**3GPP TSG- WG3 Meeting # *r2***

**Xiamen, China, 9 - 13 October, 2023**

|  |
| --- |
| *CR-Form-v12.2* |
| **CHANGE REQUEST** |
|  |
|  | **29.575** | **CR** | **0067** | **rev** | **-** | **Current version:** | **18.3.0** |  |
|  |
| *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 |  | Radio Access Network |  | Core Network | **X** |

|  |
| --- |
|  |
| ***Title:***  | Updates to Nadrf\_MLModelManagement\_Delete Service Operation |
|  |  |
| ***Source to WG:*** | Ericsson, Intel |
| ***Source to TSG:*** | CT3 |
|  |  |
| ***Work item code:*** | eNA\_Ph3 |  | ***Date:*** | 2023-09-27 |
|  |  |  |  |  |
| ***Category:*** | **B** |  | ***Release:*** |  Rel-18 |
|  | *Use one of the following categories:****F*** *(correction)****A*** *(mirror corresponding to a change in an earlier release)****B*** *(addition of feature),* ***C*** *(functional modification of feature)****D*** *(editorial modification)*Detailed explanations of the above categories canbe found in 3GPP [TR 21.900](http://www.3gpp.org/ftp/Specs/html-info/21900.htm). | *Use one of the following releases:Rel-8 (Release 8)Rel-9 (Release 9)Rel-10 (Release 10)Rel-11 (Release 11)…Rel-16 (Release 16)Rel-17 (Release 17)Rel-18 (Release 18)Rel-19 (Release 19)* |
|  |  |
| ***Reason for change:*** | As in TS 23.288 clause 10.3.3, detail content of the "Operation execution result indication" has been added for the Nadrf\_MLModelManagement\_Delete service operation, this CR proposes to update the Nadrf\_MLModelManagement\_Delete service operation by adding "200 OK" to the response body. |
|  |  |
| ***Summary of change:*** | The changes include:* Updated the descripitons in clauses 4.3.2.4.2 and 4.3.2.4.3.
* Updated Tables 5.2.3.3.3.1-3 and 5.1.4.4.2-2 by adding "200 OK" and removing "204 No Content" for the data structures supported by the DELETE/POST Response Body.
* Added "delResult" attribute to data type MLModelInfo in clause 5.2.6.2.3.
* Definedd data type "DeleteResult" in clause 5.2.6.2.Y.
* Corrected errors in clause 5.2.3.3.2.
 |
|  |  |
| ***Consequences if not approved:*** | Misalignment with stage 2 for the Nadrf\_MLModelManagement\_Delete service operation. |
|  |  |
| ***Clauses affected:*** | 4.3.2.4.2, 4.3.2.4.3, 5.2.3.3.2, 5.2.3.3.3.1, 5.2.4.4.2, 5.2.6.1, 5.2.6.2.3, 5.2.6.2.Y(new), A.3 |
|  |  |
|  | **Y** | **N** |  |  |
| ***Other specs*** |  | **X** |  Other core specifications  | TS/TR ... CR ...  |
| ***affected:*** |  | **X** |  Test specifications | TS/TR ... CR ...  |
| ***(show related CRs)*** |  | **X** |  O&M Specifications | TS/TR ... CR ...  |
|  |  |
| ***Other comments:*** | This CR introduces backwards compatible features to the Nadrf\_MLModelManagement API. |
|  |  |
| ***This CR's revision history:*** |  |

**Additional discussion(if needed):**

**Proposed changes:**

\*\*\* 1st Change \*\*\*

##### 4.3.2.4.2 Requesting removal of stored ML model(s)

Figure 4.3.2.4.2-1 shows a scenario where the NF service consumer sends a request to the ADRF to delete stored ML model(s).



Figure 4.3.2.4.2-1: NF service consumer requesting to remove stored ML model(s)

The NF service consumer shall invoke the Nadrf\_MLModelManagement\_Delete service operation to remove the ML model(s) that are stored in the corresponding storage transaction. The NF service consumer shall send an HTTP DELETE request with "{apiRoot}/nadrf-mlmodelmanagement/<apiVersion>/mlmodel-store-records/{storeTransId}" as Resource URI representing an "Individual ADRF ML Model Store Record" resource, as shown in figure 4.3.2.4.2-1, step 1, where "{storeTransId}" is the transaction identifier of the stored record that is to be deleted.

