**3GPP TSG-S4 Meeting #123-e*****S4-230473***

**Online, , 17th–21st April 2023** revision of S4aI230075

|  |  |  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- | --- | --- |
| *CR-Form-v12.0* | | | | | | | | |
| **CHANGE REQUEST** | | | | | | | | |
|  | | | | | | | | |
|  | **26.512** | **CR** | **0033** | **rev** | **1** | **Current version:** | **17.4.0** |  |
|  | | | | | | | | |
| *For* [***HE******LP***](http://www.3gpp.org/3G_Specs/CRs.htm#_blank)*on using this form: comprehensive instructions can be found at* [*http://www.3gpp.org/Change-Requests*](http://www.3gpp.org/Change-Requests)*.* | | | | | | | | |
|  | | | | | | | | |

|  |  |  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- | --- | --- |
| ***Proposed change affects:*** | UICC apps |  | ME | **X** | Radio Access Network |  | Core Network | **X** |

|  |  |  |  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- | --- | --- | --- |
|  | | | | | | | | | |
| ***Title:*** |  | | | | | | | | |
|  |  | | | | | | | | |
| ***Source to WG:*** | BBC | | | | | | | | |
| ***Source to TSG:*** | S4 | | | | | | | | |
|  |  | | | | | | | | |
| ***Work item code:*** | 5GMS3 | | | | |  | ***Date:*** | | 2023-04-05 |
|  |  | | | |  | |  | |  |
| ***Category:*** | **F** |  | | | | | ***Release:*** | | Rel-17 |
|  |  | | | | | | | | |
| ***Reason for change:*** | | A problem with conflicting YAML information element names has come to light during reference implementation of this specification. Information elements with identical names but different definitions are present in different APIs. | | | | | | | |
|  | |  | | | | | | | |
| ***Summary of change:*** | | * Rename MediaEntryPoint to M1MediaEntryPoint or M5MediaEntryPoint, as appropriate. (This follows an existing naming convention for disambiguation already used elsewhere in the same document.) | | | | | | | |
|  | |  | | | | | | | |
| ***Consequences if not approved:*** | | Some automatic code generation tools produce incorrect output because of the duplicate information element name defined in different OpenAPI interfaces. | | | | | | | |
| ***Q*** | |  | | | | | | | |
| ***Clauses affected:*** | | 7.6.3.1, 11.2.3.1, C.3.5, C.4.1 | | | | | | | |
|  | |  | | | | | | | |
|  | | **Y** | **N** |  | | | |  | |
| ***Other specs*** | |  | **X** | Other core specifications | | | |  | |
| ***affected:*** | |  | **X** | Test specifications | | | |  | |
| ***(show related CRs)*** | |  | **X** | O&M Specifications | | | |  | |
|  | |  | | | | | | | |
| ***Other comments:*** | |  | | | | | | | |
|  | |  | | | | | | | |
| ***This CR's revision history:*** | | S4aI230075 -> S4-230473 | | | | | | | |

FIRST CHANGE

#### 7.6.3.1 ContentHostingConfiguration resource

The data model for the ContentHostingConfiguration resource is specified in table 7.6.3.1-1 below:

