

TS-M2M-0031v3.0.1

oneM2M 技術仕様書
機能力タログ

oneM2M Technical Specification
Feature Catalogue

2019年06月28日制定

一般社団法人
情報通信技術委員会

THE TELECOMMUNICATION TECHNOLOGY COMMITTEE



本書は、一般社団法人情報通信技術委員会が著作権を保有しています。
内容の一部又は全部を一般社団法人情報通信技術委員会の許諾を得ることなく複製、
転載、改変、転用及びネットワーク上での送信、配布を行うことを禁止します。

<参考> [Remarks]

1. 英文記述の適用レベル [Application level of English description]

適用レベル [Application level] : E2

本標準の本文、付属資料および付録の文章および図に英文記述を含んでいる。

[English description is included in the text and figures of main body, annexes and appendices.]

2. 国際勧告等の関連 [Relationship with international recommendations and standards]

本標準は、oneM2M で承認された Technical Specification 0031V3.0.1 に準拠している。

[This standard is standardized based on the Technical Specification 0031 (V3.0.1) approved by oneM2M.]

3. 上記国際勧告等に対する追加項目等 [Departures from international recommendations]

原標準に対する変更項目 [Changes to original standard]

原標準が参照する標準のうち、TTC 標準に置き換える項目。

[Standards referred to in the original standard, which are replaced by TTC standards.]

原標準が参照する標準のうち、それらに準拠した TTC 標準等が制定されている場合は自動的に
最新版 TTC 標準等に置き換え参照するものとする。

[Standards referred to in the original standard should be replaced by derived TTC standards.]

4. 工業所有権 [IPR]

本標準に関わる「工業所有権等の実施の権利に係る確認書」の提出状況は、TTC ホームページによる。

[Status of "Confirmation of IPR Licensing Condition" submitted is provided in the TTC web site.]

5. 作成専門委員会 [Working Group]

oneM2M 専門委員会 [oneM2M Working Group]



ONEM2M

TECHNICAL SPECIFICATION

Document Number	oneM2M-TS-0031-V3.0.1
Document Name:	Feature Catalogue
Date:	2019-03-25
Abstract:	<p>Potential oneM2M product users frequently ask if a specific feature/function is supported by the specifications. A function is a combination of multiple lower-level functions or features, parameters and resource types. Each parameter and resource attribute even consist of sub-elements having their own multiple values. This brings lots of different combinations of settings which behave differently and this is not well written in current specifications.</p> <p>This TS identifies supported functions in low level as well as high level that the users easily choose a set of functions to utilize for their IoT services and understand how to implement them following the oneM2M TSes.</p>

Template Version: 08 September 2015 (Do not modify)

This Specification is provided for future development work within oneM2M only. The Partners accept no liability for any use of this Specification.

The present document has not been subject to any approval process by the oneM2M Partners Type 1. Published oneM2M specifications and reports for implementation should be obtained via the oneM2M Partners' Publications Offices.

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>

Copyright Notification

© 2019, oneM2M Partners Type 1 (ARIB, ATIS, CCSA, ETSI, TIA, TSDSI, TTA, TTC).

All rights reserved.

The copyright and the foregoing restriction extend to reproduction in all media.

Notice of Disclaimer & Limitation of Liability

The information provided in this document is directed solely to professionals who have the appropriate degree of experience to understand and interpret its contents in accordance with generally accepted engineering or other professional standards and applicable regulations. No recommendation as to products or vendors is made or should be implied.

NO REPRESENTATION OR WARRANTY IS MADE THAT THE INFORMATION IS TECHNICALLY ACCURATE OR SUFFICIENT OR CONFORMS TO ANY STATUTE, GOVERNMENTAL RULE OR REGULATION, AND FURTHER, NO REPRESENTATION OR WARRANTY IS MADE OF MERCHANTABILITY OR FITNESS FOR ANY PARTICULAR PURPOSE OR AGAINST INFRINGEMENT OF INTELLECTUAL PROPERTY RIGHTS. NO oneM2M PARTNER TYPE 1 SHALL BE LIABLE, BEYOND THE AMOUNT OF ANY SUM RECEIVED IN PAYMENT BY THAT PARTNER FOR THIS DOCUMENT, WITH RESPECT TO ANY CLAIM, AND IN NO EVENT SHALL oneM2M BE LIABLE FOR LOST PROFITS OR OTHER INCIDENTAL OR CONSEQUENTIAL DAMAGES. oneM2M EXPRESSLY ADVISES ANY AND ALL USE OF OR RELIANCE UPON THIS INFORMATION PROVIDED IN THIS DOCUMENT IS AT THE RISK OF THE USER.

Contents

1	Scope	5
2	References	5
2.1	Normative references	5
2.2	Informative references	5
3	Definitions, symbols and abbreviations	5
3.1	Definitions	5
3.2	Symbols	5
3.2	Abbreviations.....	6
4	Conventions,.....	6
5	Reader's guide	6
5.1	Introduction.....	6
5.2	Entity	6
5.3	Functions	7
5.4	Feature Set	7
5.5	Feature	7
6	oneM2M defined Functions	7
6.1	General Capability (GEN)	7
6.1.1	Binding and Serialization	7
6.1.2	Resource Identification	7
6.1.3	Request Handling	8
6.1.4	CRUD of common and universal attributes	9
6.2	Registration (REG)	9
6.2.1	CSE Capabilities	9
6.2.2	AE registration	10
6.2.3	CSE registration	11
6.3	Data Management and Repository (DMR)	11
6.3.1	Configuration of container for data sharing	11
6.3.2	Managing content instances	12
6.3.3	Managing flexcontainers	12
6.3.4	Configuration of time series	13
6.3.5	Managing time series instances	13
6.4	Discovery (DIS).....	14
6.4.1	Resource discovery	14
6.5	Group Management (GMG)	14
6.5.1	Configuration of group.....	14
6.5.2	Fan out using group.....	15
6.6	Subscription (SUB).....	15
6.6.1	Configuration of subscription for data Notification	15
6.6.2	Trigger notification pertaining to subscription.....	17
6.7	Security (SEC)	17
6.7.1	Configuration of access control policy.....	17
6.8	Resource Announcement (ANNC)	18
6.8.1	Announce a Resource.....	18
6.9.2	Announced Resource Procedures.....	18
6.9	Polling Channel (PCH)	18
6.9.1	Configure a Polling Channel	18
6.10.2	Long Polling Procedures	19
6.10	Service Charging and Accounting (SCA)	19
6.10.1	Configure an Event Based Statistics Collection	19
6.10.2	Service Statistics Collection Procedures	20
6.11	Semantics (SEM)	20
6.11.1	Semantic annotation	20
6.11.2	Semantic discovery	20
6.12	Home Appliances Information Model (HAIM)	20

6.12.1	Modeling of HAIM devices	20
6.13	Network Service Exposure, Service Execution and Triggering (NSSE) on 3GPP Network	21
6.13.1	Device Triggering	21
	History	23

1 Scope

The present document identifies the oneM2M feature catalog covering functions specified in TS-0001 (Functional Architecture) [1] and TS-0004 (Service Layer Core Protocol) [2] mainly. Other functions such as in TS-0003 (Security Solutions) [1.2] will be specified in the next release of the present document.

