

- **AutoML**
(/video-intelligence/automl/docs/reference/rpc/google.cloud.automl.v1beta1#google.cloud.automl.v1beta1.AutoML)
(interface)
- **PredictionService**
(/video-intelligence/automl/docs/reference/rpc/google.cloud.automl.v1beta1#google.cloud.automl.v1beta1.PredictionService)
(interface)
- **AnnotationPayload**
(/video-intelligence/automl/docs/reference/rpc/google.cloud.automl.v1beta1#google.cloud.automl.v1beta1.AnnotationPayload)
(message)
- **AnnotationSpec**
(/video-intelligence/automl/docs/reference/rpc/google.cloud.automl.v1beta1#google.cloud.automl.v1beta1.AnnotationSpec)
(message)
- **BatchPredictInputConfig**
(/video-intelligence/automl/docs/reference/rpc/google.cloud.automl.v1beta1#google.cloud.automl.v1beta1.BatchPredictInputConfig)
(message)
- **BatchPredictOperationMetadata**
(/video-intelligence/automl/docs/reference/rpc/google.cloud.automl.v1beta1#google.cloud.automl.v1beta1.BatchPredictOperationMetadata)
(message)

- **BatchPredictOperationMetadata.BatchPredictOutputInfo**
(/video-intelligence/automl/docs/reference/rpc/google.cloud.automl.v1beta1#google.cloud.automl.v1beta1.BatchPredictOperationMetadata.BatchPredictOutputInfo)
(message)
- **BatchPredictOutputConfig**
(/video-intelligence/automl/docs/reference/rpc/google.cloud.automl.v1beta1#google.cloud.automl.v1beta1.BatchPredictOutputConfig)
(message)
- **BatchPredictRequest**
(/video-intelligence/automl/docs/reference/rpc/google.cloud.automl.v1beta1#google.cloud.automl.v1beta1.BatchPredictRequest)
(message)
- **BatchPredictResult**
(/video-intelligence/automl/docs/reference/rpc/google.cloud.automl.v1beta1#google.cloud.automl.v1beta1.BatchPredictResult)
(message)
- **BigQueryDestination**
(/video-intelligence/automl/docs/reference/rpc/google.cloud.automl.v1beta1#google.cloud.automl.v1beta1.BigQueryDestination)
(message)
- **ClassificationAnnotation**
(/video-intelligence/automl/docs/reference/rpc/google.cloud.automl.v1beta1#google.cloud.automl.v1beta1.ClassificationAnnotation)
(message)
- **ClassificationEvaluationMetrics**
(/video-intelligence/automl/docs/reference/rpc/google.cloud.automl.v1beta1#google.cloud.automl.v1beta1.ClassificationEvaluationMetrics)
(message)

- **ClassificationEvaluationMetrics.ConfidenceMetricsEntry**
(/video-intelligence/automl/docs/reference/rpc/google.cloud.automl.v1beta1#google.cloud.automl.v1beta1.ClassificationEvaluationMetrics.ConfidenceMetricsEntry)
(message)
- **ClassificationEvaluationMetrics.ConfusionMatrix**
(/video-intelligence/automl/docs/reference/rpc/google.cloud.automl.v1beta1#google.cloud.automl.v1beta1.ClassificationEvaluationMetrics.ConfusionMatrix)
(message)
- **ClassificationEvaluationMetrics.ConfusionMatrix.Row**
(/video-intelligence/automl/docs/reference/rpc/google.cloud.automl.v1beta1#google.cloud.automl.v1beta1.ClassificationEvaluationMetrics.ConfusionMatrix.Row)
(message)
- **CreateDatasetRequest**
(/video-intelligence/automl/docs/reference/rpc/google.cloud.automl.v1beta1#google.cloud.automl.v1beta1.CreateDatasetRequest)
(message)
- **CreateModelOperationMetadata**
(/video-intelligence/automl/docs/reference/rpc/google.cloud.automl.v1beta1#google.cloud.automl.v1beta1.CreateModelOperationMetadata)
(message)
- **CreateModelRequest**
(/video-intelligence/automl/docs/reference/rpc/google.cloud.automl.v1beta1#google.cloud.automl.v1beta1.CreateModelRequest)
(message)
- **Dataset**
(/video-intelligence/automl/docs/reference/rpc/google.cloud.automl.v1beta1#google.cloud.automl.v1beta1.Dataset)
(message)

- **DeleteDatasetRequest**
(/video-intelligence/automl/docs/reference/rpc/google.cloud.automl.v1beta1#google.cloud.automl.v1beta1.DeleteDatasetRequest)
(message)
- **DeleteModelRequest**
(/video-intelligence/automl/docs/reference/rpc/google.cloud.automl.v1beta1#google.cloud.automl.v1beta1.DeleteModelRequest)
(message)
- **DeleteOperationMetadata**
(/video-intelligence/automl/docs/reference/rpc/google.cloud.automl.v1beta1#google.cloud.automl.v1beta1.DeleteOperationMetadata)
(message)
- **DeployModelOperationMetadata**
(/video-intelligence/automl/docs/reference/rpc/google.cloud.automl.v1beta1#google.cloud.automl.v1beta1.DeployModelOperationMetadata)
(message)
- **DeployModelRequest**
(/video-intelligence/automl/docs/reference/rpc/google.cloud.automl.v1beta1#google.cloud.automl.v1beta1.DeployModelRequest)
(message)
- **ExamplePayload**
(/video-intelligence/automl/docs/reference/rpc/google.cloud.automl.v1beta1#google.cloud.automl.v1beta1.ExamplePayload)
(message)
- **ExportDataOperationMetadata**
(/video-intelligence/automl/docs/reference/rpc/google.cloud.automl.v1beta1#google.cloud.automl.v1beta1.ExportDataOperationMetadata)
(message)

- **ExportDataOperationMetadata.ExportDataOutputInfo**
(/video-intelligence/automl/docs/reference/rpc/google.cloud.automl.v1beta1#google.cloud.automl.v1beta1.ExportDataOperationMetadata.ExportDataOutputInfo)
(message)
- **ExportDataRequest**
(/video-intelligence/automl/docs/reference/rpc/google.cloud.automl.v1beta1#google.cloud.automl.v1beta1.ExportDataRequest)
(message)
- **GcsDestination**
(/video-intelligence/automl/docs/reference/rpc/google.cloud.automl.v1beta1#google.cloud.automl.v1beta1.GcsDestination)
(message)
- **GcsSource**
(/video-intelligence/automl/docs/reference/rpc/google.cloud.automl.v1beta1#google.cloud.automl.v1beta1.GcsSource)
(message)
- **GetAnnotationSpecRequest**
(/video-intelligence/automl/docs/reference/rpc/google.cloud.automl.v1beta1#google.cloud.automl.v1beta1.GetAnnotationSpecRequest)
(message)
- **GetDatasetRequest**
(/video-intelligence/automl/docs/reference/rpc/google.cloud.automl.v1beta1#google.cloud.automl.v1beta1.GetDatasetRequest)
(message)
- **GetModelEvaluationRequest**
(/video-intelligence/automl/docs/reference/rpc/google.cloud.automl.v1beta1#google.cloud.automl.v1beta1.GetModelEvaluationRequest)
(message)

- **GetModelRequest**
(/video-intelligence/automl/docs/reference/rpc/google.cloud.automl.v1beta1#google.cloud.automl.v1beta1.GetModelRequest)
(message)
- **ImportDataOperationMetadata**
(/video-intelligence/automl/docs/reference/rpc/google.cloud.automl.v1beta1#google.cloud.automl.v1beta1.ImportDataOperationMetadata)
(message)
- **ImportDataRequest**
(/video-intelligence/automl/docs/reference/rpc/google.cloud.automl.v1beta1#google.cloud.automl.v1beta1.ImportDataRequest)
(message)
- **InputConfig**
(/video-intelligence/automl/docs/reference/rpc/google.cloud.automl.v1beta1#google.cloud.automl.v1beta1.InputConfig)
(message)
- **ListDatasetsRequest**
(/video-intelligence/automl/docs/reference/rpc/google.cloud.automl.v1beta1#google.cloud.automl.v1beta1.ListDatasetsRequest)
(message)
- **ListDatasetsResponse**
(/video-intelligence/automl/docs/reference/rpc/google.cloud.automl.v1beta1#google.cloud.automl.v1beta1.ListDatasetsResponse)
(message)
- **ListModelEvaluationsRequest**
(/video-intelligence/automl/docs/reference/rpc/google.cloud.automl.v1beta1#google.cloud.automl.v1beta1.ListModelEvaluationsRequest)
(message)

- **ListModelEvaluationsResponse**
(/video-intelligence/automl/docs/reference/rpc/google.cloud.automl.v1beta1#google.cloud.automl.v1beta1.ListModelEvaluationsResponse)
(message)
- **ListModelsRequest**
(/video-intelligence/automl/docs/reference/rpc/google.cloud.automl.v1beta1#google.cloud.automl.v1beta1.ListModelsRequest)
(message)
- **ListModelsResponse**
(/video-intelligence/automl/docs/reference/rpc/google.cloud.automl.v1beta1#google.cloud.automl.v1beta1.ListModelsResponse)
(message)
- **Model**
(/video-intelligence/automl/docs/reference/rpc/google.cloud.automl.v1beta1#google.cloud.automl.v1beta1.Model)
(message)
- **Model.DeploymentState**
(/video-intelligence/automl/docs/reference/rpc/google.cloud.automl.v1beta1#google.cloud.automl.v1beta1.Model.DeploymentState)
(enum)
- **ModelEvaluation**
(/video-intelligence/automl/docs/reference/rpc/google.cloud.automl.v1beta1#google.cloud.automl.v1beta1.ModelEvaluation)
(message)
- **OperationMetadata**
(/video-intelligence/automl/docs/reference/rpc/google.cloud.automl.v1beta1#google.cloud.automl.v1beta1.OperationMetadata)
(message)

