



ONEM2M TECHNICAL SPECIFICATION

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| Document Number | oneM2M-TS-0018-V-3.10.0 |
| Document Name: | Test Suite Structure and Test Purposes |
| Date: | 2022-04-05 |
| Abstract: | <p>The Test Suite Structure and Test Purposes document for conformance testing consists of:</p> <ul style="list-style-type: none">- Defining the test suite structure by grouping the test purposes according to different criteria;- Specifying test purposes for conformance test. A test purpose is an informal description of the expected test behaviour. |

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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

- Guidelines for description of test behaviours and definition of test purpose structure,
 - Notations to define a test purpose for conformance testing, and
 - 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".
- [5] oneM2M TS-0026: "3GPP Interworking".
- [6] oneM2M TS-0034: "Semantics Support".
- [7] oneM2M TS-0023: "Home Appliances Information Model and Mapping".
- [8] oneM2M TS-0030: "Ontology based Interworking".

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

Editor's Note: This may contain additional information.

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 a 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 5.1-5 shows test configurations for 3GPP interworking testing scenario where 3GPP SCEF is working in a Test System.

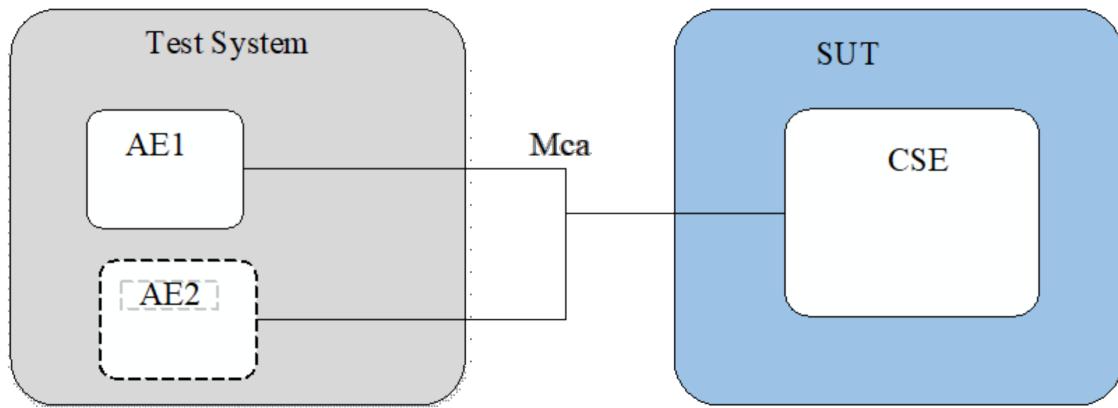


Figure 5.1-1: Test configuration 1 (CF01)

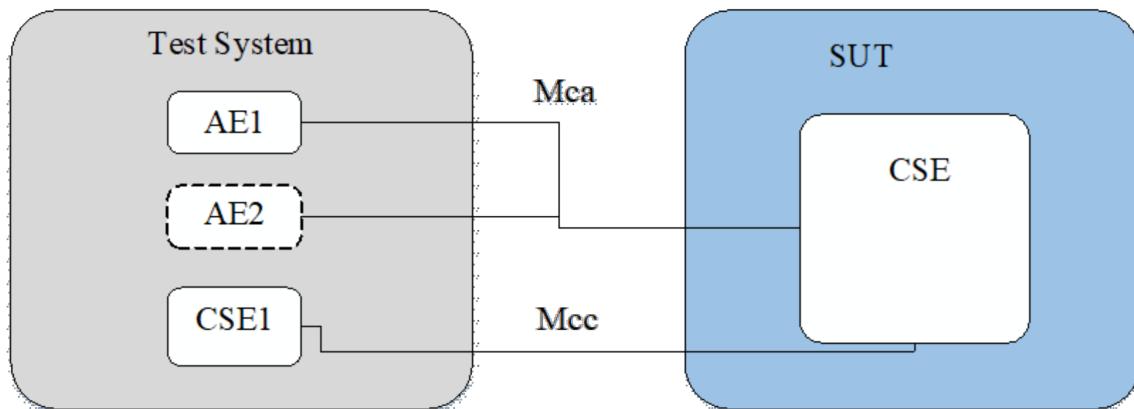


Figure 5.1-2: Test configuration 2 (CF02)

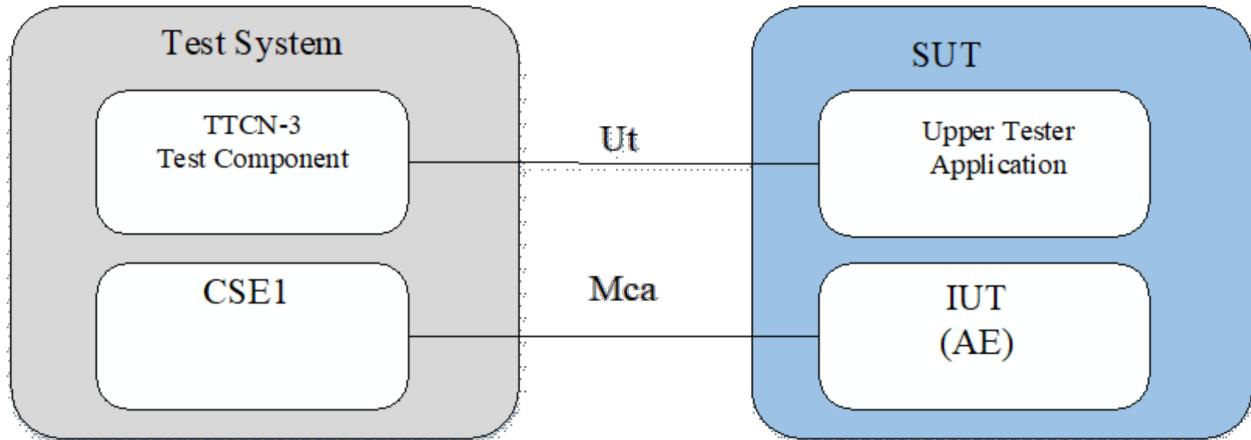


Figure 5.1-3: Test configuration 3 (CF03)

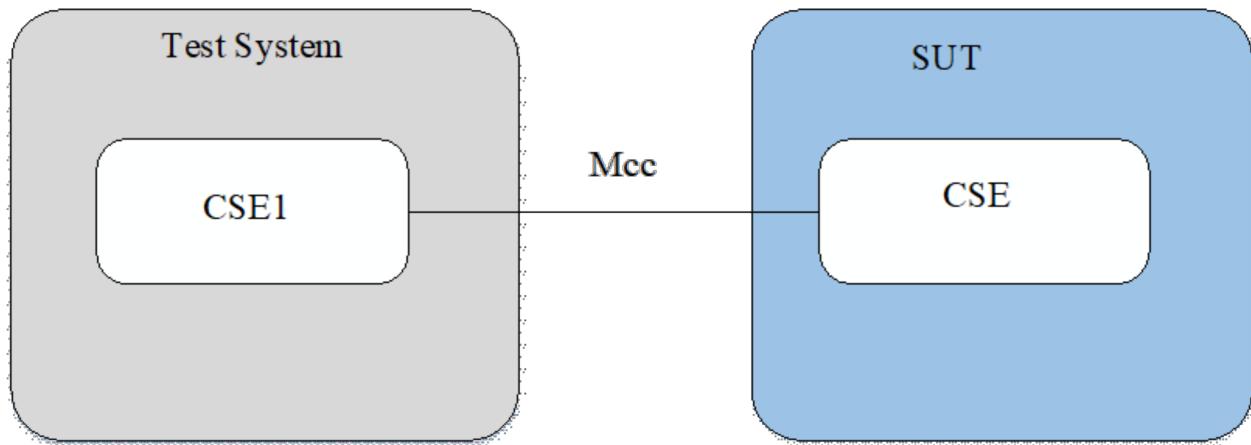


Figure 5.1-4: Test configuration 4 (CF04)

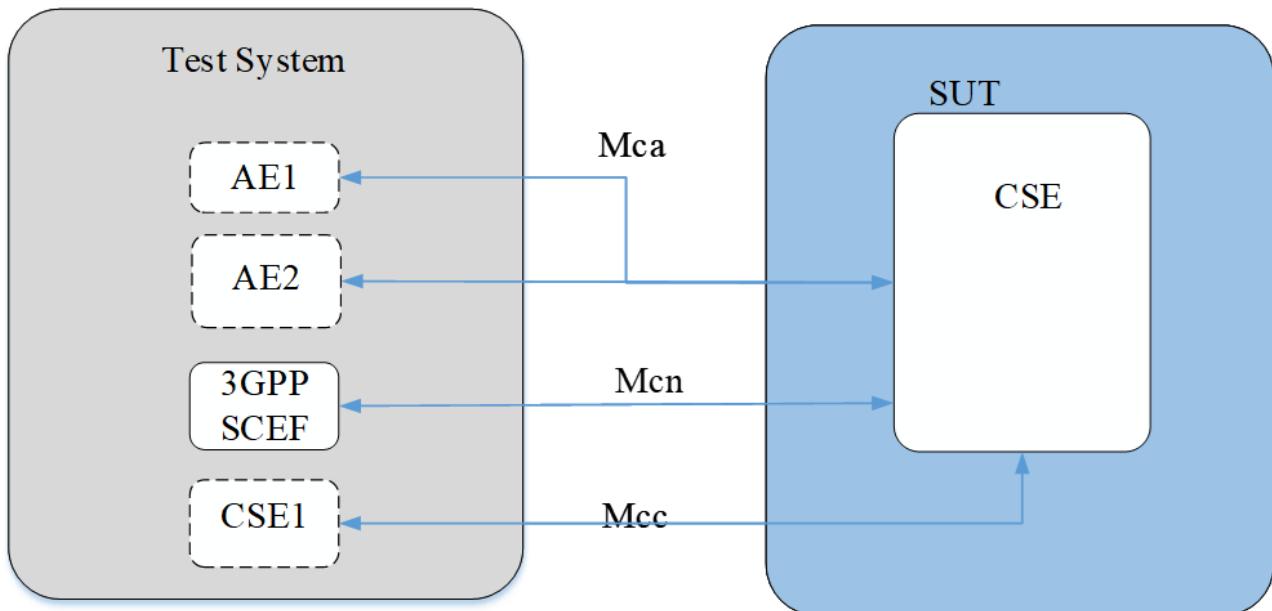


Figure 5.1-5: Test configuration 5 (CF05)

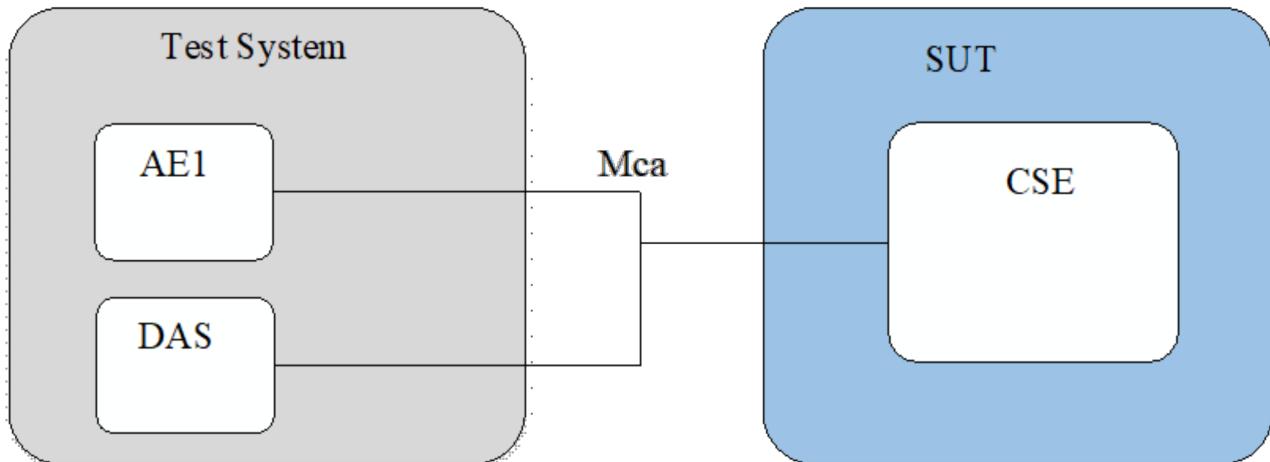


Figure 5.1-6: Test configuration 6 (CF06)

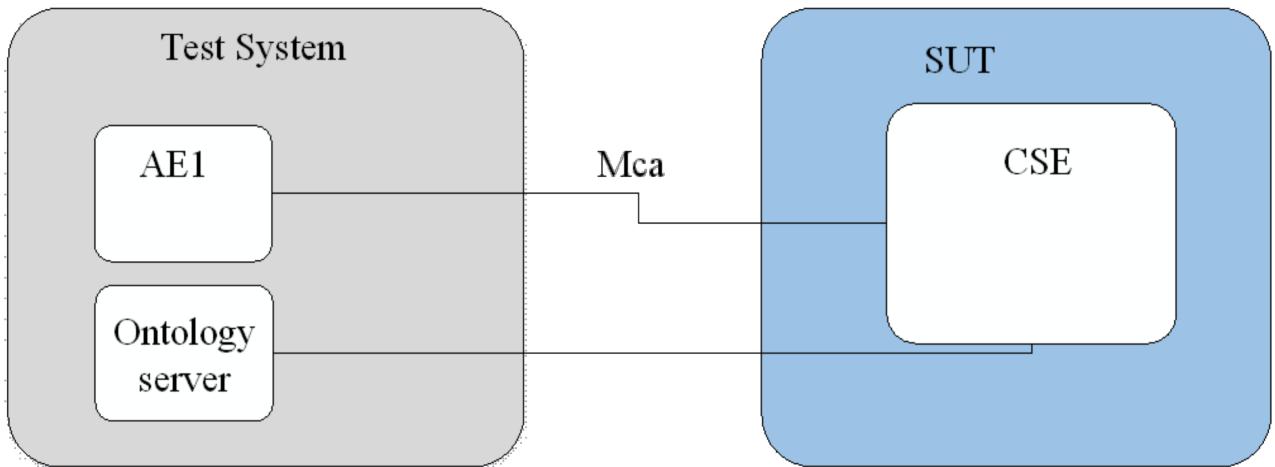


Figure 5.1-7: Test configuration 7 (CF07)

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 [대상을 찾을 수 없습니다]):

- 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
- timeSeries
- location
- 3GPP interworking
- Semantic
- HAIM
- Dynamic Authorization
- FlexContainer

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: Communication Management and Delivery Handling(CMDH)
 - Subgroup 2.5.1: Request Message Polling(PCH)
- 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 3.8.1: Data Management using TimeSeries(TS)
 - Subgroup 3.9: Communication Management and Delivery Handling(CMDH)
 - Subgroup 3.9.1: Request Message Polling(PCH)
 - Subgroup 3.9.2: Response Type(RT)
 - Subgroup 3.10: Security(SEC)
 - Subgroup 3.11: Resource Announcement (ANNC)
 - Subgroup 3.12: 3GPP Interworking(3GPP)
 - Subgroup 3.13: FlexContainer (FLXC)
 - Subgroup 3.14: Dynamic Authorization (DAU)
 - Subgroup 3.15: Semantic (SEM)
 - Subgroup 3.15: Initial Service Provisioning (ISP)

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 CSE | Application Entity Common Services Entity |
| <gr> = group | GEN REG DMR SUB GMG DIS LOC DMG CMDH SEC ANNC FLXC DAU SEM ISP | Common Service Function |
| <sgr> = sub-group | ACP | AccessControlPolicy |
| <opr> = operation | CRE UPD RET DEL NTF | Create Update Retrieve Delete Notify |
| <nnn> = sequential number | 001 to 999 | 023 |
| <pmu> = permutation part | May be number, short name of attribute or resource type depend on the permuted part in the TP. If there are more than one permuted 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] tables 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 7.1.4-3: 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 |
| 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 |

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 } | |
| Expected behaviour | Test events when { the IUT is triggered to send a valid CREATE Request containing To set to NON_HIERARCHICAL_RESOURCE_ADDRESS } 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 } | Direction NA CSE ← IUT |

| TP Id | NON_HIERARCHICAL_RESOURCE_ADDRESS |
|------------------------------|---------------------------------------|
| TP/oneM2M/AE/GEN/CRE/002 | UNSTRUCTURED_CSE_RELATIVE_RESOURCE_ID |
| TP/oneM2M/AE/GEN/CRE/001_CSR | SP_RELATIVE_RESOURCE_ID, (see note) |
| TP/oneM2M/AE/GEN/CRE/001_SPR | ABSOLUTE_RESOURCE_ID, (see note) |
| TP/oneM2M/AE/GEN/CRE/001_ABS | |

NOTE: These addresses are constructed with the Unstructured-CSE-Relative-Resource-ID.

| | | |
|---------------------------|--|-------------------------------------|
| 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 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 } then { the IUT sends a valid CREATE Request to CSE containing | Direction NA CSE ← IUT |

| | |
|---|--|
| 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 } | |
|---|--|

| 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 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 | |
| Parent Release | Release 1 | |
| PICS Selection | PICS_AE, PICS_STRUCTURED_CSE_RELATIVE_RESOURCE_ID_FORMAT | |
| Initial conditions | <p>with {</p> <p>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</p> <p>}</p> | |
| Expected behaviour | <p>Test events</p> <p>when {</p> <p>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</p> <p>}</p> <p>then {</p> <p>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</p> <p>}</p> | <p>Direction</p> <p>NA</p> <p>IUT → CSE</p> |

| 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 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 | <p>with {</p> <p>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</p> <p>}</p> | |
| Expected behaviour | <p>Test events</p> <p>when {</p> <p>the IUT is triggered to send a valid RETRIEVE Request containing To set to CONTAINER_RESOURCE_ADDRESS</p> <p>}</p> <p>then {</p> <p>the IUT sends a valid RETRIEVE request to CSE containing</p> | <p>Direction</p> <p>NA</p> <p>IUT → CSE</p> |

| | |
|---|--|
| To set to NON_HIERARCHICAL_RESOURCE_ADDRESS and From set to AE_ID } | |
|---|--|

| 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 when { the IUT is triggered to send a valid DELETE Request containing To set to CONTAINER_RESOURCE_ADDRESS } then { the IUT sends a valid DELETE request to CSE containing To set to NON_HIERARCHICAL_RESOURCE_ADDRESS and From set to AE_ID } | Direction NA 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 when { the IUT is triggered to send a valid DELETE Request containing To set to CONTAINER_RESOURCE_ADDRESS } then { the IUT sends a valid DELETE request to CSE containing To set to HIERARCHICAL_RESOURCE_ADDRESS and From set to AE_ID } | Direction NA 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 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 } 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 } | Direction NA CSE ← IUT |

| | | |
|---------------------------|--|-----------|
| 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], clause 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 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 [대상을 찾을 수 없습니다], clause | resourceName |
| TP/oneM2M/AE/REG/CRE/002_ET | TS-0004 [대상을 찾을 수 없습니다], clause | expirationTime |
| TP/oneM2M/AE/REG/CRE/002_LBL | TS-0004 [대상을 찾을 수 없습니다], clause | labels |
| TP/oneM2M/AE/REG/CRE/002_APN | TS-0004 [대상을 찾을 수 없습니다], clause | appName |
| TP/oneM2M/AE/REG/CRE/002_API | TS-0004 [대상을 찾을 수 없습니다], clause | App-ID |
| TP/oneM2M/AE/REG/CRE/002_POA | TS-0004 [대상을 찾을 수 없습니다], clause | pointOfAccess |
| TP/oneM2M/AE/REG/CRE/002_OR | TS-0004 [대상을 찾을 수 없습니다], clause | ontologyRef |
| TP/oneM2M/AE/REG/CRE/002_NL | TS-0004 [대상을 찾을 수 없습니다], clause | nodeLink |
| TP/oneM2M/AE/REG/CRE/002_RR | TS-0004 [대상을 찾을 수 없습니다], clause | requestReachability |
| TP/oneM2M/AE/REG/CRE/002_CSZ | TS-0004 [대상을 찾을 수 없습니다], clause | contentSerialization |

Editor's Note: Reference need to be checked

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 | <pre>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 }</pre> | |
| Expected behaviour | <p>Test events</p> <pre>when { the IUT is triggered to send a valid DELETE Request containing To set to AE_RESOURCE_ADDRESS }</pre> <p>then {</p> <pre> the IUT sends a valid DELETE Request containing To set to AE_RESOURCE_ADDRESS and From set to AE_ID }</pre> | <p>Direction</p> <p>NA</p> <p>CSE ← IUT</p> |

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], clause 10.1.1.1 and 10.2.4.1, TS-0004 [2], clause 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 | 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], clause 10.1.1.1 and 10.2.4.1, TS-0004 [2], clause 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 | 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 | CSE ← IUT |

| | | |
|--|---|--|
| | From set to AE_ID and Content containing contentInstance resource representation } | |
|--|---|--|

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], clause 10.1.1.1 and 10.2.4.1, TS-0004 [2], clause 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 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 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], clause 10.1.1.1 and 10.2.4.1, TS-0004 [2], clause 7.2.2.1 and 7.4.7.1 | |
| Config Id | CF03 | |
| Parent Release | Release 1 | |
| PICS Selection | PICS_AE | |
| Initial conditions | <pre>with { the IUT being registered and the IUT having privileges to perform CREATE operation on resource AE_RESOURCE_ADDRESS }</pre> | |
| Expected behaviour | Test events | Direction |
| | <pre>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 }</pre> | NA |
| | <pre>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 }</pre> | 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 |

Editor's Note: Combination of optional attributes that are included in the Content of container creation request can be extended to generate more test cases based on this test case.

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 RW attribute ATTRIBUTE_NAME } | |
| Expected behaviour | Test events 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 [대상을 찾을 수 없습니다], clause 7.4.6.1 | expirationTime |
| TP/oneM2M/AE/DMR/UPD/001_LBL | TS-0004 [대상을 찾을 수 없습니다], clause 7.4.6.1 | labels |
| TP/oneM2M/AE/DMR/UPD/001_APN | TS-0004 [대상을 찾을 수 없습니다], clause 7.4.6.1 | appName |
| TP/oneM2M/AE/DMR/UPD/001_POA | TS-0004 [대상을 찾을 수 없습니다], clause 7.4.6.1 | pointOfAccess |
| TP/oneM2M/AE/DMR/UPD/001_OR | TS-0004 [대상을 찾을 수 없습니다], clause 7.4.6.1 | ontologyRef |
| TP/oneM2M/AE/DMR/UPD/001_NL | TS-0004 [대상을 찾을 수 없습니다], clause 7.4.6.1 | nodeLink |
| TP/oneM2M/AE/DMR/UPD/001_RR | TS-0004 [대상을 찾을 수 없습니다], clause 7.4.6.1 | requestReachability |
| TP/oneM2M/AE/DMR/UPD/001_CSZ | TS-0004 [대상을 찾을 수 없습니다], clause 7.4.6.1 | contentSerialization |

| | | |
|---------------------------|--|-----------|
| 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 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 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 container resource containing valid ATTRIBUTE_NAME attribute } | IUT → CSE |

| TP Id | Reference | ATTRIBUTE_NAME |
|------------------------------|---|-----------------------|
| TP/oneM2M/AE/DMR/UPD/002_ET | TS-0004 [대상을 찾을 수 없습니다], clause 7.4.7.2.3 | expirationTime |
| TP/oneM2M/AE/DMR/UPD/002_LBL | TS-0004 [대상을 찾을 수 없습니다], clause 7.4.7.2.3 | labels |
| TP/oneM2M/AE/DMR/UPD/002_MNI | TS-0004 [대상을 찾을 수 없습니다], clause 7.4.7.2.3 | maxNrOfInstances |
| TP/oneM2M/AE/DMR/UPD/002_MBS | TS-0004 [대상을 찾을 수 없습니다], clause 7.4.7.2.3 | maxByteSize |
| TP/oneM2M/AE/DMR/UPD/002_MIA | TS-0004 [대상을 찾을 수 없습니다], 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 | <p>with {</p> <p>the IUT being registered and the IUT being switched on and the CSE having created a resource TARGET_RESOURCE_ADDRESS of type RESOURCE_TYPE and the IUT having privileges to perform RETRIEVE operation on resource TARGET_RESOURCE_ADDRESS</p> <p>}</p> | |
| Expected behaviour | <p>Test events</p> <p>when { the IUT is triggered to send a valid RETRIEVE Request containing To set to TARGET_RESOURCE_ADDRESS }</p> <p>then { the IUT sends a valid RETRIEVE Request containing To set to TARGET_RESOURCE_ADDRESS and From set to AE_ID }</p> | <p>Direction</p> <p>NA</p> <p>IUT → CSE</p> |

| 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 | <p>with {</p> <p>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</p> <p>}</p> | |
| Expected behaviour | <p>Test events</p> <p>when { the IUT is triggered to send a valid RETRIEVE Request containing To set to CONTAINER_RESOURCE_ADDRESS/oldest }</p> <p>then { the IUT sends a valid RETRIEVE Request containing To set to CONTAINER_RESOURCE_ADDRESS/oldest and From set to AE_ID }</p> | <p>Direction</p> <p>NA</p> <p>IUT → CSE</p> |

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 | <pre> 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 } </pre> | |
| Expected behaviour | Test events | Direction |
| | <pre> when { the IUT is triggered to send a valid RETRIEVE Request containing To set to CONTAINER_RESOURCE_ADDRESS/latest } </pre> | NA |
| | <pre> then { the IUT sends a valid RETRIEVE Request containing To set to CONTAINER_RESOURCE_ADDRESS/latest and From set to AE_ID } </pre> | 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 | <pre> 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 } </pre> | |
| Expected behaviour | Test events | Direction |
| | <pre> when { the IUT is triggered to send a valid RETRIEVE Request containing To set to CONTAINER_RESOURCE_ADDRESS } </pre> | NA |
| | <pre> then { the IUT sends a valid RETRIEVE Request containing To set to CONTAINER_RESOURCE_ADDRESS and From set to AE_ID } </pre> | IUT → CSE |

| | | |
|---------------------------|---|------------------|
| 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 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 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 when { the IUT is triggered to send a valid DELETE Request containing To set to CONTAINER_RESOURCE_ADDRESS } then { the IUT sends a valid DELETE Request containing To set to CONTAINER_RESOURCE_ADDRESS and From set to AE_ID } | Direction NA 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 when { the IUT is triggered to send a valid DELETE Request containing To set to CONTENTINSTANCE_RESOURCE_ADDRESS } then { the IUT sends a valid DELETE Request containing To set to CONTENTINSTANCE_RESOURCE_ADDRESS and From set to AE_ID } | Direction NA 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], clause 10.1.1.1 and 10.2.4.1, TS-0004 [2], clause 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 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 } 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 } | Direction NA 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], clause 10.1.1.1 and 10.2.11.2, TS-0004 [2], clause 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 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 } 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 | Direction NA CSE ← IUT |

| | | |
|--|--|--|
| | Content containing subscription resource containing notificationURI attribute and valid ATTRIBUTE_NAME attribute } | |
|--|--|--|

| TP Id | PICS Selection | Reference | ATTRIBUTE_NAME |
|--------------------------------|----------------|--|---------------------------|
| TP/oneM2M/AE/SUB/CRE/002_ACP_I | PICS_SUB_ACP_I | TS-0001 [1], clause 9.6.8, TS-0004 [대상을 찾을 수 없습니다], 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 [대상을 찾을 수 없습니다], clause 7.4.9.1 | eventNotificationCriteria |
| TP/oneM2M/AE/SUB/CRE/002_NCT | PICS_SUB_NCT | TS-0001 [1], clause 9.6.8, TS-0004 [대상을 찾을 수 없습니다], clause 7.4.9.1 | notificationContentType |
| TP/oneM2M/AE/SUB/CRE/002_NECK | PICS_SUB_NECK | TS-0001 [1], clause 9.6.8, TS-0004 [대상을 찾을 수 없습니다], clause 7.4.9.1 | notificationEventCategory |
| TP/oneM2M/AE/SUB/CRE/002_SU | PICS_SUB_SU | TS-0001 [1], clause 9.6.8, TS-0004 [대상을 찾을 수 없습니다], clause 7.4.9.1 | subscriberURI |

TP/oneM2M/AE/SUB/CRE/003

| TP Id | TP/oneM2M/AE/SUB/CRE/003 | | | | | | | |
|---|---|-------------|-----------|--|----|---|-----------|--|
| Test objective | Check that the IUT sends a <group>/fopt subscription creation request with optional attributes notificationForwardingURI and groupId when it is triggered | | | | | | | |
| Reference | TS-0001 [1], clause 9.6.8 and clause 10.2.7.10, TS-0004 [2], clause 7.4.14.2.3 | | | | | | | |
| Config Id | CF03 | | | | | | | |
| Parent Release | Release 1 | | | | | | | |
| PICS Selection | PICS_AE | | | | | | | |
| Initial conditions | with { the IUT being registered and and the IUT having a <group> resource as TARGET_RESOURCE_ADDRESS containing members which are subscribable the IUT having privileges to perform CREATE operation on <group> members } | | | | | | | |
| Expected behaviour | <table border="1" style="width: 100%; border-collapse: collapse;"> <thead> <tr> <th style="text-align: center;">Test events</th> <th style="text-align: center;">Direction</th> </tr> </thead> <tbody> <tr> <td>when { the IUT is triggered to send a valid CREATE Request containing To set to TARGET_RESOURCE_ADDRESS/fopt and Resource Type set to 23 (subscription) and Content containing subscription resource containing groupId, notificationURI attribute and notificationForwardingURI attribute set }</td><td style="text-align: center;">NA</td></tr> <tr> <td>then { the IUT sends a valid CREATE Request to CSE containing To set to TARGET_RESOURCE_ADDRESS/fopt and Resource Type set to 23 (subscription) and From set to AE_ID and Content containing subscription resource containing groupId, notificationURI attribute and notificationForwardingURI attribute set }</td><td style="text-align: center;">CSE ← IUT</td></tr> </tbody> </table> | Test events | Direction | when { the IUT is triggered to send a valid CREATE Request containing To set to TARGET_RESOURCE_ADDRESS/fopt and Resource Type set to 23 (subscription) and Content containing subscription resource containing groupId, notificationURI attribute and notificationForwardingURI attribute set } | NA | then { the IUT sends a valid CREATE Request to CSE containing To set to TARGET_RESOURCE_ADDRESS/fopt and Resource Type set to 23 (subscription) and From set to AE_ID and Content containing subscription resource containing groupId, notificationURI attribute and notificationForwardingURI attribute set } | CSE ← IUT | |
| Test events | Direction | | | | | | | |
| when { the IUT is triggered to send a valid CREATE Request containing To set to TARGET_RESOURCE_ADDRESS/fopt and Resource Type set to 23 (subscription) and Content containing subscription resource containing groupId, notificationURI attribute and notificationForwardingURI attribute set } | NA | | | | | | | |
| then { the IUT sends a valid CREATE Request to CSE containing To set to TARGET_RESOURCE_ADDRESS/fopt and Resource Type set to 23 (subscription) and From set to AE_ID and Content containing subscription resource containing groupId, notificationURI attribute and notificationForwardingURI attribute set } | CSE ← IUT | | | | | | | |

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 | <pre>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 }</pre> | | | | | | | |
| Expected behaviour | <table border="1"> <thead> <tr> <th>Test events</th> <th>Direction</th> </tr> </thead> <tbody> <tr> <td> <pre>when { the IUT receives a NOTIFY Request from hosting CSE containing Content containing notification message representation }</pre> </td><td>IUT ← CSE</td></tr> <tr> <td> <pre>then { the IUT sends a valid NOTIFY Response to the hosting CSE containing Response Status Code set to RESPONSE_STATUS_CODE }</pre> </td><td>CSE ← IUT</td></tr> </tbody> </table> | Test events | Direction | <pre>when { the IUT receives a NOTIFY Request from hosting CSE containing Content containing notification message representation }</pre> | IUT ← CSE | <pre>then { the IUT sends a valid NOTIFY Response to the hosting CSE containing Response Status Code set to RESPONSE_STATUS_CODE }</pre> | CSE ← IUT | |
| Test events | Direction | | | | | | | |
| <pre>when { the IUT receives a NOTIFY Request from hosting CSE containing Content containing notification message representation }</pre> | IUT ← CSE | | | | | | | |
| <pre>then { the IUT sends a valid NOTIFY Response to the hosting CSE containing Response Status Code set to RESPONSE_STATUS_CODE }</pre> | 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 | <pre>with { the IUT having been registered and the IUT having created subscription resource at <group>/fopt with notificationForwardingURI set and the IUT being reachable through a URL ACCESSIBLE_URL }</pre> | | | | | | | |
| Expected behaviour | <table border="1"> <thead> <tr> <th>Test events</th> <th>Direction</th> </tr> </thead> <tbody> <tr> <td> <pre>when { the IUT receives a NOTIFY Request from hosting CSE containing Content containing aggregatedNotification message representation }</pre> </td><td>IUT ← CSE</td></tr> <tr> <td> <pre>then { the IUT sends a valid Response to the hosting CSE containing Response Status Code set to RESPONSE_STATUS_CODE }</pre> </td><td>CSE ← IUT</td></tr> </tbody> </table> | Test events | Direction | <pre>when { the IUT receives a NOTIFY Request from hosting CSE containing Content containing aggregatedNotification message representation }</pre> | IUT ← CSE | <pre>then { the IUT sends a valid Response to the hosting CSE containing Response Status Code set to RESPONSE_STATUS_CODE }</pre> | CSE ← IUT | |
| Test events | Direction | | | | | | | |
| <pre>when { the IUT receives a NOTIFY Request from hosting CSE containing Content containing aggregatedNotification message representation }</pre> | IUT ← CSE | | | | | | | |
| <pre>then { the IUT sends a valid Response to the hosting CSE containing Response Status Code set to RESPONSE_STATUS_CODE }</pre> | CSE ← IUT | | | | | | | |

7.2.1.5 Communication Management and Delivery Handling (CMDH)

7.2.1.5.1 Resource pollingChannel (PCH)

TP/oneM2M/AE/PCH/001

| | | |
|--|---|---|
| TP Id | TP/oneM2M/AE/PCH/001 | |
| Test objective | Check that the IUT which performs polling sends the Notify request to <pollingChannelURI> Hosting CSE after receiving response using polling channel | |
| Reference | TS-0001 [1], clause 10.2.13.8 & TS-0004 [대상을 찾을 수 없습니다], clause 7.4.22.2.5 | |
| Config Id | CF03 | |
| Parent Release | Release 2 | |
| PICS Selection | PICS_PCH | |
| Initial conditions | <p>with {</p> <p>the IUT being in the "initial state" and the IUT having registered to a CSE1 and the IUT having a <pollingChannel> resource and the IUT having sent a retrieve Request to the CSE To set to POLLINGCHANNELURI_RESOURCE_ADDRESS and the CSE having received the Request from Originator containing To set to AE_RESOURCE_ADDRESS and From set to ORIGINATOR_ID</p> <p>}</p> | |
| Expected behaviour | <p>Test events</p> <p>when {</p> <p>the IUT receives a polling Response from the CSE containing Response Status Code set to 2000 (OK)</p> <p>}</p> <p>then {</p> <p>the IUT sends a NOTIFY Request to the CSE containing To set to POLLINGCHANNELURI_RESOURCE_ADDRESS and Content containing Response Status Code set to RESPONSE_STATUS_CODE</p> <p>}</p> | <p>Direction</p> <p>IUT ← CSE</p> <p>IUT → CSE</p> |
| Note: Based on figure 10.2.13.1-1 in TS-0001[1] step 004 and 005 | | |

TP/oneM2M/AE/PCH/002

| | | |
|---|---|--|
| TP Id | TP/oneM2M/AE/PCH/002 | |
| Test objective | Check that the IUT sends an RETRIEVE Request to <pollingChannelURI> resource See the Note below | |
| Reference | TS-0001 [1], clause 10.2.13.6, TS-0004 [2], clause 7.4.22.2.2 | |
| Config Id | CF02 | |
| Parent Release | Release 2 | |
| PICS Selection | PICS_PCH | |
| Initial conditions | <p>with {</p> <p>the IUT being registered and the IUT being switched on and the AE having a child <pollingChannel> resource</p> <p>}</p> | |
| Expected behaviour | <p>Test events</p> <p>when {</p> <p>the IUT is triggered to send a valid RETRIEVE Request containing To set to POLLINGCHANNELURI_RESOURCE_ADDRESS</p> <p>}</p> <p>then {</p> <p>the IUT sends a valid RETRIEVE Request containing To set to POLLINGCHANNELURI_RESOURCE_ADDRESS From set to AE_ID</p> <p>}</p> | <p>Direction</p> <p>NA</p> <p>IUT → CSE</p> |
| Note: Based on figure 10.2.5.12-1 in TS-0001[1] step 001. | | |

7.2.1.6 Ontology based Interworking IPE (OBI)

7.2.1.6.1 Initialization sequence

TP/oneM2M/AE/OBI/INI/001

| | | |
|---------------------------|--|---|
| TP Id | TP/oneM2M/AE/OBI/INI/001 | |
| Test objective | Check that the IUT starts the Initialization sequence of an Ontology based Interworking IPE and retrieves the formal description of the ontology | |
| Reference | TS-0001 [1], clause 10.1.1.1 and 10.2.4.16, TS-0004 [2], clause 7.2.2.1 and 7.4.37, TS-0030 [8], clause 6.2.1.2 item 1. | |
| Config Id | CF07 | |
| Parent Release | Release 3 | |
| PICS Selection | PICS_AE_IPE, PICS_RESTFULL_API, PICS_TS_ONTOLOGY_SERVER | |
| Initial conditions | with { the IUT being registered and the IUT being in the "initial state" and the IUT having privileges to perform RETRIEVE operation on formal description of the ontology at AE_RESOURCE_ADDRESS } | |
| Expected behaviour | Test events when { the IUT is triggered to send a request to get the formal description of the Ontology } then { the IUT sends a valid HTTP GET Request to Ontology server containing anURI indicating the address where to get the Ontology } | Direction NA Ontology server ← IUT |

7.2.1.6.2 CREATE Operation

TP/oneM2M/AE/OBI/CRE/001

| | | |
|---------------------------|--|-------------------------------------|
| TP Id | TP/oneM2M/AE/OBI/CRE/001 | |
| Test objective | Check that the IUT sends an AE initial registration request when it is started | |
| Reference | TS-0001 [1], clause 10.1.1.2.2 - case C, and clause 9.6.19, TS-0030 [8], clause 6.2.1.2 | |
| Config Id | CF07 | |
| Parent Release | Release 3 | |
| PICS Selection | PICS_AE_IPE | |
| Initial conditions | with { the IUT never being registered and the IUT being in the "initial state" and the IUT having got a valid APP-ID } | |
| Expected behaviour | Test events 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 } 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-IPE resource representation } | Direction NA CSE ← IUT |

7.2.1.6.3 RETRIEVE Operation

TP/oneM2M/AE/OBI/RET/001

| | | |
|---------------------------|---|--|
| TP Id | TP/oneM2M/AE/OBI/RET/001 | |
| Test objective | Check that the IUT accepts a retrieval request resource and responds 2000 (OK) status | |
| Reference | TS-0001 [1], clause 10.2.3.2 and clause 9.6.3, TS-0004 [2], clause 7.4.3.2.2, TS-0030 [8], clause 6.2.2.2.1. | |
| Config Id | CF07 | |
| Parent Release | Release 3 | |
| PICS Selection | PICS_AE_IPE | |
| Initial conditions | with { the IUT being registered and the IUT being in the "initial state" and the IUT having retrieved and parsed the formal description of the ontology and the IUT having performed DISCOVERY of non-oneM2M devices } | |
| Expected behaviour | Test events when { the IUT receives a valid RETRIEVE Request from CSE containing To set to AE_IPE_ID and From set to CSE_RESOURCE_ADDRESS and no Content } then { the IUT sends a valid Response containing Response Status Code set to 2000 (OK) and Resource Type set to 28 (flexContainer) and Content containing Non-oneM2M AE resource representation as a specialization of <flexContainer> } | Direction IUT ← CSE IUT → CSE |

TP/oneM2M/AE/OBI/RET/002

| | | |
|---------------------------|--|--|
| TP Id | TP/oneM2M/AE/OBI/RET/002 | |
| Test objective | Check that the IUT accepts a retrieval request resource with the optional <i>ATTRIBUTE</i> | |
| Reference | TS-0001 [1], clause 10.2.3.2 and clause 9.6.3, TS-0004 [2], clause 7.4.3.2.2, TS-0030 [8], clause 6.2.2.2.1. | |
| Config Id | CF07 | |
| Parent Release | Release 3 | |
| PICS Selection | PICS_AE_IPE | |
| Initial conditions | with { the IUT being registered and the IUT being in the "initial state" and the IUT having retrieved and parsed the formal description of the ontology and the IUT having performed DISCOVERY of non-oneM2M devices } | |
| Expected behaviour | Test events 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 } then { the IUT sends a valid Response containing Response Status Code set to 2000 (OK) and Resource Type set to 28 (flexContainer) and Content containing Non-oneM2M resource as a specialization of <flexContainer> containing valid <i>ATTRIBUTE</i> attribute } | Direction IUT ← CSE IUT → CSE |

TP/oneM2M/AE/OBI/RET/003

| | | | | | | | | |
|---------------------------|---|---------------|---|-----------|---------------|---|-----------|------------------|
| TP Id | TP/oneM2M/AE/OBI/RET/003 | | | | | | | |
| Test objective | Check that the IUT has performed DISCOVERY of non-oneM2M devices during initialization sequence | | | | | | | |
| Reference | TS-0001 [1], clause 10.1.1.1 and 10.2.4.16, TS-0004 [2], clause 7.2.2.1 and 7.4.37, TS-0030 [8], clause 6.2.1.2 item 5. | | | | | | | |
| Config Id | CF07 | | | | | | | |
| Parent Release | Release 3 | | | | | | | |
| PICS Selection | PICS_AE_IPE, PICS_AE_IPE_DISCOVERY | | | | | | | |
| Initial conditions | <p>with {</p> <p>the IUT being registered and the IUT being in the "initial state" and the IUT having retrieved and parsed the formal description of the ontology and the IUT having performed DISCOVERY of non-oneM2M devices and the IUT having discovered a non-oneM2M device with a valid address value indicating NON_ONEM2M_AE_RESOURCE_ADDRESS</p> <p>}</p> | | | | | | | |
| Expected behaviour | <p>Test events</p> <table border="1"> <tr> <td>when {</td> <td>the IUT receives a valid RETRIEVE Request from CSE containing To set to NON_ONEM2M_AE_RESOURCE_ADDRESS and From set to CSE_ID</td> <td>CSE → IUT</td> </tr> <tr> <td>then {</td> <td>the IUT sends a valid Response containing Response Status Code set to 2000 (OK) and Content containing non-oneM2M devices resource representation</td> <td>CSE ← IUT</td> </tr> </table> | when { | the IUT receives a valid RETRIEVE Request from CSE containing To set to NON_ONEM2M_AE_RESOURCE_ADDRESS and From set to CSE_ID | CSE → IUT | then { | the IUT sends a valid Response containing Response Status Code set to 2000 (OK) and Content containing non-oneM2M devices resource representation | CSE ← IUT | Direction |
| when { | the IUT receives a valid RETRIEVE Request from CSE containing To set to NON_ONEM2M_AE_RESOURCE_ADDRESS and From set to CSE_ID | CSE → IUT | | | | | | |
| then { | the IUT sends a valid Response containing Response Status Code set to 2000 (OK) and Content containing non-oneM2M devices resource representation | CSE ← IUT | | | | | | |

TP/oneM2M/AE/OBI/RET/004

| | | | | | | | | |
|---------------------------|---|---------------|---|-----------|---------------|---|-----------|------------------|
| TP Id | TP/oneM2M/AE/OBI/RET/004 | | | | | | | |
| Test objective | Check that the IUT continues to discover the devices in the non-oneM2M area | | | | | | | |
| Reference | TS-0001 [1], clause 10.1.1.1 and 10.2.4.16, TS-0004 [2], clause 7.2.2.1 and 7.3.3.14, TS-0030 [8], clause 6.2.2.1. | | | | | | | |
| Config Id | CF07 | | | | | | | |
| Parent Release | Release 3 | | | | | | | |
| PICS Selection | PICS_AE_IPE, PICS_AE_IPE_DISCOVERY | | | | | | | |
| Initial conditions | <p>with {</p> <p>the IUT being registered and the IUT being in the "initial state" and the IUT having retrieved and parsed the formal description of the ontology and the IUT having performed DISCOVERY of non-oneM2M devices and the IUT having discovered a new non-oneM2M device with a valid address value indicating NON_ONEM2M_NEW_AE_RESOURCE_ADDRESS</p> <p>}</p> | | | | | | | |
| Expected behaviour | <p>Test events</p> <table border="1"> <tr> <td>when {</td> <td>the IUT receives a valid RETRIEVE Request from CSE containing To set to NON_ONEM2M_NEW_AE_RESOURCE_ADDRESS and From set to CSE_ID</td> <td>CSE → IUT</td> </tr> <tr> <td>then {</td> <td>the IUT sends a valid Response containing Response Status Code set to 2000 (OK) and Content containing non-oneM2M devices resource representation</td> <td>CSE ← IUT</td> </tr> </table> | when { | the IUT receives a valid RETRIEVE Request from CSE containing To set to NON_ONEM2M_NEW_AE_RESOURCE_ADDRESS and From set to CSE_ID | CSE → IUT | then { | the IUT sends a valid Response containing Response Status Code set to 2000 (OK) and Content containing non-oneM2M devices resource representation | CSE ← IUT | Direction |
| when { | the IUT receives a valid RETRIEVE Request from CSE containing To set to NON_ONEM2M_NEW_AE_RESOURCE_ADDRESS and From set to CSE_ID | CSE → IUT | | | | | | |
| then { | the IUT sends a valid Response containing Response Status Code set to 2000 (OK) and Content containing non-oneM2M devices resource representation | CSE ← IUT | | | | | | |

TP/oneM2M/AE/OBI/RET/005

| | | |
|---------------------------|---|--|
| TP Id | TP/oneM2M/AE/OBI/RET/005 | |
| Test objective | Check that the IUT continues to discover the devices in the non-oneM2M area | |
| Reference | TS-0001 [1], clause 10.1.1.1 and 10.2.4.16, TS-0004 [2], clause 7.2.2.1 and 7.3.3.14, TS-0030 [8], clause 6.2.2.1. | |
| Config Id | CF07 | |
| Parent Release | Release 3 | |
| PICS Selection | PICS_AE_IPE, PICS_AE_IPE_DISCOVERY | |
| Initial conditions | with { the IUT being registered and the IUT being in the "initial state" and the IUT having retrieved and parsed the formal description of the ontology and the IUT having performed DISCOVERY of non-oneM2M devices and An existing non-oneM2M (NON_ONEM2M_NEW_AE_RESOURCE_ADDRESS) device was switched off } | |
| Expected behaviour | Test events when { the IUT receives a valid RETRIEVE Request from CSE containing To set to NON_ONEM2M_NEW_AE_RESOURCE_ADDRESS and From set to CSE_ID } then { the IUT sends a valid Response containing Response Status Code set to 4004 (NOT_FOUND) } | Direction CSE → IUT CSE ← IUT |

TP/oneM2M/AE/OBI/RET/006

| | | |
|---------------------------|---|--|
| TP Id | TP/oneM2M/AE/OBI/RET/006 | |
| Test objective | Check that the IUT accepts "on demand" discovery | |
| Reference | TS-0001 [1], clause 10.1.1.1 and 10.2.4.16, TS-0004 [2], clause 7.2.2.1 and 7.3.3.14, TS-0030 [8], clause 6.2.2.1. | |
| Config Id | CF07 | |
| Parent Release | Release 3 | |
| PICS Selection | PICS_AE_IPE, PICS_AE_IPE_DISCOVERY | |
| Initial conditions | with { the IUT being registered and the IUT being in the "initial state" and the IUT having retrieved and parsed the formal description of the ontology and the IUT having performed DISCOVERY of non-oneM2M devices } | |
| Expected behaviour | Test events when { the IUT receives a valid RETRIEVE Request from AE containing To set to IPE_RESOURCE_ADDRESS and Resource Type set to 28 (flexContainer) and From set to CSE_ID and Filter Criteria containing filterUsage set to 1 (IPE On-demand Discovery) } then { the IUT sends a valid Response containing Response Status Code set to 2000 (OK) and Content containing URIList representation } | Direction CSE → IUT CSE ← IUT |

7.2.1.7 Home Appliance Information Model and Mapping (HAIM)

7.2.1.7.1 CREATE Operation

TP/oneM2M/AE/HAIM/CRE/001

| | | |
|---------------------------|--|-------------------------------------|
| TP Id | TP/oneM2M/AE/HAIM/CRE/001 | |
| Test objective | Check that the IUT creates a <i>[HAIM_DEVICE]</i> resource as a specialization of the <flexContainer> resource on the hosting CSE using the appropriate 'DeviceClass ID' | |
| Reference | TS-0001 [1], clause 9.6.1.2.2.3, and TS-0023 [7], clauses 5.4, 6.2.2 and 6.4.2 | |
| Config Id | CF03 | |
| Parent Release | Release 3 | |
| 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 TARGET_RESOURCE_ADDRESS and the IUT exposing a controlling interface for a <i>HAIM_DEVICE</i> } | |
| Tested behaviour | Test events when { the IUT is triggered to send a valid CREATE Request containing To set to TARGET_RESOURCE_ADDRESS Content set to <i>[HAIM_DEVICE]</i> resource } then { the IUT sends a valid CREATE Request containing To set to TARGET_RESOURCE_ADDRESS and Content containing <i>[HAIM_DEVICE]</i> resource as a specialization of <flexContainer> containing containerDefinition attribute set to "org.onem2m.home.device.HAIM_DEVICE" } | Direction NA CSE ← IUT |

| TP Id | HAIM_DEVICE |
|-------------------------------|------------------------------|
| TP/oneM2M/AE/HAIM/CRE/001_AIR | deviceAirConditioner |
| TP/oneM2M/AE/HAIM/CRE/001_CLO | deviceClothesWasher |
| TP/oneM2M/AE/HAIM/CRE/001_ELE | deviceElectricVehicleCharger |
| TP/oneM2M/AE/HAIM/CRE/001_LIG | deviceLight |
| TP/oneM2M/AE/HAIM/CRE/001_MIC | deviceMicrogeneration |
| TP/oneM2M/AE/HAIM/CRE/001_OVE | deviceOven |
| TP/oneM2M/AE/HAIM/CRE/001_REF | deviceRefrigerator |
| TP/oneM2M/AE/HAIM/CRE/001_ROB | deviceRobotCleaner |
| TP/oneM2M/AE/HAIM/CRE/001_SMA | deviceSmartElectricMeter |
| TP/oneM2M/AE/HAIM/CRE/001_STO | deviceStorageBattery |
| TP/oneM2M/AE/HAIM/CRE/001_TEL | deviceTelevision |
| TP/oneM2M/AE/HAIM/CRE/001_THE | deviceThermostat |
| TP/oneM2M/AE/HAIM/CRE/001_WAT | deviceWaterHeater |

| | | |
|---------------------------|--|-------------------------------------|
| TP Id | TP/oneM2M/AE/HAIM/CRE/002 | |
| Test objective | Check that the IUT creates a <i>[HAIM_MODULE]</i> resource as a specialization of the <flexContainer> resource and as a child of <i>[HAIM_DEVICE]</i> resource on the hosting CSE using the appropriate ModuleClass ID | |
| Reference | TS-0001 [1], clause 9.6.1.2.2.3, and TS-0023 [7], clauses 5.3, 5.4, 6.2.2 and 6.4.3 | |
| Config Id | CF03 | |
| Parent Release | Release 3 | |
| 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 TARGET_RESOURCE_ADDRESS and the IUT exposing a controlling interface for a <i>HAIM_DEVICE</i> } | |
| Tested behaviour | Test events when { the IUT is triggered to send a valid CREATE Request containing To set to TARGET_RESOURCE_ADDRESS Content set to <i>[HAIM_DEVICE]</i> resource } then { the IUT sends a valid CREATE Request containing To set to TARGET_RESOURCE_ADDRESS and Content containing <i>[HAIM_DEVICE]</i> resource containing <i>[HAIM_MODULE]</i> resource as a specialization of <flexContainer> as an instance of the <i>HAIM_MODULE</i> ModuleClass containing containerDefinition attribute set to "org.onem2m.home.moduleclass.HAIM_MODULE" } | Direction NA CSE ← IUT |

| TP Id | HAIM_MODULE | HAIM_DEVICE |
|-------------------------------|--------------------------|------------------------------|
| TP/oneM2M/AE/HAIM/CRE/002_SEL | binarySwitch | deviceElectricVehicleCharger |
| TP/oneM2M/AE/HAIM/CRE/002_SLI | binarySwitch | deviceLight |
| TP/oneM2M/AE/HAIM/CRE/002_SWA | binarySwitch | deviceWaterHeater |
| TP/oneM2M/AE/HAIM/CRE/002_FEL | faultDetection | deviceElectricVehicleCharger |
| TP/oneM2M/AE/HAIM/CRE/002_REL | runState | deviceElectricVehicleCharger |
| TP/oneM2M/AE/HAIM/CRE/002_BEL | battery | deviceElectricVehicleCharger |
| TP/oneM2M/AE/HAIM/CRE/002_BST | battery | deviceStorageBattery |
| TP/oneM2M/AE/HAIM/CRE/002_VEL | electricVehicleConnector | deviceElectricVehicleCharger |
| TP/oneM2M/AE/HAIM/CRE/002_GMI | energyGeneration | deviceMicrogeneration |
| TP/oneM2M/AE/HAIM/CRE/002_CSM | energyConsumption | deviceSmartElectricMeter |
| TP/oneM2M/AE/HAIM/CRE/002_TTH | temperature | deviceThermostat |

| | | |
|---------------------------|--|-------------------------------------|
| TP Id | TP/oneM2M/AE/HAIM/CRE/003 | |
| Test objective | Check that the IUT creates the appropriate Properties, according to the <i>HAIM_DEVICE</i> model, as [customAttribute] attributes of a [deviceInfo] resource which is a child-resource of the <node> resource linked by the nodelink attribute of the <i>HAIM_DEVICE</i> model | |
| Reference | TS-0001 [1], clause 9.6.1.2.2.3, and TS-0023 [7], clauses 5.4, 5.6 and 6.2.5 | |
| Config Id | CF03 | |
| Parent Release | Release 3 | |
| 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 TARGET_RESOURCE_ADDRESS and the IUT exposing a controlling interface for a <i>HAIM_DEVICE</i> } | |
| Tested behaviour | Test events when { the IUT is triggered to send a valid CREATE Request containing To set to TARGET_RESOURCE_ADDRESS Content set to [<i>HAIM_DEVICE</i>] resource } then { the IUT sends a valid CREATE Request containing To set to TARGET_RESOURCE_ADDRESS and Content containing [<i>HAIM_DEVICE</i>] resource containing nodelink attribute containing link to a <node> resource on the same hosting CSE containing [deviceInfo] resource } | Direction NA CSE ← IUT |

| TP Id | HAIM_DEVICE |
|-------------------------------|------------------------------|
| TP/oneM2M/AE/HAIM/CRE/003_AIR | deviceAirConditioner |
| TP/oneM2M/AE/HAIM/CRE/003_CLO | deviceClothesWasher |
| TP/oneM2M/AE/HAIM/CRE/003_ELE | deviceElectricVehicleCharger |
| TP/oneM2M/AE/HAIM/CRE/003_LIG | deviceLight |
| TP/oneM2M/AE/HAIM/CRE/003_MIC | deviceMicrogeneration |
| TP/oneM2M/AE/HAIM/CRE/003_OVE | deviceOven |
| TP/oneM2M/AE/HAIM/CRE/003_REF | deviceRefrigerator |
| TP/oneM2M/AE/HAIM/CRE/003_ROB | deviceRobotCleaner |
| TP/oneM2M/AE/HAIM/CRE/003_SMA | deviceSmartElectricMeter |
| TP/oneM2M/AE/HAIM/CRE/003_STO | deviceStorageBattery |
| TP/oneM2M/AE/HAIM/CRE/003_TEL | deviceTelevision |
| TP/oneM2M/AE/HAIM/CRE/003_THE | deviceThermostat |
| TP/oneM2M/AE/HAIM/CRE/003_WAT | deviceWaterHeater |

| | | |
|---------------------------|--|---|
| TP Id | TP/oneM2M/AE/HAIM/CRE/004 | |
| Test objective | Check that the IUT creates the appropriate Properties, according to the <i>HAIM_MODULE</i> model, as [customAttribute] attributes of the <i>[HAIM_MODULE]</i> resource on the hosting CSE, with [customAttribute] name set to the prefix 'prop' plus the Property name | |
| Reference | TS-0001 [1], clause 9.6.1.2.2.3, and TS-0023 [7], clauses 5.3 and 6.2.5 | |
| Config Id | CF03 | |
| Parent Release | Release 3 | |
| 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 TARGET_RESOURCE_ADDRESS and the IUT exposing a controlling interface for a <i>HAIM_DEVICE</i> } | |
| Test behaviour | Test events when { the IUT is triggered to send a valid CREATE Request containing To set to TARGET_RESOURCE_ADDRESS Content set to <i>[HAIM_DEVICE]</i> resource } then { the IUT sends a valid CREATE Request containing To set to TARGET_RESOURCE_ADDRESS and Content containing <i>[HAIM_DEVICE]</i> resource containing <i>[HAIM_MODULE]</i> resource as a specialization of <flexContainer> containing appropriate [customAttribute] attributes with name set to "prop" prefix plus the Property name } | Direction NA CSE ← IUT |

| TP Id | HAIM_DEVICE | HAIM_MODULE |
|-------------------------------|------------------------------|--------------------------|
| TP/oneM2M/AE/HAIM/CRE/004_VBT | deviceElectricVehicleCharger | battery |
| TP/oneM2M/AE/HAIM/CRE/004_SBT | deviceStorageBattery | battery |
| TP/oneM2M/AE/HAIM/CRE/004_VCN | deviceElectricVehicleCharger | electricVehicleConnector |

| | | |
|---------------------------|---|---|
| TP Id | TP/oneM2M/AE/HAIM/CRE/005 | |
| Test objective | Check that the IUT creates the appropriate DataPoints, according to the <i>HAIM_MODULE</i> model, as [customAttribute] attributes of the <i>[HAIM_MODULE]</i> resource on the hosting CSE, with [customAttribute] name set to the Datapoint name | |
| Reference | TS-0001 [1], clause 9.6.1.2.2.3, and TS-0023 [7], clauses 5.3 and 6.2.6 | |
| Config Id | CF03 | |
| Parent Release | Release 3 | |
| 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 TARGET_RESOURCE_ADDRESS and the IUT exposing a controlling interface for a <i>HAIM_DEVICE</i> } | |
| Test behaviour | Test events when { the IUT is triggered to send a valid CREATE Request containing To set to TARGET_RESOURCE_ADDRESS Content set to <i>[HAIM_DEVICE]</i> resource } then { the IUT sends a valid CREATE Request containing To set to TARGET_RESOURCE_ADDRESS and | Direction NA CSE ← IUT |

| | | |
|--|--|--|
| | Content containing [HAIM_DEVICE] resource containing [HAIM_MODULE] resource as a specialization of <flexContainer> containing appropriate [customAttribute] attributes with name set to the DataPoint name } | |
|--|--|--|

| TP Id | HAIM_DEVICE | HAIM_MODULE |
|--------------------------------|------------------------------|--------------------------|
| TP/oneM2M/AE/HAIM/CRE/005_ACT | deviceAirConditioner | temperature |
| TP/oneM2M/AE/HAIM/CRE/005_ACU | deviceAirConditioner | turbo |
| TP/oneM2M/AE/HAIM/CRE/005_ACW | deviceAirConditioner | airflow |
| TP/oneM2M/AE/HAIM/CRE/005_CWS | deviceClothesWasher | spinLevel |
| TP/oneM2M/AE/HAIM/CRE/005_CWW | deviceClothesWasher | waterFlow |
| TP/oneM2M/AE/HAIM/CRE/005_VCB | deviceElectricVehicleCharger | battery |
| TP/oneM2M/AE/HAIM/CRE/005_VCE | deviceElectricVehicleCharger | electricVehicleConnector |
| TP/oneM2M/AE/HAIM/CRE/005_LBR | deviceLight | brightness |
| TP/oneM2M/AE/HAIM/CRE/005_LCL | deviceLight | colour |
| TP/oneM2M/AE/HAIM/CRE/005_LCS | deviceLight | colourSaturation |
| TP/oneM2M/AE/HAIM/CRE/005_LFD | deviceLight | faultDetection |
| TP/oneM2M/AE/HAIM/CRE/005_RDS | deviceRefrigerator | doorStatus |
| TP/oneM2M/AE/HAIM/CRE/005_RPS | deviceRefrigerator | powerSave |
| TP/oneM2M/AE/HAIM/CRE/005_EEC | deviceSmartElectricMeter | energyConsumption |
| TP/oneM2M/AE/HAIM/CRE/005_TVA | deviceTelevision | mediaInput |
| TP/oneM2M/AE/HAIM/CRE/005_TVV | deviceTelevision | audioVolume |
| TP/oneM2M/AE/HAIM/CRE/005_TVB | deviceTelevision | binarySwitch |
| TP/oneM2M/AE/HAIM/CRE/005_TVC | deviceTelevision | televisionChannel |
| TP/oneM2M/AE/HAIM/CRE/005_WHBL | deviceWaterHeater | boiler |
| TP/oneM2M/AE/HAIM/CRE/005_WHCL | deviceWaterHeater | clock |
| TP/oneM2M/AE/HAIM/CRE/005_WHHL | deviceWaterHeater | hotWaterSupply |
| TP/oneM2M/AE/HAIM/CRE/005_WHRL | deviceWaterHeater | runState |

7.2.1.8 Security (SEC)

7.2.1.8.1 Authentication

7.2.1.8.1.1 ESPPrim (ESP)

7.2.1.8.1.1.1 NOTIFY Operation

TP/oneM2M/AE/SEC/ESP/NTF/001

| | | |
|---------------------------|--|--|
| TP Id | TP/oneM2M/AE/SEC/ESP/NTF/001 | |
| Test objective | Check that the IUT sends a request for receiverESPrimRandObject, if the e2eSecInfo attribute of the Receiver's <remoteCSE> resource in CSE2 does not include a sharedReceiverESPrimRandObject | |
| Reference | TS-0003 8.4.2 – step B.2D, TS-0004 7.5.1.2.11 | |
| Config Id | CF03 | |
| PICS Selection | PICS_AE | |
| Initial conditions | with { the IUT being registered and the IUT being switched on and the IUT having established a pairwiseESPrimKey with the Receiver (CSE1) and the IUT having sent a RETRIEVE Request on the e2eSecInfo attribute in resource TARGET_REMOTE_CSE_ADDRESS } | |
| Expected behaviour | Test events when { the IUT receives a valid Response from CSE2 containing Response Status Code set to 2000 (OK) and Content containing <remoteCSE>resource containing e2eSecInfo attribute containing no sharedReceiverESPrimRandObject parameter } then { the IUT sends a valid NOTIFY Request to Receiver CSE(CSE1) containing To set to TARGET_RECEIVER_ADDRESS and From set to AE_ID and Content containing securityInfo element containing securityInfoType element set to 3 (receiverESPrimRandObject Request) } | Direction IUT ← CSE2 CSE1 ← IUT |

TP/oneM2M/AE/SEC/ESP/NTF/002

| | | |
|---------------------------|--|--|
| TP Id | TP/oneM2M/AE/SEC/ESP/NTF/002 | |
| Test objective | Check that the IUT sends a request for receiverESPrimRandObject to the Receiver if the sharedReceiverESPrimRandObject parameter in the Receiver's <remoteCSE> resource located in CSE2 has expired | |
| Reference | TS-0003 8.4.2 – step B.2D, TS-0004 7.5.1.2.11 | |
| Config Id | CF03 | |
| PICS Selection | PICS_AE | |
| Initial conditions | with { the IUT being registered and the IUT being switched on and the IUT having established a pairwiseESPrimKey with the Receiver CSE(CSE1) and the IUT having sent a RETRIEVE Request on the e2eSecInfo on resource TARGET_REMOTE_CSE_ADDRESS } | |
| Expected behaviour | Test events when { the IUT receives a valid Response from CSE2 containing Response Status Code set to 2000 (OK) and Content containing <remoteCSE> resource containing e2eSecInfo attribute containing sharedReceiverESPrimRandObject parameter containing ESPrimRandExpiry field set to an expired date } then { the IUT sends a valid NOTIFY Request to Receiver CSE containing To set to TARGET_RECEIVER_ADDRESS and From set to AE_ID and Content containing securityInfo element containing | Direction IUT ← CSE2 CSE1 ← IUT |

| | |
|--|--|
| <pre> securityInfoType element set to 3 (receiverESPrimRandObject Request) </pre> | |
|--|--|

TP/oneM2M/AE/SEC/ESP/NTF/003

| | | |
|---------------------------|--|--------------|
| TP Id | TP/oneM2M/AE/SEC/ESP/NTF/003 | |
| Test objective | Check that the IUT sends a valid ESPrim object to the Receiver CSE | |
| Reference | TS-0003 8.4.2 – step C.4, TS-0004 7.5.1.2.13, TS-0001 11.4.2 | |
| Config Id | CF03 | |
| PICS Selection | PICS_AE | |
| Initial conditions | with { the IUT is being registered and the IUT being switched on and the IUT having received receiverESPrimRandObject and the IUT having established a sessionESPrimKey with the Receiver CSE | |
| Expected behaviour | Test events when { the IUT is triggered to send a valid NOTIFY Request containing To set to TARGET_RECEIVER_ADDRESS and From set to AE_ID and Content containing securityInfo element containing securityInfoType element set to 5 (ESPrim Object) and esprimObject element | NA |
| | then { the IUT sends a valid NOTIFY Request to the Receiver CSE containing To set to TARGET_RECEIVER_ADDRESS and From set to AE_ID and Content containing securityInfo element containing securityInfoType element set to 5 (ESPrim Object) and esprimObject element set to a JSON Web Encryption (JWE) Compact Serialization on inner request primitive | CSE ← IUT |

7.2.1.8.1.1.2 RETRIEVE Operation

TP/oneM2M/AE/SEC/ESP/RET/001

| TP Id | TP/oneM2M/AE/SEC/ESP/RET/001 | | | | | | | |
|---|---|--------------------|------------------|---|----|--|---------------|--|
| Test objective | Check that the IUT sends a valid request for e2eSecInfo attribute of the Receiver's <remoteCSE> resource in the CSE Registered with Receiver CSE | | | | | | | |
| Reference | TS-0003 8.4.2 – step B.2A, TS-0004 7.5.1.2.11 | | | | | | | |
| Config Id | CF03 | | | | | | | |
| PICS Selection | PICS_AE | | | | | | | |
| Initial conditions | with { the IUT is being registered and the IUT being switched on and the IUT having established a pairwiseESPrimKey with the Receiver CSE } | | | | | | | |
| Expected behaviour | <table border="1"> <thead> <tr> <th>Test events</th> <th>Direction</th> </tr> </thead> <tbody> <tr> <td> when { the IUT is triggered to send a valid RETRIEVE Request containing To set to TARGET_REMOTE_CSE_ADDRESS and From set to AE_ID and Content containing attributeList element containing e2eSecInfo attribute } </td><td>NA</td></tr> <tr> <td> then { the IUT sends a valid RETRIEVE Request to CSE1 containing To set to TARGET_REMOTE_CSE_ADDRESS and From set to AE_ID and Content containing remoteCSE resource containing e2eSecInfo attribute } </td><td>CSE1 ← IUT</td></tr> </tbody> </table> | Test events | Direction | when { the IUT is triggered to send a valid RETRIEVE Request containing To set to TARGET_REMOTE_CSE_ADDRESS and From set to AE_ID and Content containing attributeList element containing e2eSecInfo attribute } | NA | then { the IUT sends a valid RETRIEVE Request to CSE1 containing To set to TARGET_REMOTE_CSE_ADDRESS and From set to AE_ID and Content containing remoteCSE resource containing e2eSecInfo attribute } | CSE1 ← IUT | |
| Test events | Direction | | | | | | | |
| when { the IUT is triggered to send a valid RETRIEVE Request containing To set to TARGET_REMOTE_CSE_ADDRESS and From set to AE_ID and Content containing attributeList element containing e2eSecInfo attribute } | NA | | | | | | | |
| then { the IUT sends a valid RETRIEVE Request to CSE1 containing To set to TARGET_REMOTE_CSE_ADDRESS and From set to AE_ID and Content containing remoteCSE resource containing e2eSecInfo attribute } | CSE1 ← IUT | | | | | | | |

TP/oneM2M/AE/SEC/ESP/RET/002

| TP Id | TP/oneM2M/AE/SEC/ESP/RET/002 | | | | | | | |
|---|--|--------------------|------------------|---|----|---|------------|--|
| Test objective | Check that the IUT sends a notification containing an inner "receiverESPrimRandObject request" to the Receiver if the sharedReceiverESPrimRandObject parameter is not present in the <remoteCSE> resource in the CSE Registered with Receiver CSE | | | | | | | |
| Reference | TS-0003 8.4.2 – step B.2D, TS-0004 7.5.1.2.11 | | | | | | | |
| Config Id | CF03 | | | | | | | |
| PICS Selection | PICS_AE | | | | | | | |
| Initial conditions | with { the IUT is being registered and the IUT being switched on and the IUT having established a pairwiseESPrimKey with the Originator and the <remoteCSE> resource at TARGET_REMOTE_CSE_ADDRESS containing e2eSecInfo attribute with no sharedReceiverESPrimRandObject parameter } | | | | | | | |
| Expected behaviour | <table border="1"> <thead> <tr> <th>Test events</th> <th>Direction</th> </tr> </thead> <tbody> <tr> <td> when { the IUT is triggered to send a valid RETRIEVE Request containing To set to TARGET_REMOTE_CSE_ADDRESS and From set to AE_ID and Content containing attributeList element containing e2eSecInfo attribute } </td><td>NA</td></tr> <tr> <td> then { the IUT sends a valid NOTIFICATION Request containing To set to TARGET_RECEIVER_ADDRESS and From set to AE_ID and Content containing securityInfo element containing securityInfoType element set to 3 (receiverESPrimRandObject Request) } </td><td>IUT → CSE1</td></tr> </tbody> </table> | Test events | Direction | when { the IUT is triggered to send a valid RETRIEVE Request containing To set to TARGET_REMOTE_CSE_ADDRESS and From set to AE_ID and Content containing attributeList element containing e2eSecInfo attribute } | NA | then { the IUT sends a valid NOTIFICATION Request containing To set to TARGET_RECEIVER_ADDRESS and From set to AE_ID and Content containing securityInfo element containing securityInfoType element set to 3 (receiverESPrimRandObject Request) } | IUT → CSE1 | |
| Test events | Direction | | | | | | | |
| when { the IUT is triggered to send a valid RETRIEVE Request containing To set to TARGET_REMOTE_CSE_ADDRESS and From set to AE_ID and Content containing attributeList element containing e2eSecInfo attribute } | NA | | | | | | | |
| then { the IUT sends a valid NOTIFICATION Request containing To set to TARGET_RECEIVER_ADDRESS and From set to AE_ID and Content containing securityInfo element containing securityInfoType element set to 3 (receiverESPrimRandObject Request) } | IUT → CSE1 | | | | | | | |

| | | |
|---------------------------|--|------------------|
| TP Id | TP/oneM2M/AE/SEC/ESP/RET/003 | |
| Test objective | Check that the IUT sends a notification containing an inner “receiverESPrimRandObject request” to the Receiver if the sharedReceiverESPrimRandObject in the <remoteCSE> resource is expired | |
| Reference | TS-0003 8.4.2 – step B.2D, TS-0004 7.5.1.2.11 | |
| Config Id | CF03 | |
| PICS Selection | PICS_AE | |
| Initial conditions | <pre>with { the IUT is being registered and the IUT being switched on and the IUT having established a pairwiseESPrimKey with the Originator and the <remoteCSE> resource at TARGET_REMOTE_CSE_ADDRESS containing e2eSeclInfo attribute with an expired sharedReceiverESPrimRandObject parameter }</pre> | |
| Expected behaviour | Test events | Direction |
| | <pre>when { the IUT is triggered to send a valid RETRIEVE Request containing To set to TARGET_REMOTE_CSE_ADDRESS and From set to AE_ID and Content containing attributeList element containing e2eSeclInfo attribute }</pre> | NA |
| | <pre>then { the IUT sends a valid NOTIFICATION Request containing To set to TARGET_RECEIVER_ADDRESS and From set to AE_ID and Content containing securityInfo element containing securityInfoType element set to 3 (receiverESPrimRandObject Request) }</pre> | IUT → CSE1 |

7.2.1.8.1.2 Roles (ROL)

7.2.1.8.1.2.1 CREATE Operation

7.2.1.8.1.3 ESCertKE (ESC)

7.2.1.8.1.3.1 NOTIFY Operation

TP/oneM2M/AE/SEC/ESC/NTF/001

| TP Id | TP/oneM2M/AE/SEC/ESC/NTF/001 | | | | | | | |
|--|---|--------------------|------------------|--|----|---|------------|--|
| Test objective | Check that the IUT sends a notify request with ESCertKE message 1 when triggered | | | | | | | |
| Reference | TS-0003 8.7.2.2 – step C.1.a, TS-0001 11.4.3, TS-0004 6.3.5.48 | | | | | | | |
| Config Id | CF03 | | | | | | | |
| PICS Selection | PICS_AE | | | | | | | |
| Initial conditions | <p>with {</p> <p style="margin-left: 20px;">the IUT is being registered and the IUT being switched on and the IUT having been provisioned with the corresponding private key and certificate and the IUT having configured Terminating End-Point's Certificate Info & Identity</p> <p>}</p> | | | | | | | |
| Expected behaviour | <table border="1" style="width: 100%; border-collapse: collapse;"> <thead> <tr> <th style="text-align: center; padding: 2px;">Test events</th> <th style="text-align: center; padding: 2px;">Direction</th> </tr> </thead> <tbody> <tr> <td style="padding: 2px;"> when { the IUT is triggered to send a valid NOTIFY Request containing To set to TERMINATING_ENDPOINT_ADDRESS and From set to AE_ID and Content containing securityInfo element containing securityInfoType element set to 6 (ESCertKE Message) and escertkeMessage element containing base64 representation of ESCertKE Message 1 (TLS Message: Client Hello) } </td><td style="text-align: center; padding: 2px;">NA</td></tr> <tr> <td style="padding: 2px;"> then { the IUT sends a valid NOTIFY Request to CSE1 containing To set to TERMINATING_ENDPOINT_ADDRESS and From set to AE_ID and Content containing securityInfo element containing securityInfoType element set to 6 (ESCertKE Message) and escertkeMessage element containing base64 representation of ESCertKE Message 1 (TLS Message: Client Hello) } </td><td style="text-align: center; padding: 2px;">IUT → CSE1</td></tr> </tbody> </table> | Test events | Direction | when { the IUT is triggered to send a valid NOTIFY Request containing To set to TERMINATING_ENDPOINT_ADDRESS and From set to AE_ID and Content containing securityInfo element containing securityInfoType element set to 6 (ESCertKE Message) and escertkeMessage element containing base64 representation of ESCertKE Message 1 (TLS Message: Client Hello) } | NA | then { the IUT sends a valid NOTIFY Request to CSE1 containing To set to TERMINATING_ENDPOINT_ADDRESS and From set to AE_ID and Content containing securityInfo element containing securityInfoType element set to 6 (ESCertKE Message) and escertkeMessage element containing base64 representation of ESCertKE Message 1 (TLS Message: Client Hello) } | IUT → CSE1 | |
| Test events | Direction | | | | | | | |
| when { the IUT is triggered to send a valid NOTIFY Request containing To set to TERMINATING_ENDPOINT_ADDRESS and From set to AE_ID and Content containing securityInfo element containing securityInfoType element set to 6 (ESCertKE Message) and escertkeMessage element containing base64 representation of ESCertKE Message 1 (TLS Message: Client Hello) } | NA | | | | | | | |
| then { the IUT sends a valid NOTIFY Request to CSE1 containing To set to TERMINATING_ENDPOINT_ADDRESS and From set to AE_ID and Content containing securityInfo element containing securityInfoType element set to 6 (ESCertKE Message) and escertkeMessage element containing base64 representation of ESCertKE Message 1 (TLS Message: Client Hello) } | IUT → CSE1 | | | | | | | |

TP/oneM2M/AE/SEC/ESC/NTF/002

| TP Id | TP/oneM2M/AE/SEC/ESC/NTF/002 | | | | | |
|--|---|--------------------|------------------|--|------------|--|
| Test objective | Check that the IUT sends a notify response with ESCertKE message 2 when it receives a notify request with ESCertKE message 1 | | | | | |
| Reference | TS-0003 8.7.2.2 – step C.1.b, TS-0001 11.4.3, TS-0004 6.3.5.48 | | | | | |
| Config Id | CF03 | | | | | |
| PICS Selection | PICS_AE | | | | | |
| Initial conditions | <p>with {</p> <p style="margin-left: 20px;">the IUT is being registered and the IUT being switched on and the IUT having been provisioned with the corresponding private key and certificate and the IUT having configured Initiating End-Point's Certificate Info & Identity</p> <p>}</p> | | | | | |
| Expected behaviour | <table border="1" style="width: 100%; border-collapse: collapse;"> <thead> <tr> <th style="text-align: center; padding: 2px;">Test events</th> <th style="text-align: center; padding: 2px;">Direction</th> </tr> </thead> <tbody> <tr> <td style="padding: 2px;"> when { the IUT receives a valid NOTIFY Request from CSE1 containing To set to TERMINATING_ENDPOINT_ADDRESS and From set to CSE1_ID and Content containing securityInfo element containing securityInfoType element set to 6 (ESCertKE Message) and escertkeMessage element containing base64 representation of ESCertKE Message 1 (TLS Message: Client Hello) } </td><td style="text-align: center; padding: 2px;">IUT ← CSE1</td></tr> </tbody> </table> | Test events | Direction | when { the IUT receives a valid NOTIFY Request from CSE1 containing To set to TERMINATING_ENDPOINT_ADDRESS and From set to CSE1_ID and Content containing securityInfo element containing securityInfoType element set to 6 (ESCertKE Message) and escertkeMessage element containing base64 representation of ESCertKE Message 1 (TLS Message: Client Hello) } | IUT ← CSE1 | |
| Test events | Direction | | | | | |
| when { the IUT receives a valid NOTIFY Request from CSE1 containing To set to TERMINATING_ENDPOINT_ADDRESS and From set to CSE1_ID and Content containing securityInfo element containing securityInfoType element set to 6 (ESCertKE Message) and escertkeMessage element containing base64 representation of ESCertKE Message 1 (TLS Message: Client Hello) } | IUT ← CSE1 | | | | | |

| | |
|---|------------|
| <pre> then { the IUT sends a valid NOTIFY Response to CSE containing To set to INITIATING_ENDPOINT_ADDRESS and From set to AE_ID and ResponseStatusCode set to OK (2000) and Content containing securityInfo element containing securityInfoType element set to 6 (ESCertKE Message) and escertkeMessage element containing base64 representation of ESCertKE Message 2 (TLS Messages: Server Hello, Certificate*, ServerKeyExchange*, CertificateRequest*, ServerHelloDone) } </pre> | IUT → CSE1 |
|---|------------|

TP/oneM2M/AE/SEC/ESC/NTF/003

| TP Id | TP/oneM2M/AE/SEC/ESC/NTF/003 | | | | | | | |
|---|---|-------------|-----------|---|------------|--|------------|--|
| Test objective | Check that the IUT sends a notify request with ESCertKE message 3 when it receives a notify response with ESCertKE message 2 | | | | | | | |
| Reference | TS-0003 8.7.2.2 – step C.1.c, TS-0001 11.4.3, TS-0004 6.3.5.48 | | | | | | | |
| Config Id | CF03 | | | | | | | |
| PICS Selection | PICS_AE, | | | | | | | |
| Initial conditions | <pre> with { the IUT is being registered and the IUT being switched on and the IUT having been provisioned with the corresponding private key and certificate and the IUT having configured Terminating End-Point's Certificate Info & Identity and the IUT having sent a notify request to the Terminating End-Point with ESCertKE Message 1 } </pre> | | | | | | | |
| Expected behaviour | <table border="1" style="width: 100%; border-collapse: collapse;"> <thead> <tr> <th style="text-align: center;">Test events</th> <th style="text-align: center;">Direction</th> </tr> </thead> <tbody> <tr> <td> <pre> when { the IUT receives a valid NOTIFY Response from CSE1 containing To set to INITIATING_ENDPOINT_ADDRESS and From set to CSE1_ID and ResponseStatusCode set to OK (2000) and Content containing securityInfo element containing securityInfoType element set to 6 (ESCertKE Message) and escertkeMessage element containing base64 representation of ESCertKE Message 2 (TLS Messages: Server Hello, Certificate*, ServerKeyExchange*, CertificateRequest*, ServerHelloDone) } </pre> </td><td style="text-align: center;">IUT ← CSE1</td></tr> <tr> <td> <pre> then { the IUT sends a valid NOTIFY Request to CSE1 containing To set to TERMINATING_ENDPOINT_ADDRESS and From set to AE_ID and Content containing securityInfo element containing securityInfoType element set to 6 (ESCertKE Message) and escertkeMessage element containing base64 representation of ESCertKE Message 3 (TLS Messages: Certificate*, ClientKeyExchange, CertificateVerify*, [ChangeCipherSpec], Finished) } </pre> </td><td style="text-align: center;">IUT → CSE1</td></tr> </tbody> </table> | Test events | Direction | <pre> when { the IUT receives a valid NOTIFY Response from CSE1 containing To set to INITIATING_ENDPOINT_ADDRESS and From set to CSE1_ID and ResponseStatusCode set to OK (2000) and Content containing securityInfo element containing securityInfoType element set to 6 (ESCertKE Message) and escertkeMessage element containing base64 representation of ESCertKE Message 2 (TLS Messages: Server Hello, Certificate*, ServerKeyExchange*, CertificateRequest*, ServerHelloDone) } </pre> | IUT ← CSE1 | <pre> then { the IUT sends a valid NOTIFY Request to CSE1 containing To set to TERMINATING_ENDPOINT_ADDRESS and From set to AE_ID and Content containing securityInfo element containing securityInfoType element set to 6 (ESCertKE Message) and escertkeMessage element containing base64 representation of ESCertKE Message 3 (TLS Messages: Certificate*, ClientKeyExchange, CertificateVerify*, [ChangeCipherSpec], Finished) } </pre> | IUT → CSE1 | |
| Test events | Direction | | | | | | | |
| <pre> when { the IUT receives a valid NOTIFY Response from CSE1 containing To set to INITIATING_ENDPOINT_ADDRESS and From set to CSE1_ID and ResponseStatusCode set to OK (2000) and Content containing securityInfo element containing securityInfoType element set to 6 (ESCertKE Message) and escertkeMessage element containing base64 representation of ESCertKE Message 2 (TLS Messages: Server Hello, Certificate*, ServerKeyExchange*, CertificateRequest*, ServerHelloDone) } </pre> | IUT ← CSE1 | | | | | | | |
| <pre> then { the IUT sends a valid NOTIFY Request to CSE1 containing To set to TERMINATING_ENDPOINT_ADDRESS and From set to AE_ID and Content containing securityInfo element containing securityInfoType element set to 6 (ESCertKE Message) and escertkeMessage element containing base64 representation of ESCertKE Message 3 (TLS Messages: Certificate*, ClientKeyExchange, CertificateVerify*, [ChangeCipherSpec], Finished) } </pre> | IUT → CSE1 | | | | | | | |

TP/oneM2M/AE/SEC/ESC/NTF/004

| | | |
|---------------------------|--|---|
| TP Id | TP/oneM2M/AE/SEC/ESC/NTF/004 | |
| Test objective | Check that the IUT sends a notify response with ESCertKE message 4 when it receives a notify request with ESCertKE message 3 | |
| Reference | TS-0003 8.7.2.2 – step C.1.d, TS-0001 11.4.3, TS-0004 6.3.5.48 | |
| Config Id | CF03 | |
| PICS Selection | PICS_AE | |
| Initial conditions | <p>with {</p> <p style="margin-left: 20px;">the IUT is being registered and the IUT being switched on and the IUT having been provisioned with the corresponding private key and certificate and the IUT having configured Initiating End-Point's Certificate Info & Identity and the IUT having sent a notify request to the Initiating End-Point with ESCertKE Message 2</p> <p>}</p> | |
| Expected behaviour | <p>Test events</p> <p>when {</p> <p style="margin-left: 20px;">the IUT receives a valid NOTIFY Request from CSE1 containing To set to TERMINATING_ENDPOINT_ADDRESS and From set to CSE1_ID and Content containing securityInfo element containing securityInfoType element set to 6 (ESCertKE Message) and escertkeMessage element containing base64 representation of ESCertKE Message 3 (TLS Messages: Certificate*, ClientKeyExchange, CertificateVerify*, [ChangeCipherSpec], Finished)</p> <p>}</p> <p>then {</p> <p style="margin-left: 20px;">the IUT sends a valid NOTIFY Response to CSE1 containing To set to INITIATING_ENDPOINT_ADDRESS and From set to AE_ID and ResponseStatusCode set to OK (2000) and Content containing securityInfo element containing securityInfoType element set to 6 (ESCertKE Message) and escertkeMessage element containing base64 representation of ESCertKE Message 4 (TLS Messages: ChangeCipherSpec], Finished)</p> <p>}</p> | <p>Direction</p> <p>IUT ← CSE1</p> <p>IUT → CSE1</p> |

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 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 } then { the IUT sends a Response message containing Response Status Code set to 2001 (CREATED) } | Direction IUT ← AE 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 | <i>PARENT_RELEASE</i> | |
| 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 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 } | Direction 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 | |

TP/oneM2M/CSE/GEN/CRE/003

| | | |
|---------------------------|---|----------------------------------|
| TP Id | TP/oneM2M/CSE/GEN/CRE/003 | |
| Test objective | Check that the IUT accepts the creation of a <container> resource using shortcut structured resource identifier | |
| Reference | TS-0001 [1], clause 9.3.1-1 | |
| Config Id | CF01 | |
| Parent Release | <i>PARENT_RELEASE</i> | |
| 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 when { the IUT receives a valid CREATE request from AE containing To set to SHORTCUT_HIERARCHICAL_RESOURCE_ADDRESS and From set to AE_ID and Resource Type set to 3 (container) and Content containing container resource representation } | Direction IUT ← AE |
| | then { the IUT sends a Response message containing Response Status Code set to 2001 (CREATED) } | IUT → AE |

| | |
|--|--|
| | |
|--|--|

| TP Id | SHORTCUT_HIERARCHICAL_RESOURCE_ADDRESS |
|--|--|
| TP/oneM2M/CSE/GEN/CRE/003_CSR | STRUCTURED_CSE_RELATIVE_RESOURCE_ID |
| TP/oneM2M/CSE/GEN/CRE/003_SPR | SP_RELATIVE_RESOURCE_ID, (see note) |
| TP/oneM2M/CSE/GEN/CRE/003_ABS | ABSOLUTE_RESOURCE_ID, (see note) |
| NOTE: These addresses are constructed with the Structured-CSE-Relative-Resource-ID | |

TP/oneM2M/CSE/GEN/CRE/004

| TP Id | TP/oneM2M/CSE/GEN/CRE/004 | | | | | | | |
|---|---|-------------|-----------|---|----------|--|----------|--|
| Test objective | Check that the IUT accepts the creation of a <container> resource using structured resource identifier with hybrid addressing | | | | | | | |
| Reference | TS-0001 [1], clause 9.3.1-1 | | | | | | | |
| Config Id | CF01 | | | | | | | |
| Parent Release | Release 2 | | | | | | | |
| PICS Selection | PICS_CSE, PICS_STRUCTURED_CSE_RELATIVE_RESOURCE_ID_FORMAT | | | | | | | |
| Initial conditions | <p>with {</p> <p>the IUT being in the "initial state"</p> <p>and the IUT having registered the AE</p> <p>and the IUT having created a <container> resource TARGET_RESOURCE_ADDRESS</p> <p>and the IUT having created a <group> resource GROUP_RESOURCE_ADDRESS</p> <p>containing</p> <p>membersIDs attribute set to TARGET_RESOURCE_ADDRESS</p> <p>and the AE having privileges to perform CREATE operation on the resource TARGET_RESOURCE_ADDRESS</p> <p>}</p> | | | | | | | |
| Expected behaviour | <table border="1"> <thead> <tr> <th>Test events</th> <th>Direction</th> </tr> </thead> <tbody> <tr> <td> <p>when {</p> <p>the IUT receives a valid CREATE request from AE containing</p> <p>To set to HYBRID_HIERARCHICAL_RESOURCE_ADDRESS and</p> <p>From set to AE_ID and</p> <p>Resource Type set to 3 (container) and</p> <p>Content containing</p> <p>container resource representation</p> <p>}</p> </td><td>IUT ← AE</td></tr> <tr> <td> <p>then {</p> <p>the IUT sends a Response message containing</p> <p>Response Status Code set to 2001 (CREATED)</p> <p>}</p> </td><td>IUT → AE</td></tr> </tbody> </table> | Test events | Direction | <p>when {</p> <p>the IUT receives a valid CREATE request from AE containing</p> <p>To set to HYBRID_HIERARCHICAL_RESOURCE_ADDRESS and</p> <p>From set to AE_ID and</p> <p>Resource Type set to 3 (container) and</p> <p>Content containing</p> <p>container resource representation</p> <p>}</p> | IUT ← AE | <p>then {</p> <p>the IUT sends a Response message containing</p> <p>Response Status Code set to 2001 (CREATED)</p> <p>}</p> | IUT → AE | |
| Test events | Direction | | | | | | | |
| <p>when {</p> <p>the IUT receives a valid CREATE request from AE containing</p> <p>To set to HYBRID_HIERARCHICAL_RESOURCE_ADDRESS and</p> <p>From set to AE_ID and</p> <p>Resource Type set to 3 (container) and</p> <p>Content containing</p> <p>container resource representation</p> <p>}</p> | IUT ← AE | | | | | | | |
| <p>then {</p> <p>the IUT sends a Response message containing</p> <p>Response Status Code set to 2001 (CREATED)</p> <p>}</p> | IUT → AE | | | | | | | |

| TP Id | HYBRID_HIERARCHICAL_RESOURCE_ADDRESS |
|--|--|
| TP/oneM2M/CSE/GEN/CRE/004_CSR | STRUCTURED_CSE_RELATIVE_RESOURCE_ID (see note) |
| TP/oneM2M/CSE/GEN/CRE/004_SPR | SP_RELATIVE_RESOURCE_ID, (see note) |
| TP/oneM2M/CSE/GEN/CRE/004_ABS | ABSOLUTE_RESOURCE_ID, (see note) |
| NOTE: These addresses are constructed with the UNSTRUCTURED_CSE_RELATIVE_RESOURCE_ID of group plus "/fopt" | |

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_ADDRESS of type RESOURCE_TYPE and the AE having privileges to perform UPDATE operation on the resource TARGET_RESOURCE_ADDRESS } | |
| Expected behaviour | Test events 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 } then { the IUT sends a Response message containing Response Status Code set to 2004 (UPDATED) } | Direction IUT ← AE 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 | <i>PARENT_RELEASE</i> | |
| 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_ADDRESS of type RESOURCE_TYPE and the AE having privileges to perform UPDATE operation on the resource TARGET_RESOURCE_ADDRESS } | |
| Expected behaviour | Test events 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 labels 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

TP/oneM2M/CSE/GEN/UPD/003

| | | |
|---------------------------|---|----------|
| TP Id | TP/oneM2M/CSE/GEN/UPD/003 | |
| Test objective | Check that the IUT accepts the update of a <container> resource using shortcut structured resource identifier | |
| Reference | TS-0001 [1], clause 9.3.1-1 | |
| Config Id | CF01 | |
| Parent Release | <i>PARENT_RELEASE</i> | |
| 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_ADDRESS of type RESOURCE_TYPE and the AE having privileges to perform UPDATE operation on the resource TARGET_RESOURCE_ADDRESS } | |
| Expected behaviour | Test events when { the IUT receives a valid UPDATE request from AE containing To set to SHORTCUT_HIERARCHICAL_RESOURCE_ADDRESS and From set to AE_ID and Content containing container resource containing valid labels attribute } | IUT ← AE |

| | |
|---|----------|
| <pre> then { the IUT sends a Response message containing Response Status Code set to 2004 (UPDATED) } </pre> | IUT → AE |
|---|----------|

| TP Id | SHORTCUT_HIERARCHICAL_RESOURCE_ADDRESS |
|--|---|
| TP/oneM2M/CSE/GEN/UPD/003 CSR | STRUCTURED_CSE_RELATIVE_RESOURCE_ID |
| TP/oneM2M/CSE/GEN/UPD/003 SPR | SP_RELATIVE_RESOURCE_ID, (see note) |
| TP/oneM2M/CSE/GEN/UPD/003 ABS | ABSOLUTE_RESOURCE_ID, (see note) |
| NOTE: These addresses are constructed with the Structured-CSE-Relative-Resource-ID | |

TP/oneM2M/CSE/GEN/UPD/004

| TP Id | TP/oneM2M/CSE/GEN/UPD/004 | |
|---------------------------|---|-----------|
| Test objective | Check that the IUT accepts the update of a <container> resource using structured resource identifier with hybrid addressing | |
| Reference | TS-0001 [1], clause 9.3.1-1 | |
| Config Id | CF01 | |
| Parent Release | Release 2 | |
| 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 IUT having created a <group> resource GROUP_RESOURCE_ADDRESS containing membersIDs attribute set to TARGET_RESOURCE_ADDRESS and the AE having privileges to perform UPDATE operation on the resource TARGET_RESOURCE_ADDRESS } | |
| Expected behaviour | Test events when { the IUT receives a valid UPDATE request from AE containing To set to HYBRID_HIERARCHICAL_RESOURCE_ADDRESS and From set to AE_ID and Content containing container resource containing valid labels attribute } | Direction |
| | IUT ← AE | |
| | then { the IUT sends a Response message containing Response Status Code set to 2004 (UPDATED) } | IUT → AE |

| TP Id | HYBRID_HIERARCHICAL_RESOURCE_ADDRESS |
|--|--|
| TP/oneM2M/CSE/GEN/UPD/004 CSR | STRUCTURED_CSE_RELATIVE_RESOURCE_ID (see note) |
| TP/oneM2M/CSE/GEN/UPD/004 SPR | SP_RELATIVE_RESOURCE_ID, (see note) |
| TP/oneM2M/CSE/GEN/UPD/004 ABS | ABSOLUTE_RESOURCE_ID, (see note) |
| NOTE: These addresses are constructed with the UNSTRUCTURED_CSE_RELATIVE_RESOURCE_ID of group plus "/fopt" | |

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 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 } then { the IUT sends a Response message containing Response Status Code set to 2000 (OK) and Content containing container resource representation } | Direction IUT ← AE 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 | <i>PARENT_RELEASE</i> | |
| 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 container resource 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

TP/oneM2M/CSE/GEN/RET/003

| | | |
|---------------------------|--|------------------|
| TP Id | TP/oneM2M/CSE/GEN/RET/003 | |
| Test objective | Check that the IUT accepts the retrieval of a <container> resource using shortcut structured resource identifier | |
| Reference | TS-0001 [1], clause 9.3.1-1 | |
| Config Id | CF01 | |
| Parent Release | <i>PARENT_RELEASE</i> | |
| 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 SHORTCUT_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 | IUT → AE |

| | |
|--|--|
| Content containing container resource representation } | |
|--|--|

| TP Id | SHORTCUT_HIERARCHICAL_RESOURCE_ADDRESS |
|--|---|
| TP/oneM2M/CSE/GEN/RET/003_CSR | STRUCTURED_CSE_RELATIVE_RESOURCE_ID |
| TP/oneM2M/CSE/GEN/RET/003_SPR | SP_RELATIVE_RESOURCE_ID, (see note) |
| TP/oneM2M/CSE/GEN/RET/003_ABS | ABSOLUTE_RESOURCE_ID, (see note) |
| NOTE: These addresses are constructed with the Structured-CSE-Relative-Resource-ID | |

TP/oneM2M/CSE/GEN/RET/004

| | | | | | | |
|--|--|--|---------------------------|---|----------|---|
| TP Id | TP/oneM2M/CSE/GEN/RET/004 | | | | | |
| Test objective | Check that the IUT accepts the retrieval of a <container> resource using structured resource identifier with hybrid addressing | | | | | |
| Reference | TS-0001 [1], clause 9.3.1-1 | | | | | |
| Config Id | CF01 | | | | | |
| Parent Release | Release 2 | | | | | |
| 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 IUT having created a <group> resource GROUP_RESOURCE_ADDRESS containing membersIDs attribute set to TARGET_RESOURCE_ADDRESS and the AE having privileges to perform RETRIEVE operation on the resource TARGET_RESOURCE_ADDRESS } | | | | | |
| Expected behaviour | Test events <table border="1" style="width: 100%; border-collapse: collapse;"> <tr> <td style="padding: 5px;"> when { the IUT receives a valid RETRIEVE request from AE containing To set to HYBRID_HIERARCHICAL_RESOURCE_ADDRESS and From set to AE_ID and no Content } </td> <td style="width: 10%; text-align: center; padding: 5px;"> Direction IUT ← AE </td> </tr> <tr> <td style="padding: 5px;"> then { the IUT sends a Response message containing Response Status Code set to 2000 (OK) and Content containing container resource representation } </td> <td style="width: 10%; text-align: center; padding: 5px;"> IUT → AE </td> </tr> </table> | when { the IUT receives a valid RETRIEVE request from AE containing To set to HYBRID_HIERARCHICAL_RESOURCE_ADDRESS and From set to AE_ID and no Content } | Direction IUT ← AE | then { the IUT sends a Response message containing Response Status Code set to 2000 (OK) and Content containing container resource representation } | IUT → AE | Direction IUT ← AE IUT → AE |
| when { the IUT receives a valid RETRIEVE request from AE containing To set to HYBRID_HIERARCHICAL_RESOURCE_ADDRESS and From set to AE_ID and no Content } | Direction IUT ← AE | | | | | |
| then { the IUT sends a Response message containing Response Status Code set to 2000 (OK) and Content containing container resource representation } | IUT → AE | | | | | |

| TP Id | HYBRID_HIERARCHICAL_RESOURCE_ADDRESS |
|--|--|
| TP/oneM2M/CSE/GEN/RET/004_CSR | STRUCTURED_CSE_RELATIVE_RESOURCE_ID (see note) |
| TP/oneM2M/CSE/GEN/RET/004_SPR | SP_RELATIVE_RESOURCE_ID, (see note) |
| TP/oneM2M/CSE/GEN/RET/004_ABS | ABSOLUTE_RESOURCE_ID, (see note) |
| NOTE: These addresses are constructed with the UNSTRUCTURED_CSE_RELATIVE_RESOURCE_ID of group plus "/fopt" | |

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 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 } then { the IUT sends a Response message containing Response Status Code set to 2002 (DELETED) } | Direction IUT ← AE 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 | PARENT_RELEASE | |
| 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 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 } then { the IUT sends a Response message containing Response Status Code set to 2002 (DELETED) } | Direction IUT ← AE 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 | |

TP/oneM2M/CSE/GEN/DEL/003

| TP Id | TP/oneM2M/CSE/GEN/DEL/003 | |
|---------------------------|--|----------|
| Test objective | Check that the IUT accepts the deletion of a <container> resource using shortcut structured resource identifier | |
| Reference | TS-0001 [1], clause 9.3.1-1 | |
| Config Id | CF01 | |
| Parent Release | <i>PARENT_RELEASE</i> | |
| 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 when { the IUT receives a valid DELETE request from AE containing To set to SHORTCUT_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 | SHORTCUT_HIERARCHICAL_RESOURCE_ADDRESS |
|--|--|
| TP/oneM2M/CSE/GEN/DEL/003_CSR/ | STRUCTURED_CSE_RELATIVE_RESOURCE_ID |
| TP/oneM2M/CSE/GEN/DEL/003_SPR | SP_RELATIVE_RESOURCE_ID, (see note) |
| TP/oneM2M/CSE/GEN/DEL/003_ABS | ABSOLUTE_RESOURCE_ID, (see note) |
| NOTE: These addresses are constructed with the Structured-CSE-Relative-Resource-ID | |

| | | |
|---------------------------|---|--|
| TP Id | TP/oneM2M/CSE/GEN/DEL/004 | |
| Test objective | Check that the IUT accepts the deletion of a <container> resource using structured resource identifier with hybrid addressing | |
| Reference | TS-0001 [1], clause 9.3.1-1 | |
| Config Id | CF01 | |
| Parent Release | Release 2 | |
| 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 when { the IUT receives a valid DELETE request from AE containing To set to HYBRID_HIERARCHICAL_RESOURCE_ADDRESS and From set to AE_ID and no Content } then { the IUT sends a Response message containing Response Status Code set to 2002 (DELETED) } | Direction IUT ← AE IUT → AE |

| TP Id | HYBRID_HIERARCHICAL_RESOURCE_ADDRESS |
|-------------------------------|--------------------------------------|
| TP/oneM2M/CSE/GEN/DEL/004_CSR | STRUCTURED_CSE_RELATIVE_RESOURCE_ID |
| TP/oneM2M/CSE/GEN/DEL/004_SPR | SP_RELATIVE_RESOURCE_ID, (see note) |
| TP/oneM2M/CSE/GEN/DEL/004_ABS | ABSOLUTE_RESOURCE_ID, (see note) |

NOTE: These addresses are constructed with the UNSTRUCTURED_CSE_RELATIVE_RESOURCE_ID of group plus "/fopt"

7.2.2.2 Registration (REG)

7.2.2.2.1 RETRIEVE Operation

| | | |
|---------------------------|--|--|
| 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], clause 10.2.3.2 and clause 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 the CSEBase resource } | |
| Expected behaviour | Test events 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 } then { the IUT sends a valid Response containing Response Status Code set to 2000 (OK) and Content containing | Direction IUT ← AE IUT → AE |

| | |
|---------------------------------|--|
| CSEBase resource representation | |
| } | |

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], clause 10.2.3.2 and clause 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 the CSEBase resource and the IUT having a CSEBase resource containing the valid ATTRIBUTE attribute } | |
| Expected behaviour | Test events 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 } then { the IUT sends a valid Response containing Response Status Code set to 2000 (OK) and Content containing CSEBase resource containing valid ATTRIBUTE attribute } | Direction IUT \leftarrow AE IUT \rightarrow AE |

| TP Id | PICS Selection | Reference | ATTRIBUTE |
|-------------------------------|----------------|---------------|-----------|
| TP/oneM2M/CSE/REG/RET/002_CST | PICS_CB_CST | TS-0001 9.6.3 | cseType |
| TP/oneM2M/CSE/REG/RET/002_NL | PICS_CB_NL | TS-0001 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, and clause 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 and the AE having privileges to perform RETRIEVE operation on the AE resource } | |
| Expected behaviour | Test events when { the IUT receives a valid RETRIEVE Request from AE containing To set to AE_RESOURCE_ADDRESS and From set to AE_ID } | Direction IUT \leftarrow AE |

| | |
|---|----------|
| <pre> then { the IUT sends a valid Response containing Response Status Code set to 2000 (OK) and Content containing AE resource representation } </pre> | 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 <i>ATTRIBUTE</i> | |
| Reference | TS-0001 [1], clause 10.2.1.2 and clause 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 <i>ATTRIBUTE</i> attribute and the AE having privileges to perform RETRIEVE operation on the AE 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 AE resource containing <i>ATTRIBUTE</i> 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], clause 10.2.3.2 and clause 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 | <pre>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 the CSEBase resource }</pre> | | | | | | | |
| Expected behaviour | <table border="1"> <thead> <tr> <th>Test events</th> <th>Direction</th> </tr> </thead> <tbody> <tr> <td> <pre>when { the IUT receives a valid RETRIEVE Request from AE containing To set to CSEBASE_RESOURCE_ADDRESS and From set to AE_ID }</pre> </td><td>IUT ← AE</td></tr> <tr> <td> <pre>then { the IUT sends a valid Response containing Response Status Code set to 2000 (OK) and Content containing CSEBase resource containing cseType attribute set to 1 (IN_CSE) }</pre> </td><td>IUT → AE</td></tr> </tbody> </table> | Test events | Direction | <pre>when { the IUT receives a valid RETRIEVE Request from AE containing To set to CSEBASE_RESOURCE_ADDRESS and From set to AE_ID }</pre> | IUT ← AE | <pre>then { the IUT sends a valid Response containing Response Status Code set to 2000 (OK) and Content containing CSEBase resource containing cseType attribute set to 1 (IN_CSE) }</pre> | IUT → AE | |
| Test events | Direction | | | | | | | |
| <pre>when { the IUT receives a valid RETRIEVE Request from AE containing To set to CSEBASE_RESOURCE_ADDRESS and From set to AE_ID }</pre> | IUT ← AE | | | | | | | |
| <pre>then { the IUT sends a valid Response containing Response Status Code set to 2000 (OK) and Content containing CSEBase resource containing cseType attribute set to 1 (IN_CSE) }</pre> | 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], clause 10.1.1.2.1 and, clause 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 | <pre>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 the remoteCSE resource }</pre> | | | | | | | |
| Expected behaviour | <table border="1"> <thead> <tr> <th>Test events</th> <th>Direction</th> </tr> </thead> <tbody> <tr> <td> <pre>when { the IUT receives a valid RETRIEVE Request from ORIGINATOR containing To set to REMOTECSE_RESOURCE_ADDRESS and From set to ORIGINATOR_ID }</pre> </td><td>IUT ← ORIGINATOR</td></tr> <tr> <td> <pre>then { the IUT sends a valid Response containing Response Status Code set to 2000 (OK) and Content containing remoteCSE resource representation }</pre> </td><td>IUT → ORIGINATOR</td></tr> </tbody> </table> | Test events | Direction | <pre>when { the IUT receives a valid RETRIEVE Request from ORIGINATOR containing To set to REMOTECSE_RESOURCE_ADDRESS and From set to ORIGINATOR_ID }</pre> | IUT ← ORIGINATOR | <pre>then { the IUT sends a valid Response containing Response Status Code set to 2000 (OK) and Content containing remoteCSE resource representation }</pre> | IUT → ORIGINATOR | |
| Test events | Direction | | | | | | | |
| <pre>when { the IUT receives a valid RETRIEVE Request from ORIGINATOR containing To set to REMOTECSE_RESOURCE_ADDRESS and From set to ORIGINATOR_ID }</pre> | IUT ← ORIGINATOR | | | | | | | |
| <pre>then { the IUT sends a valid Response containing Response Status Code set to 2000 (OK) and Content containing remoteCSE resource representation }</pre> | IUT → ORIGINATOR | | | | | | | |

| | | | |
|---------------------------|--|--|---------------------|
| 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], clause 10.1.1.2.1 and clause 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 the remoteCSE resource } | | |
| Expected behaviour | Test events when { the IUT receives a valid RETRIEVE Request from ORIGINATOR containing To set to REMOTE_CSE_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 remoteCSE resource 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 pointOfAccess containing the list of physical addresses to be used by Registrant to connect to this CSE (e.g. IP address, FQDN) | |
| Reference | TS-0001 [1], clause 10.2.3.2 and clause 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 the CSEBase resource } | |
| Expected behaviour | Test events when { the IUT receives a valid RETRIEVE Request from AE containing To set to CSEBASE_RESOURCE_ADDRESS and From set to AE_ID } then { the IUT sends a valid Response containing Response Status Code set to 2000 (OK) and Content containing CSEBase resource containing supportedResourceType set to PX_SRT pointOfAccess set to PX_POA } | Direction IUT \leftarrow AE IUT \rightarrow 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 when { the IUT is triggered to send a valid RETRIEVE Request containing To set to TARGET_REMOTE_CSE_ADDRESS } 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 } | Direction NA IUT \rightarrow CSE |

| | | |
|---------------------------|--|---|
| 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 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 } then { the IUT sends a valid Response containing Response Status Code set to 2000 (OK) and Content containing remoteCSE resource representation } | Direction IUT \leftarrow CSE IUT \rightarrow CSE |

7.2.2.2.2 CREATE Operation

| | | |
|---------------------------|---|---|
| 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 | PARENT_RELEASE | |
| PICS Selection | PICS_SELECTION | |
| Initial conditions | with { the IUT being in the "initial state" and the IUT having preconfigured AE_ID_stem } | |
| Expected behaviour | Test events 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 } then { the IUT sends a valid Response containing Response Status Code set to 2001 (CREATED) and Content containing AE resource representation } | Direction IUT \leftarrow AE IUT \rightarrow AE |

| TP Id | PARENT_RELEASE | SP_RELATIVE_AE_ID | PICS SELECTION |
|-------------------------------|----------------|-------------------|----------------|
| TP/oneM2M/CSE/REG/CRE/001_CAE | Release 1 | Starting with "C" | PICS_CSE |
| TP/oneM2M/CSE/REG/CRE/001_SAE | Release 2 | Starting with "S" | PICS_IN_CSE |

| | | | | |
|---------------------------|--|------------------|----------|--|
| 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 | <i>PARENT_RELEASE</i> | | | |
| PICS Selection | <i>PICS SELECTION</i> | | | |
| Initial conditions | <pre>with { the IUT being in the "initial state" and the IUT having preconfigured AE_ID_stem }</pre> | | | |
| Expected behaviour | Test events <pre>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 } then { the IUT sends a valid Response containing Response Status Code set to 2001 (CREATED) and Content containing AE resource representation }</pre> | Direction | | |
| | | | IUT ← AE | |
| | | | IUT → AE | |

| TP Id | PARENT_RELEASE | AE_ID_STEM | PICS Selection |
|-------------------------------|-----------------------|-------------------|-----------------------|
| TP/oneM2M/CSE/REG/CRE/002_CAE | Release 1 | Starting with "C" | PICS_CSE |
| TP/oneM2M/CSE/REG/CRE/002_SAE | Release 2 | Starting with "S" | PICS_IN_CSE |

Editor's Note: Test purpose TP/oneM2M/CSE/REG/CRE/002 is duplicated with TP/oneM2M/CSE/REG/CRE/026 in terms of testing AE re-registration in TS-0001 10.1.1.2.2, case d. Therefore, test purpose TP/oneM2M/CSE/REG/CRE/026 is going to be removed.

| | | | | |
|---------------------------|--|------------------|--------------|--|
| 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 S-AE-ID-STEM | | | |
| 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 2 | | | |
| PICS Selection | <i>PICS_MN_CSE</i> | | | |
| Initial conditions | <pre>with { the IUT being in the "initial state" and the IUT having registered to the IN-CSE }</pre> | | | |
| Expected behaviour | Test events <pre>when { the IUT receives a valid CREATE Request from AE containing From set to S-AE-ID-STEM and Resource Type set to 2(AE) and Content containing AE resource representation } then{ the IUT sends a valid CREATE Request to IN-CSE containing From set to SP-RELATIVE-AE-ID and Content containing AEAnnrc resource containing link attribute set to SP-RELATIVE-AE-ID and labels attribute set to "Credential-IDs:None" }</pre> | Direction | | |
| | | | IUT ← AE | |
| | | | IUT → IN-CSE | |

| | |
|---|--|
| } | |
| NOTE: SP-RELATIVE-AE-ID = {SP-RELATIVE-CSE-ID}/{S-AE-ID-STEM } S-AE-ID-STEM = Valid AE-ID-Stem starting with "S" | |

Editor's Note: need to clarify if there is duplication.

| | | |
|---------------------------|---|--|
| 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 | <pre>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 }</pre> | |
| Expected behaviour | Test events <pre>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 }</pre> <pre>then { the IUT does not create the AE resource and the IUT sends a valid Response containing Response Status Code set to 4126(APP_RULE_VALIDATION_FAILED) }</pre> | Direction IUT ← AE IUT → AE |

| | | |
|---------------------------|---|------------------|
| 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 2 | |
| PICS Selection | PICS MN CSE | |
| Initial conditions | <pre>with { the IUT being in the "initial state" and the IUT having registered to the IN-CSE and and the IUT allowing to register an AE containing App-ID attribute set to APP-ID }</pre> | |
| Expected behaviour | Test events | Direction |
| | <pre>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 }</pre> | IUT ← AE |
| | <pre>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 attribute indicating 'Credential-ID:None' }</pre> | IUT → IN-CSE |

Editor's Note: Double check the value of attribute nodeLink!!

