4.8.2.2 | |
| **Config Id** | | CF03 | |
| **Parent release** | | Release 1 | |
| **PICS Selection** | | PICS\_AE. | |
| **Initial conditions** | | with {  the IUT **being** registered  **and** the IUT **being** switched on  **and** the CSE **having created** a container resource  **and** the CSE **having created** a contentInstance resource under container resource  **and** the IUT **having** privileges to perform RETRIEVE operation on contentInstance resource  } | |
| **Expected behaviour** | **Test events** | | **Direction** |
| **when {**  the IUT **is triggered to send** a valid RETRIEVE Request **containing**  To **set to** CONTENTINSTANCE\_RESOURCE\_ADDRESS  **}** | | NA |
| **then {**  the IUT **sends** a valid RETRIEVE Request **containing**  To **set to** CONTENTINSTANCE\_RESOURCE\_ADDRESS **and**  From **set to** AE\_ID  **}** | | IUT 🡪 CSE |

##### 7.2.1.3.4 DELETE Operation

TP/oneM2M/AE/DMR/DEL/001

|  |  |  |  |
| --- | --- | --- | --- |
| **TP Id** | | TP/oneM2M/AE/DMR/DEL/001 | |
| **Test objective** | | Check that the IUT sends a DELETE Request of oldest virtual resource. | |
| **Reference** | | TS-0001 [1], clause 10.2.23.2, TS-0004 [2], clause 7.4.29.2.5 | |
| **Config Id** | | CF03 | |
| **Parent release** | | Release 1 | |
| **PICS Selection** | | PICS\_AE | |
| **Initial conditions** | **with {**  the IUT **being** registered  **and** the IUT **being** switched on  **and** the CSE **having created** a container resource  **and** the CSE **having created** a contentInstance resource under container resource  **and** the IUT **having** privileges to perform DELETE operation on contentInstance resource  **}** | | |
| **Expected behaviour** | **Test events** | | **Direction** |
| **when {**  the IUT **is triggered to send** a valid DELETE Request **containing**  To **set to** CONTAINER\_RESOURCE\_ADDRESS/oldest  **}** | | NA |
| **then {**  the IUT **sends** a valid DELETE Request **containing**  To **set to** CONTAINER\_RESOURCE\_ADDRESS/oldest **and**  From **set to** AE\_ID  **}** | | IUT 🡪 CSE |

TP/oneM2M/AE/DMR/DEL/002

|  |  |  |  |
| --- | --- | --- | --- |
| **TP Id** | | TP/oneM2M/AE/DMR/DEL/002 | |
| **Test objective** | | Check that the IUT sends a DELETE Request of latest virtual resource. | |
| **Reference** | | TS-0001 [1], clause 10.2.22.2, TS-0004 [2], clause 7.4.28.2.5 | |
| **Config Id** | | CF03 | |
| **Parent release** | | Release 1 | |
| **PICS Selection** | | PICS\_AE | |
| **Initial conditions** | **with {**  the IUT **being** registered  **and** the IUT **being** switched on  **and** the CSE **having created** a container resource  **and** the CSE **having created** a contentInstance resource under container resource  **and** the IUT **having** privileges to perform DELETE operation on contentInstance resource  **}** | | |
| **Expected behaviour** | **Test events** | | **Direction** |
| **when {**  the IUT **is triggered to send** a valid DELETE Request **containing**  To **set to** CONTAINER\_RESOURCE\_ADDRESS/oldest  **}** | | NA |
| **then {**  the IUT **sends** a valid DELETE Request **containing**  To **set to** CONTAINER\_RESOURCE\_ADDRESS/latest **and**  From **set to** AE\_ID  **}** | | IUT 🡪 CSE |

TP/oneM2M/AE/DMR/DEL/003

|  |  |  |
| --- | --- | --- |
| **TP Id** | TP/oneM2M/AE/DMR/DEL/003 | |
| **Test objective** | Check that the IUT sends a <container> resource DELETE request to CSE | |
| **Reference** | TS-0004 [2], clause 7.4.7.2.4 | |
| **Config Id** | CF03 | |
| **Parent release** | Release 1 | |
| **PICS Selection** | PICS\_AE | |
| **Initial conditions** | **with {**  the IUT **being** registered **and**  **and** the IUT **being** switched on  **and** the IUT **having** created a container resource CONTAINER\_RESOURCE\_ADDRESS  **and** the IUT **having** privileges to perform DELETE operation on container resource  **}** | |
| **Expected behaviour** | **Test events** | **Direction** |
| **when {**  the IUT **is triggered to send** a valid DELETE Request **containing**  To **set to** CONTAINER\_RESOURCE\_ADDRESS  **}** | **NA** |
| **then {**  the IUT **sends** a valid DELETE Request **containing**  To **set to** CONTAINER\_RESOURCE\_ADDRESS **and**  From **set to** AE\_ID  **}** | CSE 🡨 IUT |

TP/oneM2M/AE/DMR/DEL/004

|  |  |  |
| --- | --- | --- |
| **TP Id** | TP/oneM2M/AE/DMR/DEL/004 | |
| **Test objective** | Check that the IUT sends a <contentInstance> resource DELETE request to CSE | |
| **Reference** | TS-0004 [2], clause 7.4.8.2.4 | |
| **Config Id** | CF03 | |
| **Parent release** | Release 1 | |
| **PICS Selection** | PICS\_AE | |
| **Initial conditions** | **with {**  the IUT **being** registered  **and** the IUT **being** switched on  **and** the CSE **having created** a container resource  **and** the CSE **having created** a contentInstance resource under container resource  **and** the IUT **having** privileges to perform DELETE operation on contentInstance resource  **}** | |
| **Expected behaviour** | **Test events** | **Direction** |
| **when {**  the IUT **is triggered to send** a valid DELETE Request **containing**  To **set to** CONTENTINSTANCE\_RESOURCE\_ADDRESS  **}** | **NA** |
| **then {**  the IUT **sends** a valid DELETE Request **containing**  To **set to** CONTENTINSTANCE\_RESOURCE\_ADDRESS **and**  From **set to** AE\_ID  **}** | CSE 🡨 IUT |

#### 7.2.1.4 Subscription and Notification (SUB)

##### 7.2.1.4.1 CREATE Operation

TP/oneM2M/AE/SUB/CRE/001

|  |  |  |  |
| --- | --- | --- | --- |
| **TP Id** | | TP/oneM2M/AE/SUB/CRE/001 | |
| **Test objective** | | Check that the IUT sends a subscription creation request | |
| **Reference** | | TS-0001 [1], clauses 10.1.1.1 and 10.2.4.1, TS-0004 [2], clauses 7.2.2.1 and 7.4.9.2.1 | |
| **Config Id** | | CF03 | |
| **Parent release** | | Release 1 | |
| **PICS Selection** | | PICS\_AE. | |
| **Initial conditions** | **with {**  the IUT **being** registered **and**  the IUT **being** switched off **and**  the IUT **having** privileges to perform CREATE operation on resource AE\_RESOURCE\_ADDRESS  **}** | | |
| **Expected behaviour** | **Test events** | | **Direction** |
| **when {**  the IUT **is triggered to send** a valid CREATE Request **containing**  Resource Type **set to** 23 (subscription) **and**  To **set to** AE\_RESOURCE\_ADDRESS **and**  Content **containing**  subscription resource representation  **}** | | **NA** |
| **then {**  the IUT **sends** a valid CREATE Request **to** CSE **containing**  Resource Type **set to** 23 (subscription) **and**  To **set to** AE\_RESOURCE\_ADDRESS **and**  From **set to** AE\_ID **and**  Content **containing**  subscription resource representation  **}** | | CSE 🡨 IUT |

TP/oneM2M/AE/SUB/CRE/002

|  |  |  |  |
| --- | --- | --- | --- |
| **TP Id** | | TP/oneM2M/AE/SUB/CRE/002 | |
| **Test objective** | | Check that the IUT sends a subscription creation request with optional attribute ATTRIBUTE\_NAME when it is triggered | |
| **Reference** | | TS-0001 [1], clauses 10.1.1.1 and 10.2.11.2, TS-0004 [2], clauses 7.2.2.1 and 7.4.9.2.1 | |
| **Config Id** | | CF03 | |
| **Parent release** | | Release 1 | |
| **PICS Selection** | | PICS\_AE. | |
| **Initial conditions** | **with {**  the IUT **being** registered **and**  the IUT **having** privileges to perform CREATE operation on resource AE\_RESOURCE\_ADDRESS  **}** | | |
| **Expected behaviour** | **Test events** | | **Direction** |
| **when {**  the IUT **is triggered to** **send** a valid CREATE Request **containing**  To **set to** TARGET\_RESOURCE\_ADDRESS **and**  Resource Type **set to** 23 (subscription) **and**  Content **containing**  subscription resource **containing**  notificationURI attribute **and**  valid*ATTRIBUTE\_NAME* attribute  **}** | | NA |
| **then {**  the IUT **sends** a valid CREATE Request **to** CSE **containing**  To **set to** TARGET\_RESOURCE\_ADDRESS **and**  Resource Type **set to** 23 (subscription) **and**  From **set to** AE\_ID **and**  Content **containing**  subscription resource **containing**  notificationURI attribute **and**  valid*ATTRIBUTE\_NAME* attribute  **}** | | CSE 🡨 IUT |

| **TP Id** | **PICS Selection** | **Reference** | **ATTRIBUTE\_NAME** |
| --- | --- | --- | --- |
| TP/oneM2M/AE/SUB/CRE/002\_ACPI | PICS\_SUB\_ACPI | TS-0001 [1], clause 9.6.8, TS-0004 [2], clause 7.4.9.1 | accessControlPolicyIDs |
| TP/oneM2M/AE/SUB/CRE/002\_ENC | PICS\_SUB\_ENC | TS-0001 [1], clause 9.6.8, TS-0004 [2], clause 7.4.9.1 | eventNotificationCriteria |
| TP/oneM2M/AE/SUB/CRE/002\_EXC | PICS\_SUB\_EXC | TS-0001 [1], clause 9.6.8, TS-0004 [2], clause 7.4.9.1 | expirationCounter |
| TP/oneM2M/AE/SUB/CRE/002\_NFU | PICS\_SUB\_NFU | TS-0001 [1], clause 9.6.8, TS-0004 [2], clause 7.4.9.1 | notificationForwardingURI |
| TP/oneM2M/AE/SUB/CRE/002\_NCT | PICS\_SUB\_NCT | TS-0001 [1], clause 9.6.8, TS-0004 [2], clause 7.4.9.1 | notificationContentType |
| TP/oneM2M/AE/SUB/CRE/002\_NEC | PICS\_SUB\_NEC | TS-0001 [1], clause 9.6.8, TS-0004 [2], clause 7.4.9.1 | notificationEventCat |
| TP/oneM2M/AE/SUB/CRE/002\_SU | PICS\_SUB\_SU | TS-0001 [1], clause 9.6.8, TS-0004 [2], clause 7.4.9.1 | subscriberURI |

##### 7.2.1.4.2 NOTIFY Operation

TP/oneM2M/AE/SUB/NTF/001

|  |  |  |  |
| --- | --- | --- | --- |
| **TP Id** | | TP/oneM2M/AE/SUB/NTF/001 | |
| **Test objective** | | Check that the IUT sends a Notify Response to the hosting CSE when receiving a Notify request containing a single notification | |
| **Reference** | | TS-0001 [1], clause 6.1.12, TS-0004 [2], clause 7.5.1.2 | |
| **Config Id** | | CF03 | |
| **Parent release** | | Release 1 | |
| **PICS Selection** | | PICS\_AE | |
| **Initial conditions** | **with {**  the IUT **having been** registered **and**  the IUT **having created** subscription resource under the CSE **and**  the IUT **being** reachable through a URL ACCESSIBLE\_URL  **}** | | |
| **Expected behaviour** | **Test events** | | **Direction** |
| **when {**  the IUT **receives** a NOTIFY Request from hosting CSE **containing**  Content **containing**  notification message representation  **}** | | IUT 🡨 CSE |
| **then {**  the IUT **sends** a valid NOTIFY Response to the hosting CSE **containing**  Response Status Code **set to** RESPONSE\_STATUS\_CODE  **}** | | CSE 🡨 IUT |

TP/oneM2M/AE/SUB/NTF/002

|  |  |  |  |
| --- | --- | --- | --- |
| **TP Id** | | TP/oneM2M/AE/SUB/NTF/002 | |
| **Test objective** | | Check that the IUT sends a Notify Response to the hosting CSE when receiving a Notify request containing aggregated notifications | |
| **Reference** | | TS-0001 [1], clause 6.2.12, TS-0004 [2], clause 7.5.1.2 | |
| **Config Id** | | CF03 | |
| **Parent release** | | Release 1 | |
| **PICS Selection** | | PICS\_AE | |
| **Initial conditions** | **with {**  the IUT **having been** registered **and**  the IUT **having created** subscription resource under the CSE **and**  the IUT **being** reachable through a URL ACCESSIBLE\_URL  **}** | | |
| **Expected behaviour** | **Test events** | | **Direction** |
| **when {**  the IUT **receives** a NOTIFY Request from hosting CSE **containing**  Content **containing**  aggregatedNotification message representation  **}** | | IUT 🡨 CSE |
| **then {**  the IUT **sends** a valid Response to the hosting CSE **containing**  Response Status Code **set to** RESPONSE\_STATUS\_CODE  **}** | | CSE 🡨 IUT |

### 7.2.2 Group CSE (CE)

#### 7.2.2.1 General Capability (GEN)

##### 7.2.2.1.1 CREATE Operation

TP/oneM2M/CSE/GEN/CRE/001

|  |  |  |  |
| --- | --- | --- | --- |
| **TP Id** | | TP/oneM2M/CSE/GEN/CRE/001 | |
| **Test objective** | | Check that the IUT accepts the creation of a *<container>*  resource using unstructured resource identifier | |
| **Reference** | | TS-0001 [1], clause 9.3.1-1 | |
| **Config Id** | | CF01 | |
| **Parent release** | | Release 1 | |
| **PICS Selection** | | PICS\_CSE, PICS\_UNSTRUCTURED\_CSE\_RELATIVE\_RESOURCE\_ID\_FORMAT | |
| **Initial conditions** | **with {**  the IUT **being** in the "initial state"  **and** the IUT **having registered** the AE  **and** the IUT **having created** a <container> resource TARGET\_RESOURCE\_ADDRESS  **and** the AE **having** privileges to perform CREATE operation on the resource TARGET\_RESOURCE\_ADDRESS  **}** | | |
| **Expected behaviour** | **Test events** | | **Direction** |
| **when {**  the IUT **receives** a valid CREATE request **from** AE **containing**  To **set to** *NON\_HIERARCHICAL\_RESOURCE\_ADDRESS* **and**  From **set to** AE\_ID **and**  Resource Type **set to** 3 (container) **and**  Content **containing**  container resource representation  **}** | | IUT  AE |
| **then {**  the IUT **sends** a Response message **containing**  Response Status Code **set to** 2001 (CREATED)  **}** | | IUT  AE |

|  |  |
| --- | --- |
| **TP Id** | **NON\_HIERARCHICAL\_RESOURCE\_ADDRESS** |
| TP/oneM2M/CSE/GEN/CRE/001\_CSR | UNSTRUCTURED\_CSE\_RELATIVE\_RESOURCE\_ID |
| TP/oneM2M/CSE/GEN/CRE/001\_SPR | SP\_RELATIVE\_RESOURCE\_ID, (see note) |
| TP/oneM2M/CSE/GEN/CRE/001\_ABS | ABSOLUTE\_RESOURCE\_ID, (see note) |
| NOTE: These addresses are constructed with the Unstructured-CSE-Relative-Resource-ID. | |

TP/oneM2M/CSE/GEN/CRE/002

|  |  |  |  |
| --- | --- | --- | --- |
| **TP Id** | | TP/oneM2M/CSE/GEN/CRE/002 | |
| **Test objective** | | Check that the IUT accepts the creation of a *<container>*  resource using structured resource identifier | |
| **Reference** | | TS-0001 [1], clause 9.3.1-1 | |
| **Config Id** | | CF01 | |
| **Parent release** | | Release 1 | |
| **PICS Selection** | | PICS\_CSE, PICS\_STRUCTURED\_CSE\_RELATIVE\_RESOURCE\_ID\_FORMAT | |
| **Initial conditions** | **with {**  the IUT **being** in the "initial state"  **and** the IUT **having registered** the AE  **and** the IUT **having created** a <container> resource TARGET\_RESOURCE\_ADDRESS  **and** the AE **having** privileges to perform CREATE operation on the resource TARGET\_RESOURCE\_ADDRESS  **}** | | |
| **Expected behaviour** | **Test events** | | **Direction** |
| **when {**  the IUT **receives** a valid CREATE request **from** AE **containing**  To **set to** *HIERARCHICAL\_RESOURCE\_ADDRESS* **and**  From **set to** AE\_ID **and**  Resource Type **set to** 3 (container) **and**  Content **containing**  container resource representation  **}** | | IUT  AE |
| **then {**  the IUT **sends** a Response message **containing**  Response Status Code **set to** 2001 (CREATED)  **}** | | IUT  AE |

|  |  |
| --- | --- |
| **TP Id** | **HIERARCHICAL\_RESOURCE\_ADDRESS** |
| TP/oneM2M/CSE/GEN/CRE/002\_CSR | STRUCTURED\_CSE\_RELATIVE\_RESOURCE\_ID |
| TP/oneM2M/CSE/GEN/CRE/002\_SPR | SP\_RELATIVE\_RESOURCE\_ID, (see note) |
| TP/oneM2M/CSE/GEN/CRE/002\_ABS | ABSOLUTE\_RESOURCE\_ID, (see note) |
| NOTE: These addresses are constructed with the Structured-CSE-Relative-Resource-ID. | |

##### 7.2.2.1.2 UPDATE Operation

TP/oneM2M/CSE/GEN/UPD/001

|  |  |  |  |
| --- | --- | --- | --- |
| **TP Id** | | TP/oneM2M/CSE/GEN/UPD/001 | |
| **Test objective** | | Check that the IUT accepts the update of a *<container>*  resource using unstructured resource identifier | |
| **Reference** | | TS-0001 [1], clause 9.3.1-1 | |
| **Config Id** | | CF01 | |
| **Parent release** | | Release 1 | |
| **PICS Selection** | | PICS\_CSE, PICS\_UNSTRUCTURED\_CSE\_RELATIVE\_RESOURCE\_ID\_FORMAT | |
| **Initial conditions** | **with {**  the IUT **being** in the "initial state"  **and** the IUT **having registered** the AE  **and** the IUT **having created** a resource TARGET\_RESOURCE\_ADDRESSof type *RESOURCE\_TYPE*  **and** the AE **having** privileges to perform UPDATE operation on the resource *TARGET\_RESOURCE\_ADDRESS*  **}** | | |
| **Expected behaviour** | **Test events** | | **Direction** |
| **when {**  the IUT **receives** a valid UPDATE request **from** AE **containing**  To **set to** *NON\_HIERARCHICAL\_RESOURCE\_ADDRESS* **and**  From **set to** AE\_ID **and**  Content **containing**  container resource **containing**  valid labels attribute  **}** | | IUT  AE |
| **then {**  the IUT **sends** a Response message **containing**  Response Status Code **set to** 2004 (UPDATED)  **}** | | IUT  AE |

|  |  |
| --- | --- |
| **TP Id** | **NON\_HIERARCHICAL\_RESOURCE\_ADDRESS** |
| TP/oneM2M/CSE/GEN/UPD/001\_CSR | UNSTRUCTURED\_CSE\_RELATIVE\_RESOURCE\_ID |
| TP/oneM2M/CSE/GEN/UPD/001\_SPR | SP\_RELATIVE\_RESOURCE\_ID, (see note) |
| TP/oneM2M/CSE/GEN/UPD/001\_ABS | ABSOLUTE\_RESOURCE\_ID, (see note) |
| NOTE: These addresses are constructed with the Unstructured-CSE-Relative-Resource-ID. | |

TP/oneM2M/CSE/GEN/UPD/002

|  |  |  |  |
| --- | --- | --- | --- |
| **TP Id** | | TP/oneM2M/CSE/GEN/UPD/002 | |
| **Test objective** | | Check that the IUT accepts the update of a *<container>*  resource using structured resource identifier | |
| **Reference** | | TS-0001 [1], clause 9.3.1-1 | |
| **Config Id** | | CF01 | |
| **Parent release** | | Release 1 | |
| **PICS Selection** | | PICS\_CSE, PICS\_STRUCTURED\_CSE\_RELATIVE\_RESOURCE\_ID\_FORMAT | |
| **Initial conditions** | **with {**  the IUT **being** in the "initial state"  **and** the IUT **having registered** the AE  **and** the IUT **having created** a resource TARGET\_RESOURCE\_ADDRESSof type *RESOURCE\_TYPE*  **and** the AE **having** privileges to perform UPDATE operation on the resource TARGET\_RESOURCE\_ADDRESS  **}** | | |
| **Expected behaviour** | **Test events** | | **Direction** |
| **when {**  the IUT **receives** a valid UPDATE request **from** AE **containing**  To **set to** *HIERARCHICAL\_RESOURCE\_ADDRESS* **and**  From **set to** AE\_ID **and**  Content **containing**  container resource **containing**  valid **l**abels attribute  **}** | | IUT  AE |
| **then {**  the IUT **sends** a Response message **containing**  Response Status Code **set to** 2004 (UPDATED)  **}** | | IUT  AE |

|  |  |
| --- | --- |
| **TP Id** | **HIERARCHICAL\_RESOURCE\_ADDRESS** |
| TP/oneM2M/CSE/GEN/UPD/002\_CSR | STRUCTURED\_CSE\_RELATIVE\_RESOURCE\_ID |
| TP/oneM2M/CSE/GEN/UPD/002\_SPR | SP\_RELATIVE\_RESOURCE\_ID, (see note) |
| TP/oneM2M/CSE/GEN/UPD/002\_ABS | ABSOLUTE\_RESOURCE\_ID, (see note) |
| NOTE: These addresses are constructed with the Structured-CSE-Relative-Resource-ID. | |

##### 7.2.2.1.3 RETRIEVE Operation

TP/oneM2M/CSE/GEN/RET/001

|  |  |  |  |
| --- | --- | --- | --- |
| **TP Id** | | TP/oneM2M/CSE/GEN/RET/001 | |
| **Test objective** | | Check that the IUT accepts the retrieval of a *<container>*  resource using unstructured resource identifier | |
| **Reference** | | TS-0001 [1], clause 9.3.1-1 | |
| **Config Id** | | CF01 | |
| **Parent release** | | Release 1 | |
| **PICS Selection** | | PICS\_CSE, PICS\_UNSTRUCTURED\_CSE\_RELATIVE\_RESOURCE\_ID\_FORMAT | |
| **Initial conditions** | **with {**  the IUT **being** in the "initial state"  **and** the IUT **having registered** the AE  **and** the IUT **having created** a <container> resource TARGET\_RESOURCE\_ADDRESS  **and** the AE **having** privileges to perform RETRIEVE operation on the resource TARGET\_RESOURCE\_ADDRESS  **}** | | |
| **Expected behaviour** | **Test events** | | **Direction** |
| **when {**  the IUT **receives** a valid RETRIEVE request **from** AE **containing**  To **set to** *NON\_HIERARCHICAL\_RESOURCE\_ADDRESS* **and**  From **set to** AE\_ID **and**  **no** Content  **}** | | IUT  AE |
| **then {**  the IUT **sends** a Response message **containing**  Response Status Code **set to** 2000 (OK) **and**  Content **containing**  containerresource representation  **}** | | IUT  AE |

|  |  |
| --- | --- |
| **TP Id** | **NON\_HIERARCHICAL\_RESOURCE\_ADDRESS** |
| TP/oneM2M/CSE/GEN/RET/001\_CSR | UNSTRUCTURED\_CSE\_RELATIVE\_RESOURCE\_ID |
| TP/oneM2M/CSE/GEN/RET/001\_SPR | SP\_RELATIVE\_RESOURCE\_ID, (see note) |
| TP/oneM2M/CSE/GEN/RET/001\_ABS | ABSOLUTE\_RESOURCE\_ID, (see note) |
| NOTE: These addresses are constructed with the Unstructured-CSE-Relative-Resource-ID. | |

TP/oneM2M/CSE/GEN/RET/002

|  |  |  |  |
| --- | --- | --- | --- |
| **TP Id** | | TP/oneM2M/CSE/GEN/RET/002 | |
| **Test objective** | | Check that the IUT accepts the retrieval of a *<container>*  resource using structured resource identifier | |
| **Reference** | | TS-0001 [1], clause 9.3.1-1 | |
| **Config Id** | | CF01 | |
| **Parent release** | | Release 1 | |
| **PICS Selection** | | PICS\_CSE, PICS\_STRUCTURED\_CSE\_RELATIVE\_RESOURCE\_ID\_FORMAT | |
| **Initial conditions** | **with {**  the IUT **being** in the "initial state"  **and** the IUT **having registered** the AE  **and** the IUT **having created** a <container> resource TARGET\_RESOURCE\_ADDRESS  **and** the AE **having** privileges to perform RETRIEVE operation on the resource TARGET\_RESOURCE\_ADDRESS  **}** | | |
| **Expected behaviour** | **Test events** | | **Direction** |
| **when {**  the IUT **receives** a valid RETRIEVE request **from** AE **containing**  To **set to** *HIERARCHICAL\_RESOURCE\_ADDRESS* **and**  From **set to** AE\_ID **and**  **no** Content  **}** | | IUT  AE |
| **then {**  the IUT **sends** a Response message **containing**  Response Status Code **set to** 2000 (OK) **and**  Content **containing**  containerresource representation  **}** | | IUT  AE |

|  |  |
| --- | --- |
| **TP Id** | **HIERARCHICAL\_RESOURCE\_ADDRESS** |
| TP/oneM2M/CSE/GEN/RET/002\_CSR | STRUCTURED\_CSE\_RELATIVE\_RESOURCE\_ID |
| TP/oneM2M/CSE/GEN/RET/002\_SPR | SP\_RELATIVE\_RESOURCE\_ID, (see note) |
| TP/oneM2M/CSE/GEN/RET/002\_ABS | ABSOLUTE\_RESOURCE\_ID, (see note) |
| NOTE: These addresses are constructed with the Structured-CSE-Relative-Resource-ID. | |

##### 7.2.2.1.4 DELETE Operation

TP/oneM2M/CSE/GEN/DEL/001

|  |  |  |  |
| --- | --- | --- | --- |
| **TP Id** | | TP/oneM2M/CSE/GEN/DEL/001 | |
| **Test objective** | | Check that the IUT accepts the deletion of a *<container>*  resource using unstructured resource identifier | |
| **Reference** | | TS-0001 [1], clause 9.3.1-1 | |
| **Config Id** | | CF01 | |
| **Parent release** | | Release 1 | |
| **PICS Selection** | | PICS\_CSE, PICS\_UNSTRUCTURED\_CSE\_RELATIVE\_RESOURCE\_ID\_FORMAT | |
| **Initial conditions** | **with {**  the IUT **being** in the "initial state"  **and** the IUT **having registered** the AE  **and** the IUT **having created** a <container> resource TARGET\_RESOURCE\_ADDRESS  **and** the AE **having** privileges to perform DELETE operation on the resource TARGET\_RESOURCE\_ADDRESS  **}** | | |
| **Expected behaviour** | **Test events** | | **Direction** |
| **when {**  the IUT **receives** a valid DELETE request **from** AE **containing**  To **set to** *NON\_HIERARCHICAL\_RESOURCE\_ADDRESS* **and**  From **set to** AE\_ID **and**  **no** Content  **}** | | IUT  AE |
| **then {**  the IUT **sends** a Response message **containing**  Response Status Code **set to** 2002 (DELETED)  **}** | | IUT  AE |

|  |  |
| --- | --- |
| **TP Id** | **NON\_HIERARCHICAL\_RESOURCE\_ADDRESS** |
| TP/oneM2M/CSE/GEN/DEL/001\_CSR | UNSTRUCTURED\_CSE\_RELATIVE\_RESOURCE\_ID |
| TP/oneM2M/CSE/GEN/DEL/001\_SPR | SP\_RELATIVE\_RESOURCE\_ID, (see note) |
| TP/oneM2M/CSE/GEN/DEL/001\_ABS | ABSOLUTE\_RESOURCE\_ID, (see note) |
| NOTE: These addresses are constructed with the Unstructured-CSE-Relative-Resource-ID. | |

TP/oneM2M/CSE/GEN/DEL/002

|  |  |  |  |
| --- | --- | --- | --- |
| **TP Id** | | TP/oneM2M/CSE/GEN/DEL/002 | |
| **Test objective** | | Check that the IUT accepts the deletion of a *<container>*  resource using structured resource identifier | |
| **Reference** | | TS-0001 [1], clause 9.3.1-1 | |
| **Config Id** | | CF01 | |
| **Parent release** | | Release 1 | |
| **PICS Selection** | | PICS\_CSE, PICS\_STRUCTURED\_CSE\_RELATIVE\_RESOURCE\_ID\_FORMAT | |
| **Initial conditions** | **with {**  the IUT **being** in the "initial state"  **and** the IUT **having registered** the AE  **and** the IUT **having created** a <container> resource TARGET\_RESOURCE\_ADDRESS  **and** the AE **having** privileges to perform DELETE operation on the resource TARGET\_RESOURCE\_ADDRESS  **}** | | |
| **Expected behaviour** | **Test events** | | **Direction** |
| **when {**  the IUT **receives** a valid DELETE request **from** AE **containing**  To **set to** *HIERARCHICAL\_RESOURCE\_ADDRESS* **and**  From **set to** AE\_ID **and**  **no** Content  **}** | | IUT  AE |
| **then {**  the IUT **sends** a Response message **containing**  Response Status Code **set to** 2002 (DELETED)  **}** | | IUT  AE |

|  |  |
| --- | --- |
| **TP Id** | **HIERARCHICAL\_RESOURCE\_ADDRESS** |
| TP/oneM2M/CSE/GEN/DEL/002\_CSR | STRUCTURED\_CSE\_RELATIVE\_RESOURCE\_ID |
| TP/oneM2M/CSE/GEN/DEL/002\_SPR | SP\_RELATIVE\_RESOURCE\_ID, (see note) |
| TP/oneM2M/CSE/GEN/DEL/002\_ABS | ABSOLUTE\_RESOURCE\_ID, (see note) |
| NOTE: These addresses are constructed with the Structured-CSE-Relative-Resource-ID. | |

#### 7.2.2.2 Registration (REG)

##### 7.2.2.2.1 RETRIEVE Operation

TP/oneM2M/CSE/REG/RET/001

|  |  |  |  |
| --- | --- | --- | --- |
| **TP Id** | | TP/oneM2M/CSE/REG/RET/001 | |
| **Test objective** | | Check that the IUT accepts a retrieval request of <CSEBase> resource and responds with all attributes that have multiplicity equals to 1. | |
| **Reference** | | TS-0001 [1], clauses 10.2.3.2 and 9.6.3, TS-0004 [2], clause 7.4.3.2.2 | |
| **Config Id** | | CF01 | |
| **Parent release** | | Release 1 | |
| **PICS Selection** | | PICS\_CSE | |
| **Initial conditions** | **with {**  the IUT **being** in the "initial state"  **and** the IUT **having registered** the AE  **and** the AE **having** privileges to perform RETRIEVE operation on theCSEBase resource  **}** | | |
| **Expected behaviour** | **Test events** | | **Direction** |
| **when {**  the IUT **receives** a valid RETRIEVE Request **from** AE **containing**  To **set to** CSEBASE\_RESOURCE\_ADDRESS **and**  From **set to** AE\_ID **and**  **no** Content  **}** | | IUT 🡨 AE |
| **then {**  the IUT **sends** a valid Response **containing**  Response Status Code **set to** 2000 (OK) **and**  Content **containing**  CSEBaseresource representation  **}** | | IUT 🡪 AE |

TP/oneM2M/CSE/REG/RET/002

|  |  |  |  |
| --- | --- | --- | --- |
| **TP Id** | | TP/oneM2M/CSE/REG/RET/002 | |
| **Test objective** | | Check that the IUT accepts a retrieval request of <CSEBase> resource with the optional *ATTRIBUTE*. | |
| **Reference** | | TS-0001 [1], clauses 10.2.3.2 and 9.6.3, TS-0004 [2], clause 7.4.3.2.2 | |
| **Config Id** | | CF01 | |
| **Parent release** | | Release 1 | |
| **PICS Selection** | | PICS\_CSE | |
| **Initial conditions** | **with {**  the IUT **being** in the "initial state"  **and** the IUT **having registered** the AE  **and** the AE **having** privileges to perform RETRIEVE operation on theCSEBase resource  **and** the IUT **having** a CSEBase resource **containing**  the valid *ATTRIBUTE* attribute  **}** | | |
| **Expected behaviour** | **Test events** | | **Direction** |
| **when {**  the IUT **receives** a valid RETRIEVE Request **from** AE **containing**  To **set to** CSEBASE\_RESOURCE\_ADDRESS **and**  From **set to** AE\_ID **and**  **no** Content **}** | | IUT 🡨 AE |
| **then {**  the IUT **sends** a valid Response **containing**  Response Status Code **set to** 2000 (OK) **and**  Content **containing**  CSEBaseresource **containing**  valid *ATTRIBUTE* attribute  **}** | | IUT 🡪 AE |

|  |  |  |  |
| --- | --- | --- | --- |
| TP Id | PICS Selection | Reference | ATTRIBUTE |
| TP/oneM2M/CSE/REG/RET/002\_CST | PICS\_CB\_CST | TS-0001 [1], clause 9.6.3 | cseType |
| TP/oneM2M/CSE/REG/RET/002\_NL | PICS\_CB\_NL | TS-0001 [1], clause 9.6.3 | nodeLink |

TP/oneM2M/CSE/REG/RET/003

|  |  |  |  |
| --- | --- | --- | --- |
| **TP Id** | | TP/oneM2M/CSE/REG/RET/003 | |
| **Test objective** | | Check that the IUT accepts a retrieval request of <AE> resource with attributes multiplicity equals to 1. | |
| **Reference** | | TS-0001 [1], clause 10.2.1.2, TS-0004 [2], clause 7.4.5.2.2 | |
| **Config Id** | | CF01 | |
| **Parent release** | | Release 1 | |
| **PICS Selection** | | PICS\_CSE | |
| **Initial conditions** | **with {**  the IUT **being** in the "initial state"  **and** the IUT **having registered** the AE  **and** the AE **having** privileges to perform RETRIEVE operation on theAE resource  **}** | | |
| **Expected behaviour** | **Test events** | | **Direction** |
| **when {**  the IUT **receives** a valid RETRIEVE Request **from** AE **containing**  To **set to** AE\_RESOURCE\_ADDRESS **and**  From **set to** AE\_ID  **}** | | IUT 🡨 AE |
| **then {**  the IUT **sends** a valid Response **containing**  Response Status Code **set to** 2000 (OK) **and**  Content **containing**  AEresource representation  **}** | | IUT 🡪 AE |

TP/oneM2M/CSE/REG/RET/004

|  |  |  |  |
| --- | --- | --- | --- |
| **TP Id** | | TP/oneM2M/CSE/REG/RET/004 | |
| **Test objective** | | Check that the IUT accepts a retrieval request of <AE> resource with optional *ATTRIBUTE*. | |
| **Reference** | | TS-0001 [1], clauses 10.2.1.2 and 9.6.5, TS-0004 [2], clause 7.4.5.2.2 | |
| **Config Id** | | CF01 | |
| **Parent release** | | Release 1 | |
| **PICS Selection** | | PICS\_CSE | |
| **Initial conditions** | **with {**  the IUT **being** in the "initial state"  **and** the IUT **having registered** the AE **containing**  valid *ATTRIBUTE* attribute  **and** the AE **having** privileges to perform RETRIEVE operation on theAE resource  **}** | | |
| **Expected behaviour** | **Test events** | | **Direction** |
| **when {**  the IUT **receives** a valid RETRIEVE Request **from** AE **containing**  To **set to** AE\_RESOURCE\_ADDRESS **and**  From **set to** AE\_ID **}** | | IUT 🡨 AE |
| **then {**  the IUT **sends** a valid Response **containing**  Response Status Code **set to** 2000 (OK) **and**  Content **containing**  AEresource **containing** *ATTRIBUTE* attribute  **}** | | IUT 🡪 AE |

| **TP Id** | **PICS Selection** | **Reference** | **ATTRIBUTE** |
| --- | --- | --- | --- |
| TP/oneM2M/CSE/REG/RET/004\_LBL | PICS\_AE\_LBL | TS-0001 [1], clause 9.6.5 | labels |
| TP/oneM2M/CSE/REG/RET/004\_APN | PICS\_AE\_APN | TS-0001 [1], clause 9.6.5 | appName |
| TP/oneM2M/CSE/REG/RET/004\_POA | PICS\_AE\_POA | TS-0001 [1], clause 9.6.5 | pointOfAccess |
| TP/oneM2M/CSE/REG/RET/004\_NL | PICS\_AE\_NL | TS-0001 [1], clause 9.6.5 | nodeLink |
| TP/oneM2M/CSE/REG/RET/004\_CSZ | PICS\_AE\_CSZ | TS-0001 [1], clause 9.6.5 | contentSerialization |

TP/oneM2M/CSE/REG/RET/005

|  |  |  |  |
| --- | --- | --- | --- |
| **TP Id** | | TP/oneM2M/CSE/REG/RET/005 | |
| **Test objective** | | Check that the IUT accepts a retrieval request of <CSEBase> resource including the cseType attribute | |
| **Reference** | | TS-0001 [1], clauses 10.2.3.2 and 9.6.3, TS-0004 [2], clause 7.4.3.2.2 | |
| **Config Id** | | CF01 | |
| **Parent release** | | Release 1 | |
| **PICS Selection** | | PICS\_IN\_CSE | |
| **Initial conditions** | **with {**  the IUT **being** in the "initial state"  **and** the IUT **having registered** the AE  **and** the AE **having** privileges to perform RETRIEVE operation on theCSEBase resource  **}** | | |
| **Expected behaviour** | **Test events** | | **Direction** |
| **when {**  the IUT **receives** a valid RETRIEVE Request **from** AE **containing**  To **set to** CSEBASE\_RESOURCE\_ADDRESS **and**  From **set to** AE\_ID **}** | | IUT 🡨 AE |
| **then {**  the IUT **sends** a valid Response **containing**  Response Status Code **set to** 2000 (OK) **and**  Content **containing**  CSEBaseresource **containing**  cseType attribute set to 1 (IN\_CSE)  **}** | | IUT 🡪 AE |

TP/oneM2M/CSE/REG/RET/006

|  |  |  |  |
| --- | --- | --- | --- |
| **TP Id** | | TP/oneM2M/CSE/REG/RET/006 | |
| **Test objective** | | Check that the IUT accepts a retrieval request of <remoteCSE> resource. | |
| **Reference** | | TS-0001 [1], clauses 10.1.1.2.1 and 9.6.4 TS-0004 [2], clause 7.4.4.2.1 | |
| **Config Id** | | CF01 | |
| **Parent release** | | Release 1 | |
| **PICS Selection** | | PICS\_CSE | |
| **Initial conditions** | **with {**  the IUT **being** in the "initial state"  **and** the IUT **having registered** the ORIGINATOR  **and** the ORIGINATOR **having** privileges to perform RETRIEVE operation on theremoteCSE resource  **}** | | |
| **Expected behaviour** | **Test events** | | **Direction** |
| **when {**  the IUT **receives** a valid RETRIEVE Request **from** ORIGINATOR **containing**  To **set to** REMOTECSE\_RESOURCE\_ADDRESS **and**  From **set to** ORIGINATOR\_ID **}** | | IUT 🡨 ORIGINATOR |
| **then {**  the IUT **sends** a valid Response **containing**  Response Status Code **set to** 2000 (OK) **and**  Content **containing**  remoteCSEresource representation  **}** | | IUT 🡪 ORIGINATOR |

TP/oneM2M/CSE/REG/RET/007

|  |  |  |  |
| --- | --- | --- | --- |
| **TP Id** | | TP/oneM2M/CSE/REG/RET/007 | |
| **Test objective** | | Check that the IUT accepts a retrieval request of <remoteCSE> resource with optional *ATTRIBUTE* | |
| **Reference** | | TS-0001 [1], clauses 10.1.1.2.1 and 9.6.4 TS-0004 [2], clause 7.4.4.2.1 | |
| **Config Id** | | CF01 | |
| **Parent release** | | Release 1 | |
| **PICS Selection** | | PICS\_CSE | |
| **Initial conditions** | **with {**  the IUT **being** in the "initial state"  **and** the IUT **having registered** the ORIGINATOR  **and** the ORIGINATOR **having** privileges to perform RETRIEVE operation on theremoteCSE resource  **}** | | |
| **Expected behaviour** | **Test events** | | **Direction** |
| **when {**  the IUT **receives** a valid RETRIEVE Request **from** ORIGINATOR **containing**  To **set to** REMOTECSE\_RESOURCE\_ADDRESS **and**  From **set to** ORIGINATOR\_ID  **}** | | IUT 🡨 ORIGINATOR |
| **then {**  the IUT **sends** a valid Response **containing**  Response Status Code **set to** 2000 (OK) **and**  Content **containing**  remoteCSEresource **containing**  *ATTRIBUTE* attribute  **}** | | IUT 🡪 ORIGINATOR |

|  |  |  |  |
| --- | --- | --- | --- |
| **TP Id** | **PICS Selection** | **Reference** | **ATTRIBUTE** |
| TP/oneM2M/CSE/REG/RET/007\_LBL | PICS\_CSR\_LBL | TS-0001 [1], clause 9.6.4 | labels |
| TP/oneM2M/CSE/REG/RET/007\_CST | PICS\_CSR\_CST | TS-0001 [1], clause 9.6.4 | cseType |
| TP/oneM2M/CSE/REG/RET/007\_POA | PICS\_CSR\_POA | TS-0001 [1], clause 9.6.4 | pointOfAccess |
| TP/oneM2M/CSE/REG/RET/007\_NL | PICS\_CSR\_NL | TS-0001 [1], clause 9.6.4 | nodeLink |

TP/oneM2M/CSE/REG/RET/008

|  |  |  |  |
| --- | --- | --- | --- |
| **TP Id** | | TP/oneM2M/CSE/REG/RET/008 | |
| **Test objective** | | Check that the IUT accepts a retrieval request of <CSEBase> resource and responds with supportedResourceTypes attribute containing a list of the supported resources and pointOfAccesscontaining the list of physical addresses to be used by Registree to connect to this CSE (e.g. IP address, FQDN). | |
| **Reference** | | TS-0001 [1], clauses 10.2.3.2 and 9.6.3, TS-0004 [2], clause 7.4.3.2.2 | |
| **Config Id** | | CF01 | |
| **Parent release** | | Release 1 | |
| **PICS Selection** | | PICS\_CSE | |
| **Initial conditions** | **with {**  the IUT **being** in the "initial state"  **and** the IUT **having registered** the AE  **and** the AE **having** privileges to perform RETRIEVE operation on theCSEBase resource  **}** | | |
| **Expected behaviour** | **Test events** | | **Direction** |
| **when {**  the IUT **receives** a valid RETRIEVE Request **from** AE **containing**  To **set to** CSEBASE\_RESOURCE\_ADDRESS **and**  From **set to** AE\_ID **}** | | IUT 🡨 AE |
| **then {**  the IUT **sends** a valid Response **containing**  Response Status Code **set to** 2000 (OK) **and**  Content **containing**  CSEBaseresource **containing**  supportedResourceType **set to** PX\_SRT  pointOfAccess **set to** PX\_POA  **}** | | IUT 🡪 AE |

TP/oneM2M/CSE/REG/RET/009

|  |  |  |  |
| --- | --- | --- | --- |
| **TP Id** | | TP/oneM2M/CSE/REG/RET/009 | |
| **Test objective** | | Check that IUT sends a <remoteCSE> retrieve request on  TARGET\_REMOTE\_CSE\_ADDRESS | |
| **Reference** | | TS-0001 [1], clause 10.2.2.2, TS-0004 [2], clause 7.4.5.2.3 | |
| **Config Id** | | CF04 | |
| **Parent release** | | Release 1 | |
| **PICS Selection** | | PICS\_CSE | |
| **Initial conditions** | **with {**  the IUT **being** in the "initial state" **and**  the IUT **having created** a resource TARGET\_REMOTE\_CSE\_ADDRESS **and**  the IUT **having** privileges to perform RETRIEVE operation on the resource TARGET\_REMOTE\_CSE\_ADDRESS  **}** | | |
| **Expected behaviour** | **Test events** | | **Direction** |
|  | **when {**  the IUT **is triggered to send** a valid RETRIEVE Request **containing**  To **set to** TARGET\_REMOTE\_CSE\_ADDRESS  **}** | | NA |
|  | **then {**  the IUT **sends** a valid RETRIEVE Request **containing**  To **set to** TARGET\_REMOTE\_CSE\_ADDRESS **and**  From **set to** CSE\_ID **and**  **no** Content  **}** | | IUT 🡪 CSE |

TP/oneM2M/CSE/REG/RET/010

|  |  |  |  |
| --- | --- | --- | --- |
| **TP Id** | | TP/oneM2M/CSE/REG/RET/010 | |
| **Test objective** | | Check that IUT accepts a <remoteCSE> retrieve request | |
| **Reference** | | TS-0001 [1], clause 10.2.2.2, TS-0004 [2], clause 7.4.5.2.3 | |
| **Config Id** | | CF04 | |
| **Parent release** | | Release 1 | |
| **PICS Selection** | | PICS\_CSE | |
| **Initial conditions** | **with {**  the IUT **being** in the "initial state"  **and** the IUT **having created** a resource TARGET\_REMOTE\_CSE\_ADDRESS  **and** the IUT **having** privileges to perform RETRIEVE operation on the resource TARGET\_REMOTE\_CSE\_ADDRESS  **}** | | |
| **Expected behaviour** | **Test events** | | **Direction** |
|  | **when {**  the IUT **receives** a valid RETRIEVE Request **containing**  To **set to** TARGET\_REMOTE\_CSE\_ADDRESS **and**  From **set to** CSE\_ID **and**  **no** Content  **}** | | IUT 🡨 CSE |
|  | **then {**  the IUT **sends** a valid Response **containing**  Response Status Code **set to** 2000 (OK) **and**  Content **containing**  remoteCSE resource representation  **}** | | IUT 🡪 CSE |

##### 7.2.2.2.2 CREATE Operation

TP/oneM2M/CSE/REG/CRE/001

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| **TP Id** | | TP/oneM2M/CSE/REG/CRE/001 | |
| **Test objective** | | Check that the IUT accepts a create request of <AE> resource with attributes multiplicity equals to 1 and provided preprovisioned SP\_relative\_ AE\_ID. | |
| **Reference** | | TS-0001 [1], clause 10.1.1.2.2 case b, TS-0004 [2], clause 7.4.5.2.1 | |
| **Config Id** | | CF01 | |
| **Parent release** | | Release 1 | |
| **PICS Selection** | | PICS\_IN\_CSE | |
| **Initial conditions** | **with {**  the IUT **being** in the "initial state" **and**  the IUT **having** preconfigured AE\_ID\_stem  **}** | | |
| **Expected behaviour** | **Test events** | | **Direction** |
| **when {**  the IUT **receives** a valid CREATE Request **from** AE **containing**  To **set to** CSEBASE\_RESOURCE\_ADDRESS **and**  From **set to** SP\_RELATIVE\_AE\_ID **and**  Resource Type **set to** 2(AE) **and**  Content **containing**  AE resource representation **}** | | IUT 🡨 AE |
| **then {**  the IUT **sends** a valid Response **containing**  Response Status Code **set to** 2001 (CREATED) **and**  Content **containing**  AEresource representation  **}** | | IUT 🡪 AE |

TP/oneM2M/CSE/REG/CRE/002

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| **TP Id** | | TP/oneM2M/CSE/REG/CRE/002 | |
| **Test objective** | | Check that the IUT accepts a create request of <AE> resource with attributes multiplicity equals to 1 and provided preprovisioned AE\_ID of AE-ID-Stem format. | |
| **Reference** | | TS-0001 [1], clause 10.1.1.2.2 case d, TS-0004 [2], clause 7.4.5.2.1 | |
| **Config Id** | | CF01 | |
| **Parent release** | | Release 1 | |
| **PICS Selection** | | PICS\_CSE | |
| **Initial conditions** | **with {**  the IUT **being** in the "initial state" and  the IUT **having** preconfigured AE\_ID\_stem  **}** | | |
| **Expected behaviour** | **Test events** | | **Direction** |
| **when {**  the IUT **receives** a valid CREATE Request **from** AE **containing**  To **set to** CSEBASE\_RESOURCE\_ADDRESS **and**  From **set to** AE\_ID\_STEM **and**  Resource Type **set to** 2 (AE) **and**  Content **containing**  AE resource representation **}** | | IUT 🡨 AE |
| **then {**  the IUT **sends** a valid Response **containing**  Response Status Code **set to** 2001 (CREATED) **and**  Content **containing**  AEresource representation  **}** | | IUT 🡪 AE |

