

Package ‘datarobot’

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datarobot-package	8
AddEureqaSolution	8
ApplySchema	9
as.data.frame	9
as.dataRobotFeatureInfo	11
as.dataRobotMultiSeriesProperties	12
as.dataRobotProjectShort	13
AutopilotMode	14
BatchFeaturesTypeTransform	14
BlendMethods	15
BlueprintChartToGraphviz	16
CheckUrl	17
ClassificationDeploymentAccuracyMetric	17
CleanServerData	17
CloneProject	18
ComputeDatetimeTrendPlots	19
ConnectToDataRobot	20
ConstructDurationString	21
CreateBacktestSpecification	22
CreateCalendar	23
CreateComplianceDocumentation	24
CreateDataSource	25
CreateDataStore	26
CreateDatetimePartitionSpecification	26
CreateDeployment	30
CreateDerivedFeatures	31
CreateFeaturelist	32
CreateGroupPartition	33
CreateModelingFeaturelist	34
CreatePrimeCode	35
CreateRandomPartition	36
CreateRatingTable	37
CreateStratifiedPartition	38
CreateUserPartition	39
CrossValidateModel	40
cvMethods	41
DataPartition	41
DataPathFromDataArg	42
DataSubset	42
DatetimeTrendPlotsResolutions	43
DatetimeTrendPlotsStatuses	43
DeleteAnomalyAssessmentRecord	44
DeleteCalendar	44
DeleteComplianceDocTemplate	45
DeleteDataSource	45
DeleteDataStore	46

DeleteDeployment	46
DeleteFeaturelist	47
DeleteJob	47
DeleteModel	48
DeleteModelingFeaturelist	49
DeleteModelJob	49
DeletePredictionDataset	50
DeletePredictionExplanations	51
DeletePredictionExplanationsInitialization	52
DeletePredictJob	52
DeleteProject	53
DeleteTransferableModel	54
DeploymentAccuracyMetric	54
DeploymentServiceHealthMetric	55
DifferencingMethod	55
DownloadComplianceDocTemplate	56
DownloadComplianceDocumentation	57
DownloadPredictionExplanations	58
DownloadPrimeCode	59
DownloadRatingTable	60
DownloadScoringCode	60
DownloadSeriesAccuracy	61
DownloadTimeSeriesFeatureDerivationLog	62
DownloadTrainingPredictions	63
DownloadTransferableModel	64
ExpectHasKeys	64
FeatureFromAsyncUrl	65
formatRFC3339Timestamp	65
GenerateDatetimePartition	66
GetAccuracyOverTimePlot	69
GetAccuracyOverTimePlotPreview	71
GetAccuracyOverTimePlotsMetadata	72
GetAnomalyAssessmentExplanations	74
GetAnomalyAssessmentPredictionsPreview	75
GetBlenderModel	76
GetBlenderModelFromJobId	78
GetBlueprint	79
GetBlueprintChart	80
GetBlueprintDocumentation	81
GetCalendar	82
GetCalendarFromProject	83
GetComplianceDocTemplate	83
GetConfusionChart	84
GetCrossValidationScores	86
GetDataSource	86
GetDataStore	87
GetDataStoreSchemas	88
GetDataStoreTables	89

GetDatetimeModel	89
GetDatetimeModelFromJobId	92
GetDatetimePartition	93
GetDeployment	95
GetDeploymentAccuracy	96
GetDeploymentAccuracyOverTime	98
GetDeploymentAssociationId	100
GetDeploymentDriftTrackingSettings	101
GetDeploymentServiceStats	102
GetDeploymentServiceStatsOverTime	104
GetDriver	105
GetFeatureAssociationMatrix	106
GetFeatureAssociationMatrixDetails	107
GetFeatureHistogram	108
GetFeatureImpact	109
GetFeatureImpactForJobId	109
GetFeatureImpactForModel	110
GetFeatureInfo	111
GetFeaturelist	113
GetFrozenModel	114
GetFrozenModelFromJobId	116
GetGeneralizedInsight	117
GetJob	118
GetLiftChart	119
GetMissingValuesReport	120
GetModel	121
GetModelBlueprintChart	122
GetModelBlueprintDocumentation	123
GetModelCapabilities	124
GetModelFromJobId	125
GetModelingFeaturelist	126
GetModelJob	127
GetModelParameters	128
GetModelRecommendation	129
GetMultiSeriesProperties	130
GetParetoFront	131
GetPredictionDataset	132
GetPredictionExplanations	133
GetPredictionExplanationsInitialization	135
GetPredictionExplanationsInitializationFromJobId	136
GetPredictionExplanationsMetadata	137
GetPredictionExplanationsMetadataFromJobId	138
GetPredictionExplanationsRows	139
GetPredictionExplanationsRowsAsDataFrame	141
GetPredictions	142
GetPredictJob	144
GetPredictJobs	145
GetPrimeEligibility	146

GetPrimeFile	146
GetPrimeFileFromJobId	147
GetPrimeModel	148
GetPrimeModelFromJobId	149
GetProject	150
GetProjectStatus	151
GetRatingTable	152
GetRatingTableFromJobId	152
GetRatingTableModel	153
GetRatingTableModelFromJobId	154
GetRecommendedModel	155
GetResidualsChart	155
GetRocCurve	156
GetRulesets	157
GetSeriesAccuracy	158
GetSeriesAccuracyForModel	159
GetServerDataInRows	160
GetTimeSeriesFeatureDerivationLog	161
GetTrainingPredictionDataFrame	162
GetTrainingPredictions	162
GetTrainingPredictionsForModel	163
GetTrainingPredictionsFromJobId	164
GetTransferableModel	164
GetTuningParameters	166
GetValidMetrics	167
GetWordCloud	167
InitializeAnomalyAssessment	168
IsBlenderEligible	170
IsId	171
IsParameterIn	171
JobStatus	172
JobType	172
ListAnomalyAssessmentRecords	173
ListBlueprints	174
ListCalendars	175
ListComplianceDocTemplates	175
ListConfusionCharts	176
ListDataSources	177
ListDataStores	177
ListDeployments	178
ListDrivers	179
ListFeatureInfo	180
ListFeaturelists	181
ListJobs	182
ListLiftCharts	183
ListModelFeatures	184
ListModelingFeaturelists	185
ListModelJobs	186

ListModelRecommendations	187
ListModels	188
ListPredictionDatasets	189
ListPredictionExplanationsMetadata	190
ListPredictions	191
ListPredictionServers	192
ListPrimeFiles	192
ListPrimeModels	193
ListProjects	194
ListRatingTableModels	195
ListRatingTables	196
ListResidualsCharts	196
ListRocCurves	197
ListSharingAccess	198
ListStarredModels	199
ListTrainingPredictions	200
ListTransferableModels	201
MakeDataRobotRequest	202
ModelCapability	203
ModelReplacementReason	203
MulticlassDeploymentAccuracyMetric	204
parseRFC3339Timestamp	204
PauseQueue	205
PeriodicityMaxTimeStep	205
PeriodicityTimeUnits	206
plot.listOfModels	206
PostgreSQLdrivers	208
Predict	208
predict.dataRobotModel	210
PredictionDatasetFromAsyncUrl	211
PrimeLanguage	212
ProjectFromJobResponse	212
ProjectStage	213
RecommendedModelType	213
ReformatMetrics	214
RegressionDeploymentAccuracyMetric	214
RenameRatingTable	214
reorderColumns	215
ReplaceDeployedModel	216
RequestApproximation	217
RequestBlender	218
RequestCrossSeriesDetection	219
RequestFeatureImpact	220
RequestFrozenDatetimeModel	221
RequestFrozenModel	222
RequestMultiSeriesDetection	223
RequestNewDatetimeModel	224
RequestNewModel	226

RequestNewRatingTableModel	228
RequestPredictionExplanations	229
RequestPredictionExplanationsInitialization	230
RequestPredictions	231
RequestPrimeModel	232
RequestSampleSizeUpdate	233
RequestSeriesAccuracy	234
RequestTrainingPredictions	235
RequestTransferableModel	236
RFC3339DateTimeFormat	237
RunInteractiveTuning	237
ScoreBacktests	238
SegmentAnalysisAttribute	239
SeriesAggregationType	239
SetPredictionThreshold	240
SetTarget	241
SetupProject	243
SetupProjectFromDataSource	244
SetupProjectFromHDFS	245
Share	247
SharingRole	247
SourceType	248
StarModel	248
StartNewAutoPilot	249
StartProject	250
StartRetryWaiter	253
StartTuningSession	253
Stringify	254
SubmitActuals	255
summary.dataRobotModel	256
summary.listOfDataRobotTuningParameters	257
TargetLeakageType	258
TargetType	259
TestDataStore	259
tidyServiceOverTimeObject	260
TimeUnits	260
ToggleStarForModel	261
transformRFC3339Period	261
TreatAsExponential	262
TryingToSubmitNull	262
UnpauseQueue	263
UnstarModel	263
UpdateAccess	264
UpdateCalendar	265
UpdateComplianceDocTemplate	265
UpdateDataSource	266
UpdateDataStore	267
UpdateDeploymentDriftTrackingSettings	268

UpdateFeaturelist	269
UpdateModelingFeaturelist	269
UpdateProject	270
UpdateTransferableModel	270
UploadComplianceDocTemplate	272
UploadData	273
UploadPredictionDataset	273
UploadPredictionDatasetFromDataSource	275
UploadTransferableModel	276
ValidateActuals	277
ValidateCalendar	278
ValidateModel	278
ValidateMultiSeriesProperties	279
ValidateParameterIn	279
ValidatePartition	280
ValidateProject	280
ValidateReplaceDeployedModel	281
validateReportingPeriodTime	281
VariableTransformTypes	282
ViewWebModel	282
ViewWebProject	283
WaitForAutopilot	283
WaitForJobToComplete	284

Index 285

datarobot-package *datarobot: 'DataRobot' Predictive Modeling API*

Description

For working with the 'DataRobot' predictive modeling platform's API <https://www.datarobot.com/>.

AddEureqaSolution *Add a Eureqa solution to the list of models for the project.*

Description

Each Eureqa model contains multiple possible solutions (see GetParetoFront). However, only the best model is included in the leaderboard by default. To include other models, you can get them via GetParetoFront and then add them.

Usage

```
AddEureqaSolution(project, eureqaSolutionId)
```


Arguments

`project` character. Either (1) a character string giving the unique alphanumeric identifier for the project, or (2) a list containing the element `projectId` with this identifier.

`eureqaSolutionId` character. The solution ID of the Eureqa model to add.

Examples

```
## Not run:
projectId <- "5b2827556523cd05bd1507a5"
modelId <- "5b29406c6523cd0665685a8d"
eureqaModel <- GetModel(projectId, modelId)
paretoFront <- GetParetoFront(eureqaModel)

## End(Not run)
```

ApplySchema	<i>Apply a schema to DataRobot objects (lists, frames)</i>
-------------	--

Description

Apply a schema to DataRobot objects (lists, frames)

Usage

```
ApplySchema(inList, schema, mask = NULL)
```

Arguments

`inList` object. The DataRobot object to apply the schema to.

`schema` list. The schema to apply.

`mask` list. Search the schema and only apply values that match this with `grep`. Defaults to `NULL`, or no masking.

<code>as.data.frame</code>	<i>DataRobot S3 object methods for R's generic <code>as.data.frame</code> function</i>
----------------------------	--

Description

These functions extend R's generic `as.data.frame` function to the DataRobot S3 object classes `listOfBlueprints`, `listOfFeaturelists`, `listOfModels`, and `projectSummaryList`.

If `simple = TRUE` (the default), this method returns a dataframe with one row for each model and the following columns: `projectName`, `projectId`, `created`, `fileName`, `target`, `targetType`, `positiveClass`, `metric`, `autopilotMode`, `stage`, `maxTrainPct`, and `holdoutUnlocked`. If `simple = FALSE`, a dataframe is constructed from all elements of `projectSummaryList`.

Usage

```
## S3 method for class 'listOfBlueprints'
as.data.frame(x, row.names = NULL, optional = FALSE, ...)

## S3 method for class 'listOfFeaturelists'
as.data.frame(x, row.names = NULL, optional = FALSE, ...)

## S3 method for class 'listOfModels'
as.data.frame(x, row.names = NULL, optional = FALSE, simple = TRUE, ...)

## S3 method for class 'projectSummaryList'
as.data.frame(x, row.names = NULL, optional = FALSE, simple = TRUE, ...)

## S3 method for class 'listOfDataRobotPredictionDatasets'
as.data.frame(x, row.names = NULL, optional = FALSE, ...)
```

Arguments

x	S3 object to be converted into a dataframe.
row.names	character. Optional. Row names for the dataframe returned by the method.
optional	logical. Optional. If TRUE, setting row names and converting column names to syntactic names: see help for make.names function.
...	list. Additional optional parameters to be passed to the generic as.data.frame function (not used at present).
simple	logical. Optional. if TRUE (the default), a simplified dataframe is returned for objects of class listOfModels or projectSummaryList.

Details

All of the DataRobot S3 ‘listOf’ class objects have relatively complex structures and are often easier to work with as dataframes. The methods described here extend R’s generic as.data.frame function to convert objects of these classes to convenient dataframes. For objects of class listOfBlueprints and listOfFeaturelists or objects of class listOfModels and projectSummaryList with simple = FALSE, the dataframes contain all information from the original S3 object. The default value simple = TRUE provides simpler dataframes for objects of class listOfModels and projectSummaryList.

If simple = TRUE (the default), this method returns a dataframe with one row for each model and the following columns: modelType, expandedModel (constructed from modelType and processes from the listOfModels elements), modelId, blueprintId, featurelistName, featurelistId, samplePct, and the metrics validation value for projectMetric. If simple = FALSE, the method returns a complete dataframe with one row for each model and columns constructed from all fields in the original listOfModels object

Value

A dataframe containing some or all of the data from the original S3 object; see Details.

`as.dataRobotFeatureInfo`*Information on a data feature.*

Description

Information on a data feature.

Usage

```
as.dataRobotFeatureInfo(inList)
```

Arguments

`inList` list. See return value below for expected elements.

Value

A named list which contains:

- `id numeric`. feature id. Note that throughout the API, features are specified using their names, not this ID.
- `name character`. The name of the feature.
- `featureType character`. Feature type: 'Numeric', 'Categorical', etc.
- `importance numeric`. numeric measure of the strength of relationship between the feature and target (independent of any model or other features).
- `lowInformation logical`. Whether the feature has too few values to be informative.
- `uniqueCount numeric`. The number of unique values in the feature.
- `naCount numeric`. The number of missing values in the feature.
- `dateFormat character`. The format of the feature if it is date-time feature.
- `projectId character`. Character id of the project the feature belongs to.
- `max`. The maximum value in the dataset, formatted in the same format as the data.
- `min`. The minimum value in the dataset, formatted in the same format as the data.
- `mean`. The arithmetic mean of the dataset, formatted in the same format as the data.
- `median`. The median of the dataset, formatted in the same format as the data.
- `stdDev`. The standard deviation of the dataset, formatted in the same format as the data.
- `timeSeriesEligible logical`. Whether this feature can be used as the datetime partition column in a time series project.
- `timeSeriesEligibilityReason character`. Why the feature is ineligible for the datetime partition column in a time series project, "suitable" when it is eligible.
- `crossSeriesEligible logical`. Whether the cross series group by column is eligible for cross-series modeling. Will be NULL if no cross series group by column is used.

- crossSeriesEligibilityReason character. The type of cross series eligibility (or ineligibility).
- timeStep numeric. For time-series eligible features, a positive integer determining the interval at which windows can be specified. If used as the datetime partition column on a time series project, the feature derivation and forecast windows must start and end at an integer multiple of this value. NULL for features that are not time series eligible.
- timeUnit character. For time series eligible features, the time unit covered by a single time step, e.g. "HOUR", or NULL for features that are not time series eligible.
- targetLeakage character. Whether a feature is considered to have target leakage or not. A value of "SKIPPED_DETECTION" indicates that target leakage detection was not run on the feature.
- keySummary data.frame. Optional. Descriptive statistics for this feature, iff it is a summarized categorical feature. This data.frame contains:
 - key. The name of the key.
 - summary. Descriptive statistics for this key, including:
 - * max. The maximum value in the dataset.
 - * min. The minimum value in the dataset.
 - * mean. The arithmetic mean of the dataset.
 - * median. The median of the dataset.
 - * stdDev. The standard deviation of the dataset.
 - * pctRows. The percentage of rows (from the EDA sample) in which this key occurs.

See Also

Other feature functions: [GetFeatureInfo\(\)](#), [ListFeatureInfo\(\)](#), [ListModelFeatures\(\)](#)

as.dataRobotMultiSeriesProperties

Return value for GetMultiSeriesProperties() and others

Description

Return value for GetMultiSeriesProperties() and others

Usage

```
as.dataRobotMultiSeriesProperties(inList)
```

Arguments

`inList` list. See return value below for expected elements.

Value

A named list which contains:

- **timeSeriesEligible** logical. Whether or not the series is eligible to be used for time series.
- **crossSeriesEligible** logical. Whether or not the cross series group by column is eligible for cross-series modeling. Will be NULL if no cross series group by column is used.
- **crossSeriesEligibilityReason** character. The type of cross series eligibility (or ineligibility).
- **timeUnit** character. For time series eligible features, the time unit covered by a single time step, e.g. "HOUR", or NULL for features that are not time series eligible.
- **timeStep** integer. Expected difference in time units between rows in the data. Will be NULL for features that are not time series eligible.

See Also

Other MultiSeriesProject functions: [GetMultiSeriesProperties\(\)](#), [RequestCrossSeriesDetection\(\)](#), [RequestMultiSeriesDetection\(\)](#)

as.dataRobotProjectShort

Return value for SetupProject() and others

Description

Return value for SetupProject() and others

Usage

```
as.dataRobotProjectShort(inList)
```

Arguments

inList list. See return value below for expected elements.

Value

A named list that contains:

projectName character. The name assigned to the DataRobot project

projectId character. The unique alphanumeric project identifier for this DataRobot project

fileName character. The name of the CSV modeling file uploaded for this project

created character. The time and date of project creation

AutopilotMode *Autopilot modes*

Description

This is a list that contains the valid values for autopilot mode. If you wish, you can specify autopilot modes using the list values, e.g. AutopilotMode\$FullAuto instead of typing the string "auto". This way you can benefit from autocomplete and not have to remember the valid options.

Usage

AutopilotMode

Format

An object of class list of length 4.

Details

FullAuto represents running the entire autopilot. Quick runs a quicker, abridged version of the autopilot that focuses on the most important models. Manual does not run the autopilot and instead leaves it to the user to select the algorithms to be run. Comprehensive runs all blueprints in the repository, and may be extremely slow.

BatchFeaturesTypeTransform

Create new features by transforming the type of an existing ones.

Description

Supports feature transformations, including:

- text to categorical
- text to numeric
- categorical to text
- categorical to numeric
- numeric to categorical

Usage

```
BatchFeaturesTypeTransform(
  project,
  parentNames,
  variableType,
  prefix = NULL,
  suffix = NULL,
  maxWait = 600
)
```

Arguments

project	character. Either (1) a character string giving the unique alphanumeric identifier for the project, or (2) a list containing the element projectId with this identifier.
parentNames	character. Character vector of variable names to be transformed.
variableType	character. The new type that the columns should be converted to. See VariableTransformTypes.
prefix	character. Optional. The string to preface all the transformed features. Either prefix or suffix or both must be provided.
suffix	character. Optional. The string that will be appended at the end to all the transformed features. Either prefix or suffix or both must be provided.
maxWait	integer. Optional. The maximum amount of time (in seconds) to wait for DataRobot to finish processing the new column before providing a timeout error.

Value

a list of all the features, after transformation. See GetFeatureList for details.

Examples

```
## Not run:
projectId <- "59a5af20c80891534e3c2bde"
BatchFeaturesTypeTransform(projectId,
  parentNames = c("var1", "var2"),
  variableType = VariableTransformTypes$Categorical,
  suffix = "_transformed")

## End(Not run)
```

BlendMethods

Blend methods

Description

This is a list that contains the valid values for Blend methods

Usage

BlendMethods

Format

An object of class list of length 13.

BlueprintChartToGraphviz

Convert a blueprint chart into graphviz DOT format

Description

Convert a blueprint chart into graphviz DOT format

Usage

```
BlueprintChartToGraphviz(blueprintChart)
```

Arguments

`blueprintChart` list. The list returned by `GetBlueprintChart` function.

Value

Character string representation of chart in graphviz DOT language.

Examples

```
## Not run:
projectId <- "59a5af20c80891534e3c2bde"
modelId <- "5996f820af07fc605e81ead4"
model <- GetModel(projectId, modelId)
blueprintId <- model$blueprintId
blueprintChart <- GetBlueprintChart(projectId, blueprintId)
BlueprintChartToGraphviz(blueprintChart)

## End(Not run)
```

CheckUrl	<i>Make sure the path is a reasonable URL</i>
----------	---

Description

Make sure the path is a reasonable URL

Usage

```
CheckUrl(url)
```

Arguments

url	character. The URL to check.
-----	------------------------------

ClassificationDeploymentAccuracyMetric	<i>Accuracy metrics for classification deployments</i>
--	--

Description

Added in DataRobot API 2.18.

Usage

```
ClassificationDeploymentAccuracyMetric
```

Format

An object of class list of length 14.

CleanServerData	<i>Reformat paginated data returned from the server.</i>
-----------------	--

Description

Reformat paginated data returned from the server.

Usage

```
CleanServerData(serverData)
```

Arguments

serverData	list. Raw JSON parsed list returned from the server.
------------	--

CloneProject	<i>Clone a project</i>
--------------	------------------------

Description

This function clones a project, creating a fresh (post-EDA1) copy that will need a target and modeling options set.

Usage

```
CloneProject(project, newProjectName = NULL, maxWait = 600)
```

Arguments

<code>project</code>	dataRobotProject, or a character representing that project's ID.
<code>newProjectName</code>	character. The name of the newly cloned project. If no name is given, the API will default to 'Copy of project\$projectName'.
<code>maxWait</code>	integer. The maximum time to wait for each of two steps: (1) The initial project creation request, and (2) data processing that occurs after receiving the response to this initial request.

Value

A named list that contains:

projectName character. The name assigned to the DataRobot project

projectId character. The unique alphanumeric project identifier for this DataRobot project

fileName character. The name of the CSV modeling file uploaded for this project

created character. The time and date of project creation

Examples

```
## Not run:  
project <- GetProject("5c1303269300d900016b41a7")  
CloneProject(project, newProjectName = "Project Restart")  
  
## End(Not run)
```

 ComputeDatetimeTrendPlots

Compute datetime trend plots for datetime partitioned model.

Description

Compute datetime trend plots for datetime partitioned model. This includes Accuracy over Time, Forecast vs Actual, and Anomaly over Time plots.

Usage

```
ComputeDatetimeTrendPlots(
  model,
  backtest = 0,
  source = SourceType$Validation,
  forecastDistanceStart = NULL,
  forecastDistanceEnd = NULL
)
```

Arguments

model	An S3 object of class <code>dataRobotModel</code> like that returned by the function <code>GetModel</code> , or each element of the list returned by the function <code>ListModels</code> .
backtest	integer or character. Optional. Compute plots for a specific backtest. Use the backtest index starting from zero. To compute plots for holdout, use <code>DataSubset\$Holdout</code> .
source	character. Optional. The source of the data for the backtest/holdout. Must be one of <code>SourceType</code> .
forecastDistanceStart	integer. Optional. The start of forecast distance range (forecast window) to compute. If not specified, the first forecast distance for this project will be used. Only for time series supervised models.
forecastDistanceEnd	integer. Optional. The end of forecast distance range (forecast window) to compute. If not specified, the last forecast distance for this project will be used. Only for time series supervised models.

Details

- Forecast distance specifies the number of time steps between the predicted point and the origin point.
- For the multiseried models only first 1000 series in alphabetical order and an average plot for them will be computed.
- Maximum 100 forecast distances can be requested for calculation in time series supervised projects.

Value

An integer value that can be used as the `jobId` parameter in a subsequent call to `WaitForJobToComplete`.

Examples

```
## Not run:
projectId <- "59a5af20c80891534e3c2bde"
modelId <- "5996f820af07fc605e81ead4"
model <- GetModel(projectId, modelId)
jobId <- ComputeDatetimeTrendPlots(model)
WaitForJobToComplete(projectId, jobId) # optional step

## End(Not run)
```

ConnectToDataRobot *Establish a connection to the DataRobot modeling engine*

Description

This function initializes a DataRobot session. To use DataRobot, you must connect to your account. This can be done in three ways:

- by passing an endpoint and token directly to `ConnectToDataRobot`
- by having a YAML config file in `$HOME/.config/datarobot/drconfig.yaml`
- by setting `DATAROBOT_API_ENDPOINT` and `DATAROBOT_API_TOKEN` environment variables

The three methods of authentication are given priority in that order (explicitly passing parameters to the function will trump a YAML config file, which will trump the environment variables.) If you have a YAML config file or environment variables set, you will not need to pass any parameters to `ConnectToDataRobot` in order to connect.

Usage

```
ConnectToDataRobot(
  endpoint = NULL,
  token = NULL,
  username = NULL,
  password = NULL,
  userAgentSuffix = NULL,
  sslVerify = TRUE,
  configPath = NULL
)
```

Arguments

endpoint	character. URL specifying the DataRobot server to be used. It depends on DataRobot modeling engine implementation (cloud-based, on-prem...) you are using. Contact your DataRobot admin for endpoint to use and to turn on API access to your account. The endpoint for DataRobot cloud accounts is https://app.datarobot.com/api/v2
token	character. DataRobot API access token. It is unique for each DataRobot modeling engine account and can be accessed using DataRobot webapp in Account profile section.
username	character. No longer supported.
password	character. No longer supported.
userAgentSuffix	character. Additional text that is appended to the User-Agent HTTP header when communicating with the DataRobot REST API. This can be useful for identifying different applications that are built on top of the DataRobot Python Client, which can aid debugging and help track usage.
sslVerify	logical. Whether to check the SSL certificate. Either TRUE to check (default), FALSE to not check.
configPath	character. Path to YAML config file specifying configuration (token and endpoint).

Examples

```
## Not run:
ConnectToDataRobot("https://app.datarobot.com/api/v2", "thisismyfaketoken")
ConnectToDataRobot(configPath = "~/config/datarobot/drconfig.yaml")

## End(Not run)
```

ConstructDurationString

Construct a valid string representing a duration in accordance with ISO8601

Description

A duration of six months, 3 days, and 12 hours could be represented as P6M3DT12H.

Usage

```
ConstructDurationString(
  years = 0,
  months = 0,
  days = 0,
  hours = 0,
  minutes = 0,
  seconds = 0
)
```

Arguments

years	integer. The number of years in the duration.
months	integer. The number of months in the duration.
days	integer. The number of days in the duration.
hours	integer. The number of hours in the duration.
minutes	integer. The number of minutes in the duration.
seconds	integer. The number of seconds in the duration.

Value

The duration string, specified compatibly with ISO8601.

Examples

```
ConstructDurationString()
ConstructDurationString(days = 100)
ConstructDurationString(years = 10, months = 2, days = 5, seconds = 12)
```

CreateBacktestSpecification

Create a list describing backtest parameters

Description

Uniquely defines a Backtest used in a DatetimePartitioning

Usage

```
CreateBacktestSpecification(
  index,
  gapDuration,
  validationStartDate,
  validationDuration
)
```

Arguments

index	integer. The index of the backtest
gapDuration	character. The desired duration of the gap between training and validation data for the backtest in duration format (ISO8601).
validationStartDate	character. The desired start date of the validation data for this backtest (RFC 3339 format).
validationDuration	character. The desired end date of the validation data for this backtest in duration format (ISO8601).

Details

Includes only the attributes of a backtest directly controllable by users. The other attributes are assigned by the DataRobot application based on the project dataset and the user-controlled settings. All durations should be specified with a duration string such as those returned by the ConstructDurationString helper function.

Value

list with backtest parameters

Examples

```
zeroDayDuration <- ConstructDurationString()
hundredDayDuration <- ConstructDurationString(days = 100)
CreateBacktestSpecification(index = 0,
                           gapDuration = zeroDayDuration,
                           validationStartDate = "1989-12-01",
                           validationDuration = hundredDayDuration)
```

CreateCalendar	<i>Create a calendar from an uploaded CSV.</i>
----------------	--

Description

Create a calendar from an uploaded CSV.

Usage

```
CreateCalendar(
  dataSource,
  name = NULL,
  multiSeriesIdColumn = NULL,
  maxWait = 600
)
```

Arguments

dataSource	object. Either (a) the name of a CSV file, or (b) a dataframe. This parameter identifies the source of the calendar data.
name	character. Optional. The name of the calendar.
multiSeriesIdColumn	character. Optional. Added in 2.19. The column in the calendar that defines which series an event belongs to. Only one column is supported.
maxWait	integer. The maximum time (in seconds) to wait for the retrieve to complete.

Value

An S3 object of class "dataRobotCalendar"

Examples

```
## Not run:
  CreateCalendar("inst/extdata/calendar.csv", name = "intlHolidayCalendar")

## End(Not run)
## Not run:
  holidayCalendarDF <- as.data.frame(myCalendar)
  CreateCalendar(holidayCalendarDF, name = "intlHolidayCalendar")

## End(Not run)
## Not run:
  CreateCalendar("inst/extdata/calendar.csv",
                 name = "intlHolidayCalendar",
                 multiSeriesIdColumn = "Country")

## End(Not run)
```

CreateComplianceDocumentation

Create compliance documentation from a model.

Description

Note that if you're looking to download compliance documentation to a DOCX file, you can call `DownloadComplianceDocumentation` directly without using this function.

Usage

```
CreateComplianceDocumentation(model, templateId = NULL)
```

Arguments

<code>model</code>	An S3 object of class <code>dataRobotModel</code> like that returned by the function <code>GetModel</code> , or each element of the list returned by the function <code>ListModels</code> .
<code>templateId</code>	character. Optional. The ID of the template to use in generating custom model documentation.

Value

An integer value that can be used as the `jobId` parameter in a subsequent call to `WaitForJobToComplete`.

Examples

```
## Not run:
  projectId <- "59a5af20c80891534e3c2bde"
  modelId <- "5996f820af07fc605e81ead4"
  model <- GetModel(projectId, modelId)
  jobId <- CreateComplianceDocumentation(model) # optional step
```



```

    WaitForJobToComplete(projectId, jobId)      # optional step
    DownloadComplianceDocumentation(model)

## End(Not run)

```

CreateDataSource *Create a data source.*

Description

Create a data source.

Usage

```

CreateDataSource(
  type,
  canonicalName,
  dataStoreId,
  query = NULL,
  table = NULL,
  schema = NULL,
  partitionColumn = NULL,
  fetchSize = NULL
)

```

Arguments

type	character. The type of data source.
canonicalName	character. The user-friendly name of the data source.
dataStoreId	character. The ID of the data store to connect to.
query	character. A query to execute on the data store to get the data. Optional.
table	character. The specified database table. Optional.
schema	character. The specified database schema. Optional.
partitionColumn	character. The name of the partition column. Optional.
fetchSize	integer. a user specified fetch size in the range [1, 20000]. Optional. By default a fetchSize will be assigned to balance throughput and memory usage

Examples

```

## Not run:
dataStoreId <- "5c1303269300d900016b41a7"
CreateDataSource(type = "jdbc",
                canonicalName = "Airline stats after 1995",
                dataStoreId = dataStoreId,
                query = 'SELECT * FROM airlines10mb WHERE "Year" >= 1995;')

## End(Not run)

```

CreateDataStore *Create a data store.*

Description

Create a data store.

Usage

```
CreateDataStore(type, canonicalName, driverId, jdbcUrl)
```

Arguments

type	character. The type of data store.
canonicalName	character. The user-friendly name of the data store.
driverId	character. The ID of the driver to use.
jdbcUrl	character. The full JDBC url.

Examples

```
## Not run:
CreateDataStore(type = "jdbc",
                canonicalName = "Demo DB",
                driverId = "57a7c978c808916f4a630f89",
                jdbcUrl = "jdbc:postgresql://my.db.address.org:5432/my_db")

## End(Not run)
```

CreateDatetimePartitionSpecification
Create a list describing datetime partition parameters

Description

Uniquely defines a DatetimePartitioning for some project

Usage

```
CreateDatetimePartitionSpecification(
  datetimePartitionColumn,
  autopilotDataSelectionMethod = NULL,
  validationDuration = NULL,
  holdoutStartDate = NULL,
  holdoutDuration = NULL,
  disableHoldout = NULL,
```

```

    gapDuration = NULL,
    numberOfBacktests = NULL,
    backtests = NULL,
    useTimeSeries = FALSE,
    defaultToKnownInAdvance = FALSE,
    featureDerivationWindowStart = NULL,
    featureDerivationWindowEnd = NULL,
    featureSettings = NULL,
    treatAsExponential = NULL,
    differencingMethod = NULL,
    windowsBasisUnit = NULL,
    periodicities = NULL,
    forecastWindowStart = NULL,
    forecastWindowEnd = NULL,
    multiserieIdColumns = NULL,
    useCrossSeries = NULL,
    aggregationType = NULL,
    crossSeriesGroupByColumns = NULL,
    calendar = NULL
)

```

Arguments

datetimePartitionColumn
character. The name of the column whose values as dates are used to assign a row to a particular partition

autopilotDataSelectionMethod
character. Optional. Whether models created by the autopilot should use "row-Count" or "duration" as their dataSelectionMethod

validationDuration
character. Optional. The default validationDuration for the backtests

holdoutStartDate
character. The start date of holdout scoring data (RFC 3339 format). If holdoutStartDate is specified, holdoutDuration must also be specified.

holdoutDuration
character. Optional. The duration of the holdout scoring data. If holdoutDuration is specified, holdoutStartDate must also be specified.

disableHoldout
logical. Optional. Whether to suppress allocating the holdout fold. If set to TRUE, holdoutStartDate and holdoutDuration must not be specified.

gapDuration
character. Optional. The duration of the gap between training and holdout scoring data.

numberOfBacktests
integer. The number of backtests to use.

backtests
list. List of BacktestSpecification the exact specification of backtests to use. The indexes of the specified backtests should range from 0 to numberOfBacktests - 1. If any backtest is left unspecified, a default configuration will be chosen.

<code>useTimeSeries</code>	logical. Whether to create a time series project (if TRUE) or an OTV project which uses datetime partitioning (if FALSE). The default behavior is to create an OTV project.
<code>defaultToKnownInAdvance</code>	logical. Whether to default to treating features as known in advance. Defaults to FALSE. Only used for time series project. Known in advance features are expected to be known for dates in the future when making predictions (e.g., "is this a holiday").
<code>featureDerivationWindowStart</code>	integer. Optional. Offset into the past to define how far back relative to the forecast point the feature derivation window should start. Only used for time series projects. Expressed in terms of the <code>timeUnit</code> of the <code>datetimePartitionColumn</code> .
<code>featureDerivationWindowEnd</code>	integer. Optional. Offset into the past to define how far back relative to the forecast point the feature derivation window should end. Only used for time series projects. Expressed in terms of the <code>timeUnit</code> of the <code>datetimePartitionColumn</code> .
<code>featureSettings</code>	list. Optional. A list specifying settings for each feature. For each feature you would like to set feature settings for, pass the following in a list: <ul style="list-style-type: none"> • <code>featureName</code> character. The name of the feature to set feature settings. • <code>knownInAdvance</code> logical. Optional. Whether or not the feature is known in advance. Used for time series only. Defaults to FALSE. • <code>doNotDerive</code> logical. Optional. If TRUE, no time series derived features (e.g., lags) will be automatically engineered from this feature. Used for time series only. Defaults to FALSE.
<code>treatAsExponential</code>	character. Optional. Defaults to "auto". Used to specify whether to treat data as exponential trend and apply transformations like log-transform. Use values from <code>TreatAsExponential</code> enum.
<code>differencingMethod</code>	character. Optional. Defaults to "auto". Used to specify differencing method to apply if data is stationary. Use values from <code>DifferencingMethod</code> .
<code>windowsBasisUnit</code>	character. Optional. Indicates which unit is the basis for the feature derivation window and forecast window. Valid options are a time unit (see <code>TimeUnit</code>) or "ROW".
<code>periodicities</code>	list. Optional. A list of periodicities for different times. Must be specified as a list of lists, where each list item specifies the 'timeSteps' for a particular 'timeUnit'. Should be "ROW" if <code>windowsBasisUnit</code> is "ROW".
<code>forecastWindowStart</code>	integer. Optional. Offset into the future to define how far forward relative to the forecast point the forecast window should start. Only used for time series projects. Expressed in terms of the <code>timeUnit</code> of the <code>datetimePartitionColumn</code> .
<code>forecastWindowEnd</code>	integer. Optional. Offset into the future to define how far forward relative to the forecast point the forecast window should end. Only used for time series projects. Expressed in terms of the <code>timeUnit</code> of the <code>datetimePartitionColumn</code> .

multiseriesIdColumns	list. A list of the names of multiseries id columns to define series
useCrossSeries	logical. If TRUE, cross series features will be included. For details, see "Calculating features across series" in the time series section of the DataRobot user guide.
aggregationType	character. Optional. The aggregation type to apply when creating cross series features. Must be either "total" or "average". See SeriesAggregationType.
crossSeriesGroupByColumns	character. Optional. Column to split a cross series into further groups. For example, if every series is sales of an individual product, the cross series group could be e product category with values like "men's clothing", "sports equipment", etc. Requires multiseries with useCrossSeries enabled.
calendar	character. Optional. Either the calendar object or calendar id to use for this project.

Details

Includes only the attributes of DatetimePartitioning that are directly controllable by users, not those determined by the DataRobot application based on the project dataset and the user-controlled settings. This is the specification that should be passed to SetTarget via the partition parameter. To see the full partitioning based on the project dataset, GenerateDatetimePartition. All durations should be specified with a duration string such as those returned by the ConstructDurationString helper function.

Value

An S3 object of class 'partition' including the parameters required by the SetTarget function to generate a datetime partitioning of the modeling dataset.

Examples

```
CreateDatetimePartitionSpecification("date_col")
CreateDatetimePartitionSpecification("date",
  featureSettings = list(
    list("featureName" = "Product_offers",
      "defaultToKnownInAdvance" = TRUE)))
partition <- CreateDatetimePartitionSpecification("dateColumn",
  treatAsExponential = TreatAsExponential$Always,
  differencingMethod = DifferencingMethod$Seasonal,
  periodicities = list(list("timeSteps" = 10,
    "timeUnit" = "HOUR"),
    list("timeSteps" = 600,
      "timeUnit" = "MINUTE"),
    list("timeSteps" = 7,
      "timeUnit" = "DAY")))
```

CreateDeployment	<i>Create a deployment.</i>
------------------	-----------------------------

Description

Create a deployment.

Usage

```
CreateDeployment(  
    model,  
    label = "",  
    description = "",  
    defaultPredictionServerId = NULL  
)
```

Arguments

model	An S3 object of class <code>dataRobotModel</code> like that returned by the function <code>GetModel</code> , or each element of the list returned by the function <code>ListModels</code> .
label	character. The name of the deployment.
description	character. Optional. A longer description of the deployment.
defaultPredictionServerId	character. The ID of the prediction server to connect to. Can also be a prediction server object.

Value

A `DataRobotDeployment` object containing:

- `id` character. The ID of the deployment.
- `label` character. The label of the deployment.
- `description` character. The description of the deployment.
- `defaultPredictionServer` list. Information on the default prediction server connected with the deployment. See `ListPredictionServers` for details.
- `model` `dataRobotModel`. The model associated with the deployment. See `GetModel` for details.
- `capabilities` list. Information on the capabilities of the deployment.
- `predictionUsage` list. Information on the prediction usage of the deployment.
- `permissions` list. User's permissions on the deployment.
- `serviceHealth` list. Information on the service health of the deployment.
- `modelHealth` list. Information on the model health of the deployment.
- `accuracyHealth` list. Information on the accuracy health of the deployment.

Examples

```
## Not run:
projectId <- "59a5af20c80891534e3c2bde"
modelId <- "5996f820af07fc605e81ead4"
model <- GetModel(projectId, modelId)
predictionServer <- ListPredictionServers()[[1]]
CreateDeployment(model,
  label = "myDeployment",
  description = "this is my deployment",
  defaultPredictionServerId = predictionServer)

## End(Not run)
```

CreateDerivedFeatures *Derived Features*

Description

These functions request that new features be created as transformations of existing features and wait for the new feature to be created.

Usage

```
CreateDerivedFeatureAsCategorical(
  project,
  parentName,
  name = NULL,
  dateExtraction = NULL,
  replacement = NULL,
  maxWait = 600
)
```

```
CreateDerivedFeatureAsText(
  project,
  parentName,
  name = NULL,
  dateExtraction = NULL,
  replacement = NULL,
  maxWait = 600
)
```

```
CreateDerivedFeatureAsNumeric(
  project,
  parentName,
  name = NULL,
  dateExtraction = NULL,
  replacement = NULL,
```

```

    maxWait = 600
  )

CreateDerivedFeatureIntAsCategorical(
  project,
  parentName,
  name = NULL,
  dateExtraction = NULL,
  replacement = NULL,
  maxWait = 600
)

```

Arguments

project	character. Either (1) a character string giving the unique alphanumeric identifier for the project, or (2) a list containing the element projectId with this identifier.
parentName	The name of the parent feature.
name	The name of the new feature.
dateExtraction	dateExtraction: The value to extract from the date column: 'year', 'yearDay', 'month', 'monthDay', 'week', or 'weekDay'. Required for transformation of a date column. Otherwise must not be provided.
replacement	The replacement in case of a failed transformation. Optional.
maxWait	The maximum time (in seconds) to wait for feature creation.

Value

Details for the created feature; same schema as the object returned from GetFeatureInfo.

CreateFeaturelist	<i>Create a new featurelist in a DataRobot project</i>
-------------------	--

Description

This function allows the user to create a new featurelist in a project by specifying its name and a list of variables to be included

Usage

```
CreateFeaturelist(project, listName, featureNames)
```

Arguments

project	character. Either (1) a character string giving the unique alphanumeric identifier for the project, or (2) a list containing the element projectId with this identifier.
listName	character. String identifying the new featurelist to be created.
featureNames	character. Vector listing the names of the variables to be included in the featurelist.

Details

DataRobot featurelists define the variables from the modeling dataset used in fitting each project model. Some functions (SetTarget, StartNewAutopilot) optionally accept a featurelist (and use a default featurelist if none is specified).

Value

A list with the following four elements describing the featurelist created:

featurelistId Character string giving the unique alphanumeric identifier for the new featurelist.

projectId Character string giving the projectId identifying the project to which the featurelist was added.

features Character vector with the names of the variables included in the new featurelist.

name Character string giving the name of the new featurelist.

Examples

```
## Not run:
  projectId <- "59a5af20c80891534e3c2bde"
  CreateFeaturelist(projectId, "myFeaturelist", c("feature1", "feature2", "otherFeature"))

## End(Not run)
```

CreateGroupPartition *Create a group-based S3 object of class partition for the SetTarget function*

Description

Group partitioning constructs data partitions such that all records with each level in the column specified by the parameter partitionKeyCols occur together in the same partition.

Usage

```
CreateGroupPartition(
  validationType,
  holdoutPct,
  partitionKeyCols,
  reps = NULL,
  validationPct = NULL
)
```

Arguments

- `validationType` character. String specifying the type of partition generated, either "TVH" or "CV".
- `holdoutPct` integer. The percentage of data to be used as the holdout subset.
- `partitionKeyCols` list. List containing a single string specifying the name of the variable used in defining the group partition.
- `reps` integer. The number of cross-validation folds to generate; only applicable when `validationType = "CV"`.
- `validationPct` integer. The percentage of data to be used as the validation subset.

Details

This function is one of several convenience functions provided to simplify the task of starting modeling projects with custom partitioning options. The other functions are `CreateRandomPartition`, `CreateStratifiedPartition`, and `CreateUserPartition`.

Value

An S3 object of class 'partition' including the parameters required by the `SetTarget` function to generate a group-based partitioning of the modeling dataset.

See Also

[CreateRandomPartition](#), [CreateStratifiedPartition](#), [CreateUserPartition](#).

Examples

```
CreateGroupPartition(validationType = "CV",
                     holdoutPct = 20,
                     partitionKeyCols = list("groupId"),
                     reps = 5)
```

`CreateModelingFeaturelist`

This function allows the user to create a new featurelist in a project by specifying its name and a list of variables to be included

Description

In time series projects, a new set of modeling features is created after setting the partitioning options. These features are automatically derived from those in the project's dataset and are the features used for modeling. Modeling features are only accessible once the target and partitioning options have been set. In projects that don't use time series modeling, once the target has been set, `ModelingFeaturelists` and `Featurelists` will behave the same.

Usage

```
CreateModelingFeaturelist(project, listName, featureNames)
```

Arguments

project	character. Either (1) a character string giving the unique alphanumeric identifier for the project, or (2) a list containing the element projectId with this identifier.
listName	character. String identifying the new featurelist to be created.
featureNames	character. Vector listing the names of the variables to be included in the featurelist.

Examples

```
## Not run:
projectId <- "59a5af20c80891534e3c2bde"
CreateModelingFeaturelist(projectId, "myFeaturelist", c("feature1", "feature2"))
## End(Not run)
```

CreatePrimeCode	<i>Create and validate the downloadable code for the ruleset associated with this model</i>
-----------------	---

Description

Create and validate the downloadable code for the ruleset associated with this model

Usage

```
CreatePrimeCode(project, primeModelId, language)
```

Arguments

project	character. Either (1) a character string giving the unique alphanumeric identifier for the project, or (2) a list containing the element projectId with this identifier.
primeModelId	character. Id returned by GetPrimeModel(s) functions.
language	character. Programming language to use for downloadable code (see PrimeLanguage).

Value

job Id

Examples

```
## Not run:
projectId <- "59a5af20c80891534e3c2bde"
modelId <- "5996f820af07fc605e81ead4"
CreatePrimeCode(projectId, modelId, "Python")

## End(Not run)
```

CreateRandomPartition *Create a random sampling-based S3 object of class partition for the SetTarget function*

Description

Random partitioning is supported for either Training/Validation/Holdout ("TVH") or cross-validation ("CV") splits. In either case, the holdout percentage (holdoutPct) must be specified; for the "CV" method, the number of cross-validation folds (reps) must also be specified, while for the "TVH" method, the validation subset percentage (validationPct) must be specified.

Usage

```
CreateRandomPartition(
  validationType,
  holdoutPct,
  reps = NULL,
  validationPct = NULL
)
```

Arguments

validationType	character. String specifying the type of partition generated, either "TVH" or "CV".
holdoutPct	integer. The percentage of data to be used as the holdout subset.
reps	integer. The number of cross-validation folds to generate; only applicable when validationType = "CV".
validationPct	integer. The percentage of data to be used as the validation subset.

Details

This function is one of several convenience functions provided to simplify the task of starting modeling projects with custom partitioning options. The other functions are CreateGroupPartition, CreateStratifiedPartition, and CreateUserPartition.

Value

An S3 object of class partition including the parameters required by SetTarget to generate a random partitioning of the modeling dataset.

See Also

[CreateStratifiedPartition](#), [CreateGroupPartition](#), [CreateUserPartition](#).

Examples

```
CreateRandomPartition(validationType = "CV", holdoutPct = 20, reps = 5)
```

CreateRatingTable	<i>Creates and validates a new rating table from an uploaded CSV.</i>
-------------------	---

Description

Creates and validates a new rating table from an uploaded CSV.

Usage

```
CreateRatingTable(
  project,
  parentModelId,
  dataSource,
  ratingTableName = "Uploaded Rating Table"
)
```

Arguments

project	character. Either (1) a character string giving the unique alphanumeric identifier for the project, or (2) a list containing the element projectId with this identifier.
parentModelId	integer. The id of the model to validate the rating table against.
dataSource	object. Either (a) the name of a CSV file, or (b) a dataframe. This parameter identifies the source of the rating table.
ratingTableName	character. Optional. The name of the rating table.

Value

An integer value that can be used as the JobId parameter in subsequent calls representing this job.

