

teradataml: Vantage 1.0 vs Vantage 1.1 or Vantage 1.1.1 vs Vantage 1.3 Compatibility Matrix

Functions Compatibility with Vantage Versions

The following table specifies which Analytic Functions are supported on Vantage 1.0, Vantage 1.1 or Vantage 1.1.1, and Vantage 1.3.

Note: Analytic Functions not specified here are supported on all versions.

	Function	Vantage 1.0		Vantage 1.1 or Vantage 1.1.1	Vantage 1.3	
		Supported?	Function Alternatives	Supported?	Supported?	Function Alternatives
ML Engine Functions (teradataml.analytics.mle)						
1	Attribution	No	Advanced SQL Engine 'Attribution'	Yes	Yes	None
2	DecisionForestPredict	No	Advanced SQL Engine 'DecisionForestPredict'	Yes	Yes	None
3	DecisionTreePredict	No	Advanced SQL Engine 'DecisionTreePredict'	Yes	Yes	None
4	GLMPredict	No	Advanced SQL Engine 'GLMPredict'	Yes	Yes	None
5	NaiveBayesPredict	No	Advanced SQL Engine 'NaiveBayesPredict'	Yes	Yes	None
6	NaiveBayesTextClassifierPredict	No	Advanced SQL Engine 'NaiveBayesTextClassifierPredict'	Yes	Yes	None
7	Sampling	No	DataFrame.sample()	Yes	Yes	None
8	SVMSParsePredict	No	Advanced SQL Engine 'SVMSParsePredict'	Yes	Yes	None
9	Sessionize	No	Advanced SQL Engine 'Sessionize'	Yes	Yes	None
10	ROC	No	None	Yes	Yes	None
11	TextClassifierEvaluator	Yes	None	Yes	No	ML Engine 'FMeasure'
12	NaiveBayesTextClassifier2	No	ML Engine 'NaiveBayesTextClassifier'	No	Yes	None
13	Correlation2	No	ML Engine 'Correlation'	No	Yes	None

Advanced SQL Engine Functions (teradataml.analytics.sql)						
14	Antiselect	No	ML Engine `Antiselect`	Yes	Yes	None
15	MovingAverage	No	ML Engine <ul style="list-style-type: none"> • `CumulativeMovAvg` • `ExapponentialMovAvg` • `SimpleMovAvg` • `WeightedMovAvg` 	Yes	Yes	None
16	NGramSplitter	No	ML Engine `NGrams`	Yes	Yes	None
17	Pack	No	ML Engine `Pack`	Yes	Yes	None
18	StringSimilarity	No	ML Engine `StringSimilarity`	Yes	Yes	None
19	Unpack	No	ML Engine `Unpack`	Yes	Yes	None

Execution of Unsupported Analytic Functions When Connected to Vantage 1.0

If you connect to Vantage 1.0 and request to run unsupported teradataml Analytic Functions, the system will raise Error.

For example:

```
teradataml.common.exceptions.TeradataMlException: [Teradata][teradataml](TDML_2078) Function is not supported on 'Vantage 1.0'.
```

Function Arguments Compatibility with Vantage Versions

For some Analytic Functions, certain arguments are supported only on specific Vantage versions.

The following table specifies such function arguments.

Analytic Function	Argument name	Supported on Vantage 1.0	Supported on Vantage 1.1	Supported on Vantage 1.1.1	Supported on Vantage 1.3
AdaBoost	categorical_encoding	No	Yes	Yes	Yes
CFilter	null_handling	No	No	No	Yes
	use_basketgenerator				
ChangePointDetection	granularity	No	No	No	Yes
DecisionForest	categorical_encoding	No	Yes	Yes	Yes
	id_column	No	No	No	Yes
DecisionForestPredict	output_response_probdist	No	No	Yes	Yes