TP/oneM2M/CSE/REG/CRE/003

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| **TP Id** | | TP/oneM2M/CSE/REG/CRE/003 | |
| **Test objective** | | Check that the IUT accepts a create request of <AE> resource with attributes multiplicity equals to 1 and provided preprovisioned SP\_relative\_AE\_ID. | |
| **Reference** | | TS-0001 [1], clause 10.1.1.2.2 case b, TS-0004 [2], clause 7.4.5.2.1 | |
| **Config Id** | | CF02 | |
| **Parent release** | | Release 1 | |
| **PICS Selection** | | PICS\_MN\_CSE | |
| **Initial conditions** | **with {**  the IUT **being** in the "initial state" **and**  the IUT **having** preconfigured AE\_ID\_stem **and**  the IUT **having** deregistrated the AE  **}** | | |
| **Expected behaviour** | **Test events** | | **Direction** |
| **when {**  the IUT **receives** a valid CREATE Request **from** AE **containing**  To **set to** CSEBASE\_RESOURCE\_ADDRESS **and**  From **set to** SP\_RELATIVE\_AE\_ID **and**  Resource Type **set to** 2(AE) **and**  Content **containing**  AE resource representation **}** | | IUT 🡨 AE |
| **then{**  the IUT **sends** a valid UPDATE Request **to** IN-CSE **containing**  To **set to** AEANNC\_RESOURCE\_ADDRESS **and**  From **set to** IUT\_CSE\_ID **and**  Content **containing**  AEAnnc resource representation  **}** | | IUT 🡪 IN-CSE |

TP/oneM2M/CSE/REG/CRE/004

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| --- | --- | --- | --- |
| **TP Id** | | TP/oneM2M/CSE/REG/CRE/004 | |
| **Test objective** | | Check that the IUT rejects an AE registration (allowed App-ID, not allowed C-AE-ID-STEM provided by AE) | |
| **Reference** | | TS-0001 [1], clause 10.1.1.2.2 – step 3 and clause 9.6.19 | |
| **Config Id** | | CF01 | |
| **Parent release** | | Release 1 | |
| **PICS Selection** | | PICS\_CSE | |
| **Initial conditions** | **with {**  the IUT **being** in the "initial state"  **and** the IUT **not** **allowing** **to** register an AE **containing**  **allowed** App-ID attribute **indicating** APP-ID**and**  **not allowed** AE-ID attribute **indicating** C-AE-ID-STEM  **}** | | |
| **Expected behaviour** | **Test events** | | **Direction** |
| **when {**  the IUT **receives** a valid CREATE Request **from** AE **containing** Resource Type **set to** 2 (AE) **and**  From **set to** C-AE-ID-STEM **and**  Content **containing**  AE resource **containing**  App-ID attribute **set to** APP-ID **}** | | IUT 🡨 AE |
| **then {**  the IUT **does not** **create** the AE resource  **and** the IUT **sends** a valid Response **containing**  Response Status Code **set to** 4107  (SECURITY\_ASSOCIATION\_REQUIRED)  **}** | | IUT 🡪 AE |

TP/oneM2M/CSE/REG/CRE/005

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| --- | --- | --- | --- |
| **TP Id** | | TP/oneM2M/CSE/REG/CRE/005 | |
| **Test objective** | | Check that the IUT accepts an AE registration (allowed App-ID, S-AE-ID-STEM not provided by AE) | |
| **Reference** | | TS-0001 [1], clause 10.1.1.2.2 case a and clause 9.6.19 | |
| **Config Id** | | CF02 | |
| **Parent release** | | Release 1 | |
| **PICS Selection** | | PICS\_MN\_CSE | |
| **Initial conditions** | **with {**  the IUT **being** in the "initial state"  **and** the IUT **allowing** **to** register an AE **containing**  App-ID attribute **indicating** APP-ID**and**  AE-ID attribute **indicating** a value  starting with 'S' and  containing wildcard  } | | |
| **Expected behaviour** | **Test events** | | **Direction** |
| **when {**  the IUT **receives** a valid CREATE Request **from** AE **containing** Resource Type **set to** 2 (AE) **and**  From **set to** ‘S’ **and**  Content **containing**  AE resource **containing**  App-ID attribute **set to** APP-ID **}** | | IUT 🡨 AE |
| **then {**  the IUT **sends** a valid CREATE Request **to** the IN-CSE **containing**  Resource Type **set to** 10002 (AEAnnc) **and**  From **set to** SP-RELATIVE-CSE-ID followed by '/S' **and**  Content **containing**  AEAnnc resource **containing**  App-ID attribute **set to** APP-ID**and**  valid link attribute **and**  labels **indicating** 'Credential-ID:None'  **}** | | IUT 🡪 IN-CSE |

TP/oneM2M/CSE/REG/CRE/006

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| --- | --- | --- | --- |
| **TP Id** | | TP/oneM2M/CSE/REG/CRE/006 | |
| **Test objective** | | Check that the IUT accepts a create request of <AE> resource with attributes multiplicity equals to 1 and provided character 'S' in AE\_ID\_Stem ask for a SP\_relative\_AE\_ID | |
| **Reference** | | TS-0001 [1], clause 10.1.1.2.2 case a, TS-0004 [2], clause 7.4.5.2.1 | |
| **Config Id** | | CF02 | |
| **Parent release** | | Release 1 | |
| **PICS Selection** | | PICS\_MN\_CSE | |
| **Initial conditions** | **with {**  the IUT **being** in the "initial state" **and**  the IUT **having** preconfigured AE\_ID\_stem  **}** | | |
| **Expected behaviour** | **Test events** | | **Direction** |
| **when {**  the IUT **receives** a valid CREATE Request **from** AE **containing**  To **set to** CSEBASE\_RESOURCE\_ADDRESS **and**  From **set to** character 'S' **and**  Resource Type **set to** 2(AE) **and**  Content **containing**  AE resource representation } | | IUT 🡨 AE |
| **then{**  the IUT **sends** a valid CREATE Request **to** IN\_CSE **containing**  To **set to** IN\_CSEBASE\_RESOURCE\_ADDRESS **and**  From **set to** IUT\_CSE\_ID **and**  Content **containing**  AEAnnc resource **containing**  link attribute **set to** 'S'  **}** | | IUT 🡪 IN-CSE |

TP/oneM2M/CSE/REG/CRE/007

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| --- | --- | --- | --- |
| **TP Id** | | TP/oneM2M/CSE/REG/CRE/007 | |
| **Test objective** | | Check that the IUT accepts a response of AEANNC create request during AE registration with provided character 'S' in AE\_ID\_Stem and asked for a SP\_relative\_AE\_ID. | |
| **Reference** | | TS-0001 [1], clause 10.1.1.2.2 case a, TS-0004 [2], clause 7.4.5.2.1 | |
| **Config Id** | | CF02 | |
| **Parent release** | | Release 1 | |
| **PICS Selection** | | PICS\_MN\_CSE | |
| **Initial conditions** | **with {**  the IUT **being** in the "initial state" **and**  the IUT **having** preconfigured AE\_ID\_stem **and**  the IUT **having** received a valid AE create request **and**  the IUT **having** sent a valid AEANNC create to IN\_CSE  **}** | | |
| **Expected behaviour** | **Test events** | | **Direction** |
| **when{**  the IUT **receives** a valid Response **containing**  Response Status Code **set to** 2001 (CREATED) **and**  Content **containing**  AEAnnc resource **containing**  link attribute **set to** SP\_RELATIVE\_AE\_ID  **}** | | IUT <- IN-CSE |
| **then {**  the IUT **sends** a valid Response **containing**  Response Status Code **set to** 2001 (CREATED) **and**  Content **containing**  AEresource **containing**  ResourceID attribute **set to** SP\_RELATIVE\_AE\_ID **and**  AE-ID attribute **set to** SP\_RELATIVE\_AE\_ID  **}** | | IUT 🡪 AE |

TP/oneM2M/CSE/REG/CRE/008

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| --- | --- | --- | --- |
| **TP Id** | | TP/oneM2M/CSE/REG/CRE/008 | |
| **Test objective** | | Check that the IUT accepts an AE re-registration (allowed M2M-SP-assigned AE-ID, S-AE-ID-STEM provided by AE), transfer request to the IN-CSE | |
| **Reference** | | TS-0001 [1], clause 10.1.1.2.2 – case b, step 5 and clause 9.6.19 | |
| **Config Id** | | CF02 | |
| **Parent release** | | Release 1 | |
| **PICS Selection** | | PICS\_MN\_CSE | |
| **Initial conditions** | **with {**  the IUT **being** in the "initial state"  **and** the IUT **allowing** **to** register an AE **containing**  App-ID attribute **indicating** APP-ID**and**  AE-ID attribute **indicating** a value  starting with 'S' and  containing wildcard  **}** | | |
| **Expected behaviour** | **Test events** | | **Direction** |
| **when {**  the IUT **receives** a valid CREATE Request **from** AE **containing** Resource Type **set to** 2 (AE) **and**  From **set to** S-AE-ID-STEM **and**  Content **containing**  AE resource **containing**  App-ID attribute **set to** APP-ID **}** | | IUT 🡨 AE |
| **then {**  the IUT **sends** a valid UPDATE Request **to** the IN-CSE **containing**  Resource Type **set to** 10002 (AEAnnc) **and**  To **set to** IN\_CSE\_RESOURCE\_ADDRESS **and**  From **set to** '/S' **and**  Content **containing**  AEAnnc resource **containing**  App-ID attribute **set to** APP-ID**and**  link attribute **set to** AE\_UNSTRUCTURED\_SP\_RELATIVE\_ADDRESS **and**  labels **indicating** 'Credential-ID:None'  **}** | | IUT 🡪 IN-CSE |
| NOTE: AE\_UNSTRUCTURED\_SP\_RELATIVE\_ADDRESS = /CSE\_ID/ S-AE-ID-STEM. | | | |

TP/oneM2M/CSE/REG/CRE/009

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| **TP Id** | | TP/oneM2M/CSE/REG/CRE/009 | |
| **Test objective** | | Check that the IUT accepts an AE re-registration (allowed M2M-SP-assigned AE-ID, S-AE-ID-STEM provided by AE), communication between MN-CSE and IN-CSE | |
| **Reference** | | TS-0001 [1], clause 10.1.1.2.2 – case b, step 5-8 | |
| **Config Id** | | CF03 | |
| **Parent release** | | Release 1 | |
| **PICS Selection** | | PICS\_IN\_CSE | |
| **Initial conditions** | **with {**  the IUT **being** in the "initial state" **and**  the AE **having already been registered and**  the AE **having deregistered**  } | | |
| **Expected behaviour** | **Test events** | | **Direction** |
| **when {**  the IUT **receives** a valid UPDATE Request **from** the CSE **containing**  Resource Type **set to** 10002 (AEAnnc) **and**  To **set to** AEANNC\_RESOURCE\_ADDRESS **and**  From **set to** '/S' **and**  Content **containing**  AEAnnc resource **containing**  App-ID attribute **set to** APP-ID**and**  link attribute **set to** AE\_UNSTRUCTURED\_SP\_RELATIVE\_ADDRESS **and**  labels **indicating** 'Credential-ID:None'  **}** | | IUT🡨 MN-CSE |
|  | **then {**  the IUT **updates** the AEANNC\_RESOURCE\_ADDRESS resource  **and** the IUT **sends** a valid Response to CSE **containing**  Response Status Code **set to** 2004 (UPDATED) **and**  Content **containing**  AEAnnc resource **containing**  App-ID attribute **set to** APP-ID**and**  link attribute **set to** AE\_UNSTRUCTURED\_SP\_RELATIVE\_ADDRESS **and**  labels **indicating** 'Credential-ID:None'  **}** | | IUT 🡪 MN-CSE |
| NOTE: AE\_UNSTRUCTURED\_SP\_RELATIVE\_ADDRESS = /CSE\_ID/ S-AE-ID-STEM. | | | |

TP/oneM2M/CSE/REG/CRE/010

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| **TP Id** | | TP/oneM2M/CSE/REG/CRE/010 | |
| **Test objective** | | Check that the IUT accepts an AE re-registration (allowed M2M-SP-assigned AE-ID, S-AE-ID-STEM provided by AE), transfer response to the AE | |
| **Reference** | | TS-0001 [1], clause 10.1.1.2.2 – case b, step 8 | |
| **Config Id** | | CF02 | |
| **Parent release** | | Release 1 | |
| **PICS Selection** | | PICS\_MN\_CSE | |
| **Initial conditions** | **with {**  the IUT **being** in the "initial state"  **and** the IUT **allowing** **to** register an AE **containing**  App-ID attribute **indicating** APP-ID**and**  AE-ID attribute **indicating** a value  starting with 'S' and  containing wildcard  **}** | | |
| **Expected behaviour** | **Test events** | | **Direction** |
| **when {**  the IUT **receives** a valid UPDATE Response from IN-CSE **containing**  Response Status Code **set to** 2004 (UPDATED) **and**  Content **containing**  AEAnnc resource **containing**  App-ID attribute **set to** APP-ID**and**  link attribute **set to** AE\_UNSTRUCTURED\_SP\_RELATIVE\_ADDRESS **and**  labels **indicating** 'Credential-ID:None'  **}** | | IUT 🡨 IN-CSE |
| **then {**  the IUT **sends** a valid Response **to** the AE **containing**  Response Status Code **set to** 2001 (CREATED) **and**  Content **containing**  AEresource **containing**  App-ID attribute **set to** APP-ID  **}** | | IUT 🡪 AE |
| NOTE: AE\_UNSTRUCTURED\_SP\_RELATIVE\_ADDRESS = /CSE\_ID/ S-AE-ID-STEM. | | | |

TP/oneM2M/CSE/REG/CRE/011

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| **TP Id** | | TP/oneM2M/CSE/REG/CRE/011 | |
| **Test objective** | | Check that the IUT accepts a create request of <AE> resource with attributes multiplicity equals to 1 and asking an AE\_ID\_Stem starting with character 'C'. | |
| **Reference** | | TS-0001 [1], clause 10.1.1.2.2 case c, TS-0004 [2], clause 7.4.5.2.1 | |
| **Config Id** | | CF01 | |
| **Parent release** | | Release 1 | |
| **PICS Selection** | | PICS\_CSE | |
| **Initial conditions** | **with {**  the IUT **being** in the "initial state" **and**  the IUT **having** preconfigured AE\_ID\_stem  **}** | | |
| **Expected behaviour** | **Test events** | | **Direction** |
| **when {**  the IUT **receives** a valid CREATE Request **from** AE **containing**  To **set to** CSEBASE\_RESOURCE\_ADDRESS **and**  From **set to** 'C' **and**  Resource Type **set to** 2(AE) **and**  Content **containing**  AE resource representation } | | IUT 🡨 AE |
| **then {**  the IUT **sends** a valid Response **containing**  Response Status Code **set to** 2001 (CREATED) **and**  Content **containing**  AEresource **containing**  ResourceID attribute **indicating** a value  starting with 'C'  **}** | | IUT 🡪 AE |

TP/oneM2M/CSE/REG/CRE/012

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| **TP Id** | | TP/oneM2M/CSE/REG/CRE/012 | |
| **Test objective** | | Check that the IUT accepts an AE registration with the optional attribute *OPTIONAL\_ATTRIBUTE* provided | |
| **Reference** | | TS-0001 [1], clauses 10.1.1.2.2 and 9.6.5-2 | |
| **Config Id** | | CF01 | |
| **Parent release** | | Release 1 | |
| **PICS Selection** | | PICS\_CSE | |
| **Initial conditions** | **with {**  the IUT **being** in the "initial state"  **and** the IUT **having** a CSEBase resource  **}** | | |
| **Expected behaviour** | **Test events** | | **Direction** |
| **when {**  the IUT **receives** a valid CREATE Request **from** AE **containing**  Resource Type **set to** 2 (AE) **and**  From **set to** AE\_ID **and**  Content **containing**  AE resource **containing**  valid *OPTIONAL\_ATTRIBUTE* attribute  **}** | | IUT 🡨 AE |
| **then {**  the IUT **sends** a valid Response **containing**  Response Status Code **set to** 2001 (CREATED) **and**  Content **containing**  AE resource **containing**  valid *OPTIONAL\_ATTRIBUTE* attribute  **}** | | IUT 🡪 AE |

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| **TP Id** | **PICS Selection** | **Reference** | **OPTIONAL\_ATTRIBUTE** |
| TP/oneM2M/CSE/REG/CRE/012\_AE/LBL | PICS\_AE\_LBL | TS-0001 [1], clause 9.6.5-2 | labels |
| TP/oneM2M/CSE/REG/CRE/012\_AE/APN | PICS\_AE\_APN | TS-0001 [1], clause 9.6.5-2 | AppName |
| TP/oneM2M/CSE/REG/CRE/012\_AE/POA | PICS\_AE\_POA | TS-0001 [1], clause 9.6.5-2 | pointOfAccess |
| TP/oneM2M/CSE/REG/CRE/012\_AE/NL | PICS\_AE\_NL | TS-0001 [1], clause 9.6.5-2 | nodeLink |
| TP/oneM2M/CSE/REG/CRE/012\_AE/OR | PICS\_AE\_OR | TS-0001 [1], clause 9.6.5-2 | ontologyRef |

TP/oneM2M/CSE/REG/CRE/013

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| **TP Id** | | TP/oneM2M/CSE/REG/CRE/013 | |
| **Test objective** | | Check that the IUT accepts a create request of <remoteCSE> resource with *OPTIONAL\_ATTRIBUTE*. | |
| **Reference** | | TS-0001 [1], clauses 10.1.1.2.1 and 9.6.4, TS-0004 [2], clause 7.4.4.2.1 | |
| **Config Id** | | CF04 | |
| **Parent release** | | Release 1 | |
| **PICS Selection** | | PICS\_CSE | |
| **Initial conditions** | **with {**  the IUT **being** in the "initial state"  **}** | | |
| **Expected behaviour** | **Test events** | | **Direction** |
|  | **when {**  the IUT **receives** a valid CREATE Request **from** CSE **containing**  To **set to** CSEBASE\_RESOURCE\_ADDRESS **and**  From **set to** CSE\_ID **and**  Resource Type **set to** 16(remoteCSE) **and**  Content **containing**  remoteCSE resource representation **containing**  *OPTIONAL\_ATTRIBUTE* attribute **}** | | IUT 🡨 CSE |
|  | **then {**  the IUT **sends** a valid Response **containing**  Response Status Code **set to** 2001 (CREATED) **and**  Content **containing**  remoteCSEresource representation  **}** | | IUT 🡪 CSE |

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| **TP Id** | **PICS Selection** | **Reference** | **OPTIONAL\_ATTRIBUTE** |
| TP/oneM2M/CSE/REG/CRE/013\_LBL | PICS\_CSR\_LBL | TS-0001 [1], clause 9.6.4 | labels |
| TP/oneM2M/CSE/REG/CRE/013\_CST | PICS\_CSR\_CST | TS-0001 [1], clause 9.6.4 | cseType |
| TP/oneM2M/CSE/REG/CRE/013\_POA | PICS\_CSR\_POA | TS-0001 [1], clause 9.6.4 | pointOfAccess |
| TP/oneM2M/CSE/REG/CRE/013\_NL | PICS\_CSR\_NL | TS-0001 [1], clause 9.6.4 | nodeLink |

TP/oneM2M/CSE/REG/CRE/014

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| **TP Id** | | TP/oneM2M/CSE/REG/CRE/014 | |
| **Test objective** | | Check that the IUT retargets the request to the remote CSE according to pointOfAccess in the <remoteCSE> resource. | |
| **Reference** | | TS-0001 [1], clauses 9.6.4 and 9.3.2.2.3, TS-0004 [2], clause 6.2.3 | |
| **Config Id** | | CF02 | |
| **Parent release** | | Release 1 | |
| **PICS Selection** | | PICS\_CSE | |
| **Initial conditions** | **with {**  the IUT **being** in the "initial state" **and**  the IUT **having** created the remoteCSE resource **containing**  POINT\_OF\_ACCESS attribute  **}** | | |
| **Expected behaviour** | **Test events** | | **Direction** |
| **when {**  the IUT **receives** a valid REQUEST **from** Originator **containing**  To **set to** RESOURCE\_ADDRESS **and**  From **set to** Originator\_ID  **}** | | IUT 🡨 Originator |
| **then {**  the IUT **sends** the REQUEST to POINT\_OF\_ACCESS  **}** | | IUT 🡪 CSE |

TP/oneM2M/CSE/REG/CRE/015

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| **TP Id** | | TP/oneM2M/CSE/REG/CRE/015 | |
| **Test objective** | | Check that the IUT retargets the request to the CSE according to pointOfAccess in the <remoteCSE> resource and forward the response back to the originator. | |
| **Reference** | | TS-0001 [1], clauses 9.6.4 and 9.3.2.2.3, TS-0004 [2], clause 6.2.3 | |
| **Config Id** | | CF02 | |
| **Parent release** | | Release 1 | |
| **PICS Selection** | | PICS\_CSE | |
| **Initial conditions** | **with {**  the IUT **being** in the "initial state" **and**  the IUT **having** received a valid REQUEST from Originator **and**  The IUT **having** sent the REQUEST to the remoteCSE  **}** | | |
| **Expected behaviour** | **Test events** | | **Direction** |
| **when {**  the IUT **receives** a valid RESPONSE from the remoteCSE **}** | | IUT 🡨 CSE |
| **then {**  the IUT **sends** the RESPONSE to the Originator  **}** | | IUT 🡪 Originator |

TP/oneM2M/CSE/REG/CRE/016

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| **TP Id** | | TP/oneM2M/CSE/REG/CRE/016 | |
| **Test objective** | | Check that the IUT rejects an AE registration (not allowed App-ID) | |
| **Reference** | | TS-0001 [1], clause 10.1.1.2.2 – step 3 and clause 9.6.19 | |
| **Config Id** | | CF01 | |
| **Parent release** | | Release 1 | |
| **PICS Selection** | | PICS\_CSE | |
| **Initial conditions** | **with {**  the IUT **being** in the "initial state"  **and** the IUT **not allowing** **to** register an AE **containing**  **not allowed** App-ID attribute **indicating** APP-ID  } | | |
| **Expected behaviour** | **Test events** | | **Direction** |
| **when {**  the IUT **receives** a valid CREATE Request **from** AE **containing** Resource Type **set to** 2 (AE) **and**  Content **containing**  AE resource **containing**  App-ID attribute **set to** APP-ID **}** | | IUT 🡨 AE |
| **then {**  the IUT **does not** **create** the AE resource  **and** the IUT **sends** a valid Response **containing**  Response Status Code **set to** 4107  (SECURITY\_ASSOCIATION\_REQUIRED)  **}** | | IUT 🡪 AE |

TP/oneM2M/CSE/REG/CRE/017

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| **TP Id** | | TP/oneM2M/CSE/REG/CRE/017 | |
| **Test objective** | | Check that the IUT rejects a create request of <AE> resource that does not include the *MANDATORY\_ATTRIBUTE.* | |
| **Reference** | | TS-0001 [1], clause 10.1.1.2.2, TS-0004 [2], clause 7.4.5.2.1 | |
| **Config Id** | | CF01 | |
| **Parent release** | | Release 1 | |
| **PICS Selection** | | PICS\_CSE | |
| **Initial conditions** | **with {**  the IUT **being** in the "initial state" **and**  the IUT **having** preconfigured AE\_ID\_stem  **}** | | |
| **Expected behaviour** | **Test events** | | **Direction** |
| **when {**  the IUT **receives** a valid CREATE Request **from** AE **containing**  To **set to** CSEBASE\_RESOURCE\_ADDRESS **and**  From **set to** AE\_ID **and**  Resource Type **set to** 2(AE) **and**  Content **containing**  AE resource **containing**  **no** *MANDATORY\_ATTRIBUTE* attribute  **}** | | IUT 🡨 AE |
| **then {**  the IUT **sends** a valid Response **containing**  Response Status Code **set to** 4000 (BAD Request)  **}** | | IUT 🡪 AE |

|  |  |  |
| --- | --- | --- |
| **TP Id** | **Reference** | **ATTRIBUTE** |
| TP/oneM2M/CSE/REG/CRE/017\_API | TS-0001 [1], clause 9.6.5 | App-ID |
| TP/oneM2M/CSE/REG/CRE/017\_RR | TS-0001 [1], clause 9.6.5 | requestReachability |

TP/oneM2M/CSE/REG/CRE/018

|  |  |  |  |
| --- | --- | --- | --- |
| **TP Id** | | TP/oneM2M/CSE/REG/CRE/018 | |
| **Test objective** | | Check that the IUT accepts a create request of <remoteCSE> resource with attributes multiplicity equals to 1. | |
| **Reference** | | TS-0001 [1], clauses 10.1.1.2.1 and 9.6.4, TS-0004 [2], clause 7.4.5.2.2 | |
| **Config Id** | | CF04 | |
| **Parent release** | | Release 1 | |
| **PICS Selection** | | PICS\_CSE | |
| **Initial conditions** | **with {**  the IUT **being** in the "initial state"  **}** | | |
| **Expected behaviour** | **Test events** | | **Direction** |
| **when {**  the IUT **receives** a valid CREATE Request **from** CSE **containing**  To **set to** CSEBASE\_RESOURCE\_ADDRESS **and**  From **set to** CSE\_ID **and**  Resource Type **set to** 16(remoteCSE) **and**  Content **containing**  remoteCSE resource representation **}** | | IUT 🡨 CSE |
| **then {**  the IUT **sends** a valid Response **containing**  Response Status Code **set to** 2001 (CREATED) **and**  Content **containing**  remoteCSEresource representation  **}** | | IUT 🡪 CSE |

TP/oneM2M/CSE/REG/CRE/019

|  |  |  |  |
| --- | --- | --- | --- |
| **TP Id** | | TP/oneM2M/CSE/REG/CRE/019 | |
| **Test objective** | | Check that the IUT accepts a create request of <remoteCSE> resource with attributes multiplicity equals to 1 without the preconfigured CSE-ID. | |
| **Reference** | | TS-0001 [1], clauses 10.1.1.2.1 and 9.6.4, TS-0004 [2], clause 7.4.5.2.2 | |
| **Config Id** | | CF04 | |
| **Parent release** | | Release 1 | |
| **PICS Selection** | | PICS\_CSE | |
| **Initial conditions** | **with {**  the IUT **being** in the "initial state"  **}** | | |
| **Expected behaviour** | **Test events** | | **Direction** |
| **when {**  the IUT **receives** a valid CREATE Request **from** CSE **containing**  To **set to** CSEBASE\_RESOURCE\_ADDRESS **and**  **no** From **and**  Resource Type **set to** 16(remoteCSE) **and**  Content **containing**  remoteCSE resource representation  **}** | | IUT 🡨 CSE |
| **then {**  the IUT **sends** a valid Response **containing**  Response Status Code **set to** 2001 (CREATED) **and**  Content **containing**  remoteCSEresource representation  **}** | | IUT 🡪 CSE |

TP/oneM2M/CSE/REG/CRE/020

|  |  |  |  |
| --- | --- | --- | --- |
| **TP Id** | | TP/oneM2M/CSE/REG/CRE/020 | |
| **Test objective** | | Check that the IUT accepts a response from IN\_CSE on the success update of AEAnnc during AE registration with preprovisioned SP\_relative\_AE\_ID. | |
| **Reference** | | TS-0001 [1], clause 10.1.1.2.2 case b, TS-0004 [2], clause 7.4.5.2.1 | |
| **Config Id** | | CF02 | |
| **Parent release** | | Release 1 | |
| **PICS Selection** | | PICS\_MN\_CSE | |
| **Initial conditions** | **with {**  the IUT **being** in the "initial state" **and**  the IUT **having** received the AE creation request **and**  the IUT **having** sent out the AE\_ANNC Update request to IN\_CSE  **}** | | |
| **Expected behaviour** | **Test events** | | **Direction** |
| **when{**  the IUT **receives** a valid Response **containing**  Response Status Code **set to** 2004 (UPDATED) **and**  Content **containing**  AEAnnc resource representation  **}** | | IUT <- IN-CSE |
| **then {**  the IUT **sends** a valid Response **containing**  Response Status Code **set to** 2001 (CREATED) **and**  Content **containing**  AEresource representation  **}** | | IUT 🡪 AE |

TP/oneM2M/CSE/REG/CRE/021

|  |  |  |  |
| --- | --- | --- | --- |
| **TP Id** | | TP/oneM2M/CSE/REG/CRE/021 | |
| **Test objective** | | Check that the IUT rejects the create request of <CSEBase> resource. | |
| **Reference** | | TS-0001 [1], clauses 10.2.3.1 and 9.6.3, TS-0004 [2], clause 7.4.3.2.1 | |
| **Config Id** | | CF01 | |
| **Parent release** | | Release 1 | |
| **PICS Selection** | | PICS\_CSE | |
| **Initial conditions** | **with {**  the IUT **being** in the "initial state"  **and** the IUT **having registered** the AE  **}** | | |
| **Expected behaviour** | **Test events** | | **Direction** |
| **when {**  the IUT **receives** a valid CREATE Request **from** AE **containing**  To **set to** CSEBASE\_RESOURCE\_ADDRESS **and**  Resource Type **set to** 5 (CSEBase) **and**  From **set to** AE-ID **and**  Content **containing**  CSEBase resource representation  **}** | | IUT 🡨 AE |
| **then {**  the IUT **sends** a valid Response **containing**  Response Status Code **set to** 4005 (OPERATION\_NOT\_ALLOWED)  **}** | | IUT 🡪 AE |

TP/oneM2M/CSE/REG/CRE/022

|  |  |  |  |
| --- | --- | --- | --- |
| **TP Id** | | TP/oneM2M/CSE/REG/CRE/022 | |
| **Test objective** | | Check that the IUT accepts an AE registration (allowed App-ID, C-AE-ID-STEM not provided by AE) | |
| **Reference** | | TS-0001 [1], clause 10.1.1.2.2 - case C and clause 9.6.19 | |
| **Config Id** | | CF01 | |
| **Parent release** | | Release 1 | |
| **PICS Selection** | | PICS\_CSE | |
| **Initial conditions** | **with {**  the IUT **being** in the "initial state"  **and** the IUT **allowing** **to** register an AE **containing**  App-ID attribute **indicating** APP-ID**and**  AE-ID attribute **indicating** C-AE-ID-STEM  **}** | | |
| **Expected behaviour** | **Test events** | | **Direction** |
| **when {**  the IUT **receives** a valid CREATE Request **from** AE **containing**  Resource Type **set to** 2 (AE) **and**  From **set to** 'C' **and**  Content **containing**  AE resource **containing**  App-ID attribute **set to** APP-ID **}** | | IUT 🡨 AE |
| **then {**  the IUT **creates** the AE resource  **and** the IUT **sends** a valid Response **containing**  Response Status Code **set to** 2001 (CREATED)  **}** | | IUT 🡪 AE |

TP/oneM2M/CSE/REG/CRE/023

|  |  |  |  |
| --- | --- | --- | --- |
| 1. **TP Id** | | TP/oneM2M/CSE/REG/CRE/023 | |
| **Test objective** | | Check that the IUT rejects registration of already registered AE (C-AE-ID-STEM provided by AE) | |
| **Reference** | | TS-0001 [1], clause 10.1.1.2.2 – step 4 and clause 9.6.19 | |
| **Config Id** | | CF01 | |
| **Parent release** | | Release 1 | |
| **PICS Selection** | | PICS\_CSE | |
| **Initial conditions** | **with {**  the IUT **being** in the "initial state" **and**  the IUT **having** **registered** the AE **with**  AE-ID attribute **set to** C-AE-ID-STEM  **}** | | |
| **Expected behaviour** | **Test events** | | **Direction** |
| **when {**  the IUT **receives** a valid CREATE Request **from** AE **containing** Resource Type **set to** 2 (AE) **and**  To **set to** TARGE\_CSE\_RESOURCE\_ADDRESS **and**  From **set to** C-AE-ID-STEM **and**  Content **containing**  AE resource representation **}** | | IUT 🡨 AE |
| **then {**  the IUT **does not** **create** the AE resource  **and** the IUT **sends** a valid Response **containing**  Response Status Code **set to** 4105 (CONFLICT)  **}** | | IUT 🡪 AE |

TP/oneM2M/CSE/REG/CRE/024

|  |  |  |  |
| --- | --- | --- | --- |
| **TP Id** | | TP/oneM2M/CSE/REG/CRE/024 | |
| **Test objective** | | Check that IUT sends a CSE registration request with attributes multiplicity equals to 1 | |
| **Reference** | | TS-0001 [1], clause 10.1.1.2.1, TS-0004 [2], clause 7.4.5.2.2 | |
| **Config Id** | | CF04 | |
| **Parent release** | | Release 1 | |
| **PICS Selection** | | PICS\_MN\_CSE or PICS\_ASN\_CSE | |
| **Initial conditions** | **with {**  the IUT **being** in the "initial state" **and**  the IUT **having** privileges to perform CREATE operation on the resource CSEBASE\_RESOURCE\_ADDRESS  **}** | | |
| **Expected behaviour** | **Test events** | | **Direction** |
|  | **when {**  the IUT **is triggered to send** a valid CREATE Request **containing**  To **set to** CSEBASE\_RESOURCE\_ADDRESS **and**  Resource Type **set to** 16 (remoteCSE) **and**  Content **containing**  remoteCSE resource representation  **}** | | NA |
|  | **then {**  the IUT **sends** a valid CREATE Request **containing**  To **set to** CSEBASE\_RESOURCE\_ADDRESS **and**  From **set to** CSE\_ID **and**  Resource Type **set to** 16 (remoteCSE) **and**  Content **containing**  remoteCSE resource representation  **}** | | IUT 🡪 CSE |

TP/oneM2M/CSE/REG/CRE/025

|  |  |  |  |
| --- | --- | --- | --- |
| **TP Id** | | TP/oneM2M/CSE/REG/CRE/025 | |
| **Test objective** | | Check that IUT accepts a CSE registration request with attributes multiplicity equals to 1 | |
| **Reference** | | TS-0001 [1], clause 10.1.1.2.1, TS-0004 [2], clause 7.4.5.2.2 | |
| **Config Id** | | CF04 | |
| **Parent release** | | Release 1 | |
| **PICS Selection** | | PICS\_CSE | |
| **Initial conditions** | **with {**  the IUT **being** in the "initial state" **and**  the IUT **having** privileges to perform CREATE operation on the resource CSEBASE\_RESOURCE\_ADDRESS  **}** | | |
| **Expected behaviour** | **Test events** | | **Direction** |
| **when {**  the IUT **receives** a valid CREATE Request **containing**  To **set to** CSEBASE\_RESOURCE\_ADDRESS **and**  From **set to** CSE\_ID **and**  Resource Type **set to** 16 (remoteCSE) **and**  Content **containing**  remoteCSE resource representation  **}** | | IUT 🡨 CSE |
| **then {**  the IUT **sends** a valid Response **containing**  Response Status Code **set to** 2001 (CREATED) **and**  Content **containing**  remoteCSE resource representation  **and** the IUT **creates** the <remoteCSE> resource  **}** | | IUT 🡪 CSE |

TP/oneM2M/CSE/REG/CRE/026

|  |  |  |  |
| --- | --- | --- | --- |
| **TP Id** | | TP/oneM2M/CSE/REG/CRE/026 | |
| **Test objective** | | Check that IUT sends a CSE registration request with *OPTIONAL\_ATTRIBUTE* attribute | |
| **Reference** | | TS-0001 [1], clause 10.1.1.2.1, TS-0004 [2], clause 7.4.5.2.2 | |
| **Config Id** | | CF04 | |
| **Parent release** | | Release 1 | |
| **PICS Selection** | | PICS\_MN\_CSE or PICS\_ASN\_CSE | |
| **Initial conditions** | **with {**  the IUT **being** in the "initial state" **and**  the IUT **having** privileges to perform CREATE operation on the resource CSEBASE\_RESOURCE\_ADDRESS  **}** | | |
| **Expected behaviour** | **Test events** | | **Direction** |
|  | **when {**  the IUT **is triggered to send** a valid CREATE Request **containing**  To **set to** CSEBASE\_RESOURCE\_ADDRESS **and**  Content **containing**  remoteCSE resource **containing**  cseType attribute **set to** 2 (MN\_CSE) **and**  valid attribute *OPTIONAL\_ATTRIBUTE*  **}** | | NA |
|  | **then {**  the IUT **sends** a valid CREATE Request **containing**  To **set to** CSEBASE\_RESOURCE\_ADDRESS **and**  From **set to** CSE\_ID **and**  Resource Type **set to** 16 (remoteCSE) **and**  Content **containing**  remoteCSE resource **containing**  cseType attribute **set to** 2 (MN\_CSE) **and**  valid attribute *OPTIONAL\_ATTRIBUTE*  **}** | | IUT 🡪 CSE |

| **TP Id** | **PICS Selection** | **Reference** | **OPTIONAL\_ATTRIBUTE** |
| --- | --- | --- | --- |
| TP/oneM2M/CSE/REG/CRE/026\_RN | PICS\_CSR\_RN | TS-0001 [1], clause 9.6.4-2 | resourceName |
| TP/oneM2M/CSE/REG/CRE/026\_ET | PICS\_CSR\_ET | TS-0001 [1], clause 9.6.4-2 | expirationTime |
| TP/oneM2M/CSE/REG/CRE/026\_LBL | PICS\_CSR\_LBL | TS-0001 [1], clause 9.6.4-2 | labels |
| TP/oneM2M/CSE/REG/CRE/026\_POA | PICS\_CSR\_POA | TS-0001 [1], clause 9.6.4-2 | pointOfAccess |
| TP/oneM2M/CSE/REG/CRE/026\_NL | PICS\_CSR\_NL | TS-0001 [1], clause 9.6.4-2 | nodeLink |
| TP/oneM2M/CSE/REG/CRE/026\_CST | PICS\_CSR\_CST | TS-0001 [1], clause 9.6.4-2 | cseType |

TP/oneM2M/CSE/REG/CRE/027

|  |  |  |  |
| --- | --- | --- | --- |
| **TP Id** | | TP/oneM2M/CSE/REG/CRE/027 | |
| **Test objective** | | Check that IUT accepts a CSE registration request with *cseType* attribute set to 'MN\_CSE' | |
| **Reference** | | TS-0001 [1], clause 10.1.1.2.1, TS-0004 [2], clause 7.4.5.2.2 | |
| **Config Id** | | CF04 | |
| **Parent release** | | Release 1 | |
| **PICS Selection** | | PICS\_CSE | |
| **Initial conditions** | **with {**  the IUT **being** in the "initial state" **and**  the IUT **having** privileges to perform CREATE operation on the resource CSEBASE\_RESOURCE\_ADDRESS  **}** | | |
| **Expected behaviour** | **Test events** | | **Direction** |
| **when {**  the IUT **receives** a valid CREATE Request **containing**  To **set to** CSEBASE\_RESOURCE\_ADDRESS **and**  From **set to** CSE\_ID **and**  Resource Type **set to** 16 (remoteCSE) **and**  Content **containing**  remoteCSE resource **containing**  cseType attribute **set to** 2 (MN\_CSE)  **}** | | IUT 🡨 CSE |
| **then {**  the IUT **sends** a valid Response **containing**  Response Status Code **set to** 2001 (CREATED) **and**  Content **containing**  remoteCSE resource **containing**  cseType attribute **set to** 2 (MN\_CSE)  **and** the IUT **creates** a <remoteCSE> resource  **}** | | IUT 🡪 CSE |

TP/oneM2M/CSE/REG/CRE/028

|  |  |  |  |
| --- | --- | --- | --- |
| **TP Id** | | TP/oneM2M/CSE/REG/CRE/028 | |
| **Test objective** | | Check that IUT accepts a CSE registration request with *OPTIONAL\_ATTRIBUTE* attribute | |
| **Reference** | | TS-0001 [1], clause 10.1.1.2.1, TS-0004 [2], clause 7.4.5.2.2 | |
| **Config Id** | | CF04 | |
| **Parent release** | | Release 1 | |
| **PICS Selection** | | PICS\_CSE | |
| **Initial conditions** | **with {**  the IUT **being** in the "initial state" **and**  the IUT **having** privileges to perform CREATE operation on the resource CSEBASE\_RESOURCE\_ADDRESS  **}** | | |
| **Expected behaviour** | **Test events** | | **Direction** |
| **when {**  the IUT **receives** a valid CREATE Request **containing**  To **set to** CSEBASE\_RESOURCE\_ADDRESS **and**  From **set to** CSE\_ID **and**  Resource Type **set to** 16 (remoteCSE) **and**  Content **containing**  remoteCSE resource **containing**  cseType attribute **set to** 2 (MN\_CSE) **and**  valid attribute *OPTIONAL\_ATTRIBUTE*  **}** | | IUT 🡨 CSE |
| **then {**  the IUT **sends** a valid Response **containing**  Response Status Code **set to** 2001 (CREATED) **and**  Content **containing**  remoteCSE resource **containing**  cseType attribute **set to** 2 (MN\_CSE) **and**  valid attribute *OPTIONAL\_ATTRIBUTE*  **and** the IUT **creates** a <remoteCSE> resource  **}** | | IUT 🡪 CSE |

| **TP Id** | **PICS Selection** | **Reference** | **OPTIONAL\_ATTRIBUTE** |
| --- | --- | --- | --- |
| TP/oneM2M/CSE/REG/CRE/028\_RN | PICS\_CSR\_RN | TS-0001 [1], clause 9.6.4-2 | resourceName |
| TP/oneM2M/CSE/REG/CRE/028\_ET | PICS\_CSR\_ET | TS-0001 [1], clause 9.6.4-2 | expirationTime |
| TP/oneM2M/CSE/REG/CRE/028\_LBL | PICS\_CSR\_LBL | TS-0001 [1], clause 9.6.4-2 | labels |
| TP/oneM2M/CSE/REG/CRE/028\_POA | PICS\_CSR\_POA | TS-0001 [1], clause 9.6.4-2 | pointOfAccess |
| TP/oneM2M/CSE/REG/CRE/028\_NL | PICS\_CSR\_NL | TS-0001 [1], clause 9.6.4-2 | nodeLink |

##### 7.2.2.2.3 DELETE Operation

TP/oneM2M/CSE/REG/DEL/001

|  |  |  |  |
| --- | --- | --- | --- |
| **TP Id** | | TP/oneM2M/CSE/REG/DEL/001 | |
| **Test objective** | | Check that the IUT rejects the delete request of <CSEBase> resource. | |
| **Reference** | | TS-0001 [1], clause 10.2.3.4 and 9.6.3, TS-0004 [2], clause 7.4.3.2.4 | |
| **Config Id** | | CF01 | |
| **Parent release** | | Release 1 | |
| **PICS Selection** | | PICS\_CSE | |
| **Initial conditions** | **with {**  the IUT **being** in the "initial state"  **and** the IUT **having registered** the AE  **}** | | |
| **Expected behaviour** | **Test events** | | **Direction** |
| **when {**  the IUT **receives** a valid DELETE Request **from** AE **containing**  To **set to** CSEBASE\_RESOURCE\_ADDRESS **and**  From **set to** AE\_ID **and**  **no** Content **}** | | IUT 🡨 AE |
| **then {**  the IUT **sends** a valid Response **containing**  Response Status Code **set to** 4005 (OPERATION\_NOT\_ALLOWED)  **}** | | IUT 🡪 AE |

TP/oneM2M/CSE/REG/DEL/002

|  |  |  |  |
| --- | --- | --- | --- |
| **TP Id** | | TP/oneM2M/CSE/REG/DEL/002 | |
| **Test objective** | | Check that IUT accepts a <remoteCSE> delete request on TARGET\_REMOTE\_CSE\_ADDRESS, and deletes the <remoteCSE> resource. | |
| **Reference** | | TS-0001 [1], clauses 10.2.2.4 and 9.6.4, TS-0004 [2], clause 7.4.4.2.1 | |
| **Config Id** | | CF04 | |
| **Parent release** | | Release 1 | |
| **PICS Selection** | | PICS\_CSE | |
| **Initial conditions** | **with {**  the IUT **being** in the "initial state"  **and** the IUT **having registered** the CSE  **and** the CSE originator **having** privileges to perform DELETE operation on theremoteCSE resource  **}** | | |
| **Expected behaviour** | **Test events** | | **Direction** |
| **when {**  the IUT **receives** a valid DELETE Request **from** CSE **containing**  To **set to** REMOTECSE\_RESOURCE\_ADDRESS **and**  From **set to** CSE\_ID **and**  **no** Content **}** | | IUT 🡨 CSE |
| **then {**  the IUT **sends** a valid Response **containing**  Response Status Code **set to** 2002 (DELETED)  **and** the IUT **deletes** the remoteCSE resource  **}** | | IUT 🡪 CSE |

TP/oneM2M/CSE/REG/DEL/003

|  |  |  |  |
| --- | --- | --- | --- |
| **TP Id** | | TP/oneM2M/CSE/REG/DEL/003 | |
| **Test objective** | | Check that the IUT accepts an AE de-registration. | |
| **Reference** | | TS-0001 [1], clause 10.1.4.2.2 | |
| **Config Id** | | CF01 | |
| **Parent release** | | Release 1 | |
| **PICS Selection** | | PICS\_CSE | |
| **Initial conditions** | **with {**  the IUT **being** in the "initial state"  **and** the IUT **having registered** the AE  **and** the AE **having** privileges to perform DELETE operation on the resource AE  **}** | | |
| **Expected behaviour** | **Test events** | | **Direction** |
| **when {**  the IUT **receives** a valid DELETE Request **from** AE **containing**  To **set to** AE\_RESOURCE\_ADDRESS **and**  From **set to** AE\_ID **and**  **no** Content  **}** | | IUT  AE |
| **then {**  the IUT **deletes** the AE\_RESOURCE\_ADDRESS resource  **and** the IUT **sends** a valid Response **containing**  Response Status Code **set to** 2002 (DELETED)  **}** | | IUT  AE |

TP/oneM2M/CSE/REG/DEL/004

|  |  |  |  |
| --- | --- | --- | --- |
| **TP Id** | | TP/oneM2M/CSE/REG/DEL/004 | |
| **Test objective** | | Check that IUT sends a <remoteCSE> delete request on  TARGET\_REMOTE\_CSE\_ADDRESS | |
| **Reference** | | TS-0001 [1], clause 10.2.2.4, TS-0004 [2], clause 7.4.5.2.5 | |
| **Config Id** | | CF04 | |
| **Parent release** | | Release 1 | |
| **PICS Selection** | | PICS\_MN\_CSE | |
| **Initial conditions** | **with {**  the IUT **being** in the "initial state" **and**  the IUT **having created** a resource TARGET\_REMOTE\_CSE\_ADDRESS **and**  the IUT **having** privileges to perform DELETE operation on the resource TARGET\_REMOTE\_CSE\_ADDRESS  **}** | | |
| **Expected behaviour** | **Test events** | | **Direction** |
|  | **when {**  the IUT **is triggered to send** a valid DELETE Request **containing**  To **set to** TARGET\_REMOTE\_CSE\_ADDRESSS  **}** | | NA |
|  | **then {**  the IUT **sends** a valid DELETE Request **containing**  To **set to** TARGET\_REMOTE\_CSE\_ADDRESS **and**  From **set to** CSE\_ID **and**  **no** Content  **}** | | IUT 🡪 CSE |

##### 7.2.2.2.4 UPDATE Operation

TP/oneM2M/CSE/REG/UPD/001

|  |  |  |  |
| --- | --- | --- | --- |
| **TP Id** | | TP/oneM2M/CSE/REG/UPD/001 | |
| **Test objective** | | Check that the IUT rejects the update request of <CSEBase> resource. | |
| **Reference** | | TS-0001 [1], clauses 10.2.3.3 and 9.6.3, TS-0004 [2], clause 7.4.3.2.3 | |
| **Config Id** | | CF01 | |
| **Parent release** | | Release 1 | |
| **PICS Selection** | | PICS\_CSE | |
| **Initial conditions** | **with {**  the IUT **being** in the "initial state"  **and** the IUT **having registered** the AE  **}** | | |
| **Expected behaviour** | **Test events** | | **Direction** |
| **when {**  the IUT **receives** a valid UPDATE Request **from** AE **containing**  To **set to** CSEBASE\_RESOURCE\_ADDRESS **and**  From **set to** AE\_ID **and**  Content **containing**  CSEBase resource representation **}** | | IUT 🡨 AE |
| **then {**  the IUT **sends** a valid Response **containing**  Response Status Code **set to** 4005 (OPERATION\_NOT\_ALLOWED)  **}** | | IUT 🡪 AE |

TP/oneM2M/CSE/REG/UPD/002

|  |  |  |  |
| --- | --- | --- | --- |
| **TP Id** | | TP/oneM2M/CSE/REG/UPD/002 | |
| **Test objective** | | Check that IUT accepts a <remoteCSE> update request with *OPTIONAL\_ATTRIBUTE* attribute. | |
| **Reference** | | TS-0001 [1], clauses 10.1.1.2.1 and 9.6.4, TS-0004 [2], clause 7.4.4.2.1 | |
| **Config Id** | | CF01 | |
| **Parent release** | | Release 1 | |
| **PICS Selection** | | PICS\_CSE | |
| **Initial conditions** | **with {**  the IUT **being** in the "initial state"  **and** the IUT **having registered** the ORIGINATOR  **and** the CSE originator **having** privileges to perform UPDATE operation on theremoteCSE resource  **}** | | |
| **Expected behaviour** | **Test events** | | **Direction** |
| **when {**  the IUT **receives** a valid UPDATE Request **from** ORIGINATOR **containing**  To **set to** REMOTECSE\_RESOURCE\_ADDRESS **and**  From **set to** CSE\_ID **and**  Content **containing**  remoteCSE resource **containing**  valid *ATTRIBUTE* attribute **}** | | IUT 🡨 CSE |
| **then {**  the IUT **sends** a valid Response **containing**  Response Status Code **set to** 2004 (UPDATED) **and**  Content **containing**  remoteCSEresource representation **containing**  valid*ATTRIBUTE*attribute  **}** | | IUT 🡪 CSE |

|  |  |  |  |
| --- | --- | --- | --- |
| **TP Id** | **PICS Selection** | **Reference** | **ATTRIBUTE** |
| TP/oneM2M/CSE/REG/UPD/002\_ET | N/A | TS-0001 [1], clause 9.6.4 | expirationTime |
| TP/oneM2M/CSE/REG/UPD/002\_LBL | PICS\_CSR\_LBL | TS-0001 [1], clause 9.6.4 | labels |
| TP/oneM2M/CSE/REG/UPD/002\_POA | PICS\_CSR\_POA | TS-0001 [1], clause 9.6.4 | pointOfAccess |
| TP/oneM2M/CSE/REG/UPD/002\_NL | PICS\_CSR\_NL | TS-0001 [1], clause 9.6.4 | nodeLink |
| TP/oneM2M/CSE/REG/UPD/002\_RR | N/A | TS-0001 [1], clause 9.6.4-2 | requestReachability |