TP/oneM2M/CSE/REG/CRE/006

| | | |
|---|---|--------------------------|
| 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 | |
| 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 2 | |
| PICS Selection | PICS_MN_CSE | |
| Initial conditions | with { the IUT being in the "initial state" and the IUT having registered to the IN-CSE } | |
| Expected behaviour | Test events | Direction |
| | when { the IUT receives a valid CREATE Request from AE containing From set to character 'S' and Resource Type set to 2(AE) and Content containing AE resource representation } | IUT \leftarrow AE |
| | then{ the IUT sends a valid CREATE Request to IN_CSE containing From set to SP-RELATIVE-CSE-ID followed by '/S' and Content containing AEAnnC resource containing link attribute set to SP-RELATIVE-AE-ID } | IUT \rightarrow IN-CSE |
| NOTE: SP-RELATIVE-AE-ID = {SP-RELATIVE-CSE-ID}/{AE_ID_Stem} AE_ID_Stem = "S" | | |

TP/oneM2M/CSE/REG/CRE/007

| | | |
|---|---|-------------------------|
| TP Id | TP/oneM2M/CSE/REG/CRE/007 | |
| Test objective | Check that the IUT accepts an response of AEANNc create request during AE registration with provided character 'S' in AE_ID_Stem | |
| 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 2 | |
| PICS Selection | PICS_MN_CSE | |
| Initial conditions | with { the IUT being in the "initial state" and the IUT having registered to the IN-CSE and the IUT having received a valid AE create request containing From set to "S" 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 \leftarrow IN-CSE |
| | then { the IUT sends a valid Response containing Response Status Code set to 2001 (CREATED) and Content containing AE resource containing ResouceID attribute set to S-AE-ID-STEM and AE-ID attribute set to S-AE-ID-STEM } | IUT \rightarrow AE |
| NOTE: SP-RELATIVE-AE-ID = {SP-RELATIVE-CSE-ID}/{S-AE-ID-STEM} S-AE-ID-STEM = Valid AE-ID-STEM assigned by IN-CSE | | |

| | | |
|---------------------------|---|------------------|
| 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 2 | |
| PICS Selection | PICS MN CSE | |
| Initial conditions | <pre> with { the IUT being in the "initial state" the IUT having registered to the IN-CSE and the AE having already been registered containing AE-ID set to S-AE-ID-STEM and the AE having deregistered } </pre> | |
| Expected behaviour | Test events | Direction |
| | <pre> 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 representation } </pre> | IUT ← AE |
| | <pre> then { the IUT sends a valid UPDATE Request to the IN-CSE containing From set to SP-RELATIVE-AE-ID and Content containing AEAnnec resource containing link attribute set to SP-RELATIVE-AE-ID and labels attribute indicating 'Credential-ID:None' } </pre> | IUT → IN-CSE |

NOTE: SP-RELATIVE-AE-ID = {SP-RELATIVE-CSE-ID}/{S-AE-ID-STEM }
S-AE-ID-STEM = Value starting with "S" assigned by IN-CSE

| 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 2 | | | | | | | |
| PICS Selection | PICS IN CSE | | | | | | | |
| Initial conditions | <pre> with { the IUT being in the "initial state" and the IUT having registered the MN-CSE and the AE having already been registered containing AE-ID set to S-AE-ID-STEM and the AE having deregistered } </pre> | | | | | | | |
| Expected behaviour | <table border="1"> <thead> <tr> <th>Test events</th> <th>Direction</th> </tr> </thead> <tbody> <tr> <td> <pre> when { the IUT receives a valid UPDATE Request from the MN-CSE containing To set to AEANNCE_RESOURCE_ADDRESS and From set to SP-RELATIVE-AE-ID and Content containing AEAnnce resource containing link attribute set to SP-RELATIVE-AE-ID and labels attribute indicating 'Credential-ID:None' } </pre> </td><td>IUT ← MN-CSE</td></tr> <tr> <td> <pre> then { the IUT updates the AEANNCE_RESOURCE_ADDRESS resource and the IUT sends a valid Response to MN-CSE containing Response Status Code set to 2004 (UPDATED) and Content containing AEAnnce resource containing link attribute set to SP-RELATIVE-AE-ID and labels attribute indicating 'Credential-ID:None' } </pre> </td><td>IUT → MN-CSE</td></tr> </tbody> </table> | Test events | Direction | <pre> when { the IUT receives a valid UPDATE Request from the MN-CSE containing To set to AEANNCE_RESOURCE_ADDRESS and From set to SP-RELATIVE-AE-ID and Content containing AEAnnce resource containing link attribute set to SP-RELATIVE-AE-ID and labels attribute indicating 'Credential-ID:None' } </pre> | IUT ← MN-CSE | <pre> then { the IUT updates the AEANNCE_RESOURCE_ADDRESS resource and the IUT sends a valid Response to MN-CSE containing Response Status Code set to 2004 (UPDATED) and Content containing AEAnnce resource containing link attribute set to SP-RELATIVE-AE-ID and labels attribute indicating 'Credential-ID:None' } </pre> | IUT → MN-CSE | |
| Test events | Direction | | | | | | | |
| <pre> when { the IUT receives a valid UPDATE Request from the MN-CSE containing To set to AEANNCE_RESOURCE_ADDRESS and From set to SP-RELATIVE-AE-ID and Content containing AEAnnce resource containing link attribute set to SP-RELATIVE-AE-ID and labels attribute indicating 'Credential-ID:None' } </pre> | IUT ← MN-CSE | | | | | | | |
| <pre> then { the IUT updates the AEANNCE_RESOURCE_ADDRESS resource and the IUT sends a valid Response to MN-CSE containing Response Status Code set to 2004 (UPDATED) and Content containing AEAnnce resource containing link attribute set to SP-RELATIVE-AE-ID and labels attribute indicating 'Credential-ID:None' } </pre> | IUT → MN-CSE | | | | | | | |
| <p>NOTE: SP-RELATIVE-AE-ID = {SP-RELATIVE-CSE-ID}/{S-AE-ID-STEM } S-AE-ID-STEM = Value starting with "S" assigned by IN-CSE</p> | | | | | | | | |

| | | |
|--|--|---|
| 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 2 | |
| PICS Selection | PICS MN CSE | |
| Initial conditions | <p>with {</p> <p>the IUT being in the "initial state" and the IUT having registered the MN-CSE and the AE having already been registered containing AE-ID set to S-AE-ID-STEM and the AE having deregistered and the AE having sent a registration containing From set to S-AE-ID-STEM and the IUT having sent a valid AEAnnnc UPDATE Request to IN-CSE</p> <p>}</p> | |
| Expected behaviour | <p>Test events</p> <p>when {</p> <p>the IUT receives a valid UPDATE Response from IN-CSE containing Response Status Code set to 2004 (UPDATED) and Content containing AEAnnnc resource containing link attribute set to SP-RELATIVE-AE-ID and labels attribute indicating 'Credential-ID:None'</p> <p>}</p> <p>then {</p> <p>the IUT sends a valid Response to the AE containing Response Status Code set to 2001 (CREATED) and Content containing AE resource containing AE-ID attribute set to S-AE-ID-STEM</p> <p>}</p> | <p>Direction</p> <p>IUT ← IN-CSE</p> <p>IUT → AE</p> |
| <p>NOTE: SP-RELATIVE-AE-ID = {SP-RELATIVE-CSE-ID}/{S-AE-ID-STEM } S-AE-ID-STEM = Value starting with "S" assigned by IN-CSE</p> | | |

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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 AE_ID_Stem by indicating 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 | <pre>with { the IUT being in the "initial state" and the IUT having preconfigured AE_ID_stem }</pre> | |
| Expected behaviour | Test events | Direction |
| | <pre>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 }</pre> | IUT ← AE |
| | <pre>then { the IUT sends a valid Response containing Response Status Code set to 2001 (CREATED) and Content containing AE resource containing ResouceID attribute indicating a value starting with 'C' }</pre> | IUT → AE |

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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], clause 10.1.1.2.2 and clause 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 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 } 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 } | Direction IUT ← AE IUT → AE |

| 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 |

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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], clause 10.1.1.2.1 and clause 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 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 } then { the IUT sends a valid Response containing Response Status Code set to 2001 (CREATED) and Content containing remoteCSE resource representation } | Direction IUT ← CSE IUT → CSE |

| 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 remoteCSE according to pointOfAccess in the <remoteCSE> resource | |
| Reference | TS-0001 [1], clause 9.6.4 and clause 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 when { the IUT receives a valid REQUEST from Originator containing To set to RESOURCE_ADDRESS and From set to Originator_ID } then { the IUT sends the REQUEST to POINT_OF_ACCESS } | Direction IUT ← Originator IUT → CSE |

TP/oneM2M/CSE/REG/CRE/015

| | | |
|---------------------------|---|---|
| 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], clause 9.6.4 and clause 9.3.2.2.3, TS-0004 [2], clause 6.2.3 | |
| Config Id | CF02 | |
| Parent Release | Release 1 | |
| PICS Selection | PICS_CSE , PICS_SP_RELATIVE_RESOURCE_ID, PICS_ABSOLUTE_RESOURCE_ID | |
| 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 when { the IUT receives a valid RESPONSE from the remoteCSE } then { the IUT sends the RESPONSE to the Originator } | Direction IUT ← CSE IUT → Originator |

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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 | <pre>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 }</pre> | |
| Expected behaviour | Test events | Direction |
| | <pre>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 }</pre> | IUT ← AE |
| | <pre>then { the IUT does not create the AE resource and the IUT sends a valid Response containing Response Status Code set to 4126(APP_RULE_VALIDATION_FAILED) }</pre> | IUT → AE |

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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 doesn't 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 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 } then { the IUT sends a valid Response containing Response Status Code set to 4000 (BAD Request) } | Direction IUT \leftarrow AE IUT \rightarrow 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], clause 10.1.1.2.1 and clause 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 remoteCSE resource 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], clause 10.1.1.2.1 and clause 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 remoteCSE resource representation } | IUT → CSE |

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|---|--|---|
| TP Id | TP/oneM2M/CSE/REG/CRE/020 | |
| Test objective | Check that the IUT accepts a create request of <AE> resource with attributes multiplicity equals to 1 and asking AE_ID_Stem by indicating AE_ID_Stem starting with character 'S' | |
| Reference | TS-0001 [1], clause 10.1.1.2.2 case a, TS-0004 [2], clause 7.4.5.2.1 | |
| Config Id | CF01 | |
| Parent Release | Release 2 | |
| PICS Selection | PICS_IN_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 AE containing From set to 'S' and Resource Type set to 2(AE) and Content containing AE resource representation } then { the IUT sends a valid Response containing Response Status Code set to 2001 (CREATED) and Content containing AE resource containing ResouceID attribute set to S-AE-ID-STEM } | IUT \leftarrow AE IUT \rightarrow AE |
| NOTE: S-AE-ID-STEM = Value starting with "S" assigned by IN-CSE | | |

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|---------------------------|--|---|
| 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], clause 10.2.3.1 and clause 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 } then { the IUT sends a valid Response containing Response Status Code set to 4005 (OPERATION_NOT_ALLOWED) } | IUT \leftarrow AE IUT \rightarrow AE |

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|---------------------------|---|--|
| 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 | <p>with {</p> <p style="padding-left: 20px;">the IUT being in the "initial state"</p> <p style="padding-left: 20px;">and the IUT allowing to register an AE containing</p> <p style="padding-left: 40px;">App-ID attribute indicating APP-ID and</p> <p style="padding-left: 40px;">AE-ID attribute indicating C-AE-ID-STEM</p> <p>}</p> | |
| Expected behaviour | Test events <p>when {</p> <p style="padding-left: 20px;">the IUT receives a valid CREATE Request from AE containing</p> <p style="padding-left: 40px;">Resource Type set to 2 (AE) and</p> <p style="padding-left: 40px;">From set to 'C' and</p> <p style="padding-left: 40px;">Content containing</p> <p style="padding-left: 60px;">AE resource containing</p> <p style="padding-left: 80px;">App-ID attribute set to APP-ID</p> <p>}</p> <p>then {</p> <p style="padding-left: 20px;">the IUT creates the AE resource</p> <p style="padding-left: 20px;">and the IUT sends a valid Response containing</p> <p style="padding-left: 40px;">Response Status Code set to 2001 (CREATED)</p> <p>}</p> | Direction <p>IUT ← AE</p> <p>IUT → AE</p> |

TP/oneM2M/CSE/REG/CRE/023

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|---------------------------|--|--|
| 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 when { the IUT receives a valid CREATE Request from AE containing Resource Type set to 2 (AE) and To set to TARGET_CSE_RESOURCE_ADDRESS and From set to C-AE-ID-STEM and Content containing AE resource representation } then { the IUT does not create the AE resource and the IUT sends a valid Response containing Response Status Code set to 4105 (CONFLICT) } | Direction IUT ← AE IUT → AE |

TP/oneM2M/CSE/REG/CRE/024

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|---------------------------|---|-------------------------------------|
| 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 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 } 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 } | Direction NA 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 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 } 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 } | Direction IUT ← CSE IUT → CSE |

TP/oneM2M/CSE/REG/CRE/026

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|---------------------------|--|-------------------------------------|
| TP Id | TP/oneM2M/CSE/REG/CRE/026 | |
| Test objective | Check that IUT sends a CSE registration request with <i>OPTIONAL_ATTRIBUTE</i> 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 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 <i>OPTIONAL_ATTRIBUTE</i> } 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 <i>OPTIONAL_ATTRIBUTE</i> } | Direction NA 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 CSE 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 |

| | |
|---|-----------|
| <pre> 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 } </pre> | IUT → CSE |
|---|-----------|

| TP Id | PICS Selection | Reference | OPTIONAL_ATTRIBUTE |
|-------------------------------|----------------|-----------------------------|--------------------|
| 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 |

TP/oneM2M/CSE/REG/CRE/029

| TP Id | TP/oneM2M/CSE/REG/CRE/029 | |
|--|---|--------------|
| Test objective | Check that the IUT accepts an AE registration (preprovisioned 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 a, step 5-8 | |
| Config Id | CF04 | |
| Parent Release | Release 2 | |
| PICS Selection | PICS_IN_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 the CSE containing Resource Type set to 10002 (AEAnnC) and From set to SP-RELATIVE-AE-ID and Content containing AEAnnC resource containing link attribute set to SP-RELATIVE-AE-ID and labels attribute indicating 'Credential-ID:None' } | IUT ← MN-CSE |
| | then { the IUT creates the AEANN_C_RESOURCE_ADDRESS resource and the IUT sends a valid Response to CSE containing Response Status Code set to 2001 (CREATED) and Content containing AEAnnC resource containing link attribute set to SP-RELATIVE-AE-ID and labels indicating 'Credential-ID:None' } | |
| NOTE: SP-RELATIVE-AE-ID = {SP-RELATIVE-CSE-ID}/{S-AE-ID-STEM} S-AE-ID-STEM = Valid AE-ID-STEM starting with "S" | | IUT → MN-CSE |

TP/oneM2M/CSE/REG/CRE/030

| TP Id | TP/oneM2M/CSE/REG/CRE/030 | | | | | | | |
|---|---|-------------|-----------|---|--------------|--|----------|--|
| 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 2 | | | | | | | |
| PICS Selection | PICS_MN_CSE | | | | | | | |
| Initial conditions | <p>with {</p> <p>the IUT being in the "initial state" and the IUT having registered the MN-CSE and the AE having sent a registration containing From set to S-AE-ID-STEM and the IUT having sent a valid AEAnncreg CREATE Request to IN-CSE</p> <p>}</p> | | | | | | | |
| Expected behaviour | <table border="1"> <thead> <tr> <th>Test events</th> <th>Direction</th> </tr> </thead> <tbody> <tr> <td> <p>when {</p> <p>the IUT receives a valid Response from IN-CSE containing Response Status Code set to 2001 (CREATED) and Content containing AEAnncreg resource containing link attribute set to SP-RELATIVE-AE-ID and labels attribute indicating 'Credential-ID:None'</p> <p>}</p> </td><td>IUT ← IN-CSE</td></tr> <tr> <td> <p>then {</p> <p>the IUT sends a valid Response to the AE containing Response Status Code set to 2001 (CREATED) and Content containing AE resource containing AE-ID attribute set to S-AE-ID-STEM</p> <p>}</p> </td><td>IUT → AE</td></tr> </tbody> </table> | Test events | Direction | <p>when {</p> <p>the IUT receives a valid Response from IN-CSE containing Response Status Code set to 2001 (CREATED) and Content containing AEAnncreg resource containing link attribute set to SP-RELATIVE-AE-ID and labels attribute indicating 'Credential-ID:None'</p> <p>}</p> | IUT ← IN-CSE | <p>then {</p> <p>the IUT sends a valid Response to the AE containing Response Status Code set to 2001 (CREATED) and Content containing AE resource containing AE-ID attribute set to S-AE-ID-STEM</p> <p>}</p> | IUT → AE | |
| Test events | Direction | | | | | | | |
| <p>when {</p> <p>the IUT receives a valid Response from IN-CSE containing Response Status Code set to 2001 (CREATED) and Content containing AEAnncreg resource containing link attribute set to SP-RELATIVE-AE-ID and labels attribute indicating 'Credential-ID:None'</p> <p>}</p> | IUT ← IN-CSE | | | | | | | |
| <p>then {</p> <p>the IUT sends a valid Response to the AE containing Response Status Code set to 2001 (CREATED) and Content containing AE resource containing AE-ID attribute set to S-AE-ID-STEM</p> <p>}</p> | IUT → AE | | | | | | | |
| <p>NOTE: SP-RELATIVE-AE-ID = {SP-RELATIVE-CSE-ID}/{S-AE-ID-STEM }</p> <p>S-AE-ID-STEM = Value starting with "S" assigned by IN-CSE</p> | | | | | | | | |

TP/oneM2M/CSE/REG/CRE/031

| TP Id | TP/oneM2M/CSE/REG/CRE/031 | | | | | | | |
|--|---|-------------|-----------|---|--------------|--|--------------|--|
| Test objective | Check that the IUT accepts an AE registration (S-AE-ID-STEM not provided by AE), communication between MN-CSE and IN-CSE | | | | | | | |
| Reference | TS-0001 [1], clause 10.1.1.2.2 case a, TS-0004 [2], clause 7.4.5.2.1 | | | | | | | |
| Config Id | CF04 | | | | | | | |
| Parent Release | Release 2 | | | | | | | |
| PICS Selection | PICS_IN_CSE | | | | | | | |
| Initial conditions | <p>with {</p> <p>the IUT being in the "initial state"</p> <p>}</p> | | | | | | | |
| Expected behaviour | <table border="1"> <thead> <tr> <th>Test events</th> <th>Direction</th> </tr> </thead> <tbody> <tr> <td> <p>when {</p> <p>the IUT receives a valid CREATE Request from MN-CSE containing Resource Type set to 10002 (AEAnncreg) and From set to SP-RELATIVE-AE-ID and Content containing AEAnncreg resource containing link attribute set to SP-RELATIVE-AE-ID and labels indicating 'Credential-ID:None'</p> <p>}</p> </td><td>IUT ← MN-CSE</td></tr> <tr> <td> <p>then {</p> <p>the IUT creates the AEANNCREG_RESOURCE_ADDRESS resource and the IUT sends a valid Response to CSE containing Response Status Code set to 2001 (CREATED) and Content containing AEAnncreg resource containing link attribute set to SP-RELATIVE-AE-ID* and labels indicating 'Credential-ID:None'</p> <p>}</p> </td><td>IUT → MN-CSE</td></tr> </tbody> </table> | Test events | Direction | <p>when {</p> <p>the IUT receives a valid CREATE Request from MN-CSE containing Resource Type set to 10002 (AEAnncreg) and From set to SP-RELATIVE-AE-ID and Content containing AEAnncreg resource containing link attribute set to SP-RELATIVE-AE-ID and labels indicating 'Credential-ID:None'</p> <p>}</p> | IUT ← MN-CSE | <p>then {</p> <p>the IUT creates the AEANNCREG_RESOURCE_ADDRESS resource and the IUT sends a valid Response to CSE containing Response Status Code set to 2001 (CREATED) and Content containing AEAnncreg resource containing link attribute set to SP-RELATIVE-AE-ID* and labels indicating 'Credential-ID:None'</p> <p>}</p> | IUT → MN-CSE | |
| Test events | Direction | | | | | | | |
| <p>when {</p> <p>the IUT receives a valid CREATE Request from MN-CSE containing Resource Type set to 10002 (AEAnncreg) and From set to SP-RELATIVE-AE-ID and Content containing AEAnncreg resource containing link attribute set to SP-RELATIVE-AE-ID and labels indicating 'Credential-ID:None'</p> <p>}</p> | IUT ← MN-CSE | | | | | | | |
| <p>then {</p> <p>the IUT creates the AEANNCREG_RESOURCE_ADDRESS resource and the IUT sends a valid Response to CSE containing Response Status Code set to 2001 (CREATED) and Content containing AEAnncreg resource containing link attribute set to SP-RELATIVE-AE-ID* and labels indicating 'Credential-ID:None'</p> <p>}</p> | IUT → MN-CSE | | | | | | | |

| |
|--|
| NOTE: SP-RELATIVE-AE-ID = {SP-RELATIVE-CSE-ID}/{AE-ID-STEM} SP-RELATIVE-AE-ID* = {SP-RELATIVE-CSE-ID}/{S-AE-ID-STEM} AE-ID-STEM = "S" S-AE-ID-STEM = Valid AE-ID-STEM starting with "S" |
|--|

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 [1], clause 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 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 } then { the IUT sends a valid Response containing Response Status Code set to 4005 (OPERATION_NOT_ALLOWED) } | Direction IUT ← AE 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], clause 10.2.2.4 and clause 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 | <pre>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 the remoteCSE resource }</pre> | |
| Expected behaviour | Test events <pre>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 } then { the IUT sends a valid Response containing Response Status Code set to 2002 (DELETED) and the IUT deletes the remoteCSE resource }</pre> | Direction IUT \leftarrow CSE IUT \rightarrow 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 | <pre>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 }</pre> | |
| Expected behaviour | Test events <pre>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 } then { the IUT deletes the AE_RESOURCE_ADDRESS resource and the IUT sends a valid Response containing Response Status Code set to 2002 (DELETED) }</pre> | Direction IUT \leftarrow AE IUT \rightarrow 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 when { the IUT is triggered to send a valid DELETE Request containing To set to TARGET_REMOTE_CSE_ADDRESSS } 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 } | Direction NA IUT → CSE |

TP/oneM2M/CSE/REG/DEL/005

| | | |
|---------------------------|---|--|
| TP Id | TP/oneM2M/CSE/REG/DEL/005 | |
| Test objective | Check that the IUT accepts an AE de-registration when AE-ID is starting with "S" | |
| Reference | TS-0001 [1], clause 10.1.4.2.2 | |
| Config Id | CF01 | |
| Parent Release | Release 2 | |
| PICS Selection | PICS_IN_CSE | |
| Initial conditions | with { the IUT being in the "initial state" and the IUT having registered the AE containing From set to "S" and the AE having privileges to perform DELETE operation on the resource AE } | |
| Expected behaviour | Test events 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 } then { the IUT deletes the AE_RESOURCE_ADDRESS resource and the IUT sends a valid Response containing Response Status Code set to 2002 (DELETED) | Direction IUT ← AE IUT → AE |

TP/oneM2M/CSE/REG/DEL/006

| | | |
|---------------------------|---|------------------|
| TP Id | TP/oneM2M/CSE/REG/DEL/006 | |
| Test objective | Check that the IUT accepts an AE de-registration when AE-ID is starting with "S" | |
| Reference | TS-0001 [1], clause 10.1.1.2.2 | |
| Config Id | CF02 | |
| Parent Release | Release 2 | |
| PICS Selection | PICS_MN_CSE | |
| Initial conditions | with { the IUT being in the "initial state" and the IUT having registered the AE containing From set to "S" 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 sends a valid UPDATE Request containing Content containing AEANNC_RESOURCE_ADDRESS resource containing link attribute set to "INACTIVE" } | IUT → IN-CSE |

TP/oneM2M/CSE/REG/DEL/007

| | | |
|---------------------------|---|------------------|
| TP Id | TP/oneM2M/CSE/REG/DEL/007 | |
| Test objective | Check that the IUT accepts the response from IN-CSE for the AE de-registration when AE-ID is starting with "S" | |
| Reference | TS-0001 [1], clause 10.1.1.2.2 | |
| Config Id | CF02 | |
| Parent Release | Release 2 | |
| PICS Selection | PICS_MN_CSE | |
| Initial conditions | with { the IUT being in the "initial state" and the IUT having registered the AE containing From set to "S" and the AE having privileges to perform DELETE operation on the resource AE and the AE having sent a valid DELETE Request at AE_RESOURCE_ADDRESS resource and the IUT having sent a valid UPDATE Request to IN-CSE containing Content containing AEANNC_RESOURCE_ADDRESS resource containing link attribute set to empty } | |
| Expected behaviour | Test events | Direction |
| | when { the IUT receives a valid Response from IN-CSE containing Response Status Code set to 2004 (UPDATED) } | IUT ← IN-CSE |
| | 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 |

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], clause 10.2.3.3 and clause 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 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 } then { the IUT sends a valid Response containing Response Status Code set to 4005 (OPERATION_NOT_ALLOWED) } | Direction IUT ← AE 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], 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 CSE having privileges to perform UPDATE operation on the resource TARGET_REMOTE_CSE_ADDRESS } | |
| Expected behaviour | Test events when { the IUT receives a valid UPDATE Request containing To set to TARGET_REMOTE_CSE_ADDRESS and From set to CSE_ID and Content containing remoteCSE resource containing OPTIONAL_ATTRIBUTE attribute set to VALUE_2 } then { the IUT sends a valid Response containing Response Status Code set to 2004 (UPDATED) and Content containing remoteCSE resource containing OPTIONAL_ATTRIBUTE attribute set to VALUE_2 } | Direction IUT ← CSE IUT → CSE |

| TP Id | Reference | OPTIONAL_ATTRIBUTE |
|-------------------------------|-----------------------------|---------------------------|
| TP/oneM2M/CSE/REG/UPD/002_LBL | TS-0001 [1], clause 9.6.4-2 | labels |
| TP/oneM2M/CSE/REG/UPD/002_POA | TS-0001 [1], clause 9.6.4-2 | pointOfAccess |
| TP/oneM2M/CSE/REG/UPD/002_NL | TS-0001 [1], clause 9.6.4-2 | nodeLink |

| 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 | <pre>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 }</pre> | | | | | | |
| Expected behaviour | <table border="1" style="width: 100%; border-collapse: collapse;"> <thead> <tr> <th style="text-align: center; padding: 2px;">Test events</th> <th style="text-align: center; padding: 2px;">Direction</th> </tr> </thead> <tbody> <tr> <td style="padding: 2px;"> <pre>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 }</pre> </td> <td style="text-align: center; padding: 2px;">NA</td> </tr> <tr> <td style="padding: 2px;"> <pre>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 }</pre> </td> <td style="text-align: center; padding: 2px;">IUT → CSE</td> </tr> </tbody> </table> | Test events | Direction | <pre>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 }</pre> | NA | <pre>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 }</pre> | IUT → CSE |
| Test events | Direction | | | | | | |
| <pre>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 }</pre> | NA | | | | | | |
| <pre>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 }</pre> | 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_ADDRESS resource | |
| Reference | TS-0001 [1], clause 10.1.2 | |
| Config Id | CF01 | |
| Parent Release | <i>PARENT_RELEASE</i> | |
| 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_ADDRESS of type <i>RESOURCE_TYPE</i> under the AE resource and the AE having privileges to perform RETRIEVE operation on the resource TARGET_RESOURCE_ADDRESS } | |
| Expected behaviour | Test events 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 } then { the IUT sends a valid Response containing Response Status Code set to 2000 (OK) and Content containing <i>RESOURCE_TYPE</i> resource representation } | Direction IUT \leftarrow AE IUT \rightarrow AE |

| TP Id | PARENT_RELEASE | Reference | RESOURCE_TYPE |
|-------------------------------|-----------------------|-------------------------------|-------------------------|
| TP/oneM2M/CSE/DMR/RET/001_CNT | Release 1 | TS-0001 [1], clause 10.2.4.2 | 3 (container) |
| TP/oneM2M/CSE/DMR/RET/001_ACP | Release 1 | TS-0001 [1], clause 10.2.21.2 | 1 (accessControlPolicy) |
| TP/oneM2M/CSE/DMR/RET/001_SUB | Release 1 | TS-0001 [1], clause 10.2.11.3 | 23 (subscription) |
| TP/oneM2M/CSE/DMR/RET/001_CIN | Release 1 | TS-0001 [1], clause 10.2.4.2 | 4 (contentInstance) |
| TP/oneM2M/CSE/DMR/RET/001_GRP | Release 1 | TS-0001 [1], clause 10.2.7.3 | 9 (group) |
| TP/oneM2M/CSE/DMR/RET/001_SCH | Release 3 | TS-0001 [1], clause 10.2.40.2 | 18 (schedule) |
| TP/oneM2M/CSE/DMR/RET/001_PCH | Release 2 | TS-0001 [1], clause 10.2.13.3 | 15 (pollingChannel) |
| TP/oneM2M/CSE/DMR/RET/001_TS | Release 3 | TS-0001 [1], clause 10.2.30.2 | 29 (timeSeries) |

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 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 } then { the IUT sends a valid Response containing Response Status Code set to 4004 (NOT_FOUND) } | Direction IUT ← AE 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 | PARENT_RELEASE | |
| 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_ADDRESS of 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 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 } then { the IUT sends a Response containing Response Status Code set to 4103 (ORIGINATOR_HAS_NO_PRIVILEGE) } | Direction IUT ← AE IUT → AE |

| TP Id | PARENT_RELEASE | Reference | RESOURCE_TYPE |
|-------------------------------|----------------|-------------------------------|-------------------------|
| TP/oneM2M/CSE/DMR/RET/003_CNT | Release 1 | TS-0001 [1], clause 10.2.4.2 | 3 (container) |
| TP/oneM2M/CSE/DMR/RET/003_ACP | Release 1 | TS-0001 [1], clause 10.2.21.2 | 1 (accessControlPolicy) |
| TP/oneM2M/CSE/DMR/RET/003_SUB | Release 1 | TS-0001 [1], clause 10.2.11.3 | 23 (subscription) |
| TP/oneM2M/CSE/DMR/RET/003_GRP | Release 1 | TS-0001 [1], clause 10.2.7.3 | 9 (group) |
| TP/oneM2M/CSE/DMR/RET/003_SCH | Release 3 | TS-0001 [1], clause 10.2.40.2 | 18 (schedule) |

| TP Id | PARENT_RELEASE | Reference | RESOURCE_TYPE |
|------------------------------|----------------|-------------------------------|-----------------|
| TP/oneM2M/CSE/DMR/RET/003_TS | Release 3 | TS-0001 [1], clause 10.2.30.2 | 29 (timeSeries) |

TP/oneM2M/CSE/DMR/RET/004

| TP Id | TP/oneM2M/CSE/DMR/RET/004 | |
|--|---|--|
| Test objective | Check that the IUT returns successfully the ATTRIBUTE of TARGET_RESOURCE_ADDRESS resource ("To" option) | |
| Reference | TS-0001 [1], clause 10.1.2 | |
| Config Id | CF01 | |
| Parent Release | PARENT_RELEASE | |
| 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_ADDRESS of 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 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 } 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 } | Direction IUT ← AE IUT → AE |
| Notes: TARGET_ATTRIBUTE_ADDRESS is represented as TARGET_RESOURCE_ADDRESS#ATTRIBUTE where '#' is present between TARGET_RESOURCE_ADDRESS and ATTRIBUTE. ATTRIBUTE indicates common attribute for all RESOURCE_TYPE resources listed in the table below. | | |

| TP Id | PARENT_RELEASE | Reference | RESOURCE_TYPE |
|-------------------------------|----------------|-------------------------------|-------------------------|
| TP/oneM2M/CSE/DMR/RET/004_CNT | Release 1 | TS-0001 [1], clause 10.2.4.2 | 3 (container) |
| TP/oneM2M/CSE/DMR/RET/004_ACP | Release 1 | TS-0001 [1], clause 10.2.21.2 | 1 (accessControlPolicy) |
| TP/oneM2M/CSE/DMR/RET/004_SUB | Release 1 | TS-0001 [1], clause 10.2.11.3 | 23 (subscription) |
| TP/oneM2M/CSE/DMR/RET/004_GRP | Release 1 | TS-0001 [1], clause 10.2.7.3 | 9 (group) |
| TP/oneM2M/CSE/DMR/RET/004_SCH | Release 3 | TS-0001 [1], clause 10.2.40.2 | 18 (schedule) |
| TP/oneM2M/CSE/DMR/RET/004_PCH | Release 2 | TS-0001 [1], clause 10.2.13.3 | 15 (pollingChannel) |
| TP/oneM2M/CSE/DMR/RET/004_TS | Release 3 | TS-0001 [1], clause 10.2.30.2 | 29 (timeSeries) |

| | | |
|---|--|--|
| TP Id | TP/oneM2M/CSE/DMR/RET/005 | |
| Test objective | Check that the IUT returns successfully the ATTRIBUTE of TARGET_RESOURCE_ADDRESS resource ("Content" option) | |
| Reference | TS-0001 [1], clause 10.1.2 | |
| Config Id | CF01 | |
| Parent Release | <u>PARENT_RELEASE</u> | |
| 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_ADDRESS of 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 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 } 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 } | Direction IUT ← AE IUT → AE |
| Notes: ATTRIBUTE indicates common attribute for all RESOURCE_TYPE resources listed in the table below | | |

| TP Id | PARENT_RELEASE | Reference | RESOURCE_TYPE |
|-------------------------------|----------------|-------------------------------|-------------------------|
| TP/oneM2M/CSE/DMR/RET/005_CNT | Release 1 | TS-0001 [1], clause 10.2.4.2 | 3 (container) |
| TP/oneM2M/CSE/DMR/RET/005_ACP | Release 1 | TS-0001 [1], clause 10.2.21.2 | 1 (accessControlPolicy) |
| TP/oneM2M/CSE/DMR/RET/005_SUB | Release 1 | TS-0001 [1], clause 10.2.11.3 | 23 (subscription) |
| TP/oneM2M/CSE/DMR/RET/005_GRP | Release 1 | TS-0001 [1], clause 10.2.7.3 | 9 (group) |
| TP/oneM2M/CSE/DMR/RET/005_SCH | Release 3 | TS-0001 [1], clause 10.2.40.2 | 18 (schedule) |
| TP/oneM2M/CSE/DMR/RET/005_PCH | Release 2 | TS-0001 [1], clause 10.2.13.3 | 15 (pollingChannel) |
| TP/oneM2M/CSE/DMR/RET/005_TS | Release 3 | TS-0001 [1], clause 10.2.30.2 | 29 (timeSeries) |

| | | |
|---|---|----------|
| TP Id | TP/oneM2M/CSE/DMR/RET/006 | |
| Test objective | Check that the IUT returns successfully multiple attributes of TARGET_RESOURCE_ADDRESS resource | |
| Reference | TS-0001 [1], clause 10.1.2 | |
| Config Id | CF01 | |
| Parent Release | <i>PARENT_RELEASE</i> | |
| 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_ADDRESS of 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 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 containin 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 containin 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 | PARENT_RELEASE | Reference | RESOURCE_TYPE |
|-------------------------------|-----------------------|-------------------------------|-------------------------|
| TP/oneM2M/CSE/DMR/RET/006_CNT | Release 1 | TS-0001 [1], clause 10.2.4.2 | 3 (container) |
| TP/oneM2M/CSE/DMR/RET/006_ACP | Release 1 | TS-0001 [1], clause 10.2.21.2 | 1 (accessControlPolicy) |
| TP/oneM2M/CSE/DMR/RET/006_SUB | Release 1 | TS-0001 [1], clause 10.2.11.3 | 23 (subscription) |
| TP/oneM2M/CSE/DMR/RET/006_GRP | Release 1 | TS-0001 [1], clause 10.2.7.3 | 9 (group) |
| TP/oneM2M/CSE/DMR/RET/006_SCH | Release 3 | TS-0001 [1], clause 10.2.40.2 | 18 (schedule) |
| TP/oneM2M/CSE/DMR/RET/006_PCH | Release 2 | TS-0001 [1], clause 10.2.13.3 | 15 (pollingChannel) |
| TP/oneM2M/CSE/DMR/RET/006_TS | Release 3 | TS-0001 [1], clause 10.2.30.2 | 29 (timeSeries) |

| | | | |
|---------------------------|--|------------------|----------|
| 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 | <u>PARENT_RELEASE</u> | | |
| PICS Selection | PICS_CSE | | |
| Initial conditions | <p>with {</p> <p>the IUT being in the "initial state" and the IUT having registered the AE and the IUT having created a resource TARGET_RESOURCE_ADDRESS of 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 }</p> | | |
| Expected behaviour | <p>Test events</p> <p>when {</p> <p>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 }</p> <p>then {</p> <p>the IUT sends a valid Response containing Response Status Code set to 4004 (NOT_FOUND) }</p> | Direction | |
| | | | IUT → AE |

| TP Id | PARENT_RELEASE | Reference | RESOURCE_TYPE | ATTRIBUTE |
|-----------------------------------|----------------|-------------------------------|-------------------------|-----------|
| TP/oneM2M/CSE/DMR/RET/007_CNT/LBL | Release 1 | TS-0001 [1], clause 10.2.4.2 | 3 (container) | labels |
| TP/oneM2M/CSE/DMR/RET/007_ACP/LBL | Release 1 | TS-0001 [1], clause 10.2.21.2 | 1 (accessControlPolicy) | labels |
| TP/oneM2M/CSE/DMR/RET/007_SUB/LBL | Release 1 | TS-0001 [1], clause 10.2.11.3 | 23 (subscription) | labels |
| TP/oneM2M/CSE/DMR/RET/007_GRP/LBL | Release 1 | TS-0001 [1], clause 10.2.7.3 | 9 (group) | labels |
| TP/oneM2M/CSE/DMR/RET/007_SCH/LBL | Release 3 | TS-0001 [1], clause 10.2.40.2 | 18 (schedule) | labels |
| TP/oneM2M/CSE/DMR/RET/007_PCH/LBL | Release 2 | TS-0001 [1], clause 10.2.13.3 | 15 (pollingChallenge) | labels |
| TP/oneM2M/CSE/DMR/RET/007_TS/LBL | Release 3 | TS-0001 [1], clause 10.2.30.2 | 29 (timeSeries) | labels |

Editor Note: A common ATTRIBUTE has been chosen for all types of resource. A note could replace ATTRIBUTE column.

| | | |
|---------------------------|---|---|
| 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 | <i>PARENT_RELEASE</i> | |
| PICS Selection | PICS_CSE | |
| Initial conditions | <p>with {</p> <p>the IUT being in the "initial state" and the IUT having registered the AE and the IUT having created a resource TARGET_RESOURCE_ADDRESS of type RESOURCE_TYPE under the AE resource containing</p> <p>no ATTRIBUTE_1 attribute and no ATTRIBUTE_2 attribute</p> <p>and the AE having privileges to perform RETRIEVE operation on the resource TARGET_RESOURCE_ADDRESS</p> <p>}</p> | |
| Expected behaviour | <p>Test events</p> <p>when {</p> <p>the IUT receives a valid RETRIEVE Request from AE containing</p> <p>To set to TARGET_RESOURCE_ADDRESS and</p> <p>From set to AE_ID and</p> <p>Content containing</p> <p>attributeList element containing</p> <p>ATTRIBUTE_1 name and</p> <p>ATTRIBUTE_2 name</p> <p>}</p> <p>then {</p> <p>the IUT sends a valid Response containing</p> <p>Response Status Code set to 4004 (NOT_FOUND)</p> <p>}</p> | <p>Direction</p> <p>IUT ← AE</p> <p>IUT → AE</p> |

| TP Id | PARENT_RELEASE | Reference | RESOURCE_TYPE | ATTRIBUTE_1 | ATTRIBUTE_2 |
|--------------------------------------|----------------|-------------------------------|-------------------------|-------------|-------------|
| TP/oneM2M/CSE/DMR/RET/008_CNT/LBL/AT | Release 1 | TS-0001 [1], clause 10.2.4.2 | 3 (container) | labels | announc eTo |
| TP/oneM2M/CSE/DMR/RET/008_SUB/LBL/AT | Release 1 | TS-0001 [1], clause 10.2.11.3 | 23 (subscription) | labels | announc eTo |
| TP/oneM2M/CSE/DMR/RET/008_ACP/LBL/AT | Release 1 | TS-0001 [1], clause 10.2.21.2 | 1 (accessControlPolicy) | labels | announc eTo |
| TP/oneM2M/CSE/DMR/RET/008_GRP/LBL/AT | Release 1 | TS-0001 [1], clause 10.2.7.3 | 9 (group) | labels | announc eTo |
| TP/oneM2M/CSE/DMR/RET/008_SCH/LBL/AT | Release 3 | TS-0001 [1], clause 10.2.40.2 | 18 (schedule) | labels | announc eTo |
| TP/oneM2M/CSE/DMR/RET/008_PCH/LBL/PI | Release 2 | TS-0001 [1], clause 10.2.13.3 | 15 (pollingChannel) | labels | parentID |
| TP/oneM2M/CSE/DMR/RET/008_TS/LBL/AT | Release 3 | TS-0001 [1], clause 10.2.30.2 | 29 (timeSeries) | labels | announc eTo |

Editor Note: The references to the TS-0001 for the operations (CREATE, RETRIEVE) procedures of the resource type <schedule> have not been found. To check whether these procedures are missing or they have been added in newer versions (TS-0001 v1.12.0 as basis)

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 | <pre> with { the IUT being in the "initial state" and the IUT having registered the AE containing a container resource containing no direct child contentInstance resources } </pre> | |
| Expected behaviour | Test events <pre> 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 } then { the IUT sends a valid Response containing Response Status Code set to 4004 (NOT_FOUND) } </pre> | Direction IUT ← AE 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 | <pre> 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 of CONTENT_INSTANCE_1 < creationTime attribute of CONTENT_INSTANCE_2 } </pre> | |
| Expected behaviour | Test events <pre> 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 } 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 } </pre> | Direction IUT ← AE IUT → AE |

| | | |
|---------------------------|--|----------------------|
| 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 a container 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/o1 and From set to AE_ID and no Content } | IUT \leftarrow AE |
| | then { the IUT sends a valid Response containing Response Status Code set to 4004 (NOT_FOUND) } | IUT \rightarrow AE |

| | | |
|---------------------------|---|----------------------|
| 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 of CONTENT_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 \leftarrow 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 \rightarrow AE |

| | | |
|---------------------------|--|----------------------|
| TP Id | TP/oneM2M/CSE/DMR/RET/013 | |
| Test objective | Check that the IUT returns successfully the TARGET_RESOURCE_ADDRESS resource under CSEBase | |
| Reference | TS-0001 [1], clause 10.1.2 | |
| Config Id | CF01 | |
| Parent Release | <i>PARENT_RELEASE</i> | |
| 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_ADDRESS of 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 \leftarrow AE |
| | then { the IUT sends a valid Response containing Response Status Code set to 2000 (OK) and Content containing RESOURCE_TYPE resource representation } | IUT \rightarrow AE |

| TP Id | PARENT_RELEASE | Reference | RESOURCE_TYPE |
|-------------------------------|----------------|---------------------------------|-------------------------|
| TP/oneM2M/CSE/DMR/RET/013_ACP | Release 1 | TS-0001 [1], clause 10.2.21.2 | 1 (accessControlPolicy) |
| TP/oneM2M/CSE/DMR/RET/013_AE | Release 1 | TS-0001 [1], clause 10.2.1.2 | 2 (AE) |
| TP/oneM2M/CSE/DMR/RET/013_CNT | Release 1 | TS-0001 [1], clause 10.2.4.2 | 3 (container) |
| TP/oneM2M/CSE/DMR/RET/013_CSR | Release 1 | TS-0001 [1], clause 10.2.2.2 | 16 (remoteCSE) |
| TP/oneM2M/CSE/DMR/RET/013_SUB | Release 1 | TS-0001 [1], clause 10.2.11.3 | 23 (subscription) |
| TP/oneM2M/CSE/DMR/RET/013_GRP | Release 1 | TS-0001 [1], clause 10.2.7.3 | 9 (group) |
| TP/oneM2M/CSE/DMR/RET/013_LCP | Release 3 | TS-0001 [1], clause 10.2.10.1.2 | 10 (locationPolicy) |
| TP/oneM2M/CSE/DMR/RET/013_REQ | Release 2 | TS-0001 [1], clause 10.2.20.2 | 17 (request) |
| TP/oneM2M/CSE/DMR/RET/013_SCH | Release 3 | TS-0001 [1], clause 10.2.40.2 | 18 (schedule) |
| TP/oneM2M/CSE/DMR/RET/013_TS | Release 3 | TS-0001 [1], clause 10.2.30.2 | 29 (timeSeries) |

| | | |
|---------------------------|---|---|
| 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 | <i>PARENT_RELEASE</i> | |
| PICS Selection | PICS_CSE | |
| Initial conditions | <p>with {</p> <p>the IUT being in the "initial state" and the IUT having registered the AE and the IUT having created a resource TARGET_RESOURCE_ADDRESS of type RESOURCE_TYPE under the CSEBase resource and the AE having no privileges to perform RETRIEVE operation on the resource TARGET_RESOURCE_ADDRESS</p> <p>}</p> | |
| Expected behaviour | <p>Test events</p> <p>when {</p> <p>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</p> <p>}</p> <p>then {</p> <p>the IUT sends a Response containing Response Status Code set to 4103 (ORIGINATOR_HAS_NO_PRIVILEGE)</p> <p>}</p> | <p>Direction</p> <p>IUT ← AE</p> <p>IUT → AE</p> |

| TP Id | PARENT_RELEASE | Reference | RESOURCE_TYPE |
|-------------------------------|----------------|---------------------------------|-------------------------|
| TP/oneM2M/CSE/DMR/RET/014_ACP | Release 1 | TS-0001 [1], clause 10.2.21.2 | 1 (accessControlPolicy) |
| TP/oneM2M/CSE/DMR/RET/014_AE | Release 1 | TS-0001 [1], clause 10.2.1.2 | 2 (AE) |
| TP/oneM2M/CSE/DMR/RET/014_CNT | Release 1 | TS-0001 [1], clause 10.2.4.2 | 3 (container) |
| TP/oneM2M/CSE/DMR/RET/014_CSR | Release 1 | TS-0001 [1], clause 10.2.2.2 | 16 (remoteCSE) |
| TP/oneM2M/CSE/DMR/RET/014_SUB | Release 1 | TS-0001 [1], clause 10.2.11.3 | 23 (subscription) |
| TP/oneM2M/CSE/DMR/RET/014_GRP | Release 1 | TS-0001 [1], clause 10.2.7.3 | 9 (group) |
| TP/oneM2M/CSE/DMR/RET/014_LCP | Release 3 | TS-0001 [1], clause 10.2.10.1.2 | 10 (locationPolicy) |
| TP/oneM2M/CSE/DMR/RET/014_REQ | Release 2 | TS-0001 [1], clause 10.2.20.2 | 17 (request) |
| TP/oneM2M/CSE/DMR/RET/014_SCH | Release 3 | TS-0001 [1], clause 10.2.40.2 | 18 (schedule) |
| TP/oneM2M/CSE/DMR/RET/014_TS | Release 3 | TS-0001 [1], clause 10.2.30.2 | 29 (timeSeries) |

| | | | | | |
|---|--|------------------------------------|----------------------------------|--|--|
| TP Id | TP/oneM2M/CSE/DMR/RET/015 | | | | |
| Test objective | Check that the IUT returns successfully the ATTRIBUTE of TARGET_RESOURCE_ADDRESS resource ("To" option) under CSEBase | | | | |
| Reference | TS-0001 [1], clause 10.1.2 | | | | |
| Config Id | CF01 | | | | |
| Parent Release | <i>PARENT_RELEASE</i> | | | | |
| 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_ADDRESS of type RESOURCE_TYPE under the CSEBase resource and the AE having privileges to perform RETRIEVE operation on the resource TARGET_RESOURCE_ADDRESS } | | | | |
| Expected behaviour | 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 } | Test events IUT ← AE | Direction 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 } | | | | |
| 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 | PARENT_RELEASE | Reference | RESOURCE_TYPE |
|-------------------------------|----------------|---------------------------------|-------------------------|
| TP/oneM2M/CSE/DMR/RET/015_ACP | Release 1 | TS-0001 [1], clause 10.2.21.2 | 1 (accessControlPolicy) |
| TP/oneM2M/CSE/DMR/RET/015_AE | Release 1 | TS-0001 [1], clause 10.2.1.2 | 2 (AE) |
| TP/oneM2M/CSE/DMR/RET/015_CNT | Release 1 | TS-0001 [1], clause 10.2.4.2 | 3 (container) |
| TP/oneM2M/CSE/DMR/RET/015_CSR | Release 1 | TS-0001 [1], clause 10.2.2.2 | 16 (remoteCSE) |
| TP/oneM2M/CSE/DMR/RET/015_SUB | Release 1 | TS-0001 [1], clause 10.2.11.3 | 23 (subscription) |
| TP/oneM2M/CSE/DMR/RET/015_GRP | Release 1 | TS-0001 [1], clause 10.2.7.3 | 9 (group) |
| TP/oneM2M/CSE/DMR/RET/015_LCP | Release 3 | TS-0001 [1], clause 10.2.10.1.2 | 10 (locationPolicy) |
| TP/oneM2M/CSE/DMR/RET/015_REQ | Release 2 | TS-0001 [1], clause 10.2.20.2 | 17 (request) |
| TP/oneM2M/CSE/DMR/RET/015_SCH | Release 3 | TS-0001 [1], clause 10.2.40.2 | 18 (schedule) |
| TP/oneM2M/CSE/DMR/RET/015_TS | Release 3 | TS-0001 [1], clause 10.2.30.2 | 29 (timeSeries) |

Editor  Note: Update the reference of schedule resource to TS-0001 9.6.99

| | | |
|---|--|--|
| TP Id | TP/oneM2M/CSE/DMR/RET/016 | |
| Test objective | Check that the IUT returns successfully the ATTRIBUTE of TARGET_RESOURCE_ADDRESS resource ("Content" option) under CSEBase | |
| Reference | TS-0001 [1], clause 10.1.2 | |
| Config Id | CF01 | |
| Parent Release | <u>PARENT_RELEASE</u> | |
| 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_ADDRESS of 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 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 } 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 } | Direction IUT ← AE IUT → AE |
| Notes: ATTRIBUTE indicates common attribute for all RESOURCE_TYPE resources listed in the table below | | |

| TP Id | PARENT_RELEASE | Reference | RESOURCE_TYPE |
|-------------------------------|----------------|---------------------------------|-------------------------|
| TP/oneM2M/CSE/DMR/RET/016_ACP | Release 1 | TS-0001 [1], clause 10.2.21.2 | 1 (accessControlPolicy) |
| TP/oneM2M/CSE/DMR/RET/016_AE | Release 1 | TS-0001 [1], clause 10.2.1.2 | 2 (AE) |
| TP/oneM2M/CSE/DMR/RET/016_CNT | Release 1 | TS-0001 [1], clause 10.2.4.2 | 3 (container) |
| TP/oneM2M/CSE/DMR/RET/016_CSR | Release 1 | TS-0001 [1], clause 10.2.2.2 | 16 (remoteCSE) |
| TP/oneM2M/CSE/DMR/RET/016_SUB | Release 1 | TS-0001 [1], clause 10.2.11.3 | 23 (subscription) |
| TP/oneM2M/CSE/DMR/RET/016_GRP | Release 1 | TS-0001 [1], clause 10.2.7.3 | 9 (group) |
| TP/oneM2M/CSE/DMR/RET/016_LCP | Release 3 | TS-0001 [1], clause 10.2.10.1.2 | 10 (locationPolicy) |
| TP/oneM2M/CSE/DMR/RET/016_REQ | Release 2 | TS-0001 [1], clause 10.2.20.2 | 17 (request) |
| TP/oneM2M/CSE/DMR/RET/016_SCH | Release 3 | TS-0001 [1], clause 10.2.40.2 | 18 (schedule) |
| TP/oneM2M/CSE/DMR/RET/016_TS | Release 3 | TS-0001 [1], clause 10.2.30.2 | 29 (timeSeries) |

| | | |
|--|--|---|
| TP Id | TP/oneM2M/CSE/DMR/RET/017 | |
| Test objective | Check that the IUT returns successfully multiple attributes of TARGET_RESOURCE_ADDRESS resource under CSEBase | |
| Reference | TS-0001 [1], clause 10.1.2 | |
| Config Id | CF01 | |
| Parent Release | <i>PARENT_RELEASE</i> | |
| PICS Selection | PICS_CSE | |
| Initial conditions | <p>with {</p> <p>the IUT being in the "initial state" and the IUT having registered the AE and the IUT having created a resource TARGET_RESOURCE_ADDRESS of type RESOURCE_TYPE under the CSEBase resource and the AE having privileges to perform RETRIEVE operation on the resource TARGET_RESOURCE_ADDRESS</p> <p>}</p> | |
| Expected behaviour | <p>Test events</p> <p>when {</p> <p>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</p> <p>}</p> <p>then {</p> <p>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</p> <p>}</p> | <p>Direction</p> <p>IUT ← AE</p> <p>IUT → AE</p> |
| <p>Notes: ATTRIBUTE_1 indicates common attribute for all RESOURCE_TYPE resources listed in the table below</p> <p>ATTRIBUTE_2 indicates common attribute for all RESOURCE_TYPE resources listed in the table below</p> | | |

| TP Id | PARENT_RELEASE | Reference | RESOURCE_TYPE |
|-------------------------------|-----------------------|---------------------------------|-------------------------|
| TP/oneM2M/CSE/DMR/RET/017_ACP | Release 1 | TS-0001 [1], clause 10.2.21.2 | 1 (accessControlPolicy) |
| TP/oneM2M/CSE/DMR/RET/017_AE | Release 1 | TS-0001 [1], clause 10.2.1.2 | 2 (AE) |
| TP/oneM2M/CSE/DMR/RET/017_CNT | Release 1 | TS-0001 [1], clause 10.2.4.2 | 3 (container) |
| TP/oneM2M/CSE/DMR/RET/017_CSR | Release 1 | TS-0001 [1], clause 10.2.2.2 | 16 (remoteCSE) |
| TP/oneM2M/CSE/DMR/RET/017_SUB | Release 1 | TS-0001 [1], clause 10.2.11.3 | 23 (subscription) |
| TP/oneM2M/CSE/DMR/RET/017_GRP | Release 1 | TS-0001 [1], clause 10.2.7.3 | 9 (group) |
| TP/oneM2M/CSE/DMR/RET/017_LCP | Release 3 | TS-0001 [1], clause 10.2.10.1.2 | 10 (locationPolicy) |
| TP/oneM2M/CSE/DMR/RET/017_REQ | Release 2 | TS-0001 [1], clause 10.2.20.2 | 17 (request) |
| TP/oneM2M/CSE/DMR/RET/017_SCH | Release 3 | TS-0001 [1], clause 10.2.40.2 | 18 (schedule) |
| TP/oneM2M/CSE/DMR/RET/017_TS | Release 3 | TS-0001 [1], clause 10.2.30.2 | 29 (timeSeries) |

| | | | |
|---------------------------|---|------------------|--|
| 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 | <u>PARENT_RELEASE</u> | | |
| PICS Selection | PICS_CSE | | |
| Initial conditions | <p>with {</p> <p>the IUT being in the "initial state" and the IUT having registered the AE and the IUT having created a resource TARGET_RESOURCE_ADDRESS of 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 }</p> | | |
| Expected behaviour | <p>Test events</p> <p>when {</p> <p>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 }</p> <p>then {</p> <p>the IUT sends a valid Response containing Response Status Code set to 4004 (NOT_FOUND) }</p> | Direction | |
| | | | |

| TP Id | PARENT_RELEASE | Reference | RESOURCE_TYPE | ATTRIBUTE |
|-----------------------------------|-----------------------|---------------------------------|-------------------------|------------------|
| TP/oneM2M/CSE/DMR/RET/018_ACP/LBL | Release 1 | TS-0001 [1], clause 10.2.21.2 | 1 (accessControlPolicy) | labels |
| TP/oneM2M/CSE/DMR/RET/018_AE/LBL | Release 1 | TS-0001 [1], clause 10.2.1.2 | 2 (AE) | labels |
| TP/oneM2M/CSE/DMR/RET/018_CNT/LBL | Release 1 | TS-0001 [1], clause 10.2.4.2 | 3 (container) | labels |
| TP/oneM2M/CSE/DMR/RET/018_CSR/LBL | Release 1 | TS-0001 [1], clause 10.2.2.2 | 16 (remoteCSE) | labels |
| TP/oneM2M/CSE/DMR/RET/018_SUB/LBL | Release 1 | TS-0001 [1], clause 10.2.11.3 | 23 (subscription) | labels |
| TP/oneM2M/CSE/DMR/RET/018_GRP/LBL | Release 1 | TS-0001 [1], clause 10.2.7.3 | 9 (group) | labels |
| TP/oneM2M/CSE/DMR/RET/018_LCP/LBL | Release 3 | TS-0001 [1], clause 10.2.10.1.2 | 10 (locationPolicy) | labels |
| TP/oneM2M/CSE/DMR/RET/018_REQ/LBL | Release 2 | TS-0001 [1], clause 10.2.20.2 | 17 (request) | labels |
| TP/oneM2M/CSE/DMR/RET/018_SCH/LBL | Release 3 | TS-0001 [1], clause 10.2.40.2 | 18 (schedule) | labels |
| TP/oneM2M/CSE/DMR/RET/018_TS | Release 3 | TS-0001 [1], clause 10.2.30.2 | 29 (timeSeries) | labels |

| 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 | <u>PARENT_RELEASE</u> | | | | | | | |
| PICS Selection | PICS_CSE | | | | | | | |
| Initial conditions | <p>with {</p> <p style="padding-left: 20px;">the IUT being in the "initial state"</p> <p style="padding-left: 20px;">and the IUT having registered the AE</p> <p style="padding-left: 20px;">and the IUT having created a resource TARGET_RESOURCE_ADDRESS of type RESOURCE_TYPE under the <CSEBase> resource containing</p> <p style="padding-left: 40px;">no ATTRIBUTE_1 attribute and</p> <p style="padding-left: 40px;">no ATTRIBUTE_2 attribute</p> <p style="padding-left: 20px;">and the AE having privileges to perform RETRIEVE operation on the resource TARGET_RESOURCE_ADDRESS</p> <p>}</p> | | | | | | | |
| Expected behaviour | <table border="1" style="width: 100%; border-collapse: collapse;"> <thead> <tr> <th style="text-align: center; padding: 2px;">Test events</th> <th style="text-align: center; padding: 2px;">Direction</th> </tr> </thead> <tbody> <tr> <td style="padding: 2px;"> 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 } </td> <td style="text-align: center; padding: 2px;">IUT ← AE</td> </tr> <tr> <td style="padding: 2px;"> then { the IUT sends a valid Response containing Response Status Code set to 4004 (NOT_FOUND) } </td> <td style="text-align: center; padding: 2px;">IUT → AE</td> </tr> </tbody> </table> | 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 | |
| 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 | PARENT_RELEASE | Reference | RESOURCE_TYPE | ATTRIBUTE_1 | ATTRIBUTE_2 |
|--------------------------------------|----------------|---------------------------------|-------------------------|-------------|-------------|
| TP/oneM2M/CSE/DMR/RET/019_ACP/LBL/AT | Release 1 | TS-0001 [1], clause 10.2.21.2 | 1 (accessControlPolicy) | labels | announcesTo |
| TP/oneM2M/CSE/DMR/RET/019_AE/LBL/AT | Release 1 | TS-0001 [1], clause 10.2.1.2 | 2 (AE) | labels | announcesTo |
| TP/oneM2M/CSE/DMR/RET/019_CNT/LBL/AT | Release 1 | TS-0001 [1], clause 10.2.4.2 | 3 (container) | labels | announcesTo |
| TP/oneM2M/CSE/DMR/RET/019_CSR/LBL/AT | Release 1 | TS-0001 [1], clause 10.2.2.2 | 16 (remoteCSE) | labels | announcesTo |
| TP/oneM2M/CSE/DMR/RET/019_SUB/LBL/AT | Release 1 | TS-0001 [1], clause 10.2.11.3 | 23 (subscription) | labels | announcesTo |
| TP/oneM2M/CSE/DMR/RET/019_GRP/LBL/AT | Release 1 | TS-0001 [1], clause 10.2.7.3 | 9 (group) | labels | announcesTo |
| TP/oneM2M/CSE/DMR/RET/019_LCP/LBL/AT | Release 3 | TS-0001 [1], clause 10.2.10.1.2 | 10 (locationPolicy) | labels | announcesTo |
| TP/oneM2M/CSE/DMR/RET/019_REQ/LBL/AT | Release 3 | TS-0001 [1], clause 10.2.20.2 | 17 (request) | labels | announcesTo |
| TP/oneM2M/CSE/DMR/RET/019_SCH/LBL/AT | Release 3 | TS-0001 [1], clause 10.2.40.2 | 18 (schedule) | labels | announcesTo |
| TP/oneM2M/CSE/DMR/RET/019_TS/LBL/AT | Release 3 | TS-0001 [1], clause 10.2.30.2 | 29 (timeSeries) | labels | announcesTo |

| | | |
|---------------------------|---|----------------------------------|
| TP Id | TP/oneM2M/CSE/DMR/RET/020 | |
| Test objective | Check that the IUT rejects a RETRIEVE Request target to TARGET_RESOURCE_ADDRESS resource when the Result Content set to RESULT_CONTENT | |
| Reference | TS-0001 [1], clause 8.1.2, TS-0004 [2], clause 7.3.2.1 | |
| Config Id | CF01 | |
| Parent Release | Release 2 | |
| 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_ADDRESS of type RESOURCE_TYPE and the AE having privileges to perform RETRIEVE operation on the resource TARGET_RESOURCE_ADDRESS } | |
| Expected behaviour | Test events 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 and Result Content set to RESULT_CONTENT } | Direction IUT ← AE |
| | then { the IUT sends a valid Response containing Response Status Code set to 4000 (BAD_REQUEST) and no Content } | IUT → AE |

| TP Id | Reference | RESULT_CONTENT |
|---------------------------------|---|---|
| TP/oneM2M/CSE/DMR/RET/020_RCN/0 | | 0 (Nothing) |
| TP/oneM2M/CSE/DMR/RET/020_RCN/2 | | 2 (hierarchical address) |
| TP/oneM2M/CSE/DMR/RET/020_RCN/3 | | 3 (attributes and hierarchical address) |
| TP/oneM2M/CSE/DMR/RET/020_RCN/9 | TS-0004 [대상을 찾을 수 없습니다], clause 6.3.4.2.7 | 9 (modified attributes) |

| | | |
|---------------------------|--|------------------|
| TP Id | TP/oneM2M/CSE/DMR/RET/021 | |
| Test objective | Check that the IUT returns successfully only attributes of TARGET_RESOURCE_ADDRESS resource when the Result Content is set to 1 (attributes) | |
| Reference | TS-0001 [1], clause 8.1.2, TS-0004 [2], clause 6.3.3.2.7 | |
| Config Id | CF01 | |
| Parent Release | <i>PARENT_RELEASE</i> | |
| 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_ADDRESS of type <i>RESOURCE_TYPE</i> containing a child 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 and Result Content set to 1 (attributes) } | IUT ← AE |
| | then { the IUT sends a valid Response containing Response Status Code set to 2000 (OK) and Content containing <i>RESOURCE_TYPE</i> resource containing attributes and no hierachichal address and no child resources and no child resource references } | IUT → AE |

| TP Id | PARENT_RELEASE | RESOURCE_TYPE |
|-------------------------------|----------------|-------------------------|
| TP/oneM2M/CSE/DMR/RET/021_CNT | Release 2 | 3 (container) |
| TP/oneM2M/CSE/DMR/RET/021_GRP | Release 2 | 9 (group) |
| TP/oneM2M/CSE/DMR/RET/021_ACP | Release 2 | 1 (accessControlPolicy) |
| TP/oneM2M/CSE/DMR/RET/021_SCH | Release 3 | 18 (schedule) |
| TP/oneM2M/CSE/DMR/RET/021_PCH | Release 3 | 15 (pollingChannel) |
| TP/oneM2M/CSE/DMR/RET/021_SUB | Release 3 | 23 (subscription) |
| TP/oneM2M/CSE/DMR/RET/021_TS | Release 3 | 29 (timeSeries) |

| TP Id | TP/oneM2M/CSE/DMR/RET/022 | | | | | | | |
|---|---|-------------|-----------|---|---------------------|---|----------------------|--|
| Test objective | Check that the IUT returns successfully only attributes and child resources of TARGET_RESOURCE_ADDRESS resource when the Result Content is set to 4 (attributes and child resources) | | | | | | | |
| Reference | TS-0001 [1], clause 8.1.2, TS-0004 [2], clause 6.3.3.2.7 | | | | | | | |
| Config Id | CF01 | | | | | | | |
| Parent Release | <i>PARENT_RELEASE</i> | | | | | | | |
| 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_ADDRESS of type <i>RESOURCE_TYPE</i> containing a child resource and the AE having privileges to perform RETRIEVE operation on the resource TARGET_RESOURCE_ADDRESS } | | | | | | | |
| Expected behaviour | <table border="1"> <thead> <tr> <th>Test events</th> <th>Direction</th> </tr> </thead> <tbody> <tr> <td> 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 and Result Content set to 4 (attributes and child resources) } </td> <td>IUT \leftarrow AE</td> </tr> <tr> <td> then { the IUT sends a valid Response containing Response Status Code set to 2000 (OK) and Content containing <i>RESOURCE_TYPE</i> resource containing attributes and no hierachical address and child resources and no child resource references } </td> <td>IUT \rightarrow AE</td> </tr> </tbody> </table> | 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 and Result Content set to 4 (attributes and child resources) } | IUT \leftarrow AE | then { the IUT sends a valid Response containing Response Status Code set to 2000 (OK) and Content containing <i>RESOURCE_TYPE</i> resource containing attributes and no hierachical address and child resources and no child resource references } | IUT \rightarrow AE | |
| 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 and Result Content set to 4 (attributes and child resources) } | IUT \leftarrow AE | | | | | | | |
| then { the IUT sends a valid Response containing Response Status Code set to 2000 (OK) and Content containing <i>RESOURCE_TYPE</i> resource containing attributes and no hierachical address and child resources and no child resource references } | IUT \rightarrow AE | | | | | | | |

| TP Id | PARENT_RELEASE | RESOURCE_TYPE |
|-------------------------------|----------------|-------------------------|
| TP/oneM2M/CSE/DMR/RET/022_CNT | Release 3 | 3 (container) |
| TP/oneM2M/CSE/DMR/RET/022_GRP | Release 3 | 9 (group) |
| TP/oneM2M/CSE/DMR/RET/022_ACP | Release 3 | 1 (accessControlPolicy) |
| TP/oneM2M/CSE/DMR/RET/022_SCH | Release 3 | 18 (schedule) |
| TP/oneM2M/CSE/DMR/RET/022_PCH | Release 3 | 15 (pollingChannel) |
| TP/oneM2M/CSE/DMR/RET/022_SUB | Release 3 | 23 (subscription) |
| TP/oneM2M/CSE/DMR/RET/022_TS | Release 3 | 29 (timeSeries) |

| | | |
|---------------------------|---|--|
| TP Id | TP/oneM2M/CSE/DMR/RET/023 | |
| Test objective | Check that the IUT returns successfully only attributes and child resource references of TARGET_RESOURCE_ADDRESS resource when the Result Content is set to 5 (attributes and child resource references) | |
| Reference | TS-0001 [1], clause 8.1.2, TS-0004 [2], clause 6.3.3.2.7 | |
| Config Id | CF01 | |
| Parent Release | <i>PARENT_RELEASE</i> | |
| 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_ADDRESS of type RESOURCE_TYPE containing a child resource and the AE having privileges to perform RETRIEVE operation on the resource TARGET_RESOURCE_ADDRESS } | |
| Expected behaviour | Test events 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 and Result Content set to 5 (attributes and child resource references) } then { the IUT sends a valid Response containing Response Status Code set to 2000 (OK) and Content containing RESOURCE_TYPE resource containing attributes and no hierachical address and no child resources and child resource references } | Direction IUT ← AE IUT → AE |

| TP Id | PARENT_RELEASE | RESOURCE_TYPE |
|-------------------------------|----------------|-------------------------|
| TP/oneM2M/CSE/DMR/RET/023_CNT | Release 3 | 3 (container) |
| TP/oneM2M/CSE/DMR/RET/023_GRP | Release 3 | 9 (group) |
| TP/oneM2M/CSE/DMR/RET/023_ACP | Release 3 | 1 (accessControlPolicy) |
| TP/oneM2M/CSE/DMR/RET/023_SCH | Release 3 | 18 (schedule) |
| TP/oneM2M/CSE/DMR/RET/023_PCH | Release 3 | 15 (pollingChannel) |
| TP/oneM2M/CSE/DMR/RET/023_SUB | Release 3 | 23 (subscription) |
| TP/oneM2M/CSE/DMR/RET/023_TS | Release 3 | 29 (timeSeries) |

| | | |
|---------------------------|---|---|
| TP Id | TP/oneM2M/CSE/DMR/RET/024 | |
| Test objective | Check that the IUT returns successfully only child resource references of TARGET_RESOURCE_ADDRESS resource when Result Content is set to 6 (child resource references) | |
| Reference | TS-0001 [1], clause 8.1.2, TS-0004 [2], clause 6.3.3.2.7 | |
| Config Id | CF01 | |
| Parent Release | <i>PARENT_RELEASE</i> | |
| 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_ADDRESS of type RESOURCE_TYPE containing a child resource and the AE having privileges to perform RETRIEVE operation on the resource TARGET_RESOURCE_ADDRESS } | |
| Expected behaviour | Test events 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 and Result Content set to 6 (child resource references) } | Direction IUT \leftarrow AE |
| | then { the IUT sends a valid Response containing Response Status Code set to 2000 (OK) and Content containing resourceRefList element containing child resource reference } | IUT \rightarrow AE |

| TP Id | PARENT_RELEASE | RESOURCE_TYPE |
|-------------------------------|-----------------------|-------------------------|
| TP/oneM2M/CSE/DMR/RET/024_CNT | Release 3 | 3 (container) |
| TP/oneM2M/CSE/DMR/RET/024_GRP | Release 3 | 9 (group) |
| TP/oneM2M/CSE/DMR/RET/024_ACP | Release 3 | 1 (accessControlPolicy) |
| TP/oneM2M/CSE/DMR/RET/024_SCH | Release 3 | 18 (schedule) |
| TP/oneM2M/CSE/DMR/RET/024_SUB | Release 3 | 23 (subscription) |
| TP/oneM2M/CSE/DMR/RET/024_TS | Release 3 | 29 (timeSeries) |
| TP/oneM2M/CSE/DMR/RET/024_PCH | Release 3 | 15 (pollingChannel) |

| | | |
|---------------------------|---|--|
| TP Id | TP/oneM2M/CSE/DMR/RET/025 | |
| Test objective | Check that the IUT returns successfully only child resources of TARGET_RESOURCE_ADDRESS resource when Result Content is set to 8 (child resources) | |
| Reference | TS-0001 [1], clause 8.1.2, TS-0004 [2], clause 6.3.3.2.7 | |
| Config Id | CF01 | |
| Parent Release | <i>PARENT_RELEASE</i> | |
| PICS Selection | PICS_CSE | |
| Initial conditions | <p>with {</p> <ul style="list-style-type: none"> the IUT being in the "initial state" and the IUT having registered the AE and the IUT having created a resource TARGET_RESOURCE_ADDRESS of type RESOURCE_TYPE containing a child resource and the AE having privileges to perform RETRIEVE operation on the resource TARGET_RESOURCE_ADDRESS <p>}</p> | |
| Expected behaviour | Test events <p>when {</p> <ul style="list-style-type: none"> 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 and Result Content set to 8 (child resources) <p>}</p> <p>then {</p> <ul style="list-style-type: none"> the IUT sends a valid Response containing Response Status Code set to 2000 (OK) and Content containing CHILD_RESOURCE_TYPE resource representation <p>}</p> | Direction <p>IUT ← AE</p> <p>IUT → AE</p> |

| TP Id | PARENT_RELEASE | RESOURCE_TYPE |
|-------------------------------|-----------------------|-------------------------|
| TP/oneM2M/CSE/DMR/RET/025_CNT | Release 3 | 3 (container) |
| TP/oneM2M/CSE/DMR/RET/025_GRP | Release 3 | 9 (group) |
| TP/oneM2M/CSE/DMR/RET/025_ACP | Release 3 | 1 (accessControlPolicy) |
| TP/oneM2M/CSE/DMR/RET/025_SCH | Release 3 | 18 (schedule) |
| TP/oneM2M/CSE/DMR/RET/025_SUB | Release 3 | 23 (subscription) |
| TP/oneM2M/CSE/DMR/RET/025_TS | Release 3 | 29 (timeSeries) |
| TP/oneM2M/CSE/DMR/RET/025_PCH | Release 3 | 15 (pollingChannel) |

| | | |
|---------------------------|---|---|
| TP Id | TP/oneM2M/CSE/DMR/RET/026 | |
| Test objective | Check that the IUT sends a RETRIEVE request to ORIGINAL_RESOURCE_ADDRESS resource when receiving a RETRIEVE request with Result Content set to 7 (original resource) | |
| Reference | TS-0001 [1], clause 8.1.2, TS-0004 [2], clause 6.3.4.2.7 | |
| Config Id | CF01 | |
| Parent Release | <i>PARENT_RELEASE</i> | |
| 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 registered the CSE and the IUT having a resource ANNC_ORIGINAL_RESOURCE_ADDRESS containing link set to ORIGINAL_RESOURCE_ADDRESS and the AE having privileges to perform RETRIEVE operation on the resource ANNC_ORIGINAL_RESOURCE_ADDRESS } | |
| Expected behaviour | Test events when { the IUT receives a valid RETRIEVE Request from AE containing To set to ANNC_ORIGINAL_RESOURCE_ADDRESS and From set to AE_ID and no Content and Result Content set to 7 (original resource) } then { the IUT sends a valid RETRIEVE Request to CSE containing To set to ORIGINAL_RESOURCE_ADDRESS and From set to AE_ID or IUT CSE ID?? and no Content } | Direction IUT ← AE IUT → CSE |

| TP Id | PARENT_RELEASE | RESOURCE_TYPE |
|-------------------------------|-----------------------|-------------------------|
| TP/oneM2M/CSE/DMR/RET/026_CNT | Release 3 | 3 (container) |
| TP/oneM2M/CSE/DMR/RET/026_GRP | Release 3 | 9 (group) |
| TP/oneM2M/CSE/DMR/RET/026_ACP | Release 3 | 1 (accessControlPolicy) |
| TP/oneM2M/CSE/DMR/RET/026_SCH | Release 3 | 18 (schedule) |
| TP/oneM2M/CSE/DMR/RET/026_SUB | Release 3 | 23 (subscription) |
| TP/oneM2M/CSE/DMR/RET/026_TS | Release 3 | 29 (timeSeries) |
| TP/oneM2M/CSE/DMR/RET/026_PCH | Release 3 | 15 (pollingChannel) |

| | | |
|---------------------------|--|---|
| TP Id | TP/oneM2M/CSE/DMR/RET/027 | |
| Test objective | Check that the IUT returns successfully the representation of the original resource of the ANNC_ORIGINAL_RESOURCE_ADDRESS resource when receiving a RETRIEVE request with Result Content is set to 7 (original resource) | |
| Reference | TS-0001 [1], clause 8.1.2, TS-0004 [2], clause 6.3.4.2.7 | |
| Config Id | CF01 | |
| Parent Release | <i>PARENT_RELEASE</i> | |
| PICS Selection | PICS_CSE | |
| Initial conditions | <p>with {</p> <p>the IUT being in the "initial state" and the IUT having registered the AE and the IUT having registered the CSE and the IUT having a resource ANNC_ORIGINAL_RESOURCE_ADDRESS containing link set to ORIGINAL_RESOURCE_ADDRESS and the AE having privileges to perform RETRIEVE operation on the resource ANNC_ORIGINAL_RESOURCE_ADDRESS and the IUT having received a valid RETRIEVE Request containing To set to ANNC_ORIGINAL_RESOURCE_ADDRESS and Result Content set to 7 (original resource) and the IUT having sent a valid RETRIEVE Request containing To set to ORIGINAL_RESOURCE_ADDRESS</p> <p>}</p> | |
| Expected behaviour | <p>Test events</p> <p>when {</p> <p>the IUT receives a valid Response from CSE containing Response Status Code set to 2000 (OK) and Content containing a valid resource representation</p> <p>}</p> <p>then {</p> <p>the IUT sends a valid Response to AE containing Response Status Code set to 2000 (OK) and Content containing a valid resource representation</p> <p>}</p> | <p>Direction</p> <p>IUT \leftarrow AE</p> <p>IUT \rightarrow CSE</p> |

| TP Id | PARENT_RELEASE | RESOURCE_TYPE |
|-------------------------------|----------------|-------------------------|
| TP/oneM2M/CSE/DMR/RET/027_CNT | Release 3 | 3 (container) |
| TP/oneM2M/CSE/DMR/RET/027_GRP | Release 3 | 9 (group) |
| TP/oneM2M/CSE/DMR/RET/027_ACP | Release 3 | 1 (accessControlPolicy) |
| TP/oneM2M/CSE/DMR/RET/027_SCH | Release 3 | 18 (schedule) |
| TP/oneM2M/CSE/DMR/RET/027_SUB | Release 3 | 23 (subscription) |
| TP/oneM2M/CSE/DMR/RET/027_TS | Release 3 | 29 (timeSeries) |
| TP/oneM2M/CSE/DMR/RET/027_PCH | Release 3 | 15 (pollingChannel) |

7.2.2.3.2 UPDATE Operation

TP/oneM2M/CSE/DMR/UPD/001

| 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 | PARENT_RELEASE | | | | | | | | |
| PICS Selection | PICS_CSE | | | | | | | | |
| Initial conditions | <pre>with { the IUT being in the "initial state" and the IUT having registered the AE and the IUT having created a resource TARGET_RESOURCE_ADDRESS of 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 }</pre> | | | | | | | | |
| Expected behaviour | <table border="1"> <thead> <tr> <th>Test events</th> <th>Direction</th> </tr> </thead> <tbody> <tr> <td> 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 } </td><td>IUT ← AE</td></tr> <tr> <td> 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 } </td><td>IUT → AE</td></tr> </tbody> </table> | | | 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 |
| 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 | PARENT_RELEASE | Reference | RESOURCE_TYPE | ATTRIBUTE_NAME |
|-----------------------------------|----------------|---|-------------------------|----------------|
| TP/oneM2M/CSE/DMR/UPD/001_CNT/LBL | Release 1 | TS-0001 [대상을 찾을 수 없습니다], clause 10.2.4.3 | 3 (container) | labels |
| TP/oneM2M/CSE/DMR/UPD/001_ACP/LBL | Release 1 | TS-0001 [대상을 찾을 수 없습니다], clause 10.2.21.3 | 1 (accessControlPolicy) | labels |
| TP/oneM2M/CSE/DMR/UPD/001_SUB/LBL | Release 1 | TS-0001 [대상을 찾을 수 없습니다], clause 10.2.11.4 | 23 (subscription) | labels |
| TP/oneM2M/CSE/DMR/UPD/001_GRP/LBL | Release 1 | TS-0001 [대상을 찾을 수 없습니다], clause 10.2.7.4 | 9 (group) | labels |
| TP/oneM2M/CSE/DMR/UPD/001_SCH/LBL | Release 3 | TS-0001 [대상을 찾을 수 없습니다], clause 10.2.40.2 | 18 (schedule) | labels |
| TP/oneM2M/CSE/DMR/UPD/001_PCH/LBL | Release 2 | TS-0001 [대상을 찾을 수 없습니다], clause 10.2.13.4 | 15 (pollingChannel) | labels |

| | | | | |
|----------------------------------|-----------|--|-----------------|--------|
| TP/oneM2M/CSE/DMR/UPD/001_TS/LBL | Release 3 | TS-0001 [대상을 찾 을 수 없습니다], clause 10.2.13.4 | 29 (timeSeries) | labels |
|----------------------------------|-----------|--|-----------------|--------|

| TP Id | TP/oneM2M/CSE/DMR/UPD/002 | | | | | | | | |
|--|---|--|--|-------------|-----------|---|----------|--|----------|
| Test objective | Check that the IUT adds successfully the attribute ATTRIBUTE_NAME to the TARGET_RESOURCE_ADDRESS resource | | | | | | | | |
| Reference | TS-0001 [1], clause 10.1.3 | | | | | | | | |
| Config Id | CF01 | | | | | | | | |
| Parent Release | PARENT_RELEASE | | | | | | | | |
| 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_ADDRESS of type RESOURCE_TYPE containing no optional RW ATTRIBUTE_NAME attribute and the AE having privileges to perform UPDATE operation on the resource TARGET_RESOURCE_ADDRESS } | | | | | | | | |
| Expected behaviour | <table border="1"> <thead> <tr> <th style="text-align: center;">Test events</th> <th style="text-align: center;">Direction</th> </tr> </thead> <tbody> <tr> <td> 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 } </td><td style="text-align: center;">IUT ← AE</td></tr> <tr> <td> 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 } </td><td style="text-align: center;">IUT → AE</td></tr> </tbody> </table> | | | 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 |
| 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 | PARENT_RELEASE | PICS Selection | Reference | RESOURCE_TYPE | ATTRIBUTE_NAME |
|-----------------------------------|-----------------------|-----------------------|--|-------------------------|-----------------------|
| TP/oneM2M/CSE/DMR/UPD/002_CNT/LBL | Release 1 | PICS_CNT_LBL | TS-0001 [대상을 찾을 수 없습니다], clause 10.2.4.3 | 3 (container) | labels |
| TP/oneM2M/CSE/DMR/UPD/002_ACP/LBL | Release 1 | PICS_ACP_LBL | TS-0001 [대상을 찾을 수 없습니다], clause 10.2.21.3 | 1 (accessControlPolicy) | labels |
| TP/oneM2M/CSE/DMR/UPD/002_SUB/LBL | Release 1 | PICS_SUB_LBL | TS-0001 [대상을 찾을 수 없습니다], clause 10.2.11.4 | 23 (subscription) | labels |
| TP/oneM2M/CSE/DMR/UPD/002_GRP/LBL | Release 1 | PICS_GRP_LBL | TS-0001 [대상을 찾을 수 없습니다], clause | 9 (group) | labels |

| | | | | | |
|-----------------------------------|-----------|--|--|---------------------|--------|
| TP/oneM2M/CSE/DMR/UPD/002_SCH/LBL | Release 3 | | 10.2.7.4 TS-0001 [대상을 찾을 수 없습니다], clause 10.2.40.2 | 18 (schedule) | labels |
| TP/oneM2M/CSE/DMR/UPD/002_PCH/LBL | Release 2 | | TS-0001 [대상을 찾을 수 없습니다], clause 10.2.13.4 | 15 (pollingChannel) | labels |
| TP/oneM2M/CSE/DMR/UPD/002_TS/LBL | Release 3 | | TS-0001 [대상을 찾을 수 없습니다], clause 10.2.30.3 | 29 (timeSeries) | labels |

| TP Id | TP/oneM2M/CSE/DMR/UPD/003 | | | | | | | |
|---|---|--|-------------|-----------|---|---------------------|---|----------------------|
| Test objective | Check that the IUT deletes successfully the attribute ATTRIBUTE_NAME from the TARGET_RESOURCE_ADDRESS resource | | | | | | | |
| Reference | TS-0001 [1], clause 10.1.3 | | | | | | | |
| Config Id | CF01 | | | | | | | |
| Parent Release | PARENT_RELEASE | | | | | | | |
| PICS Selection | PICS_CSE | | | | | | | |
| Initial conditions | <p>with {</p> <p>the IUT being in the "initial state" and the IUT having registered the AE and the IUT having created a resource TARGET_RESOURCE_ADDRESS of type RESOURCE_TYPE containing an optional RW ATTRIBUTE_NAME attribute and the AE having privileges to perform UPDATE operation on the resource TARGET_RESOURCE_ADDRESS</p> <p>}</p> | | | | | | | |
| Expected behaviour | <table border="1"> <thead> <tr> <th>Test events</th> <th>Direction</th> </tr> </thead> <tbody> <tr> <td> 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 } </td><td>IUT \leftarrow AE</td></tr> <tr> <td> 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 } </td><td>IUT \rightarrow AE</td></tr> </tbody> </table> | | 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 \leftarrow 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 \rightarrow AE |
| 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 \leftarrow 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 \rightarrow AE | | | | | | | |

| TP Id | PARENT_RELEASE | PICS Selection | Reference | RESOURCE_TYPE | ATTRIBUTE_NAME |
|-----------------------------------|----------------|----------------|--|-------------------------|----------------|
| TP/oneM2M/CSE/DMR/UPD/003_CNT/LBL | Release 1 | PICS_CNT_LBL | TS-0001 [대상을 찾을 수 없습니다], clause 10.2.4.3 | 3 (container) | labels |
| TP/oneM2M/CSE/DMR/UPD/003_ACP/LBL | Release 1 | PICS_ACP_LBL | TS-0001 [대상을 찾을 수 없습니다], clause 10.2.21.3 | 1 (accessControlPolicy) | labels |
| TP/oneM2M/CSE/DMR/UPD/003_SUB/LBL | Release 1 | PICS_SUB_LBL | TS-0001 [대상을 찾을 수 없습니다], clause 10.2.11.4 | 23 (subscription) | labels |
| TP/oneM2M/CSE/DMR/UPD/003_GRP/LBL | Release 1 | PICS_GRP_LBL | TS-0001 [대상을 찾을 수 없습니다], | 9 (group) | labels |

| | | | | | |
|-----------------------------------|-----------|--|--|------------------------|--------|
| | | | clause 10.2.7.4 | | |
| TP/oneM2M/CSE/DMR/UPD/003_SCH/LBL | Release 3 | | TS-0001 [대상을 찾 을 수 없습 니다], clause 10.2.40.2 | 18 (schedule) | labels |
| TP/oneM2M/CSE/DMR/UPD/003_PCH/LBL | Release 2 | | TS-0001 [대상을 찾 을 수 없습 니다], clause 10.2.13.4 | 15 (pollingChannel) | labels |
| TP/oneM2M/CSE/DMR/UPD/003_TS/LBL | Release 3 | | TS-0001 [대상을 찾 을 수 없습 니다], clause 10.2.30.3 | 29 (timeSeries) | labels |

| TP Id | TP/oneM2M/CSE/DMR/UPD/004 | | | | | | | |
|--|--|-------------|-----------|---|---------------------|--|----------------------|--|
| Test objective | Check that the IUT updates the value of the attribute ATTRIBUTE_NAME_1 , and creates the ATTRIBUTE_NAME_2 and deletes the ATTRIBUTE_NAME_3 of the TARGET_RESOURCE_ADDRESS resource | | | | | | | |
| Reference | TS-0001 [1], clause 10.1.3 | | | | | | | |
| Config Id | CF01 | | | | | | | |
| Parent Release | PARENT_RELEASE | | | | | | | |
| PICS Selection | PICS CSE | | | | | | | |
| Initial conditions | <p>with {</p> <p>the IUT being in the "initial state" and the IUT having registered the AE and the IUT having created a resource TARGET_RESOURCE_ADDRESS of type RESOURCE_TYPE containing a RW ATTRIBUTE_NAME_1 attribute set to VALUE_1 and no optional RW ATTRIBUTE_NAME_2 attribute and an optional RW ATTRIBUTE_NAME_3 attribute and the AE having privileges to perform UPDATE operation on the resource TARGET_RESOURCE_ADDRESS }</p> | | | | | | | |
| Expected behaviour | <table border="1"> <thead> <tr> <th>Test events</th> <th>Direction</th> </tr> </thead> <tbody> <tr> <td> 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 attribute set to VALUE_2 and ATTRIBUTE_NAME_2 attribute set to VALUE_3 and ATTRIBUTE_NAME_3 attribute set to NULL } </td><td>IUT \leftarrow AE</td></tr> <tr> <td> 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 } </td><td>IUT \rightarrow AE</td></tr> </tbody> </table> | 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 attribute set to VALUE_2 and ATTRIBUTE_NAME_2 attribute set to VALUE_3 and ATTRIBUTE_NAME_3 attribute set to NULL } | IUT \leftarrow 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 \rightarrow AE | |
| 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 attribute set to VALUE_2 and ATTRIBUTE_NAME_2 attribute set to VALUE_3 and ATTRIBUTE_NAME_3 attribute set to NULL } | IUT \leftarrow 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 \rightarrow AE | | | | | | | |
| Editor's Note: Clarification is required in term of the test objective!! | | | | | | | | |

| TP Id | PAR ENT _RE _LEA SE | PICS Selecti on | Referenc e | RESO URCE_ TYPE | ATTR IBUT E_NA ME_1 | ATTR IBUT E_NA ME_2 | ATTR IBUT E_NA ME_3 |
|--|---------------------------------|-------------------------------|---|---------------------------|------------------------------|------------------------------|------------------------------|
| TP/oneM2M/CSE/DMR/UPD/004_CNT/ET/MNI/LBL | Release 1 | PICS_CNT_MNI and PICS_CNT_LBL | TS-0001 [대상을 찾을 수 없습니다], clause 10.2.4.3 | 3 (container) | expirationTime | maxNrOfInstances | labels |
| TP/oneM2M/CSE/DMR/UPD/004_ACP/PVS/PV/LBL | Release 1 | PICS_ACP_LBL | TS-0001 [대상을 찾을 수 없습니다], clause 10.2.21.3 | 1 (access Control Policy) | selfPrivileges | privileges | labels |
| TP/oneM2M/CSE/DMR/UPD/004_ACP/PV/AT/LBL | Release 3 | PICS_ACP_AT and PICS_ACP_LBL | TS-0001 [대상을 찾을 수 없습니다], clause 10.2.21.3 | 1 (access Control Policy) | privileges | announceTo | labels |
| TP/oneM2M/CSE/DMR/UPD/004_SUB/ET/LBL/EXC | Release 1 | PICS_SUB_LBL and PICS_SUB_EXC | TS-0001 [대상을 찾을 수 없습니다], clause 10.2.11.4 | 23 (subscription) | expirationTime | labels | expirationCounter |
| TP/oneM2M/CSE/DMR/UPD/004_GRP/ET/GN/LBL | Release 1 | PICS_GRP_GN and PICS_GRP_LBL | TS-0001 [대상을 찾을 수 없습니다], clause 10.2.7.4 | 9 (group) | expirationTime | groupName | labels |
| TP/oneM2M/CSE/DMR/UPD/004_SCH/SE/AT/LBL | Release 3 | | TS-0001 [대상을 찾을 수 없습니다], clause 10.2.40.2 | 18 (schedule) | scheduleElement | announceTo | labels |
| TP/oneM2M/CSE/DMR/UPD/004_TS/ET/MNI/LBL | Release 3 | | TS-0001 [대상을 찾을 수 없습니다], clause 10.2.13.4 | 15 (polling Channel) | expirationTime | maxNrOfInstances | labels |

| | | |
|---------------------------|---|------------------|
| 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 15) | |
| Config Id | CF01 | |
| Parent Release | <i>PARENT_RELEASE</i> | |
| 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 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 – 16) | | | | | | | | |
| Config Id | CF01 | | | | | | | | |
| Parent Release | PARENT_RELEASE | | | | | | | | |
| 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_ADDRESS of 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 | <table border="1"> <thead> <tr> <th>Test events</th> <th>Direction</th> </tr> </thead> <tbody> <tr> <td> 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 } </td><td>IUT ← AE</td></tr> <tr> <td> 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 (ORIGINATOR_HAS_NO_PRIVILEGE) } </td><td>IUT → AE</td></tr> </tbody> </table> | | | 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 (ORIGINATOR_HAS_NO_PRIVILEGE) } | IUT → AE |
| 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 (ORIGINATOR_HAS_NO_PRIVILEGE) } | IUT → AE | | | | | | | | |

| TP Id | PARENT_RELEASE | Reference | RESOURCE_TYPE | ATTRIBUTE_NAME |
|-----------------------------------|----------------|------------------------------------|---------------|----------------|
| TP/oneM2M/CSE/DMR/UPD/006_CNT/LBL | Release 1 | TS-0001 [대상을 찾을 수 없습니다], clause | 3 (container) | labels |

| | | | | |
|-----------------------------------|-----------|--|-------------------------|--------|
| | | 10.2.4.3 | | |
| TP/oneM2M/CSE/DMR/UPD/006_ACP/LBL | Release 1 | TS-0001 [대상을 찾을 수 없습니다], clause 10.2.21.3 | 1 (accessControlPolicy) | labels |
| TP/oneM2M/CSE/DMR/UPD/006_SUB/LBL | Release 1 | TS-0001 [대상을 찾을 수 없습니다], clause 10.2.11.4 | 23 (subscription) | labels |
| TP/oneM2M/CSE/DMR/UPD/006_GRP/LBL | Release 1 | TS-0001 [대상을 찾을 수 없습니다], clause 10.2.7.4 | 9 (group) | labels |
| TP/oneM2M/CSE/DMR/UPD/006_SCH/LBL | Release 3 | TS-0001 [대상을 찾을 수 없습니다], clause 10.2.40.2 | 18 (schedule) | labels |
| TP/oneM2M/CSE/DMR/UPD/005_TS/LBL | Release 3 | TS-0001 [대상을 찾을 수 없습니다], clause 10.2.30.3 | 29 (timeSeries) | labels |

| 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 <i>ATTRIBUTE_NAME</i> of a <i>TARGET_RESOURCE_ADDRESS</i> resource | | | | | | | |
| Reference | TS-0001 [1], clause 10.1.3 | | | | | | | |
| Config Id | CF01 | | | | | | | |
| Parent Release | <i>PARENT_RELEASE</i> | | | | | | | |
| PICS Selection | PICS_CSE | | | | | | | |
| Initial conditions | <p>with {</p> <p>the IUT being in the "initial state" and the IUT having registered the AE and the IUT having created a resource <i>TARGET_RESOURCE_ADDRESS</i> of type <i>RESOURCE_TYPE</i> containing a non-RW <i>ATTRIBUTE_NAME</i> attribute and the AE having privileges to perform UPDATE operation on the resource <i>TARGET_RESOURCE_ADDRESS</i></p> <p>}</p> | | | | | | | |
| Expected behaviour | <table border="1"> <thead> <tr> <th>Test events</th> <th>Direction</th> </tr> </thead> <tbody> <tr> <td> when { the IUT receives a valid UPDATE Request from AE containing To set to <i>TARGET_RESOURCE_ADDRESS</i> and From set to <i>AE_ID</i> and Content containing <i>RESOURCE_TYPE</i> resource containing valid <i>ATTRIBUTE_NAME</i> attribute } </td><td>IUT \leftarrow AE</td></tr> <tr> <td> then { the IUT does not update the <i>TARGET_RESOURCE_ADDRESS</i> resource and the IUT sends a Response containing Response Status Code set to 4000 (BAD_REQUEST) } </td><td>IUT \rightarrow AE</td></tr> </tbody> </table> | | Test events | Direction | when { the IUT receives a valid UPDATE Request from AE containing To set to <i>TARGET_RESOURCE_ADDRESS</i> and From set to <i>AE_ID</i> and Content containing <i>RESOURCE_TYPE</i> resource containing valid <i>ATTRIBUTE_NAME</i> attribute } | IUT \leftarrow AE | then { the IUT does not update the <i>TARGET_RESOURCE_ADDRESS</i> resource and the IUT sends a Response containing Response Status Code set to 4000 (BAD_REQUEST) } | IUT \rightarrow AE |
| Test events | Direction | | | | | | | |
| when { the IUT receives a valid UPDATE Request from AE containing To set to <i>TARGET_RESOURCE_ADDRESS</i> and From set to <i>AE_ID</i> and Content containing <i>RESOURCE_TYPE</i> resource containing valid <i>ATTRIBUTE_NAME</i> attribute } | IUT \leftarrow AE | | | | | | | |
| then { the IUT does not update the <i>TARGET_RESOURCE_ADDRESS</i> resource and the IUT sends a Response containing Response Status Code set to 4000 (BAD_REQUEST) } | IUT \rightarrow AE | | | | | | | |

| TP Id | <i>PARENT_RELEASE</i> | Reference | <i>RESOURCE_TYPE</i> | <i>ATTRIBUTE_NAME</i> |
|----------------------------------|-----------------------|---|----------------------|-----------------------|
| TP/oneM2M/CSE/DMR/UPD/007_CNT/CT | Release 1 | TS-0001 [대상을 찾을 수 없습니다], clause 10.2.4.3 | 3 (container) | creationTime |

| | | | | |
|----------------------------------|-----------|--|-------------------------|--------------|
| TP/oneM2M/CSE/DMR/UPD/007_ACP/CT | Release 1 | TS-0001 [대상을 찾을 수 없습니다], clause 10.2.21.3 | 1 (accessControlPolicy) | creationTime |
| TP/oneM2M/CSE/DMR/UPD/007_SUB/CT | Release 1 | TS-0001 [대상을 찾을 수 없습니다], clause 10.2.11.4 | 23 (subscription) | creationTime |
| TP/oneM2M/CSE/DMR/UPD/007_GRP/CT | Release 1 | TS-0001 [대상을 찾을 수 없습니다], clause 10.2.7.4 | 9 (group) | creationTime |
| TP/oneM2M/CSE/DMR/UPD/007_SCH/CT | Release 3 | TS-0001 [대상을 찾을 수 없습니다], clause 10.2.40.2 | 18 (schedule) | creationTime |
| TP/oneM2M/CSE/DMR/UPD/007_PCH/CT | Release 2 | TS-0001 [대상을 찾을 수 없습니다], clause 10.2.13.4 | 15 (pollingChannel) | creationTime |
| TP/oneM2M/CSE/DMR/UPD/007_TS/CT | Release 3 | TS-0001 [대상을 찾을 수 없습니다], clause 10.2.30.3 | 29 (timeSeries) | creationTime |

| 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 | PARENT_RELEASE | | | | | | | |
| PICS Selection | PICS_CSE | | | | | | | |
| Initial conditions | <p>with {</p> <p>the IUT being in the "initial state"</p> <p>and the IUT having registered the AE</p> <p>and the IUT having created a resource TARGET_RESOURCE_ADDRESS of type RESOURCE_TYPE containing</p> <p style="padding-left: 20px;">a mandatory RW ATTRIBUTE_NAME attribute</p> <p>and the AE having privileges to perform UPDATE operation on the resource TARGET_RESOURCE_ADDRESS</p> <p>}</p> | | | | | | | |
| Expected behaviour | <table border="1"> <thead> <tr> <th>Test events</th> <th>Direction</th> </tr> </thead> <tbody> <tr> <td> 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 } </td><td>IUT ← AE</td></tr> <tr> <td> 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) } </td><td>IUT → AE</td></tr> </tbody> </table> | 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 | |
| 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 | | | | | | | |

| TP Id | PARENT_RELEASE | Reference | RESOURCE_TYPE | ATTRIBUTE_NAME |
|-----------------------------------|-----------------------|--|-------------------------|-----------------------|
| TP/oneM2M/CSE/DMR/UPD/008_ACP/PVS | Release 1 | TS-0001 [대상을 찾을 수 없습니[다], clause 10.2.21.3] | 1 (accessControlPolicy) | selfPrivileges |

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|------------------------------------|-----------|--|-------------------|------------------|
| TP/oneM2M/CSE/DMR/UPD/008_SUB/NU | Release 1 | TS-0001 [대상을 찾을 수 없습니다], clause 10.2.11.4 | 23 (subscription) | notificationURI |
| TP/oneM2M/CSE/DMR/UPD/008_GRP/MNI | Release 1 | TS-0001 [대상을 찾을 수 없습니다], clause 10.2.7.4 | 9 (group) | maxNrOfInstances |
| TP/oneM2M/CSE/DMR/UPD/008_SCH/SC_E | Release 3 | TS-0001 [대상을 찾을 수 없습니다], clause 10.2.40.2 | 18 (schedule) | expirationTime |

Editor  Note: Release 2 test cases which are having expirationTime as attribute_name need to be verified.

| 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 <i>ATTRIBUTE_NAME</i> of the TARGET_RESOURCE_ADDRESS resource with an <i>UNACCEPTABLE_VALUE</i> | | | | | | | | |
| Reference | TS-0001 [1], clause 10.1.3 – item 3) | | | | | | | | |
| Config Id | CF01 | | | | | | | | |
| Parent Release | <i>PARENT_RELEASE</i> | | | | | | | | |
| PICS Selection | PICS_CSE | | | | | | | | |
| Initial conditions | <p>with {</p> <p>the IUT being in the "initial state" and the IUT having registered the AE and the IUT having created a resource TARGET_RESOURCE_ADDRESS of type <i>RESOURCE_TYPE</i> containing a valid RW <i>ATTRIBUTE_NAME</i> attribute and the AE having privileges to perform UPDATE operation on the resource TARGET_RESOURCE_ADDRESS }</p> | | | | | | | | |
| Expected behaviour | <table border="1"> <thead> <tr> <th>Test events</th> <th>Direction</th> </tr> </thead> <tbody> <tr> <td> 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 <i>RESOURCE_TYPE</i> resource containing not supported <i>ATTRIBUTE_NAME</i> attribute } </td><td>IUT ← AE</td></tr> <tr> <td> 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) } </td><td>IUT → AE</td></tr> </tbody> </table> | | | 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 <i>RESOURCE_TYPE</i> resource containing not supported <i>ATTRIBUTE_NAME</i> 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 |
| 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 <i>RESOURCE_TYPE</i> resource containing not supported <i>ATTRIBUTE_NAME</i> 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 | | | | | | | | |

| TP Id | PARENT_RELEASE | Reference | RESOURCE_TYPE | ATTRIBUTE_NAME |
|-----------------------------------|----------------|------------------------------------|---------------|-------------------|
| TP/oneM2M/CSE/DMR/UPD/009_CNT/EXC | Release 1 | TS-0001 [대상을 찾을 수 없습니다], clause | 3 (container) | expirationCounter |

| | | | | |
|-----------------------------------|-----------|--|-------------------------|-------------------|
| | | 10.2.4.3 | | |
| TP/oneM2M/CSE/DMR/UPD/009_ACP/EXC | Release 1 | TS-0001 [대상을 찾을 수 없습니다], clause 10.2.21.3 | 1 (accessControlPolicy) | expirationCounter |
| TP/oneM2M/CSE/DMR/UPD/009_SUB/MNI | Release 1 | TS-0001 [대상을 찾을 수 없습니다], clause 10.2.11.4 | 23 (subscription) | maxNrOfInstances |
| TP/oneM2M/CSE/DMR/UPD/009_GRP/EXC | Release 1 | TS-0001 [대상을 찾을 수 없습니다], clause 10.2.7.4 | 9 (group) | expirationCounter |
| TP/oneM2M/CSE/DMR/UPD/009_SCH/EXC | Release 3 | TS-0001 [대상을 찾을 수 없습니다], clause 10.2.40.2 | 18 (schedule) | expirationCounter |
| TP/oneM2M/CSE/DMR/UPD/009_PCH/EXC | Release 2 | TS-0001 [대상을 찾을 수 없습니다], clause 10.2.13.4 | 15 (pollingChannel) | expirationCounter |
| TP/oneM2M/CSE/DMR/UPD/009_TS/EXC | Release 3 | TS-0001 [대상을 찾을 수 없습니다], clause 10.2.30.3 | 29 (timeSeries) | expirationCounter |

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|---------------------------|--|------------------|----------|
| TP Id | TP/oneM2M/CSE/DMR/UPD/010 | | |
| Test objective | Check that the stateTag attribute of a <i>RESOURCE_TYPE</i> 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 | <pre> with { the IUT being in the "initial state" and the IUT having registered the AE and the IUT having created a <i>RESOURCE_TYPE</i> 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 } </pre> | | |
| Expected behaviour | Test events <pre> 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 } </pre> | Direction | |
| | | | |
| | <pre> then { the IUT increments the stateTag attribute of <i>RESOURCE_TYPE</i> resource and the IUT sends a valid Response containing Response Status Code set to 2004 (UPDATED) } </pre> | | IUT → AE |

| TP Id | PARENT_RELEASE | Reference | RESOURCE_TYPE |
|-------------------------------|----------------|---|-----------------|
| TP/oneM2M/CSE/DMR/UPD/010_CNT | Release 1 | TS-0001 [대상을 찾을 수 없습니다], clause 10.2.4.3 | 3 (container) |
| TP/oneM2M/CSE/DMR/UPD/010_TS | Release 3 | TS-0001 [대상을 찾을 수 없습니다], clause 10.2.30.3 | 29 (timeSeries) |

| | | | |
|---------------------------|--|---------------------------|--|
| TP Id | TP/oneM2M/CSE/DMR/UPD/011 | | |
| Test objective | Check that the IUT rejects the UPDATE Request of an existing <i>RESOURCE_TYPE</i> resource with error "OPERATION_NOT_ALLOWED" | | |
| Reference | TS-0001 [1], clause 10.2.19.4, TS-0004 [2], clause 7.3.2.1 and clause 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 a <i>PARENT_RESOURCE_TYPE</i> resource containing a <i>RESOURCE_TYPE</i> resource <i>TARGET_RESOURCE_ADDRESS</i> } | | |
| Expected behaviour | Test events when { the IUT receives a valid UPDATE Request from AE containing To set to <i>TARGET_RESOURCE_ADDRESS</i> and From set to <i>AE_ID</i> and Content containing <i>RESOURCE_TYPE</i> representation } | Expected behaviour | |
| | then { the IUT does not update the <i>RESOURCE_TYPE</i> resource and the IUT sends a valid Response containing Response Status Code set to 4005 (OPERATION_NOT_ALLOWED) } | | |

| TP Id | PARENT_RELEASE | Reference | RESOURCE_TYPE | PARENT_RESOURCE_TYPE |
|-----------------------------------|----------------|--|-------------------------|----------------------|
| TP/oneM2M/CSE/DMR/UPD/011_CNT/CIN | Release 1 | TS-0001 [대상을 찾을 수 없습니다], clause 10.2.4.3 | 4 (contentInstance) | 3 (container) |
| TP/oneM2M/CSE/DMR/UPD/011_TS/T SI | Release 3 | TS-0001 [대상을 찾 | 30 (timeSeriesInstance) | 29 (timeSeries) |

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|--|--|---------------------------------------|--|--|
| | | 을 수 없습 니다], clause 10.2.31.3 | | |
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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], clause 7.4.28.2.4 and clause 7.3.2.1 | |
| Config Id | CF01 | |
| Parent Release | Release 1 | |
| PICS Selection | PICS_CSE | |
| Initial conditions | <pre> with { the IUT being in the "initial state" and the IUT having registered the AE containing a container resource containing a contentInstance resource containing valid creationTime attribute set to the most recent resource creation time } </pre> | |
| Expected behaviour | Test events | Direction |
| | <pre> 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 } </pre> | IUT ← AE |
| | <pre> 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) } </pre> | IUT → AE |

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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], clause 7.4.29.2.4 and clause 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 when { the IUT receives a valid UPDATE Request from AE containing To set to CONTAINER_RESOURCE_ADDRESS/01 and From set to AE_ID and no Content } | IUT ← AE |
| | then { the IUT does not update the CONTAINER_RESOURCE_ADDRESS/01 resource and the IUT sends a Response containing Response Status Code set to 4005 (OPERATION_NOT_ALLOWED) } | IUT → AE |

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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 | PARENT_RELEASE | | |
| 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 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 } | Direction | |
| | then { the IUT sends a valid Response containing Response Status Code set to 2004 (UPDATED) and Content containing RESOURCE_TYPE resource containing OPTIONAL_ATTRIBUTE attribute set to VALUE } | | |

| TP Id | PARENT_RELEASE | PICS Selection | Reference | RESOURCE_TYPE | OPTIONAL_ATTRIBUTE |
|------------------------------------|----------------|----------------|---|---------------|------------------------|
| TP/oneM2M/CSE/DMR/UPD/014_CNT/ACPI | Release 1 | PICS_CNT_ACPI | TS-0001 [대상을 찾을 수 없습니다], Table 9.6.1.3.2-1 | container | accessControlPolicyIDs |

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|-----------------------------------|-----------|--------------|--|-----------|------------------|
| TP/oneM2M/CSE/DMR/UPD/014_CNT/ET | Release 1 | PICS_CNT_ET | TS-0001 [대상을 찾을 수 없습니다], clause 9.6.1.3.1-1 | container | expirationTime |
| TP/oneM2M/CSE/DMR/UPD/014_CNT/LBL | Release 1 | PICS_CNT_LBL | TS-0001 [대상을 찾을 수 없습니다], clause 9.6.1.3.2-1 | container | labels |
| TP/oneM2M/CSE/DMR/UPD/014_CNT/MNI | Release 1 | PICS_CNT_MNI | TS-0001 [대상을 찾을 수 없습니다], clause 9.6.6-2 | container | maxNrOfInstances |
| TP/oneM2M/CSE/DMR/UPD/014_CNT/MBS | Release 1 | PICS_CNT_MBS | TS-0001 [대상을 찾을 수 없습니다], clause 9.6.6-2 | container | maxByteSize |
| TP/oneM2M/CSE/DMR/UPD/014_CNT/MIA | Release 1 | PICS_CNT_MIA | TS-0001 [대상을 찾을 수 없습니다], clause 9.6.6-2 | container | maxInstanceAge |
| TP/oneM2M/CSE/DMR/UPD/014_CNT/OR | Release 1 | PICS_CNT_OR | TS-0001 [대상을 찾을 수 없습니다], clause 9.6.6-2 | container | ontologyRef |

| | | | | | |
|------------------------------------|-----------|---------------|--|---------------------|---------------------------|
| TP/oneM2M/CSE/DMR/UPD/014_ACP/ET | Release 1 | N/A | TS-0001 [대상을 찾을 수 없습니다], clause 9.6.1.3.1-1 | accessControlPolicy | expirationTime |
| TP/oneM2M/CSE/DMR/UPD/014_ACP/LBL | Release 1 | PICS_ACP_LBL | TS-0001 [대상을 찾을 수 없습니다], clause 9.6.1.3.2-1 | accessControlPolicy | labels |
| TP/oneM2M/CSE/DMR/UPD/014_SUB/ACPI | Release 1 | PICS_SUB_ACPI | TS-0001 [대상을 찾을 수 없습니다], clause 9.6.1.3.2-1 | subscription | accessControlPolicy IDs |
| TP/oneM2M/CSE/DMR/UPD/014_SUB/ET | Release 1 | N/A | TS-0001 [대상을 찾을 수 없습니다], clause 9.6.1.3.1-1 | subscription | expirationTime |
| TP/oneM2M/CSE/DMR/UPD/014_SUB/LBL | Release 1 | PICS_SUB_LBL | TS-0001 [대상을 찾을 수 없습니다], clause 9.6.1.3.2-1 | subscription | labels |
| TP/oneM2M/CSE/DMR/UPD/014_SUB/ENC | Release 1 | PICS_SUB_ENC | TS-0001 [대상을 찾을 수 없습니다], clause 9.6.8-2 | subscription | eventNotificationCriteria |

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|-----------------------------------|-----------|--------------|--|--------------|---------------------------|
| TP/oneM2M/CSE/DMR/UPD/014_SUB/EXC | Release 1 | PICS_SUB_EXC | TS-0001 [대상을 찾을 수 없습니다], clause 9.6.8-2 | subscription | expirationCounter |
| TP/oneM2M/CSE/DMR/UPD/014_SUB/GPI | Release 1 | PICS_SUB_GPI | TS-0001 [대상을 찾을 수 없습니다], clause 9.6.8-2 | subscription | groupID |
| TP/oneM2M/CSE/DMR/UPD/014_SUB/NFU | Release 1 | PICS_SUB_NFU | TS-0001 [대상을 찾을 수 없습니다], clause 9.6.8-2 | subscription | notificationForwardingURI |
| TP/oneM2M/CSE/DMR/UPD/014_SUB/BN | Release 1 | PICS_SUB_BN | TS-0001 [대상을 찾을 수 없습니다], clause 9.6.8-2 | subscription | batchNotify |
| TP/oneM2M/CSE/DMR/UPD/014_SUB/RL | Release 1 | PICS_SUB_RL | TS-0001 [대상을 찾을 수 없습니다], clause 9.6.8-2 | subscription | rateLimit |
| TP/oneM2M/CSE/DMR/UPD/014_SUB/PN | Release 1 | PICS_SUB_PN | TS-0001 [대상을 찾을 수 없습니다], clause 9.6.8-2 | subscription | pendingNotification |

| | | | | | |
|-----------------------------------|-----------|---------------|---|--------------|-----------------------------|
| TP/oneM2M/CSE/DMR/UPD/014_SUB/NSP | Release 1 | PICS_SUB_NSP | TS-0001 [대상을 찾을 수 없습니다], clause 9.6.8-2 | subscription | notificationStoragePriority |
| TP/oneM2M/CSE/DMR/UPD/014_SUB/LN | Release 1 | PICS_SUB_LN | TS-0001 [대상을 찾을 수 없습니다], clause 9.6.8-2 | subscription | latestNotify |
| TP/oneM2M/CSE/DMR/UPD/014_SUB/NCT | Release 1 | PICS_SUB_NCT | TS-0001 [대상을 찾을 수 없습니다], clause 9.6.8-2 | subscription | notificationContentType |
| TP/oneM2M/CSE/DMR/UPD/014_SUB/NEC | Release 1 | PICS_SUB_NECK | TS-0001 [대상을 찾을 수 없습니다], clause 9.6.8-2 | subscription | notificationEventCat |
| TP/oneM2M/CSE/DMR/UPD/014_TS/ACPI | Release 3 | | TS-0001 [대상을 찾을 수 없습니다], clause 9.6.36-2 | timeSeries | accessControlPolicyIDs |
| TP/oneM2M/CSE/DMR/UPD/014_TS/LBL | Release 3 | | TS-0001 [대상을 찾을 수 없습니다], clause 9.6.36-2 | timeSeries | labels |