Table 7.6.3.1-1: Definition of ContentHostingConfiguration resource

| Property name | Data Type | Cardinality | Description |
| --- | --- | --- | --- |
| name | String | 1..1 | A name for this Content Hosting Configuration. |
| ingestConfiguration | Object | 1..1 | Describes the 5GMSd Application Provider's origin server from which media resources will be ingested via interface M2d. |
| pull | Boolean | 1..1 | Indicates whether to the 5GMSd AS shall use Pull or Push for ingesting the content. |
| protocol | Uri | 1..1 | A fully-qualified term identifier allocated in the name space urn:3gpp:5gms:content-protocol that identifies the content ingest protocol.  The set of supported protocols is defined in clause 8. |
| baseURL | AbsoluteUrl | 0..1 | A base URL (i.e. one that includes a scheme, authority and, optionally, path segments) from which content is ingested at reference point M2d for this ingest configuration.  In the case of Pull-based content ingest (pull flag is set to True), the base URL shall be provided to the 5GMSd AF to indicate the location from which content is to be pulled for this Content Hosting Configuration. A request received at reference point M4d is mapped by the 5GMSd AS to a URL at reference point M2d whose base is the value of this property.  In the case of Push-based content ingest (pull flag is set to False), this property is populated by the 5GMSd AF and returned to the 5GMSd Application Provider to indicate the base URL to which content for this Content Hosting Configuration is to be published. |
| distributionConfigurations | Array(Object) | 1..1 | Specifies the distribution method and configuration for the ingested content.  More than one distribution may be configured for the ingested content, e.g. to offer different distribution configurations such as DASH and HLS. |
| entryPoint | M1‌Media‌Entry‌Point | 0..1 | The Media Entry Point when this distribution configuration is used to describe a single content item.  Omitted when this distribution configuration describes multiple content items. |
| relativePath | RelativeUrl | 1..1 | A relative path (i.e. without a scheme or any leading forward slash characters) to the resource for the Media Entry Point. The semantics are dependent on the value of ingestConfiguration.protocol, as specified in clause 8.  The path shall be valid at reference point M2d when appended to the ingest base URL and at reference point M4d when appended to the distribution base URL. |
| contentType | String | 1..1 | The MIME content type of the Media Entry Point.  Used by the 5GMS Client to select a distribution configuration. |
| profiles | Array(Uri) | 0..1 | An optional list of conformance profile identifiers associated with the Media Entry Point, each one expressed as a URI. A profile URI may indicate an interoperability point, for example.  Used by the 5GMS Client to select a distribution configuration.  If present, the array shall contain at least one item. |
| contentPreparationTemplateId | ResourceId | 0..1 | Indicates that content preparation prior to distribution is requested by the 5GMSd Application Provider. It identifies the Content Preparation Template that shall be used as defined in clause 7.4. |
| supplementary‌Distribution‌Networks | Array(<Distribution‌NetworkType, DistributionMode> | 0..1 | Specifies that the content for this distribution configuration is to be distributed via one of more supplementary networks. Each member of the array is a duple mapping a type of distribution network to a mode of distribution.  The same DistributionNetworkType value shall appear at most once in the array. |
| canonicalDomainName | String | 0..1 | All resources of the current distribution shall be accessible through this default Fully Qualified Domain Name assigned by the 5GMSd AF. |
| domainNameAlias | String | 0..1 | The 5GMSd Application Provider may assign another Fully-Qualified Domain Name through which media resources are additionally accessible at M4d.  This domain name is used by the 5GMSd AS to select an appropriate Server Certificate to present at M4d, and to set appropriate CORS HTTP response headers at M4d.  If this property is present, the 5GMSd Application Provider is responsible for providing in the DNS a CNAME record that resolves domainNameAlias to canonicalDomainName. |
| baseURL | AbsoluteUrl | 0..1 | A base URL (i.e. one that includes a scheme, authority and, optionally, path segments) from which content is made available to 5GMS Clients at reference point M4d for this distribution configuration.  The value is chosen by the 5GMSd AF when the Content Hosting Configuration is provisioned. It is an error for the 5GMSd Application Provider to set this. |
| pathRewriteRules | Array(Object) | 0..1 | An ordered list of rules for rewriting the request URL paths of media resource requests handled by the 5GMSd AS.  If multiple rules match a particular resource's path, only the first matching rule, in order of appearance in this array, shall be applied. |
| requestPathPattern | String | 1..1 | A regular expression [5] against which the path part of each 5GMSd AS request URL, including the leading "/", and up to and including the final "/", shall be compared. (Any leaf path element following the final "/" shall be excluded from this comparison.)  In the case of Pull-based ingest, the M4d download request path is used in the comparison.  In the case of Push-based ingest, the M2d upload request path is used in the comparison.  In either case, if the request path matches this pattern, the path mapping specified in the corresponding mappedPath shall be applied. |