TP/oneM2M/CSE/REG/UPD/003

|  |  |  |  |
| --- | --- | --- | --- |
| **TP Id** | | TP/oneM2M/CSE/REG/UPD/003 | |
| **Test objective** | | Check that IUT sends a <remoteCSE> update request with *OPTIONAL\_ATTRIBUTE* attribute | |
| **Reference** | | TS-0001 [1], clause 10.2.2.3, TS-0004 [2], clause 7.4.5.2.4 | |
| **Config Id** | | CF04 | |
| **Parent release** | | Release 1 | |
| **PICS Selection** | | PICS\_MN\_CSE | |
| **Initial conditions** | **with {**  the IUT **being** in the "initial state" **and**  the IUT **having created** a resource TARGET\_REMOTE\_CSE\_ADDRESS **containing**  a RW *OPTIONAL\_ATTRIBUTE* attribute **set to** VALUE\_1 **and**  the IUT **having** privileges to perform UPDATE operation on the resource TARGET\_REMOTE\_CSE\_ADDRESS  **}** | | |
| **Expected behaviour** | **Test events** | | **Direction** |
|  | **when {**  the IUT **is triggered to send** a valid UPDATE Request **containing**  To **set to** TARGET\_REMOTE\_CSE\_ADDRESS **and**  Content **containing**  remoteCSE resource **containing**  attribute *OPTIONAL\_ATTRIBUTE* **set to** VALUE\_2  **}** | | NA |
|  | **then {**  the IUT **sends** a valid UPDATE Request **containing**  To **set to** TARGET\_REMOTE\_CSE\_ADDRESS **and**  From **set to** CSE\_ID **and**  Content **containing**  remoteCSE resource **containing**  attribute *OPTIONAL\_ATTRIBUTE* **set to** VALUE\_2  **}** | | IUT 🡪 CSE |

|  |  |  |  |
| --- | --- | --- | --- |
| **TP Id** | **PICS Selection** | **Reference** | **OPTIONAL\_ATTRIBUTE** |
| TP/oneM2M/CSE/REG/UPD/003\_ET | PICS\_CSR\_ET | TS-0001 [1], clause 9.6.4-2 | expirationTime |
| TP/oneM2M/CSE/REG/UPD/003\_LBL | PICS\_CSR\_LBL | TS-0001 [1], clause 9.6.4-2 | labels |
| TP/oneM2M/CSE/REG/UPD/003\_POA | PICS\_CSR\_POA | TS-0001 [1], clause 9.6.4-2 | pointOfAccess |
| TP/oneM2M/CSE/REG/UPD/003\_NL | PICS\_CSR\_NL | TS-0001 [1], clause 9.6.4-2 | nodeLink |
| TP/oneM2M/CSE/REG/UPD/003\_RR | PICS\_CSR\_RR | TS-0001 [1], clause 9.6.4-2 | requestReachability |

#### 7.2.2.3 Data Management and Repository Function (DMR)

##### 7.2.2.3.1 RETRIEVE Operation

TP/oneM2M/CSE/DMR/RET/001

|  |  |  |  |
| --- | --- | --- | --- |
| **TP Id** | | TP/oneM2M/CSE/DMR/RET/001 | |
| **Test objective** | | Check that the IUT returns successfully the TARGET\_RESOURCE\_ADDRESSresource | |
| **Reference** | | TS-0001 [1], clause 10.1.2 | |
| **Config Id** | | CF01 | |
| **Parent release** | | Release 1 | |
| **PICS Selection** | | PICS\_CSE | |
| **Initial conditions** | **with {**  the IUT **being** in the "initial state"  **and** the IUT **having registered** the AE  **and** the IUT **having created** a resource TARGET\_RESOURCE\_ADDRESSof type *RESOURCE\_TYPE* under the AE resource  **and** the AE **having** privileges to perform RETRIEVE operation on the resource TARGET\_RESOURCE\_ADDRESS  **}** | | |
| **Expected behaviour** | **Test events** | | **Direction** |
| **when {**  the IUT **receives** a valid RETRIEVE Request **from** AE **containing**  To **set to** TARGET\_RESOURCE\_ADDRESS **and**  From **set to** AE\_ID **and**  **no** Content  **}** | | IUT 🡨 AE |
| **then {**  the IUT **sends** a valid Response **containing**  Response Status Code **set to** 2000 (OK) **and**  Content **containing**  *RESOURCE\_TYPE* resource representation  **}** | | IUT 🡪 AE |

|  |  |  |
| --- | --- | --- |
| **TP Id** | **Reference** | **RESOURCE\_TYPE** |
| TP/oneM2M/CSE/DMR/RET/001\_CNT | TS-0001 [1], clause 10.2.4.2 | 3 (container) |
| TP/oneM2M/CSE/DMR/RET/001\_ACP | TS-0001 [1], clause 10.2.21.2 | 1 (accessControlPolicy) |
| TP/oneM2M/CSE/DMR/RET/001\_SUB | TS-0001 [1], clause 10.2.11.3 | 23 (subscription) |
| TP/oneM2M/CSE/DMR/RET/001\_CIN | TS-0001 [1], clause 10.2.4.2 | 4 (contentInstance) |
| TP/oneM2M/CSE/DMR/RET/001\_GRP | TS-0001 [1], clause 10.2.7.3 | 9 (group) |

TP/oneM2M/CSE/DMR/RET/002

|  |  |  |  |
| --- | --- | --- | --- |
| **TP Id** | | TP/oneM2M/CSE/DMR/RET/002 | |
| **Test objective** | | Check that the IUT responds with an error when the AE tries to retrieve the resource TARGET\_RESOURCE\_ADDRESS which does not exist | |
| **Reference** | | TS-0001 [1], clause 10.1.2 - item 1) | |
| **Config Id** | | CF01 | |
| **Parent release** | | Release 1 | |
| **PICS Selection** | | PICS\_CSE | |
| **Initial conditions** | **with {**  the IUT **being** in the "initial state"  **and** the IUT **having registered** the AE  **and** the IUT **having not yet** **created** a resource TARGET\_RESOURCE\_ADDRESS  **}** | | |
| **Expected behaviour** | **Test events** | | **Direction** |
| **when {**  the IUT **receives** a valid RETRIEVE Request **from** AE **containing**  To **set to** TARGET\_RESOURCE\_ADDRESS **and**  From **set to** AE\_ID **and**  **no** Content  **}** | | IUT 🡨 AE |
| **then {**  the IUT **sends** a valid Response **containing**  Response Status Code **set to** 4004 (NOT\_FOUND)  **}** | | IUT 🡪 AE |

TP/oneM2M/CSE/DMR/RET/003

|  |  |  |  |
| --- | --- | --- | --- |
| **TP Id** | | TP/oneM2M/CSE/DMR/RET/003 | |
| **Test objective** | | Check that the IUT responds with an error when the AE tries to retrieve a resource TARGET\_RESOURCE\_ADDRESS under AE without having privileges for the RETRIEVE operation | |
| **Reference** | | TS-0001 [1], clause 10.1.2 - item 2) | |
| **Config Id** | | CF01 | |
| **Parent release** | | Release 1 | |
| **PICS Selection** | | PICS\_CSE | |
| **Initial conditions** | **with {**  the IUT **being** in the "initial state"  **and** the IUT **having registered** the AE  **and** the IUT **having created** a resource TARGET\_RESOURCE\_ADDRESSof type *RESOURCE\_TYPE* under the AE resource  **and** the AE **having no** privileges to perform RETRIEVE operation on the resource TARGET\_RESOURCE\_ADDRESS  **}** | | |
| **Expected behaviour** | **Test events** | | **Direction** |
| **when {**  the IUT **receives** a valid RETRIEVE Request **from** AE **containing**  To **set to** TARGET\_RESOURCE\_ADDRESS **and**  From **set to** AE\_ID **and**  **no** Content  **}** | | IUT 🡨 AE |
| **then {**  the IUT **sends** a Response **containing**  Response Status Code **set to** 4103 (ACCESS\_DENIED)  **}** | | IUT 🡪 AE |

| **TP Id** | **Reference** | **RESOURCE\_TYPE** |
| --- | --- | --- |
| TP/oneM2M/CSE/DMR/RET/003\_CNT | TS-0001 [1], clause 10.2.4.2 | 3 (container) |
| TP/oneM2M/CSE/DMR/RET/003\_ACP | TS-0001 [1], clause 10.2.21.2 | 1 (accessControlPolicy) |
| TP/oneM2M/CSE/DMR/RET/003\_SUB | TS-0001 [1], clause 10.2.11.3 | 23 (subscription) |
| TP/oneM2M/CSE/DMR/RET/003\_GRP | TS-0001 [1], clause 10.2.7.3 | 9 (group) |

TP/oneM2M/CSE/DMR/RET/004

|  |  |  |  |
| --- | --- | --- | --- |
| **TP Id** | | TP/oneM2M/CSE/DMR/RET/004 | |
| **Test objective** | | Check that the IUT returns successfully the ATTRIBUTEof TARGET\_RESOURCE\_ADDRESSresource ("To" option) | |
| **Reference** | | TS-0001 [1], clause 10.1.2 | |
| **Config Id** | | CF01 | |
| **Parent release** | | Release 1 | |
| **PICS Selection** | | PICS\_CSE | |
| **Initial conditions** | **with {**  the IUT **being** in the "initial state"  **and** the IUT **having registered** the AE  **and** the IUT **having created** a resource TARGET\_RESOURCE\_ADDRESSof type *RESOURCE\_TYPE* under the AE resource  **and** the AE **having** privileges to perform RETRIEVE operation on the resource TARGET\_RESOURCE\_ADDRESS  **}** | | |
| **Expected behaviour** | **Test events** | | **Direction** |
| **when {**  the IUT **receives** a valid RETRIEVE Request **from** AE **containing**  To **set to** TARGET\_ATTRIBUTE\_ADDRESS **and**  From **set to** AE\_ID **and**  **no** Content  **}** | | IUT 🡨 AE |
| **then {**  the IUT **sends** a valid Response **containing**  Response Status Code **set to** 2000 (OK) **and**  Content **containing**  *RESOURCE\_TYPE* resource **containing**  valid ATTRIBUTE attribute **and**  **no other** attribute  **}** | | IUT 🡪 AE |
| NOTES: TARGET\_ATTRIBUTE\_ADDRESSis represented as TARGET\_RESOURCE\_ADDRESS#ATTRIBUTE where '#' is present between TARGET\_RESOURCE\_ADDRESS and ATTRIBUTE.  ATTRIBUTEindicates common attribute for all *RESOURCE\_TYPE* resources listed in the table below. | | | |

|  |  |  |  |
| --- | --- | --- | --- |
| **TP Id** | **Reference** | **RESOURCE\_TYPE** | |
| P/oneM2M/CSE/DMR/RET/004\_CNT | TS-0001 [1], clause 10.2.4.2 | 3 (container) | |
| TP/oneM2M/CSE/DMR/RET/004\_ACP | TS-0001 [1], clause 10.2.21.2 | 1 (accessControlPolicy) | |
| TP/oneM2M/CSE/DMR/RET/004\_SUB | TS-0001 [1], clause 10.2.11.3 | 23 (subscription) | |
| TP/oneM2M/CSE/DMR/RET/004\_GRP | TS-0001 [1], clause 10.2.7.3 | 9 (group) |

TP/oneM2M/CSE/DMR/RET/005

|  |  |  |  |
| --- | --- | --- | --- |
| **TP Id** | | TP/oneM2M/CSE/DMR/RET/005 | |
| **Test objective** | | Check that the IUT returns successfully the ATTRIBUTEof TARGET\_RESOURCE\_ADDRESSresource ("Content" option) | |
| **Reference** | | TS-0001 [1], clause 10.1.2 | |
| **Config Id** | | CF01 | |
| **Parent release** | | Release 1 | |
| **PICS Selection** | | PICS\_CSE | |
| **Initial conditions** | **with {**  the IUT **being** in the "initial state"  **and** the IUT **having registered** the AE  **and** the IUT **having created** a resource TARGET\_RESOURCE\_ADDRESSof type *RESOURCE\_TYPE* under the AE resource  **and** the AE **having** privileges to perform RETRIEVE operation on the resource TARGET\_RESOURCE\_ADDRESS  **}** | | |
| **Expected behaviour** | **Test events** | | **Direction** |
| **when {**  the IUT **receives** a valid RETRIEVE Request **from** AE **containing**  To **set to** TARGET\_RESOURCE\_ADDRESS **and**  From **set to** AE\_ID **and**  Content **containing**  attributeList element **containing**  ATTRIBUTE name  **}** | | IUT 🡨 AE |
| **then {**  the IUT **sends** a valid Response **containing**  Response Status Code **set to** 2000 (OK) **and**  Content **containing**  *RESOURCE\_TYPE* resource **containing**  valid ATTRIBUTE attribute **and**  **no other** attribute  **}** | | IUT 🡪 AE |
| NOTES: ATTRIBUTE indicates common attribute for all *RESOURCE\_TYPE* resources listed in the table below. | | | |

|  |  |  |
| --- | --- | --- |
| **TP Id** | **Reference** | **RESOURCE\_TYPE** |
| TP/oneM2M/CSE/DMR/RET/005\_CNT | TS-0001 [1], clause 10.2.4.2 | 3 (container) |
| TP/oneM2M/CSE/DMR/RET/005\_ACP | TS-0001 [1], clause 10.2.21.2 | 1 (accessControlPolicy) |
| TP/oneM2M/CSE/DMR/RET/005\_SUB | TS-0001 [1], clause 10.2.11.3 | 23 (subscription) |
| TP/oneM2M/CSE/DMR/RET/005\_GRP | TS-0001 [1], clause 10.2.7.3 | 9 (group) |

TP/oneM2M/CSE/DMR/RET/006

|  |  |  |  |
| --- | --- | --- | --- |
| **TP Id** | | TP/oneM2M/CSE/DMR/RET/006 | |
| **Test objective** | | Check that the IUT returns successfully multiple attributesof TARGET\_RESOURCE\_ADDRESSresource | |
| **Reference** | | TS-0001 [1], clause 10.1.2 | |
| **Config Id** | | CF01 | |
| **Parent release** | | Release 1 | |
| **PICS Selection** | | PICS\_CSE | |
| **Initial conditions** | **with {**  the IUT **being** in the "initial state"  **and** the IUT **having registered** the AE  **and** the IUT **having created** a resource TARGET\_RESOURCE\_ADDRESSof type *RESOURCE\_TYPE* under the AE resource  **and** the AE **having** privileges to perform RETRIEVE operation on the resource TARGET\_RESOURCE\_ADDRESS  **}** | | |
| **Expected behaviour** | **Test events** | | **Direction** |
| **when {**  the IUT **receives** a valid RETRIEVE Request **from** AE **containing**  To **set to** TARGET\_RESOURCE\_ADDRESS **and**  From **set to** AE\_ID **and**  Content **containing**  attributeListelement **containing**  ATTRIBUTE\_1 name **and**  ATTRIBUTE\_2 name  **}** | | IUT 🡨 AE |
| **then {**  the IUT **sends** a valid Response **containing**  Response Status Code **set to** 2000 (OK) **and**  Content **containing**  *RESOURCE\_TYPE* resource**containing**  valid ATTRIBUTE\_1 attribute **and**  valid ATTRIBUTE\_2 attribute **and**  **no other** attribute  **}** | | IUT 🡪 AE |
| NOTES: ATTRIBUTE\_1 indicates common attribute for all *RESOURCE\_TYPE* resources listed in the table below  ATTRIBUTE\_2 indicates common attribute for all *RESOURCE\_TYPE* resources listed in the table below | | | |

|  |  |  |
| --- | --- | --- |
| **TP Id** | **Reference** | **RESOURCE\_TYPE** |
| TP/oneM2M/CSE/DMR/RET/006\_CNT | TS-0001 [1], clause 10.2.4.2 | 3 (container) |
| TP/oneM2M/CSE/DMR/RET/006\_ACP | TS-0001 [1], clause 10.2.21.2 | 1 (accessControlPolicy) |
| TP/oneM2M/CSE/DMR/RET/006\_SUB | TS-0001 [1], clause 10.2.11.3 | 23 (subscription) |
| TP/oneM2M/CSE/DMR/RET/006\_GRP | TS-0001 [1], clause 10.2.7.3 | 9 (group) |

TP/oneM2M/CSE/DMR/RET/007

|  |  |  |  |
| --- | --- | --- | --- |
| **TP Id** | | TP/oneM2M/CSE/DMR/RET/007 | |
| **Test objective** | | Check that the IUT responds with an error when the AE tries to retrieve a non-existing attribute of the TARGET\_RESOURCE\_ADDRESS resource ("single" attribute case) | |
| **Reference** | | TS-0001 [1], clause 10.1.2 | |
| **Config Id** | | CF01 | |
| **Parent release** | | Release 1 | |
| **PICS Selection** | | PICS\_CSE | |
| **Initial conditions** | **with {**  the IUT **being** in the "initial state"  **and** the IUT **having registered** the AE  **and** the IUT **having created** a resource TARGET\_RESOURCE\_ADDRESSof type *RESOURCE\_TYPE* under the AE resource **containing**  **no** attribute *ATTRIBUTE*  **and** the AE **having** privileges to perform RETRIEVE operation on the resource TARGET\_RESOURCE\_ADDRESS  **}** | | |
| **Expected behaviour** | **Test events** | | **Direction** |
| **when {**  the IUT **receives** a valid RETRIEVE Request **from** AE **containing**  To **set to** TARGET\_RESOURCE\_ADDRESS **and**  From **set to** AE\_ID **and**  Content **containing**  attributeListelement **containing**  *ATTRIBUTE*name  **}** | | IUT 🡨 AE |
| **then {**  the IUT **sends** a valid Response **containing**  Response Status Code **set to** 4004 (NOT\_FOUND)  **}** | | IUT 🡪 AE |

|  |  |  |  |
| --- | --- | --- | --- |
| **TP Id** | **Reference** | **RESOURCE\_TYPE** | **ATTRIBUTE** |
| TP/oneM2M/CSE/DMR/RET/007\_CNT/LBL | TS-0001 [1], clause 10.2.4.2 | 3 (container) | labels, |
| TP/oneM2M/CSE/DMR/RET/007\_ACP/LBL | TS-0001 [1], clause 10.2.21.2 | 1 (accessControlPolicy) | labels |
| TP/oneM2M/CSE/DMR/RET/007\_SUB/LBL | TS-0001 [1], clause 10.2.11.3 | 23 (subscription) | labels |
| TP/oneM2M/CSE/DMR/RET/007\_GRP/LBL | TS-0001 [1], clause 10.2.7.3 | 9 (group) | labels |

TP/oneM2M/CSE/DMR/RET/008

|  |  |  |  |
| --- | --- | --- | --- |
| **TP Id** | | TP/oneM2M/CSE/DMR/RET/008 | |
| **Test objective** | | Check that the IUT responds with an error when the AE tries to retrieve a non-existing attributes of the TARGET\_RESOURCE\_ADDRESS resource ("multiple" attributes case) | |
| **Reference** | | TS-0001 [1], clause 10.1.2 | |
| **Config Id** | | CF01 | |
| **Parent release** | | Release 1 | |
| **PICS Selection** | | PICS\_CSE | |
| **Initial conditions** | **with {**  the IUT **being** in the "initial state"  **and** the IUT **having registered** the AE  **and** the IUT **having created** a resource TARGET\_RESOURCE\_ADDRESSof type *RESOURCE\_TYPE* under the AE resource **containing**  **no** *ATTRIBUTE\_1* attribute **and**  **no** *ATTRIBUTE\_2* attribute  **and** the AE **having** privileges to perform RETRIEVE operation on the resource TARGET\_RESOURCE\_ADDRESS  **}** | | |
| **Expected behaviour** | **Test events** | | **Direction** |
| **when {**  the IUT **receives** a valid RETRIEVE Request **from** AE **containing**  To **set to** TARGET\_RESOURCE\_ADDRESS **and**  From **set to** AE\_ID **and**  Content **containing**  attributeListelement **containing**  *ATTRIBUTE\_1* name **and**  *ATTRIBUTE\_2* name  **}** | | IUT 🡨 AE |
| **then {**  the IUT **sends** a valid Response **containing**  Response Status Code **set to** 4004 (NOT\_FOUND)  **}** | | IUT 🡪 AE |

|  |  |  |  |  |
| --- | --- | --- | --- | --- |
| **TP Id** | **Reference** | **RESOURCE\_TYPE** | **ATTRIBUTE\_1** | **ATTRIBUTE\_2** |
| TP/oneM2M/CSE/DMR/RET/008\_CNT/LBL/AT | TS-0001 [1], clause 10.2.4.2 | 3 (container) | labels | announceTo |
| TP/oneM2M/CSE/DMR/RET/008\_ACP/LBL/AT | TS-0001 [1], clause 10.2.21.2 | 1 (accessControlPolicy) | labels | announceTo |
| TP/oneM2M/CSE/DMR/RET/008\_SUB/LBL/AT | TS-0001 [1], clause 10.2.11.3 | 23 (subscription) | labels | announceTo |
| TP/oneM2M/CSE/DMR/RET/008\_GRP/LBL/AT | TS-0001 [1], clause 10.2.7.3 | 9 (group) | labels | announceTo |

TP/oneM2M/CSE/DMR/RET/009

|  |  |  |  |
| --- | --- | --- | --- |
| **TP Id** | | TP/oneM2M/CSE/DMR/RET/009 | |
| **Test objective** | | Check that the IUT rejects the RETRIEVE Request of a latest resource target to a container resource that has no direct child contentInstance resources. | |
| **Reference** | | TS-0001 [1], clause 10.2.22.1, TS-0004 [2], clause 7.4.28.2.3 | |
| **Config Id** | | CF01 | |
| **Parent release** | | Release 1 | |
| **PICS Selection** | | PICS\_CSE | |
| **Initial conditions** | **with {**  the IUT **being** in the "initial state"  **and** the IUT **having registered** the AE **containing**  acontainer resource **containing**  **no** direct child contentInstance resources  **}** | | |
| **Expected behaviour** | **Test events** | | **Direction** |
|  | **when {**  the IUT **receives** a valid RETRIEVE Request **from** AE **containing**  To **set to** TARGET\_RESOURCE\_ADDRESS **and**  From **set to** AE\_ID **and**  **no** Content  **}** | | IUT 🡨 AE |
|  | **then {**  the IUT **sends** a valid Response **containing**  Response Status Code **set to** 4004 (NOT\_FOUND)  **}** | | IUT 🡪 AE |

TP/oneM2M/CSE/DMR/RET/010

|  |  |  |
| --- | --- | --- |
| **TP Id** | TP/oneM2M/CSE/DMR/RET/010 | |
| **Test objective** | Check that the IUT accepts the RETRIEVE Request of the oldest contentInstance target to a <container> resource | |
| **Reference** | TS-0001 [1], clause 10.2.23.1, TS-0004 [2], clause 7.4.29.2.3 | |
| **Config Id** | CF01 | |
| **Parent release** | Release 1 | |
| **PICS Selection** | PICS\_CSE | |
| **Initial conditions** | **with {**  the IUT **being** in the "initial state"  **and** the IUT **having registered** the AE  **and** the IUT **having created** a container resource **containing**  CONTENT\_INSTANCE\_1 contentInstance resource **and**  CONTENT\_INSTANCE\_2 contentInstance resource  **and** the AE **having** privileges to perform RETRIEVE operation on the container resource  **and** creationTime attribute ofCONTENT\_INSTANCE\_1 < creationTime attribute of CONTENT\_INSTANCE\_2  **}** | |
| **Expected behaviour** | **Test events** | **Direction** |
|  | **when {**  the IUT **receives** a valid RETRIEVE Request **from** AE **containing**  To **set to** CONTAINER\_RESOURCE\_ADDRESS/ol **and**  From **set to** AE\_ID **and**  **no** Content **}** | IUT 🡨 AE |
|  | **then {**  the IUT **sends** a valid Response **containing**  Response Status Code **set to** 2000 (OK) **and**  Content **containing**  contentInstance resource **containing**  resourceName attribute **set to** CONTENT\_INSTANCE\_1  **}** | IUT 🡪 AE |

TP/oneM2M/CSE/DMR/RET/011

|  |  |  |  |
| --- | --- | --- | --- |
| **TP Id** | | TP/oneM2M/CSE/DMR/RET/011 | |
| **Test objective** | | Check that the IUT rejects the RETRIEVE Request of an oldest resource target to a container resource that has no direct child contentInstance resources. | |
| **Reference** | | TS-0001 [1], clause 10.2.23.1, TS-0004 [2], clause 7.4.29.2.3 | |
| **Config Id** | | CF01 | |
| **Parent release** | | Release 1 | |
| **PICS Selection** | | PICS\_CSE | |
| **Initial conditions** | **with {**  the IUT **being** in the "initial state"  **and** the IUT **having registered** the AE **containing**  acontainer resource **containing**  **no** direct child contentInstance resources  **}** | | |
| **Expected behaviour** | **Test events** | | **Direction** |
|  | **when {**  the IUT **receives** a valid RETRIEVE Request **from** AE **containing**  To **set to** CONTAINER\_RESOURCE\_ADDRESS/ol **and**  From **set to** AE\_ID **and**  **no** Content **}** | | IUT 🡨 AE |
|  | **then {**  the IUT **sends** a valid Response **containing**  Response Status Code **set to** 4004 (NOT\_FOUND)  **}** | | IUT 🡪 AE |

TP/oneM2M/CSE/DMR/RET/012

|  |  |  |  |
| --- | --- | --- | --- |
| **TP Id** | | TP/oneM2M/CSE/DMR/RET/012 | |
| **Test objective** | | Check that the IUT accepts the RETRIEVE Request of the latest contentInstance target to a <container> resource | |
| **Reference** | | TS-0001 [1], clause 10.2.22.1, TS-0004 [2], clause 7.4.28.2.3 | |
| **Config Id** | | CF01 | |
| **Parent release** | | Release 1 | |
| **PICS Selection** | | PICS\_CSE | |
| **Initial conditions** | **with {**  the IUT **being** in the "initial state"  **and** the IUT **having registered** the AE **containing**  **and** the IUT **having created** a container resource **containing**  CONTENT\_INSTANCE\_1 contentInstance resource **and**  CONTENT\_INSTANCE\_2 contentInstance resource  **and** the AE **having** privileges to perform RETRIEVE operation on the container resource  **and** creationTime attribute ofCONTENT\_INSTANCE\_1 < creationTime attribute of CONTENT\_INSTANCE\_2  **}** | | |
| **Expected behaviour** | **Test events** | | **Direction** |
| **when {**  the IUT **receives** a valid RETRIEVE Request **from** AE **containing**  To **set to** CONTAINER\_RESOURCE\_ADDRESS/la **and**  From **set to** AE\_ID **and**  **no** Content **}** | | IUT 🡨 AE |
| **then {**  the IUT **sends** a Response **containing**  Response Status Code **set to** 2000 (OK) **and**  Content **containing**  contentInstance resource **containing**  resourceName attribute **set to** CONTENT\_INSTANCE\_2  **}** | | IUT 🡪 AE |

TP/oneM2M/CSE/DMR/RET/013

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| --- | --- | --- | --- |
| **TP Id** | | TP/oneM2M/CSE/DMR/RET/013 | |
| **Test objective** | | Check that the IUT returns successfully the TARGET\_RESOURCE\_ADDRESSresource under CSEBase | |
| **Reference** | | TS-0001 [1], clause 10.1.2 | |
| **Config Id** | | CF01 | |
| **Parent release** | | Release 1 | |
| **PICS Selection** | | PICS\_CSE | |
| **Initial conditions** | **with {**  the IUT **being** in the "initial state"  **and** the IUT **having registered** the AE  **and** the IUT **having created** a resource TARGET\_RESOURCE\_ADDRESSof type *RESOURCE\_TYPE* under the CSEBase resource  **and** the AE **having** privileges to perform RETRIEVE operation on the resource TARGET\_RESOURCE\_ADDRESS  **}** | | |
| **Expected behaviour** | **Test events** | | **Direction** |
| **when {**  the IUT **receives** a valid RETRIEVE Request **from** AE **containing**  To **set to** TARGET\_RESOURCE\_ADDRESS **and**  From **set to** AE\_ID  **}** | | IUT 🡨 AE |
| **then {**  the IUT **sends** a valid Response **containing**  Response Status Code **set to** 2000 (OK) **and**  Content **containing**  *RESOURCE\_TYPE* resource representation  **}** | | IUT 🡪 AE |

| **TP Id** | **Reference** | **RESOURCE\_TYPE** |
| --- | --- | --- |
| TP/oneM2M/CSE/DMR/RET/013\_ACP | TS-0001 [1], clause 10.2.21.2 | 1 (accessControlPolicy) |
| TP/oneM2M/CSE/DMR/RET/013\_AE | TS-0001 [1], clause 10.2.1.2 | 2 (AE) |
| TP/oneM2M/CSE/DMR/RET/013\_CNT | TS-0001 [1], clause 10.2.4.2 | 3 (container) |
| TP/oneM2M/CSE/DMR/RET/013\_CSR | TS-0001 [1], clause 10.2.2.2 | 16 (remoteCSE) |
| TP/oneM2M/CSE/DMR/RET/013\_SUB | TS-0001 [1], clause 10.2.11.3 | 23 (subscription) |
| TP/oneM2M/CSE/DMR/RET/013\_GRP | TS-0001 [1], clause 10.2.7.3 | 9 (group) |

TP/oneM2M/CSE/DMR/RET/014

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| --- | --- | --- | --- |
| **TP Id** | | TP/oneM2M/CSE/DMR/RET/014 | |
| **Test objective** | | Check that the IUT responds with an error when the AE tries to retrieve a resource TARGET\_RESOURCE\_ADDRESS under CSEBase without having privileges for the RETRIEVE operation | |
| **Reference** | | TS-0001 [1], clause 10.1.2 - item 2) | |
| **Config Id** | | CF01 | |
| **Parent release** | | Release 1 | |
| **PICS Selection** | | PICS\_CSE | |
| **Initial conditions** | **with {**  the IUT **being** in the "initial state"  **and** the IUT **having registered** the AE  **and** the IUT **having created** a resource TARGET\_RESOURCE\_ADDRESSof type *RESOURCE\_TYPE* under the CSEBase resource  **and** the AE **having no** privileges to perform RETRIEVE operation on the resource TARGET\_RESOURCE\_ADDRESS  **}** | | |
| **Expected behaviour** | **Test events** | | **Direction** |
| **when {**  the IUT **receives** a valid RETRIEVE Request **from** AE **containing**  To **set to** TARGET\_RESOURCE\_ADDRESS **and**  From **set to** AE\_ID **and**  **no** Content  **}** | | IUT 🡨 AE |
| **then {**  the IUT **sends** a Response **containing**  Response Status Code **set to** 4103 (ACCESS\_DENIED)  **}** | | IUT 🡪 AE |

| **TP Id** | **Reference** | **RESOURCE\_TYPE** |
| --- | --- | --- |
| TP/oneM2M/CSE/DMR/RET/014\_ACP | TS-0001 [1], clause 10.2.21.2 | 1 (accessControlPolicy) |
| TP/oneM2M/CSE/DMR/RET/014\_AE | TS-0001 [1], clause 10.2.1.2 | 2 (AE) |
| TP/oneM2M/CSE/DMR/RET/014\_CNT | TS-0001 [1], clause 10.2.4.2 | 3 (container) |
| TP/oneM2M/CSE/DMR/RET/014\_CSR | TS-0001 [1], clause 10.2.2.2 | 16 (remoteCSE) |
| TP/oneM2M/CSE/DMR/RET/014\_SUB | TS-0001 [1], clause 10.2.11.3 | 23 (subscription) |
| TP/oneM2M/CSE/DMR/RET/014\_GRP | TS-0001 [1], clause 10.2.7.3 | 9 (group) |

TP/oneM2M/CSE/DMR/RET/015

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| --- | --- | --- | --- |
| **TP Id** | | TP/oneM2M/CSE/DMR/RET/015 | |
| **Test objective** | | Check that the IUT returns successfully the ATTRIBUTEof TARGET\_RESOURCE\_ADDRESSresource ("To" option) under CSEBase | |
| **Reference** | | TS-0001 [1], clause 10.1.2 | |
| **Config Id** | | CF01 | |
| **Parent release** | | Release 1 | |
| **PICS Selection** | | PICS\_CSE | |
| **Initial conditions** | **with {**  the IUT **being** in the "initial state"  **and** the IUT **having registered** the AE  **and** the IUT **having created** a resource TARGET\_RESOURCE\_ADDRESSof type *RESOURCE\_TYPE* under the CSEBase resource  **and** the AE **having** privileges to perform RETRIEVE operation on the resource TARGET\_RESOURCE\_ADDRESS  **}** | | |
| **Expected behaviour** | **Test events** | | **Direction** |
| **when {**  the IUT **receives** a valid RETRIEVE Request **from** AE **containing**  To **set to** TARGET\_ATTRIBUTE\_ADDRESS **and**  From **set to** AE\_ID **and**  **no** Content  **}** | | IUT 🡨 AE |
| **then {**  the IUT **sends** a valid Response **containing**  Response Status Code **set to** 2000 (OK) **and**  Content **containing**  *RESOURCE\_TYPE* resource **containing**  valid ATTRIBUTE attribute **and**  **no other** attribute  **}** | | IUT 🡪 AE |
| NOTES: TARGET\_ATTRIBUTE\_ADDRESS is represented as TARGET\_RESOURCE\_ADDRESS # ATTRIBUTE  ATTRIBUTE indicates common attribute for all *RESOURCE\_TYPE* resources listed in the table below | | | |

|  |  |  |
| --- | --- | --- |
| **TP Id** | **Reference** | **RESOURCE\_TYPE** |
| TP/oneM2M/CSE/DMR/RET/015\_ACP | TS-0001 [1], clause 10.2.21.2 | 1 (accessControlPolicy) |
| TP/oneM2M/CSE/DMR/RET/015\_AE | TS-0001 [1], clause 10.2.1.2 | 2 (AE) |
| TP/oneM2M/CSE/DMR/RET/015\_CNT | TS-0001 [1], clause 10.2.4.2 | 3 (container) |
| TP/oneM2M/CSE/DMR/RET/015\_CSR | TS-0001 [1], clause 10.2.2.2 | 16 (remoteCSE) |
| TP/oneM2M/CSE/DMR/RET/015\_SUB | TS-0001 [1], clause 10.2.11.3 | 23 (subscription) |
| TP/oneM2M/CSE/DMR/RET/015\_GRP | TS-0001 [1], clause 10.2.7.3 | 9 (group) |

TP/oneM2M/CSE/DMR/RET/016

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| --- | --- | --- | --- |
| **TP Id** | | TP/oneM2M/CSE/DMR/RET/016 | |
| **Test objective** | | Check that the IUT returns successfully the ATTRIBUTEof TARGET\_RESOURCE\_ADDRESSresource ("Content" option) under CSEBase | |
| **Reference** | | TS-0001 [1], clause 10.1.2 | |
| **Config Id** | | CF01 | |
| **Parent release** | | Release 1 | |
| **PICS Selection** | | PICS\_CSE | |
| **Initial conditions** | **with {**  the IUT **being** in the "initial state"  **and** the IUT **having registered** the AE  **and** the IUT **having created** a resource TARGET\_RESOURCE\_ADDRESSof type *RESOURCE\_TYPE* under the CSEBase resource  **and** the AE **having** privileges to perform RETRIEVE operation on the resource TARGET\_RESOURCE\_ADDRESS  **}** | | |
| **Expected behaviour** | **Test events** | | **Direction** |
| **when {**  the IUT **receives** a valid RETRIEVE Request **from** AE **containing**  To **set to** TARGET\_RESOURCE\_ADDRESS **and**  From **set to** AE\_ID **and**  Content **containing**  attributeList element **containing**  ATTRIBUTE name  **}** | | IUT 🡨 AE |
| **then {**  the IUT **sends** a valid Response **containing**  Response Status Code **set to** 2000 (OK) **and**  Content **containing**  *RESOURCE\_TYPE* resource **containing**  valid ATTRIBUTE attribute **and**  **no other** attribute  **}** | | IUT 🡪 AE |
| NOTES: ATTRIBUTE indicates common attribute for all *RESOURCE\_TYPE* resources listed in the table below. | | | |

|  |  |  |
| --- | --- | --- |
| **TP Id** | **Reference** | **RESOURCE\_TYPE** |
| TP/oneM2M/CSE/DMR/RET/016\_ACP | TS-0001 [1], clause 10.2.21.2 | 1 (accessControlPolicy) |
| TP/oneM2M/CSE/DMR/RET/016\_AE | TS-0001 [1], clause 10.2.1.2 | 2 (AE) |
| TP/oneM2M/CSE/DMR/RET/016\_CNT | TS-0001 [1], clause 10.2.4.2 | 3 (container) |
| TP/oneM2M/CSE/DMR/RET/016\_CSR | TS-0001 [1], clause 10.2.2.2 | 16 (remoteCSE) |
| TP/oneM2M/CSE/DMR/RET/016\_SUB | TS-0001 [1], clause 10.2.11.3 | 23 (subscription) |
| TP/oneM2M/CSE/DMR/RET/016\_GRP | TS-0001 [1], clause 10.2.7.3 | 9 (group) |

TP/oneM2M/CSE/DMR/RET/017

|  |  |  |  |
| --- | --- | --- | --- |
| **TP Id** | | TP/oneM2M/CSE/DMR/RET/017 | |
| **Test objective** | | Check that the IUT returns successfully multiple attributesof TARGET\_RESOURCE\_ADDRESSresource under CSEBase | |
| **Reference** | | TS-0001 [1], clause 10.1.2 | |
| **Config Id** | | CF01 | |
| **Parent release** | | Release 1 | |
| **PICS Selection** | | PICS\_CSE | |
| **Initial conditions** | **with {**  the IUT **being** in the "initial state"  **and** the IUT **having registered** the AE  **and** the IUT **having created** a resource TARGET\_RESOURCE\_ADDRESSof type *RESOURCE\_TYPE* under the CSEBase resource  **and** the AE **having** privileges to perform RETRIEVE operation on the resource TARGET\_RESOURCE\_ADDRESS  **}** | | |
| **Expected behaviour** | **Test events** | | **Direction** |
| **when {**  the IUT **receives** a valid RETRIEVE Request **from** AE **containing**  To **set to** TARGET\_RESOURCE\_ADDRESS **and**  From **set to** AE\_ID **and**  Content **containing**  attributeList element **containing**  ATTRIBUTE\_1 name  **and** ATTRIBUTE\_2 name  **}** | | IUT 🡨 AE |
| **then {**  the IUT **sends** a valid Response **containing**  Response Status Code **set to** 2000 (OK) **and**  Content **containing**  *RESOURCE\_TYPE* resource **containing**  valid ATTRIBUTE\_1 attribute **and**  valid ATTRIBUTE\_2 attribute **and**  **no other** attribute  **}** | | IUT 🡪 AE |
| NOTES: ATTRIBUTE\_1 indicates common attribute for all *RESOURCE\_TYPE* resources listed in the table below  ATTRIBUTE\_2 indicates common attribute for all *RESOURCE\_TYPE* resources listed in the table below. | | | |

|  |  |  |
| --- | --- | --- |
| **TP Id** | **Reference** | **RESOURCE\_TYPE** |
| TP/oneM2M/CSE/DMR/RET/017\_ACP | TS-0001 [1], clause 10.2.21.2 | 1 (accessControlPolicy) |
| TP/oneM2M/CSE/DMR/RET/017\_AE | TS-0001 [1], clause 10.2.1.2 | 2 (AE) |
| TP/oneM2M/CSE/DMR/RET/017\_CNT | TS-0001 [1], clause 10.2.4.2 | 3 (container) |
| TP/oneM2M/CSE/DMR/RET/017\_CSR | TS-0001 [1], clause 10.2.2.2 | 16 (remoteCSE) |
| TP/oneM2M/CSE/DMR/RET/017\_SUB | TS-0001 [1], clause 10.2.11.3 | 23 (subscription) |
| TP/oneM2M/CSE/DMR/RET/017\_GRP | TS-0001 [1], clause 10.2.7.3 | 9 (group) |

TP/oneM2M/CSE/DMR/RET/018

|  |  |  |  |
| --- | --- | --- | --- |
| **TP Id** | | TP/oneM2M/CSE/DMR/RET/018 | |
| **Test objective** | | Check that the IUT responds with an error when the AE tries to retrieve a non-existing attribute of the TARGET\_RESOURCE\_ADDRESS resource ("single" attribute case) under CSEBase | |
| **Reference** | | TS-0001 [1], clause 10.1.2 | |
| **Config Id** | | CF01 | |
| **Parent release** | | Release 1 | |
| **PICS Selection** | | PICS\_CSE | |
| **Initial conditions** | **with {**  the IUT **being** in the "initial state"  **and** the IUT **having registered** the AE  **and** the IUT **having created** a resource TARGET\_RESOURCE\_ADDRESSof type *RESOURCE\_TYPE* under the CSEBase resource **containing**  **no** attribute *ATTRIBUTE*  **and** the AE **having** privileges to perform RETRIEVE operation on the resource TARGET\_RESOURCE\_ADDRESS  **}** | | |
| **Expected behaviour** | **Test events** | | **Direction** |
| **when {**  the IUT **receives** a valid RETRIEVE Request **from** AE **containing**  To **set to** TARGET\_RESOURCE\_ADDRESS **and**  From **set to** AE\_ID **and**  Content **containing**  attributeList element **containing**  *ATTRIBUTE*name  **}** | | IUT 🡨 AE |
| **then {**  the IUT **sends** a valid Response **containing**  Response Status Code **set to** 4004 (NOT\_FOUND)  **}** | | IUT 🡪 AE |

|  |  |  |  |
| --- | --- | --- | --- |
| **TP Id** | **Reference** | **RESOURCE\_TYPE** | **ATTRIBUTE** |
| TP/oneM2M/CSE/DMR/RET/018\_ACP/LBL | TS-0001 [1], clause 10.2.21.2 | 1 (accessControlPolicy) | labels |
| TP/oneM2M/CSE/DMR/RET/018\_AE/LBL | TS-0001 [1], clause 10.2.1.2 | 2 (AE) | labels |
| TP/oneM2M/CSE/DMR/RET/018\_CNT/LBL | TS-0001 [1], clause 10.2.4.2 | 3 (container) | labels |
| TP/oneM2M/CSE/DMR/RET/018\_CSR/LBL | TS-0001 [1], clause 10.2.2.2 | 16 (remoteCSE) | labels |
| TP/oneM2M/CSE/DMR/RET/018\_SUB/LBL | TS-0001 [1], clause 10.2.11.3 | 23 (subscription) | labels |
| TP/oneM2M/CSE/DMR/RET/018\_GRP/LBL | TS-0001 [1], clause 10.2.7.3 | 9 (group) | labels |

TP/oneM2M/CSE/DMR/RET/019

|  |  |  |  |
| --- | --- | --- | --- |
| **TP Id** | | TP/oneM2M/CSE/DMR/RET/019 | |
| **Test objective** | | Check that the IUT responds with an error when the AE tries to retrieve a non-existing attribute of the TARGET\_RESOURCE\_ADDRESS resource ("multiple" attributes case) under CSEBase | |
| **Reference** | | TS-0001 [1], clause 10.1.2 | |
| **Config Id** | | CF01 | |
| **Parent release** | | Release 1 | |
| **PICS Selection** | | PICS\_CSE | |
| **Initial conditions** | **with {**  the IUT **being** in the "initial state"  **and** the IUT **having registered** the AE  **and** the IUT **having created** a resource TARGET\_RESOURCE\_ADDRESSof type *RESOURCE\_TYPE* under the <CSEBase> resource **containing**  **no** *ATTRIBUTE\_1* attribute **and**  **no** *ATTRIBUTE\_2* attribute  **and** the AE **having** privileges to perform RETRIEVE operation on the resource TARGET\_RESOURCE\_ADDRESS  **}** | | |
| **Expected behaviour** | **Test events** | | **Direction** |
| **when {**  the IUT **receives** a valid RETRIEVE Request **from** AE **containing**  To **set to** TARGET\_RESOURCE\_ADDRESS **and**  From **set to** AE\_ID **and**  Content **containing**  attributeList element **containing**  *ATTRIBUTE\_1* name  **and** *ATTRIBUTE\_2* name  **}** | | IUT 🡨 AE |
| **then {**  the IUT **sends** a valid Response **containing**  Response Status Code **set to** 4004 (NOT\_FOUND)  **}** | | IUT 🡪 AE |

|  |  |  |  |  |
| --- | --- | --- | --- | --- |
| **TP Id** | **Reference** | **RESOURCE\_TYPE** | **ATTRIBUTE\_1** | **ATTRIBUTE\_2** |
| TP/oneM2M/CSE/DMR/RET/019\_ACP/LBL/AT | TS-0001 [1], clause 10.2.21.2 | 1 (accessControlPolicy) | labels | announceTo |
| TP/oneM2M/CSE/DMR/RET/019\_AE/LBL/AT | TS-0001 [1], clause 10.2.1.2 | 2 (AE) | labels | announceTo |
| TP/oneM2M/CSE/DMR/RET/019\_CNT/LBL/AT | TS-0001 [1], clause 10.2.4.2 | 3 (container) | labels | announceTo |
| TP/oneM2M/CSE/DMR/RET/019\_CSR/LBL/AT | TS-0001 [1], clause 10.2.2.2 | 16 (remoteCSE) | labels | announceTo |
| TP/oneM2M/CSE/DMR/RET/019\_SUB/LBL/AT | TS-0001 [1], clause 10.2.11.3 | 23 (subscription) | labels | announceTo |
| TP/oneM2M/CSE/DMR/RET/019\_GRP/LBL/AT | TS-0001 [1], clause 10.2.7.3 | 9 (group) | labels | announceTo |

##### 7.2.2.3.2 UPDATE Operation

TP/oneM2M/CSE/DMR/UPD/001

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| --- | --- | --- | --- |
| **TP Id** | | TP/oneM2M/CSE/DMR/UPD/001 | |
| **Test objective** | | Check that the IUT updates successfully the value of the attribute *ATTRIBUTE\_NAME* of the TARGET\_RESOURCE\_ADDRESS resource | |
| **Reference** | | TS-0001 [1], clause 10.1.3 | |
| **Config Id** | | CF01 | |
| **Parent release** | | Release 1 | |
| **PICS Selection** | | PICS\_CSE | |
| **Initial conditions** | **with {**  the IUT **being** in the "initial state"  **and** the IUT **having registered** the AE  **and** the IUT **having created** a resource TARGET\_RESOURCE\_ADDRESSof type *RESOURCE\_TYPE* **containing**  a RW*ATTRIBUTE\_NAME* attribute **set to** VALUE\_1  **and** the AE **having** privileges to perform UPDATE operation on the resource TARGET\_RESOURCE\_ADDRESS  **}** | | |
| **Expected behaviour** | **Test events** | | **Direction** |
| **when {**  the IUT **receives** a valid UPDATE Request **from** AE **containing**  To **set to** TARGET\_RESOURCE\_ADDRESS **and**  From **set to** AE\_ID **and**  Content **containing**  *RESOURCE\_TYPE* resource **containing**  *ATTRIBUTE\_NAME* attribute **set to** VALUE\_2  **}** | | IUT 🡨 AE |
| **then {**  the IUT **updates** the TARGET\_RESOURCE\_ADDRESS resource  **and** the IUT **sends** a valid Response **containing**  Response Status Code **set to** 2004 (UPDATED) **and**  Content **containing**  *RESOURCE\_TYPE*resource **containing**  *ATTRIBUTE\_NAME* attribute **set to** VALUE\_2  **}** | | IUT 🡪 AE |

|  |  |  |  |
| --- | --- | --- | --- |
| **TP Id** | **Reference** | **RESOURCE\_TYPE** | **ATTRIBUTE\_NAME** |
| TP/oneM2M/CSE/DMR/UPD/001\_CNT/LBL | TS-0001 [1], clause 10.2.4.3 | 3 (container) | labels |
| TP/oneM2M/CSE/DMR/UPD/001\_ACP/LBL | TS-0001 [1], clause 10.2.21.3 | 1 (accessControlPolicy) | labels |
| TP/oneM2M/CSE/DMR/UPD/001\_SUB/LBL | TS-0001 [1], clause 10.2.11.4 | 23 (subscription) | labels |
| TP/oneM2M/CSE/DMR/UPD/001\_GRP/LBL | TS-0001 [1], clause 10.2.7.4 | 9 (group) | labels |