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|----------------------------------|-----------|--|---|------------|----------------------|
| TP/oneM2M/CSE/DMR/UPD/014_TS/MNI | Release 3 | | TS-0001 [대상을 찾을 수 없습니다], clause 9.6.36-2 | timeSeries | maximumNrOfInstances |
| TP/oneM2M/CSE/DMR/UPD/014_TS/MBS | Release 3 | | TS-0001 [대상을 찾을 수 없습니다], clause 9.6.36-2 | timeSeries | maxByteSize |
| TP/oneM2M/CSE/DMR/UPD/014_TS/MIA | Release 3 | | TS-0001 [대상을 찾을 수 없습니다], clause 9.6.36-2 | timeSeries | maxInstanceAge |
| TP/oneM2M/CSE/DMR/UPD/014_TS/PEI | Release 3 | | TS-0001 [대상을 찾을 수 없습니다], clause 9.6.36-2 | timeSeries | periodicInterval |
| TP/oneM2M/CSE/DMR/UPD/014_TS/MDD | Release 3 | | TS-0001 [대상을 찾을 수 없습니다], clause 9.6.36-2 | timeSeries | missingDataDetect |
| TP/oneM2M/CSE/DMR/UPD/014_TS/MDN | Release 3 | | TS-0001 [대상을 찾을 수 없습니다], clause 9.6.36-2 | timeSeries | missingDataMaxNr |

| | | | | | |
|----------------------------------|-----------|--|---|------------|------------------------|
| TP/oneM2M/CSE/DMR/UPD/014_TS/MDT | Release 3 | | TS-0001 [대상을 찾을 수 없습니다], clause 9.6.36-2 | timeSeries | missingDataDetectTimer |
| TP/oneM2M/CSE/DMR/UPD/014_TS/OR | Release 3 | | TS-0001 [대상을 찾을 수 없습니다], clause 9.6.36-2 | timeSeries | ontologyRef |

| 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 | PARENT_RELEASE | | | | | | | | | | |
| PICS Selection | PICS_CSE | | | | | | | | | | |
| Initial conditions | <p>with {</p> <p>the IUT being in the "initial state" and the IUT having registered the AE and the IUT having created a resource TARGET_RESOURCE_ADDRESS of 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</p> <p>}</p> | | | | | | | | | | |
| Expected behaviour | <table border="1"> <thead> <tr> <th>Test events</th> <th>Direction</th> </tr> </thead> <tbody> <tr> <td> 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 } </td> <td>IUT ← AE</td> </tr> <tr> <td> 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 OPTIONAL_ATTRIBUTE attribute set to VALUE } </td> <td>IUT → AE</td> </tr> </tbody> </table> | | | | 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 OPTIONAL_ATTRIBUTE attribute set to VALUE } | IUT → AE | |
| 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 OPTIONAL_ATTRIBUTE attribute set to VALUE } | IUT → AE | | | | | | | | | | |

| TP Id | PARENT_RELEASE | PICS Selection | Reference | RESOURCE_TYPE | OPTIONAL_ATTRIBUTE |
|-----------------------------------|----------------|----------------|-----------------------|---------------|--------------------|
| TP/oneM2M/CSE/DMR/UPD/015_CSR/LBL | Release 1 | PICS_CSR_LBL | TS-0001 [대상을 찾을 수] | remoteCSE | labels |

| TP Id | PARENT_RELEASE | PICS Selection | Reference | RESOURCE_TYPE | OPTIONAL_ATTRIBUTE |
|-----------------------------------|----------------|----------------|---|---------------|------------------------|
| | | | 없습니다], clause 9.6.4-2 | | |
| TP/oneM2M/CSE/DMR/UPD/015_CSR/POA | Release 1 | PICS_CSR_POA | TS-0001 [대상을 찾을 수 없습니다], clause 9.6.4-2 | remoteCSE | pointOfAccess |
| TP/oneM2M/CSE/DMR/UPD/015_CSR/NL | Release 1 | PICS_CSR_NL | TS-0001 [대상을 찾을 수 없습니다], clause 9.6.4-2 | remoteCSE | nodeLink |
| TP/oneM2M/CSE/DMR/UPD/015_AE/LBL | Release 1 | PICS_AE_LBL | TS-0001 [대상을 찾을 수 없습니다], clause 9.6.5-2 | AE | labels |
| TP/oneM2M/CSE/DMR/UPD/015_AE/ACPI | Release 1 | PICS_AE_ACPI | TS-0001 [대상을 찾을 수 없습니다], clause 9.6.5-2 | AE | accessControlPolicyIDs |

| TP Id | PARENT_RELEASE | PICS_Selection | Reference | RESOURCE_TYPE | OPTIONAL_ATTRIBUTE |
|------------------------------------|----------------|----------------|--|---------------|------------------------|
| TP/oneM2M/CSE/DMR/UPD/015_AE/APN | Release 1 | PICS_AE_APN | TS-0001 [대상을 찾을 수 없습니다], clause 9.6.5-2 | AE | AppName |
| TP/oneM2M/CSE/DMR/UPD/015_AE/POA | Release 1 | PICS_AE_POA | TS-0001 [대상을 찾을 수 없습니다], clause 9.6.5-2 | AE | pointOfAccess |
| TP/oneM2M/CSE/DMR/UPD/015_AE/OR | Release 1 | PICS_AE_OR | TS-0001 [대상을 찾을 수 없습니다], clause 9.6.5-2 | AE | ontologyRef |
| TP/oneM2M/CSE/DMR/UPD/015_CNT/LBL | Release 1 | PICS_CNT_LBL | TS-0001 [대상을 찾을 수 없습니다], clause 9.6.6-2 | container | labels |
| TP/oneM2M/CSE/DMR/UPD/015_CNT/ACPI | Release 1 | PICS_CNT_ACP_I | TS-0001 [대상을 찾을 수 없습니다], | container | accessControlPolicyIDs |

| TP Id | PARENT_RELEASE | PICS Selection | Reference | RESOURCE_TYPE | OPTIONAL_ATTRIBUTE |
|-----------------------------------|----------------|----------------|--|---------------|--------------------|
| | | | clause 9.6.6-2 | | |
| TP/oneM2M/CSE/DMR/UPD/015_CNT/MNI | Release 1 | PICS_CNT_MNI | TS-0001 [대상을 찾을 수 없습니 다], clause 9.6.6-2 | container | maxNrOfInstances |
| TP/oneM2M/CSE/DMR/UPD/015_CNT/MBS | Release 1 | PICS_CNT_MBS | TS-0001 [대상을 찾을 수 없습니 다], clause 9.6.6-2 | container | maxByteSize |
| TP/oneM2M/CSE/DMR/UPD/015_CNT/MIA | Release 1 | PICS_CNT_MIA | TS-0001 [대상을 찾을 수 없습니 다], clause 9.6.6-2 | container | maxInstanceAge |
| TP/oneM2M/CSE/DMR/UPD/015_CNT/OR | Release 1 | PICS_CNT_OR | TS-0001 [대상을 찾을 수 없습니 다], clause 9.6.6-2 | container | ontologyRef |
| TP/oneM2M/CSE/DMR/UPD/015_CNT/LI | Release 1 | PICS_CNT_LI | TS-0001 [대상을 찾을 수 | container | locationID |

| TP Id | PARENT_RELEASE | PICS Selection | Reference | RESOURCE_TYPE | OPTIONAL_ATTRIBUTE |
|------------------------------------|----------------|----------------|---|---------------------|---------------------------|
| | | | 없습니다], clause 9.6.6-2 | | |
| TP/oneM2M/CSE/DMR/UPD/015_ACP/LBL | Release 1 | PICS_ACP_LBL | TS-0001 [대상을 찾을 수 없습니다], clause 9.6.2-2 | accessControlPolicy | labels |
| TP/oneM2M/CSE/DMR/UPD/015_SUB/ACPI | Release 1 | PICS_SUB_ACP_I | TS-0001 [대상을 찾을 수 없습니다], clause 9.6.8-2 | subscription | accessControlPolicyIDs |
| TP/oneM2M/CSE/DMR/UPD/015_SUB/LBL | Release 1 | PICS_SUB_LBL | TS-0001 [대상을 찾을 수 없습니다], clause 9.6.8-2 | subscription | labels |
| TP/oneM2M/CSE/DMR/UPD/015_SUB/ENC | Release 1 | PICS_SUB_ENC | TS-0001 [대상을 찾을 수 없습니다], clause 9.6.8-2 | subscription | eventNotificationCriteria |

| TP Id | PARENT_RELEASE | PICS_Selection | Reference | RESOURCE_TYPE | OPTIONAL_ATTRIBUTE |
|-----------------------------------|----------------|----------------|--|---------------|---------------------------|
| TP/oneM2M/CSE/DMR/UPD/015_SUB/EXC | Release 1 | PICS_SUB_EXC | TS-0001 [대상을 찾을 수 없습니다], clause 9.6.8-2 | subscription | expirationCounter |
| TP/oneM2M/CSE/DMR/UPD/015_SUB/GPI | Release 1 | PICS_SUB_GPI | TS-0001 [대상을 찾을 수 없습니다], clause 9.6.8-2 | subscription | groupID |
| TP/oneM2M/CSE/DMR/UPD/015_SUB/NFU | Release 1 | PICS_SUB_NFU | TS-0001 [대상을 찾을 수 없습니다], clause 9.6.8-2 | subscription | notificationForwardingURI |
| TP/oneM2M/CSE/DMR/UPD/015_SUB/BN | Release 1 | PICS_SUB_BN | TS-0001 [대상을 찾을 수 없습니다], clause 9.6.8-2 | subscription | batchNotify |
| TP/oneM2M/CSE/DMR/UPD/015_SUB/RL | Release 1 | PICS_SUB_RL | TS-0001 [대상을 찾을 수 없습니다], | subscription | rateLimit |

| TP Id | PARENT_RELEASE | PICS Selection | Reference | RESOURCE_TYPE | OPTIONAL_ATTRIBUTE |
|-----------------------------------|----------------|----------------------|--|---------------|-----------------------------|
| | | | clause 9.6.8-2 | | |
| TP/oneM2M/CSE/DMR/UPD/015_SUB/PN | Release 1 | PICS_S UB_PN | TS-0001 [대상을 찾을 수 없습니 다], clause 9.6.8-2 | subscription | pendingNotification |
| TP/oneM2M/CSE/DMR/UPD/015_SUB/NSP | Release 1 | PICS_S UB_NSP | TS-0001 [대상을 찾을 수 없습니 다], clause 9.6.8-2 | subscription | notificationStoragePriority |
| TP/oneM2M/CSE/DMR/UPD/015_SUB/LN | Release 1 | PICS_S UB_LN | TS-0001 [대상을 찾을 수 없습니 다], clause 9.6.8-2 | subscription | latestNotify |
| TP/oneM2M/CSE/DMR/UPD/015_SUB/NEC | Release 1 | PICS_S UB_NE C | TS-0001 [대상을 찾을 수 없습니 다], clause 9.6.8-2 | subscription | notificationEventCat |
| TP/oneM2M/CSE/DMR/UPD/015_GRP/LBL | Release 1 | PICS_G RP_LBL | TS-0001 [대상을 찾을 수 | group | labels |

| TP Id | PARENT_RELEASE | PICS Selection | Reference | RESOURCE_TYPE | OPTIONAL_ATTRIBUTE |
|------------------------------------|----------------|----------------|--|---------------|-------------------------------|
| | | | 없습니다], clause 9.6.13-2 | | |
| TP/oneM2M/CSE/DMR/UPD/015_GRP/ACPI | Release 1 | PICS_GRP ACPI | TS-0001 [대상을 찾을 수 없습니다], clause 9.6.13-2 | group | accessControlPolicyIDs |
| TP/oneM2M/CSE/DMR/UPD/015_GRP/MACP | Release 1 | PICS_GRP_MACP | TS-0001 [대상을 찾을 수 없습니다], clause 9.6.13-2 | group | membersAccessControlPolicyIDs |
| TP/oneM2M/CSE/DMR/UPD/015_GRP/GN | Release 1 | PICS_GRP_GN | TS-0001 [대상을 찾을 수 없습니다], clause 9.6.13-2 | group | groupName |
| TP/oneM2M/CSE/DMR/UPD/015_TS/ACPI | Release 3 | | TS-0001 [대상을 찾을 수 없습니다], clause 9.6.36-2 | timeSeries | accessControlPolicyIDs |

| TP Id | PARENT_RELEASE | PICS Selection | Reference | RESOURCE_TYPE | OPTIONAL_ATTRIBUTE |
|----------------------------------|----------------|----------------|---|---------------|----------------------|
| TP/oneM2M/CSE/DMR/UPD/015_TS/LBL | Release 3 | | TS-0001 [대상을 찾을 수 없습니다], clause 9.6.36-2 | timeSeries | labels |
| TP/oneM2M/CSE/DMR/UPD/015_TS/MNI | Release 3 | | TS-0001 [대상을 찾을 수 없습니다], clause 9.6.36-2 | timeSeries | maximumNrOfInstances |
| TP/oneM2M/CSE/DMR/UPD/015_TS/MBS | Release 3 | | TS-0001 [대상을 찾을 수 없습니다], clause 9.6.36-2 | timeSeries | maxByteSize |
| TP/oneM2M/CSE/DMR/UPD/015_TS/MIA | Release 3 | | TS-0001 [대상을 찾을 수 없습니다], clause 9.6.36-2 | timeSeries | maxInstanceAge |
| TP/oneM2M/CSE/DMR/UPD/015_TS/PEI | Release 3 | | TS-0001 [대상을 찾을 수 없습니다], | timeSeries | periodicInterval |

| TP Id | PARENT_RELEASE | PICS Selection | Reference | RESOURCE_TYPE | OPTIONAL_ATTRIBUTE |
|----------------------------------|----------------|----------------|---|---------------|------------------------|
| | | | clause 9.6.36-2 | | |
| TP/oneM2M/CSE/DMR/UPD/015_TS/MDD | Release 3 | | TS-0001 [대상을 찾을 수 없습니 다], clause 9.6.36-2 | timeSeries | missingDataDetect |
| TP/oneM2M/CSE/DMR/UPD/015_TS/MDN | Release 3 | | TS-0001 [대상을 찾을 수 없습니 다], clause 9.6.36-2 | timeSeries | missingDataMaxNr |
| TP/oneM2M/CSE/DMR/UPD/015_TS/MDT | Release 3 | | TS-0001 [대상을 찾을 수 없습니 다], clause 9.6.36-2 | timeSeries | missingDataDetectTimer |
| TP/oneM2M/CSE/DMR/UPD/015_TS/OR | Release 3 | | TS-0001 [대상을 찾을 수 없습니 다], clause 9.6.36-2 | timeSeries | ontologyRef |

| | | | |
|---------------------------|--|------------------|----------|
| 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 | PARENT_RELEASE | | |
| PICS Selection | PICS_CSE | | |
| Initial conditions | <p>with {</p> <p>the IUT being in the "initial state" and the IUT having registered the AE and the IUT having created a resource TARGET_RESOURCE_ADDRESS of type RESOURCE_TYPE under the CSEBase resource and the AE having privileges to perform UPDATE operation on the resource TARGET_RESOURCE_ADDRESS }</p> | | |
| Expected behaviour | Test events <p>when {</p> <p>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 }</p> | Direction | IUT ← AE |
| | <p>then {</p> <p>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 }</p> | | |

| TP Id | PARENT_RELEASE | Reference | RESOURCE_TYPE | MANDATORY_ATTRIBUTE |
|----------------------------------|----------------|---|---------------|---------------------|
| TP/oneM2M/CSE/DMR/UPD/016_CSR/ET | Release 1 | TS-0001 [대상을 찾을 수 없습니다], clause 9.6.4-2 | remoteCSE | expirationTime |

| TP Id | PARENT_RELEASE | Reference | RESOURCE_TYPE | MANDATORY_ATTRIB_UYE |
|----------------------------------|----------------|--|---------------------|----------------------|
| TP/oneM2M/CSE/DMR/UPD/016_CSR/RR | Release 1 | TS-0001 [대상을 찾을 수 없습니다], clause 9.6.4-2 | remoteCSE | requestReachability |
| TP/oneM2M/CSE/DMR/UPD/016_AE/ET | Release 1 | TS-0001 [대상을 찾을 수 없습니다], clause 9.6.5-2 | AE | expirationTime |
| TP/oneM2M/CSE/DMR/UPD/016_AE/RR | Release 1 | TS-0001 [대상을 찾을 수 없습니다], clause 9.6.5-2 | AE | requestReachability |
| TP/oneM2M/CSE/DMR/UPD/016_CNT/ET | Release 1 | TS-0001 [대상을 찾을 수 없습니다], clause 9.6.6-2 | container | expirationTime |
| TP/oneM2M/CSE/DMR/UPD/016_ACP/ET | Release 1 | TS-0001 [대상을 찾을 수 없습니다], clause 9.6.2-2 | accessControlPolicy | expirationTime |
| TP/oneM2M/CSE/DMR/UPD/016_ACP/PV | Release 1 | TS-0001 [대상을 찾을 수 없습니다], clause | accessControlPolicy | privileges |

| TP Id | PARENT_RELEASE | Reference | RESOURCE_TYPE | MANDATORY_ATTRIBUTE |
|-----------------------------------|----------------|---|---------------------|-------------------------|
| | | 9.6.2-2 | | |
| TP/oneM2M/CSE/DMR/UPD/016_ACP/PVS | Release 1 | TS-0001 [대상을 찾을 수 없습니다], clause 9.6.2-2 | accessControlPolicy | selfPrivileges |
| TP/oneM2M/CSE/DMR/UPD/016_SUB/ET | Release 1 | TS-0001 [대상을 찾을 수 없습니다], clause 9.6.8-2 | subscription | expirationTime |
| TP/oneM2M/CSE/DMR/UPD/016_SUB/NU | Release 1 | TS-0001 [대상을 찾을 수 없습니다], clause 9.6.8-2 | subscription | notificationURI |
| TP/oneM2M/CSE/DMR/UPD/016_SUB/NCT | Release 1 | TS-0001 [대상을 찾을 수 없습니다], clause 9.6.8-2 | subscription | notificationContentType |
| TP/oneM2M/CSE/DMR/UPD/016_GRP/ET | Release 1 | TS-0001 [대상을 찾을 수 없습니다], clause 9.6.13-2 | group | expirationTime |
| TP/oneM2M/CSE/DMR/UPD/016_GRP/MNM | Release 1 | TS-0001 [대상을 찾을 수 없습니다], | group | maxNrOfMembers |

| TP Id | PARENT_RELEASE | Reference | RESOURCE_TYPE | MANDATORY_ATTRIB_UTE |
|-----------------------------------|----------------|---|---------------|----------------------|
| | | clause 9.6.13-2 | | |
| TP/oneM2M/CSE/DMR/UPD/016_GRP/MID | Release 1 | TS-0001 [대상을 찾 을 수 없습 니다], clause 9.6.13-2 | group | memberIDs |
| TP/oneM2M/CSE/DMR/UPD/016_TS/ET | Release 3 | TS-0001 [대상을 찾 을 수 없습 니다], clause 9.6.36-2 | timeSeries | expirationTime |

| | | |
|---------------------------|--|---|
| TP Id | TP/oneM2M/CSE/DMR/UPD/017 | |
| Test objective | Check that the IUT updates successfully the value of the announceTo optional attribute of the RESOURCE_TYPE resource | |
| Reference | TS-0001 [1], clause 10.2.18.4 and clause 9.6.1.3.2-1, TS-0004 [2], clause 7.3.3.10 | |
| Config Id | CF02 | |
| Parent Release | Release 3 | |
| PICS Selection | PICS_CSE | |
| Initial conditions | <p>with {</p> <p>the IUT being in the "initial state"</p> <p>and the IUT having registered the AE</p> <p>and the IUT having created the PARENT_RESOURCE resource containing RESOURCE_TYPE resource containing</p> <p>announceTo attribute set to NULL</p> <p>and the IUT having announced the PARENT_RESOURCE resource</p> <p>and the AE having privileges to perform UPDATE operation on the resource TARGET_RESOURCE_ADDRESS</p> } | |
| Expected behaviour | Test events 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 announceTo attribute set to ANNC_TARGET_CSE_ADDRESS } then { the IUT sends a valid CREATE Request containing To set ANNC_TARGET_CSE_ADDRESS and Content containing RESOURCE_TYPE announced variant resource containing MA (mandatory) attributes } | Direction IUT ← AE IUT → CSE |

| TP Id | RESOURCE_TYPE |
|-------------------------------|--------------------|
| TP/oneM2M/CSE/DMR/UPD/017_ACP | accesControlPolicy |
| TP/oneM2M/CSE/DMR/UPD/017_CNT | container |
| TP/oneM2M/CSE/DMR/UPD/017_GRP | group |
| TP/oneM2M/CSE/DMR/UPD/017_LCP | locationPolicy |
| TP/oneM2M/CSE/DMR/UPD/017_MGO | mgmtObj |
| TP/oneM2M/CSE/DMR/UPD/017_NOD | node |
| TP/oneM2M/CSE/DMR/UPD/017_SCH | schedule |
| TP/oneM2M/CSE/DMR/UPD/017_TS | timeSeries |

| TP Id | TP/oneM2M/CSE/DMR/UPD/018 | | | | | | | |
|--|---|--------------------|------------------|--|----------|--|-----------|--|
| Test objective | Check that the IUT updates successfully the value of the announcedAttribute optional attribute of the <i>RESOURCE_TYPE</i> resource | | | | | | | |
| Reference | TS-0001 [1], clause 10.2.18.8 and clause 9.6.1.3.2-1, TS-0004 [2], clause 7.3.3.10 | | | | | | | |
| Parent Release | Release 3 | | | | | | | |
| Config Id | CF02 | | | | | | | |
| PICS Selection | PICS_CSE | | | | | | | |
| Initial conditions | <p>with {</p> <p>the IUT being in the "initial state" and the IUT having registered the AE and the IUT having created a <i>RESOURCE_TYPE</i> resource containing OA_ATTRIBUTE attribute set to VALUE and announceTo attribute set to ANNC_TARGET_CSE_ADDRESS and announcedAttribute attribute set to NULL and the IUT having announced the <i>RESOURCE_TYPE</i> resource to the announcement target CSE and the AE having privileges to perform UPDATE operation on the resource TARGET_RESOURCE_ADDRESS }</p> | | | | | | | |
| Expected behaviour | <table border="1"> <thead> <tr> <th>Test events</th> <th>Direction</th> </tr> </thead> <tbody> <tr> <td> 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 <i>RESOURCE_TYPE</i> resource containing announcedAttribute attribute set to OA_ATTRIBUTE } </td><td>IUT ← AE</td></tr> <tr> <td> then { The IUT sends a valid UPDATE Request containing To set to ANNC_TARGET_CSE_ADDRESS and Content containing <i>RESOURCE_TYPE</i> announced variant resource containing OA_ATTRIBUTE attribute set to VALUE } </td><td>IUT → CSE</td></tr> </tbody> </table> | 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 <i>RESOURCE_TYPE</i> resource containing announcedAttribute attribute set to OA_ATTRIBUTE } | IUT ← AE | then { The IUT sends a valid UPDATE Request containing To set to ANNC_TARGET_CSE_ADDRESS and Content containing <i>RESOURCE_TYPE</i> announced variant resource containing OA_ATTRIBUTE attribute set to VALUE } | IUT → CSE | |
| 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 <i>RESOURCE_TYPE</i> resource containing announcedAttribute attribute set to OA_ATTRIBUTE } | IUT ← AE | | | | | | | |
| then { The IUT sends a valid UPDATE Request containing To set to ANNC_TARGET_CSE_ADDRESS and Content containing <i>RESOURCE_TYPE</i> announced variant resource containing OA_ATTRIBUTE attribute set to VALUE } | IUT → CSE | | | | | | | |

| TP Id | RESOURCE_TYPE | OA_ATTRIBUTE |
|-----------------------------------|----------------------|---------------------|
| TP/oneM2M/CSE/DMR/UPD/018_CNT/MBS | container | maxByteSize |
| TP/oneM2M/CSE/DMR/UPD/018_GRP/MT | Group | memberType |
| TP/oneM2M/CSE/DMR/UPD/018_LCP/LOI | locationPolicy | locationContainerID |
| TP/oneM2M/CSE/DMR/UPD/018_MGO/DC | mgmtObj | description |
| TP/oneM2M/CSE/DMR/UPD/018_NOD/HCL | Node | hostedCSELINK |

| | | |
|----------------------------------|------------|-----------------|
| TP/oneM2M/CSE/DMR/UPD/018_SCH/SE | schedule | scheduleElement |
| TP/oneM2M/CSE/DMR/UPD/018_TS/MBS | timeSeries | maxByteSize |

TP/oneM2M/CSE/DMR/UPD/019

| | | |
|--------------------|--|------------------------------|
| TP Id | TP/oneM2M/CSE/DMR/UPD/019 | |
| Test objective | Check that the IUT rejects a UPDATE Request target to TARGET_RESOURCE_ADDRESS resource when the Result Content set to RESULT_CONTENT | |
| Reference | TS-0001 [1], clause 8.1.2, TS-0004 [2], clause 6.3.4.2.7 | |
| Config Id | CF01 | |
| Parent Release | PARENT_RELEASE | |
| 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_ADDRESS of type RESOURCE_TYPE and the AE having privileges to perform UPDATE operation on the resource TARGET_RESOURCE_ADDRESS } | |
| Expected behaviour | Test events when { the IUT receives a valid UPDATE Request from AE containing To set to TARGET_RESOURCE_ADDRESS and From set to AE_ID and Result Content set to RESULT_CONTENT Content and RESOURCE_TYPE resource containing valid attribute } | Direction IUT ← AE |
| | then { the IUT sends a valid Response containing Response Status Code set to 4000 (BAD_REQUEST) and no Content } | IUT → AE |

| TP Id | PARENT_RELEASE | RESULT_CONTENT |
|---------------------------------|----------------|--|
| TP/oneM2M/CSE/DMR/UPD/019_RCN/2 | Release 2 | 2 (hierarchical address) |
| TP/oneM2M/CSE/DMR/UPD/019_RCN/3 | Release 2 | 3 (attributes and hierarchical address) |
| TP/oneM2M/CSE/DMR/UPD/019_RCN/4 | Release 3 | 4 (attributes and child resources) |
| TP/oneM2M/CSE/DMR/UPD/019_RCN/5 | Release 3 | 5 (attributes and child resource references) |
| TP/oneM2M/CSE/DMR/UPD/019_RCN/6 | Release 3 | 6 (child resource references) |
| TP/oneM2M/CSE/DMR/UPD/019_RCN/7 | Release 3 | 7 (original resource) |

TP/oneM2M/CSE/DMR/UPD/020

| TP Id | TP/oneM2M/CSE/DMR/UPD/020 | | | | | | | |
|--|--|--------------------|------------------|--|----------|--|----------|--|
| Test objective | Check that the IUT returns nothing of TARGET_RESOURCE_ADDRESS resource when the Result Content is set to 0 (nothing) | | | | | | | |
| Reference | TS-0001 [1], clause 8.1.2, TS-0004 [2], clause 6.3.3.2.7 | | | | | | | |
| Config Id | CF01 | | | | | | | |
| Parent Release | <i>PARENT_RELEASE</i> | | | | | | | |
| PICS Selection | PICS_CSE | | | | | | | |
| Initial conditions | <p>with {</p> <p>the IUT being in the "initial state" and the IUT having registered the AE and the IUT having created a resource TARGET_RESOURCE_ADDRESS of type RESOURCE_TYPE containing a child resource and the AE having privileges to perform UPDATE operation on the resource TARGET_RESOURCE_ADDRESS</p> <p>}</p> | | | | | | | |
| Expected behaviour | <table border="1"> <thead> <tr> <th>Test events</th> <th>Direction</th> </tr> </thead> <tbody> <tr> <td> <p>when {</p> <p>the IUT receives a valid UPDATE Request from AE containing To set to TARGET_RESOURCE_ADDRESS and From set to AE_ID and Result Content set to 0 (nothing) Content and RESOURCE_TYPE resource containing valid attribute</p> <p>}</p> </td><td>IUT ← AE</td></tr> <tr> <td> <p>then {</p> <p>the IUT sends a valid Response containing Response Status Code set to 2004 (UPDATED) and no Content</p> <p>}</p> </td><td>IUT → AE</td></tr> </tbody> </table> | Test events | Direction | <p>when {</p> <p>the IUT receives a valid UPDATE Request from AE containing To set to TARGET_RESOURCE_ADDRESS and From set to AE_ID and Result Content set to 0 (nothing) Content and RESOURCE_TYPE resource containing valid attribute</p> <p>}</p> | IUT ← AE | <p>then {</p> <p>the IUT sends a valid Response containing Response Status Code set to 2004 (UPDATED) and no Content</p> <p>}</p> | IUT → AE | |
| Test events | Direction | | | | | | | |
| <p>when {</p> <p>the IUT receives a valid UPDATE Request from AE containing To set to TARGET_RESOURCE_ADDRESS and From set to AE_ID and Result Content set to 0 (nothing) Content and RESOURCE_TYPE resource containing valid attribute</p> <p>}</p> | IUT ← AE | | | | | | | |
| <p>then {</p> <p>the IUT sends a valid Response containing Response Status Code set to 2004 (UPDATED) and no Content</p> <p>}</p> | IUT → AE | | | | | | | |

| TP Id | PARENT_RELEASE | RESOURCE_TYPE |
|-------------------------------|-----------------------|-------------------------|
| TP/oneM2M/CSE/DMR/UPD/020_CNT | Release 2 | 3 (container) |
| TP/oneM2M/CSE/DMR/UPD/020_GRP | Release 2 | 9 (group) |
| TP/oneM2M/CSE/DMR/UPD/020_ACP | Release 2 | 1 (accessControlPolicy) |
| TP/oneM2M/CSE/DMR/UPD/020_SCH | Release 3 | 18 (schedule) |
| TP/oneM2M/CSE/DMR/UPD/020_PCH | Release 3 | 15 (pollingChannel) |
| TP/oneM2M/CSE/DMR/UPD/020_SUB | Release 3 | 23 (subscription) |
| TP/oneM2M/CSE/DMR/UPD/020_TS | Release 3 | 29 (timeSeries) |

| | | |
|---------------------------|---|---|
| TP Id | TP/oneM2M/CSE/DMR/UPD/021 | |
| Test objective | Check that the IUT returns successfully only attributes of TARGET_RESOURCE_ADDRESS resource when the Result Content is set to 1 (attributes) | |
| Reference | TS-0001 [1], clause 8.1.2, TS-0004 [2], clause 6.3.3.2.7 | |
| Config Id | CF01 | |
| Parent Release | <i>PARENT_RELEASE</i> | |
| PICS Selection | PICS_CSE | |
| Initial conditions | <p>with {</p> <p>the IUT being in the "initial state" and the IUT having registered the AE and the IUT having created a resource TARGET_RESOURCE_ADDRESS of type RESOURCE_TYPE containing a child resource and the AE having privileges to perform UPDATE operation on the resource TARGET_RESOURCE_ADDRESS }</p> | |
| Expected behaviour | <p>Test events</p> <p>when {</p> <p>the IUT receives a valid UPDATE Request from AE containing To set to TARGET_RESOURCE_ADDRESS and From set to AE_ID and Result Content set to 1 (attributes) Content and RESOURCE_TYPE resource containing valid attribute }</p> | <p>Direction</p> <p>IUT \leftarrow AE</p> |
| | <p>then {</p> <p>the IUT sends a valid Response containing Response Status Code set to 2004 (UPDATED) and Content containing RESOURCE_TYPE resource containing attributes and no hierachical address and no child resources and no child resource references }</p> | <p>IUT \rightarrow AE</p> |

| TP Id | PARENT_RELEASE | RESOURCE_TYPE |
|-------------------------------|----------------|---------------|
| TP/oneM2M/CSE/DMR/UPD/021_CNT | Release 2 | 3 (container) |
| TP/oneM2M/CSE/DMR/UPD/021_GRP | Release 2 | 9 (group) |

| | | |
|-------------------------------|-----------|-------------------------|
| TP/oneM2M/CSE/DMR/UPD/021_ACP | Release 2 | 1 (accessControlPolicy) |
| TP/oneM2M/CSE/DMR/UPD/021_SCH | Release 3 | 18 (schedule) |
| TP/oneM2M/CSE/DMR/UPD/021_PCH | Release 3 | 15 (pollingChannel) |
| TP/oneM2M/CSE/DMR/UPD/021_SUB | Release 3 | 23 (subscription) |
| TP/oneM2M/CSE/DMR/UPD/021_TS | Release 3 | 29 (timeSeries) |

| TP Id | TP/oneM2M/CSE/DMR/UPD/022 | | | | | | | |
|--|---|-------------|-----------|---|----------|--|----------|--|
| Test objective | Check that the IUT returns successfully only modified attributes of TARGET_RESOURCE_ADDRESS resource when the Result Content is set to 9 (modified attributes) | | | | | | | |
| Reference | TS-0001 [1], clause 8.1.2, TS-0004 [2], clause 6.3.3.2.7 | | | | | | | |
| Config Id | CF01 | | | | | | | |
| Parent Release | <i>PARENT_RELEASE</i> | | | | | | | |
| PICS Selection | PICS_CSE | | | | | | | |
| Initial conditions | <p>with {</p> <p>the IUT being in the "initial state" and the IUT having registered the AE and the IUT having created a resource TARGET_RESOURCE_ADDRESS of type RESOURCE_TYPE containing a child resource and the AE having privileges to perform UPDATE operation on the resource TARGET_RESOURCE_ADDRESS }</p> | | | | | | | |
| Expected behaviour | <table border="1"> <thead> <tr> <th>Test events</th> <th>Direction</th> </tr> </thead> <tbody> <tr> <td> when { the IUT receives a valid UPDATE Request from AE containing To set to TARGET_RESOURCE_ADDRESS and From set to AE_ID and Result Content set to 9 (modified attributes) Content and RESOURCE_TYPE resource containing valid ATTRIBUTE attribute set to VALUE } </td> <td>IUT ← AE</td> </tr> <tr> <td> then { the IUT sends a valid Response containing Response Status Code set to 2004 (UPDATED) and Content containing RESOURCE_TYPE resource containing modified attributes and no ATTRIBUTE attribute and no hierachical address and no child resources and no child resource references } </td> <td>IUT → AE</td> </tr> </tbody> </table> | 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 Result Content set to 9 (modified attributes) Content and RESOURCE_TYPE resource containing valid 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 modified attributes and no ATTRIBUTE attribute and no hierachical address and no child resources and no child resource references } | IUT → AE | |
| 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 Result Content set to 9 (modified attributes) Content and RESOURCE_TYPE resource containing valid 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 modified attributes and no ATTRIBUTE attribute and no hierachical address and no child resources and no child resource references } | IUT → AE | | | | | | | |

| TP Id | PARENT_RELEASE | RESOURCE_TYPE |
|-------------------------------|----------------|---------------|
| TP/oneM2M/CSE/DMR/UPD/022_CNT | Release 2 | 3 (container) |
| TP/oneM2M/CSE/DMR/UPD/022_GRP | Release 2 | 9 (group) |

| | | |
|-------------------------------|-----------|-------------------------|
| TP/oneM2M/CSE/DMR/UPD/022_ACP | Release 2 | 1 (accessControlPolicy) |
| TP/oneM2M/CSE/DMR/UPD/022_SCH | Release 3 | 18 (schedule) |
| TP/oneM2M/CSE/DMR/UPD/022_PCH | Release 3 | 15 (pollingChannel) |
| TP/oneM2M/CSE/DMR/UPD/022_SUB | Release 3 | 23 (subscription) |
| TP/oneM2M/CSE/DMR/UPD/022_TS | Release 3 | 29 (timeSeries) |

7.2.2.3.3 CREATE Operation

TP/oneM2M/CSE/DMR/CRE/001

| TP Id | TP/oneM2M/CSE/DMR/CRE/001 | | | | | | | |
|---|--|--------------------|------------------|---|----------|---|----------|--|
| Test objective | Check that the IUT accepts the creation of a <i>RESOURCE_TYPE</i> resource on the TARGET_RESOURCE_ADDRESS of type <i>PARENT_RESOURCE_TYPE</i> with resource name not provided | | | | | | | |
| Reference | TS-0001 [1], clause 10.1.1.1 | | | | | | | |
| Config Id | CF01 | | | | | | | |
| Parent Release | <i>PARENT_RELEASE</i> | | | | | | | |
| PICS Selection | <i>PICS_CSE</i> | | | | | | | |
| 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 | <table border="1"> <thead> <tr> <th>Test events</th> <th>Direction</th> </tr> </thead> <tbody> <tr> <td> when { the IUT receives a valid CREATE Request from AE containing Resource Type set to <i>RESOURCE_TYPE</i> and To set to TARGET_RESOURCE_ADDRESS and From set to AE-ID and Content containing <i>RESOURCE_TYPE</i> resource containing no resourceName attribute } </td><td>IUT ← AE</td></tr> <tr> <td> then { the IUT creates the <i>RESOURCE_TYPE</i> resource and the IUT sends a valid Response containing Response Status Code set to 2001 (CREATED) and Content containing <i>RESOURCE_TYPE</i> resource containing Valid resourceName attribute } </td><td>IUT → AE</td></tr> </tbody> </table> | Test events | Direction | when { the IUT receives a valid CREATE Request from AE containing Resource Type set to <i>RESOURCE_TYPE</i> and To set to TARGET_RESOURCE_ADDRESS and From set to AE-ID and Content containing <i>RESOURCE_TYPE</i> resource containing no resourceName attribute } | IUT ← AE | then { the IUT creates the <i>RESOURCE_TYPE</i> resource and the IUT sends a valid Response containing Response Status Code set to 2001 (CREATED) and Content containing <i>RESOURCE_TYPE</i> resource containing Valid resourceName attribute } | IUT → AE | |
| Test events | Direction | | | | | | | |
| when { the IUT receives a valid CREATE Request from AE containing Resource Type set to <i>RESOURCE_TYPE</i> and To set to TARGET_RESOURCE_ADDRESS and From set to AE-ID and Content containing <i>RESOURCE_TYPE</i> resource containing no resourceName attribute } | IUT ← AE | | | | | | | |
| then { the IUT creates the <i>RESOURCE_TYPE</i> resource and the IUT sends a valid Response containing Response Status Code set to 2001 (CREATED) and Content containing <i>RESOURCE_TYPE</i> resource containing Valid resourceName attribute } | IUT → AE | | | | | | | |

| TP Id | PARENT_RELEASE | Reference | RESOURCE_TYPE | PARENT_RESOURCE_TYPE |
|----------------------------------|----------------|--------------------------|---------------|----------------------|
| TP/oneM2M/CSE/DMR/CRE/001_CNT/CB | Release 1 | TS-0001 [대상 을 찾을 수 없] | 3 (container) | 5 (CSEBase) |

| TP Id | PARENT_RELEASE | Reference | RESOURCE_TYPE | PARENT_RESOURCE_TYPE |
|-----------------------------------|----------------|--|-------------------------|----------------------|
| | | 습니다], clause 10.2.4.1 | | |
| TP/oneM2M/CSE/DMR/CRE/001_CNT/AE | Release 1 | TS-0001 [대상 을 찾을 수 없습니다], clause 10.2.4.1 | 3 (container) | 2 (AE) |
| TP/oneM2M/CSE/DMR/CRE/001_CNT/CNT | Release 1 | TS-0001 [대상 을 찾을 수 없습니다], clause 10.2.4.1 | 3 (container) | 3 (container) |
| TP/oneM2M/CSE/DMR/CRE/001_ACP/CB | Release 1 | TS-0001 [대상 을 찾을 수 없습니다], clause 10.2.21.1 | 1 (accessControlPolicy) | 5 (CSEBase) |
| TP/oneM2M/CSE/DMR/CRE/001_ACP/AE | Release 1 | TS-0001 [대상 을 찾을 수 없습니다], clause 10.2.21.1 | 1 (accessControlPolicy) | 2 (AE) |
| TP/oneM2M/CSE/DMR/CRE/001_SUB/CB | Release 1 | TS-0001 [대상 을 찾을 수 없습니다], clause 10.2.11.2 | 23 (subscription) | 5 (CSEBase) |
| TP/oneM2M/CSE/DMR/CRE/001_SUB/AE | Release 1 | TS-0001 [대상 을 찾을 수 없습니다], clause 10.2.11.2 | 23 (subscription) | 2 (AE) |

| TP Id | PARENT_RELEASE | Reference | RESOURCE_TYPE | PARENT_RESOURCE_TYPE |
|-----------------------------------|----------------|---|---------------------|-------------------------|
| TP/oneM2M/CSE/DMR/CRE/001_SUB/CNT | Release 1 | TS-0001 [대상 을 찾을 수 없 습니다], clause 10.2.11.2 | 23 (subscription) | 3 (container) |
| TP/oneM2M/CSE/DMR/CRE/001_SUB/ACP | Release 1 | TS-0001 [대상 을 찾을 수 없 습니다], clause 10.2.11.2 | 23 (subscription) | 1 (accessControlPolicy) |
| TP/oneM2M/CSE/DMR/CRE/001_SUB/CSR | Release 1 | TS-0001 [대상 을 찾을 수 없 습니다], clause 9.6.4-1 | 23 (subscription) | 16 (remoteCSE) |
| TP/oneM2M/CSE/DMR/CRE/001_CIN/CNT | Release 1 | TS-0001 [대상 을 찾을 수 없 습니다], clause 10.2.4.1 | 4 (contentInstance) | 3 (container) |
| TP/oneM2M/CSE/DMR/CRE/001_GRP/CB | Release 1 | TS-0001 [대상 을 찾을 수 없 습니다], clause 10.2.7.2 | 9 (group) | 5 (CSEBase) |
| TP/oneM2M/CSE/DMR/CRE/001_GRP/AE | Release 1 | TS-0001 [대상 을 찾을 수 없 습니다], clause 10.2.7.2 | 9 (group) | 2 (AE) |
| TP/oneM2M/CSE/DMR/CRE/001_SUB/GRP | Release 1 | TS-0001 [대상 을 찾을 수 없 습니다], clause | 23 (subscription) | 9 (group) |

| TP Id | PARENT_RELEASE | Reference | RESOURCE_TYPE | PARENT_RESOURCE_TYPE |
|-----------------------------------|----------------|---|------------------------------|----------------------|
| | | 10.2.11.2 | | |
| TP/oneM2M/CSE/DMR/CRE/001_SCH/CB | Release 3 | TS-0001 [대상 을 찾을 수 없 습니다], clause 10.2.40.2 | 18 (schedule) | 5 (CSEBase) |
| TP/oneM2M/CSE/DMR/CRE/001_SCH/SUB | Release 2 | TS-0001 [대상 을 찾을 수 없 습니다], clause 10.2.40.2 | 18 (schedule) | 23 (subscription) |
| TP/oneM2M/CSE/DMR/CRE/001_PCH/AE | Release 2 | TS-0001 [대상 을 찾을 수 없 습니다], clause 10.2.13.2 | 15 (pollingChannel) | 2 (AE) |
| TP/oneM2M/CSE/DMR/CRE/001_SUB/SCH | Release 3 | TS-0001 [대상 을 찾을 수 없 습니다], clause 10.2.11.2 | 23 (subscription) | 18 (schedule) |
| TP/oneM2M/CSE/DMR/CRE/001_LCP/CB | Release 3 | TS-0001 [대상 을 찾을 수 없 습니다], clause 9.6.3-1 | 10 (locationPolicy) | 5 (CSEBase) |
| TP/oneM2M/CSE/DMR/CRE/001_ASAR/CB | Release 3 | TS-0001 [대상 을 찾을 수 없 습니다], clause 9.6.3-1 | 19(serviceSubscribedAppRule) | 5 (CSEBase) |
| TP/oneM2M/CSE/DMR/CRE/001_SUB/AEA | Release 3 | TS-0001 [대상 을 찾을 수 없 습니다], clause 9.6.5-1 | 23 (subscription) | 10002 (AEannnc) |

| TP Id | PARENT_RELEASE | Reference | RESOURCE_TYPE | PARENT_RESOURCE_TYPE |
|-----------------------------------|----------------|--|-------------------------|----------------------|
| TP/oneM2M/CSE/DMR/CRE/001_CNT/AEA | Release 3 | TS-0001 [대상을 찾을 수 없습니다], clause 9.6.5-1 | 3 (container) | 10002 (AEannc) |
| TP/oneM2M/CSE/DMR/CRE/001_GRP/AEA | Release 3 | TS-0001 [대상을 찾을 수 없습니다], clause 9.6.5-1 | 9 (group) | 10002 (AEannc) |
| TP/oneM2M/CSE/DMR/CRE/001_ACP/AEA | Release 3 | TS-0001 [대상을 찾을 수 없습니다], clause 9.6.5-1 | 1 (accessControlPolicy) | 10002 (AEannc) |
| TP/oneM2M/CSE/DMR/CRE/001_TS/CB | Release 3 | TS-0001 [대상을 찾을 수 없습니다], clause 9.6.36-1 | 29 (timeSeries) | 5 (CSEBase) |
| TP/oneM2M/CSE/DMR/CRE/001_TS/AE | Release 3 | TS-0001 [대상을 찾을 수 없습니다], clause 9.6.36-1 | 29 (timeSeries) | 2 (AE) |
| TP/oneM2M/CSE/DMR/CRE/001_TS/CSR | Release 3 | TS-0001 [대상을 찾을 수 없습니다], clause 9.6.36-1 | 29 (timeSeries) | 16 (remoteCSE) |
| TP/oneM2M/CSE/DMR/CRE/001_TS/AEA | Release 3 | TS-0001 [대상을 찾을 수 없습니다], clause 9.6.36-1 | 29 (timeSeries) | 10002 (AEAnnnc) |

| TP Id | PARENT_RELEASE | Reference | RESOURCE_TYPE | PARENT_RESOURCE_TYPE |
|----------------------------------|----------------|---|-------------------------|----------------------|
| TP/oneM2M/CSE/DMR/CRE/001_TSI/TS | Release 3 | TS-0001 [대상 을 찾을 수 없 습니다], clause 9.6.37- 1 | 30 (timeSeriesInstance) | 30 (timeSeries) |

TP/oneM2M/CSE/DMR/CRE/002

| | | | |
|--------------------|---|----------|-------------|
| 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 | PARENT_RELEASE | | |
| 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 TARGET_RESOURCE_ADDRESS containing no child resource containing resourceName attribute set to NAME } | | |
| Expected behaviour | when { the IUT receives a valid CREATE Request from AE containing To set to TARGET_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 | Test events |
| | 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 | PARENT_RELEASE | Reference | RESOURCE_TYPE |
|--------------------------------|----------------|---|-------------------------|
| TP/oneM2M/CSE/DMR/CRE/002_CNT | Release 1 | TS-0001 [대상을 찾을 수 없습니다], clause 10.2.4.1 | 3 (container) |
| TP/oneM2M/CSE/DMR/CRE/002_ACP | Release 1 | TS-0001 [대상을 찾을 수 없습니다], clause 10.2.21.1 | 1 (accessControlPolicy) |
| TP/oneM2M/CSE/DMR/CRE/002_SUB | Release 1 | TS-0001 [대상을 찾을 수 없습니다], clause 10.2.11.2 | 23 (subscription) |
| TP/oneM2M/CSE/DMR/CRE/002_GRP | Release 1 | TS-0001 [대상을 찾을 수 없습니다], clause 10.2.7.2 | 9 (group) |
| TP/oneM2M/CSE/DMR/CRE/002_SCH | Release 3 | TS-0001 [대상을 찾을 수 없습니다], clause 10.2.40.2 | 18 (schedule) |
| TP/oneM2M/CSE/DMR/CRE/002_PCH | Release 2 | TS-0001 [대상을 찾을 수 없습니다], clause 10.2.13.2 | 15 (pollingChannel) |
| TP/oneM2M/CSE/DMR/CRE/002_TS | Release 3 | TS-0001 [대상을 찾을 수 없습니다], clause 10.2.30.1 | 29 (timeSeries) |
| TP/oneM2M/CSE/DMR/CRE/002_FLXC | Release 2 | TS-0001 [대상을 찾을 수 없습니다], clause 10.2.29.1 | 28 (flexContainer) |

| TP Id | TP/oneM2M/CSE/DMR/CRE/003 | | | | | | | | |
|--|---|--|--|-------------|-----------|--|---------------------|--|----------------------|
| Test objective | Check that the IUT rejects the creation of a <i>RESOURCE_TYPE</i> resource with an existing resource name provided by AE | | | | | | | | |
| Reference | TS-0001 [1], clause 10.1.1.1 | | | | | | | | |
| Config Id | CF01 | | | | | | | | |
| Parent Release | <i>PARENT_RELEASE</i> | | | | | | | | |
| PICS Selection | PICS_CSE | | | | | | | | |
| Initial conditions | <p>with {</p> <p>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 TARGET_RESOURCE_ADDRESS containing a child resource having resourceName attribute set to NAME }</p> | | | | | | | | |
| Expected behaviour | <table border="1"> <thead> <tr> <th>Test events</th> <th>Direction</th> </tr> </thead> <tbody> <tr> <td> when { the IUT receives a valid CREATE Request from AE containing To set to TARGET_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 } </td> <td>IUT \leftarrow AE</td> </tr> <tr> <td> then { the IUT sends a valid Response containing Response Status Code set to 4105 (CONFLICT) } </td> <td>IUT \rightarrow AE</td> </tr> </tbody> </table> | | | 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 RESOURCE_TYPE and From set to AE-ID and Content containing RESOURCE_TYPE resource containing resourceName attribute set to NAME } | IUT \leftarrow AE | then { the IUT sends a valid Response containing Response Status Code set to 4105 (CONFLICT) } | IUT \rightarrow AE |
| 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 RESOURCE_TYPE and From set to AE-ID and Content containing RESOURCE_TYPE resource containing resourceName attribute set to NAME } | IUT \leftarrow AE | | | | | | | | |
| then { the IUT sends a valid Response containing Response Status Code set to 4105 (CONFLICT) } | IUT \rightarrow AE | | | | | | | | |

| TP Id | PARENT_RELEASE | Reference | RESOURCE_TYPE |
|-------------------------------|----------------|--|-------------------------|
| TP/oneM2M/CSE/DMR/CRE/003_CNT | Release 1 | TS-0001 [대상을 찾을 수 없습니다], clause 10.2.4.1 | 3 (container) |
| TP/oneM2M/CSE/DMR/CRE/003_ACP | Release 1 | TS-0001 [대상을 찾을 수 없습니다], clause | 1 (accessControlPolicy) |

| | | | |
|-------------------------------|-----------|---|---------------------|
| | | 10.2.21.1 | |
| TP/oneM2M/CSE/DMR/CRE/003_SUB | Release 1 | TS-0001 [대상을 찾을 수 없습니다], clause 10.2.11.2 | 23 (subscription) |
| TP/oneM2M/CSE/DMR/CRE/003_GRP | Release 1 | TS-0001 [대상을 찾을 수 없습니다], clause 10.2.7.2 | 9 (group) |
| TP/oneM2M/CSE/DMR/CRE/003_SCH | Release 3 | TS-0001 [대상을 찾을 수 없습니다], clause 10.2.40.2 | 18 (schedule) |
| TP/oneM2M/CSE/DMR/CRE/003_PCH | Release 2 | TS-0001 [대상을 찾을 수 없습니다], clause 10.2.13.2 | 15 (pollingChannel) |
| TP/oneM2M/CSE/DMR/CRE/003_TS | Release 3 | TS-0001 [대상을 찾을 수 없습니다], clause 10.2.30.1 | 29 (timeSeries) |

| TP Id | TP/oneM2M/CSE/DMR/CRE/004 | | | | | | | |
|--|---|--|-------------|-----------|--|----------|---|----------|
| Test objective | Check that the IUT rejects the creation of a <i>RESOURCE_TYPE</i> resource when AE has no privileges | | | | | | | |
| Reference | TS-0001 [1], clause 10.1.1.1 | | | | | | | |
| Config Id | CF01 | | | | | | | |
| Parent Release | <i>PARENT_RELEASE</i> | | | | | | | |
| PICS Selection | PICS_CSE | | | | | | | |
| Initial conditions | <pre>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 }</pre> | | | | | | | |
| Expected behaviour | <table border="1"> <thead> <tr> <th>Test events</th> <th>Direction</th> </tr> </thead> <tbody> <tr> <td> when { the IUT receives a valid CREATE Request from AE containing To set to TARGET_RESOURCE_ADDRESS and Resource Type set to RESOURCE_TYPE and From set to AE-ID and Content containing RESOURCE_TYPE resource } </td><td>IUT ← AE</td></tr> <tr> <td> then { the IUT does not create the RESOURCE_TYPE resource and the IUT sends a valid Response containing Response Status Code set to 4103 (ORIGINATOR_HAS_NO_PRIVILEGE) } </td><td>IUT → AE</td></tr> </tbody> </table> | | 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 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 (ORIGINATOR_HAS_NO_PRIVILEGE) } | IUT → AE |
| 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 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 (ORIGINATOR_HAS_NO_PRIVILEGE) } | IUT → AE | | | | | | | |

| TP Id | PARENT_RELEASE | Reference | RESOURCE_TYPE |
|-------------------------------|----------------|---|-------------------------|
| TP/oneM2M/CSE/DMR/CRE/004_CNT | Release 1 | TS-0001 [대상을 찾을 수 없습니다], clause 10.2.4.1 | 3 (container) |
| TP/oneM2M/CSE/DMR/CRE/004_ACP | Release 1 | TS-0001 [대상을 찾을 수 없습니다], clause 10.2.21.1 | 1 (accessControlPolicy) |
| TP/oneM2M/CSE/DMR/CRE/004_SUB | Release 1 | TS-0001 [대상을 찾을 수 없습니다], clause 10.2.11.2 | 23 (subscription) |

| | | | |
|-------------------------------|-----------|---|---------------------|
| | | | |
| TP/oneM2M/CSE/DMR/CRE/004_GRP | Release 1 | TS-0001 [대상을 찾을 수 없습니다], clause 10.2.7.2 | 9 (group) |
| TP/oneM2M/CSE/DMR/CRE/004_SCH | Release 3 | TS-0001 [대상을 찾을 수 없습니다], clause 10.2.40.2 | 18 (schedule) |
| TP/oneM2M/CSE/DMR/CRE/004_PCH | Release 2 | TS-0001 [대상을 찾을 수 없습니다], clause 10.2.13.2 | 15 (pollingChannel) |
| TP/oneM2M/CSE/DMR/CRE/004_TS | Release 3 | TS-0001 [대상을 찾을 수 없습니다], clause 10.2.30.1 | 29 (timeSeries) |

| | | |
|---------------------------|--|----------|
| 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 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 container resource 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 [대상을 찾을 수 없습니다], clause 9.6.6, TS-0004 [대상을 찾을 수 없습니다], clause 7.4.7.1 | maxNrOfInstances |
| TP/oneM2M/CSE/DMR/CRE/005_MBS | TS-0001 [대상을 찾을 수 없습니다], clause 9.6.6, TS-0004 [대상을 찾을 수 없습니다], clause 7.4.7.1 | maxByteSize |

| | | |
|-------------------------------|--|----------------|
| TP/oneM2M/CSE/DMR/CRE/005_MIA | TS-0001 [대상을 찾을 수 없습니다], clause 9.6.6, TS-0004 [대상을 찾을 수 없습니다], 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 RESOURCE_TYPE resource 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 | <i>PARENT_RELEASE</i> | | | | | | | |
| 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 | <table border="1"> <thead> <tr> <th>Test events</th> <th>Direction</th> </tr> </thead> <tbody> <tr> <td> 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 RESOURCE_TYPE and Content containing RESOURCE_TYPE resource representation } </td><td>IUT \leftarrow AE</td></tr> <tr> <td> 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 ATTRIBUTE attribute } </td><td>IUT \rightarrow AE</td></tr> </tbody> </table> | 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 RESOURCE_TYPE and Content containing RESOURCE_TYPE resource representation } | IUT \leftarrow 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 ATTRIBUTE attribute } | IUT \rightarrow AE | |
| 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 RESOURCE_TYPE and Content containing RESOURCE_TYPE resource representation } | IUT \leftarrow 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 ATTRIBUTE attribute } | IUT \rightarrow AE | | | | | | | |

| TP Id | PARENT_RELEASE | Reference | RESOURCE_TYPE | ATTRIBUTE |
|-------|----------------|-----------|---------------|-----------|
| | | | | |

| | | | | |
|-----------------------------------|-----------|---|------------|------------------|
| TP/oneM2M/CSE/DMR/CRE/006_CNT/MNI | Release 1 | TS-0001 [대상을 찾을 수 없습니다], clause 9.6.6, TS-0004 [대상을 찾을 수 없습니다], clause 7.4.7.1 | container | maxNrOfInstances |
| TP/oneM2M/CSE/DMR/CRE/006_CNT/MBS | Release 1 | TS-0001 [대상을 찾을 수 없습니다], clause 9.6.6, TS-0004 [대상을 찾을 수 없습니다], clause 7.4.7.1 | container | maxByteSize |
| TP/oneM2M/CSE/DMR/CRE/006_CNT/MIA | Release 1 | TS-0001 [대상을 찾을 수 없습니다], clause 9.6.6, TS-0004 [대상을 찾을 수 없습니다], clause 7.4.7.1 | container | maxInstanceAge |
| TP/oneM2M/CSE/DMR/CRE/006_TS/MNI | Release 3 | TS-0001 [대상을 찾을 수 없습니다], clause 9.6.36, TS-0004 [대상을 찾을 수 없습니다], clause 7.4.38.1 | timeSeries | maxNrOfInstances |
| TP/oneM2M/CSE/DMR/CRE/006_TS/MBS | Release 3 | TS-0001 [대상을 찾을 수 없습니다], clause 9.6.36, TS-0004 [대상을 찾을 수 없습니다], clause 7.4.38.1 | timeSeries | maxByteSize |
| TP/oneM2M/CSE/DMR/CRE/006_TS/MIA | Release 3 | TS-0001 [대상을 찾을 수 없습니다], clause 9.6.36, TS-0004 [대상을 찾을 수 없습니다], clause 7.4.38.1 | timeSeries | maxInstanceAge |

| TP Id | TP/oneM2M/CSE/DMR/CRE/007 | | | | | | | |
|---|--|--|-------------|-----------|---|----------|---|----------|
| Test objective | Checks that the IUT accepts a newly created <i>RESOURCE_TYPE</i> when the <i>currentNrOfInstances</i> exceeds the field value set in <i>maxNrOfInstances</i> in the <i>PARENT_RESOURCE_TYPE</i> resource by removing enough of the oldest <i>RESOURCE_TYPE</i> resources to allow the creation of the new <i>RESOURCE_TYPE</i> resource | | | | | | | |
| Reference | TS-0001 [1], clause 10.2.19.2, TS-0004 [2], clause 7.4.8.2 | | | | | | | |
| Config Id | CF01 | | | | | | | |
| Parent Release | <i>PARENT_RELEASE</i> | | | | | | | |
| PICS Selection | PICS_CSE | | | | | | | |
| Initial conditions | <p>with {</p> <ul style="list-style-type: none"> the IUT being in the "initial state" and the IUT having registered the AE containing a <i>PARENT_RESOURCE_TYPE</i> resource containing <i>currentNrOfInstances</i> attribute set to MAX_NUMBER_OF_INSTANCES <i>and maxNrOfInstances</i> attribute set to MAX_NUMBER_OF_INSTANCES and the AE having privileges to perform CREATE operation on the resource <i>PARENT_RESOURCE_ADDRESS</i> } | | | | | | | |
| Expected behaviour | <table border="1"> <thead> <tr> <th>Test events</th> <th>Direction</th> </tr> </thead> <tbody> <tr> <td> <p>when {</p> <ul style="list-style-type: none"> 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 <i>RESOURCE_TYPE</i> resource representation } </td><td>IUT ← AE</td></tr> <tr> <td> <p>then {</p> <ul style="list-style-type: none"> the IUT creates the <i>RESOURCE_TYPE</i> resource and the IUT removes the oldest <i>RESOURCE_TYPE</i> resources and the IUT sends a valid Response containing Response Status Code set to 2001 (CREATED) } </td><td>IUT → AE</td></tr> </tbody> </table> | | Test events | Direction | <p>when {</p> <ul style="list-style-type: none"> 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 <i>RESOURCE_TYPE</i> resource representation } | IUT ← AE | <p>then {</p> <ul style="list-style-type: none"> the IUT creates the <i>RESOURCE_TYPE</i> resource and the IUT removes the oldest <i>RESOURCE_TYPE</i> resources and the IUT sends a valid Response containing Response Status Code set to 2001 (CREATED) } | IUT → AE |
| Test events | Direction | | | | | | | |
| <p>when {</p> <ul style="list-style-type: none"> 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 <i>RESOURCE_TYPE</i> resource representation } | IUT ← AE | | | | | | | |
| <p>then {</p> <ul style="list-style-type: none"> the IUT creates the <i>RESOURCE_TYPE</i> resource and the IUT removes the oldest <i>RESOURCE_TYPE</i> resources and the IUT sends a valid Response containing Response Status Code set to 2001 (CREATED) } | IUT → AE | | | | | | | |

| TP Id | <i>PARENT_RELEASE</i> | <i>PARENT_RESOURCE_TYPE</i> | <i>RESOURCE_TYPE</i> |
|-----------------------------------|-----------------------|-----------------------------|----------------------|
| TP/oneM2M/CSE/DMR/CRE/007_CNT/CIN | Release 1 | container | contentInstance |
| TP/oneM2M/CSE/DMR/CRE/007_TS/TSI | Release 3 | timeSeries | timeSeriesInstance |

| TP Id | TP/oneM2M/CSE/DMR/CRE/008 | | | | | | | |
|--|--|--|-------------|--------------------|--|----------|---|----------|
| Test objective | Checks that the IUT accepts a newly created <i>RESOURCE_TYPE</i> resource when the <i>currentByteSize</i> exceeds the field value set in <i>maxByteSize</i> in the <i>PARENT_RESOURCE_TYPE</i> resource by removing enough of the oldest <i>RESOURCE_TYPE</i> resources to allow the creation of the new <i>RESOURCE_TYPE</i> resource | | | | | | | |
| Reference | TS-0001 [1], clause 10.2.19.2 | | | | | | | |
| Config Id | CF01 | | | | | | | |
| Parent Release | <i>PARENT_RELEASE</i> | | | | | | | |
| PICS Selection | PICS_CSE | | | | | | | |
| Initial conditions | <p>with {</p> <p>the IUT being in the "initial state"</p> <p>and the IUT having registered the AE containing</p> <p>a <i>PARENT_RESOURCE_TYPE</i> resource containing</p> <p><i>maxByteSize</i> attribute set to MAX_BYTE_SIZE_OF_DATA and</p> <p><i>currentByteSize</i> attribute set to MAX_BYTE_SIZE_OF_DATA</p> <p>and the AE having privileges to perform CREATE operation on the resource <i>PARENT_RESOURCE_ADDRESS</i></p> <p>}</p> | | | | | | | |
| Expected behaviour | <table border="1"> <thead> <tr> <th>Test events</th> <th>Expected behaviour</th> </tr> </thead> <tbody> <tr> <td> <p>when {</p> <p>the IUT receives a valid CREATE Request from AE containing</p> <p>To set to <i>PARENT_RESOURCE_ADDRESS</i> and</p> <p>From set to <i>AE_ID</i> and</p> <p>Resource Type set to <i>RESOURCE_TYPE</i> and</p> <p>Content containing</p> <p><i>RESOURCE_TYPE</i> resource with size less than</p> <p><i>MAX_BYTE_SIZE_OF_DATA</i></p> <p>}</p> </td><td>IUT ← AE</td></tr> <tr> <td> <p>then {</p> <p>the IUT creates the <i>RESOURCE_TYPE</i> resource</p> <p>and the IUT removes the oldest contentInstance resources</p> <p>and the IUT sends a valid Response containing</p> <p>Response Status Code set to 2001 (CREATED)</p> <p>}</p> </td><td>IUT → AE</td></tr> </tbody> </table> | | Test events | Expected behaviour | <p>when {</p> <p>the IUT receives a valid CREATE Request from AE containing</p> <p>To set to <i>PARENT_RESOURCE_ADDRESS</i> and</p> <p>From set to <i>AE_ID</i> and</p> <p>Resource Type set to <i>RESOURCE_TYPE</i> and</p> <p>Content containing</p> <p><i>RESOURCE_TYPE</i> resource with size less than</p> <p><i>MAX_BYTE_SIZE_OF_DATA</i></p> <p>}</p> | IUT ← AE | <p>then {</p> <p>the IUT creates the <i>RESOURCE_TYPE</i> resource</p> <p>and the IUT removes the oldest contentInstance resources</p> <p>and the IUT sends a valid Response containing</p> <p>Response Status Code set to 2001 (CREATED)</p> <p>}</p> | IUT → AE |
| Test events | Expected behaviour | | | | | | | |
| <p>when {</p> <p>the IUT receives a valid CREATE Request from AE containing</p> <p>To set to <i>PARENT_RESOURCE_ADDRESS</i> and</p> <p>From set to <i>AE_ID</i> and</p> <p>Resource Type set to <i>RESOURCE_TYPE</i> and</p> <p>Content containing</p> <p><i>RESOURCE_TYPE</i> resource with size less than</p> <p><i>MAX_BYTE_SIZE_OF_DATA</i></p> <p>}</p> | IUT ← AE | | | | | | | |
| <p>then {</p> <p>the IUT creates the <i>RESOURCE_TYPE</i> resource</p> <p>and the IUT removes the oldest contentInstance resources</p> <p>and the IUT sends a valid Response containing</p> <p>Response Status Code set to 2001 (CREATED)</p> <p>}</p> | IUT → AE | | | | | | | |

| TP Id | <i>PARENT_RELEASE</i> | <i>PARENT_RESOURCE_TYPE</i> | <i>RESOURCE_TYPE</i> |
|-----------------------------------|-----------------------|-----------------------------|----------------------|
| TP/oneM2M/CSE/DMR/CRE/008_CNT/CIN | Release 1 | container | contentInstance |
| TP/oneM2M/CSE/DMR/CRE/008_TS/TSI | Release 3 | timeSeries | timeSeriesInstance |

| | | |
|---------------------------|--|--|
| TP Id | TP/oneM2M/CSE/DMR/CRE/009 | |
| Test objective | Check that the IUT increments and then copies the field value of attribute <i>stateTag</i> 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 | <p>with {</p> <p>the IUT being in the "initial state" and the IUT having registered the AE containing a container resource CONTAINER_RESOURCE_ADDRESS containing stateTag attribute and the AE having privileges to perform CREATE operation on the resource CONTAINER_RESOURCE_ADDRESS }</p> | |
| Expected behaviour | <p>Test events</p> <p>when {</p> <p>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 }</p> <p>then {</p> <p>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) }</p> | <p>Direction</p> <p>IUT \leftarrow AE</p> <p>IUT \rightarrow AE</p> |

| 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], clause 7.4.28.2.2 and clause 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 a container resource CONTAINER_RESOURCE_ADDRESS and the IUT having privileges to perform CREATE operation on the resource CONTAINER_RESOURCE_ADDRESS } | | | | | | | |
| Expected behaviour | <table border="1"> <thead> <tr> <th>Test events</th> <th>Direction</th> </tr> </thead> <tbody> <tr> <td> 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" } </td><td>IUT ← AE</td></tr> <tr> <td> then { the IUT does not create the container resource and the IUT sends a valid Response containing Response Status Code set to 4005 (OPERATION_NOT_ALLOWED) } </td><td>IUT → AE</td></tr> </tbody> </table> | 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 container resource and the IUT sends a valid Response containing Response Status Code set to 4005 (OPERATION_NOT_ALLOWED) } | IUT → AE | |
| 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 container resource and the IUT sends a valid Response containing Response Status Code set to 4005 (OPERATION_NOT_ALLOWED) } | IUT → AE | | | | | | | |

| | | |
|---------------------------|---|----------------------|
| 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], clause 7.4.29.2.2 and clause 7.3.2.1 | |
| Config Id | CF01 | |
| Parent Release | Release 1 | |
| PICS Selection | PICS_CSE | |
| Initial conditions | <p>with {</p> <p>the IUT being in the "initial state" and the IUT having registered the AE and the IUT having created a container resource CONTAINER_RESOURCE_ADDRESS and the IUT having privileges to perform CREATE operation on the resource CONTAINER_RESOURCE_ADDRESS</p> <p>}</p> | |
| Expected behaviour | <p>Test events</p> <p>when {</p> <p>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"</p> <p>}</p> <p>then {</p> <p>the IUT does not create the container resource and the IUT sends a valid Response containing Response Status Code set to 4005 (OPERATION_NOT_ALLOWED)</p> <p>}</p> | Direction |
| | | IUT \leftarrow AE |
| | | IUT \rightarrow AE |

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| TP Id | TP/oneM2M/CSE/DMR/CRE/012 | | |
| Test objective | Check that the IUT accepts the creation of a <i>RESOURCE_TYPE</i> resource with the optional attribute <i>OPTIONAL_ATTRIBUTE</i> provided | | |
| Reference | TS-0001 [1], clause 10.1.1 | | |
| Config Id | CF01 | | |
| Parent Release | <i>PARENT_RELEASE</i> | | |
| 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 <i>AE_RESOURCE_ADDRESS</i> } | | |
| Expected behaviour | Test events when { the IUT receives a valid CREATE Request from AE containing To set to <i>AE_RESOURCE_ADDRESS</i> and From set to <i>AE-ID</i> and Content containing <i>RESOURCE_TYPE</i> resource containing valid <i>OPTIONAL_ATTRIBUTE</i> attribute } | Direction | IUT ← AE |
| | then { the IUT creates the <i>RESOURCE_TYPE</i> resource and the IUT sends a valid Response containing Response Status Code set to 2001 (CREATED) } | | |

| TP Id | <i>PARENT_RELEASE</i> | PICS Selection | Reference | <i>RESOURCE_TYPE</i> | <i>OPTIONAL_ATTRIBUTE</i> |
|------------------------------------|-----------------------|----------------|---|----------------------|---------------------------|
| TP/oneM2M/CSE/DMR/CRE/012_CNT/ACPI | Release 1 | PICS_CNT_ACPI | TS-0001 [대상을 찾을 수 없습니다], clause 9.6.1.3.2-1 | 3 (container) | accessControlPolicyIDs |
| TP/oneM2M/CSE/DMR/CRE/012_CNT/ET | Release 1 | PICS_CNT_ET | TS-0001 [대상을 찾을 수 없습니다] | 3 (container) | expirationTime |

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|-----------------------------------|-----------|------------------|--|---------------|------------------|
| | | | 을 수 없습 니다], clause 9.6.1.3.1-1 | | |
| TP/oneM2M/CSE/DMR/CRE/012_CNT/LBL | Release 1 | PICS_CNT _LBL | TS-0001 [대상을 찾 을 수 없습 니다], clause 9.6.1.3.2-1 | 3 (container) | labels |
| TP/oneM2M/CSE/DMR/CRE/012_CNT/MNI | Release 1 | PICS_CNT _MNI | TS-0001 [대상을 찾 을 수 없습 니다], clause 9.6.6-2 | 3 (container) | maxNrOfInstances |
| TP/oneM2M/CSE/DMR/CRE/012_CNT/MBS | Release 1 | PICS_CNT _MBS | TS-0001 [대상을 찾 을 수 없습 니다], clause 9.6.6-2 | 3 (container) | maxByteSize |
| TP/oneM2M/CSE/DMR/CRE/012_CNT/MIA | Release 1 | PICS_CNT _MIA | TS-0001 [대상을 찾 을 수 없습 니다], clause 9.6.6-2 | 3 (container) | maxInstanceAge |
| TP/oneM2M/CSE/DMR/CRE/012_CNT/OR | Release 1 | PICS_CNT _OR | TS-0001 [대상을 찾 을 수 없습 니다], clause 9.6.6-2 | 3 (container) | ontologyRef |
| TP/oneM2M/CSE/DMR/CRE/012_CNT/CR | Release 1 | PICS_CNT _CR | TS-0001 [대상을 찾 | 3 (container) | creator |

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|-----------------------------------|-----------|------------------|--|------------------------|----------------|
| | | | 을 수 없습 니다], clause 9.6.6-2 | | |
| TP/oneM2M/CSE/DMR/CRE/012_CIN/ET | Release 1 | PICS_CIN _ET | TS-0001 [대상을 찾 을 수 없습 니다], clause 9.6.1.3.1-1 | 4 (contentInstance) | expirationTime |
| TP/oneM2M/CSE/DMR/CRE/012_CIN/LBL | Release 1 | PICS_CIN _LBL | TS-0001 [대상을 찾 을 수 없습 니다], clause 9.6.1.3.2-1 | 4 (contentInstance) | labels |
| TP/oneM2M/CSE/DMR/CRE/012_CIN/CR | Release 1 | PICS_CIN _CR | TS-0001 [대상을 찾 을 수 없습 니다], clause 9.6.7-2 | 4 (contentInstance) | creator |
| TP/oneM2M/CSE/DMR/CRE/012_CIN/CNF | Release 1 | PICS_CIN _CNF | TS-0001 [대상을 찾 을 수 없습 니다], clause 9.6.7-2 | 4 (contentInstance) | contentInfo |
| TP/oneM2M/CSE/DMR/CRE/012_CIN/OR | Release 1 | PICS_CIN _OR | TS-0001 [대상을 찾 을 수 없습 니다], clause 9.6.7-2 | 4 (contentInstance) | ontologyRef |
| TP/oneM2M/CSE/DMR/CRE/012_ACP/ET | Release 1 | N/A | TS-0001 [대상을 찾 | 1 (accesControlPolicy) | expirationTime |

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|------------------------------------|-----------|-------------------|--|------------------------|---------------------------|
| | | | 을 수 없습 니다], clause 9.6.1.3.1-1 | | |
| TP/oneM2M/CSE/DMR/CRE/012_ACP/LBL | Release 1 | PICS_ACP _LBL | TS-0001 [대상을 찾 을 수 없습 니다], clause 9.6.1.3.2-1 | 1 (accesControlPolicy) | labels |
| TP/oneM2M/CSE/DMR/CRE/012_SUB/ACPI | Release 1 | PICS_SUB _ACPI | TS-0001 [대상을 찾 을 수 없습 니다], clause 9.6.1.3.2-1 | 23 (subscription) | accessControlPolicyIDs |
| TP/oneM2M/CSE/DMR/CRE/012_SUB/ET | Release 1 | N/A | TS-0001 [대상을 찾 을 수 없습 니다], clause 9.6.1.3.1-1 | 23 (subscription) | expirationTime |
| TP/oneM2M/CSE/DMR/CRE/012_SUB/LBL | Release 1 | PICS_SUB _LBL | TS-0001 [대상을 찾 을 수 없습 니다], clause 9.6.1.3.2-1 | 23 (subscription) | labels |
| TP/oneM2M/CSE/DMR/CRE/012_SUB/ENC | Release 1 | PICS_SUB _ENC | TS-0001 [대상을 찾 을 수 없습 니다], clause 9.6.8-2 | 23 (subscription) | eventNotificationCriteria |
| TP/oneM2M/CSE/DMR/CRE/012_SUB/EXC | Release 1 | PICS_SUB _EXC | TS-0001 [대상을 찾 | 23 (subscription) | expirationCounter |

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|-----------------------------------|-----------|--------------|--|-------------------|---------------------------|
| | | | 을 수 없습 니다], clause 9.6.8-2 | | |
| TP/oneM2M/CSE/DMR/CRE/012_SUB/GPI | Release 1 | PICS_SUB_GPI | TS-0001 [대상을 찾 을 수 없습 니다], clause 9.6.8-2 | 23 (subscription) | groupID |
| TP/oneM2M/CSE/DMR/CRE/012_SUB/NFU | Release 1 | PICS_SUB_NFU | TS-0001 [대상을 찾 을 수 없습 니다], clause 9.6.8-2 | 23 (subscription) | notificationForwardingURI |
| TP/oneM2M/CSE/DMR/CRE/012_SUB/BN | Release 1 | PICS_SUB_BN | TS-0001 [대상을 찾 을 수 없습 니다], clause 9.6.8-2 | 23 (subscription) | batchNotify |
| TP/oneM2M/CSE/DMR/CRE/012_SUB/RL | Release 1 | PICS_SUB_RL | TS-0001 [대상을 찾 을 수 없습 니다], clause 9.6.8-2 | 23 (subscription) | rateLimit |
| TP/oneM2M/CSE/DMR/CRE/012_SUB/PSN | Release 1 | PICS_SUB_PSN | TS-0001 [대상을 찾 을 수 없습 니다], clause 9.6.8-2 | 23 (subscription) | preSubscriptionNotify |
| TP/oneM2M/CSE/DMR/CRE/012_SUB/PN | Release 1 | PICS_SUB_PN | TS-0001 [대상을 찾 | 23 (subscription) | pendingNotification |

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|-----------------------------------|-----------|------------------|--|-------------------|-----------------------------|
| | | | 을 수 없습 니다], clause 9.6.8-2 | | |
| TP/oneM2M/CSE/DMR/CRE/012_SUB/NSP | Release 1 | PICS_SUB _NSP | TS-0001 [대상을 찾 을 수 없습 니다], clause 9.6.8-2 | 23 (subscription) | notificationStoragePriority |
| TP/oneM2M/CSE/DMR/CRE/012_SUB/LN | Release 1 | PICS_SUB _LN | TS-0001 [대상을 찾 을 수 없습 니다], clause 9.6.8-2 | 23 (subscription) | latestNotify |
| TP/oneM2M/CSE/DMR/CRE/012_SUB/NCT | Release 1 | PICS_SUB _NCT | TS-0001 [대상을 찾 을 수 없습 니다], clause 9.6.8-2 | 23 (subscription) | notificationContentType |
| TP/oneM2M/CSE/DMR/CRE/012_SUB/NEC | Release 1 | PICS_SUB _NEC | TS-0001 [대상을 찾 을 수 없습 니다], clause 9.6.8-2 | 23 (subscription) | notificationEventCat |
| TP/oneM2M/CSE/DMR/CRE/012_SUB/CR | Release 1 | PICS_SUB _CR | TS-0001 [대상을 찾 을 수 없습 니다], clause 9.6.8-2 | 23 (subscription) | creator |
| TP/oneM2M/CSE/DMR/CRE/012_SUB/SU | Release 1 | PICS_SUB _SU | TS-0001 [대상을 찾 | 23 (subscription) | subscriberURI |

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|-----------------------------------|-----------|--|---|-----------------|------------------------|
| | | | 을 수 없습 니다], clause 9.6.8-2 | | |
| TP/oneM2M/CSE/DMR/CRE/012_TS/ACPI | Release 3 | | TS-0001 [대상을 찾 을 수 없습 니다], clause 9.6.36-2 | 29 (timeSeries) | accessControlPolicyIDs |
| TP/oneM2M/CSE/DMR/CRE/012_TS/ET | Release 3 | | TS-0001 [대상을 찾 을 수 없습 니다], clause 9.6.36-2 | 29 (timeSeries) | expirationTime |
| TP/oneM2M/CSE/DMR/CRE/012_TS/LBL | Release 3 | | TS-0001 [대상을 찾 을 수 없습 니다], clause 9.6.36-2 | 29 (timeSeries) | labels |
| TP/oneM2M/CSE/DMR/CRE/012_TS/CR | Release 3 | | TS-0001 [대상을 찾 을 수 없습 니다], clause 9.6.36-2 | 29 (timeSeries) | creator |
| TP/oneM2M/CSE/DMR/CRE/012_TS/MNI | Release 3 | | TS-0001 [대상을 찾 을 수 없습 니다], clause 9.6.36-2 | 29 (timeSeries) | maxNrOfInstances |
| TP/oneM2M/CSE/DMR/CRE/012_TS/MBS | Release 3 | | TS-0001 [대상을 찾 | 29 (timeSeries) | maxByteSize |

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|----------------------------------|-----------|--|---|-----------------|------------------------|
| | | | 을 수 없습 니다], clause 9.6.36-2 | | |
| TP/oneM2M/CSE/DMR/CRE/012_TS/MIA | Release 3 | | TS-0001 [대상을 찾 을 수 없습 니다], clause 9.6.36-2 | 29 (timeSeries) | maxInstanceAge |
| TP/oneM2M/CSE/DMR/CRE/012_TS/PEI | Release 3 | | TS-0001 [대상을 찾 을 수 없습 니다], clause 9.6.36-2 | 29 (timeSeries) | periodicInterval |
| TP/oneM2M/CSE/DMR/CRE/012_TS/MDD | Release 3 | | TS-0001 [대상을 찾 을 수 없습 니다], clause 9.6.36-2 | 29 (timeSeries) | missingDataDetect |
| TP/oneM2M/CSE/DMR/CRE/012_TS/MDN | Release 3 | | TS-0001 [대상을 찾 을 수 없습 니다], clause 9.6.36-2 | 29 (timeSeries) | missingDataMaxNr |
| TP/oneM2M/CSE/DMR/CRE/012_TS/MDT | Release 3 | | TS-0001 [대상을 찾 을 수 없습 니다], clause 9.6.36-2 | 29 (timeSeries) | missingDataDetectTimer |
| TP/oneM2M/CSE/DMR/CRE/012_TS/OR | Release 3 | | TS-0001 [대상을 찾 | 29 (timeSeries) | ontologyRef |

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|-----------------------------------|-----------|--|---|----------------------------|----------------|
| | | | 을 수 없습 니다], clause 9.6.36-2 | | |
| TP/oneM2M/CSE/DMR/CRE/012_TSI/ET | Release 3 | | TS-0001 [대상을 찾 을 수 없습 니다], clause 9.6.37-2 | 30 (timeSeriesInstance) | expirationTime |
| TP/oneM2M/CSE/DMR/CRE/012_TSI/LBL | Release 3 | | TS-0001 [대상을 찾 을 수 없습 니다], clause 9.6.37-2 | 30 (timeSeriesInstance) | labels |
| TP/oneM2M/CSE/DMR/CRE/012_TSI/SNR | Release 3 | | TS-0001 [대상을 찾 을 수 없습 니다], clause 9.6.37-2 | 30 (timeSeriesInstance) | sequenceNr |

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|--------------------|--|---|
| TP Id | TP/oneM2M/CSE/DMR/CRE/013 | |
| Test objective | Check that the IUT rejects the CREATE Request of a <i>RESOURCE_TYPE</i> resource with error "NOT_ACCEPTABLE" when <i>contentSize</i> exceeds <i>maxByteSize</i> of the <i>PARENT_RESOURCE_TYPE</i> | |
| Reference | TS-0001 [1], clause 10.2.19, TS-0004 [2], clause 7.4.7.2.1 | |
| Config Id | CF01 | |
| Parent Release | <i>PARENT_RELEASE</i> | |
| PICS Selection | PICS_CSE | |
| Initial conditions | with { the IUT being in the "initial state" and the IUT having registered the AE containing a <i>PARENT_RESOURCE_TYPE</i> resource having <i>maxByteSize</i> attribute set to MAX_BYTE_SIZE } | |
| Expected behaviour | Test events when { the IUT receives a valid CREATE Request from AE containing To set to PARENT_RESOURCE_ADDRESS and From set to AE_ID and Content containing <i>RESOURCE_TYPE</i> resource containing valid content with size larger than <i>MAX_BYTE_SIZE</i> } then { the IUT sends a valid Response containing Response Status Code set to 5207 (NOT_ACCEPTABLE) } | Direction IUT \leftarrow AE IUT \rightarrow AE |

| TP Id | PARENT_RELEASE | PARENT_RESOURCE_TYPE | RESOURCE_TYPE |
|-----------------------------------|----------------|----------------------|--------------------|
| TP/oneM2M/CSE/DMR/CRE/013_CNT/CIN | Release 1 | container | contentInstance |
| TP/oneM2M/CSE/DMR/CRE/013_TS/TSI | Release 3 | timeSeries | timeSeriesInstance |

| TP Id | TP/oneM2M/CSE/DMR/CRE/014 | | | | | | | |
|---|---|--|-------------|-----------|---|----------|--|----------|
| Test objective | Check that the IUT updates the currentByteSize attribute in a <i>PARENT_RESOURCE_TYPE</i> when a new <i>RESOURCE_TYPE</i> is created | | | | | | | |
| Reference | TS-0001 [1], clause 10.2.19.2, TS-0004 [2], clause 7.4.8.2 | | | | | | | |
| Config Id | CF01 | | | | | | | |
| Parent Release | <i>PARENT_RELEASE</i> | | | | | | | |
| PICS Selection | PICS_CSE | | | | | | | |
| Initial conditions | <p>with {</p> <p>the IUT being in the "initial state"</p> <p>and the IUT having registered the AE containing</p> <p>a <i>PARENT_RESOURCE_TYPE</i> resource at <i>PARENT_RESOURCE_ADDRESS</i></p> <p>containing</p> <p><i>maxByteSize</i> attribute set to MAX_BYTE_SIZE_OF_DATA and</p> <p><i>currentByteSize</i> attribute set to 0</p> <p>and the AE having privileges to perform CREATE operation on the resource <i>PARENT_RESOURCE_ADDRESS</i></p> <p>}</p> | | | | | | | |
| Expected behaviour | <table border="1"> <thead> <tr> <th>Test events</th> <th>Direction</th> </tr> </thead> <tbody> <tr> <td> <p>when {</p> <p>the IUT receives a valid CREATE Request from AE containing</p> <p>To set to <i>PARENT_RESOURCE_ADDRESS</i> and</p> <p>From set to <i>AE_ID</i> and</p> <p>Resource Type set to <i>RESOURCE_TYPE</i> and</p> <p>Content containing</p> <p><i>RESOURCE_TYPE</i> resource containing</p> <p>valid content attribute with size equal to <i>DATA_SIZE</i></p> <p>}</p> </td><td>IUT ← AE</td></tr> <tr> <td> <p>then {</p> <p>the IUT increments <i>currentByteSize</i> attribute of</p> <p><i>PARENT_RESOURCE_ADDRESS</i> resource by <i>DATA_SIZE</i></p> <p>and the IUT sends a valid Response containing</p> <p>Response Status Code set to 2001 (CREATED)</p> <p>}</p> </td><td>IUT → AE</td></tr> </tbody> </table> | | Test events | Direction | <p>when {</p> <p>the IUT receives a valid CREATE Request from AE containing</p> <p>To set to <i>PARENT_RESOURCE_ADDRESS</i> and</p> <p>From set to <i>AE_ID</i> and</p> <p>Resource Type set to <i>RESOURCE_TYPE</i> and</p> <p>Content containing</p> <p><i>RESOURCE_TYPE</i> resource containing</p> <p>valid content attribute with size equal to <i>DATA_SIZE</i></p> <p>}</p> | IUT ← AE | <p>then {</p> <p>the IUT increments <i>currentByteSize</i> attribute of</p> <p><i>PARENT_RESOURCE_ADDRESS</i> resource by <i>DATA_SIZE</i></p> <p>and the IUT sends a valid Response containing</p> <p>Response Status Code set to 2001 (CREATED)</p> <p>}</p> | IUT → AE |
| Test events | Direction | | | | | | | |
| <p>when {</p> <p>the IUT receives a valid CREATE Request from AE containing</p> <p>To set to <i>PARENT_RESOURCE_ADDRESS</i> and</p> <p>From set to <i>AE_ID</i> and</p> <p>Resource Type set to <i>RESOURCE_TYPE</i> and</p> <p>Content containing</p> <p><i>RESOURCE_TYPE</i> resource containing</p> <p>valid content attribute with size equal to <i>DATA_SIZE</i></p> <p>}</p> | IUT ← AE | | | | | | | |
| <p>then {</p> <p>the IUT increments <i>currentByteSize</i> attribute of</p> <p><i>PARENT_RESOURCE_ADDRESS</i> resource by <i>DATA_SIZE</i></p> <p>and the IUT sends a valid Response containing</p> <p>Response Status Code set to 2001 (CREATED)</p> <p>}</p> | IUT → AE | | | | | | | |

| TP Id | <i>PARENT_RELEASE</i> | <i>PARENT_RESOURCE_TYPE</i> | <i>RESOURCE_TYPE</i> |
|-----------------------------------|-----------------------|-----------------------------|----------------------|
| TP/oneM2M/CSE/DMR/CRE/014_CNT/CIN | Release 1 | container | contentInstance |
| TP/oneM2M/CSE/DMR/CRE/014_TS/TSI | Release 3 | timeSeries | timeSeriesInstance |

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| TP Id | TP/oneM2M/CSE/DMR/CRE/015 | | |
| Test objective | Check that the IUT returns successfully after a CREATE request an empty content of created resource when the ResultContent set to 0 (Nothing) | | |
| Reference | TS-0001 [1], clause 8.1.2, clause 8.1.3 and clause 10.1.1.1, TS-0004 [2], clause 6.3.4.2.7 | | |
| Parent Release | <i>PARENT_RELEASE</i> | | |
| 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 privileges to perform CREATE operation on the resource TARGET_RESOURCE_ADDRESS } | | |
| Expected behaviour | Test events 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 RESOURCE_TYPE and Result Content set to 0 (nothing) and Content containing RESOURCE_TYPE resource representation } | Direction | IUT ← AE |
| | then { the IUT sends a valid Response containing Response Status Code set to 2001 (CREATED) and no Content } | | |

| TP Id | PARENT_RELEASE | Reference | RESOURCE_TYPE |
|-------------------------------|----------------|---|-------------------------|
| TP/oneM2M/CSE/DMR/CRE/015_CNT | Release 2 | TS-0001 [대상을 찾을 수 없습니다], clause 10.2.4.1 | 3 (container) |
| TP/oneM2M/CSE/DMR/CRE/015_GRP | Release 2 | TS-0001 [대상을 찾을 수 없습니다], clause 10.2.7.2 | 9 (group) |
| TP/oneM2M/CSE/DMR/CRE/015_ACP | Release 2 | TS-0001 [대상을 찾을 수 없습니다], clause 10.2.21.1 | 1 (accessControlPolicy) |

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| TP/oneM2M/CSE/DMR/CRE/015_SUB | Release 2 | TS-0001 [대상을 찾을 수 없습니다], clause 10.2.11.2 | 23 (subscription) |
| TP/oneM2M/CSE/DMR/CRE/015_PCH | Release 2 | TS-0001 [대상을 찾을 수 없습니다], clause 10.2.13.2 | 15 (pollingChannel) |
| TP/oneM2M/CSE/DMR/CRE/015_SCH | Release 3 | TS-0001 [대상을 찾을 수 없습니다], clause 10.2.40.2 | 18 (schedule) |
| TP/oneM2M/CSE/DMR/CRE/015_TS | Release 3 | TS-0001 [대상을 찾을 수 없습니다], clause 10.2.30.1 | 29 (timeSeries) |

TP/oneM2M/CSE/DMR/CRE/016

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| TP Id | TP/oneM2M/CSE/DMR/CRE/016 | | |
| Test objective | Check that the IUT returns successfully after a CREATE request only hierarchical address of the created resource when the Result Content is set to 2 (hierarchical address) | | |
| Reference | TS-0001 [1], clause 8.1.2, clause 8.1.3 and clause 10.1.1.1, TS-0004 [2], clause 6.3.4.2.7 | | |
| Parent Release | PARENT_RELEASE | | |
| 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 privileges to perform RETRIEVE operation on the resource TARGET_RESOURCE_ADDRESS } | | |
| Expected behaviour | Test events 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 RESOURCE_TYPE and Result Content set to 2 (hierarchical address) and Content containing RESOURCE_TYPE resource representation } | | Direction IUT ← AE |
| | then { the IUT sends a valid Response containing Response Status Code set to 2001 (CREATED) and Content containing | | IUT → AE |

| | | |
|---|---|--|
| | Hierarchical address of the <i>RESOURCE_TYPE</i> resource | |
| } | | |

| TP Id | PARENT_RELEASE | Reference | RESOURCE_TYPE |
|-------------------------------|----------------|---|-------------------------|
| TP/oneM2M/CSE/DMR/CRE/016_CNT | Release 2 | TS-0001 [대상을 찾을 수 없습니다], clause 10.2.4.1 | 3 (container) |
| TP/oneM2M/CSE/DMR/CRE/016_GRP | Release 2 | TS-0001 [대상을 찾을 수 없습니다], clause 10.2.7.2 | 9 (group) |
| TP/oneM2M/CSE/DMR/CRE/016_ACP | Release 2 | TS-0001 [대상을 찾을 수 없습니다], clause 10.2.21.1 | 1 (accessControlPolicy) |
| TP/oneM2M/CSE/DMR/CRE/016_SUB | Release 2 | TS-0001 [대상을 찾을 수 없습니다], clause 10.2.11.2 | 23 (subscription) |
| TP/oneM2M/CSE/DMR/CRE/016_PCH | Release 2 | TS-0001 [대상을 찾을 수 없습니다], clause 10.2.13.2 | 15 (pollingChannel) |
| TP/oneM2M/CSE/DMR/CRE/016_SCH | Release 3 | TS-0001 [대상을 찾을 수 없습니다], clause 10.2.40.2 | 18 (schedule) |
| TP/oneM2M/CSE/DMR/CRE/016_TS | Release 3 | TS-0001 [대상을 찾을 수 없습니다], clause 10.2.30.1 | 29 (timeSeries) |

| | | |
|---------------------------|---|------------------|
| TP Id | TP/oneM2M/CSE/DMR/CRE/017 | |
| Test objective | Check that the IUT returns successfully after a CREATE request only attributes and hierarchical address of the created resource when Result Content is set 3 (attributes and hierarchical address) | |
| Reference | TS-0001 [1], clause 8.1.2, clause 8.1.3 and clause 10.1.1.1, TS-0004 [2], clause 6.3.4.2.7 | |
| Parent Release | <i>PARENT_RELEASE</i> | |
| Config Id | CF01 | |
| PICS Selection | PICS_CSE | |
| Initial conditions | <p>with {</p> <p>the IUT being in the "initial state" and the IUT having registered the AE and the AE having privileges to perform RETRIEVE operation on the resource TARGET_RESOURCE_ADDRESS</p> <p>}</p> | |
| Expected behaviour | Test events | Direction |
| | <p>when {</p> <p>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 RESOURCE_TYPE and Result Content set to 3 (attributes and hierarchical address) and Content containing RESOURCE_TYPE resource representation</p> <p>}</p> | IUT ← AE |
| | <p>then {</p> <p>the IUT sends a valid Response containing Response Status Code set to 2001 (CREATED) and Content containing resource element containing Hierarchical address of the RESOURCE_TYPE resource and RESOURCE_TYPE resource representation</p> <p>}</p> | IUT → AE |

| TP Id | PARENT_RELEASE | Reference | RESOURCE_TYPE |
|-------------------------------|----------------|--|---------------|
| TP/oneM2M/CSE/DMR/CRE/017_CNT | Release 2 | TS-0001 [대상을 찾을 수 없습니다], clause 10.2.4.1 | 3 (container) |

| | | | |
|-------------------------------|-----------|---|-------------------------|
| TP/oneM2M/CSE/DMR/CRE/017_GRP | Release 2 | TS-0001 [대상을 찾을 수 없습니다], clause 10.2.7.2 | 9 (group) |
| TP/oneM2M/CSE/DMR/CRE/017_ACP | Release 2 | TS-0001 [대상을 찾을 수 없습니다], clause 10.2.21.1 | 1 (accessControlPolicy) |
| TP/oneM2M/CSE/DMR/CRE/017_SUB | Release 2 | TS-0001 [대상을 찾을 수 없습니다], clause 10.2.11.2 | 23 (subscription) |
| TP/oneM2M/CSE/DMR/CRE/017_PCH | Release 2 | TS-0001 [대상을 찾을 수 없습니다], clause 10.2.13.2 | 15 (pollingChannel) |
| TP/oneM2M/CSE/DMR/CRE/017_SCH | Release 3 | TS-0001 [대상을 찾을 수 없습니다], clause 10.2.40.2 | 18 (schedule) |
| TP/oneM2M/CSE/DMR/CRE/017_TS | Release 3 | TS-0001 [대상을 찾을 수 없습니다], clause 10.2.30.1 | 29 (timeSeries) |

| | | |
|---------------------------|--|----------------------|
| TP Id | TP/oneM2M/CSE/DMR/CRE/018 | |
| Test objective | Check that the IUT rejects a CREATE request when the ResultContent is set to RESULT_CONTENT | |
| Reference | TS-0001 [1], clause 8.1.2 & TS-0004 [2], clause 7.3.2.1 | |
| Parent Release | Release 2 | |
| 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 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 Result Content set to RESULT_CONTENT } | IUT \leftarrow AE |
| | then { the IUT sends a valid Response containing Response Status Code set to 4000 (BAD_REQUEST) } | IUT \rightarrow AE |

| TP Id | Reference | RESULT_CONTENT |
|---------------------------------|---|---|
| TP/oneM2M/CSE/DMR/CRE/018 RCN/4 | | 4 (attributes and child resources) |
| TP/oneM2M/CSE/DMR/CRE/018 RCN/5 | | 5 (attributes and child resources references) |
| TP/oneM2M/CSE/DMR/CRE/018 RCN/6 | | 6 (child resources references) |
| TP/oneM2M/CSE/DMR/CRE/018 RCN/7 | TS-0004 [대상을 찾을 수 없습니다], clause 6.3.4.2.7 | 7 (original resource) |
| TP/oneM2M/CSE/DMR/CRE/018 RCN/8 | | 8 (child resources) |

| | | |
|---------------------------|---|------------------|
| TP Id | TP/oneM2M/CSE/DMR/CRE/019 | |
| Test objective | Check that the IUT returns successfully only attributes of TARGET_RESOURCE_ADDRESS resource when the Result Content is set to 1 (attributes) | |
| Reference | TS-0001 [1], clause 8.1.2, TS-0004 [2], clause 6.3.3.2.7 | |
| Config Id | CF01 | |
| Parent Release | <i>PARENT_RELEASE</i> | |
| 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_ADDRESS of type <i>RESOURCE_TYPE</i> 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 Result Content set to 1 (attributes) Content containing <i>RESOURCE_TYPE</i> resource representation } | IUT ← AE |
| | then { the IUT sends a valid Response containing Response Status Code set to 2001 (CREATED) and Content containing <i>RESOURCE_TYPE</i> resource containing attributes and no hierachichal address and no child resources and no child resource references } | IUT → AE |

| TP Id | PARENT_RELEASE | RESOURCE_TYPE |
|-------------------------------|-----------------------|-------------------------|
| TP/oneM2M/CSE/DMR/CRE/019_CNT | Release 2 | 3 (container) |
| TP/oneM2M/CSE/DMR/CRE/019_GRP | Release 2 | 9 (group) |
| TP/oneM2M/CSE/DMR/CRE/019_ACP | Release 2 | 1 (accessControlPolicy) |
| TP/oneM2M/CSE/DMR/CRE/019_PCH | Release 2 | 15 (pollingChannel) |
| TP/oneM2M/CSE/DMR/CRE/019_SUB | Release 2 | 23 (subscription) |

| | | |
|-------------------------------|-----------|-----------------|
| TP/oneM2M/CSE/DMR/CRE/019_SCH | Release 3 | 18 (schedule) |
| TP/oneM2M/CSE/DMR/CRE/019_TS | Release 3 | 29 (timeSeries) |

TP/oneM2M/CSE/DMR/CRE/020

| | | |
|---------------------------|---|----------------------------------|
| TP Id | TP/oneM2M/CSE/DMR/CRE/020 | |
| Test objective | Check that the IUT returns successfully only modified attributes of TARGET_RESOURCE_ADDRESS resource when the Result Content is set to 9 (modified attributes) | |
| Reference | TS-0001 [1], clause 8.1.2, TS-0004 [2], clause 6.3.3.2.7 | |
| Config Id | CF01 | |
| Parent Release | <i>PARENT_RELEASE</i> | |
| 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_ADDRESS of type RESOURCE_TYPE and the AE having privileges to perform CREATE operation on the resource TARGET_RESOURCE_ADDRESS } | |
| Expected behaviour | Test events when { the IUT receives a valid CREATE Request from AE containing To set to TARGET_RESOURCE_ADDRESS and From set to AE_ID and Result Content set to 1 (attributes) Content containing RESOURCE_TYPE resource representation } | Direction IUT ← AE |
| | then { the IUT sends a valid Response containing Response Status Code set to 2001 (CREATED) and Content containing RESOURCE_TYPE resource containing modified attributes } | IUT → AE |

| TP Id | PARENT_RELEASE | RESOURCE_TYPE |
|-------------------------------|----------------|-------------------------|
| TP/oneM2M/CSE/DMR/CRE/020_CNT | Release 2 | 3 (container) |
| TP/oneM2M/CSE/DMR/CRE/020_GRP | Release 2 | 9 (group) |
| TP/oneM2M/CSE/DMR/CRE/020_ACP | Release 2 | 1 (accessControlPolicy) |

| | | |
|-------------------------------|-----------|---------------------|
| TP/oneM2M/CSE/DMR/CRE/020_PCH | Release 2 | 15 (pollingChannel) |
| TP/oneM2M/CSE/DMR/CRE/020_SUB | Release 2 | 23 (subscription) |
| TP/oneM2M/CSE/DMR/CRE/020_SCH | Release 3 | 18 (schedule) |
| TP/oneM2M/CSE/DMR/CRE/020_TS | Release 3 | 29 (timeSeries) |

TP/oneM2M/CSE/DMR/CRE/021

| TP Id | TP/oneM2M/CSE/DMR/CRE/021 | | | | | | | |
|---|--|-------------|-----------|---|-----------|---|-----------|--|
| Test objective | Check that the IUT accepts the creation of a <i>RESOURCE_TYPE</i> resource on the <i>TARGET_RESOURCE_ADDRESS</i> of type announced <i>PARENT_RESOURCE_TYPE</i> | | | | | | | |
| Reference | TS-0001 [1], clause 9.6.5 | | | | | | | |
| Parent Release | Release 3 | | | | | | | |
| Config Id | CF04 | | | | | | | |
| PICS Selection | PICS_CSE | | | | | | | |
| Initial conditions | <pre>with { the IUT being in the "initial state" and the IUT having registered the CSE and the IUT having created the PARENT_RESOURCE_TYPE and the Originator having privileges to perform CREATE operation on the resource PARENT_RESOURCE_ADDRESS }</pre> | | | | | | | |
| Expected behaviour | <table border="1"> <thead> <tr> <th>Test events</th> <th>Direction</th> </tr> </thead> <tbody> <tr> <td> <pre>when { the IUT receives a valid CREATE Request from CSE containing Resource Type set to RESOURCE_TYPE and To set to PARENT_RESOURCE_ADDRESS and From set to CSE-ID and Content containing RESOURCE_TYPE resource containing no resourceName attribute }</pre> </td><td>IUT ← CSE</td></tr> <tr> <td> <pre>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 }</pre> </td><td>IUT → CSE</td></tr> </tbody> </table> | Test events | Direction | <pre>when { the IUT receives a valid CREATE Request from CSE containing Resource Type set to RESOURCE_TYPE and To set to PARENT_RESOURCE_ADDRESS and From set to CSE-ID and Content containing RESOURCE_TYPE resource containing no resourceName attribute }</pre> | IUT ← CSE | <pre>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 }</pre> | IUT → CSE | |
| Test events | Direction | | | | | | | |
| <pre>when { the IUT receives a valid CREATE Request from CSE containing Resource Type set to RESOURCE_TYPE and To set to PARENT_RESOURCE_ADDRESS and From set to CSE-ID and Content containing RESOURCE_TYPE resource containing no resourceName attribute }</pre> | IUT ← CSE | | | | | | | |
| <pre>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 }</pre> | IUT → CSE | | | | | | | |

| TP Id | Reference | RESOURCE_TYPE | PARENT_RESOURCE_TYPE |
|------------------------------------|-----------------------------|-----------------|----------------------|
| TP/oneM2M/CSE/DMR/CRE/021_CNTA/AEA | TS-0001 [1], clause 9.6.5-1 | (containerAnnC) | (AEannC) |

| TP Id | Reference | RESOURCE_TYPE | PARENT_RESOURCE_TYPE |
|-----------------------------------|-----------------------------|---------------------------|----------------------|
| TP/oneM2M/CSE/DMR/CRE/021_GRP/AEA | TS-0001 [1], clause 9.6.5-1 | (groupAnn) | (AEann) |
| TP/oneM2M/CSE/DMR/CRE/021_ACP/AEA | TS-0001 [1], clause 9.6.5-1 | (accessControlPolicy Ann) | (AEann) |
| TP/oneM2M/CSE/DMR/CRE/021_TSA/AEA | TS-0001 [1], clause 9.6.5-1 | (timeSeriesAnn) | (AEann) |

TP/oneM2M/CSE/DMR/CRE/022

| TP Id | TP/oneM2M/CSE/DMR/CRE/022 | | | | | | | |
|--|---|-------------|-----------|--|----------|--|-----------|--|
| Test objective | Check that the IUT accepts the creation of a RESOURCE_TYPE resource with the optional attribute announceTo provided | | | | | | | |
| Reference | TS-0001 [1], clause 10.2.18.4 and clause 9.6.1.3.2-1, TS-0004 [2], clause 7.3.3.10 | | | | | | | |
| Parent Release | Release 3 | | | | | | | |
| Config Id | CF02 | | | | | | | |
| 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 and announced the PARENT_RESOURCE to the announcement target CSE and the AE having privileges to perform CREATE operation on the resource PARENT_RESOURCE_ADDRESS } | | | | | | | |
| Expected behaviour | <table border="1"> <thead> <tr> <th>Test events</th> <th>Direction</th> </tr> </thead> <tbody> <tr> <td> when { the IUT receives a valid CREATE Request from AE containing To set to PARENT_RESOURCE_ADDRESS and From set to AE-ID and Content containing RESOURCE_TYPE resource containing announceTo attribute set to ANNC_TARGET_CSE_ADDRESS } </td><td>IUT ← AE</td></tr> <tr> <td> then { The IUT sends a valid CREATE Request containing To set to ANNC_TARGET_CSE_ADDRESS and Content containing RESOURCE_TYPE announced variant resource containing MA (mandatory) attributes } </td><td>IUT → CSE</td></tr> </tbody> </table> | 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 Content containing RESOURCE_TYPE resource containing announceTo attribute set to ANNC_TARGET_CSE_ADDRESS } | IUT ← AE | then { The IUT sends a valid CREATE Request containing To set to ANNC_TARGET_CSE_ADDRESS and Content containing RESOURCE_TYPE announced variant resource containing MA (mandatory) attributes } | IUT → CSE | |
| 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 Content containing RESOURCE_TYPE resource containing announceTo attribute set to ANNC_TARGET_CSE_ADDRESS } | IUT ← AE | | | | | | | |
| then { The IUT sends a valid CREATE Request containing To set to ANNC_TARGET_CSE_ADDRESS and Content containing RESOURCE_TYPE announced variant resource containing MA (mandatory) attributes } | IUT → CSE | | | | | | | |

| TP Id | RESOURCE_TYPE | PICS |
|-------------------------------|------------------------|-----------------|
| TP/oneM2M/CSE/DMR/CRE/022_ACP | 1 (accesControlPolicy) | PICS_IN_PROFILE |
| TP/oneM2M/CSE/DMR/CRE/022_CNT | 3 (container) | PICS_IN_PROFILE |

| | | |
|-------------------------------|-------------------------|-----------------|
| TP/oneM2M/CSE/DMR/CRE/022_CIN | 4 (contentInstance) | PICS_IN_PROFILE |
| TP/oneM2M/CSE/DMR/CRE/022_GRP | 9 (group) | |
| TP/oneM2M/CSE/DMR/CRE/022_LCP | 10 (locationPolicy) | |
| TP/oneM2M/CSE/DMR/CRE/022_MGO | 13 (mgmtObj) | |
| TP/oneM2M/CSE/DMR/CRE/022_NOD | 14 (node) | |
| TP/oneM2M/CSE/DMR/CRE/022_SCH | 18 (schedule) | |
| TP/oneM2M/CSE/DMR/CRE/022_TS | 29 (timeSeries) | |
| TP/oneM2M/CSE/DMR/CRE/022_TSI | 30 (timeSeriesInstance) | |

| | | |
|---------------------------|---|---|
| TP Id | TP/oneM2M/CSE/DMR/CRE/023 | |
| Test objective | Check that the IUT accepts the creation of a <i>RESOURCE_TYPE</i> resource with the optional attribute announcedAttribute provided | |
| Reference | TS-0001 [1], clause 10.2.18.4 and clause 9.6.1.3.2-1, TS-0004 [2], clause 7.3.3.10 | |
| Parent Release | Release 3 | |
| Config Id | CF02 | |
| PICS Selection | PICS_CSE | |
| Initial conditions | <p>with {</p> <p>the IUT being in the "initial state" and the IUT having registered the AE and the IUT having created and announced the PARENT_RESOURCE to the announcement target CSE and the AE having privileges to perform CREATE operation on the resource PARENT_RESOURCE_ADDRESS }</p> | |
| Expected behaviour | Test events when { the IUT receives a valid CREATE Request from AE containing To set to PARENT_RESOURCE_ADDRESS and From set to AE-ID and Content containing <i>RESOURCE_TYPE</i> resource containing OA_ATTRIBUTE attribute set to VALUE and announcedAttribute attribute set to OA_ATTRIBUTE and announceTo attribute set to ANNC_TARGET_CSE_ADDRESS } then { The IUT sends a valid CREATE Request containing To set to ANNC_TARGET_CSE_ADDRESS and Content containing <i>RESOURCE_TYPE</i> announced variant resource containing MA (mandatory) attributes and OA_ATTRIBUTE attribute set to VALUE } | Direction IUT ← AE IUT → CSE |

| TP Id | RESOURCE_TYPE | PICS |
|-------------------------------|---------------------|-----------------|
| TP/oneM2M/CSE/DMR/CRE/023_CNT | 3 (container) | PICS_IN_PROFILE |
| TP/oneM2M/CSE/DMR/CRE/023_CIN | 4 (contentInstance) | PICS_IN_PROFILE |
| TP/oneM2M/CSE/DMR/CRE/023_GRP | 9 (group) | |
| TP/oneM2M/CSE/DMR/CRE/023_LCP | 10 (locationPolicy) | |

| | | |
|-------------------------------|-------------------------|--|
| TP/oneM2M/CSE/DMR/CRE/023_MGO | 13 (mgmtObj) | |
| TP/oneM2M/CSE/DMR/CRE/023_NOD | 14 (node) | |
| TP/oneM2M/CSE/DMR/CRE/023_SCH | 18 (schedule) | |
| TP/oneM2M/CSE/DMR/CRE/023_TS | 29 (timeSeries) | |
| TP/oneM2M/CSE/DMR/CRE/023_TSI | 30 (timeSeriesInstance) | |

7.2.2.3.4 DELETE Operation

TP/oneM2M/CSE/DMR/DEL/001

| TP Id | TP/oneM2M/CSE/DMR/DEL/001 | | | | | | | |
|---|---|-------------|-----------|---|----------|--|----------|--|
| Test objective | Check that the IUT accepts the deletion of a <i>RESOURCE_TYPE</i> resource | | | | | | | |
| Reference | TS-0001 [1], clause 10.1.4 | | | | | | | |
| Config Id | CF01 | | | | | | | |
| Parent Release | <i>PARENT_RELEASE</i> | | | | | | | |
| PICS Selection | PICS_CSE | | | | | | | |
| Initial conditions | <pre>with { the IUT being in the "initial state" and the IUT having registered the AE and the IUT having created a resource TARGET_RESOURCE_ADDRESS of type RESOURCE_TYPE and the AE having privileges to perform DELETE operation on the resource TARGET_RESOURCE_ADDRESS }</pre> | | | | | | | |
| Expected behaviour | <table border="1"> <thead> <tr> <th>Test events</th> <th>Direction</th> </tr> </thead> <tbody> <tr> <td> 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 } </td> <td>IUT ← AE</td> </tr> <tr> <td> then { the IUT deletes the TARGET_RESOURCE_ADDRESS resource and the IUT sends a valid Response containing Response Status Code set to 2002 (DELETED) } </td> <td>IUT → AE</td> </tr> </tbody> </table> | 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_ADDRESS resource and the IUT sends a valid Response containing Response Status Code set to 2002 (DELETED) } | IUT → AE | |
| 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_ADDRESS resource and the IUT sends a valid Response containing Response Status Code set to 2002 (DELETED) } | IUT → AE | | | | | | | |

| TP Id | PARENT_RELEASE | Reference | RESOURCE_TYPE |
|-------------------------------|----------------|---|-------------------------|
| TP/oneM2M/CSE/DMR/DEL/001_CNT | Release 1 | TS-0001 [대상을 찾을 수 없습니다], clause 10.2.4.4 | 3 (container) |
| TP/oneM2M/CSE/DMR/DEL/001_ACP | Release 1 | TS-0001 [대상을 찾을 수 없습니다], clause 10.2.21.4 | 1 (accessControlPolicy) |
| TP/oneM2M/CSE/DMR/DEL/001_SUB | Release 1 | TS-0001 [대상을 찾을 수 없습니다] | 23 (subscription) |

| | | | |
|-------------------------------|-----------|---|-------------------------|
| | | 수 없습니다], clause 10.2.11.5 | |
| TP/oneM2M/CSE/DMR/DEL/001_CIN | Release 1 | TS-0001 [대상을 찾을 수 없습니다], clause 10.2.4.1 | 4 (contentInstance) |
| TP/oneM2M/CSE/DMR/DEL/001_GRP | Release 1 | TS-0001 [대상을 찾을 수 없습니다], clause 10.2.7.5 | 9 (group) |
| TP/oneM2M/CSE/DMR/DEL/001_SCH | Release 3 | TS-0001 [대상을 찾을 수 없습니다], clause 10.2.40.2 | 18 (schedule) |
| TP/oneM2M/CSE/DMR/DEL/001_PCH | Release 2 | TS-0001 [대상을 찾을 수 없습니다], clause 10.2.13.5 | 15 (pollingChannel) |
| TP/oneM2M/CSE/DMR/DEL/001_TS | Release 3 | TS-0001 [대상을 찾을 수 없습니다], clause 10.2.30.4 | 29 (timeSeries) |
| TP/oneM2M/CSE/DMR/DEL/001_TSI | Release 3 | TS-0001 [대상을 찾을 수 없습니다], clause 10.2.31.4 | 30 (timeSeriesInstance) |

| 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 | | | | | | | |
| Parent Release | <i>PARENT_RELEASE</i> | | | | | | | |
| PICS Selection | PICS CSE | | | | | | | |
| Initial conditions | <p>with {</p> <p>the IUT being in the "initial state" and the IUT having registered the AE and the IUT having created a resource TARGET_RESOURCE_ADDRESS of type RESOURCE_TYPE and the AE having no privileges to perform DELETE operation on the resource TARGET_RESOURCE_ADDRESS</p> <p>}</p> | | | | | | | |
| Expected behaviour | <table border="1"> <thead> <tr> <th>Test events</th> <th>Direction</th> </tr> </thead> <tbody> <tr> <td> <p>when {</p> <p>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</p> <p>}</p> </td><td>IUT ← AE</td></tr> <tr> <td> <p>then {</p> <p>the IUT does not delete the TARGET_RESOURCE_ADDRESS resource and the IUT sends a valid Response containing Response Status Code set to 4103 (ORIGINATOR_HAS_NO_PRIVILEGE)</p> <p>}</p> </td><td>IUT → AE</td></tr> </tbody> </table> | Test events | Direction | <p>when {</p> <p>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</p> <p>}</p> | IUT ← AE | <p>then {</p> <p>the IUT does not delete the TARGET_RESOURCE_ADDRESS resource and the IUT sends a valid Response containing Response Status Code set to 4103 (ORIGINATOR_HAS_NO_PRIVILEGE)</p> <p>}</p> | IUT → AE | |
| Test events | Direction | | | | | | | |
| <p>when {</p> <p>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</p> <p>}</p> | IUT ← AE | | | | | | | |
| <p>then {</p> <p>the IUT does not delete the TARGET_RESOURCE_ADDRESS resource and the IUT sends a valid Response containing Response Status Code set to 4103 (ORIGINATOR_HAS_NO_PRIVILEGE)</p> <p>}</p> | IUT → AE | | | | | | | |

| TP Id | PARENT_RELEASE | Reference | RESOURCE_TYPE |
|-------------------------------|----------------|---|-------------------------|
| TP/oneM2M/CSE/DMR/DEL/002_CNT | Release 1 | TS-0001 [대상을 찾을 수 없습니다], clause 10.2.4.4 | 3 (container) |
| TP/oneM2M/CSE/DMR/DEL/002_ACP | Release 1 | TS-0001 [대상을 찾을 수 없습니다], clause 10.2.21.4 | 1 (accessControlPolicy) |
| TP/oneM2M/CSE/DMR/DEL/002_SUB | Release 1 | TS-0001 [대상을 찾을 수 없습니다], clause 10.2.11.5 | 23 (subscription) |

| TP Id | PARENT_RELEASE | Reference | RESOURCE_TYPE |
|-------------------------------|----------------|---|-----------------|
| TP/oneM2M/CSE/DMR/DEL/002_GRP | Release 1 | TS-0001 [대상을 찾을 수 없습니다], clause 10.2.7.5 | 9 (group) |
| TP/oneM2M/CSE/DMR/DEL/002_SCH | Release 3 | TS-0001 [대상을 찾을 수 없습니다], clause 10.2.40.2 | 18 (schedule) |
| TP/oneM2M/CSE/DMR/DEL/002_TS | Release 3 | TS-0001 [대상을 찾을 수 없습니다], clause 10.2.30.4 | 29 (timeSeries) |

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 | <pre> 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 } </pre> | | | | | | | | |
| Expected behaviour | <table border="1"> <thead> <tr> <th>Test events</th> <th>Direction</th> </tr> </thead> <tbody> <tr> <td> <pre> 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 } </pre> </td><td>IUT ← AE</td></tr> <tr> <td> <pre> then { the IUT does not delete the TARGET_RESOURCE_ADDRESS resource and the IUT sends a valid Response containing Response Status Code set to 4004 (NOT_FOUND) } </pre> </td><td>IUT → AE</td></tr> </tbody> </table> | Test events | Direction | <pre> 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 } </pre> | IUT ← AE | <pre> then { the IUT does not delete the TARGET_RESOURCE_ADDRESS resource and the IUT sends a valid Response containing Response Status Code set to 4004 (NOT_FOUND) } </pre> | IUT → AE | | |
| Test events | Direction | | | | | | | | |
| <pre> 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 } </pre> | IUT ← AE | | | | | | | | |
| <pre> then { the IUT does not delete the TARGET_RESOURCE_ADDRESS resource and the IUT sends a valid Response containing Response Status Code set to 4004 (NOT_FOUND) } </pre> | IUT → AE | | | | | | | | |

| 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 | PARENT_RELEASE | | | | | | | | |
| PICS Selection | PICS_CSE | | | | | | | | |
| Initial conditions | <pre> with { the IUT being in the "initial state" and the IUT having registered the AE and the IUT having created a resource TARGET_RESOURCE_ADDRESS of 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 } </pre> | | | | | | | | |
| Expected behaviour | <table border="1"> <thead> <tr> <th>Test events</th> <th>Direction</th> </tr> </thead> <tbody> <tr> <td> 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 } </td> <td>IUT ← AE</td> </tr> <tr> <td> then { the IUT sends a valid Response containing Response Status Code set to 4004 (NOT_FOUND) } </td> <td>IUT → AE</td> </tr> </tbody> </table> | | | 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 |
| 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 | PARENT_RELEASE | Reference | RESOURCE_TYPE |
|-------------------------------|----------------|---|-------------------------|
| TP/oneM2M/CSE/DMR/DEL/004_CNT | Release 1 | TS-0001 [대상을 찾을 수 없습니다], clause 10.2.4.4 | 3 (container) |
| TP/oneM2M/CSE/DMR/DEL/004_ACP | Release 1 | TS-0001 [대상을 찾을 수 없습니다], clause 10.2.21.4 | 1 (accessControlPolicy) |
| TP/oneM2M/CSE/DMR/DEL/004_SUB | Release 1 | TS-0001 [대상을 찾을 수 없습니다] | 23 (subscription) |

| | | | |
|-------------------------------|-----------|---|-----------------|
| | | 없습니다], clause 10.2.11.5 | |
| TP/oneM2M/CSE/DMR/DEL/004_GRP | Release 1 | TS-0001 [대상을 찾을 수 없습니다], clause 10.2.7.5 | 9 (group) |
| TP/oneM2M/CSE/DMR/DEL/004_SCH | Release 3 | TS-0001 [대상을 찾을 수 없습니다], clause 10.2.40.2 | 18 (schedule) |
| TP/oneM2M/CSE/DMR/DEL/004_TS | Release 3 | TS-0001 [대상을 찾을 수 없습니다], clause 10.2.30.4 | 29 (timeSeries) |

TP/oneM2M/CSE/DMR/DEL/005

| | | | |
|--------------------|---|--|------------------|
| TP Id | TP/oneM2M/CSE/DMR/DEL/005 | | |
| Test objective | Check that the stateTag attribute of a RESOURCE_TYPE 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 | <p>with {</p> <p>the IUT being in the "initial state" and the IUT having registered the AE and the IUT having created a RESOURCE_TYPE resource containing a child resource and the AE having privileges to perform DELETE operation on the TARGET_CHILD_RESOURCE_ADDRESS }</p> | | |
| Expected behaviour | <p>Test events</p> <p>when {</p> <p>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 }</p> <p>then {</p> <p>the IUT increments the stateTag attribute of the RESOURCE_TYPE resource and the IUT sends a valid Response containing</p> | | Direction |
| | | | IUT ← AE |
| | | | IUT → AE |

| | | |
|---|---|--|
| | Response Status Code set to 2002 (DELETED) | |
| } | | |

| TP Id | PARENT_RELEASE | Reference | RESOURCE_TYPE |
|-------------------------------|----------------|---|-----------------|
| TP/oneM2M/CSE/DMR/DEL/005_CNT | Release 1 | TS-0001 [대상을 찾을 수 없습니다], clause 10.2.4.4 | 3 (container) |
| TP/oneM2M/CSE/DMR/DEL/005_TS | Release 3 | TS-0001 [대상을 찾을 수 없습니다], clause 10.2.30.4 | 29 (timeSeries) |

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 RESOURCE_TYPE when a latest RESOURCE_TYPE 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 | <p>with {</p> <p>the IUT being in the "initial state" and the IUT having registered the AE and the IUT having created a PARENT_RESOURCE_TYPE resource containing currentNrOfInstances attribute set to NR_OF_INSTANCES and currentByteSize attribute set to BYTE_SIZE_OF_DATA and a RESOURCE_TYPE resource TARGET_RESOURCE_ADDRESS and the AE having privileges to perform DELETE operation on the resource TARGET_RESOURCE_ADDRESS</p> <p>}</p> | |
| Expected behaviour | <p>Test events</p> <p>when {</p> <p>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</p> <p>}</p> | <p>Direction</p> <p>IUT ← AE</p> |

| | |
|--|----------|
| <pre> then { the IUT decreases the currentNrOfInstances attribute of PARENT_RESOURCE_TYPE resource and the IUT decreases the currentByteSize attribute of PARENT_RESOURCE_TYPE resource and the IUT sends a valid Response containing Response Status Code set to 2002 (DELETED) } </pre> | IUT → AE |
|--|----------|

Editor's Note: Need to clarify if needed to split into two separate test purposes.