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 reference 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".
- [3] oneM2M TS-0009: "HTTP Protocol Binding".
- [4] oneM2M TS-0008: "CoAP Protocol Binding".
- [5] oneM2M TS-0010: "MQTT Protocol Binding".
- [6] oneM2M TS-0020: "WebSocket Protocol Binding".
- [7] oneM2M TS-0023: "Home Appliances Information Model and Mapping".

2.2 Informative 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 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-0003: "Security Solutions".

3 Definitions, symbols and abbreviations

3.1 Definitions

Void.

3.2 Symbols

For the purposes of the present document, the following symbols apply:

AE	Features that are supported by AE
CE	Features that are supported by CSE
GE	Features that are supported by both CSE and AE

3.2 Abbreviations

For the purposes of the present document, the following abbreviations apply:

AE	Application Entity
AE-ID	Application Entity - IDentifier
ANNc	resource ANNounCement
CBOR	Concise Binary Object Representation
CRUD	Create Retreive Update Delete
CSE	Common Services Entity
CSE-ID	Common Services Entity - IDentifier
DIS	DIScovery
DMG	Device ManaGement
DMR	Data Management and Repository
GEN	GENeral capability
GNC	GENeral Capability
GMG	Group ManaGement
HAIM	Home Appliances Information Modeling
HTTP	HyperText Transfer Protocol
IN-CSE	Infrastructure Node - Common Services Entity
JSON	JavaScript Object Notation
LOC	LOCation
MA	Mandatory Announced
MQTT	Message Queuing Telemetry Transport
NSSE	Network Service Exposure, Service Execution and Triggering
OA	Optional Announced
PCH	Polling Channel
REG	REGistration
SCA	Service Charging and Accounting
SEC	SECurity
SEM	SEMantics
SUB	SUBscription/Notification
XML	Extensible Markup Language

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 Reader's guide

5.1 Introduction

Features of oneM2M are organized into a hierarchical structure and separated by Entity, Function and Feature Sets at each level. Entity and Function have their dedicated abbreviations. Feature is uniquely identified by Feature ID. Feature ID is a combination of abbreviation of Entity, Function the serial number of Feature Set and the serial number of Feature separated by slash "/" in the form as the following:

{Abbr of Entity}/{Abbr of Function}/{Serial number of Feature Set}/{Serial number of Feature}

5.2 Entity

Entity is oneM2M defined Entities which could be AE or CSE as feature is implemented differently from the perspective of AE and CSE. There may some other features that are common for both AE and CSE like the binding and serialization. It is defined to have three Entity categories, AE, CSE and General.

- GE: Features that are supported by both CSE and AE
- CE: Features that are supported by CSE

- AE: Features that are supported by AE

5.3 Functions

In the present document, oneM2M defined CSFs are used to categorize features. Besides, a new category is added to organize features that are shared between Functions or agnostic to both CSE and AE. The Functions are composed of oneM2M defined CSFs and one new Function called GENC that is general capability.

5.4 Feature Set

Function is composed of Feature Sets. Feature Set is a set of Features that are closely related. For example, in group management Function, the configuration of group and the fan out of operation can be regarded as two separate Feature Sets that belong to group management (GMG). Under each Function, Feature Set is identified by a five digit number starting from 00001.

5.5 Feature

A Feature is an atomic procedure defined by oneM2M. For example, a Feature to set the max number of contentInstances within a container or a Feature for application registration. A Feature Set is composed of Features. Within each Feature Set, a Feature is identified by a five digit number starting from 00001.

6 oneM2M defined Functions

6.1 General Capability (GEN)

6.1.1 Binding and Serialization

The Feature Set below is composed of features for binding of oneM2M primitives by an AE or CSE to underlying transport network protocols.

Table 6.1.1-1: Features of GE/GEN/00001

Feature ID	Feature Description	Release
GE/GEN/00001/00001	Support HTTP binding [3]	1, 2
GE/GEN/00001/00002	Support CoAP binding [4]	1, 2
GE/GEN/00001/00003	Support MQTT binding [5]	1, 2
GE/GEN/00001/00004	Support WebSocket binding [6]	2

The Feature Set below is composed of serialization formats supported by an AE or CSE.

Table 6.1.1-2: Features of GE/GEN/00002

Feature ID	Feature Description	Release
GE/GEN/00002/00001	Support XML serialization	1, 2
GE/GEN/00002/00002	Support JSON serialization	1, 2
GE/GEN/00002/00003	Support CBOR serialization	2
GE/GEN/00002/00004	Support the <i>contentSerialization</i> attribute of applicable resources	1, 2

6.1.2 Resource Identification

The Feature Set below is composed of resource identifier formats supported by a CSE.

Table 6.1.2-1: Features of CE/GEN/00001

Feature ID	Feature Description	Release
CE/GEN/00001/00001	Support Unstructured resource identifier	1, 2
CE/GEN/00001/00002	Support Structured resource identifier	1, 2

The Feature Set below is composed of resource identifier formats supported by an AE. At least one of the identifier formats shall be supported.

Table 6.1.2-2: Features of AE/GEN/00001

Feature ID	Feature Description	Release
AE/GEN/00001/00001	Support CSE-relative Unstructured resource identifier	1, 2
AE/GEN/00001/00002	Support SP-relative Unstructured resource identifier	1, 2
AE/GEN/00001/00003	Support Absolute Unstructured resource identifier	1, 2
AE/GEN/00001/00004	Support CSE-relative Structured resource identifier	1, 2
AE/GEN/00001/00005	Support SP-relative Structured resource identifier	1, 2
AE/GEN/00001/00006	Support Absolute Structured resource identifier	1, 2

6.1.3 Request Handling

The Feature Set below is composed of supported CSE request handling features.

Table 6.1.3-1: Features of CE/GEN/00002

Feature ID	Feature Description	Release
CE/GEN/00002/00001	Support blocking request handling	1, 2
CE/GEN/00002/00002	Support of request with result content	1, 2
CE/GEN/00002/00003	Support attribute level addressing for Retrieve and Update requests	1, 2
CE/GEN/00002/00004	Support non-blocking synchronous request handling	1, 2
CE/GEN/00002/00005	Support non-blocking asynchronous request handling	1, 2
CE/GEN/00002/00006	Support for transit CSE forwarding of requests and responses	1, 2
CE/GEN/00002/00007	Support flex-blocking request handling	2
CE/GEN/00002/00008	Support for <i>Originating Timestamp</i> parameter	1, 2
CE/GEN/00002/00009	Support for <i>Request Expiration Timestamp</i> parameter	1, 2
CE/GEN/00002/00010	Support for <i>Result Expiration Timestamp</i> parameter	1, 2
CE/GEN/00002/00011	Support for <i>Result Persistence</i> parameter	1, 2
CE/GEN/00002/00012	Support for <i>Operation Execution Time</i> parameter	1, 2
CE/GEN/00002/00013	Support for <i>Release Version Indicator</i> parameter	2
CE/GEN/00002/00014	Support for <i>Vendor Information</i> parameter	2

The Feature Set below is composed of AE supported request handling features.