| mappedPath | String | 1..1 | A replacement for the portion of the 5GMSd AS request path that matches requestPathPattern.  In the case of Pull-based ingest, ingestConfiguration.entryPoint is concatenated with the mapped path and any leaf path element from the original M4d download request to form the M2d origin request URL.  In the case of Push-based ingest, canonicalDomainName (and, optionally, domainNameAlias) are concatenated with the mapped path and any leaf path element from the original M2d upload request to form the distribution URL(s) exposed over M4d. |
| cachingConfigurations | Array(Object) | 0..1 | Defines a configuration of the 5GMSd AS cache for a matching subset of media resources ingested in relation to this Content Hosting Configuration. |
| urlPatternFilter | String | 1..1 | A pattern that will be used to match media resource URLs to determine whether a given media resource is eligible for caching by the 5GMSd AS. The format of the pattern shall be a regular expression as specified in [5]. |
| cachingDirectives | Object | 1..1 | If a urlPatternFilter applies to a resource, then the provided cachingDirectives shall be applied by the 5GMSd AS at M4d, potentially overwriting any origin caching directives ingested at M2d. |
| statusCodeFilters | Array(Integer) | 0..1 | The set of HTTP origin response status codes to which these cachingDirectives apply. The filter shall be provided as a regular expression as specified in [5].  If the list is empty, the CachingDirectives shall apply to all HTTP origin response status codes at M2d. |
| noCache | Boolean | 1..1 | If set to True, this indicates that the media resources matching the filters shall not be cached by the 5GMSd AS and shall be marked as not to be cached when served by the 5GMSd AS at M4d. |
| maxAge | Integer | 0..1 | The caching time-to-live period that shall be set on ingested media resources matching the filters. This determines the minimum period for which the 5GMSd AS shall cache matching media resources as well as the time-to-live period signalled by the 5GMSd AS at interface M4d when it serves such media resources.  The time-to-live for a given media resource shall be calculated relative to the time it was ingested. |
| geoFencing | Object | 0..N | Limit access to the content to the indicated geographic areas. |
| locatorType | Uri | 1..1 | The type of the locators shall be indicated using a fully-qualified term identifier URI from the controlled vocabulary urn:3gpp:5gms:‌locator‑type, as specified in clause 7.6.4.6, or else from a vendor-specific vocabulary. |
| locators | Array(String) | 1..1 | Array of locators from which access to the resources is to be allowed. The format of the locator strings shall be determined by the value of locatorType, as specified in clause 7.6.4.6. |
| urlSignature | Object | 0..1 | Defines the URL signing scheme. Only correctly signed and valid URLs will be allowed to access the content resource at M4d. |
| urlPattern | String | 1..1 | A pattern that shall be used by the 5GMSd AS to match M4d media resource URLs. The 5GMSd AS shall not serve a matching media resource at M4d unless it includes a valid authentication token calculated over the portion of the M4d request URL that matches this pattern. The format of the pattern shall be a regular expression as specified in [5]. |
| tokenName | String | 1..1 | The name of the M4d request query parameter that the Media Player should use to present the authentication token when required to do so. |
| passphraseName | String | 1..1 | The name of the query parameter that is used to refer to the passphrase when constructing the authentication token.  Note that the token is not included in the cleartext part of the M4d URL query component. |
| passphrase | String | 1..1 | The shared secret between the 5GMSd Application Provider and the 5GMSd AS for this distributionConfiguration.  The passphrase is used in the computation and verification of the M4d authentication token but is never sent in-the-clear over that interface. |
| tokenExpiryName | String | 1..1 | The name of the M4d request query parameter that the Media Player should use to present the token expiry field. |
| useIPAddress | Boolean | 1..1 | If set to True, the IP address of the UE is included in the computation of the authentication token for resources that match urlPattern and access to matching media resources shall be allowed by the 5GMSd AF only when the M4d request is made from a UE with this IP address. |
| ipAddressName | String | 0..1 | The name of the M4d request query parameter that is encoded as part of the authentication token if the useIPAddress flag is set to True.  Note that the IP address is not passed in the cleartext part of the M4d URL query component. |
| certificateId | ResourceId | 0..1 | When content is distributed using TLS [16], the X.509 [8] certificate for the origin domain is shared with the 5GMSd AF so that it can be presented by the 5GMSd AS in the TLS handshake at M4d. This attribute indicates the identifier of the certificate to use. |