| TP Id | PARENT_RELEASE | Reference | RESOURCE_TYPE | PARENT_RESOURCE_TYPE |
|---------------------------------------|----------------|--|----------------------------|----------------------|
| TP/oneM2M/CSE/DMR/DEL/006_CN T/CIN | Release 1 | TS-0001 [대상을 찾 을 수 없습 니다], clause 10.2.4.4 | 4 (contentInstance) | 3 (container) |
| TP/oneM2M/CSE/DMR/DEL/006_TS/ TSI | Release 3 | TS-0001 [대상을 찾 을 수 없습 니다], clause 10.2.30.4 | 30 (timeSeriesInstance) | 29 (timeSeries) |

| | | |
|---------------------------|--|------------------|
| 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 | <p>with {</p> <p>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</p> } | |
| Expected behaviour | Test events | Direction |
| | <p>when {</p> <p>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</p> } | IUT ← AE |
| | <p>then {</p> <p>the IUT deletes the CONTENT_INSTANCE_2_RESOURCE_ADDRESS resource and the IUT sends a valid Response containing Response Status Code set to 2002 (DELETED)</p> } | IUT → AE |

| | | |
|---------------------------|--|------------------------------|
| 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 | <pre> with { the IUT being in the "initial state" and the IUT having registered the AE containing a container resource containing no contentInstance resources } </pre> | |
| Expected behaviour | Test events <pre> 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 } </pre> | Direction IUT ← AE |
| | then { the IUT sends a valid Response containing Response Status Code set to 4004 (NOT_FOUND) } | IUT → AE |

| | | |
|---------------------------|---|------------------|
| 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 | <p>with {</p> <p>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</p> <p>}</p> | |
| Expected behaviour | Test events | Direction |
| | <p>when {</p> <p>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</p> <p>}</p> | IUT ← AE |
| | <p>then {</p> <p>the IUT deletes the CONTENT_INSTANCE_1_RESOURCE_ADDRESS resource and the IUT sends a valid Response containing Response Status Code set to 2002 (DELETED)</p> <p>}</p> | IUT → AE |

| | | |
|---------------------------|---|------------------|
| 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 | <pre> with { the IUT being in the "initial state" and the IUT having registered the AE containing a container resource containing no contentInstance resources } </pre> | |
| Expected behaviour | Test events | Direction |
| | <pre> when { the IUT receives a valid RETRIEVE Request from AE containing To set to CONTAINER_RESOURCE_ADDRESS/01 and From set to AE_ID and no Content } </pre> | IUT ← AE |
| | <pre> then { the IUT sends a valid Response containing Response Status Code set to 4004 (NOT_FOUND) } </pre> | IUT → AE |

| | | |
|---------------------------|---|---|
| TP Id | TP/oneM2M/CSE/DMR/DEL/011 | |
| Test objective | Check that the IUT rejects a DELETE Request target to TARGET_RESOURCE_ADDRESS resource when the Result Content set to RESULT_CONTENT | |
| Reference | TS-0001 [1], clause 8.1.2, TS-0004 [2], clause 6.3.4.2.7 | |
| Config Id | CF01 | |
| Parent Release | PARENT_RELEASE | |
| PICS Selection | PICS_CSE | |
| Initial conditions | <p>with {</p> <p>the IUT being in the "initial state"</p> <p>and the IUT having registered the AE</p> <p>and the IUT having created a resource TARGET_RESOURCE_ADDRESS of type RESOURCE_TYPE</p> <p>and the AE having privileges to perform DELETE operation on the resource TARGET_RESOURCE_ADDRESS</p> <p>}</p> | |
| Expected behaviour | Test events | Direction |
| | <p>when {</p> <p>the IUT receives a valid DELETE Request from AE containing</p> <p>To set to TARGET_RESOURCE_ADDRESS and</p> <p>From set to AE_ID and</p> <p>Result Content set to RESULT_CONTENT</p> <p>no Content</p> <p>}</p> <p>then {</p> <p>the IUT sends a valid Response containing</p> <p>Response Status Code set to 4000 (BAD_REQUEST) and</p> <p>no Content</p> <p>}</p> | IUT \leftarrow AE IUT \rightarrow AE |

| TP Id | PARENT_RELEASE | RESULT_CONTENT |
|---------------------------------|-----------------------|---|
| TP/oneM2M/CSE/DMR/DEL/011_RCN/2 | Release 2 | 2 (hierarchical address) |
| TP/oneM2M/CSE/DMR/DEL/011_RCN/3 | Release 2 | 3 (attributes and hierarchical address) |
| TP/oneM2M/CSE/DMR/DEL/011_RCN/7 | Release 3 | 7 (original resource) |
| TP/oneM2M/CSE/DMR/DEL/011_RCN/9 | Release 2 | 9 (modified attributes) |

| TP Id | TP/oneM2M/CSE/DMR/DEL/012 | | | | | | | |
|---|---|--------------------|------------------|---|---------------------|---|----------------------|--|
| Test objective | Check that the IUT returns nothing of TARGET_RESOURCE_ADDRESS resource when the Result Content is set to 0 (nothing) | | | | | | | |
| Reference | TS-0001 [1], clause 8.1.2, TS-0004 [2], clause 6.3.3.2.7 | | | | | | | |
| Config Id | CF01 | | | | | | | |
| Parent Release | <i>PARENT_RELEASE</i> | | | | | | | |
| PICS Selection | PICS_CSE | | | | | | | |
| Initial conditions | <p>with {</p> <p>the IUT being in the "initial state" and the IUT having registered the AE and the IUT having created a resource TARGET_RESOURCE_ADDRESS of type RESOURCE_TYPE containing a child resource and the AE having privileges to perform DELETE operation on the resource TARGET_RESOURCE_ADDRESS</p> <p>}</p> | | | | | | | |
| Expected behaviour | <table border="1"> <thead> <tr> <th>Test events</th> <th>Direction</th> </tr> </thead> <tbody> <tr> <td> when { the IUT receives a valid DELETE Request from AE containing To set to TARGET_RESOURCE_ADDRESS and From set to AE_ID and Result Content set to 0 (nothing) no Content } </td> <td>IUT \leftarrow AE</td> </tr> <tr> <td> then { the IUT sends a valid Response containing Response Status Code set to 2002 (DELETED) and no Content } </td> <td>IUT \rightarrow AE</td> </tr> </tbody> </table> | 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 Result Content set to 0 (nothing) no Content } | IUT \leftarrow AE | then { the IUT sends a valid Response containing Response Status Code set to 2002 (DELETED) and no Content } | IUT \rightarrow AE | |
| 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 Result Content set to 0 (nothing) no Content } | IUT \leftarrow AE | | | | | | | |
| then { the IUT sends a valid Response containing Response Status Code set to 2002 (DELETED) and no Content } | IUT \rightarrow AE | | | | | | | |

| TP Id | PARENT_RELEASE | RESOURCE_TYPE |
|-------------------------------|-----------------------|-------------------------|
| TP/oneM2M/CSE/DMR/DEL/012_CNT | Release 2 | 3 (container) |
| TP/oneM2M/CSE/DMR/DEL/012_GRP | Release 2 | 9 (group) |
| TP/oneM2M/CSE/DMR/DEL/012_ACP | Release 2 | 1 (accessControlPolicy) |
| TP/oneM2M/CSE/DMR/DEL/012_SCH | Release 3 | 18 (schedule) |
| TP/oneM2M/CSE/DMR/DEL/012_PCH | Release 3 | 15 (pollingChannel) |
| TP/oneM2M/CSE/DMR/DEL/012_SUB | Release 3 | 23 (subscription) |
| TP/oneM2M/CSE/DMR/DEL/012_TS | Release 3 | 29 (timeSeries) |

| | | |
|---------------------------|--|----------------------------------|
| TP Id | TP/oneM2M/CSE/DMR/DEL/013 | |
| Test objective | Check that the IUT returns successfully only attributes of TARGET_RESOURCE_ADDRESS resource when the Result Content is set to 1 (attributes) | |
| Reference | TS-0001 [1], clause 8.1.2, TS-0004 [2], clause 6.3.3.2.7 | |
| Config Id | CF01 | |
| Parent Release | <i>PARENT_RELEASE</i> | |
| 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_ADDRESS of type RESOURCE_TYPE containing a child resource and the AE having privileges to perform DELETE operation on the resource TARGET_RESOURCE_ADDRESS } | |
| Expected behaviour | Test events when { the IUT receives a valid DELETE Request from AE containing To set to TARGET_RESOURCE_ADDRESS and From set to AE_ID and Result Content set to 1 (attributes) no Content } | Direction IUT ← AE |
| | then { the IUT sends a valid Response containing Response Status Code set to 2002 (DELETED) and Content containing RESOURCE_TYPE resource containing attributes and no hierachichal address and no child resources and no child resource references } | IUT → AE |

| TP Id | PARENT_RELEASE | RESOURCE_TYPE |
|-------------------------------|----------------|-------------------------|
| TP/oneM2M/CSE/DMR/DEL/013_CNT | Release 2 | 3 (container) |
| TP/oneM2M/CSE/DMR/DEL/013_GRP | Release 2 | 9 (group) |
| TP/oneM2M/CSE/DMR/DEL/013_ACP | Release 2 | 1 (accessControlPolicy) |
| TP/oneM2M/CSE/DMR/DEL/013_SCH | Release 3 | 18 (schedule) |
| TP/oneM2M/CSE/DMR/DEL/013_PCH | Release 3 | 15 (pollingChannel) |

| | | |
|-------------------------------|-----------|-------------------|
| TP/oneM2M/CSE/DMR/DEL/013_SUB | Release 3 | 23 (subscription) |
| TP/oneM2M/CSE/DMR/DEL/013_TS | Release 3 | 29 (timeSeries) |

TP/oneM2M/CSE/DMR/DEL/014

| TP Id | TP/oneM2M/CSE/DMR/DEL/014 | | | | | | | |
|---|--|-------------|-----------|---|----------|---|----------|--|
| Test objective | Check that the IUT returns successfully only attributes and child resources of TARGET_RESOURCE_ADDRESS resource when the Result Content is set to 4 (attributes and child resources) | | | | | | | |
| Reference | TS-0001 [1], clause 8.1.2, TS-0004 [2], clause 6.3.4.2.7 | | | | | | | |
| Config Id | CF01 | | | | | | | |
| Parent Release | <i>PARENT_RELEASE</i> | | | | | | | |
| PICS Selection | PICS_CSE | | | | | | | |
| Initial conditions | <p>with {</p> <p>the IUT being in the "initial state" and the IUT having registered the AE and the IUT having created a resource TARGET_RESOURCE_ADDRESS of type RESOURCE_TYPE containing a child resource and the AE having privileges to perform DELETE operation on the resource TARGET_RESOURCE_ADDRESS }</p> | | | | | | | |
| Expected behaviour | <table border="1"> <thead> <tr> <th>Test events</th> <th>Direction</th> </tr> </thead> <tbody> <tr> <td> when { the IUT receives a valid DELETE Request from AE containing To set to TARGET_RESOURCE_ADDRESS and From set to AE_ID and Result Content set to 4 (attributes and child resources) no Content } </td><td>IUT ← AE</td></tr> <tr> <td> then { the IUT sends a valid Response containing Response Status Code set to 2002 (DELETED) and Content containing RESOURCE_TYPE resource containing attributes and child resources } </td><td>IUT → AE</td></tr> </tbody> </table> | 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 Result Content set to 4 (attributes and child resources) no Content } | IUT ← AE | then { the IUT sends a valid Response containing Response Status Code set to 2002 (DELETED) and Content containing RESOURCE_TYPE resource containing attributes and child resources } | IUT → AE | |
| 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 Result Content set to 4 (attributes and child resources) no Content } | IUT ← AE | | | | | | | |
| then { the IUT sends a valid Response containing Response Status Code set to 2002 (DELETED) and Content containing RESOURCE_TYPE resource containing attributes and child resources } | IUT → AE | | | | | | | |

| TP Id | PARENT_RELEASE | RESOURCE_TYPE |
|-------------------------------|----------------|-------------------------|
| TP/oneM2M/CSE/DMR/DEL/014_CNT | Release 3 | 3 (container) |
| TP/oneM2M/CSE/DMR/DEL/014_GRP | Release 3 | 9 (group) |
| TP/oneM2M/CSE/DMR/DEL/014_ACP | Release 3 | 1 (accessControlPolicy) |

| | | |
|-------------------------------|-----------|-------------------|
| TP/oneM2M/CSE/DMR/DEL/014_SCH | Release 3 | 18 (schedule) |
| TP/oneM2M/CSE/DMR/DEL/014_SUB | Release 3 | 23 (subscription) |
| TP/oneM2M/CSE/DMR/DEL/014_TS | Release 3 | 29 (timeSeries) |

TP/oneM2M/CSE/DMR/DEL/015

| TP Id | TP/oneM2M/CSE/DMR/DEL/015 | |
|---------------------------|---|------------------|
| Test objective | Check that the IUT returns successfully only attributes and child resources references of TARGET_RESOURCE_ADDRESS resource when the Result Content is set to 5(attributes and child resources references) | |
| Reference | TS-0001 [1], clause 8.1.2, TS-0004 [2], clause 6.3.4.2.7 | |
| Config Id | CF01 | |
| Parent Release | <i>PARENT_RELEASE</i> | |
| PICS Selection | PICS_CSE | |
| Initial conditions | <pre> with { the IUT being in the "initial state" and the IUT having registered the AE and the IUT having created a resource TARGET_RESOURCE_ADDRESS of type RESOURCE_TYPE containing a child resource and the AE having privileges to perform DELETE operation on the resource TARGET_RESOURCE_ADDRESS } </pre> | |
| Expected behaviour | Test events | Direction |
| | <pre> when { the IUT receives a valid DELETE Request from AE containing To set to TARGET_RESOURCE_ADDRESS and From set to AE_ID and Result Content set to 5 (attributes and child resources references) no Content } </pre> | IUT ← AE |
| | <pre> then { the IUT sends a valid Response containing Response Status Code set to 2002 (DELETED) and Content containing RESOURCE_TYPE resource containing attributes and child resource references } </pre> | IUT → AE |

| TP Id | PARENT_RELEASE | RESOURCE_TYPE |
|-------|----------------|---------------|
|-------|----------------|---------------|

| | | |
|-------------------------------|-----------|-------------------------|
| TP/oneM2M/CSE/DMR/DEL/015_CNT | Release 3 | 3 (container) |
| TP/oneM2M/CSE/DMR/DEL/015_GRP | Release 3 | 9 (group) |
| TP/oneM2M/CSE/DMR/DEL/015_ACP | Release 3 | 1 (accessControlPolicy) |
| TP/oneM2M/CSE/DMR/DEL/015_SCH | Release 3 | 18 (schedule) |
| TP/oneM2M/CSE/DMR/DEL/015_SUB | Release 3 | 23 (subscription) |
| TP/oneM2M/CSE/DMR/DEL/015_TS | Release 3 | 29 (timeSeries) |

TP/oneM2M/CSE/DMR/DEL/016

| | | |
|--------------------|--|---|
| TP Id | TP/oneM2M/CSE/DMR/DEL/016 | |
| Test objective | Check that the IUT returns successfully only child resources references of TARGET_RESOURCE_ADDRESS resource when the Result Content is set to 6(child resources references) | |
| Reference | TS-0001 [1], clause 8.1.2, TS-0004 [2], clause 6.3.4.2.7 | |
| Config Id | CF01 | |
| Parent Release | PARENT_RELEASE | |
| PICS Selection | PICS_CSE | |
| Initial conditions | <p>with {</p> <p>the IUT being in the "initial state" and the IUT having registered the AE and the IUT having created a resource TARGET_RESOURCE_ADDRESS of type RESOURCE_TYPE containing a child resource and the AE having privileges to perform DELETE operation on the resource TARGET_RESOURCE_ADDRESS</p> <p>}</p> | |
| Expected behaviour | <p>Test events</p> <p>when {</p> <p>the IUT receives a valid DELETE Request from AE containing To set to TARGET_RESOURCE_ADDRESS and From set to AE_ID and Result Content set to 6 (child resources references) no Content</p> <p>}</p> <p>then {</p> <p>the IUT sends a valid Response containing Response Status Code set to 2002 (DELETED) and Content containing resourceRefList element containing child resource references</p> <p>}</p> | <p>Direction</p> <p>IUT ← AE</p> <p>IUT → AE</p> |

| TP Id | PARENT_RELEASE | RESOURCE_TYPE |
|-------|----------------|---------------|
| | | |

| | | |
|-------------------------------|-----------|-------------------------|
| TP/oneM2M/CSE/DMR/DEL/016_CNT | Release 3 | 3 (container) |
| TP/oneM2M/CSE/DMR/DEL/016_GRP | Release 3 | 9 (group) |
| TP/oneM2M/CSE/DMR/DEL/016_ACP | Release 3 | 1 (accessControlPolicy) |
| TP/oneM2M/CSE/DMR/DEL/016_SCH | Release 3 | 18 (schedule) |
| TP/oneM2M/CSE/DMR/DEL/016_SUB | Release 3 | 23 (subscription) |
| TP/oneM2M/CSE/DMR/DEL/016_TS | Release 3 | 29 (timeSeries) |

TP/oneM2M/CSE/DMR/DEL/017

| TP Id | TP/oneM2M/CSE/DMR/DEL/017 | | | | | | | |
|---|---|-------------|-----------|---|----------|--|----------|--|
| Test objective | Check that the IUT returns successfully only child resources of TARGET_RESOURCE_ADDRESS resource when the Result Content is set to 8(child resources) | | | | | | | |
| Reference | TS-0001 [1], clause 8.1.2, TS-0004 [2], clause 6.3.4.2.7 | | | | | | | |
| Config Id | CF01 | | | | | | | |
| Parent Release | PARENT_RELEASE | | | | | | | |
| PICS Selection | PICS_CSE | | | | | | | |
| Initial conditions | <p>with {</p> <p>the IUT being in the "initial state"</p> <p>and the IUT having registered the AE</p> <p>and the IUT having created a resource TARGET_RESOURCE_ADDRESS of type RESOURCE_TYPE containing</p> <p>a child resource</p> <p>and the AE having privileges to perform DELETE operation on the resource TARGET_RESOURCE_ADDRESS</p> } | | | | | | | |
| Expected behaviour | <table border="1"> <thead> <tr> <th>Test events</th> <th>Direction</th> </tr> </thead> <tbody> <tr> <td> when { the IUT receives a valid DELETE Request from AE containing To set to TARGET_RESOURCE_ADDRESS and From set to AE_ID and Result Content set to 8 (child resources) no Content } </td> <td>IUT ← AE</td> </tr> <tr> <td> then { the IUT sends a valid Response containing Response Status Code set to 2002 (DELETED) and Content containing CHILD_RESOURCE_TYPE resource representation } </td> <td>IUT → AE</td> </tr> </tbody> </table> | 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 Result Content set to 8 (child resources) no Content } | IUT ← AE | then { the IUT sends a valid Response containing Response Status Code set to 2002 (DELETED) and Content containing CHILD_RESOURCE_TYPE resource representation } | IUT → AE | |
| 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 Result Content set to 8 (child resources) no Content } | IUT ← AE | | | | | | | |
| then { the IUT sends a valid Response containing Response Status Code set to 2002 (DELETED) and Content containing CHILD_RESOURCE_TYPE resource representation } | IUT → AE | | | | | | | |

| | | |
|-------|----------------|---------------|
| TP Id | PARENT_RELEASE | RESOURCE_TYPE |
|-------|----------------|---------------|

| | | |
|-------------------------------|-----------|-------------------------|
| TP/oneM2M/CSE/DMR/DEL/017_CNT | Release 3 | 3 (container) |
| TP/oneM2M/CSE/DMR/DEL/017_GRP | Release 3 | 9 (group) |
| TP/oneM2M/CSE/DMR/DEL/017_ACP | Release 3 | 1 (accessControlPolicy) |
| TP/oneM2M/CSE/DMR/DEL/017_SCH | Release 3 | 18 (schedule) |
| TP/oneM2M/CSE/DMR/DEL/017_SUB | Release 3 | 23 (subscription) |
| TP/oneM2M/CSE/DMR/DEL/017_TS | Release 3 | 29 (timeSeries) |

7.2.2.3.5 BASIC Operation

TP/oneM2M/CSE/DMR/001

| | | |
|--------------------|---|--|
| TP Id | TP/oneM2M/CSE/DMR/001 | |
| Test objective | Check that the IUT retargets the request to the hosting CSE when the To parameter contains the hosting CSE-ID which is known by the IUT (a descendant CSE or its Registrar CSE) | |
| Reference | TS-0001 [1], clause 8.2.1.1 | |
| Config Id | CF02 | |
| Parent Release | Release 2 | |
| PICS Selection | PICS CSE | |
| Initial conditions | <p>with {</p> <p>the IUT being in the "initial state" and the IUT having registered to a Hosting CSE and the IUT having registered the AE and the Hosting CSE containing a resource representation on TARGET_RESOURCE_ADDRESS and the AE having privileges to perform OPERATION on the Hosting CSE }</p> | |
| Expected behaviour | <p>when {</p> <p>the IUT receives a valid OPERATION Request from the AE containing To set to TARGET_RESOURCE_ADDRESS and From set to AE_ID }</p> <p>then {</p> <p>the IUT sends a OPERATION Request to the Hosting CSE }</p> | <p>Test events</p> <p>Direction</p> <p>IUT ← AE</p> <p>IUT → CSE</p> |

| TP Id | OPERATION |
|---------------------------|-----------|
| TP/oneM2M/CSE/DMR/001_CRE | CREATE |
| TP/oneM2M/CSE/DMR/001_RET | RETRIEVE |
| TP/oneM2M/CSE/DMR/001_UPD | UPDATE |
| TP/oneM2M/CSE/DMR/001_DEL | DELETE |

| TP Id | TP/oneM2M/CSE/DMR/002 | | | | | | |
|---|--|--------------------|------------------|---|----------------------|--|----------------------|
| Test objective | Check that the IUT retargets the response from the hosting CSE after retargeting an OPERATION Request | | | | | | |
| Reference | TS-0001 [1], clause 8.2.1.1 | | | | | | |
| Config Id | CF02 | | | | | | |
| Parent Release | Release 2 | | | | | | |
| PICS Selection | PICS_CSE | | | | | | |
| Initial conditions | <p>with {</p> <p>the IUT being in the "initial state" and the IUT having registered to the Hosting CSE and the IUT having registered the AE and the Hosting CSE containing a resource representation on TARGET_RESOURCE_ADDRESS and the AE having privileges to perform OPERATION on the Hosting CSE and the IUT having received a valid OPERATION Request from the AE containing To set to TARGET_RESOURCE_ADDRESS and From set to AE_ID and the IUT sends the OPERATION Request to the Hosting CSE</p> <p>}</p> | | | | | | |
| Expected behaviour | <table border="1"> <thead> <tr> <th>Test events</th> <th>Direction</th> </tr> </thead> <tbody> <tr> <td>when { the IUT receives a valid OPERATION Response from the Hosting CSE }</td> <td>IUT \leftarrow CSE</td> </tr> <tr> <td>then { the IUT sends a valid Response to the AE }</td> <td>IUT \rightarrow AE</td> </tr> </tbody> </table> | Test events | Direction | when { the IUT receives a valid OPERATION Response from the Hosting CSE } | IUT \leftarrow CSE | then { the IUT sends a valid Response to the AE } | IUT \rightarrow AE |
| Test events | Direction | | | | | | |
| when { the IUT receives a valid OPERATION Response from the Hosting CSE } | IUT \leftarrow CSE | | | | | | |
| then { the IUT sends a valid Response to the AE } | IUT \rightarrow AE | | | | | | |

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

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 <i>RESOURCE_TYPE</i> 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 | <i>PARENT_RELEASE</i> | | | | | | | |
| PICS Selection | PICS CSE | | | | | | | |
| Initial conditions | <pre> 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 <i>RESOURCE_TYPE</i> resource } </pre> | | | | | | | |
| Expected behaviour | <table border="1"> <thead> <tr> <th>Test events</th> <th>Direction</th> </tr> </thead> <tbody> <tr> <td> <pre> 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 } </pre> </td><td>IUT ← AE</td></tr> <tr> <td> <pre> 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 } </pre> </td><td>IUT → AE</td></tr> </tbody> </table> | Test events | Direction | <pre> 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 } </pre> | IUT ← AE | <pre> 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 } </pre> | IUT → AE | |
| Test events | Direction | | | | | | | |
| <pre> 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 } </pre> | IUT ← AE | | | | | | | |
| <pre> 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 } </pre> | IUT → AE | | | | | | | |

| TP Id | PARENT_RELEASE | Reference | RESOURCE_TYPE |
|-------------------------------|-----------------------|---------------------------------------|----------------------|
| TP/oneM2M/CSE/SUB/CRE/001_CIN | Release 1 | TS-0001 [대상을 찾을 수 없습니다], clause 9.6.7 | 4 (contentInstance) |
| TP/oneM2M/CSE/SUB/CRE/001_SUB | Release 1 | TS-0001 [대상을 찾을 수 없습니다], clause 9.6.8 | 23 (subscription) |

| | | | |
|-------------------------------|-----------|--|----------------------------|
| TP/oneM2M/CSE/SUB/CRE/001_TSI | Release 3 | TS-0001 [대상을 찾을 수 없습니다], clause 9.6.37 | 30 (timeSeriesInstance) |
|-------------------------------|-----------|--|----------------------------|

| 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], 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 | <pre> 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 } </pre> | | | | | | | |
| Expected behaviour | <table border="1"> <thead> <tr> <th>Test events</th> <th>Direction</th> </tr> </thead> <tbody> <tr> <td> 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 } </td> <td>IUT ← AE</td> </tr> <tr> <td> 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 } </td> <td>IUT → AE</td> </tr> </tbody> </table> | 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 | |
| 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 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 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 \leftarrow 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 \rightarrow AE |

| 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 | <p>with {</p> <p>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</p> } | | | | | | | |
| Expected behaviour | <table border="1"> <thead> <tr> <th>Test events</th> <th>Direction</th> </tr> </thead> <tbody> <tr> <td> 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 } </td> <td>IUT ← AE1</td> </tr> <tr> <td> 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 } </td> <td>IUT → AE2</td> </tr> </tbody> </table> | 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 | |
| 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 Id | TP/oneM2M/CSE/SUB/CRE/005 | | | | | | | |
|---|---|-------------|-----------|---|-----------|---|------------------------|--|
| Test objective | Check that the IUT sends a Notify request to the subscriber resource when notificationEvent Type 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 | <p>with {</p> <p>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 containing notificationURI attribute set to AE2_RESOURCE_ADDRESS and eventNotificationCriteria attribute containing notificationEvent Type set to 3 (Create_of_Direct_Child_Resource) and the AE1 having privileges to perform RETRIEVE operation on the subscribed-to resource }</p> | | | | | | | |
| Expected behaviour | <table border="1"> <thead> <tr> <th>Test events</th> <th>Direction</th> </tr> </thead> <tbody> <tr> <td> 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 } </td> <td>IUT ← AE1</td> </tr> <tr> <td> then { the IUT sends a valid Response containing Response Status Code set to 2001 (CREATED) and 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 } </td> <td> IUT → AE1 IUT → AE2 </td> </tr> </tbody> </table> | 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) and 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 | |
| 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) and 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 Id | TP/oneM2M/CSE/SUB/CRE/006 | |
| Test objective | Check that the IUT accepts the creation of a <i>subscription</i> resource with the <i>eventNotificationCriteria</i> attribute which includes a CONDITION_TAG condition provided | |
| Reference | TS-0001 [1], clause 9.6.8 | |
| Config Id | CF01 | |
| Parent Release | Release 3 | |
| PICS Selection | PICS_CSE | |
| Initial conditions | <p>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 }</p> | |
| Expected behaviour | <p>Test events</p> <p>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 }</p> <p>then { the IUT creates the subscription resource and the IUT sends a valid Response containing Response Status Code set to 2001 (CREATED) }</p> | <p>Direction</p> <p>IUT ← AE</p> <p>IUT → AE</p> |

| TP Id | Reference | CONDITION_TAG |
|-------------------------------|---------------------------------------|----------------------|
| TP/oneM2M/CSE/SUB/CRE/006_CRB | TS-0001 [대상을 찾을 수 없습니다], clause 9.6.8 | createdBefore |
| TP/oneM2M/CSE/SUB/CRE/006_CRA | TS-0001 [대상을 찾을 수 없습니다], clause 9.6.8 | createdAfter |
| TP/oneM2M/CSE/SUB/CRE/006_MS | TS-0001 [대상을 찾을 수 없습니다], clause 9.6.8 | modifiedSince |
| TP/oneM2M/CSE/SUB/CRE/006_US | TS-0001 [대상을 찾을 수 없습니다] | unmodifiedSince |

| TP Id | Reference | CONDITION_TAG |
|-------------------------------|--|-------------------|
| | 없습니다], clause 9.6.8 | |
| TP/oneM2M/CSE/SUB/CRE/006_STS | TS-0001 [대상을 찾을 수 없습니다], clause 9.6.8 | stateTagSmaller |
| TP/oneM2M/CSE/SUB/CRE/006_STB | TS-0001 [대상을 찾을 수 없습니다], clause 9.6.8 | stateTagBigger |
| TP/oneM2M/CSE/SUB/CRE/006_EXB | TS-0001 [대상을 찾을 수 없습니다], clause 9.6.8 | expireBefore |
| TP/oneM2M/CSE/SUB/CRE/006_EXA | TS-0001 [대상을 찾을 수 없습니다], clause 9.6.8 | expireAfter |
| TP/oneM2M/CSE/SUB/CRE/006_SZA | TS-0001 [대상을 찾을 수 없습니다], clause 9.6.8 | sizeAbove |
| TP/oneM2M/CSE/SUB/CRE/006_SZB | TS-0001 [대상을 찾을 수 없습니다], clause 9.6.8 | sizeBelow |
| TP/oneM2M/CSE/SUB/CRE/006_ET | TS-0001 [대상을 찾을 수 없습니다], clause 9.6.8 | eventType |
| TP/oneM2M/CSE/SUB/CRE/006_OM | TS-0001 [대상을 찾을 수 없습니다], clause 9.6.8 | operationMonitor |
| TP/oneM2M/CSE/SUB/CRE/006_ATR | TS-0001 [대상을 찾을 수 없습니다], clause 9.6.8 | attribute |
| TP/oneM2M/CSE/SUB/CRE/006_ATR | TS-0001 [1], clause 9.6.8 | attribute |
| TP/oneM2M/CSE/SUB/CRE/006_CRT | TS-0001 [1], clause 9.6.8 | childResourceType |

| TP Id | TP/oneM2M/CSE/SUB/CRE/007 | | | | | | | |
|--|--|-------------|-----------|--|----------|--|----------|--|
| Test objective | Check that the IUT accepts the creation of a <i>subscription</i> resource with the <i>eventNotificationCriteria</i> attribute which includes a <i>missingData</i> condition provided | | | | | | | |
| Reference | TS-0001 [1], clause 9.6.8, 9.6.36 | | | | | | | |
| Config Id | CF01 | | | | | | | |
| Parent Release | Release 3 | | | | | | | |
| PICS Selection | PICS_CSE | | | | | | | |
| Initial conditions | <pre> with { the IUT being in the "initial state" and the IUT having registered the AE and the IUT having a TARGET_RESOURCE_ADDRESS of type <timeSeries> and the Originator having privileges to perform CREATE operation on the resource TARGET_RESOURCE_ADDRESS } </pre> | | | | | | | |
| Expected behaviour | <table border="1"> <thead> <tr> <th>Test events</th> <th>Direction</th> </tr> </thead> <tbody> <tr> <td> 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 missingData condition } </td> <td>IUT ← AE</td> </tr> <tr> <td> then { the IUT creates the subscription resource and the IUT sends a valid Response containing Response Status Code set to 2001 (CREATED) } </td> <td>IUT → AE</td> </tr> </tbody> </table> | 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 missingData 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 | |
| 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 missingData 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 | TP/oneM2M/CSE/SUB/CRE/008 | | | | | | | |
|--|---|-------------|-----------|--|----------|---|----------|--|
| Test objective | Check that the IUT accepts the creation of a <i>subscription</i> resource with the optional attributes <i>notificationForwardingURI</i> and <i>groupID</i> provided | | | | | | | |
| Reference | TS-0001 [1], clause 9.6.8 and clause 10.2.7.10, TS-0004 [2], clause 7.4.14.2.3 | | | | | | | |
| Config Id | CF01 | | | | | | | |
| Parent Release | Release 1 | | | | | | | |
| PICS Selection | PICS_CSE | | | | | | | |
| Initial conditions | <p>with {</p> <p>the IUT being in the "initial state" and the IUT having registered the AE and the IUT having a group resource as TARGET_RESOURCE_ADDRESS containing members which are subscribable and the Originator having privileges to perform CREATE operation on <group> members</p> <p>}</p> | | | | | | | |
| Expected behaviour | <table border="1"> <thead> <tr> <th>Test events</th> <th>Direction</th> </tr> </thead> <tbody> <tr> <td> when { the IUT receives a valid CREATE Request from AE containing Resource Type set to subscription and To set to TARGET_RESOURCE_ADDRESS/fopt and From set to AE-ID and Content containing subscription resource containing groupID, notificationURI attribute, and notificationForwardingURI attribute set } </td> <td>IUT ← AE</td> </tr> <tr> <td> then { the IUT creates the subscription resource on the <group> members containing groupID, notificationURI attribute and notificationForwardingURI attribute set identical to notificationURI and the IUT sends a valid Response containing Response Status Code set to 2001 (CREATED) } </td> <td>IUT → AE</td> </tr> </tbody> </table> | 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/fopt and From set to AE-ID and Content containing subscription resource containing groupID, notificationURI attribute, and notificationForwardingURI attribute set } | IUT ← AE | then { the IUT creates the subscription resource on the <group> members containing groupID, notificationURI attribute and notificationForwardingURI attribute set identical to notificationURI and the IUT sends a valid Response containing Response Status Code set to 2001 (CREATED) } | IUT → AE | |
| 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/fopt and From set to AE-ID and Content containing subscription resource containing groupID, notificationURI attribute, and notificationForwardingURI attribute set } | IUT ← AE | | | | | | | |
| then { the IUT creates the subscription resource on the <group> members containing groupID, notificationURI attribute and notificationForwardingURI attribute set identical to notificationURI and the IUT sends a valid Response containing Response Status Code set to 2001 (CREATED) } | IUT → AE | | | | | | | |

| TP Id | TP/oneM2M/CSE/SUB/CRE/009 | | | | | | | |
|---|---|--------------------|------------------|---|---------------------|---|----------------------|--|
| Test objective | Check that the IUT rejects a CREATE request when the notificationEventType is set to 6 (Trigger_Received_For_AE_Resource) in combination of NOTIFICATION_EVENT_TYPE | | | | | | | |
| Reference | TS-0001 [1], clause 9.6.8 and clause 10.2.10.2, TS-0004 [2], clause 7.4.8.2.1, 6.3.4.2.18-19 | | | | | | | |
| Config Id | CF01 | | | | | | | |
| Parent Release | Release 3 | | | | | | | |
| PICS Selection | PICS_CSE | | | | | | | |
| Initial conditions | <p>with {</p> <p style="padding-left: 20px;">the IUT being in the "initial state"</p> <p style="padding-left: 20px;">and the IUT having registered the AE</p> <p style="padding-left: 20px;">and the IUT having a resource as TARGET_RESOURCE_ADDRESS which is subscribable and</p> <p style="padding-left: 20px;">the Originator having privileges to perform CREATE operation on TARGET_RESOURCE_ADDRESS resource</p> <p>}</p> | | | | | | | |
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| Test events | Direction | | | | | | | |
| when { <p style="padding-left: 20px;">the IUT receives a valid CREATE Request from AE containing</p> <p style="padding-left: 20px;">Resource Type set to subscription and</p> <p style="padding-left: 20px;">To set to TARGET_RESOURCE_ADDRESS and</p> <p style="padding-left: 20px;">From set to AE-ID and</p> <p style="padding-left: 20px;">Content containing</p> <p style="padding-left: 40px;">subscription resource containing</p> <p style="padding-left: 40px;">eventNotificationCriteria attribute containing</p> <p style="padding-left: 40px;">notificationEventType element set to 6 (Trigger_Received_For_AE_Resource) and</p> <p style="padding-left: 40px;">NOTIFICATION_EVENT_TYPE</p> <p>}</p> | IUT \leftarrow AE | | | | | | | |
| then { <p style="padding-left: 20px;">the IUT sends a valid Response containing</p> <p style="padding-left: 20px;">Response Status Code set to 4000 (BAD_REQUEST) and</p> <p style="padding-left: 20px;">no Content</p> <p>}</p> | IUT \rightarrow AE | | | | | | | |

| TP Id | NOTIFICATION_EVENT_TYPE |
|---------------------------------|---|
| TP/oneM2M/CSE/SUB/CRE/009_NET/1 | 1 (Update_of_Resource) |
| TP/oneM2M/CSE/SUB/CRE/009_NET/2 | 2 (Delete_of_Resource) |
| TP/oneM2M/CSE/SUB/CRE/009_NET/3 | 3 (Create_of_Direct_Child_Resource) |
| TP/oneM2M/CSE/SUB/CRE/009_NET/4 | 4 (Delete_of_Direct_Child_Resource) |
| TP/oneM2M/CSE/SUB/CRE/009_NET/5 | 5 (Retrieve_of_Container_Resource_With_No_Child_Resource) |
| TP/oneM2M/CSE/SUB/CRE/009_NET/7 | 7 (Blocking_Update) |

TP/oneM2M/CSE/SUB/CRE/010

| TP Id | TP/oneM2M/CSE/SUB/CRE/010 | | | | | | | |
|---|--|--------------------|------------------|---|----------|---|----------|--|
| Test objective | Check that the IUT rejects a CREATE request when the notificationEventType is set to 7 (Blocking Update) in combination of NOTIFICATION_EVENT_TYPE | | | | | | | |
| Reference | TS-0001 [1], clause 9.6.8 and clause 10.2.10.2, TS-0004 [2], clause 7.4.8.2.1, 6.3.4.2.18-19 | | | | | | | |
| Config Id | CF01 | | | | | | | |
| Parent Release | Release 3 | | | | | | | |
| PICS Selection | PICS_CSE | | | | | | | |
| Initial conditions | <p>with {</p> <p style="padding-left: 20px;">the IUT being in the "initial state"</p> <p style="padding-left: 20px;">and the IUT having registered the AE</p> <p style="padding-left: 20px;">and the IUT having a resource as TARGET_RESOURCE_ADDRESS which is subscribable and</p> <p style="padding-left: 20px;">the Originator having privileges to perform CREATE operation on TARGET_RESOURCE_ADDRESS resource</p> <p>}</p> | | | | | | | |
| Expected behaviour | <table border="1"> <thead> <tr> <th>Test events</th> <th>Direction</th> </tr> </thead> <tbody> <tr> <td> when { <p style="padding-left: 20px;">the IUT receives a valid CREATE Request from AE containing</p> <p style="padding-left: 20px;">Resource Type set to subscription and</p> <p style="padding-left: 20px;">To set to TARGET_RESOURCE_ADDRESS and</p> <p style="padding-left: 20px;">From set to AE-ID and</p> <p style="padding-left: 20px;">Content containing</p> <p style="padding-left: 40px;">subscription resource containing</p> <p style="padding-left: 40px;">eventNotificationCriteria attribute containing</p> <p style="padding-left: 40px;">notificationEventType element set to 7 (Blocking Update)</p> <p style="padding-left: 40px;">and NOTIFICATION_EVENT_TYPE</p> <p>}</p> </td><td>IUT ← AE</td></tr> <tr> <td> then { <p style="padding-left: 20px;">the IUT sends a valid Response containing</p> <p style="padding-left: 20px;">Response Status Code set to 4000 (BAD_REQUEST) and</p> <p style="padding-left: 20px;">no Content</p> <p>}</p> </td><td>IUT → AE</td></tr> </tbody> </table> | Test events | Direction | when { <p style="padding-left: 20px;">the IUT receives a valid CREATE Request from AE containing</p> <p style="padding-left: 20px;">Resource Type set to subscription and</p> <p style="padding-left: 20px;">To set to TARGET_RESOURCE_ADDRESS and</p> <p style="padding-left: 20px;">From set to AE-ID and</p> <p style="padding-left: 20px;">Content containing</p> <p style="padding-left: 40px;">subscription resource containing</p> <p style="padding-left: 40px;">eventNotificationCriteria attribute containing</p> <p style="padding-left: 40px;">notificationEventType element set to 7 (Blocking Update)</p> <p style="padding-left: 40px;">and NOTIFICATION_EVENT_TYPE</p> <p>}</p> | IUT ← AE | then { <p style="padding-left: 20px;">the IUT sends a valid Response containing</p> <p style="padding-left: 20px;">Response Status Code set to 4000 (BAD_REQUEST) and</p> <p style="padding-left: 20px;">no Content</p> <p>}</p> | IUT → AE | |
| Test events | Direction | | | | | | | |
| when { <p style="padding-left: 20px;">the IUT receives a valid CREATE Request from AE containing</p> <p style="padding-left: 20px;">Resource Type set to subscription and</p> <p style="padding-left: 20px;">To set to TARGET_RESOURCE_ADDRESS and</p> <p style="padding-left: 20px;">From set to AE-ID and</p> <p style="padding-left: 20px;">Content containing</p> <p style="padding-left: 40px;">subscription resource containing</p> <p style="padding-left: 40px;">eventNotificationCriteria attribute containing</p> <p style="padding-left: 40px;">notificationEventType element set to 7 (Blocking Update)</p> <p style="padding-left: 40px;">and NOTIFICATION_EVENT_TYPE</p> <p>}</p> | IUT ← AE | | | | | | | |
| then { <p style="padding-left: 20px;">the IUT sends a valid Response containing</p> <p style="padding-left: 20px;">Response Status Code set to 4000 (BAD_REQUEST) and</p> <p style="padding-left: 20px;">no Content</p> <p>}</p> | IUT → AE | | | | | | | |

| TP Id | NOTIFICATION_EVENT_TYPE |
|---------------------------------|---|
| TP/oneM2M/CSE/SUB/CRE/010_NET/1 | 1 (Update of Resource) |
| TP/oneM2M/CSE/SUB/CRE/010_NET/2 | 2 (Delete of Resource) |
| TP/oneM2M/CSE/SUB/CRE/010_NET/3 | 3 (Create of Direct Child Resource) |
| TP/oneM2M/CSE/SUB/CRE/010_NET/4 | 4 (Delete of Direct Child Resource) |
| TP/oneM2M/CSE/SUB/CRE/010_NET/5 | 5 (Retrieve of Container Resource With No Child Resource) |
| TP/oneM2M/CSE/SUB/CRE/010_NET/6 | 6 (Trigger Received For AE Resource) |

| TP Id | TP/oneM2M/CSE/SUB/CRE/011 | | | | | | | |
|---|---|-------------|-----------|---|----------|--|----------|--|
| Test objective | Check that the IUT rejects a CREATE request when the notificationEventType is set to 6 (Trigger_Received_For_AE_Resource) and notificationContentType is set to NOTIFICATION_CONTENT_TYPE | | | | | | | |
| Reference | TS-0001 [1], clause 9.6.8 and clause 10.2.10.2, TS-0004 [2], clause 7.4.8.2.1, 6.3.4.2.18-19 | | | | | | | |
| Config Id | CF01 | | | | | | | |
| Parent Release | Release 3 | | | | | | | |
| PICS Selection | PICS_CSE | | | | | | | |
| Initial conditions | <p>with {</p> <p>the IUT being in the "initial state"</p> <p>and the IUT having registered the AE</p> <p>and the IUT having a resource as TARGET_RESOURCE_ADDRESS which is subscribable and</p> <p>the Originator having privileges to perform CREATE operation on TARGET_RESOURCE_ADDRESS resource</p> <p>}</p> | | | | | | | |
| Expected behaviour | <table border="1"> <thead> <tr> <th>Test events</th> <th>Direction</th> </tr> </thead> <tbody> <tr> <td> <p>when {</p> <p>the IUT receives a valid CREATE Request from AE containing</p> <p>Resource Type set to subscription and</p> <p>To set to TARGET_RESOURCE_ADDRESS and</p> <p>From set to AE-ID and</p> <p>Content containing</p> <p>subscription resource containing</p> <p>eventNotificationCriteria attribute containing</p> <p>notificationEventType element set to 6 (Trigger_Received_For_AE_Resource) and</p> <p>notificationContentType attribute set to NOTIFICATION_CONTENT_TYPE</p> <p>}</p> </td> <td>IUT ← AE</td> </tr> <tr> <td> <p>then {</p> <p>the IUT sends a valid Response containing</p> <p>Response Status Code set to 4000 (BAD_REQUEST) and</p> <p>no Content</p> <p>}</p> </td> <td>IUT → AE</td> </tr> </tbody> </table> | Test events | Direction | <p>when {</p> <p>the IUT receives a valid CREATE Request from AE containing</p> <p>Resource Type set to subscription and</p> <p>To set to TARGET_RESOURCE_ADDRESS and</p> <p>From set to AE-ID and</p> <p>Content containing</p> <p>subscription resource containing</p> <p>eventNotificationCriteria attribute containing</p> <p>notificationEventType element set to 6 (Trigger_Received_For_AE_Resource) and</p> <p>notificationContentType attribute set to NOTIFICATION_CONTENT_TYPE</p> <p>}</p> | IUT ← AE | <p>then {</p> <p>the IUT sends a valid Response containing</p> <p>Response Status Code set to 4000 (BAD_REQUEST) and</p> <p>no Content</p> <p>}</p> | IUT → AE | |
| Test events | Direction | | | | | | | |
| <p>when {</p> <p>the IUT receives a valid CREATE Request from AE containing</p> <p>Resource Type set to subscription and</p> <p>To set to TARGET_RESOURCE_ADDRESS and</p> <p>From set to AE-ID and</p> <p>Content containing</p> <p>subscription resource containing</p> <p>eventNotificationCriteria attribute containing</p> <p>notificationEventType element set to 6 (Trigger_Received_For_AE_Resource) and</p> <p>notificationContentType attribute set to NOTIFICATION_CONTENT_TYPE</p> <p>}</p> | IUT ← AE | | | | | | | |
| <p>then {</p> <p>the IUT sends a valid Response containing</p> <p>Response Status Code set to 4000 (BAD_REQUEST) and</p> <p>no Content</p> <p>}</p> | IUT → AE | | | | | | | |

| TP Id | NOTIFICATION_CONTENT_TYPE |
|---------------------------------|---------------------------|
| TP/oneM2M/CSE/SUB/CRE/011_NCT/1 | 1 (All Attributes) |
| TP/oneM2M/CSE/SUB/CRE/011_NCT/2 | 2 (Modified Attributes) |
| TP/oneM2M/CSE/SUB/CRE/011_NCT/3 | 3 (ResourceID) |

| | | |
|---------------------------|--|------------------|
| TP Id | TP/oneM2M/CSE/SUB/CRE/012 | |
| Test objective | Check that the IUT rejects a CREATE request when the notificationEventType is set to 7 (Blocking Update) and notificationContentType attribute set to NOTIFICATION_CONTENT_TYPE | |
| Reference | TS-0001 [1], clause 9.6.8 and clause 10.2.10.2, TS-0004 [2], clause 7.4.8.2.1, 6.3.4.2.18-19 | |
| Config Id | CF01 | |
| Parent Release | Release 3 | |
| PICS Selection | PICS_CSE | |
| Initial conditions | <p>with {</p> <p>the IUT being in the "initial state" and the IUT having registered the AE and the IUT having a resource as TARGET_RESOURCE_ADDRESS which is subscribable and the Originator having privileges to perform CREATE operation on TARGET_RESOURCE_ADDRESS resource }</p> | |
| Expected behaviour | <p>Test events</p> <p>when {</p> <p>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 notificationEventType element set to 7 (Blocking Update) and notificationContentType attribute set to NOTIFICATION_CONTENT_TYPE }</p> <p>then {</p> <p>the IUT sends a valid Response containing Response Status Code set to 4000 (BAD_REQUEST) and no Content }</p> | Direction |
| | | IUT ← AE |
| | | IUT → AE |

| TP Id | TP/oneM2M/CSE/SUB/CRE/013 | | | | | | | |
|---|--|-------------|-----------|---|----------|---|----------|--|
| Test objective | Check that the IUT rejects a CREATE request when the notificationEventType is set to NOTIFICATION_EVENT_TYPE and notificationContentType set to 4 (Trigger Payload) | | | | | | | |
| Reference | TS-0001 [1], clause 9.6.8 and clause 10.2.10.2, TS-0004 [2], clause 7.4.8.2.1, 6.3.4.2.18-19 | | | | | | | |
| Config Id | CF01 | | | | | | | |
| Parent Release | Release 3 | | | | | | | |
| PICS Selection | PICS CSE | | | | | | | |
| Initial conditions | <pre>with { the IUT being in the "initial state" and the IUT having registered the AE and the IUT having a resource as TARGET_RESOURCE_ADDRESS which is subscribable and the Originator having privileges to perform CREATE operation on TARGET_RESOURCE_ADDRESS resource }</pre> | | | | | | | |
| Expected behaviour | <table border="1"> <thead> <tr> <th>Test events</th> <th>Direction</th> </tr> </thead> <tbody> <tr> <td> <pre>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 notificationEventType element set to NOTIFICATION_EVENT_TYPE and notificationContentType attribute set to 4 (Trigger Payload) }</pre> </td> <td>IUT ← AE</td> </tr> <tr> <td> <pre>then { the IUT sends a valid Response containing Response Status Code set to 4000 (BAD_REQUEST) and no Content }</pre> </td> <td>IUT → AE</td> </tr> </tbody> </table> | Test events | Direction | <pre>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 notificationEventType element set to NOTIFICATION_EVENT_TYPE and notificationContentType attribute set to 4 (Trigger Payload) }</pre> | IUT ← AE | <pre>then { the IUT sends a valid Response containing Response Status Code set to 4000 (BAD_REQUEST) and no Content }</pre> | IUT → AE | |
| Test events | Direction | | | | | | | |
| <pre>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 notificationEventType element set to NOTIFICATION_EVENT_TYPE and notificationContentType attribute set to 4 (Trigger Payload) }</pre> | IUT ← AE | | | | | | | |
| <pre>then { the IUT sends a valid Response containing Response Status Code set to 4000 (BAD_REQUEST) and no Content }</pre> | IUT → AE | | | | | | | |

TP/oneM2M/CSE/SU

B/CRE/014

| TP Id | NOTIFICATION_EVENT_TYPE | | | | | | | |
|---|--|-------------|-----------|---|----------|---|----------|--|
| TP/oneM2M/CSE/SUB/CRE/013_NET/1 | 1 (Update_of_Resource) | | | | | | | |
| TP/oneM2M/CSE/SUB/CRE/013_NET/2 | 2 (Delete_of_Resource) | | | | | | | |
| TP/oneM2M/CSE/SUB/CRE/013_NET/3 | 3 (Create_of_Direct_Child_Resource) | | | | | | | |
| TP/oneM2M/CSE/SUB/CRE/013_NET/4 | 4 (Delete_of_Direct_Child_Resource) | | | | | | | |
| TP/oneM2M/CSE/SUB/CRE/013_NET/5 | 5 (Retrieve_of_Container_Resource_With_No_Child_Resource) | | | | | | | |
| TP/oneM2M/CSE/SUB/CRE/013_NET/7 | 7 (Blocking_Update) | | | | | | | |
| TP Id | TP/oneM2M/CSE/SUB/CRE/014 | | | | | | | |
| Test objective | Check that the IUT rejects a CREATE request when the notificationEventType is set to NOTIFICATION_EVENT_TYPE and notificationContentType set to 2(modified attributes) | | | | | | | |
| Reference | TS-0001 [1], clause 9.6.8 and clause 10.2.10.2, TS-0004 [2], clause 7.4.8.2.1, 6.3.4.2.18-19 | | | | | | | |
| Config Id | CF01 | | | | | | | |
| Parent Release | Release 3 | | | | | | | |
| 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 as TARGET_RESOURCE_ADDRESS which is subscribable and the Originator having privileges to perform CREATE operation on TARGET_RESOURCE_ADDRESS resource } | | | | | | | |
| Expected behaviour | <table border="1"> <thead> <tr> <th>Test events</th> <th>Direction</th> </tr> </thead> <tbody> <tr> <td> 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 notificationEventType element set to NOTIFICATION_EVENT_TYPE and notificationContentType attribute set to 2 (Modified Attributes) } </td> <td>IUT ← AE</td> </tr> <tr> <td> then { the IUT sends a valid Response containing Response Status Code set to 4000 (BAD_REQUEST) and no Content } </td> <td>IUT → AE</td> </tr> </tbody> </table> | 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 notificationEventType element set to NOTIFICATION_EVENT_TYPE and notificationContentType attribute set to 2 (Modified Attributes) } | IUT ← AE | then { the IUT sends a valid Response containing Response Status Code set to 4000 (BAD_REQUEST) and no Content } | IUT → AE | |
| 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 notificationEventType element set to NOTIFICATION_EVENT_TYPE and notificationContentType attribute set to 2 (Modified Attributes) } | IUT ← AE | | | | | | | |
| then { the IUT sends a valid Response containing Response Status Code set to 4000 (BAD_REQUEST) and no Content } | IUT → AE | | | | | | | |

TP/oneM2M/CSE/SUB/

CRE/015

| TP Id | NOTIFICATION_EVENT_TYPE | | | | | | |
|---|---|-------------|-----------|---|----------|--|----------|
| TP/oneM2M/CSE/SUB/CRE/014_NET/2 | 2 (Delete of Resource) | | | | | | |
| TP/oneM2M/CSE/SUB/CRE/014_NET/3 | 3 (Create of Direct Child Resource) | | | | | | |
| TP/oneM2M/CSE/SUB/CRE/014_NET/4 | 4 (Delete of Direct Child Resource) | | | | | | |
| TP/oneM2M/CSE/SUB/CRE/014_NET/5 | 5 (Retrieve of Container Resource With No Child Resource) | | | | | | |
| TP/oneM2M/CSE/SUB/CRE/014_NET/6 | 6 (Trigger Received For AE Resource) | | | | | | |
| TP Id | TP/oneM2M/CSE/SUB/CRE/015 | | | | | | |
| Test objective | Check that the IUT rejects a CREATE request when the notificationEventType is set to NOTIFICATION_EVENT_TYPE and notificationContentType set to 3 (ResourceID) | | | | | | |
| Reference | TS-0001 [1], clause 9.6.8 and clause 10.2.10.2, TS-0004 [2], clause 7.4.8.2.1, 6.3.4.2.18-19 | | | | | | |
| Config Id | CF01 | | | | | | |
| Parent Release | Release 3 | | | | | | |
| PICS Selection | PICS_CSE | | | | | | |
| Initial conditions | <p>with {</p> <p style="padding-left: 20px;">the IUT being in the "initial state"</p> <p style="padding-left: 20px;">and the IUT having registered the AE</p> <p style="padding-left: 20px;">and the IUT having a resource as TARGET_RESOURCE_ADDRESS which is subscribable and</p> <p style="padding-left: 20px;">the Originator having privileges to perform CREATE operation on TARGET_RESOURCE_ADDRESS resource</p> <p>}</p> | | | | | | |
| Expected behaviour | <table border="1"> <thead> <tr> <th>Test events</th> <th>Direction</th> </tr> </thead> <tbody> <tr> <td> <p>when {</p> <p style="padding-left: 20px;">the IUT receives a valid CREATE Request from AE containing</p> <p style="padding-left: 20px;">Resource Type set to subscription and</p> <p style="padding-left: 20px;">To set to TARGET_RESOURCE_ADDRESS and</p> <p style="padding-left: 20px;">From set to AE-ID and</p> <p style="padding-left: 20px;">Content containing</p> <p style="padding-left: 40px;">subscription resource containing</p> <p style="padding-left: 40px;">eventNotificationCriteria attribute containing</p> <p style="padding-left: 60px;">notificationEventType element set to</p> <p style="padding-left: 60px;">NOTIFICATION_EVENT_TYPE and</p> <p style="padding-left: 60px;">notificationContentType attribute set to 3 (ResourceID)</p> <p>}</p> </td> <td>IUT ← AE</td> </tr> <tr> <td> <p>then {</p> <p style="padding-left: 20px;">the IUT sends a valid Response containing</p> <p style="padding-left: 20px;">Response Status Code set to 4000 (BAD_REQUEST) and</p> <p style="padding-left: 20px;">no Content</p> <p>}</p> </td> <td>IUT → AE</td> </tr> </tbody> </table> | Test events | Direction | <p>when {</p> <p style="padding-left: 20px;">the IUT receives a valid CREATE Request from AE containing</p> <p style="padding-left: 20px;">Resource Type set to subscription and</p> <p style="padding-left: 20px;">To set to TARGET_RESOURCE_ADDRESS and</p> <p style="padding-left: 20px;">From set to AE-ID and</p> <p style="padding-left: 20px;">Content containing</p> <p style="padding-left: 40px;">subscription resource containing</p> <p style="padding-left: 40px;">eventNotificationCriteria attribute containing</p> <p style="padding-left: 60px;">notificationEventType element set to</p> <p style="padding-left: 60px;">NOTIFICATION_EVENT_TYPE and</p> <p style="padding-left: 60px;">notificationContentType attribute set to 3 (ResourceID)</p> <p>}</p> | IUT ← AE | <p>then {</p> <p style="padding-left: 20px;">the IUT sends a valid Response containing</p> <p style="padding-left: 20px;">Response Status Code set to 4000 (BAD_REQUEST) and</p> <p style="padding-left: 20px;">no Content</p> <p>}</p> | IUT → AE |
| Test events | Direction | | | | | | |
| <p>when {</p> <p style="padding-left: 20px;">the IUT receives a valid CREATE Request from AE containing</p> <p style="padding-left: 20px;">Resource Type set to subscription and</p> <p style="padding-left: 20px;">To set to TARGET_RESOURCE_ADDRESS and</p> <p style="padding-left: 20px;">From set to AE-ID and</p> <p style="padding-left: 20px;">Content containing</p> <p style="padding-left: 40px;">subscription resource containing</p> <p style="padding-left: 40px;">eventNotificationCriteria attribute containing</p> <p style="padding-left: 60px;">notificationEventType element set to</p> <p style="padding-left: 60px;">NOTIFICATION_EVENT_TYPE and</p> <p style="padding-left: 60px;">notificationContentType attribute set to 3 (ResourceID)</p> <p>}</p> | IUT ← AE | | | | | | |
| <p>then {</p> <p style="padding-left: 20px;">the IUT sends a valid Response containing</p> <p style="padding-left: 20px;">Response Status Code set to 4000 (BAD_REQUEST) and</p> <p style="padding-left: 20px;">no Content</p> <p>}</p> | IUT → AE | | | | | | |

| TP Id | NOTIFICATION_EVENT_TYPE |
|---------------------------------|--------------------------------------|
| TP/oneM2M/CSE/SUB/CRE/015_NET/6 | 6 (Trigger Received For AE Resource) |
| TP/oneM2M/CSE/SUB/CRE/015_NET/7 | 7 (Blocking Update) |
| TP/oneM2M/CSE/SUB/CRE/015_NET/8 | 8 (Report on missing data points) |

TP/oneM2M/CSE/SUB/CRE/016

| TP Id | TP/oneM2M/CSE/SUB/CRE/016 | | | | | | |
|--|--|-------------|-----------|--|----------|--|----------|
| Test objective | Check that the IUT rejects a CREATE request when the notificationEventType is set to NOTIFICATION_EVENT_TYPE and notificationContentType set to 5 (TimeSeries notification) | | | | | | |
| Reference | TS-0001 [1], clause 9.6.8 and clause 10.2.10.2, TS-0004 [2], clause 7.4.8.2.1, 6.3.4.2.18-19 | | | | | | |
| Config Id | CF01 | | | | | | |
| Parent Release | Release 3 | | | | | | |
| PICS Selection | PICS_CSE | | | | | | |
| Initial conditions | <pre> with { the IUT being in the "initial state" and the IUT having registered the AE and the IUT having a resource as TARGET_RESOURCE_ADDRESS which is subscribable and the Originator having privileges to perform CREATE operation on TARGET_RESOURCE_ADDRESS resource } </pre> | | | | | | |
| Expected behaviour | <table border="1"> <thead> <tr> <th>Test events</th> <th>Direction</th> </tr> </thead> <tbody> <tr> <td> 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 notificationEventType element set to NOTIFICATION_EVENT_TYPE and notificationContentType attribute set to 5 (TimeSeries notification) } </td> <td>IUT ← AE</td> </tr> <tr> <td> then { the IUT sends a valid Response containing </td> <td>IUT → AE</td> </tr> </tbody> </table> | 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 notificationEventType element set to NOTIFICATION_EVENT_TYPE and notificationContentType attribute set to 5 (TimeSeries notification) } | IUT ← AE | then { the IUT sends a valid Response containing | IUT → AE |
| 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 notificationEventType element set to NOTIFICATION_EVENT_TYPE and notificationContentType attribute set to 5 (TimeSeries notification) } | IUT ← AE | | | | | | |
| then { the IUT sends a valid Response containing | IUT → AE | | | | | | |

Response Status Code **set to** 4000 (BAD_REQUEST) **and**
no Content

}

| TP Id | NOTIFICATION_EVENT_TYPE |
|---------------------------------|---|
| TP/oneM2M/CSE/SUB/CRE/016_NET/1 | 1 (Update_of_Resource) |
| TP/oneM2M/CSE/SUB/CRE/016_NET/2 | 2 (Delete_of_Resource) |
| TP/oneM2M/CSE/SUB/CRE/016_NET/3 | 3 (Create_of_Direct_Child_Resource) |
| TP/oneM2M/CSE/SUB/CRE/016_NET/4 | 4 (Delete_of_Direct_Child_Resource) |
| TP/oneM2M/CSE/SUB/CRE/016_NET/5 | 5 (Retrieve_of_Container_Resource_With_No_Child_Resource) |
| TP/oneM2M/CSE/SUB/CRE/016_NET/6 | 6 (Trigger_Received_For_AE_Resource) |
| TP/oneM2M/CSE/SUB/CRE/016_NET/7 | 7 (Blocking_Update) |

TP/oneM2M/CSE/SUB/CRE/017

| TP Id | TP/oneM2M/CSE/SUB/CRE/017 | | | | | | | |
|--|---|--------------------|------------------|--|----------|---|----------|--|
| Test objective | Check that the IUT rejects a CREATE request when the notificationEventType is set to NOTIFICATION_EVENT_TYPE and notificationContentType set to 1 (All Attributes) | | | | | | | |
| Reference | TS-0001 [1], clause 9.6.8 and clause 10.2.10.2, TS-0004 [2], clause 7.4.8.2.1, 6.3.4.2.18-19 | | | | | | | |
| Config Id | CF01 | | | | | | | |
| Parent Release | Release 3 | | | | | | | |
| PICS Selection | PICS_CSE | | | | | | | |
| Initial conditions | <p>with {</p> <p style="padding-left: 20px;">the IUT being in the "initial state"</p> <p style="padding-left: 20px;">and the IUT having registered the AE</p> <p style="padding-left: 20px;">and the IUT having a resource as TARGET_RESOURCE_ADDRESS which is subscribable and</p> <p style="padding-left: 20px;">the Originator having privileges to perform CREATE operation on TARGET_RESOURCE_ADDRESS resource</p> <p>}</p> | | | | | | | |
| Expected behaviour | <table border="1"> <thead> <tr> <th>Test events</th> <th>Direction</th> </tr> </thead> <tbody> <tr> <td> when { <p style="padding-left: 20px;">the IUT receives a valid CREATE Request from AE containing</p> <p style="padding-left: 20px;">Resource Type set to subscription and</p> <p style="padding-left: 20px;">To set to TARGET_RESOURCE_ADDRESS and</p> <p style="padding-left: 20px;">From set to AE-ID and</p> <p style="padding-left: 20px;">Content containing</p> <p style="padding-left: 40px;">subscription resource containing</p> <p style="padding-left: 40px;">eventNotificationCriteria attribute containing</p> <p style="padding-left: 60px;">notificationEventType element set to</p> <p style="padding-left: 60px;">NOTIFICATION_EVENT_TYPE and</p> <p style="padding-left: 60px;">notificationContentType attribute set to 1 (All Attributes)</p> <p>}</p> </td> <td>IUT ← AE</td> </tr> <tr> <td> then { <p style="padding-left: 20px;">the IUT sends a valid Response containing</p> <p style="padding-left: 20px;">Response Status Code set to 4000 (BAD_REQUEST) and</p> <p style="padding-left: 20px;">no Content</p> <p>}</p> </td> <td>IUT → AE</td> </tr> </tbody> </table> | Test events | Direction | when { <p style="padding-left: 20px;">the IUT receives a valid CREATE Request from AE containing</p> <p style="padding-left: 20px;">Resource Type set to subscription and</p> <p style="padding-left: 20px;">To set to TARGET_RESOURCE_ADDRESS and</p> <p style="padding-left: 20px;">From set to AE-ID and</p> <p style="padding-left: 20px;">Content containing</p> <p style="padding-left: 40px;">subscription resource containing</p> <p style="padding-left: 40px;">eventNotificationCriteria attribute containing</p> <p style="padding-left: 60px;">notificationEventType element set to</p> <p style="padding-left: 60px;">NOTIFICATION_EVENT_TYPE and</p> <p style="padding-left: 60px;">notificationContentType attribute set to 1 (All Attributes)</p> <p>}</p> | IUT ← AE | then { <p style="padding-left: 20px;">the IUT sends a valid Response containing</p> <p style="padding-left: 20px;">Response Status Code set to 4000 (BAD_REQUEST) and</p> <p style="padding-left: 20px;">no Content</p> <p>}</p> | IUT → AE | |
| Test events | Direction | | | | | | | |
| when { <p style="padding-left: 20px;">the IUT receives a valid CREATE Request from AE containing</p> <p style="padding-left: 20px;">Resource Type set to subscription and</p> <p style="padding-left: 20px;">To set to TARGET_RESOURCE_ADDRESS and</p> <p style="padding-left: 20px;">From set to AE-ID and</p> <p style="padding-left: 20px;">Content containing</p> <p style="padding-left: 40px;">subscription resource containing</p> <p style="padding-left: 40px;">eventNotificationCriteria attribute containing</p> <p style="padding-left: 60px;">notificationEventType element set to</p> <p style="padding-left: 60px;">NOTIFICATION_EVENT_TYPE and</p> <p style="padding-left: 60px;">notificationContentType attribute set to 1 (All Attributes)</p> <p>}</p> | IUT ← AE | | | | | | | |
| then { <p style="padding-left: 20px;">the IUT sends a valid Response containing</p> <p style="padding-left: 20px;">Response Status Code set to 4000 (BAD_REQUEST) and</p> <p style="padding-left: 20px;">no Content</p> <p>}</p> | IUT → AE | | | | | | | |

| TP Id | NOTIFICATION_EVENT_TYPE |
|---------------------------------|--------------------------------------|
| TP/oneM2M/CSE/SUB/CRE/017_NET/6 | 6 (Trigger_Received_For_AE_Resource) |
| TP/oneM2M/CSE/SUB/CRE/017_NET/7 | 7 (Blocking_Update) |
| TP/oneM2M/CSE/SUB/CRE/017_NET/8 | 8 (Report_on_missing_data_points) |

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 | <pre> 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 } </pre> | | | | | | | |
| Expected behaviour | <table border="1"> <thead> <tr> <th>Test events</th> <th>Direction</th> </tr> </thead> <tbody> <tr> <td> when { the IUT receives a valid DELETE Request from AE1 containing To set to SUBSCRIPTION_RESOURCE_ADDRESS and From set to AE1_RESOURCE_ADDRESS } </td> <td>IUT ← AE1</td> </tr> <tr> <td> then { the IUT sends a valid Response containing Response Status Code set to 2002 (DELETED) and the IUT sends a NOTIFY Request contaning Content containing notification message containing subscriptionDeletion attribute set to TRUE and subscriptionReference attribute set to AE2_RESOURCE_ADDRESS } </td> <td> IUT → AE1 IUT → AE2 </td> </tr> </tbody> </table> | 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) and the IUT sends a NOTIFY Request contaning Content containing notification message containing subscriptionDeletion attribute set to TRUE and subscriptionReference attribute set to AE2_RESOURCE_ADDRESS } | IUT → AE1 IUT → AE2 | |
| 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) and the IUT sends a NOTIFY Request contaning Content containing notification message containing subscriptionDeletion attribute set to TRUE and subscriptionReference attribute set to AE2_RESOURCE_ADDRESS } | IUT → AE1 IUT → AE2 | | | | | | | |

| 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 | <p>with {</p> <p>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 containing 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</p> <p>}</p> | | | | | | | |
| Expected behaviour | <table border="1"> <thead> <tr> <th>Test events</th> <th>Direction</th> </tr> </thead> <tbody> <tr> <td>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 }</td> <td>IUT ← AE1</td> </tr> <tr> <td>then { the IUT sends a valid Response containing Response Status Code set to 2002 (DELETED) and the IUT sends a NOTIFY Request contanining Content containing notification message containing notificationEvent attribute containing a valid representation attribute }</td> <td>IUT → AE1 IUT → AE2</td> </tr> </tbody> </table> | 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) and the IUT sends a NOTIFY Request contanining Content containing notification message containing notificationEvent attribute containing a valid representation attribute } | IUT → AE1 IUT → AE2 | |
| 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) and the IUT sends a NOTIFY Request contanining Content containing notification message containing notificationEvent attribute containing a valid representation attribute } | IUT → AE1 IUT → AE2 | | | | | | | |

| 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 | <p>with {</p> <p>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 containing 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</p> <p>}</p> | | | | | | | |
| Expected behaviour | <table border="1"> <thead> <tr> <th>Test events</th> <th>Direction</th> </tr> </thead> <tbody> <tr> <td> when { the IUT receives a valid DELETE Request from AE1 containing To set to CHILD_RESOURCE_ADDRESS and From set to AE1_RESOURCE_ADDRESS } </td> <td>IUT ← AE1</td> </tr> <tr> <td> then { the IUT sends a valid Response containing Response Status Code set to 2002 (DELETED) and the IUT sends a NOTIFY Request contaning Content containing notification message containing notificationEvent attribute containing representation attribute containing CHILD_RESOURCE_TYPE resource } </td> <td> IUT → AE1 IUT → AE2 </td> </tr> </tbody> </table> | 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) and 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 | |
| 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) and 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 | <p>with {</p> <p>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 containing notificationURI attribute set to AE2_RESOURCE_ADDRESS and the AE1 having privileges to perform RETRIEVE operation on the subscribed-to resource }</p> | | | | | |
| Expected behaviour | <table border="1"> <thead> <tr> <th>Test events</th> <th>Direction</th> </tr> </thead> <tbody> <tr> <td> <p>when {</p> <p>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 }</p> <p>then {</p> <p>the IUT sends a valid Response containing Response Status Code set to 2004 (UPDATED) and 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 }</p> </td><td> IUT ← AE1 IUT → AE1 IUT → AE2 </td></tr> </tbody> </table> | Test events | Direction | <p>when {</p> <p>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 }</p> <p>then {</p> <p>the IUT sends a valid Response containing Response Status Code set to 2004 (UPDATED) and 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 }</p> | IUT ← AE1 IUT → AE1 IUT → AE2 | |
| Test events | Direction | | | | | |
| <p>when {</p> <p>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 }</p> <p>then {</p> <p>the IUT sends a valid Response containing Response Status Code set to 2004 (UPDATED) and 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 }</p> | IUT ← AE1 IUT → AE1 IUT → AE2 | | | | | |

| 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 | <p>with {</p> <p>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 containing 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 }</p> | | | | | | | |
| Expected behaviour | <table border="1"> <thead> <tr> <th>Test events</th> <th>Direction</th> </tr> </thead> <tbody> <tr> <td> 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 } </td> <td>IUT ← AE1</td> </tr> <tr> <td> then { the IUT sends a valid Response containing Response Status Code set to 2004 (UPDATED) and the IUT sends a NOTIFY Request containing Content containing notification message containing notificationEvent attribute containing representation attribute containing <subscribed-to type> resource containing ATTRIBUTE_NAME attribute set to VALUE_2 } </td> <td> IUT → AE1 IUT → AE2 </td> </tr> </tbody> </table> | 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) and the IUT sends a NOTIFY Request containing 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 | |
| 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) and the IUT sends a NOTIFY Request containing 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 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 | <p>with {</p> <p>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 containing 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 }</p> | | | | | | | |
| Expected behaviour | <table border="1"> <thead> <tr> <th>Test events</th> <th>Direction</th> </tr> </thead> <tbody> <tr> <td> 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 } </td> <td>IUT ← AE1</td> </tr> <tr> <td> 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 notification message containing notificationEvent attribute containing representation attribute containing <subscribed-to type> resource containing subscribed-to ResourceID } </td> <td> IUT → AE1 IUT → AE2 </td> </tr> </tbody> </table> | 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) and 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 | |
| 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) and 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 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 | <p>with {</p> <p>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 containing 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 }</p> | | | | | | | |
| Expected behaviour | <table border="1"> <thead> <tr> <th>Test events</th> <th>Direction</th> </tr> </thead> <tbody> <tr> <td> 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 } </td> <td>IUT ← AE1</td> </tr> <tr> <td> 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) and the IUT sends a NOTIFY Request } </td> <td> IUT → AE1 IUT → AE2 </td> </tr> </tbody> </table> | 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) and the IUT sends a NOTIFY Request } | IUT → AE1 IUT → AE2 | |
| 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) and the IUT sends a NOTIFY Request } | IUT → AE1 IUT → AE2 | | | | | | | |

| TP Id | TP/oneM2M/CSE/SUB/UPD/005 | | | | | | | |
|---|---|--------------------|------------------|---|-----------|---|------------------------|--|
| Test objective | Check that the IUT deletes the subscription resource when the 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 | <p>with {</p> <p>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 containing 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 }</p> | | | | | | | |
| Expected behaviour | <table border="1"> <thead> <tr> <th>Test events</th> <th>Direction</th> </tr> </thead> <tbody> <tr> <td> 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 } </td><td>IUT ← AE1</td></tr> <tr> <td> 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) and the IUT sends a NOTIFY Request } </td><td> IUT → AE1 IUT → AE2 </td></tr> </tbody> </table> | 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) and the IUT sends a NOTIFY Request } | IUT → AE1 IUT → AE2 | |
| 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) and the IUT sends a NOTIFY Request } | IUT → AE1 IUT → AE2 | | | | | | | |

| TP Id | TP/oneM2M/CSE/SUB/UPD/006 | | | | | | | |
|---|--|-------------|-----------|---|-----------|---|-----------|--|
| Test objective | Check that the IUT doesn't 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 | <p>with {</p> <p>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 containing 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 }</p> | | | | | | | |
| Expected behaviour | <table border="1"> <thead> <tr> <th>Test events</th> <th>Direction</th> </tr> </thead> <tbody> <tr> <td> 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 } </td> <td>IUT ← AE1</td> </tr> <tr> <td> then { the IUT sends a valid Response containing Response Status Code set to 2004 (UPDATED) and the IUT does not send a NOTIFY Request } </td> <td>IUT → AE1</td> </tr> </tbody> </table> | 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) and the IUT does not send a NOTIFY Request } | IUT → AE1 | |
| 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) and the IUT does not send a NOTIFY Request } | IUT → AE1 | | | | | | | |

| 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 | <p>with {</p> <p>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 }</p> | | | | | | | |
| Expected behaviour | <table border="1"> <thead> <tr> <th>Test events</th> <th>Direction</th> </tr> </thead> <tbody> <tr> <td> <p>when {</p> <p>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 }</p> </td><td>IUT ← AE1</td></tr> <tr> <td> <p>then {</p> <p>the IUT sends a valid Response containing Response Status Code set to 2004 (UPDATED) and the IUT sends NUMBER times a NOTIFY Request containing Content containing notification message containing a valid notificationEvent attribute }</p> </td><td> IUT → AE1 IUT → AE2 </td></tr> </tbody> </table> | Test events | Direction | <p>when {</p> <p>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 }</p> | IUT ← AE1 | <p>then {</p> <p>the IUT sends a valid Response containing Response Status Code set to 2004 (UPDATED) and the IUT sends NUMBER times a NOTIFY Request containing Content containing notification message containing a valid notificationEvent attribute }</p> | IUT → AE1 IUT → AE2 | |
| Test events | Direction | | | | | | | |
| <p>when {</p> <p>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 }</p> | IUT ← AE1 | | | | | | | |
| <p>then {</p> <p>the IUT sends a valid Response containing Response Status Code set to 2004 (UPDATED) and the IUT sends NUMBER times a NOTIFY Request containing Content containing notification message containing a valid notificationEvent attribute }</p> | IUT → AE1 IUT → AE2 | | | | | | | |

| 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 | <pre> 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 NUMBERand 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 } </pre> | | | | | | |
| Expected behaviour | <table border="1"> <thead> <tr> <th>Test events</th> <th>Direction</th> </tr> </thead> <tbody> <tr> <td> <pre> 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 } </pre> </td> <td>IUT ← AE1</td> </tr> <tr> <td> <pre> 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 } </pre> </td> <td> IUT → AE1 IUT → AE2 </td> </tr> </tbody> </table> | Test events | Direction | <pre> 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 } </pre> | IUT ← AE1 | <pre> 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 } </pre> | IUT → AE1 IUT → AE2 |
| Test events | Direction | | | | | | |
| <pre> 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 } </pre> | IUT ← AE1 | | | | | | |
| <pre> 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 } </pre> | IUT → AE1 IUT → AE2 | | | | | | |

| 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 | <p>with {</p> <p>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 containing 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</p> <p>}</p> | | | | | | | |
| Expected behaviour | <table border="1"> <thead> <tr> <th>Test events</th> <th>Direction</th> </tr> </thead> <tbody> <tr> <td> 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 } </td> <td>IUT ← AE1</td> </tr> <tr> <td> then { the IUT sends a valid Response containing Response Status Code set to 2004 (UPDATED) and the IUT sends a NOTIFY Request containing Content containing notification message containing notificationEvent attribute containing representation attribute containing <subscribed-to type> resource containing All attributes } </td> <td> IUT → AE1 IUT → AE2 </td> </tr> </tbody> </table> | 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) and the IUT sends a NOTIFY Request containing Content containing notification message containing notificationEvent attribute containing representation attribute containing <subscribed-to type> resource containing All attributes } | IUT → AE1 IUT → AE2 | |
| 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) and the IUT sends a NOTIFY Request containing 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 Code indicating 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 | <pre> 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 } </pre> | | | | | | | |
| Expected behaviour | <table border="1"> <thead> <tr> <th>Test events</th> <th>Direction</th> </tr> </thead> <tbody> <tr> <td> when { the IUT receives a valid Response containing Response Status Code set to 4101 (SUBSCRIPTION_CREATOR_HAS_NO_PRIVILEGE) } </td> <td>IUT ← AE</td> </tr> <tr> <td> 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 } </td> <td>IUT → AE</td> </tr> </tbody> </table> | 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 | |
| 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 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 | <p>with {</p> <ul style="list-style-type: none"> 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 when { <ul style="list-style-type: none"> the IUT receives a valid Response containing Response Status Code set to 5205 (SUBSCRIPTION_HOST_HAS_NO_PRIVILEGE) } then { <ul style="list-style-type: none"> 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 } | Direction IUT ← AE IUT → AE |

| 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 10.2.12.1 | | | | | | | |
| Config Id | CF01 | | | | | | | |
| Parent release | Release 1 | | | | | | | |
| PICS Selection | PICS_CSE | | | | | | | |
| Initial conditions | <p>with {</p> <p>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</p> <p>}</p> | | | | | | | |
| Expected behaviour | <table border="1"> <thead> <tr> <th>Test events</th> <th>Direction</th> </tr> </thead> <tbody> <tr> <td>when { the timer expires after the TIME_LIMIT duration value }</td><td>IUT ← AE1</td></tr> <tr> <td>then { The IUT sends a NOTIFY Request containing Content containing notification message containing a valid notificationEvent attribute }</td><td>IUT → AE2</td></tr> </tbody> </table> | Test events | Direction | when { the timer expires after the TIME_LIMIT duration value } | IUT ← AE1 | then { The IUT sends a NOTIFY Request containing Content containing notification message containing a valid notificationEvent attribute } | IUT → AE2 | |
| Test events | Direction | | | | | | | |
| when { the timer expires after the TIME_LIMIT duration value } | IUT ← AE1 | | | | | | | |
| then { The IUT sends a NOTIFY Request containing Content containing notification message containing a valid notificationEvent attribute } | IUT → AE2 | | | | | | | |

| 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 | <p>with {</p> <p>the IUT being in the "initial state"</p> <p>and the IUT having registered the AE1</p> <p>and the IUT having registered the AE2</p> <p>and the AE1 having created a <subscribed-to type> resource containing</p> <p>ATTRIBUTE_NAME set to VALUE_1 and</p> <p>subscription child resource having</p> <p>notificationURI attribute set to AE2_RESOURCE_ADDRESS and</p> <p>latestNotify attribute set to TRUE and</p> <p>batchNotify attribute containing</p> <p>duration attribute set to TIME_LIMIT</p> <p>and the AE1 having privileges to perform RETRIEVE operation on the subscribed-to resource</p> <p>and the IUT having received a valid UPDATE Request from AE1_RESOURCE_ADDRESS to</p> <p>subscribed-to resource</p> <p>and timer has not reached TIME_LIMIT</p> <p>}</p> | | | | | | | |
| Expected behaviour | <table border="1"> <thead> <tr> <th>Test events</th> <th>Direction</th> </tr> </thead> <tbody> <tr> <td> when { <p>the timer expires after the TIME_LIMIT duration value</p> } </td> <td>IUT \leftarrow AE1</td> </tr> <tr> <td> then { <p>The IUT sends a NOTIFY Request containing</p> <p>Content containing</p> <p>the latest notification message containing</p> <p>a valid notificationEvent attribute</p> } </td> <td>IUT \rightarrow AE2</td> </tr> </tbody> </table> | Test events | Direction | when { <p>the timer expires after the TIME_LIMIT duration value</p> } | IUT \leftarrow AE1 | then { <p>The IUT sends a NOTIFY Request containing</p> <p>Content containing</p> <p>the latest notification message containing</p> <p>a valid notificationEvent attribute</p> } | IUT \rightarrow AE2 | |
| Test events | Direction | | | | | | | |
| when { <p>the timer expires after the TIME_LIMIT duration value</p> } | IUT \leftarrow AE1 | | | | | | | |
| then { <p>The IUT sends a NOTIFY Request containing</p> <p>Content containing</p> <p>the latest notification message containing</p> <p>a valid notificationEvent attribute</p> } | IUT \rightarrow AE2 | | | | | | | |

| 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 | <p>with {</p> <p>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 containing 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 }</p> | | | | | | | |
| Expected behaviour | <table border="1"> <thead> <tr> <th>Test events</th> <th>Direction</th> </tr> </thead> <tbody> <tr> <td>when { the IUT escapes from the "connectionless state" }</td><td>NA</td></tr> <tr> <td>then { The IUT sends a valid NOTIFY Request containing Content containing the latest notification message }</td><td>IUT → AE2</td></tr> </tbody> </table> | Test events | Direction | when { the IUT escapes from the "connectionless state" } | NA | then { The IUT sends a valid NOTIFY Request containing Content containing the latest notification message } | IUT → AE2 | |
| Test events | Direction | | | | | | | |
| when { the IUT escapes from the "connectionless state" } | NA | | | | | | | |
| then { The IUT sends a valid NOTIFY Request containing Content containing the latest notification message } | IUT → AE2 | | | | | | | |

| 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 | <p>with {</p> <p>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 }</p> | | | | | | | |
| Expected behaviour | <table border="1"> <thead> <tr> <th>Test events</th> <th>Direction</th> </tr> </thead> <tbody> <tr> <td>when { the IUT escapes from the "connectionless state" }</td><td>NA</td></tr> <tr> <td>then { The IUT sends NUMBER times a valid NOTIFY Request containing Content containing notification message containing a valid notificationEvent attribute }</td><td>IUT → AE2</td></tr> </tbody> </table> | Test events | Direction | when { the IUT escapes from the "connectionless state" } | NA | then { The IUT sends NUMBER times a valid NOTIFY Request containing Content containing notification message containing a valid notificationEvent attribute } | IUT → AE2 | |
| Test events | Direction | | | | | | | |
| when { the IUT escapes from the "connectionless state" } | NA | | | | | | | |
| then { The IUT sends NUMBER times a valid NOTIFY Request containing Content containing notification message containing a valid notificationEvent attribute } | IUT → AE2 | | | | | | | |

| | | |
|---------------------------|---|------------------|
| 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], clause 9.6.5 and clause 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 | <pre> 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 } </pre> | |
| Expected behaviour | Test events | Direction |
| | <pre> when { the IUT receives a valid NOTIFY from CSE containing To set to AE_RESOURCE_ADDRESS From set to CSE_ID } </pre> | IUT ← CSE |
| | <pre> then { the IUT sends the valid NOTIFY to POINT_OF_ACCESS } </pre> | IUT → AE |

| | | |
|---------------------------|---|------------------|
| 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], clause 9.6.5 and clause 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 |

| | | |
|---------------------------|--|------------------------------------|
| TP Id | TP/oneM2M/CSE/SUB/NTF/009 | |
| Test objective | Check that the IUT sends an aggregatedNotification to the AE according to URI provided in <i>notificationForwardingURI</i> attribute when an event occurs on <group> resource with its members having group related subscriptions | |
| Reference | TS-0001 [1], clause 9.6.8 and clause 10.2.7.11, TS-0004 [2], clause 7.5.1.2.6 | |
| Config Id | CF02 | |
| Parent Release | Release 3 | |
| PICS Selection | PICS CSE | |
| Initial conditions | <p>with {</p> <p style="padding-left: 20px;">the IUT being in the "initial state" and</p> <p style="padding-left: 20px;">and the IUT having a <group> resource with members allowing</p> <p style="padding-left: 20px;">the AE to perform required operation and <subscription> created on these members with <i>notificationForwardingURI</i> attribute set identical to <i>notificationURI</i></p> <p>}</p> | |
| Expected behaviour | Test events when { the IUT receives a single notifications containing notificationForwardingURI, it forms an aggregatedNotification } then { the IUT sends the Notify request containing aggregatedNotification message representation to the AE } | Direction NA IUT → AE |

| TP Id | TP/oneM2M/CSE/SUB/NTF/010 | | | | | | | |
|--|--|-------------|-----------|--|-----------|--|-----------|--|
| Test objective | Check that the IUT doesn't send a Notify request to the subscriber resource when "childResourceType" condition tag of eventNotificationCriteria attribute is set to LIST_OF_RESOURCE_TYPE and this list doesn't contain the CHILD_RESOURCE_TYPE created in the request | | | | | | | |
| Reference | TS-0001 [1], clause 9.6.8, TS-0004 [2], clause 7.4.8, 7.5.1.2.2 | | | | | | | |
| Config Id | CF01 | | | | | | | |
| Parent Release | Release 3 | | | | | | | |
| PICS Selection | PICS_CSE | | | | | | | |
| Initial conditions | <pre> with { the IUT being in the "initial state" and the IUT having registered the AE1 and the IUT having registered the AE2 and the IUT having created a subscription resource on SUBSCRIBED_TO_RESOURCE_ADDRESS resource containing notificationURI attribute set to AE2_RESOURCE_ADDRESS and eventNotificationCriteria attribute containing notificationEventType element set to 3 (Create_of_Direct_Child_Resource) and childResourceType element set to LIST_OF_RESOURCE_TYPE and AE1 having create privileges SUBSCRIBED_TO_RESOURCE_ADDRESS resource } </pre> | | | | | | | |
| Expected behaviour | <table border="1"> <thead> <tr> <th>Test events</th> <th>Direction</th> </tr> </thead> <tbody> <tr> <td> when { the IUT receives a valid CREATE Request from AE1 containing To set to SUBSCRIBED_TO_RESOURCE_ADDRESS and From set to AE1_ID and Content containing CHILD_RESOURCE_TYPE resource representation } </td> <td>IUT ← AE1</td> </tr> <tr> <td> then { the IUT sends a valid Response containing Response Status Code set to 2001 (CREATED) and the IUT does not send a NOTIFY Request to AE2_RESOURCE_ADDRESS } </td> <td>IUT → AE1</td> </tr> </tbody> </table> | 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_ID and Content containing CHILD_RESOURCE_TYPE resource representation } | IUT ← AE1 | then { the IUT sends a valid Response containing Response Status Code set to 2001 (CREATED) and the IUT does not send a NOTIFY Request to AE2_RESOURCE_ADDRESS } | IUT → AE1 | |
| 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_ID and Content containing CHILD_RESOURCE_TYPE resource representation } | IUT ← AE1 | | | | | | | |
| then { the IUT sends a valid Response containing Response Status Code set to 2001 (CREATED) and the IUT does not send a NOTIFY Request to AE2_RESOURCE_ADDRESS } | IUT → AE1 | | | | | | | |

| | | |
|---------------------------|--|-------------------------------|
| TP Id | TP/oneM2M/CSE/SUB/NTF/011 | |
| Test objective | Check that the IUT sends a Notify request to the subscriber resource when "childResourceType" condition tag of eventNotificationCriteria attribute is set to LIST_OF_RESOURCE_TYPE and this list contains the CHILD_RESOURCE_TYPE created in the request | |
| Reference | TS-0001 [1], clause 9.6.8, TS-0004 [2], clause 7.4.8, 7.5.1.2.2 | |
| Config Id | CF01 | |
| Parent Release | Release 3 | |
| PICS Selection | PICS_CSE | |
| Initial conditions | <p>with {</p> <ul style="list-style-type: none"> the IUT being in the "initial state" and the IUT having registered the AE1 and the IUT having registered the AE2 and the IUT having created a subscription resource on SUBSCRIBED_TO_RESOURCE_ADDRESS resource containing notificationURI attribute set to AE2_RESOURCE_ADDRESS and eventNotificationCriteria attribute containing notificationEventType element set to 3 (Create_of_Direct_Child_Resource) and childResourceType element set to LIST_OF_RESOURCE_TYPE and AE1 having create privileges SUBSCRIBED_TO_RESOURCE_ADDRESS resource } | |
| Expected behaviour | Test events when { the IUT receives a valid CREATE Request from AE1 containing To set to SUBSCRIBED_TO_RESOURCE_ADDRESS and From set to AE1_ID and Content containing CHILD_RESOURCE_TYPE resource representation } | Direction IUT ← AE1 |
| | then { the IUT sends a valid Response containing Response Status Code set to 2001 (CREATED) and the IUT sends a NOTIFY Request to AE2_RESOURCE_ADDRESS } | IUT → AE1 IUT → AE2 |

7.2.2.5 Group Management (GMG)

7.2.2.5.1 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 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 | CF02 | | | | | | | |
| PICS Selection | PICS_CSE | | | | | | | |
| Initial conditions | <p>with {</p> <p>the IUT being in the "initial state" and IUT registered with remote CSE CSE1 and the AE having created a resource at MEMBER_RESOURCE_ADDRESS_1 at another CSE1 containing resourceType set to RESOURCE_TYPE and the IUT not having privileges to perform RETRIEVE operation on the MEMBER_RESOURCE_ADDRESS_1</p> <p>}</p> | | | | | | | |
| Expected behaviour | <table border="1"> <thead> <tr> <th style="text-align: center;">Test events</th> <th style="text-align: center;">Direction</th> </tr> </thead> <tbody> <tr> <td> 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 memberType attribute set to RESOURCE_TYPE and memberIDs attribute set to MEMBER_RESOURCE_ADDRESS_1 } </td> <td style="text-align: center;">IUT ← AE</td> </tr> <tr> <td> then { the IUT does not create the group resource and the IUT sends a valid valid Response containing Response Status Code set to 5105 (RECEIVER_HAS_NO_PRIVILEGE) } </td> <td style="text-align: center;">IUT → AE</td> </tr> </tbody> </table> | 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 memberType attribute set to RESOURCE_TYPE and memberIDs attribute set to MEMBER_RESOURCE_ADDRESS_1 } | IUT ← AE | then { the IUT does not create the group resource and the IUT sends a valid valid Response containing Response Status Code set to 5105 (RECEIVER_HAS_NO_PRIVILEGE) } | IUT → AE | |
| 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 memberType attribute set to RESOURCE_TYPE and memberIDs attribute set to MEMBER_RESOURCE_ADDRESS_1 } | IUT ← AE | | | | | | | |
| then { the IUT does not create the group resource and the IUT sends a valid valid Response containing Response Status Code set to 5105 (RECEIVER_HAS_NO_PRIVILEGE) } | IUT → AE | | | | | | | |

| 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 | <p>with {</p> <p>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</p> <p>}</p> | | | | | | | |
| Expected behaviour | <table border="1"> <thead> <tr> <th>Test events</th> <th>Direction</th> </tr> </thead> <tbody> <tr> <td> 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 } </td><td>IUT ← AE</td></tr> <tr> <td> 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 } </td><td>IUT → AE</td></tr> </tbody> </table> | 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 | |
| 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> MEMBER_RESOURCE_ADDRESS : any oneM2M resource type | | | | | | | | |

| 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 | <pre> 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 } </pre> | | | | | | | |
| Expected behaviour | <table border="1"> <thead> <tr> <th>Test events</th> <th>Direction</th> </tr> </thead> <tbody> <tr> <td> <pre> 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 } </pre> </td><td>IUT ← AE</td></tr> <tr> <td> <pre> 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 } </pre> </td><td>IUT → AE</td></tr> </tbody> </table> | Test events | Direction | <pre> 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 } </pre> | IUT ← AE | <pre> 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 } </pre> | IUT → AE | |
| Test events | Direction | | | | | | | |
| <pre> 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 } </pre> | IUT ← AE | | | | | | | |
| <pre> 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 } </pre> | IUT → AE | | | | | | | |
| <p>Note: TARGET_RESOURCE_ADDRESS : <CSEBase>, <remoteCSE> MEMBER_RESOURCE_ADDRESS : any oneM2M resource type</p> | | | | | | | | |

| 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 is SET_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 | <p>with {</p> <p>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</p> <p>}</p> | | | | | | | |
| Expected behaviour | <table border="1"> <thead> <tr> <th>Test events</th> <th>Direction</th> </tr> </thead> <tbody> <tr> <td> <p>when {</p> <p>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</p> <p>}</p> </td><td>IUT ← AE</td></tr> <tr> <td> <p>then {</p> <p>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</p> <p>}</p> </td><td>IUT → AE</td></tr> </tbody> </table> | Test events | Direction | <p>when {</p> <p>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</p> <p>}</p> | IUT ← AE | <p>then {</p> <p>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</p> <p>}</p> | IUT → AE | |
| Test events | Direction | | | | | | | |
| <p>when {</p> <p>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</p> <p>}</p> | IUT ← AE | | | | | | | |
| <p>then {</p> <p>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</p> <p>}</p> | IUT → AE | | | | | | | |
| <p>Note: TARGET_RESOURCE_ADDRESS : <CSEBase>, <remoteCSE></p> <p>MEMBER_RESOURCE_ADDRESS : any oneM2M resource type</p> | | | | | | | | |

| 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 is ABANDON 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 | <p>with {</p> <p>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</p> <p>}</p> | | | | | | | |
| Expected behaviour | <table border="1"> <thead> <tr> <th>Test events</th> <th>Direction</th> </tr> </thead> <tbody> <tr> <td> <p>when {</p> <p>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</p> <p>}</p> </td> <td>IUT ← AE</td> </tr> <tr> <td> <p>then {</p> <p>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</p> </td> <td>IUT → AE</td> </tr> </tbody> </table> | Test events | Direction | <p>when {</p> <p>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</p> <p>}</p> | IUT ← AE | <p>then {</p> <p>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</p> | IUT → AE | |
| Test events | Direction | | | | | | | |
| <p>when {</p> <p>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</p> <p>}</p> | IUT ← AE | | | | | | | |
| <p>then {</p> <p>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</p> | IUT → AE | | | | | | | |

| | |
|--|--|
| <pre> memberIDs attribute set to MEMBER_RESOURCE_ADDRESS_1 </pre> | |
| <p>Note: TARGET_RESOURCE_ADDRESS : <CSEBase>, <remoteCSE> MEMBER_RESOURCE_ADDRESS : any oneM2M resource type</p> | |

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 is ABANDON_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 | <pre> 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 } </pre> | |
| Expected behaviour | Test events | Direction |
| | <pre> 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 } </pre> | IUT ← AE |
| | <pre> then { the IUT does not create the group resource } </pre> | IUT → AE |

| | |
|--|--|
| <p>and the IUT sends a valid Response containing Response Status Code set to 4110 (GROUP_MEMBER_TYPE_INCONSISTENT)</p> | |
| <p>Note: TARGET_RESOURCE_ADDRESS : <CSEBase>, <remoteCSE> MEMBER_RESOURCE_ADDRESS : any oneM2M resource type</p> | |

TP/oneM2M/CSE/GMG/CRE/008

| TP Id | TP/oneM2M/CSE/GMG/CRE/008 | | | | | | | |
|--|--|-------------|-----------|--|----------|---|----------|--|
| Test objective | Check that the IUT creates a <group> resource with empty memberIDs attribute. | | | | | | | |
| Reference | TS-0001 [1], clause 9.6.13, 10.2.7.2, TS-0004 [2], clause 7.4.14.2.1 | | | | | | | |
| Parent Release | Release 3 | | | | | | | |
| Config Id | CF01 | | | | | | | |
| PICS Selection | PICS_CSE | | | | | | | |
| Initial conditions | <p>with { the IUT being in the "initial state" and the IUT having a resource PARENT_RESOURCE_ADDRESS allowing the AE to perform CREATE operation }</p> | | | | | | | |
| Expected behaviour | <table border="1" style="width: 100%;"> <thead> <tr> <th style="text-align: center;">Test events</th> <th style="text-align: center;">Direction</th> </tr> </thead> <tbody> <tr> <td> <p>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 empty } </p> </td><td style="text-align: center;">IUT ← AE</td></tr> <tr> <td> <p>then { the IUT sends a Response message containing Response Status Code set to 2001 (CREATED) and Content containing group resource representation }</p> </td><td style="text-align: center;">IUT → AE</td></tr> </tbody> </table> | Test events | Direction | <p>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 empty } </p> | IUT ← AE | <p>then { the IUT sends a Response message containing Response Status Code set to 2001 (CREATED) and Content containing group resource representation }</p> | IUT → AE | |
| Test events | Direction | | | | | | | |
| <p>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 empty } </p> | IUT ← AE | | | | | | | |
| <p>then { the IUT sends a Response message containing Response Status Code set to 2001 (CREATED) and Content containing group resource representation }</p> | IUT → AE | | | | | | | |

7.2.2.5.2 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 7.3.13 | | | | | | | |
| Parent Release | Release 1 | | | | | | | |
| Config Id | CF02 | | | | | | | |
| PICS Selection | PICS_CSE | | | | | | | |
| Initial conditions | <p>with {</p> <p>the IUT being in the "initial state" and IUT registered with remote CSE CSE1 and the IUT having a resource at MEMBER_RESOURCE_ADDRESS_1 containing resourceType set to RESOURCE_TYPE and the IUT having created a <group> resource at GROUP_RESOURCE_ADDRESS containing memberIDs attribute set to MEMBER_RESOURCE_ADDRESS_1 and memberType attribute set to RESOURCE_TYPE and the AE having privileges to perform UPDATE operation on the GROUP_RESOURCE_ADDRESS and the AE having created a resource at MEMBER_RESOURCE_ADDRESS_2 at another CSE1 and the IUT not having privileges to perform RETRIEVE operation on MEMBER_RESOURCE_ADDRESS_2 }</p> | | | | | | | |
| Expected behaviour | <table border="1"> <thead> <tr> <th>Test events</th> <th>Direction</th> </tr> </thead> <tbody> <tr> <td> <p>when {</p> <p>the IUT receives a valid UPDATE Request from AE containing To set to PARENT_RESOURCE_ADDRESS and From set to AE-ID and Content containing group resource containing memberIDs attribute set to MEMBER_RESOURCE_ADDRESS_2 }</p> </td><td>IUT ← AE</td></tr> <tr> <td> <p>then {</p> <p>the IUT sends a valid valid Response containing Response Status Code set to 5105 (RECEIVER_HAS_NO_PRIVILEGE) }</p> </td><td>IUT → AE</td></tr> </tbody> </table> | Test events | Direction | <p>when {</p> <p>the IUT receives a valid UPDATE Request from AE containing To set to PARENT_RESOURCE_ADDRESS and From set to AE-ID and Content containing group resource containing memberIDs attribute set to MEMBER_RESOURCE_ADDRESS_2 }</p> | IUT ← AE | <p>then {</p> <p>the IUT sends a valid valid Response containing Response Status Code set to 5105 (RECEIVER_HAS_NO_PRIVILEGE) }</p> | IUT → AE | |
| Test events | Direction | | | | | | | |
| <p>when {</p> <p>the IUT receives a valid UPDATE Request from AE containing To set to PARENT_RESOURCE_ADDRESS and From set to AE-ID and Content containing group resource containing memberIDs attribute set to MEMBER_RESOURCE_ADDRESS_2 }</p> | IUT ← AE | | | | | | | |
| <p>then {</p> <p>the IUT sends a valid valid Response containing Response Status Code set to 5105 (RECEIVER_HAS_NO_PRIVILEGE) }</p> | IUT → AE | | | | | | | |

| | | |
|---------------------------|--|------------------|
| 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 | <p>with {</p> <p>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</p> <p>}</p> | |
| Expected behaviour | Test events | Direction |
| | <p>when {</p> <p>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</p> <p>}</p> <p>then {</p> <p>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</p> <p>}</p> | IUT ← AE |
| | | IUT → AE |

| 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 | <pre> 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 } </pre> | | | | | | | |
| Expected behaviour | <table border="1"> <thead> <tr> <th>Test events</th> <th>Direction</th> </tr> </thead> <tbody> <tr> <td> <pre> 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 } </pre> </td><td>IUT ← AE</td></tr> <tr> <td> <pre> 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 } </pre> </td><td>IUT → AE</td></tr> </tbody> </table> | Test events | Direction | <pre> 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 } </pre> | IUT ← AE | <pre> 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 } </pre> | IUT → AE | |
| Test events | Direction | | | | | | | |
| <pre> 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 } </pre> | IUT ← AE | | | | | | | |
| <pre> 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 } </pre> | IUT → AE | | | | | | | |

| 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 is SET_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 | <p>with {</p> <p>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</p> <p>}</p> | | | | | | | |
| Expected behaviour | <table border="1"> <thead> <tr> <th>Test events</th> <th>Direction</th> </tr> </thead> <tbody> <tr> <td> <p>when {</p> <p>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</p> <p>}</p> </td><td>IUT ← AE</td></tr> <tr> <td> <p>then {</p> <p>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</p> <p>}</p> </td><td>IUT → AE</td></tr> </tbody> </table> | Test events | Direction | <p>when {</p> <p>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</p> <p>}</p> | IUT ← AE | <p>then {</p> <p>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</p> <p>}</p> | IUT → AE | |
| Test events | Direction | | | | | | | |
| <p>when {</p> <p>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</p> <p>}</p> | IUT ← AE | | | | | | | |
| <p>then {</p> <p>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</p> <p>}</p> | IUT → AE | | | | | | | |

| 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 is ABANDON_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 | <p>with {</p> <p>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</p> <p>}</p> | | | | | | | |
| Expected behaviour | <table border="1"> <thead> <tr> <th>Test events</th> <th>Direction</th> </tr> </thead> <tbody> <tr> <td> <p>when {</p> <p>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</p> <p>}</p> </td><td>IUT ← AE</td></tr> <tr> <td> <p>then {</p> <p>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</p> </td><td>IUT → AE</td></tr> </tbody> </table> | Test events | Direction | <p>when {</p> <p>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</p> <p>}</p> | IUT ← AE | <p>then {</p> <p>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</p> | IUT → AE | |
| Test events | Direction | | | | | | | |
| <p>when {</p> <p>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</p> <p>}</p> | IUT ← AE | | | | | | | |
| <p>then {</p> <p>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</p> | IUT → AE | | | | | | | |

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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 update of the group resource when memberType attribute is not 'mixed' and the consistencyStrategy attribute is ABANDON_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 | <p>with {</p> <p>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</p> <p>}</p> | | | | | | | |
| Expected behaviour | <table border="1"> <thead> <tr> <th>Test events</th> <th>Direction</th> </tr> </thead> <tbody> <tr> <td> <p>when {</p> <p>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</p> <p>}</p> </td><td>IUT ← AE</td></tr> <tr> <td> <p>then {</p> <p>the IUT does not update the group resource and the IUT sends a valid Response containing Response Status Code set to 4110 (GROUP_MEMBER_TYPE_INCONSISTENT)</p> <p>}</p> </td><td>IUT → AE</td></tr> </tbody> </table> | Test events | Direction | <p>when {</p> <p>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</p> <p>}</p> | IUT ← AE | <p>then {</p> <p>the IUT does not update the group resource and the IUT sends a valid Response containing Response Status Code set to 4110 (GROUP_MEMBER_TYPE_INCONSISTENT)</p> <p>}</p> | IUT → AE | |
| Test events | Direction | | | | | | | |
| <p>when {</p> <p>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</p> <p>}</p> | IUT ← AE | | | | | | | |
| <p>then {</p> <p>the IUT does not update the group resource and the IUT sends a valid Response containing Response Status Code set to 4110 (GROUP_MEMBER_TYPE_INCONSISTENT)</p> <p>}</p> | IUT → AE | | | | | | | |

| 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 | <p>with {</p> <p>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</p> } | | | | | | | |
| Expected behaviour | <table border="1"> <thead> <tr> <th>Test events</th> <th>Direction</th> </tr> </thead> <tbody> <tr> <td> <p>when {</p> <p>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</p> } </td><td>IUT ← AE</td></tr> <tr> <td> <p>then {</p> <p>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)</p> } </td><td>IUT → AE</td></tr> </tbody> </table> | Test events | Direction | <p>when {</p> <p>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</p> } | IUT ← AE | <p>then {</p> <p>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)</p> } | IUT → AE | |
| Test events | Direction | | | | | | | |
| <p>when {</p> <p>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</p> } | IUT ← AE | | | | | | | |
| <p>then {</p> <p>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)</p> } | IUT → AE | | | | | | | |

| 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 | <p>with {</p> <p>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</p> <p>}</p> | | | | | | | |
| Expected behaviour | <table border="1"> <thead> <tr> <th>Test events</th> <th>Direction</th> </tr> </thead> <tbody> <tr> <td> 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 1 } </td> <td>IUT ← AE</td> </tr> <tr> <td> 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) } </td> <td>IUT → AE</td> </tr> </tbody> </table> | 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 1 } | 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 | |
| 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 1 } | 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 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 | <p>with {</p> <p>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_1and 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</p> <p>}</p> | | | | | | | |
| Expected behaviour | <table border="1"> <thead> <tr> <th>Test events</th> <th>Direction</th> </tr> </thead> <tbody> <tr> <td> 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 } </td><td>IUT ← AE</td></tr> <tr> <td> 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 </td><td>IUT → AE</td></tr> </tbody> </table> | 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 | IUT → AE | |
| 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 | IUT → AE | | | | | | | |

| | | |
|--|---|--|
| | <p>memberTypeValidated attribute set to FALSE and memberIDs attribute set to MEMBER_RESOURCE_ADDRESS_1, MEMBER_RESOURCE_ADDRESS_2</p> | |
|--|---|--|

| 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 | <p>with {</p> <p>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</p> <p>}</p> | | | | | | | |
| Expected behaviour | <table border="1"> <thead> <tr> <th>Test events</th> <th>Direction</th> </tr> </thead> <tbody> <tr> <td> 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 } </td><td>IUT ← AE</td></tr> <tr> <td> then { the IUT sends a NOTIFY Request containing Content containing group resource containing memberTypeValidated attribute set to TRUE and memberIDs attribute set to </td><td>IUT → AE</td></tr> </tbody> </table> | 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 | IUT → AE | |
| 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 | IUT → AE | | | | | | | |

| | | |
|--|---|--|
| | } MEMBER_RESOURCE_ADDRESS_1, MEMBER_RESOURCE_ADDRESS_2 | |
|--|---|--|

7.2.2.5.3 RETRIEVE Operation

TP/oneM2M/CSE/GMG/RET/001

| | | |
|---|--|-----------------------------------|
| TP Id Test objective Reference Parent Release Config Id PICS Selection Initial conditions Expected behaviour | TP/oneM2M/CSE/GMG/RET/001 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 TS-0001 [1], clause 10.2.7.7 Release 1 CF01 PICS_CSE 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 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 resourceType attribute set to container and and the IUT having a resource at MEMBER_RESOURCE_ADDRESS2 containing resourceType attribute set to container and and MEMBER_RESOURCE_ADDRESS1 and MEMBER_RESOURCE_ADDRESS2 containing a child resource containing resourceType attribute set to contentInstance } Test events when { the IUT receives a valid RETRIEVE Request from AE containing To set to TARGET_RESOURCE_ADDRESS/fopt/la and From set to AE-ID } then { the IUT sends a valid Response containing Response Status Code set to 2000 (OK) and Content containing | Direction IUT ← AE IUT → AE |
|---|--|-----------------------------------|

| | | |
|--|---|--|
| | TaggregatedResponse message containing Response for MEMBER_RESOURCE_ADDRESS1/la, Response for MEMBER_RESOURCE_ADDRESS2/la } | |
|--|---|--|

7.2.2.5.4 BASIC OPERATION

TP/oneM2M/CSE/GMG/001

| | | |
|---------------------------|--|--|
| TP Id | TP/oneM2M/CSE/GMG/001 | |
| Test objective | Check that the IUT allows a <group>/fopt 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 when { the IUT receives a valid OPERATION Request from AE containing To set to TARGET_RESOURCE_ADDRESS/fopt and From set to AE-ID } then { the IUT sends a valid Response containing Response Status Code set to 2000(OK) and Content containing aggregatedResponse containing Response for MEMBER_RESOURCE_ADDRESS1, Response for MEMBER_RESOURCE_ADDRESS2 } | Direction IUT ← AE IUT → AE |

| TP Id | OPERATION |
|---------------------------|-----------|
| TP/oneM2M/CSE/GMG/001_CRE | CREATE |
| TP/oneM2M/CSE/GMG/001_RET | RETRIEVE |
| TP/oneM2M/CSE/GMG/001_UPD | UPDATE |
| TP/oneM2M/CSE/GMG/001_DEL | DELETE |

| TP Id | TP/oneM2M/CSE/GMG/002 | | | | | | | |
|---|---|-------------|-----------|---|----------|--|----------|--|
| Test objective | Check that IUT denies a <group>/fopt OPERATION 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 | <p>with {</p> <p>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 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</p> <p>}</p> | | | | | | | |
| Expected behaviour | <table border="1"> <thead> <tr> <th>Test events</th> <th>Direction</th> </tr> </thead> <tbody> <tr> <td> when { the IUT receives a valid OPERATION Request from AE containing To set to TARGET_RESOURCE_ADDRESS/fopt and From set to AE-ID } </td> <td>IUT ← AE</td> </tr> <tr> <td> then { the IUT sends a valid Response containing Response Status Code set to 4103 (ORIGINATOR_HAS_NO_PRIVILEGE) } </td> <td>IUT → AE</td> </tr> </tbody> </table> | 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 | |
| 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 Id | TP/oneM2M/CSE/GMG/003 | | | | | | | |
|--|---|-------------|-----------|---|----------|--|----------|--|
| Test objective | Check that the IUT allows a <group>/fopt OPERATION when the Originator has <i>OPERATION</i> permission specified in <i>accessControlPolicyIDs</i> and the <i>membersAccessControlPolicyIDs</i> is 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 | <p>with {</p> <p>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 <i>membersAccessControlPolicyIDs</i> attribute set to empty and <i>accessControlPolicyIDs</i> attribute set to ACP_RESOURCE_ID indicating to allow the AE privileges to perform <i>OPERATION</i> and the IUT having a resource at MEMBER_RESOURCE_ADDRESS1 and the IUT having a resource at MEMBER_RESOURCE_ADDRESS2</p> <p>}</p> | | | | | | | |
| Expected behaviour | <table border="1"> <thead> <tr> <th>Test events</th> <th>Direction</th> </tr> </thead> <tbody> <tr> <td> <p>when {</p> <p>the IUT receives a valid <i>OPERATION</i> Request from AE containing To set to TARGET_RESOURCE_ADDRESS/fopt and From set to AE-ID</p> <p>}</p> </td> <td>IUT ← AE</td> </tr> <tr> <td> <p>then {</p> <p>the IUT sends a valid Response containing Response Status Code set 2000(OK) and Content containing aggregatedResponse message containing Response for MEMBER_RESOURCE_ADDRESS1, Response for MEMBER_RESOURCE_ADDRESS2</p> <p>}</p> </td> <td>IUT → AE</td> </tr> </tbody> </table> | Test events | Direction | <p>when {</p> <p>the IUT receives a valid <i>OPERATION</i> Request from AE containing To set to TARGET_RESOURCE_ADDRESS/fopt and From set to AE-ID</p> <p>}</p> | IUT ← AE | <p>then {</p> <p>the IUT sends a valid Response containing Response Status Code set 2000(OK) and Content containing aggregatedResponse message containing Response for MEMBER_RESOURCE_ADDRESS1, Response for MEMBER_RESOURCE_ADDRESS2</p> <p>}</p> | IUT → AE | |
| Test events | Direction | | | | | | | |
| <p>when {</p> <p>the IUT receives a valid <i>OPERATION</i> Request from AE containing To set to TARGET_RESOURCE_ADDRESS/fopt and From set to AE-ID</p> <p>}</p> | IUT ← AE | | | | | | | |
| <p>then {</p> <p>the IUT sends a valid Response containing Response Status Code set 2000(OK) and Content containing aggregatedResponse message containing Response for MEMBER_RESOURCE_ADDRESS1, Response for MEMBER_RESOURCE_ADDRESS2</p> <p>}</p> | IUT → AE | | | | | | | |

| TP Id | OPERATION |
|---------------------------|-----------|
| TP/oneM2M/CSE/GMG/003 CRE | CREATE |
| TP/oneM2M/CSE/GMG/003 RET | RETRIEVE |
| TP/oneM2M/CSE/GMG/003 UPD | UPDATE |
| TP/oneM2M/CSE/GMG/003 DEL | DELETE |

| TP Id | TP/oneM2M/CSE/GMG/004 | | | | | | |
|---|---|-------------|-----------|---|----------|--|----------|
| Test objective | Check that IUT rejects a <group>/fopt OPERATION when the Originator does not have OPERATION permission specified in accessControlPolicyIDs and the membersAccessControlPolicyIDs is 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 | <p>with {</p> <p style="padding-left: 20px;">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</p> <p>}</p> | | | | | | |
| Expected behaviour | <table border="1" style="width: 100%; border-collapse: collapse;"> <thead> <tr> <th style="text-align: center; padding: 2px;">Test events</th> <th style="text-align: center; padding: 2px;">Direction</th> </tr> </thead> <tbody> <tr> <td style="padding: 2px;">when { the IUT receives a valid OPERATION Request from AE containing To set to TARGET_RESOURCE_ADDRESS/fopt and From set to AE-ID }</td> <td style="text-align: center; padding: 2px;">IUT ← AE</td> </tr> <tr> <td style="padding: 2px;">then { the IUT sends a valid Response containing Response Status Code set to 4103 (ORIGINATOR_HAS_NO_PRIVILEGE) }</td> <td style="text-align: center; padding: 2px;">IUT → AE</td> </tr> </tbody> </table> | 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 |
| 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 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 | <p>with {</p> <p>the IUT being in the "initial state" and the IUT having registered the AE1 and the IUT having registered the AE2 and the IUT having a <group> resource at TARGET_RESOURCE_ADDRESS containing membersAccessControlPolicyIDs attribute set to allow the AE privileges to perform OPERATION and memberType attribute set to AE 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 }</p> | | | | | | | |
| Expected behaviour | <table border="1"> <thead> <tr> <th>Test events</th> <th>Direction</th> </tr> </thead> <tbody> <tr> <td> when { the IUT receives a valid OPERATION Request from AE containing To set to TARGET_RESOURCE_ADDRESS/fopt and From set to AE-ID } </td><td>IUT ← AE</td></tr> <tr> <td> 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 and Response for MEMBER_RESOURCE_ADDRESS2 } </td><td>IUT → AE</td></tr> </tbody> </table> | 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 2000(OK) and Content containing aggregatedResponse message containing Response for MEMBER_RESOURCE_ADDRESS1 and Response for MEMBER_RESOURCE_ADDRESS2 } | IUT → AE | |
| 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 2000(OK) and Content containing aggregatedResponse message containing Response for MEMBER_RESOURCE_ADDRESS1 and Response for MEMBER_RESOURCE_ADDRESS2 } | IUT → AE | | | | | | | |

| TP Id | OPERATION |
|---------------------------|-----------|
| TP/oneM2M/CSE/GMG/005_CRE | CREATE |
| TP/oneM2M/CSE/GMG/005_RET | RETRIEVE |
| TP/oneM2M/CSE/GMG/005_UPD | UPDATE |
| TP/oneM2M/CSE/GMG/005_DEL | DELETE |

| TP Id | TP/oneM2M/CSE/GMG/006 | | | | | | |
|--|--|-------------|-----------|---|----------|--|----------|
| Test objective | Check that IUT performs an <i>OPERATION</i> 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 | <p>with {</p> <p style="margin-left: 20px;">the IUT being in the "initial state" and the IUT having registered the AE1 and the IUT having registered the AE2 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 attribute set to AE and the IUT having a resource at MEMBER_RESOURCE_ADDRESS2 containing resourceType attribute set to AE and the IUT having a resource at MEMBER_RESOURCE_ADDRESS1 containing a child resource containing resourceType attribute set to container and resourceName attribute set to NAME and the IUT having a resource at MEMBER_RESOURCE_ADDRESS2 containing a child resource containing resourceType attribute set to container and resourceName attribute set to NAME</p> <p>}</p> | | | | | | |
| Expected behaviour | <table border="1" style="width: 100%; border-collapse: collapse;"> <thead> <tr> <th style="text-align: center; padding: 2px;">Test events</th> <th style="text-align: center; padding: 2px;">Direction</th> </tr> </thead> <tbody> <tr> <td style="padding: 2px;">when { the IUT receives a valid <i>OPERATION</i> Request from AE containing To set to TARGET_RESOURCE_ADDRESS/fopt/NAME and From set to AE-ID }</td> <td style="text-align: center; padding: 2px;">IUT ← AE</td> </tr> <tr> <td style="padding: 2px;">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 and Response for MEMBER_RESOURCE_ADDRESS2 }</td> <td style="text-align: center; padding: 2px;">IUT → AE</td> </tr> </tbody> </table> | Test events | Direction | when { the IUT receives a valid <i>OPERATION</i> Request from AE containing To set to TARGET_RESOURCE_ADDRESS/fopt/NAME 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 and Response for MEMBER_RESOURCE_ADDRESS2 } | IUT → AE |
| Test events | Direction | | | | | | |
| when { the IUT receives a valid <i>OPERATION</i> Request from AE containing To set to TARGET_RESOURCE_ADDRESS/fopt/NAME 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 and Response for MEMBER_RESOURCE_ADDRESS2 } | IUT → AE | | | | | | |

| TP Id | OPERATION |
|---------------------------|-----------|
| TP/oneM2M/CSE/GMG/006_CRE | CREATE |
| TP/oneM2M/CSE/GMG/006_RET | RETRIEVE |
| TP/oneM2M/CSE/GMG/006_UPD | UPDATE |
| TP/oneM2M/CSE/GMG/006_DEL | DELETE |

| | | |
|---------------------------|--|--|
| TP Id | TP/oneM2M/CSE/GMG/007 | |
| Test objective | Check that the IUT denies a <group>/fanOutPoint RETRIEVE when there is no memberID in <group> resource | |
| Reference | TS-0004 [2], clause 7.4.14.2.4 | |
| Parent Release | Release 1 | |
| Config Id | CF01 | |
| PICS Selection | PICS_CSE | |
| Initial conditions | <p>with {</p> <p style="padding-left: 20px;">the IUT being in the "initial state"</p> <p style="padding-left: 20px;">and the IUT having registered the AE</p> <p style="padding-left: 20px;">and the IUT having a group resource at TARGET_RESOURCE_ADDRESS containing membersAccessControlPolicyIDs attribute set to ACP_RESOURCE_ID indicating to allow the AE to perform all operations and</p> <p style="padding-left: 20px;">no memberID attribute</p> <p>}</p> | |
| Expected behaviour | Test events | Direction |
| | <p>when {</p> <p style="padding-left: 20px;">the IUT receives a valid RETRIEVE Request from AE containing</p> <p style="padding-left: 40px;">To set to TARGET_RESOURCE_ADDRESS/fopt and</p> <p style="padding-left: 40px;">From set to AE-ID</p> <p>}</p> <p>then {</p> <p style="padding-left: 20px;">the IUT sends a valid Response containing</p> <p style="padding-left: 40px;">Response Status Code set to 4109 (NO_MEMBER)</p> <p>}</p> | <p>IUT \leftarrow AE</p> <p>IUT \rightarrow AE</p> |