- **OutputConfig**
(/video-intelligence/automl/docs/reference/rpc/google.cloud.automl.v1beta1#google.cloud.automl.v1beta1.OutputConfig)
(message)
- **PredictRequest**
(/video-intelligence/automl/docs/reference/rpc/google.cloud.automl.v1beta1#google.cloud.automl.v1beta1.PredictRequest)
(message)
- **PredictResponse**
(/video-intelligence/automl/docs/reference/rpc/google.cloud.automl.v1beta1#google.cloud.automl.v1beta1.PredictResponse)
(message)
- **TimeSegment**
(/video-intelligence/automl/docs/reference/rpc/google.cloud.automl.v1beta1#google.cloud.automl.v1beta1.TimeSegment)
(message)
- **UndeployModelOperationMetadata**
(/video-intelligence/automl/docs/reference/rpc/google.cloud.automl.v1beta1#google.cloud.automl.v1beta1.UndeployModelOperationMetadata)
(message)
- **UndeployModelRequest**
(/video-intelligence/automl/docs/reference/rpc/google.cloud.automl.v1beta1#google.cloud.automl.v1beta1.UndeployModelRequest)
(message)
- **VideoClassificationAnnotation**
(/video-intelligence/automl/docs/reference/rpc/google.cloud.automl.v1beta1#google.cloud.automl.v1beta1.VideoClassificationAnnotation)
(message)

- **VideoClassificationDatasetMetadata**

(/video-intelligence/automl/docs/reference/rpc/google.cloud.automl.v1beta1#google.cloud.automl.v1beta1.VideoClassificationDatasetMetadata)

(message)

- **VideoClassificationModelMetadata**

(/video-intelligence/automl/docs/reference/rpc/google.cloud.automl.v1beta1#google.cloud.automl.v1beta1.VideoClassificationModelMetadata)

(message)

AutoML Server API.

The resource names are assigned by the server. The server never reuses names that it has created after the resources with those names are deleted.

An ID of a resource is the last element of the item's resource name. For `projects/{project_id}/locations/{location_id}/datasets/{dataset_id}`, then the id for the item is `{dataset_id}`.

Currently the only supported `location_id` is "us-central1".

On any input that is documented to expect a string parameter in `snake_case` or `kebab-case`, either of those cases is accepted.

CreateDataset

CreateDataset

rpc CreateDataset(CreateDatasetRequest

(/video-intelligence/automl/docs/reference/rpc/google.cloud.automl.v1beta1#google.cloud.automl.v1beta1.CreateDatasetRequest)

) returns (Dataset

(/video-intelligence/automl/docs/reference/rpc/google.cloud.automl.v1beta1#google.cloud.automl.v1beta1.Dataset)

)

Creates a dataset.

Authorization Scopes

Requires the following OAuth scope:

- <https://www.googleapis.com/auth/cloud-platform>

For more information, see the [Authentication Overview](https://cloud.google.com/docs/authentication/) (<https://cloud.google.com/docs/authentication/>).

CreateModel

CreateModel

rpc CreateModel(CreateModelRequest

(/video-

intelligence/automl/docs/reference/rpc/google.cloud.automl.v1beta1#google.cloud.automl.v1beta1.CreateModelRequest)

) returns (Operation

(/video-intelligence/automl/docs/reference/rpc/google.longrunning#google.longrunning.Operation))

Creates a model. Returns a Model in the response

(/video-

intelligence/automl/docs/reference/rpc/google.longrunning#google.longrunning.Operation.FIELDS.google.protobuf.Any.google.longrunning.Operation.response)

field when it completes. When you create a model, several model evaluations are created for it: a global evaluation, and one evaluation for each annotation spec.

Authorization Scopes

Requires the following OAuth scope:

- <https://www.googleapis.com/auth/cloud-platform>

For more information, see the [Authentication Overview](https://cloud.google.com/docs/authentication/) (<https://cloud.google.com/docs/authentication/>).

DeleteDataset

DeleteDataset

rpc DeleteDataset(DeleteDatasetRequest

(/video-

intelligence/automl/docs/reference/rpc/google.cloud.automl.v1beta1#google.cloud.automl.v1beta1.DeleteDatasetRequest)

) **returns** (Operation

(/video-intelligence/automl/docs/reference/rpc/google.longrunning#google.longrunning.Operation))

Deletes a dataset and all of its contents. Returns empty response in the response

(/video-

intelligence/automl/docs/reference/rpc/google.longrunning#google.longrunning.Operation.FIELDS.google.protobuf.Any.google.longrunning.Operation.response)

field when it completes, and **delete_details** in the metadata

(/video-

intelligence/automl/docs/reference/rpc/google.longrunning#google.longrunning.Operation.FIELDS.google.protobuf.Any.google.longrunning.Operation.metadata)

field.

Authorization Scopes

Requires the following OAuth scope:

- <https://www.googleapis.com/auth/cloud-platform>

For more information, see the Authentication Overview (<https://cloud.google.com/docs/authentication/>).

DeleteModel

DeleteModel

rpc DeleteModel(DeleteModelRequest

(/video-

intelligence/automl/docs/reference/rpc/google.cloud.automl.v1beta1#google.cloud.automl.v1beta1.DeleteModelRequest)

) returns (Operation

(/video-intelligence/automl/docs/reference/rpc/google.longrunning#google.longrunning.Operation))

Deletes a model. Returns `google.protobuf.Empty` in the response

(/video-

intelligence/automl/docs/reference/rpc/google.longrunning#google.longrunning.Operation.FIELDS.google.protobuf.Any.google.longrunning.Operation.response)

field when it completes, and delete_details in the metadata

(/video-

intelligence/automl/docs/reference/rpc/google.longrunning#google.longrunning.Operation.FIELDS.google.protobuf.Any.google.longrunning.Operation.metadata)

field.

Authorization Scopes

Requires the following OAuth scope:

- <https://www.googleapis.com/auth/cloud-platform>

For more information, see the [Authentication Overview](https://cloud.google.com/docs/authentication/) (<https://cloud.google.com/docs/authentication/>).

DeployModel

DeployModel

rpc DeployModel(DeployModelRequest

(/video-

intelligence/automl/docs/reference/rpc/google.cloud.automl.v1beta1#google.cloud.automl.v1beta1.DeployModelRequest)

) **returns** (Operation

(/video-intelligence/automl/docs/reference/rpc/google.longrunning#google.longrunning.Operation))

Deploys a model. Not applicable for this product. This product automatically deploys models when they are successfully trained.

Returns an empty response in the response

(/video-

intelligence/automl/docs/reference/rpc/google.longrunning#google.longrunning.Operation.FIELDS.google.protobuf.Any.google.longrunning.Operation.response)

field when it completes.

Authorization Scopes

Requires the following OAuth scope:

- <https://www.googleapis.com/auth/cloud-platform>

For more information, see the [Authentication Overview](https://cloud.google.com/docs/authentication/) (https://cloud.google.com/docs/authentication/).

ExportData

ExportData

rpc ExportData(ExportDataRequest

(/video-

intelligence/automl/docs/reference/rpc/google.cloud.automl.v1beta1#google.cloud.automl.v1beta1.ExportDataRequest)

) **returns** (Operation

(/video-intelligence/automl/docs/reference/rpc/google.longrunning#google.longrunning.Operation))

Exports dataset's data to the provided output location. Returns an empty response in the response

(/video-

intelligence/automl/docs/reference/rpc/google.longrunning#google.longrunning.Operation.FIELDS.google.protobuf.Any.google.longrunning.Operation.response)

field when it completes.

Authorization Scopes

Requires the following OAuth scope:

- <https://www.googleapis.com/auth/cloud-platform>

For more information, see the [Authentication Overview](https://cloud.google.com/docs/authentication/) (<https://cloud.google.com/docs/authentication/>).

GetAnnotationSpec

GetAnnotationSpec

rpc GetAnnotationSpec(GetAnnotationSpecRequest

(/video-

intelligence/automl/docs/reference/rpc/google.cloud.automl.v1beta1#google.cloud.automl.v1beta1.GetAnnotationSpecRequest)

) returns (AnnotationSpec

(/video-

intelligence/automl/docs/reference/rpc/google.cloud.automl.v1beta1#google.cloud.automl.v1beta1.AnnotationSpec)

)

Gets an annotation spec.

Authorization Scopes

Requires the following OAuth scope:

- <https://www.googleapis.com/auth/cloud-platform>

For more information, see the [Authentication Overview](https://cloud.google.com/docs/authentication/) (<https://cloud.google.com/docs/authentication/>).

GetDataset

GetDataset

rpc GetDataset(GetDatasetRequest

(/video-intelligence/automl/docs/reference/rpc/google.cloud.aiplatform.v1beta1#google.cloud.aiplatform.v1beta1.GetDatasetRequest)

) returns (Dataset

(/video-intelligence/automl/docs/reference/rpc/google.cloud.aiplatform.v1beta1#google.cloud.aiplatform.v1beta1.Dataset)

)

Gets a dataset.