NEXT CHANGE

#### 11.2.3.1 ServiceAccessInformation resource type

The data model for the ServiceAccessInformation resource is specified in table 11.2.3.1-1 below. Different properties are present in the resource depending on the type of Provisioning Session from which the Service Access Information is derived (as indicated in the provisioningSessionType property) and this is specified in the Applicability column.

Table 11.2.3.1‑1: Definition of ServiceAccessInformation resource

| Property name | Type | Cardinality | Usage | Description | Applicability |
| --- | --- | --- | --- | --- | --- |
| provisioningSessionId | ResourceId | 1..1 | RO | Unique identification of the M1 Provisioning Session. | All types |
| provisioningSession‌Type | Provisioning‌Session‌Type | 1..1 | RO | The type of Provisioning Session. | All types. |
| streamingAccess | Object | 0..1 | RO |  | downlink |
| entryPoints | Array(M5‌Media‌Entry‌Point) | 0..1 | RO | A list of alternative Media Entry Points for the 5GMS Client to choose between. |
| locator | AbsoluteUrl | 1..1 | RO | A pointer to a document at reference point M2 that defines a media presentation e.g. MPD for DASH content or URL to a video clip file. |
| contentType | String | 1..1 | RO | The MIME content type of this Media Entry Point. |  |
| profiles | Array(Uri) | 0..1 | RO | An optional list of conformance profile URIs with which this Media Entry Point is compliant.  If present, the array shall contain at least one item. |  |
| eMBMS‌Service‌Announcement‌Locator | AbsoluteUrl | 0..1 | RO | A pointer to a document that defines a User Service Announcement for eMBMS where the service announcement file is available. | Downlink |
| clientConsumptionReporting‌Configuration | Object | 0..1 | RO |  | downlink |
| reportingInterval | DurationSec | 0..1 | RO | The time interval, expressed in seconds, between consumption report messages being sent by the Media Session Handler. The value shall be greater than zero.  When this property is omitted, a single final report shall be sent immediately after the media streaming session has ended. |
| serverAddresses | Array(AbsoluteUrl) | 1..1 | RO | A list of 5GMSd AF addresses (URLs) where the consumption reporting messages are sent by the Media Session Handler. See NOTE.  (Opaque URL, following the 5GMS URL format.) |
| locationReporting | Boolean | 1..1 | RO | Stipulates whether the Media Session Handler is required to provide location data to the 5GMSd AF in consumption reporting messages (in case of MNO or trusted third parties). |
| accessReporting | Boolean | 1..1 | RO | Stipulates whether the Media Session Handler is required to provide consumption reporting messages to the 5GMSd AF when the access network changes during a media streaming session. |
| samplePercentage | Percentage | 1..1 | RO | The percentage of media streaming sessions that shall send consumption reports, expressed as a floating point value between 0.0 and 100.0. |
| dynamicPolicyInvocation‌Configuration | Object | 0..1 | RO |  | downlink,  uplink |
| serverAddresses | Array(AbsoluteUrl) | 1..1 | RO | A list of 5GMSd AF addresses (URLs) which offer the APIs for dynamic policy invocation sent by the Media Session Handler. See NOTE.  (Opaque URL, following the 5GMS URL format.) |
| validPolicyTemplateIds | Array(ResourceId) | 1..1 | RO | A list of Policy Template identifiers which the 5GMS Client is authorized to use. |
| sdfMethods | Array(SdfMethod) | 1..1 | RO | A list of recommended service data flow description methods (descriptors), e.g. 5-Tuple, ToS, 2-Tuple, etc., which should be used by the Media Session Handler to describe the service data flows for the traffic to be policed. |