7.2.2.6 Discovery (DIS)

7.2.2.6.1 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 | <pre> 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 } </pre> | | | | | | | |
| Expected behaviour | <table border="1"> <thead> <tr> <th>Test events</th> <th>Expected behaviour</th> </tr> </thead> <tbody> <tr> <td> 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) } </td><td></td></tr> <tr> <td> then { the IUT sends a valid Response containing Response Status Code set to 2000 (OK) and Content containing URIList representation } </td><td></td></tr> </tbody> </table> | 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 } | | |
| 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 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], clause 8.1.3 and 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 | <pre> 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 on the child resource } </pre> | | | | | | | |
| Expected behaviour | <table border="1"> <thead> <tr> <th>Test events</th> <th>Direction</th> </tr> </thead> <tbody> <tr> <td> 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) } </td> <td>IUT ← AE</td> </tr> <tr> <td> then { the IUT sends a valid Response containing Response Status Code set to 2000 (OK) and Content containing URIList representation } </td> <td>IUT → AE</td> </tr> </tbody> </table> | 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 | |
| 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 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], clause 8.1.3 and 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 | <p>with {</p> <p>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 on the child resource and FILTER_CRITERIA_CONDITIONS not matching child resource</p> } | | | | | | | |
| Expected behaviour | <table border="1"> <thead> <tr> <th>Test events</th> <th>Expected behaviour</th> </tr> </thead> <tbody> <tr> <td> <p>when {</p> <p>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)</p> } </td><td></td></tr> <tr> <td> <p>then {</p> <p>the IUT sends a valid Response containing Response Status Code set to 2000 (OK) and Content containing URIList element set to empty list</p> } </td><td></td></tr> </tbody> </table> | Test events | Expected behaviour | <p>when {</p> <p>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)</p> } | | <p>then {</p> <p>the IUT sends a valid Response containing Response Status Code set to 2000 (OK) and Content containing URIList element set to empty list</p> } | | |
| Test events | Expected behaviour | | | | | | | |
| <p>when {</p> <p>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)</p> } | | | | | | | | |
| <p>then {</p> <p>the IUT sends a valid Response containing Response Status Code set to 2000 (OK) and Content containing URIList element set to empty list</p> } | | | | | | | | |

| | | |
|---------------------------|--|---------------------------|
| 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 Desired Identifier Result Type is provided in the request | |
| Reference | TS-0001 [1], clause 8.1.3 and clause 10.2.6, TS-0004 [2], clause 7.2.3.13 | |
| Config Id | CF01 | |
| PICS Selection | PICS_CSE | |
| Initial conditions | <p>with {</p> <p style="padding-left: 20px;">the IUT being in the "initial state"</p> <p style="padding-left: 20px;">and the IUT having registered the AE</p> <p style="padding-left: 20px;">and the IUT having a container resource TARGET_RESOURCE_ADDRESS containing</p> <p style="padding-left: 40px;">a child resource and</p> <p style="padding-left: 20px;">the AE having privileges to perform DISCOVERY operation</p> <p>}</p> | |
| Expected behaviour | Test events <p>when {</p> <p style="padding-left: 20px;">the IUT receives a valid RETRIEVE Request from AE containing</p> <p style="padding-left: 40px;">To set to TARGET_RESOURCE_ADDRESS and</p> <p style="padding-left: 40px;">From set to AE-ID and</p> <p style="padding-left: 40px;">Desired Identifier Result Type set to 2 (unstructured) and</p> <p style="padding-left: 40px;">Filter Criteria containing</p> <p style="padding-left: 60px;">filterUsage set to 1 (Discovery Criteria)</p> <p>}</p> <p>then {</p> <p style="padding-left: 20px;">the IUT sends a valid Response containing</p> <p style="padding-left: 40px;">Response Status Code set to 2000 (OK) and</p> <p style="padding-left: 40px;">Content containing</p> <p style="padding-left: 60px;">URIList representation containing</p> <p style="padding-left: 80px;">unstructured addresses of discovered resources</p> <p>}</p> | Expected behaviour |

| TP Id | TP/oneM2M/CSE/DIS/005 | | | | | | | |
|---|--|-------------|-----------|---|----------|---|----------|--|
| Test objective | Check that the IUT accepts a discovery requests to the resource TARGET_RESOURCE_ADDRESS when AE has no privilege to perform the discovery operation on the children/ancestor of resource TARGET_RESOURCE_ADDRESS | | | | | | | |
| Reference | TS-0001 [1], clause 10.2.6.2 and clause 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 | <p>with {</p> <p style="padding-left: 20px;">the IUT being in the "initial state"</p> <p style="padding-left: 20px;">and the IUT having registered the AE containing child resources</p> <p style="padding-left: 20px;">and the AE having no privileges to perform DISCOVERY operation on the children/ancestor of resource TARGET_RESOURCE_ADDRESS</p> <p>}</p> | | | | | | | |
| Expected behaviour | <table border="1"> <thead> <tr> <th>Test events</th> <th>Direction</th> </tr> </thead> <tbody> <tr> <td> 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) </td> <td>IUT ← AE</td> </tr> <tr> <td> then { the IUT sends a valid Response containing Response Status Code set to 2000 (OK) and Content containing URIList element set to empty list </td> <td>IUT → AE</td> </tr> </tbody> </table> | 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 2000 (OK) and Content containing URIList element set to empty list | IUT → AE | |
| 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 2000 (OK) and Content containing URIList element set to empty list | IUT → AE | | | | | | | |

| 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 | <pre> 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 } </pre> | | | | | | | |
| Expected behaviour | <table border="1"> <thead> <tr> <th>Test events</th> <th>Expected behaviour</th> </tr> </thead> <tbody> <tr> <td> <pre> 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) } </pre> </td><td></td></tr> <tr> <td> <pre> then { the IUT sends a valid Response containing Response Status Code set to 4004 (NOT_FOUND) } </pre> </td><td></td></tr> </tbody> </table> | Test events | Expected behaviour | <pre> 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) } </pre> | | <pre> then { the IUT sends a valid Response containing Response Status Code set to 4004 (NOT_FOUND) } </pre> | | |
| Test events | Expected behaviour | | | | | | | |
| <pre> 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) } </pre> | | | | | | | | |
| <pre> then { the IUT sends a valid Response containing Response Status Code set to 4004 (NOT_FOUND) } </pre> | | | | | | | | |

| | | |
|---------------------------|--|---------------------------|
| 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 | <p>with {</p> <p>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</p> <p>}</p> | |
| Expected behaviour | Test events | Expected behaviour |
| | <p>when {</p> <p>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</p> <p>}</p> <p>then {</p> <p>the IUT sends a valid Response containing Response Status Code set to 4000 (BAD_REQUEST)</p> <p>}</p> | IUT ← AE |
| | | IUT → AE |

| TP Id | TP/oneM2M/CSE/DIS/008 | | | | | | | |
|--|--|-------------|-----------|--|----------|--|----------|--|
| Test objective | Check that the IUT responds the originator with a success response 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. <i>createBefore < createdAfter</i>) | | | | | | | |
| 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 | <p>with {</p> <p style="padding-left: 20px;">the IUT being in the "initial state"</p> <p style="padding-left: 20px;">and the IUT having registered the originator AE</p> <p style="padding-left: 20px;">and the IUT having a container resource TARGET_RESOURCE_ADDRESS containing</p> <p style="padding-left: 40px;">a child resource and</p> <p style="padding-left: 40px;">the AE having privileges to perform DISCOVERY operation on the child resource</p> } | | | | | | | |
| Expected behaviour | <table border="1"> <thead> <tr> <th>Test events</th> <th>Direction</th> </tr> </thead> <tbody> <tr> <td> 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 } </td><td>IUT ← AE</td></tr> <tr> <td> then { the IUT sends a valid Response containing Response Status Code set to 2000 (OK) and Content containing URIList element set to empty list } </td><td>IUT → AE</td></tr> </tbody> </table> | 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 2000 (OK) and Content containing URIList element set to empty list } | IUT → AE | |
| 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 2000 (OK) and Content containing URIList element set to empty list } | 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 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], clause 9.6.2.3 and 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 | <p>with {</p> <p>the IUT being in the "initial state" and the IUT having registered the AE and the IUT having a resource TARGET_RESOURCE_ADDRESS containing a child resource and the AE not having privileges to perform DISCOVERY operation on the child resource and FILTER_CRITERIA_CONDITIONS matching the child resource</p> } | | | | | | | |
| Expected behaviour | <table border="1"> <thead> <tr> <th>Test events</th> <th>Direction</th> </tr> </thead> <tbody> <tr> <td> <p>when {</p> <p>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)</p> }</td><td>IUT ← AE</td></tr> <tr> <td> <p>then {</p> <p>the IUT sends a valid Response containing Response Status Code set to 2000 (OK) and Content containing URIList element set to empty list</p> }</td><td>IUT → AE</td></tr> </tbody> </table> | Test events | Direction | <p>when {</p> <p>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)</p> } | IUT ← AE | <p>then {</p> <p>the IUT sends a valid Response containing Response Status Code set to 2000 (OK) and Content containing URIList element set to empty list</p> } | IUT → AE | |
| Test events | Direction | | | | | | | |
| <p>when {</p> <p>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)</p> } | IUT ← AE | | | | | | | |
| <p>then {</p> <p>the IUT sends a valid Response containing Response Status Code set to 2000 (OK) and Content containing URIList element set to empty list</p> } | IUT → AE | | | | | | | |

| | | |
|---------------------------|--|---|
| TP Id | TP/oneM2M/CSE/DIS/010 | |
| Test objective | Check that the IUT returns successfully a list of discovered resource addresses with hierarchical addressing form when the Desired Identifier Result Type is provided in the request | |
| Reference | TS-0001 [대상을 찾을 수 없습니다], clause 8.1.3 and clause 10.2.6, TS-0004 [대상을 찾을 수 없습니다], clause 7.2.3.13 | |
| Config Id | CF01 | |
| PICS Selection | PICS_CSE | |
| Initial conditions | <pre> 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 } </pre> | |
| Expected behaviour | Test events <pre> when { the IUT receives a valid RETRIEVE Request from AE containing To set to TARGET_RESOURCE_ADDRESS and From set to AE-ID and Desired Identifier Result Type set to 1 (structured) and Filter Criteria containing filterUsage set to 1 (Discovery Criteria) } </pre> then { <pre> the IUT sends a valid Response containing Response Status Code set to 2000 (OK) and Content containing URIList representation containing structured addresses of discovered resources } </pre> | Expected behaviour <p>IUT ← AE</p> <p>IUT → AE</p> |

| | | |
|---------------------------|---|--|
| TP Id | TP/oneM2M/CSE/DIS/011 | |
| Test objective | Check that the IUT returns successfully a list of discovered resource addresses with hierarchical addressing form when the Desired Identifier Result Type is not provided in the request | |
| Reference | TS-0001 [대상을 찾을 수 없습니다], clause 8.1.3 and clause 10.2.6, TS-0004 [대상을 찾을 수 없습니다], clause 7.2.3.13 | |
| Config Id | CF01 | |
| PICS Selection | PICS_CSE | |
| Initial conditions | <pre> 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 } </pre> | |
| Expected behaviour | Test events <pre> 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 Desired Identifier Result Type parameter and Filter Criteria containing filterUsage set to 1 (Discovery Criteria) } </pre> | Expected behaviour <pre>IUT ← AE</pre> |
| | <pre> then { the IUT sends a valid Response containing Response Status Code set to 2000 (OK) and Content containing URIList representation containing structured addresses of discovered resources } </pre> | <pre>IUT → AE</pre> |

7.2.2.7 Location (LOC)

7.2.2.7.1 CREATE Operation

TP/oneM2M/CSE/LOC/CRE/001

| TP Id | TP/oneM2M/CSE/LOC/CRE/001 | | | | | | | |
|--|--|--------------------|------------------|--|----------|--|----------|--|
| Test objective | Check that the IUT rejects the creation of the locationPolicy resource when <i>locationSource</i> attribute is set by Network Based and Location Server is not reachable | | | | | | | |
| Reference | TS-0001 [1], clause 8.5 and clause 10.2.9, TS-0004 [2], clause 7.4.10 | | | | | | | |
| Config Id | CF01 | | | | | | | |
| Parent Release | Release 3 | | | | | | | |
| PICS Selection | PICS CSE | | | | | | | |
| Initial conditions | <p>with {</p> <p>the IUT being in the "initial state" and the IUT having registered the AE and the IUT having no connection to Location Server and the IUT having a CSEBase resource allowing the AE to perform CREATE operation and</p> <p>}</p> | | | | | | | |
| Expected behaviour | <table border="1"> <thead> <tr> <th>Test events</th> <th>Direction</th> </tr> </thead> <tbody> <tr> <td> when { the IUT receives a valid CREATE Request from AE containing To set to CSEBASE_RESOURCE_ADDRESS and From set to AE-ID and Content containing locationPolicy resource representation } </td><td>IUT ← AE</td></tr> <tr> <td> then { the IUT does not create the locationPolicy resource and the IUT sends a valid Response containing Response Status Code set to 4000 (BAD_REQUEST) } </td><td>IUT → AE</td></tr> </tbody> </table> | 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 Content containing locationPolicy resource representation } | IUT ← AE | then { the IUT does not create the locationPolicy resource and the IUT sends a valid Response containing Response Status Code set to 4000 (BAD_REQUEST) } | IUT → AE | |
| 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 Content containing locationPolicy resource representation } | IUT ← AE | | | | | | | |
| then { the IUT does not create the locationPolicy resource and the IUT sends a valid Response containing Response Status Code set to 4000 (BAD_REQUEST) } | IUT → AE | | | | | | | |

| | | |
|---------------------------|---|------------------|
| TP Id | TP/oneM2M/CSE/LOC/CRE/002 | |
| Test objective | Check that the IUT accepts the creation of locationPolicy resource with <i>locationSource</i> attribute and <i>locationUpdatePeriod</i> attribute provided | |
| Reference | TS-0001 [1], clause 10.2.9.2, TS-0004 [2], clause 7.4.11.2 | |
| Config Id | CF01 | |
| Parent Release | Release 3 | |
| PICS Selection | PICS_CSE | |
| Initial conditions | <pre>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 }</pre> | |
| Expected behaviour | Test events | Direction |
| | <pre>when { the IUT receives a valid CREATE Request from AE containing To set to TARGET_RESOURCE_ADDRESS and Resource Type set to 10 (locationPolicy) and From set to AE_ID and Content containing locationSource attribute set to 1 (Network_based) and valid locationUpdatePeriod attribute and valid locationTargetID attribute and valid locationServer attribute }</pre> | IUT ← AE |
| | <pre>then { the IUT creates the locationPolicy resource and the IUT sends a valid Response containing Response Status Code set to 2001 (CREATED) }</pre> | IUT → AE |

| | | |
|---------------------------|--|---|
| TP Id | TP/oneM2M/CSE/LOC/CRE/003 | |
| Test objective | Check that the IUT rejects the creation of locationPolicy resource when AE has no privilege to perform the creation request for the locationPolicy resource | |
| Reference | TS-0001 [1], clause 10.2.9.2, TS-0004 [2], clause 7.4.10.2 | |
| Config Id | CF01 | |
| Parent Release | Release 3 | |
| PICS Selection | PICS_CSE | |
| Initial conditions | <p>with {</p> <p>the IUT being in the "initial state" and the IUT having registered the originator AE and the AE having no privileges to perform CREATE operation on the resource TARGET_RESOURCE_ADDRESS</p> <p>}</p> | |
| Expected behaviour | <p>Test events</p> <p>when {</p> <p>the IUT receives a valid CREATE Request from AE containing To set to TARGET_RESOURCE_ADDRESS and Resource Type set to 10 (locationPolicy) and From set to AE_ID and Content containing locationSource attribute set to 1 (Network_based) and valid locationUpdatePeriod attribute and valid locationTargetID attribute and valid locationServer attribute</p> <p>}</p> <p>then {</p> <p>the IUT does not create the locationPolicy resource and the IUT sends a valid Response containing Response Status Code set to 4103 (ORIGINATOR_HAS_NO_PRIVILEGE)</p> <p>}</p> | <p>Direction</p> <p>IUT ← AE</p> <p>IUT → AE</p> |

| | | |
|---------------------------|--|------------------|
| TP Id | TP/oneM2M/CSE/LOC/CRE/004 | |
| Test objective | Check that the IUT responds with an error when receiving a creation request of locationPolicy resource target to the TARGET_RESOURCE_ADDRESS which does not exist in the Hosting CSE | |
| Reference | TS-0001 [1], clause 10.2.9.2, TS-0004 [2], clause 7.4.10.2 | |
| Config Id | CF01 | |
| Parent Release | Release 3 | |
| PICS Selection | PICS_CSE | |
| Initial conditions | <p>with { the IUT being in the "initial state" and the IUT having registered the originator AE and the IUT having not yet created a resource TARGET_RESOURCE_ADDRESS }</p> | |
| Expected behaviour | Test events | Direction |
| | <p>when { the IUT receives a valid CREATE Request from AE containing To set to TARGET_RESOURCE_ADDRESS and Resource Type set to 10 (locationPolicy) and From set to AE_ID and Content containing locationSource attribute set to 1 (Network_based) and valid locationUpdatePeriod attribute and valid locationTargetID attribute and valid locationServer attribute }</p> <p>then { the IUT does not create the locationPolicy resource and the IUT sends a valid Response containing Response Status Code set to 4004 (NOT_FOUND) }</p> | IUT ← AE |
| | | IUT → AE |

| TP Id | TP/oneM2M/CSE/LOC/CRE/005 | | | | | | | |
|---|--|-------------|-----------|---|----------|---|----------|--|
| Test objective | Check that the IUT creates a container resource with CONTAINER_NAME included in the associated locationPolicy create request | | | | | | | |
| Reference | TS-0001 [1], clause 8.5.2 and clause 10.2.10.2.1, TS-0004 [2], clause 7.3.3.3 and clause 7.4.11.1 | | | | | | | |
| Config Id | CF01 | | | | | | | |
| Parent Release | Release 3 | | | | | | | |
| PICS Selection | PICS_CSE | | | | | | | |
| Initial conditions | <pre> with { the IUT being in the "initial state" and the IUT having registered the AE and the IUT having no created container having resourceName set to CONTAINER_NAME and the AE having privileges to perform CREATE operation on the resource TARGET_RESOURCE_ADDRESS } </pre> | | | | | | | |
| Expected behaviour | <table border="1"> <thead> <tr> <th>Test events</th> <th>Direction</th> </tr> </thead> <tbody> <tr> <td> when { the IUT receives a valid CREATE Request from AE containing To set to TARGET_RESOURCE_ADDRESS and ResourceType set to 10 (locationPolicy) and From set to AE_ID and Content containing locationContainerName attribute set to CONTAINER_NAME } </td> <td>IUT ← AE</td> </tr> <tr> <td> then { the IUT creates the container resource with Content containing container resource representation containing resourceName attribute set to CONTAINER_NAME and locationID attribute set to resourceId of the associated locationPolicy resource and the IUT creates the locationPolicy resource with Content containing locationPolicy resource representation containing locationContainerName attribute set to CONTAINER_NAME and locationContainerId attribute set to resourceId of the created container resource and the IUT sends a valid Response containing Response Status Code set to 2001 (CREATED) } </td> <td>IUT → AE</td> </tr> </tbody> </table> | Test events | Direction | when { the IUT receives a valid CREATE Request from AE containing To set to TARGET_RESOURCE_ADDRESS and ResourceType set to 10 (locationPolicy) and From set to AE_ID and Content containing locationContainerName attribute set to CONTAINER_NAME } | IUT ← AE | then { the IUT creates the container resource with Content containing container resource representation containing resourceName attribute set to CONTAINER_NAME and locationID attribute set to resourceId of the associated locationPolicy resource and the IUT creates the locationPolicy resource with Content containing locationPolicy resource representation containing locationContainerName attribute set to CONTAINER_NAME and locationContainerId attribute set to resourceId of the created container resource and the IUT sends a valid Response containing Response Status Code set to 2001 (CREATED) } | IUT → AE | |
| Test events | Direction | | | | | | | |
| when { the IUT receives a valid CREATE Request from AE containing To set to TARGET_RESOURCE_ADDRESS and ResourceType set to 10 (locationPolicy) and From set to AE_ID and Content containing locationContainerName attribute set to CONTAINER_NAME } | IUT ← AE | | | | | | | |
| then { the IUT creates the container resource with Content containing container resource representation containing resourceName attribute set to CONTAINER_NAME and locationID attribute set to resourceId of the associated locationPolicy resource and the IUT creates the locationPolicy resource with Content containing locationPolicy resource representation containing locationContainerName attribute set to CONTAINER_NAME and locationContainerId attribute set to resourceId of the created container resource and the IUT sends a valid Response containing Response Status Code set to 2001 (CREATED) } | IUT → AE | | | | | | | |
| <p>Note that the IUT sets the <i>locationContainerID</i> attribute in locationPolicy resource to the resourceId of the created <container> resource</p> | | | | | | | | |

| TP Id | TP/oneM2M/CSE/LOC/CRE/006 | | | | | | | |
|---|--|-------------|-----------|---|----------|---|----------|--|
| Test objective | Check that the IUT creates a subscription resource with SUBSCRIPTION_NAME provided by the originator as a child resource of the container linked with a locationPolicy resource | | | | | | | |
| Reference | TS-0001 [1], clause 8.5.2 and clause 10.2.9.2, TS-0004 [2], clause 7.3.3.3 and clause 7.4.10.2 | | | | | | | |
| Config Id | CF01 | | | | | | | |
| Parent Release | Release 3 | | | | | | | |
| PICS Selection | PICS_CSE | | | | | | | |
| Initial conditions | <p>with {</p> <p>the IUT being in the "initial state"</p> <p>and the IUT having registered the AE containing <i>resourceID set to NOTI_URI_ADDRESS</i></p> <p>and the IUT having created a resource LOCATIONPOLICY_ADDRESS of type <i><locationPolicy> containing</i></p> <p><i>locationUpdatePeriod set to POSITIVE_UPDATE_PERIOD and</i></p> <p><i>locationSource set to 1 (Network_based) and</i></p> <p><i>locationTargetID set to LOCATION_TARGET_ID and</i></p> <p><i>locationServer set to LOCATION_SERVER_ADDRESS and</i></p> <p><i>locationContainerID set to CONTAINER_ADDRESS and</i></p> <p>and the IUT having created a resource CONTAINER_ADDRESS of type <container> containing</p> <p><i>locationID set to LOCATIONPOLICY_ADDRESS</i></p> <p>and the AE having privileges to perform CREATE operation on the resource TARGET_RESOURCE_ADDRESS</p> <p>}</p> | | | | | | | |
| Expected behaviour | <table border="1"> <thead> <tr> <th>Test events</th> <th>Direction</th> </tr> </thead> <tbody> <tr> <td> <p>when {</p> <p>the IUT receives a valid CREATE Request from AE containing</p> <p>To set to TARGET_RESOURCE_ADDRESS and</p> <p>ResourceType set to 23 (subscription) and</p> <p>From set to AE_ID and</p> <p>Content containing</p> <p>notificationURI attribute set to NOTI_URI_ADDRESS and</p> <p>eventNotificationCriteria attribute containing</p> <p>notificationEventType element set to 3 (Create_of_Direct_Child_Resource)</p> <p>and notificationContentType attribute set to 1 (All Attributes)</p> <p>}</p> </td> <td>IUT ← AE</td> </tr> <tr> <td> <p>then {</p> <p>the IUT creates the subscription resource</p> <p>and the IUT sends a valid Response containing</p> <p>Response Status Code set to 2001 (CREATED) and</p> </td> <td>IUT → AE</td> </tr> </tbody> </table> | Test events | Direction | <p>when {</p> <p>the IUT receives a valid CREATE Request from AE containing</p> <p>To set to TARGET_RESOURCE_ADDRESS and</p> <p>ResourceType set to 23 (subscription) and</p> <p>From set to AE_ID and</p> <p>Content containing</p> <p>notificationURI attribute set to NOTI_URI_ADDRESS and</p> <p>eventNotificationCriteria attribute containing</p> <p>notificationEventType element set to 3 (Create_of_Direct_Child_Resource)</p> <p>and notificationContentType attribute set to 1 (All Attributes)</p> <p>}</p> | IUT ← AE | <p>then {</p> <p>the IUT creates the subscription resource</p> <p>and the IUT sends a valid Response containing</p> <p>Response Status Code set to 2001 (CREATED) and</p> | IUT → AE | |
| Test events | Direction | | | | | | | |
| <p>when {</p> <p>the IUT receives a valid CREATE Request from AE containing</p> <p>To set to TARGET_RESOURCE_ADDRESS and</p> <p>ResourceType set to 23 (subscription) and</p> <p>From set to AE_ID and</p> <p>Content containing</p> <p>notificationURI attribute set to NOTI_URI_ADDRESS and</p> <p>eventNotificationCriteria attribute containing</p> <p>notificationEventType element set to 3 (Create_of_Direct_Child_Resource)</p> <p>and notificationContentType attribute set to 1 (All Attributes)</p> <p>}</p> | IUT ← AE | | | | | | | |
| <p>then {</p> <p>the IUT creates the subscription resource</p> <p>and the IUT sends a valid Response containing</p> <p>Response Status Code set to 2001 (CREATED) and</p> | IUT → AE | | | | | | | |

| | | |
|--|---|--|
| | Content containing subscription resource representation | |
| Note that the IUT sets the <i>locationContainerID</i> attribute in <locationPolicy> resource to the resourceId of the created <container> resource | | |

| TP Id | TP/oneM2M/CSE/LOC/CRE/007 | | | | | | | |
|---|--|-------------|-----------|---|--------------|---|--------------|--|
| Test objective | Check that IUT accepts the creation of a locationPolicy resource with attribute locationSource set to Device-based and locationUpdatePeriod set to POSITIVE_UPDATE_PERIOD | | | | | | | |
| Reference | TS-0001 [1], clause 8.5.2 and clause 10.2.9.2, TS-0004 [2], clause 7.3.3.3 and clause 7.4.10.2 | | | | | | | |
| Config Id | CF01 | | | | | | | |
| Parent Release | Release 3 | | | | | | | |
| PICS Selection | PICS_CSE | | | | | | | |
| Initial conditions | <p>with {</p> <p>the IUT being in the "initial state" and the IUT having location positioning modules and the originator being a PX ASN AE and the IUT being a PX ASN CSE and the IUT having registered the PX ASN AE and the ASN AE having privileges to perform CREATE operation on the resource TARGET_RESOURCE_ADDRESS</p> <p>}</p> | | | | | | | |
| Expected behaviour | <table border="1"> <thead> <tr> <th>Test events</th> <th>Direction</th> </tr> </thead> <tbody> <tr> <td> <p>when {</p> <p>the IUT receives a valid CREATE Request from AE containing To set to TARGET_RESOURCE_ADDRESS and Resource Type set to 10 (locationPolicy) and From set to AE_ID and Content containing locationSource attribute set to 2 (Device_based) and locationUpdatePeriod attribute set to POSITIVE_UPDATE_PERIOD</p> <p>}</p> </td> <td>IUT ← ASN-AE</td> </tr> <tr> <td> <p>then {</p> <p>the IUT creates the locationPolicy resource and the IUT sends a valid Response containing Response Status Code set to 2001 (CREATED) and Content containing locationPolicy resource representation</p> <p>}</p> </td> <td>IUT → ASN-AE</td> </tr> </tbody> </table> | Test events | Direction | <p>when {</p> <p>the IUT receives a valid CREATE Request from AE containing To set to TARGET_RESOURCE_ADDRESS and Resource Type set to 10 (locationPolicy) and From set to AE_ID and Content containing locationSource attribute set to 2 (Device_based) and locationUpdatePeriod attribute set to POSITIVE_UPDATE_PERIOD</p> <p>}</p> | IUT ← ASN-AE | <p>then {</p> <p>the IUT creates the locationPolicy resource and the IUT sends a valid Response containing Response Status Code set to 2001 (CREATED) and Content containing locationPolicy resource representation</p> <p>}</p> | IUT → ASN-AE | |
| Test events | Direction | | | | | | | |
| <p>when {</p> <p>the IUT receives a valid CREATE Request from AE containing To set to TARGET_RESOURCE_ADDRESS and Resource Type set to 10 (locationPolicy) and From set to AE_ID and Content containing locationSource attribute set to 2 (Device_based) and locationUpdatePeriod attribute set to POSITIVE_UPDATE_PERIOD</p> <p>}</p> | IUT ← ASN-AE | | | | | | | |
| <p>then {</p> <p>the IUT creates the locationPolicy resource and the IUT sends a valid Response containing Response Status Code set to 2001 (CREATED) and Content containing locationPolicy resource representation</p> <p>}</p> | IUT → ASN-AE | | | | | | | |

| TP Id | TP/oneM2M/CSE/LOC/CRE/008 | | | | | | | |
|--|---|-------------|-----------|--|-------------------------|--|--------------------------|--|
| Test objective | Check that the IUT accepts the creation of a locationPolicy resource with attribute locationSource set to Sharing-based | | | | | | | |
| Reference | TS-0001 [1], clause 8.5.2 and clause 10.2.9.2, TS-0004 [2], clause 7.3.3.3 and clause 7.4.10.2 | | | | | | | |
| Config Id | CF01 | | | | | | | |
| Parent Release | Release 3 | | | | | | | |
| PICS Selection | PICS_CSE | | | | | | | |
| Initial conditions | <p>with {</p> <p>the IUT being in the "initial state" and the originator being a PX_ANP_AE and the IUT being a PX_MN_CSE and the ANP-AE being no location positioning modules deployed and the ANP-AE being no Network-based positioning capabilities and the IUT having registered the PX_ANP_AE and the ANP-AE having privileges to perform CREATE operation on the resource TARGET_RESOURCE_ADDRESS</p> <p>}</p> | | | | | | | |
| Expected behaviour | <table border="1"> <thead> <tr> <th>Test events</th> <th>Direction</th> </tr> </thead> <tbody> <tr> <td> <p>when {</p> <p>the IUT receives a valid CREATE Request from AE containing To set to TARGET_RESOURCE_ADDRESS and Resource Type set to 10 (locationPolicy) and From set to AE_ID and Content containing locationSource attribute set to 3 (Sharing_based)</p> <p>}</p> </td><td>IUT \leftarrow ADN-AE</td></tr> <tr> <td> <p>then {</p> <p>the IUT creates the locationPolicy resource and the IUT sends a valid Response containing Response Status Code set to 2001 (CREATED) and Content containing locationPolicy resource representation</p> <p>}</p> </td><td>IUT \rightarrow ADN-AE</td></tr> </tbody> </table> | Test events | Direction | <p>when {</p> <p>the IUT receives a valid CREATE Request from AE containing To set to TARGET_RESOURCE_ADDRESS and Resource Type set to 10 (locationPolicy) and From set to AE_ID and Content containing locationSource attribute set to 3 (Sharing_based)</p> <p>}</p> | IUT \leftarrow ADN-AE | <p>then {</p> <p>the IUT creates the locationPolicy resource and the IUT sends a valid Response containing Response Status Code set to 2001 (CREATED) and Content containing locationPolicy resource representation</p> <p>}</p> | IUT \rightarrow ADN-AE | |
| Test events | Direction | | | | | | | |
| <p>when {</p> <p>the IUT receives a valid CREATE Request from AE containing To set to TARGET_RESOURCE_ADDRESS and Resource Type set to 10 (locationPolicy) and From set to AE_ID and Content containing locationSource attribute set to 3 (Sharing_based)</p> <p>}</p> | IUT \leftarrow ADN-AE | | | | | | | |
| <p>then {</p> <p>the IUT creates the locationPolicy resource and the IUT sends a valid Response containing Response Status Code set to 2001 (CREATED) and Content containing locationPolicy resource representation</p> <p>}</p> | IUT \rightarrow ADN-AE | | | | | | | |

| | | |
|---------------------------|--|--|
| TP Id | TP/oneM2M/CSE/LOC/CRE/009 | |
| Test objective | Check that the IUT rejects the creation of the locationPolicy resource when <i>locationSource</i> attribute is set to Network-Based and neither locationTargetID nor locationServer is provided. | |
| Reference | TS-0001 [1], clause 8.5.2 and clause 10.2.9.2, TS-0004 [2], clause 7.3.3.3 and clause 7.4.10.2.1 | |
| Config Id | CF01 | |
| Parent Release | Release 3 | |
| 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 when { the IUT receives a valid CREATE Request from AE containing To set to TARGET_RESOURCE_ADDRESS and Resource Type set to 10 (locationPolicy) and From set to AE_ID and Content containing locationSource attribute set to 1 (Network_based) } then { the IUT does not create the locationPolicy resource and the IUT sends a valid Response containing Response Status Code set to 4000 (BAD_REQUEST) } | Direction IUT ← AE IUT → AE |

7.2.2.7.2 UPDATE Operation

TP/oneM2M/CSE/LOC/UPD/001

| TP Id | TP/oneM2M/CSE/LOC/UPD/001 | | | | | | | |
|--|---|-------------|-----------|--|---------------------|--|----------------------|--|
| Test objective | Check that the IUT rejects AE to update the locationPolicy resource identified with LOCATION_ID when receiving an update request containing an invalid attribute | | | | | | | |
| Reference | TS-0001 [1], clause 10.2.9.4, TS-0004 [2], clause 7.3.3.4 and clause 7.4.10.2.3 | | | | | | | |
| Config Id | CF01 | | | | | | | |
| Parent Release | Release 3 | | | | | | | |
| PICS Selection | PICS_CSE | | | | | | | |
| Initial conditions | <p>with {</p> <p>the IUT being in the "initial state" and the IUT having registered the AE and the IUT having created a resource TARGET_RESOURCE_ADDRESS of type locationPolicy containing an optional RW attribute locationUpdatePeriod and the AE having privileges to perform UPDATE operation on the resource TARGET_RESOURCE_ADDRESS }</p> | | | | | | | |
| Expected behaviour | <table border="1"> <thead> <tr> <th>Test events</th> <th>Direction</th> </tr> </thead> <tbody> <tr> <td> when { the IUT receives an UPDATE Request from AE containing To set to TARGET_RESOURCE_ADDRESS and From set to AE_ID and Content containing locationUpdatePeriod attribute set to INVALID_LOCATION_UPDATE_PERIOD } </td><td>IUT \leftarrow AE</td></tr> <tr> <td> then { the IUT does not update the locationPolicy resource and the IUT sends a valid Response containing Response Status Code set to 4000 (BAD_REQUEST) } </td><td>IUT \rightarrow AE</td></tr> </tbody> </table> | Test events | Direction | when { the IUT receives an UPDATE Request from AE containing To set to TARGET_RESOURCE_ADDRESS and From set to AE_ID and Content containing locationUpdatePeriod attribute set to INVALID_LOCATION_UPDATE_PERIOD } | IUT \leftarrow AE | then { the IUT does not update the locationPolicy resource and the IUT sends a valid Response containing Response Status Code set to 4000 (BAD_REQUEST) } | IUT \rightarrow AE | |
| Test events | Direction | | | | | | | |
| when { the IUT receives an UPDATE Request from AE containing To set to TARGET_RESOURCE_ADDRESS and From set to AE_ID and Content containing locationUpdatePeriod attribute set to INVALID_LOCATION_UPDATE_PERIOD } | IUT \leftarrow AE | | | | | | | |
| then { the IUT does not update the locationPolicy resource and the IUT sends a valid Response containing Response Status Code set to 4000 (BAD_REQUEST) } | IUT \rightarrow AE | | | | | | | |

7.2.2.7.3 RETRIEVE Operation

TP/oneM2M/CSE/LOC/RET/001

| TP Id | TP/oneM2M/CSE/LOC/RET/001 | | | | | | | |
|---|---|-------------|-----------|---|---------------------|---|----------------------|--|
| Test objective | Check that the IUT responds with a container resource containing attribute <i>locationID</i> set to <i>resourceID</i> of the associated locationPolicy resource | | | | | | | |
| Reference | TS-0001 [1], clause 10.2.9.3, TS-0004 [2], clause 7.4.10.2.3 | | | | | | | |
| Config Id | CF01 | | | | | | | |
| Parent Release | Release 3 | | | | | | | |
| PICS Selection | PICS_CSE | | | | | | | |
| Initial conditions | <p>with {</p> <p>the IUT being in the "initial state" and the IUT having registered the AE and the IUT having created a resource LOCATIONPOLICY_ADDRESS of type locationPolicy containing</p> <p>locationContainerID attribute set to TARGET_RESOURCE_ADDRESS and locationSource attribute set to 1 (Network_based) and locationTargetID attribute set to LOCATION_TARGET_ID and locationServer attribute set to LOCATION_SERVER_ADDRESS</p> <p>and the IUT having created a resource TARGET_RESOURCE_ADDRESS of type container containing</p> <p>locationID attribute set to LOCATIONPOLICY_ADDRESS and the AE having privileges to perform RETRIEVE operation on the resource TARGET_RESOURCE_ADDRESS</p> <p>}</p> | | | | | | | |
| Expected behaviour | <table border="1"> <thead> <tr> <th>Test events</th> <th>Direction</th> </tr> </thead> <tbody> <tr> <td> when { the IUT receives a RETRIEVE Request from AE containing To set to TARGET_RESOURCE_ADDRESS and From set to AE_ID } </td><td>IUT \leftarrow AE</td></tr> <tr> <td> then { the IUT sends a valid Response containing Response Status Code set to 2000 (OK) and Content containing container resource containing locationID attribute set to LOCATIONPOLICY_ADDRESS } </td><td>IUT \rightarrow AE</td></tr> </tbody> </table> | Test events | Direction | when { the IUT receives a RETRIEVE Request from AE containing To set to TARGET_RESOURCE_ADDRESS and From set to AE_ID } | IUT \leftarrow AE | then { the IUT sends a valid Response containing Response Status Code set to 2000 (OK) and Content containing container resource containing locationID attribute set to LOCATIONPOLICY_ADDRESS } | IUT \rightarrow AE | |
| Test events | Direction | | | | | | | |
| when { the IUT receives a RETRIEVE Request from AE containing To set to TARGET_RESOURCE_ADDRESS and From set to AE_ID } | IUT \leftarrow AE | | | | | | | |
| then { the IUT sends a valid Response containing Response Status Code set to 2000 (OK) and Content containing container resource containing locationID attribute set to LOCATIONPOLICY_ADDRESS } | IUT \rightarrow AE | | | | | | | |

| TP Id | TP/oneM2M/CSE/LOC/RET/002 | | | | | | | |
|--|---|--------------------|------------------|---|---------------------|--|----------------------|--|
| Test objective | Check that the IUT sends a notification message including the location Information to the originator when the originator sends a retrieve request target to the <latest> resource of CONTAINER_ADDRESS container associated with a <locationPolicy> resource | | | | | | | |
| Reference | TS-0001 [1], clause 8.5.2, clause 10.2.9.3 and clause 10.2.10.2.2, TS-0004 [2], clause 7.4.10.2 | | | | | | | |
| Config Id | CF01 | | | | | | | |
| Parent Release | Release 3 | | | | | | | |
| PICS Selection | PICS_CSE | | | | | | | |
| Initial conditions | <p>with {</p> <p>the IUT being in the "initial state" and the IUT having registered the AE and the IUT having created a resource LOCATIONPOLICY_ADDRESS of type locationPolicy containing</p> <p>locationContainerID attribute set to CONTAINER_ADDRESS and locationUpdatePeriod attribute set to ZERO (or NULL) and locationSource attribute set to LOCATION_SOURCE</p> <p>and the IUT having created a resource CONTAINER_ADDRESS of type <container> containing</p> <p>locationID attribute set to LOCATIONPOLICY_ADDRESS and the AE having privileges to perform RETRIEVE operation on the resource CONTAINER_ADDRESS and the AE having created a resource of type subscription as a child of the resource CONTAINER_ADDRESS of type container</p> } | | | | | | | |
| Expected behaviour | <table border="1"> <thead> <tr> <th>Test events</th> <th>Direction</th> </tr> </thead> <tbody> <tr> <td> when { the IUT receives a RETRIEVE Request from AE containing To set to CONTAINER_ADDRESS and From set to AE_ID } </td> <td>IUT \leftarrow AE</td> </tr> <tr> <td> then { the IUT sends a valid NOTIFY Response containing Response Status Code set to 2000 (OK) and Content containing notification attribute containing notificationEvent attribute containing representation attribute containing contentInstance resource containing location information } </td> <td>IUT \rightarrow AE</td> </tr> </tbody> </table> | Test events | Direction | when { the IUT receives a RETRIEVE Request from AE containing To set to CONTAINER_ADDRESS and From set to AE_ID } | IUT \leftarrow AE | then { the IUT sends a valid NOTIFY Response containing Response Status Code set to 2000 (OK) and Content containing notification attribute containing notificationEvent attribute containing representation attribute containing contentInstance resource containing location information } | IUT \rightarrow AE | |
| Test events | Direction | | | | | | | |
| when { the IUT receives a RETRIEVE Request from AE containing To set to CONTAINER_ADDRESS and From set to AE_ID } | IUT \leftarrow AE | | | | | | | |
| then { the IUT sends a valid NOTIFY Response containing Response Status Code set to 2000 (OK) and Content containing notification attribute containing notificationEvent attribute containing representation attribute containing contentInstance resource containing location information } | IUT \rightarrow AE | | | | | | | |

| TP Id | Reference | LOCATION_SOURCE |
|---------------------------------|---|-------------------|
| TP/oneM2M/CSE/LOC/RET/002_LOS/1 | TS-0001 [대상을 찾을 수 없습니다] | 1 (Network_based) |
| TP/oneM2M/CSE/LOC/RET/002_LOS/2 | [다], clause 9.6.10 and 10.2.9 | 2 (Device_based) |
| TP/oneM2M/CSE/LOC/RET/002_LOS/3 | TS-0004 [대상을 찾을 수 없습니다] [다], clause 7.4.10 and 6.3.4.2.3 | 3 (Sharing_based) |

| TP Id | TP/oneM2M/CSE/LOC/RET/003 | | | | | | | |
|--|---|-------------|-----------|--|----------|--|----------|--|
| Test objective | Check that the IUT responds with a <locationPolicy> resource containing attribute <i>locationContainerID</i> set to resourceID of the associated <container> resource | | | | | | | |
| Reference | TS-0001 [1], clause 10.2.9.3, TS-0004 [2], clause 7.4.10.2.2 | | | | | | | |
| Config Id | CF01 | | | | | | | |
| Parent Release | Release 3 | | | | | | | |
| PICS Selection | PICS_CSE | | | | | | | |
| Initial conditions | <p>with {</p> <p>the IUT being in the "initial state"</p> <p>and the IUT having registered the AE</p> <p>and the IUT having created a resource TARGET_RESOURCE_ADDRESS of type locationPolicy containing</p> <ul style="list-style-type: none"> locationContainerID attribute set to CONTAINER_ADDRESS and locationSource attribute set to 1 (Network_based) and locationTargetID attribute set to LOCATION_TARGET_ID and locationServer attribute set to LOCATION_SERVER_ADDRESS and the IUT having created a resource CONTAINER_ADDRESS of type container containing locationID attribute set to TARGET_RESOURCE_ADDRESS and the AE having privileges to perform RETRIEVE operation on the resource TARGET_RESOURCE_ADDRESS <p>}</p> | | | | | | | |
| Expected behaviour | <table border="1"> <thead> <tr> <th>Test events</th> <th>Direction</th> </tr> </thead> <tbody> <tr> <td> when { the IUT receives a RETRIEVE Request from AE containing <ul style="list-style-type: none"> To set to TARGET_RESOURCE_ADDRESS and From set to AE_ID } </td> <td>IUT ← AE</td> </tr> <tr> <td> then { the IUT sends a valid Response containing <ul style="list-style-type: none"> Response Status Code set to 2000 (OK) and Content containing <ul style="list-style-type: none"> locationPolicy representation containing <ul style="list-style-type: none"> locationContainerID attribute set to CONTAINER_ADDRESS } </td> <td>IUT → AE</td> </tr> </tbody> </table> | Test events | Direction | when { the IUT receives a RETRIEVE Request from AE containing <ul style="list-style-type: none"> To set to TARGET_RESOURCE_ADDRESS and From set to AE_ID } | IUT ← AE | then { the IUT sends a valid Response containing <ul style="list-style-type: none"> Response Status Code set to 2000 (OK) and Content containing <ul style="list-style-type: none"> locationPolicy representation containing <ul style="list-style-type: none"> locationContainerID attribute set to CONTAINER_ADDRESS } | IUT → AE | |
| Test events | Direction | | | | | | | |
| when { the IUT receives a RETRIEVE Request from AE containing <ul style="list-style-type: none"> To set to TARGET_RESOURCE_ADDRESS and From set to AE_ID } | IUT ← AE | | | | | | | |
| then { the IUT sends a valid Response containing <ul style="list-style-type: none"> Response Status Code set to 2000 (OK) and Content containing <ul style="list-style-type: none"> locationPolicy representation containing <ul style="list-style-type: none"> locationContainerID attribute set to CONTAINER_ADDRESS } | IUT → AE | | | | | | | |

| | | |
|---|--|---|
| TP Id | TP/oneM2M/CSE/LOC/RET/004 | |
| Test objective | Check that the IUT sets the <i>locationStatus</i> attribute with the error status code in the locationPolicy resource when the location information of the requested node is failed to be retrieved due to NSE | |
| Reference | TS-0001 [1], clause 8.5.2 and clause 10.2.9.3, TS-0004 [2], clause 7.4.10.2.2 | |
| Config Id | CF01 | |
| Parent Release | Release 3 | |
| PICS Selection | PICS_CSE | |
| Initial conditions | <p>with {</p> <p>the IUT being in the "initial state" and the IUT having registered the AE and the IUT having created a resource TARGET_RESOURCE_ADDRESS of type locationPolicy and the AE having privileges to perform RETRIEVE operation on the resource TARGET_RESOURCE_ADDRESS }</p> | |
| Expected behaviour | Test events | Direction |
| | <p>when {</p> <p>the IUT receives a valid RETRIEVE Request from AE containing To set to TARGET_RESOURCE_ADDRESS and From set to AE_ID }</p> <p>then {</p> <p>the IUT sends a valid Response containing Response Status Code set to 2000 (OK) and Content containing locationPolicy representation containing locationStatus attribute set to LOCATION_PROTOCOL_SPECIFIC_RESULT_CODE }</p> | IUT \leftarrow AE IUT \rightarrow AE |
| Note: the error status code LOCATION_PROTOCOL_SPECIFIC_RESULT_CODE is location protocol specific, e.g. in OMA Mobile Location Protocol the result code is set to 6 indicating POSITION METHOD FAILURE. Note that the failure is caused by the NSE such as location server. | | |

| | | |
|---------------------------|---|----------------------|
| TP Id | TP/oneM2M/CSE/LOC/RET/005 | |
| Test objective | Check that the IUT responds with an error message "NOT_FOUND" when receiving a retrieve request target to an non-existing locationPolicy resource | |
| Reference | TS-0001 [1], clause 8.5.2 and clause 10.2.9.3, TS-0004 [2], clause 7.3.3.2 and clause 7.4.10.2.2 | |
| Config Id | CF01 | |
| Parent Release | Release 3 | |
| PICS Selection | PICS_CSE | |
| Initial conditions | <p>with {</p> <p>the IUT being in the "initial state" and the IUT having registered the AE and the IUT having not created LOCATIONPOLICY_ADDRESS of type locationPolicy under the AE a resource and the IUT having privileges to perform RETRIEVE operation on locationPolicy resource</p> <p>}</p> | |
| Expected behaviour | Test events when { the IUT receives a RETRIEVE Request from AE containing To set to LOCATIONPOLICY_ADDRESS and From set to AE_ID } | IUT \leftarrow AE |
| | then { the IUT sends a valid Response containing Response Status Code set to 4004 (NOT_FOUND) } | IUT \rightarrow AE |

7.2.2.7.4 NOTIFY Operation

TP/oneM2M/CSE/LOC/NTF/001

| TP Id | TP/oneM2M/CSE/LOC/NTF/001 | | | | | |
|--|---|-------------|-----------|--|----------|--|
| Test objective | Check that the IUT sends a notification message including the location Information to the originator with frequency of POSITIVE_UPDATE_PERIOD set in field of <i>locationUpdatePeriod</i> | | | | | |
| Reference | TS-0001 [1], clause 8.5.2 and clause 10.2.10.1.1, TS-0004 [2], clause 7.3.3.3 and clause 7.4.11.2 | | | | | |
| Config Id | CF01 | | | | | |
| Parent Release | Release 3 | | | | | |
| PICS Selection | PICS_CSE | | | | | |
| Initial conditions | <p>with {</p> <p>the IUT being in the "initial state" and the originator being a ADN-AE and the IUT being a MN-CSE and the ADN-AE being no location positioning modules deployed and the ADN-AE being no Network-based positioning capabilities</p> <p>and the IUT having registered the ADN-AE and the IUT having created ORIGINATOR_LOCATIONPOLICY_ADDRESS of type locationPolicy containing locationContainerID attribute set to ORIGINATOR_CONTAINER_ADDRESS and locationUpdatePeriod attribute set to POSITIVE_UPDATE_PERIOD and locationSource attribute set to 3 (Sharing-based)</p> <p>and the IUT having created ORIGINATOR_CONTAINER_ADDRESS of type container containing locationID attribute set to ORIGINATOR_LOCATIONPOLICY_ADDRESS and the IUT having created a resource of type subscription as a child resource of ORIGINATOR_CONTAINER_ADDRESS of type container and the IUT having registered a Node being a minimum hop with the originator compared to other nodes registered with the hosting CSE and the IUT having created under the Node a child resource CLOSEST_NODE_CONTAINER_ADDRESS of type <container> containing the latest contentInstance resource containing the latest location information</p> <p>and the IUT having privileges to perform RETRIEVE operation on the resource CLOSEST_NODE_CONTAINER_ADDRESS of type of container</p> <p>}</p> | | | | | |
| Expected behaviour | <table border="1"> <thead> <tr> <th>Test events</th> <th>Direction</th> </tr> </thead> <tbody> <tr> <td>when { the IUT receives a latest resource of container from the CLOSEST_NODE_CONTAINER_ADDRESS containing</td><td>IUT ← AE</td></tr> </tbody> </table> | Test events | Direction | when { the IUT receives a latest resource of container from the CLOSEST_NODE_CONTAINER_ADDRESS containing | IUT ← AE | |
| Test events | Direction | | | | | |
| when { the IUT receives a latest resource of container from the CLOSEST_NODE_CONTAINER_ADDRESS containing | IUT ← AE | | | | | |

| | | |
|--|---|--------------|
| | <p>latest location information and the IUT creates a contentInstance as a child resource of ORIGINATOR_CONTAINER_ADDRESS of type <container> containing the location information that retrieved }</p> | |
| | <p>then {</p> <p> the IUT sends a valid Response containing Response Status Code set to 2000 (OK) and Content containing notification representation containing notificationEvent attribute containing representation attribute containing contentInstance resource containing location information</p> <p>}</p> | IUT → ADN-AE |

| TP Id | TP/oneM2M/CSE/LOC/NTF/002 | | | | | | | |
|--|--|--------------------|------------------|--|----------------------|--|----------------------|--|
| Test objective | Check that the IUT sends a notification message including the location Information to the originator with frequency of POSITIVE_UPDATE_PERIOD set in field of locationUpdatePeriod | | | | | | | |
| Reference | TS-0001 [1], clause 8.5.2, clause 10.2.10.1.1 and clause 10.2.10.2.2, TS-0004 [2], clause 7.4.11.2 | | | | | | | |
| Parent Release | Release 3 | | | | | | | |
| Config Id | CF01 | | | | | | | |
| PICS Selection | PICS_CSE | | | | | | | |
| Initial conditions | <p>with {</p> <p>the IUT being in the "initial state" and the IUT having registered the AE and the IUT having created a resource LOCATIONPOLICY_ADDRESS of type locationPolicy containing</p> <ul style="list-style-type: none"> locationContainerID attribute set to CONTAINER_ADDRESS and locationUpdatePeriod attribute set to POSITIVE_UPDATE_PERIOD and locationSource attribute set to LOCATION_SOURCE <p>and the IUT having created a resource CONTAINER_ADDRESS of type container containing</p> <ul style="list-style-type: none"> locationID attribute set to LOCATIONPOLICY_ADDRESS and the AE having created a resource of type subscription as a child of the resource CONTAINER_ADDRESS of type container and the IUT having privileges to retrieve the location information from the NSE <p>}</p> | | | | | | | |
| Expected behaviour | <table border="1"> <thead> <tr> <th>Test events</th> <th>Direction</th> </tr> </thead> <tbody> <tr> <td> <p>when {</p> <p>the IUT receives a valid Response from NSE containing</p> <ul style="list-style-type: none"> location-protocol-specific-result-code of positioning procedure execution and location-response containing location information <p>}</p> </td><td>IUT \leftarrow NSE</td></tr> <tr> <td> <p>then {</p> <p>the IUT transforms the location-response into a oneM2M Response primitive and sends a valid NOTIFY Response containing</p> <ul style="list-style-type: none"> Response Status Code set to 2000 (OK) and Content containing notification representation containing notificationEvent attribute containing representation attribute containing contentInstance representation <p>}</p> </td><td>IUT \rightarrow AE</td></tr> </tbody> </table> | Test events | Direction | <p>when {</p> <p>the IUT receives a valid Response from NSE containing</p> <ul style="list-style-type: none"> location-protocol-specific-result-code of positioning procedure execution and location-response containing location information <p>}</p> | IUT \leftarrow NSE | <p>then {</p> <p>the IUT transforms the location-response into a oneM2M Response primitive and sends a valid NOTIFY Response containing</p> <ul style="list-style-type: none"> Response Status Code set to 2000 (OK) and Content containing notification representation containing notificationEvent attribute containing representation attribute containing contentInstance representation <p>}</p> | IUT \rightarrow AE | |
| Test events | Direction | | | | | | | |
| <p>when {</p> <p>the IUT receives a valid Response from NSE containing</p> <ul style="list-style-type: none"> location-protocol-specific-result-code of positioning procedure execution and location-response containing location information <p>}</p> | IUT \leftarrow NSE | | | | | | | |
| <p>then {</p> <p>the IUT transforms the location-response into a oneM2M Response primitive and sends a valid NOTIFY Response containing</p> <ul style="list-style-type: none"> Response Status Code set to 2000 (OK) and Content containing notification representation containing notificationEvent attribute containing representation attribute containing contentInstance representation <p>}</p> | IUT \rightarrow AE | | | | | | | |

Note that: the attribute location-protocol-specific-result-code and location-response are location acquisition protocol specific and the exact name of these two attributes have to follow the specification of corresponding location protocol e.g. OMA Mobile Location Protocol.

Table Referenced values for parameter LOCATION_SOURCE

| TP Id | Reference | LOCATION_SOURCE |
|---------------------------------|---|-------------------|
| TP/oneM2M/CSE/LOC/NTF/010_LOS/1 | TS-0001 [대상을 찾을 수 없습니다] | 1 (Network_based) |
| TP/oneM2M/CSE/LOC/NTF/010_LOS/2 | [다], clause 9.6.10 and 10.2.10 | 2 (Device_based) |
| TP/oneM2M/CSE/LOC/NTF/010_LOS/3 | TS-0004 [대상을 찾을 수 없습니다] [다], clause 7.4.11 and 6.3.4.2.3 | 3 (Sharing_based) |

Table Referenced values for parameter location-protocol-specific-result-code and location-response

| location-protocol-specific-result-code | location-response | Location protocol | Reference |
|--|--|------------------------------|--|
| [Result code] | [Content] | OMA Mobile Location Protocol | Not Present |
| [HTTP Response code] | < <i>TerminalLocation</i> > representation containing attributes <i>address</i> indicating the address of targeted node where location information is retrieved, <i>locationRetrievalStatus</i> indicating the status of retrieval of the location information for the target node , and <i>currentLocation</i> containing the actual location data of the target node | OMA RESTful NetAPI | TS-0004 [대상을 찾을 수 없습니다], Annex G |
| [HTTP Response code] | < <i>SubscriptionNotification</i> > representation | OMA RESTful NetAPI | Location Server Open RESTful API Specification |

7.2.2.8 Device Management (DMG)

7.2.2.8.1 Resource timeSeries (TS)

TP/oneM2M/CSE/TS/001

| TP Id | TP/oneM2M/CSE/TS/001 | | | | | |
|--|---|--------------------|------------------|--|---|--|
| Test objective | Check that the IUT inserts the dataGenerationTime information of a missing data point and increases the missingDataCurrentNr attribute when a missing data point is detected | | | | | |
| Reference | TS-0001 [1], clause 10.2.39, TS-0004 [2], clause 7.5.1.2.9 | | | | | |
| Config Id | CF01 | | | | | |
| Parent release | Release 3 | | | | | |
| PICS Selection | PICS_CSE | | | | | |
| Initial conditions | <pre> with { the IUT being in the "initial state" and the IUT having registered the AE and the AE having created a timeSeries resource containing missingDataDetect attribute set to true and a valid periodicInterval attribute and the AE having privileges to perform RETRIEVE operation on the timeSeries resource and the IUT having detected a missing data point } </pre> | | | | | |
| Expected behaviour | <table border="1"> <thead> <tr> <th>Test events</th> <th>Direction</th> </tr> </thead> <tbody> <tr> <td> when { the IUT receives a valid RETRIEVE Request from AE containing To set to TIMESERIES_RESOURCE_ADDRESS and From set to AE-ID and no Content } then { the IUT sends a valid Response containing Response Status Code set to 2000 (OK) and Content containing timeSeries resource containing missingDataList attribute containing dataGenerationTime element of the missing data point and missingDataCurrentNr attribute set to one } </td><td> IUT \leftarrow AE IUT \rightarrow AE </td></tr> </tbody> </table> | Test events | Direction | when { the IUT receives a valid RETRIEVE Request from AE containing To set to TIMESERIES_RESOURCE_ADDRESS and From set to AE-ID and no Content } then { the IUT sends a valid Response containing Response Status Code set to 2000 (OK) and Content containing timeSeries resource containing missingDataList attribute containing dataGenerationTime element of the missing data point and missingDataCurrentNr attribute set to one } | IUT \leftarrow AE IUT \rightarrow AE | |
| Test events | Direction | | | | | |
| when { the IUT receives a valid RETRIEVE Request from AE containing To set to TIMESERIES_RESOURCE_ADDRESS and From set to AE-ID and no Content } then { the IUT sends a valid Response containing Response Status Code set to 2000 (OK) and Content containing timeSeries resource containing missingDataList attribute containing dataGenerationTime element of the missing data point and missingDataCurrentNr attribute set to one } | IUT \leftarrow AE IUT \rightarrow AE | | | | | |

| TP Id | TP/oneM2M/CSE/TS/002 | | | | | | | |
|--|---|-------------|-----------|---|----------|--|----------|--|
| Test objective | Check that the IUT removes the oldest element in MissingDataList when MissingDataCurrentNr reaches MissingDataMaxNr to enable insertion of a new missing data point | | | | | | | |
| Reference | TS-0001 [1], clause 10.2.39, TS-0004 [2], clause 7.5.1.2.9 | | | | | | | |
| Config Id | CF01 | | | | | | | |
| Parent release | Release 3 | | | | | | | |
| PICS Selection | PICS_CSE | | | | | | | |
| Initial conditions | <p>with {</p> <p>the IUT being in the "initial state" and the IUT having registered the AE and the AE having created a timeSeries resource containing missingDataDetect attribute set to true and a valid periodicInterval attribute missingDataMaxNr attribute set to one and the AE having privileges to perform RETRIEVE operation on the timeSeries resource and the IUT having detected a missing data point</p> <p>}</p> | | | | | | | |
| Expected behaviour | <table border="1"> <thead> <tr> <th style="text-align: center;">Test events</th> <th style="text-align: center;">Direction</th> </tr> </thead> <tbody> <tr> <td> when { the IUT detects a new missing data point and the IUT receives a valid RETRIEVE Request from AE containing To set to TIMESERIES_RESOURCE_ADDRESS and From set to AE-ID and no Content } </td><td style="text-align: center;">IUT ← AE</td></tr> <tr> <td> then { the IUT sends a valid Response containing Response Status Code set to 2000 (OK) and Content containing timeSeries resource containing missingDataList attribute containing dataGenerationTime element of the new missing data point and missingDataCurrentNr attribute set to one } </td><td style="text-align: center;">IUT → AE</td></tr> </tbody> </table> | Test events | Direction | when { the IUT detects a new missing data point and the IUT receives a valid RETRIEVE Request from AE containing To set to TIMESERIES_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 timeSeries resource containing missingDataList attribute containing dataGenerationTime element of the new missing data point and missingDataCurrentNr attribute set to one } | IUT → AE | |
| Test events | Direction | | | | | | | |
| when { the IUT detects a new missing data point and the IUT receives a valid RETRIEVE Request from AE containing To set to TIMESERIES_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 timeSeries resource containing missingDataList attribute containing dataGenerationTime element of the new missing data point and missingDataCurrentNr attribute set to one } | IUT → AE | | | | | | | |

| TP Id | TP/oneM2M/CSE/TS/003 | | | | | | |
|---|---|-------------|-----------|---|-----|---|-----------|
| Test objective | Check that the IUT sends a notification with missing data points information when the number of missing data points detected becomes equal to the minimum specified missing number of the Time Series Data specified in missingData condition of the subscription resource | | | | | | |
| Reference | TS-0001 [1], clause 10.2.39, TS-0004 [2], clause 7.5.1.2.9 | | | | | | |
| Config Id | CF01 | | | | | | |
| Parent release | Release 3 | | | | | | |
| PICS Selection | PICS_CSE | | | | | | |
| Initial conditions | <p>with {</p> <p style="margin-left: 20px;">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 timeSeries resource containing missingDataDetect attribute set to true and a valid periodicInterval attribute and a subscription resource containing notificationURI attribute set to AE1_RESOURCE_ADDRESS and eventNotificationCriteria attribute containing missingData element containing number element set to MISSING_DATA_POINT_NR and duration element set to MISSING_DATA_POINT_DURATION and the AE1 having privileges to perform RETRIEVE operation on the timeSeries resource and the AE2 having privileges to perform CREATE operation on the timeSeries resource and the IUT having detected MISSING_DATA_POINT_NR-1 missing data points from AE2</p> <p>}</p> | | | | | | |
| Expected behaviour | <table border="1" style="width: 100%; border-collapse: collapse;"> <thead> <tr> <th style="text-align: center; padding: 2px;">Test events</th> <th style="text-align: center; padding: 2px;">Direction</th> </tr> </thead> <tbody> <tr> <td style="padding: 2px;"> when { the IUT detects a new missing data point within MISSING_DATA_POINT_DURATION timer } </td> <td style="text-align: center; padding: 2px;">IUT</td> </tr> <tr> <td style="padding: 2px;"> then { the IUT sends a valid NOTIFY request containing Content containing notificationEvent attribute containing representation attribute containing timeSeries resource containing missingDataList attribute containing dataGenerationTime of missing data points and currentMissingDataNr attribute set to MISSING_DATA_POINT_NR } </td> <td style="text-align: center; padding: 2px;">IUT → AE1</td> </tr> </tbody> </table> | Test events | Direction | when { the IUT detects a new missing data point within MISSING_DATA_POINT_DURATION timer } | IUT | then { the IUT sends a valid NOTIFY request containing Content containing notificationEvent attribute containing representation attribute containing timeSeries resource containing missingDataList attribute containing dataGenerationTime of missing data points and currentMissingDataNr attribute set to MISSING_DATA_POINT_NR } | IUT → AE1 |
| Test events | Direction | | | | | | |
| when { the IUT detects a new missing data point within MISSING_DATA_POINT_DURATION timer } | IUT | | | | | | |
| then { the IUT sends a valid NOTIFY request containing Content containing notificationEvent attribute containing representation attribute containing timeSeries resource containing missingDataList attribute containing dataGenerationTime of missing data points and currentMissingDataNr attribute set to MISSING_DATA_POINT_NR } | IUT → AE1 | | | | | | |

| TP Id | TP/oneM2M/CSE/TS/004 | | | | | | | |
|--|--|--------------------|------------------|--|-----|--|-----------|--|
| Test objective | Check that the IUT does not send notification when the total number of missing data points does not exceed the minimum specified missing number of the Time Series Data specified in missingData condition of the subscription resource during the window duration specified in the same missingData condition | | | | | | | |
| Reference | TS-0001 [1], clause 10.2.39, TS-0004 [2], clause 7.5.1.2.9 | | | | | | | |
| Config Id | CF01 | | | | | | | |
| Parent release | Release 3 | | | | | | | |
| PICS Selection | PICS_CSE | | | | | | | |
| Initial conditions | <pre> 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 timeSeries resource containing missingDataDetect attribute set to true and a valid periodicInterval attribute and a subscription resource containing notificationURI attribute set to AE1_RESOURCE_ADDRESS and eventNotificationCriteria attribute containing missingData element containing number element set to MISSING_DATA_POINT_NR and duration element set to MISSING_DATA_POINT_DURATION and the AE1 having privileges to perform RETRIEVE operation on the timeSeries resource and the AE2 having privileges to perform CREATE operation on the timeSeries resource and the IUT having detected MISSING_DATA_POINT_NR-1 missing data points from AE2 } </pre> | | | | | | | |
| Expected behaviour | <table border="1"> <thead> <tr> <th>Test events</th> <th>Direction</th> </tr> </thead> <tbody> <tr> <td> when { the IUT does not detect a new missing data point within MISSING_DATA_POINT_DURATION timer } </td> <td>IUT</td> </tr> <tr> <td> then { the IUT does not sends a NOTIFY request and the IUT restarts missing data point counter and timer } </td> <td>IUT → AE1</td> </tr> </tbody> </table> | Test events | Direction | when { the IUT does not detect a new missing data point within MISSING_DATA_POINT_DURATION timer } | IUT | then { the IUT does not sends a NOTIFY request and the IUT restarts missing data point counter and timer } | IUT → AE1 | |
| Test events | Direction | | | | | | | |
| when { the IUT does not detect a new missing data point within MISSING_DATA_POINT_DURATION timer } | IUT | | | | | | | |
| then { the IUT does not sends a NOTIFY request and the IUT restarts missing data point counter and timer } | IUT → AE1 | | | | | | | |

Editor's Note: This test case is not available on the ATS. Currently no idea to implementate internal timer, but will try to find a way to solve this problem.

| TP Id | TP/oneM2M/CSE/TS/005 | | | | | | | |
|---|--|-------------|-----------|---|-----------|---|------------------------|--|
| Test objective | Check that the IUT sends a final notification with the missing data points information when subscription is terminated | | | | | | | |
| Reference | TS-0001 [1], clause 10.2.39, TS-0004 [2], clause 7.5.1.2.9 | | | | | | | |
| Config Id | CF01 | | | | | | | |
| Parent release | Release 3 | | | | | | | |
| PICS Selection | PICS_CSE | | | | | | | |
| Initial conditions | <p>with {</p> <p>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 timeSeries resource containing missingDataDetect attribute set to true and a valid periodicInterval attribute and a subscription resource containing notificationURI attribute set to AE1_RESOURCE_ADDRESS and eventNotificationCriteria attribute containing missingData element containing number element set to MISSING_DATA_POINT_NR and duration element set to MISSING_DATA_POINT_DURATION and the AE1 having privileges to perform RETRIEVE operation on the timeSeries resource and the AE1 having privileges to perform DELETE operation on the subscription resource and the AE2 having privileges to perform CREATE operation on the timeSeries resource and the IUT having detected MISSING_DATA_POINT_NR-1 missing data points from AE2</p> <p>}</p> | | | | | | | |
| Expected behaviour | <table border="1"> <thead> <tr> <th>Test events</th> <th>Direction</th> </tr> </thead> <tbody> <tr> <td> when { the IUT receives a valid DELETE Request from AE1 containing To set to SUBSCRIPTION_RESOURCE_ADDRESS and From set to AE1-ID } </td> <td>IUT ← AE1</td> </tr> <tr> <td> then { the IUT sends a valid Response containing Response Status Code set to 2000 (OK) and and the IUT sends a NOTIFY Request containing Content containing notificationEvent attribute containing representation attribute containing timeSeries resource containing missingDataList attribute containing dataGenerationTime of missing data points and currentMissingDataNr attribute set to </td> <td>IUT → AE1 IUT → AE2</td> </tr> </tbody> </table> | 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-ID } | IUT ← AE1 | then { the IUT sends a valid Response containing Response Status Code set to 2000 (OK) and and the IUT sends a NOTIFY Request containing Content containing notificationEvent attribute containing representation attribute containing timeSeries resource containing missingDataList attribute containing dataGenerationTime of missing data points and currentMissingDataNr attribute set to | IUT → AE1 IUT → AE2 | |
| 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-ID } | IUT ← AE1 | | | | | | | |
| then { the IUT sends a valid Response containing Response Status Code set to 2000 (OK) and and the IUT sends a NOTIFY Request containing Content containing notificationEvent attribute containing representation attribute containing timeSeries resource containing missingDataList attribute containing dataGenerationTime of missing data points and currentMissingDataNr attribute set to | IUT → AE1 IUT → AE2 | | | | | | | |

| | | |
|---|---------------------------|--|
| | MISSING_DATA_POINT_NR - 1 | |
| } | | |

7.2.2.9 Communication Management and Delivery Handling(CMDH)

7.2.2.9.1 Resource pollingChannel (PCH)

TP/oneM2M/CSE/PCH/001

| TP Id | TP/oneM2M/CSE/PCH/001 | | | | | | | |
|---|---|-------------|-----------|---|-----------|---|----------|--|
| Test objective | Check that the IUT which hosts <pollingChannel> resource forwards a Notify request successfully to a target AE, once the IUT receives a polling request from AE (retrieve request to <pollingChannelURI> resource) See the Note below. | | | | | | | |
| Reference | TS-0001 [1], clause 10.2.13.6, TS-0004 [2], clause 7.4.22.2.2 | | | | | | | |
| Config Id | CF02 | | | | | | | |
| Parent Release | Release 2 | | | | | | | |
| PICS Selection | PICS_PCH | | | | | | | |
| Initial conditions | <pre> with { the IUT being in the "initial state" and the IUT having registered an AE1 and the AE having a child <pollingChannel> resource and the IUT having received a retrieve request from the AE containing To set to POLLINGCHANNELURI_RESOURCE_ADDRESS } </pre> | | | | | | | |
| Expected behaviour | <table border="1"> <thead> <tr> <th>Test events</th> <th>Direction</th> </tr> </thead> <tbody> <tr> <td> when { the IUT receives a NOTIFY Request from the CSE containing To set to AE_RESOURCE_ADDRESS and From set to CSE_ID } </td> <td>IUT ← CSE</td> </tr> <tr> <td> then { the IUT sends a RETRIEVE Response to the AE containing Response Status Code set to 2000 (OK) Content containing the request received from the CSE </td> <td>IUT → AE</td> </tr> </tbody> </table> | Test events | Direction | when { the IUT receives a NOTIFY Request from the CSE containing To set to AE_RESOURCE_ADDRESS and From set to CSE_ID } | IUT ← CSE | then { the IUT sends a RETRIEVE Response to the AE containing Response Status Code set to 2000 (OK) Content containing the request received from the CSE | IUT → AE | |
| Test events | Direction | | | | | | | |
| when { the IUT receives a NOTIFY Request from the CSE containing To set to AE_RESOURCE_ADDRESS and From set to CSE_ID } | IUT ← CSE | | | | | | | |
| then { the IUT sends a RETRIEVE Response to the AE containing Response Status Code set to 2000 (OK) Content containing the request received from the CSE | IUT → AE | | | | | | | |
| Note: Based on figure 10.2.5.12-1 in TS-0001[1] step 001, 002 and 003 in order. In this case, IUT is pending AE's polling request since there was no request to AE | | | | | | | | |

| TP Id | TP/oneM2M/CSE/PCH/002 | | | | | | | |
|--|--|-------------|-----------|---|---------------------|--|----------------------|--|
| Test objective | Check that the IUT which hosts <pollingChannel> resource forwards a Notify request successfully to a target AE, once the IUT receives a polling request from the AE | | | | | | | |
| Reference | TS-0001 [1], clause 10.2.13.6, TS-0004 [2], clause 7.4.22.2.2 | | | | | | | |
| Config Id | CF02 | | | | | | | |
| Parent Release | Release 2 | | | | | | | |
| PICS Selection | PICS_PCH | | | | | | | |
| Initial conditions | <p>with {</p> <p>the IUT being in the "initial state" and the IUT having registered an AE and the AE having a child <pollingChannel> resource and the IUT having received a NOTIFY Request from CSE containing To set to AE_RESOURCE_ADDRESS and From set to CSE_ID</p> <p>}</p> | | | | | | | |
| Expected behaviour | <table border="1"> <thead> <tr> <th>Test events</th> <th>Direction</th> </tr> </thead> <tbody> <tr> <td>when { the IUT receives a retrieve Request from the AE containing To set to POLLINGCHANNELURI_RESOURCE_ADDRESS }</td> <td>IUT \leftarrow AE</td> </tr> <tr> <td>then { the IUT sends a Response to the AE containing Response Status Code set to 2000 (OK) Content containing the Request received from the CSE }</td> <td>IUT \rightarrow AE</td> </tr> </tbody> </table> | Test events | Direction | when { the IUT receives a retrieve Request from the AE containing To set to POLLINGCHANNELURI_RESOURCE_ADDRESS } | IUT \leftarrow AE | then { the IUT sends a Response to the AE containing Response Status Code set to 2000 (OK) Content containing the Request received from the CSE } | IUT \rightarrow AE | |
| Test events | Direction | | | | | | | |
| when { the IUT receives a retrieve Request from the AE containing To set to POLLINGCHANNELURI_RESOURCE_ADDRESS } | IUT \leftarrow AE | | | | | | | |
| then { the IUT sends a Response to the AE containing Response Status Code set to 2000 (OK) Content containing the Request received from the CSE } | IUT \rightarrow AE | | | | | | | |
| <p>Note: Based on figure 10.2.13.1-1 in TS-0001[1] step 002 is followed by 001 and 003 The CSE's request to AE is pended and will be sent as soon as AE sends polling request to CSE.</p> | | | | | | | | |

| TP Id | TP/oneM2M/CSE/PCH/003 | | | | | | | |
|---|--|-------------|-----------|---|----------|---|-----------------------|--|
| Test objective | Check that the IUT performs both forwarding the response to the CSE and sending response to AE after receiving a Notify Request from the AE sent to the <pollingChannelURI> resource | | | | | | | |
| Reference | TS-0001 [1], clause 10.2.13.8, TS-0004 [2], clause 7.4.22.2.2 | | | | | | | |
| Config Id | CF02 | | | | | | | |
| Parent Release | Release 2 | | | | | | | |
| PICS Selection | PICS_PCH | | | | | | | |
| Initial conditions | <p>with {</p> <p>the IUT being in the "initial state" and the IUT having registered an AE and the AE1 having a child <pollingChannel> resource and the IUT having received a retrieve Request from the AE containing To set to POLLINGCHANNELURI_RESOURCE_ADDRESS and the IUT having received a NOTIFY Request from the CSE containing To set to AE_RESOURCE_ADDRESS and From set to CSE_ID and the IUT sends a Response to the AE containing Response Status Code set to 2000 (OK) Content containing the Request received from the CSE</p> <p>}</p> | | | | | | | |
| Expected behaviour | <table border="1"> <thead> <tr> <th>Test events</th> <th>Direction</th> </tr> </thead> <tbody> <tr> <td> <p>when {</p> <p>the IUT receives a NOTIFY Request from the AE containing To set to POLLINGCHANNELURI_RESOURCE_ADDRESS and Content containing Response Status Code set to RESPONSE_STATUS_CODE</p> <p>}</p> </td> <td>IUT ← AE</td> </tr> <tr> <td> <p>then {</p> <p>the IUT sends a Response to the CSE Response Status Code set to RESPONSE_STATUS_CODE the IUT sends the valid NOTIFY Response to the AE</p> <p>}</p> </td> <td>IUT → CSE IUT → AE</td> </tr> </tbody> </table> | Test events | Direction | <p>when {</p> <p>the IUT receives a NOTIFY Request from the AE containing To set to POLLINGCHANNELURI_RESOURCE_ADDRESS and Content containing Response Status Code set to RESPONSE_STATUS_CODE</p> <p>}</p> | IUT ← AE | <p>then {</p> <p>the IUT sends a Response to the CSE Response Status Code set to RESPONSE_STATUS_CODE the IUT sends the valid NOTIFY Response to the AE</p> <p>}</p> | IUT → CSE IUT → AE | |
| Test events | Direction | | | | | | | |
| <p>when {</p> <p>the IUT receives a NOTIFY Request from the AE containing To set to POLLINGCHANNELURI_RESOURCE_ADDRESS and Content containing Response Status Code set to RESPONSE_STATUS_CODE</p> <p>}</p> | IUT ← AE | | | | | | | |
| <p>then {</p> <p>the IUT sends a Response to the CSE Response Status Code set to RESPONSE_STATUS_CODE the IUT sends the valid NOTIFY Response to the AE</p> <p>}</p> | IUT → CSE IUT → AE | | | | | | | |
| Note: Based on figure 10.2.13.1-1 in TS-0001[1] step 005 and 006 | | | | | | | | |

| | | |
|--|--|---|
| TP Id | TP/oneM2M/CSE/PCH/004 | |
| Test objective | Check that the IUT which performs polling sends the Notify request to <pollingChannelURI> Hosting CSE after receiving response using polling channel | |
| Reference | TS-0001 [1], clause 10.2.13.8, TS-0004 [2], clause 7.4.22.2.5 | |
| Config Id | CF02 | |
| Parent Release | Release 2 | |
| PICS Selection | PICS_PCH | |
| Initial conditions | <p>with {</p> <p>the IUT being in the "initial state" and the IUT having registered to a CSE and the IUT having a <pollingChannel> resource and the IUT having sent a retrieve Request to the CSE To set to POLLINGCHANNELURI_RESOURCE_ADDRESS and the CSE having received the Request containing To set to CSE_RESOURCE_ADDRESS and From set to ORIGINATOR_ID</p> <p>}</p> | |
| Expected behaviour | <p>Test events</p> <p>when {</p> <p>the IUT receives a polling Response from the CSE containing Response Status Code set to 2000 (OK)</p> <p>}</p> <p>then {</p> <p>the IUT sends a NOTIFY Request to the CSE containing To set to POLLINGCHANNELURI_RESOURCE_ADDRESS and Content containing Response Status Code set to RESPONSE_STATUS_CODE</p> <p>}</p> | <p>Direction</p> <p>IUT ← CSE1</p> <p>IUT → CSE1</p> |
| Note: Based on figure 10.2.13.1-1 in TS-0001[1] step 004 and 005 | | |

| | | |
|---------------------------|--|-----------|
| TP Id | TP/oneM2M/CSE/PCH/005 | |
| Test objective | Check that the IUT rejects a <pollingChannel> OPERATION of the AE when AE-ID is not same as the AE-ID of the parent resource | |
| Reference | TS-0001 [1], clause 10.2.13.2, TS-0004 [2], clause 7.4.21 | |
| Config Id | CF01 | |
| Parent Release | Release 2 | |
| PICS Selection | PICS_PCH | |
| Initial conditions | <p>with {</p> <p style="padding-left: 20px;">the IUT being in the "initial state"</p> <p style="padding-left: 20px;">and the IUT having registered an AE1</p> <p style="padding-left: 20px;">and the IUT having registered an AE2</p> <p style="padding-left: 20px;">and the IUT having created a pollingChannel resource on the AE1</p> } | |
| Expected behaviour | Test events <p>when {</p> <p style="padding-left: 20px;">the IUT receives a valid OPERATION Request from the AE2</p> <p style="padding-left: 20px;">containing</p> <p style="padding-left: 40px;">To set to POLLING_CHANNEL_RESOURCE_ADDRESS and</p> <p style="padding-left: 40px;">From set to AE2_ID</p> } | IUT ← AE2 |
| | <p>then {</p> <p style="padding-left: 20px;">the IUT sends a valid Response containing</p> <p style="padding-left: 40px;">Response Status Code set to 4103</p> <p style="padding-left: 40px;">(ORIGINATOR_HAS_NO_PRIVILEGE)</p> } | IUT → AE2 |

| TP Id | Reference | OPERATION |
|---------------------------|-------------------|-----------|
| TP/oneM2M/CSE/PCH/005_RET | TS-0001 10.2.13.3 | RETRIEVE |
| TP/oneM2M/CSE/PCH/005_UPD | TS-0001 10.2.13.4 | UPDATE |
| TP/oneM2M/CSE/PCH/005_DEL | TS-0001 10.2.13.5 | DELETE |

| | | |
|---------------------------|--|--|
| TP Id | TP/oneM2M/CSE/PCH/006 | |
| Test objective | Check that the IUT sends the response with a status to the CSE1 when the request expires according to its Request Expiration Timestamp | |
| Reference | TS-0001 [1], clause 10.2.13.6 | |
| Config Id | CF02 | |
| Parent Release | Release 2 | |
| PICS Selection | PICS_PCH | |
| Initial conditions | <p>with {</p> <p>the IUT being in the "initial state"</p> <p>and the IUT having registered an AE</p> <p>and the AE having a child <pollingChannel> resource</p> <p>and the IUT having received a RETRIEVE Request from AE containing</p> <p>To set to POLLINGCHANNELURI_RESOURCE_ADDRESS and Request Expiration Timestamp set to VALUE</p> <p>}</p> | |
| Expected behaviour | Test events <p>when {</p> <p>Request Expiration Timestamp expires</p> <p>}</p> <p>then {</p> <p>and the IUT sends a Response to the AE containing</p> <p>Response Status Code set to 4008 (REQUEST_TIMEOUT)</p> <p>}</p> | Direction <p>IUT</p> <p>IUT → AE</p> |

7.2.2.9.2 Response Type (RT)

7.2.2.9.2.1 nonBlockingRequestSynch (NBS)

TP/oneM2M/CSE/RT/NBS/001

| TP Id | TP/oneM2M/CSE/RT/NBS/001 | | | | | | | |
|--|--|-------------|-----------|--|----------|--|----------|--|
| Test objective | Check that the IUT rejects a Non-Blocking Synchronous Request <i>OPERATION</i> if the IUT does not support the <request> resource | | | | | | | |
| Reference | TS-0001 [1], clause 8.2.2.2 | | | | | | | |
| Config Id | CF01 | | | | | | | |
| Parent Release | Release 2 | | | | | | | |
| PICS Selection | PICS_NON_BLOCKING_REQUEST_SYNCH | | | | | | | |
| Initial conditions | <pre> 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 } </pre> | | | | | | | |
| Expected behaviour | <table border="1"> <thead> <tr> <th>Test events</th> <th>Direction</th> </tr> </thead> <tbody> <tr> <td> when { the IUT receives a valid <i>OPERATION</i> Request from AE containing Resource Type set to 3 (container) and To set to TARGET_RESOURCE_ADDRESS and From set to AE-ID and ResponseType set to 1 (nonBlockingRequestSynch) } </td><td>IUT ← AE</td></tr> <tr> <td> then { the IUT sends a valid Response containing Response Status Code set to 5206 (NON_BLOCKING_REQUEST_NOT_SUPPORTED) } </td><td>IUT → AE</td></tr> </tbody> </table> | Test events | Direction | when { the IUT receives a valid <i>OPERATION</i> Request from AE containing Resource Type set to 3 (container) and To set to TARGET_RESOURCE_ADDRESS and From set to AE-ID and ResponseType set to 1 (nonBlockingRequestSynch) } | IUT ← AE | then { the IUT sends a valid Response containing Response Status Code set to 5206 (NON_BLOCKING_REQUEST_NOT_SUPPORTED) } | IUT → AE | |
| Test events | Direction | | | | | | | |
| when { the IUT receives a valid <i>OPERATION</i> Request from AE containing Resource Type set to 3 (container) and To set to TARGET_RESOURCE_ADDRESS and From set to AE-ID and ResponseType set to 1 (nonBlockingRequestSynch) } | IUT ← AE | | | | | | | |
| then { the IUT sends a valid Response containing Response Status Code set to 5206 (NON_BLOCKING_REQUEST_NOT_SUPPORTED) } | IUT → AE | | | | | | | |

| TP Id | OPERATION |
|------------------------------|-----------|
| TP/oneM2M/CSE/RT/NBS/001_CRE | CREATE |
| TP/oneM2M/CSE/RT/NBS/001_UPD | UPDATE |
| TP/oneM2M/CSE/RT/NBS/001_RET | RETRIEVE |
| TP/oneM2M/CSE/RT/NBS/001_DEL | DELETE |

Editor's Note: Need to be clarified that does it make sense to have such TPs on the NBR group when no support of NBR from the IUT is required.

| | | |
|---------------------------|--|--|
| TP Id | TP/oneM2M/CSE/RT/NBS/002 | |
| Test objective | Check that the IUT responds to a Non-Blocking Synchronous Request OPERATION with the reference of a <request> resource provided within the Content parameter of the Response | |
| Reference | TS-0001 [1], clause 8.2.2.1 | |
| Config Id | CF01 | |
| Parent Release | Release 2 | |
| PICS Selection | PICS_NON_BLOCKING_REQUEST_SYNCH | |
| Initial conditions | with { the IUT being in the "initial state" and the IUT having registered the AE and the Originator having privileges to perform OPERATION on the resource TARGET_RESOURCE_ADDRESS } | |
| Expected behaviour | Test events when { the IUT receives a valid OPERATION Request from AE containing Resource Type set to 3 (container) and To set to TARGET_RESOURCE_ADDRESS and From set to AE-ID and ResponseType set to 1 (nonBlockingRequestSynch) } then { and the IUT sends a valid Response containing Response Status Code set to 1001 (ACCEPTED for n onBlockingRequestSynch) and Content containing URI attribute set to REQUEST_RESOURCE_ADDRESS } | Direction IUT ← AE IUT → AE |

| TP Id | OPERATION |
|------------------------------|-----------|
| TP/oneM2M/CSE/RT/NBS/002_CRE | CREATE |
| TP/oneM2M/CSE/RT/NBS/002_UPD | UPDATE |
| TP/oneM2M/CSE/RT/NBS/002_RET | RETRIEVE |
| TP/oneM2M/CSE/RT/NBS/002_DEL | DELETE |

| TP Id | TP/oneM2M/CSE/RT/NBS/003 | | | | | | | |
|---|---|--------------------|------------------|--|----------|---|----------|--|
| Test objective | Check that the IUT returns successfully the <request> resource after receiving a Non-Blocking Synchronous Request <i>OPERATION</i> and it contains the expected result in operationResult attribute | | | | | | | |
| Reference | TS-0001 [1], clause 8.2.2.2 | | | | | | | |
| Config Id | CF01 | | | | | | | |
| Parent Release | Release 2 | | | | | | | |
| PICS Selection | PICS_NON_BLOCKING_REQUEST_SYNCH | | | | | | | |
| Initial conditions | <p>with {</p> <ul style="list-style-type: none"> the IUT being in the "initial state" and the IUT having registered the AE and the IUT having received a Non-Blocking Synchronous Request <i>OPERATION</i> and the IUT having created a resource TARGET_RESOURCE_ADDRESS of type <request> under the AE resource <p>}</p> | | | | | | | |
| Expected behaviour | <table border="1"> <thead> <tr> <th>Test events</th> <th>Direction</th> </tr> </thead> <tbody> <tr> <td> when { <ul style="list-style-type: none"> the IUT receives a valid RETRIEVE Request from AE containing To set to TARGET_RESOURCE_ADDRESS and From set to AE_ID and ResponseType set to 3 (blockingRequest) no Content } </td> <td>IUT ← AE</td> </tr> <tr> <td> then { <ul style="list-style-type: none"> the IUT sends a valid Response containing Response Status Code set to 2000 (OK) and Content containing request resource representation containing operationResult attribute containing expected response to <i>OPERATION</i> } </td> <td>IUT → AE</td> </tr> </tbody> </table> | Test events | Direction | when { <ul style="list-style-type: none"> the IUT receives a valid RETRIEVE Request from AE containing To set to TARGET_RESOURCE_ADDRESS and From set to AE_ID and ResponseType set to 3 (blockingRequest) no Content } | IUT ← AE | then { <ul style="list-style-type: none"> the IUT sends a valid Response containing Response Status Code set to 2000 (OK) and Content containing request resource representation containing operationResult attribute containing expected response to <i>OPERATION</i> } | IUT → AE | |
| Test events | Direction | | | | | | | |
| when { <ul style="list-style-type: none"> the IUT receives a valid RETRIEVE Request from AE containing To set to TARGET_RESOURCE_ADDRESS and From set to AE_ID and ResponseType set to 3 (blockingRequest) no Content } | IUT ← AE | | | | | | | |
| then { <ul style="list-style-type: none"> the IUT sends a valid Response containing Response Status Code set to 2000 (OK) and Content containing request resource representation containing operationResult attribute containing expected response to <i>OPERATION</i> } | IUT → AE | | | | | | | |

| TP Id | OPERATION |
|------------------------------|------------------|
| TP/oneM2M/CSE/RT/NBS/003_CRE | CREATE |
| TP/oneM2M/CSE/RT/NBS/003_UPD | UPDATE |
| TP/oneM2M/CSE/RT/NBS/003_RET | RETRIEVE |
| TP/oneM2M/CSE/RT/NBS/003_DEL | DELETE |

7.2.2.9.2.2 nonBlockingRequestAsynch (NBA)

TP/oneM2M/CSE/RT/NBA/001

| TP Id | TP/oneM2M/CSE/RT/NBA/001 | | | | | | | |
|---|--|--------------------|------------------|---|----------|---|----------|--|
| Test objective | Check that the IUT responds to a Non-Blocking Asynchronous Request <i>OPERATION</i> without a reference to a resource containing the context of the request if the IUT does not support the <request> resource | | | | | | | |
| Reference | TS-0001 [1], clause 8.2.2.3 | | | | | | | |
| Config Id | CF01 | | | | | | | |
| Parent Release | Release 2 | | | | | | | |
| PICS Selection | PICS_NON_BLOCKING_REQUEST_ASYNCH | | | | | | | |
| Initial conditions | <pre>with { the IUT being in the "initial state" and the IUT having registered the AE and the Originator having privileges to perform <i>OPERATION</i> on the resource TARGET_RESOURCE_ADDRESS }</pre> | | | | | | | |
| Expected behaviour | <table border="1"> <thead> <tr> <th>Test events</th> <th>Direction</th> </tr> </thead> <tbody> <tr> <td> when { the IUT receives a valid <i>OPERATION</i> Request from AE containing Resource Type set to 3 (container) and To set to TARGET_RESOURCE_ADDRESS and From set to AE-ID and ResponseType set to 2 (nonBlockingRequestAsynch) } </td><td>IUT ← AE</td></tr> <tr> <td> then { the IUT sends a valid Response containing Response Status Code set to 1002 (ACCEPTED for nonBlockingRequestAsynch) and no Content } </td><td>IUT → AE</td></tr> </tbody> </table> | Test events | Direction | when { the IUT receives a valid <i>OPERATION</i> Request from AE containing Resource Type set to 3 (container) and To set to TARGET_RESOURCE_ADDRESS and From set to AE-ID and ResponseType set to 2 (nonBlockingRequestAsynch) } | IUT ← AE | then { the IUT sends a valid Response containing Response Status Code set to 1002 (ACCEPTED for nonBlockingRequestAsynch) and no Content } | IUT → AE | |
| Test events | Direction | | | | | | | |
| when { the IUT receives a valid <i>OPERATION</i> Request from AE containing Resource Type set to 3 (container) and To set to TARGET_RESOURCE_ADDRESS and From set to AE-ID and ResponseType set to 2 (nonBlockingRequestAsynch) } | IUT ← AE | | | | | | | |
| then { the IUT sends a valid Response containing Response Status Code set to 1002 (ACCEPTED for nonBlockingRequestAsynch) and no Content } | IUT → AE | | | | | | | |

| TP Id | OPERATION |
|------------------------------|------------------|
| TP/oneM2M/CSE/RT/NBA/001 CRE | CREATE |
| TP/oneM2M/CSE/RT/NBA/001 UPD | UPDATE |
| TP/oneM2M/CSE/RT/NBA/001 RET | RETRIEVE |
| TP/oneM2M/CSE/RT/NBA/001 DEL | DELETE |

Editor's Note: Need to be clarified that does it make sense to have such TPs on the NBR group when no support of NBR from the IUT is required.

| TP Id | TP/oneM2M/CSE/RT/NBA/002 | | | | | | | |
|---|--|--------------------|------------------|---|----------|---|----------|--|
| Test objective | Check that the IUT responds to a Non-Blocking Asynchronous Request <i>OPERATION</i> with the reference of a <request> resource provided within the Content parameter of the Response | | | | | | | |
| Reference | TS-0001 [1], clause 8.2.2.2 | | | | | | | |
| Config Id | CF01 | | | | | | | |
| Parent Release | Release 2 | | | | | | | |
| PICS Selection | PICS_NON_BLOCKING_REQUEST_ASYNCH | | | | | | | |
| Initial conditions | <p>with {</p> <p style="padding-left: 20px;">the IUT being in the "initial state"</p> <p style="padding-left: 20px;">and the IUT having registered the AE</p> <p style="padding-left: 20px;">and the Originator having privileges to perform <i>OPERATION</i> on the resource TARGET_RESOURCE_ADDRESS</p> <p>}</p> | | | | | | | |
| Expected behaviour | <table border="1"> <thead> <tr> <th>Test events</th> <th>Direction</th> </tr> </thead> <tbody> <tr> <td> when { the IUT receives a valid <i>OPERATION</i> Request from AE containing Resource Type set to 3 (container) and To set to TARGET_RESOURCE_ADDRESS and From set to AE-ID and ResponseType set to 2 (nonBlockingRequestAsynch) } </td> <td>IUT ← AE</td> </tr> <tr> <td> then { and the IUT sends a valid Response containing Response Status Code set to 1002 (ACCEPTED for nonBlockingRequestAsynch) and Content containing URI attribute set to REQUEST_RESOURCE_ADDRESS } </td> <td>IUT → AE</td> </tr> </tbody> </table> | Test events | Direction | when { the IUT receives a valid <i>OPERATION</i> Request from AE containing Resource Type set to 3 (container) and To set to TARGET_RESOURCE_ADDRESS and From set to AE-ID and ResponseType set to 2 (nonBlockingRequestAsynch) } | IUT ← AE | then { and the IUT sends a valid Response containing Response Status Code set to 1002 (ACCEPTED for nonBlockingRequestAsynch) and Content containing URI attribute set to REQUEST_RESOURCE_ADDRESS } | IUT → AE | |
| Test events | Direction | | | | | | | |
| when { the IUT receives a valid <i>OPERATION</i> Request from AE containing Resource Type set to 3 (container) and To set to TARGET_RESOURCE_ADDRESS and From set to AE-ID and ResponseType set to 2 (nonBlockingRequestAsynch) } | IUT ← AE | | | | | | | |
| then { and the IUT sends a valid Response containing Response Status Code set to 1002 (ACCEPTED for nonBlockingRequestAsynch) and Content containing URI attribute set to REQUEST_RESOURCE_ADDRESS } | IUT → AE | | | | | | | |

| TP Id | OPERATION |
|------------------------------|------------------|
| TP/oneM2M/CSE/RT/NBA/002_CRE | CREATE |
| TP/oneM2M/CSE/RT/NBA/002_UPD | UPDATE |
| TP/oneM2M/CSE/RT/NBA/002_RET | RETRIEVE |
| TP/oneM2M/CSE/RT/NBA/002_DEL | DELETE |

| TP Id | TP/oneM2M/CSE/RT/NBA/003 | | | | | | | |
|--|---|--------------------|------------------|---|----------|--|----------|--|
| Test objective | Check that the IUT sends the result of the requested Non-Blocking Asynchronous <i>OPERATION</i> as notification to the Originator when no notification target list is provided | | | | | | | |
| Reference | TS-0001 [1], clause 8.1.2, 8.2.2.2 | | | | | | | |
| Config Id | CF01 | | | | | | | |
| Parent Release | Release 2 | | | | | | | |
| PICS Selection | PICS_NON_BLOCKING_REQUEST_ASYNCH | | | | | | | |
| Initial conditions | <p>with {</p> <ul style="list-style-type: none"> the IUT being in the "initial state" and the IUT having registered the AE and the Originator having privileges to perform <i>OPERATION</i> on the resource TARGET_RESOURCE_ADDRESS } | | | | | | | |
| Expected behaviour | <table border="1"> <thead> <tr> <th>Test events</th> <th>Direction</th> </tr> </thead> <tbody> <tr> <td> when { <ul style="list-style-type: none"> the IUT receives a valid OPERATION Request from AE containing <ul style="list-style-type: none"> Resource Type set to 3 (container) and To set to TARGET_RESOURCE_ADDRESS and From set to AE-ID and ResponseType set to 2 (nonBlockingRequestAsynch) NotificationURI not set } </td><td>IUT ← AE</td></tr> <tr> <td> then { <ul style="list-style-type: none"> the IUT sends a valid Response (Ack) and the IUT sends a valid NOTIFY Request containing <ul style="list-style-type: none"> Content containing <ul style="list-style-type: none"> ResponsePrimitive representation indicating the response of the original Non-Blocking Asynchronous <i>OPERATION</i> containing <ul style="list-style-type: none"> Response Status Code set to RESPONSE_STATUS_CODE } </td><td>IUT → AE</td></tr> </tbody> </table> | Test events | Direction | when { <ul style="list-style-type: none"> the IUT receives a valid OPERATION Request from AE containing <ul style="list-style-type: none"> Resource Type set to 3 (container) and To set to TARGET_RESOURCE_ADDRESS and From set to AE-ID and ResponseType set to 2 (nonBlockingRequestAsynch) NotificationURI not set } | IUT ← AE | then { <ul style="list-style-type: none"> the IUT sends a valid Response (Ack) and the IUT sends a valid NOTIFY Request containing <ul style="list-style-type: none"> Content containing <ul style="list-style-type: none"> ResponsePrimitive representation indicating the response of the original Non-Blocking Asynchronous <i>OPERATION</i> containing <ul style="list-style-type: none"> Response Status Code set to RESPONSE_STATUS_CODE } | IUT → AE | |
| Test events | Direction | | | | | | | |
| when { <ul style="list-style-type: none"> the IUT receives a valid OPERATION Request from AE containing <ul style="list-style-type: none"> Resource Type set to 3 (container) and To set to TARGET_RESOURCE_ADDRESS and From set to AE-ID and ResponseType set to 2 (nonBlockingRequestAsynch) NotificationURI not set } | IUT ← AE | | | | | | | |
| then { <ul style="list-style-type: none"> the IUT sends a valid Response (Ack) and the IUT sends a valid NOTIFY Request containing <ul style="list-style-type: none"> Content containing <ul style="list-style-type: none"> ResponsePrimitive representation indicating the response of the original Non-Blocking Asynchronous <i>OPERATION</i> containing <ul style="list-style-type: none"> Response Status Code set to RESPONSE_STATUS_CODE } | IUT → AE | | | | | | | |

| TP Id | OPERATION | RESPONSE_STATUS_CODE |
|------------------------------|------------------|-----------------------------|
| TP/oneM2M/CSE/RT/NBA/003_CRE | CREATE | 2001 (CREATED) |
| TP/oneM2M/CSE/RT/NBA/003_UPD | UPDATE | 2004 (UPDATED) |
| TP/oneM2M/CSE/RT/NBA/003_RET | RETRIEVE | 2000 (OK) |
| TP/oneM2M/CSE/RT/NBA/003_DEL | DELETE | 2002 (DELETED) |

| TP Id | TP/oneM2M/CSE/RT/NBA/004 | | | | | | | |
|--|---|-------------|-----------|--|----------|---|----------|--|
| Test objective | Check that the IUT does not send the result of the requested Non-Blocking Asynchronous <i>OPERATION</i> as notification to the Originator when an empty notification target list is provided | | | | | | | |
| Reference | TS-0001 [1], clause 8.1.2, 8.2.2.2 | | | | | | | |
| Config Id | CF01 | | | | | | | |
| Parent Release | Release 2 | | | | | | | |
| PICS Selection | PICS_NON_BLOCKING_REQUEST_ASYNCH | | | | | | | |
| Initial conditions | <p>with {</p> <p style="padding-left: 20px;">the IUT being in the "initial state"</p> <p style="padding-left: 20px;">and the IUT having registered the AE</p> <p style="padding-left: 20px;">and the Originator having privileges to perform <i>OPERATION</i> on the resource TARGET_RESOURCE_ADDRESS</p> <p>}</p> | | | | | | | |
| Expected behaviour | <table border="1" style="width: 100%; border-collapse: collapse;"> <thead> <tr> <th style="text-align: left; padding-bottom: 5px;">Test events</th> <th style="text-align: left; padding-bottom: 5px;">Direction</th> </tr> </thead> <tbody> <tr> <td style="padding-top: 5px;"> when { the IUT receives a valid <i>OPERATION</i> Request from AE containing Resource Type set to 3 (container) and To set to TARGET_RESOURCE_ADDRESS and From set to AE-ID and ResponseType set to 2 (nonBlockingRequestAsynch) and NotificationURI set to empty list } </td> <td style="padding-top: 5px; text-align: center;">IUT ← AE</td> </tr> <tr> <td style="padding-top: 5px;"> then { the IUT sends a valid Response (Ack) and the IUT does not send a NOTIFY Response } </td> <td style="padding-top: 5px; text-align: center;">IUT → AE</td> </tr> </tbody> </table> | Test events | Direction | when { the IUT receives a valid <i>OPERATION</i> Request from AE containing Resource Type set to 3 (container) and To set to TARGET_RESOURCE_ADDRESS and From set to AE-ID and ResponseType set to 2 (nonBlockingRequestAsynch) and NotificationURI set to empty list } | IUT ← AE | then { the IUT sends a valid Response (Ack) and the IUT does not send a NOTIFY Response } | IUT → AE | |
| Test events | Direction | | | | | | | |
| when { the IUT receives a valid <i>OPERATION</i> Request from AE containing Resource Type set to 3 (container) and To set to TARGET_RESOURCE_ADDRESS and From set to AE-ID and ResponseType set to 2 (nonBlockingRequestAsynch) and NotificationURI set to empty list } | IUT ← AE | | | | | | | |
| then { the IUT sends a valid Response (Ack) and the IUT does not send a NOTIFY Response } | IUT → AE | | | | | | | |

| TP Id | OPERATION |
|------------------------------|-----------|
| TP/oneM2M/CSE/RT/NBA/004_CRE | CREATE |
| TP/oneM2M/CSE/RT/NBA/004_UPD | UPDATE |
| TP/oneM2M/CSE/RT/NBA/004_RET | RETRIEVE |
| TP/oneM2M/CSE/RT/NBA/004_DEL | DELETE |

| TP Id | TP/oneM2M/CSE/RT/NBA/005 | | | | | | | |
|---|--|-------------|-----------|--|----------|---|-------------------------------------|--|
| Test objective | Check that the IUT sends the result of the requested Non-Blocking Asynchronous <i>OPERATION</i> as notification to the notification targets indicated in responseType/notificationURI attribute of the request | | | | | | | |
| Reference | TS-0001 [1], clause 8.1.2, 8.2.2.2 | | | | | | | |
| Config Id | CF01 | | | | | | | |
| Parent Release | Release 2 | | | | | | | |
| PICS Selection | PICS_NON_BLOCKING_REQUEST_ASYNCH | | | | | | | |
| Initial conditions | <p>with {</p> <p style="padding-left: 20px;">the IUT being in the "initial state"</p> <p style="padding-left: 20px;">and the IUT having registered the AE1</p> <p style="padding-left: 20px;">and the IUT having registered the AE2</p> <p style="padding-left: 20px;">and the AE1 having privileges to perform <i>OPERATION</i> on the resource TARGET_RESOURCE_ADDRESS</p> <p>}</p> | | | | | | | |
| Expected behaviour | <table border="1"> <thead> <tr> <th>Test events</th> <th>Direction</th> </tr> </thead> <tbody> <tr> <td> <p>when {</p> <p style="padding-left: 20px;">the IUT receives a valid OPERATION Request from AE containing</p> <p style="padding-left: 40px;">Resource Type set to 3 (container) and</p> <p style="padding-left: 40px;">To set to TARGET_RESOURCE_ADDRESS and</p> <p style="padding-left: 40px;">From set to AE-ID and</p> <p style="padding-left: 60px;">Response Type parameter containing</p> <p style="padding-left: 80px;">responseTypeValue set to 2 (nonBlockingRequestAsynch) and</p> <p style="padding-left: 80px;">NotificationURI set to AE1_RESOURCE_ADDRESS and</p> <p style="padding-left: 80px;">AE2_RESOURCE_ADDRESS</p> <p>}</p> </td> <td>IUT ← AE</td> </tr> <tr> <td> <p>then {</p> <p style="padding-left: 20px;">the IUT sends a valid Response (Ack)</p> <p style="padding-left: 20px;">and the IUT sends a valid NOTIFY Request containing to AE1</p> <p style="padding-left: 40px;">Content containing</p> <p style="padding-left: 40px;">ResponsePrimitive representation indicating the response of the original Non-Blocking Asynchronous <i>OPERATION</i> containing</p> <p style="padding-left: 60px;">Response Status Code set to RESPONSE_STATUS_CODE</p> <p style="padding-left: 20px;">and the IUT sends a valid NOTIFY Request containing to AE2</p> <p style="padding-left: 40px;">Content containing</p> <p style="padding-left: 40px;">ResponsePrimitive representation indicating the response of the original Non-Blocking Asynchronous <i>OPERATION</i> containing</p> <p style="padding-left: 60px;">Response Status Code set to RESPONSE_STATUS_CODE</p> <p>}</p> </td> <td> IUT → AE1 IUT → AE1 IUT → AE2 </td> </tr> </tbody> </table> | Test events | Direction | <p>when {</p> <p style="padding-left: 20px;">the IUT receives a valid OPERATION Request from AE containing</p> <p style="padding-left: 40px;">Resource Type set to 3 (container) and</p> <p style="padding-left: 40px;">To set to TARGET_RESOURCE_ADDRESS and</p> <p style="padding-left: 40px;">From set to AE-ID and</p> <p style="padding-left: 60px;">Response Type parameter containing</p> <p style="padding-left: 80px;">responseTypeValue set to 2 (nonBlockingRequestAsynch) and</p> <p style="padding-left: 80px;">NotificationURI set to AE1_RESOURCE_ADDRESS and</p> <p style="padding-left: 80px;">AE2_RESOURCE_ADDRESS</p> <p>}</p> | IUT ← AE | <p>then {</p> <p style="padding-left: 20px;">the IUT sends a valid Response (Ack)</p> <p style="padding-left: 20px;">and the IUT sends a valid NOTIFY Request containing to AE1</p> <p style="padding-left: 40px;">Content containing</p> <p style="padding-left: 40px;">ResponsePrimitive representation indicating the response of the original Non-Blocking Asynchronous <i>OPERATION</i> containing</p> <p style="padding-left: 60px;">Response Status Code set to RESPONSE_STATUS_CODE</p> <p style="padding-left: 20px;">and the IUT sends a valid NOTIFY Request containing to AE2</p> <p style="padding-left: 40px;">Content containing</p> <p style="padding-left: 40px;">ResponsePrimitive representation indicating the response of the original Non-Blocking Asynchronous <i>OPERATION</i> containing</p> <p style="padding-left: 60px;">Response Status Code set to RESPONSE_STATUS_CODE</p> <p>}</p> | IUT → AE1 IUT → AE1 IUT → AE2 | |
| Test events | Direction | | | | | | | |
| <p>when {</p> <p style="padding-left: 20px;">the IUT receives a valid OPERATION Request from AE containing</p> <p style="padding-left: 40px;">Resource Type set to 3 (container) and</p> <p style="padding-left: 40px;">To set to TARGET_RESOURCE_ADDRESS and</p> <p style="padding-left: 40px;">From set to AE-ID and</p> <p style="padding-left: 60px;">Response Type parameter containing</p> <p style="padding-left: 80px;">responseTypeValue set to 2 (nonBlockingRequestAsynch) and</p> <p style="padding-left: 80px;">NotificationURI set to AE1_RESOURCE_ADDRESS and</p> <p style="padding-left: 80px;">AE2_RESOURCE_ADDRESS</p> <p>}</p> | IUT ← AE | | | | | | | |
| <p>then {</p> <p style="padding-left: 20px;">the IUT sends a valid Response (Ack)</p> <p style="padding-left: 20px;">and the IUT sends a valid NOTIFY Request containing to AE1</p> <p style="padding-left: 40px;">Content containing</p> <p style="padding-left: 40px;">ResponsePrimitive representation indicating the response of the original Non-Blocking Asynchronous <i>OPERATION</i> containing</p> <p style="padding-left: 60px;">Response Status Code set to RESPONSE_STATUS_CODE</p> <p style="padding-left: 20px;">and the IUT sends a valid NOTIFY Request containing to AE2</p> <p style="padding-left: 40px;">Content containing</p> <p style="padding-left: 40px;">ResponsePrimitive representation indicating the response of the original Non-Blocking Asynchronous <i>OPERATION</i> containing</p> <p style="padding-left: 60px;">Response Status Code set to RESPONSE_STATUS_CODE</p> <p>}</p> | IUT → AE1 IUT → AE1 IUT → AE2 | | | | | | | |

| TP Id | OPERATION | RESPONSE_STATUS_CODE |
|------------------------------|-----------|----------------------|
| TP/oneM2M/CSE/RT/NBA/005_CRE | CREATE | 2001 (CREATED) |

| TP Id | OPERATION | RESPONSE_STATUS_CODE |
|------------------------------|-----------|----------------------|
| TP/oneM2M/CSE/RT/NBA/005_UPD | UPDATE | 2004 (UPDATED) |
| TP/oneM2M/CSE/RT/NBA/005_RET | RETRIEVE | 2000 (OK) |
| TP/oneM2M/CSE/RT/NBA/005_DEL | DELETE | 2002 (DELETED) |