Authorization Scopes

Requires the following OAuth scope:

- <https://www.googleapis.com/auth/cloud-platform>

For more information, see the [Authentication Overview](https://cloud.google.com/docs/authentication/) (<https://cloud.google.com/docs/authentication/>).

GetModel

GetModel

rpc GetModel(GetModelRequest

(/video-

intelligence/automl/docs/reference/rpc/google.cloud.automl.v1beta1#google.cloud.automl.v1beta1.GetModelRequest)

) returns (Model

(/video-

intelligence/automl/docs/reference/rpc/google.cloud.automl.v1beta1#google.cloud.automl.v1beta1.Model

)

)

Gets a model.

Authorization Scopes

Requires the following OAuth scope:

- <https://www.googleapis.com/auth/cloud-platform>

For more information, see the [Authentication Overview](https://cloud.google.com/docs/authentication/) (https://cloud.google.com/docs/authentication/).

GetModelEvaluation

GetModelEvaluation

rpc GetModelEvaluation(GetModelEvaluationRequest

(/video-

intelligence/automl/docs/reference/rpc/google.cloud.automl.v1beta1#google.cloud.automl.v1beta1.GetModelEvaluationRequest)

) returns (ModelEvaluation

(/video-

intelligence/automl/docs/reference/rpc/google.cloud.automl.v1beta1#google.cloud.automl.v1beta1.ModelEvaluation)

)

Gets a model evaluation.

Authorization Scopes

Requires the following OAuth scope:

- <https://www.googleapis.com/auth/cloud-platform>

For more information, see the [Authentication Overview](https://cloud.google.com/docs/authentication/) (https://cloud.google.com/docs/authentication/).

ImportData

ImportData

rpc ImportData(ImportDataRequest

(/video-

intelligence/automl/docs/reference/rpc/google.cloud.automl.v1beta1#google.cloud.automl.v1beta1.ImportDataRequest)

) returns (Operation

(/video-intelligence/automl/docs/reference/rpc/google.longrunning#google.longrunning.Operation))

Imports data into a dataset.

You can only call this method for an empty Dataset.

For more information, see [Importing items into a dataset](#)

(<https://cloud.google.com/video-intelligence/automl/docs/datasets#import-data>)

Authorization Scopes

Requires the following OAuth scope:

- <https://www.googleapis.com/auth/cloud-platform>

For more information, see the [Authentication Overview](#) (<https://cloud.google.com/docs/authentication/>).

ListDatasets

ListDatasets

rpc ListDatasets(ListDatasetsRequest

(/video-

intelligence/automl/docs/reference/rpc/google.cloud.automl.v1beta1#google.cloud.automl.v1beta1.ListDatasetsRequest)

) returns (ListDatasetsResponse

(/video-

intelligence/automl/docs/reference/rpc/google.cloud.automl.v1beta1#google.cloud.automl.v1beta1.ListDatasetsResponse)

)

Lists datasets in a project.

Authorization Scopes

Requires the following OAuth scope:

- <https://www.googleapis.com/auth/cloud-platform>

For more information, see the [Authentication Overview](https://cloud.google.com/docs/authentication/) (https://cloud.google.com/docs/authentication/).

ListModelEvaluations

ListModelEvaluations

```
rpc ListModelEvaluations(ListModelEvaluationsRequest
(/video-
intelligence/automl/docs/reference/rpc/google.cloud.automl.v1beta1#google.cloud.automl.v1beta1.ListM
odelEvaluationsRequest)
) returns (ListModelEvaluationsResponse
(/video-
intelligence/automl/docs/reference/rpc/google.cloud.automl.v1beta1#google.cloud.automl.v1beta1.ListM
odelEvaluationsResponse)
)
```

Lists model evaluations.

Authorization Scopes

Requires the following OAuth scope:

- <https://www.googleapis.com/auth/cloud-platform>

For more information, see the [Authentication Overview](https://cloud.google.com/docs/authentication/) (<https://cloud.google.com/docs/authentication/>).

ListModels

ListModels

rpc ListModels(ListModelsRequest

(/video-

intelligence/automl/docs/reference/rpc/google.cloud.automl.v1beta1#google.cloud.automl.v1beta1.ListModelsRequest)

) returns (ListModelsResponse

(/video-

intelligence/automl/docs/reference/rpc/google.cloud.automl.v1beta1#google.cloud.automl.v1beta1.ListModelsResponse)

)

Lists models.

Authorization Scopes

Requires the following OAuth scope:

- <https://www.googleapis.com/auth/cloud-platform>

For more information, see the [Authentication Overview](https://cloud.google.com/docs/authentication/) (<https://cloud.google.com/docs/authentication/>).

UndeployModel

UndeployModel

rpc UndeployModel(UndeployModelRequest

(/video-

intelligence/automl/docs/reference/rpc/google.cloud.automl.v1beta1#google.cloud.automl.v1beta1.UndeployModelRequest)

) returns (Operation

(/video-intelligence/automl/docs/reference/rpc/google.longrunning#google.longrunning.Operation))

Removes a deployed model. Not applicable for this product. This product automatically removes deployed models that are deleted.

Returns an empty response in the response

(/video-

intelligence/automl/docs/reference/rpc/google.longrunning#google.longrunning.Operation.FIELDS.google.protobuf.Any.google.longrunning.Operation.response)

field when it completes.

Authorization Scopes

Requires the following OAuth scope:

- <https://www.googleapis.com/auth/cloud-platform>

For more information, see the [Authentication Overview](https://cloud.google.com/docs/authentication/) (<https://cloud.google.com/docs/authentication/>).

AutoML Prediction API.

On any input that is documented to expect a string parameter in snake_case or kebab-case, either of those cases is accepted.

BatchPredict

BatchPredict

rpc BatchPredict(BatchPredictRequest

(/video-

intelligence/automl/docs/reference/rpc/google.cloud.automl.v1beta1#google.cloud.automl.v1beta1.BatchPredictRequest)

) returns (Operation

(/video-intelligence/automl/docs/reference/rpc/google.longrunning#google.longrunning.Operation))

Perform a batch prediction and return the id of a long-running operation. You can request the operation result by using the GetOperation

(/video-

intelligence/automl/docs/reference/rpc/google.longrunning#google.longrunning.Operations.GetOperation)

method. When the operation has completed, you can call GetOperation

(/video-

intelligence/automl/docs/reference/rpc/google.longrunning#google.longrunning.Operations.GetOperation)

to retrieve a BatchPredictResult

(/video-

intelligence/automl/docs/reference/rpc/google.cloud.automl.v1beta1#google.cloud.automl.v1beta1.BatchPredictResult)

from the response

(/video-

intelligence/automl/docs/reference/rpc/google.longrunning#google.longrunning.Operation.FIELDS.google.protobuf.Any.google.longrunning.Operation.response)

field.

Authorization Scopes

Requires the following OAuth scope:

- <https://www.googleapis.com/auth/cloud-platform>

For more information, see the Authentication Overview (<https://cloud.google.com/docs/authentication/>).

Predict

Predict

rpc Predict(PredictRequest

(/video-

intelligence/automl/docs/reference/rpc/google.cloud.automl.v1beta1#google.cloud.automl.v1beta1.PredictRequest)

) returns (PredictResponse

(/video-

intelligence/automl/docs/reference/rpc/google.cloud.automl.v1beta1#google.cloud.automl.v1beta1.PredictResponse)

)

Not available for AutoML Video Intelligence.

Authorization Scopes

Requires the following OAuth scope:

- <https://www.googleapis.com/auth/cloud-platform>

For more information, see the [Authentication Overview](https://cloud.google.com/docs/authentication/) (https://cloud.google.com/docs/authentication/).

Contains annotation information that is relevant to AutoML.

Fields

annotation_spec_id

string

Output only . The resource ID of the annotation spec that this annotation pertains to. The annotation spec comes from either an ancestor dataset, or the dataset that was used to train the model in use.

Fields

display_name **string**

Output only. The value of **display_name** (/video-intelligence/automl/docs/reference/rpc/google.cloud.automl.v1beta1#google.cloud.automl.v1beta1.Model.FIELDS.string.google.cloud.automl.v1beta1.Model.display_name) when the model was trained. Because this field returns a value at model training time, for different models trained using the same dataset, the returned value could be different as model owner could update the **display_name** between any two model training.

Union field **detail**. Output only . Additional information about the annotation specific to the AutoML domain. **detail** can be only one of the following:

classification **ClassificationAnnotation**
(/video-intelligence/automl/docs/reference/rpc/google.cloud.automl.v1beta1#google.cloud.automl.v1beta1.ClassificationAnnotation)

Annotation details for classification predictions.

video_classification **VideoClassificationAnnotation**
(/video-intelligence/automl/docs/reference/rpc/google.cloud.automl.v1beta1#google.cloud.automl.v1beta1.VideoClassificationAnnotation)

Annotation details for video classification. Returned for Video Classification predictions.

A definition of an annotation.