	output_responses				
DecisionTree	categorical_encoding	No	Yes	Yes	Yes
GLMPredict	output_response_probdist	No	No	Yes	Yes
	output_responses				
GLML1L2Predict	output_prob	No	Yes	Yes	Yes
	output_responses	No	No	Yes	Yes
IdentityMatch	handle_nulls	No	No	No	Yes
KNN	accumulate	No	Yes	Yes	Yes
	output_prob				
	output_responses	No	No	No	Yes
	test_block_size				
LDA	initModelTaskCount	No	No	Yes	Yes
NaiveBayesTextClassifierPredict	output_responses	No	No	Yes	Yes
	stopwords				
	is_tokenized				
	convert_to_lower_case				
	stem_tokens				
	stopwords_sequence_column				
	stopwords_order_column				
RandomSample	setid_as_first_column	No	Yes	Yes	Yes
SentimentTrainer	punctuation	No	No	No	Yes
Sessionize	accumulate	No	No	No	Yes
SVM.Dense	force_mapreduce	No	No	No	Yes
SVM.DensePredict	output_response_probdist	No	No	Yes	Yes
	output_responses				
SVM.Sparse	force_mapreduce	No	No	No	Yes
SVM.SparsePredict	output_response_probdist	No	No	Yes	Yes
	output_responses				
TextClassifierTrainer	to_lower_case	No	No	No	Yes
	punctuation				
VarMax	order_p	No	Yes	Yes	Yes
	order_d				

	order_q				
	seasonal_order_p				
	seasonal_order_d				
	seasonal_order_q				
VectorDistance	ref_columns	No	No	No	Yes
	output_format				
	input_data_same				
	target_columns				
XGBoost	output_accuracy	No	No	No	Yes
XGBoostPredict	output_response_probdist	No	No	Yes	Yes
	output_responses				

You can use these functions without the arguments mentioned in the above table, on the Vantage version where the argument is not supported. If you use the arguments with an unsupported Vantage version, you will receive this error:
[Teradata Database] [Error 4382] Argument {argument-name} is not defined in the function mapping definition

Vantage1.3: Existing Argument Updates in Analytic Function

Analytic Function	Argument name	Supported on Vantage < 1.3?	Supported on Vantage 1.3 or later	Remarks
ArimaPredict	'partition_columns' argument is now optional.	Partially supported	Yes	Function may receive error from Vantage when connected to Vantage version earlier than 1.3 and run without these parameters.
ChangePointDetection	'accumulate' argument is now optional.	Partially supported	Yes	
DTW	'mapping_data' and 'mapping_data_partition_columns' arguments are now optional.	Partially supported	Yes	
NaiveBayesTextClassifierPredict	'doc_id_columns' argument is now optional.	Partially supported	Yes	
VectorDistance	'target_data_partition_column' and 'target_feature' are now optional argument.	Partially supported	Yes	
TextClassifierTrainer	'classifier_type' argument is now optional.	Partially supported	Yes	
SVMSparse	'value_column' argument is now required.	Yes	Yes	Argument is optional when connected to Vantage version earlier than 1.3.

Vantage1.1.1: Existing Argument Updates in Analytic Function

Analytic Function	Argument name	Supported on Vantage < 1.1.1?	Supported on Vantage 1.1.1 or later	Remarks
AdaBoostPredict	'output_responses' argument is now optional.	Partially supported	Yes	Function may receive error from Vantage when connected to Vantage version earlier than 1.1.1 and run without these parameters.
DecisionTreePredict	'output_responses' argument is now optional.	Partially supported	Yes	
NaiveBayesPredict	'responses' is now optional argument	Partially supported	Yes	
SVMSParse	'value_column' argument is now required.	Yes	Yes	Argument is required even when connected to Vantage version earlier than 1.1.1.

For functions with arguments that are partially supported with Vantage version earlier 1.1.1 or Vantage version earlier than 1.3, as mentioned in the table above, you should use the argument that is now optional.

For example,

AdaBoostPredict function will fail when output_responses is not used with Vantage 1.1:

```
AdaBoostPredict(object = AdaBoost_out_2.model_table,  
                newdata = iris_attribute_test,  
                newdata_partition_column = ["pid"],  
                attr_groupby_columns = "attribute",  
                attr_pid_columns = ["pid"],  
                attr_val_column = "attrvalue",  
                output_response_probdist = True)
```

Following error occurs:

```
ADABOOST_PREDICT: Responses Argument must be specified if OutputResponseProbDist is set to true. ()
```

As a workaround, with Vantage 1.1, you should use the 'output_responses' argument to get the results.