7.2.2.10 Security(SEC)

7.2.2.10.1 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], clause 9.6.2-2 and clause, 10.2.21 | |
| Config Id | CF01 | |
| Parent Release | Release 1 | |
| PICS Selection | PICS_CSE | |
| Initial conditions | <p>with {</p> <p>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</p> <p>}</p> | |
| Expected behaviour | <p>Test events</p> <p>when {</p> <p>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</p> <p>}</p> <p>then {</p> <p>the IUT creates the accessControlPolicy resource and the IUT sends a valid Response containing Response Status Code set to 2001 (CREATED)</p> <p>}</p> | <p>Direction</p> <p>IUT ← AE</p> <p>IUT → AE</p> |

| | | |
|---------------------------|---|------------------|
| 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], clause 9.6.2-2 and clause 10.2.21 | |
| Config Id | CF01 | |
| Parent Release | Release 1 | |
| PICS Selection | PICS_CSE | |
| Initial conditions | <p>with {</p> <p>the IUT being in the "initial state"</p> <p>and the IUT having registered the AE</p> <p>and the AE having privileges to perform CREATE operation on the resource TARGET_RESOURCE_ADDRESS</p> <p>}</p> | |
| Expected behaviour | Test events | Direction |
| | <p>when {</p> <p>the IUT receives a valid CREATE Request containing</p> <p>To set to TARGET_RESOURCE_ADDRESS and</p> <p>From set to AE_ID and</p> <p>Content containing</p> <p>accessControlPolicy resource containing</p> <p>selfPrivileges attribute containing</p> <p>accessControlRule attribute containing</p> <p>ACCESS_CONTROL_RULE_1 and</p> <p>ACCESS_CONTROL_RULE_2</p> <p>}</p> <p>then {</p> <p>the IUT creates the accessControlPolicy resource</p> <p>and the IUT sends a valid Response containing</p> <p>Response Status Code set to 2001 (CREATED)</p> <p>}</p> | IUT ← AE |
| | | IUT → AE |

| 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], clause 9.6.2 and clause 10.2.21 | | | | | | | |
| Config Id | CF01 | | | | | | | |
| Parent Release | Release 1 | | | | | | | |
| PICS Selection | PICS_CSE | | | | | | | |
| Initial conditions | <p>with {</p> <p style="padding-left: 20px;">the IUT being in the "initial state"</p> <p style="padding-left: 20px;">and the IUT having registered the AE</p> <p style="padding-left: 20px;">and the AE having privileges to perform CREATE operation on the resource TARGET_RESOURCE_ADDRESS</p> <p>}</p> | | | | | | | |
| Expected behaviour | <table border="1"> <thead> <tr> <th>Test events</th> <th>Direction</th> </tr> </thead> <tbody> <tr> <td> 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 </td> <td>IUT ← AE</td> </tr> <tr> <td> then { the IUT creates the accessControlPolicy resource and the IUT sends a valid Response containing Response Status Code set to 2001 (CREATED) </td> <td>IUT → AE</td> </tr> </tbody> </table> | 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 | |
| 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 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], clause 9.6.2and clause 10.2.21 | |
| Config Id | CF01 | |
| Parent Release | Release 1 | |
| PICS Selection | PICS_CSE | |
| Initial conditions | <p>with {</p> <p>the IUT being in the "initial state"</p> <p>and the IUT having registered the AE</p> <p>and the AE having privileges to perform CREATE operation on the resource TARGET_RESOURCE_ADDRESS</p> <p>}</p> | |
| Expected behaviour | Test events | Direction |
| | <p>when {</p> <p>the IUT receives a valid CREATE Request containing</p> <p>To set to TARGET_RESOURCE_ADDRESS and</p> <p>From set to AE_ID and</p> <p>Content containing</p> <p>accessControlPolicy resource containing</p> <p>selfPrivileges attribute set to empty list</p> <p>}</p> | IUT ← AE |
| | <p>then {</p> <p>the IUT does not create the accessControlPolicy resource</p> <p>and the IUT sends a valid Response containing</p> <p>Response Status Code set to 4000 (BAD_REQUEST)</p> <p>}</p> | IUT → AE |

| TP Id | TP/oneM2M/CSE/SEC/ACP/CRE/005 | | | | | | | |
|---|--|-------------|-----------|---|-----------|---|-----------|--|
| Test objective | Check that the IUT responds successfully when an AE creates an accessControlPolicy resource having accessControlOriginators element set to a group resource identifier which contains AE resource as member | | | | | | | |
| Reference | TS-0001 [1], clause 9.6.2 | | | | | | | |
| Config Id | CF01 | | | | | | | |
| Parent release | Release 3 | | | | | | | |
| PICS Selection | PICS CSE | | | | | | | |
| Initial conditions | <p>with {</p> <p>the IUT being in the "initial state"</p> <p>and the IUT having registered the AE1</p> <p>and the AE1 having privileges to perform CREATE operation on the resource TARGET_RESOURCE_ADDRESS</p> <p>and the IUT having registered the AE2</p> <p>and the IUT having created a group resource at GROUP_RESOURCE_ADDRESS containing</p> <p>memberIDs set to AE2_RESOURCE_ADDRESS</p> <p>}</p> | | | | | | | |
| Expected behaviour | <table border="1"> <thead> <tr> <th>Test events</th> <th>Direction</th> </tr> </thead> <tbody> <tr> <td> when { <p>the IUT receives a valid CREATE Request containing</p> <p>To set to TARGET_RESOURCE_ADDRESS and</p> <p>From set to AE1 and</p> <p>Content containing</p> <p>accessControlPolicy resource containing</p> <p>privileges containing</p> <p>accessControlRule element containing</p> <p>accessControlOriginators element set to</p> <p>GROUP_RESOURCE_ADDRESS</p> <p>}</p></td> <td>IUT ← AE1</td> </tr> <tr> <td> then { <p>the IUT sends a valid Response containing</p> <p>Response Status Code set to 2001 (CREATED)</p> <p>}</p></td> <td>IUT → AE1</td> </tr> </tbody> </table> | Test events | Direction | when { <p>the IUT receives a valid CREATE Request containing</p> <p>To set to TARGET_RESOURCE_ADDRESS and</p> <p>From set to AE1 and</p> <p>Content containing</p> <p>accessControlPolicy resource containing</p> <p>privileges containing</p> <p>accessControlRule element containing</p> <p>accessControlOriginators element set to</p> <p>GROUP_RESOURCE_ADDRESS</p> <p>}</p> | IUT ← AE1 | then { <p>the IUT sends a valid Response containing</p> <p>Response Status Code set to 2001 (CREATED)</p> <p>}</p> | IUT → AE1 | |
| Test events | Direction | | | | | | | |
| when { <p>the IUT receives a valid CREATE Request containing</p> <p>To set to TARGET_RESOURCE_ADDRESS and</p> <p>From set to AE1 and</p> <p>Content containing</p> <p>accessControlPolicy resource containing</p> <p>privileges containing</p> <p>accessControlRule element containing</p> <p>accessControlOriginators element set to</p> <p>GROUP_RESOURCE_ADDRESS</p> <p>}</p> | IUT ← AE1 | | | | | | | |
| then { <p>the IUT sends a valid Response containing</p> <p>Response Status Code set to 2001 (CREATED)</p> <p>}</p> | IUT → AE1 | | | | | | | |

7.2.2.10.2 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 | <p>with {</p> <p>the IUT being in the "initial state"</p> <p>and the IUT having registered the AE containing</p> <p>accessControlPolicyID attribute set to ACP_ID_1</p> <p>and the AE having privileges to perform UPDATE operation on the AE_RESOURCE_ADDRESS in selfPrivileges</p> <p>}</p> | |
| Expected behaviour | <p>Test events</p> <p>when {</p> <p>the IUT receives a valid UPDATE Request containing</p> <p>To set to AE_RESOURCE_ADDRESS and</p> <p>From set to AE_ID</p> <p>Content containing</p> <p>AE resource containing</p> <p>accessControlPolicyIDs attribute set to ACP_ID_2</p> <p>}</p> <p>then {</p> <p>the IUT updates the accessControlPolicyIDs attribute of AE resource</p> <p>and the IUT sends a valid Response containing</p> <p>Response Status Code set to 2004 (UPDATED) and</p> <p>Content containing</p> <p>AE resource containing</p> <p>accessControlPolicyID attribute set to ACP_ID_2</p> <p>}</p> | <p>Direction</p> <p>IUT ← AE</p> <p>IUT → AE</p> |

| | | |
|---------------------------|---|--|
| 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 | <p>with {</p> <ul style="list-style-type: none"> 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 <p>}</p> | |
| Expected behaviour | Test events <p>when {</p> <ul style="list-style-type: none"> 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 <p>}</p> <p>then {</p> <ul style="list-style-type: none"> 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 (ORIGINATOR_HAS_NO_PRIVILEGE) <p>}</p> | Direction IUT ← AE IUT → AE |

7.2.2.10.3 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 <i>OPERATION</i> without having privileges for performing the <i>OPERATION</i> 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 <i>OPERATION</i> on the resource TARGET_RESOURCE_ADDRESS } | |
| Expected behaviour | Test events when { the IUT receives a valid <i>OPERATION</i> Request containing To set to TARGET_RESOURCE_ADDRESS and From set to ORIGINATOR_ID } then { the IUT sends a valid Response containing Response Status Code set to 4103 (ORIGINATOR_HAS_NO_PRIVILEGE) } | Direction IUT ← ORIGINATOR 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 Id | TP/oneM2M/CSE/SEC/ACP/002 | | | | | | | |
|--|---|-------------|-----------|--|----------|---|----------|--|
| Test objective | Check that the IUT responds successfully when the AE tries an <i>OPERATION</i> on its <AE> resource which has multiple accessControlPolicyID attribute | | | | | | | |
| Reference | TS-0001 [1], clause 9.6.1.3.2-1 and clause 9.6.2.1-1 | | | | | | | |
| Config Id | CF01 | | | | | | | |
| Parent Release | Release 1 | | | | | | | |
| PICS Selection | PICS_CSE | | | | | | | |
| Initial conditions | <p>with {</p> <p>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 <i>OPERATION</i> on itself given by ACP_ID_2 only</p> <p>}</p> | | | | | | | |
| Expected behaviour | <table border="1"> <thead> <tr> <th>Test events</th> <th>Direction</th> </tr> </thead> <tbody> <tr> <td> when { the IUT receives a valid <i>OPERATION</i> Request containing To set to AE_RESOURCE_ADDRESS and From set to AE_ID } </td> <td>IUT ← AE</td> </tr> <tr> <td> then { the IUT sends a valid Response containing Response Status Code set to RESPONSE_STATUS_CODE } </td> <td>IUT → AE</td> </tr> </tbody> </table> | Test events | Direction | when { the IUT receives a valid <i>OPERATION</i> 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 | |
| Test events | Direction | | | | | | | |
| when { the IUT receives a valid <i>OPERATION</i> 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 Id | TP/oneM2M/CSE/SEC/ACP/003 | | | | | | | |
|--|---|-------------|-----------|--|-------------------------|--|--------------------------|--|
| Test objective | Check that the IUT responds successfully when an allowed DOMAIN tries an <i>OPERATION</i> on a 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 | <p>with {</p> <p style="padding-left: 20px;">the IUT being in the "initial state"</p> <p style="padding-left: 20px;">and the IUT having registered the AE</p> <p style="padding-left: 20px;">and the DOMAIN having privileges to perform an <i>OPERATION</i> on the resource AE_RESOURCE_ADDRESS</p> <p>}</p> | | | | | | | |
| Expected behaviour | <table border="1" style="width: 100%; border-collapse: collapse;"> <thead> <tr> <th style="text-align: center; padding: 2px;">Test events</th> <th style="text-align: center; padding: 2px;">Direction</th> </tr> </thead> <tbody> <tr> <td style="padding: 2px;"> when { the IUT receives a valid <i>OPERATION</i> Request containing To set to AE_RESOURCE_ADDRESS and From set to DOMAIN } </td> <td style="text-align: center; padding: 2px;">IUT \leftarrow DOMAIN</td> </tr> <tr> <td style="padding: 2px;"> then { the IUT sends a valid Response containing Response Status Code set to RESPONSE_STATUS_CODE } </td> <td style="text-align: center; padding: 2px;">IUT \rightarrow DOMAIN</td> </tr> </tbody> </table> | Test events | Direction | when { the IUT receives a valid <i>OPERATION</i> Request containing To set to AE_RESOURCE_ADDRESS and From set to DOMAIN } | IUT \leftarrow DOMAIN | then { the IUT sends a valid Response containing Response Status Code set to RESPONSE_STATUS_CODE } | IUT \rightarrow DOMAIN | |
| Test events | Direction | | | | | | | |
| when { the IUT receives a valid <i>OPERATION</i> Request containing To set to AE_RESOURCE_ADDRESS and From set to DOMAIN } | IUT \leftarrow DOMAIN | | | | | | | |
| then { the IUT sends a valid Response containing Response Status Code set to RESPONSE_STATUS_CODE } | IUT \rightarrow 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 Id | TP/oneM2M/CSE/SEC/ACP/004 | | | | | | | |
|--|---|-------------|-----------|--|---------------------|--|---------------------|--|
| Test objective | Check that the IUT responds successfully when any ORIGINATOR tries an <i>OPERATION</i> on a 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 | <p>with {</p> <p style="padding-left: 20px;">the IUT being in the "initial state"</p> <p style="padding-left: 20px;">and the IUT having registered the AE</p> <p style="padding-left: 20px;">and any originator (*) having privileges to perform an <i>OPERATION</i> on the resource AE_RESOURCE_ADDRESS</p> <p>}</p> | | | | | | | |
| Expected behaviour | <table border="1" style="width: 100%; border-collapse: collapse;"> <thead> <tr> <th style="text-align: center; padding: 2px;">Test events</th> <th style="text-align: center; padding: 2px;">Direction</th> </tr> </thead> <tbody> <tr> <td style="padding: 2px;">when { the IUT receives a valid <i>OPERATION</i> Request containing To set to AE_RESOURCE_ADDRESS and From set to ORIGINATOR }</td><td style="text-align: center; padding: 2px;">IUT ← ORIGINATOR</td></tr> <tr> <td style="padding: 2px;">then { the IUT sends a valid Response containing Response Status Code set to RESPONSE_STATUS_CODE }</td><td style="text-align: center; padding: 2px;">IUT → ORIGINATOR</td></tr> </tbody> </table> | Test events | Direction | when { the IUT receives a valid <i>OPERATION</i> 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 | |
| Test events | Direction | | | | | | | |
| when { the IUT receives a valid <i>OPERATION</i> 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 Id | TP/oneM2M/CSE/SEC/ACP/005 | | | | | | | |
|---|--|--------------------|------------------|---|----------|---|----------|--|
| Test objective | Check that the IUT responds successfully when the AE tries an <i>OPERATION</i> on a AE_RESOURCE_TYPE resource and that the request is within accessControlTimeWindow context | | | | | | | |
| Reference | TS-0001 [1], clause 9.6.2.2-1 | | | | | | | |
| Config Id | CF01 | | | | | | | |
| Parent Release | Release 1 | | | | | | | |
| PICS Selection | PICS CSE | | | | | | | |
| Initial conditions | <pre>with { the IUT being in the "initial state" and the IUT having registered the AE and the AE having privileges to perform <i>OPERATION</i> on the AE_RESOURCE_ADDRESS within TIME_WINDOW }</pre> | | | | | | | |
| Expected behaviour | <table border="1"> <thead> <tr> <th>Test events</th> <th>Direction</th> </tr> </thead> <tbody> <tr> <td> <pre>when { the IUT receives a valid <i>OPERATION</i> Request containing To set to AE_RESOURCE_ADDRESS and From set to AE_ID within TIME_WINDOW }</pre> </td><td>IUT ← AE</td></tr> <tr> <td> <pre>then { the IUT sends a valid Response containing Response Status Code set to RESPONSE_STATUS_CODE }</pre> </td><td>IUT → AE</td></tr> </tbody> </table> | Test events | Direction | <pre>when { the IUT receives a valid <i>OPERATION</i> Request containing To set to AE_RESOURCE_ADDRESS and From set to AE_ID within TIME_WINDOW }</pre> | IUT ← AE | <pre>then { the IUT sends a valid Response containing Response Status Code set to RESPONSE_STATUS_CODE }</pre> | IUT → AE | |
| Test events | Direction | | | | | | | |
| <pre>when { the IUT receives a valid <i>OPERATION</i> Request containing To set to AE_RESOURCE_ADDRESS and From set to AE_ID within TIME_WINDOW }</pre> | IUT ← AE | | | | | | | |
| <pre>then { the IUT sends a valid Response containing Response Status Code set to RESPONSE_STATUS_CODE }</pre> | 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 Id | TP/oneM2M/CSE/SEC/ACP/006 | |
| Test objective | Check that the IUT responds with an error when the AE tries an <i>OPERATION</i> on a AE_RESOURCE_TYPE resource out of accessControlTimeWindow context | |
| Reference | TS-0001 [1], clause 9.6.2.2-1 | |
| Config Id | CF01 | |
| Parent Release | Release 1 | |
| PICS Selection | PICS_CSE | |
| Initial conditions | <p>with {</p> <p>the IUT being in the "initial state"</p> <p>and the IUT having registered the AE</p> <p>and the AE having privileges to perform <i>OPERATION</i> on the AE_RESOURCE_ADDRESS within TIME_WINDOW</p> } | |
| Expected behaviour | Test events <p>when {</p> <p>the IUT receives a valid <i>OPERATION</i> Request containing</p> <p>To set to AE_RESOURCE_ADDRESS and</p> <p>From set to AE_ID out of TIME_WINDOW</p> } | IUT ← AE |
| | <p>then {</p> <p>the IUT sends a valid Response containing</p> <p>Response Status Code set to 4103 (ORIGINATOR_HAS_NO_PRIVILEGE)</p> } | 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 Id | TP/oneM2M/CSE/SEC/ACP/007 | | | | | | | |
|---|--|-------------|-----------|---|----------|--|----------|--|
| Test objective | Check that the IUT responds successfully when the AE tries an <i>OPERATION</i> on a AE_RESOURCE_TYPE resource and that the request is within accessControlLocationRegion context | | | | | | | |
| Reference | TS-0001 [1], clause 9.6.2.2-1 | | | | | | | |
| Config Id | CF01 | | | | | | | |
| Parent Release | Release 1 | | | | | | | |
| PICS Selection | PICS_CSE | | | | | | | |
| Initial conditions | <p>with {</p> <p>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 <i>OPERATION</i> on the AE_RESOURCE_ADDRESS within LOCATION_RESTRICTION</p> <p>}</p> | | | | | | | |
| Expected behaviour | <table border="1"> <thead> <tr> <th>Test events</th> <th>Direction</th> </tr> </thead> <tbody> <tr> <td> <p>when {</p> <p>the IUT receives a valid <i>OPERATION</i> containing To set to AE_RESOURCE_ADDRESS and From set to AE_ID and LOCATION within LOCATION_RESTRICTION</p> <p>}</p> </td><td>IUT ← AE</td></tr> <tr> <td> <p>then {</p> <p>the IUT sends a valid Response containing Response Status Code set to RESPONSE_STATUS_CODE</p> <p>}</p> </td><td>IUT → AE</td></tr> </tbody> </table> | Test events | Direction | <p>when {</p> <p>the IUT receives a valid <i>OPERATION</i> containing To set to AE_RESOURCE_ADDRESS and From set to AE_ID and LOCATION within LOCATION_RESTRICTION</p> <p>}</p> | IUT ← AE | <p>then {</p> <p>the IUT sends a valid Response containing Response Status Code set to RESPONSE_STATUS_CODE</p> <p>}</p> | IUT → AE | |
| Test events | Direction | | | | | | | |
| <p>when {</p> <p>the IUT receives a valid <i>OPERATION</i> containing To set to AE_RESOURCE_ADDRESS and From set to AE_ID and LOCATION within LOCATION_RESTRICTION</p> <p>}</p> | IUT ← AE | | | | | | | |
| <p>then {</p> <p>the IUT sends a valid Response containing Response Status Code set to RESPONSE_STATUS_CODE</p> <p>}</p> | 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 <i>OPERATION</i> on a AE_RESOURCE_TYPE resource out of accessControlLocationRegion context | | | | | | | |
| Reference | TS-0001 [1], clause 9.6.2.2-1 | | | | | | | |
| Config Id | CF01 | | | | | | | |
| Parent Release | Release 1 | | | | | | | |
| PICS Selection | PICS_CSE | | | | | | | |
| Initial conditions | <p>with {</p> <p>the IUT being in the "initial state" and the IUT having registered the AE and the AE having privileges to perform <i>OPERATION</i> on the AE_RESOURCE_ADDRESS within LOCATION_RESTRICTION</p> <p>}</p> | | | | | | | |
| Expected behaviour | <table border="1"> <thead> <tr> <th>Test events</th> <th>Direction</th> </tr> </thead> <tbody> <tr> <td> <p>when {</p> <p>the IUT receives a valid OPERATION Request containing To set to AE_RESOURCE_ADDRESS and From set to AE_ID out of LOCATION_RESTRICTION</p> <p>}</p> </td><td>IUT ← AE</td></tr> <tr> <td> <p>then {</p> <p>the IUT sends a valid Response containing Response Status Code set to 4103 (ORIGINATOR_HAS_NO_PRIVILEGE)</p> <p>}</p> </td><td>IUT → AE</td></tr> </tbody> </table> | Test events | Direction | <p>when {</p> <p>the IUT receives a valid OPERATION Request containing To set to AE_RESOURCE_ADDRESS and From set to AE_ID out of LOCATION_RESTRICTION</p> <p>}</p> | IUT ← AE | <p>then {</p> <p>the IUT sends a valid Response containing Response Status Code set to 4103 (ORIGINATOR_HAS_NO_PRIVILEGE)</p> <p>}</p> | IUT → AE | |
| Test events | Direction | | | | | | | |
| <p>when {</p> <p>the IUT receives a valid OPERATION Request containing To set to AE_RESOURCE_ADDRESS and From set to AE_ID out of LOCATION_RESTRICTION</p> <p>}</p> | IUT ← AE | | | | | | | |
| <p>then {</p> <p>the IUT sends a valid Response containing Response Status Code set to 4103 (ORIGINATOR_HAS_NO_PRIVILEGE)</p> <p>}</p> | 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 Id | TP/oneM2M/CSE/SEC/ACP/009 | |
| Test objective | Check that the IUT responds successfully when the AE tries an <i>OPERATION</i> on a TARGET_RESOURCE_TYPE resource and that the request is within accessControlIpAddresses context | |
| Reference | TS-0001 [1], clause 9.6.2.2-1 | |
| Config Id | CF01 | |
| Parent Release | Release 1 | |
| PICS Selection | PICS_CSE | |
| Initial conditions | <p>with {</p> <p style="padding-left: 20px;">the IUT being in the "initial state"</p> <p style="padding-left: 20px;">and the IUT having registered the AE</p> <p style="padding-left: 20px;">and the AE having privileges to perform <i>OPERATION</i> on the AE_RESOURCE_ADDRESS within IP_ADDRESS_RESTRICTION</p> <p>}</p> | |
| Expected behaviour | Test events <pre> 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 } then { the IUT sends a valid Response containing Response Status Code set to RESPONSE_STATUS_CODE } </pre> | Direction IUT ← AE 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 Id | TP/oneM2M/CSE/SEC/ACP/010 | | | | | | | |
|---|---|--------------------|------------------|---|----------|--|----------|--|
| Test objective | Check that the IUT responds with an error when the AE tries an <i>OPERATION</i> on a <i>AE_RESOURCE_TYPE</i> resource out of accessControlIpAddresses context | | | | | | | |
| Reference | TS-0001 [1], clause 9.6.2.2-1 | | | | | | | |
| Config Id | CF01 | | | | | | | |
| Parent Release | Release 1 | | | | | | | |
| PICS Selection | PICS_CSE | | | | | | | |
| Initial conditions | <pre>with { the IUT being in the "initial state" and the IUT having registered the AE and the AE having privileges to perform <i>OPERATION</i> on the <i>AE_RESOURCE_ADDRESS</i> within <i>IP_ADDRESS_RESTRICTION</i> }</pre> | | | | | | | |
| Expected behaviour | <table border="1"> <thead> <tr> <th>Test events</th> <th>Direction</th> </tr> </thead> <tbody> <tr> <td> <pre>when { the IUT receives a valid <i>OPERATION</i> Request containing To set to <i>AE_RESOURCE_ADDRESS</i> and From set to <i>AE_ID</i> and <i>AE_IP_ADDRESS</i> out of <i>IP_ADDRESS_RESTRICTION</i> }</pre> </td><td>IUT ← AE</td></tr> <tr> <td> <pre>then { the IUT sends a valid Response containing Response Status Code set to 4103 (<i>ORIGINATOR_HAS_NO_PRIVILEGE</i>) }</pre> </td><td>IUT → AE</td></tr> </tbody> </table> | Test events | Direction | <pre>when { the IUT receives a valid <i>OPERATION</i> Request containing To set to <i>AE_RESOURCE_ADDRESS</i> and From set to <i>AE_ID</i> and <i>AE_IP_ADDRESS</i> out of <i>IP_ADDRESS_RESTRICTION</i> }</pre> | IUT ← AE | <pre>then { the IUT sends a valid Response containing Response Status Code set to 4103 (<i>ORIGINATOR_HAS_NO_PRIVILEGE</i>) }</pre> | IUT → AE | |
| Test events | Direction | | | | | | | |
| <pre>when { the IUT receives a valid <i>OPERATION</i> Request containing To set to <i>AE_RESOURCE_ADDRESS</i> and From set to <i>AE_ID</i> and <i>AE_IP_ADDRESS</i> out of <i>IP_ADDRESS_RESTRICTION</i> }</pre> | IUT ← AE | | | | | | | |
| <pre>then { the IUT sends a valid Response containing Response Status Code set to 4103 (<i>ORIGINATOR_HAS_NO_PRIVILEGE</i>) }</pre> | 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 Id | TP/oneM2M/CSE/SEC/ACP/011 | |
| Test objective | Check that the IUT responds successfully when the AE tries an <i>OPERATION</i> on its child <container> resource whose accessControlPolicyID attribute is not set and AE has privileges for such <i>OPERATION</i> 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 | <p>with {</p> <p>the IUT being in the "initial state"</p> <p>and the IUT having registered the AE</p> <p>and the AE having a child <Container> resource containing</p> <p> no accessControlPolicyID attribute</p> <p>and the AE having privileges to perform an <i>OPERATION</i> on the resource CONTAINER_RESOURCE_ADDRESS</p> <p>}</p> | |
| Expected behaviour | Test events when { the IUT receives a valid <i>OPERATION</i> 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 Id | TP/oneM2M/CSE/SEC/ACP/012 | | | | | | | |
|---|--|--------------------|------------------|---|---------------------|---|---------------------|--|
| Test objective | Check that the IUT responds with an error when an ORIGINATOR tries an <i>OPERATION</i> on a <Container> resource with no accessControlPolicyID associated and such ORIGINATOR having no privileges for performing the <i>OPERATION</i> 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 | <pre>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 <i>OPERATION</i> on the <Container> resource }</pre> | | | | | | | |
| Expected behaviour | <table border="1"> <thead> <tr> <th>Test events</th> <th>Direction</th> </tr> </thead> <tbody> <tr> <td> <pre>when { the IUT receives a valid <i>OPERATION</i> Request containing To set to CONTAINER_RESOURCE_ADDRESS and From set to ORIGINATOR_ID }</pre> </td><td>IUT ← ORIGINATOR</td></tr> <tr> <td> <pre>then { the IUT sends a valid Response containing Response Status Code set to 4103 (ORIGINATOR_HAS_NO_PRIVILEGE) }</pre> </td><td>IUT → ORIGINATOR</td></tr> </tbody> </table> | Test events | Direction | <pre>when { the IUT receives a valid <i>OPERATION</i> Request containing To set to CONTAINER_RESOURCE_ADDRESS and From set to ORIGINATOR_ID }</pre> | IUT ← ORIGINATOR | <pre>then { the IUT sends a valid Response containing Response Status Code set to 4103 (ORIGINATOR_HAS_NO_PRIVILEGE) }</pre> | IUT → ORIGINATOR | |
| Test events | Direction | | | | | | | |
| <pre>when { the IUT receives a valid <i>OPERATION</i> Request containing To set to CONTAINER_RESOURCE_ADDRESS and From set to ORIGINATOR_ID }</pre> | IUT ← ORIGINATOR | | | | | | | |
| <pre>then { the IUT sends a valid Response containing Response Status Code set to 4103 (ORIGINATOR_HAS_NO_PRIVILEGE) }</pre> | 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 |

| TP Id | TP/oneM2M/CSE/SEC/ACP/013 | | | | | | | |
|--|---|-------------|-----------|--|----------|---|----------|--|
| Test objective | Check that the IUT responds successfully when the creator AE tries an <i>OPERATION</i> on the AE resource whose accessControlPolicyIDs attribute is not set | | | | | | | |
| Reference | TS-0001 [1], clause 9.6.1.3.2-1 | | | | | | | |
| Config Id | CF01 | | | | | | | |
| Parent release | Release 1 | | | | | | | |
| PICS Selection | PICS_CSE | | | | | | | |
| Initial conditions | <pre>with { the IUT being in the "initial state" and the IUT having registered the AE and the <AE> resource having no accessControlPolicyIDs attribute }</pre> | | | | | | | |
| Expected behaviour | <table border="1"> <thead> <tr> <th>Test events</th> <th>Direction</th> </tr> </thead> <tbody> <tr> <td> <pre>when { the IUT receives a valid <i>OPERATION</i> Request containing To set to AE_RESOURCE_ADDRESS and From set to AE_ID }</pre> </td> <td>IUT ← AE</td> </tr> <tr> <td> <pre>then { the IUT sends a valid Response containing Response Status Code set to RESPONSE_STATUS_CODE }</pre> </td> <td>IUT → AE</td> </tr> </tbody> </table> | Test events | Direction | <pre>when { the IUT receives a valid <i>OPERATION</i> Request containing To set to AE_RESOURCE_ADDRESS and From set to AE_ID }</pre> | IUT ← AE | <pre>then { the IUT sends a valid Response containing Response Status Code set to RESPONSE_STATUS_CODE }</pre> | IUT → AE | |
| Test events | Direction | | | | | | | |
| <pre>when { the IUT receives a valid <i>OPERATION</i> Request containing To set to AE_RESOURCE_ADDRESS and From set to AE_ID }</pre> | IUT ← AE | | | | | | | |
| <pre>then { the IUT sends a valid Response containing Response Status Code set to RESPONSE_STATUS_CODE }</pre> | IUT → AE | | | | | | | |

| TP Id | OPERATION | RESPONSE_STATUS_CODE |
|-------------------------------|-----------|----------------------|
| TP/oneM2M/CSE/SEC/ACP/013_CRE | CREATE | 2001 (CREATED) |
| TP/oneM2M/CSE/SEC/ACP/013_RET | RETRIEVE | 2000 (OK) |
| TP/oneM2M/CSE/SEC/ACP/013_UPD | UPDATE | 2004 (UPDATED) |
| TP/oneM2M/CSE/SEC/ACP/013_DEL | DELETE | 2002 (DELETED) |

| | | |
|---------------------------|--|--|
| TP Id | TP/oneM2M/CSE/SEC/ACP/014 | |
| Test objective | Check that the IUT responds with an error when an AE2 tries an OPERATION on the AE1 resource whose accessControlPolicyIDs attribute is not set | |
| Reference | TS-0001 [1], clause 9.6.1.3.2-1 | |
| Config Id | CF01 | |
| Parent release | Release 1 | |
| PICS Selection | PICS_CSE | |
| Initial conditions | <p>with {</p> <p>the IUT being in the "initial state" and the IUT having registered the AE1 and the IUT having registered the AE2 and the <AE> resource of AE1 having no accessControlPolicyIDs attribute</p> <p>}</p> | |
| Expected behaviour | <p>Test events</p> <p>when {</p> <p>the IUT receives a valid OPERATION Request containing To set to AE1_RESOURCE_ADDRESS and From set to AE2_ID</p> <p>}</p> <p>then {</p> <p>the IUT sends a valid Response containing Response Status Code set to 4103 (ORIGINATOR_HAS_NO_PRIVILEGE)</p> <p>}</p> | <p>Direction</p> <p>IUT \leftarrow AE2</p> <p>IUT \rightarrow AE2</p> |

| TP Id | OPERATION |
|-------------------------------|------------------|
| TP/oneM2M/CSE/SEC/ACP/014_CRE | CREATE |
| TP/oneM2M/CSE/SEC/ACP/014_RET | RETRIEVE |
| TP/oneM2M/CSE/SEC/ACP/014_UPD | UPDATE |
| TP/oneM2M/CSE/SEC/ACP/014_DEL | DELETE |

| | | |
|---------------------------|--|---|
| TP Id | TP/oneM2M/CSE/SEC/ACP/015 | |
| Test objective | Check that the IUT responds successfully when an AE tries an OPERATION on the AE1 resource whose accessControlPolicyIDs attribute is set | |
| Reference | TS-0001 [1], clause 9.6.2 | |
| Config Id | CF01 | |
| Parent release | Release 3 | |
| 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 IUT having <group> resource GRP1 having AE2 as memberIds and the <AE> resource of AE1 having accessControlPolicyIDs attribute set and this referenced <accessControlPolicy> having atleast single ACR accessControlOriginators attribute having resourceId of <group> resource GRP1 and accessControlOperations to OPERATION } | |
| Expected behaviour | Test events when { the IUT receives a valid OPERATION Request containing To set to AE1_RESOURCE_ADDRESS and From set to AE2_ID } then { the IUT sends a valid Response containing Response Status Code set to RESPONSE_STATUS_CODE } | Direction IUT \leftarrow AE2 IUT \rightarrow AE2 |

| TP Id | OPERATION | RESPONSE_STATUS_CODE |
|-------------------------------|-----------|----------------------|
| TP/oneM2M/CSE/SEC/ACP/015_CRE | CREATE | 2001 (CREATED) |
| TP/oneM2M/CSE/SEC/ACP/015_RET | RETRIEVE | 2000 (OK) |
| TP/oneM2M/CSE/SEC/ACP/015_UPD | UPDATE | 2004 (UPDATED) |
| TP/oneM2M/CSE/SEC/ACP/015_DEL | DELETE | 2002 (DELETED) |

| TP Id | TP/oneM2M/CSE/SEC/ACP/016 | | | | | | | |
|---|---|-------------|-----------|---|-----------|--|-----------|--|
| Test objective | Check that the IUT responds with an error when an AE tries an OPERATION on the AE1 resource whose accessControlPolicyIDs attribute is set | | | | | | | |
| Reference | TS-0001 [1], clause 9.6.2 | | | | | | | |
| Config Id | CF01 | | | | | | | |
| Parent release | Release 3 | | | | | | | |
| PICS Selection | PICS_CSE | | | | | | | |
| Initial conditions | <p>with {</p> <p>the IUT being in the "initial state" and the IUT having registered the AE1 and the IUT having registered the AE2 and the IUT having registered the AE3 and the IUT having <group> resource GRP1 having AE3 as member only and the <AE> resource of AE1 having accessControlPolicyIDs attribute set and this referenced <accessControlPolicy> having at least single ACR accessControlOriginators attribute having resourceId of <group> resource GRP1 and accessControlOperations to OPERATION</p> <p>}</p> | | | | | | | |
| Expected behaviour | <table border="1"> <thead> <tr> <th>Test events</th> <th>Direction</th> </tr> </thead> <tbody> <tr> <td> when { the IUT receives a valid OPERATION Request containing To set to AE1_RESOURCE_ADDRESS and From set to AE2_ID } </td><td>IUT ← AE2</td></tr> <tr> <td> then { the IUT sends a valid Response containing Response Status Code set to 4103 (ORIGINATOR_HAS_NO_PRIVILEGE) } </td><td>IUT → AE2</td></tr> </tbody> </table> | Test events | Direction | when { the IUT receives a valid OPERATION Request containing To set to AE1_RESOURCE_ADDRESS and From set to AE2_ID } | IUT ← AE2 | then { the IUT sends a valid Response containing Response Status Code set to 4103 (ORIGINATOR_HAS_NO_PRIVILEGE) } | IUT → AE2 | |
| Test events | Direction | | | | | | | |
| when { the IUT receives a valid OPERATION Request containing To set to AE1_RESOURCE_ADDRESS and From set to AE2_ID } | IUT ← AE2 | | | | | | | |
| then { the IUT sends a valid Response containing Response Status Code set to 4103 (ORIGINATOR_HAS_NO_PRIVILEGE) } | IUT → AE2 | | | | | | | |

| TP Id | OPERATION |
|-------------------------------|-----------|
| TP/oneM2M/CSE/SEC/ACP/016_CRE | CREATE |
| TP/oneM2M/CSE/SEC/ACP/016_RET | RETRIEVE |
| TP/oneM2M/CSE/SEC/ACP/016_UPD | UPDATE |
| TP/oneM2M/CSE/SEC/ACP/016_DEL | DELETE |

7.2.2.10.4 Authentication

7.2.2.10.4.1 ESPrim (ESP)

7.2.2.10.4.1.1 NOTIFY Operation

TP/oneM2M/CSE/SEC/ESP/NTF/001

| | | |
|---------------------------|--|-----------|
| TP Id | TP/oneM2M/CSE/SEC/ESP/NTF/001 | |
| Test objective | Check that the IUT sends a new ESPrimRandObject when requested | |
| Reference | TS-0003 8.4.2 – step B.2C.2, TS-0004 7.5.1.2.11 | |
| Config Id | CF01 | |
| PICS Selection | PICS_CSE | |
| Initial conditions | with { the IUT being registered and the IUT being switched on and the IUT having established a pairwiseESPrimKey with the Originator (AE1) } | |
| Expected behaviour | Test events when { the IUT receives a valid NOTIFY request from AE1 containing To set to TARGET_RECEIVER_ADDRESS and From set to AE1_ID and Content containing securityInfo element containing securityInfoType element set to 3 (receiverESPrimRandObject Request) } | IUT ← AE1 |
| | then { the IUT sends a valid NOTIFY Response containing To set to TARGET_ORIGINATOR_ADDRESS and From set to CSE_ID and Content containing securityInfo element containing securityInfoType element set to 4 (receiverESPrimRandObject Response) and esprimRandObject element containing receiverESPrimRandObject } | IUT → AE1 |

TP/oneM2M/CSE/SEC/ESP/NTF/002

| | | |
|---------------------------|--|------------------|
| TP Id | TP/oneM2M/CSE/SEC/ESP/NTF/002 | |
| Test objective | Check that the IUT responds with a valid ESPrim object when it receives a request | |
| Reference | TS-0003 8.4.2 – step C.9, TS-0004 7.6.2 | |
| Config Id | CF01 | |
| PICS Selection | PICS_CSE | |
| Initial conditions | <p>with {</p> <p>the IUT being registered and the IUT being switched on and the IUT having established a sessionESPrimKey with the Originator (AE1)</p> <p>}</p> | |
| Expected behaviour | Test events | Direction |
| | <p>when {</p> <p>the IUT receives a valid NOTIFY Request from AE1 containing To set to TARGET_RECEIVER_ADDRESS and From set to AE1_ID and Content containing securityInfo element containing securityInfoType element set to 5 (ESPrim Object) and valid esprimObject element</p> <p>}</p> <p>then {</p> <p>the IUT sends a valid NOTIFY Response containing To set to RECEIVER_RECEIVER_ADDRESS and From set to CSE_ID and Response Status Code set to 2000 (OK) and Content containing securityInfo element containing securityInfoType element set to 5 (ESPrim Object) and valid esprimObject element</p> <p>}</p> | IUT ← AE1 |
| | | IUT → AE1 |

TP/oneM2M/CSE/SEC/ESP/NTF/003

| TP Id | TP/oneM2M/CSE/SEC/ESP/NTF/003 | | | | | | | |
|---|---|-------------|-----------|---|-----------|--|-----------|--|
| Test objective | Check that the IUT successfully detects AE impersonation in an End-to-End Security of Primitives | | | | | | | |
| Reference | TS-0003 7.2.2 – step 4, TS-0004 7.6.2 | | | | | | | |
| Config Id | CF01 | | | | | | | |
| PICS Selection | PICS_CSE | | | | | | | |
| Initial conditions | <p>with {</p> <ul style="list-style-type: none"> the IUT being registered and the IUT being switched on and the IUT having established a sessionESPrimKey with with the Originator (AE1) } | | | | | | | |
| Expected behaviour | <table border="1"> <thead> <tr> <th>Test events</th> <th>Direction</th> </tr> </thead> <tbody> <tr> <td> <p>when {</p> <ul style="list-style-type: none"> the IUT receives a valid NOTIFY Request from AE1 containing To set to CSE_ID and From set to a value other than AE1_ID and Content containing securityInfo element containing securityInfoType element set to 5 (ESPrim Object) and valid esprimObject element } </td><td>IUT ← AE1</td></tr> <tr> <td> <p>then {</p> <ul style="list-style-type: none"> the IUT sends a valid Response containing Response Status Code set to 4116 (ESPRIM_IMPERSONATION_ERROR) } </td><td>IUT → AE1</td></tr> </tbody> </table> | Test events | Direction | <p>when {</p> <ul style="list-style-type: none"> the IUT receives a valid NOTIFY Request from AE1 containing To set to CSE_ID and From set to a value other than AE1_ID and Content containing securityInfo element containing securityInfoType element set to 5 (ESPrim Object) and valid esprimObject element } | IUT ← AE1 | <p>then {</p> <ul style="list-style-type: none"> the IUT sends a valid Response containing Response Status Code set to 4116 (ESPRIM_IMPERSONATION_ERROR) } | IUT → AE1 | |
| Test events | Direction | | | | | | | |
| <p>when {</p> <ul style="list-style-type: none"> the IUT receives a valid NOTIFY Request from AE1 containing To set to CSE_ID and From set to a value other than AE1_ID and Content containing securityInfo element containing securityInfoType element set to 5 (ESPrim Object) and valid esprimObject element } | IUT ← AE1 | | | | | | | |
| <p>then {</p> <ul style="list-style-type: none"> the IUT sends a valid Response containing Response Status Code set to 4116 (ESPRIM_IMPERSONATION_ERROR) } | IUT → AE1 | | | | | | | |

7.2.2.10.4.1.2 RETRIEVE Operation

TP/oneM2M/CSE/SEC/ESP/RET/001

| | |
|--------------|-------------------------------|
| TP Id | TP/oneM2M/CSE/SEC/ESP/RET/001 |
|--------------|-------------------------------|

| | | |
|---------------------------|---|--|
| Test objective | Check that the IUT sends a valid request for e2eSecInfo attribute of the Receiver's <remoteCSE> resource in the CSE Registered with Receiver CSE | |
| Reference | TS-0003 8.4.2 – step B.2A, TS-0004 7.5.1.2.11 | |
| Config Id | CF04 | |
| PICS Selection | PICS_CSE | |
| Initial conditions | with { the IUT being registered and the IUT being switched on and the IUT having established a pairwiseESPrimKey with the Receiver CSE } | |
| Expected behaviour | Test events when { the IUT is triggered to send a valid RETRIEVE Request containing To set to TARGET_REMOTE_CSE_ADDRESS and From set to AE_ID and Content containing attributeList element containing e2eSecInfo attribute } then { the IUT sends a valid RETRIEVE Request to Target CSE containing To set to TARGET_REMOTE_CSE_ADDRESS and From set to CSE_ID and Content containing remoteCSE resource containing e2eSecInfo attribute } | Direction NA CSE ← IUT |

TP/oneM2M/CSE/SEC/ESP/RET/002

| | | |
|---------------------------|--|------------------|
| TP Id | TP/oneM2M/CSE/SEC/ESP/RET/002 | |
| Test objective | Check that the IUT sends a notification containing an inner “receiverESPrimRandObject request” to the Receiver if the sharedReceiverESPrimRandObject parameter is not present in the <remoteCSE> resource in the CSE Registered with Receiver CSE | |
| Reference | TS-0003 8.4.2 – step B.2D, TS-0004 7.5.1.2.11 | |
| Config Id | CF04 | |
| PICS Selection | PICS_CSE | |
| Initial conditions | <pre> with { the IUT being registered and and the IUT being switched on and the IUT having established a pairwiseESPrimKey with the Originator and the <remoteCSE> resource at TARGET_REMOTE_CSE_ADDRESS containing e2eSecInfo attribute with no sharedReceiverESPrimRandObject parameter } </pre> | |
| Expected behaviour | Test events | Direction |
| | <pre> when { the IUT is triggered to send a valid RETRIEVE Request containing To set to TARGET_REMOTE_CSE_ADDRESS and From set to CSE_ID and Content containing attributeList element containing e2eSecInfo attribute } </pre> | NA |
| | <pre> then { the IUT sends a valid NOTIFICATION Request containing To set to TARGET_RECEIVER_ADDRESS and From set to CSE_ID and Content containing securityInfo element containing securityInfoType element set to 3 (receiverESPrimRandObject Request) } </pre> | IUT → CSE1 |

TP/oneM2M/CSE/SEC/ESP/RET/003

| TP Id | TP/oneM2M/CSE/SEC/ESP/RET/003 | | | | | | | |
|--|---|-------------|-----------|--|----|--|------------|--|
| Test objective | Check that the IUT sends a notification containing an inner “receiverESPrimRandObject request” to the Receiver if the sharedReceiverESPrimRandObject in the <remoteCSE> resource is expired | | | | | | | |
| Reference | TS-0003 8.4.2 – step B.2B, TS-0004 7.5.1.2.11 | | | | | | | |
| Config Id | CF04 | | | | | | | |
| PICS Selection | PICS_CSE | | | | | | | |
| Initial conditions | <pre> with { the IUT being registered and the IUT being switched on and the IUT having established a pairwiseESPrimKey with the Originator and and the <remoteCSE> resource at TARGET_REMOTE_CSE_ADDRESS containing e2eSeclInfo attribute with an expired sharedReceiverESPrimRandObject parameter } </pre> | | | | | | | |
| Expected behaviour | <table border="1"> <thead> <tr> <th>Test events</th> <th>Direction</th> </tr> </thead> <tbody> <tr> <td> when { <p>the IUT is triggered to send a valid RETRIEVE Request containing To set to TARGET_REMOTE_CSE_ADDRESS and From set to CSE_ID and Content containing attributeList element containing e2eSeclInfo attribute } </p> <p> then { <p>the IUT sends a valid NOTIFICATION Request containing To set to TARGET_RECEIVER_ADDRESS and From set to CSE_ID and Content containing securityInfo element containing securityInfoType element set to 3 (receiverESPrimRandObject Request) } </p> </p></td><td>NA</td></tr> <tr> <td></td><td>IUT → CSE1</td></tr> </tbody> </table> | Test events | Direction | when { <p>the IUT is triggered to send a valid RETRIEVE Request containing To set to TARGET_REMOTE_CSE_ADDRESS and From set to CSE_ID and Content containing attributeList element containing e2eSeclInfo attribute } </p> <p> then { <p>the IUT sends a valid NOTIFICATION Request containing To set to TARGET_RECEIVER_ADDRESS and From set to CSE_ID and Content containing securityInfo element containing securityInfoType element set to 3 (receiverESPrimRandObject Request) } </p> </p> | NA | | IUT → CSE1 | |
| Test events | Direction | | | | | | | |
| when { <p>the IUT is triggered to send a valid RETRIEVE Request containing To set to TARGET_REMOTE_CSE_ADDRESS and From set to CSE_ID and Content containing attributeList element containing e2eSeclInfo attribute } </p> <p> then { <p>the IUT sends a valid NOTIFICATION Request containing To set to TARGET_RECEIVER_ADDRESS and From set to CSE_ID and Content containing securityInfo element containing securityInfoType element set to 3 (receiverESPrimRandObject Request) } </p> </p> | NA | | | | | | | |
| | IUT → CSE1 | | | | | | | |

7.2.2.10.4.2 Roles (ROL)

7.2.2.10.4.2.1 CREATE Operation

TP/oneM2M/CSE/SEC/ROL/CRE/001

| | | |
|---------------------------|--|---|
| TP Id | TP/oneM2M/CSE/SEC/ROL/CRE/001 | |
| Test objective | Check that the IUT sends a CREATE <role> resource request to the Role Repository (CSE1) when triggered | |
| Reference | TS-0003 7.4.2.2 – step 3 | |
| Config Id | CF04 | |
| PICS Selection | PICS_CSE | |
| Initial conditions | <p>with {</p> <p style="padding-left: 20px;">the IUT being registered and the IUT being switched on and the IUT acting as an Authorization Authority</p> } | |
| Expected behaviour | <p>Test events</p> <p>when {</p> <p style="padding-left: 20px;">the IUT is triggered to send a valid CREATE Request containing To set to ROLE_REPOSITORY_ADDRESS (CSE1) and Resource Type set to 31 (role) and Content containing <role> resource representation</p> } <p>then {</p> <p style="padding-left: 20px;">the IUT sends a valid CREATE Request to CSE1 containing To set to ROLE_REPOSITORY_ADDRESS and Resource Type set to 31 (role) and Content containing <role> resource representation</p> } | <p>Direction</p> <p>NA</p> <p>IUT → CSE1</p> |

TP/oneM2M/CSE/SEC/ROL/CRE/002

| | | |
|---------------------------|--|--|
| TP Id | TP/oneM2M/CSE/SEC/ROL/CRE/002 | |
| Test objective | Check that the IUT successfully creates the <role> resource requested by the Authorization Authority | |
| Reference | TS-0003 7.4.2.2 – step 4 and 5 | |
| Config Id | CF04 | |
| PICS Selection | PICS_CSE | |
| Initial conditions | <p>with {</p> <p style="padding-left: 20px;">the IUT being registered and</p> <p style="padding-left: 20px;">and the IUT being switched on and</p> <p style="padding-left: 20px;">and the IUT acting as a Role Repository</p> } | |
| Expected behaviour | Test events <pre> when { the IUT receives a valid CREATE Request from CSE1 (AA) containing From set to CSE1_ID and To set to ROLE_REPOSITORY_ADDRESS and Resource Type set to 31 (role) and Content containing <role> resource representation } </pre> <pre> then { the IUT creates the <role> resource and the IUT sends a valid Response containing Response Status Code set to 2001 (CREATED) and Content containing <role> resource representation } </pre> | Direction IUT ← CSE1 IUT → CSE1 |

TP/oneM2M/CSE/SEC/ROL/CRE/003

| TP Id | TP/oneM2M/CSE/SEC/ROL/CRE/003 | | | | | | | |
|---|--|-------------|-----------|---|----|---|------------|--|
| Test objective | Check that the IUT sends a CREATE <token> resource request to the Token Repository when triggered | | | | | | | |
| Reference | TS-0003 7.4.2.3 – step 2 | | | | | | | |
| Config Id | CF04 | | | | | | | |
| PICS Selection | PICS_CSE | | | | | | | |
| Initial conditions | <p>with {</p> <p>the IUT being registered and the IUT being switched on and the IUT acting as an Authorization Authority and the IUT having assigned a role for the Originator</p> } | | | | | | | |
| Expected behaviour | <table border="1"> <thead> <tr> <th>Test events</th> <th>Direction</th> </tr> </thead> <tbody> <tr> <td> when { the IUT is triggered to send a valid CREATE Request containing To set to TOKEN_REPOSITORY_ADDRESS (CSE1) and Resource Type set to 32 (token) and Content containing <token> resource representation } </td><td>NA</td></tr> <tr> <td> then { the IUT sends a valid CREATE Request to CSE containing To set to TOKEN_REPOSITORY_ADDRESS and Resource Type set to 32 (token) and Content containing <token> resource representation } </td><td>IUT → CSE1</td></tr> </tbody> </table> | Test events | Direction | when { the IUT is triggered to send a valid CREATE Request containing To set to TOKEN_REPOSITORY_ADDRESS (CSE1) and Resource Type set to 32 (token) and Content containing <token> resource representation } | NA | then { the IUT sends a valid CREATE Request to CSE containing To set to TOKEN_REPOSITORY_ADDRESS and Resource Type set to 32 (token) and Content containing <token> resource representation } | IUT → CSE1 | |
| Test events | Direction | | | | | | | |
| when { the IUT is triggered to send a valid CREATE Request containing To set to TOKEN_REPOSITORY_ADDRESS (CSE1) and Resource Type set to 32 (token) and Content containing <token> resource representation } | NA | | | | | | | |
| then { the IUT sends a valid CREATE Request to CSE containing To set to TOKEN_REPOSITORY_ADDRESS and Resource Type set to 32 (token) and Content containing <token> resource representation } | IUT → CSE1 | | | | | | | |

TP/oneM2M/CSE/SEC/ROL/CRE/004

| TP Id | TP/oneM2M/CSE/SEC/ROL/CRE/004 | | | | | | | |
|---|---|-------------|-----------|---|------------|--|------------|--|
| Test objective | Check that the IUT successfully creates the <token> resource requested by the Authorization Authority | | | | | | | |
| Reference | TS-0003 7.4.2.3 – step 3 and 4 | | | | | | | |
| Config Id | CF04 | | | | | | | |
| PICS Selection | PICS_CSE | | | | | | | |
| Initial conditions | <p>with {</p> <p>the IUT being registered and the IUT being switched on and the IUT acting as a Token Repository and the Authorization Authority having assigned a role for the Originator</p> } | | | | | | | |
| Expected behaviour | <table border="1"> <thead> <tr> <th>Test events</th> <th>Direction</th> </tr> </thead> <tbody> <tr> <td> <p>when {</p> <p>the IUT receives a valid CREATE Request from CSE1 (AA) containing From set to CSE1_ID and To set to TOKEN_REPOSITORY_ADDRESS and Resource Type set to 32 (token) and Content containing <token> resource representation</p> } </td><td>IUT ← CSE1</td></tr> <tr> <td> <p>then {</p> <p>the IUT creates the <token> resource and the IUT sends a valid Response containing Response Status Code set to 2001 (CREATED) and Content containing <token> resource representation</p> } </td><td>IUT → CSE1</td></tr> </tbody> </table> | Test events | Direction | <p>when {</p> <p>the IUT receives a valid CREATE Request from CSE1 (AA) containing From set to CSE1_ID and To set to TOKEN_REPOSITORY_ADDRESS and Resource Type set to 32 (token) and Content containing <token> resource representation</p> } | IUT ← CSE1 | <p>then {</p> <p>the IUT creates the <token> resource and the IUT sends a valid Response containing Response Status Code set to 2001 (CREATED) and Content containing <token> resource representation</p> } | IUT → CSE1 | |
| Test events | Direction | | | | | | | |
| <p>when {</p> <p>the IUT receives a valid CREATE Request from CSE1 (AA) containing From set to CSE1_ID and To set to TOKEN_REPOSITORY_ADDRESS and Resource Type set to 32 (token) and Content containing <token> resource representation</p> } | IUT ← CSE1 | | | | | | | |
| <p>then {</p> <p>the IUT creates the <token> resource and the IUT sends a valid Response containing Response Status Code set to 2001 (CREATED) and Content containing <token> resource representation</p> } | IUT → CSE1 | | | | | | | |

7.2.2.10.4.2.2 RETRIEVE Operation

TP/oneM2M/CSE/SEC/ROL/RET/001

| TP Id | TP/oneM2M/CSE/SEC/ROL/RET/001 | | | | | | | |
|---|---|-------------|-----------|--|------------|---|------------|--|
| Test objective | Check that the IUT returns the <role> resource of the Originator | | | | | | | |
| Reference | TS-0003 7.4.2.2 – step 8 | | | | | | | |
| Config Id | CF01 | | | | | | | |
| PICS Selection | PICS_CSE | | | | | | | |
| Initial conditions | <pre> with { the IUT being registered and the IUT being switched on and the IUT acting as a Role Repository and the Authorization Authority having assigned a role for the Originator at ROLE_RESOURCE_ADDRESS } </pre> | | | | | | | |
| Expected behaviour | <table border="1"> <thead> <tr> <th>Test events</th> <th>Direction</th> </tr> </thead> <tbody> <tr> <td> when { the IUT receives a RETRIEVE Request containing From set to CSE1_ID and To set to ROLE_RESOURCE_ADDRESS and no Content } </td> <td>IUT ← CSE1</td> </tr> <tr> <td> then { the IUT sends a valid Response containing Response Status Code set to 2000 (OK) and Content containing valid <role> resource representation } </td> <td>IUT → CSE1</td> </tr> </tbody> </table> | Test events | Direction | when { the IUT receives a RETRIEVE Request containing From set to CSE1_ID and To set to ROLE_RESOURCE_ADDRESS and no Content } | IUT ← CSE1 | then { the IUT sends a valid Response containing Response Status Code set to 2000 (OK) and Content containing valid <role> resource representation } | IUT → CSE1 | |
| Test events | Direction | | | | | | | |
| when { the IUT receives a RETRIEVE Request containing From set to CSE1_ID and To set to ROLE_RESOURCE_ADDRESS and no Content } | IUT ← CSE1 | | | | | | | |
| then { the IUT sends a valid Response containing Response Status Code set to 2000 (OK) and Content containing valid <role> resource representation } | IUT → CSE1 | | | | | | | |

TP/oneM2M/CSE/SEC/ROL/RET/002

| TP Id | TP/oneM2M/CSE/SEC/ROL/RET/002 | | | | | | | |
|--|---|--------------------|------------------|---|------------|--|------------|--|
| Test objective | Check that the IUT returns the <token> resource of the Originator | | | | | | | |
| Reference | TS-0003 7.4.2.3 – step 8 | | | | | | | |
| Config Id | CF01 | | | | | | | |
| PICS Selection | PICS_CSE | | | | | | | |
| Initial conditions | <pre> with { the IUT being registered and the IUT being switched on and the IUT acting as a Token Repository and the Authorization Authority having assigned a role for the Originator and the IUT having a token associated to the role of the Originator at TOKEN_RESOURCE_ADDRESS } </pre> | | | | | | | |
| Expected behaviour | <table border="1"> <thead> <tr> <th>Test events</th> <th>Direction</th> </tr> </thead> <tbody> <tr> <td> when { the IUT receives a RETRIEVE Request containing From set to CSE1_ID and To set to TOKEN_RESOURCE_ADDRESS and no Content } </td> <td>IUT ← CSE1</td> </tr> <tr> <td> then { the IUT sends a valid Response containing Response Status Code set to 2000 (OK) and Content containing valid <token> resource representation } </td> <td>IUT → CSE1</td> </tr> </tbody> </table> | Test events | Direction | when { the IUT receives a RETRIEVE Request containing From set to CSE1_ID and To set to TOKEN_RESOURCE_ADDRESS and no Content } | IUT ← CSE1 | then { the IUT sends a valid Response containing Response Status Code set to 2000 (OK) and Content containing valid <token> resource representation } | IUT → CSE1 | |
| Test events | Direction | | | | | | | |
| when { the IUT receives a RETRIEVE Request containing From set to CSE1_ID and To set to TOKEN_RESOURCE_ADDRESS and no Content } | IUT ← CSE1 | | | | | | | |
| then { the IUT sends a valid Response containing Response Status Code set to 2000 (OK) and Content containing valid <token> resource representation } | IUT → CSE1 | | | | | | | |

TP/oneM2M/CSE/SEC/ROL/RET/003

| TP Id | TP/oneM2M/CSE/SEC/ROL/RET/003 | | | | | | | |
|--|--|-------------|-----------|--|-----------|---|------------|--|
| Test objective | Check that the IUT sends a <role> Retrieve request to the Role Repository after receiving a request on a resource protected by role based access control | | | | | | | |
| Reference | TS-0003 7.4.3 – step 2 | | | | | | | |
| Config Id | CF02 | | | | | | | |
| PICS Selection | PICS_CSE | | | | | | | |
| Initial conditions | <p>with {</p> <p style="padding-left: 20px;">the IUT being registered and the IUT being switched on and the Authorization Authority having assigned a role for the Originator and the Authorization Authority having created a token associated to the role of the Originator and the IUT having a <container> resource at RESOURCE_TARGET_ADDRESS protected by role based access control and the IUT having granted the Originator access to the <container> resource</p> <p>}</p> | | | | | | | |
| Expected behaviour | <table border="1"> <thead> <tr> <th>Test events</th> <th>Direction</th> </tr> </thead> <tbody> <tr> <td> when { the IUT receives a valid RETRIEVE Request containing From set to AE1_ID and To set to RESOURCE_TARGET_ADDRESS and Role ID parameter set to address the <role> resource assigned to the Originator } </td><td>IUT ← AE1</td> </tr> <tr> <td> then { the IUT sends a valid RETRIEVE Request to CSE1 containing From set to CSE_ID and To set to Role ID and no Content } </td><td>IUT → CSE1</td> </tr> </tbody> </table> | Test events | Direction | when { the IUT receives a valid RETRIEVE Request containing From set to AE1_ID and To set to RESOURCE_TARGET_ADDRESS and Role ID parameter set to address the <role> resource assigned to the Originator } | IUT ← AE1 | then { the IUT sends a valid RETRIEVE Request to CSE1 containing From set to CSE_ID and To set to Role ID and no Content } | IUT → CSE1 | |
| Test events | Direction | | | | | | | |
| when { the IUT receives a valid RETRIEVE Request containing From set to AE1_ID and To set to RESOURCE_TARGET_ADDRESS and Role ID parameter set to address the <role> resource assigned to the Originator } | IUT ← AE1 | | | | | | | |
| then { the IUT sends a valid RETRIEVE Request to CSE1 containing From set to CSE_ID and To set to Role ID and no Content } | IUT → CSE1 | | | | | | | |

TP/oneM2M/CSE/SEC/ROL/RET/004

| TP Id | TP/oneM2M/CSE/SEC/ROL/RET/004 | | | | | | | |
|---|---|-------------|-----------|---|----------------------|--|------------------------|--|
| Test objective | Check that the IUT sends a <token> Retrieve request to the Token Repository after receiving a request on a resource protected by role based access control | | | | | | | |
| Reference | TS-0003 7.4.3 – step 2 | | | | | | | |
| Config Id | CF02 | | | | | | | |
| PICS Selection | PICS_CSE | | | | | | | |
| Initial conditions | <p>with {</p> <ul style="list-style-type: none"> the IUT being registered and the IUT being switched on and the Authorization Authority having assigned a role for the Originator and the Authorization Authority having created a token associated to the role of the Originator and the IUT having a <container> resource at RESOURCE_TARGET_ADDRESS protected by role based access control procedure and the IUT having granted the Originator access to the <container> resource } | | | | | | | |
| Expected behaviour | <table border="1"> <thead> <tr> <th>Test events</th> <th>Direction</th> </tr> </thead> <tbody> <tr> <td> when { the IUT receives a valid RETRIEVE Request containing From set to AE1_ID and To set to RESOURCE_TARGET_ADDRESS and Role ID parameter set to address the <role> resource assigned to the Originator Token ID parameter set to address the <token> resource assigned to the role of the Originator } </td><td>IUT \leftarrow AE1</td></tr> <tr> <td> then { the IUT sends a valid RETRIEVE Request to CSE1 containing From set to CSE_ID and To set to Token_ID and no Content } </td><td>IUT \rightarrow CSE1</td></tr> </tbody> </table> | Test events | Direction | when { the IUT receives a valid RETRIEVE Request containing From set to AE1_ID and To set to RESOURCE_TARGET_ADDRESS and Role ID parameter set to address the <role> resource assigned to the Originator Token ID parameter set to address the <token> resource assigned to the role of the Originator } | IUT \leftarrow AE1 | then { the IUT sends a valid RETRIEVE Request to CSE1 containing From set to CSE_ID and To set to Token_ID and no Content } | IUT \rightarrow CSE1 | |
| Test events | Direction | | | | | | | |
| when { the IUT receives a valid RETRIEVE Request containing From set to AE1_ID and To set to RESOURCE_TARGET_ADDRESS and Role ID parameter set to address the <role> resource assigned to the Originator Token ID parameter set to address the <token> resource assigned to the role of the Originator } | IUT \leftarrow AE1 | | | | | | | |
| then { the IUT sends a valid RETRIEVE Request to CSE1 containing From set to CSE_ID and To set to Token_ID and no Content } | IUT \rightarrow CSE1 | | | | | | | |

TP/oneM2M/CSE/SEC/ROL/RET/005

| TP Id | TP/oneM2M/CSE/SEC/ROL/RET/005 | | | | | | | |
|---|--|-------------|-----------|---|----------------------|--|-----------------------|--|
| Test objective | Check that the IUT returns the result of a request on a resource protected by role based access control, when the appropriate credentials are provided in the request | | | | | | | |
| Reference | TS-0003 7.4.3 – step 7 | | | | | | | |
| Config Id | CF01 | | | | | | | |
| PICS Selection | PICS_CSE | | | | | | | |
| Initial conditions | <p>with {</p> <ul style="list-style-type: none"> the IUT being registered and the IUT being switched on and the Authorization Authority having assigned a role for the Originator and the Authorization Authority having created a token associated to the role of the Originator and the IUT having a <container> resource at RESOURCE_TARGET_ADDRESS protected by role based access control procedure and the IUT having granted the Originator access to the <container> resource } | | | | | | | |
| Expected behaviour | <table border="1"> <thead> <tr> <th>Test events</th> <th>Direction</th> </tr> </thead> <tbody> <tr> <td> when { the IUT receives a valid RETRIEVE Request containing <ul style="list-style-type: none"> From set to AE1_ID and To set to RESOURCE_TARGET_ADDRESS and Role ID parameter set to address the <role> resource assigned to the Originator Token ID parameter set to address the <token> resource assigned to the role of the Originator } </td><td>IUT \leftarrow AE1</td></tr> <tr> <td> then { the IUT sends a RETRIEVE Response containing <ul style="list-style-type: none"> Response Status Code set to 2000 (OK) and Content containing <ul style="list-style-type: none"> <container> resource } </td><td>IUT \rightarrow AE1</td></tr> </tbody> </table> | Test events | Direction | when { the IUT receives a valid RETRIEVE Request containing <ul style="list-style-type: none"> From set to AE1_ID and To set to RESOURCE_TARGET_ADDRESS and Role ID parameter set to address the <role> resource assigned to the Originator Token ID parameter set to address the <token> resource assigned to the role of the Originator } | IUT \leftarrow AE1 | then { the IUT sends a RETRIEVE Response containing <ul style="list-style-type: none"> Response Status Code set to 2000 (OK) and Content containing <ul style="list-style-type: none"> <container> resource } | IUT \rightarrow AE1 | |
| Test events | Direction | | | | | | | |
| when { the IUT receives a valid RETRIEVE Request containing <ul style="list-style-type: none"> From set to AE1_ID and To set to RESOURCE_TARGET_ADDRESS and Role ID parameter set to address the <role> resource assigned to the Originator Token ID parameter set to address the <token> resource assigned to the role of the Originator } | IUT \leftarrow AE1 | | | | | | | |
| then { the IUT sends a RETRIEVE Response containing <ul style="list-style-type: none"> Response Status Code set to 2000 (OK) and Content containing <ul style="list-style-type: none"> <container> resource } | IUT \rightarrow AE1 | | | | | | | |

7.2.2.10.4.2.3 UPDATE Operation

TP/oneM2M/CSE/SEC/ROL/UPD/001

| TP Id | TP/oneM2M/CSE/SEC/ROL/UPD/001 | | | | | | | |
|--|--|-------------|-----------|--|------------|--|------------|--|
| Test objective | Check that the IUT updates the tokenLink attribute of the <role> resource after creating its associated <token> resource | | | | | | | |
| Reference | TS-0003 7.4.2.3 – step 5 | | | | | | | |
| Config Id | CF04 | | | | | | | |
| PICS Selection | PICS_CSE | | | | | | | |
| Initial conditions | <pre> with { the IUT being registered and the IUT being switched on and the IUT acting as an Authorization Authority and the IUT having assigned a role for the Originator and the IUT having created a token associated to the role of the Originator at TOKEN_RESOURCE_ADDRESS } </pre> | | | | | | | |
| Expected behaviour | <table border="1"> <thead> <tr> <th style="text-align: center;">Test events</th> <th style="text-align: center;">Direction</th> </tr> </thead> <tbody> <tr> <td> <pre> when { the IUT receives a valid CREATE Response from CSE2 (TR) containing Response Status Code set to 2001 (CREATED) and Content containing <token> resource representation } </pre> </td><td style="text-align: center;">IUT ← CSE2</td></tr> <tr> <td> <pre> then { the IUT sends a valid UPDATE Request to CSE1 (RR) containing To set to ROLE_REPOSITORY_ADDRESS and Resource Type set to 32 (token) and Content containing <token> resource representation containing tokenLink attribute set to TOKEN_RESOURCE_ADDRESS } </pre> </td><td style="text-align: center;">IUT → CSE1</td></tr> </tbody> </table> | Test events | Direction | <pre> when { the IUT receives a valid CREATE Response from CSE2 (TR) containing Response Status Code set to 2001 (CREATED) and Content containing <token> resource representation } </pre> | IUT ← CSE2 | <pre> then { the IUT sends a valid UPDATE Request to CSE1 (RR) containing To set to ROLE_REPOSITORY_ADDRESS and Resource Type set to 32 (token) and Content containing <token> resource representation containing tokenLink attribute set to TOKEN_RESOURCE_ADDRESS } </pre> | IUT → CSE1 | |
| Test events | Direction | | | | | | | |
| <pre> when { the IUT receives a valid CREATE Response from CSE2 (TR) containing Response Status Code set to 2001 (CREATED) and Content containing <token> resource representation } </pre> | IUT ← CSE2 | | | | | | | |
| <pre> then { the IUT sends a valid UPDATE Request to CSE1 (RR) containing To set to ROLE_REPOSITORY_ADDRESS and Resource Type set to 32 (token) and Content containing <token> resource representation containing tokenLink attribute set to TOKEN_RESOURCE_ADDRESS } </pre> | IUT → CSE1 | | | | | | | |

7.2.2.10.4.2.4 NOTIFY Operation

TP/oneM2M/CSE/SEC/ROL/NTF/001

| TP Id | TP/oneM2M/CSE/SEC/ROL/NTF/001 | | | | | | | |
|--|--|-------------|-----------|--|------------|--|------------|--|
| Test objective | Check that the IUT notifies the Originator about a token issuance associated to its role | | | | | | | |
| Reference | TS-0003 7.4.2.3 – step 6 | | | | | | | |
| Config Id | CF04 | | | | | | | |
| PICS Selection | PICS_CSE | | | | | | | |
| Initial conditions | <pre> with { the IUT being registered and the IUT being switched on the IUT being in the "initial state" and the IUT acting as an Authorization Authority and the IUT having assigned a role for the Originator and the IUT having created a token associated to the role of the Originator } </pre> | | | | | | | |
| Expected behaviour | <table border="1"> <thead> <tr> <th>Test events</th> <th>Direction</th> </tr> </thead> <tbody> <tr> <td> <pre> when { the IUT receives a valid CREATE Response from CSE2 (TR) containing Response Status Code set to 2001 (CREATED) and Content containing <token> resource representation } </pre> </td><td>IUT ← CSE2</td></tr> <tr> <td> <pre> then { the IUT sends a valid NOTIFY Request to CSE1 (Originator) containing Content containing notificationEvent attribute containing representation attribute containing <token> resource representation } </pre> </td><td>IUT → CSE1</td></tr> </tbody> </table> | Test events | Direction | <pre> when { the IUT receives a valid CREATE Response from CSE2 (TR) containing Response Status Code set to 2001 (CREATED) and Content containing <token> resource representation } </pre> | IUT ← CSE2 | <pre> then { the IUT sends a valid NOTIFY Request to CSE1 (Originator) containing Content containing notificationEvent attribute containing representation attribute containing <token> resource representation } </pre> | IUT → CSE1 | |
| Test events | Direction | | | | | | | |
| <pre> when { the IUT receives a valid CREATE Response from CSE2 (TR) containing Response Status Code set to 2001 (CREATED) and Content containing <token> resource representation } </pre> | IUT ← CSE2 | | | | | | | |
| <pre> then { the IUT sends a valid NOTIFY Request to CSE1 (Originator) containing Content containing notificationEvent attribute containing representation attribute containing <token> resource representation } </pre> | IUT → CSE1 | | | | | | | |

7.2.2.10.4.3 DAS (DAS)

7.2.2.10.4.3.1 NOTIFY Operation

7.2.2.10.4.4 ESCertKE (ESC)

7.2.2.10.4.4.1 NOTIFY Operation

TP/oneM2M/CSE/SEC/ESC/NTF/001

| | | |
|---------------------------|---|------------------|
| TP Id | TP/oneM2M/CSE/SEC/ESC/NTF/001 | |
| Test objective | Check that the IUT sends a notify request with ESCertKE message 1 when triggered | |
| Reference | TS-0003 8.7.2.2 – step C.1.a, TS-0001 11.4.3, TS-0004 6.3.5.48 | |
| Config Id | CF04 | |
| PICS Selection | PICS_CSE | |
| Initial conditions | <pre> with { the IUT is being registered and the IUT being switched on and the IUT having been provisioned with the corresponding private key and certificate and the IUT having configured Terminating End-Point's Certificate Info & Identity } </pre> | |
| Expected behaviour | Test events | Direction |
| | <pre> when { the IUT is triggered to send a valid NOTIFY Request containing To set to TERMINATING_ENDPOINT_ADDRESS and From set to CSE_ID and Content containing securityInfo element containing securityInfoType element set to 6 (ESCertKE Message) and escertkeMessage element containing base64 representation of ESCertKE Message 1 (TLS Message: Client Hello) } </pre> | NA |
| | <pre> then { the IUT sends a valid NOTIFY Request to CSE1 containing To set to TERMINATING_ENDPOINT_ADDRESS and From set to CSE1 ID and Content containing securityInfo element containing securityInfoType element set to 6 (ESCertKE Message) and escertkeMessage element containing base64 representation of ESCertKE Message 1 (TLS Message: Client Hello) } </pre> | IUT → CSE1 |

TP/oneM2M/CSE/SEC/ESC/NTF/002

| TP Id | TP/oneM2M/CSE/SEC/ESC/NTF/002 | | | | | | | |
|---|---|-------------|-----------|--|------------|---|------------|--|
| Test objective | Check that the IUT sends a notify response with ESCertKE message 2 when it receives a notify request with ESCertKE message 1 | | | | | | | |
| Reference | TS-0003 8.7.2.2 – step C.1.b, TS-0001 11.4.3, TS-0004 6.3.5.48 | | | | | | | |
| Config Id | CF04 | | | | | | | |
| PICS Selection | PICS_CSE | | | | | | | |
| Initial conditions | <p>with {</p> <ul style="list-style-type: none"> the IUT is being registered and the IUT being switched on and the IUT having been provisioned with the corresponding private key and certificate and the IUT having configured Initiating End-Point's Certificate Info & Identity } | | | | | | | |
| Expected behaviour | <table border="1"> <thead> <tr> <th>Test events</th> <th>Direction</th> </tr> </thead> <tbody> <tr> <td> <p>when {</p> <p>the IUT receives a valid NOTIFY Request from CSE1 containing</p> <ul style="list-style-type: none"> To set to TERMINATING_ENDPOINT_ADDRESS and From set to CSE1_ID and Content containing securityInfo element containing securityInfoType element set to 6 (ESCertKE Message) and escertkeMessage element containing base64 representation of ESCertKE Message 1 (TLS Message: Client Hello) }</td><td>IUT ← CSE1</td></tr> <tr> <td> <p>then {</p> <p>the IUT sends a valid NOTIFY Response to CSE1 containing</p> <ul style="list-style-type: none"> To set to INITIATING_ENDPOINT_ADDRESS and From set to CSE_ID and ResponseStatusCode set to OK (2000) and Content containing securityInfo element containing securityInfoType element set to 6 (ESCertKE Message) and escertkeMessage element containing base64 representation of ESCertKE Message 2 (TLS Messages: Server Hello, Certificate*, ServerKeyExchange*, CertificateRequest*, ServerHelloDone) }</td><td>IUT → CSE1</td></tr> </tbody> </table> | Test events | Direction | <p>when {</p> <p>the IUT receives a valid NOTIFY Request from CSE1 containing</p> <ul style="list-style-type: none"> To set to TERMINATING_ENDPOINT_ADDRESS and From set to CSE1_ID and Content containing securityInfo element containing securityInfoType element set to 6 (ESCertKE Message) and escertkeMessage element containing base64 representation of ESCertKE Message 1 (TLS Message: Client Hello) } | IUT ← CSE1 | <p>then {</p> <p>the IUT sends a valid NOTIFY Response to CSE1 containing</p> <ul style="list-style-type: none"> To set to INITIATING_ENDPOINT_ADDRESS and From set to CSE_ID and ResponseStatusCode set to OK (2000) and Content containing securityInfo element containing securityInfoType element set to 6 (ESCertKE Message) and escertkeMessage element containing base64 representation of ESCertKE Message 2 (TLS Messages: Server Hello, Certificate*, ServerKeyExchange*, CertificateRequest*, ServerHelloDone) } | IUT → CSE1 | |
| Test events | Direction | | | | | | | |
| <p>when {</p> <p>the IUT receives a valid NOTIFY Request from CSE1 containing</p> <ul style="list-style-type: none"> To set to TERMINATING_ENDPOINT_ADDRESS and From set to CSE1_ID and Content containing securityInfo element containing securityInfoType element set to 6 (ESCertKE Message) and escertkeMessage element containing base64 representation of ESCertKE Message 1 (TLS Message: Client Hello) } | IUT ← CSE1 | | | | | | | |
| <p>then {</p> <p>the IUT sends a valid NOTIFY Response to CSE1 containing</p> <ul style="list-style-type: none"> To set to INITIATING_ENDPOINT_ADDRESS and From set to CSE_ID and ResponseStatusCode set to OK (2000) and Content containing securityInfo element containing securityInfoType element set to 6 (ESCertKE Message) and escertkeMessage element containing base64 representation of ESCertKE Message 2 (TLS Messages: Server Hello, Certificate*, ServerKeyExchange*, CertificateRequest*, ServerHelloDone) } | IUT → CSE1 | | | | | | | |

TP/oneM2M/CSE/SEC/ESC/NTF/003

| | | |
|---------------------------|---|---|
| TP Id | TP/oneM2M/CSE/SEC/ESC/NTF/003 | |
| Test objective | Check that the IUT sends a notify request with ESCertKE message 3 when it receives a notify response with ESCertKE message 2 | |
| Reference | TS-0003 8.7.2.2 – step C.1.c, TS-0001 11.4.3, TS-0004 6.3.5.48 | |
| Config Id | CF04 | |
| PICS Selection | PICS_CSE | |
| Initial conditions | <p>with {</p> <p style="margin-left: 20px;">the IUT is being registered and the IUT being switched on and the IUT having been provisioned with the corresponding private key and certificate and the IUT having configured Terminating End-Point's Certificate Info & Identity and the IUT having sent a notify request to the Terminating End-Point with ESCertKE Message 1</p> <p>}</p> | |
| Expected behaviour | <p>Test events</p> <p>when {</p> <p style="margin-left: 20px;">the IUT receives a valid NOTIFY Response from CSE1 containing To set to INITIATING_ENDPOINT_ADDRESS and From set to CSE1_ID and ResponseStatusCode set to OK (2000) and Content containing securityInfo element containing securityInfoType element set to 6 (ESCertKE Message) and escertkeMessage element containing base64 representation of ESCertKE Message 2 (TLS Messages: Server Hello, Certificate*, ServerKeyExchange*, CertificateRequest*, ServerHelloDone)</p> <p>}</p> <p>then {</p> <p style="margin-left: 20px;">the IUT sends a valid NOTIFY Request to CSE1 containing To set to TERMINATING_ENDPOINT_ADDRESS and From set to CSE_ID and Content containing securityInfo element containing securityInfoType element set to 6 (ESCertKE Message) and escertkeMessage element containing base64 representation of ESCertKE Message 3 (TLS Messages: Certificate*, ClientKeyExchange, CertificateVerify*, [ChangeCipherSpec], Finished)</p> <p>}</p> | <p>Direction</p> <p>IUT ← CSE1</p> |
| | | <p>IUT → CSE1</p> |

TP/oneM2M/CSE/SEC/ESC/NTF/004

| TP Id | TP/oneM2M/CSE/SEC/ESC/NTF/004 | | | | | | |
|---|--|--------------------|------------------|---|------------|---|------------|
| Test objective | Check that the IUT sends a notify response with ESCertKE message 4 when it receives a notify request with ESCertKE message 3 | | | | | | |
| Reference | TS-0003 8.7.2.2 – step C.1.d, TS-0001 11.4.3, TS-0004 6.3.5.48 | | | | | | |
| Config Id | CF04 | | | | | | |
| PICS Selection | PICS CSE | | | | | | |
| Initial conditions | <p>with {</p> <ul style="list-style-type: none"> the IUT is being registered and the IUT being switched on and the IUT having been provisioned with the corresponding private key and certificate and the IUT having configured Initiating End-Point's Certificate Info & Identity and the IUT having sent a notify request to the Initiating End-Point with ESCertKE Message 2 <p>}</p> | | | | | | |
| Expected behaviour | <table border="1"> <thead> <tr> <th>Test events</th> <th>Direction</th> </tr> </thead> <tbody> <tr> <td> when { <ul style="list-style-type: none"> the IUT receives a valid NOTIFY Request from CSE1 containing <ul style="list-style-type: none"> To set to TERMINATING_ENDPOINT_ADDRESS and From set to CSE1_ID and Content containing <ul style="list-style-type: none"> securityInfo element containing <ul style="list-style-type: none"> securityInfoType element set to 6 (ESCertKE Message) and escertkeMessage element containing <ul style="list-style-type: none"> base64 representation of ESCertKE Message 3 (TLS Messages: Certificate*, ClientKeyExchange, CertificateVerify*, [ChangeCipherSpec], Finished) <p>}</p> </td><td>IUT ← CSE1</td></tr> <tr> <td> then { <ul style="list-style-type: none"> the IUT sends a valid NOTIFY Response to CSE containing <ul style="list-style-type: none"> To set to INITIATING_ENDPOINT_ADDRESS and From set to CSE_ID and ResponseStatusCode set to OK (2000) and Content containing <ul style="list-style-type: none"> securityInfo element containing <ul style="list-style-type: none"> securityInfoType element set to 6 (ESCertKE Message) and escertkeMessage element containing <ul style="list-style-type: none"> base64 representation of ESCertKE Message 4 (TLS Messages: [ChangeCipherSpec], Finished) <p>}</p> </td><td>IUT → CSE1</td></tr> </tbody> </table> | Test events | Direction | when { <ul style="list-style-type: none"> the IUT receives a valid NOTIFY Request from CSE1 containing <ul style="list-style-type: none"> To set to TERMINATING_ENDPOINT_ADDRESS and From set to CSE1_ID and Content containing <ul style="list-style-type: none"> securityInfo element containing <ul style="list-style-type: none"> securityInfoType element set to 6 (ESCertKE Message) and escertkeMessage element containing <ul style="list-style-type: none"> base64 representation of ESCertKE Message 3 (TLS Messages: Certificate*, ClientKeyExchange, CertificateVerify*, [ChangeCipherSpec], Finished) <p>}</p> | IUT ← CSE1 | then { <ul style="list-style-type: none"> the IUT sends a valid NOTIFY Response to CSE containing <ul style="list-style-type: none"> To set to INITIATING_ENDPOINT_ADDRESS and From set to CSE_ID and ResponseStatusCode set to OK (2000) and Content containing <ul style="list-style-type: none"> securityInfo element containing <ul style="list-style-type: none"> securityInfoType element set to 6 (ESCertKE Message) and escertkeMessage element containing <ul style="list-style-type: none"> base64 representation of ESCertKE Message 4 (TLS Messages: [ChangeCipherSpec], Finished) <p>}</p> | IUT → CSE1 |
| Test events | Direction | | | | | | |
| when { <ul style="list-style-type: none"> the IUT receives a valid NOTIFY Request from CSE1 containing <ul style="list-style-type: none"> To set to TERMINATING_ENDPOINT_ADDRESS and From set to CSE1_ID and Content containing <ul style="list-style-type: none"> securityInfo element containing <ul style="list-style-type: none"> securityInfoType element set to 6 (ESCertKE Message) and escertkeMessage element containing <ul style="list-style-type: none"> base64 representation of ESCertKE Message 3 (TLS Messages: Certificate*, ClientKeyExchange, CertificateVerify*, [ChangeCipherSpec], Finished) <p>}</p> | IUT ← CSE1 | | | | | | |
| then { <ul style="list-style-type: none"> the IUT sends a valid NOTIFY Response to CSE containing <ul style="list-style-type: none"> To set to INITIATING_ENDPOINT_ADDRESS and From set to CSE_ID and ResponseStatusCode set to OK (2000) and Content containing <ul style="list-style-type: none"> securityInfo element containing <ul style="list-style-type: none"> securityInfoType element set to 6 (ESCertKE Message) and escertkeMessage element containing <ul style="list-style-type: none"> base64 representation of ESCertKE Message 4 (TLS Messages: [ChangeCipherSpec], Finished) <p>}</p> | IUT → CSE1 | | | | | | |

7.2.2.11 Resource Announcement (ANNC)

7.2.2.11.1 BASIC Operation

TP/oneM2M/CSE/ANNC/001

| TP Id | TP/oneM2M/CSE/ANNC/001 | | | | | | |
|--|--|-------------|-----------|--|-----------|--|----------|
| Test objective | Check that the IUT provides confirmation of the announcement of a resource to the originator of the initiating request after a successful resource announcement procedure | | | | | | |
| Reference | TS-0001 [1], clause 10.2.18.1, TS-0004 [2], clause 7.3.3.10 | | | | | | |
| Parent Release | Release 3 | | | | | | |
| Config Id | CF02 | | | | | | |
| PICS Selection | PICS_CSE | | | | | | |
| Initial conditions | <pre> with { the IUT being in the "initial state" and the IUT having registered the AE and the IUT having registered to the remoteCSE and the IUT having created the PARENT_RESOURCE resource containing RESOURCE_TYPE resource and the IUT having announced the PARENT_RESOURCE resource and the AE having privileges to perform an OPERATION operation on the resource TARGET_RESOURCE_ADDRESS and the IUT having received a valid OPERATION Request from AE containing To set to TARGET_RESOURCE_ADDRESS and Content containing RESOURCE_TYPE resource containing announceTo attribute set to ANNC_TARGET_CSE_ADDRESS and The IUT having sent a valid CREATE Request containing To set REMOTE_CSE_RESOURCE_ADDRESS and Content containing RESOURCE_TYPE announced variant resource containing MA (mandatory) attributes } </pre> | | | | | | |
| Expected behaviour | <table border="1"> <thead> <tr> <th>Test events</th> <th>Direction</th> </tr> </thead> <tbody> <tr> <td> <pre> when { the IUT receives a valid Response from ANNC_TARGET_CSE containing Response Status Code set to 2001 (CREATED) containing valid RESOURCE_TYPE announced variant resource representation } </pre> </td> <td>IUT ← CSE</td> </tr> <tr> <td> <pre> then { The IUT sends a valid Response containing Response Status Code set to RESPONSE_STATUS_CODE and Content containing RESOURCE_TYPE resource containing announceTo attribute set to ANNC_RESOURCE_ADDRESS } </pre> </td> <td>IUT → AE</td> </tr> </tbody> </table> | Test events | Direction | <pre> when { the IUT receives a valid Response from ANNC_TARGET_CSE containing Response Status Code set to 2001 (CREATED) containing valid RESOURCE_TYPE announced variant resource representation } </pre> | IUT ← CSE | <pre> then { The IUT sends a valid Response containing Response Status Code set to RESPONSE_STATUS_CODE and Content containing RESOURCE_TYPE resource containing announceTo attribute set to ANNC_RESOURCE_ADDRESS } </pre> | IUT → AE |
| Test events | Direction | | | | | | |
| <pre> when { the IUT receives a valid Response from ANNC_TARGET_CSE containing Response Status Code set to 2001 (CREATED) containing valid RESOURCE_TYPE announced variant resource representation } </pre> | IUT ← CSE | | | | | | |
| <pre> then { The IUT sends a valid Response containing Response Status Code set to RESPONSE_STATUS_CODE and Content containing RESOURCE_TYPE resource containing announceTo attribute set to ANNC_RESOURCE_ADDRESS } </pre> | IUT → AE | | | | | | |

| TP Id | RESOURCE_TYPE | OPERATION | RESPONSE_STATUS_CODE |
|--------------------------------|------------------------|-----------|----------------------|
| TP/oneM2M/CSE/ANNC/001_ACP/UPD | 1 (accesControlPolicy) | UPDATE | 2004 (UPDATED) |
| TP/oneM2M/CSE/ANNC/001_ACP/CRE | 1 (accesControlPolicy) | CREATE | 2001 (CREATED) |
| TP/oneM2M/CSE/ANNC/001_CNT/UPD | 3 (container) | UPDATE | 2004 (UPDATED) |

| TP Id | RESOURCE_TYPE | OPERATION | RESPONSE_STATUS_CODE |
|--------------------------------|-------------------------|-----------|----------------------|
| TP/oneM2M/CSE/ANNC/001_CNT/CRE | 3 (container) | CREATE | 2001 (CREATED) |
| TP/oneM2M/CSE/ANNC/001_GRP/UPD | 9 (group) | UPDATE | 2004 (UPDATED) |
| TP/oneM2M/CSE/ANNC/001_GRP/CRE | 9 (group) | CREATE | 2001 (CREATED) |
| TP/oneM2M/CSE/ANNC/001_LCP/UPD | 10 (locationPolicy) | UPDATE | 2004 (UPDATED) |
| TP/oneM2M/CSE/ANNC/001_LCP/CRE | 10 (locationPolicy) | CREATE | 2001 (CREATED) |
| TP/oneM2M/CSE/ANNC/001_MGO/UPD | 13 (mgmtObj) | UPDATE | 2004 (UPDATED) |
| TP/oneM2M/CSE/ANNC/001_MGO/CRE | 13 (mgmtObj) | CREATE | 2001 (CREATED) |
| TP/oneM2M/CSE/ANNC/001_NOD/UPD | 14 (node) | UPDATE | 2004 (UPDATED) |
| TP/oneM2M/CSE/ANNC/001_NOD/CRE | 14 (node) | CREATE | 2001 (CREATED) |
| TP/oneM2M/CSE/ANNC/001_SCH/UPD | 18 (schedule) | UPDATE | 2004 (UPDATED) |
| TP/oneM2M/CSE/ANNC/001_SCH/CRE | 18 (schedule) | CREATE | 2001 (CREATED) |
| TP/oneM2M/CSE/ANNC/001_CIN/CRE | 4 (contentInstance) | CREATE | 2001 (CREATED) |
| TP/oneM2M/CSE/ANNC/001_TS/UPD | 29 (timeSeries) | CREATE | 2001 (CREATED) |
| TP/oneM2M/CSE/ANNC/001_TS/CRE | 29 (timeSeries) | CREATE | 2001 (CREATED) |
| TP/oneM2M/CSE/ANNC/001_TSI/CRE | 30 (timeSeriesInstance) | CREATE | 2001 (CREATED) |

7.2.2.11.2 CREATE Operation

TP/oneM2M/CSE/ANNC/CRE/001

| TP Id | TP/oneM2M/CSE/ANNC/CRE/001 | | | | | | | |
|--|---|-------------|-----------|--|----------|--|-----------|--|
| Test objective | Check that the accessControlPolicyIDs attribute is announced when accessControlPolicyIDs attribute of the original resource is not present | | | | | | | |
| Reference | TS-0001 [1], clause 10.2.18.4 and clause 9.6.26.3-1, TS-0004 [2], clause 7.3.3.10 | | | | | | | |
| Parent Release | Release 3 | | | | | | | |
| Config Id | CF02 | | | | | | | |
| PICS Selection | PICS_CSE | | | | | | | |
| Initial conditions | <pre> with { the IUT being in the "initial state" and the IUT having registered the AE and the IUT having registered to the CSE and the IUT having created and announced the PARENT_RESOURCE to the announcement target CSE and the AE having privileges to perform CREATE operation on the resource PARENT_RESOURCE_ADDRESS } </pre> | | | | | | | |
| Expected behaviour | <table border="1"> <thead> <tr> <th>Test events</th> <th>Direction</th> </tr> </thead> <tbody> <tr> <td> when { the IUT receives a valid CREATE Request from AE containing To set to PARENT_RESOURCE_ADDRESS and From set to AE-ID and Content containing container resource containing no accessControlPolicyIDs attribute and no announcedAttribute attribute and announceTo attribute set to ANNC_TARGET_CSE_ID } </td> <td>IUT ← AE</td> </tr> <tr> <td> then { The IUT sends a valid CREATE Request containing To set to ANNC_PARENT_RESOURCE and Content containing containerAnnec resource containing MA (mandatory) attributes and valid accessControlPolicyIDs attribute } </td> <td>IUT → CSE</td> </tr> </tbody> </table> | 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 Content containing container resource containing no accessControlPolicyIDs attribute and no announcedAttribute attribute and announceTo attribute set to ANNC_TARGET_CSE_ID } | IUT ← AE | then { The IUT sends a valid CREATE Request containing To set to ANNC_PARENT_RESOURCE and Content containing containerAnnec resource containing MA (mandatory) attributes and valid accessControlPolicyIDs attribute } | IUT → CSE | |
| 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 Content containing container resource containing no accessControlPolicyIDs attribute and no announcedAttribute attribute and announceTo attribute set to ANNC_TARGET_CSE_ID } | IUT ← AE | | | | | | | |
| then { The IUT sends a valid CREATE Request containing To set to ANNC_PARENT_RESOURCE and Content containing containerAnnec resource containing MA (mandatory) attributes and valid accessControlPolicyIDs attribute } | IUT → CSE | | | | | | | |

| TP Id | TP/oneM2M/CSE/ANNC/CRE/002 | | | | | | | |
|--|---|-------------|-----------|--|-----------|--|-----------|--|
| Test objective | Check that the IUT announces successfully the <i>RESOURCE_TYPE</i> resource when a new CSE-ID is provided in announcedTo optional attribute and IUT having not been announced to announcement target CSE | | | | | | | |
| Reference | TS-0001 [1], clause 10.2.18.4, TS-0004 [2], clause 7.3.3.10 | | | | | | | |
| Parent Release | Release 3 | | | | | | | |
| Config Id | CF02 | | | | | | | |
| PICS Selection | PICS_CSE | | | | | | | |
| Initial conditions | <p>with {</p> <p>the IUT being in the "initial state" and the IUT having registered the AE and the IUT having created the <i>RESOURCE_TYPE</i> resource and the IUT having not been announced nor registered to the announcement target CSE and the AE having privileges to perform UPDATE operation on the resource TARGET_RESOURCE_ADDRESS and the IUT having received a valid UPDATE Request containing Content containing <i>RESOURCE_TYPE</i> resource containing announceTo attribute set to ANNC_TARGET_CSE_ADDRESS and the IUT having sent a valid UPDATE Request containing To set to REMOTE_CSE_RESOURCE_ADDRESS and Content containing remoteCSE resource containing announceTo attribute set to ANNC_TARGET_CSE_ID and the IUT having sent a valid CREATE Request containing To set to ANNC_TARGET_CSE_ID and Content containing CSEBaseAnnnc resource</p> } | | | | | | | |
| Expected behaviour | <table border="1"> <thead> <tr> <th>Test events</th> <th>Direction</th> </tr> </thead> <tbody> <tr> <td> <p>when {</p> <p>the IUT receives a valid Response containing Response Status Code set to 2001 (CREATED)</p> } </td><td>IUT → CSE</td></tr> <tr> <td> <p>then {</p> <p>and the IUT sends a valid CREATE Request containing To set to CSE_BASE_ANNC_RESOURCE_ADDRESS and Content containing <i>RESOURCE_TYPE</i> announced variant resource containing MA (mandatory) attributes</p> } </td><td>CSE → IUT</td></tr> </tbody> </table> | Test events | Direction | <p>when {</p> <p>the IUT receives a valid Response containing Response Status Code set to 2001 (CREATED)</p> } | IUT → CSE | <p>then {</p> <p>and the IUT sends a valid CREATE Request containing To set to CSE_BASE_ANNC_RESOURCE_ADDRESS and Content containing <i>RESOURCE_TYPE</i> announced variant resource containing MA (mandatory) attributes</p> } | CSE → IUT | |
| Test events | Direction | | | | | | | |
| <p>when {</p> <p>the IUT receives a valid Response containing Response Status Code set to 2001 (CREATED)</p> } | IUT → CSE | | | | | | | |
| <p>then {</p> <p>and the IUT sends a valid CREATE Request containing To set to CSE_BASE_ANNC_RESOURCE_ADDRESS and Content containing <i>RESOURCE_TYPE</i> announced variant resource containing MA (mandatory) attributes</p> } | CSE → IUT | | | | | | | |

| TP Id | RESOURCE_TYPE |
|--------------------------------|------------------------|
| TP/oneM2M/CSE/ANNC/CRE/002_ACP | 1 (accesControlPolicy) |
| TP/oneM2M/CSE/ANNC/CRE/002_CNT | 3 (container) |
| TP/oneM2M/CSE/ANNC/CRE/002_GRP | 9 (group) |
| TP/oneM2M/CSE/ANNC/CRE/002_LCP | 10 (locationPolicy) |
| TP/oneM2M/CSE/ANNC/CRE/002_MGO | 13 (mgmtObj) |
| TP/oneM2M/CSE/ANNC/CRE/002_NOD | 14 (node) |
| TP/oneM2M/CSE/ANNC/CRE/002_SCH | 18 (schedule) |
| TP/oneM2M/CSE/ANNC/CRE/002_TS | 29 (timeSeries) |

| TP Id | TP/oneM2M/CSE/ANNC/CRE/003 | | | | | | | |
|---|--|--------------------|------------------|--|----------------------|---|----------------------|--|
| Test objective | Host CSE of original resource removes an announcement target CSE from the announceTo attribute if it does not return successful CREATE response for the announced resource (for a CREATE initiating resource announcement) | | | | | | | |
| Reference | TS-0001 [1], clause 10.2.18.4 | | | | | | | |
| Parent Release | Release 3 | | | | | | | |
| Config Id | CF02 | | | | | | | |
| PICS Selection | PICS_CSE | | | | | | | |
| Initial conditions | <p>with {</p> <p>the IUT being in the "initial state" and the IUT having registered the AE and the IUT having registered to the CSE and the IUT having created and announced the container resource and the AE having privileges to perform CREATE operation on the resource CONTAINER_RESOURCE_ADDRESS and the IUT having received 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 announceTo attribute set to ANNC_TARGET_CSE_ID and The IUT having sent a valid CREATE Request containing To set to REMOTE_CSE_RESOURCE_ADDRESS and Content containing contentInstanceAnn resource containing MA (mandatory) attributes }</p> | | | | | | | |
| Expected behaviour | <table border="1"> <thead> <tr> <th>Test events</th> <th>Direction</th> </tr> </thead> <tbody> <tr> <td>when { the IUT receives a valid Response from ANNC_TARGET_CSE containing Response Status Code set to 4000 (BAD_REQUEST) }</td><td>IUT \leftarrow CSE</td></tr> <tr> <td>then { The IUT sends a valid Response containing Response Status Code set to 2001 (CREATED) and Content containing contentInstance resource containing announceTo attribute set to EMPTY }</td><td>IUT \rightarrow AE</td></tr> </tbody> </table> | Test events | Direction | when { the IUT receives a valid Response from ANNC_TARGET_CSE containing Response Status Code set to 4000 (BAD_REQUEST) } | IUT \leftarrow CSE | then { The IUT sends a valid Response containing Response Status Code set to 2001 (CREATED) and Content containing contentInstance resource containing announceTo attribute set to EMPTY } | IUT \rightarrow AE | |
| Test events | Direction | | | | | | | |
| when { the IUT receives a valid Response from ANNC_TARGET_CSE containing Response Status Code set to 4000 (BAD_REQUEST) } | IUT \leftarrow CSE | | | | | | | |
| then { The IUT sends a valid Response containing Response Status Code set to 2001 (CREATED) and Content containing contentInstance resource containing announceTo attribute set to EMPTY } | IUT \rightarrow AE | | | | | | | |

| TP Id | TP/oneM2M/CSE/ANNC/CRE/004 | | | | | | | |
|---|--|-------------|-----------|---|----------|--|-----------|--|
| Test objective | Check that the IUT announces successfully the <i>RESOURCE_TYPE</i> resource during its creation when announceTo optional attribute is provided and its parent resource having been announced to the announcement target CSE | | | | | | | |
| Reference | TS-0001 [1], clause 10.2.18.4, TS-0004 [2], clause 7.3.3.10 | | | | | | | |
| Parent Release | Release 3 | | | | | | | |
| Config Id | CF02 | | | | | | | |
| PICS Selection | PICS_CSE | | | | | | | |
| Initial conditions | <p>with {</p> <p style="padding-left: 20px;">the IUT being in the "initial state"</p> <p style="padding-left: 20px;">and the IUT having registered the AE</p> <p style="padding-left: 20px;">and the IUT having registered to the CSE</p> <p style="padding-left: 20px;">and the IUT having created and announced the PARENT_RESOURCE resource</p> <p style="padding-left: 20px;">and the AE having privileges to perform CREATE operation on the resource PARENT_RESOURCE_ADDRESS</p> <p>}</p> | | | | | | | |
| Expected behaviour | <table border="1"> <thead> <tr> <th>Test events</th> <th>Direction</th> </tr> </thead> <tbody> <tr> <td> when { the IUT receives a valid CREATE Request from AE containing To set to PARENT_RESOURCE_ADDRESS and From set to AE-ID and Content containing <i>RESOURCE_TYPE</i> resource containing announceTo attribute set to ANNC_TARGET_CSE_ID } </td><td>IUT ← AE</td></tr> <tr> <td> then { The IUT sends a valid CREATE Request containing To set to REMOTE_CSE_RESOURCE_ADDRESS and Content containing <i>RESOURCE_TYPE</i> announced variant resource containing MA (mandatory) attributes } </td><td>IUT → CSE</td></tr> </tbody> </table> | 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 Content containing <i>RESOURCE_TYPE</i> resource containing announceTo attribute set to ANNC_TARGET_CSE_ID } | IUT ← AE | then { The IUT sends a valid CREATE Request containing To set to REMOTE_CSE_RESOURCE_ADDRESS and Content containing <i>RESOURCE_TYPE</i> announced variant resource containing MA (mandatory) attributes } | IUT → CSE | |
| 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 Content containing <i>RESOURCE_TYPE</i> resource containing announceTo attribute set to ANNC_TARGET_CSE_ID } | IUT ← AE | | | | | | | |
| then { The IUT sends a valid CREATE Request containing To set to REMOTE_CSE_RESOURCE_ADDRESS and Content containing <i>RESOURCE_TYPE</i> announced variant resource containing MA (mandatory) attributes } | IUT → CSE | | | | | | | |

| TP Id | RESOURCE_TYPE |
|--------------------------------|------------------------|
| TP/oneM2M/CSE/ANNC/CRE/004_ACP | 1 (accesControlPolicy) |
| TP/oneM2M/CSE/ANNC/CRE/004_CNT | 3 (container) |
| TP/oneM2M/CSE/ANNC/CRE/004_CIN | 4 (contentInstance) |
| TP/oneM2M/CSE/ANNC/CRE/004_GRP | 9 (group) |
| TP/oneM2M/CSE/ANNC/CRE/004_LCP | 10 (locationPolicy) |
| TP/oneM2M/CSE/ANNC/CRE/004_MGO | 13 (mgmtObj) |
| TP/oneM2M/CSE/ANNC/CRE/004_NOD | 14 (node) |
| TP/oneM2M/CSE/ANNC/CRE/004_SCH | 18 (schedule) |

| TP Id | TP/oneM2M/CSE/ANNC/CRE/005 | | | | | | | |
|--|--|-------------|-----------|--|----------|---|-----------|--|
| Test objective | Check that the IUT announces successfully the <i>RESOURCE_TYPE</i> resource during its creation when announceTo optional attribute is provided and IUT having been already announced to announcement target CSE | | | | | | | |
| Reference | TS-0001 [1], clause 10.2.18.4, TS-0004 [2], clause 7.3.3.10 | | | | | | | |
| Parent Release | Release 3 | | | | | | | |
| Config Id | CF02 | | | | | | | |
| PICS Selection | PICS_CSE | | | | | | | |
| Initial conditions | <p>with {</p> <p>the IUT being in the "initial state" and the IUT having registered the AE and the IUT not having registered to the CSE and the IUT having created the PARENT_RESOURCE resource and the IUT having been announced to the announcement target CSE and the AE having privileges to perform CREATE operation on the resource PARENT_RESOURCE_ADDRESS</p> <p>}</p> | | | | | | | |
| Expected behaviour | <table border="1"> <thead> <tr> <th>Test events</th> <th>Direction</th> </tr> </thead> <tbody> <tr> <td> when { <p>the IUT receives a valid CREATE Request from AE containing To set to PARENT_RESOURCE_ADDRESS and From set to AE-ID and Content containing <i>RESOURCE_TYPE</i> resource containing announceTo attribute set to ANNC_TARGET_CSE_ID</p> <p>}</p></td> <td>IUT ← AE</td> </tr> <tr> <td> then { <p>The IUT sends a valid CREATE Request containing To set to CSE_BASE_ANNC_RESOURCE_ADDRESS and Content containing <i>RESOURCE_TYPE</i> announced variant resource containing MA (mandatory) attributes</p> <p>}</p></td> <td>IUT → CSE</td> </tr> </tbody> </table> | Test events | Direction | when { <p>the IUT receives a valid CREATE Request from AE containing To set to PARENT_RESOURCE_ADDRESS and From set to AE-ID and Content containing <i>RESOURCE_TYPE</i> resource containing announceTo attribute set to ANNC_TARGET_CSE_ID</p> <p>}</p> | IUT ← AE | then { <p>The IUT sends a valid CREATE Request containing To set to CSE_BASE_ANNC_RESOURCE_ADDRESS and Content containing <i>RESOURCE_TYPE</i> announced variant resource containing MA (mandatory) attributes</p> <p>}</p> | IUT → CSE | |
| Test events | Direction | | | | | | | |
| when { <p>the IUT receives a valid CREATE Request from AE containing To set to PARENT_RESOURCE_ADDRESS and From set to AE-ID and Content containing <i>RESOURCE_TYPE</i> resource containing announceTo attribute set to ANNC_TARGET_CSE_ID</p> <p>}</p> | IUT ← AE | | | | | | | |
| then { <p>The IUT sends a valid CREATE Request containing To set to CSE_BASE_ANNC_RESOURCE_ADDRESS and Content containing <i>RESOURCE_TYPE</i> announced variant resource containing MA (mandatory) attributes</p> <p>}</p> | IUT → CSE | | | | | | | |

| TP Id | RESOURCE_TYPE |
|--------------------------------|------------------------|
| TP/oneM2M/CSE/ANNC/CRE/005_ACP | 1 (accesControlPolicy) |
| TP/oneM2M/CSE/ANNC/CRE/005_CNT | 3 (container) |
| TP/oneM2M/CSE/ANNC/CRE/005_GRP | 9 (group) |
| TP/oneM2M/CSE/ANNC/CRE/005_LCP | 10 (locationPolicy) |
| TP/oneM2M/CSE/ANNC/CRE/005_MGO | 13 (mgmtObj) |
| TP/oneM2M/CSE/ANNC/CRE/005_NOD | 14 (node) |
| TP/oneM2M/CSE/ANNC/CRE/005_SCH | 18 (schedule) |

| TP Id | TP/oneM2M/CSE/ANNC/CRE/006 | | | | | | | |
|---|--|-------------|-----------|---|----------|---|----------|--|
| Test objective | Check that the IUT removes successfully an entry from announceTo attribute of the <i>RESOURCE_TYPE</i> resource during its creation when announceTo optional attribute is provided when parent has not been announced at the announcement target CSE | | | | | | | |
| Reference | TS-0001 [1], clause 10.2.18.4, TS-0004 [2], clause 7.3.3.10 | | | | | | | |
| Parent Release | Release 3 | | | | | | | |
| Config Id | CF02 | | | | | | | |
| PICS Selection | PICS_CSE | | | | | | | |
| Initial conditions | <p>with {</p> <p>the IUT being in the "initial state" and the IUT having registered the AE and the IUT having registered to the CSE and the IUT having created the PARENT_RESOURCE resource and the AE having privileges to perform CREATE operation on the resource PARENT_RESOURCE_ADDRESS</p> <p>}</p> | | | | | | | |
| Expected behaviour | <table border="1"> <thead> <tr> <th>Test events</th> <th>Direction</th> </tr> </thead> <tbody> <tr> <td> <p>when {</p> <p>the IUT receives a valid CREATE Request from AE containing To set to PARENT_RESOURCE_ADDRESS and From set to AE-ID and Content containing <i>RESOURCE_TYPE</i> resource containing announceTo attribute set to ANNC_TARGET_CSE_ID</p> <p>}</p> </td><td>IUT ← AE</td></tr> <tr> <td> <p>then {</p> <p>the IUT sends a valid Response containing Response Status Code set to 2001 (CREATED) and Content containing contentInstance resource containing announceTo attribute set to EMPTY</p> <p>}</p> </td><td>IUT → AE</td></tr> </tbody> </table> | Test events | Direction | <p>when {</p> <p>the IUT receives a valid CREATE Request from AE containing To set to PARENT_RESOURCE_ADDRESS and From set to AE-ID and Content containing <i>RESOURCE_TYPE</i> resource containing announceTo attribute set to ANNC_TARGET_CSE_ID</p> <p>}</p> | IUT ← AE | <p>then {</p> <p>the IUT sends a valid Response containing Response Status Code set to 2001 (CREATED) and Content containing contentInstance resource containing announceTo attribute set to EMPTY</p> <p>}</p> | IUT → AE | |
| Test events | Direction | | | | | | | |
| <p>when {</p> <p>the IUT receives a valid CREATE Request from AE containing To set to PARENT_RESOURCE_ADDRESS and From set to AE-ID and Content containing <i>RESOURCE_TYPE</i> resource containing announceTo attribute set to ANNC_TARGET_CSE_ID</p> <p>}</p> | IUT ← AE | | | | | | | |
| <p>then {</p> <p>the IUT sends a valid Response containing Response Status Code set to 2001 (CREATED) and Content containing contentInstance resource containing announceTo attribute set to EMPTY</p> <p>}</p> | IUT → AE | | | | | | | |

| TP Id | RESOURCE_TYPE |
|--------------------------------|-------------------------|
| TP/oneM2M/CSE/ANNC/CRE/006_CIN | 4 (contentInstance) |
| TP/oneM2M/CSE/ANNC/CRE/006_TSI | 30 (timeSeriesInstance) |

| TP Id | TP/oneM2M/CSE/ANNC/CRE/007 | | | | | | | |
|---|---|-------------|-----------|--|-----------|---|-----------|--|
| Test objective | Check that the IUT announces successfully the <i>RESOURCE_TYPE</i> resource during its creation when announceTo optional attribute is provided and IUT having not been announced to announcement target CSE | | | | | | | |
| Reference | TS-0001 [1], clause 10.2.18.4, TS-0004 [2], clause 7.3.3.10 | | | | | | | |
| Parent Release | Release 3 | | | | | | | |
| Config Id | CF02 | | | | | | | |
| PICS Selection | PICS_CSE | | | | | | | |
| Initial conditions | <p>with {</p> <p>the IUT being in the "initial state" and the IUT having registered the AE and the IUT having created the PARENT_RESOURCE resource and the IUT having not been announced nor registered to the announcement target CSE and the AE having privileges to perform CREATE operation on the resource PARENT_RESOURCE_ADDRESS and the IUT having received a valid CREATE Request containing To set to PARENT_RESOURCE_ADDRESS Content containing <i>RESOURCE_TYPE</i> resource containing announceTo attribute set to ANNC_TARGET_CSE_ID and the IUT having sent a valid CREATE Request containing To set to ANNC_TARGET_CSE_ID and Content containing CSEBaseAnnC resource representation }</p> | | | | | | | |
| Expected behaviour | <table border="1"> <thead> <tr> <th>Test events</th> <th>Direction</th> </tr> </thead> <tbody> <tr> <td> when { the IUT receives a valid Response containing Response Status Code set to 2001 (CREATED) } </td> <td>CSE → IUT</td> </tr> <tr> <td> then { The IUT sends a valid CREATE Request containing To set to CSE_BASE_ANNC_RESOURCE_ADDRESS and Content containing <i>RESOURCE_TYPE</i> announced variant resource containing MA (mandatory) attributes } </td> <td>IUT → CSE</td> </tr> </tbody> </table> | Test events | Direction | when { the IUT receives a valid Response containing Response Status Code set to 2001 (CREATED) } | CSE → IUT | then { The IUT sends a valid CREATE Request containing To set to CSE_BASE_ANNC_RESOURCE_ADDRESS and Content containing <i>RESOURCE_TYPE</i> announced variant resource containing MA (mandatory) attributes } | IUT → CSE | |
| Test events | Direction | | | | | | | |
| when { the IUT receives a valid Response containing Response Status Code set to 2001 (CREATED) } | CSE → IUT | | | | | | | |
| then { The IUT sends a valid CREATE Request containing To set to CSE_BASE_ANNC_RESOURCE_ADDRESS and Content containing <i>RESOURCE_TYPE</i> announced variant resource containing MA (mandatory) attributes } | IUT → CSE | | | | | | | |

| TP Id | RESOURCE_TYPE |
|--------------------------------|------------------------|
| TP/oneM2M/CSE/ANNC/CRE/007_ACP | 1 (accesControlPolicy) |
| TP/oneM2M/CSE/ANNC/CRE/007_CNT | 3 (container) |

| | |
|--------------------------------|---------------------|
| TP/oneM2M/CSE/ANNC/CRE/007_GRP | 9 (group) |
| TP/oneM2M/CSE/ANNC/CRE/007_LCP | 10 (locationPolicy) |
| TP/oneM2M/CSE/ANNC/CRE/007_MGO | 13 (mgmtObj) |
| TP/oneM2M/CSE/ANNC/CRE/007_NOD | 14 (node) |
| TP/oneM2M/CSE/ANNC/CRE/007_SCH | 18 (schedule) |
| TP/oneM2M/CSE/ANNC/CRE/007_TS | 29 (timeSeries) |

| TP Id | TP/oneM2M/CSE/ANNC/CRE/008 | | | | | | | |
|---|---|-------------|-----------|---|----------|---|-----------|--|
| Test objective | Check that the IUT announces successfully the <i>RESOURCE_TYPE</i> resource during its creation when announceTo and announcedAttribute optional attributes are provided and its parent resource having been announced to the announcement target CSE | | | | | | | |
| Reference | TS-0001 [1], clause 10.2.18.6, TS-0004 [2], clause 7.3.3.10 | | | | | | | |
| Parent Release | Release 3 | | | | | | | |
| Config Id | CF02 | | | | | | | |
| PICS Selection | PICS_CSE | | | | | | | |
| Initial conditions | <p>with {</p> <p>the IUT being in the "initial state" and the IUT having registered the AE and the IUT having registered to the CSE and the IUT having created and announced the PARENT_RESOURCE to the announcement target CSE and the AE having privileges to perform CREATE operation on the resource PARENT_RESOURCE_ADDRESS</p> <p>}</p> | | | | | | | |
| Expected behaviour | <table border="1"> <thead> <tr> <th>Test events</th> <th>Direction</th> </tr> </thead> <tbody> <tr> <td> when { <p>the IUT receives a valid CREATE Request from AE containing To set to PARENT_RESOURCE_ADDRESS and From set to AE-ID and Content containing <i>RESOURCE_TYPE</i> resource containing OA_ATTRIBUTE attribute set to VALUE and announcedAttribute attribute set to OA_ATTRIBUTE and announceTo attribute set to ANNC_TARGET_CSE_ID</p> <p>}</p></td> <td>IUT ← AE</td> </tr> <tr> <td> then { <p>The IUT sends a valid CREATE Request containing To set to REMOTE_CSE_RESOURCE_ADDRESS and Content containing <i>RESOURCE_TYPE</i> announced variant resource containing MA (mandatory) attributes and OA_ATTRIBUTE attribute set to VALUE</p> <p>}</p></td> <td>IUT → CSE</td> </tr> </tbody> </table> | Test events | Direction | when { <p>the IUT receives a valid CREATE Request from AE containing To set to PARENT_RESOURCE_ADDRESS and From set to AE-ID and Content containing <i>RESOURCE_TYPE</i> resource containing OA_ATTRIBUTE attribute set to VALUE and announcedAttribute attribute set to OA_ATTRIBUTE and announceTo attribute set to ANNC_TARGET_CSE_ID</p> <p>}</p> | IUT ← AE | then { <p>The IUT sends a valid CREATE Request containing To set to REMOTE_CSE_RESOURCE_ADDRESS and Content containing <i>RESOURCE_TYPE</i> announced variant resource containing MA (mandatory) attributes and OA_ATTRIBUTE attribute set to VALUE</p> <p>}</p> | IUT → CSE | |
| Test events | Direction | | | | | | | |
| when { <p>the IUT receives a valid CREATE Request from AE containing To set to PARENT_RESOURCE_ADDRESS and From set to AE-ID and Content containing <i>RESOURCE_TYPE</i> resource containing OA_ATTRIBUTE attribute set to VALUE and announcedAttribute attribute set to OA_ATTRIBUTE and announceTo attribute set to ANNC_TARGET_CSE_ID</p> <p>}</p> | IUT ← AE | | | | | | | |
| then { <p>The IUT sends a valid CREATE Request containing To set to REMOTE_CSE_RESOURCE_ADDRESS and Content containing <i>RESOURCE_TYPE</i> announced variant resource containing MA (mandatory) attributes and OA_ATTRIBUTE attribute set to VALUE</p> <p>}</p> | IUT → CSE | | | | | | | |

| TP Id | RESOURCE_TYPE | OA_ATTRIBUTE |
|------------------------------------|---------------------|---------------------|
| TP/oneM2M/CSE/ANNC/CRE/008_CNT/MBS | 3 (container) | maxByteSize |
| TP/oneM2M/CSE/ANNC/CRE/008_CIN/CNF | 4 (contentInstance) | contentInfo |
| TP/oneM2M/CSE/ANNC/CRE/008_GRP/MT | 9 (group) | memberType |
| TP/oneM2M/CSE/ANNC/CRE/008_LCP/LOI | 10 (locationPolicy) | locationContainerID |
| TP/oneM2M/CSE/ANNC/CRE/008_MGO/DC | 13 (mgmtObj) | description |

| | | |
|------------------------------------|-------------------------|--------------------|
| TP/oneM2M/CSE/ANNC/CRE/008_NOD/HCL | 14 (node) | hostCSELink |
| TP/oneM2M/CSE/ANNC/CRE/008_SCH/SE | 18 (schedule) | scheduleElement |
| TP/oneM2M/CSE/ANNC/CRE/008_TS/MBS | 29 (timeSeries) | maxByteSize |
| TP/oneM2M/CSE/ANNC/CRE/008_TSI/DGT | 30 (timeSeriesInstance) | dataGenerationTime |

| TP Id | TP/oneM2M/CSE/ANNC/CRE/009 | | | | | | | |
|--|--|-------------|-----------|--|----------|---|-----------|--|
| Test objective | Check that the labels attribute is announced when such attribute is present in the original resource | | | | | | | |
| Reference | TS-0001 [1], clause 10.2.18.4 and 9.6.26.3-1, TS-0004 [2], clause 7.3.3.10 | | | | | | | |
| Parent Release | Release 3 | | | | | | | |
| Config Id | CF02 | | | | | | | |
| PICS Selection | PICS_CSE | | | | | | | |
| Initial conditions | <p>with {</p> <p>the IUT being in the "initial state" and the IUT having registered the AE and the IUT having registered to the CSE and the IUT having created and announced the PARENT_RESOURCE to the announcement target CSE and the AE having privileges to perform CREATE operation on the resource PARENT_RESOURCE_ADDRESS</p> <p>}</p> | | | | | | | |
| Expected behaviour | <table border="1"> <thead> <tr> <th style="text-align: center;">Test events</th> <th style="text-align: center;">Direction</th> </tr> </thead> <tbody> <tr> <td> when { the IUT receives a valid CREATE Request from AE containing To set to PARENT_RESOURCE_ADDRESS and From set to AE-ID and Content containing container resource containing no announcedAttribute attribute and labels attribute set to VALUE and announceTo attribute set to ANNC_TARGET_CSE_ID } </td> <td style="text-align: center;">IUT ← AE</td> </tr> <tr> <td> then { The IUT sends a valid CREATE Request containing To set to ANNC_PARENT_RESOURCE_ADDRESS and Content containing containerAnncc resource containing MA (mandatory) attributes and labels attribute set to VALUE } </td> <td style="text-align: center;">IUT → CSE</td> </tr> </tbody> </table> | 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 Content containing container resource containing no announcedAttribute attribute and labels attribute set to VALUE and announceTo attribute set to ANNC_TARGET_CSE_ID } | IUT ← AE | then { The IUT sends a valid CREATE Request containing To set to ANNC_PARENT_RESOURCE_ADDRESS and Content containing containerAnncc resource containing MA (mandatory) attributes and labels attribute set to VALUE } | IUT → CSE | |
| 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 Content containing container resource containing no announcedAttribute attribute and labels attribute set to VALUE and announceTo attribute set to ANNC_TARGET_CSE_ID } | IUT ← AE | | | | | | | |
| then { The IUT sends a valid CREATE Request containing To set to ANNC_PARENT_RESOURCE_ADDRESS and Content containing containerAnncc resource containing MA (mandatory) attributes and labels attribute set to VALUE } | IUT → CSE | | | | | | | |