Fields

Fields	
name	<p>string</p> <p>Output only. Resource name of the annotation spec. Form: 'projects/{project_id}/locations/{location_id}/datasets/{dataset_id}/annot</p>
display_name	<p>string</p> <p>Required. The name of the annotation spec to show in the interface. The name is long and can consist only of ASCII Latin letters A-Z and a-z, underscores (_),</p>
example_count	<p>int32</p> <p>Output only. The number of examples in the parent dataset labeled by the annotation spec.</p>

Input configuration for **BatchPredict**

(/video-

intelligence/automl/docs/reference/rpc/google.cloud.automl.v1beta1#google.cloud.automl.v1beta1.PredictionService.BatchPredict)

action. The input is one or more CSV files stored in Google Cloud Storage where the CSV files are in the following format:

- **GCS_FILE_PATH** identifies the Google Cloud Storage path to a video up to 50GB in size and up to 3h duration. Supported extensions: .MOV, .MPEG4, .MP4, .AVI.
- **TIME_SEGMENT_START** and **TIME_SEGMENT_END** must be within the length of the video, and end has to be after the start.

Three sample rows:

See [Annotating videos](https://cloud.google.com/video-intelligence/automl/docs/predict) (https://cloud.google.com/video-intelligence/automl/docs/predict) for more information.

Fields

gcs_source	<p><u>GcsSource</u> (/video-intelligence/automl/docs/reference/rpc/google.cloud.automl.v1beta1#google.cloud.automl.v1beta1.GcsSource)</p> <p>The Google Cloud Storage location for the input content.</p>
-------------------	--

Details of BatchPredict operation.

Fields

input_config	<p><u>BatchPredictInputConfig</u> (/video-intelligence/automl/docs/reference/rpc/google.cloud.automl.v1beta1#google.cloud.automl.v1beta1.BatchPredictInputConfig)</p> <p>Output only. The input config that was given upon starting this batch predict operation.</p>
output_info	<p><u>BatchPredictOutputInfo</u> (/video-intelligence/automl/docs/reference/rpc/google.cloud.automl.v1beta1#google.cloud.automl.v1beta1.BatchPredictOperationMetadata.BatchPredictOutputInfo)</p> <p>Output only. Information further describing this batch predict's output.</p>

Further describes this batch predict's output. Supplements

BatchPredictOutputConfig

(/video-intelligence/automl/docs/reference/rpc/google.cloud.automl.v1beta1#google.cloud.automl.v1beta1.BatchPredictOutputConfig)

Fields

Union field **output_location**. The output location into which prediction output is written. **output_location** can be only one of the following:

gcs_output_directory	string	The full path of the Google Cloud Storage directory created, into which the prediction output is written.
bigquery_output_dataset	string	The path of the BigQuery dataset created, in bq://projectId.bqDatasetId (bq://projectId.bqDatasetId) format, into which the prediction output is written.

Output configuration for **BatchPredict**

(/video-intelligence/automl/docs/reference/rpc/google.cloud.automl.v1beta1#google.cloud.automl.v1beta1.PredictionService.BatchPredict)

Action.

AutoML Video Intelligence creates a directory specified in the **gcsDestination**

(/video-intelligence/automl/docs/reference/rpc/google.cloud.automl.v1beta1#google.cloud.automl.v1beta1.BatchPredictOutputConfig.FIELDS.google.cloud.automl.v1beta1.GcsDestination.google.cloud.automl.v1beta1.BatchPredictOutputConfig.gcs_destination)

. The name of the directory is "prediction-<model-display-name><timestamp-of-prediction-call>", where timestamp is in YYYY-MM-DDThh:mm:ss.sssZ ISO-8601 format.

AutoML Video Intelligence creates a file named `video_classification.csv` in the new directory, and also a JSON file for each video classification requested. That is, each row in the input CSV file.

The format of the `video_classification.csv` file is as follows:

- The `GCS_FILE_PATH`, `TIME_SEGMENT_START`, `TIME_SEGMENT_END` match the same fields from the input CSV file.
- `JSON_FILE_NAME` is the name of the JSON file in the output directory that contains prediction responses for the video time segment.
- `STATUS` contains "OK" if the prediction completed successfully; otherwise contains error information. If `STATUS` is not "OK" then the JSON file for that prediction might be empty or the file might not exist.

Each JSON file where `STATUS` is "OK", contains a list of `AnnotationPayload` protos in JSON format, which are the predictions for the video time segment the file is assigned to in the `video_classification.csv`. All `AnnotationPayload` protos have a `video_classification` field, and are sorted by the `video_classification.type` field. The types returned are determined by the `classification_types` parameter of [BatchPredictRequest.params](#)

(/video-intelligence/automl/docs/reference/rpc/google.cloud.automl.v1beta1#google.cloud.automl.v1beta1.BatchPredictRequest.FIELDS.repeated.google.cloud.automl.v1beta1.BatchPredictRequest.ParamsEntry.google.cloud.automl.v1beta1.BatchPredictRequest.params)

Fields

Union field `destination`. Required. The destination of the output. `destination` can be only one of the following:

Fields

gcs_destination	<p><u>GcsDestination</u> (/video-intelligence/automl/docs/reference/rpc/google.cloud.automl.v1beta1#google.cloud.automl.v1beta1.GcsDestination)</p> <p>The Google Cloud Storage location of the directory where the output is to be written to.</p>
bigquery_destination	<p><u>BigQueryDestination</u> (/video-intelligence/automl/docs/reference/rpc/google.cloud.automl.v1beta1#google.cloud.automl.v1beta1.BigQueryDestination)</p> <p>The BigQuery location where the output is to be written to.</p>

Request message for **PredictionService.BatchPredict**

(/video-intelligence/automl/docs/reference/rpc/google.cloud.automl.v1beta1#google.cloud.automl.v1beta1.PredictionService.BatchPredict)

Fields

name	<p>string</p> <p>Name of the model requested to serve the batch prediction.</p> <p>Authorization requires the following Google IAM (https://cloud.google.com/iam) permission on the specified resource name:</p> <ul style="list-style-type: none"> automl.models.predict
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Fields	
input_config	<p><u>BatchPredictInputConfig</u> (/video-intelligence/automl/docs/reference/rpc/google.cloud.automl.v1beta1#google.cloud.automl.v1beta1.BatchPredictInputConfig)</p> <p>Required. The input configuration for batch prediction.</p>
output_config	<p><u>BatchPredictOutputConfig</u> (/video-intelligence/automl/docs/reference/rpc/google.cloud.automl.v1beta1#google.cloud.automl.v1beta1.BatchPredictOutputConfig)</p> <p>Required. The Configuration specifying where output predictions should be written.</p>

Fields

params

`map<string, string>`

Can be one of the following:

score_threshold (float) A value from 0.0 to 1.0. When the model makes predictions for a video, it will only produce results that have at least this confidence score. The default is 0.

segment_classification (boolean) Set to true to request segment-level classification. AutoML Video Intelligence returns labels and their confidence scores for the entire segment of the video that user specified in the request configuration. The default is "true".

shot_classification (boolean) Set to true to request shot-level classification. AutoML Video Intelligence determines the boundaries for each camera shot in the entire segment of the video that user specified in the request configuration. AutoML Video Intelligence then returns labels and their confidence scores for each detected shot, along with the start and end time of the shot. **WARNING:** Model evaluation is not done for this classification type, the quality of it depends on training data, but there are no metrics provided to describe that quality. The default is "false".

1s_interval_classification (boolean) Set to true to request classification for a video at one-second intervals. AutoML Video Intelligence returns labels and their confidence scores for each second of the entire segment of the video that user specified in the request configuration. **WARNING:** Model evaluation is not done for this classification type, the quality of it depends on training data, but there are no metrics provided to describe that quality. The default is "false".

See [Annotating videos](#)

(<https://cloud.google.com/video-intelligence/automl/docs/predict>) for more details.

Result of the Batch Predict. This message is returned in response

(/video-

intelligence/automl/docs/reference/rpc/google.longrunning#google.longrunning.Operation.FIELDS.google.protobuf.Any.google.longrunning.Operation.response)

of the operation returned by the PredictionService.BatchPredict

(/video-

intelligence/automl/docs/reference/rpc/google.cloud.automl.v1beta1#google.cloud.automl.v1beta1.PredictionService.BatchPredict)

Fields

metadata

map<string, string>

Additional domain-specific prediction response metadata.

The BigQuery location for the output content.

Fields

output_uri

string

Required. BigQuery URI to a project, up to 2000 characters long. For example: **bq://projectId**


Contains annotation details specific to classification.