Upon the reception of an HTTP DELETE request with "{apiRoot}/nadrf-mlmodelmanagement/<apiVersion>/mlmodel-store-records/{storeTransId}" as Resource URI, if the ADRF successfully processed and accepted the received HTTP DELETE request, the ADRF shall:

- remove the storage transaction corresponding stored ML model record;

- respond with HTTP "200 OK" status code with the message body containing the MLModelInfo data structure with the unique ML model identifier in the "modelUniqueId" attribute and the result (i.e. ML model deleted, ML model not found, ML model found but not deleted) in the "delResult" attribute.

If errors occur when processing the HTTP DELETE request, the ADRF shall send an HTTP error response as specified in clause 5.2.7.

If the ADRF determines the received HTTP DELETE request needs to be redirected, the ADRF shall send an HTTP redirect response as specified in clause 6.10.9 of 3GPP TS 29.500 [4].

\*\*\* 2nd Change \*\*\*

##### 4.3.2.4.3 Requesting removal of stored ML model(s) using unique ML model identifier

Figure 4.3.2.4.3-1 shows a scenario where the NF service consumer sends a request to the ADRF to delete stored ML model(s) based on the unique ML model identifier.

Figure 4.3.2.4.3-1: NF service consumer requesting to remove stored ML model(s)

The NF service consumer shall invoke the Nadrf\_MLModelManagement\_Delete service operation to remove stored ML model(s) based on the unique ML model identifier. The NF service consumer shall send an HTTP POST request with "{apiRoot}/nadrf-mlmodelmanagement/<apiVersion>/remove-stored-mlmodel" as URI, as shown in figure 4.3.2.4.3-1, step 1. The POST request body shall contain a NadrfMLModelStoreRecord data structure. The NadrfMLModelStoreRecord data structure provided in the request body shall include the MLModelInfo data structure in the "mlModelInfo" attribute with the unique ML model identifier in the "modelUniqueId" attribute.

Upon the reception of an HTTP POST request with "{apiRoot}/nadrf-mlmodelmanagement/<apiVersion>/remove-stored-mlmodel" as URI, if the ADRF successfully processed and accepted the received HTTP POST request, the ADRF shall remove any stored ML model(s) that match the unique ML model identifier received in the request and respond with HTTP "200 OK" status with the message body containing the NadrfMLModelStoreRecord data structure. The ADRF shall include the MLModelInfo data structure with the unique ML model identifier in the "modelUniqueId" attribute and the result (i.e. ML model deleted, ML model not found, ML model found but not deleted) in the "delResult" attribute. If errors occur when processing the HTTP POST request, the ADRF shall send an HTTP error response as specified in clause 5.2.7.

\*\*\* 3rd Change \*\*\*

##### 5.2.3.3.2 Resource Definition

Resource URI: **{apiRoot}/nadrf-mlmodelmanagement/<apiVersion>/mlmodel-store-records/{storeTransId}**

The <apiVersion> shall be set as described in clause 5.2.1.

This resource shall support the resource URI variables defined in table 5.2.3.3.2-1.

Table 5.2.3.3.2-1: Resource URI variables for this resource

|  |  |  |
| --- | --- | --- |
| Name | Data type | Definition |
| apiRoot | string | See clause 5.2.1. |
| storeTransId | string | Identifies an individual data store record. |

\*\*\* 4th Change \*\*\*

###### 5.2.3.3.3.1 DELETE

This method shall support the URI query parameters specified in table 5.2.3.3.3.1-1.

Table 5.2.3.3.3.1-1: URI query parameters supported by the DELETE method on this resource

|  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- |
| Name | Data type | P | Cardinality | Description | Applicability |
| n/a |  |  |  |  |  |

This method shall support the request data structures specified in table 5.2.3.3.3.1-2 and the response data structures and response codes specified in table 5.2.3.3.3.1-3.