7.2.2.11.3 RETRIEVE Operation

TP/oneM2M/CSE/ANNC/RET/001

| | | |
|---------------------------|--|--|
| TP Id | TP/oneM2M/CSE/ANNC/RET/001 | |
| Test objective | Host of <resourceAnnc> returns the <resourceAnnc> representation in a RETRIEVE response | |
| Reference | TS-0001 [1], clause 10.2.18.2 | |
| Parent Release | Release 3 | |
| Config Id | CF02 | |
| 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 registered to the CSE and the IUT having RESOURCE_TYPE announced variant resource containing link attribute set to ORIGINAL_RESOURCE_ADDRESS and the AE having privileges to perform RETRIEVE operation on the TARGET_RESOURCE_ANNC_ADDRESS } | |
| Expected behaviour | Test events when { the IUT receives a valid RETRIEVE Request from AE containing To set to TARGET_RESOURCE_ANNC_ADDRESS and From set to AE-ID } then { the IUT sends a valid Response containing Response Status Code set to 2000 (OK) and Content containing RESOURCE_TYPE announced variant resource representation } | Direction IUT ← AE IUT → AE |

| TP Id | RESOURCE_TYPE |
|--------------------------------|-------------------------|
| TP/oneM2M/CSE/ANNC/RET/001_ACP | 1 (accesControlPolicy) |
| TP/oneM2M/CSE/ANNC/RET/001_CNT | 3 (container) |
| TP/oneM2M/CSE/ANNC/RET/001_CIN | 4 (contentInstance) |
| TP/oneM2M/CSE/ANNC/RET/001_GRP | 9 (group) |
| TP/oneM2M/CSE/ANNC/RET/001_LCP | 10 (locationPolicy) |
| TP/oneM2M/CSE/ANNC/RET/001_MGO | 13 (mgmtObj) |
| TP/oneM2M/CSE/ANNC/RET/001_NOD | 14 (node) |
| TP/oneM2M/CSE/ANNC/RET/001_SCH | 18 (schedule) |
| TP/oneM2M/CSE/ANNC/RET/001_TS | 29 (timeSeries) |
| TP/oneM2M/CSE/ANNC/RET/001_TSI | 30 (timeSeriesInstance) |

| TP Id | TP/oneM2M/CSE/ANNC/RET/002 | | | | | | | |
|--|---|-------------|-----------|--|-----------|---|----------|--|
| Test objective | Host of <resourceAnnc> returns the original <resource> representation from the original resource hosting CSE in a RETRIEVE response when result content is set to "original-resource" | | | | | | | |
| Reference | TS-0001 [1], clause 10.2.18.2 | | | | | | | |
| Parent Release | Release 3 | | | | | | | |
| Config Id | CF02 | | | | | | | |
| PICS Selection | PICS CSE | | | | | | | |
| Initial conditions | <p>with {</p> <ul style="list-style-type: none"> the IUT being in the "initial state" and the IUT having registered the AE and the IUT having registered to the CSE and the CSE having created RESOURCE_TYPE and the IUT having RESOURCE_TYPE announced variant resource containing link attribute set to ORIGINAL_RESOURCE_ADDRESS and the AE having privileges to perform RETRIEVE operation on the TARGET_RESOURCE_ANNC_ADDRESS and the IUT having received a valid RETRIEVE Request from AE containing <ul style="list-style-type: none"> To set to TARGET_RESOURCE_ANNC_ADDRESS and From set to AE-ID and Result Content set to 7 (original-resource) and no Content and the IUT having sent a valid RETRIEVE Request to CSE containing <ul style="list-style-type: none"> To set to ORIGINAL_RESOURCE_ADDRESS and From set to AE-ID and no Content } | | | | | | | |
| Expected behaviour | <table border="1"> <thead> <tr> <th>Test events</th> <th>Direction</th> </tr> </thead> <tbody> <tr> <td> when { <ul style="list-style-type: none"> the IUT receives a valid Response containing <ul style="list-style-type: none"> Response Status Code set to 2000 (OK) and Content containing RESOURCE_TYPE resource representation } </td><td>IUT ← CSE</td></tr> <tr> <td> then { <ul style="list-style-type: none"> the IUT sends a valid Response containing <ul style="list-style-type: none"> Response Status Code set to 2000 (OK) and Content containing RESOURCE_TYPE resource representation } </td><td>IUT → AE</td></tr> </tbody> </table> | Test events | Direction | when { <ul style="list-style-type: none"> the IUT receives a valid Response containing <ul style="list-style-type: none"> Response Status Code set to 2000 (OK) and Content containing RESOURCE_TYPE resource representation } | IUT ← CSE | then { <ul style="list-style-type: none"> the IUT sends a valid Response containing <ul style="list-style-type: none"> Response Status Code set to 2000 (OK) and Content containing RESOURCE_TYPE resource representation } | IUT → AE | |
| Test events | Direction | | | | | | | |
| when { <ul style="list-style-type: none"> the IUT receives a valid Response containing <ul style="list-style-type: none"> Response Status Code set to 2000 (OK) and Content containing RESOURCE_TYPE resource representation } | IUT ← CSE | | | | | | | |
| then { <ul style="list-style-type: none"> the IUT sends a valid Response containing <ul style="list-style-type: none"> Response Status Code set to 2000 (OK) and Content containing RESOURCE_TYPE resource representation } | IUT → AE | | | | | | | |

| | |
|-------|---------------|
| TP Id | RESOURCE_TYPE |
|-------|---------------|

| TP Id | RESOURCE_TYPE |
|--------------------------------|-------------------------|
| TP/oneM2M/CSE/ANNC/RET/002_ACP | 1 (accesControlPolicy) |
| TP/oneM2M/CSE/ANNC/RET/002_CNT | 3 (container) |
| TP/oneM2M/CSE/ANNC/RET/002_CIN | 4 (contentInstance) |
| TP/oneM2M/CSE/ANNC/RET/002_GRP | 9 (group) |
| TP/oneM2M/CSE/ANNC/RET/002_LCP | 10 (locationPolicy) |
| TP/oneM2M/CSE/ANNC/RET/002_MGO | 13 (mgmtObj) |
| TP/oneM2M/CSE/ANNC/RET/002_NOD | 14 (node) |
| TP/oneM2M/CSE/ANNC/RET/002_SCH | 18 (schedule) |
| TP/oneM2M/CSE/ANNC/RET/002_TS | 29 (timeSeries) |
| TP/oneM2M/CSE/ANNC/RET/002_TSI | 30 (timeSeriesInstance) |

7.2.2.11.4 UPDATE Operation

TP/oneM2M/CSE/ANNC/UPD/001

| TP Id | TP/oneM2M/CSE/ANNC/UPD/001 | | | | | | | |
|--|--|--------------------|------------------|--|----------|---|-----------|--|
| Test objective | Check that the IUT announces successfully the <i>RESOURCE_TYPE</i> resource when a new CSE-ID is provided in announcedTo optional attribute and its parent resource having been announced to the announcement target CSE | | | | | | | |
| Reference | TS-0001 [1], clause 10.2.18.4, TS-0004 [2], clause 7.3.3.10 | | | | | | | |
| Parent Release | Release 3 | | | | | | | |
| Config Id | CF02 | | | | | | | |
| PICS Selection | PICS_CSE | | | | | | | |
| Initial conditions | <p>with {</p> <ul style="list-style-type: none"> the IUT being in the "initial state" and the IUT having registered the AE and the IUT having registered to the remoteCSE and the IUT having created and announced the PARENT_RESOURCE resource to the announcement target CSE and the IUT having created a <i>RESOURCE_TYPE</i> resource at TARGET_RESOURCE_ADDRESS containing announceTo attribute set to NULL and the AE having privileges to perform UPDATE operation on the resource TARGET_RESOURCE_ADDRESS } | | | | | | | |
| Expected behaviour | <table border="1"> <thead> <tr> <th>Test events</th> <th>Direction</th> </tr> </thead> <tbody> <tr> <td> 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 <i>RESOURCE_TYPE</i> resource containing announceTo attribute set to ANNC_TARGET_CSE_ADDRESS } </td> <td>IUT ← AE</td> </tr> <tr> <td> then { The IUT sends a valid CREATE Request containing To set REMOTE_CSE_RESOURCE_ADDRESS and Content containing <i>RESOURCE_TYPE</i> announced variant resource containing MA (mandatory) attributes } </td> <td>IUT → CSE</td> </tr> </tbody> </table> | 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 <i>RESOURCE_TYPE</i> resource containing announceTo attribute set to ANNC_TARGET_CSE_ADDRESS } | IUT ← AE | then { The IUT sends a valid CREATE Request containing To set REMOTE_CSE_RESOURCE_ADDRESS and Content containing <i>RESOURCE_TYPE</i> announced variant resource containing MA (mandatory) attributes } | IUT → CSE | |
| 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 <i>RESOURCE_TYPE</i> resource containing announceTo attribute set to ANNC_TARGET_CSE_ADDRESS } | IUT ← AE | | | | | | | |
| then { The IUT sends a valid CREATE Request containing To set REMOTE_CSE_RESOURCE_ADDRESS and Content containing <i>RESOURCE_TYPE</i> announced variant resource containing MA (mandatory) attributes } | IUT → CSE | | | | | | | |

| TP Id | RESOURCE_TYPE |
|--------------------------------|------------------------|
| TP/oneM2M/CSE/ANNC/UPD/001_ACP | 1 (accesControlPolicy) |

| | |
|--------------------------------|---------------------|
| TP/oneM2M/CSE/ANNC/UPD/001_CNT | 3 (container) |
| TP/oneM2M/CSE/ANNC/UPD/001_GRP | 9 (group) |
| TP/oneM2M/CSE/ANNC/UPD/001_LCP | 10 (locationPolicy) |
| TP/oneM2M/CSE/ANNC/UPD/001_MGO | 13 (mgmtObj) |
| TP/oneM2M/CSE/ANNC/UPD/001_NOD | 14 (node) |
| TP/oneM2M/CSE/ANNC/UPD/001_SCH | 18 (schedule) |
| TP/oneM2M/CSE/ANNC/UPD/001_TS | 29 (timeSeries) |

| TP Id | TP/oneM2M/CSE/ANNC/UPD/002 | | | | | | | |
|---|---|-------------|-----------|---|----------|---|-----------|--|
| Test objective | Check that the IUT initiates de-announcement of the <i>RESOURCE_TYPE</i> resource when a CSE-ID is deleted from the <i>announceTo</i> optional attribute | | | | | | | |
| Reference | TS-0001 [1], clause 10.2.18.5, TS-0004 [2], clause 7.3.3.10 | | | | | | | |
| Parent Release | Release 3 | | | | | | | |
| Config Id | CF02 | | | | | | | |
| PICS Selection | PICS_CSE | | | | | | | |
| Initial conditions | <p>with {</p> <p>the IUT being in the "initial state" and the IUT having registered the AE and the IUT having registered to the remoteCSE and the IUT having created a <i>RESOURCE_TYPE</i> resource containing <i>announceTo</i> attribute set to ANNC_TARGET_CSE_ADDRESS and the IUT having announced the <i>RESOURCE_TYPE</i> resource to the announcement target CSE and the AE having privileges to perform UPDATE operation on the resource TARGET_RESOURCE_ADDRESS</p> <p>}</p> | | | | | | | |
| Expected behaviour | <table border="1"> <thead> <tr> <th>Test events</th> <th>Direction</th> </tr> </thead> <tbody> <tr> <td> when { the IUT receives a valid UPDATE Request from AE containing To set to TARGET_RESOURCE_ADDRESS and Content containing <i>RESOURCE_TYPE</i> resource containing <i>announceTo</i> attribute set to NULL } </td> <td>IUT ← AE</td> </tr> <tr> <td> then { The IUT sends a valid DELETE Request containing To set to TARGET_ANNC_RESOURCE_ADDRESS } </td> <td>IUT → CSE</td> </tr> </tbody> </table> | Test events | Direction | when { the IUT receives a valid UPDATE Request from AE containing To set to TARGET_RESOURCE_ADDRESS and Content containing <i>RESOURCE_TYPE</i> resource containing <i>announceTo</i> attribute set to NULL } | IUT ← AE | then { The IUT sends a valid DELETE Request containing To set to TARGET_ANNC_RESOURCE_ADDRESS } | IUT → CSE | |
| Test events | Direction | | | | | | | |
| when { the IUT receives a valid UPDATE Request from AE containing To set to TARGET_RESOURCE_ADDRESS and Content containing <i>RESOURCE_TYPE</i> resource containing <i>announceTo</i> attribute set to NULL } | IUT ← AE | | | | | | | |
| then { The IUT sends a valid DELETE Request containing To set to TARGET_ANNC_RESOURCE_ADDRESS } | IUT → CSE | | | | | | | |

| TP Id | RESOURCE_TYPE |
|--------------------------------|------------------------|
| TP/oneM2M/CSE/ANNC/UPD/002_ACP | 1 (accesControlPolicy) |
| TP/oneM2M/CSE/ANNC/UPD/002_CNT | 3 (container) |
| TP/oneM2M/CSE/ANNC/UPD/002_GRP | 4 (group) |
| TP/oneM2M/CSE/ANNC/UPD/002_LCP | 9 (locationPolicy) |
| TP/oneM2M/CSE/ANNC/UPD/002_MGO | 13 (mgmtObj) |
| TP/oneM2M/CSE/ANNC/UPD/002_NOD | 14 (node) |
| TP/oneM2M/CSE/ANNC/UPD/002_SCH | 18 (schedule) |
| TP/oneM2M/CSE/ANNC/UPD/002_TS | 29 (timeSeries) |

| TP Id | TP/oneM2M/CSE/ANNC/UPD/003 | | | | | | | |
|---|---|-------------|-----------|--|-----------|---|----------|--|
| Test objective | Check that the IUT provides confirmation of resource de-announcement to the originator of the initiating request after a successful resource de-announcement procedure originator (for an UPDATE initiating resource de-announcement) | | | | | | | |
| Reference | TS-0001 [1], clause 10.2.18.3, TS-0004 [2], clause 7.3.3.10 | | | | | | | |
| Parent Release | Release 3 | | | | | | | |
| Config Id | CF02 | | | | | | | |
| PICS Selection | PICS_CSE | | | | | | | |
| Initial conditions | <pre> with { and the IUT having registered the AE and the IUT having registered to the remoteCSE and the IUT having created a RESOURCE_TYPE resource containing announceTo attribute set to ANNC_TARGET_CSE_ADDRESS and the IUT having announced the RESOURCE_TYPE resource to the announcement target CSE and the AE having privileges to perform UPDATE operation on the resource TARGET_RESOURCE_ADDRESS and the IUT having received a valid UPDATE Request from AE containing To set to TARGET_RESOURCE_ADDRESS and Content attribute containing RESOURCE_TYPE resource containing announceTo attribute set to NULL and the IUT having sent a valid DELETE Request containing To set to TARGET_ANNC_RESOURCE_ADDRESS } </pre> | | | | | | | |
| Expected behaviour | <table border="1"> <thead> <tr> <th>Test events</th> <th>Direction</th> </tr> </thead> <tbody> <tr> <td> <pre> when { the IUT receives a valid Response from ANNC_TARGET_CSE containing Response Status Code set to 2002 (DELETED) } </pre> </td><td>IUT ← CSE</td></tr> <tr> <td> <pre> then { the IUT updates 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 announceTo attribute set to NULL } </pre> </td><td>IUT → AE</td></tr> </tbody> </table> | Test events | Direction | <pre> when { the IUT receives a valid Response from ANNC_TARGET_CSE containing Response Status Code set to 2002 (DELETED) } </pre> | IUT ← CSE | <pre> then { the IUT updates 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 announceTo attribute set to NULL } </pre> | IUT → AE | |
| Test events | Direction | | | | | | | |
| <pre> when { the IUT receives a valid Response from ANNC_TARGET_CSE containing Response Status Code set to 2002 (DELETED) } </pre> | IUT ← CSE | | | | | | | |
| <pre> then { the IUT updates 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 announceTo attribute set to NULL } </pre> | IUT → AE | | | | | | | |

| TP Id | RESOURCE_TYPE |
|--------------------------------|------------------------|
| TP/oneM2M/CSE/ANNC/UPD/003_ACP | 1 (accesControlPolicy) |

| TP Id | RESOURCE_TYPE |
|--------------------------------|---------------------|
| TP/oneM2M/CSE/ANNC/UPD/003_CNT | 3 (container) |
| TP/oneM2M/CSE/ANNC/UPD/003_GRP | 9 (group) |
| TP/oneM2M/CSE/ANNC/UPD/003_LCP | 10 (locationPolicy) |
| TP/oneM2M/CSE/ANNC/UPD/003_MGO | 13 (mgmtObj) |
| TP/oneM2M/CSE/ANNC/UPD/003_NOD | 14 (node) |
| TP/oneM2M/CSE/ANNC/UPD/003_SCH | 18 (schedule) |
| TP/oneM2M/CSE/ANNC/UPD/003_TS | 29 (timeSeries) |

| TP Id | TP/oneM2M/CSE/ANNC/UPD/004 | | | | | | | |
|--|---|-------------|-----------|--|-----------|--|----------|--|
| Test objective | HOST CSE of original resource returns a valid response where value in announcedAttributes is removed if such attribute is not marked OA | | | | | | | |
| Reference | TS-0001 [1], clause 10.2.18.1 and clause 10.2.18.4, TS-0004 [2], clause 7.3.1.10 | | | | | | | |
| Parent Release | Release 3 | | | | | | | |
| Config Id | CF02 | | | | | | | |
| PICS Selection | PICS_CSE | | | | | | | |
| Initial conditions | <p>with {</p> <p>the IUT being in the "initial state" and the IUT having registered to the CSE and the IUT having registered the AE and the IUT having a resource of type <i>RESOURCE_TYPE</i> at TARGET_RESOURCE_ADDRESS containing</p> <p>announceTo attribute set to NULL announcedAttribute attribute set to NULL parentId attribute set to PARENT_RESOURCE_ADDRESS and the AE having privileges to perform UPDATE operation on the TARGET_RESOURCE_ADDRESS and the resource at PARENT_RESOURCE_ADDRESS containing</p> <p>announceTo attribute set to ANNOUNCED_PARENT_ADDRESS</p> <p>}</p> | | | | | | | |
| Expected behaviour | <table border="1"> <thead> <tr> <th>Test events</th> <th>Direction</th> </tr> </thead> <tbody> <tr> <td> when { the IUT receives a validUPDATE Request from AE containing To set to TARGET_RESOURCE_ADDRESS and From set to AE-ID and Content containing <i>RESOURCE_TYPE</i> resource containing announceTo set to ANNCC_TARGET_CSE_ID and announcedAttributes attribute set to pi } </td> <td>IUT ← CSE</td> </tr> <tr> <td> then { the IUT sends a Response containing Response Status Code set to 2004 (UPDATED) announceTo attribute set to ANNOUNCED_RESOURCE_ADDRESS </td> <td>IUT → AE</td> </tr> </tbody> </table> | Test events | Direction | when { the IUT receives a validUPDATE Request from AE containing To set to TARGET_RESOURCE_ADDRESS and From set to AE-ID and Content containing <i>RESOURCE_TYPE</i> resource containing announceTo set to ANNCC_TARGET_CSE_ID and announcedAttributes attribute set to pi } | IUT ← CSE | then { the IUT sends a Response containing Response Status Code set to 2004 (UPDATED) announceTo attribute set to ANNOUNCED_RESOURCE_ADDRESS | IUT → AE | |
| Test events | Direction | | | | | | | |
| when { the IUT receives a validUPDATE Request from AE containing To set to TARGET_RESOURCE_ADDRESS and From set to AE-ID and Content containing <i>RESOURCE_TYPE</i> resource containing announceTo set to ANNCC_TARGET_CSE_ID and announcedAttributes attribute set to pi } | IUT ← CSE | | | | | | | |
| then { the IUT sends a Response containing Response Status Code set to 2004 (UPDATED) announceTo attribute set to ANNOUNCED_RESOURCE_ADDRESS | IUT → AE | | | | | | | |

| <pre> and announcedAttributes set to empty } </pre> | |
|---|---------------------|
| TP Id | RESOURCE_TYPE |
| TP/oneM2M/CSE/ANNC/UPD/004_CNT | 3 (container) |
| TP/oneM2M/CSE/ANNC/UPD/004_GRP | 9 (group) |
| TP/oneM2M/CSE/ANNC/UPD/004_LCP | 10 (locationPolicy) |
| TP/oneM2M/CSE/ANNC/UPD/004_MGO | 13 (mgmtObj) |
| TP/oneM2M/CSE/ANNC/UPD/004_NOD | 14 (node) |
| TP/oneM2M/CSE/ANNC/UPD/004_SCH | 18 (schedule) |
| TP/oneM2M/CSE/ANNC/UPD/004_TS | 29 (timeSeries) |

TP/oneM2M/CSE/ANNC/UPD/005

| | | |
|---|--|--|
| TP Id Test objective Reference Parent Release Config Id PICS Selection Initial conditions Expected behaviour | TP/oneM2M/CSE/ANNC/UPD/005 Check that the labels attribute is de-announced when such attribute is deleted from the original resource TS-0001 [1], clause 10.2.18.4 and clause 9.6.26.3-1, TS-0004 [2], clause 7.3.3.10 Release 3 CF02 PICS CSE with { the IUT being in the "initial state" and the IUT having registered the AE and the IUT having registered to the remoteCSE and the IUT having created a container resource containing announceTo attribute set to ANNC_TARGET_CSE_ADDRESS and valid labels attribute and the IUT having announced the container resource to the announcement target CSE and the AE having privileges to perform UPDATE operation on the resource CONTAINER_RESOURCE_ADDRESS } when { the IUT receives a valid UPDATE Request from AE containing To set to CONTAINER_RESOURCE_ADDRESS and From set to AE-ID and Content containing container resource containing labels attribute set to NULL } then { The IUT sends a valid UPDATE Request containing | Test events Direction |
| | | IUT ← AE |
| | | IUT → CSE |

| | | |
|--|--|--|
| | To set to CONTAINER_ANNC_RESOURCE_ADDRESS and Content containing containerAnn resource containing labels attribute set to NULL } | |
|--|--|--|

TP/oneM2M/CSE/ANNC/UPD/006

| TP Id | TP/oneM2M/CSE/ANNC/UPD/006 | | | | | | | |
|---|---|-------------|-----------|---|----------|---|-----------|--|
| Test objective | Check that the IUT announces successfully the RESOURCE_TYPE resource when a new CSE-ID is provided in announcedTo optional attribute and IUT having been already announced to announcement target CSE | | | | | | | |
| Reference | TS-0001 [1], clause 10.2.18.4, TS-0004 [2], clause 7.3.3.10 | | | | | | | |
| Parent Release | Release 3 | | | | | | | |
| Config Id | CF02 | | | | | | | |
| 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 registered to the CSE and the IUT having been announced to the announcement target CSE 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 | <table border="1"> <thead> <tr> <th>Test events</th> <th>Direction</th> </tr> </thead> <tbody> <tr> <td> 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 announceTo attribute set to ANNC_TARGET_CSE_ID } </td><td>IUT ← AE</td></tr> <tr> <td> then { The IUT sends a valid CREATE Request containing To set to CSE_BASE_ANNC_RESOURCE_ADDRESS and Content containing RESOURCE_TYPE announced variant resource containing MA (mandatory) attributes } </td><td>IUT → CSE</td></tr> </tbody> </table> | 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 announceTo attribute set to ANNC_TARGET_CSE_ID } | IUT ← AE | then { The IUT sends a valid CREATE Request containing To set to CSE_BASE_ANNC_RESOURCE_ADDRESS and Content containing RESOURCE_TYPE announced variant resource containing MA (mandatory) attributes } | IUT → CSE | |
| 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 announceTo attribute set to ANNC_TARGET_CSE_ID } | IUT ← AE | | | | | | | |
| then { The IUT sends a valid CREATE Request containing To set to CSE_BASE_ANNC_RESOURCE_ADDRESS and Content containing RESOURCE_TYPE announced variant resource containing MA (mandatory) attributes } | IUT → CSE | | | | | | | |

| TP Id | RESOURCE_TYPE |
|--------------------------------|------------------------|
| TP/oneM2M/CSE/ANNC/UPD/006_ACP | 1 (accesControlPolicy) |

| | |
|--------------------------------|---------------------|
| TP/oneM2M/CSE/ANNC/UPD/006_CNT | 3 (container) |
| TP/oneM2M/CSE/ANNC/UPD/006_GRP | 9 (group) |
| TP/oneM2M/CSE/ANNC/UPD/006_LCP | 10 (locationPolicy) |
| TP/oneM2M/CSE/ANNC/UPD/006_MGO | 13 (mgmtObj) |
| TP/oneM2M/CSE/ANNC/UPD/006_NOD | 14 (node) |
| TP/oneM2M/CSE/ANNC/UPD/006_SCH | 18 (schedule) |
| TP/oneM2M/CSE/ANNC/UPD/006_TS | 29 (timeSeries) |

TP/oneM2M/CSE/ANNC/UPD/007

| TP Id | TP/oneM2M/CSE/ANNC/UPD/007 | | | | | | | |
|---|--|-------------|-----------|---|----------|--|-----------|--|
| Test objective | Check that the IUT announces successfully the <i>RESOURCE_TYPE</i> resource when a new CSE-ID is provided in announcedTo optional attribute and IUT has registered and created a <remoteCSE> resource to the announcement target CSE | | | | | | | |
| Reference | TS-0001 [1], clause 10.2.18.4, TS-0004 [2], clause 7.3.3.10 | | | | | | | |
| Parent Release | Release 3 | | | | | | | |
| Config Id | CF02 | | | | | | | |
| 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 <i>RESOURCE_TYPE</i> resource and the IUT having registered and created a CSE resource to the announcement target CSE and the AE having privileges to perform UPDATE operation on the resource TARGET_RESOURCE_ADDRESS } | | | | | | | |
| Expected behaviour | <table border="1"> <thead> <tr> <th>Test events</th> <th>Direction</th> </tr> </thead> <tbody> <tr> <td> 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 <i>RESOURCE_TYPE</i> resource containing announceTo attribute set to ANNC_TARGET_CSE_ID } </td><td>IUT ← AE</td></tr> <tr> <td> then { The IUT sends a valid CREATE Request containing To set to ANNC_TARGET_CSE_ID and Content containing CSEBaseAnnC resource containing MA (mandatory) attributes } </td><td>IUT → CSE</td></tr> </tbody> </table> | 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 <i>RESOURCE_TYPE</i> resource containing announceTo attribute set to ANNC_TARGET_CSE_ID } | IUT ← AE | then { The IUT sends a valid CREATE Request containing To set to ANNC_TARGET_CSE_ID and Content containing CSEBaseAnnC resource containing MA (mandatory) attributes } | IUT → CSE | |
| 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 <i>RESOURCE_TYPE</i> resource containing announceTo attribute set to ANNC_TARGET_CSE_ID } | IUT ← AE | | | | | | | |
| then { The IUT sends a valid CREATE Request containing To set to ANNC_TARGET_CSE_ID and Content containing CSEBaseAnnC resource containing MA (mandatory) attributes } | IUT → CSE | | | | | | | |

| TP Id | RESOURCE_TYPE |
|--------------------------------|------------------------|
| TP/oneM2M/CSE/ANNC/UPD/007_ACP | 1 (accesControlPolicy) |
| TP/oneM2M/CSE/ANNC/UPD/007_CNT | 3 (container) |
| TP/oneM2M/CSE/ANNC/UPD/007_GRP | 9 (group) |
| TP/oneM2M/CSE/ANNC/UPD/007_LCP | 10 (locationPolicy) |
| TP/oneM2M/CSE/ANNC/UPD/007_MGO | 13 (mgmtObj) |
| TP/oneM2M/CSE/ANNC/UPD/007_NOD | 14 (node) |
| TP/oneM2M/CSE/ANNC/UPD/007_SCH | 18 (schedule) |
| TP/oneM2M/CSE/ANNC/UPD/007_TS | 29 (timeSeries) |

| TP Id | TP/oneM2M/CSE/ANNC/UPD/008 | | | | | | | |
|--|--|-------------|-----------|--|-----------|--|----------|--|
| Test objective | Check that the IUT provides confirmation of the announcement of an attribute to the originator of the initiating request after a successful attribute announcement procedure | | | | | | | |
| Reference | TS-0001 [1], clause 10.2.18.6, TS-0004 [2], clause 7.3.3.10 | | | | | | | |
| Parent Release | Release 3 | | | | | | | |
| Config Id | CF02 | | | | | | | |
| PICS Selection | PICS_CSE | | | | | | | |
| Initial conditions | <p>with {</p> <p>the IUT being in the "initial state" and the IUT having registered the AE and the IUT having registered to the CSE and the IUT having created a RESOURCE_TYPE resource containing OA_ATTRIBUTE attribute set to VALUE and announceTo attribute set to ANNC_TARGET_CSE_ID and announcedAttribute attribute set to NULL and the IUT having announced the RESOURCE_TYPE resource to the announcement target CSE and the AE having privileges to perform UPDATE operation on the resource TARGET_RESOURCE_ADDRESS and the IUT having received a valid UPDATE Request from AE containing To set to TARGET_RESOURCE_ADDRESS and Content containing RESOURCE_TYPE resource containing announcedAttribute attribute set to OA_ATTRIBUTE and the IUT having sent a valid UPDATE Request containing To set to TARGET_ANNC_RESOURCE_ADDRESS and Content containing RESOURCE_TYPE announced variant resource containing OA_ATTRIBUTE attribute set to VALUE</p> <p>}</p> | | | | | | | |
| Expected behaviour | <table border="1"> <thead> <tr> <th>Test events</th> <th>Direction</th> </tr> </thead> <tbody> <tr> <td> when { the IUT receives a valid Response from CSE containing Response Status Code set to 2004 (UPDATED) containing valid RESOURCE_TYPE announced variant resource representation } </td> <td>IUT ← CSE</td> </tr> <tr> <td> 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 announcedAttribute attribute set to OA_ATTRIBUTE </td> <td>IUT → AE</td> </tr> </tbody> </table> | Test events | Direction | when { the IUT receives a valid Response from CSE containing Response Status Code set to 2004 (UPDATED) containing valid RESOURCE_TYPE announced variant resource representation } | IUT ← CSE | 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 announcedAttribute attribute set to OA_ATTRIBUTE | IUT → AE | |
| Test events | Direction | | | | | | | |
| when { the IUT receives a valid Response from CSE containing Response Status Code set to 2004 (UPDATED) containing valid RESOURCE_TYPE announced variant resource representation } | IUT ← CSE | | | | | | | |
| 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 announcedAttribute attribute set to OA_ATTRIBUTE | IUT → AE | | | | | | | |

| | | |
|--|---|--|
| | } | |
|--|---|--|

| TP Id | RESOURCE_TYPE | OA_ATTRIBUTE |
|------------------------------------|---------------------|---------------------|
| TP/oneM2M/CSE/ANNC/UPD/008_CNT/MBS | 3 (container) | maxByteSize |
| TP/oneM2M/CSE/ANNC/UPD/008_GRP/MNM | 9 (group) | maxNrOfMembers |
| TP/oneM2M/CSE/ANNC/UPD/008_LCP/LOI | 10 (locationPolicy) | locationContainerID |
| TP/oneM2M/CSE/ANNC/UPD/008_MGO/DC | 13 (mgmtObj) | description |
| TP/oneM2M/CSE/ANNC/UPD/008_NOD/HCL | 14 (node) | hostedCSELINK |
| TP/oneM2M/CSE/ANNC/UPD/008_SCH/SE | 18 (schedule) | scheduleElement |
| TP/oneM2M/CSE/ANNC/UPD/008_TS/MBS | 29 (timeSeries) | maxByteSize |

| TP Id | TP/oneM2M/CSE/ANNC/UPD/009 | | | | | | | |
|--|--|-------------|-----------|--|----------|---|-----------|--|
| Test objective | Check that the IUT updates successfully <i>RESOURCE_TYPE</i> announced variant resource when a new OA attribute is provided to announcedAttribute attribute of the original resource | | | | | | | |
| Reference | TS-0001 [1], clause 10.2.18.8, TS-0004 [2], clause 7.3.3.10 | | | | | | | |
| Parent Release | Release 3 | | | | | | | |
| Config Id | CF02 | | | | | | | |
| PICS Selection | PICS_CSE | | | | | | | |
| Initial conditions | <p>with {</p> <p>the IUT being in the "initial state" and the IUT having registered the AE and the IUT having registered to the CSE and the IUT having created a <i>RESOURCE_TYPE</i> resource containing <i>OA_ATTRIBUTE</i> attribute set to VALUE and <i>announceTo</i> attribute set to ANNC_TARGET_CSE_ID and <i>announcedAttribute</i> attribute set to NULL and the IUT having announced the <i>RESOURCE_TYPE</i> resource to the announcement target CSE and the AE having privileges to perform UPDATE operation on the resource TARGET_RESOURCE_ADDRESS }</p> | | | | | | | |
| Expected behaviour | <table border="1"> <thead> <tr> <th>Test events</th> <th>Direction</th> </tr> </thead> <tbody> <tr> <td> 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 <i>RESOURCE_TYPE</i> resource containing <i>announcedAttribute</i> attribute set to OA_ATTRIBUTE } </td> <td>IUT ← AE</td> </tr> <tr> <td> then { The IUT sends a valid UPDATE Request containing To set to TARGET_ANNC_RESOURCE_ADDRESS and Content containing <i>RESOURCE_TYPE</i> announced variant resource containing <i>OA_ATTRIBUTE</i> attribute set to VALUE } </td> <td>IUT → CSE</td> </tr> </tbody> </table> | 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 <i>RESOURCE_TYPE</i> resource containing <i>announcedAttribute</i> attribute set to OA_ATTRIBUTE } | IUT ← AE | then { The IUT sends a valid UPDATE Request containing To set to TARGET_ANNC_RESOURCE_ADDRESS and Content containing <i>RESOURCE_TYPE</i> announced variant resource containing <i>OA_ATTRIBUTE</i> attribute set to VALUE } | IUT → CSE | |
| 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 <i>RESOURCE_TYPE</i> resource containing <i>announcedAttribute</i> attribute set to OA_ATTRIBUTE } | IUT ← AE | | | | | | | |
| then { The IUT sends a valid UPDATE Request containing To set to TARGET_ANNC_RESOURCE_ADDRESS and Content containing <i>RESOURCE_TYPE</i> announced variant resource containing <i>OA_ATTRIBUTE</i> attribute set to VALUE } | IUT → CSE | | | | | | | |

| TP Id | RESOURCE_TYPE | OA_ATTRIBUTE |
|------------------------------------|---------------------|---------------------|
| TP/oneM2M/CSE/ANNC/UPD/009_CNT/MBS | 3 (container) | maxByteSize |
| TP/oneM2M/CSE/ANNC/UPD/009_GRP/MNM | 9 (group) | maxNrOfMembers |
| TP/oneM2M/CSE/ANNC/UPD/009_LCP/LOI | 10 (locationPolicy) | locationContainerID |
| TP/oneM2M/CSE/ANNC/UPD/009_MGO/DC | 13 (mgmtObj) | description |
| TP/oneM2M/CSE/ANNC/UPD/009_NOD/HCL | 14 (node) | hostedCSELINK |

| TP_Id | RESOURCE_TYPE | OA_ATTRIBUTE |
|-----------------------------------|-----------------|-----------------|
| TP/oneM2M/CSE/ANNC/UPD/009_SCH/SE | 18 (schedule) | scheduleElement |
| TP/oneM2M/CSE/ANNC/UPD/009_TS/MBS | 29 (timeSeries) | maxByteSize |

| TP Id | TP/oneM2M/CSE/ANNC/UPD/010 | | | | | | | |
|---|--|--------------------|------------------|---|---------------------|---|-----------------------|--|
| Test objective | Check that the IUT updates successfully the <i>RESOURCE_TYPE</i> announced variant resource when a MA attribute of its original resource is updated | | | | | | | |
| Reference | TS-0001 [1], clause 10.2.18.10, TS-0004 [2], clause 7.3.3.10 | | | | | | | |
| Parent Release | Release 3 | | | | | | | |
| Config Id | CF02 | | | | | | | |
| PICS Selection | PICS_CSE | | | | | | | |
| Initial conditions | <p>with {</p> <p>the IUT being in the "initial state" and the IUT having registered the AE and the IUT having registered to the CSE and the IUT having created a <i>RESOURCE_TYPE</i> resource containing expirationTime attribute set to VALUE_1 and announceTo attribute set to ANNC_TARGET_CSE_ID and the IUT having announced the <i>RESOURCE_TYPE</i> resource to the announcement target CSE and the AE having privileges to perform UPDATE operation on the resource TARGET_RESOURCE_ADDRESS</p> <p>}</p> | | | | | | | |
| Expected behaviour | <table border="1"> <thead> <tr> <th>Test events</th> <th>Direction</th> </tr> </thead> <tbody> <tr> <td> 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 <i>RESOURCE_TYPE</i> resource containing expirationTime attribute set to VALUE_2 } </td><td>IUT \leftarrow AE</td></tr> <tr> <td> then { The IUT sends a valid UPDATE Request containing To set to TARGET_ANNC_RESOURCE_ADDRESS and Content containing <i>RESOURCE_TYPE</i> announced variant resource containing expirationTime attribute set to VALUE_2 } </td><td>IUT \rightarrow CSE</td></tr> </tbody> </table> | 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 <i>RESOURCE_TYPE</i> resource containing expirationTime attribute set to VALUE_2 } | IUT \leftarrow AE | then { The IUT sends a valid UPDATE Request containing To set to TARGET_ANNC_RESOURCE_ADDRESS and Content containing <i>RESOURCE_TYPE</i> announced variant resource containing expirationTime attribute set to VALUE_2 } | IUT \rightarrow CSE | |
| 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 <i>RESOURCE_TYPE</i> resource containing expirationTime attribute set to VALUE_2 } | IUT \leftarrow AE | | | | | | | |
| then { The IUT sends a valid UPDATE Request containing To set to TARGET_ANNC_RESOURCE_ADDRESS and Content containing <i>RESOURCE_TYPE</i> announced variant resource containing expirationTime attribute set to VALUE_2 } | IUT \rightarrow CSE | | | | | | | |

| TP Id | RESOURCE_TYPE |
|--------------------------------|------------------------|
| TP/oneM2M/CSE/ANNC/UPD/010_ACP | 1 (accesControlPolicy) |
| TP/oneM2M/CSE/ANNC/UPD/010_CNT | 3 (container) |
| TP/oneM2M/CSE/ANNC/UPD/010_GRP | 9 (group) |
| TP/oneM2M/CSE/ANNC/UPD/010_LCP | 10 (locationPolicy) |
| TP/oneM2M/CSE/ANNC/UPD/010_MGO | 13 (mgmtObj) |

| | |
|--------------------------------|-----------------|
| TP/oneM2M/CSE/ANNC/UPD/010_NOD | 14 (node) |
| TP/oneM2M/CSE/ANNC/UPD/010_SCH | 18 (schedule) |
| TP/oneM2M/CSE/ANNC/UPD/010_TS | 29 (timeSeries) |

| TP Id | TP/oneM2M/CSE/ANNC/UPD/011 | | | | | | | |
|--|---|-------------|-----------|--|----------|--|-----------|--|
| Test objective | Check that the IUT updates successfully the <i>RESOURCE_TYPE</i> announced variant resource when a optional attribute present in the announcedAttribute attribute of its original resource is updated | | | | | | | |
| Reference | TS-0001 [1], clause 10.2.18.10, TS-0004 [2], clause 7.3.3.10 | | | | | | | |
| Parent Release | Release 3 | | | | | | | |
| Config Id | CF02 | | | | | | | |
| PICS Selection | PICS_CSE | | | | | | | |
| Initial conditions | <p>with {</p> <p>the IUT being in the "initial state"</p> <p>and the IUT having registered the AE</p> <p>and the IUT having registered to the CSE</p> <p>and the IUT having created a <i>RESOURCE_TYPE</i> resource containing</p> <p><i>OA_ATTRIBUTE</i> attribute set to VALUE_1 and</p> <p>announceTo attribute set to ANNC_TARGET_CSE_ID and</p> <p>announcedAttribute attribute set to <i>OA_ATTRIBUTE</i></p> <p>and the IUT having announced the <i>RESOURCE_TYPE</i> resource to the announcement target CSE</p> <p>and the AE having privileges to perform UPDATE operation on the resource TARGET_RESOURCE_ADDRESS</p> <p>}</p> | | | | | | | |
| Expected behaviour | <table border="1"> <thead> <tr> <th>Test events</th> <th>Direction</th> </tr> </thead> <tbody> <tr> <td> <p>when {</p> <p>the IUT receives a valid UPDATE Request from AE containing</p> <p>To set to TARGET_RESOURCE_ADDRESS and</p> <p>From set to AE-ID and</p> <p>Content containing</p> <p><i>RESOURCE_TYPE</i> resource containing</p> <p><i>OA_ATTRIBUTE</i> attribute set to VALUE_2</p> <p>}</p> </td><td>IUT ← AE</td></tr> <tr> <td> <p>then {</p> <p>The IUT sends a valid UPDATE Request containing</p> <p>To set to TARGET_ANNC_RESOURCE_ADDRESS and</p> <p>Content containing</p> <p><i>RESOURCE_TYPE</i> announced variant resource containing</p> <p><i>OA_ATTRIBUTE</i> attribute set to VALUE_2</p> <p>}</p> </td><td>IUT → CSE</td></tr> </tbody> </table> | Test events | Direction | <p>when {</p> <p>the IUT receives a valid UPDATE Request from AE containing</p> <p>To set to TARGET_RESOURCE_ADDRESS and</p> <p>From set to AE-ID and</p> <p>Content containing</p> <p><i>RESOURCE_TYPE</i> resource containing</p> <p><i>OA_ATTRIBUTE</i> attribute set to VALUE_2</p> <p>}</p> | IUT ← AE | <p>then {</p> <p>The IUT sends a valid UPDATE Request containing</p> <p>To set to TARGET_ANNC_RESOURCE_ADDRESS and</p> <p>Content containing</p> <p><i>RESOURCE_TYPE</i> announced variant resource containing</p> <p><i>OA_ATTRIBUTE</i> attribute set to VALUE_2</p> <p>}</p> | IUT → CSE | |
| Test events | Direction | | | | | | | |
| <p>when {</p> <p>the IUT receives a valid UPDATE Request from AE containing</p> <p>To set to TARGET_RESOURCE_ADDRESS and</p> <p>From set to AE-ID and</p> <p>Content containing</p> <p><i>RESOURCE_TYPE</i> resource containing</p> <p><i>OA_ATTRIBUTE</i> attribute set to VALUE_2</p> <p>}</p> | IUT ← AE | | | | | | | |
| <p>then {</p> <p>The IUT sends a valid UPDATE Request containing</p> <p>To set to TARGET_ANNC_RESOURCE_ADDRESS and</p> <p>Content containing</p> <p><i>RESOURCE_TYPE</i> announced variant resource containing</p> <p><i>OA_ATTRIBUTE</i> attribute set to VALUE_2</p> <p>}</p> | IUT → CSE | | | | | | | |

| TP Id | RESOURCE_TYPE | OA_ATTRIBUTE |
|------------------------------------|---------------------|---------------------|
| TP/oneM2M/CSE/ANNC/UPD/011_CNT/MBS | 3 (container) | maxByteSize |
| TP/oneM2M/CSE/ANNC/UPD/011_GRP/MNM | 9 (group) | maxNrOfMembers |
| TP/oneM2M/CSE/ANNC/UPD/011_LCP/LOI | 10 (locationPolicy) | locationContainerID |
| TP/oneM2M/CSE/ANNC/UPD/011_MGO/DC | 13 (mgmtObj) | description |

| | | |
|------------------------------------|-----------------|-----------------|
| TP/oneM2M/CSE/ANNC/UPD/011_NOD/HCL | 14 (node) | hostedCSELink |
| TP/oneM2M/CSE/ANNC/UPD/011_SCH/SE | 18 (schedule) | scheduleElement |
| TP/oneM2M/CSE/ANNC/UPD/011_TS/MBS | 29 (timeSeries) | maxByteSize |

| TP Id | TP/oneM2M/CSE/ANNC/UPD/012 | | | | | | | |
|---|---|-------------|-----------|---|----------|---|-----------|--|
| Test objective | Check that the IUT de-announces successfully an announced attribute when such attribute is deleted from announcedAttribute attribute | | | | | | | |
| Reference | TS-0001 [1], clause 10.2.18.9, TS-0004 [2], clause 7.3.3.10 | | | | | | | |
| Parent Release | Release 3 | | | | | | | |
| Config Id | CF02 | | | | | | | |
| PICS Selection | PICS_CSE | | | | | | | |
| Initial conditions | <p>with {</p> <p>the IUT being in the "initial state" and the IUT having registered the AE and the IUT having registered to the CSE and the IUT having created a RESOURCE_TYPE resource containing announceTo attribute set to ANNC_TARGET_CSE_ID and announcedAttribute attribute set to OA_ATTRIBUTE and valid OA_ATTRIBUTE attribute and the IUT having announced the RESOURCE_TYPE resource to the announcement target CSE and the AE having privileges to perform UPDATE operation on the resource TARGET_RESOURCE_ADDRESS }</p> | | | | | | | |
| Expected behaviour | <table border="1"> <thead> <tr> <th>Test events</th> <th>Direction</th> </tr> </thead> <tbody> <tr> <td> 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 announcedAttribute attribute set to NULL } </td> <td>IUT ← AE</td> </tr> <tr> <td> then { The IUT sends a valid UPDATE Request containing To set to TARGET_ANNC_RESOURCE_ADDRESS and Content containing RESOURCE_TYPE announced variant resource containing OA_ATTRIBUTE attribute set to NULL } </td> <td>IUT → CSE</td> </tr> </tbody> </table> | 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 announcedAttribute attribute set to NULL } | IUT ← AE | then { The IUT sends a valid UPDATE Request containing To set to TARGET_ANNC_RESOURCE_ADDRESS and Content containing RESOURCE_TYPE announced variant resource containing OA_ATTRIBUTE attribute set to NULL } | IUT → CSE | |
| 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 announcedAttribute attribute set to NULL } | IUT ← AE | | | | | | | |
| then { The IUT sends a valid UPDATE Request containing To set to TARGET_ANNC_RESOURCE_ADDRESS and Content containing RESOURCE_TYPE announced variant resource containing OA_ATTRIBUTE attribute set to NULL } | IUT → CSE | | | | | | | |

| TP Id | RESOURCE_TYPE | OA_ATTRIBUTE |
|------------------------------------|---------------------|---------------------|
| TP/oneM2M/CSE/ANNC/UPD/012_CNT/MBS | 3 (container) | maxByteSize |
| TP/oneM2M/CSE/ANNC/UPD/012_GRP/MT | 9 (group) | memberType |
| TP/oneM2M/CSE/ANNC/UPD/012_LCP/LOI | 10 (locationPolicy) | locationContainerID |
| TP/oneM2M/CSE/ANNC/UPD/012_MGO/DC | 13 (mgmtObj) | description |
| TP/oneM2M/CSE/ANNC/UPD/012_NOD/HCL | 14 (node) | hostedCSELink |

| | | |
|-----------------------------------|-----------------|-----------------|
| TP/oneM2M/CSE/ANNC/UPD/012_SCH/SE | 18 (schedule) | scheduleElement |
| TP/oneM2M/CSE/ANNC/UPD/012_TS/MBS | 29 (timeSeries) | maxByteSize |

| TP Id | TP/oneM2M/CSE/ANNC/UPD/013 | | | | | | | |
|---|--|-------------|-----------|--|-----------|---|----------|--|
| Test objective | Check that the IUT provides confirmation of the de-announcement of an attribute to the originator of the initiating request after a successful attribute de-announcement procedure | | | | | | | |
| Reference | TS-0001 [1], clause 10.2.18.7, TS-0004 [2], clause 7.3.3.10 | | | | | | | |
| Parent Release | Release 3 | | | | | | | |
| Config Id | CF02 | | | | | | | |
| PICS Selection | PICS_CSE | | | | | | | |
| Initial conditions | <p>with {</p> <p>the IUT being in the "initial state" and the IUT having registered the AE and the IUT having registered to the CSE and the IUT having created a <i>RESOURCE_TYPE</i> resource containing announceTo attribute set to ANNC_TARGET_CSE_ID and announcedAttribute attribute set to OA_ATTRIBUTE and valid OA_ATTRIBUTE attribute and the IUT having announced the <i>RESOURCE_TYPE</i> resource to the announcement target CSE and the AE having privileges to perform UPDATE operation on the resource TARGET_RESOURCE_ADDRESS and the IUT having received a valid UPDATE Request from AE containing To set to TARGET_RESOURCE_ADDRESS and Content containing <i>RESOURCE_TYPE</i> resource containing announcedAttribute attribute set to NULL and The IUT having sent a valid UPDATE Request containing To set to TARGET_ANNC_RESOURCE_ADDRESS and Content containing <i>RESOURCE_TYPE</i> announced variant resource containing OA_ATTRIBUTE attribute set to NULL }</p> | | | | | | | |
| Expected behaviour | <table border="1"> <thead> <tr> <th>Test events</th> <th>Direction</th> </tr> </thead> <tbody> <tr> <td>when { the IUT receives a valid Response from CSE containing Response Status Code set to 2004 (UPDATED) containing <i>RESOURCE_TYPE</i> announced variant resource containing no OA_ATTRIBUTE attribute }</td> <td>IUT ← CSE</td> </tr> <tr> <td>then { the IUT updates the <i>RESOURCE_TYPE</i> resource and the IUT sends valid Response containing Response Status Code set to 2004 (UPDATED) and Content containing <i>RESOURCE_TYPE</i> resource containing</td> <td>IUT → AE</td> </tr> </tbody> </table> | Test events | Direction | when { the IUT receives a valid Response from CSE containing Response Status Code set to 2004 (UPDATED) containing <i>RESOURCE_TYPE</i> announced variant resource containing no OA_ATTRIBUTE attribute } | IUT ← CSE | then { the IUT updates the <i>RESOURCE_TYPE</i> resource and the IUT sends valid Response containing Response Status Code set to 2004 (UPDATED) and Content containing <i>RESOURCE_TYPE</i> resource containing | IUT → AE | |
| Test events | Direction | | | | | | | |
| when { the IUT receives a valid Response from CSE containing Response Status Code set to 2004 (UPDATED) containing <i>RESOURCE_TYPE</i> announced variant resource containing no OA_ATTRIBUTE attribute } | IUT ← CSE | | | | | | | |
| then { the IUT updates the <i>RESOURCE_TYPE</i> resource and the IUT sends valid Response containing Response Status Code set to 2004 (UPDATED) and Content containing <i>RESOURCE_TYPE</i> resource containing | IUT → AE | | | | | | | |

| | | |
|---|---------------------------------|--|
| | no announcedAttribute attribute | |
| } | | |

| TP Id | RESOURCE_TYPE | OA_ATTRIBUTE | PICS |
|------------------------------------|---------------------|---------------------|-----------------|
| TP/oneM2M/CSE/ANNC/UPD/013_CNT/MBS | 3 (container) | maxByteSize | PICS_IN_PROFILE |
| TP/oneM2M/CSE/ANNC/UPD/013_GRP/MNM | 9 (group) | maxNrOfMembers | |
| TP/oneM2M/CSE/ANNC/UPD/013_LCP/LOI | 10 (locationPolicy) | locationContainerID | |
| TP/oneM2M/CSE/ANNC/UPD/013_MGO/DC | 13 (mgmtObj) | description | |
| TP/oneM2M/CSE/ANNC/UPD/013_NOD/HCL | 14 (node) | hostedCSELink | |
| TP/oneM2M/CSE/ANNC/UPD/013_SCH/SE | 18 (schedule) | scheduleElement | |
| TP/oneM2M/CSE/ANNC/UPD/013_TS/MBS | 29 (timeSeries) | maxByteSize | |

| TP Id | TP/oneM2M/CSE/ANNC/UPD/014 | | | | | | | |
|---|---|-------------|-----------|---|----------------------|---|----------------------|--|
| Test objective | Check that the IUT removes an announcement target CSE from the announceTo attribute if it does not return successful CREATE response for the announced resource (for an UPDATE initiating resource announcement) | | | | | | | |
| Reference | TS-0001 [1], clause 10.2.18.4 | | | | | | | |
| Parent Release | Release 3 | | | | | | | |
| Config Id | CF02 | | | | | | | |
| PICS Selection | PICS_CSE | | | | | | | |
| Initial conditions | <p>with {</p> <p>the IUT being in the "initial state" and the IUT having registered the AE and the IUT having registered to the CSE and the IUT having created the container resource and the AE having privileges to perform UPDATE operation on the resource CONTAINER_RESOURCE_ADDRESS and the IUT having received a valid UPDATE Request from AE containing To set to CONTAINER_RESOURCE_ADDRESS and From set to AE-ID and Content containing container resource containing announceTo attribute set to ANNC_TARGET_CSE_ID and the IUT having created a CSEBaseAnnnc at CSE_BASE_ANNC_RESOURCE_ADDRESS and The IUT having sent a valid CREATE Request containing To set to CSE_BASE_ANNC_RESOURCE_ADDRESS and Content containing containerAnnnc resource containing MA (mandatory) attributes }</p> | | | | | | | |
| Expected behaviour | <table border="1"> <thead> <tr> <th>Test events</th> <th>Direction</th> </tr> </thead> <tbody> <tr> <td> <p>when {</p> <p>the IUT receives a valid Response from CSE containing Response Status Code set to 4000 (BAD_REQUEST) }</p> </td> <td>IUT \leftarrow CSE</td> </tr> <tr> <td> <p>then {</p> <p>the IUT updates the container resource and the IUT sends a valid Response containing Response Status Code set to 2004 (UPDATED) and Content containing container resource containing announceTo attribute set to empty list }</p> </td> <td>IUT \rightarrow AE</td> </tr> </tbody> </table> | Test events | Direction | <p>when {</p> <p>the IUT receives a valid Response from CSE containing Response Status Code set to 4000 (BAD_REQUEST) }</p> | IUT \leftarrow CSE | <p>then {</p> <p>the IUT updates the container resource and the IUT sends a valid Response containing Response Status Code set to 2004 (UPDATED) and Content containing container resource containing announceTo attribute set to empty list }</p> | IUT \rightarrow AE | |
| Test events | Direction | | | | | | | |
| <p>when {</p> <p>the IUT receives a valid Response from CSE containing Response Status Code set to 4000 (BAD_REQUEST) }</p> | IUT \leftarrow CSE | | | | | | | |
| <p>then {</p> <p>the IUT updates the container resource and the IUT sends a valid Response containing Response Status Code set to 2004 (UPDATED) and Content containing container resource containing announceTo attribute set to empty list }</p> | IUT \rightarrow AE | | | | | | | |

7.2.2.11.5 DELETE Operation

TP/oneM2M/CSE/ANNC/DEL/001

| TP Id | TP/oneM2M/CSE/ANNC/DEL/001 | | | | | | | |
|---|---|-------------|-----------|--|-----------|---|----------|--|
| Test objective | Check that the IUT provides confirmation of resource de-announcement to the originator of the initiating request after a successful resource de-announcement procedure (for a DELETE initiating resource de-announcement) | | | | | | | |
| Reference | TS-0001 [1], clause 10.2.18.3, TS-0004 [2], clause 7.3.3.10 | | | | | | | |
| Parent Release | Release 3 | | | | | | | |
| Config Id | CF02 | | | | | | | |
| PICS Selection | PICS_CSE | | | | | | | |
| Initial conditions | <p>with {</p> <p style="padding-left: 20px;">and the IUT having registered the AE</p> <p style="padding-left: 20px;">and the IUT having registered to the remoteCSE</p> <p style="padding-left: 20px;">and the IUT having created a <i>RESOURCE_TYPE</i> resource containing</p> <p style="padding-left: 40px;">announceTo attribute set to ANNC_TARGET_CSE_ADDRESS</p> <p style="padding-left: 20px;">and the IUT having announced the <i>RESOURCE_TYPE</i> resource to the announcement target CSE</p> <p style="padding-left: 20px;">and the AE having privileges to perform DELETE operation on the resource TARGET_RESOURCE_ADDRESS</p> <p style="padding-left: 20px;">and the IUT having received a valid DELETE Request from AE containing</p> <p style="padding-left: 40px;">To set to TARGET_RESOURCE_ADDRESS</p> <p style="padding-left: 20px;">and the IUT having sent a valid DELETE Request containing</p> <p style="padding-left: 40px;">To set to TARGET_ANNC_RESOURCE_ADDRESS</p> } | | | | | | | |
| Expected behaviour | <table border="1"> <thead> <tr> <th>Test events</th> <th>Direction</th> </tr> </thead> <tbody> <tr> <td> when { the IUT receives a valid Response from ANNC_TARGET_CSE containing Response Status Code set to 2002 (DELETED) } </td> <td>IUT ← CSE</td> </tr> <tr> <td> then { the IUT deletes the <i>RESOURCE_TYPE</i> resource and the IUT sends a valid Response containing Response Status Code set to 2002 (DELETED) } </td> <td>IUT → AE</td> </tr> </tbody> </table> | Test events | Direction | when { the IUT receives a valid Response from ANNC_TARGET_CSE containing Response Status Code set to 2002 (DELETED) } | IUT ← CSE | then { the IUT deletes the <i>RESOURCE_TYPE</i> resource and the IUT sends a valid Response containing Response Status Code set to 2002 (DELETED) } | IUT → AE | |
| Test events | Direction | | | | | | | |
| when { the IUT receives a valid Response from ANNC_TARGET_CSE containing Response Status Code set to 2002 (DELETED) } | IUT ← CSE | | | | | | | |
| then { the IUT deletes the <i>RESOURCE_TYPE</i> resource and the IUT sends a valid Response containing Response Status Code set to 2002 (DELETED) } | IUT → AE | | | | | | | |

| TP Id | RESOURCE_TYPE |
|--------------------------------|------------------------|
| TP/oneM2M/CSE/ANNC/DEL/001_ACP | 1 (accesControlPolicy) |
| TP/oneM2M/CSE/ANNC/DEL/001_CNT | 3 (container) |
| TP/oneM2M/CSE/ANNC/DEL/001_GRP | 9 (group) |
| TP/oneM2M/CSE/ANNC/DEL/001_LCP | 10 (locationPolicy) |
| TP/oneM2M/CSE/ANNC/DEL/001_MGO | 13 (mgmtObj) |

| | |
|--------------------------------|-----------------|
| TP/oneM2M/CSE/ANNC/DEL/001_NOD | 14 (node) |
| TP/oneM2M/CSE/ANNC/DEL/001_SCH | 18 (schedule) |
| TP/oneM2M/CSE/ANNC/DEL/001_TS | 29 (timeSeries) |

| TP Id | TP/oneM2M/CSE/ANNC/DEL/002 | | | | | | | |
|--|---|-------------|-----------|--|----------|---|-----------|--|
| Test objective | Check that the IUT deletes all announced resources when the original resource is deleted | | | | | | | |
| Reference | TS-0001 [1], clause 9.6.26.1 and clause 10.2.18.5, TS-0004 [2], clause 7.3.3.10 | | | | | | | |
| Parent Release | Release 3 | | | | | | | |
| Config Id | CF02 | | | | | | | |
| PICS Selection | PICS_CSE | | | | | | | |
| Initial conditions | <pre> with { the IUT being in the "initial state" and the IUT having registered the AE and the IUT having registered to the remoteCSE and the IUT having created a RESOURCE_TYPE resource containing announceTo attribute set to ANNC_TARGET_CSE_ADDRESS and the IUT having announced the RESOURCE_TYPE resource to the announcement target CSE and the AE having privileges to perform DELETE operation on the resource TARGET_RESOURCE_ADDRESS } </pre> | | | | | | | |
| Expected behaviour | <table border="1"> <thead> <tr> <th>Test events</th> <th>Direction</th> </tr> </thead> <tbody> <tr> <td> when { the IUT receives a valid DELETE Request from AE containing To set to TARGET_RESOURCE_ADDRESS } </td> <td>IUT ← AE</td> </tr> <tr> <td> then { The IUT sends a valid DELETE Request containing To set to TARGET_RESOURCE_ANNC_ADDRESS } </td> <td>IUT → CSE</td> </tr> </tbody> </table> | Test events | Direction | when { the IUT receives a valid DELETE Request from AE containing To set to TARGET_RESOURCE_ADDRESS } | IUT ← AE | then { The IUT sends a valid DELETE Request containing To set to TARGET_RESOURCE_ANNC_ADDRESS } | IUT → CSE | |
| Test events | Direction | | | | | | | |
| when { the IUT receives a valid DELETE Request from AE containing To set to TARGET_RESOURCE_ADDRESS } | IUT ← AE | | | | | | | |
| then { The IUT sends a valid DELETE Request containing To set to TARGET_RESOURCE_ANNC_ADDRESS } | IUT → CSE | | | | | | | |

| TP Id | RESOURCE_TYPE |
|--------------------------------|-----------------------|
| TP/oneM2M/CSE/ANNC/DEL/002_ACP | 1(accesControlPolicy) |
| TP/oneM2M/CSE/ANNC/DEL/002_CNT | 3 (container) |
| TP/oneM2M/CSE/ANNC/DEL/002_GRP | 9 (group) |
| TP/oneM2M/CSE/ANNC/DEL/002_LCP | 10 (locationPolicy) |
| TP/oneM2M/CSE/ANNC/DEL/002_MGO | 13 (mgmtObj) |
| TP/oneM2M/CSE/ANNC/DEL/002_NOD | 14 (node) |
| TP/oneM2M/CSE/ANNC/DEL/002_SCH | 18 (schedule) |
| TP/oneM2M/CSE/ANNC/DEL/002_TS | 29 (timeSeries) |

7.2.2.12 3GPP interworking

7.2.2.12.1 BASIC Operation

TP/oneM2M/CSE/3GPP/TRIG/001

| | | |
|---------------------------|--|---|
| TP Id | TP/oneM2M/CSE/3GPP/TRIG/001 | |
| Test objective | Check that the IUT sends an explicit 3GPP Device Trigger Request when it receives a valid <triggerRequest> from an A | |
| Reference | TS-0026 [5], clause 7.5.1, step 3a | |
| Parent Release | Release 3 | |
| Config Id | CFG05 | |
| PICS Selection | PICS_CSE, PICS_3GPP | |
| Initial conditions | with { the IUT being in the "initial state" and the IUT allowing to register an AE1 and the AE1 being hosted on a 3GPP UE and the IUT allowing to register an AE2 } | |
| Expected behaviour | Test events when { the IUT receives a valid CREATE request from AE2 containing To set to AE2_RESOURCE_ADDRESS and From set to AE2_ID and Resource Type set to 38 (triggerRequest) and Content containing triggerRequest resource containing triggerPurpose set to TRIGGER_PURPOSE } then { the IUT sends a Request to the SCEF containing 3GPP Device Trigger Request message containing A valid 3GPP Device Trigger Request containing triggerPayload attribute } | Direction IUT ← AE1 IUT → SCEF |

| TP Id | TRIGGER_PURPOSE |
|---------------------------------|---------------------|
| TP/oneM2M/CSE/3GPP/TRIG/001_CON | establishConnection |
| TP/oneM2M/CSE/3GPP/TRIG/001_REQ | registrationRequest |
| TP/oneM2M/CSE/3GPP/TRIG/001_EXE | executeCRUD |
| TP/oneM2M/CSE/3GPP/TRIG/001_ENR | enrolmentRequest |

| | | |
|---------------------------|--|------------------|
| TP Id | TP/oneM2M/CSE/3GPP/TRIG/002 | |
| Test objective | Check that the IUT sends an implicit 3GPP Device Trigger Request when it receives a valid <notification> from an AE | |
| Reference | TS-0026 [5], clause 7.5.1 | |
| Parent Release | Release 3 | |
| Config Id | CF05 | |
| PICS Selection | PICS_CSE, PICS_3GPP | |
| Initial conditions | <pre> with { the IUT being in the "initial state" and the IUT allowing to register an AE1 and the AE1 being hosted on a 3GPP UE and the AE1 having subscribed to CONTAINER_RESOURCE_ADDRESS and the AE1 being not reachable and the IUT allowing to register an AE2 } </pre> | |
| Expected behaviour | Test events | Direction |
| | <pre> when { the IUT receives the UPDATE request from the AE2 containing To set to CONTAINER_RESOURCE_ADDRESS containing From set to AE2_ID and Content containing container resource containing valid labels attribute } </pre> | IUT ← AE1 |
| | <pre> then { the IUT sends a Request to the SCEF containing 3GPP Device Trigger Request message containing A valid 3GPP Device Trigger Request containing triggerPayload attribute set to NULL } </pre> | IUT → SCEF |

| | | |
|---------------------------|---|------------------|
| TP Id | TP/oneM2M/CSE/3GPP/TRIG/003 | |
| Test objective | Check that the IUT sets the triggerStatus attribute of the <triggerRequest> to ERROR_NSE_NOT_FOUND when the SCEF does not respond to the Device Trigger Request prior to the timeout period | |
| Reference | TS-0026 [5], clause 7.5.1, step 3 | |
| Parent Release | Release 3 | |
| Config Id | CFG05 | |
| PICS Selection | PICS_CSE, PICS_3GPP | |
| Initial conditions | <pre> with { the IUT being in the "initial state" and the IUT allowing to register an AE1 and the AE1 being hosted on a 3GPP UE and the IUT allowing to register an AE2 and the AE2 having created a <triggerRequest> resource and the IUT having sent a 3GPP Device Trigger Request } </pre> | |
| Expected behaviour | Test events | Direction |
| | <pre> when { the IUT does not receive a response from SCEF } </pre> | IUT |
| | <pre> then { the IUT updates <triggerRequest> resource containing triggerStatus attribute set to ERROR_NSE_NOT_FOUND } </pre> | IUT |

| TP Id | TP/oneM2M/CSE/3GPP/TRIG/004 | | | | | | | |
|---|---|-------------|-----------|---|------------|--|------------|--|
| Test objective | Check that the IUT sets the triggerStatus attribute of the <triggerRequest> to the proper value when the SCEF responds to the Device Trigger Request | | | | | | | |
| Reference | TS-0026 [5], clause 7.5.1, step 3b | | | | | | | |
| Parent Release | Release 3 | | | | | | | |
| Config Id | CFG05 | | | | | | | |
| PICS Selection | PICS_CSE, PICS_3GPP | | | | | | | |
| Initial conditions | <p>with {</p> <p>the IUT being in the "initial state" and the IUT allowing to register an AE1 and the AE1 being hosted on a 3GPP UE and the IUT allowing to register an AE2 and AE2 having created a TRIGGER_REQUEST and the IUT having sent a POST 3GPP Device Trigger Request</p> } | | | | | | | |
| Expected behaviour | <table border="1"> <thead> <tr> <th>Test events</th> <th>Direction</th> </tr> </thead> <tbody> <tr> <td> <p>when {</p> <p>the IUT receives a valid Device Triggering response from SCEF containing deliveryResult set to SCEF_RESULT</p> } </td><td>IUT ← SCEF</td></tr> <tr> <td> <p>then {</p> <p>the IUT sets triggerStatus attribute of TRIGGER_REQUEST to TRIGGER_RESULT</p> } </td><td>IUT → SCEF</td></tr> </tbody> </table> | Test events | Direction | <p>when {</p> <p>the IUT receives a valid Device Triggering response from SCEF containing deliveryResult set to SCEF_RESULT</p> } | IUT ← SCEF | <p>then {</p> <p>the IUT sets triggerStatus attribute of TRIGGER_REQUEST to TRIGGER_RESULT</p> } | IUT → SCEF | |
| Test events | Direction | | | | | | | |
| <p>when {</p> <p>the IUT receives a valid Device Triggering response from SCEF containing deliveryResult set to SCEF_RESULT</p> } | IUT ← SCEF | | | | | | | |
| <p>then {</p> <p>the IUT sets triggerStatus attribute of TRIGGER_REQUEST to TRIGGER_RESULT</p> } | IUT → SCEF | | | | | | | |

| TP Id | SCEF_RESULT | TRIGGER_RESULT |
|-------------------------------|-------------|---------------------|
| TP/oneM2M/CSE/3GPP/TRIG/004_1 | SUCCESS | TRIGGER-DELIVERED |
| TP/oneM2M/CSE/3GPP/TRIG/004_2 | UNKNOWN | TRIGGER-FAILED |
| TP/oneM2M/CSE/3GPP/TRIG/004_3 | FAILURE | TRIGGER-FAILED |
| TP/oneM2M/CSE/3GPP/TRIG/004_4 | TRIGGERED | TRIGGER-TRIGGERED |
| TP/oneM2M/CSE/3GPP/TRIG/004_5 | EXPIRED | TRIGGER-EXPIRED |
| TP/oneM2M/CSE/3GPP/TRIG/004_6 | UNCONFIRMED | TRIGGER-UNCONFIRMED |
| TP/oneM2M/CSE/3GPP/TRIG/004_7 | REPLACED | TRIGGER-FAILED |
| TP/oneM2M/CSE/3GPP/TRIG/004_8 | TERMINATE | TRIGGER-TERMINATED |

| TP Id | TP/oneM2M/CSE/3GPP/TRIG/005 | | | | | | | |
|--|--|-------------|-----------|--|------------|--|------------|--|
| Test objective | Check that the IUT returns a HTTP response when it receives a valid DeviceTriggeringDeliveryReportNotification Report message | | | | | | | |
| Reference | TS-0026 [5], clause 7.5.1, step 6 and 7 | | | | | | | |
| Parent Release | Release 3 | | | | | | | |
| Config Id | CFG05 | | | | | | | |
| PICS Selection | PICS_CSE, PICS_3GPP | | | | | | | |
| Initial conditions | <p>with {</p> <p>the IUT being in the "initial state" and the IUT allowing to register an AE1 and the AE1 being hosted on a 3GPP UE and the IUT allowing to register an AE2 and AE2 having created a TRIGGER_REQUEST and the IUT having sent a POST 3GPP Device Trigger Request</p> } | | | | | | | |
| Expected behaviour | <table border="1"> <thead> <tr> <th>Test events</th> <th>Direction</th> </tr> </thead> <tbody> <tr> <td> <p>when {</p> <p>the IUT receives a valid DeviceTriggeringDeliveryReportNotification request from SCEF containing deliveryResult set to SCEF_RESULT</p> } </td><td>IUT ← SCEF</td></tr> <tr> <td> <p>then {</p> <p>the IUT sets triggerStatus attribute of TRIGGER_REQUEST to TRIGGER_RESULT and the IUT sends a valid HTTP response containing Response Code set to 204 (NO_CONTENT)</p> } </td><td>IUT → SCEF</td></tr> </tbody> </table> | Test events | Direction | <p>when {</p> <p>the IUT receives a valid DeviceTriggeringDeliveryReportNotification request from SCEF containing deliveryResult set to SCEF_RESULT</p> } | IUT ← SCEF | <p>then {</p> <p>the IUT sets triggerStatus attribute of TRIGGER_REQUEST to TRIGGER_RESULT and the IUT sends a valid HTTP response containing Response Code set to 204 (NO_CONTENT)</p> } | IUT → SCEF | |
| Test events | Direction | | | | | | | |
| <p>when {</p> <p>the IUT receives a valid DeviceTriggeringDeliveryReportNotification request from SCEF containing deliveryResult set to SCEF_RESULT</p> } | IUT ← SCEF | | | | | | | |
| <p>then {</p> <p>the IUT sets triggerStatus attribute of TRIGGER_REQUEST to TRIGGER_RESULT and the IUT sends a valid HTTP response containing Response Code set to 204 (NO_CONTENT)</p> } | IUT → SCEF | | | | | | | |

| TP Id | SCEF RESULT | TRIGGER RESULT |
|-------------------------------|-------------|---------------------|
| TP/oneM2M/CSE/3GPP/TRIG/005_1 | SUCCESS | TRIGGER-DELIVERED |
| TP/oneM2M/CSE/3GPP/TRIG/005_2 | UNKNOWN | TRIGGER-FAILED |
| TP/oneM2M/CSE/3GPP/TRIG/005_3 | FAILURE | TRIGGER-FAILED |
| TP/oneM2M/CSE/3GPP/TRIG/005_4 | TRIGGERED | TRIGGER-TRIGGERED |
| TP/oneM2M/CSE/3GPP/TRIG/005_5 | EXPIRED | TRIGGER-EXPIRED |
| TP/oneM2M/CSE/3GPP/TRIG/005_6 | UNCONFIRMED | TRIGGER-UNCONFIRMED |
| TP/oneM2M/CSE/3GPP/TRIG/005_7 | REPLACED | TRIGGER-FAILED |
| TP/oneM2M/CSE/3GPP/TRIG/005_8 | TERMINATE | TRIGGER-TERMINATED |

7.2.2.13 FlexContainer

7.2.2.13.1 CREATE Operation

TP/oneM2M/CSE/FLXC/CRE/001

| TP Id | TP/oneM2M/CSE/FLXC/CRE/001 | | | | | | | |
|---|---|--------------------|------------------|---|----------|--|----------|--|
| Test objective | Check that the IUT rejects the creation of the <flexContainer> resource when the resource representation does not comply with the schema definition. | | | | | | | |
| Reference | TS-0001 [1], clause 3, 10.2.4.16, TS-0004 [2], clause 7.4.29.2.1 | | | | | | | |
| Parent Release | Release 2 | | | | | | | |
| 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 privileges to perform CREATE operation on the resource AE_RESOURCE_ADDRESS } | | | | | | | |
| Expected behaviour | <table border="1"> <thead> <tr> <th>Test events</th> <th>Direction</th> </tr> </thead> <tbody> <tr> <td> when { the IUT receives an invalid CREATE request from AE containing To set to AE_RESOURCE_ADDRESS and From set to AE_ID and Resource Type set to 28 (flexContainer) and Content containing an invalid resource representation } </td><td>IUT ← AE</td></tr> <tr> <td> then { the IUT does not create the flexContainer resource and the IUT sends a valid Response containing Response Status Code set to 4000 (BAD_REQUEST) } </td><td>IUT → AE</td></tr> </tbody> </table> | Test events | Direction | when { the IUT receives an invalid CREATE request from AE containing To set to AE_RESOURCE_ADDRESS and From set to AE_ID and Resource Type set to 28 (flexContainer) and Content containing an invalid resource representation } | IUT ← AE | then { the IUT does not create the flexContainer resource and the IUT sends a valid Response containing Response Status Code set to 4000 (BAD_REQUEST) } | IUT → AE | |
| Test events | Direction | | | | | | | |
| when { the IUT receives an invalid CREATE request from AE containing To set to AE_RESOURCE_ADDRESS and From set to AE_ID and Resource Type set to 28 (flexContainer) and Content containing an invalid resource representation } | IUT ← AE | | | | | | | |
| then { the IUT does not create the flexContainer resource and the IUT sends a valid Response containing Response Status Code set to 4000 (BAD_REQUEST) } | IUT → AE | | | | | | | |

7.2.2.13.2 UPDATE Operation

TP/oneM2M/CSE/FLXC/UPD/001

| | | |
|--------------------|--|------------------------------|
| TP Id | TP/oneM2M/CSE/FLXC/UPD/001 | |
| Test objective | Check that the IUT increments the field value of attribute stateTag in the <flexContainer> resource when a custom attribute of the resource is modified | |
| Reference | TS-0001 [1], clause 9.6.35 | |
| Config Id | CF01 | |
| Parent Release | Release 2 | |
| 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 FLEXCONTAINER_RESOURCE_ADDRESS containing stateTag attribute and the AE having privileges to perform UPDATE operation on the resource FLEXCONTAINER_RESOURCE_ADDRESS } | |
| Expected behaviour | Test events when { the IUT receives a valid UPDATE Request from AE containing To set to FLEXCONTAINER_RESOURCE_ADDRESS and From set to AE_ID and Content containing flexContainer resource containing ATTRIBUTE_NAME attribute set to VALUE } | Direction IUT ← AE |
| | then { the IUT increments the stateTag attribute of FLEXCONTAINER_RESOURCE_ADDRESS resource and the IUT sends a valid Response containing Response Status Code set to 2004 (UPDATED) } | IUT → AE |

| | | |
|---------------------------|---|----------|
| TP Id | TP/oneM2M/CSE/FLXC/UPD/002 | |
| Test objective | Check that the IUT does not increment the field value of attribute <i>stateTag</i> in the <flexContainer> resource when a common attribute of the resource is modified | |
| Reference | TS-0001 [1], clause 9.6.35 | |
| Config Id | CF01 | |
| Parent Release | Release 2 | |
| PICS Selection | PICS_CSE | |
| Initial conditions | <pre> with { the IUT being in the "initial state" and the IUT having registered the AE containing a container resource FLEXCONTAINER_RESOURCE_ADDRESS containing stateTag attribute and the AE having privileges to perform UPDATE operation on the resource FLEXCONTAINER_RESOURCE_ADDRESS } </pre> | |
| Expected behaviour | Test events <pre> when { the IUT receives a valid UPDATE Request from AE containing To set to FLEXCONTAINER_RESOURCE_ADDRESS and From set to AE_ID and Content containing flexContainer resource containing ATTRIBUTE_NAME attribute set to VALUE } </pre> | IUT ← AE |
| | then { the IUT does not increment the stateTag attribute of FLEXCONTAINER resource and the IUT sends a valid Response containing Response Status Code set to 2004 (UPDATED) } | IUT → AE |

| TP Id | TP/oneM2M/CSE/FLXC/UPD/003 | | | | | | | |
|---|---|-------------|-----------|---|----------|--|----------|--|
| Test objective | Check that the IUT rejects the update of the <flexContainer> resource when the resource representation does not comply with the schema definition. | | | | | | | |
| Reference | TS-0001 [1], clause 10.2.4.18, TS-0004 [2], clause 7.4.29.2.3 | | | | | | | |
| Parent Release | Release 2 | | | | | | | |
| Config Id | CF01 | | | | | | | |
| PICS Selection | PICS_CSE, | | | | | | | |
| Initial conditions | <p>with {</p> <p>the IUT being in the "initial state"</p> <p>and the IUT having registered the AE</p> <p>and the AE having privileges to perform UPDATE operation on the resource FLXC_RESOURCE_ADDRESS</p> <p>}</p> | | | | | | | |
| Expected behaviour | <table border="1"> <thead> <tr> <th>Test events</th> <th>Direction</th> </tr> </thead> <tbody> <tr> <td> when { <p>the IUT receives an invalid UPDATE request from AE</p> <p>containing</p> <p>To set to FLXC_RESOURCE_ADDRESS and</p> <p>From set to AE_ID and</p> <p>Content containing</p> <p>flexContainer resource containing</p> <p>an invalid resource representation</p> <p>}</p></td> <td>IUT ← AE</td> </tr> <tr> <td> then { <p>the IUT does not update the flexContainer resource</p> <p>and the IUT sends a valid Response containing</p> <p>Response Status Code set to 4000 (BAD_REQUEST)</p> <p>}</p></td> <td>IUT → AE</td> </tr> </tbody> </table> | Test events | Direction | when { <p>the IUT receives an invalid UPDATE request from AE</p> <p>containing</p> <p>To set to FLXC_RESOURCE_ADDRESS and</p> <p>From set to AE_ID and</p> <p>Content containing</p> <p>flexContainer resource containing</p> <p>an invalid resource representation</p> <p>}</p> | IUT ← AE | then { <p>the IUT does not update the flexContainer resource</p> <p>and the IUT sends a valid Response containing</p> <p>Response Status Code set to 4000 (BAD_REQUEST)</p> <p>}</p> | IUT → AE | |
| Test events | Direction | | | | | | | |
| when { <p>the IUT receives an invalid UPDATE request from AE</p> <p>containing</p> <p>To set to FLXC_RESOURCE_ADDRESS and</p> <p>From set to AE_ID and</p> <p>Content containing</p> <p>flexContainer resource containing</p> <p>an invalid resource representation</p> <p>}</p> | IUT ← AE | | | | | | | |
| then { <p>the IUT does not update the flexContainer resource</p> <p>and the IUT sends a valid Response containing</p> <p>Response Status Code set to 4000 (BAD_REQUEST)</p> <p>}</p> | IUT → AE | | | | | | | |

7.2.2.14 Dynamic Authorization (DAU)

7.2.1.14.1 NOTIFY Operation

TP/oneM2M/CSE/DAU/NOT/001

| | | |
|---------------------------|---|--|
| TP Id | TP/oneM2M/CSE/DAU/NOT/001 | |
| Test objective | Check that the IUT starts the Dynamic Authorization for an incoming request and sends a Notify Request to DAS including all mandatory fields | |
| Reference | TS-0001 [1], clause 10.1.6 and 10.2.10.6, TS-0004 [2], clause 7.2.2.1 and 7.5.1.2.10 | |
| Config Id | CF06 | |
| Parent Release | Release 3 | |
| PICS Selection | PICS_CSE | |
| Initial conditions | with { the IUT being registered and the IUT being a hosting CSE and the IUT having registered AE1 and the IUT having registered the DAS and the IUT having a <container> resource at TARGET_RESOURCE_ADDRESS and the <container> resource having a dynamicAuthorizationConsultationID attribute and corresponding <dynamicAuthorizationConsultation> not set to FALSE } | |
| Expected behaviour | Test events when { the IUT receives a valid RETRIEVE request from AE1 containing To set to TARGET_RESOURCE_ADDRESS and From set to AE1_ID and no Content } then { the IUT sends a valid NOTIFY Request to DAS containing To set to DAS_ADDRESS and From set to CSE_ID and Notification data containing securityInfo containing securityInfoType set to 1 (Dynamic Authorization Request) and dasRequest containing originator set to AE_ID and targetedResourceType set to 3 (container) and operation set to 2 (Retrieve) } | Direction IUT ← AE1 DAS ← IUT |

Editor Note: Config Id will be newly proposed to cover this test purpose.

| | | |
|---------------------------|--|--|
| TP Id | TP/oneM2M/CSE/DAU/NOT/002 | |
| Test objective | Check that the IUT starts the Dynamic Authorization for an incoming request and sends a Notify Request including all mandatory fields and one ore more optional fields | |
| Reference | TS-0001 [1], clause 10.1.6 and 10.2.10.6, TS-0004 [2], clause 7.2.2.1 and 7.5.1.2.10 | |
| Config Id | CF06 | |
| Parent Release | Release 3 | |
| PICS Selection | PICS_CSE | |
| Initial conditions | with { the IUT being registered and the IUT being a hosting CSE and the IUT having registered AE1 and the IUT having registered the DAS and the IUT having a <container> resource at TARGET_RESOURCE_ADDRESS and the <container> resource has a dynamicAuthorizationConsultationID attribute and corresponding <dynamicAuthorizationConsultation> not set to FALSE } | |
| Expected behaviour | Test events when { the IUT receives a valid RETRIEVE request from AE1 containing To set to TARGET_RESOURCE_ADDRESS and From set to AE1_ID and no Content } then { the IUT sends a valid NOTIFY Request to DAS containing To set to DAS_ADDRESS and From set to CSE_ID and Notification data containing securityInfo containing securityInfoType set to 1 (Dynamic Authorization Request) and dasRequest containing originator set to AE_ID and targetedResourceType set to 3 (container) and operation set to 2 (Retrieve) originatorIP set to AE_IP originatorLocation set to location of originator of the received request originatorRole set to role of originator of the received request requestTimestamp set to time of receipt of request targetedResourceId set to identifier of the targeted resource proposedPrivilegesLifetime set to time duration of requested privileges rolesFromACPs set to list of roles of requested resource | Direction IUT \leftarrow AE1 DAS \leftarrow IUT |

| | | |
|--|---|--|
| | tokenIdDs set to list of token identifiers from the received request authorSignIndicator set to value specified by the received request } | |
|--|---|--|

TP/oneM2M/CSE/DAU/NOT/003

| | | |
|---------------------------|---|--|
| TP Id | TP/oneM2M/CSE/DAU/NOT/003 | |
| Test objective | Check that the IUT does not start the Dynamic Authorization for an incoming request and rejects that incoming request if the dynamicAuthorizationConsultationID attribute and corresponding <dynamicAuthorizationConsultation> resource can not be found | |
| Reference | TS-0001 [1], clause 10.1.6 and 10.2.10.6, TS-0004 [2], clause 7.2.2.1 and 7.5.1.2.10 | |
| Config Id | CF01 | |
| Parent Release | Release 3 | |
| PICS Selection | PICS_CSE | |
| Initial conditions | with { the IUT being registered and the IUT being a hosting CSE and the IUT having registered AE1 and the IUT having registered the DAS and the IUT having a <container> resource at TARGET_RESOURCE_ADDRESS and the <container> resource does not have a <i>dynamicAuthorizationConsultationID</i> attribute nor corresponding <dynamicAuthorizationConsultation> } | |
| Expected behaviour | Test events when { the IUT receives a valid RETRIEVE request from AE1 containing To set to TARGET_RESOURCE_ADDRESS and From set to AE1_ID and no Content } then { the IUT rejects the incoming request from the AE1 containing Response Status Code set to "ORIGINATOR_HAS_NO_PRIVILEGE" } | Direction IUT ← AE1 AE1 ← IUT |

| TP Id | TP/oneM2M/CSE/DAU/NOT/004 | | | | | | | |
|---|--|-------------|-----------|---|-----------|---|-----------|--|
| Test objective | Check that the IUT does not start the Dynamic Authorization for an incoming request and rejects that incoming request if the dynamicAuthorizationEnabled of a <dynamicAuthorizationConsultation> is set to FALSE | | | | | | | |
| Reference | TS-0001 [1], clause 10.1.6 and 10.2.10.6, TS-0004 [2], clause 7.2.2.1 and 7.5.1.2.10 | | | | | | | |
| Config Id | CF01 | | | | | | | |
| Parent Release | Release 3 | | | | | | | |
| PICS Selection | PICS_CSE | | | | | | | |
| Initial conditions | <p>with {</p> <p>the IUT being registered and the IUT being a hosting CSE and the IUT having registered AE1 and the IUT having registered the DAS and the IUT having a <container> resource at TARGET_RESOURCE_ADDRESS and the <container> resource has <dynamicAuthorizationConsultation> with dynamicAuthorizationEnabled set to FALSE</p> <p>}</p> | | | | | | | |
| Expected behaviour | <table border="1"> <thead> <tr> <th>Test events</th> <th>Direction</th> </tr> </thead> <tbody> <tr> <td> when { the IUT receives a valid RETRIEVE request from AE1 containing To set to TARGET_RESOURCE_ADDRESS and From set to AE1_ID and no Content } </td> <td>IUT ← AE1</td> </tr> <tr> <td> then { the IUT rejects the incoming request from the AE1 containing Response Status Code set to "ORIGINATOR_HAS_NO_PRIVILEGE" } </td> <td>AE1 ← IUT</td> </tr> </tbody> </table> | Test events | Direction | when { the IUT receives a valid RETRIEVE request from AE1 containing To set to TARGET_RESOURCE_ADDRESS and From set to AE1_ID and no Content } | IUT ← AE1 | then { the IUT rejects the incoming request from the AE1 containing Response Status Code set to "ORIGINATOR_HAS_NO_PRIVILEGE" } | AE1 ← IUT | |
| Test events | Direction | | | | | | | |
| when { the IUT receives a valid RETRIEVE request from AE1 containing To set to TARGET_RESOURCE_ADDRESS and From set to AE1_ID and no Content } | IUT ← AE1 | | | | | | | |
| then { the IUT rejects the incoming request from the AE1 containing Response Status Code set to "ORIGINATOR_HAS_NO_PRIVILEGE" } | AE1 ← IUT | | | | | | | |

| | | |
|---------------------------|---|--|
| TP Id | TP/oneM2M/CSE/DAU/NOT/005 | |
| Test objective | Check that the IUT correctly processes a Notify response received in response to a Notify request that started Dynamic Authorization | |
| Reference | TS-0001 [1], clause 10.1.6 and 10.2.10.6, TS-0004 [2], clause 7.2.2.1 and 7.5.1.2.10 | |
| Config Id | CF06 | |
| Parent Release | Release 3 | |
| PICS Selection | PICS_CSE | |
| Initial conditions | with { the IUT being registered and the IUT being a hosting CSE and the IUT having registered AE1 and the IUT having registered the DAS and the IUT having a <container> resource at TARGET_RESOURCE_ADDRESS and the AE1 having sent a Retrieve request for the resource at TARGET_RESOURCE_ADDRESS and the AE1 having no privileges to perform RETRIEVE operation on the resource and the IUT having sent a NOTIFY Request to DAS to start Dynamic Authorization } | |
| Expected behaviour | Test events when { the IUT receives a valid NOTIFY Response containing Notification data containing securityInfo containing securityInfoType set to 2 (Dynamic Authorization Response) } then { the IUT sends a valid Response to AE1 containing ResponseStatusCode set to OK (2000) and Content containing <container> representation } | Direction DAS → IUT AE1 ← IUT |

| | | |
|---------------------------|---|--|
| TP Id | TP/oneM2M/CSE/DAU/NOT/006 | |
| Test objective | Check that the IUT correctly processes a Notify response including a dynamicACPIInfo element received in response to a Notify request that started Dynamic Authorization | |
| Reference | TS-0001 [1], clause 10.1.6 and 10.2.10.6, TS-0004 [2], clause 7.2.2.1 and 7.5.1.2.10 | |
| Config Id | CF06 | |
| Parent Release | Release 3 | |
| PICS Selection | PICS_CSE | |
| Initial conditions | with { the IUT being registered and the IUT being a hosting CSE and the IUT having registered AE1 and the IUT having registered the DAS and the IUT having a <container> resource at TARGET_RESOURCE_ADDRESS and the AE1 having sent a Retrieve request for the resource at TARGET_RESOURCE_ADDRESS and the AE1 having no privileges to perform RETRIEVE operation on the resource and the IUT having sent a NOTIFY Request to DAS to start Dynamic Authorization } | |
| Expected behaviour | Test events when { the IUT receives a valid NOTIFY Response containing Notification data containing securityInfo containing securityInfoType set to 2 (Dynamic Authorization Response) and dynAuthDasResponse containing dynamicACPIInfo } then { the IUT creates <accesscontrolPolicy> child resource and configures the privileges, expirationTime and selfPrivileges attributes based on the data received in the dynamicACPIInfo, and the IUT sends a valid Response to AE1 containing ResponseStatusCode set to OK (2000) and Content containing <container> representation } | Direction DAS → IUT AE1 ← IUT |

| | | |
|---------------------------|---|--|
| TP Id | TP/oneM2M/CSE/DAU/NOT/007 | |
| Test objective | Check that the IUT correctly processes a Notify response including a tokens element received in response to a Notify request that started Dynamic Authorization | |
| Reference | TS-0001 [1], clause 10.1.6 and 10.2.10.6, TS-0004 [2], clause 7.2.2.1 and 7.5.1.2.10 | |
| Config Id | CF06 | |
| Parent Release | Release 3 | |
| PICS Selection | PICS_CSE | |
| Initial conditions | with { the IUT being registered and the IUT being a hosting CSE and the IUT having registered AE1 and the IUT having registered the DAS and the IUT having a <container> resource at TARGET_RESOURCE_ADDRESS and the AE1 having sent a Retrieve request for the resource at TARGET_RESOURCE_ADDRESS and the AE1 having no privileges to perform RETRIEVE operation on the resource and the IUT having sent a NOTIFY Request to DAS to start Dynamic Authorization } | |
| Expected behaviour | Test events when { the IUT receives a valid NOTIFY Response containing Notification data containing Tokens element } then { the IUT sends a valid Response to AE1 containing ResponseStatusCode set to OK (2000) and Content containing <container> representation } | Direction DAS → IUT AE1 ← IUT |

| | | |
|---------------------------|---|--|
| TP Id | TP/oneM2M/CSE/DAU/NOT/008 | |
| Test objective | | |
| Reference | TS-0001 [1], clause 10.1.6 and 10.2.10.6, TS-0004 [2], clause 7.2.2.1 and 7.5.1.2.10 | |
| Config Id | CF06 | |
| Parent Release | Release 3 | |
| PICS Selection | PICS_CSE | |
| Initial conditions | with { the IUT being registered and the IUT being a hosting CSE and the IUT having registered AE1 and the IUT having registered the DAS and the IUT having a <container> resource at TARGET_RESOURCE_ADDRESS and the AE1 having sent a Retrieve request for the resource at TARGET_RESOURCE_ADDRESS and the AE1 having no privileges to perform RETRIEVE operation on the resource and the IUT having sent a NOTIFY Request to DAS to start Dynamic Authorization } | |
| Expected behaviour | Test events when { the IUT receives a valid NOTIFY Response NOT containing Notification data containing securityInfo containing securityInfoType set to 2 (Dynamic Authorization Response) } then { the IUT rejects the incoming request from the AE1 containing Response Status Code set to "ORIGINATOR_HAS_NO_PRIVILEGE" } | Direction DAS → IUT AE1 ← IUT |

7.2.2.15 Semantic (SEM)

7.2.2.15.1 CREATE Operation

TP/oneM2M/CSE/SEM/CRE/001

| TP Id | TP/oneM2M/CSE/SEM/CRE/001 | | | | | | | |
|--|--|--------------------|------------------|--|----------|--|----------|--|
| Test objective | Check that the IUT rejects the creation request of a <semanticDescriptor> resource which descriptor attribute does not conform to the RDF/XML syntax as defined in RDF 1.1 XML Syntax | | | | | | | |
| Reference | TS-0034 [6], clause 6.1.2, and TS-0004 [2], clause 7.4.34.2.1 | | | | | | | |
| Config Id | CF01 | | | | | | | |
| Parent Release | Release 3 | | | | | | | |
| 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 parent resource at TARGET_RESOURCE_ADDRESS and the AE having privileges to perform CREATE operation at TARGET_RESOURCE_ADDRESS } | | | | | | | |
| Expected behaviour | <table border="1"> <thead> <tr> <th>Test events</th> <th>Direction</th> </tr> </thead> <tbody> <tr> <td> when { the IUT receives a valid CREATE Request from AE containing To set to TARGET_RESOURCE_ADDRESS and Resource Type set to 24 (semanticDescriptor) and From set to AE-ID and Content containing <semanticDescriptor> resource representation containing descriptor attribute set to a value that does not conform to the RDF/XML syntax } </td> <td>IUT ← AE</td> </tr> <tr> <td> then { the IUT does not create the <semanticDescriptor> resource and the IUT sends a valid Response containing failure information with additional error information } </td> <td>IUT → AE</td> </tr> </tbody> </table> | 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 24 (semanticDescriptor) and From set to AE-ID and Content containing <semanticDescriptor> resource representation containing descriptor attribute set to a value that does not conform to the RDF/XML syntax } | IUT ← AE | then { the IUT does not create the <semanticDescriptor> resource and the IUT sends a valid Response containing failure information with additional error information } | IUT → AE | |
| 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 24 (semanticDescriptor) and From set to AE-ID and Content containing <semanticDescriptor> resource representation containing descriptor attribute set to a value that does not conform to the RDF/XML syntax } | IUT ← AE | | | | | | | |
| then { the IUT does not create the <semanticDescriptor> resource and the IUT sends a valid Response containing failure information with additional error information } | IUT → AE | | | | | | | |

| TP Id | TP/oneM2M/CSE/SEM/CRE/002 | | | | | | | |
|---|---|-------------|-----------|---|----------|--|----------|--|
| Test objective | Check that the IUT generates a Response Status Code indicating a "ONTOLOGY_NOT_AVAILABLE" error when referenced ontology cannot be retrieved during a semantic validation process | | | | | | | |
| Reference | TS-0004 [2], clause 7.4.34.2.1 | | | | | | | |
| Config Id | CF01 | | | | | | | |
| Parent Release | Release 3 | | | | | | | |
| PICS Selection | PICS_CSE | | | | | | | |
| Initial conditions | <p>with {</p> <p>the IUT being in the "initial state" and the IUT having registered the AE and the AE having privileges to perform CREATE operation at TARGET_RESOURCE_ADDRESS and the IUT having a local policy that allows semantic validation procedures</p> } | | | | | | | |
| Expected behaviour | <table border="1"> <thead> <tr> <th>Test events</th> <th>Direction</th> </tr> </thead> <tbody> <tr> <td> <p>when {</p> <p>the IUT receives a valid CREATE Request from AE containing To set to TARGET_RESOURCE_ADDRESS and Resource Type set to 24 (semanticDescriptor) and From set to AE-ID and Content containing <semanticDescriptor> resource representation containing validationEnable attribute set to "True" and ontologyRef attribute set to a non-resolvable URI</p> }</td> <td>IUT ← AE</td> </tr> <tr> <td> <p>then {</p> <p>the IUT sends a valid Response containing Response Status Code set to 4118 (ONTOLOGY_NOT_AVAILABLE)</p> }</td> <td>IUT → AE</td> </tr> </tbody> </table> | Test events | Direction | <p>when {</p> <p>the IUT receives a valid CREATE Request from AE containing To set to TARGET_RESOURCE_ADDRESS and Resource Type set to 24 (semanticDescriptor) and From set to AE-ID and Content containing <semanticDescriptor> resource representation containing validationEnable attribute set to "True" and ontologyRef attribute set to a non-resolvable URI</p> } | IUT ← AE | <p>then {</p> <p>the IUT sends a valid Response containing Response Status Code set to 4118 (ONTOLOGY_NOT_AVAILABLE)</p> } | IUT → AE | |
| Test events | Direction | | | | | | | |
| <p>when {</p> <p>the IUT receives a valid CREATE Request from AE containing To set to TARGET_RESOURCE_ADDRESS and Resource Type set to 24 (semanticDescriptor) and From set to AE-ID and Content containing <semanticDescriptor> resource representation containing validationEnable attribute set to "True" and ontologyRef attribute set to a non-resolvable URI</p> } | IUT ← AE | | | | | | | |
| <p>then {</p> <p>the IUT sends a valid Response containing Response Status Code set to 4118 (ONTOLOGY_NOT_AVAILABLE)</p> } | IUT → AE | | | | | | | |

| TP Id | TP/oneM2M/CSE/SEM/CRE/003 | | | | | | | |
|--|--|-------------|-----------|--|----------|--|----------|--|
| Test objective | Check that the IUT generates a Response Status Code indicating a "LINKED_SEMATICS_NOT_AVAILABLE" error when local linked <semanticDescriptor> resources cannot be retrieved during a semantic validation process | | | | | | | |
| Reference | TS-0004 [2], clause 7.4.34.2.1 | | | | | | | |
| Config Id | CF01 | | | | | | | |
| Parent Release | Release 3 | | | | | | | |
| PICS Selection | PICS_CSE | | | | | | | |
| Initial conditions | <p>with {</p> <p>the IUT being in the "initial state" and the IUT having registered the AE and the the AE having privileges to perform CREATE operation at TARGET_RESOURCE_ADDRESS and the IUT having a local policy that allows semantic validation procedures</p> } | | | | | | | |
| Expected behaviour | <table border="1"> <thead> <tr> <th>Test events</th> <th>Direction</th> </tr> </thead> <tbody> <tr> <td> <p>when {</p> <p>the IUT receives a valid CREATE Request from AE containing To set to TARGET_RESOURCE_ADDRESS and Resource Type set to 24 (semanticDescriptor) and From set to AE-ID and Content containing <semanticDescriptor> resource representation containing validationEnable attribute set to "True" and relatedSemantics attribute set to a non-resolvable URI</p> } </td> <td>IUT ← AE</td> </tr> <tr> <td> <p>then {</p> <p>the IUT sends a valid Response containing Response Status Code set to 4119 (LINKED_SEMATICS_NOT_AVAILABLE)</p> } </td> <td>IUT → AE</td> </tr> </tbody> </table> | Test events | Direction | <p>when {</p> <p>the IUT receives a valid CREATE Request from AE containing To set to TARGET_RESOURCE_ADDRESS and Resource Type set to 24 (semanticDescriptor) and From set to AE-ID and Content containing <semanticDescriptor> resource representation containing validationEnable attribute set to "True" and relatedSemantics attribute set to a non-resolvable URI</p> } | IUT ← AE | <p>then {</p> <p>the IUT sends a valid Response containing Response Status Code set to 4119 (LINKED_SEMATICS_NOT_AVAILABLE)</p> } | IUT → AE | |
| Test events | Direction | | | | | | | |
| <p>when {</p> <p>the IUT receives a valid CREATE Request from AE containing To set to TARGET_RESOURCE_ADDRESS and Resource Type set to 24 (semanticDescriptor) and From set to AE-ID and Content containing <semanticDescriptor> resource representation containing validationEnable attribute set to "True" and relatedSemantics attribute set to a non-resolvable URI</p> } | IUT ← AE | | | | | | | |
| <p>then {</p> <p>the IUT sends a valid Response containing Response Status Code set to 4119 (LINKED_SEMATICS_NOT_AVAILABLE)</p> } | IUT → AE | | | | | | | |

| TP Id | TP/oneM2M/CSE/SEM/CRE/004 | | | | | | | |
|---|---|-------------|-----------|---|----------|--|-----------|--|
| Test objective | Check that the IUT retrieves the referenced ontology from the ontology hosting CSE when performing a semantic validation as a result of a creation of a stand-alone <semanticDescriptor> resource | | | | | | | |
| Reference | TS-0034 [6], clauses 6.1.2 and 7.10.3, and TS-0004 [2], clause 7.4.34.2.1 | | | | | | | |
| Parent Release | Release 3 | | | | | | | |
| Config Id | CF02 | | | | | | | |
| PICS Selection | PICS_CSE | | | | | | | |
| Initial conditions | <p>with {</p> <ul style="list-style-type: none"> the IUT being in the "initial state" and the IUT having registered the AE and the the AE having privileges to perform CREATE operation at TARGET_RESOURCE_ADDRESS and the IUT having a local policy that allows semantic validation procedures and the ontology hosting CSE having an <ontology> resource at REFERENCED_ONTOLOGY_ADDRESS } | | | | | | | |
| Expected behaviour | <table border="1"> <thead> <tr> <th>Test events</th> <th>Direction</th> </tr> </thead> <tbody> <tr> <td> <p>when {</p> <ul style="list-style-type: none"> the IUT receives a valid CREATE Request from AE containing <ul style="list-style-type: none"> To set to TARGET_RESOURCE_ADDRESS and Resource Type set to 24 (semanticDescriptor) and From set to AE-ID and Content containing <ul style="list-style-type: none"> <semanticDescriptor> resource representation containing <ul style="list-style-type: none"> validationEnable attribute set to "True" and descriptor attribute and ontologyRef attribute set to <ul style="list-style-type: none"> REFERENCED_ONTOLOGY_ADDRESS } </td> <td>IUT ← AE</td> </tr> <tr> <td> <p>then {</p> <ul style="list-style-type: none"> the IUT sends a valid RETRIEVE Request containing <ul style="list-style-type: none"> To set to REFERENCED_ONTOLOGY_ADDRESS and Content containing <ul style="list-style-type: none"> <ontology> resource representation } </td> <td>IUT → CSE</td> </tr> </tbody> </table> | Test events | Direction | <p>when {</p> <ul style="list-style-type: none"> the IUT receives a valid CREATE Request from AE containing <ul style="list-style-type: none"> To set to TARGET_RESOURCE_ADDRESS and Resource Type set to 24 (semanticDescriptor) and From set to AE-ID and Content containing <ul style="list-style-type: none"> <semanticDescriptor> resource representation containing <ul style="list-style-type: none"> validationEnable attribute set to "True" and descriptor attribute and ontologyRef attribute set to <ul style="list-style-type: none"> REFERENCED_ONTOLOGY_ADDRESS } | IUT ← AE | <p>then {</p> <ul style="list-style-type: none"> the IUT sends a valid RETRIEVE Request containing <ul style="list-style-type: none"> To set to REFERENCED_ONTOLOGY_ADDRESS and Content containing <ul style="list-style-type: none"> <ontology> resource representation } | IUT → CSE | |
| Test events | Direction | | | | | | | |
| <p>when {</p> <ul style="list-style-type: none"> the IUT receives a valid CREATE Request from AE containing <ul style="list-style-type: none"> To set to TARGET_RESOURCE_ADDRESS and Resource Type set to 24 (semanticDescriptor) and From set to AE-ID and Content containing <ul style="list-style-type: none"> <semanticDescriptor> resource representation containing <ul style="list-style-type: none"> validationEnable attribute set to "True" and descriptor attribute and ontologyRef attribute set to <ul style="list-style-type: none"> REFERENCED_ONTOLOGY_ADDRESS } | IUT ← AE | | | | | | | |
| <p>then {</p> <ul style="list-style-type: none"> the IUT sends a valid RETRIEVE Request containing <ul style="list-style-type: none"> To set to REFERENCED_ONTOLOGY_ADDRESS and Content containing <ul style="list-style-type: none"> <ontology> resource representation } | IUT → CSE | | | | | | | |

| TP Id | TP/oneM2M/CSE/SEM/CRE/005 | | | | | | | |
|---|---|-------------|-----------|---|----------|--|----------|--|
| Test objective | Check that the IUT sends a valid response when performing a semantic validation as a result of a creation of a stand-alone <semanticDescriptor> resource | | | | | | | |
| Reference | TS-0034 [6], clauses 6.1.2 and 7.10.3, and TS-0004 [2], clause 7.4.34.2.1 | | | | | | | |
| Parent Release | Release 3 | | | | | | | |
| Config Id | CF02 | | | | | | | |
| PICS Selection | PICS_CSE | | | | | | | |
| Initial conditions | <p>with {</p> <p>the IUT being in the "initial state" and the IUT having registered the AE and the AE having privileges to perform CREATE operation at TARGET_RESOURCE_ADDRESS and the IUT having a local policy that allows semantic validation procedures and the ontology hosting CSE having an <ontology> resource at REFERENCED_ONTOLOGY_ADDRESS</p> } | | | | | | | |
| Expected behaviour | <table border="1"> <thead> <tr> <th>Test events</th> <th>Direction</th> </tr> </thead> <tbody> <tr> <td> <p>when {</p> <p>the IUT receives a valid CREATE Request from AE containing To set to TARGET_RESOURCE_ADDRESS and Resource Type set to 24 (semanticDescriptor) and From set to AE-ID and Content containing <semanticDescriptor> resource representation containing validationEnable attribute set to "True" and descriptor attribute and ontologyRef attribute set to REFERENCED_ONTOLOGY_ADDRESS</p> } </td><td>IUT ← AE</td></tr> <tr> <td> <p>then {</p> <p>the IUT sends a valid Response containing Response Status Code indicating success of validation Content containing <semanticDescriptor> resource representation</p> } </td><td>IUT → AE</td></tr> </tbody> </table> | Test events | Direction | <p>when {</p> <p>the IUT receives a valid CREATE Request from AE containing To set to TARGET_RESOURCE_ADDRESS and Resource Type set to 24 (semanticDescriptor) and From set to AE-ID and Content containing <semanticDescriptor> resource representation containing validationEnable attribute set to "True" and descriptor attribute and ontologyRef attribute set to REFERENCED_ONTOLOGY_ADDRESS</p> } | IUT ← AE | <p>then {</p> <p>the IUT sends a valid Response containing Response Status Code indicating success of validation Content containing <semanticDescriptor> resource representation</p> } | IUT → AE | |
| Test events | Direction | | | | | | | |
| <p>when {</p> <p>the IUT receives a valid CREATE Request from AE containing To set to TARGET_RESOURCE_ADDRESS and Resource Type set to 24 (semanticDescriptor) and From set to AE-ID and Content containing <semanticDescriptor> resource representation containing validationEnable attribute set to "True" and descriptor attribute and ontologyRef attribute set to REFERENCED_ONTOLOGY_ADDRESS</p> } | IUT ← AE | | | | | | | |
| <p>then {</p> <p>the IUT sends a valid Response containing Response Status Code indicating success of validation Content containing <semanticDescriptor> resource representation</p> } | IUT → AE | | | | | | | |

| | | |
|---------------------------|--|--|
| TP Id | TP/oneM2M/CSE/SEM/CRE/006 | |
| Test objective | Check that the IUT rejects the creation request of a <semanticMashupInstance> resource, indicating a "BAD_REQUEST" error, when the <semanticMashupJobProfile> resource referenced in its smjpID attribute does not exist | |
| Reference | TS-0034 [6], clause 6.4.2, and TS-0004 [2], clause 7.4.50.2.1 | |
| Config Id | CF01 | |
| Parent Release | Release 3 | |
| PICS Selection | PICS_CSE | |
| Initial conditions | <p>with {</p> <ul style="list-style-type: none"> the IUT being in the "initial state" and the IUT having registered the AE and the IUT having privileges to perform CREATE operation at TARGET_RESOURCE_ADDRESS } | |
| Expected behaviour | Test events <pre> when { the IUT receives a valid CREATE Request from AE containing To set to TARGET_RESOURCE_ADDRESS and Resource Type set to 41 (semanticMashupInstance) and From set to AE-ID and Content containing <semanticMashupInstance> resource representation containing smjpID attribute set to a reference to a non-existent <semanticMashupJobProfile> resource } then { the IUT does not create the <semanticMashupInstance> resource and the IUT sends a valid Response containing Response Status Code set to 4000 (BAD_REQUEST) } </pre> | Direction IUT ← AE IUT → AE |

| TP Id | TP/oneM2M/CSE/SEM/CRE/007 | | | | | | | |
|---|--|-------------|-----------|---|----------|---|----------|--|
| Test objective | Check that the IUT rejects the creation request of a <semanticMashupInstance> resource, indicating a "BAD_REQUEST" error, when its smjplInputParameter attribute value does not conform to the RDF/XML syntax as defined in RDF 1.1 XML Syntax | | | | | | | |
| Reference | TS-0034 [6], clause 6.4.2, and TS-0004 [2], clause 7.4.50.2.1 | | | | | | | |
| Config Id | CF01 | | | | | | | |
| Parent Release | Release 3 | | | | | | | |
| PICS Selection | PICS_CSE | | | | | | | |
| Initial conditions | <p>with {</p> <ul style="list-style-type: none"> the IUT being in the "initial state" and the IUT having registered the AE and the IUT having a <semanticMashupJobProfile> resource at TARGET_RESOURCE_ADDRESS containing accessControlPolicyIDs attribute set to allow the AE privileges to perform CREATE operation } | | | | | | | |
| Expected behaviour | <table border="1"> <thead> <tr> <th>Test events</th> <th>Direction</th> </tr> </thead> <tbody> <tr> <td> when { the IUT receives a valid CREATE Request from AE containing <ul style="list-style-type: none"> To set to TARGET_RESOURCE_ADDRESS and Resource Type set to 41 (semanticMashupInstance) and From set to AE-ID and Content containing <ul style="list-style-type: none"> <semanticMashupInstance> resource representation containing smjplID attribute set to a reference to the <semanticMashupJobProfile> resource at TARGET_RESOURCE_ADDRESS smjplInputParameter set to a value that does not conform to the RDF/XML syntax } </td><td>IUT ← AE</td></tr> <tr> <td> then { the IUT does not create the <semanticMashupInstance> resource and <ul style="list-style-type: none"> the IUT sends a valid Response containing <ul style="list-style-type: none"> Response Status Code set to 4000 (BAD_REQUEST) } </td><td>IUT → AE</td></tr> </tbody> </table> | Test events | Direction | when { the IUT receives a valid CREATE Request from AE containing <ul style="list-style-type: none"> To set to TARGET_RESOURCE_ADDRESS and Resource Type set to 41 (semanticMashupInstance) and From set to AE-ID and Content containing <ul style="list-style-type: none"> <semanticMashupInstance> resource representation containing smjplID attribute set to a reference to the <semanticMashupJobProfile> resource at TARGET_RESOURCE_ADDRESS smjplInputParameter set to a value that does not conform to the RDF/XML syntax } | IUT ← AE | then { the IUT does not create the <semanticMashupInstance> resource and <ul style="list-style-type: none"> the IUT sends a valid Response containing <ul style="list-style-type: none"> Response Status Code set to 4000 (BAD_REQUEST) } | IUT → AE | |
| Test events | Direction | | | | | | | |
| when { the IUT receives a valid CREATE Request from AE containing <ul style="list-style-type: none"> To set to TARGET_RESOURCE_ADDRESS and Resource Type set to 41 (semanticMashupInstance) and From set to AE-ID and Content containing <ul style="list-style-type: none"> <semanticMashupInstance> resource representation containing smjplID attribute set to a reference to the <semanticMashupJobProfile> resource at TARGET_RESOURCE_ADDRESS smjplInputParameter set to a value that does not conform to the RDF/XML syntax } | IUT ← AE | | | | | | | |
| then { the IUT does not create the <semanticMashupInstance> resource and <ul style="list-style-type: none"> the IUT sends a valid Response containing <ul style="list-style-type: none"> Response Status Code set to 4000 (BAD_REQUEST) } | IUT → AE | | | | | | | |

| | | |
|---------------------------|---|------------------|
| TP Id | TP/oneM2M/CSE/SEM/CRE/008 | |
| Test objective | Check that the IUT rejects the creation request of a <semanticMashupInstance> resource, indicating a "BAD_REQUEST" error, when its smjplInputParameter attribute value does not meet the input parameter requirement specified by the inputDescriptor attribute of the corresponding <semanticMashupJobProfile> resource | |
| Reference | TS-0034 [6], clause 6.4.2, and TS-0004 [2], clause 7.4.50.2.1 | |
| Config Id | CF01 | |
| Parent Release | Release 3 | |
| PICS Selection | PICS_CSE | |
| Initial conditions | <pre> with { the IUT being in the "initial state" and the IUT having registered the AE and the IUT having a <semanticMashupJobProfile> resource at TARGET_RESOURCE_ADDRESS containing accessControlPolicyIDs attribute set to allow the AE privileges to perform CREATE operation inputDescriptor attribute set to a valid value } </pre> | |
| Expected behaviour | Test events <pre> when { the IUT receives a valid CREATE Request from AE containing To set to TARGET_RESOURCE_ADDRESS and Resource Type set to 41 (semanticMashupInstance) and From set to AE-ID and Content containing <semanticMashupInstance> resource representation containing smjplID attribute set to a reference to the <semanticMashupJobProfile> resource at TARGET_RESOURCE_ADDRESS smjplInputParameter set to a value of a type not allowed according to the inputDescriptor attribute of the <semanticMashupJobProfile> resource at TARGET_RESOURCE_ADDRESS } </pre> | Direction |
| | <pre> then { the IUT does not create the <semanticMashupInstance> resource and the IUT sends a valid Response containing Response Status Code set to 4000 (BAD_REQUEST) } </pre> | IUT → AE |

| TP Id | TP/oneM2M/CSE/SEM/CRE/009 | | | | | | | |
|---|---|-------------|-----------|---|----------|--|----------|--|
| Test objective | Check that the IUT returns a "MASHUP_MEMBER_NOT_FOUND" error when creating a <semanticMashupInstance> when a required mashup member resource cannot be identified | | | | | | | |
| Reference | TS-0034 [6], clause 6.4.2, and TS-0004 [2], clause 7.4.50.2.1 | | | | | | | |
| Config Id | CF01 | | | | | | | |
| Parent Release | Release 3 | | | | | | | |
| PICS Selection | PICS_CSE | | | | | | | |
| Initial conditions | <p>with {</p> <p>the IUT being in the "initial state"</p> <p>and the IUT having registered the AE</p> <p>and the IUT having a <semanticMashupJobProfile> resource at TARGET_RESOURCE_ADDRESS containing</p> <p>accessControlPolicyIDs attribute set to allow the AE privileges to perform CREATE operation</p> <p>memberFilter attribute set to a SPARQL query to discover an unidentified mashup member</p> <p>}</p> | | | | | | | |
| Expected behaviour | <table border="1"> <thead> <tr> <th>Test events</th> <th>Direction</th> </tr> </thead> <tbody> <tr> <td> <p>when {</p> <p>the IUT receives a valid CREATE Request from AE containing</p> <p>To set to TARGET_RESOURCE_ADDRESS and</p> <p>Resource Type set to 41 (semanticMashupInstance) and</p> <p>From set to AE-ID and</p> <p>Content containing</p> <p><semanticMashupInstance> resource representation containing</p> <p>smjpID attribute set to a reference to the <semanticMashupJobProfile> resource at TARGET_RESOURCE_ADDRESS</p> <p>}</p> </td> <td>IUT ← AE</td> </tr> <tr> <td> <p>then {</p> <p>the IUT sends a valid Response containing</p> <p>Response Status Code set to 4121 (MASHUP_MEMBER_NOT_FOUND)</p> <p>}</p> </td> <td>IUT → AE</td> </tr> </tbody> </table> | Test events | Direction | <p>when {</p> <p>the IUT receives a valid CREATE Request from AE containing</p> <p>To set to TARGET_RESOURCE_ADDRESS and</p> <p>Resource Type set to 41 (semanticMashupInstance) and</p> <p>From set to AE-ID and</p> <p>Content containing</p> <p><semanticMashupInstance> resource representation containing</p> <p>smjpID attribute set to a reference to the <semanticMashupJobProfile> resource at TARGET_RESOURCE_ADDRESS</p> <p>}</p> | IUT ← AE | <p>then {</p> <p>the IUT sends a valid Response containing</p> <p>Response Status Code set to 4121 (MASHUP_MEMBER_NOT_FOUND)</p> <p>}</p> | IUT → AE | |
| Test events | Direction | | | | | | | |
| <p>when {</p> <p>the IUT receives a valid CREATE Request from AE containing</p> <p>To set to TARGET_RESOURCE_ADDRESS and</p> <p>Resource Type set to 41 (semanticMashupInstance) and</p> <p>From set to AE-ID and</p> <p>Content containing</p> <p><semanticMashupInstance> resource representation containing</p> <p>smjpID attribute set to a reference to the <semanticMashupJobProfile> resource at TARGET_RESOURCE_ADDRESS</p> <p>}</p> | IUT ← AE | | | | | | | |
| <p>then {</p> <p>the IUT sends a valid Response containing</p> <p>Response Status Code set to 4121 (MASHUP_MEMBER_NOT_FOUND)</p> <p>}</p> | IUT → AE | | | | | | | |

| TP Id | TP/oneM2M/CSE/SEM/CRE/010 | | | | | | | |
|---|--|-------------|-----------|---|----------|---|----------|--|
| Test objective | Check that the IUT rejects the creation request of a <semanticMashupJobProfile> resource, indicating a "BAD_REQUEST" error, when its <i>inputDescriptor</i> attribute value does not conform to the RDF/XML syntax as defined in RDF 1.1 XML Syntax | | | | | | | |
| Reference | TS-0034 [6], clause 6.3.2, and TS-0004 [2], clause 7.4.49.2.1 | | | | | | | |
| Config Id | CF01 | | | | | | | |
| Parent Release | Release 3 | | | | | | | |
| PICS Selection | PICS_CSE | | | | | | | |
| Initial conditions | <p>with {</p> <ul style="list-style-type: none"> 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 | <table border="1"> <thead> <tr> <th>Test events</th> <th>Direction</th> </tr> </thead> <tbody> <tr> <td> When { the IUT receives a valid CREATE Request from AE containing To set to TARGET_RESOURCE_ADDRESS and Resource Type set to 40 (semanticMashupJobProfile) and From set to AE-ID and Content containing <semanticMashupJobProfile> resource representation containing inputDescriptor attribute set to a value that does not conform to the RDF/XML syntax </td> <td>IUT ← AE</td> </tr> <tr> <td> then { the IUT does not create the <semanticMashupJobProfile> resource and the IUT sends a valid Response containing Response Status Code set to 4000 (BAD_REQUEST) </td> <td>IUT → AE</td> </tr> </tbody> </table> | 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 40 (semanticMashupJobProfile) and From set to AE-ID and Content containing <semanticMashupJobProfile> resource representation containing inputDescriptor attribute set to a value that does not conform to the RDF/XML syntax | IUT ← AE | then { the IUT does not create the <semanticMashupJobProfile> resource and the IUT sends a valid Response containing Response Status Code set to 4000 (BAD_REQUEST) | IUT → AE | |
| 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 40 (semanticMashupJobProfile) and From set to AE-ID and Content containing <semanticMashupJobProfile> resource representation containing inputDescriptor attribute set to a value that does not conform to the RDF/XML syntax | IUT ← AE | | | | | | | |
| then { the IUT does not create the <semanticMashupJobProfile> 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 | TP/oneM2M/CSE/SEM/CRE/011 | |
| Test objective | Check that the IUT rejects the creation request of a <semanticMashupJobProfile> resource, indicating a "BAD_REQUEST" error, when its <i>outputDescriptor</i> attribute value does not conform to the RDF/XML syntax as defined in RDF 1.1 XML Syntax | |
| Reference | TS-0034 [6], clause 6.3.2, and TS-0004 [2], clause 7.4.49.2.1 | |
| Config Id | CF01 | |
| Parent Release | Release 3 | |
| PICS Selection | PICS_CSE | |
| Initial conditions | <p>with {</p> <p style="padding-left: 20px;">the IUT being in the "initial state" and</p> <p style="padding-left: 20px;">the IUT having registered the AE and</p> <p style="padding-left: 20px;">the AE having privileges to perform CREATE operation on the resource TARGET_RESOURCE_ADDRESS</p> <p>}</p> | |
| Expected behaviour | Test events <p>When {</p> <p style="padding-left: 20px;">the IUT receives a valid CREATE Request from AE containing To set to TARGET_RESOURCE_ADDRESS and Resource Type set to 40 (semanticMashupJobProfile) and From set to AE-ID and Content containing <semanticMashupJobProfile> resource representation containing outputDescriptor attribute set to a value that does not conform to the RDF/XML syntax</p> <p>}</p> <p>then {</p> <p style="padding-left: 20px;">the IUT does not create the <semanticMashupJobProfile> resource and the IUT sends a valid Response containing Response Status Code set to 4000 (BAD_REQUEST)</p> <p>}</p> | Direction <p>IUT ← AE</p> <p>IUT → AE</p> |

| TP Id | TP/oneM2M/CSE/SEM/CRE/012 | | | | | | | |
|--|---|--------------------|------------------|--|----------|---|----------|--|
| Test objective | Check that the IUT rejects the creation request of a <semanticMashupJobProfile> resource, indicating a "BAD_REQUEST" error, when its <i>functionDescriptor</i> attribute value does not conform to the RDF/XML syntax as defined in RDF 1.1 XML Syntax | | | | | | | |
| Reference | TS-0034 [6], clause 6.3.2, and TS-0004 [2], clause 7.4.49.2.1 | | | | | | | |
| Config Id | CF01 | | | | | | | |
| Parent Release | Release 3 | | | | | | | |
| PICS Selection | PICS_CSE | | | | | | | |
| Initial conditions | <p>with {</p> <ul style="list-style-type: none"> 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 | <table border="1"> <thead> <tr> <th>Test events</th> <th>Direction</th> </tr> </thead> <tbody> <tr> <td> When { the IUT receives a valid CREATE Request from AE containing To set to TARGET_RESOURCE_ADDRESS and Resource Type set to 40 (semanticMashupJobProfile) and From set to AE-ID and Content containing <semanticMashupJobProfile> resource representation containing functionDescriptor attribute set to a value that does not conform to the RDF/XML syntax </td> <td>IUT ← AE</td> </tr> <tr> <td> then { the IUT does not create the <semanticMashupJobProfile> resource and the IUT sends a valid Response containing Response Status Code set to 4000 (BAD_REQUEST) </td> <td>IUT → AE</td> </tr> </tbody> </table> | 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 40 (semanticMashupJobProfile) and From set to AE-ID and Content containing <semanticMashupJobProfile> resource representation containing functionDescriptor attribute set to a value that does not conform to the RDF/XML syntax | IUT ← AE | then { the IUT does not create the <semanticMashupJobProfile> resource and the IUT sends a valid Response containing Response Status Code set to 4000 (BAD_REQUEST) | IUT → AE | |
| 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 40 (semanticMashupJobProfile) and From set to AE-ID and Content containing <semanticMashupJobProfile> resource representation containing functionDescriptor attribute set to a value that does not conform to the RDF/XML syntax | IUT ← AE | | | | | | | |
| then { the IUT does not create the <semanticMashupJobProfile> resource and the IUT sends a valid Response containing Response Status Code set to 4000 (BAD_REQUEST) | IUT → AE | | | | | | | |

| TP Id | TP/oneM2M/CSE/SEM/CRE/013 | | | | | | | |
|---|---|-------------|-----------|---|----------|--|----------|--|
| Test objective | Check that the IUT rejects the creation request of a <semanticMashupJobProfile> resource, indicating a "BAD_REQUEST" error, when its <i>memberFilter</i> attribute value does not conform to a valid SPARQL query request | | | | | | | |
| Reference | TS-0034 [6], clause 6.3.2, and TS-0004 [2], clause 7.4.49.2.1 | | | | | | | |
| Config Id | CF01 | | | | | | | |
| Parent Release | Release 3 | | | | | | | |
| PICS Selection | PICS_CSE | | | | | | | |
| Initial conditions | <p>with {</p> <p style="padding-left: 20px;">the IUT being in the "initial state"</p> <p style="padding-left: 20px;">and the IUT having registered the AE</p> <p style="padding-left: 20px;">and the IUT having a < semanticMashupJobProfile > resource at TARGET_RESOURCE_ADDRESS containing</p> <p style="padding-left: 20px;">accessControlPolicyIDs attribute set to allow the AE privileges to perform CREATE operation</p> <p>}</p> | | | | | | | |
| Expected behaviour | <table border="1"> <thead> <tr> <th>Test events</th> <th>Direction</th> </tr> </thead> <tbody> <tr> <td> <p>When {</p> <p style="padding-left: 20px;">the IUT receives a valid UPDATE Request from AE containing</p> <p style="padding-left: 20px;">To set to TARGET_RESOURCE_ADDRESS and Resource Type set to 40 (semanticMashupJobProfile) and</p> <p style="padding-left: 20px;">From set to AE-ID and</p> <p style="padding-left: 20px;">Content containing <semanticMashupJobProfile> resource representation containing memberFilter attribute set to a value that does not conform to a valid SPARQL query request</p> <p>}</p> </td><td>IUT ← AE</td></tr> <tr> <td> <p>then {</p> <p style="padding-left: 20px;">the IUT does not create the <semanticMashupJobProfile> resource and</p> <p style="padding-left: 20px;">the IUT sends a valid Response containing</p> <p style="padding-left: 20px;">Response Status Code set to 4000 (BAD_REQUEST)</p> <p>}</p> </td><td>IUT → AE</td></tr> </tbody> </table> | Test events | Direction | <p>When {</p> <p style="padding-left: 20px;">the IUT receives a valid UPDATE Request from AE containing</p> <p style="padding-left: 20px;">To set to TARGET_RESOURCE_ADDRESS and Resource Type set to 40 (semanticMashupJobProfile) and</p> <p style="padding-left: 20px;">From set to AE-ID and</p> <p style="padding-left: 20px;">Content containing <semanticMashupJobProfile> resource representation containing memberFilter attribute set to a value that does not conform to a valid SPARQL query request</p> <p>}</p> | IUT ← AE | <p>then {</p> <p style="padding-left: 20px;">the IUT does not create the <semanticMashupJobProfile> resource and</p> <p style="padding-left: 20px;">the IUT sends a valid Response containing</p> <p style="padding-left: 20px;">Response Status Code set to 4000 (BAD_REQUEST)</p> <p>}</p> | IUT → AE | |
| Test events | Direction | | | | | | | |
| <p>When {</p> <p style="padding-left: 20px;">the IUT receives a valid UPDATE Request from AE containing</p> <p style="padding-left: 20px;">To set to TARGET_RESOURCE_ADDRESS and Resource Type set to 40 (semanticMashupJobProfile) and</p> <p style="padding-left: 20px;">From set to AE-ID and</p> <p style="padding-left: 20px;">Content containing <semanticMashupJobProfile> resource representation containing memberFilter attribute set to a value that does not conform to a valid SPARQL query request</p> <p>}</p> | IUT ← AE | | | | | | | |
| <p>then {</p> <p style="padding-left: 20px;">the IUT does not create the <semanticMashupJobProfile> resource and</p> <p style="padding-left: 20px;">the IUT sends a valid Response containing</p> <p style="padding-left: 20px;">Response Status Code set to 4000 (BAD_REQUEST)</p> <p>}</p> | IUT → AE | | | | | | | |

| TP Id | TP/oneM2M/CSE/SEM/CRE/014 | | | | | | | |
|---|---|-------------|-----------|---|----------|--|----------|--|
| Test objective | Check that the IUT creates successfully the <semanticMashupInstance> resource | | | | | | | |
| Reference | TS-0001 [1], clause 9.6.54, TS-0004 [2], clause 7.4.50.2.1, TS-0034 [6], clause 6.4.2 | | | | | | | |
| Config Id | CF01 | | | | | | | |
| Parent Release | Release 3 | | | | | | | |
| PICS Selection | PICS_CSE | | | | | | | |
| Initial conditions | <p>with {</p> <p>the IUT being in the "initial state" and the IUT having registered the AE and the IUT having a <semanticMashupJobProfile> resource at TARGET_RESOURCE_ADDRESS containing accessControlPolicyIDs attribute set to allow the AE privileges to perform CREATE operation</p> <p>}</p> | | | | | | | |
| Expected behaviour | <table border="1"> <thead> <tr> <th>Test events</th> <th>Direction</th> </tr> </thead> <tbody> <tr> <td> when { the IUT receives a valid CREATE Request from AE containing To set to TARGET_RESOURCE_ADDRESS and Resource Type set to 41 (semanticMashupInstance) and From set to AE-ID and Content containing <semanticMashupInstance> resource representation containing smjplID attribute set to a reference to the <semanticMashupJobProfile> resource at TARGET_RESOURCE_ADDRESS smjplInputParameter set to a value that does conform to the RDF/XML syntax } </td><td>IUT ← AE</td></tr> <tr> <td> then { the IUT creates the semanticMashupInstance resource and the IUT sends a valid Response containing Response Status Code set to 2001 (CREATED) } </td><td>IUT → AE</td></tr> </tbody> </table> | 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 41 (semanticMashupInstance) and From set to AE-ID and Content containing <semanticMashupInstance> resource representation containing smjplID attribute set to a reference to the <semanticMashupJobProfile> resource at TARGET_RESOURCE_ADDRESS smjplInputParameter set to a value that does conform to the RDF/XML syntax } | IUT ← AE | then { the IUT creates the semanticMashupInstance resource and the IUT sends a valid Response containing Response Status Code set to 2001 (CREATED) } | IUT → AE | |
| 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 41 (semanticMashupInstance) and From set to AE-ID and Content containing <semanticMashupInstance> resource representation containing smjplID attribute set to a reference to the <semanticMashupJobProfile> resource at TARGET_RESOURCE_ADDRESS smjplInputParameter set to a value that does conform to the RDF/XML syntax } | IUT ← AE | | | | | | | |
| then { the IUT creates the semanticMashupInstance resource and the IUT sends a valid Response containing Response Status Code set to 2001 (CREATED) } | IUT → AE | | | | | | | |