Table 6.1.3-2: Features of AE/GEN/00002

Feature ID	Feature Description	Release
AE/GEN/00002/00001	Support Create request targeting one resource	1, 2
AE/GEN/00002/00002	Support Retrieve request targeting one resource	1, 2
AE/GEN/00002/00003	Support Update request targeting one resource	1, 2
AE/GEN/00002/00004	Support Delete request targeting one resource	1, 2
AE/GEN/00002/00005	Support issuing of retrieve and update requests targeting attribute(s)	1, 2
AE/GEN/00002/00006	Support of requesting attributes by setting Result Content	1, 2
AE/GEN/00002/00007	Support of requesting hierarchical address by setting Result Content	1, 2
AE/GEN/00002/00008	Support of requesting hierarchical address and attributes by setting Result Content	1, 2
AE/GEN/00002/00009	Support of requesting attributes and child resources by setting Result Content	1, 2
AE/GEN/00002/00010	Support of requesting child resources by setting Result Content	1, 2
AE/GEN/00002/00011	Support of requesting attributes and child resource references by setting Result Content	1, 2
AE/GEN/00002/00012	Support of requesting child resource references by setting Result Content	1, 2
AE/GEN/00002/00013	Support of requesting nothing by setting Result Content	1, 2
AE/GEN/00002/00014	Support of requesting modified attributes by setting Result Content	2
AE/GEN/00002/00015	Support for issuing blocking requests	1, 2
AE/GEN/00002/00016	Support for issuing non-blocking synchronous request	1, 2
AE/GEN/00002/00017	Support for issuing non-blocking asynchronous request	1, 2
AE/GEN/00002/00018	Support for issuing flex-blocking request	1, 2
AE/GEN/00002/00019	Support for issuing requests with <i>Originating Timestamp</i> parameter	1, 2
AE/GEN/00002/00020	Support for issuing requests with <i>Request Expiration Timestamp</i> parameter	1, 2
AE/GEN/00002/00021	Support for issuing requests with <i>Result Expiration Timestamp</i> parameter	1, 2
AE/GEN/00002/00022	Support for issuing requests with <i>Result Persistence</i> parameter	1, 2
AE/GEN/00002/00023	Support for issuing requests with <i>Operation Execution Time</i> parameter	1, 2
AE/GEN/00002/00024	Support for issuing requests with <i>Release Version Indicator</i> parameter	2
AE/GEN/00002/00025	Support for issuing requests with <i>Vendor Information</i> parameter	2

6.1.4 CRUD of common and universal attributes

The Feature Set below is composed of features that enable an AE to initiate CRUD requests on common and universal resources attributes.

Table 6.1.4-1: Features of AE/GEN/00003

Feature ID	Feature Description	Release
AE/GEN/00003/00001	Configure <i>resourceName</i> attribute upon Create for all applicable resources	1, 2
AE/GEN/00003/00002	Configure <i>expirationTime</i> attribute upon Create or Update for all applicable resources	1, 2

6.2 Registration (REG)

6.2.1 CSE Capabilities

The Feature Set below is composed of features for CSE supporting discovery of basic CSE capabilities.

Table 6.2.1-1: Feature set CE/REG/00001

Feature ID	Feature Description	Release
CE/REG/00001/00001	Support <CSEBase> resource with attributes multiplicity equals 1 [1].	1, 2
CE/REG/00001/00002	Support the <i>cseType</i> attribute of <CSEBase> resource.	1, 2
CE/REG/00001/00003	Support the <i>nodeLink</i> attribute of <CSEBase> resource. This is dependent on the feature set for <node> resource.	1, 2
CE/REG/00001/00004	Support the <i>supportedReleaseVersions</i> attribute of <CSEBase> resource.	2

Table 6.2.1-2: Feature set AE/REG/00001

Feature ID	Feature Description	Release
AE/REG/00001/00001	The Retrieval of <CSEBase> resource.	1, 2

6.2.2 AE registration

The Feature Set below is composed of features for a CSE to support AE registration.

Table 6.2.2-1: Feature set CE/REG/00002

Feature ID	Feature Description	Release
CE/REG/00002/00001	Support <AE> resource with attributes multiplicity equals 1 [1]	1, 2
CE/REG/00002/00002	AE registration/de-registration without a pre-assigned AE-ID in the registration request and where the AE-ID Stem is configured with 'C'	1, 2
CE/REG/00002/00003	AE registration/de-registration without a pre-assigned AE-ID in the registration request and where the AE-ID Stem is configured with 'S'	1, 2
CE/REG/00002/00004	AE registration/de-registration without a pre-assigned AE-ID in the registration request and where no AE-ID Stem is included	1, 2
CE/REG/00002/00005	AE registration/de-registration without a pre-assigned AE-ID in the registration request and where the AE-ID Stem is configured with 'S' and where announcement to an IN-CSE is needed to get an AE-ID assigned	1, 2
CE/REG/00002/00007	Support the <i>appName</i> attribute of <AE> resource	1, 2
CE/REG/00002/00008	Support the <i>pointOfAccess</i> attribute of <AE> resource	1, 2
CE/REG/00002/00009	AE registration/de-registration with pre-assigned AE-ID	1, 2
CE/REG/00002/00010	Support the <i>nodeLink</i> attribute of <AE> resource	1, 2
CE/REG/00002/00011	Support the <i>supportedReleaseVersions</i> attribute of <AE> resource	2

The Feature Set below is composed of features to support M2M Service Subscription Profiles.

Table 6.2.2-2: Feature set CE/REG/00003

Feature ID	Feature Description	Release
CE/REG/00003/00001	Support for CRUD of <m2mServiceSubscriptionProfile> resource attributes with multiplicity equaling 1 [1]	1, 2
CE/REG/00003/00002	Support for CRUD of <serviceSubscribedNode> with attribute multiplicity equals 1	1, 2
CE/REG/00003/00003	Support the <i>CSE-ID</i> attribute of < serviceSubscribedNode >	1, 2
CE/REG/00003/00004	Support the <i>deviceIdentifier</i> attribute of < serviceSubscribedNode >	1, 2
CE/REG/00003/00005	Support the <i>ruleLinks</i> attribute of < serviceSubscribedNode >	1, 2
CE/REG/00003/00006	Support for CRUD of < serviceSubscribedAppRule > resource attributes with multiplicity equaling 1	1, 2
CE/REG/00003/00007	Support the <i>allowedApp-IDs</i> attribute of <serviceSubscribedAppRule >	1, 2
CE/REG/00003/00008	Support the <i>allowedAEs</i> attribute of <serviceSubscribedAppRule >	1, 2
CE/REG/00003/00009	Support the <i>allowedRole-IDs</i> attribute of <serviceSubscribedAppRule>	1, 2
CE/REG/00003/00010	Support the <i>Credential-IDs</i> attribute of <serviceSubscribedAppRule>	1, 2

The Feature Set below is composed of features to support AE registration.

Table 6.2.2-3: Feature set AE/REG/00002

Feature ID	Feature Description	Release
AE/REG/00002/00001	Create <AE> with mandatory attributes [2]	1, 2
AE/REG/00002/00002	Create <AE> with <i>appName</i>	1, 2
AE/REG/00002/00003	Create <AE> with <i>pointOfAccess</i>	1, 2
AE/REG/00002/00004	Create <AE> with <i>nodeLink</i>	1, 2
AE/REG/00002/00005	Create <AE> with <i>contentSerialization</i>	1, 2
AE/REG/00002/00006	Create <AE> with <i>supportedReleaseVersions</i>	2
AE/REG/00002/00007	Update <AE> with <i>appName</i>	1, 2
AE/REG/00002/00008	Update <AE> with <i>pointOfAccess</i>	1, 2
AE/REG/00002/00009	Update <AE> with <i>nodeLink</i>	1, 2
AE/REG/00002/00010	Update <AE> with <i>contentSerialization</i>	1, 2
AE/REG/00002/00011	Update <AE> with <i>supportedReleaseVersions</i>	2
AE/REG/00002/00012	Retrieve <AE>	1, 2
AE/REG/00002/00013	Delete <AE>	1, 2

6.2.3 CSE registration

The Feature Set below is composed of features to support CSE registration as a registrar CSE.