Examples

```
## Not run:
projectId <- "5984b4d7100d2b31c1166529"
modelId <- "5984b4d7100d2b31c1166529"
CreateRatingTable(projectId, modelId, dataSource = "myRatingTable.csv")

## End(Not run)
```

CreateStratifiedPartition

Create a stratified sampling-based S3 object of class partition for the SetTarget function

Description

Stratified partitioning is supported for binary classification problems and it randomly partitions the modeling data, keeping the percentage of positive class observations in each partition the same as in the original dataset. Stratified partitioning is supported for either Training/Validation/Holdout ("TVH") or cross-validation ("CV") splits. In either case, the holdout percentage (holdoutPct) must be specified; for the "CV" method, the number of cross-validation folds (reps) must also be specified, while for the "TVH" method, the validation subset percentage (validationPct) must be specified.

Usage

```
CreateStratifiedPartition(  
  validationType,  
  holdoutPct,  
  reps = NULL,  
  validationPct = NULL  
)
```

Arguments

validationType character. String specifying the type of partition generated, either "TVH" or "CV".

holdoutPct integer. The percentage of data to be used as the holdout subset.

reps integer. The number of cross-validation folds to generate; only applicable when validationType = "CV".

validationPct integer. The percentage of data to be used as the validation subset.

Details

This function is one of several convenience functions provided to simplify the task of starting modeling projects with custom partitioning options. The other functions are CreateGroupPartition, CreateRandomPartition, and CreateUserPartition.

Value

An S3 object of class 'partition' including the parameters required by the SetTarget function to generate a stratified partitioning of the modeling dataset.

See Also

[CreateGroupPartition](#), [CreateRandomPartition](#), [CreateUserPartition](#).

Examples

```
CreateStratifiedPartition(validationType = "CV", holdoutPct = 20, reps = 5)
```

CreateUserPartition	<i>Create a class partition object for use in the SetTarget function representing a user-defined partition.</i>
---------------------	---

Description

Creates a list object used by the SetTarget function to specify either Training/Validation/Holdout (validationType = "TVH") or cross-validation (validationType = "CV") partitions of the modeling dataset based on the values included in a column from the dataset. In either case, the name of this data column must be specified (as userPartitionCol).

Usage

```
CreateUserPartition(
  validationType,
  userPartitionCol,
  cvHoldoutLevel = NULL,
  trainingLevel = NULL,
  holdoutLevel = NULL,
  validationLevel = NULL
)
```

Arguments

validationType	character. String specifying the type of partition generated, either "TVH" or "CV".
userPartitionCol	character. String naming the data column from the modeling dataset containing the subset designations.
cvHoldoutLevel	character. Data value from userPartitionCol that identifies the holdout subset under the "CV" option.
trainingLevel	character. Data value from userPartitionCol that identifies the training subset under the "TVH" option.
holdoutLevel	character. Data value from userPartitionCol that identifies the holdout subset under both "TVH" and "CV" options. To specify that the project should not use a holdout you can omit this parameter or pass NA directly.
validationLevel	character. Data value from userPartitionCol that identifies the validation subset under the "TVH" option.

Details

For the "TVH" option of cvMethod, no cross-validation is used. Users must specify the trainingLevel and validationLevel; use of a holdoutLevel is always recommended but not required. If no holdoutLevel is used, then the column must contain exactly 2 unique values. If a holdoutLevel is used, the column must contain exactly 3 unique values.

For the "CV" option, each value in the column will be used to separate rows into cross-validation folds. Use of a holdoutLevel is optional; if not specified, then no holdout is used.

This function is one of several convenience functions provided to simplify the task of starting modeling projects with custom partitioning options. The other functions are CreateGroupPartition, CreateRandomPartition, and CreateStratifiedPartition.

Value

An S3 object of class 'partition' including the parameters required by the SetTarget function to generate a user-specified of the modeling dataset.

See Also

[CreateGroupPartition](#), [CreateRandomPartition](#), [CreateStratifiedPartition](#).

Examples

```
CreateUserPartition(validationType = "CV", userPartitionCol = "TVHflag", cvHoldoutLevel = NA)
```

CrossValidateModel *Run cross validation on a model.*

Description

Note that this runs cross validation on a model as-is. If you would like to run cross-validation on a model with new parameters, use RequestNewModel instead.

Usage

```
CrossValidateModel(model)
```

Arguments

model An S3 object of class dataRobotModel like that returned by the function GetModel, or each element of the list returned by the function ListModels.

Details

Note that this is not implemented for prime models or datetime models.

Value

Job ID of the cross validation job.

Examples

```
## Not run:
projectId <- "59a5af20c80891534e3c2bde"
modelId <- "5996f820af07fc605e81ead4"
model <- GetModel(projectId, modelId)
CrossValidateModel(model)

## End(Not run)
```

cvMethods

CV methods

Description

This is a list that contains the valid values for CV methods

Usage

```
cvMethods
```

Format

An object of class `list` of length 5.

DataPartition

Data Partition methods

Description

This is a list that contains the valid values for data partitions

Usage

```
DataPartition
```

Format

An object of class `list` of length 3.

DataPathFromDataArg *Get the data path.*

Description

Verifies that new data is either an existing datafile or a dataframe. If a dataframe, save as a CSV file. If neither an existing datafile nor a dataframe, halt with error.

Usage

```
DataPathFromDataArg(dataSource, saveFile = NULL)
```

Arguments

dataSource	object. The dataframe or path to CSV to get data for.
saveFile	character. Optional. A file name to write an autosaved dataframe to.

DataSubset *Data subset for training predictions*

Description

This is a list that contains the valid values for the dataSubset parameter found in RequestTrainingPredictions. If you wish, you can specify dataSubset using the list values here.

Usage

```
DataSubset
```

Format

An object of class list of length 4.

Details

For All, all available data is used.

For ValidationAndHoldout, only data outside the training set is used.

For Holdout, only holdout data is used.

For AllBacktests, data is used from all backtest validation folds. This requires the model to have successfully scored all backtests. Backtests are available on datetime partitioned projects only.

DatetimeTrendPlotsResolutions

Datetime trend plots resolutions

Description

Datetime trend plots resolutions

Usage

DatetimeTrendPlotsResolutions

Format

An object of class list of length 9.

DatetimeTrendPlotsStatuses

Datetime trend plots statuses

Description

Datetime trend plots statuses

Usage

DatetimeTrendPlotsStatuses

Format

An object of class list of length 6.

`DeleteAnomalyAssessmentRecord`*Delete anomaly assessment record.*

Description

Record is deleted with preview and explanations.

Usage

```
DeleteAnomalyAssessmentRecord(projectId, recordId)
```

Arguments

<code>projectId</code>	character. The ID of the project.
<code>recordId</code>	character. The ID of the anomaly assessment record.

See Also

Other Anomaly Assessment functions: [GetAnomalyAssessmentExplanations\(\)](#), [GetAnomalyAssessmentPredictionsPr](#)
[InitializeAnomalyAssessment\(\)](#), [ListAnomalyAssessmentRecords\(\)](#)

Examples

```
## Not run:  
projectId <- "59a5af20c80891534e3c2bde"  
recordId <- "59a5af20c80891534e3c2bdb"  
explanations <- DeleteAnomalyAssessmentRecord(projectId, recordId)  
  
## End(Not run)
```

`DeleteCalendar`*Delete a calendar*

Description

Delete a calendar

Usage

```
DeleteCalendar(calendarId)
```

Arguments

<code>calendarId</code>	character. The ID of the calendar to retrieve.
-------------------------	--

Examples

```
## Not run:
calendarId <- "5da75da31fb4a45b8a815a53"
DeleteCalendar(calendarId)

## End(Not run)
```

DeleteComplianceDocTemplate

Deletes a compliance doc template.

Description

Note that default templates cannot be deleted.

Usage

```
DeleteComplianceDocTemplate(templateId)
```

Arguments

templateId character. The ID of the template to update.

Value

Nothing returned, but deletes the compliance doc template.

Examples

```
## Not run:
templateId <- "5cf85080d9436e5c310c796d"
DeleteComplianceDocTemplate(templateId)

## End(Not run)
```

DeleteDataSource

Delete a data store.

Description

Delete a data store.

Usage

```
DeleteDataSource(dataSourceId)
```

Arguments

dataSourceId character. The ID of the data store to update.

Examples

```
## Not run:
dataSourceId <- "5c1303269300d900016b41a7"
DeleteDataSource(dataSourceId)

## End(Not run)
```

DeleteDataSource *Delete a data store.*

Description

Delete a data store.

Usage

```
DeleteDataSource(dataSourceId)
```

Arguments

dataStoreId character. The ID of the data store to update.

Examples

```
## Not run:
dataStoreId <- "5c1303269300d900016b41a7"
DeleteDataStore(dataStoreId)

## End(Not run)
```

DeleteDeployment *Delete a deployment.*

Description

Delete a deployment.

Usage

```
DeleteDeployment(deploymentId)
```

Arguments

deploymentId character. The ID of the deployment.

Examples

```
## Not run:
deploymentId <- "5e319d2e422fbd6b58a5edad"
DeleteDeployment(deploymentId)

## End(Not run)
```

DeleteFeaturelist	<i>Delete a featurelist</i>
-------------------	-----------------------------

Description

Delete a featurelist

Usage

```
DeleteFeaturelist(featurelist)
```

Arguments

featurelist list. The featurelist to delete.

Examples

```
## Not run:
projectId <- "59a5af20c80891534e3c2bde"
featureList <- CreateFeaturelist(projectId, "myFeaturelist", c("feature1", "feature2"))
DeleteFeaturelist(featurelist)

## End(Not run)
```

DeleteJob	<i>Cancel a running job</i>
-----------	-----------------------------

Description

Cancel a running job

Usage

```
DeleteJob(job)
```

Arguments

`job` object. The job you want to cancel (one of the items in the list returned from `ListJobs`)

Examples

```
## Not run:
projectId <- "59a5af20c80891534e3c2bde"
initialJobs <- ListModelJobs(project)
job <- initialJobs[[1]]
DeleteJob(job)

## End(Not run)
```

`DeleteModel`*Delete a specified DataRobot model*

Description

This function removes the model specified by the parameter `model` from its associated project.

Usage

```
DeleteModel(model)
```

Arguments

`model` An S3 object of class `dataRobotModel` like that returned by the function `GetModel`, or each element of the list returned by the function `ListModels`.

Examples

```
## Not run:
projectId <- "59a5af20c80891534e3c2bde"
modelId <- "5996f820af07fc605e81ead4"
model <- GetModel(projectId, modelId)
DeleteModel(model)

## End(Not run)
```

DeleteModelingFeaturelist
Delete a modeling featurelist

Description

Delete a modeling featurelist

Usage

```
DeleteModelingFeaturelist(featurelist)
```

Arguments

featurelist list. The modeling featurelist to delete.

Examples

```
## Not run:
projectId <- "59a5af20c80891534e3c2bde"
featureList <- CreateModelingFeaturelist(projectId, "myFeaturelist", c("feature1", "feature2"))
featurelistId <- featureList$featurelistId
GetModelingFeaturelist(projectId, featurelistId)
DeleteModelingFeaturelist(projectId, featurelistId)

## End(Not run)
```

DeleteModelJob *Delete a model job from the modeling queue*

Description

This function deletes the modeling job specified by modelJobId from the DataRobot modeling queue.

Usage

```
DeleteModelJob(project, modelJobId)
```

Arguments

project character. Either (1) a character string giving the unique alphanumeric identifier for the project, or (2) a list containing the element projectId with this identifier.

modelJobId integer. Identifier for the modeling job to be deleted; can be obtained from the results returned by the function ListModelJobs.

Examples

```
## Not run:
projectId <- "59a5af20c80891534e3c2bde"
initialJobs <- ListModelJobs(project)
job <- initialJobs[[1]]
modelJobId <- job$modelJobId
DeleteModelJob(projectId, modelJobId)

## End(Not run)
```

DeletePredictionDataset

Delete a specified prediction dataset

Description

This function removes a prediction dataset

Usage

```
DeletePredictionDataset(project, datasetId)
```

Arguments

project	character. Either (1) a character string giving the unique alphanumeric identifier for the project, or (2) a list containing the element projectId with this identifier.
datasetId	The id of the dataset to delete

Examples

```
## Not run:
projectId <- "59a5af20c80891534e3c2bde"
datasets <- ListPredictionDatasets(projectId)
dataset <- datasets[[1]]
datasetId <- dataset$id
DeletePredictionDataset(projectId, datasetId)

## End(Not run)
```

`DeletePredictionExplanations`*Function to delete prediction explanations*

Description

This function deletes prediction explanations specified by project and predictionExplanationId.

Usage

```
DeletePredictionExplanations(project, predictionExplanationId)
```

Arguments

`project` character. Either (1) a character string giving the unique alphanumeric identifier for the project, or (2) a list containing the element projectId with this identifier.

`predictionExplanationId` character. Id of the prediction explanations.

Value

Logical TRUE and displays a message to the user if the delete request was successful; otherwise an error message is displayed.

Examples

```
## Not run:
projectId <- "59a5af20c80891534e3c2bde"
modelId <- "5996f820af07fc605e81ead4"
datasets <- ListPredictionDatasets(projectId)
dataset <- datasets[[1]]
datasetId <- dataset$id
model <- GetModel(projectId, modelId)
jobId <- RequestPredictionExplanations(model, datasetId)
predictionExplanationId <- GetPredictionExplanationsMetadataFromJobId(projectId, jobId)$id
DeletePredictionExplanations(projectId, predictionExplanationId)

## End(Not run)
```

DeletePredictionExplanationsInitialization

Delete the prediction explanations initialization for a model.

Description

Delete the prediction explanations initialization for a model.

Usage

```
DeletePredictionExplanationsInitialization(model)
```

Arguments

`model` An S3 object of class `dataRobotModel` like that returned by the function `GetModel`, or each element of the list returned by the function `ListModels`.

Value

Logical TRUE and displays a message to the user if the delete request was successful; otherwise an error message is displayed.

Examples

```
## Not run:
projectId <- "59a5af20c80891534e3c2bde"
modelId <- "5996f820af07fc605e81ead4"
model <- GetModel(projectId, modelId)
DeletePredictionExplanationsInitialization(model)

## End(Not run)
```

DeletePredictJob

Function to delete one predict job from the DataRobot queue

Description

This function deletes the predict job specified by `predictJobId` from the DataRobot queue.

Usage

```
DeletePredictJob(project, predictJobId)
```

Arguments

`project` character. Either (1) a character string giving the unique alphanumeric identifier for the project, or (2) a list containing the element `projectId` with this identifier.

`predictJobId` integer. The integer ID `predictionJobId` that is created by the call to `RequestPredictions`.

Value

Logical TRUE and displays a message to the user if the delete request was successful; otherwise, execution halts and an error message is displayed.

Examples

```
## Not run:
  projectId <- "59a5af20c80891534e3c2bde"
  initialJobs <- GetPredictJobs(project)
  job <- initialJobs[[1]]
  predictJobId <- job$predictJobId
  DeletePredictJob(projectId, predictJobId)

## End(Not run)
```

DeleteProject

Delete a specified element from the DataRobot project list

Description

This function deletes the project defined by project, described under Arguments. This parameter may be obtained in several ways, including: (1), as one of the projectId elements of the list returned by ListProjects; (2), as the S3 object returned by the GetProject function; or (3), as the list returned by the SetupProject function.

Usage

```
DeleteProject(project)
```

Arguments

project character. Either (1) a character string giving the unique alphanumeric identifier for the project, or (2) a list containing the element projectId with this identifier.

Examples

```
## Not run:
  projectId <- "59a5af20c80891534e3c2bde"
  DeleteProject(projectId)

## End(Not run)
```

DeleteTransferableModel

Delete this imported model.

Description

Delete this imported model.

Usage

```
DeleteTransferableModel(importId)
```

Arguments

importId character. Id of the import.

See Also

Other Transferable Model functions: [DownloadTransferableModel\(\)](#), [GetTransferableModel\(\)](#), [ListTransferableModels\(\)](#), [RequestTransferableModel\(\)](#), [UpdateTransferableModel\(\)](#), [UploadTransferableModel\(\)](#)

Examples

```
## Not run:  
id <- UploadTransferableModel("model.drmodel")  
DeleteTransferableModel(id)  
  
## End(Not run)
```

DeploymentAccuracyMetric

Deployment accuracy metrics

Description

All possible deployment accuracy metrics. Added in DataRobot API 2.18.

Usage

```
DeploymentAccuracyMetric
```

Format

An object of class list of length 27.

Details

For usage, see 'DeploymentAccuracy' and 'codeDeploymentAccuracyOverTime'.

DeploymentServiceHealthMetric
Deployment service health metrics

Description

Added in DataRobot API 2.18.

Usage

DeploymentServiceHealthMetric

Format

An object of class list of length 11.

Details

For usage, see GetDeploymentServiceStats.

DifferencingMethod *Differencing method*

Description

Differencing method

Usage

DifferencingMethod

Format

An object of class list of length 4.

DownloadComplianceDocTemplate

Download a compliance doc template (in JSON format).

Description

Download a compliance doc template (in JSON format).

Usage

```
DownloadComplianceDocTemplate(  
  filename = "template.json",  
  templateId = NULL,  
  type = NULL  
)
```

Arguments

filename	character. Filename of file to save the compliance doc template to.
templateId	character. Optional. The ID of the template to use in generating custom model documentation.
type	character. Optional. The type of compliance doc to get. Can be "normal" to retrieve the default template or "timeSeries" to get the default time series template.

Value

Nothing returned, but downloads the file to the stated filename.

Examples

```
## Not run:  
DownloadComplianceDocTemplate("template.json") # download the default template  
# download the default template  
DownloadComplianceDocTemplate("template.json", type = "normal")  
# download the default time series template  
DownloadComplianceDocTemplate("template.json" type = "timeSeries")  
templateId <- "5cf85080d9436e5c310c796d"  
DownloadComplianceDocTemplate(templateId) # Download a custom template for a specific ID.  
  
## End(Not run)
```

`DownloadComplianceDocumentation`*Download compliance documentation (in DOCX format).*

Description

This function will create the compliance documentation first if it has not already been created. To create compliance documentation without downloading it, use `CreateComplianceDocumentation`. You can then skip the create step in this function by using `'create = FALSE'`.

Usage

```
DownloadComplianceDocumentation(  
  model,  
  filename,  
  templateId = NULL,  
  create = TRUE,  
  maxWait = 600  
)
```

Arguments

<code>model</code>	An S3 object of class <code>dataRobotModel</code> like that returned by the function <code>GetModel</code> , or each element of the list returned by the function <code>ListModels</code> .
<code>filename</code>	character. Filename of file to save the compliance documentation to.
<code>templateId</code>	character. Optional. The ID of the template to use in generating custom model documentation.
<code>create</code>	logical. Should we create the compliance documentation prior to downloading?
<code>maxWait</code>	integer. How long to wait (in seconds) for compliance documentation creation before raising a timeout error? Default 600.

Value

Nothing returned, but downloads the file to the stated filename.

Examples

```
## Not run:  
projectId <- "59a5af20c80891534e3c2bde"  
modelId <- "5996f820af07fc605e81ead4"  
model <- GetModel(projectId, modelId)  
DownloadComplianceDocumentation(model)  
  
## End(Not run)
```

DownloadPredictionExplanations

Function to download and save prediction explanations rows as csv file

Description

Function to download and save prediction explanations rows as csv file

Usage

```
DownloadPredictionExplanations(  
  project,  
  predictionExplanationId,  
  filename,  
  encoding = "UTF-8",  
  excludeAdjustedPredictions = TRUE  
)
```

Arguments

project character. Either (1) a character string giving the unique alphanumeric identifier for the project, or (2) a list containing the element projectId with this identifier.

predictionExplanationId character. Id of the prediction explanations.

filename character. Filename of file to save prediction explanations rows

encoding character. Optional. Character string A string representing the encoding to use in the output file, defaults to 'UTF-8'.

excludeAdjustedPredictions logical. Optional. Set to FALSE to include adjusted predictions, which are predictions adjusted by an exposure column. This is only relevant for projects that use an exposure column.

Value

Logical TRUE and displays a message to the user if the delete request was successful; otherwise an error message is displayed.

Examples

```
## Not run:  
projectId <- "59a5af20c80891534e3c2bde"  
modelId <- "5996f820af07fc605e81ead4"  
datasets <- ListPredictionDatasets(projectId)  
dataset <- datasets[[1]]  
datasetId <- dataset$id  
model <- GetModel(projectId, modelId)
```

```
jobId <- RequestPredictionExplanations(model, datasetId)
predictionExplanationId <- GetPredictionExplanationsMetadataFromJobId(projectId, jobId)$id
file <- file.path(tempdir(), "testPredictionExplanation.csv")
DownloadPredictionExplanations(projectId, predictionExplanationId, file)

## End(Not run)
```

DownloadPrimeCode *Download the code of DataRobot Prime model and save it to a file.*

Description

Training a model using a ruleset is a necessary prerequisite for being able to download the code for a ruleset.

Usage

```
DownloadPrimeCode(project, primeFileId, filepath)
```

Arguments

project	character. Either (1) a character string giving the unique alphanumeric identifier for the project, or (2) a list containing the element projectId with this identifier.
primeFileId	numeric. Prime file Id (can be acquired using ListPrimeFiles function)
filepath	character. The location to save the file to.

Examples

```
## Not run:
projectId <- "59a5af20c80891534e3c2bde"
primeFiles <- ListPrimeFiles(projectId)
primeFile <- primeFiles[[1]]
primeFileId <- primeFile$id
file <- file.path(tempdir(), "primeCode.py")
DownloadPrimeCode(projectId, primeFileId, file)

## End(Not run)
```

DownloadRatingTable *Download a rating table to a CSV.*

Description

Download a rating table to a CSV.

Usage

```
DownloadRatingTable(project, ratingTableId, filename)
```

Arguments

project	character. Either (1) a character string giving the unique alphanumeric identifier for the project, or (2) a list containing the element projectId with this identifier.
ratingTableId	character. The ID of the rating table.
filename	character. Filename of file to save the rating table to.

Value

Nothing returned, but downloads the file to the stated filename.

Examples

```
## Not run:
projectId <- "5984b4d7100d2b31c1166529"
ratingTableId <- "5984b4d7100d2b31c1166529"
file <- file.path(tempdir(), "ratingTable.csv")
DownloadRatingTable(projectId, ratingTableId, file)

## End(Not run)
```

DownloadScoringCode *Download scoring code JAR*

Description

Download scoring code JAR

Usage

```
DownloadScoringCode(project, modelId, fileName, sourceCode = FALSE)
```

Arguments

project	character. Either (1) a character string giving the unique alphanumeric identifier for the project, or (2) a list containing the element projectId with this identifier.
modelId	character. Unique alphanumeric identifier for the model of interest.
fileName	character. File path where scoring code will be saved.
sourceCode	logical. Optional. Set to TRUE to download source code archive. It will not be executable.

Examples

```
## Not run:
  projectId <- "59a5af20c80891534e3c2bde"
  modelId <- "5996f820af07fc605e81ead4"
  file <- file.path(tempdir(), "scoringCode.jar")
  DownloadScoringCode(projectId, modelId, file)

## End(Not run)
```

DownloadSeriesAccuracy

Download the series accuracy for a model, computing it if not already computed.

Description

Download the series accuracy for a model, computing it if not already computed.

Usage

```
DownloadSeriesAccuracy(model, filename, encoding = "UTF-8")
```

Arguments

model	character. The model for which you want to compute Feature Impact, e.g. from the list of models returned by ListModels(project).
filename	character. Filename of file to save reason codes rows
encoding	character. Optional. Character string A string representing the encoding to use in the output file, defaults to 'UTF-8'.

Value

Nothing returned, but downloads the file to the stated filename.

Examples

```
## Not run:
  projectId <- "5984b4d7100d2b31c1166529"
  modelId <- "5984b4d7100d2b31c1166529"
  model <- GetModel(projectId, modelId)
  DownloadSeriesAccuracy(model, "seriesAccuracy.csv")

## End(Not run)
```

DownloadTimeSeriesFeatureDerivationLog

Download the time series feature derivation log as a text file.

Description

Download the time series feature derivation log as a text file.

Usage

```
DownloadTimeSeriesFeatureDerivationLog(project, file)
```

Arguments

project	character. Either (1) a character string giving the unique alphanumeric identifier for the project, or (2) a list containing the element projectId with this identifier.
file	character. The name or path of the file to download to.

Value

Nothing, but writes the output to the desired file.

See Also

[GetTimeSeriesFeatureDerivationLog](#)

Examples

```
## Not run:
  projectId <- "5984b4d7100d2b31c1166529"
  DownloadTimeSeriesFeatureDerivationLog(projectId, "featureLog.txt")

## End(Not run)
```

`DownloadTrainingPredictions`*Download training predictions on a specified data set.*

Description

Download training predictions on a specified data set.

Usage

```
DownloadTrainingPredictions(  
  project,  
  predictionId,  
  filename,  
  encoding = "UTF-8"  
)
```

Arguments

<code>project</code>	character. Either (1) a character string giving the unique alphanumeric identifier for the project, or (2) a list containing the element <code>projectId</code> with this identifier.
<code>predictionId</code>	character. ID of the prediction to retrieve training predictions for.
<code>filename</code>	character. Filename of file to save reason codes rows
<code>encoding</code>	character. Optional. Character string A string representing the encoding to use in the output file, defaults to 'UTF-8'.

Value

NULL, but will produce a CSV with a dataframe with out-of-fold predictions for the training data.

Examples

```
## Not run:  
projectId <- "59a5af20c80891534e3c2bde"  
predictions <- ListTrainingPredictions(projectId)  
predictionId <- predictions[[1]]$predictionId  
file <- file.path(tempdir(), "myTrainingPredictions.csv")  
DownloadTrainingPredictions(projectId, predictionId, file)  
  
## End(Not run)
```

DownloadTransferableModel

Download an transferable model file for use in an on-premise DataRobot standalone prediction environment.

Description

This function can only be used if model export is enabled, and will only be useful if you have an on-premise environment in which to import it.

Usage

```
DownloadTransferableModel(project, modelId, modelFile)
```

Arguments

project	character. Either (1) a character string giving the unique alphanumeric identifier for the project, or (2) a list containing the element projectId with this identifier.
modelId	numeric. Unique alphanumeric identifier for the model of interest.
modelFile	character. File name to be use for transferable model

See Also

Other Transferable Model functions: [DeleteTransferableModel\(\)](#), [GetTransferableModel\(\)](#), [ListTransferableModels\(\)](#), [RequestTransferableModel\(\)](#), [UpdateTransferableModel\(\)](#), [UploadTransferableModel\(\)](#)

Examples

```
## Not run:
projectId <- "59a5af20c80891534e3c2bde"
modelId <- "5996f820af07fc605e81ead4"
file <- file.path(tempdir(), "model.drmodel")
DownloadTransferableModel(projectId, modelId, file)

## End(Not run)
```

ExpectHasKeys

Make sure that the object has all of the keys specified. Also tests that there are not additional keys if allowAdditional is FALSE (default).

Description

Make sure that the object has all of the keys specified. Also tests that there are not additional keys if allowAdditional is FALSE (default).

Usage

```
ExpectHasKeys(obj, keys, allowAdditional = FALSE)
```

Arguments

obj	object. A list, vector, or data.frame to check names.
keys	character. A vector of names of keys to check.
allowAdditional	logical. Should we allow there to be more keys than specified?

```
FeatureFromAsyncUrl     Retrieve a feature from the creation URL
```

Description

If feature creation times out, the error message includes a URL corresponding to the creation task. That URL can be passed to this function (which will return the feature details when finished) to resume waiting for feature creation.

Usage

```
FeatureFromAsyncUrl(asyncUrl, maxWait = 600)
```

Arguments

asyncUrl	character. The temporary status URL.
maxWait	integer. Optional. The maximum time to wait (in seconds) for project creation before aborting.

```
formatRFC3339Timestamp  
                          formatRFC3339Timestamp
```

Description

The DataRobot APIs expect dates formatted as RFC 3339 strings. This is the same as ISO 8601. To be safe, use UTC as the timezone (and format it with a 'Z' suffix), and use 'T' as the date/time separator.

Usage

```
formatRFC3339Timestamp(date)
```

Arguments

date POSIXt or date. The date(s) to be formatted.

See Also

Other API datetime functions: [RFC3339DateTimeFormat](#), [parseRFC3339Timestamp\(\)](#), [transformRFC3339Period\(\)](#), [validateReportingPeriodTime\(\)](#)

GenerateDatetimePartition

Preview the full partitioning determined by a DatetimePartitioningSpecification

Description

Based on the project dataset and the partitioning specification, inspect the full partitioning that would be used if the same specification were passed into SetTarget. This is not intended to be passed to SetTarget.

Usage

```
GenerateDatetimePartition(project, spec)
```

Arguments

project character. Either (1) a character string giving the unique alphanumeric identifier for the project, or (2) a list containing the element projectId with this identifier.

spec list. Datetime partition specification returned by CreateDatetimePartitionSpecification

Value

list describing datetime partition with following components

- cvMethod. The type of validation scheme used for the project.
- projectId character. The id of the project this partitioning applies to.
- datetimePartitionColumn character. The name of the column whose values as dates are used to assign a row to a particular partition.
- dateFormat character. The format (e.g. " partition column was interpreted (compatible with strftime [<https://docs.python.org/2/library/time.html#time.strftime>])).
- autopilotDataSelectionMethod character. Whether models created by the autopilot use "row-Count" or "duration" as their dataSelectionMethod.
- validationDuration character. The validation duration specified when initializing the partitioning - not directly significant if the backtests have been modified, but used as the default validationDuration for the backtests.

- availableTrainingStartDate character. The start date of the available training data for scoring the holdout.
- availableTrainingDuration character. The duration of the available training data for scoring the holdout.
- availableTrainingRowCount integer. The number of rows in the available training data for scoring the holdout. Only available when retrieving the partitioning after setting the target.
- availableTrainingEndDate character. The end date of the available training data for scoring the holdout.
- primaryTrainingStartDate character. The start date of primary training data for scoring the holdout.
- primaryTrainingDuration character. The duration of the primary training data for scoring the holdout.
- primaryTrainingRowCount integer. The number of rows in the primary training data for scoring the holdout. Only available when retrieving the partitioning after setting the target.
- primaryTrainingEndDate character. The end date of the primary training data for scoring the holdout.
- gapStartDate character. The start date of the gap between training and holdout scoring data.
- gapDuration character. The duration of the gap between training and holdout scoring data.
- gapRowCount integer. The number of rows in the gap between training and holdout scoring data. Only available when retrieving the partitioning after setting the target.
- gapEndDate character. The end date of the gap between training and holdout scoring data.
- holdoutStartDate character. The start date of holdout scoring data.
- holdoutDuration character. The duration of the holdout scoring data.
- holdoutRowCount integer. The number of rows in the holdout scoring data. Only available when retrieving the partitioning after setting the target.
- holdoutEndDate character. The end date of the holdout scoring data.
- numberOfBacktests integer. the number of backtests used.
- backtests data.frame. A data frame of partition backtest. Each element represent one backtest and has the following components: index, availableTrainingStartDate, availableTrainingDuration, availableTrainingRowCount, availableTrainingEndDate, primaryTrainingStartDate, primaryTrainingDuration, primaryTrainingRowCount, primaryTrainingEndDate, gapStartDate, gapDuration, gapRowCount, gapEndDate, validationStartDate, validationDuration, validationRowCount, validationEndDate, totalRowCount.
- useTimeSeries logical. Whether the project is a time series project (if TRUE) or an OTV project which uses datetime partitioning (if FALSE).
- defaultToKnownInAdvance logical. Whether the project defaults to treating features as known in advance. Known in advance features are time series features that are expected to be known for dates in the future when making predictions (e.g., "is this a holiday").
- featureDerivationWindowStart integer. Offset into the past to define how far back relative to the forecast point the feature derivation window should start. Only used for time series projects. Expressed in terms of the timeUnit of the datetimePartitionColumn.

- `featureDerivationWindowEnd` integer. Offset into the past to define how far back relative to the forecast point the feature derivation window should end. Only used for time series projects. Expressed in terms of the `timeUnit` of the `datetimePartitionColumn`.
- `forecastWindowStart` integer. Offset into the future to define how far forward relative to the forecast point the forecast window should start. Only used for time series projects. Expressed in terms of the `timeUnit` of the `datetimePartitionColumn`.
- `forecastWindowEnd` integer. Offset into the future to define how far forward relative to the forecast point the forecast window should end. Only used for time series projects. Expressed in terms of the `timeUnit` of the `datetimePartitionColumn`.
- `featureSettings` list. A list of lists specifying settings for each feature. For each feature you would like to set feature settings for, pass the following in a list:
 - `featureName` character. The name of the feature to set feature settings.
 - `knownInAdvance` logical. Optional. Whether or not the feature is known in advance. Used for time series only. Defaults to `FALSE`.
 - `doNotDerive` logical. Optional. If `TRUE`, no time series derived features (e.g., lags) will be automatically engineered from this feature. Used for time series only. Defaults to `FALSE`.
- `treatAsExponential` character. Specifies whether to treat data as exponential trend and apply transformations like log-transform. Uses values from `TreatAsExponential`.
- `differencingMethod` character. Used to specify differencing method to apply if data is stationary. Use values from `DifferencingMethod`.
- `windowsBasisUnit` character. Indicates which unit is the basis for the feature derivation window and forecast window. Uses values from `TimeUnit` and the value "ROW".
- `periodicities` list. A list of periodicities for different times, specified as a list of lists, where each list item specifies the 'timeSteps' for a particular 'timeUnit'. Will be "ROW" if `windowsBasisUnit` is "ROW".
- `totalRowCount` integer. The number of rows in the project dataset. Only available when retrieving the partitioning after setting the target. Thus it will be `NULL` for `GenerateDatetimePartition` and populated for `GetDatetimePartition`.
- `validationRowCount` integer. The number of rows in the validation set.
- `multiseriesIdColumns` list. A list of the names of multiseries id columns to define series.
- `numberOfKnownInAdvanceFeatures` integer. The number of known in advance features.
- `useCrossSeriesFeatures` logical. Whether or not cross series features are included.
- `aggregationType` character. The aggregation type to apply when creating cross series features. See `SeriesAggregationType`.
- `calendarId` character. The ID of the calendar used for this project, if any.

Examples

```
## Not run:
projectId <- "59a5af20c80891534e3c2bde"
partitionSpec <- CreateDatetimePartitionSpecification("date_col")
GenerateDatetimePartition(projectId, partitionSpec)

## End(Not run)
```

 GetAccuracyOverTimePlot

Retrieve Accuracy over Time plot for a model.

Description

Retrieve Accuracy over Time plot for a model.

Usage

```
GetAccuracyOverTimePlot(
  model,
  backtest = 0,
  source = SourceType$Validation,
  seriesId = NULL,
  forecastDistance = NULL,
  maxBinSize = NULL,
  resolution = NULL,
  startDate = NULL,
  endDate = NULL,
  maxWait = 600
)
```

Arguments

model	An S3 object of class <code>dataRobotModel</code> like that returned by the function <code>GetModel</code> , or each element of the list returned by the function <code>ListModels</code> .
backtest	integer or character. Optional. Retrieve plots for a specific backtest. Use the backtest index starting from zero. To retrieve plots for holdout, use <code>DataSubset\$Holdout</code> .
source	character. Optional. The source of the data for the backtest/holdout. Must be one of <code>SourceType</code> .
seriesId	character. Optional. The name of the series to retrieve for multiseries projects. If not provided an average plot for the first 1000 series will be retrieved.
forecastDistance	integer. Optional. Forecast distance to retrieve the chartdata for. If not specified, the first forecast distance for this project will be used. Only available for time series projects.
maxBinSize	integer. Optional. An int between 1 and 1000, which specifies the maximum number of bins for the retrieval. Default is 500.
resolution	character. Optional. Specifying at which resolution the data should be binned. If not provided an optimal resolution will be used to build chart data with number of bins \leq <code>maxBinSize</code> . One of <code>DatetimeTrendPlotsResolutions</code> .
startDate	POSIXct. Optional. The start of the date range to return. If not specified, start date for requested plot will be used.

endDate	POSIXct. Optional. The end of the date range to return. If not specified, end date for requested plot will be used.
maxWait	integer. Optional. The maximum time to wait for a compute job to complete before retrieving the plots. Default is 600. If 0, the plots would be retrieved without attempting the computation.

Value

list with the following components:

- resolution. character: The resolution that is used for binning. One of `DatetimeTrendPlotsResolutions`.
- startDate. POSIXct: The datetime of the start of the chartdata (inclusive).
- endDate. POSIXct: The datetime of the end of the chartdata (exclusive).
- bins. data.frame: Each row represents a bin in the plot. Dataframe has following columns:
 - startDate. POSIXct: The datetime of the start of the bin (inclusive).
 - endDate. POSIXct: The datetime of the end of the bin (exclusive).
 - actual. numeric: Average actual value of the target in the bin. NA if there are no entries in the bin.
 - predicted. numeric: Average prediction of the model in the bin. NA if there are no entries in the bin.
 - frequency. integer: Indicates number of values averaged in bin.
- statistics. list: Contains statistical properties for the plot.
 - durbinWatson. numeric: The Durbin-Watson statistic for the chart data. Value is between 0 and 4. Durbin-Watson statistic is a test statistic used to detect the presence of autocorrelation at lag 1 in the residuals (prediction errors) from a regression analysis.
- calendarEvents. data.frame: Each row represents a calendar event in the plot. Dataframe has following columns:
 - date. POSIXct: The date of the calendar event.
 - seriesId. character: The series ID for the event. If this event does not specify a series ID, then this will be NA, indicating that the event applies to all series.
 - name. character: The name of the calendar event.

Examples

```
## Not run:
projectId <- "59a5af20c80891534e3c2bde"
modelId <- "5996f820af07fc605e81ead4"
model <- GetModel(projectId, modelId)
GetAccuracyOverTimePlot(model)
plot <- GetAccuracyOverTimePlot(model)
png("accuracy_over_time.png", width = 1200, height = 600, units = "px")
par(mar = c(10, 5, 5, 5))
plot(plot$bins$startDate, plot$bins$actual, type = "l", ylab = "Target", xaxt = "n", xlab = "")
lines(plot$bins$startDate, plot$bins$predicted, col = "red")
axis(1, plot$bins$startDate, format(plot$bins$startDate, "%Y-%m-%d"), las = 3)
title(xlab = "Date", mgp = c(7, 1, 0))
legend("topright", legend = c("Actual", "Predicted"), col = c("black", "red"), lty = 1:1)
```

```
dev.off()

## End(Not run)
```

GetAccuracyOverTimePlotPreview

Retrieve Accuracy over Time preview plot for a model.

Description

Retrieve Accuracy over Time preview plot for a model.

Usage

```
GetAccuracyOverTimePlotPreview(
  model,
  backtest = 0,
  source = SourceType$Validation,
  seriesId = NULL,
  forecastDistance = NULL,
  maxWait = 600
)
```

Arguments

model	An S3 object of class <code>dataRobotModel</code> like that returned by the function <code>GetModel</code> , or each element of the list returned by the function <code>ListModels</code> .
backtest	integer or character. Optional. Retrieve plots for a specific backtest. Use the backtest index starting from zero. To retrieve plots for holdout, use <code>DataSubset\$Holdout</code> .
source	character. Optional. The source of the data for the backtest/holdout. Must be one of <code>SourceType</code> .
seriesId	character. Optional. The name of the series to retrieve for multiseries projects. If not provided an average plot for the first 1000 series will be retrieved.
forecastDistance	integer. Optional. Forecast distance to retrieve the chartdata for. If not specified, the first forecast distance for this project will be used. Only available for time series projects.
maxWait	integer. Optional. The maximum time to wait for a compute job to complete before retrieving the plots. Default is 600. If 0, the plots would be retrieved without attempting the computation.

Value

list with the following components:

- startDate. POSIXct: The datetime of the start of the chartdata (inclusive).
- endDate. POSIXct: The datetime of the end of the chartdata (exclusive).
- bins. data.frame: Each row represents a bin in the plot. Dataframe has following columns:
 - startDate. POSIXct: The datetime of the start of the bin (inclusive).
 - endDate. POSIXct: The datetime of the end of the bin (exclusive).
 - actual. numeric: Average actual value of the target in the bin. NA if there are no entries in the bin.
 - predicted. numeric: Average prediction of the model in the bin. NA if there are no entries in the bin.

Examples

```
## Not run:
projectId <- "59a5af20c80891534e3c2bde"
modelId <- "5996f820af07fc605e81ead4"
model <- GetModel(projectId, modelId)
plot <- GetAccuracyOverTimePlotPreview(model)
png("accuracy_over_time_preview.png", width = 1200, height = 600, units = "px")
par(mar = c(10, 5, 5, 5))
plot(plot$bins$startDate, plot$bins$actual, type = "l", ylab = "Target", xaxt = "n", xlab = "")
lines(plot$bins$startDate, plot$bins$predicted, col = "red")
axis(1, plot$bins$startDate, format(plot$bins$startDate, "%Y-%m-%d"), las = 3)
title(xlab = "Date", mgp = c(7, 1, 0))
legend("topright", legend = c("Actual", "Predicted"), col = c("black", "red"), lty = 1:1)
dev.off()

## End(Not run)
```

GetAccuracyOverTimePlotsMetadata

Retrieve Accuracy over Time plots metadata for a model.

Description

Retrieve Accuracy over Time plots metadata for a model.

Usage

```
GetAccuracyOverTimePlotsMetadata(model, forecastDistance = NULL)
```


Arguments

- `model` An S3 object of class `dataRobotModel` like that returned by the function `GetModel`, or each element of the list returned by the function `ListModels`.
- `forecastDistance` integer. Optional. Forecast distance to retrieve the metadata for. If not specified, the first forecast distance for this project will be used. Only available for time series projects.

Value

list with the following components:

- `forecastDistance`. integer or NULL: The forecast distance for which the metadata was retrieved. NULL for OTV projects.
- `resolutions`. list: A list of `DatetimeTrendPlotsResolutions`, which represents available time resolutions for which plots can be retrieved.
- `backtestStatuses`. data.frame: Each row represents a status for the backtest `SourceType`. The row index corresponds to the backtest index via the relation `rowIndex <- backtestIndex + 1`. Status should be one of `DatetimeTrendPlotsStatuses`
- `backtestMetadata`. data.frame: Each row represents a metadata for the backtest `SourceType` start and end date. The row index corresponds to the backtest index via the relation `rowIndex <- backtestIndex + 1`. Each cell contains a POSIXct timestamp for start date (inclusive) and end date (exclusive) if the corresponding source type for the backtest is computed, and NA otherwise.
- `holdoutStatuses`. list: Contains statuses for holdout.
 - `training`. character: Status, one of `DatetimeTrendPlotsStatuses`
 - `validation`. character: Status, one of `DatetimeTrendPlotsStatuses`
- `holdoutMetadata`. list: Contains metadata for holdout.
 - `training`. list: Contains start and end date for holdout training.
 - `validation`. list: Contains start and end date for holdout validation.
 - * `startDate`. POSIXct or NA: The datetime of the start of the holdout training/validation (inclusive). NA if the data is not computed.
 - * `endDate`. POSIXct or NA: The datetime of the end of the holdout training/validation (exclusive). NA if the data is not computed.

Examples

```
## Not run:
projectId <- "59a5af20c80891534e3c2bde"
modelId <- "5996f820af07fc605e81ead4"
model <- GetModel(projectId, modelId)
GetAccuracyOverTimePlotsMetadata(model)

## End(Not run)
```

GetAnomalyAssessmentExplanations

Retrieve anomaly assessment explanations.

Description

Explanations contain predictions along with shap explanations for the most anomalous records in the specified date range/for defined number of points. Two out of three parameters: startDate, endDate or pointsCount must be specified.

Usage

```
GetAnomalyAssessmentExplanations(  
    projectId,  
    recordId,  
    startDate = NULL,  
    endDate = NULL,  
    pointsCount = NULL  
)
```

Arguments

projectId	character. The ID of the project.
recordId	character. The ID of the anomaly assessment record.
startDate	POSIXct. Optional. The start of the date range to get explanations in.
endDate	POSIXct. Optional. The end of the date range to get explanations in.
pointsCount	integer. Optional. The number of the rows to return.

Value

The anomaly assessment explanations:

- recordId. character. The ID of the record.
- projectId. character. The project ID of the record.
- modelId. character. The model ID of the record.
- backtest. character. The backtest of the record.
- source. character. The source of the record.
- seriesId. character. the series ID of the record.
- startDate. POSIXct. First timestamp in the response. Will be NULL if there is no data in the specified range.
- endDate. POSIXct. Last timestamp in the response. Will be NULL if there is no data in the specified range.
- shapBaseValue. numeric. Shap base value.

- count. integer. The number of points in the data.
- data. list. A list of DataPoint objects in the specified date range containing:
 - shapExplanation. NULL or an array of up to 10 ShapleyFeatureContribution objects. Only rows with the highest anomaly scores have Shapley explanations calculated.
 - timestamp POSIXct. Timestamp for the row.
 - prediction numeric. The output of the model for this row.

Each ShapleyFeatureContribution contains:

- featureValue. character. The feature value for this row. First 50 characters are returned.
- strength numeric. The shap value for this feature and row.
- feature character. The feature name.

See Also

Other Anomaly Assessment functions: [DeleteAnomalyAssessmentRecord\(\)](#), [GetAnomalyAssessmentPredictionsPreview\(\)](#), [InitializeAnomalyAssessment\(\)](#), [ListAnomalyAssessmentRecords\(\)](#)

Examples

```
## Not run:
projectId <- "59a5af20c80891534e3c2bde"
recordId <- "59a5af20c80891534e3c2bdb"
explanations <- GetAnomalyAssessmentExplanations(projectId, recordId, pointsCount=100,
  startDate=as.Date("2021-01-01"))

## End(Not run)
```

GetAnomalyAssessmentPredictionsPreview

Retrieve anomaly assessment predictions preview.

Description

Aggregated predictions over time for the corresponding anomaly assessment record. Intended to find the bins with highest anomaly scores.

Usage

```
GetAnomalyAssessmentPredictionsPreview(projectId, recordId)
```

Arguments

projectId	character. The ID of the project.
recordId	character. The ID of the anomaly assessment record.

Value

The anomaly assessment predictions preview:

- recordId. character. The ID of the record.
- projectId. character. The project ID of the record.
- modelId. character. The model ID of the record.
- backtest. character. The backtest of the record.
- source. character. The source of the record.
- seriesId. character. the series ID of the record.
- startDate. POSIXct. Timestamp of the first prediction in the subset.
- endDate. POSIXct. Timestamp of the last prediction in the subset.
- previewBins. list. A list of PreviewBin objects in the specified date range. The aggregated predictions for the subset. Bins boundaries may differ from actual start/end dates because this is an aggregation. Each PreviewBin contains:
 - startDate. POSIXct. Datetime of the start of the bin.
 - endDate. POSIXct. Datetime of the end of the bin.
 - avgPredicted numeric. The average prediction of the model in the bin. NA if there are no entries in the bin.
 - maxPredicted numeric. The maximum prediction of the model in the bin. NA if there are no entries in the bin.
 - frequency integer. The number of the rows in the bin.

See Also

Other Anomaly Assessment functions: [DeleteAnomalyAssessmentRecord\(\)](#), [GetAnomalyAssessmentExplanations\(\)](#), [InitializeAnomalyAssessment\(\)](#), [ListAnomalyAssessmentRecords\(\)](#)

Examples

```
## Not run:
projectId <- "59a5af20c80891534e3c2bde"
recordId <- "59a5af20c80891534e3c2bdb"
explanations <- GetAnomalyAssessmentPredictionsPreview(projectId, recordId)

## End(Not run)
```

GetBlenderModel

Retrieve the details of a specified blender model

Description

This function returns a DataRobot S3 object of class dataRobotModel for the model defined by project and modelId.

Usage

```
GetBlenderModel(project, modelId)
```

Arguments

project	character. Either (1) a character string giving the unique alphanumeric identifier for the project, or (2) a list containing the element projectId with this identifier.
modelId	character. Unique alphanumeric identifier for the blender model of interest.

