tdplyr: Vantage 1.0 vs Vantage 1.1 or later Compatibility Matrix

Functions Compatibility with Vantage Versions

Following table specifies which Analytic Functions are supported on Vantage 1.0 vs Vantage 1.1 or later.
Note: Analytic Functions not specified here are supported on both.

	Function	Vantage 1.0		Vantage 1.1 or later
		Supported?	Function Alternatives	Supported?
ML Engine Functions				
1	td_attribution_mle	No	td_attribution_sqle	Yes
2	td_decision_forest_predict_mle	No	td_decision_forest_predict_sqle	Yes
3	td_decision_tree_predict_mle	No	td_decision_tree_predict_sqle	Yes
4	td_glm_predict_mle	No	td_glm_predict_sqle	Yes
5	td_naivebayes_predict_mle	No	td_naivebayes_predict_sqle	Yes
6	td_naivebayes_textclassifier_predict_mle	No	td_naivebayes_textclassifier_predict_sqle	Yes
7	td_sessionize_mle	No	td_sessionize_sqle	Yes
8	td_svm_sparse_predict_mle	No	td_svm_sparse_predict_sqle	Yes
9	td_sampling_mle	No	td_sample	Yes
Advanced SQL Engine Functions				
10	td_antiselect_sqle	No	td_antiselect_mle	Yes
11	td_moving_average_sqle	No	Use the following ML Engine functions: • td_cumulative_mov_avg_mle • td_exponential_mov_avg_mle • td_simple_mov_avg_mle • td_weighted_mov_avg_mle	Yes
12	td_ngramsplitter_sqle	No	td_ngramsplitter_mle	Yes
13	td_pack_sqle	No	td_pack_mle	Yes
14	td_string_similarity_sqle	No	td_string_similarity_mle	Yes
15	td_unpack_sqle	No	td_unpack_mle	Yes

Execution of Unsupported Analytic Functions when connected to Vantage 1.0

If you connect to Vantage 1.0 and request to run unsupported tdplyr Analytic Functions, the system raises an error.

```
The function '{function-name}' is not supported for engine '{engine}' in Vantage
'{vantage-version}'
```

Function Arguments Compatibility with Vantage Versions

For some Analytic Functions, certain arguments are supported only on particular Vantage version.
The following table specifies such new arguments:

Analytic Function	Argument name	Supported on Vantage 1.0	Supported on Vantage 1.1	Supported on Vantage 1.1.1 or later
td_adaboost_mle	categorical.encoding	No	Yes	Yes
td_decision_forest_mle	categorical.encoding	No	Yes	Yes
td_decision_forest_predict_mle	output.response.probdist	No	No	Yes
	output.responses			
td_decision_tree_mle	categorical.encoding	No	Yes	Yes
td_glm_predict_mle	output.response.probdist	No	No	Yes
	output.responses			
td_glml1l2_predict_mle	output.prob	No	Yes	Yes
	output.responses	No	No	Yes
td_knn_mle	accumulate	No	Yes	Yes
	output.prob			
td_lda_mle	initmodeltaskcount	No	No	Yes
td_naivebayes_textclassifier_predict_mle	output.responses	No	No	Yes
td_random_sample_mle	setid.as.first.column	No	Yes	Yes
td_svm_dense_predict_mle	output.response.probdist	No	No	Yes
	output.responses			
td_svm_sparse_predict_mle	output.response.probdist	No	No	Yes
	output.responses			
td_varmax_mle	order.p	No	Yes	Yes
	order.d			
	order.q			
	seasonal.order.p			
	seasonal.order.d			
	seasonal.order.q			
td_xgboost_predict_mle	output.response.probdist	No	No	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. These new arguments are supported only on Vantage 1.1 or later. If used with an unsupported Vantage version, the following error is returned:

```
[Teradata Database] [Error 4382] Argument {argument-name} is not defined in the function mapping definition
```

Vantage 1.1.1: 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
td_adaboost_predict_mle	'output.responses' argument is now optional.	Partially supported	Yes	Function may receive error from Vantage when connected to Vantage versions earlier than 1.1.1 and run without these parameters.
td_decision_tree_predict_mle	'output.responses' argument is now optional.	Partially supported	Yes	
td_naivebayes_predict_mle	'responses' argument is now optional.	Partially supported	Yes	
td_svm_sparse_mle	'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 which are partially supported with Vantage version earlier than 1.1.1, as mentioned in the table above, you should use the argument that is now optional.

For example,
td_adaboost_predict_mle function will fail when 'output.responses' is not used with Vantage 1.1:

```
td_adaboost_predict_mle (object = td_adaboost_out2,
                         newdata = iris_attribute_test,
                         attr.groupby.columns = 'attribute',
                         attr.pid.columns = 'pid',
                         attr.val.column = 'attrvalue',
                         newdata.partition.column = "pid",
                         output.response.probdist = TRUE,
                         object.order.column="classifier_id")
```

Following error is seen:

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

As a workaround, with Vantage 1.1, a user should use the 'output.responses' argument as well to get the results.