Table 5.2.3.3.3.1-2: Data structures supported by the DELETE Request Body on this resource

|  |  |  |  |
| --- | --- | --- | --- |
| Data type | P | Cardinality | Description |
| n/a |  |  |  |

Table 5.2.3.3.3.1-3: Data structures supported by the DELETE Response Body on this resource

|  |  |  |  |  |
| --- | --- | --- | --- | --- |
| Data type | P | Cardinality | Responsecodes | Description |
|  |  |  |  |  |
| array(MLModelInfo) | M | 1..N | 200 OK | The Individual ADRF ML Model Store Record resource was deleted successfully. |
| RedirectResponse | O | 0..1 | 307 Temporary Redirect | Temporary redirection, during Individual ADRF ML Model Store Record deletion.(NOTE 2) |
| RedirectResponse | O | 0..1 | 308 Permanent Redirect | Permanent redirection, during Individual ADRF ML Model Store Record deletion.(NOTE 2) |
| NOTE 1: The mandatory HTTP error status code for the DELETE method listed in Table 5.2.7.1-1 of 3GPP TS 29.500 [4] also apply.NOTE 2: The RedirectResponse data structure may be provided by an SCP (cf. clause 6.10.9.1 of 3GPP TS 29.500 [4]). |

Table 5.2.3.3.3.1-4: Headers supported by the 307 Response Code on this resource

|  |  |  |  |  |
| --- | --- | --- | --- | --- |
| Name | Data type | P | Cardinality | Description |
| Location | string | M | 1 | Contains an alternative URI of the resource located in an alternative ADRF (service) instance towards which the request is redirected.For the case where the request is redirected to the same target via a different SCP, refer to clause 6.10.9.1 of 3GPP TS 29.500 [4]. |
| 3gpp-Sbi-Target-Nf-Id | string | O | 0..1 | Identifier of the target ADRF (service) instance towards which the request is redirected. |

Table 5.2.3.3.3.1-5: Headers supported by the 308 Response Code on this resource

|  |  |  |  |  |
| --- | --- | --- | --- | --- |
| Name | Data type | P | Cardinality | Description |
| Location | string | M | 1 | Contains an alternative URI of the resource located in an alternative ADRF (service) instance towards which the request is redirected.For the case where the request is redirected to the same target via a different SCP, refer to clause 6.10.9.1 of 3GPP TS 29.500 [4]. |
| 3gpp-Sbi-Target-Nf-Id | string | O | 0..1 | Identifier of the target ADRF (service) instance towards which the request is redirected. |

\*\*\* 5th Change \*\*\*

##### 5.2.4.4.2 Operation Definition

This operation shall support the request data structures shown in Table 5.2.4.4.2-1 and the response data structures and error codes specified in Tables 5.2.4.4.2-2.

Table 5.2.4.4.2-1: Data structures supported by the POST Request Body on this resource

|  |  |  |  |
| --- | --- | --- | --- |
| Data type | P | Cardinality | Description |
| array(NadrfMLModelStoreRecord) | M | 1..N | Unique ML model identifier of the ML model stored in ADRF. |

Table 5.1.4.4.2-2: Data structures supported by the POST Response Body on this resource

|  |  |  |  |  |
| --- | --- | --- | --- | --- |
| Data type | P | Cardinality | Responsecodes | Description |
|  |  |  |  |  |
| NadrfMLModelStoreRecord | M | 1 | 200 OK | Successful request to remove ML model in the ADRF based on the unique ML model identifier. |
| NOTE: The mandatory HTTP error status code for the POST method listed in Table 5.1.7.1-1 of 3GPP TS 29.500 [4] also apply. |

\*\*\* 6th Change \*\*\*

#### 5.2.6.1 General

This clause specifies the application data model supported by the Nadrf\_MLModelManagement API.

Table 5.2.6.1-1 specifies the data types defined for the Nadrf\_MLModelManagement service based interface protocol.

Table 5.2.6.1-1: Nadrf\_MLModelManagement specific Data Types

|  |  |  |  |
| --- | --- | --- | --- |
| Data type | Clause defined | Description | Applicability |
| NadrfMLModelStoreRecord | 5.2.6.2.2 | Represents an Individual ADRF ML Model Store Record resource. |  |
| MLModelInfo | 5.2.6.2.3 | Represents informatiom of the ML Model. |  |
| DeleteResult | 5.2.6.2.Y | Indicates the result of the Nadrf\_MLModelManagement\_Delete service operation. |  |

Table 5.2.6.1-2 specifies data types re-used by the Nadrf\_MLModelManagement service based interface protocol from other specifications, including a reference to their respective specifications and when needed, a short description of their use within the Nadrf\_MLModelManagement service based interface.