Value

An S3 object of class 'dataRobotBlenderModel' summarizing all available information about the model. It is a list with the following components:

- modelId. character. The unique alphanumeric blender model identifier.
- modelNumber. integer. The assigned model number.
- modelType. character. The type of model, e.g. 'AVG Blender'.
- modelIds. character. List of unique identifiers for the blended models.
- blenderMethod. character. The blender method used to create this model.
- featurelistId. character. Unique alphanumeric identifier for the featurelist on which the model is based.
- processes. character. Components describing preprocessing; may include modelType.
- featurelistName. character. Name of the featurelist on which the model is based.
- blueprintId. character. The unique blueprint identifier on which the model is based.
- samplePct. numeric. The percentage of the dataset used in training the model. For projects that use datetime partitioning, this will be NA. See trainingRowCount instead.
- trainingRowCount. integer. Number of rows of the dataset used in training the model. For projects that use datetime partitioning, if specified, this defines the number of rows used to train the model and evaluate backtest scores; if unspecified, either trainingDuration or trainingStartDate and trainingEndDate was used instead.
- isFrozen. logical. Was the model created with frozen tuning parameters?
- metrics. list. The metrics associated with this model. Each element is a list with elements for each possible evaluation type (holdout, validation, and crossValidation).
- modelCategory. character. The category of model (e.g., blend, model, prime).
- projectId. character. Unique alphanumeric identifier for the project.
- projectName. character. Name of the project.
- projectTarget. character. The target variable predicted by all models in the project.
- projectMetric. character. The fitting metric optimized by all project models.

Examples

```
## Not run:
projectId <- "59a5af20c80891534e3c2bde"
modelId <- "5996f820af07fc605e81ead4"
GetBlenderModel(projectId, modelId)

## End(Not run)
```

GetBlenderModelFromJobId

Retrieve a new or updated blender model defined by modelJobId

Description

The function RequestBlender initiates the creation of new blender models in a DataRobot project.

Usage

```
GetBlenderModelFromJobId(project, modelJobId, maxWait = 600)
```

Arguments

project	character. Either (1) a character string giving the unique alphanumeric identifier for the project, or (2) a list containing the element projectId with this identifier.
modelJobId	integer. The integer returned by RequestBlender.
maxWait	integer. The maximum time (in seconds) to wait for the model job to complete.

Details

It submits requests to the DataRobot modeling engine and returns an integer-valued modelJobId. The GetBlenderModelFromJobId function polls the modeling engine until the model has been built or a specified time limit is exceeded, returning an S3 object of class 'dataRobotBlenderModel' when the model is available.

Motivation for this function is the fact that some models - e.g., very complex machine learning models fit to large datasets - may take a long time to complete. Splitting the model creation request from model retrieval in these cases allows the user to perform other interactive R session tasks between the time the model creation/update request is made and the time the final model is available.

Value

An S3 object of class 'dataRobotBlenderModel' summarizing all available information about the model. It is a list with the following components:

- modelId. character. The unique alphanumeric blender model identifier.
- modelNumber. integer. The assigned model number.
- modelType. character. The type of model, e.g. 'AVG Blender'.

- `modelIds`. character. List of unique identifiers for the blended models.
- `blenderMethod`. character. The blender method used to create this model.
- `featurelistId`. character. Unique alphanumeric identifier for the featurelist on which the model is based.
- `processes`. character. Components describing preprocessing; may include `modelType`.
- `featurelistName`. character. Name of the featurelist on which the model is based.
- `blueprintId`. character. The unique blueprint identifier on which the model is based.
- `samplePct`. numeric. The percentage of the dataset used in training the model. For projects that use datetime partitioning, this will be NA. See `trainingRowCount` instead.
- `trainingRowCount`. integer. Number of rows of the dataset used in training the model. For projects that use datetime partitioning, if specified, this defines the number of rows used to train the model and evaluate backtest scores; if unspecified, either `trainingDuration` or `trainingStartDate` and `trainingEndDate` was used instead.
- `isFrozen`. logical. Was the model created with frozen tuning parameters?
- `metrics`. list. The metrics associated with this model. Each element is a list with elements for each possible evaluation type (holdout, validation, and crossValidation).
- `modelCategory`. character. The category of model (e.g., blend, model, prime).
- `projectId`. character. Unique alphanumeric identifier for the project.
- `projectName`. character. Name of the project.
- `projectTarget`. character. The target variable predicted by all models in the project.
- `projectMetric`. character. The fitting metric optimized by all project models.

Examples

```
## Not run:
projectId <- "59a5af20c80891534e3c2bde"
modelsToBlend <- c("5996f820af07fc605e81ead4", "59a5ce3301e9f0296721c64c")
blendJobId <- RequestBlender(projectId, modelsToBlend, "GLM")
GetBlenderModelFromJobId(projectId, blendJobId)

## End(Not run)
```

GetBlueprint

Retrieve a blueprint

Description

Retrieve a blueprint

Usage

```
GetBlueprint(project, blueprintId)
```

Arguments

project	character. Either (1) a character string giving the unique alphanumeric identifier for the project, or (2) a list containing the element projectId with this identifier.
blueprintId	character. Id of blueprint to retrieve.

Value

List with the following four components:

projectId Character string giving the unique DataRobot project identifier

processes List of character strings, identifying any preprocessing steps included in the blueprint

blueprintId Character string giving the unique DataRobot blueprint identifier

modelType Character string, specifying the type of model the blueprint builds

blueprintCategory Character string. Describes the category of the blueprint and the kind of model it produces.

Examples

```
## Not run:
projectId <- "59a5af20c80891534e3c2bde"
modelId <- "5996f820af07fc605e81ead4"
model <- GetModel(projectId, modelId)
blueprintId <- model$blueprintId
GetBlueprint(projectId, blueprintId)

## End(Not run)
```

GetBlueprintChart	<i>Retrieve a blueprint chart</i>
-------------------	-----------------------------------

Description

A Blueprint chart can be used to understand data flow in blueprint.

Usage

```
GetBlueprintChart(project, blueprintId)
```

Arguments

project	character. Either (1) a character string giving the unique alphanumeric identifier for the project, or (2) a list containing the element projectId with this identifier.
blueprintId	character. Id of blueprint to retrieve.

Value

List with the following two components:

- nodes. list each element contains information about one node of a blueprint : id and label.
- edges. Two column matrix, identifying blueprint nodes connections.

Examples

```
## Not run:
projectId <- "59a5af20c80891534e3c2bde"
modelId <- "5996f820af07fc605e81ead4"
model <- GetModel(projectId, modelId)
blueprintId <- model$blueprintId
GetBlueprintChart(projectId, blueprintId)

## End(Not run)
```

GetBlueprintDocumentation

Get documentation for tasks used in the blueprint

Description

Get documentation for tasks used in the blueprint

Usage

```
GetBlueprintDocumentation(project, blueprintId)
```

Arguments

project	character. Either (1) a character string giving the unique alphanumeric identifier for the project, or (2) a list containing the element projectId with this identifier.
blueprintId	character. Id of blueprint to retrieve.

Value

list with following components

task Character string name of the task described in document

description Character string task description

title Character string title of document

parameters List of parameters that task can received in human-readable format with following components: name, type, description

links List of external lines used in document with following components: name, url

references List of references used in document with following components: name, url

Examples

```
## Not run:
projectId <- "59a5af20c80891534e3c2bde"
modelId <- "5996f820af07fc605e81ead4"
model <- GetModel(projectId, modelId)
blueprintId <- model$blueprintId
GetBlueprintDocumentation(projectId, blueprintId)

## End(Not run)
```

GetCalendar

Retrieve a calendar

Description

Retrieve a calendar

Usage

```
GetCalendar(calendarId)
```

Arguments

calendarId character. The ID of the calendar to retrieve.

Value

An S3 object of class "dataRobotCalendar"

Examples

```
## Not run:
calendarId <- "5da75da31fb4a45b8a815a53"
GetCalendar(calendarId)

## End(Not run)
```

`GetCalendarFromProject`*Retrieve the calendar for a particular project.*

Description

Retrieve the calendar for a particular project.

Usage

```
GetCalendarFromProject(project)
```

Arguments

<code>project</code>	character. Either (1) a character string giving the unique alphanumeric identifier for the project, or (2) a list containing the element <code>projectId</code> with this identifier.
----------------------	---

Value

An S3 object of class "dataRobotCalendar"

Examples

```
## Not run:  
projectId <- "59a5af20c80891534e3c2bde"  
GetCalendar(projectId)  
  
## End(Not run)
```

`GetComplianceDocTemplate`*Get a compliance doc template.*

Description

A custom compliance doc template can be retrieved using `templateId`. Default compliance doc templates that are built-in to DataRobot can be retrieved by using the `type` parameter. A type of `NULL` or "normal" will retrieve the default template. A type of "timeSeries" can be used to retrieve the default time series template.

Usage

```
GetComplianceDocTemplate(templateId = NULL, type = NULL)
```

Arguments

templateId	character. Optional. The ID of the template to use in generating custom model documentation.
type	character. Optional. The type of compliance doc to get. Can be "normal" to retrieve the default template or "timeSeries" to get the default time series template.

Value

An S3 object of class 'dataRobotComplianceDocTemplate' that contains:

- name character. The name of the compliance doc template.
- creatorUsername character. The name of the user who created the compliance doc template.
- orgId character. The ID of the organization of the creator user.
- creatorId character. The ID of the creator user.
- sections list. The list of sections that define the template.
- id character. The ID of the template.

Examples

```
## Not run:
  GetComplianceDocTemplate() # get the default template
  GetComplianceDocTemplate(type = "normal") # get the default template
  GetComplianceDocTemplate(type = "timeSeries") # get the default time series template
  templateId <- "5cf85080d9436e5c310c796d"
  GetComplianceDocTemplate(templateId) # Get a custom template for a specific ID.

## End(Not run)
```

GetConfusionChart *Retrieve a model's confusion chart for a specified source.*

Description

Retrieve a model's confusion chart for a specified source.

Usage

```
GetConfusionChart(
  model,
  source = DataPartition$VALIDATION,
  fallbackToParentInsights = FALSE
)
```

Arguments

model	dataRobotModel. A DataRobot model object like that returned by GetModel.
source	character. The data partition for which data would be returned. Default is DataPartition\$VALIDATION. See DataPartition for details.
fallbackToParentInsights	logical. If TRUE, this will return the lift chart data for the model's parent if the lift chart is not available for the model and the model has a parent model.

Value

data.frame with the following components:

- source character. The name of the source of the confusion chart. Will be a member of DataPartition.
- data list. The data for the confusion chart, containing:
 - classes character. A vector containing the names of all the classes.
 - confusionMatrix matrix. A matrix showing the actual versus the predicted class values.
 - classMetrics list. A list detailing further metrics for each class:
 - * wasActualPercentages data.frame. A dataframe detailing the actual percentage distribution of the classes.
 - * wasPredictedPercentages data.frame. A dataframe detailing the predicted distribution of the classes.
 - * f1 numeric. The F1 score for the predictions of the class.
 - * recall numeric. The recall score for the predictions of the class.
 - * precision numeric. The precision score for the predictions of the class.
 - * actualCount integer. The actual count of values for the class.
 - * predictedCount integer. The predicted count of values for the class.
 - * className character. A vector containing the name of the class.

Examples

```
## Not run:
projectId <- "59a5af20c80891534e3c2bde"
modelId <- "5996f820af07fc605e81ead4"
GetModel(projectId, modelId)
GetConfusionChart(modelId, source = DataPartition$VALIDATION)

## End(Not run)
```

 GetCrossValidationScores

Get cross validation scores

Description

Get cross validation scores

Usage

```
GetCrossValidationScores(model, partition = NULL, metric = NULL)
```

Arguments

model	An S3 object of class <code>dataRobotModel</code> like that returned by the function <code>GetModel</code> , or each element of the list returned by the function <code>ListModels</code> .
partition	numeric. Optional. The ID of the partition to filter results by.
metric	character. Optional. The name of the metric to filter results by.

Value

A list of lists with cross validation score data. Each list contains a series of lists for each model metric. Each model metric list contains the metric data for each fold.

Examples

```
## Not run:
projectId <- "59a5af20c80891534e3c2bde"
modelId <- "5996f820af07fc605e81ead4"
model <- GetModel(projectId, modelId)
GetCrossValidationScores(model)

## End(Not run)
```

 GetDataSource

Returns information about a particular data source.

Description

Returns information about a particular data source.

Usage

```
GetDataSource(dataSourceId)
```

Arguments

dataSourceId character. The id of the data source

Value

A list containing information on the particular data source:

- className character. The Java class name of the driver.
- baseNames character. A vector of the file name(s) of the jar files.
- canonicalName character. The user-friendly name of the driver.
- id character. The dataSourceId of the driver.
- creator character. The userId of the user who created the driver.

Examples

```
## Not run:  
dataSourceId <- "57a7c978c808916f4a630f89"  
GetDataSource(dataSourceId)  
  
## End(Not run)
```

GetDataStore

Returns information about a particular data store.

Description

Returns information about a particular data store.

Usage

```
GetDataStore(dataSourceId)
```

Arguments

dataSourceId character. The id of the data store.

Value

A list containing information on the particular data store:

- id character. The dataSourceId of the data store.
- canonicalName character. The user-friendly name of the data store.
- type character. The type of data store.
- updated datetime. A timestamp for the last time the data store was updated.
- creator character. The userId of the user who created the data store.
- params list. A list specifying the data store parameters.

Examples

```
## Not run:  
dataStoreId <- "5c1303269300d900016b41a7"  
GetDataStore(dataStoreId)  
  
## End(Not run)
```

GetDataStoreSchemas *Get the schemas associated with a data store.*

Description

Get the schemas associated with a data store.

Usage

```
GetDataStoreSchemas(dataStoreId, username, password)
```

Arguments

dataStoreId	character. The ID of the data store to update.
username	character. The username to use for authentication to the database.
password	character. The password to use for authentication to the database. The password is encrypted at server side and never saved or stored.

Value

A list with the name of the catalog and the name of the schemas.

Examples

```
## Not run:  
dataStoreId <- "5c1303269300d900016b41a7"  
GetDataStoreSchemas(dataStoreId, username = "myUser", password = "mySecurePass129")  
  
## End(Not run)
```

GetDataStoreTables	<i>Get all tables associated with a data store.</i>
--------------------	---

Description

Get all tables associated with a data store.

Usage

```
GetDataStoreTables(dataStoreId, username, password, schema = NULL)
```

Arguments

dataStoreId	character. The ID of the data store to update.
username	character. The username to use for authentication to the database.
password	character. The password to use for authentication to the database. The password is encrypted at server side and never saved or stored.
schema	character. The name of the schema to reference. Optional.

Value

A list with the name of the catalog and the name of the tables.

Examples

```
## Not run:  
dataStoreId <- "5c1303269300d900016b41a7"  
GetDataStoreTables(dataStoreId, username = "myUser", password = "mySecurePass129")  
  
## End(Not run)
```

GetDatetimeModel	<i>Retrieve the details of a specified datetime model.</i>
------------------	--

Description

This function returns a DataRobot S3 object of class dataRobotDatetimeModel for the model defined by project and modelId.

Usage

```
GetDatetimeModel(project, modelId)
```

Arguments

project	character. Either (1) a character string giving the unique alphanumeric identifier for the project, or (2) a list containing the element projectId with this identifier.
modelId	character. Unique alphanumeric identifier for the model of interest.

Details

If the project does not use datetime partitioning an error will occur.

Value

An S3 object of class 'dataRobotDatetimeModel', which is a list with the following components:

- featurelistId character. Unique alphanumeric identifier for the featurelist on which the model is based.
- processes character. Vector with components describing preprocessing; may include 'model-Type'.
- featurelistName character. The name of the featurelist on which the model is based.
- projectId character. The unique alphanumeric identifier for the project.
- samplePct numeric. Percentage of the dataset used to form the training dataset for model fitting.
- isFrozen logical. Is model created with frozen tuning parameters?
- modelType character. A description of the model.
- metrics list. List with one element for each valid metric associated with the model. Each element is a list with elements for each possible evaluation type (holdout, validation, and crossValidation).
- modelCategory character. The model category (e.g., blend, model).
- blueprintId character. The unique DataRobot blueprint identifier on which the model is based.
- modelId character. The unique alphanumeric model identifier.
- modelNumber. integer. The assigned model number.
- projectName character. Optional description of project defined by projectId.
- projectTarget character. The target variable predicted by all models in the project.
- projectMetric character. The fitting metric optimized by all project models.
- trainingRowCount integer. The number of rows of the project dataset used in training the model. In a datetime partitioned project, if specified, defines the number of rows used to train the model and evaluate backtest scores; if unspecified, either trainingDuration or trainingStartDate and trainingEndDate was used to determine that instead.
- trainingDuration character. Only present for models in datetime partitioned projects. If specified, a duration string specifying the duration spanned by the data used to train the model and evaluate backtest scores.
- trainingStartDate character. Only present for frozen models in datetime partitioned projects. If specified, the start date of the data used to train the model.

- `trainingEndDate` character. Only present for frozen models in datetime partitioned projects. If specified, the end date of the data used to train the model.
- `backtests` list. What data was used to fit each backtest, the score for the project metric, and why the backtest score is unavailable if it is not provided.
- `dataSelectionMethod` character. Which of `trainingRowCount`, `trainingDuration`, or `trainingStartDate` and `trainingEndDate` were used to determine the data used to fit the model. One of "rowCount", "duration", or "selectedDateRange".
- `trainingInfo` list. Which data was used to train on when scoring the holdout and making predictions. `trainingInfo` will have the following keys: 'holdoutTrainingStartDate', 'holdoutTrainingDuration', 'holdoutTrainingRowCount', 'holdoutTrainingEndDate', 'predictionTrainingStartDate', 'predictionTrainingDuration', 'predictionTrainingRowCount', 'predictionTrainingEndDate'. Start and end dates will be datetime string, durations will be duration strings, and rows will be integers.
- `holdoutScore` numeric. The score against the holdout, if available and the holdout is unlocked, according to the project metric.
- `holdoutStatus` character. The status of the holdout score, e.g. "COMPLETED", "HOLD-OUT_BOUNDARIES_EXCEEDED".
- `effectiveFeatureDerivationWindowStart` integer. Only available for time series projects. How many timeUnits into the past relative to the forecast point the user needs to provide history for at prediction time. This can differ from the 'featureDerivationWindowStart' set on the project due to the differencing method and period selected, or if the model is a time series native model such as ARIMA. Will be a negative integer in time series projects and 'NULL' otherwise.
- `effectiveFeatureDerivationWindowEnd` integer. Only available for time series projects. How many timeUnits into the past relative to the forecast point the feature derivation window should end. Will be a non-positive integer in time series projects and 'NULL' otherwise.
- `forecastWindowStart` integer. Only available for time series projects. How many timeUnits into the future relative to the forecast point the forecast window should start. Note that this field will be the same as what is shown in the project settings. Will be a non-negative integer in time series projects and 'NULL' otherwise.
- `forecastWindowEnd` integer. Only available for time series projects. How many timeUnits into the future relative to the forecast point the forecast window should end. Note that this field will be the same as what is shown in the project settings. Will be a non-negative integer in time series projects and 'NULL' otherwise.
- `windowsBasisUnit` character. Only available for time series projects. Indicates which unit is the basis for the feature derivation window and the forecast window. Note that this field will be the same as what is shown in the project settings. In time series projects, will be either the detected time unit or "ROW", and 'NULL' otherwise.

Examples

```
## Not run:
projectId <- "59a5af20c80891534e3c2bde"
modelId <- "5996f820af07fc605e81ead4"
GetDatetimeModel(projectId, modelId)

## End(Not run)
```

 GetDatetimeModelFromJobId

Retrieve a new or updated datetime model defined by modelJobId

Description

The functions RequestNewDatetimeModel and RequestFrozenDatetimeModel initiate the creation of new models in a DataRobot project. Both functions submit requests to the DataRobot modeling engine and return an integer-valued modelJobId. The GetDatetimeModelFromJobId function polls the modeling engine until the model has been built or a specified time limit is exceeded, returning an S3 object of class 'dataRobotDatetimeModel' when the model is available.

Usage

```
GetDatetimeModelFromJobId(project, modelJobId, maxWait = 600)
```

Arguments

project	character. Either (1) a character string giving the unique alphanumeric identifier for the project, or (2) a list containing the element projectId with this identifier.
modelJobId	The integer returned by either RequestNewDatetimeModel
maxWait	Integer, The maximum time (in seconds) to wait for the model job to complete

Details

Motivation for this function is the fact that some models - e.g., very complex machine learning models fit to large datasets - may take a long time to complete. Splitting the model creation request from model retrieval in these cases allows the user to perform other interactive R session tasks between the time the model creation/update request is made and the time the final model is available.

Value

An S3 object of class 'dataRobotDatetimeModel' summarizing all available information about the model. See GetDatetimeModel

Examples

```
## Not run:
projectId <- "59a5af20c80891534e3c2bde"
initialJobs <- ListModelJobs(project)
job <- initialJobs[[1]]
modelJobId <- job$modelJobId
GetDatetimeModelFromJobId(projectId, modelJobId)

## End(Not run)
```

GetDatetimePartition *Retrieve the DatetimePartitioning from a project*

Description

Only available if the project has already set the target as a datetime project.

Usage

```
GetDatetimePartition(project)
```

Arguments

`project` character. Either (1) a character string giving the unique alphanumeric identifier for the project, or (2) a list containing the element `projectId` with this identifier.

Value

list describing datetime partition with following components

- `cvMethod`. The type of validation scheme used for the project.
- `projectId` character. The id of the project this partitioning applies to.
- `datetimePartitionColumn` character. The name of the column whose values as dates are used to assign a row to a particular partition.
- `dateFormat` character. The format (e.g. "partition column was interpreted (compatible with `strftime` [<https://docs.python.org/2/library/time.html#time.strftime>])).
- `autopilotDataSelectionMethod` character. Whether models created by the autopilot use "row-Count" or "duration" as their `dataSelectionMethod`.
- `validationDuration` character. The validation duration specified when initializing the partitioning - not directly significant if the backtests have been modified, but used as the default `validationDuration` for the backtests.
- `availableTrainingStartDate` character. The start date of the available training data for scoring the holdout.
- `availableTrainingDuration` character. The duration of the available training data for scoring the holdout.
- `availableTrainingRowCount` integer. The number of rows in the available training data for scoring the holdout. Only available when retrieving the partitioning after setting the target.
- `availableTrainingEndDate` character. The end date of the available training data for scoring the holdout.
- `primaryTrainingStartDate` character. The start date of primary training data for scoring the holdout.
- `primaryTrainingDuration` character. The duration of the primary training data for scoring the holdout.

- `primaryTrainingRowCount` integer. The number of rows in the primary training data for scoring the holdout. Only available when retrieving the partitioning after setting the target.
- `primaryTrainingEndDate` character. The end date of the primary training data for scoring the holdout.
- `gapStartDate` character. The start date of the gap between training and holdout scoring data.
- `gapDuration` character. The duration of the gap between training and holdout scoring data.
- `gapRowCount` integer. The number of rows in the gap between training and holdout scoring data. Only available when retrieving the partitioning after setting the target.
- `gapEndDate` character. The end date of the gap between training and holdout scoring data.
- `holdoutStartDate` character. The start date of holdout scoring data.
- `holdoutDuration` character. The duration of the holdout scoring data.
- `holdoutRowCount` integer. The number of rows in the holdout scoring data. Only available when retrieving the partitioning after setting the target.
- `holdoutEndDate` character. The end date of the holdout scoring data.
- `numberOfBacktests` integer. the number of backtests used.
- `backtests` data.frame. A data frame of partition backtest. Each element represent one backtest and has the following components: `index`, `availableTrainingStartDate`, `availableTrainingDuration`, `availableTrainingRowCount`, `availableTrainingEndDate`, `primaryTrainingStartDate`, `primaryTrainingDuration`, `primaryTrainingRowCount`, `primaryTrainingEndDate`, `gapStartDate`, `gapDuration`, `gapRowCount`, `gapEndDate`, `validationStartDate`, `validationDuration`, `validationRowCount`, `validationEndDate`, `totalRowCount`.
- `useTimeSeries` logical. Whether the project is a time series project (if TRUE) or an OTV project which uses datetime partitioning (if FALSE).
- `defaultToKnownInAdvance` logical. Whether the project defaults to treating features as known in advance. Known in advance features are time series features that are expected to be known for dates in the future when making predictions (e.g., "is this a holiday").
- `featureDerivationWindowStart` integer. Offset into the past to define how far back relative to the forecast point the feature derivation window should start. Only used for time series projects. Expressed in terms of the `timeUnit` of the `datetimePartitionColumn`.
- `featureDerivationWindowEnd` integer. Offset into the past to define how far back relative to the forecast point the feature derivation window should end. Only used for time series projects. Expressed in terms of the `timeUnit` of the `datetimePartitionColumn`.
- `forecastWindowStart` integer. Offset into the future to define how far forward relative to the forecast point the forecast window should start. Only used for time series projects. Expressed in terms of the `timeUnit` of the `datetimePartitionColumn`.
- `forecastWindowEnd` integer. Offset into the future to define how far forward relative to the forecast point the forecast window should end. Only used for time series projects. Expressed in terms of the `timeUnit` of the `datetimePartitionColumn`.
- `featureSettings` list. A list of lists specifying settings for each feature. For each feature you would like to set feature settings for, pass the following in a list:
 - `featureName` character. The name of the feature to set feature settings.
 - `knownInAdvance` logical. Optional. Whether or not the feature is known in advance. Used for time series only. Defaults to FALSE.

- doNotDerive logical. Optional. If TRUE, no time series derived features (e.g., lags) will be automatically engineered from this feature. Used for time series only. Defaults to FALSE.
- treatAsExponential character. Specifies whether to treat data as exponential trend and apply transformations like log-transform. Uses values from TreatAsExponential.
- differencingMethod character. Used to specify differencing method to apply if data is stationary. Use values from DifferencingMethod.
- windowsBasisUnit character. Indicates which unit is the basis for the feature derivation window and forecast window. Uses values from TimeUnit and the value "ROW".
- periodicities list. A list of periodicities for different times, specified as a list of lists, where each list item specifies the 'timeSteps' for a particular 'timeUnit'. Will be "ROW" if windowsBasisUnit is "ROW".
- totalRowCount integer. The number of rows in the project dataset. Only available when retrieving the partitioning after setting the target. Thus it will be NULL for GenerateDatetimePartition and populated for GetDatetimePartition.
- validationRowCount integer. The number of rows in the validation set.
- multiseriesIdColumns list. A list of the names of multiseries id columns to define series.
- numberOfKnownInAdvanceFeatures integer. The number of known in advance features.
- useCrossSeriesFeatures logical. Whether or not cross series features are included.
- aggregationType character. The aggregation type to apply when creating cross series features. See SeriesAggregationType.
- calendarId character. The ID of the calendar used for this project, if any.

Examples

```
## Not run:
projectId <- "59a5af20c80891534e3c2bde"
GetDatetimePartition(projectId)

## End(Not run)
```

GetDeployment

Get information on a particular deployment.

Description

Get information on a particular deployment.

Usage

```
GetDeployment(deploymentId)
```

Arguments

deploymentId character. The ID of the deployment.

Value

A DataRobotDeployment object containing:

- id character. The ID of the deployment.
- label character. The label of the deployment.
- description character. The description of the deployment.
- defaultPredictionServer list. Information on the default prediction server connected with the deployment. See ListPredictionServers for details.
- model dataRobotModel. The model associated with the deployment. See GetModel for details.
- capabilities list. Information on the capabilities of the deployment.
- predictionUsage list. Information on the prediction usage of the deployment.
- permissions list. User's permissions on the deployment.
- serviceHealth list. Information on the service health of the deployment.
- modelHealth list. Information on the model health of the deployment.
- accuracyHealth list. Information on the accuracy health of the deployment.

Examples

```
## Not run:  
deploymentId <- "5e319d2e422fbd6b58a5edad"  
GetDeployment(deploymentId)  
  
## End(Not run)
```

GetDeploymentAccuracy *Retrieve accuracy statistics for a deployment.*

Description

Retrieve accuracy statistics for a deployment.

Usage

```
GetDeploymentAccuracy(  
  deploymentId,  
  modelId = NULL,  
  start = NULL,  
  end = NULL,  
  segmentAttribute = NULL,  
  segmentValue = NULL,  
  targetClasses = NULL  
)
```


Arguments

deploymentId	character. The ID of the deployment.
modelId	character. Optional. The ID of the model to query. If provided, only data for this specific model will be retrieved; otherwise, data for the deployment's default model will be retrieved.
start	POSIXct. Optional. The start time of the reporting period for monitoring data. Defaults to seven days prior to the end of the period. Sub-hour resolution is not permitted, and the timezone must be UTC.
end	POSIXct. Optional. The end time of the reporting period for monitoring data. Defaults to the next top of the hour. Sub-hour resolution is not permitted, and the timezone must be UTC.
segmentAttribute	character. Optional. The name of an attribute used for segment analysis. See <code>SegmentAnalysisAttribute</code> for permitted values. Added in DataRobot 2.21.
segmentValue	character. Optional. The value of <code>segmentAttribute</code> . Added in DataRobot 2.21.
targetClasses	character. Optional. List of target classes to filter out of the response. Added in DataRobot 2.23.

Value

An object representing service health metrics for the deployment, containing:

- `modelId` character. The ID of the deployment model for which monitoring data was retrieved.
- `period` list. The duration of the reporting period, containing:
 - `start` POSIXct. Start of the reporting period.
 - `end` POSIXct. End of the reporting period.
- `metrics` `data.frame`. Accuracy metrics for the deployment, where each row is a separate metric and contains the columns:
 - `metric`. character. Name of the metric. See `DeploymentAccuracyMetric` for valid values.
 - `baselineValue`. numeric. May be NA if accuracy data is not available.
 - `value`. numeric. May be NA if accuracy data is not available.
 - `percentChange`. numeric. The percent change of value over baseline. May be NA if accuracy data is not available.
- `segmentAttribute` character. Optional. The name of the segment on which segment analysis was performed. Added in DataRobot 2.21.
- `segmentValue` character. Optional. The value of the `segmentAttribute`. Added in DataRobot 2.21.

See Also

Other deployment accuracy functions: [GetDeploymentAccuracyOverTime\(\)](#), [GetDeploymentAssociationId\(\)](#), [SubmitActuals\(\)](#)

Examples

```
## Not run:
library(dplyr)
deploymentId <- "59a5af20c80891534e3c2bde"
acc <- GetDeploymentAccuracy(deploymentId, end = ISOdate(2021, 01, 06, 1, 0, 0, tz = "UTC"))
df <- mutate(
  acc$metrics,
  "modelId" = acc$modelId,
  "startTime" = acc$period$start,
  "endTime" = acc$period$end,
  .before = everything()
)

## End(Not run)
```

GetDeploymentAccuracyOverTime

Retrieves accuracy statistics over time on given metrics for a deployment.

Description

By default this will return statistics for the last seven days prior to the next; set the start and end parameters to adjust the reporting period.

Usage

```
GetDeploymentAccuracyOverTime(
  deploymentId,
  metrics,
  modelId = NULL,
  start = NULL,
  end = NULL,
  bucketSize = NULL,
  segmentAttribute = NULL,
  segmentValue = NULL
)
```

Arguments

deploymentId	character. The ID of the deployment in question.
metrics	character. Metrics to query. See DeploymentAccuracyMetric for supported values.
modelId	character. Optional. The ID of the model to query. If provided, only data for this specific model will be retrieved; otherwise, data for the deployment's default model will be retrieved.

start	POSIXct. Optional. The start time of the reporting period for monitoring data. Defaults to seven days prior to the end of the period. Sub-hour resolution is not permitted, and the timezone must be UTC.
end	POSIXct. Optional. The end time of the reporting period for monitoring data. Defaults to the next top of the hour. Sub-hour resolution is not permitted, and the timezone must be UTC.
bucketSize	character. Optional. The time duration of a bucket. This should be a multiple of one hour and cannot be longer than the total length of the period. If not set, a default value will be calculated based on the start and end times.
segmentAttribute	character. Optional. The name of an attribute used for segment analysis. See <code>SegmentAnalysisAttribute</code> for permitted values. Added in DataRobot 2.21.
segmentValue	character. Optional. The value of <code>segmentAttribute</code> . Added in DataRobot 2.21.

Value

An object representing how accuracy has changed over time for the deployment, containing:

- `modelId` character. The ID of the deployment model for which monitoring data was retrieved.
- `summary` data.frame. A summary bucket across the entire reporting period.
- `buckets` data.frame. A list of buckets representing each interval (constrained by the `bucketSize` parameter) in the reporting period.
- `baseline` data.frame. A baseline bucket.

Each bucket contains:

- `sampleSize`. integer. The number of predictions made against this deployment.
- `start`. POSIXct. The start time of the bucket. May be NA.
- `end`. POSIXct. The end time of the bucket. May be NA.
- `metricName`. numeric. Given N metrics queried, there will be N value columns, each one named for the metric. See `DeploymentAccuracyMetric` for supported values. May be NA if `sampleSize` is 0.

See Also

Other deployment accuracy functions: [GetDeploymentAccuracy\(\)](#), [GetDeploymentAssociationId\(\)](#), [SubmitActuals\(\)](#)

Examples

```
## Not run:
deploymentId <- "59a5af20c80891534e3c2bde"
aot <- GetDeploymentAccuracyOverTime(deploymentId,
  metrics = c(DeploymentAccuracyMetric$Gamma.Deviance,
             DeploymentAccuracyMetric$LogLoss,
             DeploymentAccuracyMetric$RMSE))

## End(Not run)
```

GetDeploymentAssociationId
Deployment Association ID

Description

The association ID of a deployment is a foreign key for your prediction dataset that will be used to match up actual values with those predictions. The ID should correspond to an event for which you want to track the outcome.

Usage

```
GetDeploymentAssociationId(deployment)
```

```
UpdateDeploymentAssociationId(  
  deployment,  
  columnNames = c(),  
  requiredInPredictionRequests = NULL,  
  maxWait = 600  
)
```

Arguments

deployment	An S3 object representing a model deployment, or the unique ID of such a deployment.
columnNames	character. Optional. Name(s) of the column(s) in your dataset that will be used to map actuals to predictions and determine accuracy. Note: This cannot be changed after the model has served predictions and the API will return an error.
requiredInPredictionRequests	logical. Optional. Whether the association ID is required in a prediction request.
maxWait	integer. How long to wait (in seconds) for the computation to complete before returning a timeout error? (Default 600 seconds)

Details

These functions are convenience methods to get and set the association ID settings for a deployment.

Value

An object classed `dataRobotDeploymentAssociationIdSettings` that contains:

columnNames character. The columns that can be used as association IDs.

requiredInPredictionRequests logical. Whether the association ID is required in a prediction request.

Functions

- `UpdateDeploymentAssociationId()`: Updates the association ID settings of a deployment. It will only update those settings that correspond to set arguments. This function will throw an error if the update fails and return the updated settings on success.

See Also

Other deployment accuracy functions: [GetDeploymentAccuracyOverTime\(\)](#), [GetDeploymentAccuracy\(\)](#), [SubmitActuals\(\)](#)

GetDeploymentDriftTrackingSettings

Get drift tracking settings for a deployment.

Description

Get drift tracking settings for a deployment.

Usage

```
GetDeploymentDriftTrackingSettings(deploymentId)
```

Arguments

`deploymentId` character. The ID of the deployment.

Value

A list with the following information on drift tracking:

- `associationId`
- `predictionIntervals` list. A list with two keys:
 - `enabled`. 'TRUE' if prediction intervals are enabled and 'FALSE' otherwise.
 - `percentiles` list. A list of percentiles, if prediction intervals are enabled.
- `targetDrift` list. A list with one key, 'enabled', which is 'TRUE' if target drift is enabled, and 'FALSE' otherwise.
- `featureDrift` list. A list with one key, 'enabled', which is 'TRUE' if feature drift is enabled, and 'FALSE' otherwise.

Examples

```
## Not run:  
deploymentId <- "5e319d2e422fbd6b58a5edad"  
GetDeploymentDriftTrackingSettings(deploymentId)  
  
## End(Not run)
```

 GetDeploymentServiceStats

Retrieve service health statistics for a deployment.

Description

Retrieve service health statistics for a deployment.

Usage

```
GetDeploymentServiceStats(
  deploymentId,
  modelId = NULL,
  start = NULL,
  end = NULL,
  executionTimeQuantile = NULL,
  responseTimeQuantile = NULL,
  slowRequestsThreshold = NULL,
  segmentAttribute = NULL,
  segmentValue = NULL
)
```

Arguments

deploymentId	character. The ID of the deployment.
modelId	character. Optional. The ID of the model to query. If provided, only data for this specific model will be retrieved; otherwise, data for the deployment's default model will be retrieved.
start	POSIXct. Optional. The start time of the reporting period for monitoring data. Defaults to seven days prior to the end of the period. Sub-hour resolution is not permitted, and the timezone must be UTC.
end	POSIXct. Optional. The end time of the reporting period for monitoring data. Defaults to the next top of the hour. Sub-hour resolution is not permitted, and the timezone must be UTC.
executionTimeQuantile	numeric. Optional. Quantile for the executionTime metric. Defaults to 0.5.
responseTimeQuantile	numeric. Optional. Quantile for the responseTime metric. Defaults to 0.5.
slowRequestsThreshold	integer. Optional. Threshold for the slowRequests metric. Defaults to 1000.
segmentAttribute	character. Optional. The name of an attribute used for segment analysis. See SegmentAnalysisAttribute for permitted values. Added in DataRobot 2.20.
segmentValue	character. Optional. The value of segmentAttribute. Added in DataRobot 2.20.

Value

An object representing service health metrics for the deployment, containing:

- modelId character. The ID of the deployment model for which monitoring data was retrieved.
- period list. The duration of the reporting period, containing:
 - start POSIXct. Start of the reporting period.
 - end POSIXct. End of the reporting period.
- metrics list. Service health metrics for the deployment, containing:
 - totalPredictions integer. Total number of prediction rows.
 - totalRequests integer. Total number of prediction requests performed.
 - slowRequests integer. Number of requests with response time greater than slowRequestsThreshold.
 - responseTime numeric. Request response time at responseTimeQuantile in milliseconds. May be NA.
 - executionTime numeric. Request execution time at executionTimeQuantile in milliseconds. May be NA.
 - medianLoad integer. Median request rate, in requests per minute.
 - peakLoad integer. Greatest request rate, in requests per minute.
 - userErrorRate numeric. Ratio of user errors to the total number of requests.
 - serverErrorRate numeric. Ratio of server errors to the total number of requests.
 - numConsumers integer. Number of unique users performing requests.
 - cacheHitRatio numeric. The ratio of cache hits to requests.
- segmentAttribute character. Added in DataRobot 2.20. The name of the segment on which segment analysis was performed.
- segmentValue character. Added in DataRobot 2.20. The value of the segmentAttribute.

Examples

```
## Not run:
deploymentId <- "59a5af20c80891534e3c2bde"
startTime = ISOdate(2020, 12, 25, 1, 0, 0, tz = "UTC")
endTime = ISOdate(2021, 01, 06, 1, 0, 0, tz = "UTC")
GetDeploymentServiceStats(deploymentId, startTime, endTime)

## End(Not run)
## Not run:
deploymentId <- "59a5af20c80891534e3c2bde"
GetDeploymentServiceStats(deploymentId,
                          segmentAttribute = SegmentAnalysisAttribute$DataRobotRemoteIP,
                          segmentValue = "192.168.0.1")

## End(Not run)
```

GetDeploymentServiceStatsOverTime

Retrieves service health statistics over time on given metrics for a deployment.

Description

By default this will return statistics for the last seven days prior to the next; set the start and end parameters to adjust the reporting period.

Usage

```
GetDeploymentServiceStatsOverTime(
  deploymentId,
  metrics = DeploymentServiceHealthMetric$TotalPredictions,
  modelId = NULL,
  start = NULL,
  end = NULL,
  bucketSize = NULL,
  quantile = NULL,
  threshold = NULL,
  segmentAttribute = NULL,
  segmentValue = NULL
)
```

Arguments

deploymentId	character. The ID of the deployment.
metrics	character. Optional. Metrics to query. See DeploymentServiceHealthMetric for supported values. If not provided, defaults to TotalPredictions.
modelId	character. Optional. The ID of the model to query. If provided, only data for this specific model will be retrieved; otherwise, data for the deployment's default model will be retrieved.
start	POSIXct. Optional. The start time of the reporting period for monitoring data. Defaults to seven days prior to the end of the period. Sub-hour resolution is not permitted, and the timezone must be UTC.
end	POSIXct. Optional. The end time of the reporting period for monitoring data. Defaults to the next top of the hour. Sub-hour resolution is not permitted, and the timezone must be UTC.
bucketSize	character. Optional. The time duration of a bucket. This should be a multiple of one hour and cannot be longer than the total length of the period. If not set, a default value will be calculated based on the start and end times.
quantile	numeric. Optional. Quantile for the executionTime and responseTime metrics. Defaults to 0.5.
threshold	integer. Optional. Threshold for the slowQueries metric. Defaults to 1000.

segmentAttribute	character. Optional. The name of an attribute used for segment analysis. See SegmentAnalysisAttribute for permitted values. Added in DataRobot 2.20.
segmentValue	character. Optional. The value of segmentAttribute. Added in DataRobot 2.20.

Value

- modelId character. The ID of the deployment model for which monitoring data was retrieved.
- summary data.frame. Summarizes statistics for each metric over the entire reporting period.
- buckets data.frame. Statistics for each metric, split into intervals of equal duration. There is one column representing stats for each metric queried, as well as:
 - start POSIXct. Start of the interval.
 - end POSIXct. End of the interval.
- segmentAttribute character. Added in DataRobot 2.20. The name of the segment on which segment analysis was performed.
- segmentValue character. Added in DataRobot 2.20. The value of segmentAttribute.

Examples

```
## Not run:
metrics <- c(DeploymentServiceHealthMetric)
GetDeploymentServiceStatsOverTime(deploymentId, metrics = metrics)

## End(Not run)
```

GetDriver

Returns information about a particular driver.

Description

Returns information about a particular driver.

Usage

```
GetDriver(driverId)
```

Arguments

driverId character. The id of the driver.

Value

A list containing information on the particular driver:

- `className` character. The Java class name of the driver.
- `baseNames` character. A vector of the file name(s) of the jar files.
- `canonicalName` character. The user-friendly name of the driver.
- `id` character. The `driverId` of the driver.
- `creator` character. The `userId` of the user who created the driver.

Examples

```
## Not run:
driverId <- "57a7c978c808916f4a630f89"
GetDriver(driverId)

## End(Not run)
```

GetFeatureAssociationMatrix

Get pairwise feature association statistics for a project's informative features

Description

Get pairwise feature association statistics for a project's informative features

Usage

```
GetFeatureAssociationMatrix(project, associationType, metric)
```

Arguments

<code>project</code>	character. Either (1) a character string giving the unique alphanumeric identifier for the project, or (2) a list containing the element <code>projectId</code> with this identifier.
<code>associationType</code>	character. The type of association, must be either "association" or "correlation".
<code>metric</code>	character. The specified association metric, must be one of "mutualInfo", "cramersV", "spearman", "pearson", or "tau".

Value

A list with two items:

- `features` data.frame. A data.frame containing the following info for each feature:
 - `alphabeticSortIndex` integer. A number representing the alphabetical order of this feature compared to the other features in this dataset.

- feature character. The name of the feature.
- importanceSortIndex integer. A number ranking the importance of this feature compared to the other features in this dataset.
- strengthSortIndex integer. A number ranking the strength of this feature compared to the other features in this dataset.
- strengths data.frame. A data.frame of pairwise strength data, with the following info:
 - feature1 character. The name of the first feature.
 - feature2 character. The name of the second feature.
 - statistic numeric. Feature association statistics for ‘feature1’ and ‘feature2’.

Examples

```
## Not run:
projectId <- "59a5af20c80891534e3c2bde"
GetFeatureAssociationMatrix(projectId)

## End(Not run)
```

GetFeatureAssociationMatrixDetails

Get a sample of the actual values used to measure the association between a pair of features.

Description

Get a sample of the actual values used to measure the association between a pair of features.

Usage

```
GetFeatureAssociationMatrixDetails(project, feature1, feature2)
```

Arguments

project	character. Either (1) a character string giving the unique alphanumeric identifier for the project, or (2) a list containing the element projectId with this identifier.
feature1	character. The name of the first feature of interest.
feature2	character. The name of the second feature of interest.

Value

A list with the following info:

- features list. The names of ‘feature1’ and ‘feature2’.
- types list. The type of ‘feature1’ and ‘feature2’. Will be "C" for categorical and "N" for numeric.
- values data.frame. The values of the feature associations and the relative frequency of the data points in the sample.

Examples

```
## Not run:
projectId <- "59a5af20c80891534e3c2bde"
GetFeatureAssociationMatrix(projectId, "SepalWidth", "SepalLength")

## End(Not run)
```

GetFeatureHistogram *Retrieve histogram plot data for a specific feature*

Description

A histogram is a popular way of visual representation of a feature values distribution in a series of bins. For categorical features every bin represents exactly one of feature values plus the number of occurrences of that value. For numeric features every bin represents a range of values (low end inclusive, high end exclusive) plus the total number of occurrences of all values in this range. In addition to that, with every bin for categorical and numeric features there is also included a target feature average for values in that bin (though it can be missing if the feature is deemed uninformative, if the project target has not been selected yet using `SetTarget`, or if the project is a multiclass project).

Usage

```
GetFeatureHistogram(project, featureName, binLimit = NULL)
```

Arguments

<code>project</code>	character. Either (1) a character string giving the unique alphanumeric identifier for the project, or (2) a list containing the element <code>projectId</code> with this identifier.
<code>featureName</code>	Name of the feature to retrieve. Note: DataRobot renames some features, so the feature name may not be the one from your original data. You can use <code>ListFeatureInfo</code> to list the features and check the name.
<code>binLimit</code>	integer. Optional. Desired max number of histogram bins. The default is 60.

Value

list containing:

- `count numeric`. The number of values in this bin's range. If a project is using weights, the value is equal to the sum of weights of all feature values in the bin's range.
- `target numeric`. Average of the target feature for values in this bin. It may be `NULL` if the feature is deemed uninformative, if the target has not yet been set (see `SetTarget`), or if the project is multiclass.
- `label character`. The value of the feature if categorical, otherwise the low end of the bin range such that the difference between two consecutive bin labels is the length of the bin.

GetFeatureImpact	<i>Get the feature impact for a model, requesting the feature impact if it is not already available.</i>
------------------	--

Description

Feature Impact is computed for each column by creating new data with that column randomly permuted (but the others left unchanged), and seeing how the error metric score for the predictions is affected. The 'impactUnnormalized' is how much worse the error metric score is when making predictions on this modified data. The 'impactNormalized' is normalized so that the largest value is 1. In both cases, larger values indicate more important features. Elsewhere this technique is sometimes called 'Permutation Importance'.

Usage

```
GetFeatureImpact(model)
```

Arguments

model	character. The model for which you want to compute Feature Impact, e.g. from the list of models returned by <code>ListModels(project)</code> .
-------	--

Details

Note that `GetFeatureImpact` will block for the duration of feature impact calculation. If you would prefer not to block the call, use `RequestFeatureImpact` to generate an async request for feature impact and then use `GetFeatureImpactForModel` or `GetFeatureImpactForJobId` to get the feature impact when it has been calculated. `GetFeatureImpactForJobId` will also block until the request is complete, whereas `GetFeatureImpactForModel` will error if the job is not complete yet.

GetFeatureImpactForJobId	<i>Retrieve completed Feature Impact results given a job ID</i>
--------------------------	---

Description

This will wait for the Feature Impact job to be completed (giving an error if the job is not a Feature Impact job and an error if the job errors).

Usage

```
GetFeatureImpactForJobId(project, jobId, maxWait = 600)
```

Arguments

project	character. The project the Feature Impact is part of.
jobId	character. The ID of the job (e.g. as returned from RequestFeatureImpact)
maxWait	integer. The maximum time (in seconds) to wait for the model job to complete

Value

A data frame with the following columns:

- featureName character. The name of the feature.
- impactNormalized numeric. The normalized impact score (largest value is 1).
- impactUnnormalized numeric. The unnormalized impact score.
- redundantWith character. A feature that makes this feature redundant, or NA if the feature is not redundant.