| externalReferences | Array(String) | 0..1 | RO | Additional identifier for this Policy Template, unique within the scope of its Provisioning Session, that can be cross-referenced with external metadata about the media streaming session.  Example: "HD\_Premium". |
| clientMetricsReporting‌Configurations | Array(Object) | 0..1 | RO |  | downlink,  uplink |
| *metricsReporting‌ConfigurationId* | ResourceId | 1..1 | RO | The identifier of this metrics reporting configuration, unique within the scope of provisioningSessionId.  The value shall be the same as the corresponding identifier provisioned at reference point M1. |
| serverAddresses | Array(AbsoluteUrl) | 1..1 | RO | A list of 5GMS AF addresses to which metrics reports shall be sent. See NOTE.  (Opaque URL, following the 5GMS URL format.) |
| scheme | Uri | 1..1 | RO | The metrics reporting scheme that metrics reports shall use (see clause 4.7.5). |
| dataNetworkName | Dnn | 0..1 | RO | The DNN which shall be used when sending metrics reports. If not specified, the name of the default DN shall be used. |
| reportingInterval | DurationSec | 0..1 | RO | The time interval, expressed in seconds, between metrics reports being sent by the Media Session Handler. The value shall be greater than zero.  When this property is omitted, a single final report shall be sent immediately after the media streaming session has ended. |
| samplePercentage | Percentage | 1..1 | RO | The percentage of media streaming sessions that shall report metrics, expressed as a floating point value between 0.0 and 100.0. |
| urlFilters | Array(String) | 0..1 | RO | A non-empty list of URL patterns for which metrics reporting shall be done. The format of each pattern shall be a regular expression as specified in [5].  If not specified, reporting shall be done for all sessions. |
| Metrics | Array(String) | 1..1 | RO | A list of metrics which shall be reported. |
| networkAssistance‌Configuration | Object | 0..1 | RO |  | downlink,  uplink |
| serverAddresses | Array(AbsoluteUrl) | 1..1 | RO | A list of 5GMS AF addresses (URLs) that offer the APIs for 5GMS AF-based Network Assistance, for access by the 5GMSd Media Session Handler. See NOTE.  Each address shall be an opaque URL, following the 5GMS URL format. |
| Client‌EdgeResources‌Configuration | Object | 0..1 | RO | Present only for Provisioning Sessions with client-driven edge computing management mode provisioned. | Downlink,  uplink |
| eligibilityCriteria | Edge‌Processing‌Eligibility‌Criteria | 0..1 | RO | Conditions for activating edge resources for media streaming sessions in the scope of this Service Access Information. (See clause 6.4.3.8.) |
| easDiscoveryTemplate | EAS‌Discovery‌Template | 1..1 | RO | A template for the EAS discovery filter that shall be used by the EEC to discover and select a 5GMS EAS instance to serve media streaming sessions in the scope of this Service Access Information. (See clause 11.2.3.2.) |
| easRelocation‌Requirements | M5EAS‌Relocation‌Requirements | 0..1 | RO | EAS relocation tolerance and requirements.  If absent, the EEC shall assume that relocation is tolerated by all 5GMS EAS instances in the scope of this Service Access Information. (See clause 11.2.3.3.) |
| NOTE: In deployments where multiple instances of the 5GMSd AF expose the Media Session Handling APIs at M5, the 5G System may use a suitable mechanism (e.g. HTTP load balancing or DNS resolution) to direct requests to a suitable AF instance. | | | | | |