Table 5.2.6.1-2: Nadrf\_MLModelManagement re-used Data Types

|  |  |  |  |
| --- | --- | --- | --- |
| Data type | Reference | Comments | Applicability |
| MLModelAddr | 3GPP TS 29.520 [15]  | Address of ML model file |  |
| NfInstanceId | 3GPP TS 29.571 [16] | NF instance identifier. |  |
| NfSetId | 3GPP TS 29.571 [16] | NF set identifier. |  |
| SupportedFeatures | 3GPP TS 29.571 [16] | Used to negotiate the applicability of the optional features defined in table 5.2.8-1. |  |
| Uinteger | 3GPP TS 29.571 [16] | Unsigned Integer, i.e. only value 0 and integers above 0 are permissible. |  |

\*\*\* 7th Change \*\*\*

##### 5.2.6.2.3 Type: MLModelInfo

Table 5.2.6.2.3-1: Definition of type MLModelInfo

|  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- |
| Attribute name | Data type | P | Cardinality | Description | Applicability |
| modelUniqueId | Uinteger | M | 1 | Unique ML Model identifier |  |
| mlFileAddr | MLModelAddr | M | 1 | Address (e.g. a URL or an FQDN) of the ML model file. |  |
| mlStorageSize | Uinteger | M | 1 | Storage size in octets required for each of the ML model. |  |
| delResult | DeleteResult | C | 0..1 | Indicates the result of the Nadrf\_MLModelManagement\_Delete service operation (NOTE) |  |
| NOTE: The "delResult" attribute is only applicable when included in the response to a Nadrf\_MLModelManagement\_Delete service operation to remove stored ML model(s) using unique ML model identifier. |

\*\*\* 8th Change \*\*\*

5.2.6.2.Y Enumeration: DeleteResult

Table 5.2.6.2.Y-1: Enumeration DeleteResult

|  |  |  |
| --- | --- | --- |
| Attribute name | Description | Applicability |
| ML\_MODEL\_DELETED | Indicates that the ML model was deleted in ADRF. |  |
| ML\_MODEL\_NOT\_FOUND | Indicates that the ML model was not found in ADRF. |  |
| ML\_MODEL\_FOUND\_BUT\_NOT\_DELETED | Indicates that the ML model was found in ADRF but not deleted. |  |

\*\*\* 9th Change \*\*\*

# A.3 Nadrf\_MLModelManagement API

openapi: 3.0.0

info:

 version: 1.0.0-alpha.1

 title: Nadrf\_MLModelManagement

 description: |

 ADRF ML Model Management Service.

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externalDocs:

 description: 3GPP TS 29.575 V18.3.0; 5G System; Analytics Data Repository Services; Stage 3.

 url: 'https://www.3gpp.org/ftp/Specs/archive/29\_series/29.575/'

#

servers:

 - url: '{apiRoot}/nadrf-mlmodelmanagement/v1'

 variables:

 apiRoot:

 default: https://example.com

 description: apiRoot as defined in clause 4.4 of 3GPP TS 29.501.

#

security:

 - {}

 - oAuth2ClientCredentials:

 - nadrf-mlmodelmanagement

#

paths:

 /mlmodel-store-records:

 post:

 summary: Creates a new Individual ADRF ML Model Store Record resource.

 operationId: CreateADRFMLModelStoreRecord

 tags:

 - ADRF ML Model Store Records (Collection)

 requestBody:

 content:

 application/json:

 schema:

 $ref: '#/components/schemas/NadrfMLModelStoreRecord'

 required: true

 description: ADRF ML model store record to be stored.

 responses:

 '201':

 description: Successful creation of new Individual ADRF ML Model Store Record resource.

 headers:

 Location:

 description: >

 Contains the URI of the newly created resource, according to the structure

 {apiRoot}/nadrf-mlmodelmanagement/<apiVersion>/mlmodel-store-records/{storeTransId}

 required: true

 schema:

 type: string

 content:

 application/json:

 schema:

 $ref: '#/components/schemas/NadrfMLModelStoreRecord'

 '400':

 $ref: 'TS29571\_CommonData.yaml#/components/responses/400'

 '401':

 $ref: 'TS29571\_CommonData.yaml#/components/responses/401'