TP/oneM2M/CSE/DMR/UPD/002

|  |  |  |  |
| --- | --- | --- | --- |
| **TP Id** | | TP/oneM2M/CSE/DMR/UPD/002 | |
| **Test objective** | | Check that the IUT adds successfully the attribute *ATTRIBUTE\_NAME* to the TARGET\_RESOURCE\_ADDRESSresource | |
| **Reference** | | TS-0001 [1], clause 10.1.3 | |
| **Config Id** | | CF01 | |
| **Parent release** | | Release 1 | |
| **PICS Selection** | | PICS\_CSE | |
| **Initial conditions** | **with {**  the IUT **being** in the "initial state"  **and** the IUT **having registered** the AE  **and** the IUT **having created** a resource TARGET\_RESOURCE\_ADDRESSof type *RESOURCE\_TYPE* **containing**  **no** optionalRW*ATTRIBUTE\_NAME* attribute  **and** the AE **having** privileges to perform UPDATE operation on the resource TARGET\_RESOURCE\_ADDRESS  **}** | | |
| **Expected behaviour** | **Test events** | | **Direction** |
|  | **when {**  the IUT **receives** a valid UPDATE Request **from** AE **containing**  To **set to** TARGET\_RESOURCE\_ADDRESS **and**  From **set to** AE\_ID **and**  Content **containing**  *RESOURCE\_TYPE* resource **containing**  *ATTRIBUTE\_NAME* attribute **set to** VALUE\_1  **}** | | IUT 🡨 AE |
|  | **then {**  the IUT **updates** the TARGET\_RESOURCE\_ADDRESS resource  **and** the IUT **sends** a valid Response **containing**  Response Status Code **set to** 2004 (UPDATED) **and**  Content **containing**  *RESOURCE\_TYPE* resource **containing**  *ATTRIBUTE\_NAME* attribute **set to** VALUE\_1  **}** | | IUT 🡪 AE |

|  |  |  |  |  |
| --- | --- | --- | --- | --- |
| **TP Id** | **PICS Selection** | **Reference** | **RESOURCE\_TYPE** | **ATTRIBUTE\_NAME** |
| TP/oneM2M/CSE/DMR/UPD/002\_CNT/LBL | PICS\_CNT\_LBL | TS-0001 [1], clause 10.2.4.3 | 3 (container) | labels |
| TP/oneM2M/CSE/DMR/UPD/002\_ACP/LBL | PICS\_ACP\_LBL | TS-0001 [1], clause 10.2.21.3 | 1 (accessControlPolicy) | labels |
| TP/oneM2M/CSE/DMR/UPD/002\_SUB/LBL | PICS\_SUB\_LBL | TS-0001 [1], clause 10.2.11.4 | 23 (subscription) | labels |
| TP/oneM2M/CSE/DMR/UPD/002\_GRP/LBL | PICS\_GRP\_LBL | TS-0001 [1], clause 10.2.7.4 | 9 (group) | labels |

TP/oneM2M/CSE/DMR/UPD/003

|  |  |  |  |
| --- | --- | --- | --- |
| **TP Id** | | TP/oneM2M/CSE/DMR/UPD/003 | |
| **Test objective** | | Check that the IUT deletes successfully the attribute *ATTRIBUTE\_NAME* from the TARGET\_RESOURCE\_ADDRESSresource | |
| **Reference** | | TS-0001 [1], clause 10.1.3 | |
| **Config Id** | | CF01 | |
| **Parent release** | | Release 1 | |
| **PICS Selection** | | PICS\_CSE | |
| **Initial conditions** | **with {**  the IUT **being** in the "initial state"  **and** the IUT **having registered** the AE  **and** the IUT **having created** a resource TARGET\_RESOURCE\_ADDRESSof type *RESOURCE\_TYPE* **containing**  anoptionalRW*ATTRIBUTE\_NAME* attribute  **and** the AE **having** privileges to perform UPDATE operation on the resource TARGET\_RESOURCE\_ADDRESS  **}** | | |
| **Expected behaviour** | **Test events** | | **Direction** |
|  | **when {**  the IUT **receives** a valid UPDATE Request **from** AE **containing**  To **set to** TARGET\_RESOURCE\_ADDRESS **and**  From **set to** AE\_ID **and**  Content **containing**  *RESOURCE\_TYPE* resource **containing**  *ATTRIBUTE\_NAME* attribute **set to** NULL  **}** | | IUT 🡨 AE |
|  | **then {**  the IUT **updates** the TARGET\_RESOURCE\_ADDRESS resource  **and** the IUT **sends** a valid Response **containing**  Response Status Code **set to** 2004 (UPDATED) **and**  Content **containing**  *RESOURCE\_TYPE* resource **containing**  *ATTRIBUTE\_NAME* attribute **set to** NULL  **}** | | IUT 🡪 AE |

|  |  |  |  |  |
| --- | --- | --- | --- | --- |
| **TP Id** | **PICS Selection** | **Reference** | **RESOURCE\_TYPE** | **ATTRIBUTE\_NAME** |
| TP/oneM2M/CSE/DMR/UPD/003\_CNT/LBL | PICS\_CNT\_LBL | TS-0001 [1], clause 10.2.4.3 | 3 (container) | labels |
| TP/oneM2M/CSE/DMR/UPD/003\_ACP/LBL | PICS\_ACP\_LBL | TS-0001 [1], clause 10.2.21.3 | 1 (accessControlPolicy) | labels |
| TP/oneM2M/CSE/DMR/UPD/003\_SUB/LBL | PICS\_SUB\_LBL | TS-0001 [1], clause 10.2.11.4 | 23 (subscription) | labels |
| TP/oneM2M/CSE/DMR/UPD/003\_GRP/LBL | PICS\_GRP\_LBL | TS-0001 [1], clause 10.2.7.4 | 9 (group) | labels |

TP/oneM2M/CSE/DMR/UPD/004

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| **TP Id** | TP/oneM2M/CSE/DMR/UPD/004 | |
| **Test objective** | Check that the IUT updates the value of the attribute *ATTRIBUTE\_NAME\_1* and the *ATTRIBUTE\_NAME\_2,* and deletes the *ATTRIBUTE\_NAME\_3* of the TARGET\_RESOURCE\_ADDRESSresource | |
| **Reference** | TS-0001 [1], clause 10.1.3 | |
| **Config Id** | CF01 | |
| **Parent release** | Release 1 | |
| **PICS Selection** | PICS\_CSE | |
| **Initial conditions** | **with {**  the IUT **being** in the "initial state"  **and** the IUT **having registered** the AE  **and** the IUT **having created** a resource TARGET\_RESOURCE\_ADDRESSof type *RESOURCE\_TYPE* **containing**  a RW*ATTRIBUTE\_NAME\_1* attribute **set to** VALUE\_1 **and**  **no** optionalRW*ATTRIBUTE\_NAME\_2* attribute **and**  anoptionalRW*ATTRIBUTE\_NAME\_3* attribute  **and** the AE **having** privileges to perform UPDATE operation on the resource TARGET\_RESOURCE\_ADDRESS  **}** | |
| **Expected behaviour** | **Test events** | **Direction** |
|  | **when {**  the IUT **receives** a valid UPDATE Request **from** AE **containing**  To **set to** TARGET\_RESOURCE\_ADDRESS **and**  From **set to** AE\_ID **and**  Content **containing**  *RESOURCE\_TYPE* resource **containing**  *ATTRIBUTE\_NAME\_1* attibute **set to** VALUE\_2 **and**  *ATTRIBUTE\_NAME\_2* attribute **set to** VALUE\_3 **and**  *ATTRIBUTE\_NAME\_3* attribute **set to** NULL  **}** | IUT 🡨 AE |
|  | **then {**  the IUT **updates** the TARGET\_RESOURCE\_ADDRESS resource  **and** the IUT **sends** a valid Response **containing**  Response Status Code **set to** 2004 (UPDATED) **and**  Content **containing**  *RESOURCE\_TYPE* resource **containing**  *ATTRIBUTE\_NAME\_1* attribute **set to** VALUE\_2 **and**  *ATTRIBUTE\_NAME\_2* attribute **set to** VALUE*\_*3 **and**  *ATTRIBUTE\_NAME\_3* attribute **set to** NULL  **}** | IUT 🡪 AE |
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| **TP Id** | **PICS Selection** | **Reference** | **RESOURCE\_TYPE** | **ATTRIBUTE\_ NAME\_1** | **ATTRIBUTE\_ NAME\_2** | **ATTRIBUTE\_ NAME\_3** |
| TP/oneM2M/CSE/DMR/UPD/004\_CNT/ET/MNI/LBL | PICS\_CNT\_MNI and PICS\_CNT\_LBL | TS-0001 [1], clause 10.2.4.3 | 3 (container) | expirationTime | maxNrOfInstances | labels |
| TP/oneM2M/CSE/DMR/UPD/004\_ACP/PVS/PV/LBL | PICS\_ACP\_LBL | TS-0001 [1], clause 10.2.21.3 | 1 (accessControlPolicy) | selfPrivileges | privileges | labels |
| TP/oneM2M/CSE/DMR/UPD/004\_ACP/PV/AT/LBL | PICS\_ACP\_AT and PICS\_ACP\_LBL | TS-0001 [1], clause 10.2.21.3 | 1 (accessControlPolicy) | privileges | announceTo | labels |
| TP/oneM2M/CSE/DMR/UPD/004\_SUB/ET/LBL/EXC | PICS\_SUB\_LBL and PICS\_SUB\_EXC | TS-0001 [1], clause 10.2.11.4 | 23 (subscription) | expirationTime | labels | expirationCounter |
| TP/oneM2M/CSE/DMR/UPD/004\_GRP/ET/GN/LBL | PICS\_GRP\_GN and PICS\_GRP\_LBL | TS-0001 [1], clause 10.2.7.4 | 9 (group) | expirationTime | groupName | labels |

TP/oneM2M/CSE/DMR/UPD/005

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| **TP Id** | | TP/oneM2M/CSE/DMR/UPD/005 | |
| **Test objective** | | Check that the IUT responds with an error when the AE tries to update an attribute of a TARGET\_RESOURCE\_ADDRESS resource when the resource does not exist | |
| **Reference** | | TS-0001 [1], clause 10.1.3 – item 1) | |
| **Config Id** | | CF01 | |
| **Parent release** | | Release 1 | |
| **PICS Selection** | | PICS\_CSE | |
| **Initial conditions** | **with {**  the IUT **being** in the "initial state"  **and** the IUT **having registered** the AE  **and** the IUT **not having created** a resource TARGET\_RESOURCE\_ADDRESS  **}** | | |
| **Expected behaviour** | **Test events** | | **Direction** |
|  | **when {**  the IUT **receives** a valid UPDATE Request **from** AE **containing**  To **set to** TARGET\_RESOURCE\_ADDRESS **and**  From **set to** AE\_ID **and**  Content **containing**  valid representation resource **containing**  valid attribute  **}** | | IUT 🡨 AE |
|  | **then {**  the IUT **sends** a valid Response **containing**  Response Status Code **set to** 4004 (NOT\_FOUND)  **}** | | IUT 🡪 AE |

TP/oneM2M/CSE/DMR/UPD/006

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| **TP Id** | | TP/oneM2M/CSE/DMR/UPD/006 | |
| **Test objective** | | Check that the IUT responds with an error when the AE tries to update the attribute *ATTRIBUTE\_NAME* of a TARGET\_RESOURCE\_ADDRESS resource without having privileges for the UPDATE operation | |
| **Reference** | | TS-0001 [1], clause 10.1.3 – 1) | |
| **Config Id** | | CF01 | |
| **Parent release** | | Release 1 | |
| **PICS Selection** | | PICS\_CSE | |
| **Initial conditions** | **with {**  the IUT **being** in the "initial state"  **and** the IUT **having registered** the AE  **and** the IUT **having created** a resource TARGET\_RESOURCE\_ADDRESSof type *RESOURCE\_TYPE* **containing**  a RW*ATTRIBUTE\_NAME* attribute **set to** VALUE\_1  **and** the AE **having no** privileges to perform UPDATE operation on the resource TARGET\_RESOURCE\_ADDRESS  **}** | | |
| **Expected behaviour** | **Test events** | | **Direction** |
| **when {**  the IUT **receives** a valid UPDATE Request **from** AE **containing**  To **set to** TARGET\_RESOURCE\_ADDRESS **and**  From **set to** AE\_ID **and**  Content **containing**  *RESOURCE\_TYPE* resource **containing**  *ATTRIBUTE\_NAME* **set to** VALUE\_2  **}** | | IUT 🡨 AE |
| **then {**  the IUT **does not** **update** the TARGET\_RESOURCE\_ADDRESS resource  **and** the IUT **sends** a valid Response **containing**  Response Status Code **set to** 4103 (ACCESS\_DENIED)  **}** | | IUT 🡪 AE |

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| **TP Id** | **Reference** | **RESOURCE\_TYPE** | **ATTRIBUTE\_NAME** |
| TP/oneM2M/CSE/DMR/UPD/006\_CNT/LBL | TS-0001 [1], clause 10.2.4.3 | 3 (container) | labels |
| TP/oneM2M/CSE/DMR/UPD/006\_ACP/LBL | TS-0001 [1], clause 10.2.21.3 | 1 (accessControlPolicy) | labels |
| TP/oneM2M/CSE/DMR/UPD/006\_SUB/LBL | TS-0001 [1], clause 10.2.11.4 | 23 (subscription) | labels |
| TP/oneM2M/CSE/DMR/UPD/006\_GRP/LBL | TS-0001 [1], clause 10.2.7.4 | 9 (group) | labels |

TP/oneM2M/CSE/DMR/UPD/007

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| **TP Id** | | TP/oneM2M/CSE/DMR/UPD/007 | |
| **Test objective** | | Check that the IUT responds with an error when the AE tries to update a non-RW attribute *ATTRIBUTE\_NAME* of a TARGET\_RESOURCE\_ADDRESS resource | |
| **Reference** | | TS-0001 [1], clause 10.1.3 | |
| **Config Id** | | CF01 | |
| **Parent release** | | Release 1 | |
| **PICS Selection** | | PICS\_CSE | |
| **Initial conditions** | **with {**  the IUT **being** in the "initial state"  **and** the IUT **having registered** the AE  **and** the IUT **having created** a resource TARGET\_RESOURCE\_ADDRESSof type *RESOURCE\_TYPE* **containing**  a non-RW*ATTRIBUTE\_NAME* attribute  **and** the AE **having** privileges to perform UPDATE operation on the resource TARGET\_RESOURCE\_ADDRESS  **}** | | |
| **Expected behaviour** | **Test events** | | **Direction** |
| **when {**  the IUT **receives** a valid UPDATE Request **from** AE **containing**  To **set to** TARGET\_RESOURCE\_ADDRESS **and**  From **set to** AE\_ID **and**  Content **containing**  *RESOURCE\_TYPE* resource **containing**  valid *ATTRIBUTE\_NAME* attribute  **}** | | IUT 🡨 AE |
| **then {**  the IUT **does** **not update** the TARGET\_RESOURCE\_ADDRESS resource  **and** the IUT **sends** a Response **containing**  Response Status Code **set to** 4000 (BAD\_REQUEST)  **}** | | IUT 🡪 AE |

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| **TP Id** | **Reference** | **RESOURCE\_TYPE** | **ATTRIBUTE\_NAME** |
| TP/oneM2M/CSE/DMR/UPD/007\_CNT/CT | TS-0001 [1], clause 10.2.4.3 | 3 (container) | creationTime |
| TP/oneM2M/CSE/DMR/UPD/007\_ACP/CT | TS-0001 [1], clause 10.2.21.3 | 1 (accessControlPolicy) | creationTime |
| TP/oneM2M/CSE/DMR/UPD/007\_SUB/CT | TS-0001 [1], clause 10.2.11.4 | 23 (subscription) | creationTime |
| TP/oneM2M/CSE/DMR/UPD/007\_GRP/CT | TS-0001 [1], clause 10.2.7.4 | 9 (group) | creationTime |

TP/oneM2M/CSE/DMR/UPD/008

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| **TP Id** | | TP/oneM2M/CSE/DMR/UPD/008 | |
| **Test objective** | | Check that the IUT responds with an error when the AE tries to delete a mandatory RW attribute *ATTRIBUTE\_NAME* of a TARGET\_RESOURCE\_ADDRESS resource | |
| **Reference** | | TS-0001 [1], clause 10.1.3 | |
| **Config Id** | | CF01 | |
| **Parent release** | | Release 1 | |
| **PICS Selection** | | PICS\_CSE | |
| **Initial conditions** | **with {**  the IUT **being** in the "initial state"  **and** the IUT **having registered** the AE  **and** the IUT **having created** a resource TARGET\_RESOURCE\_ADDRESSof type *RESOURCE\_TYPE* **containing**  a mandatory RW*ATTRIBUTE\_NAME* attribute  **and** the AE **having** privileges to perform UPDATE operation on the resource TARGET\_RESOURCE\_ADDRESS  **}** | | |
| **Expected behaviour** | **Test events** | | **Direction** |
|  | **when {**  the IUT **receives** a valid UPDATE Request **from** AE **containing**  To **set to** TARGET\_RESOURCE\_ADDRESS **and**  From **set to** AE\_ID **and**  Content **containing**  *RESOURCE\_TYPE* resource **containing**  *ATTRIBUTE\_NAME* attribute **set to** NULL  **}** | | IUT 🡨 AE |
|  | **then {**  the IUT **does not** **update** the TARGET\_RESOURCE\_ADDRESS resource  **and** the IUT **sends** a valid Response **containing**  Response Status Code **set to** 4000 (BAD\_REQUEST)  **}** | | IUT 🡪 AE |

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| **TP Id** | **Reference** | **RESOURCE\_TYPE** | **ATTRIBUTE\_NAME** |
| TP/oneM2M/CSE/DMR/UPD/008\_ACP/PVS | TS-0001 [1], clause 10.2.21.3 | 1 (accessControlPolicy) | selfPrivileges |
| TP/oneM2M/CSE/DMR/UPD/008\_SUB/NU | TS-0001 [1], clause 10.2.11.4 | 23 (subscription) | notificationURI |
| TP/oneM2M/CSE/DMR/UPD/008\_GRP/MNI | TS-0001 [1], clause 10.2.7.4 | 9 (group) | maxNrOfInstance |

TP/oneM2M/CSE/DMR/UPD/009

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| **TP Id** | | TP/oneM2M/CSE/DMR/UPD/009 | |
| **Test objective** | | Check that the IUT responds with an error when the AE tries to update a RW attribute *ATTRIBUTE\_NAME* of the TARGET\_RESOURCE\_ADDRESS resource with an *UNACCEPTABLE\_VALUE* | |
| **Reference** | | TS-0001 [1], clause 10.1.3 – item 3) | |
| **Config Id** | | CF01 | |
| **Parent release** | | Release 1 | |
| **PICS Selection** | | PICS\_CSE | |
| **Initial conditions** | **with {**  the IUT **being** in the "initial state"  **and** the IUT **having registered** the AE  **and** the IUT **having created** a resource TARGET\_RESOURCE\_ADDRESSof type *RESOURCE\_TYPE* **containing**  a valid RW*ATTRIBUTE\_NAME* attribute  **and** the AE **having** privileges to perform UPDATE operation on the resource TARGET\_RESOURCE\_ADDRESS  **}** | | |
| **Expected behaviour** | **Test events** | | **Direction** |
| **when {**  the IUT **receives** a valid UPDATE Request **from** AE **containing**  To **set to** TARGET\_RESOURCE\_ADDRESS **and**  From **set to** AE\_ID **and**  Content **containing**  *RESOURCE\_TYPE* resource **containing**  **not supported** *ATTRIBUTE\_NAME* attribute  **}** | | IUT 🡨 AE |
| **then {**  the IUT **does not update** the TARGET\_RESOURCE\_ADDRESS resource  **and** the IUT **sends** a Response **containing**  Response Status Code **set to** 4000 (BAD\_REQUEST)  **}** | | IUT 🡪 AE |

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| **TP Id** | **Reference** | **RESOURCE\_TYPE** | **ATTRIBUTE\_NAME** |
| TP/oneM2M/CSE/DMR/UPD/009\_CNT/EXC | TS-0001 [1], clause 10.2.4.3 | 3 (container) | expirationCounter |
| TP/oneM2M/CSE/DMR/UPD/009\_ACP/EXC | TS-0001 [1], clause 10.2.21.3 | 1 (accessControlPolicy) | expirationCounter |
| TP/oneM2M/CSE/DMR/UPD/009\_SUB/MNI | TS-0001 [1], clause 10.2.11.4 | 23 (subscription) | maxNrOfInstances |
| TP/oneM2M/CSE/DMR/UPD/009\_GRP/EXC | TS-0001 [1], clause 10.2.7.4 | 9 (group) | expirationCounter |

TP/oneM2M/CSE/DMR/UPD/010

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| **TP Id** | | TP/oneM2M/CSE/DMR/UPD/010 | |
| **Test objective** | | Check that the stateTag attribute of a container resource is increased when an update operation has been performed on its child resource | |
| **Reference** | | TS-0001 [1], clause 10.1.3 | |
| **Config Id** | | CF01 | |
| **Parent release** | | Release 1 | |
| **PICS Selection** | | PICS\_CSE | |
| **Initial conditions** | **with {**  the IUT **being** in the "initial state"  **and** the IUT **having registered** the AE  **and** the IUT **having created** a container resource **containing**  CHILD\_RESOURCE\_TYPE resource **containing**  ATTRIBUTE\_NAME attribute **set to** VALUE\_1  **and** the AE **having** privileges to perform UPDATE operation on the TARGET\_CHILD\_RESOURCE\_ADDRESS  **}** | | |
| **Expected behaviour** | **Test events** | | **Direction** |
| **when {**  the IUT **receives** a valid UPDATE Request **from** AE **containing**  To **set to** TARGET\_CHILD\_RESOURCE\_ADDRESS **and**  From **set to** AE\_ID  Content **containing**  CHILD\_RESOURCE\_TYPE resource **containing**  ATTRIBUTE\_NAME attribute **set to** VALUE\_2  **}** | | IUT  AE |
| **then {**  the IUT **increments** the stateTag attribute of container resource   **and** the IUT sends a valid Response **containing**  Response Status Code **set to** 2004 (UPDATED)  **}** | | IUT  AE |

TP/oneM2M/CSE/DMR/UPD/011

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| **TP Id** | | TP/oneM2M/CSE/DMR/UPD/011 | |
| **Test objective** | | Check that the IUT rejects the UPDATE Request of an existing contentInstance resource with error "OPERATION\_NOT\_ALLOWED" | |
| **Reference** | | TS-0001 [1], clause 10.2.19.4, TS-0004 [2], clauses 7.3.2.1 and 7.4.8.2.3 | |
| **Config Id** | | CF01 | |
| **Parent release** | | Release 1 | |
| **PICS Selection** | | PICS\_CSE | |
| **Initial conditions** | **with {**  the IUT **being** in the "initial state"  **and** the IUT **having registered** the AE **containing**  acontainer resource **containing**  a contentInstance resource TARGET\_RESOURCE\_ADDRESS  **}** | | |
| **Expected behaviour** | **Test events** | | **Expected behaviour** |
|  | **when {**  the IUT **receives** a valid UPDATE Request **from** AE **containing**  To **set to** TARGET\_RESOURCE\_ADDRESS **and**  From **set to** AE\_ID **and**  Content **containing**  contentInstancerepresentation **}** | |  |
|  | **then {**  the IUT **does not update** the TARGET\_RESOURCE\_ADDRESS resource  **and** the IUT **sends** a valid Response **containing**  Response Status Code **set to** 4005 (OPERATION\_NOT\_ALLOWED)  **}** | |  |

TP/oneM2M/CSE/DMR/UPD/012

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| **TP Id** | | TP/oneM2M/CSE/DMR/UPD/012 | |
| **Test objective** | | Check that the IUT rejects the UPDATE Request of a latest resource as a direct child of a <container> resource with error "OPERATION\_NOT\_ALLOWED" | |
| **Reference** | | TS-0001 [1], clause 10.2.22, TS-0004 [2], clauses 7.4.28.2.4 and 7.3.2.1 | |
| **Config Id** | | CF01 | |
| **Parent release** | | Release 1 | |
| **PICS Selection** | | PICS\_CSE | |
| **Initial conditions** | **with {**  the IUT **being** in the "initial state"  **and** the IUT **having registered** the AE **containing**  a container resource **containing**  a contentInstance resource **containing**  validcreationTimeattribute **set to** the most recent resource creation time  **}** | | |
| **Expected behaviour** | **Test events** | | **Direction** |
| **when {**  the IUT **receives** an UPDATE Request **from** AE **containing**  To **set to** CONTAINER\_RESOURCE\_ADDRESS/la **and**  From **set to** AE\_ID **and**  **no** Content  **}** | | IUT 🡨 AE |
| **then {**  the IUT **does not update** the CONTAINER\_RESOURCE\_ADDRESS/la resource  **and** the IUT **sends** a valid Response **containing**  Response Status Code **set to** 4005 (OPERATION\_NOT\_ALLOWED)  **}** | | IUT 🡪 AE |

TP/oneM2M/CSE/DMR/UPD/013

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| **TP Id** | | TP/oneM2M/CSE/DMR/UPD/013 | |
| **Test objective** | | Check that the IUT rejects the UPDATE Request of an oldest resource as a direct child of a <container> resource with error "OPERATION\_NOT\_ALLOWED" | |
| **Reference** | | TS-0001 [1], clause 10.2.23, TS-0004 [2], clauses 7.4.29.2.4 and 7.3.2.1 | |
| **Config Id** | | CF01 | |
| **Parent release** | | Release 1 | |
| **PICS Selection** | | PICS\_CSE | |
| **Initial conditions** | **with {**  the IUT **being** in the "initial state"  **and** the IUT **having registered** the AE **containing**  a container resource **containing**  contentInstance resource(s)  **}** | | |
| **Expected behaviour** | **Test events** | | **Direction** |
| **when {**  the IUT **receives** a valid UPDATE Request **from** AE **containing**  To **set to** CONTAINER\_RESOURCE\_ADDRESS/ol **and**  From **set to** AE\_ID **and**  **no** Content  **}** | | IUT 🡨 AE |
| **then {**  the IUT **does not update** the CONTAINER\_RESOURCE\_ADDRESS/ol resource  **and** the IUT **sends** a Response **containing**  Response Status Code **set to** 4005 (OPERATION\_NOT\_ALLOWED)  **}** | | IUT 🡪 AE |

TP/oneM2M/CSE/DMR/UPD/014

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| **TP Id** | | TP/oneM2M/CSE/DMR/UPD/014 | |
| **Test objective** | | Check that the IUT updates successfully the value of the optional attribute *OPTIONAL\_ATTRIBUTE* of the *RESOURCE*\_*TYPE* resource. | |
| **Reference** | | TS-0001 [1], clause 10.1.3 | |
| **Config Id** | | CF01 | |
| **Parent release** | | Release 1 | |
| **PICS Selection** | | PICS\_CSE | |
| **Initial conditions** | **with {**  the IUT **being** in the "initial state"  **and** the IUT **having registered** the AE  **and** the IUT **having created** the *RESOURCE\_TYPE* resource  **and** the AE **having** privileges to perform UPDATE operation on the resource TARGET\_RESOURCE\_ADDRESS  } | | |
| **Expected behaviour** | **Test events** | | **Direction** |
|  | **when {**  the IUT **receives** a valid UPDATE Request **from** AE **containing**  To **set to** TARGET\_RESOURCE\_ADDRESS**and**  From **set to** AE-ID **and**  Content **containing**  *RESOURCE*\_*TYPE* resource **containing**  *OPTIONAL\_ATTRIBUTE* attribute **set to** VALUE **}** | | IUT 🡨 AE |
|  | **then {**  the IUT **sends** a valid Response **containing**  Response Status Code **set to** 2004 (UPDATED) **and**  Content **containing**  *RESOURCE\_TYPE*resource **containing**  O*PTIONAL\_ATTRIBUTE* attribute **set to** VALUE  **}** | | IUT 🡪 AE |

| **TP Id** | **PICS Selection** | **Reference** | **RESOURCE\_TYPE** | **OPTIONAL\_ATTRIBUTE** |
| --- | --- | --- | --- | --- |
| TP/oneM2M/CSE/DMR/UPD/014\_CNT/ACPI | PICS\_CNT\_ACPI | TS-0001 [1], clause 9.6.1.3.2-1 | container | accessControlPolicyIDs |
| TP/oneM2M/CSE/DMR/UPD/014\_CNT/ET | PICS\_CNT\_ET | TS-0001 [1], clause 9.6.1.3.1-1 | container | expirationTime |
| TP/oneM2M/CSE/DMR/UPD/014\_CNT/LBL | PICS\_CNT\_LBL | TS-0001 [1], clause 9.6.1.3.2-1 | container | labels |
| TP/oneM2M/CSE/DMR/UPD/014\_CNT/MNI | PICS\_CNT\_MNI | TS-0001 [1], clause 9.6.6-2 | container | maxNrOfInstances |
| TP/oneM2M/CSE/DMR/UPD/014\_CNT/MBS | PICS\_CNT\_MBS | TS-0001 [1], clause 9.6.6-2 | container | maxByteSize |
| TP/oneM2M/CSE/DMR/UPD/014\_CNT/MIA | PICS\_CNT\_MIA | TS-0001 [1], clause 9.6.6-2 | container | maxInstanceAge |
| TP/oneM2M/CSE/DMR/UPD/014\_CNT/OR | PICS\_CNT\_OR | TS-0001 [1], clause 9.6.6-2 | container | ontologyRef |
| TP/oneM2M/CSE/DMR/UPD/014\_ACP/ET | N/A | TS-0001 [1], clause 9.6.1.3.1-1 | accessControlPolicy | expirationTime |
| TP/oneM2M/CSE/DMR/UPD/014\_ACP/LBL | PICS\_ACP\_LBL | TS-0001 [1], clause 9.6.1.3.2-1 | accessControlPolicy | labels |
| TP/oneM2M/CSE/DMR/UPD/014\_SUB/ACPI | PICS\_SUB\_ACPI | TS-0001 [1], clause 9.6.1.3.2-1 | subscription | accessControlPolicyIDs |
| TP/oneM2M/CSE/DMR/UPD/014\_SUB/ET | N/A | TS-0001 [1], clause 9.6.1.3.1-1 | subscription | expirationTime |
| TP/oneM2M/CSE/DMR/UPD/014\_SUB/LBL | PICS\_SUB\_LBL | TS-0001 [1], clause 9.6.1.3.2-1 | subscription | labels |
| TP/oneM2M/CSE/DMR/UPD/014\_SUB/ENC | PICS\_SUB\_ENC | TS-0001 [1], clause 9.6.8-2 | subscription | eventNotificationCriteria |
| TP/oneM2M/CSE/DMR/UPD/014\_SUB/EXC | PICS\_SUB\_EXC | TS-0001 [1], clause 9.6.8-2 | subscription | expirationCounter |
| TP/oneM2M/CSE/DMR/UPD/014\_SUB/GPI | PICS\_SUB\_GPI | TS-0001 [1], clause 9.6.8-2 | subscription | groupID |
| TP/oneM2M/CSE/DMR/UPD/014\_SUB/NFU | PICS\_SUB\_NFU | TS-0001 [1], clause 9.6.8-2 | subscription | notificationForwardingURI |
| TP/oneM2M/CSE/DMR/UPD/014\_SUB/BN | PICS\_SUB\_BN | TS-0001 [1], clause 9.6.8-2 | subscription | batchNotify |
| TP/oneM2M/CSE/DMR/UPD/014\_SUB/RL | PICS\_SUB\_RL | TS-0001 [1], clause 9.6.8-2 | subscription | rateLimit |
| TP/oneM2M/CSE/DMR/UPD/014\_SUB/PN | PICS\_SUB\_PN | TS-0001 [1], clause 9.6.8-2 | subscription | pendingNotification |
| TP/oneM2M/CSE/DMR/UPD/014\_SUB/NSP | PICS\_SUB\_NSP | TS-0001 [1], clause 9.6.8-2 | subscription | notificationStoragePriority |
| TP/oneM2M/CSE/DMR/UPD/014\_SUB/LN | PICS\_SUB\_LN | TS-0001 [1], clause 9.6.8-2 | subscription | latestNotify |
| TP/oneM2M/CSE/DMR/UPD/014\_SUB/NCT | PICS\_SUB\_NCT | TS-0001 [1], clause 9.6.8-2 | subscription | notificationContentType |
| TP/oneM2M/CSE/DMR/UPD/014\_SUB/NEC | PICS\_SUB\_NEC | TS-0001 [1], clause 9.6.8-2 | subscription | notificationEventCat |

TP/oneM2M/CSE/DMR/UPD/015

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| --- | --- | --- | --- |
| **TP Id** | | TP/oneM2M/CSE/DMR/UPD/015 | |
| **Test objective** | | Check that the IUT updates successfully the value of the optional attribute *OPTIONAL\_ATTRIBUTE* of the *RESOURCE*\_*TYPE* resource under CSEBase | |
| **Reference** | | TS-0001 [1], clause 10.1.3 | |
| **Config Id** | | CF01 | |
| **Parent release** | | Release 1 | |
| **PICS Selection** | | PICS\_CSE | |
| **Initial conditions** | **with {**  the IUT **being** in the "initial state"  **and** the IUT **having registered** the AE  **and** the IUT **having created** a resource TARGET\_RESOURCE\_ADDRESSof type *RESOURCE\_TYPE* under the CSEBase resource **containing**  **no** *OPTIONAL\_ATTRIBUTE* attribute  **and** the AE **having** privileges to perform UPDATE operation on the resource TARGET\_RESOURCE\_ADDRESS  **}** | | |
| **Expected behaviour** | **Test events** | | **Direction** |
| **when {**  the IUT **receives** a valid UPDATE Request **from** AE **containing**  To **set to** TARGET\_RESOURCE\_ADDRESS **and**  From **set to** AE-ID **and**  Content **containing**  *RESOURCE*\_*TYPE* resource **containing**  *OPTIONAL\_ATTRIBUTE* attribute **set to** VALUE  **}** | | IUT 🡨 AE |
| **then {**  the IUT **updates** the *RESOURCE\_TYPE*resource  **and** the IUT **sends** a valid Response **containing**  Response Status Code **set to** 2004 (UPDATED) **and**  Content **containing**  *RESOURCE\_TYPE*resource **containing**  O*PTIONAL\_ATTRIBUTE* attribute **set to** VALUE  **}** | | IUT 🡪 AE |

| **TP Id** | **PICS Selection** | **Reference** | **RESOURCE\_TYPE** | **OPTIONAL\_ATTRIBUTE** |
| --- | --- | --- | --- | --- |
| TP/oneM2M/CSE/DMR/UPD/015\_CSR/LBL | PICS\_CSR\_LBL | TS-0001 [1], clause 9.6.4-2 | remoteCSE | labels |
| TP/oneM2M/CSE/DMR/UPD/015\_CSR/POA | PICS\_CSR\_POA | TS-0001 [1], clause 9.6.4-2 | remoteCSE | pointOfAccess |
| TP/oneM2M/CSE/DMR/UPD/015\_CSR/NL | PICS\_CSR\_NL | TS-0001 [1], clause 9.6.4-2 | remoteCSE | nodeLink |
| TP/oneM2M/CSE/DMR/UPD/015\_AE/LBL | PICS\_AE\_LBL | TS-0001 [1], clause 9.6.5-2 | AE | labels |
| TP/oneM2M/CSE/DMR/UPD/015\_AE/ACPI | PICS\_AE\_ACPI | TS-0001 [1], clause 9.6.5-2 | AE | accessControlPolicyIDs |
| TP/oneM2M/CSE/DMR/UPD/015\_AE/APN | PICS\_AE\_APN | TS-0001 [1], clause 9.6.5-2 | AE | AppName |
| TP/oneM2M/CSE/DMR/UPD/015\_AE/POA | PICS\_AE\_POA | TS-0001 [1], clause 9.6.5-2 | AE | pointOfAccess |
| TP/oneM2M/CSE/DMR/UPD/015\_AE/OR | PICS\_AE\_OR | TS-0001 [1], clause 9.6.5-2 | AE | ontologyRef |
| TP/oneM2M/CSE/DMR/UPD/015\_CNT/LBL | PICS\_CNT\_LBL | TS-0001 [1], clause 9.6.6-2 | container | labels |
| TP/oneM2M/CSE/DMR/UPD/015\_CNT/ACPI | PICS\_CNT\_ACPI | TS-0001 [1], clause 9.6.6-2 | container | accessControlPolicyIDs |
| TP/oneM2M/CSE/DMR/UPD/015\_CNT/MNI | PICS\_CNT\_MNI | TS-0001 [1], clause 9.6.6-2 | container | maxNrOfInstances |
| TP/oneM2M/CSE/DMR/UPD/015\_CNT/MBS | PICS\_CNT\_MBS | TS-0001 [1], clause 9.6.6-2 | container | maxByteSize |
| TP/oneM2M/CSE/DMR/UPD/015\_CNT/MIA | PICS\_CNT\_MIA | TS-0001 [1], clause 9.6.6-2 | container | maxInstanceAge |
| TP/oneM2M/CSE/DMR/UPD/015\_CNT/OR | PICS\_CNT\_OR | TS-0001 [1], clause 9.6.6-2 | container | ontologyRef |
| TP/oneM2M/CSE/DMR/UPD/015\_CNT/LI | PICS\_CNT\_LI | TS-0001 [1], clause 9.6.6-2 | container | locationID |
| TP/oneM2M/CSE/DMR/UPD/015\_ACP/LBL | PICS\_ACP\_LBL | TS-0001 [1], clause 9.6.2-2 | accessControlPolicy | labels |
| TP/oneM2M/CSE/DMR/UPD/015\_SUB/ACPI | PICS\_SUB\_ACPI | TS-0001 [1], clause 9.6.8-2 | subscription | accessControlPolicyIDs |
| TP/oneM2M/CSE/DMR/UPD/015\_SUB/LBL | PICS\_SUB\_LBL | TS-0001 [1], clause 9.6.8-2 | subscription | labels |
| TP/oneM2M/CSE/DMR/UPD/015\_SUB/ENC | PICS\_SUB\_ENC | TS-0001 [1], clause 9.6.8-2 | subscription | eventNotificationCriteria |
| TP/oneM2M/CSE/DMR/UPD/015\_SUB/EXC | PICS\_SUB\_EXC | TS-0001 [1], clause 9.6.8-2 | subscription | expirationCounter |
| TP/oneM2M/CSE/DMR/UPD/015\_SUB/GPI | PICS\_SUB\_GPI | TS-0001 [1], clause 9.6.8-2 | subscription | groupID |
| TP/oneM2M/CSE/DMR/UPD/015\_SUB/NFU | PICS\_SUB\_NFU | TS-0001 [1], clause 9.6.8-2 | subscription | notificationForwardingURI |
| TP/oneM2M/CSE/DMR/UPD/015\_SUB/BN | PICS\_SUB\_BN | TS-0001 [1], clause 9.6.8-2 | subscription | batchNotify |
| TP/oneM2M/CSE/DMR/UPD/015\_SUB/RL | PICS\_SUB\_RL | TS-0001 [1], clause 9.6.8-2 | subscription | rateLimit |
| TP/oneM2M/CSE/DMR/UPD/015\_SUB/PN | PICS\_SUB\_PN | TS-0001 [1], clause 9.6.8-2 | subscription | pendingNotification |
| TP/oneM2M/CSE/DMR/UPD/015\_SUB/NSP | PICS\_SUB\_NSP | TS-0001 [1], clause 9.6.8-2 | subscription | notificationStoragePriority |
| TP/oneM2M/CSE/DMR/UPD/015\_SUB/LN | PICS\_SUB\_LN | TS-0001 [1], clause 9.6.8-2 | subscription | latestNotify |
| TP/oneM2M/CSE/DMR/UPD/015\_SUB/NEC | PICS\_SUB\_NEC | TS-0001 [1], clause 9.6.8-2 | subscription | notificationEventCat |
| TP/oneM2M/CSE/DMR/UPD/015\_GRP/LBL | PICS\_GRP\_LBL | TS-0001 [1], clause 9.6.13-2 | group | labels |
| TP/oneM2M/CSE/DMR/UPD/015\_GRP/ACPI | PICS\_GRP\_ACPI | TS-0001 [1], clause 9.6.13-2 | group | accessControlPolicyIDs |
| TP/oneM2M/CSE/DMR/UPD/015\_GRP/MACP | PICS\_GRP\_MACP | TS-0001 [1], clause 9.6.13-2 | group | membersAccessControlPolicyIDs |
| TP/oneM2M/CSE/DMR/UPD/015\_GRP/GN | PICS\_GRP\_GN | TS-0001 [1], clause 9.6.13-2 | group | groupName |

TP/oneM2M/CSE/DMR/UPD/016

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| **TP Id** | | TP/oneM2M/CSE/DMR/UPD/016 | |
| **Test objective** | | Check that the IUT updates successfully the value of the attribute *MANDATORY\_ATTRIBUTE* of the *RESOURCE*\_*TYPE* resource under CSEBase | |
| **Reference** | | TS-0001 [1], clause 10.1.3 | |
| **Config Id** | | CF01 | |
| **Parent release** | | Release 1 | |
| **PICS Selection** | | PICS\_CSE | |
| **Initial conditions** | **with {**  the IUT **being** in the "initial state"  **and** the IUT **having registered** the AE  **and** the IUT **having created** a resource TARGET\_RESOURCE\_ADDRESSof type *RESOURCE\_TYPE* under the CSEBase resource  **and** the AE **having** privileges to perform UPDATE operation on the resource TARGET\_RESOURCE\_ADDRESS  **}** | | |
| **Expected behaviour** | **Test events** | | **Direction** |
|  | **when {**  the IUT **receives** a valid UPDATE Request **from** AE **containing**  To **set to** TARGET\_RESOURCE\_ADDRESS **and**  From **set to** AE-ID **and**  Content **containing**  *RESOURCE*\_*TYPE* resource **containing**  *MANDATORY\_ATTRIBUTE* attribute **set to** VALUE  **}** | | IUT 🡨 AE |
|  | **then {**  the IUT **updates** the *RESOURCE\_TYPE*resource  **and** the IUT **sends** a valid Response **containing**  Response Status Code **set to** 2004 (UPDATED) **and**  Content **containing**  *RESOURCE\_TYPE*resource **containing**  *MANDATORY\_ATTRIBUTE* attribute **set to** VALUE  **}** | | IUT 🡪 AE |

| **TP Id** | **Reference** | **RESOURCE\_TYPE** | **MANDATORY\_ATTRIBUTE** |
| --- | --- | --- | --- |
| TP/oneM2M/CSE/DMR/UPD/016\_CSR/ET | TS-0001 [1], clause 9.6.4-2 | remoteCSE | expirationTime |
| TP/oneM2M/CSE/DMR/UPD/016\_CSR/RR | TS-0001 [1], clause 9.6.4-2 | remoteCSE | requestReachability |
| TP/oneM2M/CSE/DMR/UPD/016\_AE/ET | TS-0001 [1], clause 9.6.5-2 | AE | expirationTime |
| TP/oneM2M/CSE/DMR/UPD/016\_AE/RR | TS-0001 [1], clause 9.6.5-2 | AE | requestReachability |
| TP/oneM2M/CSE/DMR/UPD/016\_CNT/ET | TS-0001 [1], clause 9.6.6-2 | container | expirationTime |
| TP/oneM2M/CSE/DMR/UPD/016\_ACP/ET | TS-0001 [1], clause 9.6.2-2 | accessControlPolicy | expirationTime |
| TP/oneM2M/CSE/DMR/UPD/016\_ACP/PV | TS-0001 [1], clause 9.6.2-2 | accessControlPolicy | privileges |
| TP/oneM2M/CSE/DMR/UPD/016\_ACP/PVS | TS-0001 [1], clause 9.6.2-2 | accessControlPolicy | selfPrivileges |
| TP/oneM2M/CSE/DMR/UPD/016\_SUB/ET | TS-0001 [1], clause 9.6.8-2 | subscription | expirationTime |
| TP/oneM2M/CSE/DMR/UPD/016\_SUB/NU | TS-0001 [1], clause 9.6.8-2 | subscription | notificationURI |
| TP/oneM2M/CSE/DMR/UPD/016\_SUB/NCT | TS-0001 [1], clause 9.6.8-2 | subscription | notificationContentType |
| TP/oneM2M/CSE/DMR/UPD/016\_GRP/ET | TS-0001 [1], clause 9.6.13-2 | group | expirationTime |
| TP/oneM2M/CSE/DMR/UPD/016\_GRP/MNM | TS-0001 [1], clause 9.6.13-2 | group | maxNrOfMembers |
| TP/oneM2M/CSE/DMR/UPD/016\_GRP/MID | TS-0001 [1], clause 9.6.13-2 | group | memberIDs |

##### 7.2.2.3.3 CREATE Operation

TP/oneM2M/CSE/DMR/CRE/001

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| --- | --- | --- |
| **TP Id** | TP/oneM2M/CSE/DMR/CRE/001 | |
| **Test objective** | Check that the IUT accepts the creation of a *RESOURCE\_TYPE* resource on the TARGET\_RESOURCE\_ADDRESS of type *PARENT\_RESOURCE\_TYPE* with resource name not provided | |
| **Reference** | TS-0001 [1], clause 10.1.1.1 | |
| **Config Id** | CF01 | |
| **Parent release** | Release 1 | |
| **PICS Selection** | PICS\_CSE | |
| **Initial conditions** | **with {**  the IUT **being** in the "initial state"  **and** the IUT **having registered** the AE  **and** the Originator **having** privileges to perform CREATE operation on the resource TARGET\_RESOURCE\_ADDRESS  **}** | |
| **Expected behaviour** | **Test events** | **Direction** |
|  | **when {**  the IUT **receives** a valid CREATE Request **from** AE **containing**  Resource Type **set to** *RESOURCE\_TYPE* **and**  To **set to** TARGET\_RESOURCE\_ADDRESS **and**  From **set to** AE-ID **and**  Content **containing**  *RESOURCE\_TYPE* resource **containing**  **no** resourceName attribute **}** | IUT 🡨 AE |
|  | **then {** the IUT **creates** the *RESOURCE\_TYPE* resource   **and** the IUT **sends** a valid Response **containing**  Response Status Code **set to** 2001 (CREATED) **and**  Content **containing**  *RESOURCE\_TYPE* resource **containing**  Valid resourceName attribute  **}** | IUT 🡪 AE |

| **TP Id** | **Reference** | **RESOURCE\_TYPE** | **PARENT\_RESOURCE\_TYPE** |
| --- | --- | --- | --- |
| TP/oneM2M/CSE/DMR/CRE/001\_CNT/CB | TS-0001 [1], clause 10.2.4.1 | 3 (container) | 5 (CSEBase) |
| TP/oneM2M/CSE/DMR/CRE/001\_CNT/AE | TS-0001 [1], clause 10.2.4.1 | 3 (container) | 2 (AE) |
| TP/oneM2M/CSE/DMR/CRE/001\_CNT/CNT | TS-0001 [1], clause 10.2.4.1 | 3 (container) | 3 (container) |
| TP/oneM2M/CSE/DMR/CRE/001\_ACP/CB | TS-0001 [1], clause 10.2.21.1 | 1 (accessControlPolicy) | 5 (CSEBase) |
| TP/oneM2M/CSE/DMR/CRE/001\_ACP/AE | TS-0001 [1], clause 10.2.21.1 | 1 (accessControlPolicy) | 2 (AE) |
| TP/oneM2M/CSE/DMR/CRE/001\_SUB/CB | TS-0001 [1], clause 10.2.11.2 | 23 (subscription) | 5 (CSEBase) |
| TP/oneM2M/CSE/DMR/CRE/001\_SUB/AE | TS-0001 [1], clause 10.2.11.2 | 23 (subscription) | 2 (AE) |
| TP/oneM2M/CSE/DMR/CRE/001\_SUB/CNT | TS-0001 [1], clause 10.2.11.2 | 23 (subscription) | 3 (container) |
| TP/oneM2M/CSE/DMR/CRE/001\_SUB/ACP | TS-0001 [1], clause 10.2.11.2 | 23 (subscription) | 1 (accessControlPolicy) |
| TP/oneM2M/CSE/DMR/CRE/001\_SUB/SCH | TS-0001 [1], clause 10.2.11.2 | 23 (subscription) | 18 (schedule) |
| TP/oneM2M/CSE/DMR/CRE/001\_SUB/GRP | TS-0001 [1], clause 10.2.11.2 | 23 (subscription) | 9 (group) |
| TP/oneM2M/CSE/DMR/CRE/001\_SUB/CSR | TS-0001 [1], clause 9.6.4-1 | 23 (subscription) | 16 (remoteCSE) |
| TP/oneM2M/CSE/DMR/CRE/001\_SUB/STCG | TS-0001 [1], clause 9.6.23-1 | 23 (subscription) | 22 (statsConfig) |
| TP/oneM2M/CSE/DMR/CRE/001\_CIN/CNT | TS-0001 [1], clause 10.2.4.1 | 4 (contentInstance) | 3 (container) |
| TP/oneM2M/CSE/DMR/CRE/001\_GRP/CB | TS-0001 [1], clause 10.2.7.2 | 9 (group) | 5 (CSEBase) |
| TP/oneM2M/CSE/DMR/CRE/001\_GRP/AE | TS-0001 [1], clause 10.2.7.2 | 9 (group) | 2 (AE) |

TP/oneM2M/CSE/DMR/CRE/002

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| --- | --- | --- |
| **TP Id** | TP/oneM2M/CSE/DMR/CRE/002 | |
| **Test objective** | Check that the IUT accepts the creation of a *RESOURCE\_TYPE* resource with a non-existing resource name provided by AE | |
| **Reference** | TS-0001 [1], clause 10.1.1.1 | |
| **Config Id** | CF01 | |
| **Parent release** | Release 1 | |
| **PICS Selection** | PICS\_CSE | |
| **Initial conditions** | **with {**  the IUT **being** in the "initial state"  **and** the IUT **having registered** the AE  **and** the AE **having** privileges to perform CREATE operation on the resource TARGET\_RESOURCE\_ADDRESS  **and** the AE **containing**  **no** child resource **having**  resourceName attribute **set to** *NAME*  } | |
| **Expected behaviour** | **Test events** | **Direction** |
|  | **when {**  the IUT **receives** a valid CREATE Request **from** AE **containing**  To **set to** AE\_RESOURCE\_ADDRESS**and**  Resource Type **set to** *RESOURCE\_TYPE* **and**  From **set to** AE-ID **and**  Content **containing**  *RESOURCE\_TYPE* resource **containing**  resourceName attribute **set to** *NAME* **}** | IUT 🡨 AE |
|  | **then {**  the IUT **creates** the *RESOURCE\_TYPE* resource   **and** the IUT **sends** a valid Response **containing**  Response Status Code **set to** 2001 (CREATED)  **}** | IUT 🡪 AE |

|  |  |  |
| --- | --- | --- |
| **TP Id** | **Reference** | **RESOURCE\_TYPE** |
| TP/oneM2M/CSE/DMR/CRE/002\_CNT | TS-0001 [1], clause 10.2.4.1 | 3 (container) |
| TP/oneM2M/CSE/DMR/CRE/002\_ACP | TS-0001 [1], clause 10.2.21.1 | 1 (accessControlPolicy) |
| TP/oneM2M/CSE/DMR/CRE/002\_SUB | TS-0001 [1], clause 10.2.11.2 | 23 (subscription) |
| TP/oneM2M/CSE/DMR/CRE/002\_GRP | TS-0001 [1], clause 10.2.7.2 | 9 (group) |