Examples

```
## Not run:  
model <- ListModels(project)[[1]]  
featureImpactJobId <- RequestFeatureImpact(model)  
featureImpact <- GetFeatureImpactForJobId(project, featureImpactJobId)  
  
## End(Not run)
```

GetFeatureImpactForModel

Retrieve completed Feature Impact results given a model

Description

This will only succeed if the Feature Impact computation has completed.

Usage

```
GetFeatureImpactForModel(model)
```

Arguments

model	character. The model for which you want to retrieve Feature Impact.
-------	---

Details

Feature Impact is computed for each column by creating new data with that column randomly permuted (but the others left unchanged), and seeing how the error metric score for the predictions is affected. The 'impactUnnormalized' is how much worse the error metric score is when making predictions on this modified data. The 'impactNormalized' is normalized so that the largest value is 1. In both cases, larger values indicate more important features. Elsewhere this technique is sometimes called 'Permutation Importance'.

Feature impact also runs redundancy detection, which detects if some features are redundant with higher importance features. Note that some types of projects, like multiclass, do not run redundancy detection. This function will generate a warning if redundancy detection was not run.

Value

A data frame with the following columns:

- featureName character. The name of the feature.
- impactNormalized numeric. The normalized impact score (largest value is 1).
- impactUnnormalized numeric. The unnormalized impact score.
- redundantWith character. A feature that makes this feature redundant, or NA if the feature is not redundant.

Examples

```
## Not run:
model <- ListModels(project)[[1]]
featureImpactJobId <- RequestFeatureImpact(model)
# Note: This will only work after the feature impact job has completed. Use
#       GetFeatureImpactFromJobId to automatically wait for the job.\
featureImpact <- GetFeatureImpactForModel(model)

## End(Not run)
```

GetFeatureInfo

Details about a feature

Description

Details about a feature

Usage

```
GetFeatureInfo(project, featureName)
```

Arguments

project	character. Either (1) a character string giving the unique alphanumeric identifier for the project, or (2) a list containing the element projectId with this identifier.
featureName	Name of the feature to retrieve. Note: DataRobot renames some features, so the feature name may not be the one from your original data. You can use ListFeatureInfo to list the features and check the name.

Value

A named list which contains:

- id numeric. feature id. Note that throughout the API, features are specified using their names, not this ID.
- name character. The name of the feature.
- featureType character. Feature type: 'Numeric', 'Categorical', etc.
- importance numeric. numeric measure of the strength of relationship between the feature and target (independent of any model or other features).
- lowInformation logical. Whether the feature has too few values to be informative.
- uniqueCount numeric. The number of unique values in the feature.
- naCount numeric. The number of missing values in the feature.
- dateFormat character. The format of the feature if it is date-time feature.
- projectId character. Character id of the project the feature belongs to.
- max. The maximum value in the dataset, formatted in the same format as the data.
- min. The minimum value in the dataset, formatted in the same format as the data.
- mean. The arithmetic mean of the dataset, formatted in the same format as the data.
- median. The median of the dataset, formatted in the same format as the data.
- stdDev. The standard deviation of the dataset, formatted in the same format as the data.
- timeSeriesEligible logical. Whether this feature can be used as the datetime partition column in a time series project.
- timeSeriesEligibilityReason character. Why the feature is ineligible for the datetime partition column in a time series project, "suitable" when it is eligible.
- crossSeriesEligible logical. Whether the cross series group by column is eligible for cross-series modeling. Will be NULL if no cross series group by column is used.
- crossSeriesEligibilityReason character. The type of cross series eligibility (or ineligibility).
- timeStep numeric. For time-series eligible features, a positive integer determining the interval at which windows can be specified. If used as the datetime partition column on a time series project, the feature derivation and forecast windows must start and end at an integer multiple of this value. NULL for features that are not time series eligible.
- timeUnit character. For time series eligible features, the time unit covered by a single time step, e.g. "HOUR", or NULL for features that are not time series eligible.
- targetLeakage character. Whether a feature is considered to have target leakage or not. A value of "SKIPPED_DETECTION" indicates that target leakage detection was not run on the feature.

- keySummary data.frame. Optional. Descriptive statistics for this feature, iff it is a summarized categorical feature. This data.frame contains:
 - key. The name of the key.
 - summary. Descriptive statistics for this key, including:
 - * max. The maximum value in the dataset.
 - * min. The minimum value in the dataset.
 - * mean. The arithmetic mean of the dataset.
 - * median. The median of the dataset.
 - * stdDev. The standard deviation of the dataset.
 - * pctRows. The percentage of rows (from the EDA sample) in which this key occurs.

See Also

Other feature functions: [ListFeatureInfo\(\)](#), [ListModelFeatures\(\)](#), [as.dataRobotFeatureInfo\(\)](#)

Examples

```
## Not run:  
projectId <- "59a5af20c80891534e3c2bde"  
GetFeatureInfo(projectId, "myFeature")  
  
## End(Not run)
```

GetFeaturelist

Retrieve a specific featurelist from a DataRobot project

Description

This function returns information about and the contents of a specified featurelist from a specified project.

Usage

```
GetFeaturelist(project, featurelistId)
```

Arguments

project character. Either (1) a character string giving the unique alphanumeric identifier for the project, or (2) a list containing the element projectId with this identifier.

featurelistId Unique alphanumeric identifier for the featurelist to be retrieved.

Details

DataRobot featurelists define the variables from the modeling dataset used in fitting each project model. In most cases, the same featurelist is used in fitting all project models, but models can be fit using alternative featurelists using the RequestNewModel function. To do this, featurelistId is required, and this is one of the elements returned by the GetFeaturelist function.

DataRobot featurelists define the variables from the modeling dataset used in fitting each project model. In most cases, the same featurelist is used in fitting all project models, but models can be fit using alternative featurelists using the RequestNewModel function. To do this, featurelistId is required, and this is one of the elements returned by the GetFeaturelist function.

Value

A list with the following elements describing the requested featurelist:

- featurelistId character. The unique alphanumeric identifier for the featurelist.
- projectId character. The project to which the featurelist belongs.
- features character. The names of the variables included in the featurelist.
- name character. The name of the featurelist.
- created character. A timestamp of when the featurelist was created.
- isUserCreated logical. Whether or not the featurelist was created by a user (as opposed to DataRobot automation).
- numModels numeric. The number of models that currently use this featurelist.

Examples

```
## Not run:
projectId <- "59a5af20c80891534e3c2bde"
featureList <- CreateFeaturelist(projectId, "myFeaturelist", c("feature1", "feature2"))
featurelistId <- featureList$featurelistId
GetFeaturelist(projectId, featurelistId)

## End(Not run)
```

GetFrozenModel	<i>Retrieve the details of a specified frozen model</i>
----------------	---

Description

This function returns a DataRobot S3 object of class dataRobotFrozenModel for the model defined by project and modelId. GetModel also can be used to retrieve some information about frozen model, however then some frozen specific information (parentModelId) will not be returned

Usage

```
GetFrozenModel(project, modelId)
```

Arguments

project	character. Either (1) a character string giving the unique alphanumeric identifier for the project, or (2) a list containing the element projectId with this identifier.
modelId	Unique alphanumeric identifier for the model of interest.

Details

The S3 object returned by this function is required by the functions DeleteModel, ListModelFeatures, and RequestSampleSizeUpdate.

Value

An S3 object of class 'dataRobotModel', which is a list with the following components:

- featurelistId. Character string: unique alphanumeric identifier for the featurelist on which the model is based.
- processes. Character vector with components describing preprocessing; may include modelType.
- featurelistName. Character string giving the name of the featurelist on which the model is based.
- projectId. Character string giving the unique alphanumeric identifier for the project.
- samplePct. Numeric or NULL. The percentage of the project dataset used in training the model. If the project uses datetime partitioning, the samplePct will be NULL. See trainingRowCount, trainingDuration, and trainingStartDate and trainingEndDate instead.
- trainingRowCount. Integer. The number of rows of the project dataset used in training the model. In a datetime partitioned project, if specified, defines the number of rows used to train the model and evaluate backtest scores; if unspecified, either trainingDuration or trainingStartDate and trainingEndDate was used to determine that instead.
- isFrozen. Logical : is model created with frozen tuning parameters.
- modelType. Character string describing the model type.
- metrics. List with one element for each valid metric associated with the model. Each element is a list with elements for each possible evaluation type (holdout, validation, and crossValidation).
- modelCategory. Character string giving model category (e.g., blend, model).
- blueprintId. Character string giving the unique DataRobot blueprint identifier on which the model is based.
- modelId. Character string giving the unique alphanumeric model identifier.
- modelNumber. Integer. The assigned model number.
- projectName. Character string: optional description of project defined by projectId.
- projectTarget. Character string defining the target variable predicted by all models in the project.
- projectMetric. Character string defining the fitting metric optimized by all project models.
- supportsMonotonicConstraints logical. Whether or not the model supports monotonic constraints.

- `monotonicIncreasingFeaturelistId` character. The ID of the featurelist specifying the features that are constrained to be monotonically increasing. Will be NULL if no increasing constraints are used.
- `monotonicDecreasingFeaturelistId` character. The ID of the featurelist specifying the features that are constrained to be monotonically decreasing. Will be NULL if no decreasing constraints are used.
- `isStarred` logical. Whether or not the model is starred.
- `predictionThreshold` numeric. For binary classification projects, the threshold used for predictions.
- `predictionThresholdReadOnly` logical. Whether or not the prediction threshold can be modified. Typically, the prediction threshold can no longer be modified once a model has a deployment created or predictions have been made with the dedicated prediction API.

Examples

```
## Not run:
projectId <- "59a5af20c80891534e3c2bde"
modelId <- "5996f820af07fc605e81ead4"
GetFrozenModel(projectId, modelId)

## End(Not run)
```

GetFrozenModelFromJobId

Retrieve a frozen model defined by modelJobId

Description

The function `RequestFrozenModel` initiate the creation of frozen models in a DataRobot project. `RequestFrozenModel` function submit requests to the DataRobot modeling engine and return an integer-valued `modelJobId`. The `GetFrozenModelFromJobId` function polls the modeling engine until the model has been built or a specified time limit is exceeded, returning an S3 object of class `'dataRobotFrozenModel'` when the model is available.

Usage

```
GetFrozenModelFromJobId(project, modelJobId, maxWait = 600)
```

Arguments

<code>project</code>	character. Either (1) a character string giving the unique alphanumeric identifier for the project, or (2) a list containing the element <code>projectId</code> with this identifier.
<code>modelJobId</code>	integer. The integer returned by either <code>RequestNewModel</code> or <code>RequestSampleSizeUpdate</code> .
<code>maxWait</code>	integer. The maximum time (in seconds) to wait for the model job to complete.

Details

Motivation for this function is the fact that some models - e.g., very complex machine learning models fit to large datasets - may take a long time to complete. Splitting the model creation request from model retrieval in these cases allows the user to perform other interactive R session tasks between the time the model creation/update request is made and the time the final model is available.

GetModelFromJobId also can be used to retrieve some information about frozen model, however then some frozen specific information (parentModelId) will not be returned.

Value

An S3 object of class 'dataRobotFrozenModel' summarizing all available information about the model.

Examples

```
## Not run:
projectId <- "59a5af20c80891534e3c2bde"
initialJobs <- ListModelJobs(project)
job <- initialJobs[[1]]
modelJobId <- job$modelJobId
GetModelJobFromJobId(projectId, modelJobId)

## End(Not run)
```

GetGeneralizedInsight *An internal function to help fetch insights.*

Description

See GetLiftChart, GetRocCurve, GetResidualsChart for details.

Usage

```
GetGeneralizedInsight(
  method,
  model,
  source = DataPartition$VALIDATION,
  fallbackToParentInsights = FALSE
)
```

Arguments

method	character. The API URL to use to get insight information.
model	dataRobotModel. A DataRobot model object like that returned by GetModel.
source	character. The data partition for which data would be returned. Default is DataPartition\$VALIDATION. See DataPartition for details.

fallbackToParentInsights

logical. If TRUE, this will return the lift chart data for the model's parent if the lift chart is not available for the model and the model has a parent model.

GetJob

Request information about a job

Description

Request information about a job

Usage

```
GetJob(project, jobId)
```

Arguments

project	character. Either (1) a character string giving the unique alphanumeric identifier for the project, or (2) a list containing the element projectId with this identifier.
jobId	Character string specifying the job id

Value

list with following elements:

- status character. Model job status; an element of JobStatus, e.g. JobStatus\$Queue.
- url character. URL to request more detail about the job.
- id character. The job id.
- jobType character. See JobType for valid values.
- projectId character. The project that contains the model.
- isBlocked logical. If TRUE, the job is blocked (cannot be executed) until its dependencies are resolved.

Examples

```
## Not run:
projectId <- "59a5af20c80891534e3c2bde"
initialJobs <- ListModelJobs(project)
job <- initialJobs[[1]]
jobId <- job$modelJobId
GetJob(projectId, jobId)

## End(Not run)
```

GetLiftChart	<i>Retrieve lift chart data for a model for a data partition (see DataPartition)</i>
--------------	--

Description

Retrieve lift chart data for a model for a data partition (see DataPartition)

Usage

```
GetLiftChart(  
  model,  
  source = DataPartition$VALIDATION,  
  fallbackToParentInsights = FALSE  
)
```

Arguments

model	dataRobotModel. A DataRobot model object like that returned by GetModel.
source	character. The data partition for which data would be returned. Default is DataPartition\$VALIDATION. See DataPartition for details.
fallbackToParentInsights	logical. If TRUE, this will return the lift chart data for the model's parent if the lift chart is not available for the model and the model has a parent model.

Value

data.frame with the following components:

- binWeight. Numeric: weight of the bin. For weighted projects, the sum of the weights of all rows in the bin; otherwise, the number of rows in the bin.
- actual. Numeric: sum of actual target values in bin.
- predicted. Numeric: sum of predicted target values in bin.

Examples

```
## Not run:  
projectId <- "59a5af20c80891534e3c2bde"  
modelId <- "5996f820af07fc605e81ead4"  
model <- GetModel(projectId, modelId)  
GetLiftChart(model, source = DataPartition$VALIDATION)  
  
## End(Not run)
```

`GetMissingValuesReport`*Get a report on missing values for the model.*

Description

The missing values report is a list of items, one per feature, sorted by missing count in descending order. Each item in the report contains details on the number of missing values for that feature and how they were handled by the model.

Usage

```
GetMissingValuesReport(project, modelId)
```

Arguments

<code>project</code>	character. Either (1) a character string giving the unique alphanumeric identifier for the project, or (2) a list containing the element <code>projectId</code> with this identifier.
<code>modelId</code>	character. Unique alphanumeric identifier for the model of interest.

Value

A list containing:

- `feature` character. The name of the feature.
- `type` character. Feature type (numeric or categorical).
- `missingCount` numeric. The number of missing values in the training data for that feature.
- `missingPercentage` numeric. The percentage of missing values in the training data for the feature.
- `tasks` list. A list of information on each task that was applied to that feature to handle missing values. This information contains:
 - `id` character. The id of the node in the model blueprint chart for this task. (See [Get-BlueprintChart](#) for more information on blueprint charts.)
 - `name` character. The name of the task.
 - `descriptions` character. Aggregated information about how the task handles missing values.

Examples

```
## Not run:
projectId <- "5984b4d7100d2b31c1166529"
modelId <- "5984b4d7100d2b31c1166529"
GetMissingValuesReport(projectId, modelId)

## End(Not run)
```

GetModel	<i>Retrieve the details of a specified model</i>
----------	--

Description

This function returns a DataRobot S3 object of class `dataRobotModel` for the model defined by `project` and `modelId`.

Usage

```
GetModel(project, modelId)
```

Arguments

<code>project</code>	character. Either (1) a character string giving the unique alphanumeric identifier for the project, or (2) a list containing the element <code>projectId</code> with this identifier.
<code>modelId</code>	character. Unique alphanumeric identifier for the model of interest.

Details

The S3 object returned by this function is required by the functions `DeleteModel`, `ListModelFeatures`, and `RequestSampleSizeUpdate`.

Value

An S3 object of class `'dataRobotModel'`, which is a list with the following components:

- `featurelistId`. Character string: unique alphanumeric identifier for the featurelist on which the model is based.
- `processes`. Character vector with components describing preprocessing; may include `modelType`.
- `featurelistName`. Character string giving the name of the featurelist on which the model is based.
- `projectId`. Character string giving the unique alphanumeric identifier for the project.
- `samplePct`. Numeric or NULL. The percentage of the project dataset used in training the model. If the project uses `datetime` partitioning, the `samplePct` will be NULL. See `trainingRowCount`, `trainingDuration`, and `trainingStartDate` and `trainingEndDate` instead.
- `trainingRowCount`. Integer. The number of rows of the project dataset used in training the model. In a `datetime` partitioned project, if specified, defines the number of rows used to train the model and evaluate backtest scores; if unspecified, either `trainingDuration` or `trainingStartDate` and `trainingEndDate` was used to determine that instead.
- `isFrozen`. Logical : is model created with frozen tuning parameters.
- `modelType`. Character string describing the model type.
- `metrics`. List with one element for each valid metric associated with the model. Each element is a list with elements for each possible evaluation type (`holdout`, `validation`, and `crossValidation`).

- `modelCategory`. Character string giving model category (e.g., blend, model).
- `blueprintId`. Character string giving the unique DataRobot blueprint identifier on which the model is based.
- `modelId`. Character string giving the unique alphanumeric model identifier.
- `modelNumber`. Integer. The assigned model number.
- `projectName`. Character string: optional description of project defined by `projectId`.
- `projectTarget`. Character string defining the target variable predicted by all models in the project.
- `projectMetric`. Character string defining the fitting metric optimized by all project models.
- `supportsMonotonicConstraints` logical. Whether or not the model supports monotonic constraints.
- `monotonicIncreasingFeaturelistId` character. The ID of the featurelist specifying the features that are constrained to be monotonically increasing. Will be NULL if no increasing constraints are used.
- `monotonicDecreasingFeaturelistId` character. The ID of the featurelist specifying the features that are constrained to be monotonically decreasing. Will be NULL if no decreasing constraints are used.
- `isStarred` logical. Whether or not the model is starred.
- `predictionThreshold` numeric. For binary classification projects, the threshold used for predictions.
- `predictionThresholdReadOnly` logical. Whether or not the prediction threshold can be modified. Typically, the prediction threshold can no longer be modified once a model has a deployment created or predictions have been made with the dedicated prediction API.

Examples

```
## Not run:
projectId <- "59a5af20c80891534e3c2bde"
modelId <- "5996f820af07fc605e81ead4"
GetModel(projectId, modelId)

## End(Not run)
```

GetModelBlueprintChart

Retrieve a model blueprint chart

Description

A model blueprint is a "pruned down" blueprint representing what was actually run for the model. This is solely the branches of the blueprint that were executed based on the featurelist.

Usage

```
GetModelBlueprintChart(project, modelId)
```

Arguments

project	character. Either (1) a character string giving the unique alphanumeric identifier for the project, or (2) a list containing the element projectId with this identifier.
modelId	character. Unique alphanumeric identifier for the model of interest.

Value

List with the following two components:

- nodes. list each element contains information about one node of a blueprint : id and label.
- edges. Two column matrix, identifying blueprint nodes connections.

Examples

```
## Not run:
projectId <- "59a5af20c80891534e3c2bde"
modelId <- "5996f820af07fc605e81ead4"
GetModelBlueprintChart(projectId, modelId)

## End(Not run)
```

GetModelBlueprintDocumentation

Get documentation for tasks used in the model blueprint

Description

A model blueprint is a "pruned down" blueprint representing what was actually run for the model. This is solely the branches of the blueprint that were executed based on the featurelist.

Usage

```
GetModelBlueprintDocumentation(project, modelId)
```

Arguments

project	character. Either (1) a character string giving the unique alphanumeric identifier for the project, or (2) a list containing the element projectId with this identifier.
modelId	character. Unique alphanumeric identifier for the model of interest.

Value

list with following components

task Character string name of the task described in document

description Character string task description

title Character string title of document

parameters List of parameters that task can received in human-readable format with following components: name, type, description

links List of external links used in document with following components: name, url

references List of references used in document with following components: name, url

Examples

```
## Not run:
projectId <- "59a5af20c80891534e3c2bde"
modelId <- "5996f820af07fc605e81ead4"
GetModelBlueprintDocumentation(projectId, modelId)

## End(Not run)
```

GetModelCapabilities *Get supported capabilities for a model, e.g., whether it has a word cloud.*

Description

Get supported capabilities for a model, e.g., whether it has a word cloud.

Usage

```
GetModelCapabilities(model)
```

Arguments

`model` An S3 object of class `dataRobotModel` like that returned by the function `GetModel`, or each element of the list returned by the function `ListModels`.

Value

Returns a list of logicals, representing different capabilities. Some of them are defined below:

- `supportsBlending` logical. Whether the model supports blending. See `RequestBlender`.
- `supportsMonotonicConstraints` logical. Whether the model supports monotonic constraints. See `RequestModel`.
- `supportsModelPackageExport`. logical. Whether the model can be exported as a model package (a `.mloc` file).
- `supportsCodeGeneration` logical. Added in DataRobot API 2.18. Whether the model supports code generation.
- `supportsShap` logical. Added in DataRobot API 2.18. Whether the model supports the Shapley package, i.e. Shapley-based feature importance.
- `supportsEarlyStopping`. logical. Added in DataRobot API 2.22. Whether this is an early-stopping tree-based model, which denotes that the number of trained iterations can be retrieved.

- `hasWordCloud` logical. Whether the model has a word cloud. See `GetWordCloud`.
- `eligibleForPrime` logical. Whether the model is eligible for Prime. See `CreatePrimeCode`.
- `hasParameters` logical. Whether the model has parameters. See `GetModelParameters`.

The list also includes the following:

- `reasons`. character. Explanations for why this model does not support certain capabilities. Not all capabilities are listed here. Names correspond to capabilities listed in `ModelCapability`.

Examples

```
## Not run:
projectId <- "59a5af20c80891534e3c2bde"
modelId <- "5996f820af07fc605e81ead4"
model <- GetModel(projectId, modelId)
GetModelCapabilities(model)

## End(Not run)
```

<code>GetModelFromJobId</code>	<i>Retrieve a new or updated model defined by <code>modelJobId</code></i>
--------------------------------	---

Description

The functions `RequestNewModel` and `RequestSampleSizeUpdate` initiate the creation of new models in a DataRobot project. Both functions submit requests to the DataRobot modeling engine and return an integer-valued `modelJobId`. The `GetModelFromJobId` function polls the modeling engine until the model has been built or a specified time limit is exceeded, returning an S3 object of class `'dataRobotModel'` when the model is available.

Usage

```
GetModelFromJobId(project, modelJobId, maxWait = 600)
```

Arguments

<code>project</code>	character. Either (1) a character string giving the unique alphanumeric identifier for the project, or (2) a list containing the element <code>projectId</code> with this identifier.
<code>modelJobId</code>	The integer returned by either <code>RequestNewModel</code> or <code>RequestSampleSizeUpdate</code> .
<code>maxWait</code>	integer. The maximum time (in seconds) to wait for the model job to complete.

Details

Motivation for this function is the fact that some models - e.g., very complex machine learning models fit to large datasets - may take a long time to complete. Splitting the model creation request from model retrieval in these cases allows the user to perform other interactive R session tasks between the time the model creation/update request is made and the time the final model is available.

Value

An S3 object of class 'dataRobotModel' summarizing all available information about the model.

Examples

```
## Not run:
projectId <- "59a5af20c80891534e3c2bde"
initialJobs <- ListModelJobs(project)
job <- initialJobs[[1]]
modelJobId <- job$modelJobId
GetModelJobFromJobId(projectId, modelJobId)

## End(Not run)
```

GetModelingFeaturelist

Retrieve a specific modeling featurelist from a DataRobot project

Description

In time series projects, a new set of modeling features is created after setting the partitioning options. These features are automatically derived from those in the project's dataset and are the features used for modeling. Modeling features are only accessible once the target and partitioning options have been set. In projects that don't use time series modeling, once the target has been set, ModelingFeaturelists and Featurelists will behave the same.

Usage

```
GetModelingFeaturelist(project, featurelistId)
```

Arguments

project	character. Either (1) a character string giving the unique alphanumeric identifier for the project, or (2) a list containing the element projectId with this identifier.
featurelistId	Unique alphanumeric identifier for the featurelist to be retrieved.

Value

A list with the following elements describing the requested featurelist:

- featurelistId character. The unique alphanumeric identifier for the featurelist.
- projectId character. The project to which the featurelist belongs.
- features character. The names of the variables included in the featurelist.
- name character. The name of the featurelist.
- created character. A timestamp of when the featurelist was created.
- isUserCreated logical. Whether or not the featurelist was created by a user (as opposed to DataRobot automation).
- numModels numeric. The number of models that currently use this featurelist.

Examples

```
## Not run:
projectId <- "59a5af20c80891534e3c2bde"
featureList <- CreateModelingFeaturelist(projectId, "myFeaturelist", c("feature1", "feature2"))
featurelistId <- featureList$featurelistId
GetModelingFeaturelist(projectId, featurelistId)

## End(Not run)
```

 GetModelJob

Request information about a single model job

Description

Request information about a single model job

Usage

```
GetModelJob(project, modelJobId)
```

Arguments

project	character. Either (1) a character string giving the unique alphanumeric identifier for the project, or (2) a list containing the element projectId with this identifier.
modelJobId	Character string specifying the job id

Value

list with following elements:

- status character. Model job status; an element of JobStatus, e.g. JobStatus\$Queue.
- processes list. List of character vectors describing any preprocessing applied.
- projectId character. The unique identifier for the project.
- modelId character. The unique identifier for the related model.
- samplePct numeric. The percentage of the dataset used for model building.
- trainingRowCount. Integer. The number of rows of the project dataset used in training the model.
- modelType character. string specifying the model this job builds.
- modelCategory character. What kind of model this is - prime for DataRobot Prime models, /codeblend for blender models, and /codemodel for other models.
- featurelistId character. Id of the featurelist used in fitting the model.
- blueprintId character. Id of the DataRobot blueprint on which the model is based.
- modelJobId character. Id of the job.
- isBlocked logical. If TRUE, the job is blocked (cannot be executed) until its dependencies are resolved.

Examples

```
## Not run:
projectId <- "59a5af20c80891534e3c2bde"
initialJobs <- ListModelJobs(project)
job <- initialJobs[[1]]
modelJobId <- job$modelJobId
GetModelJob(projectId, modelJobId)

## End(Not run)
```

GetModelParameters	<i>Retrieve model parameters</i>
--------------------	----------------------------------

Description

Retrieve model parameters

Usage

```
GetModelParameters(project, modelId)
```

Arguments

project	character. Either (1) a character string giving the unique alphanumeric identifier for the project, or (2) a list containing the element projectId with this identifier.
modelId	character. Unique alphanumeric identifier for the model of interest.

Value

List with the following components:

- parameters. List of model parameters that are related to the whole model with following components: name, value.
- derivedFeatures. List containing preprocessing information about derived features with following components: originalFeature, derivedFeature, type, coefficient, transformations and stageCoefficients. 'transformations' is a list itself with components: name and value. 'stage-Coefficients' is also a list with components: stage and coefficient. It contains coefficients for each stage of multistage models and is empty list for single stage models.

Examples

```
## Not run:
projectId <- "59a5af20c80891534e3c2bde"
modelId <- "5996f820af07fc605e81ead4"
GetModelParameters(projectId, modelId)

## End(Not run)
```

`GetModelRecommendation`*Retrieve a model recommendation from DataRobot for your project.*

Description

Model recommendations are only generated when you run full Autopilot. One of them (the most accurate individual, non-blender model) will be prepared for deployment. In the preparation process, DataRobot will: (1) calculate feature impact for the selected model and use it to generate a reduced feature list, (2) retrain the selected model on the reduced featurelist, (3) will replace the recommended model with the new model if performance is improved on the reduced featurelist, (4) will retrain the model on a higher sample size, and (5) will replace the recommended model with the higher sample size model if it is more accurate.

Usage

```
GetModelRecommendation(project, type = RecommendedModelType$FastAccurate)
```

Arguments

<code>project</code>	character. Either (1) a character string giving the unique alphanumeric identifier for the project, or (2) a list containing the element <code>projectId</code> with this identifier.
<code>type</code>	character. The type of recommendation to retrieve. See <code>RecommendedModelType</code> for available options. Defaults to <code>RecommendedModelType\$FastAccurate</code> .

Value

A list containing information about the recommended model:

- `modelId` character. The model ID of the recommended model.
- `projectId` character. The project ID of the project the recommendations were made for.
- `recommendationType` character. The type of recommendation being made.

Examples

```
## Not run:  
projectId <- "5984b4d7100d2b31c1166529"  
GetModelRecommendation(projectId)  
  
## End(Not run)
```

GetMultiSeriesProperties

Retrieve time series properties for a potential multiserries datetime partition column

Description

Multiserries time series projects use multiserries id columns to model multiple distinct series within a single project. This function returns the time series properties (time step and time unit) of this column if it were used as a datetime partition column with the specified multiserries id columns, running multiserries detection automatically if it had not previously been successfully ran.

Usage

```
GetMultiSeriesProperties(
  project,
  dateColumn,
  multiserriesIdColumns,
  crossSeriesGroupByColumns = NULL,
  maxWait = 600
)
```

Arguments

project	character. Either (1) a character string giving the unique alphanumeric identifier for the project, or (2) a list containing the element projectId with this identifier.
dateColumn	character. The name of the column containing the date that defines the time series.
multiserriesIdColumns	character. Optional. The Series ID to demarcate the series. If not specified, DataRobot will attempt to automatically infer the series ID.
crossSeriesGroupByColumns	character. Optional. Column to split a cross series into further groups. For example, if every series is sales of an individual product, the cross series group could be e product category with values like "men's clothing", "sports equipment", etc. Requires multiserries with useCrossSeries enabled.
maxWait	integer. if a multiserries detection task is run, the maximum amount of time to wait for it to complete before giving up.

Value

A named list which contains:

- timeSeriesEligible logical. Whether or not the series is eligible to be used for time series.
- crossSeriesEligible logical. Whether or not the cross series group by column is eligible for cross-series modeling. Will be NULL if no cross series group by column is used.

- `crossSeriesEligibilityReason` character. The type of cross series eligibility (or ineligibility).
- `timeUnit` character. For time series eligible features, the time unit covered by a single time step, e.g. "HOUR", or NULL for features that are not time series eligible.
- `timeStep` integer. Expected difference in time units between rows in the data. Will be NULL for features that are not time series eligible.

See Also

Other MultiSeriesProject functions: [RequestCrossSeriesDetection\(\)](#), [RequestMultiSeriesDetection\(\)](#), [as.dataRobotMultiSeriesProperties\(\)](#)

Examples

```
## Not run:
projectId <- "59a5af20c80891534e3c2bde"
GetMultiSeriesProperties(projectId,
                        dateColumn = "myFeature",
                        multiseriessIdColumns = "Store")

## End(Not run)
```

GetParetoFront

Pareto Front data for a Eureka model

Description

The Eureka algorithm generates millions and millions of equations. Eureka takes the best bits from the best initial models and splices them randomly into the next generation. After enough mixing, the models can achieve good accuracy. There are usually many equations at every complexity level, but they aren't exposed. The models that are displayed are the "Pareto-optimal" models. That means that for any given complexity score, it shows the model with the best error metric on the training data out of all the modes. After that, for each remaining model, if there a strictly better model, throw out the strictly-worse model. A Pareto Front are those "Pareto-optimal" models that are generated at various complexity scores.

Usage

```
GetParetoFront(model)
```

Arguments

`model` An S3 object of class `dataRobotModel` like that returned by the function `GetModel`, or each element of the list returned by the function `ListModels`.

Value

data.frame with the following components:

- projectId character. the id of the project the model belongs to
- errorMetric character. Eureqa error-metric identifier used to compute error metrics for this search. Note that Eureqa error metrics do NOT correspond 1:1 with DataRobot error metrics – the available metrics are not the same, and even equivalent metrics may be computed slightly differently.
- hyperparameters list. A list of the various hyperparameters that could be used. By default there are none.
- targetType character. Indicating what kind of modeling is being done in this project Options are: "Regression", "Binary" (Binary classification), "Multiclass" (Multiclass classification)
- solutions list. List of Pareto points. Every Pareto point contains a dictionary with keys:
 - eureqaSolutionId character. ID of this solution
 - complexity numeric. Complexity score for this solution. Complexity score is a function of the mathematical operators used in the current solution. The Complexity calculation can be tuned via model hyperparameters.
 - error numeric. Error for the current solution, as computed by Eureqa using the "error_metric" error metric.
 - expression character. String specifying the Eureqa model equation.
 - expression_annotated character. Eureqa model equation string with variable names tagged for easy identification.

Examples

```
## Not run:
projectId <- "5b2827556523cd05bd1507a5"
modelId <- "5b29406c6523cd0665685a8d"
model <- GetModel(projectId, modelId)
GetParetoFront(model)

## End(Not run)
```

GetPredictionDataset *Retrieve data on a prediction dataset*

Description

Retrieve data on a prediction dataset

Usage

```
GetPredictionDataset(project, datasetId)
```

Arguments

project	character. Either (1) a character string giving the unique alphanumeric identifier for the project, or (2) a list containing the element projectId with this identifier.
datasetId	character. The ID of the prediction dataset.

Value

Data for a particular prediction dataset:

- id character. The unique alphanumeric identifier for the dataset.
- numColumns numeric. Number of columns in dataset.
- name character. Name of dataset file.
- created character. time of upload.
- projectId character. String giving the unique alphanumeric identifier for the project.
- numRows numeric. Number of rows in dataset.
- forecastPoint. The point relative to which predictions will be generated, based on the forecast window of the project. Only specified in time series projects, otherwise will be NULL.

Examples

```
## Not run:  
projectId <- "59a5af20c80891534e3c2bde"  
datasetId <- "5cd36e6e77a90f79a28ba414"  
GetPredictionDataset(projectId, datasetId)  
  
## End(Not run)
```

```
GetPredictionExplanations  
  Get prediction explanations
```

Description

A streamlined workflow to both generate and retrieve prediction explanations for a model.

Usage

```
GetPredictionExplanations(  
  model,  
  dataset,  
  maxExplanations = NULL,  
  thresholdLow = NULL,  
  thresholdHigh = NULL,  
  batchSize = NULL,  
  maxWait = 600,  
  excludeAdjustedPredictions = TRUE  
)
```

Arguments

model	An S3 object of class <code>dataRobotModel</code> like that returned by the function <code>GetModel</code> , or each element of the list returned by the function <code>ListModels</code> .
dataset	object. Either (1) the prediction dataset object of class <code>dataRobotPredictionDataset</code> , (2) a <code>data.frame</code> containing the prediction data, (3) the <code>datasetID</code> of the prediction dataset, (4) a file path to the data, or (5) a URL to the data. References the dataset of predictions used to get prediction explanations for.
maxExplanations	integer. Optional. The maximum number of prediction explanations to supply per row of the dataset, default: 3.
thresholdLow	numeric. Optional. The lower threshold, below which a prediction must score in order for prediction explanations to be computed for a row in the dataset. If neither <code>threshold_high</code> nor <code>threshold_low</code> is specified, prediction explanations will be computed for all rows.
thresholdHigh	numeric. Optional. The high threshold, above which a prediction must score in order for prediction explanations to be computed. If neither <code>threshold_high</code> nor <code>threshold_low</code> is specified, prediction explanations will be computed for all rows.
batchSize	integer. Optional. Maximum number of prediction explanations rows to retrieve per request
maxWait	integer. The maximum time (in seconds) to wait for the model job to complete.
excludeAdjustedPredictions	logical. Optional. Set to <code>FALSE</code> to include adjusted predictions, which are predictions adjusted by an exposure column. This is only relevant for projects that use an exposure column.

Value

data frame with following columns:

- `rowId` integer. Row id from prediction dataset.
- `prediction` numeric. The output of the model for this row (numeric prediction for regression problem, predicted class for classification problem).
- `class1Label` character. Label of class 0. Available only for classification problem.
- `class1Probability` numeric. Predicted probability of class 0. Available only for classification problem.
- `class2Label` character. Label of class 1. Available only for classification problem.
- `class2Probability` numeric. Predicted probability of class 1. Available only for classification problem.
- `explanation1FeatureName` character. The name of the feature contributing to the prediction.
- `explanation1FeatureValue` character. the value the feature took on for this row.
- `explanation1QualitativeStrength` numeric. How strongly the feature affected the prediction.
- `explanation1Strength` character. A human-readable description of how strongly the feature affected the prediction (e.g. '+++', '-', '+').

- explanation1Label character. Describes what output was driven by this prediction explanation. For regression projects, it is the name of the target feature. For classification projects, it is the class whose probability increasing would correspond to a positive strength of this.
- explanationNFeatureName character. The name of the feature contributing to the prediction.
- explanationNFeatureValue character. The value the feature took on for this row.
- explanationNQualitativeStrength numeric. How strongly the feature affected the prediction.
- explanationNStrength character. A human-readable description of how strongly the feature affected the prediction (e.g. '+++', '-', '+').
- explanationNLabel character. Describes what output was driven by this prediction explanation. For regression projects, it is the name of the target feature. For classification projects, it is the class whose probability increasing would correspond to a positive strength of this.
- explanationNFeatureName. Character string the name of the feature contributing to the prediction.

Examples

```
## Not run:
projectId <- "59a5af20c80891534e3c2bde"
modelId <- "5996f820af07fc605e81ead4"
datasets <- ListPredictionDatasets(projectId)
dataset <- datasets[[1]]
model <- GetModel(projectId, modelId)
GetPredictionExplanations(model, dataset)

## End(Not run)
```

GetPredictionExplanationsInitialization

Retrieve the prediction explanations initialization for a model.

Description

Prediction explanations initializations are a prerequisite for computing prediction explanations, and include a sample what the computed prediction explanations for a prediction dataset would look like.

Usage

```
GetPredictionExplanationsInitialization(model)
```

Arguments

model An S3 object of class `dataRobotModel` like that returned by the function `GetModel`, or each element of the list returned by the function `ListModels`.

Value

A named list which contains:

- projectId character. ID of the project the feature belongs to.
- modelId character. The unique alphanumeric model identifier.
- predictionExplanationsSample list. List with sample of prediction explanations. Each element of the list is information about prediction explanations for one data row. For more information see GetPredictionExplanationsRows.

Examples

```
## Not run:
projectId <- "59a5af20c80891534e3c2bde"
modelId <- "5996f820af07fc605e81ead4"
model <- GetModel(projectId, modelId)
GetPredictionExplanationsInitialization(model)

## End(Not run)
```

GetPredictionExplanationsInitializationFromJobId

Retrieve the prediction explanations initialization for a model using jobId

Description

Prediction explanations initializations are a prerequisite for computing prediction explanations, and include a sample what the computed prediction explanations for a prediction dataset would look like.

Usage

```
GetPredictionExplanationsInitializationFromJobId(project, jobId, maxWait = 600)
```

Arguments

project	character. Either (1) a character string giving the unique alphanumeric identifier for the project, or (2) a list containing the element projectId with this identifier.
jobId	integer. Unique integer identifier pointing to the prediction explanations job (returned for example by RequestPredictionExplanationsInitialization.)
maxWait	integer. The maximum time (in seconds) to wait for the model job to complete

Value

A named list which contains:

- `projectId` character. ID of the project the feature belongs to.
- `modelId` character. The unique alphanumeric model identifier.
- `predictionExplanationsSample` list. List with sample of prediction explanations. Each element of the list is information about prediction explanations for one data row. For more information see `GetPredictionExplanationsRows`.

Examples

```
## Not run:
projectId <- "59a5af20c80891534e3c2bde"
modelId <- "5996f820af07fc605e81ead4"
model <- GetModel(projectId, modelId)
jobId <- RequestPredictionExplanationsInitialization(model)
GetPredictionExplanationsInitializationFromJobId(projectId, jobId)

## End(Not run)
```

GetPredictionExplanationsMetadata

Retrieve metadata for specified prediction explanations

Description

Retrieve metadata for specified prediction explanations

Usage

```
GetPredictionExplanationsMetadata(project, predictionExplanationId)
```

Arguments

`project` character. Either (1) a character string giving the unique alphanumeric identifier for the project, or (2) a list containing the element `projectId` with this identifier.

`predictionExplanationId` character. Id of the prediction explanations.

Value

A named list which contains prediction explanation metadata:

- `id` character. ID of the record and prediction explanations computation result.
- `projectId` character. ID of the project the model belongs to.
- `modelId` character. ID of the model prediction explanations initialization is for.
- `datasetId` character. ID of the prediction dataset prediction explanations were computed for.

- `maxExplanations` integer. Maximum number of prediction explanations to supply per row of the dataset.
- `thresholdLow` numeric. The low threshold, below which a prediction must score in order for prediction explanations to be computed for a row in the dataset.
- `thresholdHigh` numeric. The high threshold, above which a prediction must score in order for prediction explanations to be computed for a row in the dataset.
- `numColumns` integer. The number of columns prediction explanations were computed for.
- `finishTime`. Numeric timestamp referencing when computation for these prediction explanations finished.
- `predictionExplanationsLocation` character. Where to retrieve the prediction explanations.

Examples

```
## Not run:
projectId <- "59a5af20c80891534e3c2bde"
modelId <- "5996f820af07fc605e81ead4"
datasets <- ListPredictionDatasets(projectId)
dataset <- datasets[[1]]
datasetId <- dataset$id
model <- GetModel(projectId, modelId)
jobId <- RequestPredictionExplanations(model, datasetId)
predictionExplanationId <- GetPredictionExplanationsMetadataFromJobId(projectId, jobId)$id
GetPredictionExplanationsMetadata(projectId, predictionExplanationId)

## End(Not run)
```

`GetPredictionExplanationsMetadataFromJobId`

Retrieve the prediction explanations metadata for a model using jobId

Description

Retrieve the prediction explanations metadata for a model using jobId

Usage

```
GetPredictionExplanationsMetadataFromJobId(project, jobId, maxWait = 600)
```

Arguments

<code>project</code>	character. Either (1) a character string giving the unique alphanumeric identifier for the project, or (2) a list containing the element <code>projectId</code> with this identifier.
<code>jobId</code>	integer. Unique integer identifier (return for example by <code>RequestPredictionExplanations</code>).
<code>maxWait</code>	integer. The maximum time (in seconds) to wait for the model job to complete.

Value

A named list which contains prediction explanation metadata. For more information see `GetPredictionExplanationsMetadata`

Examples

```
## Not run:
projectId <- "59a5af20c80891534e3c2bde"
modelId <- "5996f820af07fc605e81ead4"
datasets <- ListPredictionDatasets(projectId)
dataset <- datasets[[1]]
datasetId <- dataset$id
model <- GetModel(projectId, modelId)
jobId <- RequestPredictionExplanations(model, datasetId)
GetPredictionExplanationsMetadataFromJobId(projectId, jobId)

## End(Not run)
```

GetPredictionExplanationsRows

Retrieve all prediction explanations rows

Description

Retrieve all prediction explanations rows

Usage

```
GetPredictionExplanationsRows(
  project,
  predictionExplanationId,
  batchSize = NULL,
  excludeAdjustedPredictions = TRUE
)
```

Arguments

<code>project</code>	character. Either (1) a character string giving the unique alphanumeric identifier for the project, or (2) a list containing the element <code>projectId</code> with this identifier.
<code>predictionExplanationId</code>	character. Id of the prediction explanations.
<code>batchSize</code>	integer. Optional. Maximum number of prediction explanations rows to retrieve per request
<code>excludeAdjustedPredictions</code>	logical. Optional. Set to <code>FALSE</code> to include adjusted predictions, which are predictions adjusted by an exposure column. This is only relevant for projects that use an exposure column.

Value

list of raw prediction explanations, each element corresponds to a row of the prediction dataset and has following components.

- rowId. Character string row Id.
- prediction. prediction for the row.
- predictionValues. list containing
 - label. describes what this model output corresponds to. For regression projects, it is the name of the target feature. For classification projects, it is a level from the target feature.
 - value. the output of the prediction. For regression projects, it is the predicted value of the target. For classification projects, it is the predicted probability the row belongs to the class identified by the label.
- adjustedPrediction. adjusted predictions, if they are not excluded.
- adjustedPredictionValues. Similar to predictionValues, but for adjusted predictions, if they are not excluded.
- predictionExplanations. list containing
 - label. described what output was driven by this prediction explanation. For regression projects, it is the name of the target feature. For classification projects, it is the class whose probability increasing would correspond to a positive strength of this prediction explanation.
 - feature. the name of the feature contributing to the prediction.
 - featureValue. the value the feature took on for this row
 - strength. the amount this feature’s value affected the prediction
 - qualitativeStrength. a human-readable description of how strongly the feature affected the prediction (e.g. '+++', '-', '+').

Examples

```
## Not run:
projectId <- "59a5af20c80891534e3c2bde"
modelId <- "5996f820af07fc605e81ead4"
datasets <- ListPredictionDatasets(projectId)
dataset <- datasets[[1]]
datasetId <- dataset$id
model <- GetModel(projectId, modelId)
jobId <- RequestPredictionExplanations(model, datasetId)
predictionExplanationId <- GetPredictionExplanationsMetadataFromJobId(projectId, jobId)$id
GetPredictionExplanationsRows(projectId, predictionExplanationId)

## End(Not run)
```

`GetPredictionExplanationsRowsAsDataFrame`

Retrieve all prediction explanations rows and return them as a data frame

Description

There are some groups of columns whose appearance depends on the exact contents of the project dataset. For classification projects, columns "classNLabel", "classNProbability", "classNLabel", "classNProbability" will appear corresponding to each class within the target; these columns will not appear for regression projects. Columns like "explanationNLabel" will appear corresponding to each included prediction explanation in the row. In both cases, the value of N will start at 1 and count up.

Usage

```
GetPredictionExplanationsRowsAsDataFrame(  
  project,  
  predictionExplanationId,  
  excludeAdjustedPredictions = TRUE,  
  batchSize = NULL  
)
```

Arguments

<code>project</code>	character. Either (1) a character string giving the unique alphanumeric identifier for the project, or (2) a list containing the element <code>projectId</code> with this identifier.
<code>predictionExplanationId</code>	character. Id of the prediction explanations.
<code>excludeAdjustedPredictions</code>	logical. Optional. Set to <code>FALSE</code> to include adjusted predictions, which are predictions adjusted by an exposure column. This is only relevant for projects that use an exposure column.
<code>batchSize</code>	integer. Optional. Maximum number of prediction explanations rows to retrieve per request

Value

data frame with following columns:

- `rowId` integer. Row id from prediction dataset.
- `prediction` numeric. The output of the model for this row (numeric prediction for regression problem, predicted class for classification problem).
- `class1Label` character. Label of class 0. Available only for classification problem.
- `class1Probability` numeric. Predicted probability of class 0. Available only for classification problem.

- class2Label character. Label of class 1. Available only for classification problem.
- class2Probability numeric. Predicted probability of class 1. Available only for classification problem.
- explanation1FeatureName character. The name of the feature contributing to the prediction.
- explanation1FeatureValue character. the value the feature took on for this row.
- explanation1QualitativeStrength numeric. How strongly the feature affected the prediction.
- explanation1Strength character. A human-readable description of how strongly the feature affected the prediction (e.g. '+++', '-', '+').
- explanation1Label character. Describes what output was driven by this prediction explanation. For regression projects, it is the name of the target feature. For classification projects, it is the class whose probability increasing would correspond to a positive strength of this.
- explanationNFeatureName character. The name of the feature contributing to the prediction.
- explanationNFeatureValue character. The value the feature took on for this row.
- explanationNQualitativeStrength numeric. How strongly the feature affected the prediction.
- explanationNStrength character. A human-readable description of how strongly the feature affected the prediction (e.g. '+++', '-', '+').
- explanationNLabel character. Describes what output was driven by this prediction explanation. For regression projects, it is the name of the target feature. For classification projects, it is the class whose probability increasing would correspond to a positive strength of this.
- explanationNFeatureName. Character string the name of the feature contributing to the prediction.