Table 6.2.3-1: Feature Set CE/REG/00004

Feature ID	Feature Description	Release
CE/REG/00004/00001	Support <remoteCSE> resource with attributes multiplicity equals 1 [1]	1, 2
CE/REG/00004/00002	Support the <i>cseType</i> attribute of <remoteCSE> resource	1, 2
CE/REG/00004/00003	Support the <i>pointOfAccess</i> attribute of <remoteCSE> resource	1, 2
CE/REG/00004/00004	Support the <i>nodeLink</i> attribute of <remoteCSE> resource	1, 2
CE/REG/00004/00005	Support the <i>supportedReleaseVersions</i> attribute of <remoteCSE> resource	2

The Feature Set below is composed of features to support CSE registration as a registree CSE.

Table 6.2.3-2: Features of CE/REG/00005

Feature ID	Feature Description	Release
CE/REG/00005/00001	CSE Registration/De-Registration	1, 2
CE/REG/00005/00002	Create the <remoteCSE> with <i>cseType</i> attribute	1, 2
CE/REG/00005/00003	Create the <remoteCSE> with <i>pointOfAccess</i> attribute	1, 2
CE/REG/00005/00004	Create the <remoteCSE> with <i>requestReachability</i>	1, 2
CE/REG/00005/00005	Create the <remoteCSE> with <i>nodeLink</i> attribute	1, 2
CE/REG/00005/00006	Update the <remoteCSE> with <i>pointOfAccess</i> attribute	1, 2
CE/REG/00005/00007	Update the <remoteCSE> with <i>requestReachability</i>	1, 2
CE/REG/00005/00008	Update the <remoteCSE> with <i>nodeLink</i> attribute	1, 2
CE/REG/00005/00009	Retrieve the <remoteCSE> resource	1, 2

6.3 Data Management and Repository (DMR)

6.3.1 Configuration of container for data sharing

The Feature Set below is composed of features to support CSE configuration of a container.

Table 6.3.1-1: Feature Set CE/DMR/00001

Feature ID	Feature Description	Release
CE/DMR/00001/00001	Support <container> resource with attributes multiplicity equals 1 [1]	1, 2
CE/DMR/00001/00002	Support the <i>maxNrOfInstances</i> attribute of <container> resource	1, 2
CE/DMR/00001/00003	Support the <i>maxByteSize</i> attribute of <container> resource	1, 2
CE/DMR/00001/00004	Support the <i>maxInstanceAge</i> attribute of <container> resource	1, 2
CE/DMR/00001/00005	Support the <i>disableRetrieval</i> attribute of <container> resource	2

The Feature Set below is composed of features to support AE configuration of a container.

Table 6.3.1-2: Feature Set AE/DMR/00001

Feature ID	Feature Description	Release
AE/DMR/00001/00001	Create <container> with no attribute set	1, 2
AE/DMR/00001/00002	Create <container> with <i>maxNrOfInstances</i>	1, 2
AE/DMR/00001/00003	Create <container> with <i>maxByteSize</i>	1, 2
AE/DMR/00001/00004	Create <container> with <i>maxInstanceAge</i>	1, 2
AE/DMR/00001/00005	Create <container> with <i>disableRetrieval</i>	2
AE/DMR/00001/00006	Update <container> with <i>maxNrOfInstances</i>	1, 2
AE/DMR/00001/00007	Update <container> with <i>maxByteSize</i>	1, 2
AE/DMR/00001/00008	Update <container> with <i>maxInstanceAge</i>	1, 2
AE/DMR/00001/00010	Update <container> with <i>disableRetrieval</i>	2
AE/DMR/00001/00011	Delete <container>	1, 2
AE/DMR/00001/00012	Retrieve <container>	1, 2

6.3.2 Managing content instances

The Feature Set below is composed of features to support a CSE managing a content instance.

Table 6.3.2-1: Feature Set CE/DMR/00002

Feature ID	Feature Description	Release
CE/DMR/00002/00001	Support <contentInstance> resource with attributes multiplicity equals 1 [1]	1, 2
CE/DMR/00002/00002	Support the <i>contentInfo</i> attribute of <contentInstance> resource	1, 2
CE/DMR/00002/00003	Support the <i>contentRef</i> attribute of <contentInstance> resource	1, 2
CE/DMR/00002/00004	Retrieve and Delete of latest <contentInstance> resource by <latest> virtual resource	1, 2
CE/DMR/00002/00005	Retrieve and Delete of oldest <contentInstance> resource by <oldest> virtual resource	1, 2

The Feature Set below is composed of features to support an AE reporting of content instance.

Table 6.3.2-2: Feature Set AE/DMR/00002

Feature ID	Feature Description	Release
AE/DMR/00002/00001	Create <contentInstance> with mandatory attributes [2]	1, 2
AE/DMR/00002/00002	Create <contentInstance> with <i>contentInfo</i>	1, 2
AE/DMR/00002/00003	Create <contentInstance> with <i>contentRef</i>	1, 2
AE/DMR/00002/00004	Retrieve <contentInstance> resource targeting the <contentInstance> resource	1, 2
AE/DMR/00002/00005	Retrieve oldest <contentInstance> resource targeting the <oldest> resource	1, 2
AE/DMR/00002/00006	Retrieve latest <contentInstance> resource targeting the <latest> resource	1, 2
AE/DMR/00002/00007	Delete <contentInstance>	1, 2
AE/DMR/00002/00008	Delete oldest <contentInstance> resource targeting the <oldest> resource	1, 2
AE/DMR/00002/00009	Delete latest <contentInstance> resource targeting the <latest> resource	1, 2

6.3.3 Managing flexcontainers

The Feature Set below is composed of features to support a CSE managing a flexcontainer.

Table 6.3.3-1: Feature Set CE/DMR/00003

Feature ID	Feature Description	Release
CE/DMR/00003/00001	Support <flexcontainer> resource with attributes multiplicity equals 1 [1]	2
CE/DMR/00003/00002	Support the <i>[customAttribute]</i> attribute of <flexcontainer> resource	2

The Feature Set below is composed of features to support an AE managing of flexcontainer instance.

Table 6.3.3-2: Feature Set AE/DMR/00003

Feature ID	Feature Description	Release
AE/DMR/00003/00001	Create <flexcontainer> with mandatory attributes [2]	2
AE/DMR/00003/00002	Create <flexcontainer> with <i>containerDefinition</i>	2
AE/DMR/00003/00003	Create <flexcontainer> with <i>[customAttribute]</i>	2
AE/DMR/00003/00004	Update <flexcontainer> with <i>[customAttribute]</i>	2
AE/DMR/00003/00005	Retrieve <flexcontainer> resource	2
AE/DMR/00003/00006	Delete <flexContainer> resource	2

6.3.4 Configuration of time series

The Feature Set below is composed of features to support CSE configuration of a time series.