 '403':

 $ref: 'TS29571\_CommonData.yaml#/components/responses/403'

 '404':

 $ref: 'TS29571\_CommonData.yaml#/components/responses/404'

 '411':

 $ref: 'TS29571\_CommonData.yaml#/components/responses/411'

 '413':

 $ref: 'TS29571\_CommonData.yaml#/components/responses/413'

 '415':

 $ref: 'TS29571\_CommonData.yaml#/components/responses/415'

 '429':

 $ref: 'TS29571\_CommonData.yaml#/components/responses/429'

 '500':

 $ref: 'TS29571\_CommonData.yaml#/components/responses/500'

 '502':

 $ref: 'TS29571\_CommonData.yaml#/components/responses/502'

 '503':

 $ref: 'TS29571\_CommonData.yaml#/components/responses/503'

 default:

 $ref: 'TS29571\_CommonData.yaml#/components/responses/default'

 get:

 summary: Retrieves existing Individual ADRF ML Model Store Record.

 operationId: GetAdrfMLModelStoreRecord

 tags:

 - ADRF ML Model Store Records (Collection)

 parameters:

 - name: store-trans-id

 description: A storage transaction identifier of a ML model store record in ADRF.

 in: query

 required: false

 schema:

 type: string

 - name: modelUniqueId

 description: Unique Model identifier of a ML model.

 in: query

 required: false

 schema:

 type: array

 items:

 $ref: 'TS29571\_CommonData.yaml#/components/schemas/Uinteger'

 minItems: 1

 responses:

 '200':

 description: ML model store records are returned.

 content:

 application/json:

 schema:

 $ref: '#/components/schemas/NadrfMLModelStoreRecord'

 '204':

 description: No matching ADRF ML Model were found.

 '400':

 $ref: 'TS29571\_CommonData.yaml#/components/responses/400'

 '401':

 $ref: 'TS29571\_CommonData.yaml#/components/responses/401'

 '403':

 $ref: 'TS29571\_CommonData.yaml#/components/responses/403'

 '404':

 $ref: 'TS29571\_CommonData.yaml#/components/responses/404'

 '406':

 $ref: 'TS29571\_CommonData.yaml#/components/responses/406'

 '429':

 $ref: 'TS29571\_CommonData.yaml#/components/responses/429'

 '500':

 $ref: 'TS29571\_CommonData.yaml#/components/responses/500'

 '502':

 $ref: 'TS29571\_CommonData.yaml#/components/responses/502'

 '503':

 $ref: 'TS29571\_CommonData.yaml#/components/responses/503'

 default:

 $ref: 'TS29571\_CommonData.yaml#/components/responses/default'

 /mlmodel-store-records/{storeTransId}:

 delete:

 summary: Delete an existing Individual ADRF ML Model Store Record.

 operationId: DeleteADRFMLModelStoreRecord

 tags:

 - Individual ADRF ML Model Store Record (Document)

 parameters:

 - name: storeTransId

 in: path

 description: String identifying a ML Model Store Record in ADRF.

 required: true

 schema:

 type: string

 responses:

 '200':

 description: >

 The Individual ADRF ML Model Store Record resource matching the

 storeTransId was deleted. The result is returned.

 content:

 application/json:

 schema:

 type: array

 items:

 $ref: '#/components/schemas/MLModelInfo'

 minItems: 1

 '307':

 $ref: 'TS29571\_CommonData.yaml#/components/responses/307'

 '308':

 $ref: 'TS29571\_CommonData.yaml#/components/responses/308'

 '400':

 $ref: 'TS29571\_CommonData.yaml#/components/responses/400'

 '401':

 $ref: 'TS29571\_CommonData.yaml#/components/responses/401'

 '403':

 $ref: 'TS29571\_CommonData.yaml#/components/responses/403'

 '404':

 $ref: 'TS29571\_CommonData.yaml#/components/responses/404'

 '429':

 $ref: 'TS29571\_CommonData.yaml#/components/responses/429'

 '500':

 $ref: 'TS29571\_CommonData.yaml#/components/responses/500'

 '502':

 $ref: 'TS29571\_CommonData.yaml#/components/responses/502'

 '503':

 $ref: 'TS29571\_CommonData.yaml#/components/responses/503'

 default:

 $ref: 'TS29571\_CommonData.yaml#/components/responses/default'

 /remove-stored-mlmodel:

 post:

 summary: Remove stored ML model based on unique ML model identifier.

 operationId: DeleteADRFMLModel

 tags:

 - ADRF Stored ML Model

 requestBody:

 content:

 application/json:

 schema:

 type: array

 items:

 $ref: '#/components/schemas/NadrfMLModelStoreRecord'

 minItems: 1

 required: true

 responses:

 '200':

 description: >

 The ADRF ML model matching the provided unique ML model identifier

 was deleted. The result is returned.

 content:

 application/json:

 schema:

 $ref: '#/components/schemas/NadrfMLModelStoreRecord'

 '400':

 $ref: 'TS29571\_CommonData.yaml#/components/responses/400'

 '401':

 $ref: 'TS29571\_CommonData.yaml#/components/responses/401'

 '403':

 $ref: 'TS29571\_CommonData.yaml#/components/responses/403'

 '404':

 $ref: 'TS29571\_CommonData.yaml#/components/responses/404'

 '411':

 $ref: 'TS29571\_CommonData.yaml#/components/responses/411'

 '413':

 $ref: 'TS29571\_CommonData.yaml#/components/responses/413'

 '415':

 $ref: 'TS29571\_CommonData.yaml#/components/responses/415'

 '429':

 $ref: 'TS29571\_CommonData.yaml#/components/responses/429'

 '500':

 $ref: 'TS29571\_CommonData.yaml#/components/responses/500'

 '502':

 $ref: 'TS29571\_CommonData.yaml#/components/responses/502'

 '503':

 $ref: 'TS29571\_CommonData.yaml#/components/responses/503'

 default:

 $ref: 'TS29571\_CommonData.yaml#/components/responses/default'

#

components:

 securitySchemes:

 oAuth2ClientCredentials:

 type: oauth2

 flows:

 clientCredentials:

 tokenUrl: '{nrfApiRoot}/oauth2/token'

 scopes:

 nadrf-mlmodelmanagement: Access to the nadrf-mlmodelmanagement API

#

 schemas:

#

 NadrfMLModelStoreRecord:

 description: Represents an Individual ADRF ML Model Store Record.

 type: object

 allOf:

 - oneOf:

 - required: [nfInstanceId]

 - required: [nfSetId]

 - required: [mlModelIdnfo]

 properties:

 nfInstanceId:

 $ref: 'TS29571\_CommonData.yaml#/components/schemas/NfInstanceId'

 nfSetId:

 $ref: 'TS29571\_CommonData.yaml#/components/schemas/NfSetId'

 mlModelInfo:

 type: array

 items:

 $ref: '#/components/schemas/MLModelInfo'

 minItems: 1

 description: List of ML Model Information.

 suppFeat:

 $ref: 'TS29571\_CommonData.yaml#/components/schemas/SupportedFeatures'

#

 MLModelInfo:

 description: Represents informatiom of the ML Model.

 type: object

 allOf:

 - required: [modelUniqueId]

 - required: [mlFileAddr]

 - required: [mlStorageSize]

 properties:

 modelUniqueId:

 $ref: 'TS29571\_CommonData.yaml#/components/schemas/Uinteger'

 mlModelAddr:

 $ref: 'TS29520\_Nnwdaf\_MLModelProvision.yaml#/components/schemas/MLModelAddr'

 mlStorageSize:

 $ref: 'TS29571\_CommonData.yaml#/components/schemas/Uinteger'

#

# ENUMERATIONS DATA TYPES

#

 DeleteResult:

 anyOf:

 - type: string

 enum:

 - ML\_MODEL\_DELETED

 - ML\_MODEL\_NOT\_FOUND

 - ML\_MODEL\_FOUND\_BUT\_NOT\_DELETED

 - 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.

 description: |

 Represents the store result type.

 Possible values are:

 - ML\_MODEL\_DELETED: Indicates that the ML model was deleted in ADRF.

 - ML\_MODEL\_FILE\_ADDRESS\_NOT\_FOUND: Indicates that the ML model was not found in ADRF.

 - ML\_MODEL\_FOUND\_BUT\_NOT\_DELETED: Indicates that the ML model was found in ADRF but not deleted.

\*\*\* End of Changes \*\*\*