Examples

```
## Not run:
projectId <- "59a5af20c80891534e3c2bde"
modelId <- "5996f820af07fc605e81ead4"
datasets <- ListPredictionDatasets(projectId)
dataset <- datasets[[1]]
datasetId <- dataset$id
model <- GetModel(projectId, modelId)
jobId <- RequestPredictionExplanations(model, datasetId)
predictionExplanationId <- GetPredictionExplanationsMetadataFromJobId(projectId, jobId)$id
GetPredictionExplanationsRowsAsDataFrame(projectId, predictionExplanationId)

## End(Not run)
```

GetPredictions

Retrieve model predictions

Description

This function can be used to retrieve predictions from a project and either (1) a predictionId specifying the ID for the predictions desired (use ListPredictions to see available predictionIds for individual prediction sets) or (2) a predictionJobId that comes from a call to RequestPredictions. This function will then return the predictions generated for the model and data.

Usage

```
GetPredictions(  
  project,  
  predictId,  
  type = "response",  
  classPrefix = "class_",  
  maxWait = 600  
)
```

Arguments

<code>project</code>	character. Either (1) a character string giving the unique alphanumeric identifier for the project, or (2) a list containing the element <code>projectId</code> with this identifier.
<code>predictId</code>	character or integer. Either can be the character id of the <code>predictionId</code> associated with the prediction or the integer <code>predictionJobId</code> that is created by the call to <code>RequestPredictions</code> .
<code>type</code>	character. String specifying the type of response for binary classifiers; see <code>Details</code> .
<code>classPrefix</code>	character. For multiclass projects returning prediction probabilities, this prefix is prepended to each class in the header of the dataframe. Defaults to <code>"class_"</code> .
<code>maxWait</code>	integer. The maximum time (in seconds) to wait for the prediction job to complete.

Details

The contents of the return vector depends on the modeling task - binary classification, multiclass classification, or regression; whether or not the underlying data is time series, multiseried, cross-series, or not time series; and the value of the `'type'` parameter. For non-time-series regression tasks, the `type` parameter is ignored and a vector of numerical predictions of the response variable is returned.

For binary classification tasks, either a vector of predicted responses is returned if `type` has the value `response` (the default), or a vector of probabilities for the positive class is returned, if `type` is `probability`. You can also fetch the raw dataframe of prediction values using `raw`.

For multiclass classification tasks, `response` will return the predicted class and `probability` will return the probability of each class.

For time series tasks, `'type = "raw"'` will return more detailed information on the time series prediction. This will also include any prediction intervals if requested.

This function will error if the requested job has errored or if it has not completed within `maxWait` seconds.

Value

Vector of predictions, depending on the modeling task (`"Binary"`, `"Multiclass"`, or `"Regression"`) and the value of the `type` parameter; see `Details`.

Examples

```
## Not run:
# Retrieve by predictJobID
dataset <- UploadPredictionDataset(project, diamonds_small)
model <- ListModels(project)[[1]]
modelId <- model$modelId
predictJobId <- RequestPredictions(project, modelId, dataset$id)
predictions <- GetPredictions(project, predictJobId)
# Retrieve by predictionID
predictions <- ListPredictions(project)
predictions <- GetPredictions(project, predictions$predictionId[[1]])

## End(Not run)
```

GetPredictJob

Request information about a predict job

Description

Request information about a predict job

Usage

```
GetPredictJob(project, predictJobId)
```

Arguments

project character. Either (1) a character string giving the unique alphanumeric identifier for the project, or (2) a list containing the element `projectId` with this identifier.

predictJobId Character string specifying the job id

Value

list with following elements:

status Prediction job status; an element of `JobStatus`, e.g. `JobStatus$Queue`

predictJobId Character string specifying the job id

modelId Character string specifying the model from which predictions have been requested

projectId Character string specifying the project that contains the model

Examples

```
## Not run:
projectId <- "59a5af20c80891534e3c2bde"
initialJobs <- GetPredictJobs(project)
job <- initialJobs[[1]]
predictJobId <- job$predictJobId
GetPredictJob(projectId, predictJobId)
```



```
## End(Not run)
```

GetPredictJobs	<i>Function to list all prediction jobs in a project</i>
----------------	--

Description

Function to list all prediction jobs in a project

Usage

```
GetPredictJobs(project, status = NULL)
```

Arguments

project	character. Either (1) a character string giving the unique alphanumeric identifier for the project, or (2) a list containing the element <code>projectId</code> with this identifier.
status	character. The status of the desired jobs: one of <code>JobStatus\$Queue</code> , <code>JobStatus\$InProgress</code> , or <code>JobStatus\$Error</code> . If <code>NULL</code> (default), queued and inprogress jobs are returned.

Value

Dataframe with one row for each prediction job in the queue, with the following columns:

status Prediction job status; one of `JobStatus$Queue`, `JobStatus$InProgress`, or `JobStatus$Error`

predictJobId Character string specifying the job id

modelId Character string specifying the model from which predictions have been requested

projectId Character string specifying the project that contains the model

Examples

```
## Not run:
projectId <- "59a5af20c80891534e3c2bde"
GetPredictJobs(projectId)

## End(Not run)
```

GetPrimeEligibility *Check if model can be approximated with DataRobot Prime*

Description

Check if model can be approximated with DataRobot Prime

Usage

```
GetPrimeEligibility(project, modelId)
```

Arguments

project	character. Either (1) a character string giving the unique alphanumeric identifier for the project, or (2) a list containing the element projectId with this identifier.
modelId	character. Unique alphanumeric identifier for the model of interest.

Value

list with two members:

- canMakePrime logical. TRUE if model can be approximated using DataRobot Prime, FALSE if model can not be approximated.
- message character. Provides information why model may not be approximated with DataRobot Prime.

Examples

```
## Not run:  
projectId <- "59a5af20c80891534e3c2bde"  
modelId <- "5996f820af07fc605e81ead4"  
GetPrimeEligibility(projectId, modelId)  
  
## End(Not run)
```

GetPrimeFile *Retrieve a specific Prime file from a DataRobot project*

Description

This function returns information about specified Prime file from a specified project.

Usage

```
GetPrimeFile(project, primeFileId)
```

Arguments

project character. Either (1) a character string giving the unique alphanumeric identifier for the project, or (2) a list containing the element projectId with this identifier.

primeFileId numeric. Unique alphanumeric identifier for the primeFile to be retrieved.

Value

List with following elements:

language Character string. Code programming language

isValid logical flag indicating if code passed validation

rulesetId Integer identifier for the ruleset

parentModelId Unique alphanumeric identifier for the parent model

projectId Unique alphanumeric identifier for the project

id Unique alphanumeric identifier for the Prime file

modelId Unique alphanumeric identifier for the model

Examples

```
## Not run:
projectId <- "59a5af20c80891534e3c2bde"
primeFiles <- ListPrimeFiles(projectId)
primeFile <- primeFiles[[1]]
primeFileId <- primeFile$id
GetPrimeFile(projectId, primeFileId)

## End(Not run)
```

GetPrimeFileFromJobId *Retrieve a specific Prime file from a DataRobot project for corresponding jobId*

Description

Retrieve a specific Prime file from a DataRobot project for corresponding jobId

Usage

```
GetPrimeFileFromJobId(project, jobId, maxWait = 600)
```

Arguments

project character. Either (1) a character string giving the unique alphanumeric identifier for the project, or (2) a list containing the element projectId with this identifier.

jobId numeric. Unique integer identifier (return for example by RequestPrimeModel)

maxWait numeric. maximum time to wait (in sec) before job completed.

Value

List with following elements:

language Character string. Code programming language

isValid logical flag indicating if code passed validation

rulesetId Integer identifier for the ruleset

parentModelId Unique alphanumeric identifier for the parent model

projectId Unique alphanumeric identifier for the project

id Unique alphanumeric identifier for the Prime file

modelId Unique alphanumeric identifier for the model

Examples

```
## Not run:
projectId <- "59a5af20c80891534e3c2bde"
initialJobs <- ListModelJobs(project)
job <- initialJobs[[1]]
modelJobId <- job$modelJobId
GetPrimeFileFromJobId(projectId, modelJobId)

## End(Not run)
```

GetPrimeModel

Retrieve information about specified DataRobot Prime model.

Description

This function requests the DataRobot Prime model information for the DataRobot project specified by the project argument, and modelId.

Usage

```
GetPrimeModel(project, modelId)
```

Arguments

project character. Either (1) a character string giving the unique alphanumeric identifier for the project, or (2) a list containing the element projectId with this identifier.

modelId character. Unique alphanumeric identifier for the model of interest.

Details

The function returns list containing information about specified DataRobot Prime model.

Value

list (classed as `dataRobotPrimeModel`) containing information about specified DataRobot Prime model.

Examples

```
## Not run:
projectId <- "59a5af20c80891534e3c2bde"
modelId <- "5996f820af07fc605e81ead4"
GetPrimeModel(projectId, modelId)
```

```
## End(Not run)
```

GetPrimeModelFromJobId

Retrieve information about specified DataRobot Prime model using corresponding jobId.

Description

Retrieve information about specified DataRobot Prime model using corresponding jobId.

Usage

```
GetPrimeModelFromJobId(project, jobId, maxWait = 600)
```

Arguments

<code>project</code>	character. Either (1) a character string giving the unique alphanumeric identifier for the project, or (2) a list containing the element <code>projectId</code> with this identifier.
<code>jobId</code>	Unique integer identifier (return for example by <code>RequestPrimeModel</code>)
<code>maxWait</code>	maximum time to wait (in sec) before job completed

Value

list (classed as `dataRobotPrimeModel`) containing information about specified DataRobot Prime model.

Examples

```
## Not run:
projectId <- "59a5af20c80891534e3c2bde"
initialJobs <- ListModelJobs(project)
job <- initialJobs[[1]]
modelJobId <- job$modelJobId
GetPrimeModelFromJobId(projectId, modelJobId)
```

```
## End(Not run)
```

 GetProject

Retrieve details about a specified DataRobot modeling project

Description

Returns a list of details about the DataRobot modeling project specified by project.

Usage

```
GetProject(project)
```

Arguments

`project` character. Either (1) a character string giving the unique alphanumeric identifier for the project, or (2) a list containing the element `projectId` with this identifier.

Value

An S3 object of class 'dataRobotProject', consisting of the following elements:

- `projectId`. Character string giving the unique project identifier.
- `projectName`. Character string giving the name assigned to the project.
- `fileName`. Character string giving the name of the modeling dataset for the project.
- `stage`. Character string describing the stage of the DataRobot Autopilot.
- `autopilotMode`. Numeric: 0 for fully automatic mode; 1 for semi-automatic mode; 2 for manual mode.
- `created`. Character string representation of the project creation time and date.
- `target`. Name of the target variable from `fileName`.
- `metric`. Character string specifying the metric optimized by all project models.
- `partition`. A 7-element list describing the data partitioning for model fitting and cross validation.
- `advancedOptions`. A 4-element list with advanced option specifications.
- `positiveClass`. Character string: name of positive class for binary response models.
- `maxTrainPct`. The maximum percentage of the project dataset that can be used without going into the validation data or being too large to submit any blueprint for training a project.
- `maxTrainRows`. The maximum number of rows that can be trained on without going into the validation data or being too large to submit any blueprint for training.
- `holdoutUnlocked`. A logical flag indicating whether the holdout dataset has been used for model evaluation.
- `targetType`. Character string specifying the type of modeling problem (e.g., regression or binary classification).

Examples

```
## Not run:
  projectId <- "59a5af20c80891534e3c2bde"
  GetProject(projectId)

## End(Not run)
```

GetProjectStatus	<i>Request Autopilot status for a specified DataRobot project</i>
------------------	---

Description

This function polls the DataRobot Autopilot for the status of the project specified by the project parameter.

Usage

```
GetProjectStatus(project)
```

Arguments

project character. Either (1) a character string giving the unique alphanumeric identifier for the project, or (2) a list containing the element `projectId` with this identifier.

Value

List with the following three components:

autopilotDone Logical flag indicating whether the Autopilot has completed

stage Character string specifying the Autopilot stage

stageDescription Character string interpreting the Autopilot stage value

Examples

```
## Not run:
  projectId <- "59a5af20c80891534e3c2bde"
  GetProjectStatus(projectId)

## End(Not run)
```

GetRatingTable	<i>Retrieve a single rating table.</i>
----------------	--

Description

Retrieve a single rating table.

Usage

```
GetRatingTable(project, ratingTableId)
```

Arguments

project	character. Either (1) a character string giving the unique alphanumeric identifier for the project, or (2) a list containing the element projectId with this identifier.
ratingTableId	character. The ID of the rating table.

Value

An S3 object of class 'dataRobotRatingTable' summarizing all available information about the rating table.

Examples

```
## Not run:  
projectId <- "5984b4d7100d2b31c1166529"  
ratingTableId <- "5984b4d7100d2b31c1166529"  
GetRatingTable(projectId, ratingTableId)  
  
## End(Not run)
```

GetRatingTableFromJobId	<i>Get a rating table from the rating table job metadata.</i>
-------------------------	---

Description

Get a rating table from the rating table job metadata.

Usage

```
GetRatingTableFromJobId(project, ratingTableJobId, maxWait = 600)
```


Arguments

project	character. Either (1) a character string giving the unique alphanumeric identifier for the project, or (2) a list containing the element projectId with this identifier.
ratingTableJobId	integer. The job ID returned by CreateRatingTable.
maxWait	integer. The maximum time (in seconds) to wait for the retrieve to complete.

Value

An S3 object of class 'dataRobotRatingTable' summarizing all available information about the rating table.

Examples

```
## Not run:
  projectId <- "5984b4d7100d2b31c1166529"
  modelId <- "5984b4d7100d2b31c1166529"
  ratingTableJobId <- CreateRatingTable(projectId, modelId, dataSource = "myRatingTable.csv")
  GetRatingTableFromJobId(projectId, ratingTableJobId)

## End(Not run)
```

GetRatingTableModel *Retrieve information about specified model with a rating table.*

Description

Retrieve information about specified model with a rating table.

Usage

```
GetRatingTableModel(project, modelId)
```

Arguments

project	character. Either (1) a character string giving the unique alphanumeric identifier for the project, or (2) a list containing the element projectId with this identifier.
modelId	character. Unique alphanumeric identifier for the model of interest.

Value

list containing information about specified model with a rating table.

Examples

```
## Not run:
projectId <- "5984b4d7100d2b31c1166529"
modelId <- "5984b4d7100d2b31c1166529"
GetRatingTableModel(projectId, modelId)

## End(Not run)
```

GetRatingTableModelFromJobId

Retrieve a new or updated rating table model defined by a job ID.

Description

Retrieve a new or updated rating table model defined by a job ID.

Usage

```
GetRatingTableModelFromJobId(project, ratingTableModelJobId, maxWait = 600)
```

Arguments

project character. Either (1) a character string giving the unique alphanumeric identifier for the project, or (2) a list containing the element projectId with this identifier.

ratingTableModelJobId integer. The ID returned by RequestNewRatingTableModel.

maxWait integer. The maximum time (in seconds) to wait for the retrieve to complete.

Value

An S3 object of class 'dataRobotRatingTableModel' summarizing all available information about the model.

Examples

```
## Not run:
projectId <- "59a5af20c80891534e3c2bde"
ratingTableId <- "5984b4d7100d2b31c1166529"
ratingTableModelJobId <- RequestNewModel(projectId, ratingTableId)
GetRatingTableModelFromJobId(project, ratingTableModelJobId)

## End(Not run)
```

GetRecommendedModel *Retrieve the model object that DataRobot recommends for your project.*

Description

See GetModelRecommendation for details.

Usage

```
GetRecommendedModel(project, type = RecommendedModelType$FastAccurate)
```

Arguments

project	character. Either (1) a character string giving the unique alphanumeric identifier for the project, or (2) a list containing the element projectId with this identifier.
type	character. The type of recommendation to retrieve. See RecommendedModelType for available options. Defaults to RecommendedModelType\$FastAccurate.

Value

The model object corresponding with that recommendation

Examples

```
## Not run:
projectId <- "5984b4d7100d2b31c1166529"
GetRecommendedModel(projectId)

## End(Not run)
```

GetResidualsChart *Retrieve residuals chart data for a model for a data partition (see DataPartition).*

Description

Retrieve residuals chart data for a model for a data partition (see DataPartition).

Usage

```
GetResidualsChart(
  model,
  source = DataPartition$VALIDATION,
  fallbackToParentInsights = FALSE
)
```

Arguments

model	dataRobotModel. A DataRobot model object like that returned by GetModel. The model must be a regression model that is not time-aware.
source	character. The data partition for which data would be returned. Default is DataPartition\$VALIDATION. See DataPartition for details.
fallbackToParentInsights	logical. If TRUE, this will return the residuals chart data for the model's parent if the residuals chart is not available for the model and the model has a parent model.

Value

list with a single object containing residuals chart data whose name matches the source requested. See DataPartition for details. This object has the following components:

- residualMean. Numeric: the arithmetic mean of the predicted value minus the actual value over the downsampled dataset.
- coefficientOfDetermination. Numeric: aka the r-squared value. This value is calculated over the downsampled output, not the full input.
- data. data.frame: The rows of chart data in [actual, predicted, residual, rowNumber] form. If the row number was not available at the time of model creation, or if working with DataRobot 5.2, which does not provide rowNumber in the API response, the rowNumber will be NA.
- histogram. list: Data to plot a histogram of residual values. Each object contains:
 - intervalStart. Numeric: Start value for an interval, inclusive.
 - intervalEnd. Numeric: End value for an interval, exclusive for all but the last interval.
 - occurrences. Integer: the number of times the predicted value fits within the interval.

Examples

```
## Not run:
projectId <- "59a5af20c80891534e3c2bde"
modelId <- "5996f820af07fc605e81ead4"
model <- GetModel(projectId, modelId)
GetResidualsChart(model, source = DataPartition$VALIDATION)

## End(Not run)
```

GetRocCurve

Retrieve ROC curve data for a model for a particular data partition (see DataPartition)

Description

Retrieve ROC curve data for a model for a particular data partition (see DataPartition)

Usage

```
GetRocCurve(
  model,
  source = DataPartition$VALIDATION,
  fallbackToParentInsights = FALSE
)
```

Arguments

model dataRobotModel. A DataRobot model object like that returned by GetModel.

source character. The data partition for which data would be returned. Default is DataPartition\$VALIDATION. See DataPartition for details.

fallbackToParentInsights logical. If TRUE, this will return the lift chart data for the model's parent if the lift chart is not available for the model and the model has a parent model.

Value

list with the following components:

- **source**. Character: data partition for which ROC curve data is returned (see DataPartition).
- **negativeClassPredictions**. Numeric: example predictions for the negative class.
- **rocPoints**. data.frame: each row represents pre-calculated metrics (accuracy, f1_score, false_negative_score, true_negative_score, true_positive_score, false_positive_score, true_negative_rate, false_positive_rate, true_positive_rate, matthews_correlation_coefficient, positive_predictive_value, negative_predictive_value, threshold) associated with different thresholds for the ROC curve.
- **positiveClassPredictions**. Numeric: example predictions for the positive class.

Examples

```
## Not run:
projectId <- "59a5af20c80891534e3c2bde"
modelId <- "5996f820af07fc605e81ead4"
model <- GetModel(projectId, modelId)
GetRocCurve(model)

## End(Not run)
```

GetRulesets

List the rulesets approximating a model generated by DataRobot Prime

Description

This function will return list of rulesets that could be used to approximate the specified model. Rulesets are created using the RequestApproximation function. If model hasn't been approximated yet, will return empty list

Usage

```
GetRulesets(project, modelId)
```

Arguments

project	character. Either (1) a character string giving the unique alphanumeric identifier for the project, or (2) a list containing the element projectId with this identifier.
modelId	Unique alphanumeric identifier for the model of interest.

Value

A list of lists with one element for each ruleset. If there are no rulesets created for a model then an empty list is returned. If the group is not empty, a list is returned with the following elements:

- projectId. Character string giving the unique identifier for the project.
- rulesetId. Integer number giving the identifier for the ruleset.
- score. Score of ruleset (using project leaderboard metric).
- parentModelId. Character string giving the unique identifier for the parent model.
- ruleCount. integer: number of rules in ruleset.
- modelId. Character string giving the unique identifier for a model using the ruleset. May be NULL if no model using the ruleset has been created yet.

Examples

```
## Not run:
projectId <- "59a5af20c80891534e3c2bde"
modelId <- "5996f820af07fc605e81ead4"
GetRulesets(projectId, modelId)

## End(Not run)
```

GetSeriesAccuracy	<i>Get the computed series accuracy for a model, computing it if not already computed.</i>
-------------------	--

Description

Get the computed series accuracy for a model, computing it if not already computed.

Usage

```
GetSeriesAccuracy(model, maxWait = 600)
```

Arguments

model	character. The model for which you want to compute Feature Impact, e.g. from the list of models returned by <code>ListModels(project)</code> .
maxWait	integer. How long (in seconds) to wait for series accuracy computation before raising a timeout error? Default 600.

Value

data.frame with items:

- multiseriesId character. The ID of the series.
- rowCount integer. The number of rows in the series.
- multiseriesValues character. The name of the series.
- duration character. The duration of the series.
- validationScore numeric. The validation score for the series.
- backtestingScore numeric. The score on backtests for the series. See `ScoreBacktests`.
- holdoutScore numeric. The score for the series on the holdout set.

Examples

```
## Not run:
projectId <- "5984b4d7100d2b31c1166529"
modelId <- "5984b4d7100d2b31c1166529"
model <- GetModel(projectId, modelId)
seriesAccuracy <- GetSeriesAccuracy(model)

## End(Not run)
```

GetSeriesAccuracyForModel

Get the series accuracy associated with a particular model.

Description

This will not work if you have not separately computed series accuracy via `RequestSeriesAccuracy`. See `GetSeriesAccuracy` for a function that will get series accuracy and also compute it automatically if it has not already been compute.

Usage

```
GetSeriesAccuracyForModel(model)
```

Arguments

model	character. The model for which you want to compute Feature Impact, e.g. from the list of models returned by <code>ListModels(project)</code> .
-------	--

Value

data.frame with items:

- multiseriesId character. The ID of the series.
- rowCount integer. The number of rows in the series.
- multiseriesValues character. The name of the series.
- duration character. The duration of the series.
- validationScore numeric. The validation score for the series.
- backtestingScore numeric. The score on backtests for the series. See ScoreBacktests.
- holdoutScore numeric. The score for the series on the holdout set.

Examples

```
## Not run:
projectId <- "5984b4d7100d2b31c1166529"
modelId <- "5984b4d7100d2b31c1166529"
model <- GetModel(projectId, modelId)
jobId <- RequestSeriesAccuracy(projectId, modelId)
WaitForJobToComplete(projectId, jobId)
seriesAccuracy <- GetSeriesAccuracyForModel(model)

## End(Not run)
```

GetServerDataInRows *Handle server side pagination.*

Description

Handle server side pagination.

Usage

```
GetServerDataInRows(serverData, batchSize = 50)
```

Arguments

serverData	list. Raw JSON parsed list returned from the server.
batchSize	integer. The number of requests per page to expect.

`GetTimeSeriesFeatureDerivationLog`*Retrieve the time series feature derivation log content*

Description

The time series feature derivation log provides details about the feature generation process for a time series project. It includes information about which features are generated and their priority, as well as the detected properties of the time series data such as whether the series is stationary, and periodicities detected.

Usage

```
GetTimeSeriesFeatureDerivationLog(project, offset = NULL, limit = NULL)
```

Arguments

<code>project</code>	character. Either (1) a character string giving the unique alphanumeric identifier for the project, or (2) a list containing the element <code>projectId</code> with this identifier.
<code>offset</code>	integer. Optional. Default is 0. This many results will be skipped.
<code>limit</code>	integer. Optional. Defaults to 100. At most this many results are returned. To specify no limit, use 0. The default may change without notice.

Details

This route is only supported for time series projects that have finished partitioning. The time series feature log will include information about:

- Detected stationarity of the series (e.g. "Series detected as non-stationary")
- Detected presence of multiplicative trend in the series (e.g., "Multiplicative trend detected")
- Any periodicities (e.g., "Detected periodicities: 7 day")
- Maximum number of feature to be generated (e.g., "Maximum number of feature to be generated is 1440")
- Window sizes used in rolling statistics / lag extractors (e.g., "The window sizes chosen to be: 2 months") (because the time step is 1 month and Feature Derivation Window is 2 months)
- Features that are specified as known-in-advance (e.g., "Variables treated as known in advance: holiday")
- Details about why certain variables are transformed in the input data (e.g., "Generating variable "y (log)" from "y" because multiplicative trend is detected")
- Details about features generated as time series features, and their priority (e.g., "Generating feature "date (actual)" from "date" (priority: 1)")

Value

Returns the feature log output

Examples

```
## Not run:
projectId <- "5984b4d7100d2b31c1166529"
GetTimeSeriesFeatureDerivationLog(projectId)

## End(Not run)
```

GetTrainingPredictionDataFrame

Simplify the training prediction rows into a tidy format dataframe.

Description

Simplify the training prediction rows into a tidy format dataframe.

Usage

```
GetTrainingPredictionDataFrame(rows)
```

Arguments

rows data.frame. The dataframe to tidy.

GetTrainingPredictions

Retrieve training predictions on a specified data set.

Description

Training predictions are the internal out-of-fold predictions for data that was used to train the model. These predictions are especially useful for creating stacked models or blenders.

Usage

```
GetTrainingPredictions(project, predictionId)
```

Arguments

project character. Either (1) a character string giving the unique alphanumeric identifier for the project, or (2) a list containing the element projectId with this identifier.

predictionId character. ID of the prediction to retrieve training predictions for.

Examples

```
## Not run:
projectId <- "59a5af20c80891534e3c2bde"
predictions <- ListTrainingPredictions(projectId)
predictionId <- predictions[[1]]$id
trainingPredictions <- GetTrainingPredictions(projectId, predictionId)

## End(Not run)
```

GetTrainingPredictionsForModel

Get training predictions for a particular model.

Description

Training predictions are the internal out-of-fold predictions for data that was used to train the model. These predictions are especially useful for creating stacked models or blenders.

Usage

```
GetTrainingPredictionsForModel(model, dataSubset = "all", maxWait = 600)
```

Arguments

model	dataRobotModel. The model to get training predictions for.
dataSubset	character. What data subset would you like to predict on? Possible options are included in DataSubset. Possible options are: <ul style="list-style-type: none">• DataSubset\$All will use all available data.• DataSubset\$ValidationAndHoldout will use all data except the training set.• DataSubset\$Holdout will use only holdout data.
maxWait	integer. The maximum time (in seconds) to wait for the model job to complete.

Examples

```
## Not run:
projectId <- "59a5af20c80891534e3c2bde"
modelId <- "5996f820af07fc605e81ead4"
model <- GetModel(projectId, modelId)
trainingPredictions <- GetTrainingPredictionsFromModel(model)

## End(Not run)
```

GetTrainingPredictionsFromJobId

Retrieve the training predictions for a model using a job id.

Description

Retrieve the training predictions for a model using a job id.

Usage

```
GetTrainingPredictionsFromJobId(project, jobId, maxWait = 600)
```

Arguments

project	character. Either (1) a character string giving the unique alphanumeric identifier for the project, or (2) a list containing the element projectId with this identifier.
jobId	integer. Unique integer identifier (return for example by RequestPredictionExplanations).
maxWait	integer. The maximum time (in seconds) to wait for the model job to complete.

Value

A dataframe with out-of-fold predictions for the training data.

Examples

```
## Not run:
projectId <- "59a5af20c80891534e3c2bde"
modelId <- "5996f820af07fc605e81ead4"
model <- GetModel(projectId, modelId)
jobId <- RequestTrainingPredictions(model, dataSubset = "all")
trainingPredictions <- GetTrainingPredictionsFromJobId(projectId, jobId)

## End(Not run)
```

GetTransferableModel *Retrieve imported model info using import id*

Description

Retrieve imported model info using import id

Usage

```
GetTransferableModel(importId)
```

Arguments

importId character. Id of the import.

Value

A list describing uploaded transferable model with the following components:

- note. Character string Manually added node about this imported model.
- datasetName. Character string Filename of the dataset used to create the project the model belonged to.
- modelName. Character string Model type describing the model generated by DataRobot.
- displayName. Character string Manually specified human-readable name of the imported model.
- target. Character string The target of the project the model belonged to prior to export.
- projectName. Character string Name of the project the model belonged to prior to export.
- importedByUsername. Character string Username of the user who imported the model.
- importedAt. Character string The time the model was imported.
- version. Numeric Project version of the project the model belonged to.
- projectId. Character id of the project the model belonged to prior to export.
- featurelistName. Character string Name of the featurelist used to train the model.
- createdByUsername. Character string Username of the user who created the model prior to export.
- importedById. Character string id of the user who imported the model.
- id. Character string id of the import.
- createdById. Character string id of the user who created the model prior to export.
- modelId. Character string original id of the model prior to export.
- originUrl. Character string URL.

See Also

Other Transferable Model functions: [DeleteTransferableModel\(\)](#), [DownloadTransferableModel\(\)](#), [ListTransferableModels\(\)](#), [RequestTransferableModel\(\)](#), [UpdateTransferableModel\(\)](#), [UploadTransferableModel\(\)](#)

Examples

```
## Not run:  
id <- UploadTransferableModel("model.drmodel")  
GetTransferableModel(id)  
  
## End(Not run)
```

GetTuningParameters *Retrieve data on tuning parameters for a particular model.*

Description

Retrieve data on tuning parameters for a particular model.

Usage

```
GetTuningParameters(model)
```

Arguments

model dataRobotModel. A DataRobot model object to get tuning parameters for.

Value

A list detailing the following about each tuning parameter:

- currentValue character. The current searched values of that parameter.
- defaultValue character. The default value of that parameter.
- parameterId character. A unique ID for that particular parameter.
- parameterName character. The name of the tuning parameter.
- taskName character. The name of the task the parameter is for.
- constraints list. A list describing constraints on the possible values for the parameter. Will be one of int or float specifying a min and max value, or will be select and will specify possible values from a list of choices. int and float correspond with integer and floating-point parameter spaces respectively. It is possible for a parameter to be multiple types. Lastly, some parameters will also have a supportsGridSearch logical for whether or not that parameter can be grid searched or not.

Examples

```
## Not run:  
projectId <- "59a5af20c80891534e3c2bde"  
modelId <- "5996f820af07fc605e81ead4"  
model <- GetModel(projectId, modelId)  
GetTuningParameters(model)  
  
## End(Not run)
```

GetValidMetrics *Retrieve the valid fitting metrics for a specified project and target*

Description

For the response variable defined by the character string `target` and the project defined by the parameter `project`, return the vector of metric names that can be specified for fitting models in this project. This function is intended for use after `SetupProject` has been run but before `SetTarget`, allowing the user to specify valid non-default values for the metric parameter.

Usage

```
GetValidMetrics(project, target)
```

Arguments

<code>project</code>	character. Either (1) a character string giving the unique alphanumeric identifier for the project, or (2) a list containing the element <code>projectId</code> with this identifier.
<code>target</code>	character. String giving the name of the response variable to be predicted by all project models.

Value

Character vector containing the names of the metric values that are valid for a subsequent call to the `SetTarget` function.

Examples

```
## Not run:  
projectId <- "59a5af20c80891534e3c2bde"  
GetValidMetrics(projectId, "targetFeature")  
  
## End(Not run)
```

GetWordCloud *Retrieve word cloud data for a model.*

Description

Retrieve word cloud data for a model.

Usage

```
GetWordCloud(project, modelId, excludeStopWords = FALSE)
```

Arguments

<code>project</code>	character. Either (1) a character string giving the unique alphanumeric identifier for the project, or (2) a list containing the element <code>projectId</code> with this identifier.
<code>modelId</code>	character. Unique alphanumeric identifier for the model of interest.
<code>excludeStopWords</code>	logical. Optional. Set to TRUE if you want stopwords filtered out the response.

Value

data.frame with the following components:

ngram character. word or ngram value

coefficient numeric. value from [-1.0, 1.0] range, describes effect of this ngram on the target. A large negative value means a strong effect toward the negative class in classification projects and a smaller predicted target value in regression projects. A large positive value means a strong effect toward the positive class and a larger predicted target value respectively

frequency numeric. value from (0.0, 1.0] range, frequency of this ngram relative to the most frequent ngram

count integer. number of rows in the training sample where this ngram appears

isStopword logical. true for ngrams that DataRobot evaluates as stopwords

variable character. Optional. Added in DataRobot API 2.19. String representation of the ngram source. Contains the column name and, for some models, preprocessing details. For example, 'NGRAM_OCCUR_L2_cname' represents the ngram occurrences count using L2 normalization from the cname column

class character. Optional. Added in DataRobot API 2.19. Values of the target class for the corresponding word or ngram. For regression, NA

Examples

```
## Not run:
projectId <- "59a5af20c80891534e3c2bde"
modelId <- "5996f820af07fc605e81ead4"
GetWordCloud(projectId, modelId)

## End(Not run)
```

InitializeAnomalyAssessment

Request anomaly assessment insight computation on the specified subset.

Description

Request anomaly assessment insight computation on the specified subset.

Usage

```
InitializeAnomalyAssessment(
  projectId,
  modelId,
  backtest,
  source,
  seriesId = NULL
)
```

Arguments

projectId	character. The ID of the project to compute insight for.
modelId	character. The ID of the model to compute insight for.
backtest	integer or "holdout". The backtest to compute insight for.
source	"training" or "validation". The source to compute insight for.
seriesId	character. Optional. The series id to compute insight for. Required for multi-series projects.

Value

An object with anomaly assessment metadata:

- recordId. character. The ID of the record.
- projectId. character. The project ID of the record.
- modelId. character. The model ID of the record.
- backtest. character. The backtest of the record.
- source. character. The source of the record.
- seriesId. character. the series ID of the record.
- status. character. The status of the insight.
- statusDetails. character. The explanation of the status.
- startDate. POSIXct. Timestamp of the first prediction in the subset. Will be NULL if status is not completed.
- endDate. POSIXct. Timestamp of the last prediction in the subset. Will be NULL if status is not completed.
- predictionThreshold. numeric. The threshold, all rows with anomaly scores greater or equal to it have shap explanations computed. Will be NULL if status is not completed.
- previewLocation. character. URL to retrieve predictions preview for the subset. Will be NULL if status is not completed.
- latestExplanationsLocation. character. the URL to retrieve the latest predictions with the shap explanations. Will be NULL if status is not completed.
- deleteLocation. character. the URL to delete anomaly assessment record and relevant insight data.

See Also

Other Anomaly Assessment functions: [DeleteAnomalyAssessmentRecord\(\)](#), [GetAnomalyAssessmentExplanations\(\)](#), [GetAnomalyAssessmentPredictionsPreview\(\)](#), [ListAnomalyAssessmentRecords\(\)](#)

Examples

```
## Not run:
projectId <- "59a5af20c80891534e3c2bde"
modelId <- "59a5af20c80891534e3c2bdd"
record <- InitializeAnomalyAssessment(projectId, modelId, backtest=0, source="validation",
  seriesId="Baltimore")

## End(Not run)
```

IsBlenderEligible	<i>Check whether individual models can be blended together</i>
-------------------	--

Description

Check whether individual models can be blended together

Usage

```
IsBlenderEligible(project, modelIds, blendMethod)
```

Arguments

project	character. Either (1) a character string giving the unique alphanumeric identifier for the project, or (2) a list containing the element projectId with this identifier.
modelIds	list. A list of model ids corresponding to the models to check.
blendMethod	character. The blender method to check. See BlendMethods.

Value

List with:

- blendable logical. Whether or not the models can be blended.
- reason character. An explanation for why the models cannot be blended, if not blendable. Otherwise "".

Examples

```
## Not run:
projectId <- "59a5af20c80891534e3c2bde"
modelsToBlend <- c("5996f820af07fc605e81ead4", "59a5ce3301e9f0296721c64c")
IsBlenderEligible(projectId, modelId, "GLM")

## End(Not run)
```

IsId	<i>Checks if an id is a valid DataRobot ID (24 character string)</i>
------	--

Description

Checks if an id is a valid DataRobot ID (24 character string)

Usage

```
IsId(id)
```

Arguments

id	character. An ID to test whether it is a valid DataRobot ID.
----	--

IsParameterIn	<i>Check if a parameter is in a list of possibilities.</i>
---------------	--

Description

Check if a parameter is in a list of possibilities.

Usage

```
IsParameterIn(  
  paramValue,  
  paramPossibilities,  
  allowNull = TRUE,  
  paramName = NULL  
)
```

Arguments

paramValue	object. The parameter value to check.
paramPossibilities	vector. A vector of possible values for the parameter.
allowNULL	logical. Whether or not to allow NULL as a possibility.
paramName	character. The name of the parameter to check.

Value

TRUE if paramValue is valid, otherwise returns an error message.

Examples

```
## Not run:
  IsParameterIn("all", DataSubset)

## End(Not run)
```

JobStatus	<i>Job statuses</i>
-----------	---------------------

Description

This is a list that contains the valid values for job status when querying the list of jobs mode. If you wish, you can specify job status modes using the list values, e.g. `JobStatus$InProgress` instead of typing the string "inprogress". This way you can benefit from autocomplete and not have to remember the valid options.

Usage

```
JobStatus
```

Format

An object of class `list` of length 5.

JobType	<i>Job type</i>
---------	-----------------

Description

This is a list that contains the valid values for job type when querying the list of jobs.

Usage

```
JobType
```

Format

An object of class `list` of length 10.

ListAnomalyAssessmentRecords

Retrieve anomaly assessment records.

Description

Retrieve anomaly assessment records.

Usage

```
ListAnomalyAssessmentRecords(  
    projectId,  
    modelId,  
    backtest = NULL,  
    source = NULL,  
    seriesId = NULL,  
    limit = 100,  
    offset = 0  
)
```

Arguments

projectId	character. The ID of the project.
modelId	character. The ID of the model.
backtest	integer or "holdout". Optional. The backtest to filter records by.
source	"training" or "validation". Optional. The source of the data to filter records by.
seriesId	character. Optional. Can be specified for multiseried projects. The series id to filter records by.
limit	integer, greater than zero. Optional. Defaults to 100. At most this many results are returned. The default may change without notice.
offset	integer. Optional. Default is 0. This many results will be skipped.

Value

A list of objects with anomaly assessment metadata:

- recordId. character. The ID of the record.
- projectId. character. The project ID of the record.
- modelId. character. The model ID of the record.
- backtest. character. The backtest of the record.
- source. character. The source of the record.
- seriesId. character. the series ID of the record.
- status. character. The status of the insight.

- `statusDetails`. character. The explanation of the status.
- `startDate`. POSIXct. Timestamp of the first prediction in the subset. Will be NULL if status is not completed.
- `endDate`. POSIXct. Timestamp of the last prediction in the subset. Will be NULL if status is not completed.
- `predictionThreshold`. numeric. The threshold, all rows with anomaly scores greater or equal to it have shap explanations computed. Will be NULL if status is not completed.
- `previewLocation`. character. URL to retrieve predictions preview for the subset. Will be NULL if status is not completed.
- `latestExplanationsLocation`. character. the URL to retrieve the latest predictions with the shap explanations. Will be NULL if status is not completed.
- `deleteLocation`. character. the URL to delete anomaly assessment record and relevant insight data.

See Also

Other Anomaly Assessment functions: [DeleteAnomalyAssessmentRecord\(\)](#), [GetAnomalyAssessmentExplanations\(\)](#), [GetAnomalyAssessmentPredictionsPreview\(\)](#), [InitializeAnomalyAssessment\(\)](#)

Examples

```
## Not run:
projectId <- "59a5af20c80891534e3c2bde"
modelId <- "59a5af20c80891534e3c2bdd"
records <- ListAnomalyAssessmentRecords(projectId, modelId, backtest=0, seriesId="Baltimore")

## End(Not run)
```

ListBlueprints

Retrieve the list of available blueprints for a project

Description

This function returns the list of available blueprints for a specified modeling project, as an S3 object of class `listOfBlueprints`; see [Value](#).

Usage

```
ListBlueprints(project)
```

Arguments

`project` character. Either (1) a character string giving the unique alphanumeric identifier for the project, or (2) a list containing the element `projectId` with this identifier.

Value

An S3 object of class 'listOfBlueprints', a list with one element for each recommended blueprint in the associated project. For more information see GetBlueprint()

Examples

```
## Not run:
  projectId <- "59a5af20c80891534e3c2bde"
  ListBlueprints(projectId)

## End(Not run)
```

ListCalendars	<i>List all available calendars.</i>
---------------	--------------------------------------

Description

List all available calendars.

Usage

```
ListCalendars()
```

Value

A list of S3 objects of class "dataRobotCalendar"

Examples

```
## Not run:
  ListCalendars()

## End(Not run)
```

ListComplianceDocTemplates	<i>Retrieve information about all compliance doc templates.</i>
----------------------------	---

Description

Retrieve information about all compliance doc templates.

Usage

```
ListComplianceDocTemplates(namePart = NULL, limit = NULL, offset = NULL)
```

Arguments

namePart	character. Return only compliance doc templates that have a name that contains this string.
limit	integer. Return only this many compliance doc templates.
offset	integer. Skip this many compliance doc templates before returning.

Value

list of available compliance doc templates. Contains:

- name character. The name of the compliance doc template.
- creatorUsername character. The name of the user who created the compliance doc template.
- orgId character. The ID of the organization of the creator user.
- creatorId character. The ID of the creator user.
- sections list. The list of sections that define the template.
- id character. The ID of the template.

Examples

```
## Not run:
# Get all compliance doc templates
ListComplianceDocTemplates()
Get the first three compliance doc templates with names that contain "foo".
ListComplianceDocTemplates(namePart = "foo", limit = 3)

## End(Not run)
```

ListConfusionCharts *Returns all available confusion charts for the model.*

Description

Note that the confusion chart for source = "crossValidation" will not be available unless cross validation has been run for that model. Also, the confusion chart for source = "holdout" will not be available unless the holdout has been unlocked for the project.

Usage

```
ListConfusionCharts(model, fallbackToParentInsights = FALSE)
```

Arguments

model	dataRobotModel. A DataRobot model object like that returned by GetModel.
fallbackToParentInsights	logical. If TRUE, this will return the lift chart data for the model's parent if the lift chart is not available for the model and the model has a parent model.

Value

A list of all confusion charts for the model, one for each partition type found in DataPartition.

Examples

```
## Not run:  
modelId <- "5996f820af07fc605e81ead4"  
ListConfusionCharts(modelId)  
  
## End(Not run)
```

ListDataSources	<i>Returns a dataframe with information on available data sources.</i>
-----------------	--

Description

Returns a dataframe with information on available data sources.

Usage

```
ListDataSources()
```

Value

data.frame containing information on possible data sources.

Examples

```
## Not run:  
ListDataSources()  
  
## End(Not run)
```

ListDataStores	<i>Returns a dataframe with information on available data stores.</i>
----------------	---

Description

Returns a dataframe with information on available data stores.

Usage

```
ListDataStores()
```

Value

data.frame containing information on possible data stores.

Examples

```
## Not run:
  ListDataStores()

## End(Not run)
```

ListDeployments	<i>List all current model deployments.</i>
-----------------	--

Description

List all current model deployments.

Usage

```
ListDeployments(orderBy = NULL, search = NULL)
```

Arguments

orderBy	string. Optional. the order to sort the deployment list by, defaults to label Allowed attributes to sort by are: <ul style="list-style-type: none"> • label • serviceHealth • modelHealth • accuracyHealth • recentPredictions • lastPredictionTimestamp If the sort attribute is preceded by a hyphen, deployments will be sorted in descending order, otherwise in ascending order. For health related sorting, ascending means failing, warning, passing, unknown.
search	string. Optional. Case insensitive search against deployment labels and descriptions.

Value

A list of DataRobotDeployment objects containing:

- id character. The ID of the deployment.
- label character. The label of the deployment.
- description character. The description of the deployment.
- defaultPredictionServer list. Information on the default prediction server connected with the deployment. See `ListPredictionServers` for details.
- model dataRobotModel. The model associated with the deployment. See `GetModel` for details.

- capabilities list. Information on the capabilities of the deployment.
- predictionUsage list. Information on the prediction usage of the deployment.
- permissions list. User's permissions on the deployment.
- serviceHealth list. Information on the service health of the deployment.
- modelHealth list. Information on the model health of the deployment.
- accuracyHealth list. Information on the accuracy health of the deployment.

Examples

```
## Not run:  
  ListDeployments()  
  
## End(Not run)
```

ListDrivers	<i>Returns a dataframe with information on available drivers.</i>
-------------	---

Description

Returns a dataframe with information on available drivers.

Usage

```
ListDrivers()
```

Value

data.frame containing information on possible drivers.

Examples

```
## Not run:  
  ListDrivers()  
  
## End(Not run)
```

ListFeatureInfo

Details about all features for this project

Description

Details about all features for this project

Usage

ListFeatureInfo(project)

Arguments

project character. Either (1) a character string giving the unique alphanumeric identifier for the project, or (2) a list containing the element projectId with this identifier.

Value

A named list which contains:

- id numeric. feature id. Note that throughout the API, features are specified using their names, not this ID.
- name character. The name of the feature.
- featureType character. Feature type: 'Numeric', 'Categorical', etc.
- importance numeric. numeric measure of the strength of relationship between the feature and target (independent of any model or other features).
- lowInformation logical. Whether the feature has too few values to be informative.
- uniqueCount numeric. The number of unique values in the feature.
- naCount numeric. The number of missing values in the feature.
- dateFormat character. The format of the feature if it is date-time feature.
- projectId character. Character id of the project the feature belongs to.
- max. The maximum value in the dataset, formatted in the same format as the data.
- min. The minimum value in the dataset, formatted in the same format as the data.
- mean. The arithmetic mean of the dataset, formatted in the same format as the data.
- median. The median of the dataset, formatted in the same format as the data.
- stdDev. The standard deviation of the dataset, formatted in the same format as the data.
- timeSeriesEligible logical. Whether this feature can be used as the datetime partition column in a time series project.
- timeSeriesEligibilityReason character. Why the feature is ineligible for the datetime partition column in a time series project, "suitable" when it is eligible.
- crossSeriesEligible logical. Whether the cross series group by column is eligible for cross-series modeling. Will be NULL if no cross series group by column is used.

- crossSeriesEligibilityReason character. The type of cross series eligibility (or ineligibility).
- timeStep numeric. For time-series eligible features, a positive integer determining the interval at which windows can be specified. If used as the datetime partition column on a time series project, the feature derivation and forecast windows must start and end at an integer multiple of this value. NULL for features that are not time series eligible.
- timeUnit character. For time series eligible features, the time unit covered by a single time step, e.g. "HOUR", or NULL for features that are not time series eligible.
- targetLeakage character. Whether a feature is considered to have target leakage or not. A value of "SKIPPED_DETECTION" indicates that target leakage detection was not run on the feature.
- keySummary data.frame. Optional. Descriptive statistics for this feature, iff it is a summarized categorical feature. This data.frame contains:
 - key. The name of the key.
 - summary. Descriptive statistics for this key, including:
 - * max. The maximum value in the dataset.
 - * min. The minimum value in the dataset.
 - * mean. The arithmetic mean of the dataset.
 - * median. The median of the dataset.
 - * stdDev. The standard deviation of the dataset.
 - * pctRows. The percentage of rows (from the EDA sample) in which this key occurs.

See Also

Other feature functions: [GetFeatureInfo\(\)](#), [ListModelFeatures\(\)](#), [as.dataRobotFeatureInfo\(\)](#)

Examples

```
## Not run:
projectId <- "59a5af20c80891534e3c2bde"
ListFeatureInfo(projectId)

## End(Not run)
```

ListFeaturelists

Retrieve all featurelists associated with a project

Description

This function returns an S3 object of class listOfFeaturelists that describes all featurelists (i.e., lists of modeling variables) available for the project specified by the project parameter. This list may be converted to a dataframe with the `as.data.frame` method for objects of class listOfFeaturelists.

Usage

```
ListFeaturelists(project)
```

Arguments

project character. Either (1) a character string giving the unique alphanumeric identifier for the project, or (2) a list containing the element `projectId` with this identifier.