Table 6.3.4-1: Feature Set CE/DMR/00004

Feature ID	Feature Description	Release
CE/DMR/00004/00001	Support <timeSeries> resource with attributes multiplicity equals 1 [1]	2
CE/DMR/00004/00002	Support the <i>maxNrOfInstances</i> attribute of <timeSeries> resource	2
CE/DMR/00004/00003	Support the <i>maxByteSize</i> attribute of <timeSeries> resource	2
CE/DMR/00004/00004	Support the <i>maxInstanceAge</i> attribute of <timeSeries> resource	2
CE/DMR/00004/00005	Support the <i>periodicInterval</i> attribute of <timeSeries> resource	2
CE/DMR/00004/00006	Support the <i>missingDataDetect</i> attribute of <timeSeries> resource	2
CE/DMR/00004/00007	Support the <i>missingDataMaxNr</i> attribute of <timeSeries> resource	2
CE/DMR/00004/00008	Support the <i>missingDataList</i> attribute of <timeSeries> resource	2
CE/DMR/00004/00009	Support the <i>missingDataCurrentNr</i> attribute of <timeSeries> resource	2
CE/DMR/00004/00010	Support the <i>missingDataDetectTimer</i> attribute of <timeSeries> resource	2

The Feature Set below is composed of features to support AE configuration of a time series.

Table 6.3.4-2: Feature Set AE/DMR/00004

Feature ID	Feature Description	Release
AE/DMR/00004/00001	Create <timeSeries> with no attribute set	2
AE/DMR/00004/00002	Create <timeSeries> with <i>maxNrOfInstances</i>	2
AE/DMR/00004/00003	Create <timeSeries> with <i>maxByteSize</i>	2
AE/DMR/00004/00004	Create <timeSeries> with <i>maxInstanceAge</i>	2
AE/DMR/00004/00005	Create <timeSeries> with <i>periodicInterval</i>	2
AE/DMR/00004/00006	Create <timeSeries> with <i>missingDataDetect</i>	2
AE/DMR/00004/00007	Create <timeSeries> with <i>missingDataMaxNr</i>	2
AE/DMR/00004/00008	Create <timeSeries> with <i>missingDataList</i>	2
AE/DMR/00004/00009	Create <timeSeries> with <i>missingDataCurrentNr</i>	2
AE/DMR/00004/00010	Create <timeSeries> with <i>missingDataDetectTimer</i>	2
AE/DMR/00004/00011	Update <timeSeries> with <i>maxNrOfInstances</i>	2
AE/DMR/00004/00012	Update <timeSeries> with <i>maxByteSize</i>	2
AE/DMR/00004/00013	Update <timeSeries> with <i>maxInstanceAge</i>	2
AE/DMR/00004/00014	Update <timeSeries> with <i>missingDataMaxNr</i>	2
AE/DMR/00004/00015	Update <timeSeries> with <i>missingDataDetectTimer</i>	2
AE/DMR/00004/00016	Delete <timeSeries>	2
AE/DMR/00004/00017	Retrieve <timeSeries>	2

6.3.5 Managing time series instances

The Feature Set below is composed of features to support a CSE managing a time series instance.

Table 6.3.5-1: Feature Set CE/DMR/00005

Feature ID	Feature Description	Release
CE/DMR/00005/00001	Support <timeSeriesInstance> resource with attributes multiplicity equals 1 [1]	2
CE/DMR/00005/00002	Support the <i>SequenceNr</i> attribute of <timeSeriesInstance> resource	2

This Feature Set is composed of features to support an AE reporting of a time series instance.

Table 6.3.5-2: Feature Set AE/DMR/00005

Feature ID	Feature Description	Release
AE/DMR/00005/00001	Create <timeSeriesInstance> with mandatory attributes [2]	2

6.4 Discovery (DIS)

6.4.1 Resource discovery

The Feature Set below is about CSE supporting resource discovery.

Table 6.4.1-1: Features of CE/DIS/00001

Feature ID	Feature Description	Release
CE/DIS/00001/00001	Support the Discovery request with filterUsage equals to "Discovery"	1, 2
CE/DIS/00001/00002	Support discovery with filterCriteria (<i>createdBefore</i> , <i>createdAfter</i> , <i>modifiedSince</i> , <i>unmodifiedSince</i> , <i>stateTagSmaller</i> , <i>stateTagBigger</i> , <i>expireBefore</i> , <i>expireAfter</i> , <i>labels</i> , <i>resourceType</i> , <i>sizeAbove</i> , <i>sizeBelow</i> , <i>contentType</i> , <i>limit</i> , <i>attribute</i>)	1, 2
CE/DIS/00001/00003	Support discovery with filterCriteria (<i>level</i> , <i>offset</i>)	2
CE/DIS/00001/00004	Support discovery with content filter (<i>contentFilterSyntax</i> , <i>contentFilterQuery</i> of <i>filterCriteria</i>)	2
CE/DIS/00001/00005	Support discovery with filterCriteria (<i>filterOperation</i>)	2
CE/DIS/00001/00006	Support discovery with filterCriteria (<i>labels</i>)	1, 2

The Feature Set below is about AE supporting Discovery Request.

Table 6.4.1-2: Features of AE/DIS/00001

Feature ID	Feature Description	Release
AE/DIS/00001/00001	Support discovery of resources without <i>filterCriteria</i>	1, 2
AE/DIS/00001/00002	Support filter according to creation time (<i>createdBefore</i> , <i>createdAfter</i>)	1, 2
AE/DIS/00001/00003	Support filter according to modified time (<i>modifiedSince</i> , <i>unmodifiedSince</i>)	1, 2
AE/DIS/00001/00004	Support filter according to state tag (<i>stateTagSmaller</i> , <i>stateTagBigger</i>)	1, 2
AE/DIS/00001/00005	Support filter according to expiration time (<i>expireBefore</i> , <i>expireAfter</i>)	1, 2
AE/DIS/00001/00006	Support filter according to labels (<i>labels</i>)	1, 2
AE/DIS/00001/00007	Support filter according to resource type (<i>resourceType</i>)	1, 2
AE/DIS/00001/00008	Support filter according to resource size (<i>sizeAbove</i> , <i>sizeBelow</i>)	1, 2
AE/DIS/00001/00009	Support filter according to contentType (<i>contentType</i>)	1, 2
AE/DIS/00001/00010	Support limit the number of resources in the response (<i>limit</i>)	1, 2
AE/DIS/00001/00011	Support filter according to attributes (<i>attribute</i>)	1, 2
AE/DIS/00001/00012	Support the logical operation between multiple criteria (<i>filterOperation</i>)	2
AE/DIS/00001/00013	Support limit the level of the discovery (<i>level</i>)	1, 2
AE/DIS/00001/00014	Support indicating the offset when returning the discovered results (<i>offset</i>)	1, 2
AE/DIS/00001/00015	Support content based discovery (<i>contentFilterSyntax</i> , <i>contentFilterQuery</i>)	2

6.5 Group Management (GMG)

6.5.1 Configuration of group

The Feature Set below is about CSE supporting configuration of group.

Table 6.5.1-1: Feature Set CE/GMG/00001

Feature ID	Feature Description	Release
CE/GMG/00001/00001	Support the <group> resource with attributes multiplicity equals 1 [1]	1, 2

The Feature Set below is about CSE supporting configuration of group with memberType other than MIXED.

Table 6.5.1-2: Feature Set CE/GMG/00002

Feature ID	Feature Description	Release
CE/GMG/00002/00001	Support <i>consistencyStrategy</i>	1, 2

The Feature Set below is about AE supporting configuration of group.