NEXT CHANGE

## C.3.5 M1\_ContentHostingProvisioning API

|  |
| --- |
| openapi: 3.0.0  info:    title: M1\_ContentHostingProvisioning    version: 2.2.0    description: |      5GMS AF M1 Content Hosting Provisioning API  *©* 2023, 3GPP Organizational Partners (ARIB, ATIS, CCSA, ETSI, TSDSI, TTA, TTC).      All rights reserved.  tags:    - name: M1\_ContentHostingProvisioning      description: '5G Media Streaming: Provisioning (M1) APIs: Content Hosting Provisioning'  externalDocs:    description: 'TS 26.512 V17.4.0; 5G Media Streaming (5GMS); Protocols'    url: 'https://www.3gpp.org/ftp/Specs/archive/26\_series/26.512/'  servers:    - url: '{apiRoot}/3gpp-m1/v2'      variables:        apiRoot:          default: https://example.com          description: See 3GPP TS 29.512 clause 6.1.  paths:    /provisioning-sessions/{provisioningSessionId}/content-hosting-configuration:      parameters:        - name: provisioningSessionId          in: path          required: true          schema:            $ref: 'TS26512\_CommonData.yaml#/components/schemas/ResourceId'          description: 'The resource identifier of an existing Provisioning Session.'      post:        operationId: createContentHostingConfiguration        summary: 'Create (and optionally upload) the Content Hosting Configuration for the specified Provisioning Session'        requestBody:          description: 'A JSON representation of a Content Hosting Configuration'          required: true          content:            application/json:              schema:                $ref: '#/components/schemas/ContentHostingConfiguration'        responses:          '201':            description: 'Content Hosting Configuration Created'            headers:              Location:                description: 'URL of the newly created Content Hosting Configuration (same as request URL).'                required: true                schema:                  $ref: 'TS26512\_CommonData.yaml#/components/schemas/AbsoluteUrl'      get:        operationId: retrieveContentHostingConfiguration        summary: 'Retrieve the Content Hosting Configuration of the specified Provisioning Session'        responses:          '200':            description: 'Success'            content:              application/json:                schema:                  $ref: '#/components/schemas/ContentHostingConfiguration'          '404':            description: 'Not Found'      put:        operationId: updateContentHostingConfiguration        summary: 'Update the Content Hosting Configuration for the specified Provisioning Session'        requestBody:          description: 'A JSON representation of a Content Hosting Configuration'          required: true          content:            application/json:              schema:                $ref: '#/components/schemas/ContentHostingConfiguration'        responses:          '204':            description: 'Updated Content Hosting Configuration'          '404':            description: 'Not Found'      patch:        operationId: patchContentHostingConfiguration        summary: 'Patch the Content Hosting Configuration for the specified Provisioning Session'        requestBody:          description: 'A JSON representation of a Content Hosting Configuration'          required: true          content:            application/merge-patch+json:              schema:                $ref: '#/components/schemas/ContentHostingConfiguration'            application/json-patch+json:              schema:                $ref: '#/components/schemas/ContentHostingConfiguration'        responses:          '200':            description: 'Patched Content Hosting Configuration'            content:              application/json:                schema:                  $ref: '#/components/schemas/ContentHostingConfiguration'          '404':            description: 'Not Found'      delete:        operationId: destroyContentHostingConfiguration        summary: 'Destroy the current Content Hosting Configuration of the specified Provisioning Session'        responses:          '204':            description: 'Destroyed Content Hosting Configuration'          '404':            description: 'Not Found'      /provisioning-sessions/{provisioningSessionId}/content-hosting-configuration/purge:      parameters:          - name: provisioningSessionId            in: path            required: true            schema:              $ref: 'TS26512\_CommonData.yaml#/components/schemas/ResourceId'            description: A unique identifier of the Provisioning      post:        operationId: purgeContentHostingCache        summary: 'Purge the content of the cache for the Content Hosting Configuration of the specified Provisioning Session'        requestBody:          description: 'The regular expression pattern for resources to purge from the cache'          required: true          content:            application/x-www-form-urlencoded:              schema:                properties:                  pattern:                    description: 'The regular expression'                    type: string        responses:          '200':            # OK            description: 'Content Purged'            content:              application/json:                schema:                  description: 'The aggregate number of cache entries purged in all 5GMSd AS instances distributing content for the requested Provisioning Session.'                  type: integer                  minimum: 1          '204':            # No Content            description: 'No Content Purged'          '404':            # Not Found            $ref: 'TS29571\_CommonData.yaml#/components/responses/404'          '413':            # Payload Too Large            $ref: 'TS29571\_CommonData.yaml#/components/responses/413'          '414':            # URI Too Long            $ref: 'TS29571\_CommonData.yaml#/components/responses/414'          '415':            # Unsupported Media Type            $ref: 'TS29571\_CommonData.yaml#/components/responses/415'          '422':            # Unprocessable Entity (e.g. syntactically invalid regular expression in request body)            description: 'Unprocessable Entity'            content:              application/problem+json:                schema:                  $ref: 'TS29571\_CommonData.yaml#/components/schemas/ProblemDetails'          '500':            # Internal Server Error            $ref: 'TS29571\_CommonData.yaml#/components/responses/500'          '503':            # Service Unavailable            $ref: 'TS29571\_CommonData.yaml#/components/responses/503'          default:            $ref: 'TS29571\_CommonData.yaml#/components/responses/default'  components:    schemas:      IngestConfiguration:        type: object        description: 'A configuration for content ingest.'        