Fields

Fields	
score	<p>float</p> <p>Output only. A confidence estimate between 0.0 and 1.0. A higher value means greater confidence that the annotation is positive. If a user approves an annotation as negative or positive, the score value remains unchanged. If a user creates an annotation, the score is 0 for negative or 1 for positive.</p>

Model evaluation metrics for classification problems. These metrics only describe the quality of predictions where the type is set to `segment_classification`. For information on the prediction type, see [BatchPredictRequest.params](#)

(/video-intelligence/automl/docs/reference/rpc/google.cloud.automl.v1beta1#google.cloud.automl.v1beta1.BatchPredictRequest.FIELDS.repeated.google.cloud.automl.v1beta1.BatchPredictRequest.ParamsEntry.google.cloud.automl.v1beta1.BatchPredictRequest.params)

Fields	
au_prc	<p>float</p> <p>Output only. The Area Under Precision-Recall Curve metric. Micro-averaged for the overall evaluation.</p>
base_au_prc (deprecated)	<p>float</p> <p> This item is deprecated!</p> <p>Output only. The Area Under Precision-Recall Curve metric based on priors. Micro-averaged for the overall evaluation. Deprecated.</p>
au_roc	<p>float</p> <p>Output only. The Area Under Receiver Operating Characteristic curve metric. Micro-averaged for the overall evaluation.</p>

Fields	
log_loss	<p>float</p> <p>Output only. The Log Loss metric.</p>
confidence_metrics_entry[]	<p><u>ConfidenceMetricsEntry</u> (/video-intelligence/automl/docs/reference/rpc/google.cloud.automl.v1beta1#google.cloud.automl.v1beta1.ClassificationEvaluationMetrics.ConfidenceMetricsEntry)</p> <p>Output only. Metrics for each confidence_threshold in 0.00,0.05,0.10,...,0.95,0.96,0.97,0.98,0.99 and position_threshold = INT32_MAX_VALUE. ROC and precision-recall curves, and other aggregated metrics are derived from them. The confidence metrics entries may also be supplied for additional values of position_threshold, but from these no aggregated metrics are computed.</p>
confusion_matrix	<p><u>ConfusionMatrix</u> (/video-intelligence/automl/docs/reference/rpc/google.cloud.automl.v1beta1#google.cloud.automl.v1beta1.ClassificationEvaluationMetrics.ConfusionMatrix)</p> <p>Output only. Confusion matrix of the evaluation. Only set for MULTICLASS classification problems where number of labels is no more than 10. Only set for model level evaluation, not for evaluation per label.</p>
annotation_spec_id[]	<p>string</p> <p>Output only. The annotation spec ids used for this evaluation.</p>

Metrics for a single confidence threshold.

Fields

Fields	
confidence_threshold	<p>float</p> <p>Output only. Metrics are computed with an assumption that the model never returns predictions with score lower than this value.</p>
position_threshold	<p>int32</p> <p>Output only. Metrics are computed with an assumption that the model always returns at most this many predictions (ordered by their score, descendingly), but they all still need to meet the confidence_threshold.</p>
recall	<p>float</p> <p>Output only. Recall (True Positive Rate) for the given confidence threshold.</p>
precision	<p>float</p> <p>Output only. Precision for the given confidence threshold.</p>
false_positive_rate	<p>float</p> <p>Output only. False Positive Rate for the given confidence threshold.</p>
f1_score	<p>float</p> <p>Output only. The harmonic mean of recall and precision.</p>
recall_at1	<p>float</p> <p>Output only. The Recall (True Positive Rate) when only considering the label that has the highest prediction score and not below the confidence threshold for each example.</p>
precision_at1	<p>float</p> <p>Output only. The precision when only considering the label that has the highest prediction score and not below the confidence threshold for each example.</p>
false_positive_rate_at1	<p>float</p> <p>Output only. The False Positive Rate when only considering the label that has the highest prediction score and not below the confidence threshold for each example.</p>

Fields	
f1_score_at1	<p>float</p> <p>Output only. The harmonic mean of <u>recall_at1</u> (/video-intelligence/automl/docs/reference/rpc/google.cloud.automl.v1beta1#google.cloud.automl.v1beta1.ClassificationEvaluationMetrics.ConfidenceMetricsEntry.FIELDS.float.google.cloud.automl.v1beta1.ClassificationEvaluationMetrics.ConfidenceMetricsEntry.recall_at1) and <u>precision_at1</u> (/video-intelligence/automl/docs/reference/rpc/google.cloud.automl.v1beta1#google.cloud.automl.v1beta1.ClassificationEvaluationMetrics.ConfidenceMetricsEntry.FIELDS.float.google.cloud.automl.v1beta1.ClassificationEvaluationMetrics.ConfidenceMetricsEntry.precision_at1)</p>
true_positive_count	<p>int64</p> <p>Output only. The number of model created labels that match a ground truth label.</p>
false_positive_count	<p>int64</p> <p>Output only. The number of model created labels that do not match a ground truth label.</p>
false_negative_count	<p>int64</p> <p>Output only. The number of ground truth labels that are not matched by a model created label.</p>
true_negative_count	<p>int64</p> <p>Output only. The number of labels that were not created by the model, but if they would, they would not match a ground truth label.</p>

Confusion matrix of the model running the classification.

Fields

annotation_spec_id[]	string Output only. IDs of the annotation specs used in the confusion matrix.
row[]	Row (/video-intelligence/automl/docs/reference/rpc/google.cloud.automl.v1beta1#google.cloud.automl.v1beta1.ClassificationEvaluationMetrics.ConfusionMatrix.Row) Output only. Rows in the confusion matrix. The number of rows is equal to the size of annotation_spec_id . row[i].value[j] is the number of examples that have ground truth of the annotation_spec_id[i] and are predicted as annotation_spec_id[j] by the model being evaluated.

Output only. A row in the confusion matrix.

Fields

example_count[]	int32 Output only. Value of the specific cell in the confusion matrix. The number of values each row has (i.e. the length of the row) is equal to the length of the annotation_spec_id field or, if that one is not populated, length of the display_name field.
------------------------	--

Request message for AutoML.CreateDataset

(/video-intelligence/automl/docs/reference/rpc/google.cloud.automl.v1beta1#google.cloud.automl.v1beta1.AutoML.CreateDataset)

Fields

parent	<p>string</p> <p>The resource name of the project to create the dataset for.</p> <p>Authorization requires the following Google IAM (https://cloud.google.com/iam) permission on the specified resource parent:</p> <ul style="list-style-type: none"> • <code>automl.datasets.create</code>
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dataset	<p><u>Dataset</u> (/video-intelligence/automl/docs/reference/rpc/google.cloud.automl.v1beta1#google.cloud.automl.v1beta1.Dataset)</p> <p>The dataset to create.</p>
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Details of CreateModel operation.

Request message for **AutoML.CreateModel**
(/video-intelligence/automl/docs/reference/rpc/google.cloud.automl.v1beta1#google.cloud.automl.v1beta1.AutoML.CreateModel)

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Fields

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Fields	
parent	<p>string</p> <p>Resource name of the parent project where the model is being created.</p> <p>Authorization requires the following Google IAM (https://cloud.google.com/iam) permission on the specified resource parent:</p> <ul style="list-style-type: none"> • <code>automl.models.create</code>
model	<p><u>Model</u> (/video-intelligence/automl/docs/reference/rpc/google.cloud.automl.v1beta1#google.cloud.automl.v1beta1.Model)</p> <p>The model to create.</p>
<p>A workspace for solving a single, particular machine learning (ML) problem. A workspace contains examples that may be annotated.</p>	
Fields	
name	<p>string</p> <p>Output only. The resource name of the dataset. Form: <code>projects/{project_id}/locations/{location_id}/datasets/{dataset_id}</code></p>
display_name	<p>string</p> <p>Required. The name of the dataset to show in the interface. The name can be up to 32 characters long and can consist only of ASCII Latin letters A-Z and a-z, underscores (<code>_</code>), and ASCII digits 0-9.</p>
example_count	<p>int32</p> <p>Output only. The number of examples in the dataset.</p>

Fields

create_time	<p>Timestamp (https://developers.google.com/protocol-buffers/docs/reference/google.protobuf#google.protobuf.Timestamp)</p> <p>Output only. Timestamp when this dataset was created.</p>
video_classification_dataset_metadata	<p>VideoClassificationDatasetMetadata (/video-intelligence/automl/docs/reference/rpc/google.cloud.automl.v1beta1#google.cloud.automl.v1beta1.VideoClassificationDatasetMetadata)</p> <p>Metadata for a dataset used for video classification.</p>

Request message for **AutoML.DeleteDataset**

(/video-intelligence/automl/docs/reference/rpc/google.cloud.automl.v1beta1#google.cloud.automl.v1beta1.AutoML.DeleteDataset)

Fields

name	<p>string</p> <p>The resource name of the dataset to delete.</p> <p>Authorization requires the following Google IAM (https://cloud.google.com/iam) permission on the specified resource name:</p> <ul style="list-style-type: none"> automl.datasets.delete
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Request message for AutoML.DeleteModel

(/video-intelligence/automl/docs/reference/rpc/google.cloud.automl.v1beta1#google.cloud.automl.v1beta1.AutoML.DeleteModel)

Fields

name	string
	Resource name of the model being deleted.
	Authorization requires the following Google IAM (https://cloud.google.com/iam) permission on the specified resource name :
	<ul style="list-style-type: none">• <code>automl.models.delete</code>

Details of operations that perform deletes of any entities.

Details of DeployModel operation.

Request message for AutoML.DeployModel

(/video-intelligence/automl/docs/reference/rpc/google.cloud.automl.v1beta1#google.cloud.automl.v1beta1.AutoML.DeployModel)

Fields

Fields

name

string

Resource name of the model to deploy.

Authorization requires the following [Google IAM](#) (<https://cloud.google.com/iam>) permission on the specified resource name:

- `automl.models.deploy`

Example data used for training or prediction.

Details of ExportData operation.

Fields

output_info

ExportDataOutputInfo

(/video-intelligence/automl/docs/reference/rpc/google.cloud.automl.v1beta1#google.cloud.automl.v1beta1.ExportDataOperationMetadata.ExportDataOutputInfo)

Output only. Information further describing this export data's output.

Further describes this export data's output. Supplements [OutputConfig](#)

(/video-

intelligence/automl/docs/reference/rpc/google.cloud.automl.v1beta1#google.cloud.automl.v1beta1.OutputConfig)

Fields

Union field **output_location**. The output location to which the exported data is written. **output_location** can be only one of the following:

gcs_output_directory	string	The full path of the Google Cloud Storage directory created, into which the exported data is written.
bigquery_output_dataset	string	The path of the BigQuery dataset created, in bq://projectId.bqDatasetId (bq://projectId.bqDatasetId) format, into which the exported data is written.