Table 6.5.1-3: Feature Set AE/GMG/00001

Feature ID	Feature Description	Release
AE/GMG/00001/00001	Create <group> resource with mandatory attributes [2]	1, 2
AE/GMG/00001/00003	Create <group> resource with <i>membersAccessControlPolicyIDs</i>	1, 2
AE/GMG/00001/00005	Update <group> resource with <i>maxNrOfMembers</i>	1, 2
AE/GMG/00001/00006	Update <group> resource with <i>memberIDs</i>	1, 2
AE/GMG/00001/00007	Update <group> resource with <i>membersAccessControlPolicyIDs</i>	1, 2
AE/GMG/00001/00008	Delete <group> resource	1, 2
AE/GMG/00001/00009	Retrieve <group> resource	1, 2

6.5.2 Fan out using group

The Feature Set below is about CSE supporting fan out of requests through group.

Table 6.5.2-1: Feature Set CE/GMG/00003

Feature ID	Feature Description	Release
CE/GMG/00003/00001	Fan out of request to all members	1, 2
CE/GMG/00003/00002	Create sub group resource in case multiple members belong to same member CSE	1, 2
CE/GMG/00003/00003	Create <subscription> resource via group	1, 2

The Feature Set below is about AE supporting fan out of requests through group.

Table 6.5.2-2: Feature Set AE/GMG/00002

Feature ID	Feature Description	Release
AE/GMG/00002/00001	Request by addressing <i>fanOutPoint</i> of group resource	1, 2
AE/GMG/00002/00002	Create <subscription> resource via group without aggregating notifications	1, 2
AE/GMG/00002/00003	Create <subscription> resource via group and aggregate notifications	1, 2

6.6 Subscription (SUB)

6.6.1 Configuration of subscription for data Notification

The Feature Set below is about CSE supporting configuration of subscription.

Table 6.6.1-1: Features of CE/SUB/00001

Feature ID	Feature Description	Release
CE/SUB/00001/00001	The Support of <subscription> resource with attributes multiplicity equals 1 [1]	1, 2
CE/SUB/00001/00002	Support <i>notificationSchedule</i> feature	1, 2

The Feature Set below is about CSE supporting configuration of policies related to notification.

Table 6.6.1-2: Features of CE/SUB/00002

Feature ID	Feature Description	Release
CE/SUB/00002/00001	Support the <i>expirationCounter</i> attribute of <subscription> resource	1, 2
CE/SUB/00002/00002	Support the <i>batchNotify</i> attribute of <subscription> resource	1, 2
CE/SUB/00002/00003	Support the <i>rateLimit</i> attribute of <subscription> resource	1, 2
CE/SUB/00002/00004	Support the <i>preSubscriptionNotify</i> attribute of <subscription> resource	1, 2
CE/SUB/00002/00005	Support the <i>pendingNotification</i> attribute of <subscription> resource	1, 2
CE/SUB/00002/00006	Support the notification congestion policy features	1, 2
CE/SUB/00002/00007	Support the <i>latestNotify</i> attribute of <subscription> resource	1, 2
CE/SUB/00002/00008	Support the <i>notificationEventCat</i> attribute of <subscription> resource	1, 2
CE/SUB/00002/00009	Support the eventNotificationCriteria (all) attribute of <subscription> resource	1, 2

The Feature Set below is about CSE supporting configuration of subscription through group.

Table 6.6.1-3: Features of CE/SUB/00003

Feature ID	Feature Description	Release
CE/SUB/00003/00001	Support the <i>groupID</i> attribute of <subscription> resource	1, 2
CE/SUB/00003/00002	Support the <i>notificationForwardingURI</i> attribute of <subscription> resource.	1, 2

The Feature Set below is about AE supporting configuration of subscription.

Table 6.6.1-4: Features of AE/SUB/00001

Feature ID	Feature Description	Release
AE/SUB/00001/00001	Create <subscription> with mandatory attributes [2]	1, 2
AE/SUB/00001/00002	Create <subscription> with <i>labels</i> attribute	1, 2
AE/SUB/00001/00003	Create <subscription> with <i>expirationTime</i> attribute	1, 2
AE/SUB/00001/00004	Create <subscription> with <i>creator</i> attribute	1, 2
AE/SUB/00001/00005	Create <subscription> with <i>subscriberURI</i> attribute	1, 2
AE/SUB/00001/00006	Update <subscription> with <i>labels</i> attribute	1, 2
AE/SUB/00001/00007	Update <subscription> with <i>expirationTime</i> attribute	1, 2
AE/SUB/00001/00008	Update <subscription> with <i>creator</i> attribute	1, 2
AE/SUB/00001/00009	Delete <Subscription>	1, 2
AE/SUB/00001/00010	Retrieve <Subscription>	1, 2

The Feature Set below is about AE supporting configuration of policies related to notification.

Table 6.6.1-5: Features of AE/SUB/00002

Feature ID	Feature Description	Release
AE/SUB/00002/00001	Create <subscription> with <i>eventNotificationCriteria</i> attribute	1, 2
AE/SUB/00002/00002	Create <subscription> with <i>expirationCounter</i> attribute	1, 2
AE/SUB/00002/00003	Create <subscription> with <i>batchNotify</i> attribute	1, 2
AE/SUB/00002/00004	Create <subscription> with <i>rateLimit</i> attribute	1, 2
AE/SUB/00002/00005	Create <subscription> with <i>preSubscriptionNotify</i> attribute	1, 2
AE/SUB/00002/00006	Create <subscription> with <i>pendingNotification</i> attribute	1, 2
AE/SUB/00002/00007	Create <subscription> with <i>notificationStoragePriority</i> attribute	1, 2
AE/SUB/00002/00008	Create <subscription> with <i>latestNotify</i> attribute	1, 2
AE/SUB/00002/00009	Create <subscription> with <i>notificationContentType</i> attribute	1, 2
AE/SUB/00002/00010	Create <subscription> with <i>notificationEventCat</i> attribute	1, 2
AE/SUB/00002/00011	Update <subscription> with <i>eventNotificationCriteria</i> attribute	1, 2
AE/SUB/00002/00012	Update <subscription> with <i>expirationCounter</i> attribute	1, 2
AE/SUB/00002/00013	Update <subscription> with <i>batchNotify</i> attribute	1, 2
AE/SUB/00002/00014	Update <subscription> with <i>rateLimit</i> attribute	1, 2
AE/SUB/00002/00015	Update <subscription> with <i>pendingNotification</i> attribute	1, 2
AE/SUB/00002/00016	Update <subscription> with <i>notificationStoragePriority</i> attribute	1, 2
AE/SUB/00002/00017	Update <subscription> with <i>latestNotify</i> attribute	1, 2
AE/SUB/00002/00018	Update <subscription> with <i>notificationContentType</i> attribute	1, 2
AE/SUB/00002/00019	Update <subscription> with <i>notificationEventCat</i> attribute	1, 2

The Feature Set below is about AE supporting configuration of subscription through group.

Table 6.6.1-6: Features of AE/SUB/00003

Feature ID	Feature Description	Release
AE/SUB/00003/00001	Create <subscription> with <i>notificationForwardingURI</i> attribute	1, 2

6.6.2 Trigger notification pertaining to subscription

The Feature Set below is about CSE supporting trigger notification pertaining to subscription.

