# 20230912

TINYIOT

# 이번 주 진행 상황

1. 속도측정 마무리

2. Announcement 공부

# 시간측정 마무리

### TinyIoT - Raspi
**CIN create**

| 회차 | 1 x 120 | 2 x 60 | 4 x 30 | 6 x 20 | 8 x 15 | 10 x 12 |
|---|---|---|---|---|---|---|
| 1 | 0.049889481 | 0.086626281 | 0.168292952 | 0.2525808 | 0.340682667 | 0.408943568 |
| 2 | 0.050266953 | 0.08523071 | 0.168828793 | 0.258926811 | 0.332166958 | 0.408578098 |
| 3 | 0.067122813 | 0.08546714 | 0.17119753 | 0.258096274 | 0.334912219 | 0.40884228 |
| 4 | 0.049798528 | 0.086708937 | 0.171104133 | 0.249718 | 0.340849473 | 0.409730383 |
| 5 | 0.050290847 | 0.085783251 | 0.176454175 | 0.254530289 | 0.330338987 | 0.408329521 |
| 평균 | 0.053473724 | 0.085963264 | 0.171175516 | 0.254770435 | 0.335790061 | 0.40888477 |

### TinyIoT - Raspi
**Discovery** 리소스 개수  필터 : ty = 4, lim=20

| 회차 | CNT 5 x CIN 300 | CNT 5 x CIN 40 | CNT 5 x CIN 80 | CNT 5 x CIN 120 | CNT 5 x CIN 160 | CNT 5 x CIN 180 | CNT 5 x CIN 200 |
|---|---|---|---|---|---|---|---|
| 1 | 0.166012708 | 0.044793351 | 0.061901522 | 0.088765979 | 0.11181372 | 0.099196251 | 0.127027686 |
| 2 | 0.157780329 | 0.047154713 | 0.069126995 | 0.098859986 | 0.100941634 | 0.105998 | 0.122063009 |
| 3 | 0.182340519 | 0.049239286 | 0.066552083 | 0.09433895 | 0.100912897 | 0.106811031 | 0.115086166 |
| 4 | 0.164415654 | 0.051772722 | 0.069199347 | 0.10166719 | 0.125625881 | 0.106327097 | 0.115174596 |
| 5 | 0.180730629 | 0.045727086 | 0.081192875 | 0.096642319 | 0.100728432 | 0.103117863 | 0.117196401 |
| 평균 | 0.170255968 | 0.047737432 | 0.069594564 | 0.096054885 | 0.108004513 | 0.104290048 | 0.119309572 |

### Mobius - GCP (sangpaulo)
**CIN create**

| 회차 | 1 x 120 | 2 x 60 | 4 x 30 | 6 x 20 | 8 x 15 | 10 x 12 |
|---|---|---|---|---|---|---|
| 1 | 0.614131961 | 0.621924669 | 0.604498323 | 0.603662125 | 0.60789155 | 0.615002364 |
| 2 | 0.67111764 | 0.604657068 | 0.602924738 | 0.604055597 | 0.60737342 | 0.605588275 |
| 3 | 0.601085798 | 0.603016682 | 0.603419159 | 0.607944294 | 0.606341841 | 0.612753473 |
| 4 | 0.608832198 | 0.605215313 | 0.604901594 | 0.602561992 | 0.60672694 | 0.605375191 |
| 5 | 0.60221597 | 0.603051241 | 0.603279996 | 0.60536024 | 0.608676779 | 0.604502265 |
| 평균 | 0.619476713 | 0.607572995 | 0.603804762 | 0.60471685 | 0.607402106 | 0.608644313 |

### TinyIoT - Raspi
**Discovery** 리소스 개수  Raspi

| 회차/리소스 | AE 2 x CNT 5 (CIN total 1000) | | | AE 2 x CNT 8 (CIN total 1500) | | | AE 2 x CNT 14 (CIN total 2000) | | |
|---|---|---|---|---|---|---|---|---|---|
| | AE | CNT | CIN | AE | CNT | CIN | AE | CNT | CIN |
| 1 | 0.023214022 | 0.020429897 | 0.211417325 | 0.022107959 | 0.01830972 | 0.22374142 | 0.026007565 | 0.024221762 | 0.252120447 |
| 2 | 0.017176247 | 0.014150858 | 0.170383716 | 0.027413034 | 0.022088234 | 0.270075011 | 0.023580376 | 0.020316688 | 0.224594744 |
| 3 | 0.025077144 | 0.023329385 | 0.18361787 | 0.018929211 | 0.0179715 | 0.231398034 | 0.027291139 | 0.030425143 | 0.283905411 |
| 4 | 0.016881633 | 0.013609004 | 0.176421587 | 0.026758567 | 0.021735787 | 0.241958412 | 0.023182495 | 0.021233424 | 0.288275488 |
| 5 | 0.017838566 | 0.015910959 | 0.243971539 | 0.01992228 | 0.019906106 | 0.242374961 | 0.017901103 | 0.017190369 | 0.24796807 |
| 평균 | 0.020037522 | 0.017486021 | 0.197162407 | 0.02302621 | 0.020002269 | 0.241909568 | 0.023592536 | 0.022677477 | 0.259372832 |