Value

An S3 object of class 'listOfFeaturelists', which is a list of dataframes: each element of the list corresponds to one featurelist associated with the project, and each dataframe has one row and the following four columns:

- `featurelistId`. Unique alphanumeric identifier for the featurelist.
- `projectId`. Unique alphanumeric project identifier.
- `features`. Comma-separated character string listing the variables included in the featurelist.
- `name`. Character string giving the name of the featurelist.

Examples

```
## Not run:
projectId <- "59a5af20c80891534e3c2bde"
ListFeaturelists(projectId)

## End(Not run)
```

ListJobs

Retrieve information about jobs

Description

This function requests information about the jobs that go through the DataRobot queue.

Usage

```
ListJobs(project, status = NULL)
```

Arguments

project character. Either (1) a character string giving the unique alphanumeric identifier for the project, or (2) a list containing the element `projectId` with this identifier.

status character. The status of the desired jobs: one of `JobStatus$Queue`, `JobStatus$InProgress`, or `JobStatus$Error`. If `NULL` (default), queued and inprogress jobs are returned.

Value

A list of lists with one element for each job. The named list for each job contains:

- status character. Model job status; an element of JobStatus, e.g. JobStatus\$Queue.
- url character. URL to request more detail about the job.
- id character. The job id.
- jobType character. See JobType for valid values.
- projectId character. The project that contains the model.
- isBlocked logical. If TRUE, the job is blocked (cannot be executed) until its dependencies are resolved.

Examples

```
## Not run:
projectId <- "59a5af20c80891534e3c2bde"
ListJobs(projectId)

## End(Not run)
```

ListLiftCharts	<i>Retrieve lift chart data for a model for all available data partitions (see DataPartition)</i>
----------------	---

Description

Retrieve lift chart data for a model for all available data partitions (see DataPartition)

Usage

```
ListLiftCharts(model, fallbackToParentInsights = FALSE)
```

Arguments

model dataRobotModel. A DataRobot model object like that returned by GetModel.
fallbackToParentInsights logical. If TRUE, this will return the lift chart data for the model's parent if the lift chart is not available for the model and the model has a parent model.

Value

data.frame with the following components:

- binWeight. Numeric: weight of the bin. For weighted projects, the sum of the weights of all rows in the bin; otherwise, the number of rows in the bin.
- actual. Numeric: sum of actual target values in bin.
- predicted. Numeric: sum of predicted target values in bin.

Examples

```
## Not run:
projectId <- "59a5af20c80891534e3c2bde"
modelId <- "5996f820af07fc605e81ead4"
model <- GetModel(projectId, modelId)
ListLiftCharts(model)

## End(Not run)
```

ListModelFeatures	<i>Returns the list of features (i.e., variables) on which a specified model is based</i>
-------------------	---

Description

This function returns the list of features (typically, response variable and raw covariates) used in building the model specified by model, an S3 object of class 'dataRobotModel'.

Usage

```
ListModelFeatures(model)
```

Arguments

model An S3 object of class dataRobotModel like that returned by the function GetModel, or each element of the list returned by the function ListModels.

Value

A character vector of feature names, with one component for each model feature.

See Also

Other feature functions: [GetFeatureInfo\(\)](#), [ListFeatureInfo\(\)](#), [as.dataRobotFeatureInfo\(\)](#)

Examples

```
## Not run:
modelId <- "5996f820af07fc605e81ead4"
ListModelFeatures(modelId)

## End(Not run)
```

`ListModelingFeaturelists`*Retrieve all modeling featurelists associated with a project*

Description

In time series projects, a new set of modeling features is created after setting the partitioning options. These features are automatically derived from those in the project's dataset and are the features used for modeling. Modeling features are only accessible once the target and partitioning options have been set. In projects that don't use time series modeling, once the target has been set, ModelingFeaturelists and Featurelists will behave the same.

Usage

```
ListModelingFeaturelists(project)
```

Arguments

`project` character. Either (1) a character string giving the unique alphanumeric identifier for the project, or (2) a list containing the element `projectId` with this identifier.

Value

An S3 object of class 'listOfFeaturelists', which is a list of dataframes: each element of the list corresponds to one featurelist associated with the project, and each dataframe has one row and the following four columns:

- `featurelistId`. Unique alphanumeric identifier for the featurelist.
- `projectId`. Unique alphanumeric project identifier.
- `features`. Comma-separated character string listing the variables included in the featurelist.
- `name`. Character string giving the name of the featurelist.

Examples

```
## Not run:  
projectId <- "59a5af20c80891534e3c2bde"  
ListModelingFeaturelists(projectId)  
  
## End(Not run)
```

ListModelJobs

Retrieve status of Autopilot modeling jobs that are not complete

Description

This function requests information on DataRobot Autopilot modeling tasks that are not complete, for one of three reasons: the task is running and has not yet completed; the task is queued and has not yet been started; or, the task has terminated due to an error.

Usage

```
ListModelJobs(project, status = NULL)
```

Arguments

project	character. Either (1) a character string giving the unique alphanumeric identifier for the project, or (2) a list containing the element projectId with this identifier.
status	character. The status of the desired jobs: one of JobStatus\$Queue, JobStatus\$InProgress, or JobStatus\$Error. If NULL (default), queued and inprogress jobs are returned.

Details

The jobStatus variable specifies which of the three groups of modeling tasks is of interest. Specifically, if jobStatus has the value 'inprogress', the request returns information about modeling tasks that are running but not yet complete; if jobStatus has the value 'queue', the request returns information about modeling tasks that are scheduled to run but have not yet started; if jobStatus has the value 'error', the request returns information about modeling tasks that have terminated due to an error. By default, jobStatus is NULL, which means jobs with status "inprogress" or "queue" are returned, but not those with status "error".

Value

A list of lists with one element for each modeling task in the group being queried; if there are no tasks in the class being queried, an empty list is returned. If the group is not empty, a list is returned with the following nine elements:

- status. Prediction job status; an element of JobStatus, e.g. JobStatus\$Queue.
- processes. List of character vectors describing any preprocessing applied.
- projectId. Character string giving the unique identifier for the project.
- modelId character. The unique identifier for the related model.
- samplePct. Numeric: the percentage of the dataset used for model building.
- modelType. Character string specifying the model type.
- modelCategory. Character string: what kind of model this is - 'prime' for DataRobot Prime models, 'blend' for blender models, and 'model' for other models.

- featurelistId. Character string: id of the featurelist used in fitting the model.
- blueprintId. Character string: id of the DataRobot blueprint on which the model is based.
- modelJobId. Character: id of the job.
- isBlocked logical. If TRUE, the job is blocked (cannot be executed) until its dependencies are resolved.

Examples

```
## Not run:
projectId <- "59a5af20c80891534e3c2bde"
ListModelJobs(projectId)

## End(Not run)
```

ListModelRecommendations

Retrieve information about model recommendation made by DataRobot for your project.

Description

DataRobot will help pick out a few models from your project that meet certain criteria, such as being the most accurate model or being a model that captures a good blend of both prediction speed and model accuracy.

Usage

```
ListModelRecommendations(project)
```

Arguments

project character. Either (1) a character string giving the unique alphanumeric identifier for the project, or (2) a list containing the element projectId with this identifier.

Value

A list containing information about each recommendation made by DataRobot, containing:

- modelId character. The model ID of the recommended model.
- projectId character. The project ID of the project the recommendations were made for.
- recommendationType character. The type of recommendation being made.

Examples

```
## Not run:
projectId <- "5984b4d7100d2b31c1166529"
ListModelRecommendations(projectId)

## End(Not run)
```

ListModels*Retrieve all available model information for a DataRobot project*

Description

This function requests the model information for the DataRobot project specified by the project argument, described under Arguments. This parameter may be obtained in several ways, including: (1), from the projectId element of the list returned by ListProjects; (2), as the object returned by the GetProject function; or (3), as the list returned by the SetupProject function. The function returns an S3 object of class 'listOfModels'.

Usage

```
ListModels(project, orderBy = NULL, filter = NULL)
```

Arguments

project	character. Either (1) a character string giving the unique alphanumeric identifier for the project, or (2) a list containing the element projectId with this identifier.
orderBy	character. Optional. A vector of keys to order the list by. You can order by metric or samplePct. If the sort attribute is preceded by a hyphen, models will be sorted in descending order, otherwise in ascending order. Multiple sort attributes can be included as a comma-delimited string or in a vector.
filter	list. Optional. A named list of parameters to search a model by, such as name, samplePct, or isStarred.

Value

An S3 object of class listOfModels, which may be characterized using R's generic summary function or converted to a dataframe with the as.data.frame method.

Examples

```
## Not run:
projectId <- "59a5af20c80891534e3c2bde"
ListModels(projectId)
ListModels(projectId, orderBy=c("samplePct", "-metric"))
ListModels(projectId, filter=list("sample_pct_gt" = 64, "name" = "Ridge"))
ListModels(projectId, filter=list("isStarred" = TRUE))

## End(Not run)
```

`ListPredictionDatasets`*Retrieve all prediction datasets associated with a project*

Description

This function returns an S3 object of class `listDataRobotPredictionDataset` that describes all prediction datasets available for the project specified by the `project` parameter. This list may be converted to a dataframe with the `as.data.frame` method for objects of class `listDataRobotPredictionDataset`.

Usage

```
ListPredictionDatasets(project)
```

Arguments

`project` character. Either (1) a character string giving the unique alphanumeric identifier for the project, or (2) a list containing the element `projectId` with this identifier.

Value

An S3 object of class `'listDataRobotPredictionDataset'`, which is a list of dataframes: each element of the list corresponds to one prediction dataset associated with the project, and each dataframe has one row and the following columns:

- `id` character. The unique alphanumeric identifier for the dataset.
- `numColumns` numeric. Number of columns in dataset.
- `name` character. Name of dataset file.
- `created` character. time of upload.
- `projectId` character. String giving the unique alphanumeric identifier for the project.
- `numRows` numeric. Number of rows in dataset.
- `forecastPoint`. The point relative to which predictions will be generated, based on the forecast window of the project. Only specified in time series projects, otherwise will be `NULL`.

Examples

```
## Not run:  
projectId <- "59a5af20c80891534e3c2bde"  
ListPredictionDatasets(projectId)  
  
## End(Not run)
```

`ListPredictionExplanationsMetadata`*Retrieve metadata for prediction explanations in specified project*

Description

Retrieve metadata for prediction explanations in specified project

Usage

```
ListPredictionExplanationsMetadata(  
  project,  
  modelId = NULL,  
  limit = NULL,  
  offset = NULL  
)
```

Arguments

<code>project</code>	character. Either (1) a character string giving the unique alphanumeric identifier for the project, or (2) a list containing the element <code>projectId</code> with this identifier.
<code>modelId</code>	character. Optional. If specified, only prediction explanations computed for this model will be returned.
<code>limit</code>	integer. Optional. At most this many results are returned, default: no limit
<code>offset</code>	integer. This many results will be skipped, default: 0

Value

List of metadata for all prediction explanations in the project. Each element of list is metadata for one prediction explanations (for format see `GetPredictionExplanationsMetadata`).

Examples

```
## Not run:  
projectId <- "59a5af20c80891534e3c2bde"  
ListPredictionExplanationsMetadata(projectId)  
  
## End(Not run)
```

ListPredictions	<i>Fetch all computed predictions for a project.</i>
-----------------	--

Description

This function itemizes the predictions available for a given project, model, and/or dataset. Note that this function does not actually return the predictions. Use `GetPredictions(projectId, predictionId)` to get the predictions for a particular set of predictions.

Usage

```
ListPredictions(project, modelId = NULL, datasetId = NULL)
```

Arguments

<code>project</code>	character. Either (1) a character string giving the unique alphanumeric identifier for the project, or (2) a list containing the element <code>projectId</code> with this identifier.
<code>modelId</code>	numeric. Optional. Filter returned predictions to only be predictions made against the model specified by this model ID.
<code>datasetId</code>	numeric. Optional. Filter returned predictions to only be predictions made against the prediction dataset specified by this dataset ID.

Value

A data.frame specifying:

- `projectId` character. The ID of the project the predictions were made in.
- `datasetId` character. The dataset ID of the dataset used to make predictions
- `modelId` character. The model ID of the model used to make predictions.
- `predictionId` character. The unique ID corresponding to those predictions. Use `GetPredictions(projectId, predictionId)` to fetch the individual predictions.
- `includesPredictionIntervals` logical. Whether or not the predictions include prediction intervals. See `Predict` for details.
- `predictionIntervalsSize` integer. Optional. The size, in percent, of prediction intervals or `NULL` if there are no intervals. See `Predict` for details.

Examples

```
## Not run:  
projectId <- "59a5af20c80891534e3c2bde"  
predictions <- ListPredictions(projectId)  
  
## End(Not run)
```

ListPredictionServers *List all available prediction servers.*

Description

List all available prediction servers.

Usage

```
ListPredictionServers()
```

Value

A list of DataRobotPredictionServer objects containing:

- id character. The ID of the prediction server.
- url character. The URL of the prediction server.
- dataRobotKey character. The key used to access the prediction server.

Examples

```
## Not run:
  ListPredictionServers()

## End(Not run)
```

ListPrimeFiles *List all downloadable code files from DataRobot Prime for the project*

Description

Training a model using a ruleset is a necessary prerequisite for being able to download the code for a ruleset.

Usage

```
ListPrimeFiles(project, parentModelId = NULL, modelId = NULL)
```

Arguments

project	character. Either (1) a character string giving the unique alphanumeric identifier for the project, or (2) a list containing the element projectId with this identifier.
parentModelId	numeric. Optional. Filter for only those prime files approximating this parent model.
modelId	numeric. Optional. Filter for only those prime files with code for this prime model.

Value

List of lists. Each element of the list corresponds to one Prime file available to download. The elements of this list have the same format as the return value of GetPrimeFile.

Examples

```
## Not run:  
projectId <- "59a5af20c80891534e3c2bde"  
ListPrimeFiles(projectId)
```

```
## End(Not run)
```

ListPrimeModels	<i>Retrieve information about all DataRobot Prime models for a DataRobot project</i>
-----------------	--

Description

This function requests the DataRobot Prime models information for the DataRobot project specified by the project argument, described under Arguments.

Usage

```
ListPrimeModels(project)
```

Arguments

project character. Either (1) a character string giving the unique alphanumeric identifier for the project, or (2) a list containing the element projectId with this identifier.

Details

The function returns data.frame containing information about each DataRobot Prime model in a project (one row per Prime model)

Value

data.frame (classed as dataRobotPrimeModels) containing information about each DataRobot Prime model in a project (one row per Prime model).

Examples

```
## Not run:  
projectId <- "59a5af20c80891534e3c2bde"  
ListPrimeModels(projectId)
```

```
## End(Not run)
```

ListProjects

Retrieve a list of all DataRobot projects

Description

This function returns an S3 object of class `projectSummaryList` that describes all (optionally filtered) DataRobot modeling projects available to the user. This list may be converted into a dataframe with the `as.data.frame` method for this class of S3 objects.

Usage

```
ListProjects(filter = NULL, limit = 1000, offset = 0)
```

Arguments

<code>filter</code>	list. Optional. A named list that can be used to specify various filters. Currently 'projectName' is supported which will filter returned projects for projects with names containing the specified string.
<code>limit</code>	integer. Optional. At most this many results are returned, default: 1000
<code>offset</code>	integer. Optional. This many results will be skipped, default: 0

Value

An S3 object of class 'projectSummaryList', consisting of the following elements:

- `projectId`. List of character strings giving the unique DataRobot identifier for each project.
- `projectName`. List of character strings giving the user-supplied project names.
- `fileName`. List of character strings giving the name of the modeling dataset for each project.
- `stage`. List of character strings specifying each project's Autopilot stage (e.g., 'aim' is necessary to set target). Use `ProjectStage` to get a list of options.
- `autopilotMode`. List of integers specifying the Autopilot mode (0 = fully automatic, 1 = semi-automatic, 2 = manual).
- `created`. List of character strings giving the project creation time and date.
- `target`. List of character strings giving the name of the target variable for each project.
- `metric`. List of character strings identifying the fitting metric optimized for each project.
- `partition`. Dataframe with one row for each project and 12 columns specifying partitioning details.
- `advancedOptions`. Dataframe with one row for each project and 4 columns specifying values for advanced option parameters.
- `positiveClass`. Character string identifying the positive target class for binary classification projects.
- `maxTrainPct`. The maximum percentage of the project dataset that can be used without going into the validation data or being too large to submit any blueprint for training a project.

- `maxTrainRows`. The maximum number of rows that can be trained on without going into the validation data or being too large to submit any blueprint for training.
- `holdoutUnlocked`. Logical flag indicating whether holdout subset results have been computed.
- `targetType`. Character string giving the type of modeling project (e.g., regression or binary classification).

Examples

```
## Not run:  
ListProjects()  
ListProjects(filter = list("projectName" = "TimeSeries"))  
  
## End(Not run)
```

ListRatingTableModels *Retrieve information about all DataRobot models with a rating table.*

Description

Retrieve information about all DataRobot models with a rating table.

Usage

```
ListRatingTableModels(project)
```

Arguments

`project` character. Either (1) a character string giving the unique alphanumeric identifier for the project, or (2) a list containing the element `projectId` with this identifier.

Value

data.frame containing information about each model with a rating table in a project (one row per model with a rating table).

Examples

```
## Not run:  
projectId <- "5984b4d7100d2b31c1166529"  
ListRatingTableModels(projectId)  
  
## End(Not run)
```

ListRatingTables *Retrieve information about all rating tables.*

Description

Retrieve information about all rating tables.

Usage

```
ListRatingTables(project)
```

Arguments

project character. Either (1) a character string giving the unique alphanumeric identifier for the project, or (2) a list containing the element projectId with this identifier.

Value

data.frame containing information about each rating table in a project (one row per model with a rating table).

Examples

```
## Not run:
projectId <- "5984b4d7100d2b31c1166529"
ListRatingTables(projectId)

## End(Not run)
```

ListResidualsCharts *Retrieve residuals chart data for a model for all available data partitions (see DataPartition). This chart is only available for regression models that are not time-aware.*

Description

Retrieve residuals chart data for a model for all available data partitions (see DataPartition). This chart is only available for regression models that are not time-aware.

Usage

```
ListResidualsCharts(model, fallbackToParentInsights = FALSE)
```

Arguments

- `model` `dataRobotModel`. A DataRobot model object like that returned by `GetModel`. The model must be a regression model that is not time-aware.
- `fallbackToParentInsights` logical. If TRUE, this will return the residuals chart data for the model's parent if the residuals chart is not available for the model and the model has a parent model.

Value

list of objects containing residuals chart data for all available data partitions. See `DataPartition` for details. Each object has the following components:

- `residualMean`. Numeric: the arithmetic mean of the predicted value minus the actual value over the downsampled dataset.
- `coefficientOfDetermination`. Numeric: aka the r-squared value. This value is calculated over the downsampled output, not the full input.
- `data`. `data.frame`: The rows of chart data in [actual, predicted, residual, row number] form. If the row number was not available at the time of model creation, the row number will be null.
- `histogram`. list: Data to plot a histogram of residual values. Each object contains:
 - `intervalStart`. Numeric: Start value for an interval, inclusive.
 - `intervalEnd`. Numeric: End value for an interval, exclusive for all but the last interval.
 - `occurrences`. Integer: the number of times the predicted value fits within the interval.

Examples

```
## Not run:
projectId <- "59a5af20c80891534e3c2bde"
modelId <- "5996f820af07fc605e81ead4"
model <- GetModel(projectId, modelId)
ListResidualsCharts(model)

## End(Not run)
```

<code>ListRocCurves</code>	<i>Retrieve ROC curve data for a model for all available data partitions (see <code>DataPartition</code>)</i>
----------------------------	---

Description

Retrieve ROC curve data for a model for all available data partitions (see `DataPartition`)

Usage

```
ListRocCurves(model, fallbackToParentInsights = FALSE)
```

Arguments

`model` `dataRobotModel`. A DataRobot model object like that returned by `GetModel`.
`fallbackToParentInsights` logical. If TRUE, this will return the lift chart data for the model's parent if the lift chart is not available for the model and the model has a parent model.

Value

list of lists where each list is renamed as the data partitions source and returns the following components:

- `source`. Character: data partitions for which ROC curve data is returned (see `DataPartition`).
- `negativeClassPredictions`. Numeric: example predictions for the negative class for each data partition source.
- `rocPoints`. `data.frame`: each row represents pre-calculated metrics (`accuracy`, `f1_score`, `false_negative_score`, `true_negative_score`, `true_positive_score`, `false_positive_score`, `true_negative_rate`, `false_positive_rate`, `true_positive_rate`, `matthews_correlation_coefficient`, `positive_predictive_value`, `negative_predictive_value`, `threshold`) associated with different thresholds for the ROC curve.
- `positiveClassPredictions`. Numeric: example predictions for the positive class for each data partition source.

Examples

```
## Not run:
projectId <- "59a5af20c80891534e3c2bde"
modelId <- "5996f820af07fc605e81ead4"
model <- GetModel(projectId, modelId)
ListRocCurves(model)

## End(Not run)
```

`ListSharingAccess` *List information about which users have what kinds of access to a shared object.*

Description

Note that currently only data sources and data stores can be shared with this API.

Usage

```
ListSharingAccess(object, batchSize = NULL)
```

Arguments

`object` object. The shared object to inspect access for.
`batchSize` integer. The number of requests per page to expect.

Value

A list specifying information on access:

- username character. The name of the user with access.
- userId character. The ID of the user with access.
- role character. The type of access granted. See `SharingRole` for options.
- canShare logical. Whether the user can further share access.

Examples

```
## Not run:  
dataStoreId <- "5c1303269300d900016b41a7"  
dataStore <- GetDataStore(dataStoreId)  
ListSharingAccess(dataStore)  
  
## End(Not run)
```

ListStarredModels	<i>List all the starred models in a project.</i>
-------------------	--

Description

Star models and add them to this list using `StarModel` or `ToggleStarForModel`. Unstar models and remove them from this list using `UnstarModel` or `ToggleStarForModel`.

Usage

```
ListStarredModels(project, orderBy = NULL)
```

Arguments

project	character. Either (1) a character string giving the unique alphanumeric identifier for the project, or (2) a list containing the element <code>projectId</code> with this identifier.
orderBy	character. Optional. A vector of keys to order the list by. You can order by <code>metric</code> or <code>samplePct</code> . If the sort attribute is preceded by a hyphen, models will be sorted in descending order, otherwise in ascending order. Multiple sort attributes can be included as a comma-delimited string or in a vector.

Value

An S3 object of class `listOfModels`, which may be characterized using R's generic summary function or converted to a dataframe with the `as.data.frame` method.

Examples

```
## Not run:
  projectId <- "59a5af20c80891534e3c2bde"
  ListStarredModels(projectId)

## End(Not run)
```

ListTrainingPredictions

Retrieve information about all training prediction datasets in a project.

Description

Retrieve information about all training prediction datasets in a project.

Usage

```
ListTrainingPredictions(project)
```

Arguments

project character. Either (1) a character string giving the unique alphanumeric identifier for the project, or (2) a list containing the element `projectId` with this identifier.

Value

data.frame containing information about each training prediction.

Examples

```
## Not run:
  projectId <- "5984b4d7100d2b31c1166529"
  ListTrainingPredictions(projectId)

## End(Not run)
```

ListTransferableModels

Retrieve information about all imported models This function returns a data.frame that describes all imported models

Description

Retrieve information about all imported models This function returns a data.frame that describes all imported models

Usage

```
ListTransferableModels(limit = NULL, offset = NULL)
```

Arguments

limit	integer. The number of records to return. The server will use a (possibly finite) default if not specified.
offset	integer. The number of records to skip.

Value

A data.frame describing uploaded transferable model with the following components:

- note. Character string Manually added note about this imported model.
- datasetName. Character string Filename of the dataset used to create the project the model belonged to.
- modelName. Character string Model type describing the model generated by DataRobot.
- displayName. Character string Manually specified human-readable name of the imported model.
- target. Character string The target of the project the model belonged to prior to export.
- projectName. Character string Name of the project the model belonged to prior to export.
- importedByUsername. Character string Username of the user who imported the model.
- importedAt. Character string The time the model was imported.
- version. Numeric Project version of the project the model belonged to.
- projectId. Character id of the project the model belonged to prior to export.
- featurelistName. Character string Name of the featurelist used to train the model.
- createdByUsername. Character string Username of the user who created the model prior to export.
- importedById. Character string id of the user who imported the model.
- id. Character string id of the import.
- createdById. Character string id of the user who created the model prior to export.
- modelId. Character string original id of the model prior to export.
- originUrl. Character string URL.

See Also

Other Transferable Model functions: [DeleteTransferableModel\(\)](#), [DownloadTransferableModel\(\)](#), [GetTransferableModel\(\)](#), [RequestTransferableModel\(\)](#), [UpdateTransferableModel\(\)](#), [UploadTransferableModel\(\)](#)

Examples

```
## Not run:
  ListTransferableModels()

## End(Not run)
```

MakeDataRobotRequest *Make a HTTP request*

Description

Make a HTTP request

Usage

```
MakeDataRobotRequest(
  requestMethod,
  routeString,
  addUrl = TRUE,
  returnRawResponse = TRUE,
  as = "json",
  simplifyDataFrame = TRUE,
  body = NULL,
  query = NULL,
  timeout = DefaultHTTPTimeout,
  encode = NULL,
  followLocation = TRUE,
  filename = NULL,
  stopOnError = TRUE
)
```

Arguments

requestMethod function. A function from httr (e.g., 'httr::GET', 'httr::POST') to use.

routeString character. The path to make the request on.

addUrl logical. Should the endpoint be prepended to the routeString? (Default TRUE).

returnRawResponse logical. Whether to return the raw httr response object (as opposed to post processing and returning the content of that object, which is the default.)

as character. What should the resulting data be interpreted as? (default "json"). Use "file" to download as a file (see filename).

simplifyDataFrame	logical. Whether to invoke <code>jsonlite::simplifyDataFrame</code> .
body	list. The body of the request for POST.
query	list. The query parameters for GET.
timeout	numeric. How many seconds before the request times out?
encode	character. What should the body be encoded as for the JSON request?
followLocation	logical. Should HTTR follow the location if provided? (Default TRUE).
filename	character. The path of the file to download to, if it is a download request.
stopOnError	logical. If there is an error, should it be raised as a fatal R error? (Default TRUE).

ModelCapability	<i>Model capabilities</i>
-----------------	---------------------------

Description

For usage, see ‘GetModelCapabilities’.

Usage

```
ModelCapability
```

Format

An object of class `list` of length 12.

ModelReplacementReason	<i>Model replacement reason</i>
------------------------	---------------------------------

Description

Model replacement reason

Usage

```
ModelReplacementReason
```

Format

An object of class `list` of length 6.

MulticlassDeploymentAccuracyMetric

Accuracy metrics for multiclass deployments

Description

Added in DataRobot API 2.23.

Usage

MulticlassDeploymentAccuracyMetric

Format

An object of class list of length 3.

`parseRFC3339Timestamp` *parseRFC3339Timestamp*

Description

The DataRobot APIs returns dates in RFC 3339 format.

Usage

`parseRFC3339Timestamp(timestampstring)`

Arguments

`timestampstring`

character. Timestamp in RFC 3339 format.

Value

The input timestamp as a POSIXt

See Also

Other API datetime functions: [RFC3339DateTimeFormat](#), [formatRFC3339Timestamp\(\)](#), [transformRFC3339Period\(\)](#), [validateReportingPeriodTime\(\)](#)

`PauseQueue`*Pause the DataRobot modeling queue*

Description

This function pauses the DataRobot modeling queue for a specified project

Usage

```
PauseQueue(project)
```

Arguments

`project` character. Either (1) a character string giving the unique alphanumeric identifier for the project, or (2) a list containing the element `projectId` with this identifier.

Examples

```
## Not run:  
projectId <- "59a5af20c80891534e3c2bde"  
PauseQueue(projectId)  
  
## End(Not run)
```

`PeriodicityMaxTimeStep`*Periodicity max time step*

Description

Periodicity max time step

Usage

```
PeriodicityMaxTimeStep
```

Format

An object of class `numeric` of length 1.

PeriodicityTimeUnits *Periodicity time units*

Description

Same as time units, but kept for backwards compatibility.

Usage

PeriodicityTimeUnits

Format

An object of class `list` of length 8.

plot.listOfModels *Plot method for DataRobot S3 objects of class listOfModels*

Description

Method for R's generic plot function for DataRobot S3 objects of class `listOfModels`. This function generates a horizontal barplot as described under Details.

Usage

```
## S3 method for class 'listOfModels'  
plot(  
  x,  
  y,  
  metric = NULL,  
  pct = NULL,  
  selectRecords = NULL,  
  orderDecreasing = NULL,  
  textSize = 0.8,  
  textColor = "black",  
  borderColor = "blue",  
  xpos = NULL,  
  ...  
)
```

Arguments

x	S3 object of class <code>listOfModels</code> to be plotted.
y	Not used; included for conformance with <code>plot()</code> generic function parameter requirements.
metric	character. Optional. Defines the metric to be used in constructing the barplot. If <code>NULL</code> (the default), the validation set value for the project fitting metric is used; otherwise, this value must name one of the elements of the metrics list associated with each model in <code>x</code> .
pct	integer. Optional. Specifies a <code>samplePct</code> value used in selecting models to include in the barplot summary. If <code>NULL</code> (the default), all project models are included. Note, however, that this list of models is intersected with the list of models defined by the <code>selectRecords</code> parameter, so that only those models identified by both <code>selectRecords</code> and <code>pct</code> appear in the plot.
selectRecords	integer. Optional. A vector that specifies the individual elements of the list <code>x</code> to be included in the barplot summary. If <code>NULL</code> (the default), all models are included. Note, however, that this list of models is intersected with the list of models defined by the <code>pct</code> parameter, so that only those models identified by both <code>selectRecords</code> and <code>pct</code> appear in the plot.
orderDecreasing	logical. Optional. If <code>TRUE</code> , the barplot is built from the bottom up in decreasing order of the metric values; if <code>FALSE</code> , the barplot is built in increasing order of metric values. The default is <code>NULL</code> , which causes the plot to be generated in the order in which the models appear in the list <code>x</code> .
textSize	numeric. Optional. Multiplicative scaling factor for the model name labels on the barplot.
textColor	character. Optional. If character, this parameter specifies the text color used in labelling all models in the barplot; if a character vector, it specifies one color for each model in the plot.
borderColor	character. Optional. Specifies the border color for all bars in the barplot, surrounding a transparent background.
xpos	numeric. Optional. Defines the horizontal position of the center of all text labels on the plot. The default is <code>NULL</code> , which causes all text to be centered in the plot; if <code>xpos</code> is a single number, all text labels are centered at this position; if <code>xpos</code> is a vector, it specifies one center position for each model in the plot.
...	list. Optional. Additional named parameters to be passed to R's <code>barplot</code> function used in generating the plot

Details

This function generates a horizontal barplot with one bar for each model characterized in the `'listOfModels'` object `x`. The length of each bar is specified by the value of `metric`; if this parameter is specified as `NULL` (the default), the project fitting metric is used, as determined by the `projectMetric` value from the first element of `x`. Text is added to each bar in the plot, centered at the position specified by the `xpos` parameter, based on the value of the `modelType` element of each model in the list `x`. The size and color of these text labels may be controlled with the `textSize` and `textColor`

parameters. The order in which these models appear on the plot is controlled by the choice of metric and the value of the orderDecreasing parameter, and subsets of the models appearing in the list x may be selected via the pct and selectRecords parameters.

Value

None. This function is called for its side-effect of generating a plot.

Examples

```
## Not run:
projectId <- "59a5af20c80891534e3c2bde"
plot(ListModels(projectId))

## End(Not run)
```

PostgreSQLdrivers	<i>PostgreSQL drivers</i>
-------------------	---------------------------

Description

This is a list that contains the valid values for PostgreSQL drivers.

Usage

```
PostgreSQLdrivers
```

Format

An object of class list of length 2.

Predict	<i>Retrieve model predictions</i>
---------	-----------------------------------

Description

This function can be used to predict with a particular model.

Usage

```
Predict(
  model,
  predictionDataset,
  classPrefix = "class_",
  maxWait = 600,
  forecastPoint = NULL,
  predictionsStartDate = NULL,
  predictionsEndDate = NULL,
  type = "response",
  includePredictionIntervals = FALSE,
  predictionIntervalsSize = NULL
)
```

Arguments

<code>model</code>	An S3 object of class <code>dataRobotModel</code> like that returned by the function <code>GetModel</code> , or each element of the list returned by the function <code>ListModels</code> .
<code>predictionDataset</code>	object. Either a dataframe of data to predict on or a <code>DataRobot</code> prediction dataset object of class <code>dataRobotPredictionDataset</code> .
<code>classPrefix</code>	character. For multiclass projects returning prediction probabilities, this prefix is prepended to each class in the header of the dataframe. Defaults to <code>"class_"</code> .
<code>maxWait</code>	integer. The maximum time (in seconds) to wait for the prediction job to complete.
<code>forecastPoint</code>	character. Optional. The point relative to which predictions will be generated, based on the forecast window of the project. Only specified in time series projects.
<code>predictionsStartDate</code>	datetime. Optional. Only specified in time series projects. The start date for bulk predictions. Note that this parameter is for generating historical predictions using the training data. This parameter should be provided in conjunction <code>predictionsEndDate</code> . Can't be provided with <code>forecastPoint</code> parameter.
<code>predictionsEndDate</code>	datetime. Optional. Only specified in time series projects. The end date for bulk predictions. Note that this parameter is for generating historical predictions using the training data. This parameter should be provided in conjunction <code>predictionsStartDate</code> . Can't be provided with <code>forecastPoint</code> parameter.
<code>type</code>	character. String specifying the type of response for binary classifiers; see <code>Details</code> .
<code>includePredictionIntervals</code>	logical. Optional. Should prediction intervals bounds should be part of predictions? Only available for time series projects. See <code>"Details"</code> for more info.
<code>predictionIntervalsSize</code>	numeric. Optional. Size of the prediction intervals, in percent. Only available for time series projects. See <code>"Details"</code> for more info.

Details

The contents of the return vector depends on the modeling task - binary classification, multiclass classification, or regression; whether or not the underlying data is time series, multiseried, cross-series, or not time series; and the value of the /codetype parameter. For non-time-series regression tasks, the type parameter is ignored and a vector of numerical predictions of the response variable is returned.

This function will error if the requested job has errored or if it has not completed within maxWait seconds.

See RequestPredictions and GetPredictions for more details.

Value

Vector of predictions, depending on the modeling task ("Binary", "Multiclass", or "Regression") and the value of the type parameter; see Details.

Examples

```
## Not run:
trainIndex <- sample(nrow(iris) * 0.7)
trainIris <- iris[trainIndex, ]
testIris <- iris[-trainIndex, ]
project <- StartProject(trainIris, "iris", target = "Petal_Width", wait = TRUE)
model <- GetRecommendedModel(project)
predictions <- Predict(model, testIris)

# Or, if prediction intervals are desired (datetime only)
model <- GetRecommendedModel(datetimeProject)
predictions <- Predict(model,
                      dataset,
                      includePredictionIntervals = TRUE,
                      predictionIntervalsSize = 100,
                      type = "raw")

## End(Not run)
```

predict.dataRobotModel

Retrieve model predictions using R's default S3 predict method.

Description

Retrieve model predictions using R's default S3 predict method.

Usage

```
## S3 method for class 'dataRobotModel'
predict(object, ...)
```

Arguments

object dataRobotModel. The object of class dataRobotModel to predict with.
 ... list. Additional arguments to pass to Predict

See Also

Predict

Examples

```
## Not run:
trainIndex <- sample(nrow(iris) * 0.7)
trainIris <- iris[trainIndex, ]
testIris <- iris[-trainIndex, ]
project <- StartProject(trainIris, "iris", target = "Petal_Width", wait = TRUE)
model <- GetRecommendedModel(project)
predictions <- predict(model, testIris)

## End(Not run)
```

PredictionDatasetFromAsyncUrl

Retrieve prediction dataset info from the dataset creation URL

Description

If dataset creation times out, the error message includes a URL corresponding to the creation task. That URL can be passed to this function (which will return the completed dataset info details when finished) to resume waiting for creation.

Usage

```
PredictionDatasetFromAsyncUrl(asyncUrl, maxWait = 600)
```

Arguments

asyncUrl The temporary status URL
 maxWait The maximum time to wait (in seconds) for creation before aborting.

PrimeLanguage	<i>Prime Language</i>
---------------	-----------------------

Description

This is a list that contains the valid values for downloadable code programming languages.

Usage

PrimeLanguage

Format

An object of class list of length 2.

ProjectFromJobResponse

Retrieve a project from the job response, which has a project-creation URL

Description

If project creation times out, the error message includes a URL corresponding to the project creation task. That URL can be passed to this function (which will return the completed project details when finished) to resume waiting for project creation.

Usage

ProjectFromJobResponse(jobResponse, maxWait = 600)

Arguments

jobResponse	An HTTP POST response that includes a redirect to the temporary status URL.
maxWait	The maximum time to wait (in seconds) for project creation before aborting.

ProjectStage	<i>Project stage</i>
--------------	----------------------

Description

Project stage

Usage

ProjectStage

Format

An object of class list of length 4.

RecommendedModelType	<i>Recommended model type values</i>
----------------------	--------------------------------------

Description

MostAccurate retrieves the most accurate model based on validation or cross-validation results. In most cases, this will be a blender model.

Usage

RecommendedModelType

Format

An object of class list of length 3.

Details

FastAccurate retrieves the most accurate individual model (not blender) that passes set guidelines for prediction speed. If no models meet the prediction speed guideline, this will not retrieve anything.

RecommendedForDeployment retrieves the most accurate individual model. This model will have undergone specific pre-preparations to be deployment ready. See GetModelRecommendation for details.

ReformatMetrics *replace NULL in \$metrics list elements with NA*

Description

replace NULL in \$metrics list elements with NA

Usage

```
ReformatMetrics(metricsList)
```

Arguments

metricsList list. List of metrics to reformat.

RegressionDeploymentAccuracyMetric
Accuracy metrics for regression deployments

Description

Added in DataRobot API 2.18.

Usage

```
RegressionDeploymentAccuracyMetric
```

Format

An object of class list of length 12.

RenameRatingTable *Renames a rating table to a different name.*

Description

Renames a rating table to a different name.

Usage

```
RenameRatingTable(project, ratingTableId, ratingTableName)
```

Arguments

`project` character. Either (1) a character string giving the unique alphanumeric identifier for the project, or (2) a list containing the element `projectId` with this identifier.

`ratingTableId` character. The ID of the rating table.

`ratingTableName` character. The new name for the rating table.

Value

An S3 object of class `'dataRobotRatingTable'` summarizing all available information about the re-named rating table.

Examples

```
## Not run:
projectId <- "5984b4d7100d2b31c1166529"
ratingTableId <- "5984b4d7100d2b31c1166529"
RenameRatingTable(projectId, ratingTableId, "Renamed Table")

## End(Not run)
```

reorderColumns	<i>Reorder the columns in a data.frame</i>
----------------	--

Description

This function reorders columns in a `data.frame` without relying on `dplyr` or `data.table`. You only need to specify the columns that should be moved; all others will be slotted in the gaps. Invalid columns are ignored.

Usage

```
reorderColumns(df, vars)
```

Arguments

`df` `data.frame` with named columns.

`vars` integer. named vector where the names represent column names in `df` that should be moved. The value of each item is the new location of that column.

Value

A copy of the input `data.frame`, with columns rearranged per `vars`

Examples

```
{
  df <- data.frame(Time=c(1,2), In=c(2,3), Out=c(3,4), Files=c(4,5))
  datarobot::reorderColumns(df, c("In" = 3, "Time" = 4))
}
```

ReplaceDeployedModel *Replace a model in a deployment with another model.*

Description

Replace a model in a deployment with another model.

Usage

```
ReplaceDeployedModel(
  deploymentId,
  newModelId,
  replacementReason,
  maxWait = 600
)
```

Arguments

deploymentId	character. The ID of the deployment.
newModelId	character. The ID of the model to use in the deployment. This model will replace the old model. You can also pass a dataRobotModel object.
replacementReason	character. Optional. The reason for replacing the deployment. See ModelReplacementReason for a list of reasons.
maxWait	integer. How long to wait (in seconds) for the computation to complete before returning a timeout error? (Default 600 seconds)

Value

A DataRobotDeployment object containing:

- id character. The ID of the deployment.
- label character. The label of the deployment.
- description character. The description of the deployment.
- defaultPredictionServer list. Information on the default prediction server connected with the deployment. See ListPredictionServers for details.
- model dataRobotModel. The model associated with the deployment. See GetModel for details.

- capabilities list. Information on the capabilities of the deployment.
- predictionUsage list. Information on the prediction usage of the deployment.
- permissions list. User's permissions on the deployment.
- serviceHealth list. Information on the service health of the deployment.
- modelHealth list. Information on the model health of the deployment.
- accuracyHealth list. Information on the accuracy health of the deployment.

Examples

```
## Not run:
deploymentId <- "5e319d2e422fbd6b58a5edad"
newModelId <- "5996f820af07fc605e81ead4"
ReplaceDeployedModel(deploymentId, newModelId, ModelReplacementReason$Other)

## End(Not run)
```

RequestApproximation *Request an approximation of a model using DataRobot Prime*

Description

This function will create several rulesets that approximate the specified model. The code used in the approximation can be downloaded to be run locally. Currently only Python and Java downloadable code is available

Usage

```
RequestApproximation(project, modelId)
```

Arguments

project	character. Either (1) a character string giving the unique alphanumeric identifier for the project, or (2) a list containing the element projectId with this identifier.
modelId	character. Unique alphanumeric identifier for the model of interest.

Details

General workflow of creating and downloading Prime code may look like following: RequestApproximation - create several rulesets that approximate the specified model GetRulesets - list all rulesets created for the parent model RequestPrimeModel - create Prime model for specified ruleset (use one of rulesets return by GetRulesets) GetPrimeModelFromJobId - get PrimeModelId using JobId returned by RequestPrimeModel CreatePrimeCode - create code for one of available Prime models GetPrimeFileFromJobId - get PrimeFileId using JobId returned by CreatePrimeCode DownloadPrimeCode - download specified Prime code file

Value

job Id

Examples

```
## Not run:
projectId <- "59a5af20c80891534e3c2bde"
modelId <- "5996f820af07fc605e81ead4"
RequestApproximation(projectId, modelId)

## End(Not run)
```

RequestBlender	<i>Submit a job for creating blender model. Upon success, the new job will be added to the end of the queue.</i>
----------------	--

Description

This function requests the creation of a blend of several models in specified DataRobot project. The function also allows the user to specify method used for blending. This function returns an integer modelJobId value, which can be used by the GetBlenderModelFromJobId function to return the full blender model object.

Usage

```
RequestBlender(project, modelsToBlend, blendMethod)
```

Arguments

project	character. Either (1) a character string giving the unique alphanumeric identifier for the project, or (2) a list containing the element projectId with this identifier.
modelsToBlend	character. Vector listing the model Ids to be blended.
blendMethod	character. Parameter specifying blending method. See acceptable values within BlendMethods.

Value

An integer value that can be used as the modelJobId parameter in subsequent calls to the GetBlenderModelFromJobId function.

Examples

```
## Not run:
projectId <- "59a5af20c80891534e3c2bde"
modelsToBlend <- c("5996f820af07fc605e81ead4", "59a5ce3301e9f0296721c64c")
RequestBlender(projectId, modelsToBlend, "GLM")

## End(Not run)
```

RequestCrossSeriesDetection

Format a cross series with group by columns.

Description

Call this function to request the project be formatted as a cross series project with a group by column.

Usage

```
RequestCrossSeriesDetection(
  project,
  dateColumn,
  multiseriesIdColumns = NULL,
  crossSeriesGroupByColumns = NULL,
  maxWait = 600
)
```

Arguments

project	character. Either (1) a character string giving the unique alphanumeric identifier for the project, or (2) a list containing the element projectId with this identifier.
dateColumn	character. The name of the column containing the date that defines the time series.
multiseriesIdColumns	character. Optional. The Series ID to demarcate the series. If not specified, DataRobot will attempt to automatically infer the series ID.
crossSeriesGroupByColumns	character. Optional. Column to split a cross series into further groups. For example, if every series is sales of an individual product, the cross series group could be e product category with values like "men's clothing", "sports equipment", etc. Requires multiseries with useCrossSeries enabled.
maxWait	integer. The maximum time (in seconds) to wait for the model job to complete.

Details

Note that this function no longer needs to be called directly, but is called indirectly as a part of SetTarget (which itself is called indirectly as part of StartProject) when you pass a /code-crossSeriesGroupByColumn using CreateDatetimePartitionSpecification.

Value

A named list which contains:

- timeSeriesEligible logical. Whether or not the series is eligible to be used for time series.

- `crossSeriesEligible` logical. Whether or not the cross series group by column is eligible for cross-series modeling. Will be NULL if no cross series group by column is used.
- `crossSeriesEligibilityReason` character. The type of cross series eligibility (or ineligibility).
- `timeUnit` character. For time series eligible features, the time unit covered by a single time step, e.g. "HOUR", or NULL for features that are not time series eligible.
- `timeStep` integer. Expected difference in time units between rows in the data. Will be NULL for features that are not time series eligible.

See Also

Other MultiSeriesProject functions: [GetMultiSeriesProperties\(\)](#), [RequestMultiSeriesDetection\(\)](#), [as.dataRobotMultiSeriesProperties\(\)](#)

RequestFeatureImpact *Request Feature Impact to be computed.*

Description

This adds a Feature Impact job to the project queue.

Usage

```
RequestFeatureImpact(model, rowCount = NULL)
```

Arguments

<code>model</code>	character. The model for which you want to compute Feature Impact, e.g. from the list of models returned by <code>ListModels(project)</code> .
<code>rowCount</code>	numeric. The sample size to use for Feature Impact computation. It is possible to re-compute Feature Impact with a different row count.

Value

A job ID (character)

Examples

```
## Not run:
model <- ListModels(project)[[1]]
featureImpactJobId <- RequestFeatureImpact(model)
featureImpact <- GetFeatureImpactForJobId(project, featureImpactJobId)

## End(Not run)
```

RequestFrozenDatetimeModel

Train a new frozen datetime model with parameters from the specified model

Description

Requires that this model belongs to a datetime partitioned project. If it does not, an error will occur when submitting the job

Usage

```
RequestFrozenDatetimeModel(
  model,
  trainingRowCount = NULL,
  trainingDuration = NULL,
  trainingStartDate = NULL,
  trainingEndDate = NULL,
  timeWindowSamplePct = NULL
)
```

Arguments

model	An S3 object of class <code>dataRobotModel</code> like that returned by the function <code>GetModel</code> , or each element of the list returned by the function <code>ListModels</code> .
trainingRowCount	integer. (optional) the number of rows of data that should be used to train the model.
trainingDuration	character. string (optional) a duration string specifying what time range the data used to train the model should span.
trainingStartDate	character. string(optional) the start date of the data to train to model on (" be used.
trainingEndDate	character. string(optional) the end date of the data to train the model on (" will be used.
timeWindowSamplePct	integer. (optional) May only be specified when the requested model is a time window (e.g. duration or start and end dates). An integer between 1 and 99 indicating the percentage to sample by within the window. The points kept are determined by a random uniform sample.

Details

Frozen models use the same tuning parameters as their parent model instead of independently optimizing them to allow efficiently retraining models on larger amounts of the training data.

In addition to `trainingRowCount` and `trainingDuration`, frozen datetime models may be trained on an exact date range. Only one of `trainingRowCount`, `trainingDuration`, or `trainingStartDate` and `trainingEndDate` should be specified. Models specified using `trainingStartDate` and `trainingEndDate` are the only ones that can be trained into the holdout data (once the holdout is unlocked).

Value

An integer value that can be used as the `modelJobId` parameter in subsequent calls to the `GetDatetimeModelFromJobId` function.

Examples

```
## Not run:
projectId <- "59a5af20c80891534e3c2bde"
modelId <- "5996f820af07fc605e81ead4"
model <- GetDatetimeModel(modelId)
RequestFrozenDatetimeModel(model)

## End(Not run)
```

`RequestFrozenModel` *Train a new frozen model with parameters from specified model*

Description

Frozen models use the same tuning parameters as their parent model instead of independently optimizing them to allow efficiently retraining models on larger amounts of the training data.