TP/oneM2M/CSE/DMR/CRE/003

|  |  |  |  |
| --- | --- | --- | --- |
| **TP Id** | | TP/oneM2M/CSE/DMR/CRE/003 | |
| **Test objective** | | Check that the IUT rejects the creation of a *RESOURCE\_TYPE* resource with an existing resource name provided by AE | |
| **Reference** | | TS-0001 [1], clause 10.1.1.1 | |
| **Config Id** | | CF01 | |
| **Parent release** | | Release 1 | |
| **PICS Selection** | | PICS\_CSE | |
| **Initial conditions** | **with {**  the IUT **being** in the "initial state"  **and** the IUT **having registered** the AE  **and** the AE **having** privileges to perform CREATE operation on the resource TARGET\_RESOURCE\_ADDRESS  **and** the AE **containing**  achild resource **having**  resourceName attribute **set to** NAME  **}** | | |
| **Expected behaviour** | **Test events** | | **Direction** |
| **when {**  the IUT **receives** a valid CREATE Request **from** AE **containing**  To **set to** AE\_RESOURCE\_ADDRESS**and**  Resource Type **set to** *RESOURCE\_TYPE* **and**  From **set to** AE-ID **and**  Content **containing**  *RESOURCE\_TYPE* resource **containing**  resourceName attribute **set to** NAME **}** | | IUT 🡨 AE |
| **then {**  the IUT **sends** a valid Response **containing**  Response Status Code **set to** 4105 (CONFLICT)  **}** | | IUT 🡪 AE |

|  |  |  |
| --- | --- | --- |
| **TP Id** | **Reference** | **RESOURCE\_TYPE** |
| TP/oneM2M/CSE/DMR/CRE/003\_CNT | TS-0001 [1], clause 10.2.4.1 | 3 (container) |
| TP/oneM2M/CSE/DMR/CRE/003\_ACP | TS-0001 [1], clause 10.2.21.1 | 1 (accessControlPolicy) |
| TP/oneM2M/CSE/DMR/CRE/003\_SUB | TS-0001 [1], clause 10.2.11.2 | 23 (subscription) |
| TP/oneM2M/CSE/DMR/CRE/003\_GRP | TS-0001 [1], clause 10.2.7.2 | 9 (group) |

TP/oneM2M/CSE/DMR/CRE/004

|  |  |  |  |
| --- | --- | --- | --- |
| **TP Id** | | TP/oneM2M/CSE/DMR/CRE/004 | |
| **Test objective** | | Check that the IUT rejects the creation of a *RESOURCE\_TYPE* resource when AE has no privileges | |
| **Reference** | | TS-0001 [1], clause 10.1.1.1 | |
| **Config Id** | | CF01 | |
| **Parent release** | | Release 1 | |
| **PICS Selection** | | PICS\_CSE | |
| **Initial conditions** | **with {**  the IUT **being** in the "initial state"  **and** the IUT **having registered** the AE  **and** the AE **having no** privileges to perform CREATE operation on the resource TARGET\_RESOURCE\_ADDRESS  **}** | | |
| **Expected behaviour** | **Test events** | | **Direction** |
| **when {**  the IUT **receives** a valid CREATE Request **from** AE **containing**  To **set to** AE\_RESOURCE\_ADDRESS**and**  Resource Type **set to** *RESOURCE\_TYPE* **and**  From **set to** AE-ID **and**  Content **containing**  *RESOURCE\_TYPE* resource **}** | | IUT 🡨 AE |
| **then {**  the IUT **does not** **create** the *RESOURCE\_TYPE* resource   **and** the IUT **sends** a valid Response **containing**  Response Status Code **set to** 4103 (ACCESS\_DENIED)  **}** | | IUT 🡪 AE |

|  |  |  |
| --- | --- | --- |
| **TP Id** | **Reference** | **RESOURCE\_TYPE** |
| TP/oneM2M/CSE/DMR/CRE/004\_CNT | TS-0001 [1], clause 10.2.4.1 | 3 (container) |
| TP/oneM2M/CSE/DMR/CRE/004\_ACP | TS-0001 [1], clause 10.2.21.1 | 1 (accessControlPolicy) |
| TP/oneM2M/CSE/DMR/CRE/004\_SUB | TS-0001 [1], clause 10.2.11.2 | 23 (subscription) |
| TP/oneM2M/CSE/DMR/CRE/004\_GRP | TS-0001 [1], clause 10.2.7.2 | 9 (group) |

TP/oneM2M/CSE/DMR/CRE/005

|  |  |  |  |
| --- | --- | --- | --- |
| **TP Id** | | TP/oneM2M/CSE/DMR/CRE/005 | |
| **Test objective** | | Check that the IUT rejects the CREATE Request of container resource when the RW ATTRIBUTE is provided with an invalid value | |
| **Reference** | | TS-0001 [1], clause 10.2.4.1, TS-0004 [2], clause 7.4.7.1 | |
| **Config Id** | | CF01 | |
| **Parent release** | | Release 1 | |
| **PICS Selection** | | PICS\_CSE | |
| **Initial conditions** | **with {**  the IUT **being** in the "initial state"  **and** the IUT **having registered** the AE  **and** the AE **having** privileges to perform CREATE operation on the resource AE\_RESOURCE\_ADDRESS  **}** | | |
| **Expected behaviour** | **Test events** | | **Direction** |
|  | **when {**  the IUT **receives** a valid CREATE Request **from** AE **containing**  To **set to** TARGET\_RESOURCE\_ADDRESS **and**  From **set to** AE\_ID **and**  Resource Type **set to** 3 (container) **and**  Content **containing**  an invalid RW *ATTRIBUTE* attribute **}** | | IUT 🡨 AE |
|  | **then {**  the IUT **does not** **create** the containerresource   **and** the IUT **sends** a valid Response **containing**  Response Status Code **set to** 4000 (BAD\_REQUEST)  **}** | | IUT 🡪 AE |

|  |  |  |
| --- | --- | --- |
| **TP Id** | **Reference** | **ATTRIBUTE** |
| TP/oneM2M/CSE/DMR/CRE/005\_MNI | TS-0001 [1], clause 9.6.6, TS-0004 [2], clause 7.4.7.1 | maxNrOfInstances |
| TP/oneM2M/CSE/DMR/CRE/005\_MBS | TS-0001 [1], clause 9.6.6, TS-0004 [2], clause 7.4.7.1 | maxByteSize |
| TP/oneM2M/CSE/DMR/CRE/005\_MIA | TS-0001 [1], clause 9.6.6, TS-0004 [2], clause 7.4.7.1 | maxInstanceAge |

TP/oneM2M/CSE/DMR/CRE/006

|  |  |  |  |
| --- | --- | --- | --- |
| **TP Id** | | TP/oneM2M/CSE/DMR/CRE/006 | |
| **Test objective** | | Check that the IUT returns a default value to RW ATTRIBUTE in the response of a <container> CREATE Request where no a RW ATTRIBUTE is provided by AE | |
| **Reference** | | TS-0001 [1], clause 10.2.4.1, TS-0004 [2], clause 7.4.7.1 | |
| **Config Id** | | CF01 | |
| **Parent release** | | Release 1 | |
| **PICS Selection** | | PICS\_CSE | |
| **Initial conditions** | **with {**  the IUT **being** in the "initial state"  **and** the IUT **having registered** the AE  **and** the AE **having** privileges to perform CREATE operation on the resource AE\_RESOURCE\_ADDRESS  **}** | | |
| **Expected behaviour** | **Test events** | | **Direction** |
|  | **when {**  the IUT **receives** a valid CREATE Request **from** AE **containing**  To **set to** AE\_RESOURCE\_ADDRESS **and**  From **set to** AE\_ID **and**  Resource Type **set to** 3 (container) **and**  Content **containing**  container resource representation  **}** | | IUT 🡨 AE |
|  | **then {**  the IUT **creates** the containerresource   **and** the IUT **sends** a valid Response **containing**  Response Status Code **set to** 2001 (CREATED) **and**  Content **containing**  container resource **containing**  valid*ATTRIBUTE* attribute  **}** | | IUT 🡪 AE |

|  |  |  |
| --- | --- | --- |
| **TP Id** | **Reference** | **ATTRIBUTE** |
| TP/oneM2M/CSE/DMR/CRE/006\_MNI | TS-0001 [1], clause 9.6.6, TS-0004 [2], clause 7.4.7.1 | maxNrOfInstances |
| TP/oneM2M/CSE/DMR/CRE/006\_MBS | TS-0001 [1], clause 9.6.6, TS-0004 [2], clause 7.4.7.1 | maxByteSize |
| TP/oneM2M/CSE/DMR/CRE/006\_MIA | TS-0001 [1], clause 9.6.6, TS-0004 [2], clause 7.4.7.1 | maxInstanceAge |

TP/oneM2M/CSE/DMR/CRE/007

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| --- | --- | --- | --- |
| **TP Id** | | TP/oneM2M/CSE/DMR/CRE/007 | |
| **Test objective** | | Checks that the IUT accepts a newly created contentInstance when the *currentNrOfInstances* exceeds the field value set in maxNrOfInstances in the parent container resource by removing enough of the oldest <contentInstance> resources to allow the creation of the new <contentInstance> resource | |
| **Reference** | | TS-0001 [1], clause 10.2.19.2, TS-0004 [2], clause 7.4.8.2 | |
| **Config Id** | | CF01 | |
| **Parent release** | | Release 1 | |
| **PICS Selection** | | PICS\_CSE | |
| **Initial conditions** | **with {**  the IUT **being** in the "initial state"  **and** the IUT **having registered** the AE **containing**  acontainer resource TARGET\_RESOURCE\_ADDRESS **containing**  currentNrOfInstances attribute**set to** MAX\_NUMBER\_OF\_INSTANCES  **and** maxNrOfInstancesattribute **set to** MAX\_NUMBER\_OF\_INSTANCES  **and** the AE **having** privileges to perform CREATE operation on the resource TARGET\_RESOURCE\_ADDRESS  **}** | | |
| **Expected behaviour** | **Test events** | | **Direction** |
| **when {**  the IUT **receives** a valid CREATE Request **from** AE **containing**  To **set to** TARGET\_RESOURCE\_ADDRESS **and**  From **set to** AE\_ID **and**  Resource Type **set to** 4 (contentInstance) **and**  Content **containing**  contentInstance resource representation **}** | | IUT 🡨 AE |
| **then {**  the IUT **creates** the contentInstanceresource  **and** the IUT **removes** the oldest contentInstance resources   **and** the IUT **sends** a valid Response **containing**  Response Status Code set to 2001 (CREATED)  **}** | | IUT 🡪 AE |

TP/oneM2M/CSE/DMR/CRE/008

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| **TP Id** | | TP/oneM2M/CSE/DMR/CRE/008 | |
| **Test objective** | | Checks that the IUT accepts a newly created contentInstance when the *currentByteSize* exceeds the field value set in maxByteSize in the parent container resource by removing enough of the oldest <contentInstance> resources to allow the creation of the new <contentInstance> resource | |
| **Reference** | | TS-0001 [1], clause 10.2.19.2 | |
| **Config Id** | | CF01 | |
| **Parent release** | | Release 1 | |
| **PICS Selection** | | PICS\_CSE | |
| **Initial conditions** | **with {**  the IUT **being** in the "initial state"  **and** the IUT **having registered** the AE **containing**  acontainer resource TARGET\_RESOURCE\_ADDRESS **containing**  maxByteSize attribute **set to** MAX\_BYTE\_SIZE\_OF\_DATA **and**  currentByteSize attribute **set to** MAX\_BYTE\_SIZE\_OF\_DATA  **and** the AE **having** privileges to perform CREATE operation on the resource TARGET\_RESOURCE\_ADDRESS  **}** | | |
| **Expected behaviour** | **Test events** | | **Expected behaviour** |
| **when {**  the IUT **receives** a valid CREATE Request **from** AE **containing**  To **set to** TARGET\_RESOURCE\_ADDRESS **and**  From **set to** AE\_ID **and**  Resource Type **set to** 4 (contentInstance) **and**  Content **containing**  contentInstance resource **with size less than**  MAX\_BYTE\_SIZE\_OF DATA **}** | | IUT 🡨 AE |
| **then {**  the IUT **creates** the contentInstanceresource  **and** the IUT **removes** the oldest contentInstance resources   **and** the IUT **sends** a valid Response **containing**  Response Status Code **set to** 2001 (CREATED)  **}** | | IUT 🡪 AE |

TP/oneM2M/CSE/DMR/CRE/009

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| --- | --- | --- | --- |
| **TP Id** | | TP/oneM2M/CSE/DMR/CRE/009 | |
| **Test objective** | | Check that the IUT increments and then copies the field value of attribute *stateTag* in parent container resource when contentInstance resource is created as the direct child of the parent container | |
| **Reference** | | TS-0001 [1], clause 9.6.1.3.2, TS-0004 [2], clause 7.4.7.1 | |
| **Config Id** | | CF01 | |
| **Parent release** | | Release 1 | |
| **PICS Selection** | | PICS\_CSE | |
| **Initial conditions** | **with {**  the IUT **being** in the "initial state"  **and** the IUT **having registered** the AE **containing**  acontainer resource CONTAINER\_RESOURCE\_ADDRESS **containing**  stateTag attribute  **and** the AE **having** privileges to perform CREATE operation on the resource CONTAINER\_RESOURCE\_ADDRESS  **}** | | |
| **Expected behaviour** | **Test events** | | **Direction** |
| **when {**  the IUT **receives** a valid CREATE Request **from** AE **containing**  To **set to** CONTAINER\_RESOURCE\_ADDRESS **and**  From **set to** AE\_ID **and**  Resource Type **set to** 4 (contentInstance) **and**  Content **containing**  contentInstance resource representation  **}** | | IUT 🡨 AE |
| **then {**  the IUT **increments** stateTag attribute of CONTAINER\_RESOURCE\_ADDRESS resource  **and** the IUT **sends** a valid Response **containing**  Response Status Code **set to** 2001 (CREATED)  **}** | | IUT 🡪 AE |

TP/oneM2M/CSE/DMR/CRE/010

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| --- | --- | --- | --- |
| **TP Id** | | TP/oneM2M/CSE/DMR/CRE/010 | |
| **Test objective** | | Check that the IUT rejects the CREATE Request of a container resource named "la" as a direct child of a container resource | |
| **Reference** | | TS-0001 [1], clause 10.2.22, TS-0004 [2], clauses 7.4.28.2.2 and 7.3.2.1 | |
| **Config Id** | | CF01 | |
| **Parent release** | | Release 1 | |
| **PICS Selection** | | PICS\_CSE | |
| **Initial conditions** | **with {**  the IUT **being** in the "initial state"  **and** the IUT **having registered** the AE  **and** the IUT **having created** acontainer resource CONTAINER\_RESOURCE\_ADDRESS  **and** the IUT **having** privileges to perform CREATE operation on the resource CONTAINER\_RESOURCE\_ADDRESS  **}** | | |
| **Expected behaviour** | **Test events** | | **Direction** |
| **when {**  the IUT **receives** a valid CREATE Request **from** AE **containing**  To **set to** CONTAINER\_RESOURCE\_ADDRESS **and**  From **set to** AE\_ID **and**  Content **containing**  Container resource **containing**  resourceName attribute **set to** "la"  **}** | | IUT 🡨 AE |
| **then {**  the IUT **does not** **create** the containerresource   **and** the IUT **sends** a valid Response **containing**  Response Status Code **set to** 4005 (OPERATION\_NOT\_ALLOWED)  **}** | | IUT 🡪 AE |

TP/oneM2M/CSE/DMR/CRE/011

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| --- | --- | --- | --- |
| **TP Id** | | TP/oneM2M/CSE/DMR/CRE/011 | |
| **Test objective** | | Check that the IUT rejects the CREATE Request of a container resource named "ol" as a direct child of a container resource | |
| **Reference** | | TS-0001 [1], clause 10.2.23, TS-0004 [2], clauses 7.4.29.2.2 and 7.3.2.1 | |
| **Config Id** | | CF01 | |
| **Parent release** | | Release 1 | |
| **PICS Selection** | | PICS\_CSE | |
| **Initial conditions** | **with {**  the IUT **being** in the "initial state"  **and** the IUT **having registered** the AE  **and** the IUT **having created** acontainer resource CONTAINER\_RESOURCE\_ADDRESS  **and** the IUT **having** privileges to perform CREATE operation on the resource CONTAINER\_RESOURCE\_ADDRESS  **}** | | |
| **Expected behaviour** | **Test events** | | **Direction** |
| **when {**  the IUT **receives** a valid CREATE Request **from** AE **containing**  To **set to** CONTAINER\_RESOURCE\_ADDRESS **and**  From **set to** AE\_ID **and**  Content **containing**  container resource **containing**  resourceName attribute **set to** "ol"  **}** | | IUT 🡨 AE |
| **then {**  the IUT **does not** **create** the containerresource   **and** the IUT **sends** a valid Response **containing**  Response Status Code **set to** 4005 (OPERATION\_NOT\_ALLOWED)  **}** | | IUT 🡪 AE |

TP/oneM2M/CSE/DMR/CRE/012

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| --- | --- | --- | --- |
| **TP Id** | | TP/oneM2M/CSE/DMR/CRE/012 | |
| **Test objective** | | Check that the IUT accepts the creation of a *RESOURCE\_TYPE* resource with the optional attribute *OPTIONAL\_ATTRIBUTE* provided | |
| **Reference** | | TS-0001 [1], clause 10.1.1 | |
| **Config Id** | | CF01 | |
| **Parent release** | | Release 1 | |
| **PICS Selection** | | PICS\_CSE | |
| **Initial conditions** | **with {**  the IUT **being** in the "initial state"  **and** the IUT **having registered** the AE  **and** the AE **having** privileges to perform CREATE operation on the resource AE\_RESOURCE\_ADDRESS  **}** | | |
| **Expected behaviour** | **Test events** | | **Direction** |
|  | **when {**  the IUT **receives** a valid CREATE Request **from** AE **containing**  To **set to** AE\_RESOURCE\_ADDRESS**and**  From **set to** AE-ID **and**  Content **containing**  *RESOURCE\_TYPE* resource **containing**  valid *OPTIONAL\_ATTRIBUTE* attribute  **}** | | IUT 🡨 AE |
|  | **then {**  the IUT **creates** the *RESOURCE\_TYPE* resource  **and** the IUT **sends** a valid Response **containing**  Response Status Code **set to** 2001 (CREATED)  **}** | | IUT 🡪 AE |

| **TP Id** | **PICS Selection** | **Reference** | **RESOURCE\_TYPE** | **OPTIONAL\_ATTRIBUTE** |
| --- | --- | --- | --- | --- |
| TP/oneM2M/CSE/DMR/CRE/012\_CNT/ACPI | PICS\_CNT\_ACPI | TS-0001 [1], clause 9.6.1.3.2-1 | 3 (container) | accessControlPolicyIDs |
| TP/oneM2M/CSE/DMR/CRE/012\_CNT/ET | PICS\_CNT\_ET | TS-0001 [1], clause 9.6.1.3.1-1 | 3 (container) | expirationTime |
| TP/oneM2M/CSE/DMR/CRE/012\_CNT/LBL | PICS\_CNT\_LBL | TS-0001 [1], clause 9.6.1.3.2-1 | 3 (container) | labels |
| TP/oneM2M/CSE/DMR/CRE/012\_CNT/MNI | PICS\_CNT\_MNI | TS-0001 [1], clause 9.6.6-2 | 3 (container) | maxNrOfInstances |
| TP/oneM2M/CSE/DMR/CRE/012\_CNT/MBS | PICS\_CNT\_MBS | TS-0001 [1], clause 9.6.6-2 | 3 (container) | maxByteSize |
| TP/oneM2M/CSE/DMR/CRE/012\_CNT/MIA | PICS\_CNT\_MIA | TS-0001 [1], clause 9.6.6-2 | 3 (container) | maxInstanceAge |
| TP/oneM2M/CSE/DMR/CRE/012\_CNT/OR | PICS\_CNT\_OR | TS-0001 [1], clause 9.6.6-2 | 3 (container) | ontologyRef |
| TP/oneM2M/CSE/DMR/CRE/012\_CNT/CR | PICS\_CNT\_CR | TS-0001 [1], clause 9.6.6-2 | 3 (container) | creator |
| TP/oneM2M/CSE/DMR/CRE/012\_CIN/ET | PICS\_CIN\_ET | TS-0001 [1], clause 9.6.1.3.1-1 | 4 (contentInstance) | expirationTime |
| TP/oneM2M/CSE/DMR/CRE/012\_CIN/LBL | PICS\_CIN\_LBL | TS-0001 [1], clause 9.6.1.3.2-1 | 4 (contentInstance) | labels |
| TP/oneM2M/CSE/DMR/CRE/012\_CIN/CR | PICS\_CIN\_CR | TS-0001 [1], clause 9.6.7-2 | 4 (contentInstance) | creator |
| TP/oneM2M/CSE/DMR/CRE/012\_CIN/CNF | PICS\_CIN\_CNF | TS-0001 [1], clause 9.6.7-2 | 4 (contentInstance) | contentInfo |
| TP/oneM2M/CSE/DMR/CRE/012\_CIN/OR | PICS\_CIN\_OR | TS-0001 [1], clause 9.6.7-2 | 4 (contentInstance) | ontologyRef |
| TP/oneM2M/CSE/DMR/CRE/012\_ACP/ET | N/A | TS-0001 [1], clause 9.6.1.3.1-1 | 1 (accesControlPolicy) | expirationTime |
| TP/oneM2M/CSE/DMR/CRE/012\_ACP/LBL | PICS\_ACP\_LBL | TS-0001 [1], clause 9.6.1.3.2-1 | 1 (accesControlPolicy) | labels |
| TP/oneM2M/CSE/DMR/CRE/012\_SUB/ACPI | PICS\_SUB\_ACPI | TS-0001 [1], clause 9.6.1.3.2-1 | 23 (subscription) | accessControlPolicyIDs |
| TP/oneM2M/CSE/DMR/CRE/012\_SUB/ET | N/A | TS-0001 [1], clause 9.6.1.3.1-1 | 23 (subscription) | expirationTime |
| TP/oneM2M/CSE/DMR/CRE/012\_SUB/LBL | PICS\_SUB\_LBL | TS-0001 [1], clause 9.6.1.3.2-1 | 23 (subscription) | labels |
| TP/oneM2M/CSE/DMR/CRE/012\_SUB/ENC | PICS\_SUB\_ENC | TS-0001 [1], clause 9.6.8-2 | 23 (subscription) | eventNotificationCriteria |
| TP/oneM2M/CSE/DMR/CRE/012\_SUB/EXC | PICS\_SUB\_EXC | TS-0001 [1], clause 9.6.8-2 | 23 (subscription) | expirationCounter |
| TP/oneM2M/CSE/DMR/CRE/012\_SUB/GPI | PICS\_SUB\_GPI | TS-0001 [1], clause 9.6.8-2 | 23 (subscription) | groupID |
| TP/oneM2M/CSE/DMR/CRE/012\_SUB/NFU | PICS\_SUB\_NFU | TS-0001 [1], clause 9.6.8-2 | 23 (subscription) | notificationForwardingURI |
| TP/oneM2M/CSE/DMR/CRE/012\_SUB/BN | PICS\_SUB\_BN | TS-0001 [1], clause 9.6.8-2 | 23 (subscription) | batchNotify |
| TP/oneM2M/CSE/DMR/CRE/012\_SUB/RL | PICS\_SUB\_RL | TS-0001 [1], clause 9.6.8-2 | 23 (subscription) | rateLimit |
| TP/oneM2M/CSE/DMR/CRE/012\_SUB/PSN | PICS\_SUB\_PSN | TS-0001 [1], clause 9.6.8-2 | 23 (subscription) | preSubscriptionNotify |
| TP/oneM2M/CSE/DMR/CRE/012\_SUB/PN | PICS\_SUB\_PN | TS-0001 [1], clause 9.6.8-2 | 23 (subscription) | pendingNotification |
| TP/oneM2M/CSE/DMR/CRE/012\_SUB/NSP | PICS\_SUB\_NSP | TS-0001 [1], clause 9.6.8-2 | 23 (subscription) | notificationStoragePriority |
| TP/oneM2M/CSE/DMR/CRE/012\_SUB/LN | PICS\_SUB\_LN | TS-0001 [1], clause 9.6.8-2 | 23 (subscription) | latestNotify |
| TP/oneM2M/CSE/DMR/CRE/012\_SUB/NCT | PICS\_SUB\_NCT | TS-0001 [1], clause 9.6.8-2 | 23 (subscription) | notificationContentType |
| TP/oneM2M/CSE/DMR/CRE/012\_SUB/NEC | PICS\_SUB\_NEC | TS-0001 [1], clause 9.6.8-2 | 23 (subscription) | notificationEventCat |
| TP/oneM2M/CSE/DMR/CRE/012\_SUB/CR | PICS\_SUB\_CR | TS-0001 [1], clause 9.6.8-2 | 23 (subscription) | creator |
| TP/oneM2M/CSE/DMR/CRE/012\_SUB/SU | PICS\_SUB\_SU | TS-0001 [1], clause 9.6.8-2 | 23 (subscription) | subscriberURI |

TP/oneM2M/CSE/DMR/CRE/013

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| --- | --- | --- | --- |
| **TP Id** | | TP/oneM2M/CSE/DMR/CRE/013 | |
| **Test objective** | | Check that the IUT rejects the CREATE Request of a contentInstance resource with error "NOT\_ACCEPTABLE" when *contentSize* exceeds *maxByteSize* | |
| **Reference** | | TS-0001 [1], clause 10.2.19, TS-0004 [2], clause 7.4.7.2.1 | |
| **Config Id** | | CF01 | |
| **Parent release** | | Release 1 | |
| **PICS Selection** | | PICS\_CSE | |
| **Initial conditions** | **with {**  the IUT **being** in the "initial state"  **and** the IUT **having registered** the AE **containing**  acontainer resource **having**  *maxByteSize**attribute* **set to** MAX\_BYTE\_SIZE  **}** | | |
| **Expected behaviour** | **Test events** | | **Direction** |
|  | **when {**  the IUT **receives** a valid CREATE Request **from** AE **containing**  To **set to** container\_RESOURCE\_ADDRESS **and**  From **set to** AE\_ID **and**  Content **containing**  *contentInstance* resource **containing**  validcontent **with size larger than** MAX\_BYTE\_SIZE **}** | | IUT 🡨 AE |
|  | **then {**  the IUT **sends** a valid Response **containing**  Response Status Code **set to** 5207 (NOT\_ACCEPTABLE)  **}** | | IUT 🡪 AE |

TP/oneM2M/CSE/DMR/CRE/014

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| --- | --- | --- | --- |
| **TP Id** | | TP/oneM2M/CSE/DMR/CRE/014 | |
| **Test objective** | | Check that the IUT updates the currentByteSizeattribute in a *PARENT\_RESOURCE\_TYPE* when a new *RESOURCE\_TYPE* is created | |
| **Reference** | | TS-0001 [1], clause 10.2.19.2, TS-0004 [2], clause 7.4.8.2 | |
| **Config Id** | | CF01 | |
| **Parent release** | | Release 1 | |
| **PICS Selection** | | PICS\_CSE | |
| **Initial conditions** | **with {**  the IUT **being** in the "initial state"  **and** the IUT **having registered** the AE **containing**  aPARENT\_RESOURCE\_TYPE resource at PARENT\_RESOURCE\_ADDRESS **containing**  maxByteSize attribute **set to** MAX\_BYTE\_SIZE\_OF\_DATA **and**  currentByteSize attribute **set to** 0  **and** the AE **having** privileges to perform CREATE operation on the resource PARENT\_RESOURCE\_ADDRESS  **}** | | |
| **Expected behaviour** | **Test events** | | **Direction** |
| **when {**  the IUT **receives** a valid CREATE Request **from** AE **containing**  To **set to** PARENT\_RESOURCE\_ADDRESS **and**  From **set to** AE\_ID **and**  Resource Type **set to** *RESOURCE\_TYPE* **and**  Content **containing**  *RESOURCE\_TYPE* resource **containing**  validcontent attribute **with size equal to** DATA\_SIZE **}** | | IUT 🡨 AE |
| **then {**  the IUT **increments** currentByteSize attribute of PARENT\_RESOURCE\_ADDRESSresource by DATA\_SIZE  **and** the IUT **sends** a valid Response **containing**  Response Status Code **set to** 2001 (CREATED)  **}** | | IUT 🡪 AE |

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| --- | --- | --- |
| **TP Id** | PARENT\_RESOURCE\_TYPE | RESOURCE\_TYPE |
| TP/oneM2M/CSE/DMR/CRE/014\_CNT\_CIN | container | contentInstance |

##### 7.2.2.3.4 DELETE Operation

TP/oneM2M/CSE/DMR/DEL/001

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| **TP Id** | | TP/oneM2M/CSE/DMR/DEL/001 | |
| **Test objective** | | Check that the IUT accepts the deletion of a *RESOURCE\_TYPE* resource | |
| **Reference** | | TS-0001 [1], clause 10.1.4 | |
| **Config Id** | | CF01 | |
| **Parent release** | | Release 1 | |
| **PICS Selection** | | PICS\_CSE | |
| **Initial conditions** | **with {**  the IUT **being** in the "initial state"  **and** the IUT **having registered** the AE  **and** the IUT **having created** a resource TARGET\_RESOURCE\_ADDRESSof type *RESOURCE\_TYPE*  **and** the AE **having** privileges to perform DELETE operation on the resource *TARGET\_RESOURCE\_ADDRESS*  **}** | | |
| **Expected behaviour** | **Test events** | | **Direction** |
| **when {**  the IUT **receives** a valid DELETE Request **from** AE **containing**  To **set to** TARGET\_RESOURCE\_ADDRESS **and**  From **set to** AE\_ID **and**  **no** Content  **}** | | IUT  AE |
| **then {**  the IUT **deletes** the TARGET\_RESOURCE\_ADDRESSresource  **and** the IUT **sends** a valid Response **containing**  Response Status Code **set to** 2002 (DELETED)  **}** | | IUT  AE |

|  |  |  |
| --- | --- | --- |
| **TP Id** | **Reference** | **RESOURCE\_TYPE** |
| TP/oneM2M/CSE/DMR/DEL/001\_CNT | TS-0001 [1], clause 10.2.4.4 | 3 (container) |
| TP/oneM2M/CSE/DMR/DEL/001\_ACP | TS-0001 [1], clause 10.2.21.4 | 1 (accessControlPolicy) |
| TP/oneM2M/CSE/DMR/DEL/001\_SUB | TS-0001 [1], clause 10.2.11.5 | 23 (subscription) |
| TP/oneM2M/CSE/DMR/DEL/001\_CIN | TS-0001 [1], clause 10.2.4.1 | 4 (contentInstance) |
| TP/oneM2M/CSE/DMR/DEL/001\_GRP | TS-0001 [1], clause 10.2.7.5 | 9 (group) |

TP/oneM2M/CSE/DMR/DEL/002

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| --- | --- | --- | --- |
| **TP Id** | | TP/oneM2M/CSE/DMR/DEL/002 | |
| **Test objective** | | Check that the IUT responds with an error when the AE tries to delete the resource TARGET\_RESOURCE\_ADDRESS without having privileges for the DELETE operation | |
| **Reference** | | TS-0001 [1], clause 10.1.4 | |
| **Config Id** | | CF01 | |
| **PICS Selection** | | PICS\_CSE | |
| **Initial conditions** | **with {**  the IUT **being** in the "initial state"  **and** the IUT **having registered** the AE  **and** the IUT **having created** a resource TARGET\_RESOURCE\_ADDRESSof type *RESOURCE\_TYPE*  **and** the AE **having no** privileges to perform DELETE operation on the resource TARGET\_RESOURCE\_ADDRESS  **}** | | |
| **Expected behaviour** | **Test events** | | **Direction** |
| **when {**  the IUT **receives** a valid DELETE Request **from** AE **containing**  To **set to** TARGET\_RESOURCE\_ADDRESS **and**  From **set to** AE\_ID **and**  **no** Content  **}** | | IUT 🡨 AE |
| **then {**  the IUT **does not delete** the TARGET\_RESOURCE\_ADDRESSresource  **and** the IUT **sends** a valid Response **containing**  Response Status Code **set to** 4103 (ORIGINATOR\_HAS\_NO\_PRIVILEGE)  **}** | | IUT 🡪 AE |

| **TP Id** | **Reference** | **RESOURCE\_TYPE** |
| --- | --- | --- |
| TP/oneM2M/CSE/DMR/DEL/002\_CNT | TS-0001 [1], clause 10.2.4.4 | 3 (container) |
| TP/oneM2M/CSE/DMR/DEL/002\_ACP | TS-0001 [1], clause 10.2.21.4 | 1 (accessControlPolicy) |
| TP/oneM2M/CSE/DMR/DEL/002\_SUB | TS-0001 [1], clause 10.2.11.5 | 23 (subscription) |
| TP/oneM2M/CSE/DMR/DEL/002\_GRP | TS-0001 [1], clause 10.2.7.5 | 9 (group) |

TP/oneM2M/CSE/DMR/DEL/003

|  |  |  |  |
| --- | --- | --- | --- |
| **TP Id** | | TP/oneM2M/CSE/DMR/DEL/003 | |
| **Test objective** | | Check that the IUT responds with an error when the AE tries to delete the resource TARGET\_RESOURCE\_ADDRESS which does not exist | |
| **Reference** | | TS-0001 [1], clause 10.1.4 | |
| **Config Id** | | CF01 | |
| **Parent release** | | Release 1 | |
| **PICS Selection** | | PICS\_CSE | |
| **Initial conditions** | **with {**  the IUT **being** in the "initial state"  **and** the IUT **having registered** the AE  **and** the IUT **having not** **yet created** a resource TARGET\_RESOURCE\_ADDRESS  **}** | | |
| **Expected behaviour** | **Test events** | | **Direction** |
| **when {**  the IUT **receives** a valid DELETE Request **from** AE **containing**  To **set to** TARGET\_RESOURCE\_ADDRESS **and**  From **set to** AE\_ID **and**  **no** Content  **}** | | IUT 🡨 AE |
| **then {**  the IUT **does not delete** the TARGET\_RESOURCE\_ADDRESSresource  **and** the IUT **sends** a valid Response **containing**  Response Status Code **set to** 4004 (NOT\_FOUND)  **}** | | IUT 🡪 AE |

TP/oneM2M/CSE/DMR/DEL/004

|  |  |  |  |
| --- | --- | --- | --- |
| **TP Id** | | TP/oneM2M/CSE/DMR/DEL/004 | |
| **Test objective** | | Check that the IUT responds with an error when AE tries to delete a child resource of a *RESOURCE\_TYPE* resource when this resource has been already deleted | |
| **Reference** | | TS-0001 [1], clause 10.1.4 | |
| **Config Id** | | CF01 | |
| **Parent release** | | Release 1 | |
| **PICS Selection** | | PICS\_CSE | |
| **Initial conditions** | **with {**  the IUT **being** in the "initial state"  **and** the IUT **having registered** the AE  **and** the IUT **having created** a resource TARGET\_RESOURCE\_ADDRESSof type *RESOURCE\_TYPE* **containing**  a child resource  **and** the AE **having** privileges to perform DELETE operation on the resource TARGET\_RESOURCE\_ADDRESS  **and** the AE **having deleted** the TARGET\_RESOURCE\_ADDRESS resource  **}** | | |
| **Expected behaviour** | **Test events** | | **Direction** |
| **when {**  the IUT **receives** a valid DELETE Request **from** AE **containing**  To **set to** TARGET\_CHILD\_RESOURCE\_ADDRESS **and**  From **set to** AE\_ID **and**  **no** Content  **}** | | IUT  AE |
| **then {**  the IUT **sends** a valid Response **containing**  Response Status Code **set to** 4004 (NOT\_FOUND)  **}** | | IUT 🡪 AE |

|  |  |  |
| --- | --- | --- |
| **TP Id** | **Reference** | **RESOURCE\_TYPE** |
| TP/oneM2M/CSE/DMR/DEL/004\_CNT | TS-0001 [1], clause 10.2.4.4 | 3 (container) |
| TP/oneM2M/CSE/DMR/DEL/004\_ACP | TS-0001 [1], clause 10.2.21.4 | 1 (accessControlPolicy) |
| TP/oneM2M/CSE/DMR/DEL/004\_SUB | TS-0001 [1], clause 10.2.11.5 | 23 (subscription) |
| TP/oneM2M/CSE/DMR/DEL/004\_GRP | TS-0001 [1], clause 10.2.7.5 | 9 (group) |

TP/oneM2M/CSE/DMR/DEL/005

|  |  |  |  |
| --- | --- | --- | --- |
| **TP Id** | | TP/oneM2M/CSE/DMR/DEL/005 | |
| **Test objective** | | Check that the stateTag attribute of a container resource is increased when a child resource is deleted | |
| **Reference** | | TS-0001 [1], clause 10.1.4 | |
| **Config Id** | | CF01 | |
| **Parent release** | | Release 1 | |
| **PICS Selection** | | PICS\_CSE | |
| **Initial conditions** | **with {**  the IUT **being** in the "initial state"  **and** the IUT **having registered** the AE  **and** the IUT **having created** a container resource **containing**  a child resource  **and** the AE **having** privileges to perform DELETE operation on the TARGET\_CHILD\_RESOURCE\_ADDRESS  **}** | | |
| **Expected behaviour** | **Test events** | | **Direction** |
| **when {**  the IUT **receives** a valid DELETE Request **from** AE **containing**  To **set to** TARGET\_CHILD\_RESOURCE\_ADDRESS **and**  From **set to** AE\_ID **and**  **no** Content  **}** | | IUT  AE |
| **then {**  the IUT **increments** the stateTag attribute of the container resource   **and** the IUT sends a valid Response **containing**  Response Status Code **set to** 2002 (DELETED)  **}** | | IUT  AE |

TP/oneM2M/CSE/DMR/DEL/006

|  |  |  |  |
| --- | --- | --- | --- |
| **TP Id** | | TP/oneM2M/CSE/DMR/DEL/006 | |
| **Test objective** | | Check that the IUT decreases the field value of attribute currentNrOfInstances and currentByteSize of parent container when a latest contentInstance resource is deleted successfully | |
| **Reference** | | TS-0001 [1], clause 10.2.19.5, TS-0004 [2], clause 7.4.8.2.4 | |
| **Config Id** | | CF01 | |
| **Parent release** | | Release 1 | |
| **PICS Selection** | | PICS\_CSE | |
| **Initial conditions** | **with {**  the IUT **being** in the "initial state"  **and** the IUT **having registered** the AE  **and** the IUT **having created** a container resource **containing**  currentNrOfInstances attribute**set to** NR\_OF\_INSTANCES **and**  currentByteSize attribute **set to** BYTE\_SIZE\_OF\_DATA **and**  a contentInstance resource TARGET\_RESOURCE\_ADDRESS  **and** the AE **having** privileges to perform DELETE operation on the resource TARGET\_RESOURCE\_ADDRESS  **}** | | |
| **Expected behaviour** | **Test events** | | **Direction** |
| **when {**  the IUT **receives** a valid DELETE Request **from** AE **containing**  To **set to** TARGET\_RESOURCE\_ADDRESS **and**  From **set to** AE\_ID **and**  **no** Content  **}** | | IUT 🡨 AE |
| **then {**  the IUT **decreases** the currentNrOfInstancesattribute of container resource  **and** the IUT **decreases** the currentByteSize attributeof container resource  **and**the IUT **sends** a valid Response **containing**  Response Status Code **set to** 2002 (DELETED)  **}** | | IUT 🡪 AE |

TP/oneM2M/CSE/DMR/DEL/007

|  |  |  |  |
| --- | --- | --- | --- |
| **TP Id** | | TP/oneM2M/CSE/DMR/DEL/007 | |
| **Test objective** | | Check that the IUT accepts the DELETE Request of the latest contentInstance resource target to a container resource | |
| **Reference** | | TS-0001 [1], clause 10.2.22.2, TS-0004 [2], clause 7.4.28.2.5 | |
| **Config Id** | | CF01 | |
| **Parent release** | | Release 1 | |
| **PICS Selection** | | PICS\_CSE | |
| **Initial conditions** | **with {**  the IUT **being** in the "initial state"  **and** the IUT **having registered** the AE  **and** the IUT **having created** a container resource **containing**  CONTENT\_INSTANCE\_1 contentInstance resource **and**  CONTENT\_INSTANCE\_2 contentInstance resource  **and** the AE **having** privileges to perform DELETE operation on the container resource  **and** creationTime attribute of CONTENT\_INSTANCE\_1 < creationTime attribute of CONTENT\_INSTANCE\_2  **}** | | |
| **Expected behaviour** | **Test events** | | **Direction** |
| **when {**  the IUT **receives** a valid DELETE Request **from** AE **containing**  To **set to** CONTAINER\_RESOURCE\_ADDRESS/la **and**  From **set to** AE\_ID **and**  **no** Content **}** | | IUT 🡨 AE |
| **then {**  the IUT **deletes** the CONTENT\_INSTANCE\_2\_RESOURCE\_ADDRESSresource  **and** the IUT **sends** a valid Response **containing**  Response Status Code **set to** 2002 (DELETED)  **}** | | IUT 🡪 AE |

TP/oneM2M/CSE/DMR/DEL/008

|  |  |  |  |
| --- | --- | --- | --- |
| **TP Id** | | TP/oneM2M/CSE/DMR/DEL/008 | |
| **Test objective** | | Check that the IUT rejects the DELETE request of a latest resource in a container resource that has no direct child contentInstance resources. | |
| **Reference** | | TS-0001 [1], clause 10.2.22.2, TS-0004 [2], clause 7.4.28.2.5 | |
| **Config Id** | | CF01 | |
| **Parent release** | | Release 1 | |
| **PICS Selection** | | PICS\_CSE | |
| **Initial conditions** | **with {**  the IUT **being** in the "initial state"  **and** the IUT **having registered** the AE **containing**  acontainer resource **containing**  **no** contentInstance resources  **}** | | |
| **Expected behaviour** | **Test events** | | **Direction** |
| **when {**  the IUT **receives** a valid DELETE Request **from** AE **containing**  To **set to** CONTAINER\_RESOURCE\_ADDRESS/la **and**  From **set to** AE\_ID **and**  **no** Content  **}** | | IUT 🡨 AE |
| **then {**  the IUT **sends** a valid Response **containing**  Response Status Code **set to** 4004 (NOT\_FOUND)  **}** | | IUT 🡪 AE |

TP/oneM2M/CSE/DMR/DEL/009

|  |  |  |  |
| --- | --- | --- | --- |
| **TP Id** | | TP/oneM2M/CSE/DMR/DEL/009 | |
| **Test objective** | | Check that the IUT accepts the DELETE Request of the oldest contentInstance resource target to a container resource | |
| **Reference** | | TS-0001 [1], clause 10.2.23.2, TS-0004 [2], clause 7.4.29.2.5 | |
| **Config Id** | | CF01 | |
| **Parent release** | | Release 1 | |
| **PICS Selection** | | PICS\_CSE | |
| **Initial conditions** | **with {**  the IUT **being** in the "initial state"  **and** the IUT **having registered** the AE  **and** the IUT **having created** a container resource **containing**  CONTENT\_INSTANCE\_1 contentInstance resource **and**  CONTENT\_INSTANCE\_2 contentInstance resource  **and** the AE **having** privileges to perform DELETE operation on the container resource  **and** creationTime attribute ofCONTENT\_INSTANCE\_1 < creationTime attribute of CONTENT\_INSTANCE\_2  **}** | | |
| **Expected behaviour** | **Test events** | | **Direction** |
| **when {**  the IUT **receives** a valid DELETE Request **from** AE **containing**  To **set to** TARGET\_RESOURCE\_ADDRESS **and**  From **set to** AE\_ID **and**  **no** Content  **}** | | IUT 🡨 AE |
| **then {**  the IUT **deletes** the CONTENT\_INSTANCE\_1\_RESOURCE\_ADDRESSresource  **and** the IUT **sends** a valid Response **containing**  Response Status Code **set to** 2002 (DELETED)  **}** | | IUT 🡪 AE |

TP/oneM2M/CSE/DMR/DEL/010

|  |  |  |  |
| --- | --- | --- | --- |
| **TP Id** | | TP/oneM2M/CSE/DMR/DEL/010 | |
| **Test objective** | | Check that the IUT rejects the DELETE request of an oldest resource in a container resource that has no direct child contentInstance resources. | |
| **Reference** | | TS-0001 [1], clause 10.2.23.2, TS-0004 [2], clause 7.4.29.2.5 | |
| **Config Id** | | CF01 | |
| **Parent release** | | Release 1 | |
| **PICS Selection** | | PICS\_CSE | |
| **Initial conditions** | **with {**  the IUT **being** in the "initial state"  **and** the IUT **having registered** the AE **containing**  acontainer resource **containing**  **no** contentInstance resources  **}** | | |
| **Expected behaviour** | **Test events** | | **Direction** |
| **when {**  the IUT **receives** a valid RETRIEVE Request **from** AE **containing**  To **set to** CONTAINER\_RESOURCE\_ADDRESS/ol **and**  From **set to** AE\_ID **and**  **no** Content  **}** | | IUT 🡨 AE |
| **then {**  the IUT **sends** a valid Response **containing**  Response Status Code **set to** 4004 (NOT\_FOUND)  **}** | | IUT 🡪 AE |

#### 7.2.2.4 Subscription and Notification (SUB)

##### 7.2.2.4.1 CREATE Operation

TP/oneM2M/CSE/SUB/CRE/001

|  |  |  |  |
| --- | --- | --- | --- |
| **TP Id** | | TP/oneM2M/CSE/SUB/CRE/001 | |
| **Test objective** | | Check that the IUT rejects the creation of the <subscription> resource when the target subscribed-to *RESOURCE\_TYPE* resource is not subscribable | |
| **Reference** | | TS-0001 [1], clause 10.2.11.2, TS-0004 [2], clause 7.4.8.2.1 | |
| **Config Id** | | CF01 | |
| **Parent release** | | Release 1 | |
| **PICS Selection** | | PICS\_CSE | |
| **Initial conditions** | **with {**  the IUT **being** in the "initial state"  **and** the IUT **having** a resource PARENT\_RESOURCE\_ADDRESS**allowing**  the AE to perform CREATE operation  **and** the IUT **having** a resource PARENT\_RESOURCE\_ADDRESS**not being**  subscribable *RESOURCE\_TYPE* resource  **}** | | |
| **Expected behaviour** | **Test events** | | **Direction** |
| **when {**  the IUT **receives** a valid CREATE Request **from** AE **containing**  To **set to** PARENT\_RESOURCE\_ADDRESS**and**  Resource Type **set to** 23 (subscription) **and**  From **set to** AE-ID **and**  Content **containing**  subscription resource representation  **}** | | IUT 🡨 AE |
| **then {**  the IUT **does not create** the subscription resource  **and** the IUT **sends** a valid Response **containing**  Response Status Code **set to** 5203 (TARGET\_NOT\_SUBSCRIBABLE) **and**  **no** Content  **}** | | IUT 🡪 AE |

|  |  |  |
| --- | --- | --- |
| **TP Id** | **Reference** | **RESOURCE\_TYPE** |
| TP/oneM2M/CSE/SUB/CRE/001\_CIN | TS-0001 [1], clause 9.6.7 | 4 (contentInstance) |
| TP/oneM2M/CSE/SUB/CRE/001\_SUB | TS-0001 [1], clause 9.6.8 | 23 (subscription) |

TP/oneM2M/CSE/SUB/CRE/002

|  |  |  |  |
| --- | --- | --- | --- |
| **TP Id** | | TP/oneM2M/CSE/SUB/CRE/002 | |
| **Test objective** | | Check that the IUT rejects the creation of the <subscription> resource when the originator does not have privileges for retrieving the subscribed-to resource. | |
| **Reference** | | TS-0001 [1], clauses 10.2.11.2, TS-0004 [2], clause 7.4.8.2.1 | |
| **Config Id** | | CF01 | |
| **Parent release** | | Release 1 | |
| **PICS Selection** | | PICS\_CSE | |
| **Initial conditions** | **with {**  the IUT **being** in the "initial state"  **and** the IUT **having** a resource PARENT\_RESOURCE\_ADDRESS**containing**  accessControlPolicyIDs attribute **pointing to**  accessControlPolicy resource **containing**  privileges attribute **containing**  accessControlRule attribute **containing**  accessControlOriginators attribute **indicating** AE-ID **and**  accessControlOperations attribute **not indicating** RETRIEVE  **}** | | |
| **Expected behaviour** | **Test events** | | **Direction** |
| **when {**  the IUT **receives** a valid CREATE Request **from** AE **containing**  To **set to** PARENT\_RESOURCE\_ADDRESS**and**  Resource Type **set to** 23 (subscription) **and**  From **set to** AE-ID **and**  Content **containing**  subscription resource representation **}** | | IUT 🡨 AE |
| **then {**  the IUT **does not create** the subscription resource  **and** the IUT **sends** a valid Response **containing**  Response Status Code **set to** 4103 (ORIGINATOR\_HAS\_NO\_PRIVILEGE) **and**  **no** Content  **}** | | IUT 🡪 AE |