properties:          pull:            type: boolean          protocol:            $ref: 'TS29571\_CommonData.yaml#/components/schemas/Uri'          baseURL:            $ref: 'TS26512\_CommonData.yaml#/components/schemas/AbsoluteUrl'      M1MediaEntryPoint:        description: "A typed entry point for downlink or uplink media streaming."        type: object        required:          - relativePath          - contentType        properties:          relativePath:            $ref: 'TS26512\_CommonData.yaml#/components/schemas/RelativeUrl'          contentType:            type: string          profiles:            type: array            items:              $ref: 'TS29571\_CommonData.yaml#/components/schemas/Uri'            minItems: 1      PathRewriteRule:        type: object        description: 'A rule to manipulate URL paths.'        required:          - requestPathPattern          - mappedPath        properties:          requestPathPattern:            type: string          mappedPath:            type: string      CachingConfiguration:        type: object        description: 'A content caching configuration.'        required:          - urlPatternFilter        properties:          urlPatternFilter:            type: string          cachingDirectives:            type: object            required:              - noCache            properties:              statusCodeFilters:                type: array                items:                  type: integer              noCache:                type: boolean              maxAge:                type: integer                format: int32      DistributionConfiguration:        type: object        description: 'A content distribution configuration.'        properties:          entryPoint:            $ref: '#/components/schemas/M1MediaEntryPoint'          contentPreparationTemplateId:            $ref: 'TS26512\_CommonData.yaml#/components/schemas/ResourceId'          canonicalDomainName:            type: string          domainNameAlias:            type: string          baseURL:            $ref: 'TS26512\_CommonData.yaml#/components/schemas/AbsoluteUrl'          pathRewriteRules:            type: array            items:              $ref: '#/components/schemas/PathRewriteRule'          cachingConfigurations:            type: array            items:              $ref: '#/components/schemas/CachingConfiguration'          geoFencing:            type: object            required:              - locatorType              - locators            properties:              locatorType:                $ref: 'TS29571\_CommonData.yaml#/components/schemas/Uri'              locators:                type: array                items:                  type: string                  description: 'Format of individual locators depends on the locatorType.'                minItems: 1          urlSignature:            type: object            required:              - urlPattern              - tokenName              - passphraseName              - passphrase              - tokenExpiryName              - useIPAddress            properties:              urlPattern:                type: string              tokenName:                type: string              passphraseName:                type: string              passphrase:                type: string              tokenExpiryName:                type: string              useIPAddress:                type: boolean              ipAddressName:                type: string          certificateId:            $ref: 'TS26512\_CommonData.yaml#/components/schemas/ResourceId'          supplementaryDistributionNetworks:            type: array            items:              type: object              description: "A duple tying a type of supplementary distribution network to its distribution mode."              required:                - distributionNetworkType                - distributionMode              properties:                distributionNetworkType:                  $ref: '#/components/schemas/DistributionNetworkType'                distributionMode:                  $ref: '#/components/schemas/DistributionMode'      # Schema for the resource itself      ContentHostingConfiguration:        type: object        description: "A representation of a Content Hosting Configuration resource."        required:          - name          - ingestConfiguration          - distributionConfigurations        properties:          name:            type: string          ingestConfiguration:            $ref: '#/components/schemas/IngestConfiguration'          distributionConfigurations:            type: array            items:              $ref: '#/components/schemas/DistributionConfiguration'      DistributionNetworkType:        description: "Type of distribution network."        anyOf:          - type: string            enum: [NETWORK\_EMBMS]          - type: string            description: >              This string provides forward-compatibility with future              extensions to the enumeration but is not used to encode              content defined in the present version of this API.      DistributionMode:        description: "Mode of content distribution."        anyOf:          - type: string            enum: [MODE\_EXCLUSIVE, MODE\_HYBRID, MODE\_DYNAMIC]          - type: string            description: >              This string provides forward-compatibility with future              extensions to the enumeration but is not used to encode              content defined in the present version of this API. |