Request message for [AutoML.ExportData](#)

(/video-

intelligence/automl/docs/reference/rpc/google.cloud.automl.v1beta1#google.cloud.automl.v1beta1.AutoML.ExportData)

Fields

Fields

name

string

Required. The resource name of the dataset.

Authorization requires the following [Google IAM](#) (<https://cloud.google.com/iam>) permission on the specified resource name:

- `automl.datasets.export`

output_config

OutputConfig

(/video-intelligence/automl/docs/reference/rpc/google.cloud.automl.v1beta1#google.cloud.automl.v1beta1.OutputConfig)

Required. The desired output location.

The Google Cloud Storage location where the output is to be written to.

Fields

output_uri_prefix

string

Required. Google Cloud Storage URI to output directory, up to 2000 characters long. Accepted forms: * Prefix path: [gs://bucket/directory](#) (gs://bucket/directory) The requesting user must have write permission to the bucket. The directory is created if it doesn't exist.

The Google Cloud Storage location for the input content.

Fields

Fields**input_uris[]****string**

Required. Google Cloud Storage URIs to input files, up to 2000 characters long. Accepted forms: * Full object path, e.g. <gs://bucket/directory/object.csv> (`gs://bucket/directory/object.csv`)

Request message for AutoML.GetAnnotationSpec

(/video-

intelligence/automl/docs/reference/rpc/google.cloud.automl.v1beta1#google.cloud.automl.v1beta1.AutoML.GetAnnotationSpec)

Fields**name****string**

The resource name of the annotation spec to retrieve.

Authorization requires the following [Google IAM](https://cloud.google.com/iam) (<https://cloud.google.com/iam>) permission on the specified resource **name**:

- `automl.annotationSpecs.get`

Request message for AutoML.GetDataset

(/video-

intelligence/automl/docs/reference/rpc/google.cloud.automl.v1beta1#google.cloud.automl.v1beta1.AutoML.GetDataset)

Fields**name****string**

The resource name of the dataset to retrieve.

Authorization requires the following [Google IAM](#) (<https://cloud.google.com/iam>) permission on the specified resource **name**:

- `automl.datasets.get`

Request message for [AutoML.GetModelEvaluation](#)

(/video-

intelligence/automl/docs/reference/rpc/google.cloud.automl.v1beta1#google.cloud.automl.v1beta1.AutoML.GetModelEvaluation)

Fields**name****string**

Resource name for the model evaluation.

Authorization requires the following [Google IAM](#) (<https://cloud.google.com/iam>) permission on the specified resource **name**:

- `automl.modelEvaluations.get`

Request message for AutoML.GetModel

(/video-intelligence/automl/docs/reference/rpc/google.cloud.automl.v1beta1#google.cloud.automl.v1beta1.AutoML.GetModel)

Fields

name	string
	Resource name of the model.
	Authorization requires the following Google IAM (https://cloud.google.com/iam) permission on the specified resource name :
	<ul style="list-style-type: none">• <code>automl.models.get</code>

Details of ImportData operation.

Request message for AutoML.ImportData

(/video-intelligence/automl/docs/reference/rpc/google.cloud.automl.v1beta1#google.cloud.automl.v1beta1.AutoML.ImportData)

Fields

Fields	
name	<p>string</p> <p>Required. Dataset name. Dataset must already exist. All imported annotations and examples will be added.</p> <p>Authorization requires the following Google IAM (https://cloud.google.com/iam) permission on the specified resource name:</p> <ul style="list-style-type: none"> • <code>automl.datasets.import</code>
input_config	<p><u>InputConfig</u> (/video-intelligence/automl/docs/reference/rpc/google.cloud.automl.v1beta1#google.cloud.automl.v1beta1.InputConfig)</p> <p>Required. The desired input location and its domain specific semantics, if any.</p>

Input configuration for [ImportData](#)

(/video-intelligence/automl/docs/reference/rpc/google.cloud.automl.v1beta1#google.cloud.automl.v1beta1.AutoML.ImportData) action.

The format of input depends on dataset_metadata the Dataset into which the import is happening has. As input source the [gcs_source](#)

(/video-intelligence/automl/docs/reference/rpc/google.cloud.automl.v1beta1#google.cloud.automl.v1beta1.InputConfig.FIELDS.google.cloud.automl.v1beta1.GcsSource.google.cloud.automl.v1beta1.InputConfig.gcs_source)

is expected, unless specified otherwise. If a file with identical content (even if it had different `GCS_FILE_PATH`) is mentioned multiple times, then its label, bounding boxes etc. are appended. The same file should be always provided with the same `ML_USE` and `GCS_FILE_PATH`, if it is not then these values are nondeterministically selected from the given ones.

The formats are represented in EBNF with commas being literal and with non-terminal symbols defined near the end of this comment. The formats are:

See [Preparing your training data](https://cloud.google.com/video-intelligence/automl/docs/prepare) (https://cloud.google.com/video-intelligence/automl/docs/prepare) for more information.

A CSV file(s) with each line in format:

- **ML_USE** - Identifies the data set that the current row (file) applies to. This value can be one of the following:
 - **TRAIN** - Rows in this file are used to train the model.
 - **TEST** - Rows in this file are used to test the model during training.
 - **UNASSIGNED** - Rows in this file are not categorized. They are Automatically divided into train and test data. 80% for training and 20% for testing.
- **GCS_FILE_PATH** - Identifies a file stored in Google Cloud Storage that contains the model training information.

After the training data set has been determined from the **TRAIN** and **UNASSIGNED** CSV files, the training data is divided into train and validation data sets. 70% for training and 30% for validation.

Each CSV file specified using the **GCS_FILE_PATH** field has the following format:

- **GCS_FILE_PATH** - The path to a video stored in Google Cloud Storage. The video can be up to 1h duration. Supported extensions: .MOV, .MPEG4, .MP4, .AVI.
- **LABEL** - A label that identifies the object of the video segment.
- **TIME_SEGMENT_START** and **TIME_SEGMENT_END** - The start and end timestamps in seconds for the segment of video to be annotated. The values must be within the length of the video, and **TIME_SEGMENT_END** must be after the **TIME_SEGMENT_START**.

You can specify videos in the CSV file without any labels. You must then use the AutoML Video Intelligence UI to apply labels to the video before you train your model. To specify a video segment in this way, provide the Google Cloud Storage URI for the video followed by three commas.

Sample file:

Here is an example of the format of one of the CSV files identified by the `gcsSource` "top level" file.

Errors:

If any of the provided CSV files can't be parsed or if more than certain percent of CSV rows cannot be processed then the operation fails and nothing is imported. Regardless of overall success or failure the per-row failures, up to a certain count cap, will be listed in `Operation.metadata.partial_failures`.

Fields

`gcs_source`

`GcsSource`

(/video-intelligence/automl/docs/reference/rpc/google.cloud.automl.v1beta1#google.cloud.automl.v1beta1.GcsSource)

The Google Cloud Storage location for the input content.

Request message for AutoML.ListDatasets

(/video-intelligence/automl/docs/reference/rpc/google.cloud.automl.v1beta1#google.cloud.automl.v1beta1.AutoML.ListDatasets)

Fields

parent	<p>string</p> <p>The resource name of the project from which to list datasets.</p> <p>Authorization requires the following Google IAM (https://cloud.google.com/iam) permission on the specified resource parent:</p> <ul style="list-style-type: none"> • <code>automl.datasets.list</code>
filter	<p>string</p> <p>An expression for filtering the results of the request.</p> <ul style="list-style-type: none"> • dataset_metadata: test for existence of metadata. • display_name: =, !=, and <code>regex()</code>. Uses re2 (https://github.com/google/re2/wiki/Syntax) syntax. <p>An example of using the filter is:</p> <ul style="list-style-type: none"> • <code>video_classification_dataset_metadata:*</code> --> The dataset has video_classification_dataset_metadata. • <code>regex(display_name, "^A")</code> -> The dataset's display name starts with "A"
page_size	<p>int32</p> <p>Requested page size. Server may return fewer results than requested. If unspecified, server will pick a default size.</p>

Fields

page_token

string

A token identifying a page of results for the server to return Typically obtained via [ListDatasetsResponse.next_page_token](#) (/video-intelligence/automl/docs/reference/rpc/google.cloud.automl.v1beta1#google.cloud.automl.v1beta1.ListDatasetsResponse.FIELDS.string.google.cloud.automl.v1beta1.ListDatasetsResponse.next_page_token) of the previous [AutoML.ListDatasets](#) (/video-intelligence/automl/docs/reference/rpc/google.cloud.automl.v1beta1#google.cloud.automl.v1beta1.AutoML.ListDatasets) call.

Response message for [AutoML.ListDatasets](#)

(/video-intelligence/automl/docs/reference/rpc/google.cloud.automl.v1beta1#google.cloud.automl.v1beta1.AutoML.ListDatasets)

Fields

datasets[]

[Dataset](#)

(/video-intelligence/automl/docs/reference/rpc/google.cloud.automl.v1beta1#google.cloud.automl.v1beta1.Dataset)

The datasets read.