Table 6.6.2-1: Features of CE/SUB/00004

Feature ID	Feature Description	Release
CE/SUB/00004/00001	Notify the address indicated in <i>notificationURI</i> with notification elements multiplicity equals 1 [2]	1, 2
CE/SUB/00004/00002	Notify with notificationEvent/representation set in the notification	1, 2
CE/SUB/00004/00003	Support of subscription verification	1, 2
CE/SUB/00004/00004	Support subscriptions with <i>notificationEventType</i> equal to "G" [1]	3

The Feature Set below is about AE supporting reception of notification.

Table 6.6.2-2: Features of AE/SUB/00004

Feature ID	Feature Description	Release
AE/SUB/00004/00001	Respond to a notification	1,2,3
AE/SUB/00004/00002	Respond to a notification where <i>notificationEventType</i> equal to "G" [1]	3

6.7 Security (SEC)

6.7.1 Configuration of access control policy

The Feature Set below is about CSE supporting configuration of access control policy.

Table 6.7.1-1: Features of CE/SEC/00001

Feature ID	Feature Description	Release
CE/SEC/00001/00001	Support <accessControlPolicy> resource with attributes multiplicity equals 1 [1]	1, 2
CE/SEC/00002/00002	Support for <i>accessControlPolicyIDs</i> attribute for all applicable resources	1, 2

The Feature Set below is about AE supporting configuration of access control policy.

Table 6.7.1-2: Features of AE/SEC/00001

Feature ID	Feature Description	Release
AE/SEC/00001/00001	Create <accessControlPolicy> resource with mandatory attributes [2]	1, 2
AE/SEC/00001/00002	Update <accessControlPolicy> resource with <i>privileges</i>	1, 2
AE/SEC/00001/00003	Update <accessControlPolicy> resource with <i>selfPrivileges</i>	1, 2
AE/SEC/00001/00004	Delete <accessControlPolicy> resource	1, 2
AE/SEC/00001/00005	Retrieve <accessControlPolicy> resource	1, 2
AE/SEC/00001/00006	Retrieval of <i>accessControlPolicyIDs</i> attribute for all applicable resources	1, 2
AE/SEC/00001/00007	Configure <i>accessControlPolicyIDs</i> attribute upon Create or Update for all applicable resources	1, 2

The Feature Set below is about CSE supporting access control to the addressed resources.

Table 6.7.1-3: Features of CE/SEC/00002

Feature ID	Feature Description	Release
CE/SEC/00002/00001	Support accessControlPolicyIDs attribute for <resource> that the Implementation supports.	1, 2
CE/SEC/00002/00002	Support access control decision and enforcement making on the Hosting CSE	1, 2

6.8 Resource Announcement (ANNC)

6.8.1 Announce a Resource

The Feature Set below is about CSE supporting announcement of a resource.

Table 6.8.1-1: Feature Set CE/ANNC/00001

Feature ID	Feature Description	Release
CE/ANNC/00001/00001	Announce a resource and the MA attributes	1, 2
CE/ANNC/00001/00002	Announce "OA" attributes	1, 2
CE/ANNC/00001/00003	Update announced resources	1, 2
CE/ANNC/00001/00004	Delete an announced resource	1, 2
CE/ANNC/00001/00005	De-Announce "OA" attributes	1, 2

The Feature Set below is about AE supporting announcement of a resource.

Table 6.8.1-2: Feature Set AE/ANNC/00001

Feature ID	Feature Description	Release
AE/ANNC/00001/00001	Announce a resource	1, 2
AE/ANNC/00001/00002	Announce "OA" attributes	1, 2
AE/ANNC/00001/00003	De-Announce an announced resource	1, 2
AE/ANNC/00001/00004	De-Announce "OA" attributes	1, 2

6.9.2 Announced Resource Procedures

The Feature Set below is about CSE supporting operations on an announced resource.

Table 6.9.2-1: Feature Set CE/ANNC/00002

Feature ID	Feature Description	Release
CE/ANNC/00002/00001	Handle Notification sent to AEAnnc	1, 2
CE/ANNC/00002/00002	Retrieve an <original> resource	1, 2

6.9 Polling Channel (PCH)

6.9.1 Configure a Polling Channel

The Feature Set below is about CSE supporting Polling Channel Configuration.

Table 6.9.1-1: Feature Set CE/PCH/00001

Feature ID	Feature Description	Release
CE/PCH/00001/00001	Support <pollingChannel> resource with attributes multiplicity equals 1 [1]	1, 2

The Feature Set below is about AE supporting announcement of a resource.

Table 6.9.1-2: Feature Set GE/PCH/00001

Feature ID	Feature Description	Release
GE/PCH/00001/00001	Create <pollingChannel>	1, 2
GE/PCH/00001/00002	Retrieve <pollingChannel>	1, 2
GE/PCH/00001/00003	Delete <pollingChannel>	1, 2

6.10.2 Long Polling Procedures

The Feature Set below is about CSE supporting long polling operations.

Table 6.9.2-1: Feature Set CE/PCH/00002

Feature ID	Feature Description	Release
CE/PCH/00002/00001	Support <pollingChannelURI>	1, 2

The Feature Set below is about GE supporting long polling operations.

Table 6.9.2-2: Feature Set GE/PCH/00002

Feature ID	Feature Description	Release
GE/PCH/00002/00001	Retrieve <pollingChannelURI>	1, 2

6.10 Service Charging and Accounting (SCA)

6.10.1 Configure an Event Based Statistics Collection

The Feature Set below is about CSE supporting statistics collection configuration.

Table 6.10.1-1: Feature Set CE/SCA/00001

Feature ID	Feature Description	Release
CE/SCA/00001/00001	Support <statsConfig> resource with attributes multiplicity equals 1	2
CE/SCA/00001/00002	Support <eventConfig> resource with attributes multiplicity equals 1	2
CE/SCA/00001/00003	Support Event Based Collection	2
CE/SCA/00001/00004	Support Storage Based Collection	2
CE/SCA/00001/00005	Support Timer Based Collection	2
CE/SCA/00001/00006	Support <statsCollect> resource with attributes multiplicity equals 1	2
CE/SCA/00001/00007	Support the collectPeriod attribute of <statsCollect> resource.	2
CE/SCA/00001/00008	Support the collectedEntityID attribute of <statsCollect> resource.	2
CE/SCA/00001/00009	Support the eventID attribute of <statsCollect> resource.	2

The Feature Set below is about AE supporting announcement of a resource.

Table 6.10.1-2: Feature Set AE/SCA/00001

Feature ID	Feature Description	Release
AE/SCA/00001/00001	Create <statsConfig> resource with mandatory attributes	2
AE/SCA/00001/00002	Create <eventConfig> resource with mandatory attributes	2
AE/SCA/00001/00003	Create <eventConfig> resource with Timer based collection	2
AE/SCA/00001/00004	Create <eventConfig> resource with Operation based collection	2
AE/SCA/00001/00005	Create <eventConfig> resource with Storage based collection	2
AE/SCA/00001/00006	Update <eventConfig> resource with Timer based collection	2
AE/SCA/00001/00007	Update <eventConfig> resource with Operation based collection	2
AE/SCA/00001/00008	Update <eventConfig> resource with Storage based collection	2
AE/SCA/00001/00009	Retrieve <eventConfig> resource	2
AE/SCA/00001/00010	Delete <eventConfig> resource	2
AE/SCA/00001/00011	Create <statsCollect> resource with mandatory attributes	2
AE/SCA/00001/00012	Create <statsCollect> resource with event based collection	2
AE/SCA/00001/00013	Create <statsCollect> resource with subscriber based collection	2

6.10.2 Service Statistics Collection Procedures

The Feature Set below is about CSE supporting long polling operations.