### Mobius - GCP (Iowa)
**CIN create**

| 회차 | 1 x 120 | 2 x 60 | 4 x 30 | 6 x 20 | 8 x 15 | 10 x 12 |
|---|---|---|---|---|---|---|
| 1 | 0.390194416 | 0.385890134 | 0.383732927 | 0.385542106 | 0.386401073 | 0.387185587 |
| 2 | 0.38465695 | 0.382805395 | 0.383408286 | 0.386640517 | 0.386662396 | 0.384600679 |
| 3 | 0.38795493 | 0.38297526 | 0.382226417 | 0.386012703 | 0.386571465 | 0.3856969 |
| 4 | 0.383034982 | 0.382120856 | 0.382839372 | 0.388975028 | 0.386364718 | 0.384322802 |
| 5 | 0.383079123 | 0.38464605 | 0.382479254 | 0.386246669 | 0.388427709 | 0.394926357 |
| 평균 | 0.38578408 | 0.383687539 | 0.382937251 | 0.386683405 | 0.386885472 | 0.387346465 |

### Mobius - GCP (Iowa)
**Discovery** 리소스 개수  GCP - Iowa
S

| 회차/리소스 | AE | CNT | CIN |
|---|---|---|---|
| 1 | 0.563565032 | 0.690774266 | 0.580215883 |
| 2 | 0.555091317 | 0.681888715 | 0.571136785 |
| 3 | 0.556419873 | 0.680274741 | 0.570798826 |
| 4 | 0.558926988 | 0.678269045 | 0.581548643 |
| 5 | 0.557113393 | 0.708587631 | 0.579794391 |
| 평균 | 0.558223321 | 0.687958879 | 0.576698906 |

# Announcement

TS 0001, 9.6.1.3.2-1

| | |
|---|---|
| *announceTo* | This attribute may be included in a CREATE or UPDATE Request in which case it contains a list of addresses/CSE-IDs where the resource is to be announced. For the case that CSE-IDs are provided, the announced-to CSE shall decide the location of the announced resources based on the rules described in clause 9.6.26.<br><br>For the original resource, this attribute shall only be present if it has been successfully announced to other CSEs. This attribute maintains the list of the resource addresses to the successfully announced resources. Updates on this attribute will trigger new resource announcement or de-announcement.<br><br>If the *announceTo* attribute includes resource address(s), the present document does not provide any means for validating these address(s) for announcement purposes. It is the responsibility of the Hosting-CSE referenced by the resource address(s) to validate the access privileges of the originator of the Request that triggers the announcement. |

# Announcement

## 6.5.4 announceableResource

### 6.5.4.1 Description

This type definition includes the universal and common attributes used by oneM2M resource types that are capable of being announced. In addition to the attributes of a regularResource, it includes (as optional) the common attributes that are used by the announcement mechanism.

### 6.5.4.2 Reference

See Table 6.3.6-2.

### 6.5.4.3 Usage

This type is used by the following resource types:

    <AE>, <container>, <group>, <locationPolicy>, <node>, <remoteCSE>, <semanticDescriptor>, <timeSeries>, <ontologyRepository>, <ontology>, <ontologyMapping>, <ontologyMappingAlgorithm>, <ontologyMappingAlgorithmRepository>, <semanticMashupJobProfile>, <semanticMashupInstance>, <semanticMashupResult>, <multimediaSession>, <schedule>, <semanticRuleRepository>, <reasoningRules>, <reasoningJobInstance>, <timeSyncBeacon>, <primitiveProfile>, <processManagement>, <state>, <action>, <dependency>, <softwareCampaign>.

It is also used by the specializations of <mgmtObj> and of <flexContainer>.

# Announcement

## TS 0004, 7.3.3.10

If a CREATE Request that contains an *announceTo* attribute is received, or if an UPDATE Request is received that adds a URI or CSE-ID to the *announceTo* attribute that is not already stored in the *announceTo* attribute of the resource:

1) Compose a CREATE Request primitive as follows:

  - The *link* attribute is set to the URI of the original resource.

  - If the *accessControlPolicyIDs* attribute of the original resource is not present, the *accessControlPolicyIDs* attribute is set to the same value as the parent resource or is set using the local policy of the original resource.