Usage

```
RequestFrozenModel(model, samplePct = NULL, trainingRowCount = NULL)
```

Arguments

<code>model</code>	An S3 object of class <code>dataRobotModel</code> like that returned by the function <code>GetModel</code> , or each element of the list returned by the function <code>ListModels</code> .
<code>samplePct</code>	Numeric, specifying the percentage of the training dataset to be used in building the new model
<code>trainingRowCount</code>	integer. The number of rows to use to train the requested model.

Details

Either 'sample_pct' or 'training_row_count' can be used to specify the amount of data to use, but not both. If neither are specified, a default of the maximum amount of data that can safely be used to train any blueprint without going into the validation data will be selected. In smart-sampled projects, 'samplePct' and 'trainingRowCount' are assumed to be in terms of rows of the minority class.

Note : For datetime partitioned projects, use 'RequestFrozenDatetimeModel' instead

Value

An integer value that can be used as the modelJobId parameter in subsequent calls to the GetModelFromJobId function.

An integer value that can be used as the modelJobId parameter in subsequent calls to the GetModelFromJobId function.

Examples

```
## Not run:
projectId <- "59a5af20c80891534e3c2bde"
modelId <- "5996f820af07fc605e81ead4"
model <- GetModel(projectId, modelId)
RequestFrozenModel(model, samplePct = 10)

## End(Not run)
```

RequestMultiSeriesDetection
Format a multiserries.

Description

Call this function to request the project be formatted as a multiserries project, with the dateColumn specifying the time series.

Usage

```
RequestMultiSeriesDetection(  
  project,  
  dateColumn,  
  multiserriesIdColumns = NULL,  
  maxWait = 600  
)
```

Arguments

project	character. Either (1) a character string giving the unique alphanumeric identifier for the project, or (2) a list containing the element projectId with this identifier.
dateColumn	character. The name of the column containing the date that defines the time series.
multiseriesIdColumns	character. Optional. The Series ID to demarcate the series. If not specified, DataRobot will attempt to automatically infer the series ID.
maxWait	integer. The maximum time (in seconds) to wait for the model job to complete.

Details

Note that as of v2.13 this function no longer needs to be called directly, but is called indirectly as a part of SetTarget (which itself is called indirectly as part of StartProject) when you pass a multiseries partition using CreateDatetimePartitionSpecification.

Value

A named list which contains:

- timeSeriesEligible logical. Whether or not the series is eligible to be used for time series.
- crossSeriesEligible logical. Whether or not the cross series group by column is eligible for cross-series modeling. Will be NULL if no cross series group by column is used.
- crossSeriesEligibilityReason character. The type of cross series eligibility (or ineligibility).
- timeUnit character. For time series eligible features, the time unit covered by a single time step, e.g. "HOUR", or NULL for features that are not time series eligible.
- timeStep integer. Expected difference in time units between rows in the data. Will be NULL for features that are not time series eligible.

See Also

Other MultiSeriesProject functions: [GetMultiSeriesProperties\(\)](#), [RequestCrossSeriesDetection\(\)](#), [as.dataRobotMultiSeriesProperties\(\)](#)

RequestNewDatetimeModel

Adds a new datetime model of the type specified by the blueprint to a DataRobot project

Description

This function requests the creation of a new datetime model in the DataRobot modeling project defined by the project parameter. The function also allows the user to specify alternatives to the project default for featurelist, samplePct, and scoringType. This function returns an integer modelJobId value, which can be used by the GetDatetimeModelFromJobId function to return the full model object.

Usage

```
RequestNewDatetimeModel(
  project,
  blueprint,
  featurelist = NULL,
  trainingRowCount = NULL,
  trainingDuration = NULL,
  timeWindowSamplePct = NULL,
  monotonicIncreasingFeaturelistId = NULL,
  monotonicDecreasingFeaturelistId = NULL
)
```

Arguments

- | | |
|----------------------------------|---|
| project | character. Either (1) a character string giving the unique alphanumeric identifier for the project, or (2) a list containing the element <code>projectId</code> with this identifier. |
| blueprint | list. A list with at least the following two elements: <code>blueprintId</code> and <code>projectId</code> . Note that the individual elements of the list returned by <code>ListBlueprints</code> are admissible values for this parameter. |
| featurelist | list. A list that contains the element <code>featurelistId</code> that specifies the featurelist to be used in building the model; if not specified (i.e., for the default value <code>NULL</code>), the project default (Informative Features) is used. |
| trainingRowCount | integer. Optional, the number of rows of data that should be used to train the model. If specified, <code>trainingDuration</code> may not be specified. |
| trainingDuration | character. String (optional) a duration string specifying what time range the data used to train the model should span. If specified, <code>trainingRowCount</code> may not be specified. |
| timeWindowSamplePct | integer. Optional. May only be specified when the requested model is a time window (e.g. duration or start and end dates). An integer between 1 and 99 indicating the percentage to sample by within the window. The points kept are determined by a random uniform sample. |
| monotonicIncreasingFeaturelistId | character. Optional. The id of the featurelist that defines the set of features with a monotonically increasing relationship to the target. If <code>NULL</code> (default), the default for the project will be used (if any). Note that currently there is no way to create a model without monotonic constraints if there was a project-level default set. If desired, the featurelist itself can also be passed as this parameter. |
| monotonicDecreasingFeaturelistId | character. Optional. The id of the featurelist that defines the set of features with a monotonically decreasing relationship to the target. If <code>NULL</code> , the default for the project will be used (if any). If empty (i.e., <code>""</code>), no such constraints are enforced. Also, if desired, the featurelist itself can be passed as this parameter. |

Details

Motivation for this function is the fact that some models - e.g., very complex machine learning models fit to large datasets - may take a long time to complete. Splitting the model creation request from model retrieval in these cases allows the user to perform other interactive R session tasks between the time the model creation/update request is made and the time the final model is available.

Value

An integer value that can be used as the `modelJobId` parameter in subsequent calls to the `GetDatetimeModelFromJobId` function.

Examples

```
## Not run:
projectId <- "59a5af20c80891534e3c2bde"
blueprints <- ListBlueprints(projectId)
blueprint <- blueprints[[1]]
RequestNewDatetimeModel(projectId, blueprint)

## End(Not run)
```

RequestNewModel	<i>Adds a new model of type specified by blueprint to a DataRobot project</i>
-----------------	---

Description

This function requests the creation of a new model in the DataRobot modeling project defined by the `project` parameter. The function also allows the user to specify alternatives to the project default for `featurelist`, `samplePct`, and `scoringType`. This function returns an integer `modelJobId` value, which can be used by the `GetModelFromJobId` function to return the full model object.

Usage

```
RequestNewModel(
  project,
  blueprint,
  featurelist = NULL,
  samplePct = NULL,
  trainingRowCount = NULL,
  scoringType = NULL,
  monotonicIncreasingFeaturelistId = NULL,
  monotonicDecreasingFeaturelistId = NULL
)
```

Arguments

project	character. Either (1) a character string giving the unique alphanumeric identifier for the project, or (2) a list containing the element projectId with this identifier.
blueprint	list. A list with at least the following two elements: blueprintId and projectId. Note that the individual elements of the list returned by ListBlueprints are admissible values for this parameter.
featurelist	list. A list that contains the element featurelistId that specifies the featurelist to be used in building the model; if not specified (i.e., for the default value NULL), the project default (Informative Features) is used.
samplePct	numeric. The percentage of the training dataset to be used in building the new model; if not specified (i.e., for the default value NULL), the maxTrainPct value for the project is used. Value should be between 0 and 100.
trainingRowCount	integer. The number of rows to use to train the requested model.
scoringType	character. String specifying the scoring type; default is validation set scoring, but cross-validation averaging is also possible.
monotonicIncreasingFeaturelistId	character. Optional. The id of the featurelist that defines the set of features with a monotonically increasing relationship to the target. If NULL (default), the default for the project will be used (if any). Note that currently there is no way to create a model without monotonic constraints if there was a project-level default set. If desired, the featurelist itself can also be passed as this parameter.
monotonicDecreasingFeaturelistId	character. Optional. The id of the featurelist that defines the set of features with a monotonically decreasing relationship to the target. If NULL, the default for the project will be used (if any). If empty (i.e., ""), no such constraints are enforced. Also, if desired, the featurelist itself can be passed as this parameter.

Details

Motivation for this function is the fact that some models - e.g., very complex machine learning models fit to large datasets - may take a long time to complete. Splitting the model creation request from model retrieval in these cases allows the user to perform other interactive R session tasks between the time the model creation/update request is made and the time the final model is available.

Either 'sample_pct' or 'training_row_count' can be used to specify the amount of data to use, but not both. If neither are specified, a default of the maximum amount of data that can safely be used to train any blueprint without going into the validation data will be selected. In smart-sampled projects, 'samplePct' and 'trainingRowCount' are assumed to be in terms of rows of the minority class.

Note : For datetime partitioned projects, use RequestNewDatetimeModel instead

Value

An integer value that can be used as the modelJobId parameter in subsequent calls to the GetModelFromJobId function.

Examples

```
## Not run:
projectId <- "59a5af20c80891534e3c2bde"
blueprints <- ListBlueprints(projectId)
blueprint <- blueprints[[1]]
RequestNewModel(projectId, blueprint)

## End(Not run)
```

RequestNewRatingTableModel

Create a new model from a rating table.

Description

Create a new model from a rating table.

Usage

```
RequestNewRatingTableModel(project, ratingTableId)
```

Arguments

project character. Either (1) a character string giving the unique alphanumeric identifier for the project, or (2) a list containing the element projectId with this identifier.

ratingTableId character. The ID of the rating table.

Value

An integer value that can be used as the modelJobId parameter in subsequent calls to the GetModelFromJobId function.

Examples

```
## Not run:
projectId <- "59a5af20c80891534e3c2bde"
ratingTableId <- "5984b4d7100d2b31c1166529"
RequestNewModel(projectId, ratingTableId)

## End(Not run)
```

RequestPredictionExplanations

Request prediction explanations computation for a specified model and dataset.

Description

In order to create PredictionExplanations for a particular model and dataset, you must first: Compute feature impact for the model via RequestFeatureImpact() Compute a PredictionExplanationsInitialization for the model via RequestPredictionExplanationsInitialization() Compute predictions for the model and dataset via RequestPredictions() After prediction explanations are requested information about them can be accessed using the functions GetPredictionExplanationsMetadataFrom and GetPredictionExplanationsMetadata. Prediction explanations themselves can be accessed using the functions GetPredictionExplanationsRows, GetPredictionExplanationsRowsAsDataFrame, and DownloadPredictionExplanations.

Usage

```
RequestPredictionExplanations(
  model,
  datasetId,
  maxExplanations = NULL,
  thresholdLow = NULL,
  thresholdHigh = NULL
)
```

Arguments

model	An S3 object of class dataRobotModel like that returned by the function GetModel, or each element of the list returned by the function ListModels.
datasetId	character. ID of the prediction dataset for which prediction explanations are requested.
maxExplanations	integer. Optional. The maximum number of prediction explanations to supply per row of the dataset, default: 3.
thresholdLow	numeric. Optional. The lower threshold, below which a prediction must score in order for prediction explanations to be computed for a row in the dataset. If neither threshold_high nor threshold_low is specified, prediction explanations will be computed for all rows.
thresholdHigh	numeric. Optional. The high threshold, above which a prediction must score in order for prediction explanations to be computed. If neither threshold_high nor threshold_low is specified, prediction explanations will be computed for all rows.

Details

thresholdHigh and thresholdLow are optional filters applied to speed up computation. When at least one is specified, only the selected outlier rows will have prediction explanations computed. Rows are considered to be outliers if their predicted value (in case of regression projects) or probability of being the positive class (in case of classification projects) is less than threshold_low or greater than thresholdHigh. If neither is specified, prediction explanations will be computed for all rows.

Value

job Id

Examples

```
## Not run:
projectId <- "59a5af20c80891534e3c2bde"
modelId <- "5996f820af07fc605e81ead4"
datasets <- ListPredictionDatasets(projectId)
dataset <- datasets[[1]]
datasetId <- dataset$id
model <- GetModel(projectId, modelId)
RequestPredictionExplanations(model, datasetId)

## End(Not run)
```

RequestPredictionExplanationsInitialization

Request prediction explanations initialization for specified model

Description

Prediction explanations initializations are a prerequisite for computing prediction explanations, and include a sample of what the computed prediction explanations for a prediction dataset would look like.

Usage

```
RequestPredictionExplanationsInitialization(model)
```

Arguments

model An S3 object of class dataRobotModel like that returned by the function Get-Model, or each element of the list returned by the function ListModels.

Value

job Id

Examples

```
## Not run:
  projectId <- "59a5af20c80891534e3c2bde"
  modelId <- "5996f820af07fc605e81ead4"
  model <- GetModel(projectId, modelId)
  RequestPredictionExplanationsInitialization(model)

## End(Not run)
```

RequestPredictions	<i>Request predictions from a model against a previously uploaded dataset</i>
--------------------	---

Description

Prediction intervals can now be returned for predictions with datetime models. Use ‘includePredictionIntervals = TRUE’ in calls to /codePredict or /codeRequestPredictions. For each model, prediction intervals estimate the range of values DataRobot expects actual values of the target to fall within. They are similar to a confidence interval of a prediction, but are based on the residual errors measured during the backtesting for the selected model.

Usage

```
RequestPredictions(
  project,
  modelId,
  datasetId,
  includePredictionIntervals = NULL,
  predictionIntervalsSize = NULL
)
```

Arguments

project	character. Either (1) a character string giving the unique alphanumeric identifier for the project, or (2) a list containing the element projectId with this identifier.
modelId	numeric. The ID of the model to use to make predictions
datasetId	numeric. The ID of the dataset to make predictions against (as uploaded from UploadPredictionDataset)
includePredictionIntervals	logical. Optional. Should prediction intervals bounds should be part of predictions? Only available for time series projects. See "Details" for more info.
predictionIntervalsSize	numeric. Optional. Size of the prediction intervals, in percent. Only available for time series projects. See "Details" for more info.

Value

predictJobId to be used by GetPredictions function to retrieve the model predictions.

Examples

```
## Not run:
dataset <- UploadPredictionDataset(project, diamonds_small)
model <- ListModels(project)[[1]]
modelId <- model$modelId
predictJobId <- RequestPredictions(project, modelId, dataset$id)
predictions <- GetPredictions(project, predictJobId)

# Or, if prediction intervals are desired (datetime only)
predictJobId <- RequestPredictions(datetimeProject,
                                   DatetimeModelId,
                                   includePredictionIntervals = TRUE,
                                   predictionIntervalsSize = 100)
predictions <- GetPredictions(datetimeProject, predictJobId, type = "raw")

## End(Not run)
```

RequestPrimeModel	<i>Request training for a DataRobot Prime model using a specified ruleset</i>
-------------------	---

Description

Training a model using a ruleset is a necessary prerequisite for being able to download the code for a ruleset.

Usage

```
RequestPrimeModel(project, ruleset)
```

Arguments

project	character. Either (1) a character string giving the unique alphanumeric identifier for the project, or (2) a list containing the element projectId with this identifier.
ruleset	list. A list specifying ruleset parameters (see GetRulesets)

Value

job Id

Examples

```
## Not run:
projectId <- "59a5af20c80891534e3c2bde"
modelId <- "5996f820af07fc605e81ead4"
rulesets <- GetRulesets(projectId, modelId)
ruleset <- rulesets[[1]]
RequestPrimeModel(projectId, ruleset)

## End(Not run)
```

RequestSampleSizeUpdate

Refits an existing model to a different fraction of the training dataset

Description

This function requests a refit of the model defined by the model parameter to the same training dataset used in building it originally, but with a different fraction of the data, specified by the samplePct parameter. The function returns an integer value that may be used with the function GetModelFromJobId to retrieve the model after fitting is complete.

Usage

```
RequestSampleSizeUpdate(model, samplePct = NULL, trainingRowCount = NULL)
```

Arguments

model	An S3 object of class dataRobotModel like that returned by the function GetModel, or each element of the list returned by the function ListModels.
samplePct	Numeric, specifying the percentage of the training dataset to be used in building the new model.
trainingRowCount	integer. The number of rows to use to train the requested model.

Details

Motivation for this function is the fact that some models - e.g., very complex machine learning models fit to large datasets - may take a long time to complete. Splitting the model creation request from model retrieval in these cases allows the user to perform other interactive R session tasks between the time the model creation/update request is made and the time the final model is available.

Either 'sample_pct' or 'training_row_count' can be used to specify the amount of data to use, but not both. If neither are specified, a default of the maximum amount of data that can safely be used to train any blueprint without going into the validation data will be selected. In smart-sampled projects, 'samplePct' and 'trainingRowCount' are assumed to be in terms of rows of the minority class.

Value

Integer, value to be used as the modelJobId parameter in calling the function GetModelFromJobId to retrieve the updated model.

Examples

```
## Not run:
projectId <- "59a5af20c80891534e3c2bde"
modelId <- "5996f820af07fc605e81ead4"
model <- GetModel(projectId, modelId)
RequestSampleSizeUpdate(model, samplePct = 100)

## End(Not run)
```

RequestSeriesAccuracy *Compute the series accuracy for a model.*

Description

Note that you can call GetSeriesAccuracy without calling this function, and the series accuracy will be requested automatically.

Usage

```
RequestSeriesAccuracy(model)
```

Arguments

model character. The model for which you want to compute Feature Impact, e.g. from the list of models returned by ListModels(project).

Value

Job ID for the async job associated with the computation.

Examples

```
## Not run:
projectId <- "5984b4d7100d2b31c1166529"
modelId <- "5984b4d7100d2b31c1166529"
model <- GetModel(projectId, modelId)
jobId <- RequestSeriesAccuracy(projectId, modelId)
WaitForJobToComplete(projectId, jobId)

## End(Not run)
```

RequestTrainingPredictions

Request training predictions for a specific model.

Description

Request training predictions for a specific model.

Usage

```
RequestTrainingPredictions(model, dataSubset)
```

Arguments

- | | |
|------------|--|
| model | An S3 object of class <code>dataRobotModel</code> like that returned by the function <code>GetModel</code> , or each element of the list returned by the function <code>ListModels</code> . |
| dataSubset | character. What data subset would you like to predict on? Possible options are included in <code>DataSubset</code> . Possible options are: <ul style="list-style-type: none">• <code>DataSubset\$All</code> will use all available data.• <code>DataSubset\$ValidationAndHoldout</code> will use all data except the training set.• <code>DataSubset\$Holdout</code> will use only holdout data. |

Value

job Id

Examples

```
## Not run:
projectId <- "59a5af20c80891534e3c2bde"
modelId <- "5996f820af07fc605e81ead4"
model <- GetModel(projectId, modelId)
RequestTrainingPredictions(model, dataSubset = DataSubset$All)

## End(Not run)
```

RequestTransferableModel

Request creation of a transferable model

Description

Requests generation of an transferable model file for use in an on-premise DataRobot standalone prediction environment. This function can only be used if model export is enabled, and will only be useful if you have an on-premise environment in which to import it.

Usage

```
RequestTransferableModel(project, modelId, predictionIntervalSize = NULL)
```

Arguments

project	character. Either (1) a character string giving the unique alphanumeric identifier for the project, or (2) a list containing the element projectId with this identifier.
modelId	numeric. Unique alphanumeric identifier for the model of interest.
predictionIntervalSize	integer. Optional. Added in 2.19. For supervised time series projects, this is the desired prediction interval size for the exported model. A prediction interval is the range of values DataRobot expects actual values of the target to fall within 0 to 100 (inclusive).

Details

This function does not download the exported file. Use `DownloadTransferableModel` for that.

Value

jobId

See Also

Other Transferable Model functions: [DeleteTransferableModel\(\)](#), [DownloadTransferableModel\(\)](#), [GetTransferableModel\(\)](#), [ListTransferableModels\(\)](#), [UpdateTransferableModel\(\)](#), [UploadTransferableModel\(\)](#)

Examples

```
## Not run:
projectId <- "59a5af20c80891534e3c2bde"
modelId <- "5996f820af07fc605e81ead4"
jobId <- RequestTransferableModel(projectId,
                                modelId,
                                50)
WaitForJobToComplete(projectId, jobId)
file <- file.path(tempdir(), "model.drmodel")
```

```
DownloadTransferableModel(projectObject, modelId, file)

## End(Not run)
```

RFC3339DateTimeFormat *RFC 3339 datetime format*

Description

The DataRobot API returns dates in RFC 3339 format. Since this comes from a Python datetime object, we assume that the period returned is in the format "

Usage

```
RFC3339DateTimeFormat
```

Format

An object of class character of length 1.

See Also

Other API datetime functions: [formatRFC3339Timestamp\(\)](#), [parseRFC3339Timestamp\(\)](#), [transformRFC3339Period\(\)](#), [validateReportingPeriodTime\(\)](#)

RunInteractiveTuning *Run an interactive model tuning session.*

Description

The advanced tuning feature allows you to manually set model parameters and override the DataRobot default selections. It is generally available for Eureka models. To use this feature with other model types, contact your CFDS for more information.

Usage

```
RunInteractiveTuning(model)
```

Arguments

model dataRobotModel. A DataRobot model object to get tuning parameters for.

Details

This function runs an interactive session to iterate you through individual arguments for each tunable hyperparameter, presenting you with the defaults and other available information. You can set each parameter one at a time, skipping ones you don't intend to set. At the end, it will return a job ID that can be used to get the tuned model.

Note that sometimes you may see the exact same parameter more than once. These are for different parts of the blueprint that use the same parameter (e.g., one hot encoding for text and then one hot encoding for numeric). They are listed in the order they are found in the blueprint but unfortunately more user-facing information cannot be provided.

Value

A job ID that can be used to get the tuned model.

Examples

```
## Not run:
projectId <- "59a5af20c80891534e3c2bde"
modelId <- "5996f820af07fc605e81ead4"
myXGBModel <- GetModel(projectId, modelId)
tuningJob <- RunInteractiveTuning(myXGBModel)
tunedModel <- GetModelFromJobId(projectId, tuningJob)

## End(Not run)
```

ScoreBacktests

Compute the scores for all available backtests.

Description

Some backtests may be unavailable if the model is trained into their validation data.

Usage

```
ScoreBacktests(model, wait = FALSE)
```

Arguments

<code>model</code>	An S3 object of class <code>dataRobotModel</code> like that returned by the function <code>GetModel</code> , or each element of the list returned by the function <code>ListModels</code> .
<code>wait</code>	logical. If <code>TRUE</code> , wait until job completion.

Value

job ID of pending job if `wait` is `FALSE`. Use `WaitForJobToComplete` to await job completion. If `wait` is `TRUE`, will wait until completion and return `NULL`. Upon completion, all available backtests will have scores computed.

Examples

```
## Not run:
projectId <- "59a5af20c80891534e3c2bde"
modelId <- "5996f820af07fc605e81ead4"
model <- GetModel(projectId, modelId)
ScoreBacktests(model)

## End(Not run)
```

SegmentAnalysisAttribute
Segment analysis attributes

Description

Added in DataRobot API 2.20.

Usage

SegmentAnalysisAttribute

Format

An object of class list of length 3.

Details

For usage, see GetDeploymentServiceStats.

SeriesAggregationType *Series aggregation type*

Description

For details, see "Calculating features across series" in the time series section of the DataRobot user guide.

Usage

SeriesAggregationType

Format

An object of class list of length 2.

SetPredictionThreshold

Set a custom prediction threshold for binary classification models.

Description

The prediction threshold is used by a binary classification model when deciding between the positive and negative class.

Usage

```
SetPredictionThreshold(model, threshold)
```

Arguments

model	An S3 object of class <code>dataRobotModel</code> like that returned by the function <code>GetModel</code> , or each element of the list returned by the function <code>ListModels</code> .
threshold	numeric. The threshold to use when deciding between the positive and negative class. Should be between 0 and 1 inclusive.

Details

Note: This feature can only be used when `PredictionThresholdReadOnly` is `FALSE`. Models typically cannot have their prediction threshold modified if they have been used to set a deployment or predictions have been made with the dedicated prediction API.

Value

Returns `NULL` but updates the model in place.

Examples

```
## Not run:
projectId <- "59a5af20c80891534e3c2bde"
modelId <- "5996f820af07fc605e81ead4"
model <- GetModel(projectId, modelId)
SetPredictionThreshold(model, threshold = 0.6)

## End(Not run)
```

SetTarget	<i>Set the target variable (and by default, start the DataRobot Autopilot)</i>
-----------	--

Description

This function sets the target variable for the project defined by project, starting the process of building models to predict the response variable target. Both of these parameters - project and target - are required and they are sufficient to start a modeling project with DataRobot default specifications for the other optional parameters.

Usage

```
SetTarget(
  project,
  target,
  metric = NULL,
  weights = NULL,
  partition = NULL,
  mode = AutopilotMode$Quick,
  seed = NULL,
  targetType = NULL,
  positiveClass = NULL,
  blueprintThreshold = NULL,
  responseCap = NULL,
  featurelistId = NULL,
  smartDownsampled = NULL,
  majorityDownsamplingRate = NULL,
  accuracyOptimizedBlueprints = NULL,
  offset = NULL,
  exposure = NULL,
  eventsCount = NULL,
  monotonicIncreasingFeaturelistId = NULL,
  monotonicDecreasingFeaturelistId = NULL,
  onlyIncludeMonotonicBlueprints = FALSE,
  maxWait = 600
)
```

Arguments

project	character. Either (1) a character string giving the unique alphanumeric identifier for the project, or (2) a list containing the element projectId with this identifier.
target	character. String giving the name of the response variable to be predicted by all project models.
metric	character. Optional. String specifying the model fitting metric to be optimized; a list of valid options for this parameter, which depends on both project and target, may be obtained with the function GetValidMetrics.

weights	character. Optional. String specifying the name of the column from the modeling dataset to be used as weights in model fitting.
partition	partition. Optional. S3 object of class 'partition' whose elements specify a valid partitioning scheme. See help for functions CreateGroupPartition, CreateRandomPartition, CreateStratifiedPartition, CreateUserPartition and CreateDatetimePartitionSpecification.
mode	character. Optional. Specifies the autopilot mode used to start the modeling project; See AutopilotMode for valid options; AutopilotMode\$Quick is default.
seed	integer. Optional. Seed for the random number generator used in creating random partitions for model fitting.
targetType	character. Optional. Used to specify the targetType to use for a project. Valid options are "Binary", "Multiclass", "Regression". Set to "Multiclass" to enable multiclass modeling. Otherwise, it can help to disambiguate, i.e. telling DataRobot how to handle a numeric target with a few unique values that could be used for either multiclass or regression. See TargetType for an easier way to keep track of the options.
positiveClass	character. Optional. Target variable value corresponding to a positive response in binary classification problems.
blueprintThreshold	integer. Optional. The maximum time (in hours) that any modeling blueprint is allowed to run before being excluded from subsequent autopilot stages.
responseCap	numeric. Optional. Floating point value, between 0.5 and 1.0, specifying a capping limit for the response variable. The default value NULL corresponds to an uncapped response, equivalent to responseCap = 1.0.
featurelistId	numeric. Specifies which feature list to use. If NULL (default), a default featurelist is used.
smartDownsampled	logical. Optional. Whether to use smart downsampling to throw away excess rows of the majority class. Only applicable to classification and zero-boosted regression projects.
majorityDownsamplingRate	numeric. Optional. Floating point value, between 0.0 and 100.0. The percentage of the majority rows that should be kept. Specify only if using smart downsampling. May not cause the majority class to become smaller than the minority class.
accuracyOptimizedBlueprints	logical. Optional. When enabled, accuracy optimized blueprints will run in autopilot for the project. These are longer-running model blueprints that provide increased accuracy over normal blueprints that run during autopilot.
offset	character. Optional. Vector of the names of the columns containing the offset of each row.
exposure	character. Optional. The name of a column containing the exposure of each row.
eventsCount	character. Optional. The name of a column specifying the events count.

<code>monotonicIncreasingFeaturelistId</code>	character. Optional. The id of the featurelist that defines the set of features with a monotonically increasing relationship to the target. If NULL (default), no such constraints are enforced. When specified, this will set a default for the project that can be overridden at model submission time if desired. The featurelist itself can also be passed as this parameter.
<code>monotonicDecreasingFeaturelistId</code>	character. Optional. The id of the featurelist that defines the set of features with a monotonically decreasing relationship to the target. If NULL (default), no such constraints are enforced. When specified, this will set a default for the project that can be overridden at model submission time if desired. The featurelist itself can also be passed as this parameter.
<code>onlyIncludeMonotonicBlueprints</code>	logical. Optional. When TRUE, only blueprints that support enforcing monotonic constraints will be available in the project or selected for the autopilot.
<code>maxWait</code>	integer. Specifies how many seconds to wait for the server to finish analyzing the target and begin the modeling process. If the process takes longer than this parameter specifies, execution will stop (but the server will continue to process the request).

Examples

```
## Not run:
projectId <- "59a5af20c80891534e3c2bde"
SetTarget(projectId, "targetFeature")
SetTarget(projectId, "targetFeature", metric = "LogLoss")
SetTarget(projectId, "targetFeature", mode = AutopilotMode$Manual)
SetTarget(projectId, "targetFeature", targetType = TargetType$Multiclass)

## End(Not run)
```

SetupProject

Function to set up a new DataRobot project

Description

This function uploads a modeling dataset defined by the `dataSource` parameter and allows specification of the optional project name `projectName`. The `dataSource` parameter can be either the name of a CSV file or a dataframe; in the latter case, it is saved as a CSV file whose name is described in the Details section. This function returns the `projectName` specified in the calling sequence, the unique alphanumeric identifier `projectId` for the new project, the name of the modeling dataset uploaded to create this project, and the project creation time and date.

Usage

```
SetupProject(dataSource, projectName = NULL, maxWait = 60 * 60)
```

Arguments

<code>dataSource</code>	object. Either (a) the name of a CSV file, (b) a dataframe or (c) url to a publicly available file; in each case, this parameter identifies the source of the data from which all project models will be built. See Details.
<code>projectName</code>	character. Optional. String specifying a project name.
<code>maxWait</code>	integer. The maximum time to wait for each of two steps: (1) The initial project creation request, and (2) data processing that occurs after receiving the response to this initial request.

Details

The DataRobot modeling engine requires a CSV file containing the data to be used in fitting models, and this has been implemented here in two ways. The first and simpler is to specify `dataSource` as the name of this CSV file, but for the convenience of those who wish to work with dataframes, this function also provides the option of specifying a dataframe, which is then written to a CSV file and uploaded to the DataRobot server. In this case, the file name is either specified directly by the user through the `saveFile` parameter, or indirectly from the name of the `dataSource` dataframe if `saveFile` = NULL (the default). In this second case, the file name consists of the name of the `dataSource` dataframe with the string `csvExtension` appended.

Value

A named list that contains:

projectName character. The name assigned to the DataRobot project

projectId character. The unique alphanumeric project identifier for this DataRobot project

fileName character. The name of the CSV modeling file uploaded for this project

created character. The time and date of project creation

Examples

```
## Not run:
  SetupProject(iris, "dr-iris")

## End(Not run)
```

SetupProjectFromDataSource

Create a project from a data source.

Description

Create a project from a data source.

Usage

```
SetupProjectFromDataSource(
  dataSourceId,
  username,
  password,
  projectName = NULL,
  maxWait = 60 * 60
)
```

Arguments

<code>dataSourceId</code>	character. The ID of the data source to create a project from.
<code>username</code>	character. The username to use for authentication to the database.
<code>password</code>	character. The password to use for authentication to the database.
<code>projectName</code>	character. Optional. String specifying a project name. The password is encrypted at server side and never saved or stored.
<code>maxWait</code>	integer. The maximum time to wait for each of two steps: (1) The initial project creation request, and (2) data processing that occurs after receiving the response to this initial request.

Value

A named list that contains:

projectName character. The name assigned to the DataRobot project

projectId character. The unique alphanumeric project identifier for this DataRobot project

fileName character. The name of the CSV modeling file uploaded for this project

created character. The time and date of project creation

Examples

```
## Not run:
dataSourceId <- "5c1303269300d900016b41a7"
SetupProjectFromDataSource(dataSourceId, username = "username", password = "hunter1",
  projectName = "My Project")

## End(Not run)
```

SetupProjectFromHDFS *Function to set up a new DataRobot project using datasource on a WebHDFS server (deprecated)*

Description

This function is deprecated. Use SetupProjectFromDataSource instead.

Usage

```
SetupProjectFromHDFS(url, port = NULL, projectName = NULL, maxWait = 60 * 60)
```

Arguments

<code>url</code>	character. The location of the WebHDFS file, both server and full path. Per the DataRobot specification, must begin with <code>hdfs://</code>
<code>port</code>	integer. Optional. The port to use. If not specified, will default to the server default (50070).
<code>projectName</code>	character. Optional. String specifying a project name.
<code>maxWait</code>	integer. The maximum time to wait for each of two steps: (1) The initial project creation request, and (2) data processing that occurs after receiving the response to this initial request.

Details

This function returns the `projectName` specified in the calling sequence, the unique alphanumeric identifier `projectId` for the new project, the name of the modeling dataset uploaded to create this project, and the project creation time and date.

Value

A named list that contains:

projectName character. The name assigned to the DataRobot project

projectId character. The unique alphanumeric project identifier for this DataRobot project

fileName character. The name of the CSV modeling file uploaded for this project

created character. The time and date of project creation

Examples

```
## Not run:
  SetupProjectFromHDFS(url = 'hdfs://path/to/data',
                      port = 12345,
                      projectName = 'dataProject')

## End(Not run)
```

Share	<i>Share a shareable object with a particular user.</i>
-------	---

Description

See `SharingRole` for more details on available access levels that can be granted to a user. Set `role` to `NULL` to revoke access to a particular user.

Usage

```
Share(object, username, role = "default", canShare = NULL)
```

Arguments

<code>object</code>	object. The shared object to inspect access for.
<code>username</code>	character. The name of the user to share the object with.
<code>role</code>	character. The role (access level) to give that user. See <code>SharingRole</code> .
<code>canShare</code>	logical. Is the user allowed to further reshare?

Examples

```
## Not run:
dataStoreId <- "5c1303269300d900016b41a7"
dataStore <- GetDataStore(dataStoreId)
# Grant access to a particular user.
Share(dataStore, "foo@foo.com")
# Grant access in a Read Only role.
Share(dataStore, "foo@foo.com", role = SharingRole$ReadOnly)
# Revoke access
Share(dataStore, "foo@foo.com", role = NULL)

## End(Not run)
```

<code>SharingRole</code>	<i>Sharing role</i>
--------------------------	---------------------

Description

This is a list that contains the valid values for granting access to other users (see `Share`). If you wish, you can specify access roles using the list values, e.g., `SharingRole$ReadWrite` instead of typing the string `"READ_WRITE"`. This way you can benefit from autocomplete and not have to remember the valid options.

Usage

```
SharingRole
```

Format

An object of class `list` of length 6.

Details

`Owner` allows any action including deletion.

`ReadWrite` or `Editor` allows modifications to the state, e.g., renaming and creating data sources from a data store, but **not** deleting the entity.

`ReadOnly` or `Consumer` - for data sources, enables creating projects and predictions; for data stores, allows viewing them only.

SourceTypes	<i>Source types</i>
-------------	---------------------

Description

This is a list that contains the valid values for source type

Usage

SourceTypes

Format

An object of class `list` of length 2.

StarModel	<i>Star a model.</i>
-----------	----------------------

Description

Star a model.

Usage

StarModel(model)

Arguments

model	character. The model for which you want to compute Feature Impact, e.g. from the list of models returned by <code>ListModels(project)</code> .
-------	--

Value

the model object, but now starred

Examples

```
## Not run:
projectId <- "59a5af20c80891534e3c2bde"
modelId <- "5996f820af07fc605e81ead4"
model <- GetModel(projectId, modelId)
StarModel(model)

## End(Not run)
```

StartNewAutoPilot	<i>Starts autopilot on provided featurelist. Only one autopilot can be running at the time. That's why any ongoing autopilot on different featurelist will be halted - modeling jobs in queue would not be affected but new jobs would not be added to queue by halted autopilot.</i>
-------------------	---

Description

There is an error if autopilot is currently running on or has already finished running on the provided featurelist and also if project's target was not selected (via SetTarget).

Usage

```
StartNewAutoPilot(project, featurelistId, mode = AutopilotMode$FullAuto)
```

Arguments

project	character. Either (1) a character string giving the unique alphanumeric identifier for the project, or (2) a list containing the element projectId with this identifier.
featurelistId	numeric. Specifies which feature list to use.
mode	character. The desired autopilot mode. Currently only AutopilotMode\$FullAuto is supported.

Examples

```
## Not run:
projectId <- "59a5af20c80891534e3c2bde"
featureList <- CreateFeaturelist(projectId, "myFeaturelist", c("feature1", "feature2"))
featurelistId <- featureList$featurelistId
StartNewAutoPilot(projectId, featurelistId)

## End(Not run)
```

StartProject	<i>Start a project, set the target, and run autopilot.</i>
--------------	--

Description

This function is a convenient shorthand to start a project and set the target. See SetupProject and SetTarget.

Usage

```
StartProject(  
  dataSource,  
  projectName = NULL,  
  target,  
  metric = NULL,  
  weights = NULL,  
  partition = NULL,  
  mode = NULL,  
  seed = NULL,  
  targetType = NULL,  
  positiveClass = NULL,  
  blueprintThreshold = NULL,  
  responseCap = NULL,  
  featurelistId = NULL,  
  smartDownsampled = NULL,  
  majorityDownsamplingRate = NULL,  
  accuracyOptimizedBlueprints = NULL,  
  offset = NULL,  
  exposure = NULL,  
  eventsCount = NULL,  
  monotonicIncreasingFeaturelistId = NULL,  
  monotonicDecreasingFeaturelistId = NULL,  
  onlyIncludeMonotonicBlueprints = FALSE,  
  workerCount = NULL,  
  wait = FALSE,  
  checkInterval = 20,  
  timeout = NULL,  
  username = NULL,  
  password = NULL,  
  verbosity = 1,  
  maxWait = 600  
)
```

Arguments

dataSource	object. Either (a) the name of a CSV file, (b) a dataframe or (c) url to a publicly available file; in each case, this parameter identifies the source of the data from which all project models will be built. See Details.
------------	--

projectName	character. Optional. String specifying a project name.
target	character. String giving the name of the response variable to be predicted by all project models.
metric	character. Optional. String specifying the model fitting metric to be optimized; a list of valid options for this parameter, which depends on both project and target, may be obtained with the function <code>GetValidMetrics</code> .
weights	character. Optional. String specifying the name of the column from the modeling dataset to be used as weights in model fitting.
partition	partition. Optional. S3 object of class 'partition' whose elements specify a valid partitioning scheme. See help for functions <code>CreateGroupPartition</code> , <code>CreateRandomPartition</code> , <code>CreateStratifiedPartition</code> , <code>CreateUserPartition</code> and <code>CreateDatetimePartitionSpecification</code> .
mode	character. Optional. Specifies the autopilot mode used to start the modeling project; See <code>AutopilotMode</code> for valid options; <code>AutopilotMode\$Quick</code> is default.
seed	integer. Optional. Seed for the random number generator used in creating random partitions for model fitting.
targetType	character. Optional. Used to specify the targetType to use for a project. Valid options are "Binary", "Multiclass", "Regression". Set to "Multiclass" to enable multiclass modeling. Otherwise, it can help to disambiguate, i.e. telling <code>DataRobot</code> how to handle a numeric target with a few unique values that could be used for either multiclass or regression. See <code>TargetType</code> for an easier way to keep track of the options.
positiveClass	character. Optional. Target variable value corresponding to a positive response in binary classification problems.
blueprintThreshold	integer. Optional. The maximum time (in hours) that any modeling blueprint is allowed to run before being excluded from subsequent autopilot stages.
responseCap	numeric. Optional. Floating point value, between 0.5 and 1.0, specifying a capping limit for the response variable. The default value <code>NULL</code> corresponds to an uncapped response, equivalent to <code>responseCap = 1.0</code> .
featurelistId	numeric. Specifies which feature list to use. If <code>NULL</code> (default), a default featurelist is used.
smartDownsampled	logical. Optional. Whether to use smart downsampling to throw away excess rows of the majority class. Only applicable to classification and zero-boosted regression projects.
majorityDownsamplingRate	numeric. Optional. Floating point value, between 0.0 and 100.0. The percentage of the majority rows that should be kept. Specify only if using smart downsampling. May not cause the majority class to become smaller than the minority class.
accuracyOptimizedBlueprints	logical. Optional. When enabled, accuracy optimized blueprints will run in autopilot for the project. These are longer-running model blueprints that provide increased accuracy over normal blueprints that run during autopilot.

offset	character. Optional. Vector of the names of the columns containing the offset of each row.
exposure	character. Optional. The name of a column containing the exposure of each row.
eventsCount	character. Optional. The name of a column specifying the events count.
monotonicIncreasingFeaturelistId	character. Optional. The id of the featurelist that defines the set of features with a monotonically increasing relationship to the target. If NULL (default), no such constraints are enforced. When specified, this will set a default for the project that can be overridden at model submission time if desired. The featurelist itself can also be passed as this parameter.
monotonicDecreasingFeaturelistId	character. Optional. The id of the featurelist that defines the set of features with a monotonically decreasing relationship to the target. If NULL (default), no such constraints are enforced. When specified, this will set a default for the project that can be overridden at model submission time if desired. The featurelist itself can also be passed as this parameter.
onlyIncludeMonotonicBlueprints	logical. Optional. When TRUE, only blueprints that support enforcing monotonic constraints will be available in the project or selected for the autopilot.
workerCount	integer. The number of workers to run (default 2). Use "max" to set to the maximum number of workers available.
wait	logical. If TRUE, invokes WaitForAutopilot to block execution until the autopilot is complete.
checkInterval	numeric. Optional. Maximum wait (in seconds) between checks that Autopilot is finished. Defaults to 20.
timeout	numeric. Optional. Time (in seconds) after which to give up (Default is no timeout). There is an error if Autopilot is not finished before timing out.
username	character. The username to use for authentication to the database.
password	character. The password to use for authentication to the database.
verbosity	numeric. Optional. 0 is silent, 1 or more displays information about progress. Default is 1.
maxWait	integer. Specifies how many seconds to wait for the server to finish analyzing the target and begin the modeling process. If the process takes longer than this parameter specifies, execution will stop (but the server will continue to process the request).

Examples

```
## Not run:
projectId <- "59a5af20c80891534e3c2bde"
StartProject(iris,
  projectName = "iris",
  target = "Species",
  targetType = TargetType$Multiclass)

## End(Not run)
```

StartRetryWaiter	<i>Creates a waiter function that can be used in a loop while trying some task many times. The waiter sleeps while waiting to try again, with sleep times determined by exponential back-off.</i>
------------------	---

Description

Creates a waiter function that can be used in a loop while trying some task many times. The waiter sleeps while waiting to try again, with sleep times determined by exponential back-off.

Usage

```
StartRetryWaiter(timeout = NULL, delay = 0.1, maxdelay = 1)
```

Arguments

timeout	integer. How long (in seconds) to keep trying before timing out (NULL means no timeout)
delay	integer. Initial delay between tries (in seconds).
maxdelay	integer. Maximum delay (in seconds) between tries.

Value

function which gets the waiter status. This function returns a list with these items: /itemize /item index numeric. How many times we have waited. /item secondsWaited numeric. How long (in seconds) since we started the timer. /item stillTrying logical. Whether we should keep trying or give up (logical)

StartTuningSession	<i>Create a function to initiate hyperparameter tuning for a particular model.</i>
--------------------	--

Description

The advanced tuning feature allows you to manually set model parameters and override the DataRobot default selections.

Usage

```
StartTuningSession(model)
```

Arguments

model	dataRobotModel. A DataRobot model object to get tuning parameters for.
-------	--

Value

A function that can be used to tune the model. The function will take `model`, the model object to tune, and will have individual arguments for each tunable hyperparameter that are each set to the default value for that hyperparameter. Furthermore, the function takes `tuningDescription` which can be used to describe the hyperparameter tuning taking place for future reference. The function itself will return a job ID that can be used to get the tuned model.

See Also

`RunInteractiveTuning`

Examples

```
## Not run:
projectId <- "59a5af20c80891534e3c2bde"
modelId <- "5996f820af07fc605e81ead4"
myXGBModel <- GetModel(projectId, modelId)
RunTune <- StartTuningSession(myXGBModel)
tuningJob <- RunTune(myXGBModel, colsample_bytree = 0.4, colsample_bylevel = 0.8)
tunedModel <- GetModelFromJobId(projectId, tuningJob)

## End(Not run)
```

Stringify

Convert a function into a single string for DataRobot

Description

Convert a function into a single string for DataRobot

Usage

```
Stringify(functionToConvert, dputFile = tempfile())
```

Arguments

`functionToConvert` function. The function to convert to a string.

`dputFile` character. Optional. A filepath to sink dput into.

SubmitActuals	<i>Submit actuals for processing.</i>
---------------	---------------------------------------

Description

The actuals submitted will be used to calculate accuracy metrics. Values are not processed immediately and may take some time to propagate through deployment systems. Submission of actuals is limited to 10,000,000 actuals per hour. For time series deployments, total actuals = number of actuals * number of forecast distances. For example, submitting 10 actuals for a deployment with 50 forecast distances = 500 total actuals. For multiclass deployments, a similar calculation is made where total actuals = number of actuals * number of classes. For example, submitting 10 actuals for a deployment with 20 classes = 200 actuals.

Usage

```
SubmitActuals(actuals, deploymentId, batchSize = 10000)
```

Arguments

actuals	dataframe. Data that describes actual values. Any strings stored as factors will be coerced to characters with <code>as.character</code> . Allowed columns are: <ul style="list-style-type: none"> • <code>associationId</code> string. A unique identifier used with a prediction. Max length 128 characters. • <code>actualValue</code> string or numeric. The actual value of a prediction; should be numeric for deployments with regression models or string for deployments with classification model. • <code>wasActedOn</code> logical. Optional. Indicates if the prediction was acted on in a way that could have affected the actual outcome. • <code>timestamp</code> POSIXt. Optional. If the datetime provided does not have a timezone, we assume it is UTC.
deploymentId	character. The ID of the deployment.
batchSize	integer. Optional. The max number of actuals in each batch request. Cannot exceed 10000.

See Also

Other deployment accuracy functions: [GetDeploymentAccuracyOverTime\(\)](#), [GetDeploymentAccuracy\(\)](#), [GetDeploymentAssociationId\(\)](#)

Examples

```
## Not run:
deploymentId <- "5e319d2e422fbd6b58a5edad"
myActuals <- data.frame(associationId = c("439917"),
                        actualValue = c("True"),
                        wasActedOn = c(TRUE))
```

```

SubmitActuals(actuals = myActuals,
               deploymentId)

## End(Not run)

```

```
summary.dataRobotModel
```

DataRobot S3 object methods for R's generic summary function

Description

These functions extend R's generic summary function to the DataRobot S3 object classes dataRobotModel, dataRobotProject, listOfBlueprints, listOfFeaturelists, listOfModels, and projectSummaryList.

Usage

```

## S3 method for class 'dataRobotModel'
summary(object, ...)

## S3 method for class 'dataRobotProject'
summary(object, ...)

## S3 method for class 'listOfBlueprints'
summary(object, nList = 6, ...)

## S3 method for class 'listOfFeaturelists'
summary(object, nList = 6, ...)

## S3 method for class 'listOfModels'
summary(object, nList = 6, ...)

## S3 method for class 'projectSummaryList'
summary(object, nList = 6, ...)

```

Arguments

object	The S3 object to be summarized.
...	list. Not currently used.
nList	integer. For the 'listOf' class objects, the first nList elements of the list are summarized in the dataframe in the second element of the list returned by the function.

Value

An object-specific summary: for objects of class `dataRobotModel` and `dataRobotProject`, this summary is a character vector giving key characteristics of the model or project, respectively; for the other object classes, the value is a two-element list where the first element is a brief summary character string and the second element is a more detailed dataframe with `nList` elements. The summary of object has the following components: `modelType`, `expandedModel` (constructed from `modelType` and `processes`), `modelId`, `blueprintId`, and `projectId`.