TP/oneM2M/CSE/SUB/CRE/003

|  |  |  |  |
| --- | --- | --- | --- |
| **TP Id** | | TP/oneM2M/CSE/SUB/CRE/003 | |
| **Test objective** | | Check that the IUT rejects the creation of the <subscription> resource when the notificationURI is not the originator and the IUT cannot send the Notify request to the notificationURI | |
| **Reference** | | TS-0001 [1], clause 10.2.11.2, TS-0004 [2], clause 7.4.8.2.1 | |
| **Config Id** | | CF01 | |
| **Parent release** | | Release 1 | |
| **PICS Selection** | | PICS\_CSE | |
| **Initial conditions** | **with {**  the IUT **being** in the "initial state"  **and** the IUT **having** a resource PARENT\_RESOURCE\_ADDRESS**allowing**  the AE to perform CREATE operation  **and** the IUT **not being** able to send the NOTIFY Request to the NOTI\_URI\_ADDRESS **containing** verificationRequest **set to** TRUE  **}** | | |
| **Expected behaviour** | **Test events** | | **Direction** |
| **when {**  the IUT **receives** a valid CREATE Request **from** AE **containing**  To **set to** PARENT\_RESOURCE\_ADDRESS**and**  Resource Type **set to** 23 (subscription) **and**  From **set to** AE-ID **and**  Content **containing**  subscription resource **containing**  notificationURI attribute **set to** NOTI\_URI\_ADDRESS  **}** | | IUT 🡨 AE |
| **then {**  the IUT **does not create** the subscription resource  **and** the IUT **sends** a valid Response **containing**  Response Status Code **set to** 5204 (SUBSCRIPTION\_VERIFICATION\_INITIATION\_FAILED) **and**  **no** Content  **}** | | IUT 🡪 AE |

TP/oneM2M/CSE/SUB/CRE/004

|  |  |  |  |
| --- | --- | --- | --- |
| **TP Id** | | TP/oneM2M/CSE/SUB/CRE/004 | |
| **Test objective** | | Check that the IUT stores Originator ID in the notification creator attribute when a <SUBSCRIPTION> creation request which needs verification is received and the notificationURI is not the Originator. | |
| **Reference** | | TS-0001 [1], clause 10.2.12.1, TS-0004 [2], clause 7.4.9.2.1 | |
| **Config Id** | | CF01 | |
| **Parent release** | | Release 1 | |
| **PICS Selection** | | PICS\_CSE | |
| **Initial conditions** | **with {**  the IUT **being** in the "initial state"  **and** the IUT **having registered** the AE1  **and** the IUT **having registered** the AE2  **and** the AE1 **having created** a <subscribed-to type>  **and** the AE1 **having** privileges to perform RETRIEVE operation on the subscribed-to resource  **}** | | |
| **Expected behaviour** | **Test events** | | **Direction** |
| **when {**  the IUT **receives** a valid CREATE Request **from** AE1 **containing**  To **set to** SUBSCRIBED\_TO\_RESOURCE\_ADDRESS **and**  From **set to** AE1\_RESOURCE\_ADDRESS **and**  Resource Type **set to** 23 (subscription) **and**  Content **containing**  subscription resource **containing**  notificationURI attribute **set to** AE2\_RESOURCE\_ADDRESS  **}** | | IUT  AE1 |
| **then {**  the IUT **sends** a valid NOTIFY Request **containing**  Content **containing**  notification message **containing**  verificationRequest attribute **set to** TRUE **and**  creator attribute **set to** AE1\_RESOURCE\_ADDRESS  **}** | | IUT  AE2 |

TP/oneM2M/CSE/SUB/CRE/005

|  |  |  |  |
| --- | --- | --- | --- |
| **TP Id** | | TP/oneM2M/CSE/SUB/CRE/005 | |
| **Test objective** | | Check that the IUT sends a Notify request to the subscriber resource when notificationEventType attribute is set to "Create\_of\_Direct\_Child\_Resource" and a create operation has been performed on the subscribed-to resource | |
| **Reference** | | TS-0001 [1], clause 9.6.8-3 | |
| **Config Id** | | CF01 | |
| **Parent release** | | Release 1 | |
| **PICS Selection** | | PICS\_CSE | |
| **Initial conditions** | **with {**  the IUT **being** in the "initial state"  **and** the IUT **having registered** the AE1  **and** the IUT **having registered** the AE2  **and** the AE1 **having created** a <subscribed-to type> resource **containing**  subscription child resource **having**  notificationURI attribute **set to** AE2\_RESOURCE\_ADDRESS **and**  eventNotificationCriteria attribute**containing**  notificationEventType **set to** 3 (Create\_of\_Direct\_Child\_Resource)  **and** the AE1 **having** privileges to perform RETRIEVE operation on the subscribed-to resource  **}** | | |
| **Expected behaviour** | **Test events** | | **Direction** |
| **when {**  the IUT **receives** a valid CREATE Request **from** AE1 **containing**  To **set to** SUBSCRIBED\_TO\_RESOURCE\_ADDRESS **and**  From **set to** AE1\_RESOURCE\_ADDRESS **and**  Content **containing**  CHILD\_RESOURCE\_TYPE resource **containing**  resourceName attribute **set to** NAME  **}** | | IUT  AE1 |
| **then {**  the IUT **sends** a valid Response **containing**  Response Status Code **set to** 2001 (CREATED)  a**nd** the IUT **sends** a NOTIFY Request **containing**  Content **containing**  Notification message **containing**  notificationEvent attribute **containing**  representation attribute **containing**  CHILD\_RESOURCE\_TYPE resource **containing**  All attributes  **}** | | IUT  AE1  IUT  AE2 |

TP/oneM2M/CSE/SUB/CRE/006

|  |  |  |  |
| --- | --- | --- | --- |
| **TP Id** | | TP/oneM2M/CSE/DMR/CRE/006 | |
| **Test objective** | | Check that the IUT accepts the creation of a *subscription* resource with the *eventNotificationCriteria* attribute which includes a *CONDITION\_TAG* condition provided | |
| **Reference** | | TS-0001 [1], clause 9.6.8 | |
| **Config Id** | | CF01 | |
| **Parent release** | | Release 1 | |
| **PICS Selection** | | PICS\_CSE | |
| **Initial conditions** | **with {**  the IUT **being** in the "initial state"  **and** the IUT **having registered** the AE  **and** the Originator **having** privileges to perform CREATE operation on the resource TARGET\_RESOURCE\_ADDRESS  **}** | | |
| **Expected behaviour** | **Test events** | | **Direction** |
| **when {**  the IUT **receives** a valid CREATE Request **from** AE **containing**  Resource Type **set to** *subscription* **and**  To **set to** TARGET\_RESOURCE\_ADDRESS **and**  From **set to** AE-ID **and**  Content **containing**  *subscription* resource **containing**  *eventNotificationCriteria* attribute **containing**  *valid CONDITION\_TAG* condition **}** | | IUT 🡨 AE |
| **then {** the IUT **creates** the *subscription* resource   **and** the IUT **sends** a valid Response **containing**  Response Status Code **set to** 2001 (CREATED)  **}** | | IUT 🡪 AE |

| **TP Id** | **Reference** | **CONDITION\_TAG** |
| --- | --- | --- |
| TP/oneM2M/CSE/SUB/CRE/006\_CRB | TS-0001 [1], clause 9.6.8 | createdBefore |
| TP/oneM2M/CSE/SUB/CRE/006\_CRA | TS-0001 [1], clause 9.6.8 | createdAfter |
| TP/oneM2M/CSE/SUB/CRE/006\_MS | TS-0001 [1], clause 9.6.8 | modifiedSince |
| TP/oneM2M/CSE/SUB/CRE/006\_US | TS-0001 [1], clause 9.6.8 | unmodifiedSince |
| TP/oneM2M/CSE/SUB/CRE/006\_STS | TS-0001 [1], clause 9.6.8 | stateTagSmaller |
| TP/oneM2M/CSE/SUB/CRE/006\_STB | TS-0001 [1], clause 9.6.8 | stateTagBigger |
| TP/oneM2M/CSE/SUB/CRE/006\_EXB | TS-0001 [1], clause 9.6.8 | expireBefore |
| TP/oneM2M/CSE/SUB/CRE/006\_EXA | TS-0001 [1], clause 9.6.8 | expireAfter |
| TP/oneM2M/CSE/SUB/CRE/006\_SZA | TS-0001 [1], clause 9.6.8 | sizeAbove |
| TP/oneM2M/CSE/SUB/CRE/006\_SZB | TS-0001 [1], clause 9.6.8 | sizeBelow |
| TP/oneM2M/CSE/SUB/CRE/006\_ET | TS-0001 [1], clause 9.6.8 | eventType |
| TP/oneM2M/CSE/SUB/CRE/006\_OM | TS-0001 [1], clause 9.6.8 | operationMonitor |
| TP/oneM2M/CSE/SUB/CRE/006\_ATR | TS-0001 [1], clause 9.6.8 | attribute |

##### 7.2.2.4.2 DELETE Operation

TP/oneM2M/CSE/SUB/DEL/001

|  |  |  |  |
| --- | --- | --- | --- |
| **TP Id** | | TP/oneM2M/CSE/SUB/DEL/001 | |
| **Test objective** | | Check that the IUT sends a Notify request to the AE2\_RESOURCE\_ADDRESS of the subscriberURI attribute when the SUBSCRIPTION\_RESOURCE\_ADDRESS <subscription> resource is deleted | |
| **Reference** | | TS-0001 [1], clause 9.6.8, TS-0004 [2], clause 7.5.1.2.4 | |
| **Config Id** | | CF01 | |
| **Parent release** | | Release 1 | |
| **PICS Selection** | | PICS\_CSE | |
| **Initial conditions** | **with {**  the IUT **being** in the "initial state"  **and** the IUT **having registered** the AE1  **and** the IUT **having registered** the AE2  **and** the AE1 **having created** a <subscribed-to type> resource **containing**  subscription resource **containing**  subscriberURI attribute **set to** AE2\_RESOURCE\_ADDRESS  **and** the AE1 **having** privileges to perform RETRIEVE operation on the subscribed-to resource  **}** | | |
| **Expected behaviour** | **Test events** | | **Direction** |
| **when {**  the IUT **receives** a valid DELETE Request **from** AE1 **containing**  To **set to** SUBSCRIPTION\_RESOURCE\_ADDRESS **and**  From **set to** AE1\_RESOURCE\_ADDRESS  **}** | | IUT  AE1 |
| **then {**  the IUT **sends** a valid Response **containing**  Response Status Code **set to** 2002 (DELETED)  a**nd** the IUT **sends** a NOTIFY Request **containing**  Content **containing**  notification message **containing**  subscriptionDeletion attribute **set to** TRUE **and**  subscriptionReference attribute **set to** AE2\_RESOURCE\_ADDRESS  **}** | | IUT  AE1  IUT 🡪 AE2 |

TP/oneM2M/CSE/SUB/DEL/002

|  |  |  |  |
| --- | --- | --- | --- |
| **TP Id** | | TP/oneM2M/CSE/SUB/DEL/002 | |
| **Test objective** | | Check that the IUT sends a Notify request to the subscriber resource when eventNotificationCriteria/notificationEventType attribute is set to "Delete\_of\_Resource" and an delete operation has been performed the subscribed-to resource | |
| **Reference** | | TS-0001 [1], clause 9.6.8-3 | |
| **Config Id** | | CF01 | |
| **Parent release** | | Release 1 | |
| **PICS Selection** | | PICS\_CSE | |
| **Initial conditions** | **with {**  the IUT **being** in the "initial state"  **and** the IUT **having registered** the AE1  **and** the IUT **having registered** the AE2  **and** the AE1 **having created** a <subscribed-to type> resource **containing**  subscription child resource **having**  notificationURI attribute **set to** AE2\_RESOURCE\_ADDRESS **and**  eventNotificationCriteria attribute**containing**  notificationEventType **set to** 2 (Delete\_of\_Resource)  **and** the AE1 **having** privileges to perform RETRIEVE operation on the subscribed-to resource  **}** | | |
| **Expected behaviour** | **Test events** | | **Direction** |
| **when {**  the IUT **receives** a valid DELETE Request **from** AE1 **containing**  To **set to** SUBSCRIBED\_TO\_RESOURCE\_ADDRESS **and**  From **set to** AE1\_RESOURCE\_ADDRESS  **}** | | IUT  AE1 |
| **then {**  the IUT **sends** a valid Response **containing**  Response Status Code **set to** 2002 (DELETED)  a**nd** the IUT **sends** a NOTIFY Request **contaning**  Content **containing**  notification message **containing**  notificationEvent attribute **containing**  a valid representation attribute **}** | | IUT  AE1  IUT  AE2 |

TP/oneM2M/CSE/SUB/DEL/003

|  |  |  |  |
| --- | --- | --- | --- |
| **TP Id** | | TP/oneM2M/CSE/SUB/DEL/003 | |
| **Test objective** | | Check that the IUT sends a Notify request to the subscriber resource when eventNotificationCriteria/notificationEventType attribute is set to "Delete\_of\_Direct\_Child\_Resource" and an delete operation has been performed on a child resource of the subscribed-to resource | |
| **Reference** | | TS-0001 [1], clause 9.6.8-3 | |
| **Config Id** | | CF01 | |
| **Parent release** | | Release 1 | |
| **PICS Selection** | | PICS\_CSE | |
| **Initial conditions** | **with {**  the IUT **being** in the "initial state"  **and** the IUT **having registered** the AE1  **and** the IUT **having registered** the AE2  **and** the AE1 **having created** a <subscribed-to type> resource **containing**  a CHILD\_RESOURCE\_ADDRESS child resource **and**  subscription child resource **having**  notificationURI attribute **set to** AE2\_RESOURCE\_ADDRESS **and**  eventNotificationCriteria attribute**containing**  notificationEventType **set to** 4 (Delete\_of\_Direct\_Child\_Resource)  **and** the AE1 **having** privileges to perform RETRIEVE operation on the subscribed-to resource  **}** | | |
| **Expected behaviour** | **Test events** | | **Direction** |
| **when {**  the IUT **receives** a valid DELETE Request **from** AE1 **containing**  To **set to** CHILD\_RESOURCE\_ADDRESS **and**  From **set to** AE1\_RESOURCE\_ADDRESS  **}** | | IUT  AE1 |
| **then {**  the IUT **sends** a valid Response **containing**  Response Status Code **set to** 2002 (DELETED)  a**nd** the IUT **sends** a NOTIFY Request **contaning**  Content **containing**  notification message **containing**  notificationEvent attribute **containing**  representation attribute **containing**  CHILD\_RESOURCE\_TYPE resource**}** | | IUT  AE1  IUT  AE2 |

##### 7.2.2.4.3 UPDATE Operation

TP/oneM2M/CSE/SUB/UPD/001

|  |  |  |  |
| --- | --- | --- | --- |
| **TP Id** | | TP/oneM2M/CSE/SUB/UPD/001 | |
| **Test objective** | | Check that the IUT sends Notify request to the subscriber resource when an update operation has been performed on the subscribed-to resource | |
| **Reference** | | TS-0001 [1], clause 10.2.11.2 | |
| **Config Id** | | CF01 | |
| **Parent release** | | Release 1 | |
| **PICS Selection** | | PICS\_CSE | |
| **Initial conditions** | **with {**  the IUT **being** in the "initial state"  **and** the IUT **having registered** the AE1  **and** the IUT **having registered** the AE2  **and** the AE1 **having created** a <subscribed-to type> resource **containing**  ATTRIBUTE\_NAME **set to** VALUE\_1 **and**  subscription child resource **having**  notificationURI attribute **set to** AE2\_RESOURCE\_ADDRESS  **and** the AE1 **having** privileges to perform RETRIEVE operation on the subscribed-to resource  **}** | | |
| **Expected behaviour** | **Test events** | | **Direction** |
| **when {**  the IUT **receives** a valid UPDATE Request **from** AE1 **containing**  To **set to** SUBSCRIBED\_TO\_RESOURCE\_ADDRESS **and**  From **set to** AE1\_RESOURCE\_ADDRESS **and**  Content **containing**  <subscribed-to type> resource **containing**  ATTRIBUTE\_NAME **set to** VALUE\_2 **}** | | IUT  AE1 |
| **then {**  the IUT **sends** a valid Response **containing**  Response Status Code **set to** 2004 (UPDATED)  a**nd** the IUT **sends** a NOTIFY Request **contaning**  Content **containing**  notification message **containing**  notificationEvent attribute **containing**  representation attribute **containing**  <subscribed-to type> resource **containing**  All attributes  **}** | | IUT 🡪 AE1  IUT 🡪 AE2 |

TP/oneM2M/CSE/SUB/UPD/002

|  |  |  |  |
| --- | --- | --- | --- |
| **TP Id** | | TP/oneM2M/CSE/SUB/UPD/002 | |
| **Test objective** | | Check that the IUT sends a Notify request to the subscriber resource when the notificationContentType attribute is set to "modified attributes" and an update operation has been performed on the subscribed-to resource | |
| **Reference** | | TS-0001 [1], clause 10.2.11.2, TS-0004 [2], clause 7.5.1.2.2 | |
| **Config Id** | | CF01 | |
| **Parent release** | | Release 1 | |
| **PICS Selection** | | PICS\_CSE | |
| **Initial conditions** | **with {**  the IUT **being** in the "initial state"  **and** the IUT **having registered** the AE1  **and** the IUT **having registered** the AE2  **and** the AE1 **having created** a <subscribed-to type> resource **containing**  ATTRIBUTE\_NAME **set to** VALUE\_1 **and**  subscription child resource **having**  notificationURI attribute **set to** AE2\_RESOURCE\_ADDRESS **and**  notificationContentType attribute **set to** 2 (modified attributes)  **and** the AE1 **having** privileges to perform RETRIEVE operation on the subscribed-to resource  **}** | | |
| **Expected behaviour** | **Test events** | | **Direction** |
| **when {**  the IUT **receives** a valid UPDATE Request **from** AE1 **containing**  To **set to** SUBSCRIBED\_TO\_RESOURCE\_ADDRESS **and**  From **set to** AE1\_RESOURCE\_ADDRESS **and**  Content **containing**  <subscribed-to type> resource **containing**  ATTRIBUTE\_NAME attribute **set to** VALUE\_2  **}** | | IUT  AE1 |
| **then {**  the IUT **sends** a valid Response **containing**  Response Status Code **set to** 2004 (UPDATED)  a**nd** the IUT **sends** a NOTIFY Request **contaning**  Content **containing**  notification message **containing**  notificationEvent attribute **containing**  representation attribute **containing**  <subscribed-to type> resource **containing**  ATTRIBUTE\_NAME attribute **set to** VALUE\_2  **}** | | IUT  AE1  IUT  AE2 |

TP/oneM2M/CSE/SUB/UPD/003

|  |  |  |  |
| --- | --- | --- | --- |
| **TP Id** | | TP/oneM2M/CSE/SUB/UPD/003 | |
| **Test objective** | | Check that the IUT sends a Notify request to the subscriber resource when the notificationContentType attribute is set to "ResourceID" and an update operation has been performed on the subscribed-to resource | |
| **Reference** | | TS-0001 [1], clause 10.2.11.2, TS-0004 [2], clause 7.5.1.2.2 | |
| **Config Id** | | CF01 | |
| **Parent release** | | Release 1 | |
| **PICS Selection** | | PICS\_CSE | |
| **Initial conditions** | **with {**  the IUT **being** in the "initial state"  **and** the IUT **having registered** the AE1  **and** the IUT **having registered** the AE2  **and** the AE1 **having created** a <subscribed-to type> resource **containing**  ATTRIBUTE\_NAME **set to** VALUE\_1 **and**  subscription child resource **having**  notificationURI attribute **set to** AE2\_RESOURCE\_ADDRESS **and**  notificationContentType attribute **set to** 3 (ResourceID)  **and** the AE1 **having** privileges to perform RETRIEVE operation on the subscribed-to resource  **}** | | |
| **Expected behaviour** | **Test events** | | **Direction** |
| **when {**  the IUT **receives** a valid UPDATE Request **from** AE1 **containing**  To **set to** SUBSCRIBED\_TO\_RESOURCE\_ADDRESS **and**  From **set to** AE1\_RESOURCE\_ADDRESS **and**  Content **containing**  **<**subscribed-to type> resource **containing**  ATTRIBUTE\_NAME attribute **set to** VALUE\_2  **}** | | IUT  AE1 |
| **then {**  the IUT **sends** a valid Response **containing**  Response Status Code **set to** 2004 (UPDATED)  a**nd** the IUT **sends** a NOTIFY Request **contaning**  Content **containing**  notification message **containing**  notificationEvent attribute **containing**  representation attribute **containing**  <subscribed-to type> resource **containing**  subscribed-to ResourceID  **}** | | IUT  AE1  IUT  AE2 |

TP/oneM2M/CSE/SUB/UPD/004

|  |  |  |  |
| --- | --- | --- | --- |
| **TP Id** | | TP/oneM2M/CSE/SUB/UPD/004 | |
| **Test objective** | | Check that the IUT decreases the expirationCounter attribute of a subscription resource when the Hosting CSE of the subscribed-to resource successfully sends the notification request to subscriber resource(s) | |
| **Reference** | | TS-0001 [1], clause 10.2.11.2, TS-0004 [2], clause 7.5.1.2.2 | |
| **Config Id** | | CF01 | |
| **Parent release** | | Release 1 | |
| **PICS Selection** | | PICS\_CSE | |
| **Initial conditions** | **with {**  the IUT **being** in the "initial state"  **and** the IUT **having registered** the AE1  **and** the IUT **having registered** the AE2  **and** the AE1 **having created** a <subscribed-to type> resource **containing**  ATTRIBUTE\_NAME **set to** VALUE\_1 **and**  subscription child resource **having**  notificationURI attribute **set to** AE2\_RESOURCE\_ADDRESS **and**  expirationCounter attribute **set to** MAX\_NUMBER\_NOTIFICATION  **and** the AE1 **having** privileges to perform RETRIEVE operation on the subscribed-to resource  **}** | | |
| **Expected behaviour** | **Test events** | | **Direction** |
| **when {**  the IUT **receives** a valid UPDATE Request **from** AE1 **containing**  To **set to** SUBSCRIBED\_TO\_RESOURCE\_ADDRESS **and**  From **set to** AE1\_RESOURCE\_ADDRESS **and**  Content **containing**  <subscribed-to type> resource **containing**  ATTRIBUTE\_NAME attribute **set to** VALUE\_2  **}** | | IUT  AE1 |
| **then {**  the IUT **decreases** the expirationCounter attribute of the subscription resource  **and** the IUT **sends** a valid Response **containing**  Response Status Code **set to** 2004 (UPDATED)  a**nd** the IUT **sends** a NOTIFY Request  **}** | | IUT  AE1  IUT  AE2 |

TP/oneM2M/CSE/SUB/UPD/005

|  |  |  |  |
| --- | --- | --- | --- |
| **TP Id** | | TP/oneM2M/CSE/SUB/UPD/005 | |
| **Test objective** | | Check that the IUT deletes the subscription resource when the expirationCounter meets zero | |
| **Reference** | | TS-0001 [1], clause 10.2.11.2, TS-0004 [2], clause 7.5.1.2.2 | |
| **Config Id** | | CF01 | |
| **Parent release** | | Release 1 | |
| **PICS Selection** | | PICS\_CSE | |
| **Initial conditions** | **with {**  the IUT **being** in the "initial state"  **and** the IUT **having registered** the AE1  **and** the IUT **having registered** the AE2  **and** the AE1 **having created** a <subscribed-to type> resource **containing**  ATTRIBUTE\_NAME **set to** VALUE\_1 **and**  subscription child resource **having**  notificationURI attribute **set to** AE2\_RESOURCE\_ADDRESS **and**  expirationCounter attribute **set to** 1  **and** the AE1 **having** privileges to perform RETRIEVE operation on the subscribed-to resource  **}** | | |
| **Expected behaviour** | **Test events** | | **Direction** |
| **when {**  the IUT **receives** a valid UPDATE Request **from** AE1 **containing**  To **set to** SUBSCRIBED\_TO\_RESOURCE\_ADDRESS **and**  From **set to** AE1\_RESOURCE\_ADDRESS **and**  Content **containing**  <subscribed-to type> resource **containing**  ATTRIBUTE\_NAME attribute **set to** VALUE\_2  **}** | | IUT  AE1 |
| **then {**  the IUT **decreases** the expirationCounter attribute of the subscription resource  **and** the IUT **deletes** the subscription resource  **and** the IUT **sends** a valid Response **containing**  Response Status Code **set to** 2004 (UPDATED)  a**nd** the IUT **sends** a NOTIFY Request  **}** | | IUT  AE1  IUT  AE2 |

TP/oneM2M/CSE/SUB/UPD/006

|  |  |  |  |
| --- | --- | --- | --- |
| **TP Id** | | TP/oneM2M/CSE/SUB/UPD/006 | |
| **Test objective** | | Check that the IUT does not send a Notify request to the subscriber resource when the "attribute" condition tag of eventNotificationCriteria attribute is set to LIST\_OF\_ATTRIBUTE and doesn't contain the ATTRIBUTE\_NAME attribute updated. | |
| **Reference** | | TS-0001 [1], clause 9.6.8, TS-0004 [2], clause 7.5.1.2.2 | |
| **Config Id** | | CF01 | |
| **Parent release** | | Release 1 | |
| **PICS Selection** | | PICS\_CSE | |
| **Initial conditions** | **with {**  the IUT **being** in the "initial state"  **and** the IUT **having registered** the AE1  **and** the IUT **having registered** the AE2  **and** the AE1 **having created** a <subscribed-to type> resource **containing**  ATTRIBUTE\_NAME **set to** VALUE\_1 **and**  subscription child resource **having**  notificationURI attribute **set to** AE2\_RESOURCE\_ADDRESS **and**  eventNotificationCriteria attribute**containing**  attribute condition tag **set to** LIST\_OF\_ATTRIBUTE **containing**  **no** ATTRIBUTE\_NAME attribute  **and** the AE1 **having** privileges to perform RETRIEVE operation on the subscribed-to resource  **}** | | |
| **Expected behaviour** | **Test events** | | **Direction** |
| **when {**  the IUT **receives** a valid UPDATE Request **from** AE1 **containing**  To **set to** SUBSCRIBED\_TO\_RESOURCE\_ADDRESS **and**  From **set to** AE1\_RESOURCE\_ADDRESS **and**  Content **containing**  <subscribed-to type> resource **containing**  ATTRIBUTE\_NAME attribute **set to** VALUE\_2  **}** | | IUT  AE1 |
| **then {**  the IUT **sends** a valid Response **containing**  Response Status Code **set to** 2004 (UPDATED)  a**nd** the IUT **doesn't send** a NOTIFY Request  **}** | | IUT  AE1 |

TP/oneM2M/CSE/SUB/UPD/007

|  |  |  |  |
| --- | --- | --- | --- |
| **TP Id** | | TP/oneM2M/CSE/SUB/UPD/007 | |
| **Test objective** | | Check that the IUT sends batched notifications to the subscriber resource when the number value of the batchNotify attribute is set to NUMBER and when this number have been reached | |
| **Reference** | | TS-0001 [1], clause 10.2.12.1 | |
| **Config Id** | | CF01 | |
| **Parent release** | | Release 1 | |
| **PICS Selection** | | PICS\_CSE | |
| **Initial conditions** | **with {**  the IUT **being** in the "initial state"  **and** the IUT **having registered** the AE1  **and** the IUT **having registered** the AE2  **and** the AE1 **having created** a <subscribed-to type> resource **containing**  ATTRIBUTE\_NAME **set to** VALUE\_1 **and**  subscription child resource **having**  notificationURI attribute **set to** AE2\_RESOURCE\_ADDRESS **and**  batchNotify attribute **containing**  number attribute **set to** NUMBER **and**  duration attribute **set to** TIME\_LIMIT  **and** the AE1 **having** privileges to perform RETRIEVE operation on the subscribed-to resource  **and** the IUT **having** received (NUMBER– 1) valid UPDATE Requests **from** AE1\_RESOURCE\_ADDRESS **to** subscribed-to resource  **and** the timer has **not reached** the TIME\_LIMIT duration value  **}** | | |
| **Expected behaviour** | **Test events** | | **Direction** |
| **when {**  the IUT **receives** a valid UPDATE Request **from** AE1 **containing**  To **set to** SUBSCRIBED\_TO\_RESOURCE\_ADDRESS **and**  From **set to** AE1\_RESOURCE\_ADDRESS **and**  Content **containing**  <subscribed-to type> resource **containing**  a valid ATTRIBUTE\_NAME attribute  **}** | | IUT  AE1 |
| **then {**  the IUT **sends** a valid Response **containing**  Response Status Code **set to** 2004 (UPDATED)  a**nd** the IUT **sends** NUMBER times a NOTIFY Request **contaning**  Content **containing**  notification message **containing**  a valid notificationEvent attribute  **}** | | IUT  AE1  IUT  AE2 |

TP/oneM2M/CSE/SUB/UPD/008

|  |  |  |  |
| --- | --- | --- | --- |
| **TP Id** | | TP/oneM2M/CSE/SUB/UPD/008 | |
| **Test objective** | | Check that the IUT sends the latest notification to the subscriber resource when latestNotify is set to TRUE, the number value of the batchNotify attribute is set to NUMBER and when this number has been reached | |
| **Reference** | | TS-0001 [1], clause 10.2.12.1 | |
| **Config Id** | | CF01 | |
| **Parent release** | | Release 1 | |
| **PICS Selection** | | PICS\_CSE | |
| **Initial conditions** | **with {**  the IUT **being** in the "initial state"  **and** the IUT **having registered** the AE1  **and** the IUT **having registered** the AE2  **and** the AE1 **having created** a <subscribed-to type> resource **containing**  ATTRIBUTE\_NAME **set to** VALUE\_1 **and**  subscription child resource **having**  notificationURI attribute **set to** AE2\_RESOURCE\_ADDRESS **and**  latestNotify attribute **set to** TRUE **and**  batchNotify attribute **containing**  number attribute **set to** NUMBER**and**  duration attribute **set to** TIME\_LIMIT  **and** the AE1 **having** privileges to perform RETRIEVE operation on the subscribed-to resource  **and** the IUT **having** received (NUMBER– 1) valid UPDATE Requests **from** AE1\_RESOURCE\_ADDRESS **to** subscribed-to resource  **and** the timer has **not reached** the TIME\_LIMIT duration value  **}** | | |
| **Expected behaviour** | **Test events** | | **Direction** |
| **when {**  the IUT **receives** a valid UPDATE Request **from** AE1 **containing**  To **set to** SUBSCRIBED\_TO\_RESOURCE\_ADDRESS **and**  From **set to** AE1\_RESOURCE\_ADDRESS **and**  Content **containing**  <subscribed-to type> resource **containing**  a valid ATTRIBUTE\_NAME attribute  **}** | | IUT  AE1 |
| **then {**  the IUT **sends** a valid Response **containing**  Response Status Code **set to** 2004 (UPDATED)  **and** the IUT **sends** a NOTIFY Request **contaning**  Content **containing**  the **latest** notification message **containing**  a valid notificationEvent attribute**}** | | IUT  AE1  IUT  AE2 |

TP/oneM2M/CSE/SUB/UPD/009

|  |  |  |  |
| --- | --- | --- | --- |
| **TP Id** | | TP/oneM2M/CSE/SUB/UPD/009 | |
| **Test objective** | | Check that the IUT sends a Notify request to the subscriber resource when the "attribute" condition tag of eventNotificationCriteria attribute is set to ATTRIBUTE\_NAME and an update operation has been performed on the subscribed-to resource | |
| **Reference** | | TS-0001 [1], clause 9.6.8, TS-0004 [2], clause 7.5.1.2.2 | |
| **Config Id** | | CF01 | |
| **Parent release** | | Release 1 | |
| **PICS Selection** | | PICS\_CSE | |
| **Initial conditions** | **with {**  the IUT **being** in the "initial state"  **and** the IUT **having registered** the AE1  **and** the IUT **having registered** the AE2  **and** the AE1 **having created** a <subscribed-to type> resource **containing**  ATTRIBUTE\_NAME **set to** VALUE\_1 **and**  subscription child resource **having**  notificationURI attribute **set to** AE2\_RESOURCE\_ADDRESS **and**  eventNotificationCriteria attribute**containing**  attribute condition tag **set to** ATTRIBUTE\_NAME  **and** the AE1 **having** privileges to perform RETRIEVE operation on the subscribed-to resource  **}** | | |
| **Expected behaviour** | **Test events** | | **Direction** |
| **when {**  the IUT **receives** a valid UPDATE Request **from** AE1 **containing**  To **set to** SUBSCRIBED\_TO\_RESOURCE\_ADDRESS **and**  From **set to** AE1\_RESOURCE\_ADDRESS **and**  Content **containing**  <subscribed-to type> resource **containing**  ATTRIBUTE\_NAME attribute **set to** VALUE\_2  **}** | | IUT  AE1 |
| **then {**  the IUT **sends** a valid Response **containing**  Response Status Code **set to** 2004 (UPDATED)  a**nd** the IUT **sends** a NOTIFY Request **contaning**  Content **containing**  notification message **containing**  notificationEvent attribute **containing**  representation attribute **containing**  <subscribed-to type> resource **containing**  All attributes  **}** | | IUT  AE1  IUT  AE2 |

##### 7.2.2.4.4 NOTIFY Operation

TP/oneM2M/CSE/SUB/NTF/001

|  |  |  |  |
| --- | --- | --- | --- |
| **TP Id** | | TP/oneM2M/CSE/SUB/NTF/001 | |
| **Test objective** | | Check that the IUT rejects the creation of the *<*subscription*>* resource when the notificationURI is not the originator and the IUT have received the Notify response containing Response Status Codeindicating SUBSCRIPTION\_CREATOR\_HAS\_NO\_PRIVILEGE | |
| **Reference** | | TS-0001 [1], clause 10.2.11.2, TS-0004 [2], clause 7.4.8.2.1 | |
| **Config Id** | | CF01 | |
| **Parent release** | | Release 1 | |
| **PICS Selection** | | PICS\_CSE | |
| **Initial conditions** | **with {**  the IUT **being** in the "initial state"  **and** the IUT **having** a resource PARENT\_RESOURCE\_ADDRESS**allowing**  the AE to perform CREATE operation  **and** notificationURI **not being** the originator  **and** the IUT **having** sent the NOTIFY Request to the NOTI\_URI\_ADDRESS **containing**  verificationRequest **set to** TRUE  **}** | | |
| **Expected behaviour** | **Test events** | | **Direction** |
| **when {**  the IUT **receives** a valid Response **containing**  Response Status Code **set to** 4101 (SUBSCRIPTION\_CREATOR\_HAS\_NO\_PRIVILEGE)  **}** | | IUT 🡨 AE |
| **then {**  the IUT **does not create** the subscription resource  **and** the IUT **sends** a valid Response **containing**  Response Status Code **set to** 4101 (SUBSCRIPTION\_CREATOR\_HAS\_NO\_PRIVILEGE) **and**  **no** Content  **}** | | IUT 🡪 AE |

TP/oneM2M/CSE/SUB/NTF/002

|  |  |  |  |
| --- | --- | --- | --- |
| **TP Id** | | TP/oneM2M/CSE/SUB/NTF/002 | |
| **Test objective** | | Check that the IUT rejects the creation of the *<*subscription*>* resource when the notificationURI is not the originator and the IUT have received the Notify response containing Response Status Code indicating SUBSCRIPTION\_HOST\_HAS\_NO\_PRIVILEGE | |
| **Reference** | | TS-0001 [1], clause 10.2.11.2, TS-0004 [2], clause 7.4.8.2.1 | |
| **Config Id** | | CF01 | |
| **Parent release** | | Release 1 | |
| **PICS Selection** | | PICS\_CSE | |
| **Initial conditions** | **with {**  the IUT **being** in the "initial state"  **and** the IUT **having** a resource PARENT\_RESOURCE\_ADDRESS**allowing**  the AE to perform CREATE operation  **and** notificationURI **not being** the originator  **and** the IUT **having** sent the NOTIFY Request to the NOTI\_URI\_ADDRESS **containing**  verificationRequest **set to** TRUE  **}** | | |
| **Expected behaviour** | **Test events** | | **Direction** |
| **when {**  the IUT **receives** a valid Response containing  Response Status Code **set to** 5205 (SUBSCRIPTION\_HOST\_HAS\_NO\_PRIVILEGE)  **}** | | IUT 🡨 AE |
| **then {**  the IUT **does not create** the subscription resource  **and** the IUT **sends** a valid Response **containing**  Response Status Code **set to** 5205 (SUBSCRIPTION\_HOST\_HAS\_NO\_PRIVILEGE) **and**  **no** Content  **}** | | IUT 🡪 AE |

TP/oneM2M/CSE/SUB/NTF/003

|  |  |  |  |
| --- | --- | --- | --- |
| **TP Id** | | TP/oneM2M/CSE/SUB/NTF/003 | |
| **Test objective** | | Check that the IUT sends batched notifications to the subscriber resource when the duration value of the batchNotify attribute is set to TIME\_LIMIT and when this timer expires | |
| **Reference** | | TS-0001 [1], clause 10.2.12.1 | |
| **Config Id** | | CF01 | |
| **Parent release** | | Release 1 | |
| **PICS Selection** | | PICS\_CSE | |
| **Initial conditions** | **with {**  the IUT **being** in the "initial state"  **and** the IUT **having registered** the AE1  **and** the IUT **having registered** the AE2  **and** the AE1 **having created** a <subscribed-to type> resource **containing**  ATTRIBUTE\_NAME attribute **set to** VALUE\_1 **and**  subscription child resource **having**  notificationURI attribute **set to** AE2\_RESOURCE\_ADDRESS **and**  batchNotify attribute **containing**  duration attribute **set to** TIME\_LIMIT  **and** the AE1 **having** privileges to perform RETRIEVE operation on the subscribed-to resource  **and** the IUT **having** received a valid UPDATE Request **from** AE1\_RESOURCE\_ADDRESS **to** subscribed-to resource  **and** timer has not reached TIME\_LIMIT  **}** | | |
| **Expected behaviour** | **Test events** | | **Direction** |
| **when {**  the timer expires after the TIME\_LIMIT duration value  **}** | | IUT  AE1 |
| **then {**  The IUT **sends** a NOTIFY Request **contaning**  Content **containing**  notification message **containing**  a valid notificationEvent attribute  **}** | | IUT  AE2 |

TP/oneM2M/CSE/SUB/NTF/004

|  |  |  |  |
| --- | --- | --- | --- |
| **TP Id** | | TP/oneM2M/CSE/SUB/NTF/004 | |
| **Test objective** | | Check that the IUT sends the latest notification to the subscriber resource when latestNotify is set to TRUE, the duration value of the batchNotify attribute is set to TIME\_LIMIT and when this timer expires | |
| **Reference** | | TS-0001 [1], clause 10.2.12.1 | |
| **Config Id** | | CF01 | |
| **Parent release** | | Release 1 | |
| **PICS Selection** | | PICS\_CSE | |
| **Initial conditions** | **with {**  the IUT **being** in the "initial state"  **and** the IUT **having registered** the AE1  **and** the IUT **having registered** the AE2  **and** the AE1 **having created** a <subscribed-to type> resource **containing**  ATTRIBUTE\_NAME **set to** VALUE\_1 **and**  subscription child resource **having**  notificationURI attribute **set to** AE2\_RESOURCE\_ADDRESS **and**  latestNotify attribute **set to** TRUE **and**  batchNotify attribute **containing**  duration attribute **set to** TIME\_LIMIT  **and** the AE1 **having** privileges to perform RETRIEVE operation on the subscribed-to resource  **and** the IUT **having** received a valid UPDATE Request **from** AE1\_RESOURCE\_ADDRESS **to** subscribed-to resource  **and** timer has not reached TIME\_LIMIT  **}** | | |
| **Expected behaviour** | **Test events** | | **Direction** |
| **when {**  the timer expires after the TIME\_LIMIT duration value  **}** | | IUT  AE1 |
| **then {**  The IUT **sends** a NOTIFY Request **contaning**  Content **containing**  the **latest** notification message **containing**  a valid notificationEvent attribute } | | IUT  AE2 |

TP/oneM2M/CSE/SUB/NTF/005

|  |  |  |  |
| --- | --- | --- | --- |
| **TP Id** | | TP/oneM2M/CSE/SUB/NTF/005 | |
| **Test objective** | | Check that the IUT sends the latest cached notification after IUT escapes from connectionless state when the pendingNotification is set to 1 (sendLatest) | |
| **Reference** | | TS-0001 [1], clause 9.6.8 | |
| **Config Id** | | CF01 | |
| **Parent release** | | Release 1 | |
| **PICS Selection** | | PICS\_CSE | |
| **Initial conditions** | **with {**  the IUT **being** in the "initial state"  **and** the IUT **having registered** the AE1  **and** the IUT **having registered** the AE2  **and** the AE1 **having created** a <subscribed-to type> resource **containing**  subscription child resource **having**  notificationURI attribute **set to** AE2\_RESOURCE\_ADDRESS **and**  pendingNotification attribute **set to** 1 (sendLatest)  **and** the AE2 **having** privileges to perform RETRIEVE operation on the subscribed-to resource  **and** the IUT **being** in the "connectionless state" with AE2  **and** the IUT **having** frequently received from AE1 a valid UPDATE Requests to subscribed-to resource  **}** | | |
| **Expected behaviour** | **Test events** | | **Direction** |
|  | **when {**  the IUT **escapes** from the "connectionless state"  **}** | | NA |
|  | **then {**  The IUT **sends** a valid NOTIFY Request **contaning**  Content **containing**  the latest notification message  } | | IUT  AE2 |

TP/oneM2M/CSE/SUB/NTF/006

|  |  |  |  |
| --- | --- | --- | --- |
| **TP Id** | | TP/oneM2M/CSE/SUB/NTF/006 | |
| **Test objective** | | Check that the IUT sends the notifications of cached notification messages after IUT escapes from connectionless state when the pendingNotification is set to 2 (sendAllPending) | |
| **Reference** | | TS-0001 [1], clause 9.6.8 | |
| **Config Id** | | CF01 | |
| **Parent release** | | Release 1 | |
| **PICS Selection** | | PICS\_CSE | |
| **Initial conditions** | **with {**  the IUT **being** in the "initial state"  **and** the IUT **having registered** the AE1  **and** the IUT **having registered** the AE2  **and** the AE1 **having created** a <subscribed-to type> resource **containing**  subscription child resource **having**  notificationURI attribute **set to** AE2\_RESOURCE\_ADDRESS **and**  pendingNotification attribute **set to** 2 (sendAllPending)  **and** the AE2 **having** privileges to perform RETRIEVE operation on the subscribed-to resource  **and** the IUT **being** in the "connectionless state" with AE2  **and** the IUT **having** received from AE1 a NUMBER of valid UPDATE Requests to subscribed-to resource  **}** | | |
| **Expected behaviour** | **Test events** | | **Direction** |
|  | **when {**  the IUT **escapes** from the "connectionless state"  **}** | | NA |
|  | **then {**  The IUT **sends** NUMBER times a valid NOTIFY Request **contaning**  Content **containing**  notification message **containing**  a valid notificationEvent attribute  } | | IUT  AE2 |

TP/oneM2M/CSE/SUB/NTF/007

|  |  |  |  |
| --- | --- | --- | --- |
| **TP Id** | | TP/oneM2M/CSE/SUB/NTF/007 | |
| **Test objective** | | Check that the IUT retargets the notification to the AE according to pointOfAccess in the <AE> resource. | |
| **Reference** | | TS-0001 [1], clauses 9.6.5and 9.3.2.3.1 TS-0004 [2], clause 7.3.3.9 | |
| **Config Id** | | CF02 | |
| **Parent release** | | Release 1 | |
| **PICS Selection** | | PICS\_CSE | |
| **Initial conditions** | **with {**  the IUT **being** in the "initial state" **and**  the IUT **having** created the AE resource **containing**  POINT\_OF\_ACCESS attribute **and**  REQUEST\_REACHABILITY **set to** true  **}** | | |
| **Expected behaviour** | **Test events** | | **Direction** |
| **when {**  the IUT **receives** a valid NOTIFY **from** CSE **containing**  To **set to** AE\_RESOURCE\_ADDRESS  From **set to** CSE\_ID  **}** | | IUT 🡨 CSE |
| **then {**  the IUT **sends** the valid NOTIFY to POINT\_OF\_ACCESS  **}** | | IUT 🡪 AE |

TP/oneM2M/CSE/SUB/NTF/008

|  |  |  |
| --- | --- | --- |
| **TP Id** | TP/oneM2M/CSE/SUB/NTF/008 | |
| **Test objective** | Check that the IUT retargets the notification to the AE according to pointOfAccess in the <AE> resource and forward the response back to the CSE. | |
| **Reference** | TS-0001 [1], clauses 9.6.5 and 9.3.2.3.1, TS-0004 [2], clause 7.3.3.9 | |
| **Config Id** | CF02 | |
| **Parent release** | Release 1 | |
| **PICS Selection** | PICS\_CSE | |
| **Initial conditions** | **with {**  the IUT **being** in the "initial state" **and**  the IUT **having** received a valid NOTIFY from CSE **and**  The IUT **having** sent the NOTIFY to the AE  **}** | |
| **Expected behaviour** | **Test events** | **Direction** |
|  | **when {**  the IUT **receives** a valid NOTIFY RESPONSE from the AE **}** | IUT 🡨 AE |
|  | **then {**  the IUT **sends** the valid NOTIFY RESPONSE to the CSE  **}** | IUT 🡪 CSE |

#### 7.2.2.5 Security(SEC)

##### 7.2.2.5.1 CREATE Operation

TP/oneM2M/CSE/SEC/ACP/CRE/001

|  |  |  |  |
| --- | --- | --- | --- |
| **TP Id** | | TP/oneM2M/CSE/SEC/ACP/CRE/001 | |
| **Test objective** | | Check that the IUT accepts the creation of a accessControlPolicy resource with privileges attribute having multiple access control rules | |
| **Reference** | | TS-0001 [1], clauses 9.6.2-2 and 10.2.21 | |
| **Config Id** | | CF01 | |
| **Parent release** | | Release 1 | |
| **PICS Selection** | | PICS\_CSE | |
| **Initial conditions** | **with {**  the IUT **being** in the "initial state"  **and** the IUT **having registered** the AE  **and** the AE **having** privileges to perform CREATE operation on the resource TARGET\_RESOURCE\_ADDRESS  **}** | | |
| **Expected behaviour** | **Test events** | | **Direction** |
| **when {**  the IUT **receives** a valid CREATE Request **containing**  To **set to** TARGET\_RESOURCE\_ADDRESS **and**  From **set to** AE\_ID **and**  Content **containing**  accessControlPolicy resource **containing**  privileges attribute **containing**  accessControlRule attribute **containing**  ACCESS\_CONTROL\_RULE\_1 **and**  ACCESS\_CONTROL\_RULE\_2  **}** | | IUT 🡨 AE |
| **then {**  the IUT **creates** the accessControlPolicy resource  **and** the IUT **sends** a valid Response **containing**  Response Status Code **set to** 2001 (CREATED)  **}** | | IUT 🡪 AE |

TP/oneM2M/CSE/SEC/ACP/CRE/002

|  |  |  |  |
| --- | --- | --- | --- |
| **TP Id** | | TP/oneM2M/CSE/SEC/ACP/CRE/002 | |
| **Test objective** | | Check that the IUT accepts the creation of a accessControlPolicy resource with selfPrivileges attribute having multiple access control rules | |
| **Reference** | | TS-0001 [1], clauses 9.6.2-2 and 10.2.21 | |
| **Config Id** | | CF01 | |
| **Parent release** | | Release 1 | |
| **PICS Selection** | | PICS\_CSE | |
| **Initial conditions** | **with {**  the IUT **being** in the "initial state"  **and** the IUT **having registered** the AE  **and** the AE **having** privileges to perform CREATE operation on the resource TARGET\_RESOURCE\_ADDRESS  } | | |
| **Expected behaviour** | **Test events** | | **Direction** |
| **when {**  the IUT **receives** a valid CREATE Request **containing**  To **set to** TARGET\_RESOURCE\_ADDRESS **and**  From **set to** AE\_ID **and**  Content **containing**  accessControlPolicy resource **containing**  selfPrivileges attribute **containing**  accessControlRule attribute **containing**  ACCESS\_CONTROL\_RULE\_1 **and**  ACCESS\_CONTROL\_RULE\_2  } | | IUT 🡨 AE |
| **then {**  the IUT **creates** the accessControlPolicy resource  **and** the IUT **sends** a valid Response **containing**  Response Status Code **set to** 2001 (CREATED)  **}** | | IUT 🡪 AE |

TP/oneM2M/CSE/SEC/ACP/CRE/003

|  |  |  |  |
| --- | --- | --- | --- |
| **TP Id** | | TP/oneM2M/CSE/SEC/ACP/CRE/003 | |
| **Test objective** | | Check that the IUT accepts the creation of a accessControlPolicy resource with privileges attribute having empty rules | |
| **Reference** | | TS-0001 [1], clauses 9.6.2 and 10.2.21 | |
| **Config Id** | | CF01 | |
| **Parent release** | | Release 1 | |
| **PICS Selection** | | PICS\_CSE | |
| **Initial conditions** | **with {**  the IUT **being** in the "initial state"  **and** the IUT **having registered** the AE  **and** the AE **having** privileges to perform CREATE operation on the resource TARGET\_RESOURCE\_ADDRESS  **}** | | |
| **Expected behaviour** | **Test events** | | **Direction** |
| **when {**  the IUT **receives** a valid CREATE Request **containing**  To **set to** TARGET\_RESOURCE\_ADDRESS **and**  From **set to** AE\_ID **and**  Content **containing**  accessControlPolicy resource **containing**  privileges attribute **set to** empty list  **}** | | IUT 🡨 AE |
| **then {**  the IUT **creates** the accessControlPolicy resource  **and** the IUT **sends** a valid Response **containing**  Response Status Code **set to** 2001 (CREATED)  **}** | | IUT 🡪 AE |