  - Attributes marked with MA in oneM2M TS-0001 [6]. Such attributes shall be included if present in the original resource and set to same value as in the original resource.

  - Attributes marked with OA that are included in the *announcedAttribute* attribute. Such attributes shall be included if present in the original resource and set to same value as in the original resource.

  - The *resourceType* attribute is set to the announced variant of the original resource (see Table 6.3.4.2.1-1).
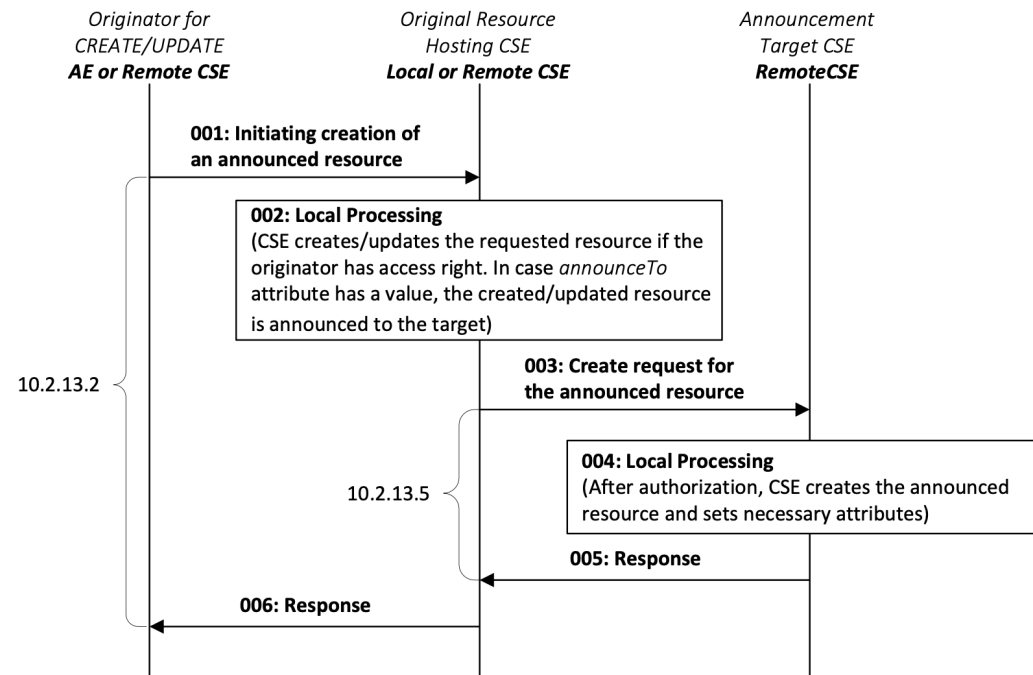
# Announcement

TS0001, 10.2.13.1



**Figure 10.2.13.2-1: Announced resource CREATE procedures**

# Announcement

TS0004

7.4.26.1

```xml
<xs:element name="AEAnnc" substitutionGroup="m2m:sg_announcedResource">
    <xs:complexType>
        <xs:complexContent>
            <!-- Inherit common attributes for announced Resources -->
            <xs:extension base="m2m:announcedResource">
                <xs:sequence>
                    <!-- Resource Specific Attributes -->
                    <xs:element name="location" type="m2m:geoCoordinates" minOccurs="0" />
                    <xs:element name="appName" type="xs:string" minOccurs="0" />
                    <xs:element name="App-ID" type="xs:string" minOccurs="0" />
                    <xs:element name="AE-ID" type="m2m:ID" minOccurs="0" />
                    <xs:element name="pointOfAccess" type="m2m:poaList" minOccurs="0" />
                    <xs:element name="ontologyRef" type="xs:anyURI" minOccurs="0" />
                    <xs:element name="nodeLink" type="xs:anyURI" minOccurs="0" />
                    <xs:element name="requestReachability" type="xs:boolean" minOccurs="0" />
                    <xs:element name="contentSerialization" type="m2m:serializations" minOccurs="0" />
                    <xs:element name="e2eSecInfo" type="m2m:e2eSecInfo" minOccurs="0" />
                    <xs:element name="supportedReleaseVersions" type="m2m:supportedReleaseVersions" />
                    <xs:element name="registrationStatus" type="m2m:AERegistrationStatus" minOccurs="0" />
                    <xs:element name="trackRegistrationPoints" type="xs:boolean" minOccurs="0" />
                    <xs:element name="sessionCapabilities" type="m2m:sessionCapabilities" minOccurs="0" />
                    <xs:element name="triggerEnable" type="xs:boolean" minOccurs="0" />
                    <xs:element name="activityPatternElements" type="m2m:activityPatternElements" minOccurs="0" />
                    <xs:element name="externalGroupID" type="m2m:externalID" minOccurs="0" />
```