Examples

```
## Not run:
projectId <- "59a5af20c80891534e3c2bde"
modelId <- "5996f820af07fc605e81ead4"
model <- GetModel(projectId, modelId)
summary(model)

## End(Not run)
## Not run:
projectId <- "59a5af20c80891534e3c2bde"
project <- GetProject(projectId)
summary(project)

## End(Not run)
## Not run:
projectId <- "59a5af20c80891534e3c2bde"
blueprints <- ListBlueprints(projectId)
summary(blueprints)

## End(Not run)
## Not run:
projectId <- "59a5af20c80891534e3c2bde"
featureList <- CreateFeaturelist(projectId, "myFeaturelist", c("feature1", "feature2"))
summary(featureList)

## End(Not run)
## Not run:
projectId <- "59a5af20c80891534e3c2bde"
models <- ListModels(projectId)
summary(models)

## End(Not run)
## Not run:
projectSummary <- ListProjects()
summary(projectSummary)

## End(Not run)
```

```
summary.listOfDataRobotTuningParameters
```

Summarize the list of tuning parameters available for a model.

Description

Summarize the list of tuning parameters available for a model.

Usage

```
## S3 method for class 'listOfDataRobotTuningParameters'
summary(object, ...)
```

Arguments

`object` list. The list of tuning parameters to summarize.
`...` list. Extra parameters that are ignored. Used to allow S3 inheritance to work.

Value

A data.frame detailing the following about each tuning parameter:

- name character. The name of the tuning parameter.
- current character. The current searched values of that parameter.
- default character. The default value of that parameter.
- constraint character. A short description of the possible values that parameter can take.

Examples

```
## Not run:
projectId <- "59a5af20c80891534e3c2bde"
modelId <- "5996f820af07fc605e81ead4"
model <- GetModel(projectId, modelId)
summary(GetTuningParameters(model))

## End(Not run)
```

TargetLeakageType	<i>Target leakage report values</i>
-------------------	-------------------------------------

Description

Target leakage report values

Usage

```
TargetLeakageType
```

Format

An object of class `list` of length 4.

TargetType	<i>Target Type modes</i>
------------	--------------------------

Description

This is a list that contains the valid values for the Target Types

Usage

TargetType

Format

An object of class list of length 3.

TestDataStore	<i>Test the database connection to the data store.</i>
---------------	--

Description

Test the database connection to the data store.

Usage

TestDataStore(dataStoreId, username, password)

Arguments

dataStoreId	character. The ID of the data store to update.
username	character. The username to use for authentication to the database.
password	character. The password to use for authentication to the database. The password is encrypted at server side and never saved or stored.

Value

TRUE if successful, otherwise it will error.

Examples

```
## Not run:
dataStoreId <- "5c1303269300d900016b41a7"
TestDataStore(dataStoreId, username = "myUser", password = "mySecurePass129")

## End(Not run)
```

`tidyServiceOverTimeObject`

Tidies a ServiceOverTime response object for use in a DF

Description

Tidies a ServiceOverTime response object for use in a DF

Usage

```
tidyServiceOverTimeObject(df, valueColName)
```

Arguments

`df` A data frame that contains the following:

- period list, containing the following two items:
 - start POSIXct.
 - end POSIXct.
- value object.

`valueColName` character. The column in `df` currently named 'value' will be renamed to this.

`TimeUnits`

Time units

Description

Time units

Usage

```
TimeUnits
```

Format

An object of class `list` of length 8.

ToggleStarForModel *Star a model if it is unstarred, otherwise unstar the model.*

Description

Star a model if it is unstarred, otherwise unstar the model.

Usage

```
ToggleStarForModel(model)
```

Arguments

model character. The model for which you want to compute Feature Impact, e.g. from the list of models returned by ListModels(project).

Value

the model object, but now starred if unstarred or unstarred if starred.

Examples

```
## Not run:
projectId <- "59a5af20c80891534e3c2bde"
modelId <- "5996f820af07fc605e81ead4"
model <- GetModel(projectId, modelId)
ToggleStarForModel(model)

## End(Not run)
```

transformRFC3339Period

The DataRobot Monitoring APIs return dates formatted as RFC 3339 strings. This is the same as ISO 8601. Specifically, 'T' is the date/time separator and 'Z' is used to denote UTC. Fractional seconds are returned. e.g. 2020-01-01T05:00:00.000000Z

Description

The DataRobot Monitoring APIs return dates formatted as RFC 3339 strings. This is the same as ISO 8601. Specifically, 'T' is the date/time separator and 'Z' is used to denote UTC. Fractional seconds are returned. e.g. 2020-01-01T05:00:00.000000Z

Usage

```
transformRFC3339Period(periodContainer)
```

Arguments

periodContainer

an object containing the following:

- period list, containing the following two items:
 - start character. RFC 3339 formatted timestamp.
 - end character. RFC 3339 formatted timestamp.

See Also

Other API datetime functions: [RFC3339DateTimeFormat](#), [formatRFC3339Timestamp\(\)](#), [parseRFC3339Timestamp\(\)](#), [validateReportingPeriodTime\(\)](#)

<code>TreatAsExponential</code>	<i>Treat as exponential</i>
---------------------------------	-----------------------------

Description

Treat as exponential

Usage

`TreatAsExponential`

Format

An object of class `list` of length 3.

<code>TryingToSubmitNull</code>	<i>Checks to see if we are trying to submit 'NULL' as a value.</i>
---------------------------------	--

Description

Checks to see if we are trying to submit 'NULL' as a value.

Usage

`TryingToSubmitNull(body)`

Arguments

body list. The body to check for NULL.

`UnpauseQueue`*Re-start the DataRobot modeling queue*

Description

This function unpauses the modeling queue for a specified DataRobot project.

Usage

```
UnpauseQueue(project)
```

Arguments

`project` character. Either (1) a character string giving the unique alphanumeric identifier for the project, or (2) a list containing the element `projectId` with this identifier.

Examples

```
## Not run:
projectId <- "59a5af20c80891534e3c2bde"
UnpauseQueue(projectId)

## End(Not run)
```

`UnstarModel`*Unstar a model.*

Description

Unstar a model.

Usage

```
UnstarModel(model)
```

Arguments

`model` character. The model for which you want to compute Feature Impact, e.g. from the list of models returned by `ListModels(project)`.

Value

the model object, but now unstarred

Examples

```
## Not run:
projectId <- "59a5af20c80891534e3c2bde"
modelId <- "5996f820af07fc605e81ead4"
model <- GetModel(projectId, modelId)
UnstarModel(model)

## End(Not run)
```

UpdateAccess

Update access to a particular object.

Description

Update access to a particular object.

Usage

```
UpdateAccess(object, access)
```

Arguments

object	object. The shared object to inspect access for.
access	dataRobotAccessList. A list specifying access given to all users. See ListSharingAccess.

Examples

```
## Not run:
dataStoreId <- "5c1303269300d900016b41a7"
dataStore <- GetDataStore(dataStoreId)
access <- ListSharingAccess(dataStore)
# Remove access from the first user and grant it to foo@foo.com instead.
access[[1]]$username <- "foo@foo.com"
UpdateAccess(dataStore, access)
# Change access to a Read Only role.
access[[1]]$role <- SharingRole$ReadOnly
UpdateAccess(dataStore, access)

## End(Not run)
```

UpdateCalendar	<i>Update a calendar</i>
----------------	--------------------------

Description

Currently supports changing the name of a calendar.

Usage

```
UpdateCalendar(calendarId, name = NULL)
```

Arguments

calendarId	character. The ID of the calendar to retrieve.
name	character. The new name to name the calendar.

Value

An S3 object of class "dataRobotCalendar"

Examples

```
## Not run:  
calendarId <- "5da75da31fb4a45b8a815a53"  
UpdateCalendar(calendarId, name = "New name for calendar")  
  
## End(Not run)
```

UpdateComplianceDocTemplate

Update the name or sections of an existing doc template.

Description

Note that default templates cannot be updated.

Usage

```
UpdateComplianceDocTemplate(templateId, name = NULL, sections = NULL)
```

Arguments

templateId	character. The ID of the template to update.
name	character. Optional. A new name to identify the compliance doc template by.
sections	list. Optional. Section definitions for the compliance template.

Value

The updated compliance doc template object.

Examples

```
## Not run:
sections <- list(list("title" = "Missing Values Report",
                    "highlightedText" = "NOTICE",
                    "regularText" = paste("This dataset had a lot of Missing Values."
                                         "See the chart below: {{missingValues}}"),
                    "type" = "user"),
                list("title" = "Blueprints",
                    "regularText" = "{{blueprintDiagram}} /n Blueprint for this model",
                    "type" = "user"))
templateId <- "5cf85080d9436e5c310c796d"
UpdateComplianceDocTemplate(templateId, name = "newName", sections = sections)

## End(Not run)
```

UpdateDataSource

Update a data store.

Description

Update a data store.

Usage

```
UpdateDataSource(
  dataSourceId,
  canonicalName = NULL,
  dataStoreId = NULL,
  query = NULL,
  table = NULL,
  schema = NULL,
  partitionColumn = NULL,
  fetchSize = NULL
)
```

Arguments

dataSourceId	character. The ID of the data store to update.
canonicalName	character. The user-friendly name of the data source.
dataStoreId	character. The ID of the data store to connect to.
query	character. A query to execute on the data store to get the data. Optional.
table	character. The specified database table. Optional.

schema character. The specified database schema. Optional.
 partitionColumn character. The name of the partition column. Optional.
 fetchSize integer. a user specified fetch size in the range [1, 20000]. Optional. By default
 a fetchSize will be assigned to balance throughput and memory usage

Examples

```

## Not run:
dataSourceId <- "5c1303269300d900016b41a7"
UpdateDataSource(dataSourceId, canonicalName = "Different Name")

## End(Not run)

```

UpdateDataStore *Update a data store.*

Description

Update a data store.

Usage

```

UpdateDataStore(
  dataStoreId,
  canonicalName = NULL,
  driverId = NULL,
  jdbcUrl = NULL
)

```

Arguments

dataStoreId character. The ID of the data store to update.
 canonicalName character. The user-friendly name of the data store.
 driverId character. The ID of the driver to use.
 jdbcUrl character. The full JDBC url.

Examples

```

## Not run:
dataStoreId <- "5c1303269300d900016b41a7"
UpdateDataStore(dataStoreId, canonicalName = "Different Name")

## End(Not run)

```

 UpdateDeploymentDriftTrackingSettings

Update drift tracking settings for a deployment.

Description

Update drift tracking settings for a deployment.

Usage

```
UpdateDeploymentDriftTrackingSettings(
  deploymentId,
  targetDriftEnabled = NULL,
  featureDriftEnabled = NULL,
  maxWait = 600
)
```

Arguments

deploymentId	character. The ID of the deployment.
targetDriftEnabled	logical. Optional. Set to TRUE to enable target drift. Set to FALSE to disable.
featureDriftEnabled	logical. Optional. Set to TRUE to enable feature drift. Set to FALSE to disable.
maxWait	integer. How long to wait (in seconds) for the computation to complete before returning a timeout error? (Default 600 seconds)

Value

A list with the following information on drift tracking:

- associationId
- predictionIntervals list. A list with two keys:
 - enabled. 'TRUE' if prediction intervals are enabled and 'FALSE' otherwise.
 - percentiles list. A list of percentiles, if prediction intervals are enabled.
- targetDrift list. A list with one key, 'enabled', which is 'TRUE' if target drift is enabled, and 'FALSE' otherwise.
- featureDrift list. A list with one key, 'enabled', which is 'TRUE' if feature drift is enabled, and 'FALSE' otherwise.

Examples

```
## Not run:
deploymentId <- "5e319d2e422fbd6b58a5edad"
UpdateDeploymentDriftTrackingSettings(deploymentId, targetDriftEnabled = TRUE)

## End(Not run)
```

UpdateFeaturelist	<i>Update a featurelist</i>
-------------------	-----------------------------

Description

Updates a featurelist to change the name or description.

Usage

```
UpdateFeaturelist(featurelist, listName = NULL, description = NULL)
```

Arguments

featurelist	list. The featurelist to delete.
listName	character. String identifying the new featurelist to be created.
description	character. A user-friendly description to give a featurelist.

Value

A list with the following four elements describing the featurelist created:

featurelistId Character string giving the unique alphanumeric identifier for the new featurelist.

projectId Character string giving the projectId identifying the project to which the featurelist was added.

features Character vector with the names of the variables included in the new featurelist.

name Character string giving the name of the new featurelist.

UpdateModelingFeaturelist	<i>Update a modeling featurelist</i>
---------------------------	--------------------------------------

Description

Updates a modeling featurelist to change the name or description.

Usage

```
UpdateModelingFeaturelist(featurelist, listName = NULL, description = NULL)
```

Arguments

featurelist	list. The modeling featurelist to delete.
listName	character. String identifying the new featurelist to be created.
description	character. A user-friendly description to give a featurelist.

UpdateProject	<i>Update parameters for an existing project</i>
---------------	--

Description

This function updates parameters for the project defined by project.

Usage

```
UpdateProject(
  project,
  newProjectName = NULL,
  workerCount = NULL,
  holdoutUnlocked = NULL
)
```

Arguments

project	character. Either (1) a character string giving the unique alphanumeric identifier for the project, or (2) a list containing the element projectId with this identifier.
newProjectName	character. Updated value for the projectName parameter associated with the project.
workerCount	integer. The number of workers to run (default 2). Use "max" to set to the maximum number of workers available.
holdoutUnlocked	logical. Either NULL (default) or TRUE. If TRUE, this function requests the DataRobot Autopilot to unlock the holdout data subset.

Examples

```
## Not run:
projectId <- "59a5af20c80891534e3c2bde"
UpdateProject(projectId, newProjectName = "cooler Project")
UpdateProject(projectId, workerCount = 20)
UpdateProject(projectId, holdoutUnlocked = TRUE)

## End(Not run)
```

UpdateTransferableModel	<i>Update the display name or note for an imported model.</i>
-------------------------	---

Description

Update the display name or note for an imported model.

Usage

```
UpdateTransferableModel(importId, displayName = NULL, note = NULL)
```

Arguments

<code>importId</code>	character. Id of the import.
<code>displayName</code>	character. The new display name.
<code>note</code>	character. The new note.

Value

A list describing uploaded transferable model with the following components:

- `note`. Character string Manually added node about this imported model.
- `datasetName`. Character string Filename of the dataset used to create the project the model belonged to.
- `modelName`. Character string Model type describing the model generated by DataRobot.
- `displayName`. Character string Manually specified human-readable name of the imported model.
- `target`. Character string The target of the project the model belonged to prior to export.
- `projectName`. Character string Name of the project the model belonged to prior to export.
- `importedByUsername`. Character string Username of the user who imported the model.
- `importedAt`. Character string The time the model was imported.
- `version`. Numeric Project version of the project the model belonged to.
- `projectId`. Character id of the project the model belonged to prior to export.
- `featurelistName`. Character string Name of the featurelist used to train the model.
- `createdByUsername`. Character string Username of the user who created the model prior to export.
- `importedById`. Character string id of the user who imported the model.
- `id`. Character string id of the import.
- `createdById`. Character string id of the user who created the model prior to export.
- `modelId`. Character string original id of the model prior to export.
- `originUrl`. Character string URL.

See Also

Other Transferable Model functions: [DeleteTransferableModel\(\)](#), [DownloadTransferableModel\(\)](#), [GetTransferableModel\(\)](#), [ListTransferableModels\(\)](#), [RequestTransferableModel\(\)](#), [UploadTransferableModel\(\)](#)

Examples

```
## Not run:  
id <- UploadTransferableModel("model.drmodel")  
UpdateTransferableModel(id, displayName = "NewName", note = "This is my note.")  
  
## End(Not run)
```

 UploadComplianceDocTemplate

Upload a compliance doc template.

Description

The structure of the compliance doc template can be specified by either a file specified by filename or by specifying it with a list via sections.

Usage

```
UploadComplianceDocTemplate(name, filename = NULL, sections = NULL)
```

Arguments

name	character. A name to identify the compliance doc template by.
filename	character. Optional. Filename of file to save the compliance doc template to.
sections	list. Optional. Section definitions for the compliance template.

Value

Nothing returned, but uploads the compliance doc template.

Examples

```
## Not run:
## Create a compliance documentation template from uploading a file
DownloadComplianceDocTemplate("template.json")
# Edit template.json in your favorite editor
UploadComplianceDocTemplate("myTemplate", "template.json")

## Create a compliance documentation template from a list.
sections <- list(list("title" = "Missing Values Report",
  "highlightedText" = "NOTICE",
  "regularText" = paste("This dataset had a lot of Missing Values.",
    "See the chart below: {{missingValues}}"),
  "type" = "user"),
list("title" = "Blueprints",
  "regularText" = "{{blueprintDiagram}} /n Blueprint for this model",
  "type" = "user"))

## End(Not run)
```

UploadData	<i>Upload a data source.</i>
------------	------------------------------

Description

Takes either a file path or a dataframe and returns output for POST that specifies the file object via form upload. This function is meant to facilitate uploading CSV data sources into DataRobot, such as through SetupProject.

Usage

```
UploadData(dataSource, fileName = NULL)
```

Arguments

dataSource	character. The file to upload.
fileName	character. The name of the file after it is uploaded. If not set, defaults to the name of the uploaded file.

Value

An httr object specifying the form upload content of the file path.

See Also

SetupProject

UploadPredictionDataset	<i>Function to upload new data to a DataRobot project for predictions</i>
-------------------------	---

Description

The DataRobot prediction engine requires a CSV file containing the data to be used in prediction, and this has been implemented here in two ways. The first and simpler is to specify dataSource as the name of this CSV file, but for the convenience of those who wish to work with dataframes, this function also provides the option of specifying a dataframe, which is then written to a CSV file and uploaded to the DataRobot server.

Usage

```

UploadPredictionDataset(
  project,
  dataSource,
  forecastPoint = NULL,
  predictionsStartDate = NULL,
  predictionsEndDate = NULL,
  relaxKIAFeaturesCheck = NULL,
  maxWait = 600
)

```

Arguments

project	character. Either (1) a character string giving the unique alphanumeric identifier for the project, or (2) a list containing the element projectId with this identifier.
dataSource	object. Either (a) the name of a CSV file (b) a dataframe or (c) url to publicly available file; in each case, this parameter identifies the source of the data for which predictions will be calculated.
forecastPoint	character. Optional. The point relative to which predictions will be generated, based on the forecast window of the project. Only specified in time series projects.
predictionsStartDate	datetime. Optional. Only specified in time series projects. The start date for bulk predictions. Note that this parameter is for generating historical predictions using the training data. This parameter should be provided in conjunction predictionsEndDate. Can't be provided with forecastPoint parameter.
predictionsEndDate	datetime. Optional. Only specified in time series projects. The end date for bulk predictions. Note that this parameter is for generating historical predictions using the training data. This parameter should be provided in conjunction predictionsStartDate. Can't be provided with forecastPoint parameter.
relaxKIAFeaturesCheck	logical. For time series projects only. If True, missing values in the known in advance features are allowed in the forecast window at the prediction time. If omitted or FALSE, missing values are not allowed.
maxWait	integer. The maximum time (in seconds) to wait for each of two steps: (1) The initial dataset upload request, and (2) data processing that occurs after receiving the response to this initial request.

Value

list with the following components:

- id character. The unique alphanumeric identifier for the dataset.
- numColumns numeric. Number of columns in dataset.
- name character. Name of dataset file.

- created character. time of upload.
- projectId character. String giving the unique alphanumeric identifier for the project.
- numRows numeric. Number of rows in dataset.
- forecastPoint character. The point relative to which predictions will be generated, based on the forecast window of the project. Only specified in time series projects, otherwise will be NULL.
- dataQualityWarnings list. A list of available warnings about potential problems in the uploaded prediction dataset. Will be empty if there are no warnings.

Examples

```
## Not run:
projectId <- "59a5af20c80891534e3c2bde"
UploadPredictionDataset(projectId, iris)

## End(Not run)
```

UploadPredictionDatasetFromDataSource

Upload a prediction dataset from a data source.

Description

Upload a prediction dataset from a data source.

Usage

```
UploadPredictionDatasetFromDataSource(
  project,
  dataSourceId,
  username,
  password,
  forecastPoint = NULL,
  maxWait = 600,
  relaxKIAFeaturesCheck = NULL
)
```

Arguments

project	character. Either (1) a character string giving the unique alphanumeric identifier for the project, or (2) a list containing the element projectId with this identifier.
dataSourceId	character. The id of the data source
username	character. The username to use for authentication to the database.
password	character. The password to use for authentication to the database. The password is encrypted at server side and never saved or stored.

forecastPoint	character. Optional. The point relative to which predictions will be generated, based on the forecast window of the project. Only specified in time series projects.
maxWait	integer. The maximum time (in seconds) to wait for each of two steps: (1) The initial dataset upload request, and (2) data processing that occurs after receiving the response to this initial request.
relaxKIAFeaturesCheck	logical. For time series projects only. If True, missing values in the known in advance features are allowed in the forecast window at the prediction time. If omitted or FALSE, missing values are not allowed.

Examples

```
## Not run:
dataSourceId <- "5c1303269300d900016b41a7"
TestDataStore(dataSourceId, username = "myUser", password = "mySecurePass129")

## End(Not run)
```

UploadTransferableModel

Import a previously exported model for predictions.

Description

Import a previously exported model for predictions.

Usage

```
UploadTransferableModel(modelFile, maxWait = 600)
```

Arguments

modelFile	character. Path to binary transferable model file.
maxWait	integer. Specifies how many seconds to wait for upload to finish.

Value

A list describing uploaded transferable model with the following components:

- note. Character string Manually added node about this imported model.
- datasetName. Character string Filename of the dataset used to create the project the model belonged to.
- modelName. Character string Model type describing the model generated by DataRobot.
- displayName. Character string Manually specified human-readable name of the imported model.

- target. Character string The target of the project the model belonged to prior to export.
- projectName. Character string Name of the project the model belonged to prior to export.
- importedByUsername. Character string Username of the user who imported the model.
- importedAt. Character string The time the model was imported.
- version. Numeric Project version of the project the model belonged to.
- projectId. Character id of the project the model belonged to prior to export.
- featurelistName. Character string Name of the featurelist used to train the model.
- createdByUsername. Character string Username of the user who created the model prior to export.
- importedById. Character string id of the user who imported the model.
- id. Character string id of the import.
- createdById. Character string id of the user who created the model prior to export.
- modelId. Character string original id of the model prior to export.
- originUrl. Character string URL.

See Also

Other Transferable Model functions: [DeleteTransferableModel\(\)](#), [DownloadTransferableModel\(\)](#), [GetTransferableModel\(\)](#), [ListTransferableModels\(\)](#), [RequestTransferableModel\(\)](#), [UpdateTransferableModel\(\)](#)

Examples

```
## Not run:
  UploadTransferableModel("model.drmodel")

## End(Not run)
```

ValidateActuals	<i>Validate that the actuals are a dataframe and contain required columns.</i>
-----------------	--

Description

Validate that the actuals are a dataframe and contain required columns.

Usage

```
ValidateActuals(actuals, error = TRUE)
```

Arguments

actuals	dataframe. Contains all actuals to be submitted.
error	logical. Should an error be raised if there is an issue?

Value

TRUE if the actuals dataframe has required properties, otherwise FALSE or raises error.

ValidateCalendar	<i>Get a calendar id from a calendar object.</i>
------------------	--

Description

Get a calendar id from a calendar object.

Usage

```
ValidateCalendar(calendar)
```

Arguments

calendar	object. Either list with calendarId element or calendarId value
----------	---

ValidateModel	<i>Validate that model belongs to class 'dataRobotModel' and includes projectId and modelId.</i>
---------------	--

Description

Validate that model belongs to class 'dataRobotModel' and includes projectId and modelId.

Usage

```
ValidateModel(model)
```

Arguments

model	An S3 object of class dataRobotModel like that returned by the function Get-Model, or each element of the list returned by the function ListModels.
-------	---

ValidateMultiSeriesProperties

Validate that the multiserries properties indicate a successful multi-series setup.

Description

Validate that the multiserries properties indicate a successful multiserries setup.

Usage

```
ValidateMultiSeriesProperties(properties, error = TRUE)
```

Arguments

properties	list. List of multiserries properties.
error	logical. Should an error be raised if there is an issue?

Value

TRUE if all properties verify, otherwise FALSE or raises error.

ValidateParameterIn *Ensure a parameter is valid*

Description

A valid parameter paramValue is either NULL or in the space of paramPossibilities.

Usage

```
ValidateParameterIn(paramValue, paramPossibilities, allowNULL = TRUE)
```

Arguments

paramValue	object. The parameter value to check.
paramPossibilities	vector. A vector of possible values for the parameter.
allowNULL	logical. Whether or not to allow NULL as a possibility.

Value

TRUE if paramValue is valid, otherwise it raises an error.

Examples

```
## Not run:
  ValidateParameterIn("all", DataSubset)

## End(Not run)
```

ValidatePartition	<i>Checks if a partition is valid.</i>
-------------------	--

Description

Checks if a partition is valid.

Usage

```
ValidatePartition(validationType, partition, reps = NULL, validationPct = NULL)
```

Arguments

validationType character. The type of partition to validate.
 partition partition. The partition object.
 reps numeric. The number of repetitions for a CV validation.
 validationPct numeric. The size of the validation set for TVH validation.

ValidateProject	<i>Get a projectId from a project object.</i>
-----------------	---

Description

Get a projectId from a project object.

Usage

```
ValidateProject(project)
```

Arguments

project object. Either list with projectId element or projectId value

ValidateReplaceDeployedModel

Validate a potential deployment model replacement.

Description

Validate a potential deployment model replacement.

Usage

```
ValidateReplaceDeployedModel(deploymentId, newModelId)
```

Arguments

deploymentId	character. The ID of the deployment.
newModelId	character. The ID of the model to use in the deployment. This model will replace the old model. You can also pass a dataRobotModel object.

Value

A validation report with:

- status character. Either PASSED or FAILED depending on whether all checks passed or not.
- message character. A message explaining the status failure, if any.
- checks list. A list of each check and the individual status.

Examples

```
## Not run:
deploymentId <- "5e319d2e422fbd6b58a5edad"
newModelId <- "5996f820af07fc605e81ead4"
ValidateReplaceDeployedModel(deploymentId, newModelId)

## End(Not run)
```

validateReportingPeriodTime

Helper function for validating reporting period objects used by the deployment monitoring functions. See GetDeploymentServiceStats, GetDeploymentAccuracy, GetDeploymentServiceStatsOverTime, and GetDeploymentAccuracyOverTime.

Description

Helper function for validating reporting period objects used by the deployment monitoring functions. See GetDeploymentServiceStats, GetDeploymentAccuracy, GetDeploymentServiceStatsOverTime, and GetDeploymentAccuracyOverTime.

Usage

```
validateReportingPeriodTime(timestamp, tsName = "timestamp")
```

Arguments

timestamp	character. A timestamp in RFC 3339 format.
tsName	character. Optional. Explanation of the timestamp for error messages.

See Also

Other API datetime functions: [RFC3339DateTimeFormat](#), [formatRFC3339Timestamp\(\)](#), [parseRFC3339Timestamp\(\)](#), [transformRFC3339Period\(\)](#)

VariableTransformTypes

Types of variable transformations

Description

Types of variable transformations

Usage

```
VariableTransformTypes
```

Format

An object of class list of length 4.

ViewWebModel

Retrieve a DataRobot web page that displays detailed model information

Description

This function brings up a web page that displays detailed model information like that available from the standard DataRobot user interface (e.g., graphical representations of model structures).

Usage

```
ViewWebModel(model)
```

Arguments

model	An S3 object of class <code>dataRobotModel</code> like that returned by the function <code>GetModel</code> , or each element of the list returned by the function <code>ListModels</code> .
-------	---

Examples

```
## Not run:
projectId <- "59a5af20c80891534e3c2bde"
modelId <- "5996f820af07fc605e81ead4"
model <- GetModel(projectId, modelId)
ViewWebModel(model)

## End(Not run)
```

ViewWebProject	<i>Retrieve a DataRobot web page that displays detailed project information</i>
----------------	---

Description

This function brings up a web page that displays detailed project information like that available from the standard DataRobot user interface.

Usage

```
ViewWebProject(project)
```

Arguments

project character. Either (1) a character string giving the unique alphanumeric identifier for the project, or (2) a list containing the element projectId with this identifier.

Examples

```
## Not run:
projectId <- "59a5af20c80891534e3c2bde"
ViewWebProject(projectId)

## End(Not run)
```

WaitForAutopilot	<i>This function periodically checks whether Autopilot is finished and returns only after it is.</i>
------------------	--

Description

This function periodically checks whether Autopilot is finished and returns only after it is.

Usage

```
WaitForAutopilot(project, checkInterval = 20, timeout = NULL, verbosity = 1)
```

Arguments

project	character. The project for which you want to wait until autopilot is finished.
checkInterval	numeric. Optional. Maximum wait (in seconds) between checks that Autopilot is finished. Defaults to 20.
timeout	numeric. Optional. Time (in seconds) after which to give up (Default is no timeout). There is an error if Autopilot is not finished before timing out.
verbosity	numeric. Optional. 0 is silent, 1 or more displays information about progress. Default is 1.

Examples

```
## Not run:
projectId <- "59a5af20c80891534e3c2bde"
WaitForAutopilot(projectId)

## End(Not run)
```

WaitForJobToComplete *Wait for specified job to complete*

Description

Wait for specified job to complete

Usage

```
WaitForJobToComplete(project, jobId, maxWait = 600)
```

Arguments

project	character. Either (1) a character string giving the unique alphanumeric identifier for the project, or (2) a list containing the element projectId with this identifier.
jobId	integer identifier (returned for example by RequestPrimeModel)
maxWait	maximum time to wait (in seconds) for the job to complete

Examples

```
## Not run:
projectId <- "59a5af20c80891534e3c2bde"
blueprints <- ListBlueprints(projectId)
blueprint <- blueprints[[1]]
jobId <- RequestNewModel(projectId, blueprint)
WaitForJobToComplete(projectId, jobId)

## End(Not run)
```

Index

- * **API datetime functions**
 - [formatRFC3339Timestamp](#), 65
 - [parseRFC3339Timestamp](#), 204
 - [RFC3339DateTimeFormat](#), 237
 - [transformRFC3339Period](#), 261
 - [validateReportingPeriodTime](#), 281
- * **Anomaly Assessment functions**
 - [DeleteAnomalyAssessmentRecord](#), 44
 - [GetAnomalyAssessmentExplanations](#), 74
 - [GetAnomalyAssessmentPredictionsPreview](#), 75
 - [InitializeAnomalyAssessment](#), 168
 - [ListAnomalyAssessmentRecords](#), 173
- * **MultiSeriesProject functions**
 - [as.dataRobotMultiSeriesProperties](#), 12
 - [GetMultiSeriesProperties](#), 130
 - [RequestCrossSeriesDetection](#), 219
 - [RequestMultiSeriesDetection](#), 223
- * **Transferable Model functions**
 - [DeleteTransferableModel](#), 54
 - [DownloadTransferableModel](#), 64
 - [GetTransferableModel](#), 164
 - [ListTransferableModels](#), 201
 - [RequestTransferableModel](#), 236
 - [UpdateTransferableModel](#), 270
 - [UploadTransferableModel](#), 276
- * **datasets**
 - [AutopilotMode](#), 14
 - [BlendMethods](#), 15
 - [ClassificationDeploymentAccuracyMetric](#), 17
 - [cvMethods](#), 41
 - [DataPartition](#), 41
 - [DataSubset](#), 42
 - [DatetimeTrendPlotsResolutions](#), 43
 - [DatetimeTrendPlotsStatuses](#), 43
 - [DeploymentAccuracyMetric](#), 54
 - [DeploymentServiceHealthMetric](#), 55
 - [DifferencingMethod](#), 55
 - [JobStatus](#), 172
 - [JobType](#), 172
 - [ModelCapability](#), 203
 - [ModelReplacementReason](#), 203
 - [MulticlassDeploymentAccuracyMetric](#), 204
 - [PeriodicityMaxTimeStep](#), 205
 - [PeriodicityTimeUnits](#), 206
 - [PostgreSQLDrivers](#), 208
 - [PrimeLanguage](#), 212
 - [ProjectStage](#), 213
 - [RecommendedModelType](#), 213
 - [RegressionDeploymentAccuracyMetric](#), 214
 - [RFC3339DateTimeFormat](#), 237
 - [SegmentAnalysisAttribute](#), 239
 - [SeriesAggregationType](#), 239
 - [SharingRole](#), 247
 - [SourceType](#), 248
 - [TargetLeakageType](#), 258
 - [TargetType](#), 259
 - [TimeUnits](#), 260
 - [TreatAsExponential](#), 262
 - [VariableTransformTypes](#), 282
- * **deployment accuracy functions**
 - [GetDeploymentAccuracy](#), 96
 - [GetDeploymentAccuracyOverTime](#), 98
 - [GetDeploymentAssociationId](#), 100
 - [SubmitActuals](#), 255
- * **feature functions**
 - [as.dataRobotFeatureInfo](#), 11
 - [GetFeatureInfo](#), 111
 - [ListFeatureInfo](#), 180
 - [ListModelFeatures](#), 184
- [AddEureqaSolution](#), 8
- [ApplySchema](#), 9
- [as.data.frame](#), 9

- as.dataRobotFeatureInfo, [11](#), [113](#), [181](#), [184](#)
- as.dataRobotMultiSeriesProperties, [12](#), [131](#), [220](#), [224](#)
- as.dataRobotProjectShort, [13](#)
- AutopilotMode, [14](#)
- BatchFeaturesTypeTransform, [14](#)
- BlendMethods, [15](#)
- BlueprintChartToGraphviz, [16](#)
- CheckUrl, [17](#)
- ClassificationDeploymentAccuracyMetric, [17](#)
- CleanServerData, [17](#)
- CloneProject, [18](#)
- ComputeDatetimeTrendPlots, [19](#)
- ConnectToDataRobot, [20](#)
- ConstructDurationString, [21](#)
- CreateBacktestSpecification, [22](#)
- CreateCalendar, [23](#)
- CreateComplianceDocumentation, [24](#)
- CreateDataSource, [25](#)
- CreateDataStore, [26](#)
- CreateDatetimePartitionSpecification, [26](#)
- CreateDeployment, [30](#)
- CreateDerivedFeatureAsCategorical (CreateDerivedFeatures), [31](#)
- CreateDerivedFeatureAsNumeric (CreateDerivedFeatures), [31](#)
- CreateDerivedFeatureAsText (CreateDerivedFeatures), [31](#)
- CreateDerivedFeatureIntAsCategorical (CreateDerivedFeatures), [31](#)
- CreateDerivedFeatures, [31](#)
- CreateFeaturelist, [32](#)
- CreateGroupPartition, [33](#), [37](#), [38](#), [40](#)
- CreateModelingFeaturelist, [34](#)
- CreatePrimeCode, [35](#)
- CreateRandomPartition, [34](#), [36](#), [38](#), [40](#)
- CreateRatingTable, [37](#)
- CreateStratifiedPartition, [34](#), [37](#), [38](#), [40](#)
- CreateUserPartition, [34](#), [37](#), [38](#), [39](#)
- CrossValidateModel, [40](#)
- cvMethods, [41](#)
- DataPartition, [41](#)
- DataPathFromDataArg, [42](#)
- datarobot (datarobot-package), [8](#)
- datarobot-package, [8](#)
- DataSubset, [42](#)
- DatetimeTrendPlotsResolutions, [43](#)
- DatetimeTrendPlotsStatuses, [43](#)
- DeleteAnomalyAssessmentRecord, [44](#), [75](#), [76](#), [170](#), [174](#)
- DeleteCalendar, [44](#)
- DeleteComplianceDocTemplate, [45](#)
- DeleteDataSource, [45](#)
- DeleteDataStore, [46](#)
- DeleteDeployment, [46](#)
- DeleteFeaturelist, [47](#)
- DeleteJob, [47](#)
- DeleteModel, [48](#)
- DeleteModelingFeaturelist, [49](#)
- DeleteModelJob, [49](#)
- DeletePredictionDataset, [50](#)
- DeletePredictionExplanations, [51](#)
- DeletePredictionExplanationsInitialization, [52](#)
- DeletePredictJob, [52](#)
- DeleteProject, [53](#)
- DeleteTransferableModel, [54](#), [64](#), [165](#), [202](#), [236](#), [271](#), [277](#)
- DeploymentAccuracyMetric, [54](#)
- DeploymentServiceHealthMetric, [55](#)
- DifferencingMethod, [55](#)
- DownloadComplianceDocTemplate, [56](#)
- DownloadComplianceDocumentation, [57](#)
- DownloadPredictionExplanations, [58](#)
- DownloadPrimeCode, [59](#)
- DownloadRatingTable, [60](#)
- DownloadScoringCode, [60](#)
- DownloadSeriesAccuracy, [61](#)
- DownloadTimeSeriesFeatureDerivationLog, [62](#)
- DownloadTrainingPredictions, [63](#)
- DownloadTransferableModel, [54](#), [64](#), [165](#), [202](#), [236](#), [271](#), [277](#)
- ExpectHasKeys, [64](#)
- FeatureFromAsyncUrl, [65](#)
- formatRFC3339Timestamp, [65](#), [204](#), [237](#), [262](#), [282](#)
- GenerateDatetimePartition, [66](#)
- GetAccuracyOverTimePlot, [69](#)

- GetAccuracyOverTimePlotPreview, [71](#)
- GetAccuracyOverTimePlotsMetadata, [72](#)
- GetAnomalyAssessmentExplanations, [44](#),
[74](#), [76](#), [170](#), [174](#)
- GetAnomalyAssessmentPredictionsPreview,
[44](#), [75](#), [75](#), [170](#), [174](#)
- GetBlenderModel, [76](#)
- GetBlenderModelFromJobId, [78](#)
- GetBlueprint, [79](#)
- GetBlueprintChart, [80](#), [120](#)
- GetBlueprintDocumentation, [81](#)
- GetCalendar, [82](#)
- GetCalendarFromProject, [83](#)
- GetComplianceDocTemplate, [83](#)
- GetConfusionChart, [84](#)
- GetCrossValidationScores, [86](#)
- GetDataSource, [86](#)
- GetDataStore, [87](#)
- GetDataStoreSchemas, [88](#)
- GetDataStoreTables, [89](#)
- GetDatetimeModel, [89](#)
- GetDatetimeModelFromJobId, [92](#)
- GetDatetimePartition, [93](#)
- GetDeployment, [95](#)
- GetDeploymentAccuracy, [96](#), [99](#), [101](#), [255](#)
- GetDeploymentAccuracyOverTime, [97](#), [98](#),
[101](#), [255](#)
- GetDeploymentAssociationId, [97](#), [99](#), [100](#),
[255](#)
- GetDeploymentDriftTrackingSettings,
[101](#)
- GetDeploymentServiceStats, [102](#)
- GetDeploymentServiceStatsOverTime, [104](#)
- GetDriver, [105](#)
- GetFeatureAssociationMatrix, [106](#)
- GetFeatureAssociationMatrixDetails,
[107](#)
- GetFeatureHistogram, [108](#)
- GetFeatureImpact, [109](#)
- GetFeatureImpactForJobId, [109](#)
- GetFeatureImpactForModel, [110](#)
- GetFeatureInfo, [12](#), [111](#), [181](#), [184](#)
- GetFeaturelist, [113](#)
- GetFrozenModel, [114](#)
- GetFrozenModelFromJobId, [116](#)
- GetGeneralizedInsight, [117](#)
- GetJob, [118](#)
- GetLiftChart, [119](#)
- GetMissingValuesReport, [120](#)
- GetModel, [121](#)
- GetModelBlueprintChart, [122](#)
- GetModelBlueprintDocumentation, [123](#)
- GetModelCapabilities, [124](#)
- GetModelFromJobId, [125](#)
- GetModelingFeaturelist, [126](#)
- GetModelJob, [127](#)
- GetModelParameters, [128](#)
- GetModelRecommendation, [129](#)
- GetMultiSeriesProperties, [13](#), [130](#), [220](#),
[224](#)
- GetParetoFront, [131](#)
- GetPredictionDataset, [132](#)
- GetPredictionExplanations, [133](#)
- GetPredictionExplanationsInitialization,
[135](#)
- GetPredictionExplanationsInitializationFromJobId,
[136](#)
- GetPredictionExplanationsMetadata, [137](#)
- GetPredictionExplanationsMetadataFromJobId,
[138](#)
- GetPredictionExplanationsRows, [139](#)
- GetPredictionExplanationsRowsAsDataFrame,
[141](#)
- GetPredictions, [142](#)
- GetPredictJob, [144](#)
- GetPredictJobs, [145](#)
- GetPrimeEligibility, [146](#)
- GetPrimeFile, [146](#)
- GetPrimeFileFromJobId, [147](#)
- GetPrimeModel, [148](#)
- GetPrimeModelFromJobId, [149](#)
- GetProject, [150](#)
- GetProjectStatus, [151](#)
- GetRatingTable, [152](#)
- GetRatingTableFromJobId, [152](#)
- GetRatingTableModel, [153](#)
- GetRatingTableModelFromJobId, [154](#)
- GetRecommendedModel, [155](#)
- GetResidualsChart, [155](#)
- GetRocCurve, [156](#)
- GetRulesets, [157](#)
- GetSeriesAccuracy, [158](#)
- GetSeriesAccuracyForModel, [159](#)
- GetServerDataInRows, [160](#)
- GetTimeSeriesFeatureDerivationLog, [62](#),
[161](#)

- GetTrainingPredictionDataFrame, 162
- GetTrainingPredictions, 162
- GetTrainingPredictionsForModel, 163
- GetTrainingPredictionsFromJobId, 164
- GetTransferableModel, 54, 64, 164, 202, 236, 271, 277
- GetTuningParameters, 166
- GetValidMetrics, 167
- GetWordCloud, 167
- InitializeAnomalyAssessment, 44, 75, 76, 168, 174
- IsBlenderEligible, 170
- IsId, 171
- IsParameterIn, 171
- JobStatus, 172
- JobType, 172
- ListAnomalyAssessmentRecords, 44, 75, 76, 170, 173
- ListBlueprints, 174
- ListCalendars, 175
- ListComplianceDocTemplates, 175
- ListConfusionCharts, 176
- ListDataSources, 177
- ListDataStores, 177
- ListDeployments, 178
- ListDrivers, 179
- ListFeatureInfo, 12, 113, 180, 184
- ListFeaturelists, 181
- ListJobs, 182
- ListLiftCharts, 183
- ListModelFeatures, 12, 113, 181, 184
- ListModelingFeaturelists, 185
- ListModelJobs, 186
- ListModelRecommendations, 187
- ListModels, 188
- ListPredictionDatasets, 189
- ListPredictionExplanationsMetadata, 190
- ListPredictions, 191
- ListPredictionServers, 192
- ListPrimeFiles, 192
- ListPrimeModels, 193
- ListProjects, 194
- ListRatingTableModels, 195
- ListRatingTables, 196
- ListResidualsCharts, 196
- ListRocCurves, 197
- ListSharingAccess, 198
- ListStarredModels, 199
- ListTrainingPredictions, 200
- ListTransferableModels, 54, 64, 165, 201, 236, 271, 277
- MakeDataRobotRequest, 202
- ModelCapability, 203
- ModelReplacementReason, 203
- MulticlassDeploymentAccuracyMetric, 204
- parseRFC3339Timestamp, 66, 204, 237, 262, 282
- PauseQueue, 205
- PeriodicityMaxTimeStep, 205
- PeriodicityTimeUnits, 206
- plot.listOfModels, 206
- PostgreSQLdrivers, 208
- Predict, 208
- predict.dataRobotModel, 210
- PredictionDatasetFromAsyncUrl, 211
- PrimeLanguage, 212
- ProjectFromJobResponse, 212
- ProjectStage, 213
- RecommendedModelType, 213
- ReformatMetrics, 214
- RegressionDeploymentAccuracyMetric, 214
- RenameRatingTable, 214
- reorderColumns, 215
- ReplaceDeployedModel, 216
- RequestApproximation, 217
- RequestBlender, 218
- RequestCrossSeriesDetection, 13, 131, 219, 224
- RequestFeatureImpact, 220
- RequestFrozenDatetimeModel, 221
- RequestFrozenModel, 222
- RequestMultiSeriesDetection, 13, 131, 220, 223
- RequestNewDatetimeModel, 224
- RequestNewModel, 226
- RequestNewRatingTableModel, 228
- RequestPredictionExplanations, 229
- RequestPredictionExplanationsInitialization, 230

- RequestPredictions, [231](#)
- RequestPrimeModel, [232](#)
- RequestSampleSizeUpdate, [233](#)
- RequestSeriesAccuracy, [234](#)
- RequestTrainingPredictions, [235](#)
- RequestTransferableModel, [54](#), [64](#), [165](#),
[202](#), [236](#), [271](#), [277](#)
- RFC3339DateTimeFormat, [66](#), [204](#), [237](#), [262](#),
[282](#)
- RunInteractiveTuning, [237](#)

- ScoreBacktests, [238](#)
- SegmentAnalysisAttribute, [239](#)
- SeriesAggregationType, [239](#)
- SetPredictionThreshold, [240](#)
- SetTarget, [241](#)
- SetupProject, [243](#)
- SetupProjectFromDataSource, [244](#)
- SetupProjectFromHDFS, [245](#)
- Share, [247](#)
- SharingRole, [247](#)
- SourceType, [248](#)
- StarModel, [248](#)
- StartNewAutoPilot, [249](#)
- StartProject, [250](#)
- StartRetryWaiter, [253](#)
- StartTuningSession, [253](#)
- Stringify, [254](#)
- SubmitActuals, [97](#), [99](#), [101](#), [255](#)
- summary.dataRobotModel, [256](#)
- summary.dataRobotProject
(summary.dataRobotModel), [256](#)
- summary.listOfBlueprints
(summary.dataRobotModel), [256](#)
- summary.listOfDataRobotTuningParameters,
[257](#)
- summary.listOfFeaturelists
(summary.dataRobotModel), [256](#)
- summary.listOfModels
(summary.dataRobotModel), [256](#)
- summary.projectSummaryList
(summary.dataRobotModel), [256](#)

- TargetLeakageType, [258](#)
- TargetType, [259](#)
- TestDataStore, [259](#)
- tidyServiceOverTimeObject, [260](#)
- TimeUnits, [260](#)
- ToggleStarForModel, [261](#)

- transformRFC3339Period, [66](#), [204](#), [237](#), [261](#),
[282](#)
- TreatAsExponential, [262](#)
- TryingToSubmitNull, [262](#)

- UnpauseQueue, [263](#)
- UnstarModel, [263](#)
- UpdateAccess, [264](#)
- UpdateCalendar, [265](#)
- UpdateComplianceDocTemplate, [265](#)
- UpdateDataSource, [266](#)
- UpdateDataStore, [267](#)
- UpdateDeploymentAssociationId
(GetDeploymentAssociationId),
[100](#)
- UpdateDeploymentDriftTrackingSettings,
[268](#)
- UpdateFeaturelist, [269](#)
- UpdateModelingFeaturelist, [269](#)
- UpdateProject, [270](#)
- UpdateTransferableModel, [54](#), [64](#), [165](#), [202](#),
[236](#), [270](#), [277](#)
- UploadComplianceDocTemplate, [272](#)
- UploadData, [273](#)
- UploadPredictionDataset, [273](#)
- UploadPredictionDatasetFromDataSource,
[275](#)
- UploadTransferableModel, [54](#), [64](#), [165](#), [202](#),
[236](#), [271](#), [276](#)

- ValidateActuals, [277](#)
- ValidateCalendar, [278](#)
- ValidateModel, [278](#)
- ValidateMultiSeriesProperties, [279](#)
- ValidateParameterIn, [279](#)
- ValidatePartition, [280](#)
- ValidateProject, [280](#)
- ValidateReplaceDeployedModel, [281](#)
- validateReportingPeriodTime, [66](#), [204](#),
[237](#), [262](#), [281](#)
- VariableTransformTypes, [282](#)
- ViewWebModel, [282](#)
- ViewWebProject, [283](#)

- WaitForAutopilot, [283](#)
- WaitForJobToComplete, [284](#)