TP/oneM2M/CSE/SEM/CRE/015

| | | |
|----------------|---|--|
| TP Id | TP/oneM2M/CSE/SEM/CRE/015 | |
| Test objective | Check that the IUT creates successfully the <semanticMashupInstance> resource with resultGenType set to WHEN_SMI_IS_CREATED | |
| Reference | TS-0001 [1], clause 9.6.54, TS-0004 [2], clause 7.4.50.2.1, TS-0034 [6], clause 6.4.2 | |
| Config Id | CF01 | |

| | | |
|--------------------|---|--|
| Parent Release | Release 3 | |
| PICS Selection | PICS_CSE | |
| Initial conditions | <pre> with { the IUT being in the "initial state" and the IUT having registered the AE and the IUT having a <semanticMashupJobProfile> resource at TARGET_RESOURCE_ADDRESS containing accessControlPolicyIDs attribute set to allow the AE privileges to perform CREATE operation } </pre> | |
| Expected behaviour | <p>Test events</p> <p>when {</p> <p>the IUT receives a valid CREATE Request from AE containing To set to TARGET_RESOURCE_ADDRESS and Resource Type set to 41 (semanticMashupInstance) and From set to AE-ID and Content containing <semanticMashupInstance> resource representation containing smjplID attribute set to a reference to the <semanticMashupJobProfile> resource at TARGET_RESOURCE_ADDRESS smjplInputParameter set to a value that does conform to the RDF/XML syntax and resultGenType is set to WHEN_SMI_IS_CREATED }</p> <p>then {</p> <p>the IUT creates the semanticMashupInstance resource and the IUT sends a valid Response containing Response Status Code set to 2001 (CREATED) }</p> | <p>Direction</p> <p>IUT ← AE</p> <p>IUT → AE</p> |

TP/oneM2M/CSE/SEM/CRE/016

| | | |
|---------------------------|---|------------------------------|
| TP Id | TP/oneM2M/CSE/SEM/CRE/016 | |
| Test objective | Check that the IUT creates successfully the <semanticMashupInstance> resource with resultGenType set to PERIODICALLY | |
| Reference | TS-0001 [1], clause 9.6.54, TS-0004 [2], clause 7.4.50.2.1, TS-0034 [6], clause 6.4.2 | |
| Config Id | CF01 | |
| Parent Release | Release 3 | |
| PICS Selection | PICS_CSE | |
| Initial conditions | <pre> with { the IUT being in the "initial state" and the IUT having registered the AE and the IUT having a <semanticMashupJobProfile> resource at TARGET_RESOURCE_ADDRESS and the AE having privileges to perform CREATE operation at TARGET_RESOURCE_ADDRESS } </pre> | |
| Expected behaviour | Test events <pre> when { the IUT receives a valid CREATE Request from AE containing To set to TARGET_RESOURCE_ADDRESS and Resource Type set to 41 (semanticMashupInstance) and From set to AE-ID and Content containing <semanticMashupInstance> resource representation containing smjPID attribute set to a reference to the <semanticMashupJobProfile> resource at TARGET_RESOURCE_ADDRESS smjInputParameter set to a value that does conform to the RDF/XML syntax and resultGenType is set to PERIODICALLY with a period of t1 } </pre> | Direction IUT ← AE |
| | then { the IUT creates a new semanticMashupInstance resource and the IUT sends a valid Response containing Response Status Code set to 2001 (CREATED) } | IUT → AE |

| TP Id | TP/oneM2M/CSE/SEM/CRE/017 | | | | | | | |
|---|--|-------------|-----------|---|----------|---|----------|--|
| Test objective | Check that the IUT rejects the creation request of a <semanticDescriptor> resource in which descriptorRepresentation attribute is set to "IRI". | | | | | | | |
| Reference | TS-0034 [6], clause 6.1.2, and TS-0004 [2], clause 7.4.34.2.1 | | | | | | | |
| Config Id | CF01 | | | | | | | |
| Parent Release | Release 3 | | | | | | | |
| PICS Selection | PICS_CSE | | | | | | | |
| Initial conditions | <p>with {</p> <p>the IUT being in the "initial state" and the IUT having registered the AE and the IUT having a parent resource at TARGET_RESOURCE_ADDRESS and the AE having privileges to perform CREATE operation at TARGET_RESOURCE_ADDRESS</p> <p>}</p> | | | | | | | |
| Expected behaviour | <table border="1"> <thead> <tr> <th>Test events</th> <th>Direction</th> </tr> </thead> <tbody> <tr> <td> <p>when {</p> <p>the IUT receives a valid CREATE Request from AE containing To set to TARGET_RESOURCE_ADDRESS and Resource Type set to 24 (semanticDescriptor) and From set to AE-ID and Content containing <semanticDescriptor> resource representation containing descriptorRepresentation attribute is set to "IRI"</p> <p>}</p> </td><td>IUT ← AE</td></tr> <tr> <td> <p>then {</p> <p>the IUT does not create the <semanticDescriptor> resource and the IUT sends a valid Response containing Response Status Code set to 4000 (BAD_REQUEST)</p> <p>}</p> </td><td>IUT → AE</td></tr> </tbody> </table> | Test events | Direction | <p>when {</p> <p>the IUT receives a valid CREATE Request from AE containing To set to TARGET_RESOURCE_ADDRESS and Resource Type set to 24 (semanticDescriptor) and From set to AE-ID and Content containing <semanticDescriptor> resource representation containing descriptorRepresentation attribute is set to "IRI"</p> <p>}</p> | IUT ← AE | <p>then {</p> <p>the IUT does not create the <semanticDescriptor> resource and the IUT sends a valid Response containing Response Status Code set to 4000 (BAD_REQUEST)</p> <p>}</p> | IUT → AE | |
| Test events | Direction | | | | | | | |
| <p>when {</p> <p>the IUT receives a valid CREATE Request from AE containing To set to TARGET_RESOURCE_ADDRESS and Resource Type set to 24 (semanticDescriptor) and From set to AE-ID and Content containing <semanticDescriptor> resource representation containing descriptorRepresentation attribute is set to "IRI"</p> <p>}</p> | IUT ← AE | | | | | | | |
| <p>then {</p> <p>the IUT does not create the <semanticDescriptor> resource and the IUT sends a valid Response containing Response Status Code set to 4000 (BAD_REQUEST)</p> <p>}</p> | IUT → AE | | | | | | | |

| TP Id | TP/oneM2M/CSE/SEM/CRE/018 | | | | | | | |
|--|---|-------------|-----------|--|----------|---|----------|--|
| Test objective | Check that the IUT generates a Response Status Code indicating a "ONTOLOGY_NOT_AVAILABLE" error when referenced ontology of the local linked <semanticDescriptor> resources cannot be retrieved during a semantic validation process. | | | | | | | |
| Reference | TS-0004 [2], clause 7.4.34.2.1 | | | | | | | |
| Config Id | CF01 | | | | | | | |
| Parent Release | Release 3 | | | | | | | |
| PICS Selection | PICS_CSE, PICS_SEMANTIC_VALIDATION | | | | | | | |
| Initial conditions | <p>with {</p> <p>the IUT being in the "initial state" and the IUT having registered the AE and the AE having privileges to perform CREATE operation at TARGET_RESOURCE_ADDRESS and <u>the IUT having privileges to perform RETRIEVE operation on <semanticDescriptor> resource at SEMANTIC_DESCRIPTOR_RESOURCE_ADDRESS containing ontologyRef attribute set to an invalid URI</u></p> <p>}</p> | | | | | | | |
| Expected behaviour | <table border="1"> <thead> <tr> <th>Test events</th> <th>Direction</th> </tr> </thead> <tbody> <tr> <td> <p>when {</p> <p>the IUT receives a valid CREATE Request from AE containing To set to TARGET_RESOURCE_ADDRESS and Resource Type set to 24 (semanticDescriptor) and From set to AE-ID and Content containing <semanticDescriptor> resource containing validationEnable attribute set to "True" and relatedSemantics attribute set to SEMANTIC_DESCRIPTOR_RESOURCE_ADDRESS</p> <p>}</p> </td> <td>IUT ← AE</td> </tr> <tr> <td> <p>then {</p> <p>the IUT sends a valid Response containing Response Status Code set to 4118 (ONTOLOGY_NOT_AVAILABLE)</p> <p>}</p> </td> <td>IUT → AE</td> </tr> </tbody> </table> | Test events | Direction | <p>when {</p> <p>the IUT receives a valid CREATE Request from AE containing To set to TARGET_RESOURCE_ADDRESS and Resource Type set to 24 (semanticDescriptor) and From set to AE-ID and Content containing <semanticDescriptor> resource containing validationEnable attribute set to "True" and relatedSemantics attribute set to SEMANTIC_DESCRIPTOR_RESOURCE_ADDRESS</p> <p>}</p> | IUT ← AE | <p>then {</p> <p>the IUT sends a valid Response containing Response Status Code set to 4118 (ONTOLOGY_NOT_AVAILABLE)</p> <p>}</p> | IUT → AE | |
| Test events | Direction | | | | | | | |
| <p>when {</p> <p>the IUT receives a valid CREATE Request from AE containing To set to TARGET_RESOURCE_ADDRESS and Resource Type set to 24 (semanticDescriptor) and From set to AE-ID and Content containing <semanticDescriptor> resource containing validationEnable attribute set to "True" and relatedSemantics attribute set to SEMANTIC_DESCRIPTOR_RESOURCE_ADDRESS</p> <p>}</p> | IUT ← AE | | | | | | | |
| <p>then {</p> <p>the IUT sends a valid Response containing Response Status Code set to 4118 (ONTOLOGY_NOT_AVAILABLE)</p> <p>}</p> | IUT → AE | | | | | | | |

| | | |
|---------------------------|---|------------------|
| TP Id | TP/oneM2M/CSE/SEM/CRE/019 | |
| Test objective | Check that the IUT generates a Response Status Code indicating a "INVALID_SEMANTICS" error when any aspect of the semantic validation process fails (according to clause 7.10.3.7.10.4 in TS-0034[6]). | |
| Reference | TS-0004 [2], clause 7.4.34.2.1, TS-0034 [6], clause 7.10.3, 7.10.4 | |
| Config Id | CF01 | |
| Parent Release | Release 3 | |
| PICS Selection | PICS_CSE, PICS_SEMANTIC_VALIDATION | |
| Initial conditions | <p>with {</p> <p>the IUT being in the "initial state" and the IUT having registered the AE and the the AE having privileges to perform CREATE operation at TARGET_RESOURCE_ADDRESS}</p> | |
| Expected behaviour | Test events | Direction |
| | <p>when {</p> <p>the IUT receives a valid CREATE Request from AE containing To set to TARGET_RESOURCE_ADDRESS and Resource Type set to 24 (semanticDescriptor) and From set to AE-ID and Content containing <semanticDescriptor> resource containing validationEnable attribute set to "True" and descriptor attribute set to invalid RDF triples</p> <p>}</p> | iIUT ← AE |
| | <p>then {</p> <p>the IUT sends a valid Response containing Response Status Code set to 4120 (INVALID_SEMANTICS)</p> <p>}</p> | IUT → AE |

7.2.2.15.2 UPDATE Operation

TP/oneM2M/CSE/SEM/UPD/001

| TP Id | TP/oneM2M/CSE/SEM/UPD/001 | | | | | | | |
|---|---|-------------|-----------|---|----------|--|----------|--|
| Test objective | Check that the IUT rejects the update request of a <semanticDescriptor> resource indicating a "NOT_ACCEPTABLE" error when the request contains both semanticOpExec and descriptor attributes | | | | | | | |
| Reference | TS-0004 [2], clause 7.4.34.2.3 | | | | | | | |
| Config Id | CF01 | | | | | | | |
| Parent Release | Release 3 | | | | | | | |
| PICS Selection | PICS_CSE | | | | | | | |
| Initial conditions | <pre> with { the IUT being in the "initial state" and the IUT having registered the AE and the IUT having <semanticDescriptor> resource at TARGET_RESOURCE_ADDRESS and the AE having privileges to perform UPDATE operation at TARGET_RESOURCE_ADDRESS } </pre> | | | | | | | |
| Expected behaviour | <table border="1"> <thead> <tr> <th>Test events</th> <th>Direction</th> </tr> </thead> <tbody> <tr> <td> when { the IUT receives a valid UPDATE Request from AE containing To set to TARGET_RESOURCE_ADDRESS and Resource Type set to 24 (semanticDescriptor) and From set to AE-ID and Content containing <semanticDescriptor> resource representation containing descriptor attribute set to a valid value semanticOpExec attribute set to a valid value } </td> <td>IUT ← AE</td> </tr> <tr> <td> then { the IUT does not update the <semanticDescriptor> resource and the IUT sends a valid Response containing Response Status Code set to 5207 (NOT_ACCEPTABLE) } </td> <td>IUT → AE</td> </tr> </tbody> </table> | Test events | Direction | when { the IUT receives a valid UPDATE Request from AE containing To set to TARGET_RESOURCE_ADDRESS and Resource Type set to 24 (semanticDescriptor) and From set to AE-ID and Content containing <semanticDescriptor> resource representation containing descriptor attribute set to a valid value semanticOpExec attribute set to a valid value } | IUT ← AE | then { the IUT does not update the <semanticDescriptor> resource and the IUT sends a valid Response containing Response Status Code set to 5207 (NOT_ACCEPTABLE) } | IUT → AE | |
| Test events | Direction | | | | | | | |
| when { the IUT receives a valid UPDATE Request from AE containing To set to TARGET_RESOURCE_ADDRESS and Resource Type set to 24 (semanticDescriptor) and From set to AE-ID and Content containing <semanticDescriptor> resource representation containing descriptor attribute set to a valid value semanticOpExec attribute set to a valid value } | IUT ← AE | | | | | | | |
| then { the IUT does not update the <semanticDescriptor> resource and the IUT sends a valid Response containing Response Status Code set to 5207 (NOT_ACCEPTABLE) } | IUT → AE | | | | | | | |

| TP Id | TP/oneM2M/CSE/SEM/UPD/002 | | | | | | | |
|--|--|-------------|-----------|--|----------|--|----------|--|
| Test objective | Check that the IUT rejects the update request of a <semanticDescriptor> resource indicating a "NOT_ACCEPTABLE" error when the request contains a semanticOpExec attribute which does not contain a valid SPARQL query request | | | | | | | |
| Reference | TS-0004 [2], clause 7.4.34.2.3 | | | | | | | |
| Config Id | CF01 | | | | | | | |
| Parent Release | Release 3 | | | | | | | |
| PICS Selection | PICS_CSE | | | | | | | |
| Initial conditions | <p>with {</p> <p style="padding-left: 20px;">the IUT being in the "initial state"</p> <p style="padding-left: 20px;">and the IUT having registered the AE</p> <p style="padding-left: 20px;">and the IUT having <semanticDescriptor> resource at TARGET_RESOURCE_ADDRESS</p> <p style="padding-left: 20px;">and the AE having privileges to perform UPDATE operation at TARGET_RESOURCE_ADDRESS</p> <p>}</p> | | | | | | | |
| Expected behaviour | <table border="1"> <thead> <tr> <th>Test events</th> <th>Direction</th> </tr> </thead> <tbody> <tr> <td> <p>when {</p> <p style="padding-left: 20px;">the IUT receives a valid UPDATE Request from AE containing</p> <p style="padding-left: 20px;">To set to TARGET_RESOURCE_ADDRESS and</p> <p style="padding-left: 20px;">Resource Type set to 24 (semanticDescriptor) and</p> <p style="padding-left: 20px;">From set to AE-ID and</p> <p style="padding-left: 20px;">Content containing</p> <p style="padding-left: 40px;"><semanticDescriptor> resource representation containing</p> <p style="padding-left: 40px;">no descriptor attribute and</p> <p style="padding-left: 40px;">semanticOpExec attribute set to a non-valid SPARQL query request</p> <p>}</p> </td> <td>IUT ← AE</td> </tr> <tr> <td> <p>then {</p> <p style="padding-left: 20px;">the IUT does not update the <semanticDescriptor> resource and</p> <p style="padding-left: 20px;">the IUT sends a valid Response containing</p> <p style="padding-left: 20px;">Response Status Code set to 5207 (NOT_ACCEPTABLE)</p> <p>}</p> </td> <td>IUT → AE</td> </tr> </tbody> </table> | Test events | Direction | <p>when {</p> <p style="padding-left: 20px;">the IUT receives a valid UPDATE Request from AE containing</p> <p style="padding-left: 20px;">To set to TARGET_RESOURCE_ADDRESS and</p> <p style="padding-left: 20px;">Resource Type set to 24 (semanticDescriptor) and</p> <p style="padding-left: 20px;">From set to AE-ID and</p> <p style="padding-left: 20px;">Content containing</p> <p style="padding-left: 40px;"><semanticDescriptor> resource representation containing</p> <p style="padding-left: 40px;">no descriptor attribute and</p> <p style="padding-left: 40px;">semanticOpExec attribute set to a non-valid SPARQL query request</p> <p>}</p> | IUT ← AE | <p>then {</p> <p style="padding-left: 20px;">the IUT does not update the <semanticDescriptor> resource and</p> <p style="padding-left: 20px;">the IUT sends a valid Response containing</p> <p style="padding-left: 20px;">Response Status Code set to 5207 (NOT_ACCEPTABLE)</p> <p>}</p> | IUT → AE | |
| Test events | Direction | | | | | | | |
| <p>when {</p> <p style="padding-left: 20px;">the IUT receives a valid UPDATE Request from AE containing</p> <p style="padding-left: 20px;">To set to TARGET_RESOURCE_ADDRESS and</p> <p style="padding-left: 20px;">Resource Type set to 24 (semanticDescriptor) and</p> <p style="padding-left: 20px;">From set to AE-ID and</p> <p style="padding-left: 20px;">Content containing</p> <p style="padding-left: 40px;"><semanticDescriptor> resource representation containing</p> <p style="padding-left: 40px;">no descriptor attribute and</p> <p style="padding-left: 40px;">semanticOpExec attribute set to a non-valid SPARQL query request</p> <p>}</p> | IUT ← AE | | | | | | | |
| <p>then {</p> <p style="padding-left: 20px;">the IUT does not update the <semanticDescriptor> resource and</p> <p style="padding-left: 20px;">the IUT sends a valid Response containing</p> <p style="padding-left: 20px;">Response Status Code set to 5207 (NOT_ACCEPTABLE)</p> <p>}</p> | IUT → AE | | | | | | | |

| TP Id | TP/oneM2M/CSE/SEM/UPD/003 | | | | | | | |
|--|--|-------------|-----------|--|----------|--|----------|--|
| Test objective | Check that the IUT rejects the update request of a <semanticDescriptor> resource when the request contains a descriptor attribute which does not conform to the RDF/XML syntax as defined in RDF 1.1 XML Syntax | | | | | | | |
| Reference | TS-0004 [2], clause 7.4.34.2.3 | | | | | | | |
| Config Id | CF01 | | | | | | | |
| Parent Release | Release 3 | | | | | | | |
| PICS Selection | PICS_CSE | | | | | | | |
| Initial conditions | <p>with {</p> <p>the IUT being in the "initial state" and the IUT having registered the AE and the IUT having <semanticDescriptor> resource at TARGET_RESOURCE_ADDRESS and the AE having privileges to perform UPDATE operation at TARGET_RESOURCE_ADDRESS }</p> | | | | | | | |
| Expected behaviour | <table border="1"> <thead> <tr> <th>Test events</th> <th>Direction</th> </tr> </thead> <tbody> <tr> <td> <p>when {</p> <p>the IUT receives a valid UPDATE Request from AE containing To set to TARGET_RESOURCE_ADDRESS and Resource Type set to 24 (semanticDescriptor) and From set to AE-ID and Content containing <semanticDescriptor> resource representation containing no semanticOpExec attribute and descriptor attribute set to a value that does not conform to the RDF/XML syntax }</p> </td><td>IUT ← AE</td></tr> <tr> <td> <p>then {</p> <p>the IUT does not update the <semanticDescriptor> resource and the IUT sends a valid Response containing Response Status Code set to 5207 (NOT_ACCEPTABLE) }</p> </td><td>IUT → AE</td></tr> </tbody> </table> | Test events | Direction | <p>when {</p> <p>the IUT receives a valid UPDATE Request from AE containing To set to TARGET_RESOURCE_ADDRESS and Resource Type set to 24 (semanticDescriptor) and From set to AE-ID and Content containing <semanticDescriptor> resource representation containing no semanticOpExec attribute and descriptor attribute set to a value that does not conform to the RDF/XML syntax }</p> | IUT ← AE | <p>then {</p> <p>the IUT does not update the <semanticDescriptor> resource and the IUT sends a valid Response containing Response Status Code set to 5207 (NOT_ACCEPTABLE) }</p> | IUT → AE | |
| Test events | Direction | | | | | | | |
| <p>when {</p> <p>the IUT receives a valid UPDATE Request from AE containing To set to TARGET_RESOURCE_ADDRESS and Resource Type set to 24 (semanticDescriptor) and From set to AE-ID and Content containing <semanticDescriptor> resource representation containing no semanticOpExec attribute and descriptor attribute set to a value that does not conform to the RDF/XML syntax }</p> | IUT ← AE | | | | | | | |
| <p>then {</p> <p>the IUT does not update the <semanticDescriptor> resource and the IUT sends a valid Response containing Response Status Code set to 5207 (NOT_ACCEPTABLE) }</p> | IUT → AE | | | | | | | |

| TP Id | TP/oneM2M/CSE/SEM/UPD/004 | | | | | | | |
|---|--|-------------|-----------|---|----------|--|-----------|--|
| Test objective | Check that the IUT retrieves the referenced ontology from the ontology hosting CSE when performing a semantic validation as a result of an update of a stand-alone <semanticDescriptor> resource | | | | | | | |
| Reference | TS-0034 [6], clauses 6.1.4 and 7.10.3, and TS-0004 [2], clause 7.4.34.2.3 | | | | | | | |
| Parent Release | Release 3 | | | | | | | |
| Config Id | CF02 | | | | | | | |
| PICS Selection | PICS_CSE | | | | | | | |
| Initial conditions | <p>with {</p> <p>the IUT being in the "initial state" and the IUT having registered the AE and the IUT having <semanticDescriptor> resource at TARGET_RESOURCE_ADDRESS and the AE having privileges to perform UPDATE operation at TARGET_RESOURCE_ADDRESS and the IUT having a local policy that allows semantic validation procedures and the ontology hosting CSE having an <ontology> resource at REFERENCED_ONTOLOGY_ADDRESS</p> <p>}</p> | | | | | | | |
| Expected behaviour | <table border="1"> <thead> <tr> <th>Test events</th> <th>Direction</th> </tr> </thead> <tbody> <tr> <td> <p>when {</p> <p>the IUT receives a valid UPDATE Request from AE containing To set to TARGET_RESOURCE_ADDRESS and Resource Type set to 24 (semanticDescriptor) and From set to AE-ID and Content containing <semanticDescriptor> resource representation containing validationEnable attribute set to "True" and descriptor attribute and ontologyRef attribute set to REFERENCED_ONTOLOGY_ADDRESS</p> <p>}</p> </td><td>IUT ← AE</td></tr> <tr> <td> <p>then {</p> <p>the IUT sends a valid RETRIEVE Request containing To set to REFERENCED_ONTOLOGY_ADDRESS and Content containing <ontology> resource representation</p> <p>}</p> </td><td>IUT → CSE</td></tr> </tbody> </table> | Test events | Direction | <p>when {</p> <p>the IUT receives a valid UPDATE Request from AE containing To set to TARGET_RESOURCE_ADDRESS and Resource Type set to 24 (semanticDescriptor) and From set to AE-ID and Content containing <semanticDescriptor> resource representation containing validationEnable attribute set to "True" and descriptor attribute and ontologyRef attribute set to REFERENCED_ONTOLOGY_ADDRESS</p> <p>}</p> | IUT ← AE | <p>then {</p> <p>the IUT sends a valid RETRIEVE Request containing To set to REFERENCED_ONTOLOGY_ADDRESS and Content containing <ontology> resource representation</p> <p>}</p> | IUT → CSE | |
| Test events | Direction | | | | | | | |
| <p>when {</p> <p>the IUT receives a valid UPDATE Request from AE containing To set to TARGET_RESOURCE_ADDRESS and Resource Type set to 24 (semanticDescriptor) and From set to AE-ID and Content containing <semanticDescriptor> resource representation containing validationEnable attribute set to "True" and descriptor attribute and ontologyRef attribute set to REFERENCED_ONTOLOGY_ADDRESS</p> <p>}</p> | IUT ← AE | | | | | | | |
| <p>then {</p> <p>the IUT sends a valid RETRIEVE Request containing To set to REFERENCED_ONTOLOGY_ADDRESS and Content containing <ontology> resource representation</p> <p>}</p> | IUT → CSE | | | | | | | |

| TP Id | TP/oneM2M/CSE/SEM/UPD/005 | | | | | | | |
|--|--|-------------|-----------|--|----------|--|----------|--|
| Test objective | Check that the IUT sends a valid response when performing a semantic validation as a result of an update of a stand-alone <semanticDescriptor> resource | | | | | | | |
| Reference | TS-0034 [6], clauses 6.1.4 and 7.10.3, and TS-0004 [2], clause 7.4.34.2.3 | | | | | | | |
| Parent Release | Release 3 | | | | | | | |
| Config Id | CF02 | | | | | | | |
| PICS Selection | PICS_CSE | | | | | | | |
| Initial conditions | <p>with {</p> <p>the IUT being in the "initial state" and the IUT having registered the AE and the IUT having <semanticDescriptor> resource at TARGET_RESOURCE_ADDRESS and the AE having privileges to perform UPDATE operation at TARGET_RESOURCE_ADDRESS and the IUT having a local policy that allows semantic validation procedures and the ontology hosting CSE having an <ontology> resource at REFERENCED_ONTOLOGY_ADDRESS</p> } | | | | | | | |
| Expected behaviour | <table border="1"> <thead> <tr> <th>Test events</th> <th>Direction</th> </tr> </thead> <tbody> <tr> <td> <p>when {</p> <p>the IUT receives a valid UPDATE Request from AE containing To set to TARGET_RESOURCE_ADDRESS and Resource Type set to 24 (semanticDescriptor) and From set to AE-ID and Content containing <semanticDescriptor> resource representation containing validationEnable attribute set to "True" and descriptor attribute and ontologyRef attribute set to REFERENCED_ONTOLOGY_ADDRESS</p> } </td><td>IUT ← AE</td></tr> <tr> <td> <p>then {</p> <p>the IUT sends a valid Response containing Response Status Code set to 2002 (UPDATED) and Content containing <semanticDescriptor> resource</p> } </td><td>IUT → AE</td></tr> </tbody> </table> | Test events | Direction | <p>when {</p> <p>the IUT receives a valid UPDATE Request from AE containing To set to TARGET_RESOURCE_ADDRESS and Resource Type set to 24 (semanticDescriptor) and From set to AE-ID and Content containing <semanticDescriptor> resource representation containing validationEnable attribute set to "True" and descriptor attribute and ontologyRef attribute set to REFERENCED_ONTOLOGY_ADDRESS</p> } | IUT ← AE | <p>then {</p> <p>the IUT sends a valid Response containing Response Status Code set to 2002 (UPDATED) and Content containing <semanticDescriptor> resource</p> } | IUT → AE | |
| Test events | Direction | | | | | | | |
| <p>when {</p> <p>the IUT receives a valid UPDATE Request from AE containing To set to TARGET_RESOURCE_ADDRESS and Resource Type set to 24 (semanticDescriptor) and From set to AE-ID and Content containing <semanticDescriptor> resource representation containing validationEnable attribute set to "True" and descriptor attribute and ontologyRef attribute set to REFERENCED_ONTOLOGY_ADDRESS</p> } | IUT ← AE | | | | | | | |
| <p>then {</p> <p>the IUT sends a valid Response containing Response Status Code set to 2002 (UPDATED) and Content containing <semanticDescriptor> resource</p> } | IUT → AE | | | | | | | |

| TP Id | TP/oneM2M/CSE/SEM/UPD/006 | | | | | | | |
|---|--|-------------|-----------|---|----------|--|-----------|--|
| Test objective | Check that the IUT retrieves the linked <semanticDescriptor> resource from the hosting CSE when performing a semantic validation as a result of an update of the <semanticValidation> virtual resource | | | | | | | |
| Reference | TS-0034 [6], clauses 6.9.4 and 7.10.3, and TS-0004 [2], clause 7.4.48.2.3 | | | | | | | |
| Parent Release | Release 3 | | | | | | | |
| Config Id | CF02 | | | | | | | |
| PICS Selection | PICS_CSE | | | | | | | |
| Initial conditions | <p>with {</p> <p>the IUT being in the "initial state" and the IUT having registered the AE and the IUT having a <ontologyRepository> resource at TARGET_RESOURCE_ADDRESS and the AE having privileges to perform UPDATE operation at TARGET_RESOURCE_ADDRESS and the IUT having a <ontology> resource at REFERENCED_ONTOLOGY_ADDRESS and the IUT having a local policy that allows semantic validation procedures and the hosting CSE having a <semanticDescriptor> resource</p> } | | | | | | | |
| Expected behaviour | <table border="1"> <thead> <tr> <th>Test events</th> <th>Direction</th> </tr> </thead> <tbody> <tr> <td> <p>when {</p> <p>the IUT receives a valid UPDATE Request from AE containing To set to the TARGET_RESOURCE_ADDRESS/smv and From set to AE-ID and Content containing <semanticDescriptor> resource representation containing validationEnable attribute set to "True" and descriptor attribute and ontologyRef attribute set to REFERENCED_ONTOLOGY_ADDRESS and relatedSemantics attribute set to LINKED_SEMANTIC_DESCRIPTOR_ADDRESS</p> } </td><td>IUT ← AE</td></tr> <tr> <td> <p>then {</p> <p>the IUT sends a valid RETRIEVE Request containing To set to LINKED_SEMANTIC_DESCRIPTOR_ADDRESS and Content containing <semanticDescriptor> resource representation</p> } </td><td>IUT → CSE</td></tr> </tbody> </table> | Test events | Direction | <p>when {</p> <p>the IUT receives a valid UPDATE Request from AE containing To set to the TARGET_RESOURCE_ADDRESS/smv and From set to AE-ID and Content containing <semanticDescriptor> resource representation containing validationEnable attribute set to "True" and descriptor attribute and ontologyRef attribute set to REFERENCED_ONTOLOGY_ADDRESS and relatedSemantics attribute set to LINKED_SEMANTIC_DESCRIPTOR_ADDRESS</p> } | IUT ← AE | <p>then {</p> <p>the IUT sends a valid RETRIEVE Request containing To set to LINKED_SEMANTIC_DESCRIPTOR_ADDRESS and Content containing <semanticDescriptor> resource representation</p> } | IUT → CSE | |
| Test events | Direction | | | | | | | |
| <p>when {</p> <p>the IUT receives a valid UPDATE Request from AE containing To set to the TARGET_RESOURCE_ADDRESS/smv and From set to AE-ID and Content containing <semanticDescriptor> resource representation containing validationEnable attribute set to "True" and descriptor attribute and ontologyRef attribute set to REFERENCED_ONTOLOGY_ADDRESS and relatedSemantics attribute set to LINKED_SEMANTIC_DESCRIPTOR_ADDRESS</p> } | IUT ← AE | | | | | | | |
| <p>then {</p> <p>the IUT sends a valid RETRIEVE Request containing To set to LINKED_SEMANTIC_DESCRIPTOR_ADDRESS and Content containing <semanticDescriptor> resource representation</p> } | IUT → CSE | | | | | | | |

| TP Id | TP/oneM2M/CSE/SEM/UPD/007 | | | | | | | |
|---|---|-------------|-----------|---|----------|---|-----------|--|
| Test objective | Check that the IUT sends a valid response when performing a semantic validation a semantic validation as a result of an update of the <semanticValidation> virtual resource | | | | | | | |
| Reference | TS-0034 [6], clauses 6.9.4 and 7.10.3, and TS-0004 [2], clause 7.4.48.2.3 | | | | | | | |
| Parent Release | Release 3 | | | | | | | |
| Config Id | CF02 | | | | | | | |
| PICS Selection | PICS_CSE | | | | | | | |
| Initial conditions | <p>with {</p> <p>the IUT being in the "initial state" and the IUT having registered the AE and the IUT having a <ontologyRepository> resource at TARGET_RESOURCE_ADDRESS and the AE having privileges to perform UPDATE operation at TARGET_RESOURCE_ADDRESS and the IUT having a <ontology> resource at REFERENCED_ONTOLOGY_ADDRESS and the IUT having a local policy that allows semantic validation procedures and the hosting CSE having a <semanticDescriptor> resource</p> } | | | | | | | |
| Expected behaviour | <table border="1"> <thead> <tr> <th>Test events</th> <th>Direction</th> </tr> </thead> <tbody> <tr> <td> <p>when {</p> <p>the IUT receives a valid UPDATE Request from AE containing To set to the TARGET_RESOURCE_ADDRESS/smv and From set to AE-ID and Content containing <semanticDescriptor> resource representation containing validationEnable attribute set to "True" and descriptor attribute and ontologyRef attribute set to REFERENCED_ONTOLOGY_ADDRESS and relatedSemantics attribute set to LINKED_SEMANTIC_DESCRIPTOR_ADDRESS</p> } </td><td>IUT ← AE</td></tr> <tr> <td> <p>then {</p> <p>the IUT sends a valid response containing Response Status Code indicating success of validation Content containing <semanticDescriptor> resource representation</p> } </td><td>IUT → CSE</td></tr> </tbody> </table> | Test events | Direction | <p>when {</p> <p>the IUT receives a valid UPDATE Request from AE containing To set to the TARGET_RESOURCE_ADDRESS/smv and From set to AE-ID and Content containing <semanticDescriptor> resource representation containing validationEnable attribute set to "True" and descriptor attribute and ontologyRef attribute set to REFERENCED_ONTOLOGY_ADDRESS and relatedSemantics attribute set to LINKED_SEMANTIC_DESCRIPTOR_ADDRESS</p> } | IUT ← AE | <p>then {</p> <p>the IUT sends a valid response containing Response Status Code indicating success of validation Content containing <semanticDescriptor> resource representation</p> } | IUT → CSE | |
| Test events | Direction | | | | | | | |
| <p>when {</p> <p>the IUT receives a valid UPDATE Request from AE containing To set to the TARGET_RESOURCE_ADDRESS/smv and From set to AE-ID and Content containing <semanticDescriptor> resource representation containing validationEnable attribute set to "True" and descriptor attribute and ontologyRef attribute set to REFERENCED_ONTOLOGY_ADDRESS and relatedSemantics attribute set to LINKED_SEMANTIC_DESCRIPTOR_ADDRESS</p> } | IUT ← AE | | | | | | | |
| <p>then {</p> <p>the IUT sends a valid response containing Response Status Code indicating success of validation Content containing <semanticDescriptor> resource representation</p> } | IUT → CSE | | | | | | | |

| | | |
|---------------------------|--|---|
| TP Id | TP/oneM2M/CSE/SEM/UPD/008 | |
| Test objective | Check that the IUT rejects the update request of a <semanticMashupJobProfile> resource, indicating a "NOT_ACCEPTABLE" error, when its <i>inputDescriptor</i> attribute value does not conform to the RDF/XML syntax as defined in RDF 1.1 XML Syntax | |
| Reference | TS-0034 [6], clause 6.3.4, and TS-0004 [2], clause 7.4.49.2.3 | |
| Config Id | CF01 | |
| Parent Release | Release 3 | |
| PICS Selection | PICS_CSE | |
| Initial conditions | <p>with {</p> <p>the IUT being in the "initial state" and the IUT having registered the AE and the IUT having a <semanticMashupJobProfile> resource at TARGET_RESOURCE_ADDRESS containing accessControlPolicyIDs attribute set to allow the AE privileges to perform UPDATE operation</p> <p>}</p> | |
| Expected behaviour | Test events <p>When {</p> <p>the IUT receives a valid UPDATE Request from AE containing To set to TARGET_RESOURCE_ADDRESS and Resource Type set to 40 (semanticMashupJobProfile) and From set to AE-ID and Content containing <semanticMashupJobProfile> resource representation containing inputDescriptor attribute set to a value that does not conform to the RDF/XML syntax</p> <p>}</p> <p>then {</p> <p>the IUT does not create the <semanticMashupJobProfile> resource and the IUT sends a valid Response containing Response Status Code set to 5207 (NOT_ACCEPTABLE)</p> <p>}</p> | Direction <p>IUT ← AE</p> <p>IUT → AE</p> |

| TP Id | TP/oneM2M/CSE/SEM/UPD/009 | | | | | | | |
|---|--|-------------|-----------|---|----------|---|----------|--|
| Test objective | Check that the IUT rejects the update request of a <semanticMashupJobProfile> resource, indicating a "NOT_ACCEPTABLE" error, when its <i>outputDescriptor</i> attribute value does not conform to the RDF/XML syntax as defined in RDF 1.1 XML Syntax | | | | | | | |
| Reference | TS-0034 [6], clause 6.3.4, and TS-0004 [2], clause 7.4.49.2.3 | | | | | | | |
| Config Id | CF01 | | | | | | | |
| Parent Release | Release 3 | | | | | | | |
| PICS Selection | PICS_CSE | | | | | | | |
| Initial conditions | <p>with {</p> <p style="padding-left: 20px;">the IUT being in the "initial state" and</p> <p style="padding-left: 20px;">the IUT having registered the AE and</p> <p style="padding-left: 20px;">the IUT having a < semanticMashupJobProfile > resource at TARGET_RESOURCE_ADDRESS containing accessControlPolicyIDs attribute set to allow the AE privileges to perform UPDATE operation</p> <p>}</p> | | | | | | | |
| Expected behaviour | <table border="1"> <thead> <tr> <th>Test events</th> <th>Direction</th> </tr> </thead> <tbody> <tr> <td> When { <p style="padding-left: 20px;">the IUT receives a valid UPDATE Request from AE containing To set to TARGET_RESOURCE_ADDRESS and Resource Type set to 40 (semanticMashupJobProfile) and From set to AE-ID and Content containing <semanticMashupJobProfile> resource representation containing outputDescriptor attribute set to a value that does not conform to the RDF/XML syntax</p> } </td> <td>IUT ← AE</td> </tr> <tr> <td> then { <p style="padding-left: 20px;">the IUT does not create the <semanticMashupJobProfile> resource and the IUT sends a valid Response containing Response Status Code set to 5207 (NOT_ACCEPTABLE)</p> } </td> <td>IUT → AE</td> </tr> </tbody> </table> | Test events | Direction | When { <p style="padding-left: 20px;">the IUT receives a valid UPDATE Request from AE containing To set to TARGET_RESOURCE_ADDRESS and Resource Type set to 40 (semanticMashupJobProfile) and From set to AE-ID and Content containing <semanticMashupJobProfile> resource representation containing outputDescriptor attribute set to a value that does not conform to the RDF/XML syntax</p> } | IUT ← AE | then { <p style="padding-left: 20px;">the IUT does not create the <semanticMashupJobProfile> resource and the IUT sends a valid Response containing Response Status Code set to 5207 (NOT_ACCEPTABLE)</p> } | IUT → AE | |
| Test events | Direction | | | | | | | |
| When { <p style="padding-left: 20px;">the IUT receives a valid UPDATE Request from AE containing To set to TARGET_RESOURCE_ADDRESS and Resource Type set to 40 (semanticMashupJobProfile) and From set to AE-ID and Content containing <semanticMashupJobProfile> resource representation containing outputDescriptor attribute set to a value that does not conform to the RDF/XML syntax</p> } | IUT ← AE | | | | | | | |
| then { <p style="padding-left: 20px;">the IUT does not create the <semanticMashupJobProfile> resource and the IUT sends a valid Response containing Response Status Code set to 5207 (NOT_ACCEPTABLE)</p> } | IUT → AE | | | | | | | |

| TP Id | TP/oneM2M/CSE/SEM/UPD/010 | | | | | | | |
|---|--|-------------|-----------|---|----------|---|----------|--|
| Test objective | Check that the IUT rejects the update request of a <semanticMashupJobProfile> resource, indicating a "NOT_ACCEPTABLE" error, when its <i>functionDescriptor</i> attribute value does not conform to the RDF/XML syntax as defined in RDF 1.1 XML Syntax | | | | | | | |
| Reference | TS-0034 [6], clause 6.3.4, and TS-0004 [2], clause 7.4.49.2.3 | | | | | | | |
| Config Id | CF01 | | | | | | | |
| Parent Release | Release 3 | | | | | | | |
| PICS Selection | PICS_CSE | | | | | | | |
| Initial conditions | <p>with {</p> <p style="padding-left: 20px;">the IUT being in the "initial state" and the IUT having registered the AE and the IUT having a <semanticMashupJobProfile> resource at TARGET_RESOURCE_ADDRESS containing accessControlPolicyIDs attribute set to allow the AE privileges to perform UPDATE operation</p> <p>}</p> | | | | | | | |
| Expected behaviour | <table border="1"> <thead> <tr> <th>Test events</th> <th>Direction</th> </tr> </thead> <tbody> <tr> <td> <p>When {</p> <p style="padding-left: 20px;">the IUT receives a valid UPDATE Request from AE containing To set to TARGET_RESOURCE_ADDRESS and Resource Type set to 40 (semanticMashupJobProfile) and From set to AE-ID and Content containing <semanticMashupJobProfile> resource representation containing functionDescriptor attribute set to a value that does not conform to the RDF/XML syntax</p> <p>}</p></td> <td>IUT ← AE</td> </tr> <tr> <td> <p>then {</p> <p style="padding-left: 20px;">the IUT does not create the <semanticMashupJobProfile> resource and the IUT sends a valid Response containing Response Status Code set to 5207 (NOT_ACCEPTABLE)</p> <p>}</p></td> <td>IUT → AE</td> </tr> </tbody> </table> | Test events | Direction | <p>When {</p> <p style="padding-left: 20px;">the IUT receives a valid UPDATE Request from AE containing To set to TARGET_RESOURCE_ADDRESS and Resource Type set to 40 (semanticMashupJobProfile) and From set to AE-ID and Content containing <semanticMashupJobProfile> resource representation containing functionDescriptor attribute set to a value that does not conform to the RDF/XML syntax</p> <p>}</p> | IUT ← AE | <p>then {</p> <p style="padding-left: 20px;">the IUT does not create the <semanticMashupJobProfile> resource and the IUT sends a valid Response containing Response Status Code set to 5207 (NOT_ACCEPTABLE)</p> <p>}</p> | IUT → AE | |
| Test events | Direction | | | | | | | |
| <p>When {</p> <p style="padding-left: 20px;">the IUT receives a valid UPDATE Request from AE containing To set to TARGET_RESOURCE_ADDRESS and Resource Type set to 40 (semanticMashupJobProfile) and From set to AE-ID and Content containing <semanticMashupJobProfile> resource representation containing functionDescriptor attribute set to a value that does not conform to the RDF/XML syntax</p> <p>}</p> | IUT ← AE | | | | | | | |
| <p>then {</p> <p style="padding-left: 20px;">the IUT does not create the <semanticMashupJobProfile> resource and the IUT sends a valid Response containing Response Status Code set to 5207 (NOT_ACCEPTABLE)</p> <p>}</p> | IUT → AE | | | | | | | |

| TP Id | TP/oneM2M/CSE/SEM/UPD/011 | | | | | | | |
|---|--|-------------|-----------|---|----------|---|----------|--|
| Test objective | Check that the IUT rejects the creation request of a <semanticMashupJobProfile> resource, indicating a "NOT_ACCEPTABLE" error, when its <i>memberFilter</i> attribute value does not conform to a valid SPARQL query request | | | | | | | |
| Reference | TS-0034 [6], clause 6.3.4, and TS-0004 [2], clause 7.4.49.2.3 | | | | | | | |
| Config Id | CF01 | | | | | | | |
| Parent Release | Release 3 | | | | | | | |
| PICS Selection | PICS_CSE | | | | | | | |
| Initial conditions | <p>with {</p> <p style="padding-left: 20px;">the IUT being in the "initial state" and</p> <p style="padding-left: 20px;">the IUT having registered the AE and</p> <p style="padding-left: 20px;">the IUT having a < semanticMashupJobProfile > resource at TARGET_RESOURCE_ADDRESS containing</p> <p style="padding-left: 40px;">accessControlPolicyIDs attribute set to allow the AE privileges to perform UPDATE operation</p> <p>}</p> | | | | | | | |
| Expected behaviour | <table border="1"> <thead> <tr> <th>Test events</th> <th>Direction</th> </tr> </thead> <tbody> <tr> <td> <p>When {</p> <p style="padding-left: 20px;">the IUT receives a valid UPDATE Request from AE containing To set to TARGET_RESOURCE_ADDRESS and</p> <p style="padding-left: 20px;">Resource Type set to 40 (semanticMashupJobProfile) and</p> <p style="padding-left: 20px;">From set to AE-ID and</p> <p style="padding-left: 20px;">Content containing <semanticMashupJobProfile> resource representation containing memberFilter attribute set to a value that does not conform to a valid SPARQL query request</p> <p>}</p> </td><td>IUT ← AE</td></tr> <tr> <td> <p>then {</p> <p style="padding-left: 20px;">the IUT does not create the <semanticMashupJobProfile> resource and</p> <p style="padding-left: 20px;">the IUT sends a valid Response containing</p> <p style="padding-left: 40px;">Response Status Code set to 5207 (NOT_ACCEPTABLE)</p> <p>}</p> </td><td>IUT → AE</td></tr> </tbody> </table> | Test events | Direction | <p>When {</p> <p style="padding-left: 20px;">the IUT receives a valid UPDATE Request from AE containing To set to TARGET_RESOURCE_ADDRESS and</p> <p style="padding-left: 20px;">Resource Type set to 40 (semanticMashupJobProfile) and</p> <p style="padding-left: 20px;">From set to AE-ID and</p> <p style="padding-left: 20px;">Content containing <semanticMashupJobProfile> resource representation containing memberFilter attribute set to a value that does not conform to a valid SPARQL query request</p> <p>}</p> | IUT ← AE | <p>then {</p> <p style="padding-left: 20px;">the IUT does not create the <semanticMashupJobProfile> resource and</p> <p style="padding-left: 20px;">the IUT sends a valid Response containing</p> <p style="padding-left: 40px;">Response Status Code set to 5207 (NOT_ACCEPTABLE)</p> <p>}</p> | IUT → AE | |
| Test events | Direction | | | | | | | |
| <p>When {</p> <p style="padding-left: 20px;">the IUT receives a valid UPDATE Request from AE containing To set to TARGET_RESOURCE_ADDRESS and</p> <p style="padding-left: 20px;">Resource Type set to 40 (semanticMashupJobProfile) and</p> <p style="padding-left: 20px;">From set to AE-ID and</p> <p style="padding-left: 20px;">Content containing <semanticMashupJobProfile> resource representation containing memberFilter attribute set to a value that does not conform to a valid SPARQL query request</p> <p>}</p> | IUT ← AE | | | | | | | |
| <p>then {</p> <p style="padding-left: 20px;">the IUT does not create the <semanticMashupJobProfile> resource and</p> <p style="padding-left: 20px;">the IUT sends a valid Response containing</p> <p style="padding-left: 40px;">Response Status Code set to 5207 (NOT_ACCEPTABLE)</p> <p>}</p> | IUT → AE | | | | | | | |

| TP Id | TP/oneM2M/CSE/SEM/UPD/012 | | | | | | | |
|---|--|--------------------|------------------|---|----------|---|----------|--|
| Test objective | Check that the IUT creates a new semanticMashupResult when the parameter smjplInputParameter is updated | | | | | | | |
| Reference | TS-0034 [6], clause 6.3.4, and TS-0004 [2], clause 7.4.49.2.3 | | | | | | | |
| Config Id | CF01 | | | | | | | |
| Parent Release | Release 3 | | | | | | | |
| PICS Selection | PICS_CSE | | | | | | | |
| Initial conditions | <pre> with { the IUT being in the "initial state" and the IUT having registered the AE and the IUT having a <semanticMashupInstance> resource at TARGET_RESOURCE_ADDRESS containing accessControlPolicyIDs attribute set to allow the AE privileges to perform UPDATE operation } </pre> | | | | | | | |
| Expected behaviour | <table border="1"> <thead> <tr> <th>Test events</th> <th>Direction</th> </tr> </thead> <tbody> <tr> <td> When { the IUT receives a valid UPDATE Request from AE containing To set to TARGET_RESOURCE_ADDRESS and Resource Type set to 41 (semanticMashupInstance) and From set to AE-ID and Content containing smjplInputParameter attribute set to a valid value } </td> <td>IUT ← AE</td> </tr> <tr> <td> then { the IUT creates a new <semanticMashupResult> resource and the IUT sends a valid Response containing Response Status Code set to 2004 (UPDATED) } </td> <td>IUT → AE</td> </tr> </tbody> </table> | Test events | Direction | When { the IUT receives a valid UPDATE Request from AE containing To set to TARGET_RESOURCE_ADDRESS and Resource Type set to 41 (semanticMashupInstance) and From set to AE-ID and Content containing smjplInputParameter attribute set to a valid value } | IUT ← AE | then { the IUT creates a new <semanticMashupResult> resource and the IUT sends a valid Response containing Response Status Code set to 2004 (UPDATED) } | IUT → AE | |
| Test events | Direction | | | | | | | |
| When { the IUT receives a valid UPDATE Request from AE containing To set to TARGET_RESOURCE_ADDRESS and Resource Type set to 41 (semanticMashupInstance) and From set to AE-ID and Content containing smjplInputParameter attribute set to a valid value } | IUT ← AE | | | | | | | |
| then { the IUT creates a new <semanticMashupResult> resource and the IUT sends a valid Response containing Response Status Code set to 2004 (UPDATED) } | IUT → AE | | | | | | | |

| TP Id | TP/oneM2M/CSE/SEM/UPD/013 | | | | | | | |
|---|---|--------------------|------------------|---|----------|--|----------|--|
| Test objective | Check that the IUT changes the mashupMember attribute of semanticMashupInstance when the parameter memberStoreType is updated | | | | | | | |
| Reference | TS-0034 [6], clause 6.4.4, and TS-0004 [2], clause 7.4.50.2.3, TS-0001 [1], clause 9.6.54 | | | | | | | |
| Config Id | CF01 | | | | | | | |
| Parent Release | Release 3 | | | | | | | |
| PICS Selection | PICS_CSE | | | | | | | |
| Initial conditions | <pre> with { the IUT being in the "initial state" and the IUT having registered the AE and the IUT having a <semanticMashupInstance> resource at TARGET_RESOURCE_ADDRESS containing accessControlPolicyIDs attribute set to allow the AE privileges to perform UPDATE operation } </pre> | | | | | | | |
| Expected behaviour | <table border="1"> <thead> <tr> <th>Test events</th> <th>Direction</th> </tr> </thead> <tbody> <tr> <td> When { the IUT receives a valid UPDATE Request from AE containing To set to TARGET_RESOURCE_ADDRESS and Resource Type set to 41 (semanticMashupInstance) and From set to AE-ID and Content containing memberStoreType attribute set to a new valid value } </td> <td>IUT ← AE</td> </tr> <tr> <td> then { the IUT updates mashupMember attribute of resource and the IUT sends a valid Response containing Response Status Code set to 2004 (UPDATED) } </td> <td>IUT → AE</td> </tr> </tbody> </table> | Test events | Direction | When { the IUT receives a valid UPDATE Request from AE containing To set to TARGET_RESOURCE_ADDRESS and Resource Type set to 41 (semanticMashupInstance) and From set to AE-ID and Content containing memberStoreType attribute set to a new valid value } | IUT ← AE | then { the IUT updates mashupMember attribute of resource and the IUT sends a valid Response containing Response Status Code set to 2004 (UPDATED) } | IUT → AE | |
| Test events | Direction | | | | | | | |
| When { the IUT receives a valid UPDATE Request from AE containing To set to TARGET_RESOURCE_ADDRESS and Resource Type set to 41 (semanticMashupInstance) and From set to AE-ID and Content containing memberStoreType attribute set to a new valid value } | IUT ← AE | | | | | | | |
| then { the IUT updates mashupMember attribute of resource and the IUT sends a valid Response containing Response Status Code set to 2004 (UPDATED) } | IUT → AE | | | | | | | |

| | | |
|---------------------------|--|------------------|
| TP Id | TP/oneM2M/CSE/SEM/UPD/014 | |
| Test objective | Check that the IUT rejects the update request of a <semanticDescriptor> resource in which descriptorRepresentation attribute is set to "IRI". | |
| Reference | TS-0034 [6], clause 6.1.4, and TS-0004 [2], clause 7.4.34.2.3 | |
| Config Id | CF01 | |
| Parent Release | Release 3 | |
| PICS Selection | PICS_CSE | |
| Initial conditions | <pre> with { the IUT being in the "initial state" and the IUT having registered the AE and the IUT having a <semanticDescriptor> resource at TARGET_RESOURCE_ADDRESS and the AE having privileges to perform UPDATE operation at TARGET_RESOURCE_ADDRESS } </pre> | |
| Expected behaviour | Test events | Direction |
| | <pre> 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 <semanticDescriptor> resource representation containing descriptorRepresentation attribute is set to "IRI" } </pre> | IUT ← AE |
| | <pre> then { the IUT does not update the <semanticDescriptor> resource and the IUT sends a valid Response containing Response Status Code set to 4000 (BAD_REQUEST) } </pre> | IUT → AE |

| | | |
|---------------------------|---|------------------|
| TP Id | TP/oneM2M/CSE/SEM/UPD/015 | |
| Test objective | Check that the IUT generates a Response Status Code indicating a "SPARQL_UPDATE_ERROR" error to a update request of a <semanticDescriptor> resource in which semanticOpExec attribute contains a valid SPARQL update request and request cannot be executed by the Hosting CSE. | |
| Reference | TS-0034 [6], clause 6.1.4, and TS-0004 [2], clause 7.4.34.2.3 | |
| Config Id | CF01 | |
| Parent Release | Release 3 | |
| PICS Selection | PICS_CSE | |
| Initial conditions | <pre>with { the IUT being in the "initial state" and the IUT having registered the AE and the IUT having a <semanticDescriptor> resource at TARGET_RESOURCE_ADDRESS and the AE having privileges to perform UPDATE operation at TARGET_RESOURCE_ADDRESS }</pre> | |
| Expected behaviour | Test events | Direction |
| | <pre>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 semanticOpExec attribute set to a SPARQL update request and SPARQL update request cannot be executed by IUT }</pre> | IUT ← AE |
| | <pre>then { the IUT does not update the <semanticDescriptor> resource and the IUT sends a valid Response containing Response Status Code set to 5212 (SPARQL_UPDATE_ERROR) }</pre> | IUT → AE |

7.2.2.15.3 RETRIEVE Operation

TP/oneM2M/CSE/SEM/RET/001

| TP Id | TP/oneM2M/CSE/SEM/RET/001 | | | | | | | |
|--|--|-------------|-----------|--|----------|--|----------|--|
| Test objective | Check that the IUT generates a Response Status Code indicating a "NOT_ACCEPTABLE" error to a retrieve request of a <semanticFanOutPoint> resource when the request contains a semanticsFilter condition set to a non-valid SPARQL query request | | | | | | | |
| Reference | TS-0004 [2], clause 7.4.35.2.2 | | | | | | | |
| Config Id | CF01 | | | | | | | |
| Parent Release | Release 3 | | | | | | | |
| PICS Selection | PICS_CSE | | | | | | | |
| Initial conditions | <pre> 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 semanticSupportIndicator attribute set to "True" and accessControlPolicyIDs attribute set to allow the AE privileges to perform RETRIEVE operation and <semanticFanOutPoint> virtual resource } </pre> | | | | | | | |
| Expected behaviour | <table border="1"> <thead> <tr> <th>Test events</th> <th>Direction</th> </tr> </thead> <tbody> <tr> <td> when { the IUT receives a valid RETRIEVE Request from AE containing To set to TARGET_RESOURCE_ADDRESS/sfop and From set to AE-ID and Semantic Query Indicator set to "True" and Filter Criteria containing semanticsFilter condition set to a non-valid SPARQL query request } </td> <td>IUT ← AE</td> </tr> <tr> <td> then { the IUT sends a valid Response containing Response Status Code set to 5207 (NOT_ACCEPTABLE) } </td> <td>IUT → AE</td> </tr> </tbody> </table> | Test events | Direction | when { the IUT receives a valid RETRIEVE Request from AE containing To set to TARGET_RESOURCE_ADDRESS/sfop and From set to AE-ID and Semantic Query Indicator set to "True" and Filter Criteria containing semanticsFilter condition set to a non-valid SPARQL query request } | IUT ← AE | then { the IUT sends a valid Response containing Response Status Code set to 5207 (NOT_ACCEPTABLE) } | IUT → AE | |
| Test events | Direction | | | | | | | |
| when { the IUT receives a valid RETRIEVE Request from AE containing To set to TARGET_RESOURCE_ADDRESS/sfop and From set to AE-ID and Semantic Query Indicator set to "True" and Filter Criteria containing semanticsFilter condition set to a non-valid SPARQL query request } | IUT ← AE | | | | | | | |
| then { the IUT sends a valid Response containing Response Status Code set to 5207 (NOT_ACCEPTABLE) } | IUT → AE | | | | | | | |

| TP Id | TP/oneM2M/CSE/SEM/RET/002 | | | | | | | |
|---|---|-------------|-----------|--|----------|---|----------|--|
| Test objective | Check that the IUT generates a <semanticMashupResult> resource as a child of a <semanticMashupInstance> when a retrieve operation is sent to its <mashup> virtual resource | | | | | | | |
| Reference | TS-0004 [2], clause 7.4.51.2.2, and TS-0034 [6], clause 6.5.2 | | | | | | | |
| Config Id | CF01 | | | | | | | |
| Parent Release | Release 3 | | | | | | | |
| PICS Selection | PICS_CSE | | | | | | | |
| Initial conditions | <p>with {</p> <p>the IUT being in the "initial state" and the IUT having registered the AE and the IUT having a <semanticMashupInstance> resource at TARGET_RESOURCE_ADDRESS containing accessControlPolicyIDs attribute set to allow the AE privileges to perform RETRIEVE operation and <mashup> virtual resource</p> } | | | | | | | |
| Expected behaviour | <table border="1"> <thead> <tr> <th>Test events</th> <th>Direction</th> </tr> </thead> <tbody> <tr> <td> <p>when {</p> <p>the IUT receives a valid RETRIEVE Request from AE containing To set to TARGET_RESOURCE_ADDRESS/msp and From set to AE-ID and Content set to void</p> } </td><td>IUT ← AE</td></tr> <tr> <td> <p>then {</p> <p>the IUT creates a child <semanticMashupResult> resource at TARGET_RESOURCE_ADDRESS and the IUT sends a valid Response containing Response Status Code set to 2000 (OK)</p> } </td><td>IUT → AE</td></tr> </tbody> </table> | Test events | Direction | <p>when {</p> <p>the IUT receives a valid RETRIEVE Request from AE containing To set to TARGET_RESOURCE_ADDRESS/msp and From set to AE-ID and Content set to void</p> } | IUT ← AE | <p>then {</p> <p>the IUT creates a child <semanticMashupResult> resource at TARGET_RESOURCE_ADDRESS and the IUT sends a valid Response containing Response Status Code set to 2000 (OK)</p> } | IUT → AE | |
| Test events | Direction | | | | | | | |
| <p>when {</p> <p>the IUT receives a valid RETRIEVE Request from AE containing To set to TARGET_RESOURCE_ADDRESS/msp and From set to AE-ID and Content set to void</p> } | IUT ← AE | | | | | | | |
| <p>then {</p> <p>the IUT creates a child <semanticMashupResult> resource at TARGET_RESOURCE_ADDRESS and the IUT sends a valid Response containing Response Status Code set to 2000 (OK)</p> } | IUT → AE | | | | | | | |

| TP Id | TP/oneM2M/CSE/SEM/RET/003 | | | | | | | |
|--|--|-------------|-----------|--|----------|--|----------|--|
| Test objective | Check that the IUT generates a Response Status Code indicating a "NOT_ACCEPTABLE" error to a retrieve request of a <semanticFanOutPoint> resource when the request addresses a group resource with semanticSupportIndicator attribute set to "False" | | | | | | | |
| Reference | TS-0004 [2], clause 7.4.35.2.2, and TS-0001 [1], clause 10.2.7.12 | | | | | | | |
| Config Id | CF01 | | | | | | | |
| Parent Release | Release 3 | | | | | | | |
| PICS Selection | PICS_CSE | | | | | | | |
| Initial conditions | <p>with {</p> <p>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</p> <p>semanticSupportIndicator attribute set to "False" and accessControlPolicyIDs attribute set to allow the AE privileges to perform RETRIEVE operation and <semanticFanOutPoint> virtual resource</p> } | | | | | | | |
| Expected behaviour | <table border="1"> <thead> <tr> <th>Test events</th> <th>Direction</th> </tr> </thead> <tbody> <tr> <td> <p>when {</p> <p>the IUT receives a valid RETRIEVE Request from AE containing</p> <p>To set to TARGET_RESOURCE_ADDRESS/sfop and From set to AE-ID and Filter Criteria containing</p> <p>semanticsFilter condition set to a valid SPARQL query request</p> } </td><td>IUT ← AE</td></tr> <tr> <td> <p>then {</p> <p>the IUT sends a valid Response containing</p> <p>Response Status Code set to 5207 (NOT_ACCEPTABLE)</p> } </td><td>IUT → AE</td></tr> </tbody> </table> | Test events | Direction | <p>when {</p> <p>the IUT receives a valid RETRIEVE Request from AE containing</p> <p>To set to TARGET_RESOURCE_ADDRESS/sfop and From set to AE-ID and Filter Criteria containing</p> <p>semanticsFilter condition set to a valid SPARQL query request</p> } | IUT ← AE | <p>then {</p> <p>the IUT sends a valid Response containing</p> <p>Response Status Code set to 5207 (NOT_ACCEPTABLE)</p> } | IUT → AE | |
| Test events | Direction | | | | | | | |
| <p>when {</p> <p>the IUT receives a valid RETRIEVE Request from AE containing</p> <p>To set to TARGET_RESOURCE_ADDRESS/sfop and From set to AE-ID and Filter Criteria containing</p> <p>semanticsFilter condition set to a valid SPARQL query request</p> } | IUT ← AE | | | | | | | |
| <p>then {</p> <p>the IUT sends a valid Response containing</p> <p>Response Status Code set to 5207 (NOT_ACCEPTABLE)</p> } | IUT → AE | | | | | | | |

| | | |
|---------------------------|---|------------------|
| TP Id | TP/oneM2M/CSE/SEM/RET/004 | |
| Test objective | Check that the IUT accepts a valid semantic discovery request for target resource other than <semanticFanOutPoint> | |
| Reference | TS-0034 [6], clause 7.4, TS-0001 [1] clauses 8.1.2 and 10.2.14 | |
| Config Id | CF01 | |
| Parent Release | Release 3 | |
| PICS Selection | PICS_CSE | |
| Initial conditions | <pre> with { the IUT being in the "initial state" and the IUT having registered the AE and the IUT having a AE resource containing <semanticDescriptor> and no restrictions from ACPs } </pre> | |
| Expected behaviour | Test events | Direction |
| | <pre> when { the IUT receives a valid RETRIEVE Request from AE containing To set to TARGET_RESOURCE_ADDRESS and Filter Criteria containing semanticsFilter condition set to a valid SPARQL query request not containing <Semantic Query Indicator> parameter } </pre> | IUT ← AE |
| | <pre> then { the IUT sends a valid Response containing Response Status Code set to 2000 (OK) and Semantic resource discovery result containing URI (of child resource with target semanticDescriptor) } </pre> | IUT → AE |

| TP Id | TP/oneM2M/CSE/SEM/RET/005 | | | | | | | |
|---|--|-------------|-----------|---|----------|---|----------|--|
| Test objective | Check that the IUT accepts a valid semantic discovery request for group members | | | | | | | |
| Reference | TS-0001 [1], clauses 8.1.2, 9.6.14a, 10.2.7.12 and 10.2.14, and TS-0034 [6], clauses 6.2.2 and 7.4 | | | | | | | |
| Config Id | CF01 | | | | | | | |
| Parent Release | Release 3 | | | | | | | |
| PICS Selection | PICS_CSE | | | | | | | |
| Initial conditions | <p>with {</p> <p>the IUT being in the "initial state"</p> <p>and the IUT having <semanticSupportIndicator> set to TRUE</p> <p>and the IUT having registered the AE</p> <p>and the IUT having a AE <group> resource containing <semanticDescriptor></p> <p>and no restrictions from ACPs</p> } | | | | | | | |
| Expected behaviour | <table border="1"> <thead> <tr> <th>Test events</th> <th>Direction</th> </tr> </thead> <tbody> <tr> <td> <p>when {</p> <p>the IUT receives a valid RETRIEVE Request from AE containing To set to TARGET_RESOURCE_ADDRESS containing <semanticFanOutPoint> and Filter Criteria containing semanticsFilter condition set to a valid SPARQL query request not containing <Semantic Query Indicator> parameter</p> } </td><td>IUT ← AE</td></tr> <tr> <td> <p>then {</p> <p>the IUT sends a valid Response containing Response Status Code set to 2000 (OK) and Semantic resource discovery result containing URI (of child resource with target semanticDescriptor)</p> } </td><td>IUT → AE</td></tr> </tbody> </table> | Test events | Direction | <p>when {</p> <p>the IUT receives a valid RETRIEVE Request from AE containing To set to TARGET_RESOURCE_ADDRESS containing <semanticFanOutPoint> and Filter Criteria containing semanticsFilter condition set to a valid SPARQL query request not containing <Semantic Query Indicator> parameter</p> } | IUT ← AE | <p>then {</p> <p>the IUT sends a valid Response containing Response Status Code set to 2000 (OK) and Semantic resource discovery result containing URI (of child resource with target semanticDescriptor)</p> } | IUT → AE | |
| Test events | Direction | | | | | | | |
| <p>when {</p> <p>the IUT receives a valid RETRIEVE Request from AE containing To set to TARGET_RESOURCE_ADDRESS containing <semanticFanOutPoint> and Filter Criteria containing semanticsFilter condition set to a valid SPARQL query request not containing <Semantic Query Indicator> parameter</p> } | IUT ← AE | | | | | | | |
| <p>then {</p> <p>the IUT sends a valid Response containing Response Status Code set to 2000 (OK) and Semantic resource discovery result containing URI (of child resource with target semanticDescriptor)</p> } | IUT → AE | | | | | | | |

| | | |
|---------------------------|--|------------------|
| TP Id | TP/oneM2M/CSE/SEM/RET/006 | |
| Test objective | Check that the IUT accepts a valid semantic discovery request for group members hosted at other CSE and sends a discovery request to the remote CSE | |
| Reference | TS-0034 [6], clauses 6.2.2 and 7.4 | |
| Config Id | CF02 | |
| Parent Release | Release 3 | |
| PICS Selection | PICS_CSE | |
| Initial conditions | <p>with {</p> <p>the IUT being in the "initial state"</p> <p>and the IUT having registered the AE</p> <p>and the IUT having <semanticDescriptor> having linked semantic resource at remote CSE</p> <p>and no restrictions from ACPs</p> } | |
| Expected behaviour | Test events | Direction |
| | <p>when {</p> <p>the IUT receives a valid RETRIEVE Request from AE containing</p> <p>To set to TARGET_RESOURCE_ADDRESS containing</p> <p><semanticFanOutPoint> and</p> <p>not containing <Semantic Query Indicator> parameter</p> } | IUT ← AE |
| | <p>then {</p> <p>the IUT sends a valid RETRIEVE Request containing</p> <p>To set to address of linked semantic resource at remote CSE</p> } | IUT → CSE2 |

| TP Id | TP/oneM2M/CSE/SEM/RET/007 | | | | | | | |
|---|---|-------------|-----------|--|------------|---|----------|--|
| Test objective | Check that the IUT accepts a valid semantic discovery response for group members hosted at other CSE and sends a discovery response to the originating AE | | | | | | | |
| Reference | TS-0001 [1], clauses 8.1.2, 9.6.14a, 10.2.7.12 and 10.2.14, and TS-0034 [6], clauses 6.2.2 and 7.4 | | | | | | | |
| Config Id | CF02 | | | | | | | |
| Parent Release | Release 3 | | | | | | | |
| PICS Selection | PICS_CSE | | | | | | | |
| Initial conditions | <p>with {</p> <p>the IUT being in the "initial state" and the IUT having registered the AE and the IUT having a <semanticDescriptor> resource having linked semantic resource at remote CSE and no restrictions from ACPs and the IUT having received a valid RETRIEVE Request from AE containing To set to TARGET_RESOURCE_ADDRESS containing <semanticFanOutPoint> and Filter Criteria containing semanticsFilter condition set to a valid SPARQL query request not containing <Semantic Query Indicator> parameter and the IUT having sent a valid RETRIEVE Request containing To set to address of linked semantic resource at remote CSE</p> } | | | | | | | |
| Expected behaviour | <table border="1"> <thead> <tr> <th>Test events</th> <th>Direction</th> </tr> </thead> <tbody> <tr> <td> when { the IUT receives a valid Response from CSE2 containing Response Status Code set to 2000 (OK) and containing Semantic resource from remote CSE } </td><td>IUT ← CSE2</td></tr> <tr> <td> then { the IUT sends a valid Response containing Response Status Code set to 2000 (OK) and Semantic resource discovery result containing URI (of child resource with target semanticDescriptor) } </td><td>IUT → AE</td></tr> </tbody> </table> | Test events | Direction | when { the IUT receives a valid Response from CSE2 containing Response Status Code set to 2000 (OK) and containing Semantic resource from remote CSE } | IUT ← CSE2 | then { the IUT sends a valid Response containing Response Status Code set to 2000 (OK) and Semantic resource discovery result containing URI (of child resource with target semanticDescriptor) } | IUT → AE | |
| Test events | Direction | | | | | | | |
| when { the IUT receives a valid Response from CSE2 containing Response Status Code set to 2000 (OK) and containing Semantic resource from remote CSE } | IUT ← CSE2 | | | | | | | |
| then { the IUT sends a valid Response containing Response Status Code set to 2000 (OK) and Semantic resource discovery result containing URI (of child resource with target semanticDescriptor) } | IUT → AE | | | | | | | |

| TP Id | TP/oneM2M/CSE/SEM/RET/008 | | | | | | | |
|---|---|-------------|-----------|---|----------|--|----------|--|
| Test objective | Check that the IUT retrieves <i>relatedSemantics</i> in a <i>valid</i> semantic discovery request | | | | | | | |
| Reference | TS-0034 [6], clauses 7.4, 7.4.3, and TS-0001 [1] clauses 8.1.2, 10.2.14 | | | | | | | |
| Config Id | CF01 | | | | | | | |
| Parent Release | Release 3 | | | | | | | |
| PICS Selection | PICS_CSE | | | | | | | |
| Initial conditions | <pre>with { the IUT being in the "initial state" and the IUT having registered the AE and the IUT having a AE resource containing <semanticDescriptor> containing <i>relatedSemantics</i> attribute and no restrictions from ACPs }</pre> | | | | | | | |
| Expected behaviour | <table border="1"> <thead> <tr> <th>Test events</th> <th>Direction</th> </tr> </thead> <tbody> <tr> <td> <pre>when { the IUT receives a valid RETRIEVE Request from AE containing To set to TARGET_RESOURCE_ADDRESS and Filter Criteria containing semanticsFilter condition set to a valid SPARQL query request not containing <Semantic Query Indicator> parameter }</pre> </td><td>IUT ← AE</td></tr> <tr> <td> <pre>then { the IUT sends a valid Response containing Response Status Code set to 2000 (OK) and Semantic resource discovery result containing URI (of child resource with target semanticDescriptor) and URI (of resources from <i>relatedSemantics</i>) }</pre> </td><td>IUT → AE</td></tr> </tbody> </table> | Test events | Direction | <pre>when { the IUT receives a valid RETRIEVE Request from AE containing To set to TARGET_RESOURCE_ADDRESS and Filter Criteria containing semanticsFilter condition set to a valid SPARQL query request not containing <Semantic Query Indicator> parameter }</pre> | IUT ← AE | <pre>then { the IUT sends a valid Response containing Response Status Code set to 2000 (OK) and Semantic resource discovery result containing URI (of child resource with target semanticDescriptor) and URI (of resources from <i>relatedSemantics</i>) }</pre> | IUT → AE | |
| Test events | Direction | | | | | | | |
| <pre>when { the IUT receives a valid RETRIEVE Request from AE containing To set to TARGET_RESOURCE_ADDRESS and Filter Criteria containing semanticsFilter condition set to a valid SPARQL query request not containing <Semantic Query Indicator> parameter }</pre> | IUT ← AE | | | | | | | |
| <pre>then { the IUT sends a valid Response containing Response Status Code set to 2000 (OK) and Semantic resource discovery result containing URI (of child resource with target semanticDescriptor) and URI (of resources from <i>relatedSemantics</i>) }</pre> | IUT → AE | | | | | | | |

| TP Id | TP/oneM2M/CSE/SEM/RET/009 | | | | | | | |
|--|---|-------------|-----------|--|----------|---|----------|--|
| Test objective | Check that the IUT retrieves <i>content-related semantics</i> in a <i>valid semantic discovery request</i> | | | | | | | |
| Reference | TS-0034 [6], clauses 7.4, 7.6, and TS-0001 [1] clauses 8.1.2, 10.2.14 | | | | | | | |
| Config Id | CF01 | | | | | | | |
| Parent Release | Release 3 | | | | | | | |
| PICS Selection | PICS_CSE | | | | | | | |
| Initial conditions | <pre> with { the IUT being in the "initial state" and the IUT having registered the AE and the IUT having a AE resource containing <semanticDescriptor> and <contentInstance> present and no restrictions from ACPs } </pre> | | | | | | | |
| Expected behaviour | <table border="1"> <thead> <tr> <th>Test events</th> <th>Direction</th> </tr> </thead> <tbody> <tr> <td> <pre> when { the IUT receives a valid RETRIEVE Request from AE containing To set to TARGET_RESOURCE_ADDRESS and Filter Criteria containing semanticsFilter condition set to a valid SPARQL query request and content-related semantics not containing <Semantic Query Indicator> parameter } </pre> </td><td>IUT ← AE</td></tr> <tr> <td> <pre> then { the IUT sends a valid Response containing Response Status Code set to 2000 (OK) and Semantic resource discovery result containing URI (of child resource with target semanticDescriptor) } </pre> </td><td>IUT → AE</td></tr> </tbody> </table> | Test events | Direction | <pre> when { the IUT receives a valid RETRIEVE Request from AE containing To set to TARGET_RESOURCE_ADDRESS and Filter Criteria containing semanticsFilter condition set to a valid SPARQL query request and content-related semantics not containing <Semantic Query Indicator> parameter } </pre> | IUT ← AE | <pre> then { the IUT sends a valid Response containing Response Status Code set to 2000 (OK) and Semantic resource discovery result containing URI (of child resource with target semanticDescriptor) } </pre> | IUT → AE | |
| Test events | Direction | | | | | | | |
| <pre> when { the IUT receives a valid RETRIEVE Request from AE containing To set to TARGET_RESOURCE_ADDRESS and Filter Criteria containing semanticsFilter condition set to a valid SPARQL query request and content-related semantics not containing <Semantic Query Indicator> parameter } </pre> | IUT ← AE | | | | | | | |
| <pre> then { the IUT sends a valid Response containing Response Status Code set to 2000 (OK) and Semantic resource discovery result containing URI (of child resource with target semanticDescriptor) } </pre> | IUT → AE | | | | | | | |

| TP Id | TP/oneM2M/CSE/SEM/RET/010 | | | | | | | |
|---|--|-------------|-----------|---|----------|---|----------|--|
| Test objective | Check that the IUT returns successfully the attributes of the <semanticMashupJobProfile> resource | | | | | | | |
| Reference | TS-0004 [2], clause 7.4.49.2.2, TS-0034 [6], clause 6.3.3, TS-0001 [1], clause 9.6.53 | | | | | | | |
| Config Id | CF01 | | | | | | | |
| Parent Release | Release 3 | | | | | | | |
| PICS Selection | PICS_CSE | | | | | | | |
| Initial conditions | <p>with {</p> <p style="padding-left: 20px;">the IUT being in the "initial state"</p> <p style="padding-left: 20px;">and the IUT having registered the AE</p> <p style="padding-left: 20px;">and the IUT having a <semanticMashupJobProfile> resource at TARGET_RESOURCE_ADDRESS containing</p> <p style="padding-left: 40px;">accessControlPolicyIDs attribute set to allow the AE privileges to perform RETRIEVE operation</p> <p>}</p> | | | | | | | |
| Expected behaviour | <table border="1"> <thead> <tr> <th>Test events</th> <th>Direction</th> </tr> </thead> <tbody> <tr> <td> 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 } </td><td>IUT ← AE</td></tr> <tr> <td> then { the IUT sends a valid Response containing Response Status Code set to 2000 (OK) and Content containing attributes of resource representation } </td><td>IUT → AE</td></tr> </tbody> </table> | 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 attributes of resource representation } | IUT → AE | |
| 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 attributes of resource representation } | IUT → AE | | | | | | | |

| TP Id | TP/oneM2M/CSE/SEM/RET/011 | | | | | | | |
|--|--|-------------|-----------|--|----------|--|----------|--|
| Test objective | Check that the IUT returns successfully the attributes of the <semanticMashupInstance> resource | | | | | | | |
| Reference | TS-0004 [2], clause 7.4.50.2.2, TS-0034 [6], clause 6.4.3, TS-0001 [1], clause 9.6.54 | | | | | | | |
| Config Id | CF01 | | | | | | | |
| Parent Release | Release 3 | | | | | | | |
| PICS Selection | PICS_CSE | | | | | | | |
| Initial conditions | <p>with {</p> <p>the IUT being in the "initial state" and the IUT having registered the AE and the IUT having a <semanticMashupInstance> resource at TARGET_RESOURCE_ADDRESS containing accessControlPolicyIDs attribute set to allow the AE privileges to perform RETRIEVE operation</p> <p>}</p> | | | | | | | |
| Expected behaviour | <table border="1"> <thead> <tr> <th>Test events</th> <th>Direction</th> </tr> </thead> <tbody> <tr> <td> <p>when {</p> <p>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</p> <p>}</p> </td> <td>IUT ← AE</td> </tr> <tr> <td> <p>then {</p> <p>the IUT sends a valid Response containing Response Status Code set to 2000 (OK) and Content containing attributes of resource representation</p> <p>}</p> </td> <td>IUT → AE</td> </tr> </tbody> </table> | Test events | Direction | <p>when {</p> <p>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</p> <p>}</p> | IUT ← AE | <p>then {</p> <p>the IUT sends a valid Response containing Response Status Code set to 2000 (OK) and Content containing attributes of resource representation</p> <p>}</p> | IUT → AE | |
| Test events | Direction | | | | | | | |
| <p>when {</p> <p>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</p> <p>}</p> | IUT ← AE | | | | | | | |
| <p>then {</p> <p>the IUT sends a valid Response containing Response Status Code set to 2000 (OK) and Content containing attributes of resource representation</p> <p>}</p> | IUT → AE | | | | | | | |

| | | |
|---------------------------|--|---|
| TP Id | TP/oneM2M/CSE/SEM/RET/012 | |
| Test objective | Check that the IUT returns successfully the attributes of the <semanticMashupResult> resource | |
| Reference | TS-0004 [2], clause 7.4.52.2.2, TS-0034 [6], clause 6.6.2, TS-0001 [1], clause 9.6.56 | |
| Config Id | CF01 | |
| Parent Release | Release 3 | |
| PICS Selection | PICS_CSE | |
| Initial conditions | <p>with {</p> <p>the IUT being in the "initial state" and the IUT having registered the AE and the IUT having a <semanticMashupResult> resource at TARGET_RESOURCE_ADDRESS containing accessControlPolicyIDs attribute set to allow the AE privileges to perform RETRIEVE operation</p> <p>}</p> | |
| Expected behaviour | Test events <p>when {</p> <p>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</p> <p>}</p> <p>then {</p> <p>the IUT sends a valid Response containing Response Status Code set to 2000 (OK) and Content containing attributes of resource representation</p> <p>}</p> | Direction <p>IUT ← AE</p> <p>IUT → AE</p> |

| TP Id | TP/oneM2M/CSE/SEM/RET/013 | | | | | | | |
|--|--|--------------------|------------------|--|---------------------|---|----------------------|--|
| Test objective | Check that the IUT rejects a semantic query request with semanticsFilter condition set to a non-valid SPARQL query request. | | | | | | | |
| Reference | TS-0034 [6], clause 7.5, TS-0004 [1] clauses 7.3.3.19 | | | | | | | |
| Config Id | CF01 | | | | | | | |
| Parent Release | Release 3 | | | | | | | |
| PICS Selection | PICS_CSE | | | | | | | |
| Initial conditions | <p>with {</p> <p>the IUT being in the "initial state" and the IUT having registered the AE and the IUT having a resource at TARGET_RESOURCE_ADDRESS containing <semanticDescriptor> resource as direct child or as a descendent with accessControlPolicyIDs attribute set to allow the AE privileges to perform RETRIEVE operation }</p> | | | | | | | |
| Expected behaviour | <table border="1"> <thead> <tr> <th>Test events</th> <th>Direction</th> </tr> </thead> <tbody> <tr> <td> when { the IUT receives a valid RETRIEVE Request from AE containing To set to TARGET_RESOURCE_ADDRESS and From set to AE-ID and Semantic Query Indicator set to "True" and Result Content shall be set to "semantic content" Filter Criteria containing semanticsFilter condition set to a non-valid SPARQL query request } </td> <td>IUT \leftarrow AE</td> </tr> <tr> <td> then { the IUT sends a valid Response containing Response Status Code set to 4000 (BAD_REQUEST) } </td> <td>IUT \rightarrow AE</td> </tr> </tbody> </table> | 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 Semantic Query Indicator set to "True" and Result Content shall be set to "semantic content" Filter Criteria containing semanticsFilter condition set to a non-valid SPARQL query request } | IUT \leftarrow AE | then { the IUT sends a valid Response containing Response Status Code set to 4000 (BAD_REQUEST) } | IUT \rightarrow AE | |
| 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 Semantic Query Indicator set to "True" and Result Content shall be set to "semantic content" Filter Criteria containing semanticsFilter condition set to a non-valid SPARQL query request } | IUT \leftarrow AE | | | | | | | |
| then { the IUT sends a valid Response containing Response Status Code set to 4000 (BAD_REQUEST) } | IUT \rightarrow AE | | | | | | | |

| | | |
|---------------------------|--|----------|
| TP Id | TP/oneM2M/CSE/SEM/RET/014 | |
| Test objective | Check that the IUT accepts a valid semantic query request for target resource and returns a valid query result. | |
| Reference | TS-0034 [6], clause 7.5, TS-0004 [1] clauses 7.3.3.19 | |
| Config Id | CF01 | |
| Parent Release | Release 3 | |
| PICS Selection | PICS_CSE | |
| Initial conditions | <p>with {</p> <p>the IUT being in the "initial state" and the IUT having registered the AE and the IUT having a resource at TARGET_RESOURCE_ADDRESS containing <semanticDescriptor> resource as direct child or as a descendent with accessControlPolicyIDs attribute set to allow the AE privileges to perform RETRIEVE operation</p> } | |
| Expected behaviour | Test events <p>when {</p> <p>the IUT receives a valid RETRIEVE Request from AE containing To set to TARGET_RESOURCE_ADDRESS and From set to AE-ID and Semantic Query Indicator set to "True" and Result Content shall be set to "semantic content" Filter Criteria containing semanticsFilter condition set to a valid SPARQL query request</p> } | IUT ← AE |
| | <p>then {</p> <p>the IUT sends a valid Response containing Response Status Code set to 2000 (OK) and Content containing string representing Semantic query result</p> } | IUT → AE |

| TP Id | TP/oneM2M/CSE/SEM/RET/015 | | | | | | | |
|--|---|--------------------|------------------|---|----------|--|----------|--|
| Test objective | Check that the IUT returns successfully the attributes of the <semanticDescriptor> resource except the semanticOpEx attribute. | | | | | | | |
| Reference | TS-0004 [2], clause 7.4.34.2.2., TS-0001 [1], clause 9.6.30 | | | | | | | |
| Config Id | CF01 | | | | | | | |
| Parent Release | Release 3 | | | | | | | |
| PICS Selection | PICS_CSE | | | | | | | |
| Initial conditions | <p>with {</p> <p>the IUT being in the "initial state" and the IUT having registered the AE and the IUT having a <semanticDescriptor> resource at TARGET_RESOURCE_ADDRESS containing accessControlPolicyIDs attribute set to allow the AE privileges to perform RETRIEVE operation }</p> | | | | | | | |
| Expected behaviour | <table border="1"> <thead> <tr> <th>Test events</th> <th>Direction</th> </tr> </thead> <tbody> <tr> <td> 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 } </td><td>IUT ← AE</td></tr> <tr> <td> then { the IUT sends a valid Response containing Response Status Code set to 2000 (OK) and Content containing attributes of resource representation ensuring that the semanticOpExec attribute is never returned in the response. } </td><td>IUT → AE</td></tr> </tbody> </table> | 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 attributes of resource representation ensuring that the semanticOpExec attribute is never returned in the response. } | IUT → AE | |
| 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 attributes of resource representation ensuring that the semanticOpExec attribute is never returned in the response. } | IUT → AE | | | | | | | |

7.2.2.15.4 DELETE Operation

TP/oneM2M/CSE/SEM/DEL/001

| TP Id | TP/oneM2M/CSE/SEM/DEL/001 | | | | | | | |
|--|--|--------------------|------------------|--|----------|--|----------|--|
| Test objective | Check that the IUT delete all <semanticMashupInstance> child resources when their parent <semanticMashupJobProfile> receives a delete request | | | | | | | |
| Reference | TS-0034 [6], clause 6.3.5 | | | | | | | |
| Config Id | CF01 | | | | | | | |
| Parent Release | Release 3 | | | | | | | |
| PICS Selection | PICS_CSE | | | | | | | |
| Initial conditions | <pre> with { the IUT being in the "initial state" and the IUT having registered the AE and the IUT having a <semanticMashupJobProfile> resource at TARGET_RESOURCE_ADDRESS containing accessControlPolicyIDs attribute set to allow the AE privileges to perform DELETE operation and <semanticMashupInstance> resource and <semanticMashupInstance> resource } </pre> | | | | | | | |
| Expected behaviour | <table border="1"> <thead> <tr> <th>Test events</th> <th>Direction</th> </tr> </thead> <tbody> <tr> <td> when { the IUT receives a valid DELETE Request from AE containing To set to TARGET_RESOURCE_ADDRESS and From set to AE-ID and Content containing <semanticMashupJobProfile> resource representation } </td><td>IUT ← AE</td></tr> <tr> <td> then { the IUT sends a valid Response containing Response Status Code set to 2002 (DELETED) and the IUT deletes the <semanticMashupJobProfile> resource and the IUT deletes the two <semanticMashupInstance> child resources } </td><td>IUT → AE</td></tr> </tbody> </table> | 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 Content containing <semanticMashupJobProfile> resource representation } | IUT ← AE | then { the IUT sends a valid Response containing Response Status Code set to 2002 (DELETED) and the IUT deletes the <semanticMashupJobProfile> resource and the IUT deletes the two <semanticMashupInstance> child resources } | IUT → AE | |
| 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 Content containing <semanticMashupJobProfile> resource representation } | IUT ← AE | | | | | | | |
| then { the IUT sends a valid Response containing Response Status Code set to 2002 (DELETED) and the IUT deletes the <semanticMashupJobProfile> resource and the IUT deletes the two <semanticMashupInstance> child resources } | IUT → AE | | | | | | | |

| TP Id | TP/oneM2M/CSE/SEM/DEL/002 | | | | | | | |
|--|---|-------------|-----------|--|----------|--|-----------|--|
| Test objective | Check that the IUT notifies all <semanticMashupInstance> resources referenced in the smiID attribute when the corresponding <semanticMashupJobProfile> receives a delete request | | | | | | | |
| Reference | TS-0034 [6], clause 6.3.5 | | | | | | | |
| Config Id | CF02 | | | | | | | |
| Parent Release | Release 3 | | | | | | | |
| PICS Selection | PICS_CSE | | | | | | | |
| Initial conditions | <pre> with { the IUT being in the "initial state" and the IUT having registered the AE and the IUT having a <semanticMashupJobProfile> resource at TARGET_RESOURCE_ADDRESS containing accessControlPolicyIDs attribute set to allow the AE privileges to perform DELETE operation and smiID attribute set to a list of two <semanticMashupInstance> resources located in hosting CSE } </pre> | | | | | | | |
| Expected behaviour | <table border="1"> <thead> <tr> <th>Test events</th> <th>Direction</th> </tr> </thead> <tbody> <tr> <td> <pre> when { the IUT receives a valid DELETE Request from AE containing To set to TARGET_RESOURCE_ADDRESS and From set to AE-ID and Content containing <semanticMashupJobProfile> resource representation } </pre> </td> <td>IUT ← AE</td> </tr> <tr> <td> <pre> then { the IUT notifies each referenced <semanticMashupJobProfile> resource located in the hosting CSE } </pre> </td> <td>IUT → CSE</td> </tr> </tbody> </table> | Test events | Direction | <pre> when { the IUT receives a valid DELETE Request from AE containing To set to TARGET_RESOURCE_ADDRESS and From set to AE-ID and Content containing <semanticMashupJobProfile> resource representation } </pre> | IUT ← AE | <pre> then { the IUT notifies each referenced <semanticMashupJobProfile> resource located in the hosting CSE } </pre> | IUT → CSE | |
| Test events | Direction | | | | | | | |
| <pre> when { the IUT receives a valid DELETE Request from AE containing To set to TARGET_RESOURCE_ADDRESS and From set to AE-ID and Content containing <semanticMashupJobProfile> resource representation } </pre> | IUT ← AE | | | | | | | |
| <pre> then { the IUT notifies each referenced <semanticMashupJobProfile> resource located in the hosting CSE } </pre> | IUT → CSE | | | | | | | |

| | | |
|---------------------------|--|------------------|
| TP Id | TP/oneM2M/CSE/SEM/DEL/003 | |
| Test objective | Check that the IUT deletes successfully <semanticMashupResult> resource | |
| Reference | TS-0004 [2], clause 7.4.52.2.4, TS-0034 [6], clause 6.6.3, TS-0001 [1], clause 9.6.56 | |
| Config Id | CF01 | |
| Parent Release | Release 3 | |
| PICS Selection | PICS_CSE | |
| Initial conditions | <pre> with { the IUT being in the "initial state" and the IUT having registered the AE and the IUT having a <semanticMashupResult> resource at TARGET_RESOURCE_ADDRESS containing accessControlPolicyIDs attribute set to allow the AE privileges to perform DELETE operation } </pre> | |
| Expected behaviour | Test events | Direction |
| | <pre> 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 } </pre> | IUT ← AE |
| | <pre> then { the IUT deletes the TARGET_RESOURCE_ADDRESS resource and the IUT sends a Response message containing Response Status Code set to 2002 (DELETED) } </pre> | IUT → AE |

7.2.2.16 Initial Service Provisioning (ISP)

7.2.2.16.1 BASIC Operation

TP/oneM2M/CSE/ISP/001

| TP Id | TP/oneM2M/CSE/ISP/001 | | | | | | | |
|---|---|--------------------|------------------|---|---------------------|---|----------------------|--|
| Test objective | Check that the IUT accepts a valid M2M node subscription | | | | | | | |
| Reference | TS-0001 [1], clauses 9.6.19, 9.6.20,11.2 | | | | | | | |
| Config Id | CF01 | | | | | | | |
| Parent Release | Release 3 | | | | | | | |
| PICS Selection | PICS_IN_CSE, PICS_REMOTE_PROVISIONING | | | | | | | |
| Initial conditions | <p>with {</p> <p>the IUT being in the "initial state" and the IUT having completed the enrolment function procedure with the AE and the IUT having completed the security provisioning procedure and the IUT having a <i><m2mserviceSubscriptionProfile></i> at PARENT_RESOURCE_ADDRESS</p> <p>}</p> | | | | | | | |
| Expected behaviour | <table border="1"> <thead> <tr> <th>Test events</th> <th>Direction</th> </tr> </thead> <tbody> <tr> <td> when { the IUT receives a valid CREATE Request from AE containing To set to PARENT_RESOURCE_ADDRESS and Resource Type set to 20(serviceSubscribedNode) and Content containing valid serviceSubscribedNode resource representation } </td><td>IUT \leftarrow AE</td></tr> <tr> <td> then { the IUT sends a valid Response containing Response Status Code set to 2001 (CREATED) } </td><td>IUT \rightarrow AE</td></tr> </tbody> </table> | 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 20(serviceSubscribedNode) and Content containing valid serviceSubscribedNode resource representation } | IUT \leftarrow AE | then { the IUT sends a valid Response containing Response Status Code set to 2001 (CREATED) } | IUT \rightarrow AE | |
| 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 20(serviceSubscribedNode) and Content containing valid serviceSubscribedNode resource representation } | IUT \leftarrow AE | | | | | | | |
| then { the IUT sends a valid Response containing Response Status Code set to 2001 (CREATED) } | IUT \rightarrow AE | | | | | | | |

| | | |
|---------------------------|---|------------------|
| TP Id | TP/oneM2M/CSE/ISP/002 | |
| Test objective | Check that the IUT rejects a non-authorized M2M node subscription | |
| Reference | TS-0001 [1], clauses 9.6.19, 9.6.20, 11.2 | |
| Config Id | CF01 | |
| Parent Release | Release 3 | |
| PICS Selection | PICS_IN_CSE, PICS_REMOTE_PROVISIONING | |
| Initial conditions | <p>with {</p> <p style="padding-left: 20px;">the IUT being in the "initial state" and the IUT having completed the enrolment function procedure with the AE and the IUT having completed the security provisioning procedure and the IUT not containing a <m2mserviceSubscriptionProfile></p> <p>}</p> | |
| Expected behaviour | Test events | Direction |
| | <p>when {</p> <p style="padding-left: 20px;">the IUT receives a valid CREATE Request from AE containing Resource Type set to 20(serviceSubscribedNode) and Content containing valid serviceSubscribedNode resource</p> <p>}</p> <p>then {</p> <p style="padding-left: 20px;">the IUT sends a valid Response containing Response Status Code set to 4103 (ORIGINATOR_HAS_NO_PRIVILEGE) and no Content</p> <p>}</p> | IUT ← AE |
| | | IUT → AE |

Annex: A

Conformance Test Requirement

A.1 MQTT Protocol Conformance Test Requirement

| Test Items | | TS Chapter | 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 if the message is not Durable |
| | | TS-0010, clause 6.4.4 | Conditional | (for Initial Registration) when Originator doesn't know its 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 its 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 | if DUT's Initial ID assigning oneM2M/req/+<Receiver> | Fail if DUT's ID assigning is other than this |

| | | | | | |
|----------------|----------------------------|-------------|--------------------------------|---|---|
| | | wild card | | | |
| | 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 |

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Annex (Informative):

B.1 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

| Publication history | | |
|---------------------|--|--|
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| Draft history (to be removed on publication) | | |
|--|------------|--|
| V3.0.0 | 2019-02-22 | Incorporated agreed documents from TDE#39 <ul style="list-style-type: none">- TDE-2019-0027-TS-0018_Changes_for_rcn_TPs_R3- TDE-2019-0030R03-TS-0018_TP_FlexContainers_R3 |

| | | |
|--------|------------|--|
| V3.1.0 | 2019-04-24 | <p>Incorporated agreed documents from TDE#39.1</p> <ul style="list-style-type: none"> - TDE-2019-0042R01-TS-0018_New_TPs_for_registration_R3 - TDE-2019-0044R01-TS-0018_Changes_for_registration_TPs_R3 - TDE-2019-0045-TS-0018_Changes_for_location_TPs_R3 - TDE-2019-0046-TS-0018_New_TPs_for_dau_R3 - TDE-2019-0047-TS-0018_New_TPs_for_haim_R3 - TDE-2019-0048-TS-0018_New_TPs_for_semantic_R3 - TDE-2019-0049-TS-0018_New_TPs_for_obi_R3 - TDE-2019-0054-TS-0018_Rel-2_hybrid_addressing_TP_changes_mirror_R3 - TDE-2019-0055-TS-0018_Rel-2_shortcut_addressing_TP_changes_mirror_R3 |
| V3.2.0 | 2019-05-24 | <p>Incorporated agreed documents from TDE#39.2</p> <ul style="list-style-type: none"> - TDE-2019-0070R01-TS-0018_New_TPs_for_registration_R3 |
| V3.3.0 | 2019-09-27 | <p>Incorporated agreed documents from TDE#40.1, TDE#41.1</p> <ul style="list-style-type: none"> - TDE-2019-0108-TS-0018_TP_changes_for_HAIM_R3 - TDE-2019-0109-TS-0018_TP_changes_for_DAU_R3 - TDE-2019-0129R01-TS-0018_TP_changes_for_RCN_R3 - TDE-2019-0130R01-TS-0018_TP_changes_for_ANNC_R3 - TDE-2019-0134-TS-0018_New_TPs_for_semantic_R3 - TDE-2019-0135-TS-0018_New_TPs_from_TS-0028_R3 - TDE-2019-0144R03-SubNotTestCasesAdded(R3) - TDE-2019-0146R01-TS-0018_Changes_for_group_TPs_R3 - TDE-2019-0148R01-TS-0018_Changes_for_discovery_TPs_R3 |
| V3.4.0 | 2019-11-19 | <p>Incorporated agreed documents from TDE#42.1</p> <ul style="list-style-type: none"> - TDE-2019-0165R01-TS-0018_New_TPs_for_discovery_R3 - TDE-2019-0166-TS-0018_New_TPs_from_TS-0028_R3 - TDE-2019-0172-TS-0018_New_TPs_for_ISP_R3 - TDE-2019-0173-TS-0018_New_TPs_for_semantic_R3 |
| V3.5.0 | 2019-12-06 | <p>Incorporated agreed documents from TDE#42.2, TDE#43</p> <ul style="list-style-type: none"> - TDE-2019-0176-TS-0018_New_TPs_for_3GPP_triggering_R3 - TDE-2019-0177-TS-0018_Changes_for_ontology_interworking_TPs_R3 - TDE-2019-0179-TS-0018_Changes_for_announcement_TPs_R3 - TDE-2019-0180-TS-0018_New_TPs_for_RCN_R3 - TDE-2019-0184-TS-0018_Changes_for_security_TPs_R3 - TDE-2019-0185-TS-0018_Changes_for_semantic_TPs_R3 |

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| V3.6.0 | 2020-03-10 | <p>Incorporated agreed documents from TDE#44</p> <ul style="list-style-type: none"> - TDE-2020-0011R01-TS-0018_Changes_for_announcement_TPs_R3 - TDE-2020-0013-TS-0018_Changes_for_generic_TPs_R3 - TDE-2020-0014-TS-0018_Changes_for_schedule_TPs_R3 |
| V3.7.0 | 2020-05-12 | <p>Incorporated agreed documents from TDE#44.1, TDE#44.2, TDE#45</p> <ul style="list-style-type: none"> - TDE-2020-0020R01-TS-0018_Changes_for_discovery_TPs_R3 - TDE-2020-0026-TS-0018_Changes_for_announcement_TPs_R3 - TDE-2020-0027-TS-0018_Changes_for_timeSeries_TPs_R3 - TDE-2020-0028R01-AcpAcrWithGroupID_R3 - TDE-2020-0030-DMRDeleteWithRCNs_R3 - TDE-2020-0031R01-GroupMembersPrivilegeCheck_R3 - TDE-2020-0037R01-DMRDeleteWithValidRCNs_R3 - TDE-2020-0039R01-SubscriptionWithNCTValues_R3 |
| V3.8.0 | 2020-06-02 | <p>Incorporated agreed documents from TDE#45</p> <ul style="list-style-type: none"> - TDE-2020-0045-AccessDeniedChangedToOriginatorHasNoPrivilege_R3 - TDE-2020-0046R01-RSCSecurityAssosiationRequiredToAppRuleValidationFailed_R3 - TDE-2020-0047R01-TestCasesSubscriptionChildResourceType_R3-MRO - TDE-2020-0051-TS-0018_Changes_for_subscription_TPs_R3 - TDE-2020-0052-TS-0018_Changes_for_DMR_TPs_R3 - TDE-2020-0053-DiscoverPrivilegeCheck |
| V3.8.1 | 2020-06-30 | <p>Incorporated agreed documents from TDE#45</p> <ul style="list-style-type: none"> - TDE-2020-0036-TS-0018_Removing_release4_TPs_R3 |
| V3.9.0 | 2021-06-30 | <p>Incorporated agreed documents from TDE#49.2, TDE#50</p> <ul style="list-style-type: none"> - TDE-2021-0011R01-TS-0018_New_TPs_for_semantics_based_operations_R3 - TDE-2021-0037R02-New_TestPurposes_Semantics_R3 |
| V3.10.0 | 2022-04-05 | <p>Incorporated agreed documents from TDE#52, TDE#52.2</p> <ul style="list-style-type: none"> - TDE-2021-0077R01-New_TPs_for_SUB_NOTIF_notifContentType_notifEventType_R3 - TDE-2021-0079R01-New_TP_for_Empty_memberID_R3 - TDE-2022-0004R01-TS-0018_Changes_for_announcement_TPs_R3 |