TP/oneM2M/CSE/SEC/ACP/CRE/004

|  |  |  |  |
| --- | --- | --- | --- |
| **TP Id** | | TP/oneM2M/CSE/SEC/ACP/CRE/004 | |
| **Test objective** | | Check that the IUT responds with an error when the creation of a accessControlPolicy resource with selfPrivileges attribute having empty rules | |
| **Reference** | | TS-0001 [1], clauses 9.6.2 and 10.2.21 | |
| **Config Id** | | CF01 | |
| **Parent release** | | Release 1 | |
| **PICS Selection** | | PICS\_CSE | |
| **Initial conditions** | **with {**  the IUT **being** in the "initial state"  **and** the IUT **having registered** the AE  **and** the AE **having** privileges to perform CREATE operation on the resource TARGET\_RESOURCE\_ADDRESS  **}** | | |
| **Expected behaviour** | **Test events** | | **Direction** |
| **when {**  the IUT **receives** a valid CREATE Request **containing**  To **set to** TARGET\_RESOURCE\_ADDRESS **and**  From **set to** AE\_ID **and**  Content **containing**  accessControlPolicy resource **containing**  selfPrivileges attribute **set to** empty list  **}** | | IUT 🡨 AE |
| **then {**  the IUT **does not create** the accessControlPolicy resource  **and** the IUT **sends** a valid Response **containing**  Response Status Code **set to** 4000 (BAD\_REQUEST)  **}** | | IUT 🡪 AE |

##### 7.2.2.5.2 UPDATE Operation

TP/oneM2M/CSE/SEC/ACP/UPD/001

|  |  |  |
| --- | --- | --- |
| **TP Id** | TP/oneM2M/CSE/SEC/ACP/UPD/001 | |
| **Test objective** | Check that the IUT updates successfully the accessControlPolicyIDs attribute of the <AE> resource when the AE has privileges for UPDATE operation in any selfPrivileges of the *<accessControlPolicy>* resources which this attribute originally indicates. | |
| **Reference** | TS-0001 [1], clause 9.6.1.3.2-1 | |
| **Config Id** | CF01 | |
| **Parent release** | Release 1 | |
| **PICS Selection** | PICS\_CSE | |
| **Initial conditions** | **with {**  the IUT **being** in the "initial state"  **and** the IUT **having registered** the AE **containing**  accessControlPolicyID attribute **set to** ACP\_ID\_1  **and** the AE **having** privileges to perform UPDATE operation on the AE\_RESOURCE\_ADDRESS in selfPrivileges  } | |
| **Expected behaviour** | **Test events** | **Direction** |
| **when {**  the IUT **receives** a valid UPDATE Request **containing**  To **set to** AE\_RESOURCE\_ADDRESS **and**  From **set to** AE\_ID  Content **containing**  AE resource **containing**  accessControlPolicyIDs attribute **set to** ACP\_ID\_2  } | IUT 🡨 AE |
| **then {**  the IUT **updates** the accessControlPolicyIDs attribute of AE resource  **and** the IUT **sends** a valid Response **containing**  Response Status Code **set to** 2004 (UPDATED) **and**  Content **containing**  AEresource **containing**  accessControlPolicyID attribute **set to** ACP\_ID\_2  **}** | IUT 🡪 AE |

TP/oneM2M/CSE/SEC/ACP/UPD/002

|  |  |  |
| --- | --- | --- |
| **TP Id** | TP/oneM2M/CSE/SEC/ACP/UPD/002 | |
| **Test objective** | Check that the IUT responds with an error when the AE tries an UPDATE operation on the accessControlPolicyIDs attribute without having privileges for such operation in any selfPrivileges of the *<accessControlPolicy>* resources which this attribute originally indicates. | |
| **Reference** | TS-0001 [1], clause 9.6.1.3.2-1 | |
| **Config Id** | CF01 | |
| **Parent release** | Release 1 | |
| **PICS Selection** | PICS\_CSE | |
| **Initial conditions** | **with {**  the IUT **being** in the "initial state"  **and** the IUT **having registered** the AE **containing**  accessControlPolicyID attribute **set to** ACP\_ID\_1  **and** the AE **having no** privileges to perform UPDATE operation on the AE\_RESOURCE\_ADDRESS in selfPrivileges  } | |
| **Expected behaviour** | **Test events** | **Direction** |
| **when {**  the IUT **receives** a valid UPDATE Request **containing**  To **set to** AE\_RESOURCE\_ADDRESS **and**  From **set to** AE\_ID  Content **containing**  AE resource **containing**  accessControlPolicyID attribute **set to** ACP\_ID\_2  } | IUT 🡨 AE |
| **then {**  the IUT **does not** **update** the accessControlPolicyIDs attribute of AE resource  **and** the IUT **sends** a valid Response **containing**  Response Status Code **set to** 4103 (ACCESS\_DENIED)  } | IUT 🡪 AE |

##### 7.2.2.5.3 BASIC OPERATION

TP/oneM2M/CSE/SEC/ACP/001

|  |  |  |  |
| --- | --- | --- | --- |
| **TP Id** | | TP/oneM2M/CSE/SEC/ACP/001 | |
| **Test objective** | | Check that the IUT responds with an error when an ORIGINATOR tries an *OPERATION* without having privileges for performing the *OPERATION* on the TARGET\_RESOURCE\_TYPE resource. | |
| **Reference** | | TS-0001 [1], clause 9.6.1.3.2-1 | |
| **Config Id** | | CF01 | |
| **Parent release** | | Release 1 | |
| **PICS Selection** | | PICS\_CSE | |
| **Initial conditions** | **with {**  the IUT **being** in the "initial state"  **and** the IUT **having registered** the AE  **and** the ORIGINATOR **having no** privileges to perform an *OPERATION* on the resource TARGET\_RESOURCE\_ADDRESS  } | | |
| **Expected behaviour** | **Test events** | | **Direction** |
| **when {**  the IUT **receives** a valid *OPERATION* Request **containing**  To **set to** TARGET\_RESOURCE\_ADDRESS **and**  From **set to** ORIGINATOR\_ID  } | | IUT 🡨 ORIGINATOR |
| **then {**  the IUT **sends** a valid Response **containing**  Response Status Code **set to** 4103 (ACCESS\_DENIED)  } | | IUT 🡪 ORIGINATOR |

|  |  |
| --- | --- |
| **TP Id** | **OPERATION** |
| TP/oneM2M/CSE/SEC/ACP/001\_CRE | CREATE |
| TP/oneM2M/CSE/SEC/ACP/001\_RET | RETRIEVE |
| TP/oneM2M/CSE/SEC/ACP/001\_UPD | UPDATE |
| TP/oneM2M/CSE/SEC/ACP/001\_DEL | DELETE |

TP/oneM2M/CSE/SEC/ACP/002

|  |  |  |  |
| --- | --- | --- | --- |
| **TP Id** | | TP/oneM2M/CSE/SEC/ACP/014 | |
| **Test objective** | | Check that the IUT responds successfully when the AE tries an *OPERATION* on its *<AE>* resource which has multiple accessControlPolicyID attribute | |
| **Reference** | | TS-0001 [1], clauses 9.6.1.3.2-1 and 9.6.2.1-1 | |
| **Config Id** | | CF01 | |
| **Parent release** | | Release 1 | |
| **PICS Selection** | | PICS\_CSE | |
| **Initial conditions** | **with {**  the IUT **being** in the "initial state"  **and** the IUT **having registered** the AE  **and** the AE **having** a child <Container> resource **containing**  accessControlPolicyID attribute **containing**  ACP\_ID\_1 **and**  ACP\_ID\_2  **and** the AE **having** privileges to perform an *OPERATION* on itself **given by** ACP\_ID\_2 only  } | | |
| **Expected behaviour** | **Test events** | | **Direction** |
| **when {**  the IUT **receives** a valid *OPERATION* Request **containing**  To **set to** AE\_RESOURCE\_ADDRESS **and**  From **set to** AE\_ID  } | | IUT 🡨 AE |
| **then {**  the IUT **sends** a valid Response **containing**  Response Status Code **set to** *RESPONSE\_STATUS\_CODE*  } | | IUT 🡪 AE |

|  |  |  |
| --- | --- | --- |
| **TP Id** | **OPERATION** | **RESPONSE\_STATUS\_CODE** |
| TP/oneM2M/CSE/SEC/ACP/002\_CRE | CREATE | 2001 (CREATED) |
| TP/oneM2M/CSE/SEC/ACP/002\_RET | RETRIEVE | 2000 (OK) |
| TP/oneM2M/CSE/SEC/ACP/002\_UPD | UPDATE | 2004 (UPDATED) |
| TP/oneM2M/CSE/SEC/ACP/002\_DEL | DELETE | 2002 (DELETED) |

TP/oneM2M/CSE/SEC/ACP/003

|  |  |  |  |
| --- | --- | --- | --- |
| **TP Id** | | TP/oneM2M/CSE/SEC/ACP/003 | |
| **Test objective** | | Check that the IUT responds successfully when an allowed DOMAIN tries an *OPERATION* on an AE\_RESOURCE\_TYPE resource. | |
| **Reference** | | TS-0001 [1], clause 9.6.2.1 | |
| **Config Id** | | CF01 | |
| **Parent release** | | Release 1 | |
| **PICS Selection** | | PICS\_CSE | |
| **Initial conditions** | **with {**  the IUT **being** in the "initial state"  **and** the IUT **having registered** the AE  **and** the DOMAIN **having** privileges to perform an *OPERATION* on the resource AE\_RESOURCE\_ADDRESS  } | | |
| **Expected behaviour** | **Test events** | | **Direction** |
| **when {**  the IUT **receives** a valid *OPERATION* Request **containing**  To **set to** AE\_RESOURCE\_ADDRESS **and**  From **set to** DOMAIN  } | | IUT 🡨 DOMAIN |
| **then {**  the IUT **sends** a valid Response **containing**  Response Status Code **set to** *RESPONSE\_STATUS\_CODE*  **}** | | IUT 🡪 DOMAIN |

|  |  |  |
| --- | --- | --- |
| **TP Id** | **OPERATION** | **RESPONSE\_STATUS\_CODE** |
| TP/oneM2M/CSE/SEC/ACP/003\_CRE | CREATE | 2001 (CREATED) |
| TP/oneM2M/CSE/SEC/ACP/003\_RET | RETRIEVE | 2000 (OK) |
| TP/oneM2M/CSE/SEC/ACP/003\_UPD | UPDATE | 2004 (UPDATED) |
| TP/oneM2M/CSE/SEC/ACP/003\_DEL | DELETE | 2002 (DELETED) |

TP/oneM2M/CSE/SEC/ACP/004

|  |  |  |  |
| --- | --- | --- | --- |
| **TP Id** | | TP/oneM2M/CSE/SEC/ACP/004 | |
| **Test objective** | | Check that the IUT responds successfully when any ORIGINATOR tries an *OPERATION* on an AE\_RESOURCE\_TYPE resource for which all originators are allowed | |
| **Reference** | | TS-0001 [1], clause 9.6.2.1 | |
| **Config Id** | | CF01 | |
| **Parent release** | | Release 1 | |
| **PICS Selection** | | PICS\_CSE | |
| **Initial conditions** | **with {**  the IUT **being** in the "initial state"  **and** the IUT **having registered** the AE  **and** any originator (\*) **having** privileges to perform an *OPERATION* on the resource AE\_RESOURCE\_ADDRESS  } | | |
| **Expected behaviour** | **Test events** | | **Direction** |
| **when {**  the IUT **receives** a valid *OPERATION* Request **containing**  To **set to** AE\_RESOURCE\_ADDRESS **and**  From **set to** ORIGINATOR  } | | IUT 🡨 ORIGINATOR |
| **then** {  the IUT **sends** a valid Response containing  Response Status Code **set to** *RESPONSE\_STATUS\_CODE*  } | | IUT 🡪 ORIGINATOR |

|  |  |  |
| --- | --- | --- |
| **TP Id** | **OPERATION** | **RESPONSE\_STATUS\_CODE** |
| TP/oneM2M/CSE/SEC/ACP/004\_CRE | CREATE | 2001 (CREATED) |
| TP/oneM2M/CSE/SEC/ACP/004\_RET | RETRIEVE | 2000 (OK) |
| TP/oneM2M/CSE/SEC/ACP/004\_UPD | UPDATE | 2004 (UPDATED) |
| TP/oneM2M/CSE/SEC/ACP/004\_DEL | DELETE | 2002 (DELETED) |

TP/oneM2M/CSE/SEC/ACP/005

|  |  |  |  |
| --- | --- | --- | --- |
| **TP Id** | | TP/oneM2M/CSE/SEC/ACP/005 | |
| **Test objective** | | Check that the IUT responds successfully when the AE tries an *OPERATION* on a AE\_RESOURCE\_TYPE resource and that the request is within accessControlTimeWindowcontext | |
| **Reference** | | TS-0001 [1], clause 9.6.2.2-1 | |
| **Config Id** | | CF01 | |
| **Parent release** | | Release 1 | |
| **PICS Selection** | | PICS\_CSE | |
| **Initial conditions** | **with {**  the IUT **being** in the "initial state"  **and** the IUT **having registered** the AE  **and** the AE **having** privileges to perform *OPERATION* on theAE\_RESOURCE\_ADDRESS **within** TIME\_WINDOW  } | | |
| **Expected behaviour** | **Test events** | | **Direction** |
| **when {**  the IUT **receives** a valid *OPERATION* Request **containing**  To **set to** AE\_RESOURCE\_ADDRESS **and**  From **set to** AE\_ID  **within** TIME\_WINDOW  } | | IUT 🡨 AE |
| **then {**  the IUT **sends** a valid Response **containing**  Response Status Code **set to** *RESPONSE\_STATUS\_CODE*  **}** | | IUT 🡪 AE |

|  |  |  |
| --- | --- | --- |
| **TP Id** | **OPERATION** | **RESPONSE\_STATUS\_CODE** |
| TP/oneM2M/CSE/SEC/ACP/005\_CRE | CREATE | 2001 (CREATED) |
| TP/oneM2M/CSE/SEC/ACP/005\_RET | RETRIEVE | 2000 (OK) |
| TP/oneM2M/CSE/SEC/ACP/005\_UPD | UPDATE | 2004 (UPDATED) |
| TP/oneM2M/CSE/SEC/ACP/005\_DEL | DELETE | 2002 (DELETED) |

TP/oneM2M/CSE/SEC/ACP/006

|  |  |  |  |
| --- | --- | --- | --- |
| **TP Id** | | TP/oneM2M/CSE/SEC/ACP/006 | |
| **Test objective** | | Check that the IUT responds with an error when the AE tries an *OPERATION* on an AE\_RESOURCE\_TYPE resource out of accessControlTimeWindowcontext | |
| **Reference** | | TS-0001 [1], clause 9.6.2.2-1 | |
| **Config Id** | | CF01 | |
| **Parent release** | | Release 1 | |
| **PICS Selection** | | PICS\_CSE | |
| **Initial conditions** | **with {**  the IUT **being** in the "initial state"  **and** the IUT **having registered** the AE  **and** the AE **having** privileges to perform *OPERATION* on the AE\_RESOURCE\_ADDRESS **within** TIME\_WINDOW  } | | |
| **Expected behaviour** | **Test events** | | **Direction** |
| **when {**  the IUT **receives** a valid *OPERATION* Request **containing**  To **set to** AE\_RESOURCE\_ADDRESS **and**  From **set to** AE\_ID  **out of** TIME\_WINDOW  } | | IUT 🡨 AE |
| **then {**  the IUT **sends** a valid Response **containing**  Response Status Code **set to** 4103 (ACCESS\_DENIED)  **}** | | IUT 🡪 AE |

| **TP Id** | | **OPERATION** | |
| --- | --- | --- | --- |
| TP/oneM2M/CSE/SEC/ACP/006\_CRE | CREATE | |
| TP/oneM2M/CSE/SEC/ACP/006\_RET | RETRIEVE | |
| TP/oneM2M/CSE/SEC/ACP/006\_UPD | UPDATE | |
| TP/oneM2M/CSE/SEC/ACP/006\_DEL | DELETE | |

TP/oneM2M/CSE/SEC/ACP/007

|  |  |  |  |
| --- | --- | --- | --- |
| **TP Id** | | TP/oneM2M/CSE/SEC/ACP/007 | |
| **Test objective** | | Check that the IUT responds successfully when the AE tries an *OPERATION* on an AE\_RESOURCE\_TYPE resource and that the request is within accessControlLocationRegioncontext | |
| **Reference** | | TS-0001 [1], clause 9.6.2.2-1 | |
| **Config Id** | | CF01 | |
| **Parent release** | | Release 1 | |
| **PICS Selection** | | PICS\_CSE | |
| **Initial conditions** | **with {**  the IUT **being** in the "initial state"  **and** the IUT **having registered** the AE **containing**  a child locationPolicy resource **containing**  locationContainerID attribute **set to** CONTAINER\_ID  **and** a child container resource **containing**  locationID attribute **set to** LOCATION\_POLICY\_ID **and**  contentInstance resource **containing**  content attribute **set to** LOCATION  **and** the AE **having** privileges to perform *OPERATION* on the AE\_RESOURCE\_ADDRESS **within** LOCATION\_RESTRICTION  } | | |
| **Expected behaviour** | **Test events** | | **Direction** |
| **when {**  the IUT **receives** a valid *OPERATION* **containing**  To **set to** AE\_RESOURCE\_ADDRESS **and**  From **set to** AE\_ID  **and** LOCATION **within** LOCATION\_RESTRICTION  } | | IUT 🡨 AE |
| **then {**  the IUT **sends** a valid Response **containing**  Response Status Code **set to** *RESPONSE\_STATUS\_CODE*  **}** | | IUT 🡪 AE |

|  |  |  |
| --- | --- | --- |
| **TP Id** | **OPERATION** | **RESPONSE\_STATUS\_CODE** |
| TP/oneM2M/CSE/SEC/ACP/007\_CRE | CREATE | 2001 (CREATED) |
| TP/oneM2M/CSE/SEC/ACP/007\_RET | RETRIEVE | 2000 (OK) |
| TP/oneM2M/CSE/SEC/ACP/007\_UPD | UPDATE | 2004 (UPDATED) |
| TP/oneM2M/CSE/SEC/ACP/007\_DEL | DELETE | 2002 (DELETED) |

TP/oneM2M/CSE/SEC/ACP/008

|  |  |  |  |
| --- | --- | --- | --- |
| **TP Id** | | TP/oneM2M/CSE/SEC/ACP/008 | |
| **Test objective** | | Check that the IUT responds with an error when the AE tries an *OPERATION* on an AE\_RESOURCE\_TYPE resource out of accessControlLocationRegioncontext | |
| **Reference** | | TS-0001 [1], clause 9.6.2.2-1 | |
| **Config Id** | | CF01 | |
| **Parent release** | | Release 1 | |
| **PICS Selection** | | PICS\_CSE | |
| **Initial conditions** | **with {**  the IUT **being** in the "initial state"  **and** the IUT **having registered** the AE  **and** the AE **having** privileges to perform *OPERATION* on the AE\_RESOURCE\_ADDRESS **within** LOCATION\_RESTRICTION  } | | |
| **Expected behaviour** | **Test events** | | **Direction** |
| **when {**  the IUT **receives** a valid *OPERATION* Request **containing**  To **set to** AE\_RESOURCE\_ADDRESS **and**  From **set to** AE\_ID  **out** **of** LOCATION\_RESTRICTION  } | | IUT 🡨 AE |
| **then {**  the IUT **sends** a valid Response **containing**  Response Status Code **set to** 4103 (ACCESS\_DENIED)  **}** | | IUT 🡪 AE |

|  |  |
| --- | --- |
| **TP Id** | **OPERATION** |
| TP/oneM2M/CSE/SEC/ACP/008\_CRE | CREATE |
| TP/oneM2M/CSE/SEC/ACP/008\_RET | RETRIEVE |
| TP/oneM2M/CSE/SEC/ACP/008\_UPD | UPDATE |
| TP/oneM2M/CSE/SEC/ACP/008\_DEL | DELETE |

TP/oneM2M/CSE/SEC/ACP/009

|  |  |  |  |
| --- | --- | --- | --- |
| **TP Id** | | TP/oneM2M/CSE/SEC/ACP/009 | |
| **Test objective** | | Check that the IUT responds successfully when the AE tries an *OPERATION* on a TARGET\_RESOURCE\_TYPE resource and that the request is within accessControlIpAddressescontext | |
| **Reference** | | TS-0001 [1], clause 9.6.2.2-1 | |
| **Config Id** | | CF01 | |
| **Parent release** | | Release 1 | |
| **PICS Selection** | | PICS\_CSE | |
| **Initial conditions** | **with {**  the IUT **being** in the "initial state"  **and** the IUT **having registered** the AE  **and** the AE **having** privileges to perform *OPERATION* on the AE\_RESOURCE\_ADDRESS **within** IP\_ADDRESS\_RESTRICTION  } | | |
| **Expected behaviour** | **Test events** | | **Direction** |
| **when {**  the IUT **receives** a valid *OPERATION* Request **containing**  To **set to** AE\_RESOURCE\_ADDRESS **and**  From **set to** AE\_ID  **and** AE\_IP\_ADDRESS **within** IP\_ADDRESS\_RESTRICTION  } | | IUT 🡨 AE |
| **then {**  the IUT **sends** a valid Response **containing**  Response Status Code **set to** *RESPONSE\_STATUS\_CODE*  **}** | | IUT 🡪 AE |

|  |  |  |
| --- | --- | --- |
| **TP Id** | **OPERATION** | **RESPONSE\_STATUS\_CODE** |
| TP/oneM2M/CSE/SEC/ACP/009\_CRE | CREATE | 2001 (CREATED) |
| TP/oneM2M/CSE/SEC/ACP/009\_RET | RETRIEVE | 2000 (OK) |
| TP/oneM2M/CSE/SEC/ACP/009\_UPD | UPDATE | 2004 (UPDATED) |
| TP/oneM2M/CSE/SEC/ACP/009\_DEL | DELETE | 2002 (DELETED) |

TP/oneM2M/CSE/SEC/ACP/010

|  |  |  |  |
| --- | --- | --- | --- |
| **TP Id** | | TP/oneM2M/CSE/SEC/ACP/010 | |
| **Test objective** | | Check that the IUT responds with an error when the AE tries an *OPERATION* on an AE\_RESOURCE\_TYPE resource out of accessControlIpAddressescontext | |
| **Reference** | | TS-0001 [1], clause 9.6.2.2-1 | |
| **Config Id** | | CF01 | |
| **Parent release** | | Release 1 | |
| **PICS Selection** | | PICS\_CSE | |
| **Initial conditions** | **with {**  the IUT **being** in the "initial state"  **and** the IUT **having registered** the AE  **and** the AE **having** privileges to perform *OPERATION* on the AE\_RESOURCE\_ADDRESS **within** IP\_ADDRESS\_RESTRICTION  } | | |
| **Expected behaviour** | **Test events** | | **Direction** |
| **when {**  the IUT **receives** a valid *OPERATION* Request **containing**  To **set to** AE\_RESOURCE\_ADDRESS **and**  From **set to** AE\_ID  **and** AE\_IP\_ADDRESS **out of** IP\_ADDRESS\_RESTRICTION  } | | IUT 🡨 AE |
| **then {**  the IUT **sends** a valid Response **containing**  Response Status Code **set to** 4103 (ACCESS\_DENIED)  } | | IUT 🡪 AE |

|  |  |
| --- | --- |
| **TP Id** | **OPERATION** |
| TP/oneM2M/CSE/SEC/ACP/010\_CRE | CREATE |
| TP/oneM2M/CSE/SEC/ACP/010\_RET | RETRIEVE |
| TP/oneM2M/CSE/SEC/ACP/010\_UPD | UPDATE |
| TP/oneM2M/CSE/SEC/ACP/010\_DEL | DELETE |

TP/oneM2M/CSE/SEC/ACP/011

|  |  |  |  |
| --- | --- | --- | --- |
| **TP Id** | | TP/oneM2M/CSE/SEC/ACP/011 | |
| **Test objective** | | Check that the IUT responds successfully when the AE tries an *OPERATION* on its child *<container>* resource whose accessControlPolicyID attribute is not set and AE has privileges for such *OPERATION* on its associated accessControlPolicy resource | |
| **Reference** | | TS-0001 [1], clause 9.6.1.3.2-1 | |
| **Config Id** | | CF01 | |
| **Parent release** | | Release 1 | |
| **PICS Selection** | | PICS\_CSE | |
| **Initial conditions** | **with {**  the IUT **being** in the "initial state"  **and** the IUT **having registered** the AE  **and** the AE **having** a child <Container> resource **containing**  **no** accessControlPolicyID attribute  **and** the AE **having** privileges to perform an *OPERATION* on the resource CONTAINER\_RESOURCE\_ADDRESS  } | | |
| **Expected behaviour** | **Test events** | | **Direction** |
| **when {**  the IUT **receives** a valid *OPERATION* Request **containing**  To **set to** CONTAINER\_RESOURCE\_ADDRESS **and**  From **set to** AE\_ID  } | | IUT 🡨 AE |
| **then {**  the IUT **sends** a valid Response **containing**  Response Status Code **set to** *RESPONSE\_STATUS\_CODE*  } | | IUT 🡪 AE |

|  |  |  |
| --- | --- | --- |
| **TP Id** | **OPERATION** | **RESPONSE\_STATUS\_CODE** |
| TP/oneM2M/CSE/SEC/ACP/011\_CRE | CREATE | 2001 (CREATED) |
| TP/oneM2M/CSE/SEC/ACP/011\_RET | RETRIEVE | 2000 (OK) |
| TP/oneM2M/CSE/SEC/ACP/011\_UPD | UPDATE | 2004 (UPDATED) |
| TP/oneM2M/CSE/SEC/ACP/011\_DEL | DELETE | 2002 (DELETED) |

TP/oneM2M/CSE/SEC/ACP/012

|  |  |  |  |
| --- | --- | --- | --- |
| **TP Id** | | TP/oneM2M/CSE/SEC/ACP/012 | |
| **Test objective** | | Check that the IUT responds with an error when an ORIGINATOR tries an *OPERATION* on a *<Container>* resource with no accessControlPolicyID associated and such ORIGINATOR having no privileges for performing the *OPERATION* on the <Container> resource | |
| **Reference** | | TS-0001 [1], clause 9.6.1.3.2-1 | |
| **Config Id** | | CF01 | |
| **Parent release** | | Release 1 | |
| **PICS Selection** | | PICS\_CSE, PICS\_ACP\_SUPPORT | |
| **Initial conditions** | **with {**  the IUT **being** in the "initial state"  **and** the IUT **having registered** the AE  **and** the AE **having** a child <Container> resource **containing**  **no** accessControlPolicyID attribute  **and** the ORIGINATOR **having no** privileges to perform an *OPERATION* on the <Container> resource  } | | |
| **Expected behaviour** | **Test events** | | **Direction** |
| **when {**  the IUT **receives** a valid *OPERATION* Request **containing**  To **set to** CONTAINER\_RESOURCE\_ADDRESS **and**  From **set to** ORIGINATOR\_ID  } | | IUT 🡨 ORIGINATOR |
| **then {**  the IUT **sends** a valid Response **containing**  Response Status Code **set to** 4103 (ACCESS\_DENIED)  } | | IUT 🡪 ORIGINATOR |

| **TP Id** | **OPERATION** |
| --- | --- |
| TP/oneM2M/CSE/SEC/ACP/012\_CRE | CREATE |
| TP/oneM2M/CSE/SEC/ACP/012\_RET | RETRIEVE |
| TP/oneM2M/CSE/SEC/ACP/012\_UPD | UPDATE |
| TP/oneM2M/CSE/SEC/ACP/012\_DEL | DELETE |

#### 7.2.2.6 Group Management (GMG)

##### 7.2.2.6.1 CREATE Operation

TP/oneM2M/CSE/GMG/CRE/001

|  |  |  |  |
| --- | --- | --- | --- |
| **TP Id** | | TP/oneM2M/CSE/GMG/CRE/001 | |
| **Test objective** | | Check that the IUT rejects the creation of the group resource when member ID exceed max number of members | |
| **Reference** | | TS-0001 [1], clause 10.2.7.2, TS-0004 [2], clause 7.3.13 | |
| **Parent Release** | | Release 1 | |
| **Config Id** | | CF01 | |
| **PICS Selection** | | PICS\_CSE | |
| **Initial conditions** | **with {**  the IUT **being** in the "initial state"  **and** the IUT **having** a resource PARENT\_RESOURCE\_ADDRESS**allowing**  the AE to perform CREATE operation  **}** | | |
| **Expected behaviour** | **Test events** | | **Direction** |
| **when {**  the IUT **receives** a valid CREATE Request **from** AE **containing**  To **set to** PARENT\_RESOURCE\_ADDRESS**and**  Resource Type **set to** 9 (group) **and**  From **set to** AE-ID **and**  Content **containing**  group resource **containing**  memberIDs attribute **set to** LIST\_OF\_MEMBER\_RESOURCE\_IDS **and**  maxNrOfMembers attribute **set to** MAX\_NR\_MEMBERS less than the number of memerIDs set in memberIDs attribute  **}** | | IUT 🡨 AE |
| **then {**  the IUT **does not create** the group resource  **and** the IUT **sends** a valid Response **containing**  Response Status Code **set to** 6010 (MAX\_NUMBER\_OF\_MEMBER\_EXCEEDED)  **}** | | IUT 🡪 AE |

TP/oneM2M/CSE/GMG/CRE/002

|  |  |  |  |
| --- | --- | --- | --- |
| **TP Id** | | TP/oneM2M/CSE/GMG/CRE/002 | |
| **Test objective** | | Check that the IUT rejects the creation of the group resource when the memberType cannot be retrieved due to lack of privilege. | |
| **Reference** | | TS-0001 [1], clause 10.2.7.2, TS-0004 [2], clause 7.3.13 | |
| **Parent Release** | | Release 1 | |
| **Config Id** | | CF01 | |
| **PICS Selection** | | PICS\_CSE | |
| **Initial conditions** | **with {**  the IUT **being** in the "initial state"  **and** the IUT **having** a resource PARENT\_RESOURCE\_ADDRESS**allowing**  the AE to perform CREATE operation  **and** the sub-group members **being** in the "inital state"  **and** the AE **not** **having** privileges to perform RETRIEVE operation on the sub-group members  **}** | | |
| **Expected behaviour** | **Test events** | | **Direction** |
| **when {**  the IUT **receives** a valid CREATE Request **from** AE **containing**  To **set to** PARENT\_RESOURCE\_ADDRESS**and**  Resource Type **set to** RESOURCE\_TYPE **and**  From **set to** AE-ID **and**  Content **containing**  group resource representation **containing**  memberIDs attribute **containing** sub-group members **}** | | IUT 🡨 AE |
| **then {**  the IUT **does not create** the group resource  **and** the IUT **sends** a valid Response **containing**  Response Status Code **set to** 5105 (NO\_PRIVILEGE)  **}** | | IUT 🡪 AE |

TP/oneM2M/CSE/GMG/CRE/003

|  |  |  |  |
| --- | --- | --- | --- |
| **TP Id** | | TP/oneM2M/CSE/GMG/CRE/003 | |
| **Test objective** | | Check that the IUT detects the presence of duplicate member IDs during the creation of the *<group>* resource and removes the duplicate member IDs prior to creation of the <group> resource | |
| **Reference** | | TS-0001 [1], clause 10.2.7.2 | |
| **Parent Release** | | Release 1 | |
| **Config Id** | | CF01 | |
| **PICS Selection** | | PICS\_CSE | |
| **Initial conditions** | **with {**  the IUT **being** in the "initial state"  **and** the IUT **having registered** the AE  **and** the IUT **having** created a resource at TARGET\_RESOURCE\_ADDRESS **allowing**  a child resource type group  **and** the AE **having** privileges to perform CREATE operation on the TARGET\_RESOURCE\_ADDRESS  **and** the IUT **having** created a resource at MEMBER\_RESOURCE\_ADDRESS  **}** | | |
| **Expected behaviour** | **Test events** | | **Direction** |
| **when {**  the IUT **receives** an valid CREATE Request **from** AE **containing**  To **set to** TARGET\_RESOURCE\_ADDRESS**and**  Resource Type **set to** 9(group) **and**  From **set to** AE-ID **and**  Content **containing**  group resource **containing**  memberIDs attribute **set to**  MEMBER\_RESOURCE\_ADDRESS,  MEMBER\_RESOURCE\_ADDRESS  **}** | | IUT 🡨 AE |
| **then {**  the IUT **creates** the group resource  **and** the IUT **sends** a valid Response **containing**  Response Status Code **set to** 2001 (CREATED)  Content **containing**  group resource **containing**  memberIDs attribute **set to**  MEMBER\_RESOURCE\_ADDRESS  **}** | | IUT 🡪 AE |
| NOTE: TARGET\_RESOURCE\_ADDRESS : <CSEBase>, <remoteCSE>, <AE>  MEMBER\_RESOURCE\_ADDRESS : any oneM2M resource type | | | |

TP/oneM2M/CSE/GMG/CRE/004

|  |  |  |  |
| --- | --- | --- | --- |
| **TP Id** | | TP/oneM2M/CSE/GMG/CRE/004 | |
| **Test objective** | | Check that the IUT validates the resource type during the creation of the *<group>* resource when memberType attribute is not 'mixed' | |
| **Reference** | | TS-0001 [1], clause 10.2.7.2, TS-0004 [2], clause 7.4.14.2.1 | |
| **Parent Release** | | Release 1 | |
| **Config Id** | | CF01 | |
| **PICS Selection** | | PICS\_CSE | |
| **Initial conditions** | **with {**  the IUT **being** in the "initial state"  **and** the IUT **having registered** the AE  **and** the IUT **having** a resource at TARGET\_RESOURCE\_ADDRESS**allowing**  a child resource type group  **and** the AE **having** privileges to perform CREATE operation on the TARGET\_RESOURCE\_ADDRESS  **and** the IUT **having** a resource at MEMBER\_RESOURCE\_ADDRESS  **having** resourceType attribute RESOURCE\_TYPE  **}** | | |
| **Expected behaviour** | **Test events** | | **Direction** |
| **when {**  the IUT **receives** a valid CREATE Request **from** AE **containing**  To **set to** TARGET\_RESOURCE\_ADDRESS**and**  Resource Type **set to** 9 (group) **and**  From **set to** AE-ID **and**  Content **containing**  group resource **containing**  memberIDs attribute **set to** MEMBER\_RESOURCE\_ADDRESS  **and**  memberType attribute **set to** RESOURCE\_TYPE  **}** | | IUT 🡨 AE |
| **then {**  the IUT **creates** the group resource  **and** the IUT **sends** a valid Response **containing**  Response Status Code **set to** 2001 (CREATED)  Content **containing**  group resource **containing**  memberTypeValidated attribute **set to** TRUE  **}** | | IUT 🡪 AE |
| NOTE: TARGET\_RESOURCE\_ADDRESS : <CSEBase>, <remoteCSE>, <AE>  MEMBER\_RESOURCE\_ADDRESS : any oneM2M resource type | | | |

TP/oneM2M/CSE/GMG/CRE/005

|  |  |  |  |
| --- | --- | --- | --- |
| **TP Id** | | TP/oneM2M/CSE/GMG/CRE/005 | |
| **Test objective** | | Check that the IUT handles unsuccessful validation of the resource type during the creation of the *<group>* resource when memberType attribute is not 'mixed' and the consistencyStrategy attribute isSET\_MIXED. | |
| **Reference** | | TS-0001 [1], clause 10.2.7.2, TS-0004 [2], clause 7.4.14.2.1 | |
| **Parent Release** | | Release 1 | |
| **Config Id** | | CF01 | |
| **PICS Selection** | | PICS\_CSE | |
| **Initial conditions** | **with {**  the IUT **being** in the "initial state"  **and** the IUT **having registered** the AE  **and** the IUT **having** a resource at TARGET\_RESOURCE\_ADDRESS**allowing**  a child resource type group  **and** the AE **having** privileges to perform CREATE operation on the TARGET\_RESOURCE\_ADDRESS  **and** the IUT **having** a resource at MEMBER\_RESOURCE\_ADDRESS **having** resourceType attribute RESOURCE\_TYPE\_1  **}** | | |
| **Expected behaviour** | **Test events** | | **Direction** |
| **when {**  the IUT **receives** a valid CREATE Request **from** AE **containing**  To **set to** TARGET\_RESOURCE\_ADDRESS**and**  Resource Type **set to** 9 (group) **and**  From **set to** AE-ID **and**  Content **containing**  group resource **containing**  memberIDs attribute **set to**  MEMBER\_RESOURCE\_ADDRESS  **and** memberType attribute **set to** RESOURCE\_TYPE\_2  **and** consistencyStrategy attribute **set to** SET\_MIXED  **}** | | IUT 🡨 AE |
| **then {**  the IUT **creates** the group resource  **and** the IUT **sends** a valid Response **containing**  Response Status Code **set to** 2001 (CREATED) **and**  Content **containing**  group resource **containing**  memberTypeValidated attribute **set to** TRUE **and**  memberType attribute **set to** MIXED  **}** | | IUT 🡪 AE |
| NOTE: TARGET\_RESOURCE\_ADDRESS : <CSEBase>, <remoteCSE>, <AE>  MEMBER\_RESOURCE\_ADDRESS : any oneM2M resource type | | | |

TP/oneM2M/CSE/GMG/CRE/006

|  |  |  |  |
| --- | --- | --- | --- |
| **TP Id** | | TP/oneM2M/CSE/GMG/CRE/006 | |
| **Test objective** | | Check that the IUT handles unsuccessful validation of the resource type during the creation of the *<group>* resource when memberType attribute is not 'mixed' and the consistencyStrategy attribute isABANDON\_MEMBER,. | |
| **Reference** | | TS-0001 [1], clause 10.2.7.2, TS-0004 [2], clause 7.4.14.2.1 | |
| **Parent Release** | | Release 1 | |
| **Config Id** | | CF01 | |
| **PICS Selection** | | PICS\_CSE | |
| **Initial conditions** | **with {**  the IUT **being** in the "initial state"  **and** the IUT **having registered** the AE  **and** the IUT **having** a resource at TARGET\_RESOURCE\_ADDRESS**allowing**  a child resource type group  **and** the AE **having** privileges to perform CREATE operation on the TARGET\_RESOURCE\_ADDRESS  **and** the IUT **having** a resource at MEMBER\_RESOURCE\_ADDRESS\_1  **having** resourceType attribute RESOURCE\_TYPE\_1  **and** the IUT **having** a resource at MEMBER\_RESOURCE\_ADDRESS\_2  **having** resourceType attribute RESOURCE\_TYPE\_2  **}** | | |
| **Expected behaviour** | **Test events** | | **Direction** |
| **when {**  the IUT **receives** a valid CREATE Request **from** AE **containing**  To **set to** TARGET\_RESOURCE\_ADDRESS**and**  Resource Type **set to** 9 (group) **and**  From **set to** AE-ID **and**  Content **containing**  group resource **containing**  memberIDs attribute **set to**  MEMBER\_RESOURCE\_ADDRESS\_1,  MEMBER\_RESOURCE\_ADDRESS\_2 **and**  memberType attribute **set to** RESOURCE\_TYPE\_1 **and** consistencyStrategy attribute **set to** ABANDON\_MEMBER  **}** | | IUT 🡨 AE |
| **then {**  the IUT **creates** the group resource  **and** the IUT **sends** a valid Response **containing**  Response Status Code **set to** 2001 (CREATED) **and**  Content **containing**  group resource **containing**  memberTypeValidated attribute **set to** TRUE **and**  memberIDs attribute **set to**  MEMBER\_RESOURCE\_ADDRESS\_1  **}** | | IUT 🡪 AE |
| NOTE: TARGET\_RESOURCE\_ADDRESS : <CSEBase>, <remoteCSE>, <AE>  MEMBER\_RESOURCE\_ADDRESS : any oneM2M resource type | | | |

TP/oneM2M/CSE/GMG/CRE/007

|  |  |  |  |
| --- | --- | --- | --- |
| **TP Id** | | TP/oneM2M/CSE/GMG/CRE/007 | |
| **Test objective** | | Check that the IUT handles unsuccessful validation of the resource type during the creation of the group resource when memberType attribute is not 'mixed' and the consistencyStrategy attribute isABANDON\_GROUP. | |
| **Reference** | | TS-0001 [1], clause 10.2.7.2, TS-0004 [2], clause 7.4.14.2.1 | |
| **Parent Release** | | Release 1 | |
| **Config Id** | | CF01 | |
| **PICS Selection** | | PICS\_CSE | |
| **Initial conditions** | **with {**  the IUT **being** in the "initial state"  **and** the IUT **having registered** the AE  **and** the IUT **having** a resource at TARGET\_RESOURCE\_ADDRESS**allowing**  a child resource type <group>  **and** the AE **having** privileges to perform CREATE operation on the TARGET\_RESOURCE\_ADDRESS  **and** the IUT **having** a resource at MEMBER\_RESOURCE\_ADDRESS\_1 **having** resourceType attribute RESOURCE\_TYPE\_1  **and** the IUT **having** a resource at MEMBER\_RESOURCE\_ADDRESS\_2 **having** resourceType attribute RESOURCE\_TYPE\_2  **}** | | |
| **Expected behaviour** | **Test events** | | **Direction** |
| **when {**  the IUT **receives** a valid CREATE Request **from** AE **containing**  To **set to** TARGET\_RESOURCE\_ADDRESS**and**  Resource Type **set to** 9 (group) **and**  From **set to** AE-ID **and**  Content **containing**  group resource **containing**  memberIDs attribute **set to**  MEMBER\_RESOURCE\_ADDRESS\_1,  MEMBER\_RESOURCE\_ADDRESS\_2 **and**  memberType attribute **set to** RESOURCE\_TYPE\_1 **and** consistencyStrategy attribute **set to** ABANDON\_GROUP  **}** | | IUT 🡨 AE |
| **then {**  the IUT **does not create** the group resource  **and** the IUT **sends** a valid Response **containing**  Response Status Code **set to** 4110 (GROUP\_MEMBER\_TYPE\_INCONSISTENT)  **}** | | IUT 🡪 AE |
| NOTE: TARGET\_RESOURCE\_ADDRESS : <CSEBase>, <remoteCSE>, <AE>  MEMBER\_RESOURCE\_ADDRESS : any oneM2M resource type | | | |

##### 7.2.2.6.2 UPDATE Operation

TP/oneM2M/CSE/GMG/UPD/001

|  |  |  |  |
| --- | --- | --- | --- |
| **TP Id** | | TP/oneM2M/CSE/GMG/UPD/001 | |
| **Test objective** | | Check that the IUT rejects the update of the group resource when the memberType cannot be retrieved due to lack of privilege | |
| **Reference** | | TS-0001 [1], clause 10.2.7.4, TS-0004 [2], clause 7.4.14 | |
| **Parent Release** | | Release 1 | |
| **Config Id** | | CF01 | |
| **PICS Selection** | | PICS\_CSE | |
| **Initial conditions** | **with {**  the IUT **being** in the "initial state"  **and** the IUT **having** a resource PARENT\_RESOURCE\_ADDRESS**allowing**  the AE to perform UPDATE operation  **and** the sub-group members **being** in the "inital state"  **and** the AE **not** **having** privileges to perform RETRIEVE operation on the sub-group members  **}** | | |
| **Expected behaviour** | **Test events** | | **Direction** |
| **when {**  the IUT **receives** a valid UPDATE Request **from** AE **containing**  To **set to** PARENT\_RESOURCE\_ADDRESS**and**  Resource Type **set to** RESOURCE\_TYPE **and**  From **set to** AE-ID **and**  Content **containing**  group resource representation  **}** | | IUT 🡨 AE |
| **then {**  the IUT **sends** a valid Response **containing**  Response Status Code **set to** 5105 (NO\_PRIVILEGE)  **}** | | IUT 🡪 AE |

TP/oneM2M/CSE/GMG/UPD/002

|  |  |  |  |
| --- | --- | --- | --- |
| **TP Id** | | TP/oneM2M/CSE/GMG/UPD/002 | |
| **Test objective** | | Check that the IUT detects the presence of duplicate member IDs during an update of the *<group>* resource and removes the duplicate member IDs prior to updating the <group> resource. | |
| **Reference** | | TS-0001 [1], clause 10.2.7.4, TS-0004 [2], clause 7.4.14.2.4 | |
| **Parent Release** | | Release 1 | |
| **Config Id** | | CF01 | |
| **PICS Selection** | | PICS\_CSE | |
| **Initial conditions** | **with {**  the IUT **being** in the "initial state"  **and** the IUT **having registered** the AE  **and** the IUT **having** a resource at MEMBER\_RESOURCE\_ADDRESS\_1  **and** the IUT **having** created a <group> resource at GROUP\_RESOURCE\_ADDRESS  **containing**  memberIDs attribute **set to** MEMBER\_RESOURCE\_ADDRESS\_1  **and** the AE **having** privileges to perform UPDATE operation on the GROUP\_RESOURCE\_ADDRESS  **and** the IUT **having** created a resource at MEMBER\_RESOURCE\_ADDRESS\_2  **}** | | |
| **Expected behaviour** | **Test events** | | **Direction** |
| **when {**  the IUT **receives** a valid UPDATE Request **from** AE **containing**  To **set to** GROUP\_RESOURCE\_ADDRESS**and**  From **set to** AE-ID **and**  Content **containing**  group resource **containing**  memberIDs attribute **set to**  MEMBER\_RESOURCE\_ADDRESS\_2,  MEMBER\_RESOURCE\_ADDRESS\_2  **}** | | IUT 🡨 AE |
| **then {**  the IUT **updates** the group resource  **and** the IUT **sends** a valid Response **containing**  Response Status Code **set to** 2004 (UPDATED)  Content **containing**  group resource **containing**  memberIDs attribute **set to**  MEMBER\_RESOURCE\_ADDRESS\_2  **}** | | IUT 🡪 AE |

TP/oneM2M/CSE/GMG/UPD/003

|  |  |  |  |
| --- | --- | --- | --- |
| **TP Id** | | TP/oneM2M/CSE/GMG/UPD/003 | |
| **Test objective** | | Check that the IUT validates the resource type during an UPDATE of the *<group>* resource when memberType attribute is not 'mixed'. | |
| **Reference** | | TS-0001 [1], clause 10.2.7.4, TS-0004 [2], clause 7.4.14.2.4 | |
| **Parent Release** | | Release 1 | |
| **Config Id** | | CF01 | |
| **PICS Selection** | | PICS\_CSE | |
| **Initial conditions** | **with {**  the IUT **being** in the "initial state"  **and** the IUT **having registered** the AE  **and** the IUT **having** a group resource at TARGET\_RESOURCE\_ADDRESS **containing**  memberIDs attribute **set to** MEMBER\_RESOURCE\_ADDRESS\_1  memberType attribute **set to** RESOURCE\_TYPE\_1  **and** the AE **having** privileges to perform UPDATE operation on the TARGET\_RESOURCE\_ADDRESS  **and** the IUT **having** a resource at MEMBER\_RESOURCE\_ADDRESS\_1 **having** resourceType attribute RESOURCE\_TYPE\_1  **and** the IUT **having** a resource at MEMBER\_RESOURCE\_ADDRESS\_2 **having** resourceType attribute RESOURCE\_TYPE\_1  **}** | | |
| **Expected behaviour** | **Test events** | | **Direction** |
| **when {**  the IUT **receives** a valid UPDATE Request **from** AE **containing**  To **set to** TARGET\_RESOURCE\_ADDRESS**and**  From **set to** AE-ID **and**  Content **containing**  group resource **containing**  memberIDs attribute **set to**  MEMBER\_RESOURCE\_ADDRESS\_2  **}** | | IUT 🡨 AE |
| **then {**  the IUT **updates** the group resource  **and** the IUT **sends** a valid Response **containing**  Response Status Code **set to** 2004 (UPDATED)  Content **containing**  group resource **containing**  memberTypeValidated attribute **set to** TRUE  **}** | | IUT 🡪 AE |

TP/oneM2M/CSE/GMG/UPD/004

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| --- | --- | --- | --- |
| **TP Id** | | TP/oneM2M/CSE/GMG/UPD/004 | |
| **Test objective** | | Check that the IUT handles unsuccessful validation of the resource type during an UPDATE of the *<*group*>* resource when memberType attribute is not 'mixed' and the consistencyStrategy attribute isSET\_MIXED. | |
| **Reference** | | TS-0001 [1], clause 10.2.7.4, TS-0004 [2], clause 7.4.14.2.4 | |
| **Parent Release** | | Release 1 | |
| **Config Id** | | CF01 | |
| **PICS Selection** | | PICS\_CSE | |
| **Initial conditions** | **with {**  the IUT **being** in the "initial state"  **and** the IUT **having registered** the AE  **and** the IUT **having** a group resource at TARGET\_RESOURCE\_ADDRESS**containing**  memberIDs attribute **set to** MEMBER\_RESOURCE\_ADDRESS\_1 **and**  memberType attribute **set to** RESOURCE\_TYPE\_1 **and**  memberTypeValidated attribute **set to** TRUE and  consistencyStrategy attribute **set to** SET\_MIXED  **and** the AE **having** privileges to perform UPDATE operation on the TARGET\_RESOURCE\_ADDRESS  **and** the IUT **having** a resource at MEMBER\_RESOURCE\_ADDRESS\_1 **having** resourceType attribute RESOURCE\_TYPE\_1  **and** the IUT **having** a resource at MEMBER\_RESOURCE\_ADDRESS\_2 **having** resourceType attribute RESOURCE\_TYPE\_2  **}** | | |
| **Expected behaviour** | **Test events** | | **Direction** |
| **when {**  the IUT **receives** a valid UPDATE Request **from** AE **containing**  To **set to** TARGET\_RESOURCE\_ADDRESS**and**  From **set to** AE-ID **and**  Content **containing**  group resource **containing**  memberIDs attribute **set to**  MEMBER\_RESOURCE\_ADDRESS\_1,  MEMBER\_RESOURCE\_ADDRESS\_2  **}** | | IUT 🡨 AE |
| **then {**  the IUT **updates** the group resource  **and** the IUT **sends** a valid Response **containing**  Response Status Code **set to** 2004 (UPDATED) **and**  Content **containing**  group resource **containing**  memberTypeValidated attribute **set to** TRUE **and**  memberType attribute **set to** MIXED  **}** | | IUT 🡪 AE |