Table 6.10.2-1: Feature Set CE/SCA/00002

Feature ID	Feature Description	Release
CE/SCA/00002/00001	Support transfer of Statistics Collection record over the Mch reference point	2

6.11 Semantics (SEM)

6.11.1 Semantic annotation

The Feature Set below is about CSE supporting semantic annotation.

Table 6.11.1-1: Features of CE/SEM/00001

Feature ID	Feature Description	Release
CE/SEM/00001/00001	Support <semanticDescriptor> resource with mandatory attributes [1]	2

The Feature Set below is about AE managing semantic annotations.

Table 6.11.1-2: Features of AE/SEM/00001

Feature ID	Feature Description	Release
AE/SEM/00001/00001	Create <semanticDescriptor> resource with mandatory attributes [2]	2
AE/SEM/00001/00002	Update <semanticDescriptor> resource with descriptor	2
AE/SEM/00001/00003	Support partial update to <semanticDescriptor> resource through semanticOpExec	2
AE/SEM/00001/00004	Retrieve <semanticDescriptor>	2
AE/SEM/00001/00005	Delete <semanticDescriptor>	2

6.11.2 Semantic discovery

The Feature Set below is about CSE supporting semantic discovery.

Table 6.11.2-1: Features of CE/SEM/00002

Feature ID	Feature Description	Release
CE/SEM/00002/00001	Support the Semantic Discovery request	2
CE/SEM/00002/00002	Support discovery request targeting to a <semanticFanOutPoint> resource	2

The Feature Set below is about AE supporting semantic discovery request.

Table 6.11.2-2: Features of AE/SEM/00002

Feature ID	Feature Description	Release
AE/SEM/00002/00001	Support filter according to a specific SPARQL statement (semanticFilter)	2

6.12 Home Appliances Information Model (HAIM)

6.12.1 Modeling of HAIM devices

The feature set below is about the AE supporting generation of HAIM.

Table 6.12.1-1: Features of AE/HAIM/00001

Feature ID	Feature Description	Release
AE/HAIM/00001/00001	Support for device3Dprinter information model	3
AE/HAIM/00001/00002	Support for deviceAirConditioner information model	3
AE/HAIM/00001/00003	Support for deviceAirPurifier information model	3
AE/HAIM/00001/00004	Support for deviceAirQualityMonitor information model	3
AE/HAIM/00001/00005	Support for deviceAudioReceiver information model	3
AE/HAIM/00001/00006	Support for deviceBloodPressureMonitor information model	3
AE/HAIM/00001/00007	Support for deviceCamera information model	3
AE/HAIM/00001/00008	Support for deviceClothesDryer information model	3
AE/HAIM/00001/00009	Support for deviceClothesWasher information model	3
AE/HAIM/00001/00010	Support for deviceClothesWasherDryer information model	3
AE/HAIM/00001/00011	Support for deviceCoffeeMachine information model	3
AE/HAIM/00001/00012	Support for deviceCookerHood information model	3
AE/HAIM/00001/00013	Support for deviceCooktop information model	3
AE/HAIM/00001/00014	Support for deviceDehumidifier information model	3
AE/HAIM/00001/00015	Support for deviceDishwasher information model	3
AE/HAIM/00001/00016	Support for deviceDoor information model	3
AE/HAIM/00001/00017	Support for deviceDoorLock information model	3
AE/HAIM/00001/00018	Support for deviceElectricVehicleCharger information model	3
AE/HAIM/00001/00019	Support for deviceFan information model	3
AE/HAIM/00001/00020	Support for deviceFoodProbe information model	3
AE/HAIM/00001/00021	Support for deviceFreezer information model	3
AE/HAIM/00001/00022	Support for deviceGlucosemeter information model	3
AE/HAIM/00001/00023	Support for deviceHeartRateMonitor information model	3
AE/HAIM/00001/00024	Support for deviceHomeCCTV information model	3
AE/HAIM/00001/00025	Support for deviceHumidifier information model	3
AE/HAIM/00001/00026	Support for deviceKettle information model	3
AE/HAIM/00001/00027	Support for deviceLight information model	3
AE/HAIM/00001/00028	Support for deviceMicrogeneration information model	3
AE/HAIM/00001/00029	Support for deviceMultifunctionPrinter information model	3
AE/HAIM/00001/00030	Support for deviceOutdoorLamp information model	3
AE/HAIM/00001/00031	Support for deviceOven information model	3
AE/HAIM/00001/00032	Support for devicePrinter information model	3
AE/HAIM/00001/00033	Support for devicePulseOximeter information model	3
AE/HAIM/00001/00034	Support for deviceRefrigerator information model	3
AE/HAIM/00001/00035	Support for deviceRobotCleaner information model	3
AE/HAIM/00001/00036	Support for deviceScanner information model	3
AE/HAIM/00001/00037	Support for deviceSecurityPanel information model	3
AE/HAIM/00001/00038	Support for deviceSetTopBox information model	3
AE/HAIM/00001/00039	Support for deviceSmartElectricMeter information model	3
AE/HAIM/00001/00040	Support for deviceSmartPlug information model	3
AE/HAIM/00001/00041	Support for deviceSteamCloset information model	3
AE/HAIM/00001/00042	Support for deviceStorageBattery information model	3
AE/HAIM/00001/00043	Support for deviceSwitch information model	3
AE/HAIM/00001/00044	Support for deviceTelevision information model	3
AE/HAIM/00001/00045	Support for deviceThermometer information model	3
AE/HAIM/00001/00046	Support for deviceThermostat information model	3
AE/HAIM/00001/00047	Support for deviceWaterHeater information model	3
AE/HAIM/00001/00048	Support for deviceWaterValve information model	3
AE/HAIM/00001/00049	Support for deviceWeightScaleAndBodycompositionAnalyser information model	3
AE/HAIM/00001/00050	Support for deviceWindowShade information model	3

6.13 Network Service Exposure, Service Execution and Triggering (NSSE) on 3GPP Network

6.13.1 Device Triggering

The Feature Set below is about CSE supporting sending a trigger request over the 3GPP Network.

Table 6.5.1-1: Feature Set CE/NSSE/00001

Feature ID	Feature Description	Release
CE/NSSE/00001/00001	Support a <triggerRequest> resource to an oneM2M entity on a UE	3

The Feature Set below is about an AE/CSE supporting trigger requests from a CSE.

Table 6.5.1-2: Feature Set GE/NSSE/00001

Feature ID	Feature Description	Release
GE/NSSE/00001/00001	Support processing a trigger request for enrolment	3
GE/NSSE/00001/00002	Support processing a trigger request for establishConnection	3
GE/NSSE/00001/00003	Support processing a trigger request for registrationRequest	3
GE/NSSE/00001/00004	Support processing a trigger request for executeCRUD	3

The Feature Set below is about AE initiating a trigger request to an AE/CSE on a UE.

Table 6.5.1-3: Feature Set AE/NSSE/00001

Feature ID	Feature Description	Release
AE/NSSE/00001/00001	Manage <triggerRequest> resource for enrolment	3
AE/NSSE/00001/00002	Manage <triggerRequest> resource for establishConnection	3
AE/NSSE/00001/00003	Manage <triggerRequest> resource for registrationRequest	3
AE/NSSE/00001/00004	Manage <triggerRequest> resource for executeCRUD	3

History

Publication history		
V3.0.1	March 2019	Release 3 - Publication