NEXT CHANGE

## C.4.1 M5\_ServiceAccessInformation API

|  |
| --- |
| openapi: 3.0.0  info:    title: M5\_ServiceAccessInformation    version: 2.2.0    description: |      5GMS AF M5 Service Access Information API  *©* 2023, 3GPP Organizational Partners (ARIB, ATIS, CCSA, ETSI, TSDSI, TTA, TTC).      All rights reserved.  tags:    - name: M5\_ServiceAccessInformation      description: '5G Media Streaming: Media Session Handling (M5) APIs: Service Access Information'  externalDocs:    description: 'TS 26.512 V17.4.0; 5G Media Streaming (5GMS); Protocols'    url: 'https://www.3gpp.org/ftp/Specs/archive/26\_series/26.512/'  servers:    - url: '{apiRoot}/3gpp-m5/v2'      variables:        apiRoot:          default: https://example.com          description: See 3GPP TS 29.512 clause 6.1.  paths:    /service-access-information/{provisioningSessionId}:      parameters:        - name: provisioningSessionId          description: 'The resource identifier of an existing Provisioning Session.'          in: path          required: true          schema:            $ref: 'TS26512\_CommonData.yaml#/components/schemas/ResourceId'      get:        operationId: retrieveServiceAccessInformation        summary: 'Retrieve the Service Access Information resource'        responses:          '200':            description: 'Success'            content:              application/json:                schema:                    $ref: '#/components/schemas/ServiceAccessInformationResource'          '404':            description: 'Not Found'  components:    schemas:      M5MediaEntryPoint:        description: "A typed entry point for downlink or uplink media streaming."        type: object        required:          - locator          - contentType        properties:          locator:            $ref: 'TS26512\_CommonData.yaml#/components/schemas/AbsoluteUrl'          contentType:            type: string          profiles:            type: array            items:              $ref: 'TS29571\_CommonData.yaml#/components/schemas/Uri'            minItems: 1      ServerAddresses:        description: "A set of application endpoint addresses."        type: array        items:          $ref: 'TS26512\_CommonData.yaml#/components/schemas/AbsoluteUrl'        minItems: 1      ServiceAccessInformationResource:        description: "A representation of a Service Access Information resource."        type: object        required:        - provisioningSessionId        - provisioningSessionType        properties:          provisioningSessionId:            $ref: 'TS26512\_CommonData.yaml#/components/schemas/ResourceId'          provisioningSessionType:            $ref: 'TS26512\_CommonData.yaml#/components/schemas/ProvisioningSessionType'          streamingAccess:            type: object            properties:              entryPoints:                type: array                items:                  $ref: '#/components/schemas/M5MediaEntryPoint'              eMBMSServiceAnnouncementLocator:                $ref: 'TS26512\_CommonData.yaml#/components/schemas/AbsoluteUrl'          clientConsumptionReportingConfiguration:            type: object            required:              - serverAddresses              - locationReporting              - samplePercentage            properties:              reportingInterval:                $ref: 'TS29571\_CommonData.yaml#/components/schemas/DurationSec'              serverAddresses:                $ref: '#/components/schemas/ServerAddresses'              locationReporting:                type: boolean              accessReporting:                type: boolean              samplePercentage:                $ref: 'TS26512\_CommonData.yaml#/components/schemas/Percentage'          dynamicPolicyInvocationConfiguration:            type: object            required:              - serverAddresses              - validPolicyTemplateIds              - sdfMethods            properties:              serverAddresses:                $ref: '#/components/schemas/ServerAddresses'              validPolicyTemplateIds:                type: array                items:                  $ref: 'TS26512\_CommonData.yaml#/components/schemas/ResourceId'                minItems: 0              sdfMethods:                type: array                items:                  $ref: 'TS26512\_CommonData.yaml#/components/schemas/SdfMethod'                minItems: 0              externalReferences:                type: array                items:                  type: string                minItems: 1          clientMetricsReportingConfiguration:            type: array            items:              type: object              required:              - serverAddresses              - scheme              - samplePercentage              - urlFilters              - metrics              properties:                serverAddresses:                  $ref: '#/components/schemas/ServerAddresses'                scheme:                  $ref: 'TS29571\_CommonData.yaml#/components/schemas/Uri'                dataNetworkName:                  $ref: 'TS29571\_CommonData.yaml#/components/schemas/Dnn'                reportingInterval:                  $ref: 'TS29571\_CommonData.yaml#/components/schemas/DurationSec'                samplePercentage:                  $ref: 'TS26512\_CommonData.yaml#/components/schemas/Percentage'                urlFilters:                  type: array                  items:                    type: string                  minItems: 0                metrics:                  type: array                  items:                    type: string          networkAssistanceConfiguration:            type: object            required:              - serverAddresses            properties:              serverAddresses:                $ref: '#/components/schemas/ServerAddresses'  clientEdgeResourcesConfiguration:            type: object            required:              - easDiscoveryTemplate            properties:              eligibilityCriteria:                $ref: 'TS26512\_CommonData.yaml#/components/schemas/EdgeProcessingEligibilityCriteria'              easDiscoveryTemplate:                $ref: '#/components/schemas/EASDiscoveryTemplate'              easRelocationRequirements:                $ref: '#/components/schemas/M5EASRelocationRequirements'      M5EASRelocationRequirements:        description: 'Relocation requirements of an EAS.'        type: object        required:          - tolerance        properties:          tolerance:            $ref: 'TS26512\_CommonData.yaml#/components/schemas/EASRelocationTolerance'          maxInterruptionDuration:            $ref: 'TS29571\_CommonData.yaml#/components/schemas/UintegerRm'      EASDiscoveryTemplate:        description: 'A template for discovering an EAS instance .'        type: object        required:          - easType          - easProviderIds          - serviceFeatures        properties:          easType:            type: string          easProviderIds:            type: array            items:              type: string          serviceFeatures:            type: array            items:              type: string |

END OF CHANGES