TP/oneM2M/CSE/GMG/UPD/005

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| --- | --- | --- | --- |
| **TP Id** | | TP/oneM2M/CSE/GMG/UPD/005 | |
| **Test objective** | | Check that the IUT handles unsuccessful validation of the resource type during an UPDATE of the group resource when memberType attribute is not 'mixed' and the consistencyStrategy attribute isABANDON\_MEMBER | |
| **Reference** | | TS-0001 [1], clause 10.2.7.4, TS-0004 [2], clause 7.4.14.2.4 | |
| **Parent Release** | | Release 1 | |
| **Config Id** | | CF01 | |
| **PICS Selection** | | PICS\_CSE | |
| **Initial conditions** | **with {**  the IUT **being** in the "initial state"  **and** the IUT **having registered** the AE  **and** the IUT **having** a group resource at TARGET\_RESOURCE\_ADDRESS**containing**  memberIDs attribute **set to** MEMBER\_RESOURCE\_ADDRESS\_1 **and**  memberType attribute **set to** RESOURCE\_TYPE\_1 **and**  memberTypeValidated attribute **set to** TRUE **and**  consistencyStrategy attribute **set to** ABANDON\_MEMBER  **and** the AE **having** privileges to perform UPDATE operation on the TARGET\_RESOURCE\_ADDRESS  **and** the IUT **having** a resource at MEMBER\_RESOURCE\_ADDRESS\_1 **having** resourceType attribute RESOURCE\_TYPE\_1  **and** the IUT **having** a resource at MEMBER\_RESOURCE\_ADDRESS\_2 **having** resourceType attribute RESOURCE\_TYPE\_2  **}** | | |
| **Expected behaviour** | **Test events** | | **Direction** |
| **when {**  the IUT **receives** a valid UPDATE Request **from** AE **containing**  To **set to** TARGET\_RESOURCE\_ADDRESS**and**  From **set to** AE-ID **and**  Content **containing**  group resource **containing**  memberIDs attribute **set to**  MEMBER\_RESOURCE\_ADDRESS\_1,  MEMBER\_RESOURCE\_ADDRESS\_2  **}** | | IUT 🡨 AE |
| **then {**  the IUT **updates** the group resource  **and** the IUT **sends** a valid Response **containing**  Response Status Code **set to** 2004 (UPDATED) **and**  Content **containing**  group resource **containing**  memberTypeValidated attribute **set to** TRUE **and**  memberIDs attribute **set to** MEMBER\_RESOURCE\_ADDRESS\_1  **}** | | IUT 🡪 AE |

TP/oneM2M/CSE/GMG/UPD/006

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| --- | --- | --- | --- |
| **TP Id** | | TP/oneM2M/CSE/GMG/UPD/006 | |
| **Test objective** | | Check that the IUT handles unsuccessful validation of the resource type during the creation of the group resource when memberType attribute is not 'mixed' and the consistencyStrategy attribute isABANDON\_GROUP. | |
| **Reference** | | TS-0001 [1], clause 10.2.7.4, TS-0004 [2], clause 7.4.14.2.4 | |
| **Parent Release** | | Release 1 | |
| **Config Id** | | CF01 | |
| **PICS Selection** | | PICS\_CSE | |
| **Initial conditions** | **with {**  the IUT **being** in the "initial state"  **and** the IUT **having registered** the AE  **and** the IUT **having** a group resource at TARGET\_RESOURCE\_ADDRESS**containing**  memberIDs attribute **set to** MEMBER\_RESOURCE\_ADDRESS\_1 **and**  memberType attribute **set to** RESOURCE\_TYPE\_1**and**  memberTypeValidated attribute **set to** TRUE **and**  consistencyStrategy attribute **set to** ABANDON\_GROUP  **and** the AE **having** privileges to perform UPDATE operation on the TARGET\_RESOURCE\_ADDRESS  **and** the IUT **having** a resource at MEMBER\_RESOURCE\_ADDRESS\_1 **having** resourceType attribute RESOURCE\_TYPE\_1  **and** the IUT **having** a resource at MEMBER\_RESOURCE\_ADDRESS\_2 **having** resourceType attribute RESOURCE\_TYPE\_2  **}** | | |
| **Expected behaviour** | **Test events** | | **Direction** |
| **when {**  the IUT **receives** a valid UPDATE Request **from** AE **containing**  To **set to** TARGET\_RESOURCE\_ADDRESS**and**  From **set to** AE-ID **and**  Content **containing**  group resource **containing**  memberIDs attribute **set to**  MEMBER\_RESOURCE\_ADDRESS\_1,  MEMBER\_RESOURCE\_ADDRESS\_2  **}** | | IUT 🡨 AE |
| **then {**  the IUT **updates** the group resource  **and** the IUT **sends** a valid Response **containing**  Response Status Code **set to** 2004 (UPDATED)  **}** | | IUT 🡪 AE |

TP/oneM2M/CSE/GMG/UPD/007

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| --- | --- | --- | --- |
| **TP Id** | | TP/oneM2M/CSE/GMG/UPD/007 | |
| **Test objective** | | Check that the IUT detects when the number of memberIDs exceeds the limitation of maxNrOfMembers | |
| **Reference** | | TS-0001 [1], clause 10.2.7.4, TS-0004 [2], clause 7.4.14.2.4 | |
| **Parent Release** | | Release 1 | |
| **Config Id** | | CF01 | |
| **PICS Selection** | | PICS\_CSE | |
| **Initial conditions** | **with {**  the IUT **being** in the "initial state"  **and** the IUT **having registered** the AE  **and** the IUT **having** a group resource at TARGET\_RESOURCE\_ADDRESS**containing**  memberIDs attribute **set to** MEMBER\_RESOURCE\_ADDRESS\_1,  MEMBER\_RESOURCE\_ADDRESS\_2 **and** maxNrOfMembers attribute **set to** 2  **and** the AE **having** privileges to perform UPDATE operation on the TARGET\_RESOURCE\_ADDRESS  **and** the IUT **having** a resource at MEMBER\_RESOURCE\_ADDRESS\_1 **having** resourceType attribute **set to** RESOURCE\_TYPE\_1  **and** the IUT **having** a resource at MEMBER\_RESOURCE\_ADDRESS\_2 **having** resourceType attribute **set to** RESOURCE\_TYPE\_1  **and** the IUT **having** a resource at MEMBER\_RESOURCE\_ADDRESS\_3 **having** resourceType attribute **set to** RESOURCE\_TYPE\_1  **}** | | |
| **Expected behaviour** | **Test events** | | **Direction** |
| **when {**  the IUT **receives** a valid UPDATE Request **from** AE **containing**  To **set to** TARGET\_RESOURCE\_ADDRESS**and**  From **set to** AE-ID **and**  Content **containing**  group resource **containing**  memberIDs attribute **set to**  MEMBER\_RESOURCE\_ADDRESS\_1,  MEMBER\_RESOURCE\_ADDRESS\_2,  MEMBER\_RESOURCE\_ADDRESS\_3  **}** | | IUT 🡨 AE |
| **then {**  the IUT **does not update** the group resource  **and** the IUT **sends** a valid Response **containing**  Response Status Code **set to** 6010 (MAX\_NUMBER\_OF\_MEMBER\_EXCEEDED)  **}** | | IUT 🡪 AE |

TP/oneM2M/CSE/GMG/UPD/008

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| --- | --- | --- | --- |
| **TP Id** | | TP/oneM2M/CSE/GMG/UPD/008 | |
| **Test objective** | | Check that the IUT detects when the value provided for maxNrOfMembers attribute is less than the value of the currentNrOfMembers attribute | |
| **Reference** | | TS-0001 [1], clause 10.2.7.4, TS-0004 [2], clause 7.4.14.2.4 | |
| **Parent Release** | | Release 1 | |
| **Config Id** | | CF01 | |
| **PICS Selection** | | PICS\_CSE | |
| **Initial conditions** | **with {**  the IUT **being** in the "initial state"  **and** the IUT **having registered** the AE  **and** the IUT **having** a group resource at TARGET\_RESOURCE\_ADDRESS**containing**  memberIDs attribute **set to** MEMBER\_RESOURCE\_ADDRESS\_1,  MEMBER\_RESOURCE\_ADDRESS\_2,  MEMBER\_RESOURCE\_ADDRESS\_3 **and** maxNrOfMembers attribute **set to** 3  **and** the AE **having** privileges to perform UPDATE operation on the TARGET\_RESOURCE\_ADDRESS  **and** the IUT **having** a resource at MEMBER\_RESOURCE\_ADDRESS\_1 **having** resourceType attribute **set to** RESOURCE\_TYPE\_1  **and** the IUT **having** a resource at MEMBER\_RESOURCE\_ADDRESS\_2 **having** resourceType attribute **set to** RESOURCE\_TYPE\_1  **and** the IUT **having** a resource at MEMBER\_RESOURCE\_ADDRESS\_3 **having** resourceType attribute **set to** RESOURCE\_TYPE\_1  **}** | | |
| **Expected behaviour** | **Test events** | | **Direction** |
| **when {**  the IUT **receives** a valid UPDATE Request **from** AE **containing**  To **set to** TARGET\_RESOURCE\_ADDRESS**and**  From **set to** AE-ID **and**  Content **containing** group resource **containing**  maxNrOfMembers attribute **set to** 2  **}** | | IUT 🡨 AE |
| **then {**  the IUT **does not update** the group resource  **and** the IUT **sends** a valid Response **containing**  Response Status Code **set to** 6010 (MAX\_NUMBER\_OF\_MEMBER\_EXCEEDED)  **}** | | IUT 🡪 AE |

TP/oneM2M/CSE/GMG/UPD/009

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| --- | --- | --- | --- |
| **TP Id** | | TP/oneM2M/CSE/GMG/UPD/009 | |
| **Test objective** | | Check that the IUT handles validation of the resource type during an UPDATE of the *<group>* resource when memberIDs contains a sub-group on a temporarily unreachable Hosting CSE | |
| **Reference** | | TS-0001 [1], clause 10.2.7.4, TS-0004 [2], clause 7.4.14.2.4 | |
| **Parent Release** | | Release 1 | |
| **Config Id** | | CF02 | |
| **PICS Selection** | | PICS\_CSE | |
| **Initial conditions** | **with {**  the IUT **being** in the "initial state"  **and** the IUT **having registered** to the remoteCSE  **and** the IUT **having registered** the AE  **and** the IUT **having** a group resource at TARGET\_RESOURCE\_ADDRESS**containing**  memberIDs attribute **set to** MEMBER\_RESOURCE\_ADDRESS\_1**and**  memberType attribute **set to** RESOURCE\_TYPE\_1**and**  memberTypeValidated attribute **set to** TRUE **and**  consistencyStrategy attribute **set to** ABANDON\_MEMBER  **and** the AE **having** privileges to perform UPDATE operation on the TARGET\_RESOURCE\_ADDRESS  **and** the IUT **having** a resource at MEMBER\_RESOURCE\_ADDRESS\_1 **having**  resourceType attribute **set to** RESOURCE\_TYPE\_1  **and** the remoteCSE **having** a group resource at MEMBER\_RESOURCE\_ADDRESS\_2  **containing**  memberType attribute **set to** RESOURCE\_TYPE\_1  **and** the remoteCSE **having** onlineStatus **set to** False  **}** | | |
| **Expected behaviour** | **Test events** | | **Direction** |
| **when {**  the IUT **receives** a valid UPDATE Request **from** AE **containing**  To **set to** TARGET\_RESOURCE\_ADDRESS**and**  From **set to** AE-ID **and**  Content **containing**  group resource **containing**  memberIDs attribute **set to**  MEMBER\_RESOURCE\_ADDRESS\_1,  MEMBER\_RESOURCE\_ADDRESS\_2  **}** | | IUT 🡨 AE |
| **then {**  the IUT **updates** the group resource  **and** the IUT **sends** a valid Response **containing**  Response Status Code **set to** 2004 (UPDATED)  Content **containing**  group resource **containing**  memberTypeValidated attribute **set to** FALSE **and**  memberIDs attribute **set to**  MEMBER\_RESOURCE\_ADDRESS\_1,  MEMBER\_RESOURCE\_ADDRESS\_2  **}** | | IUT 🡪 AE |

TP/oneM2M/CSE/GMG/UPD/010

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| --- | --- | --- | --- |
| **TP Id** | | TP/oneM2M/CSE/GMG/UPD/010 | |
| **Test objective** | | Check that the IUT handles validation of the resource type during an UPDATE of the group resource when memberIDs contains a sub-group on a previously unreachable Hosting CSE that has become reachable | |
| **Reference** | | TS-0001 [1], clause 10.2.7.4, TS-0004 [2], clause 7.4.14.2.4 | |
| **Parent Release** | | Release 1 | |
| **Config Id** | | CF01 | |
| **PICS Selection** | | PICS\_CSE | |
| **Initial conditions** | **with {**  the IUT **being** in the "initial state"  **and** the IUT **having registered** to the remoteCSE  **and** the IUT **having registered** the AE  **and** the IUT **having** a group resource at TARGET\_RESOURCE\_ADDRESS**containing**  memberIDs attribute **set to** MEMBER\_RESOURCE\_ADDRESS\_1,  MEMBER\_RESOURCE\_ADDRESS\_2 **and**  memberType attribute **set to** RESOURCE\_TYPE\_1**and**  memberTypeValidated attribute **set to** FALSE **and**  consistencyStrategy attribute **set to** ABANDON\_MEMBER  **and** the AE **having** privileges to perform UPDATE operation on the TARGET\_RESOURCE\_ADDRESS  **and** the AE **having** a subscription to TARGET\_RESOURCE\_ADDRESS  **and** the IUT **having** a resource at MEMBER\_RESOURCE\_ADDRESS\_1 **having**  resourceType attribute **set to** RESOURCE\_TYPE\_1  **and** the remoteCSE **having** a group resource at MEMBER\_RESOURCE\_ADDRESS\_2  **containing**  memberType attribute **set to** RESOURCE\_TYPE\_2  **and** the remoteCSE **having** onlineStatus **set to** False  **}** | | |
| **Expected behaviour** | **Test events** | | **Direction** |
| **when {**  the IUT **receives** a valid UPDATE Request **from** remoteCSE **containing**  To **set to** REMOTE\_CSE\_ADDRESS**and**  From **set to** CSE-ID **and**  Content **containing**  remoteCSE resource **containing**  onlineStatus attribute **set to** TRUE  **}** | | IUT 🡨 AE |
| **then {**  the IUT **sends** a NOTIFY Request **containing**  Content **containing**  group resource **containing**  memberTypeValidated attribute **set to** TRUE **and**  memberIDs attribute **set to**  MEMBER\_RESOURCE\_ADDRESS\_1,  MEMBER\_RESOURCE\_ADDRESS\_2  **}** | | IUT 🡪 AE |

##### 7.2.2.6.3 RETRIEVE Operation

TP/oneM2M/CSE/GMG/RET/001

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| --- | --- | --- | --- |
| **TP Id** | | TP/oneM2M/CSE/GMG/RET/001 | |
| **Test objective** | | Check that the IUT performs a RETRIEVE request for each resource in memberIDs with a relative address appended to fanOutPoint that includes a virtual resource. | |
| **Reference** | | TS-0001 [1], clause 10.2.7.7 | |
| **Parent Release** | | Release 1 | |
| **Config Id** | | CF01 | |
| **PICS Selection** | | PICS\_CSE | |
| **Initial conditions** | **with {**  the IUT **being** in the "initial state"  **and** the IUT **having registered** the AE  **and** the IUT **having** a group resource at TARGET\_RESOURCE\_ADDRESS **containing**  membersAccessControlPolicyIDsattribute**set to** ACP\_RESOURCE\_ID**indicating to** allow the AE privileges to perform RETRIEVE operation **and**  memberType attribute **set to** 3 (container) **and**  memberIDs attribute **set to** MEMBER\_RESOURCE\_ADDRESS1,  MEMBER\_RESOURCE\_ADDRESS2    **and** the IUT **having** a resource at MEMBER\_RESOURCE\_ADDRESS1 **containing** resourceTypeattribute **set to** container **and**  **and** the IUT **having** a resource at MEMBER\_RESOURCE\_ADDRESS2 **containing** resourceTypeattribute **set to** container **and**  **and** MEMBER\_RESOURCE\_ADDRESS1 and MEMBER\_RESOURCE\_ADDRESS2 **containing**  a child resource **containing**  resourceType attribute **set to** contentInstance  **}** | | |
| **Expected behaviour** | **Test events** | | **Direction** |
| **when {**  the IUT **receives** a valid RETRIEVE Request **from** AE **containing**  To **set to** ARGET\_RESOURCE\_ADDRESS/fopt/NAME/la**and**  From **set to** AE-ID  **}** | | IUT 🡨 AE |
| **then {**  the IUT **sends** a valid Response **containing**  Response Status Code **set to** 2000 (OK) **and**  Content **containing**  aggregatedResponse message **containing**  Response for MEMBER\_RESOURCE\_ADDRESS1/NAME/la,  Response for MEMBER\_RESOURCE\_ADDRESS2/NAME/la  **}** | | IUT 🡪 AE |

##### 7.2.2.6.4 BASIC OPERATION

TP/oneM2M/CSE/GMG/001

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| --- | --- | --- | --- |
| **TP Id** | | TP/oneM2M/CSE/GMG/001 | |
| **Test objective** | | Check that the IUT allows a <group>/fanoutPoint OPERATION when the Originator has OPERATION\_PERMISSION specified in membersAccessControlPolicyIDs attribute in the group resource | |
| **Reference** | | TS-0001 [1], clause 10.2.7.7 | |
| **Parent Release** | | Release 1 | |
| **Config Id** | | CF01 | |
| **PICS Selection** | | PICS\_CSE | |
| **Initial conditions** | **with {**  the IUT **being** in the "initial state"  **and** the IUT **having registered** the AE  **and** the IUT **having** a group resource at TARGET\_RESOURCE\_ADDRESS**containing**  membersAccessControlPolicyIDs attribute**set to**allow the AE to perform OPERATION  **and** the IUT **having** a resource at MEMBER\_RESOURCE\_ADDRESS1  **and** the IUT **having** a resource at MEMBER\_RESOURCE\_ADDRESS2  **}** | | |
| **Expected behaviour** | **Test events** | | **Direction** |
| **when {**  the IUT **receives** a valid OPERATION Request **from** AE **containing**  To **set to** TARGET\_RESOURCE\_ADDRESS/fopt**and**  From **set to** AE-ID  **}** | | IUT 🡨 AE |
| **then {**  the IUT **sends** a valid Response **containing**  Response Status Code **set to** *RESPONSE\_STATUS\_CODE* **and**  Content **containing**  aggregatedResponse **containing**  Response for MEMBER\_RESOURCE\_ADDRESS1,  Response for MEMBER\_RESOURCE\_ADDRESS2  **}** | | IUT 🡪 AE |

|  |  |  |
| --- | --- | --- |
| **TP Id** | **OPERATION** | **RESPONSE\_STATUS\_CODE** |
| TP/oneM2M/CSE/GMG/001\_CRE | CREATE | 2001 (CREATED) |
| TP/oneM2M/CSE/GMG/001\_RET | RETRIEVE | 2000 (OK) |
| TP/oneM2M/CSE/GMG/001\_UPD | UPDATE | 2004 (UPDATED) |
| TP/oneM2M/CSE/GMG/001\_DEL | DELETE | 2002 (DELETED) |

TP/oneM2M/CSE/GMG/002

|  |  |  |  |
| --- | --- | --- | --- |
| **TP Id** | | TP/oneM2M/CSE/GMG/002 | |
| **Test objective** | | Check that IUT denies a <group>/fanOutPointOPERATION when the Originator does not have OPERATION\_PERMISSION specified in membersAccessControlPolicyIDs in the group resource. | |
| **Reference** | | TS-0001 [1], clause 10.2.7.7 | |
| **Parent Release** | | Release 1 | |
| **Config Id** | | CF01 | |
| **PICS Selection** | | PICS\_CSE | |
| **Initial conditions** | **with {**  the IUT **being** in the "initial state"  **and** the IUT **having registered** the AE  **and** the IUT **having** a group resource at TARGET\_RESOURCE\_ADDRESS**containing**  membersAccessControlPolicyIDs attribute**setto** ACP\_RESOURCE\_ID**indicating to** allow the AE to perform all operations except OPERATION  **and** the IUT **having** a resource at MEMBER\_RESOURCE\_ADDRESS1  **and** the IUT **having** a resource at MEMBER\_RESOURCE\_ADDRESS2  **}** | | |
| **Expected behaviour** | **Test events** | | **Direction** |
| **when {**  the IUT **receives** a valid OPERATION Request **from** AE **containing**  To **set to** TARGET\_RESOURCE\_ADDRESS/fopt**and**  From **set to** AE-ID  **}** | | IUT 🡨 AE |
| **then {**  the IUT **sends** a valid Response **containing**  Response Status Code **set to** 4103 (ORIGINATOR\_HAS\_NO\_PRIVILEGE)  **}** | | IUT 🡪 AE |

|  |  |
| --- | --- |
| **TP Id** | **OPERATION** |
| TP/oneM2M/CSE/GMG/002\_CRE | CREATE |
| TP/oneM2M/CSE/GMG/002\_RET | RETRIEVE |
| TP/oneM2M/CSE/GMG/002\_UPD | UPDATE |
| TP/oneM2M/CSE/GMG/002\_DEL | DELETE |

TP/oneM2M/CSE/GMG/003

|  |  |  |  |
| --- | --- | --- | --- |
| **TP Id** | | TP/oneM2M/CSE/GMG/003 | |
| **Test objective** | | Check that the IUT allows a <group>/fanoutPoint OPERATION when the Originator has OPERATION\_PERMISSION specified in *accessControlPolicyIDs* and the membersAccessControlPolicyIDsis empty in the <group> resource. | |
| **Reference** | | TS-0001 [1], clause 10.2.7.7 | |
| **Parent Release** | | Release 1 | |
| **Config Id** | | CF01 | |
| **PICS Selection** | | PICS\_CSE | |
| **Initial conditions** | **with {**  the IUT **being** in the "initial state"  **and** the IUT **having registered** the AE  **and** the IUT **having** a group resource at TARGET\_RESOURCE\_ADDRESS**containing** membersAccessControlPolicyIDs attribute**set to**empty **and**  accessControlPolicyIDs attribute**set to** ACP\_RESOURCE\_ID**indicating to**allow the AE privileges to perform OPERATION  **and** the IUT **having** a resource at MEMBER\_RESOURCE\_ADDRESS1  **and** the IUT **having** a resource at MEMBER\_RESOURCE\_ADDRESS2  **}** | | |
| **Expected behaviour** | **Test events** | | **Direction** |
| **when {**  the IUT **receives** a valid OPERATION Request **from** AE **containing**  To **set to** TARGET\_RESOURCE\_ADDRESS/fopt**and**  From **set to** AE-ID  **}** | | IUT 🡨 AE |
| **then {**  the IUT **sends** a valid Response **containing**  Response Status Code **set** *RESPONSE\_STATUS\_CODE*  Content **containing**  aggregatedResponse message **containing**  Response for MEMBER\_RESOURCE\_ADDRESS1,  Response for MEMBER\_RESOURCE\_ADDRESS2  **}** | | IUT 🡪 AE |

|  |  |  |
| --- | --- | --- |
| **TP Id** | **OPERATION** | **RESPONSE\_STATUS\_CODE** |
| TP/oneM2M/CSE/GMG/003\_CRE | CREATE | 2001 (CREATED) |
| TP/oneM2M/CSE/GMG/003\_RET | RETRIEVE | 2000 (OK) |
| TP/oneM2M/CSE/GMG/003\_UPD | UPDATE | 2004 (UPDATED) |
| TP/oneM2M/CSE/GMG/003\_DEL | DELETE | 2002 (DELETED) |

TP/oneM2M/CSE/GMG/004

|  |  |  |  |
| --- | --- | --- | --- |
| **TP Id** | | TP/oneM2M/CSE/GMG/004 | |
| **Test objective** | | Check that IUT rejects a <group>/fanOutPoint OPERATION when the Originator does not have OPERATION\_PERMISSION specified in *accessControlPolicyIDs* and the membersAccessControlPolicyIDsis empty in the group resource. | |
| **Reference** | | TS-0001 [1], clause 10.2.7.7 | |
| **Parent Release** | | Release 1 | |
| **Config Id** | | CF01 | |
| **PICS Selection** | | PICS\_CSE | |
| **Initial conditions** | **with {**  the IUT **being** in the "initial state"  **and** the IUT **having registered** the AE  **and** the IUT **having** a group resource at TARGET\_RESOURCE\_ADDRESS**containing** membersAccessControlPolicyIDs attribute**set to**empty **and**  accessControlPolicyIDs attribute**set to** ACP\_RESOURCE\_ID**indicating to**allow the AE privileges to perform all operations except OPERATION  **and** the IUT **having** a resource at MEMBER\_RESOURCE\_ADDRESS1  **and** the IUT **having** a resource at MEMBER\_RESOURCE\_ADDRESS2  **}** | | |
| **Expected behaviour** | **Test events** | | **Direction** |
| **when {**  the IUT **receives** a valid OPERATION Request **from** AE **containing**  To **set to** TARGET\_RESOURCE\_ADDRESS/fopt**and**  From **set to** AE-ID  **}** | | IUT 🡨 AE |
| **then {**  the IUT **sends** a valid Response **containing**  Response Status Code **set to** 4103 (ORIGINATOR\_HAS\_NO\_PRIVILEGE)  **}** | | IUT 🡪 AE |

|  |  |
| --- | --- |
| **TP Id** | **OPERATION** |
| TP/oneM2M/CSE/GMG/004\_CRE | CREATE |
| TP/oneM2M/CSE/GMG/004\_RET | RETRIEVE |
| TP/oneM2M/CSE/GMG/004\_UPD | UPDATE |
| TP/oneM2M/CSE/GMG/004\_DEL | DELETE |

TP/oneM2M/CSE/GMG/005

|  |  |  |  |
| --- | --- | --- | --- |
| **TP Id** | | TP/oneM2M/CSE/GMG/005 | |
| **Test objective** | | Check that IUT performs an *OPERATION* request for each resource in memberIDs with no relative address appended to it. | |
| **Reference** | | TS-0001 [1], clause 10.2.7.7 | |
| **Parent Release** | | Release 1 | |
| **Config Id** | | CF01 | |
| **PICS Selection** | | PICS\_CSE | |
| **Initial conditions** | **with {**  the IUT **being** in the "initial state"  **and** the IUT **having registered** the AE  **and** the IUT **having** a <group> resource at TARGET\_RESOURCE\_ADDRESS**containing** membersAccessControlPolicyIDs attribute**set to**allow the AE privileges to perform CREATE **and**  memberType attribute **set to** AE **and**  memberIDs attribute **set to** MEMBER\_RESOURCE\_ADDRESS1,  MEMBER\_RESOURCE\_ADDRESS2  **and** the IUT **having** a resource at MEMBER\_RESOURCE\_ADDRESS1 **containing** resourceType **set to** AE  **and** the IUT **having** a resource at MEMBER\_RESOURCE\_ADDRESS2 **containing** resourceType **set to** AE  **}** | | |
| **Expected behaviour** | **Test events** | | **Direction** |
| **when {**  the IUT **receives** a valid CREATE Request **from** AE **containing**  To **set to** TARGET\_RESOURCE\_ADDRESS/fopt**and**  From **set to** AE-ID **and**  Resource Type **set to** 3 (container) **and**  Content **containing**  container resource representation  **}** | | IUT 🡨 AE |
| **then {**  the IUT **sends** a valid Response **containing**  Response Status Code **set to** *RESPONSE\_STATUS\_CODE* **and**  Content **containing**  aggregatedResponse message **containing**  Response for MEMBER\_RESOURCE\_ADDRESS1 **and**  Response for MEMBER\_RESOURCE\_ADDRESS2  **}** | | IUT 🡪 AE |

|  |  |  |
| --- | --- | --- |
| TP Id | OPERATION | RESPONSE\_STATUS\_CODE |
| TP/oneM2M/CSE/GMG/005\_CRE | CREATE | 2001 (CREATED) |
| TP/oneM2M/CSE/GMG/005\_RET | RETRIEVE | 2000 (OK) |
| TP/oneM2M/CSE/GMG/005\_UPD | UPDATE | 2004 (UPDATED) |
| TP/oneM2M/CSE/GMG/005\_DEL | DELETE | 2002 (DELETED) |

TP/oneM2M/CSE/GMG/006

|  |  |  |  |
| --- | --- | --- | --- |
| **TP Id** | | TP/oneM2M/CSE/GMG/006 | |
| **Test objective** | | Check that IUT performs an *OPERATION* request for each resource in memberIDs with a relative address appended to it. | |
| **Reference** | | TS-0001 [1], clause 10.2.7.7 | |
| **Parent Release** | | Release 1 | |
| **Config Id** | | CF01 | |
| **PICS Selection** | | PICS\_CSE | |
| **Initial conditions** | **with {**  the IUT **being** in the "initial state"  **and** the IUT **having registered** the AE  **and** the IUT **having** a <group> resource at TARGET\_RESOURCE\_ADDRESS **containing** membersAccessControlPolicyIDsattribute **set to**allow the AE privileges to  perform CREATE **and**  memberType attribute **set to** AE **and**  memberIDs attribute **set to** MEMBER\_RESOURCE\_ADDRESS1,  MEMBER\_RESOURCE\_ADDRESS2  **and** the IUT **having** a resource at MEMBER\_RESOURCE\_ADDRESS1 **containing** resourceTypeattribute **set to** AE  **and** the IUT **having** a resource at MEMBER\_RESOURCE\_ADDRESS2 **containing** resourceTypeattribute **set to** AE  **and** the IUT **having** a resource at MEMBER\_RESOURCE\_ADDRESS1 **containing** resourceTypeattribute **set to** container **and**  resourceName attribute **set to** NAME  **and** the IUT **having** a resource at MEMBER\_RESOURCE\_ADDRESS2 **containing** resourceTypeattribute **set to** container **and**  resourceName attribute **set to** NAME  **}** | | |
| **Expected behaviour** | **Test events** | | **Direction** |
| **when {**  the IUT **receives** a valid CREATE Request **from** AE **containing**  To **set to** TARGET\_RESOURCE\_ADDRESS/fopt/NAME**and**  From **set to** AE-ID **and**  Content **containing**  contentInstance resource representation  **}** | | IUT 🡨 AE |
| **then {**  the IUT **sends** a valid Response **containing**  Response Status Code **set to** *RESPONSE\_STATUS\_CODE* **and**  Content **containing**  aggregatedResponse message **containing**  Response for MEMBER\_RESOURCE\_ADDRESS1 **and**  Response for MEMBER\_RESOURCE\_ADDRESS2  **}** | | IUT 🡪 AE |

|  |  |  |
| --- | --- | --- |
| **TP Id** | **OPERATION** | **RESPONSE\_STATUS\_CODE** |
| TP/oneM2M/CSE/GMG/006\_CRE | CREATE | 2001 (CREATED) |
| TP/oneM2M/CSE/GMG/006\_RET | RETRIEVE | 2000 (OK) |
| TP/oneM2M/CSE/GMG/006\_UPD | UPDATE | 2004 (UPDATED) |
| TP/oneM2M/CSE/GMG/006\_DEL | DELETE | 2002 (DELETED) |

#### 7.2.2.7 Discovery (DIS)

##### 7.2.2.7.1 RETRIEVE Operation

TP/oneM2M/CSE/DIS/001

|  |  |  |  |
| --- | --- | --- | --- |
| **TP Id** | | TP/oneM2M/CSE/DIS/001 | |
| **Test objective** | | Check that the IUT returns successfully a list all discovered resource addresses | |
| **Reference** | | TS-0001 [1], clause 10.2.6, TS-0004 [2], clause 7.2.3.13 | |
| **Parent Release** | | Release 1 | |
| **Config Id** | | CF01 | |
| **PICS Selection** | | PICS\_CSE | |
| **Initial conditions** | **with {**  the IUT **being** in the "initial state"  **and** the IUT **having registered** the AE  **and** the IUT **having** a container resource TARGET\_RESOURCE\_ADDRESS **containing**  a child resource**and**  the AE **having** privileges to perform DISCOVERY operation  } | | |
| **Expected behaviour** | **Test events** | | **Expected behaviour** |
| **when {**  the IUT **receives** a valid RETRIEVE Request **from** AE **containing**  To **set to** TARGET\_RESOURCE\_ADDRESS**and**  From **set to** AE\_ID **and**  Filter Criteria **containing**  filterUsage **set to** 1 (Discovery Criteria)  **}** | |  |
| **then {**  the IUT **sends** a valid Response **containing**  Response Status Code **set to** 2000 (OK) **and**  Content **containing**  URIList representation  **}** | |  |

TP/oneM2M/CSE/DIS/002

|  |  |  |  |
| --- | --- | --- | --- |
| **TP Id** | | TP/oneM2M/CSE/DIS/002 | |
| **Test objective** | | Check that the IUT returns successfully appropriate list of discovered resource when the filter criteria is provided in the request | |
| **Reference** | | TS-0001 [1], clauses 8.1.3 and 10.2.6, TS-0004 [2], clause 7.2.3.13 | |
| **Parent Release** | | Release 1 | |
| **Config Id** | | CF01 | |
| **PICS Selection** | | PICS\_CSE | |
| **Initial conditions** | **with {**  the IUT **being** in the "initial state"  **and** the IUT **having registered** the AE  **and** the IUT **having** a container resource *TARGET\_RESOURCE\_ADDRESS* **containing**  a child resource **and**  the AE **having** privileges to perform RETRIEVE operation  **}** | | |
| **Expected behaviour** | **Test events** | | **Direction** |
| **when {**  the IUT **receives** a valid RETRIEVE Request **from** AE **containing**  To **set to** TARGET\_RESOURCE\_ADDRESS**and**  From **set to** AE-ID **and**  Filter Criteria **set to** FILTER\_CRITERIA\_CONDITIONS **containing**  filterUsage **set to** 1 (Discovery Criteria)  **}** | | IUT 🡨 AE |
| **then {**  the IUT **sends** a valid Response **containing**  Response Status Code **set to** 2000 (OK) **and**  Content **containing**  URIList representation  **}** | | IUT 🡪 AE |

TP/oneM2M/CSE/DIS/003

|  |  |  |  |
| --- | --- | --- | --- |
| **TP Id** | | TP/oneM2M/CSE/DIS/003 | |
| **Test objective** | | Check that the IUT returns the empty address list when no result matching with filter criteria is discovered | |
| **Reference** | | TS-0001 [1], clauses 8.1.3 and 10.2.6, TS-0004 [2], clause 7.2.3.13 | |
| **Parent Release** | | Release 1 | |
| **Config Id** | | CF01 | |
| **PICS Selection** | | PICS\_CSE | |
| **Initial conditions** | **with {**  the IUT **being** in the "initial state"  **and** the IUT **having registered** the AE  **and** the IUT **having** a container resource TARGET\_RESOURCE\_ADDRESS **containing**  a child resource**and**  the AE **having** privileges to perform RETRIEVE operation  **and** FILTER\_CRITERIA\_CONDITIONS**not being** applicable to the IUT  } | | |
| **Expected behaviour** | **Test events** | | **Expected behaviour** |
| **when {**  the IUT **receives** a valid RETRIEVE Request **from** AE **containing**  To **set to** TARGET\_RESOURCE\_ADDRESS**and**  From **set to** AE-ID **and**  Filter Criteria **set to** FILTER\_CRITERIA\_CONDITIONS**containing**  filterUsage **set to** 1 (Discovery Criteria)  **}** | |  |
| **then {** the IUT **sends** a valid Response **containing**  Response Status Code **set to** 2000 (OK) **and**  **no** Content  **}** | |  |

TP/oneM2M/CSE/DIS/004

|  |  |  |  |
| --- | --- | --- | --- |
| **TP Id** | | TP/oneM2M/CSE/DIS /004 | |
| **Test objective** | | Check that the IUT returns successfully a list of discovered resource addresses with Non-hierarchical addressing form when the Discovery Result Type is provided in the request | |
| **Reference** | | TS-0001 [1], clauses 8.1.3 and 10.2.6, TS-0004 [2], clause 7.2.3.13 | |
| **Config Id** | | CF01 | |
| **PICS Selection** | | PICS\_CSE | |
| **Initial conditions** | **with {**  the IUT **being** in the "initial state"  **and** the IUT **having registered** the AE  **and** the IUT **having** a container resource *TARGET\_RESOURCE\_ADDRESS* **containing**  a child resource **and**  the AE **having** privileges to perform DISCOVERY operation  } | | |
| **Expected behaviour** | **Test events** | | **Expected behaviour** |
| **when {** the IUT **receives** a valid RETRIEVE Request **from** AE **containing**  To **set to** TARGET\_RESOURCE\_ADDRESS**and**  From **set to** AE-ID **and**  Discovery Result Type **set to** 2 (unstructured)**and**  Filter Criteria **containing**  filterUsage **set to** 1 (Discovery Criteria)  **}** | |  |
| **then {** the IUT **sends** a valid Response **containing**  Response Status Code **set to** 2000 (OK) **and**  Content **containing**  URIList representation **containing**  unstructured addresses of discovered resources  **}** | |  |

TP/oneM2M/CSE/DIS/005

|  |  |  |  |
| --- | --- | --- | --- |
| **TP Id** | | TP/oneM2M/CSE/DIS/005 | |
| **Test objective** | | Check that the IUT rejects the discovery requests to theresource TARGET\_RESOURCE\_ADDRESS when AE has no privilege to perform the discovery request for the resource TARGET\_RESOURCE\_ADDRESS | |
| **Reference** | | TS-0001 [1], clauses 10.2.6.2 and 7.2.3.14, TS-0004 [2], clause 7.3.3.14 | |
| **Parent Release** | | Release 1 | |
| **Config Id** | | CF01 | |
| **PICS Selection** | | PICS\_CSE | |
| **Initial conditions** | **with {**  the IUT **being** in the "initial state"  **and** the IUT **having** **registered** the AE  **and** the AE **having no** privileges to perform RETRIEVE operation on the resource  TARGET\_RESOURCE\_ADDRESS  **}** | | |
| **Expected behaviour** | **Test events** | | **Direction** |
| **when {** the IUT **receives** a valid RETRIEVE Request **from** AE **containing**  To**set to** TARGET\_RESOURCE\_ADDRESS**and**  From**set to** AE\_ID**and**  Filter Criteria **containing**  filterUsage**set to** 1 (Discovery Criteria)  **}** | | IUT 🡨 AE |
| **then {**  the IUT sends a valid Response **containing**  Response Status Code **set to** 4103 (ACCESS\_DENIED)  **}** | | IUT 🡪 AE |

TP/oneM2M/CSE/DIS/006

|  |  |  |  |
| --- | --- | --- | --- |
| **TP Id** | | TP/oneM2M/CSE/DIS/006 | |
| **Test objective** | | Check that the IUT responds with an error when the AE sends requests to discover the resource TARGET\_RESOURCE\_ADDRESS which does not exist in the Hosting CSE | |
| **Reference** | | TS-0001 [1], clause 10.2.6.2, TS-0004 [2], clause 7.3.3.14 | |
| **Config Id** | | CF01 | |
| **Parent Release** | | Release 1 | |
| **PICS Selection** | | PICS\_CSE | |
| **Initial conditions** | **with {** the IUT **being** in the "initial state"  **and** the IUT **having registered** the AE  **and** the IUT **having** **not** **yet created** a resource TARGET\_RESOURCE\_ADDRESS  **}** | | |
| **Expected behaviour** | **Test events** | | **Expected behaviour** |
| **when {**  the IUT **receives** a valid RETRIEVE Request **from** AE **containing**  To**set to** TARGET\_RESOURCE\_ADDRESS**and**  From**set to** AE\_ID**and**  Filter Criteria **containing**  filterUsage**set to** 1 (Discovery Criteria)  **}** | |  |
| **then {**  the IUT **sends** a valid Response **containing**  Response Status Code **set to** 4004 (NOT\_FOUND)  **}** | |  |

TP/oneM2M/CSE/DIS/007

|  |  |  |  |
| --- | --- | --- | --- |
| **TP Id** | | TP/oneM2M/CSE/DIS/007 | |
| **Test objective** | | Check that the IUT responds the originator with an error when the originator sends a request including an invalid format of filter criteria to discover the resource TARGET\_RESOURCE\_ADDRESS | |
| **Reference** | | TS-0001 [1], clause 10.2.6, TS-0004 [2], clause 7.3.3.6 | |
| **Parent Release** | | Release 1 | |
| **Config Id** | | CF01 | |
| **PICS Selection** | | PICS\_CSE | |
| **Initial conditions** | | **with {** the IUT **being** in the "initial state"  **and** the IUT **having registered** the originator AE  **and** the IUT **having** a container resource TARGET\_RESOURCE\_ADDRESS **containing**  a child resource **and**  the AE **having** privileges to perform DISCOVERY operation  **}** | |
| **Expected behaviour** | **Test events** | | **Expected behaviour** |
| **when {**  the IUT **receives** a valid RETRIEVE Request **from** AE **containing**  To**set to** TARGET\_RESOURCE\_ADDRESS **and**  From**set to** AE\_ID**and**  Filter Criteria **set to** FILTER\_CRITERIA\_CONDITIONS**not being** valid format  **}** | | IUT 🡨 AE |
| **then {**  the IUT **sends** a valid Response **containing**  Response Status Code **set to** 4102 (CONTENTS\_UNACCEPTABLE)  **}** | | IUT 🡪 AE |

TP/oneM2M/CSE/DIS/008

|  |  |  |  |
| --- | --- | --- | --- |
| **TP Id** | | TP/oneM2M/CSE/DIS/008 | |
| **Test objective** | | Check that the IUT responds the originator with an error when the originator sends a request to discover the resource TARGET\_RESOURCE\_ADDRESS including two conflicted filter criteria of different type FILTER\_CRITERIA\_CONDITION\_1 and FILTER\_CRITERIA\_CONDITION*\_*2 (E.G. *createBefore < createdAfter*) | |
| **Reference** | | TS-0001 [1], clause 6.2.5, TS-0004 [2], clause 7.3.3.17 | |
| **Parent Release** | | Release 1 | |
| **Config Id** | | CF01 | |
| **PICS Selection** | | PICS\_CSE | |
| **Initial conditions** | **with {** the IUT **being** in the "initial state"  **and** the IUT **having registered** the originator AE  **and** the IUT **having** a container resource TARGET\_RESOURCE\_ADDRESS **containing**  a child resource **and**  the AE **having** privileges to perform RETRIEVE operation  **}** | | |
| **Expected behaviour** | **Test events** | | **Direction** |
| **when {**  the IUT **receives** a valid RETRIEVE Request from AE **containing**  To**set to** TARGET\_RESOURCE\_ADDRESS**and**  From**set to** AE\_ID **and**  Filter Criteria **containing**  filterUsage **set to** 1 (Discovery Criteria) **and**  **having** conflict conditions  **}** | | IUT 🡨 AE |
| **then {**  the IUT **sends** a valid Response **containing**  Response Status Code **set to** 4102 (CONTENTS\_UNACCEPTABLE) **}** | | IUT 🡪 AE |

|  |  |  |  |
| --- | --- | --- | --- |
| **TP Id** | **REQ Reference** | **FILTER\_CRITERIA**  **\_CONDITION\_1** | **FILTER\_CRITERIA**  **\_CONDITION\_2** |
| TP/oneM2M/CSE/DIS/008\_CRB/CRA | REQ-0004-07241 | createdBefore | createdAfter |
| TP/oneM2M/CSE/DIS/008\_MS/US | REQ-0004-07242 | unmodifiedSince | modifiedSince |
| TP/oneM2M/CSE/DIS/008\_STS/STB | REQ-0004-07243 | stateTagSmaller | stateTagBigger |
| TP/oneM2M/CSE/DIS/008\_EXB/EXA | REQ-0004-07244 | expireBefore | expireAfter |

TP/oneM2M/CSE/DIS/009

|  |  |  |  |
| --- | --- | --- | --- |
| **TP Id** | | TP/oneM2M/CSE/DIS/009 | |
| **Test objective** | | Check that the IUT returns the empty address list when resources match the filter criteria but they do not include DISCOVERY permission. | |
| **Reference** | | TS-0001 [1], clauses 9.6.2.3 and 10.2.6, TS-0004 [2], clause 7.2.3.13 | |
| **Parent Release** | | Release 1 | |
| **Config Id** | | CF01 | |
| **PICS Selection** | | PICS\_CSE | |
| **Initial conditions** | **with {**  the IUT **being** in the "initial state"  **and** the IUT **having registered** the AE  **and** the IUT **having** a resource TARGET\_RESOURCE\_ADDRESS**not allowing**  the AE to perform DISCOVERY operation  **and** FILTER\_CRITERIA\_CONDITIONS**being** applicable to the IUT  } | | |
| **Expected behaviour** | **Test events** | | **Direction** |
| **when {**  the IUT **receives** a valid RETRIEVE Request **from** AE **containing**  To **set to** TARGET\_RESOURCE\_ADDRESS**and**  From **set to** AE-ID **and**  Filter Criteria **set to** FILTER\_CRITERIA\_CONDITIONS**containing**  filterUsage **set to** 1 (Discovery Criteria)  **}** | | IUT 🡨 AE |
| **then {** the IUT **sends** a valid Response **containing**  Response Status Code **set to** 2000 (OK) **and**  **no** Content  **}** | | IUT 🡪 AE |

# Annex A: Conformance Test Requirement

A.1 MQTT Protocol Conformance Test Requirement

|  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- |
| **Test Items** | | **TS Clause** | **Obligation** | **Condition for  Optional Item** | **Checking point** | **Fail condition** |
| Commonly Repeated Items | | TS-0010, clause 5.1 | Mandatory |  | "QoS=1" | Fail when QoS is other than "1" |
| TS-0010, clause 5.1 | Mandatory |  | "Retain" flag set as "0" | Fail if DUT sends with "Retain" flag=1 |
| Connection Items | Connect | TS-0010, clause 6.3 | Mandatory |  | Prefix A:: or C:: is added to the ID | Fail if Prefix A:: or C:: are not added to the ID |
| TS-0010, clause 6.3 | Mandatory |  | if Clean session (ex: Retain) flag is  set to "False" in CONNECT | Fail when clean session is "True" when  DUT want to be connected |
| TS-0010, clause 6.3 | Mandatory |  | if "Will Flag" is not set in CONNECT | Fail when will flag is enabled |
| Disconnect | TS-0010, clause 6.3 | Mandatory |  | if Clean session (ex: Retain) flag is  set to "True" in CONNECT | Fail when clean session is "False" when  DUT want to be disconnected |
| Subscription Items | | TS-0010, clause 5.1 | Mandatory |  | if the message is set to Durable | Fail is the message is not Durable |
| TS-0010, clause 6.4.4 | Conditional | (for Initial Registration) when Originator doesn't knows it's ID | if DUT's Initial ID assigning  /oneM2M/reg\_req/<originator>/<receiver> oneM2M/reg\_resp/<originator>/<receiver> | Fail if DUT's ID assigning is other than this |
| Publish Item | | TS-0010,  Figure 6.4.5-2 | Conditional | when Originator knows  it's ID | if DUT's Initial ID assigning  oneM2M/req/<Originator>/<Receiver> | Fail if DUT's ID assigning is other than this |
| TS-0010,  Figure 6.4.5-2 | Conditional | When Originator uses  wild card | if DUT's Initial ID assigning oneM2M/req/+/<Receiver> | Fail if DUT's ID assigning is other than this |
| MQTT v3.1.1 | Conditional |  | if the has proper Primitive contents ("op", "fr", "to", "ri", "pc", "ty") | Fail if any of primitive contents feature wrong |
| Reception Item | | TS-0010,  Figure 6.4.5-2 | Conditional | when Originator knows  it's ID | if DUT's Initial ID assigning  oneM2M/resp/<Originator>/<Receiver> | Fail if DUT's ID assigning is other than this |
| TS-0010,  Figure 6.4.5-2 | Conditional | When Originator uses  wild card | if DUT's Initial ID assigning  oneM2M/resp/<Originator>/+ | Fail if DUT's ID assigning is other than this |
| TS-0010,  Figure 6.4.5-2 | Conditional |  | server Delete received contents properly  not storing data | Fail if Receiver stores message |
| TS-0010,  Figure 6.4.5-2 | Conditional |  | If the receiver sends PubACK  when receives messages | Fail if the receiver doesn't send PubACK |
| MQTT v3.1.1 | Mandatory |  | if the has proper Primitive contents ("op", "fr", "to", "ri", "pc", "ty") | Fail if any of primitive contents feature wrong |

# Annex B (informative): TP template

|  |  |  |  |
| --- | --- | --- | --- |
| **TP Id** | |  | |
| **Test objective** | |  | |
| **Reference** | |  | |
| **Config Id** | |  | |
| **PICS Selection** | |  | |
| **Initial conditions** |  | | |
| **Expected behaviour** | **Test events** | | **Direction** |
| **when {** **}** | | IUT 🡨 AE |
| **then {** **}** | | IUT 🡪 AE |

# History

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| --- | --- | --- |
| **Publication history** | | |
| V1.2.2 | 2018-05-30 | Release 2A Publication |
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