Fields

next_page_token	string
	<p>A token to retrieve next page of results. Pass to ListDatasetsRequest.page_token (/video-intelligence/automl/docs/reference/rpc/google.cloud.automl.v1beta1#google.cloud.automl.v1beta1.ListDatasetsRequest.FIELDS.string.google.cloud.automl.v1beta1.ListDatasetsRequest.page_token) to obtain that page.</p>

Request message for [AutoML.ListModelEvaluations](#)

(/video-intelligence/automl/docs/reference/rpc/google.cloud.automl.v1beta1#google.cloud.automl.v1beta1.AutoML.ListModelEvaluations)

Fields

parent	string
	<p>Resource name of the model to list the model evaluations for. If modelId is set as "-", this will list model evaluations from across all models of the parent location.</p> <p>Authorization requires the following Google IAM (https://cloud.google.com/iam) permission on the specified resource parent:</p> <ul style="list-style-type: none"> <code>automl.modelEvaluations.list</code>

Fields	
filter	<p>string</p> <p>An expression for filtering the results of the request.</p> <ul style="list-style-type: none"> • annotation_spec_id - for =, != or existence. See example below for the last. <p>Some examples of using the filter are:</p> <ul style="list-style-type: none"> • annotation_spec_id!=4 --> The model evaluation was done for annotation spec with ID different than 4. • NOT annotation_spec_id:* --> The model evaluation was done for aggregate of all annotation specs.
page_size	<p>int32</p> <p>Requested page size.</p>
page_token	<p>string</p> <p>A token identifying a page of results for the server to return. Typically obtained via ListModelEvaluationsResponse.next_page_token (/video-intelligence/automl/docs/reference/rpc/google.cloud.automl.v1beta1#google.cloud.automl.v1beta1.ListModelEvaluationsResponse.FIELDS.string.google.cloud.automl.v1beta1.ListModelEvaluationsResponse.next_page_token) of the previous AutoML.ListModelEvaluations (/video-intelligence/automl/docs/reference/rpc/google.cloud.automl.v1beta1#google.cloud.automl.v1beta1.AutoML.ListModelEvaluations) call.</p>

Response message for [AutoML.ListModelEvaluations](#)

(/video-intelligence/automl/docs/reference/rpc/google.cloud.automl.v1beta1#google.cloud.automl.v1beta1.AutoML.ListModelEvaluations)

Fields

model_evaluation[]	<p><u>ModelEvaluation</u> (/video-intelligence/automl/docs/reference/rpc/google.cloud.automl.v1beta1#google.cloud.automl.v1beta1.ModelEvaluation)</p> <p>List of model evaluations in the requested page.</p>
next_page_token	<p>string</p> <p>A token to retrieve next page of results. Pass to the <u>ListModelEvaluationsRequest.page_token</u> (/video-intelligence/automl/docs/reference/rpc/google.cloud.automl.v1beta1#google.cloud.automl.v1beta1.ListModelEvaluationsRequest.FIELDS.string.google.cloud.automl.v1beta1.ListModelEvaluationsRequest.page_token) field of a new <u>AutoML.ListModelEvaluations</u> (/video-intelligence/automl/docs/reference/rpc/google.cloud.automl.v1beta1#google.cloud.automl.v1beta1.AutoML.ListModelEvaluations) request to obtain that page.</p>

Request message for **AutoML.ListModels**

(/video-intelligence/automl/docs/reference/rpc/google.cloud.automl.v1beta1#google.cloud.automl.v1beta1.AutoML.ListModels)

Fields

Fields	
parent	<p>string</p> <p>Resource name of the project, from which to list the models.</p> <p>Authorization requires the following Google IAM (https://cloud.google.com/iam) permission on the specified resource parent:</p> <ul style="list-style-type: none"> • <code>automl.models.list</code>
filter	<p>string</p> <p>An expression for filtering the results of the request.</p> <ul style="list-style-type: none"> • <code>model_metadata</code>: test for existence of metadata. • <code>dataset_id</code>: = or != a dataset ID. • <code>display_name</code>: =, !=, and <code>regex()</code>. Uses re2 (https://github.com/google/re2/wiki/Syntax) syntax. <p>Some examples of using the filter are:</p> <ul style="list-style-type: none"> • <code>video_classification_model_metadata:*</code> --> The model has <code>video_classification_model_metadata</code>. • <code>dataset_id=5</code> --> The model was created from a dataset with an ID of 5. • <code>regex(display_name, "^A")</code> -> The model's display name starts with "A".
page_size	<p>int32</p> <p>Requested page size.</p>

Fields

page_token

string

A token identifying a page of results for the server to return. Typically obtained via [ListModelsResponse.next_page_token](#) (/video-intelligence/automl/docs/reference/rpc/google.cloud.aiplatform.v1beta1#google.cloud.aiplatform.v1beta1.ListModelsResponse.FIELDS.string.google.cloud.aiplatform.v1beta1.ListModelsResponse.next_page_token) of the previous [AutoML.ListModels](#) (/video-intelligence/automl/docs/reference/rpc/google.cloud.aiplatform.v1beta1#google.cloud.aiplatform.v1beta1.AutoML.ListModels) call.

Response message for [AutoML.ListModels](#)

(/video-intelligence/automl/docs/reference/rpc/google.cloud.aiplatform.v1beta1#google.cloud.aiplatform.v1beta1.AutoML.ListModels)

Fields

model[]

Model

(/video-intelligence/automl/docs/reference/rpc/google.cloud.aiplatform.v1beta1#google.cloud.aiplatform.v1beta1.Model)

List of models in the requested page.

Fields

next_page_token	string
	A token to retrieve next page of results. Pass to <u>ListModelsRequest.page_token</u> (/video-intelligence/automl/docs/reference/rpc/google.cloud.automl.v1beta1#google.cloud.automl.v1beta1.ListModelsRequest.FIELDS.string.google.cloud.automl.v1beta1.ListModelsRequest.page_token) to obtain that page.

API proto representing a trained machine learning model.

Fields

name	string
	Output only. Resource name of the model. Format: <code>projects/{project_id}/locations/{location_id}/models/{model_id}</code>
display_name	string
	Required. The name of the model to show in the interface. The name can be up to 32 characters long and can consist only of ASCII Latin letters A-Z and a-z, underscores (<code>_</code>), and ASCII digits 0-9. It must start with a letter.
dataset_id	string
	Required. The resource ID of the dataset used to create the model. The dataset must come from the same ancestor project and location.
create_time	<u>Timestamp</u> (https://developers.google.com/protocol-buffers/docs/reference/google.protobuf#google.protobuf.Timestamp)
	Output only. Timestamp when the model training finished and can be used for prediction.

Fields	
update_time	<p><u>Timestamp</u> (https://developers.google.com/protocol-buffers/docs/reference/google.protobuf#google.protobuf.Timestamp)</p> <p>Output only. Timestamp when this model was last updated.</p>
deployment_state	<p><u>DeploymentState</u> (/video-intelligence/automl/docs/reference/rpc/google.cloud.automl.v1beta1#google.cloud.automl.v1beta1.Model.DeploymentState)</p> <p>Output only. Deployment state of the model. A model can only serve prediction requests after it gets deployed.</p>
video_classification_model_metadata	<p><u>VideoClassificationModelMetadata</u> (/video-intelligence/automl/docs/reference/rpc/google.cloud.automl.v1beta1#google.cloud.automl.v1beta1.VideoClassificationModelMetadata)</p> <p>Metadata for video classification models.</p>
Deployment state of the model.	
Enums	
DEPLOYMENT_STATE_UNSPECIFIED	Should not be used, an un-set enum has this value by default.
DEPLOYED	Model is deployed.
UNDEPLOYED	Model is not deployed.
Evaluation results of a model.	

Fields	
name	<p>string</p> <p>Output only. Resource name of the model evaluation. Format:</p> <p><code>projects/{project_id}/locations/{location_id}/models/{model_id}/modelEvaluations/{model_evaluation_id}</code></p>
annotation_spec_id	<p>string</p> <p>Output only. The ID of the annotation spec that the model evaluation applies to. The ID is empty for the overall model evaluation.</p>
display_name	<p>string</p> <p>Output only. The value of display_name (/video-intelligence/automl/docs/reference/rpc/google.cloud.automl.v1beta1#google.cloud.automl.v1beta1.Model.FIELDS.string.google.cloud.automl.v1beta1.Model.display_name) at the moment when the model was trained. Because this field returns a value at model training time, for different models trained from the same dataset, the values may differ, since display names could have been changed between the two model's trainings.</p> <p>The display_name is empty for the overall model evaluation.</p>
create_time	<p>Timestamp</p> <p>(https://developers.google.com/protocol-buffers/docs/reference/google.protobuf#google.protobuf.Timestamp)</p> <p>Output only. Timestamp when this model evaluation was created.</p>

Fields

evaluated_example_count	int32 Output only. The number of examples used for model evaluation, i.e. for which ground truth from time of model creation is compared against the predicted annotations created by the model. For overall ModelEvaluation (i.e. with annotation_spec_id not set) this is the total number of all examples used for evaluation. Otherwise, this is the count of examples that according to the ground truth were annotated by the <u>annotation_spec_id</u> (/video-intelligence/automl/docs/reference/rpc/google.cloud.automl.v1beta1#google.cloud.automl.v1beta1.ModelEvaluation.FIELDS.string.google.cloud.automl.v1beta1.ModelEvaluation.annotation_spec_id) .
classification_evaluation_metrics	<u>ClassificationEvaluationMetrics</u> (/video-intelligence/automl/docs/reference/rpc/google.cloud.automl.v1beta1#google.cloud.automl.v1beta1.ClassificationEvaluationMetrics) Evaluation metrics for classification models.

Metadata used across all long running operations returned by AutoML API.

Fields

progress_percent	int32 Output only. Progress of operation. Range: [0, 100]. Not used currently.
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Fields	
partial_failures[]	<p>Status (/video-intelligence/automl/docs/reference/rpc/google.rpc#google.rpc.Status)</p> <p>Output only. Partial failures encountered. E.g. single files that couldn't be read. This field should never exceed 20 entries. Status details field will contain standard GCP error details.</p>
create_time	<p>Timestamp (https://developers.google.com/protocol-buffers/docs/reference/google.protobuf#google.protobuf.Timestamp)</p> <p>Output only. Time when the operation was created.</p>
update_time	<p>Timestamp (https://developers.google.com/protocol-buffers/docs/reference/google.protobuf#google.protobuf.Timestamp)</p> <p>Output only. Time when the operation was updated for the last time.</p>
<p>Union field details. Output only. Details of specific operation. Even if this field is empty, the presence allows to distinguish different types of operations. details can be only one of the following:</p>	
delete_details	<p>DeleteOperationMetadata (/video-intelligence/automl/docs/reference/rpc/google.cloud.automl.v1beta1#google.cloud.automl.v1beta1.DeleteOperationMetadata)</p> <p>Details of a Delete operation.</p>
deploy_model_details	<p>DeployModelOperationMetadata (/video-intelligence/automl/docs/reference/rpc/google.cloud.automl.v1beta1#google.cloud.automl.v1beta1.DeployModelOperationMetadata)</p> <p>Details of a DeployModel operation.</p>
undeploy_model_details	<p>UndeployModelOperationMetadata (/video-intelligence/automl/docs/reference/rpc/google.cloud.automl.v1beta1#google.cloud.automl.v1beta1.UndeployModelOperationMetadata)</p> <p>Details of an UndeployModel operation.</p>

Fields	
create_model_details	<p><u>CreateModelOperationMetadata</u> (/video-intelligence/automl/docs/reference/rpc/google.cloud.automl.v1beta1#google.cloud.automl.v1beta1.CreateModelOperationMetadata)</p> <p>Details of CreateModel operation.</p>
import_data_details	<p><u>ImportDataOperationMetadata</u> (/video-intelligence/automl/docs/reference/rpc/google.cloud.automl.v1beta1#google.cloud.automl.v1beta1.ImportDataOperationMetadata)</p> <p>Details of ImportData operation.</p>
batch_predict_details	<p><u>BatchPredictOperationMetadata</u> (/video-intelligence/automl/docs/reference/rpc/google.cloud.automl.v1beta1#google.cloud.automl.v1beta1.BatchPredictOperationMetadata)</p> <p>Details of BatchPredict operation.</p>
export_data_details	<p><u>ExportDataOperationMetadata</u> (/video-intelligence/automl/docs/reference/rpc/google.cloud.automl.v1beta1#google.cloud.automl.v1beta1.ExportDataOperationMetadata)</p> <p>Details of ExportData operation.</p>

Output configuration for **ExportData**

(/video-intelligence/automl/docs/reference/rpc/google.cloud.automl.v1beta1#google.cloud.automl.v1beta1.AutoML.ExportData)

AutoML Video Intelligence writes a CSV file named **video_classification.csv** in the Google Cloud Storage bucket specified in **gcs_destination**

```
(/video-intelligence/automl/docs/reference/rpc/google.cloud.automl.v1beta1#google.cloud.automl.v1beta1.OutputConfig.FIELDS.google.cloud.automl.v1beta1.GcsDestination.google.cloud.automl.v1beta1.OutputConfig.gcs_destination)
```

The output file has the following fields:

- **ML_USE** - Identifies the data set that the current row (file) applies to. This value can be one of the following:
 - **TRAIN** - Rows in this file are used to train the model.
 - **TEST** - Rows in this file are used to test the model during training.
 - **UNASSIGNED** - Rows in this file are not categorized. They are Automatically divided into train and test data. 80% for training and 20% for testing.
- **GCS_FILE_PATH** - Identifies a file stored in Google Cloud Storage that contains the model training information. AutoML Video Intelligence writes this file to the Google Cloud Storage bucket specified in **gcs_destination**

```
(/video-intelligence/automl/docs/reference/rpc/google.cloud.automl.v1beta1#google.cloud.automl.v1beta1.OutputConfig.FIELDS.google.cloud.automl.v1beta1.GcsDestination.google.cloud.automl.v1beta1.OutputConfig.gcs_destination)
```

Each CSV file identified with a **GCS_FILE_PATH** value has the following format:

- **GCS_FILE_PATH** - The path to the original, imported video stored in Google Cloud Storage.
- **LABEL** - The label that identifies the object of the imported video segment.
- **TIME_SEGMENT_START** and **TIME_SEGMENT_END** - The start and end timestamps in seconds for the segment of video to be annotated. The values must be within the length of the video, and **TIME_SEGMENT_END** must be after the **TIME_SEGMENT_START**.

Fields

gcs_destination	<p><u>GcsDestination</u> (/video-intelligence/automl/docs/reference/rpc/google.cloud.automl.v1beta1#google.cloud.automl.v1beta1.GcsDestination)</p> <p>The Google Cloud Storage location where the output from the <u>predict</u> (/video-intelligence/automl/docs/reference/rpc/google.cloud.automl.v1beta1#google.cloud.automl.v1beta1.PredictionService.Predict) command is to be written to. Does not apply for this product.</p>
------------------------	---

Request message for **PredictionService.Predict**

(/video-intelligence/automl/docs/reference/rpc/google.cloud.automl.v1beta1#google.cloud.automl.v1beta1.PredictionService.Predict)

.

Fields

name	<p>string</p> <p>Name of the model requested to serve the prediction.</p> <p>Authorization requires the following <u>Google IAM</u> (https://cloud.google.com/iam) permission on the specified resource name:</p> <ul style="list-style-type: none"> • automl.models.predict
payload	<p><u>ExamplePayload</u> (/video-intelligence/automl/docs/reference/rpc/google.cloud.automl.v1beta1#google.cloud.automl.v1beta1.ExamplePayload)</p> <p>Required. Payload to perform a prediction on. The payload must match the problem type that the model was trained to solve.</p>

Fields**params****map<string, string>**

Additional domain-specific parameters, any string must be up to 25000 characters long.

Response message for PredictionService.Predict

(/video-

intelligence/automl/docs/reference/rpc/google.cloud.automl.v1beta1#google.cloud.automl.v1beta1.PredictionService.Predict)

Fields**payload[]****AnnotationPayload**

(/video-

intelligence/automl/docs/reference/rpc/google.cloud.automl.v1beta1#google.cloud.automl.v1beta1.AnnotationPayload)

Prediction result.

metadata**map<string, string>**

Additional domain-specific prediction response metadata.

A time period inside of an example that has a time dimension (e.g. video).

Fields

Fields**start_time_offset****Duration**

(<https://developers.google.com/protocol-buffers/docs/reference/google.protobuf#google.protobuf.Duration>)

Start of the time segment (inclusive), represented as the duration since the example start.

end_time_offset**Duration**

(<https://developers.google.com/protocol-buffers/docs/reference/google.protobuf#google.protobuf.Duration>)

End of the time segment (exclusive), represented as the duration since the example start.

Details of UndeployModel operation.

Request message for **AutoML.UndeployModel**

(/video-

intelligence/automl/docs/reference/rpc/google.cloud.automl.v1beta1#google.cloud.automl.v1beta1.AutoML.UndeployModel)

Fields

Fields**name****string**

Resource name of the model to undeploy.

Authorization requires the following [Google IAM](#) (<https://cloud.google.com/iam>) permission on the specified resource name:

- `automl.models.undeploy`

Contains annotation details specific to video classification.

Fields

Fields	
type	<p>string</p> <p>Output only. Expresses the type of video classification. Possible values:</p> <ul style="list-style-type: none"> • segment - Classification done on a specified by user time segment of a video. AnnotationSpec is answered to be present in that time segment, if it is present in any part of it. The video ML model evaluations are done only for this type of classification. • shot- Shot-level classification. AutoML Video Intelligence determines the boundaries for each camera shot in the entire segment of the video that user specified in the request configuration. AutoML Video Intelligence then returns labels and their confidence scores for each detected shot, along with the start and end time of the shot. WARNING: Model evaluation is not done for this classification type, the quality of it depends on training data, but there are no metrics provided to describe that quality. • 1s_interval - AutoML Video Intelligence returns labels and their confidence scores for each second of the entire segment of the video that user specified in the request configuration. WARNING: Model evaluation is not done for this classification type, the quality of it depends on training data, but there are no metrics provided to describe that quality.
classification_annotation	<p><u>ClassificationAnnotation</u> (/video-intelligence/automl/docs/reference/rpc/google.cloud.automl.v1beta1#google.cloud.automl.v1beta1.ClassificationAnnotation)</p> <p>Output only . The classification details of this annotation.</p>
time_segment	<p><u>TimeSegment</u> (/video-intelligence/automl/docs/reference/rpc/google.cloud.automl.v1beta1#google.cloud.automl.v1beta1.TimeSegment)</p> <p>Output only . The time segment of the video to which the annotation applies.</p>

Dataset metadata specific to video classification. All Video Classification datasets are treated as multi label.

Model metadata specific to video classification.