

KYLIN-5395 Design & Test

讨论：

1. comment左右两边空格 研发是否主动trim

后端会trim

2. 维度名称是否支持特殊字符，comment 很长且伴有特殊字符

只支持空格，其他特殊字符（，¥%#）不支持

3. tds 结合可能会有问题（待测试验证）

4. count_distinct 度量也做同步注释，cc 列不同步注释（考虑cc列引用的表达式引用多个列）

5. 下个版本会新增一个新的半累加度量，是否同步注释（同步，取第一个column类型的字段的comment）

6. 是否要前端调用后端的api保持一致，否则随着双方修改，有越来越多的gap（新增 API 之后，两个都是独立的）

7. 前端调用一次是否会有影响（不会，前后端分开的）

8. 引用相同的列的维度的名称或者同comment的列，将维度的名称改为默认的 colname_tableAlias

Dev design

创建新的 API 接口 /api/models/comments_synchronization

输入参数：ModelRequest 对象

输出结果：SynchronizedCommentsResponse

```
1 @Data
2 public class SynchronizedCommentsResponse {
3
4     @JsonProperty("model_request")
5     private ModelRequest modelRequest;
6
7     @JsonProperty("conflict_info")
8     private ConflictInfo conflictInfo;
9
10    @Data
11    @AllArgsConstructor
12    public static class ConflictInfo implements Serializable {
13        @JsonProperty("cols_with_same_comment")
```

```

14     private List<String> colsWithSameComment;
15     @JsonProperty("dims_origin_from_same_col")
16     private List<String> dimsOriginFromSameCol;
17 }
18 }

```

在 modelservice 中新增 syncComment 方法，将维度引用的列注释同步为维度的名称，将度量引用的列注释同步为度量的注释

如何实现同步？

维度同步：获取所有的维度，遍历每个度量引用的列名称，通过 "\\." 切分为数组，根据 split[0] 获取表的别名，然后从模型中获取所有引用的表信息，根据表的别名进行匹配，获取对应的真实表的信息，然后根据 tablemanger 获取该表的所有列信息，从而获取到列的 comment 信息，然后根据表+列名匹配，替换维度的名称

度量同步：获取所有的度量，过滤所有引用到 column 类型的函数的参数，然后获取引用的列的信息，获取到列的 comment，将列的 comment 同步到度量的 comment 中

注意点：

cols_with_same_comment：如果维度引用不同的列有相同的 comment 的话，会保存在其中，并将维度的名称改为 colname_tableAlias

dims_origin_from_same_col：同一个列生成的维度(维表被 join 多次) 它们的 comment 一样，ModelRequest 中的 维度名称不会同步，仍然维持 colname_tableAlias 的命名方式，并将维度的名称改为 colname_tableAlias

Test

场景一：多表同步 comments，调用 API 可正常返回接口

```

1 {
2     "uuid": null,
3     "name": "test_model1",
4     "owner": "",
5     "project": "KYLIN_40052",
6     "alias": "test_model1",
7     "fact_table": "DEFAULT.STUDENT_SCORE",
8     "join_tables": [
9
10    ],
11     "simplified_dimensions": [
12         {
13             "name": "STU_ID",

```

```
14         "column": "STUDENT_SCORE.STU_ID",
15         "status": "DIMENSION",
16         "datatype": "varchar(4096)"
17     },
18     {
19         "name": "STU_NAME",
20         "column": "STUDENT_SCORE.STU_NAME",
21         "status": "DIMENSION",
22         "datatype": "varchar(4096)"
23     },
24     {
25         "name": "COURSES",
26         "column": "STUDENT_SCORE.COURSES",
27         "status": "DIMENSION",
28         "datatype": "varchar(4096)"
29     },
30     {
31         "name": "SCORES",
32         "column": "STUDENT_SCORE.SCORES",
33         "status": "DIMENSION",
34         "datatype": "varchar(4096)"
35     },
36     {
37         "name": "CC_1",
38         "column": "STUDENT_SCORE.CC_1",
39         "status": "DIMENSION",
40         "datatype": "VARCHAR"
41     }
42 ],
43 "simplified_measures": [
44     {
45         "expression": "COUNT",
46         "name": "COUNT_ALL",
47         "parameter_value": [
48             {
49                 "type": "constant",
50                 "value": 1,
51                 "table_guid": null
52             }
53         ],
54         "return_type": ""
55     },
56     {
57         "name": "max_a",
58         "expression": "MAX",
59         "return_type": "",
60         "comment": ""
```

```

61         "parameter_value":[
62             {
63                 "type":"column",
64                 "value":"STUDENT_SCORE.STU_ID"
65             }
66         ]
67     },
68     {
69         "name":"max_2",
70         "expression":"MAX",
71         "return_type":"",
72         "comment":"",
73         "parameter_value":[
74             {
75                 "type":"column",
76                 "value":"STUDENT_SCORE.CC_1"
77             }
78         ]
79     }
80 ],
81 "computed_columns":[
82     {
83         "tableIdentity":"DEFAULT.STUDENT_SCORE",
84         "tableAlias":"STUDENT_SCORE",
85         "guid":"1668659123788_08076028011028411",
86         "columnName":"CC_1",
87         "expression":"substring(STUDENT_SCORE.STU_ID, 0, 1)",
88         "innerExpression":"SUBSTRING(`STUDENT_SCORE`.`STU_ID`, 0, 1)",
89         "datatype":"VARCHAR",
90         "comment":null,
91         "rec_uuid":null,
92         "table_guid":"1668659058033_01666673425604248",
93         "name":"STUDENT_SCORE.CC_1",
94         "full_colname":"STUDENT_SCORE.CC_1"
95     }
96 ],
97 "last_modified":0,
98 "filter_condition":"",
99 "partition_desc":null,
100 "multi_partition_desc":null,
101 "management_type":"MODEL_BASED",
102 "canvas":{
103     "coordinate":{
104         "STUDENT_SCORE":{
105             "x":654.9444580078125,
106             "y":79.27778455946181,
107             "width":200,

```

```
108         "height":230,
109         "isSpread":true
110     }
111 },
112     "zoom":9,
113     "marginClient":{
114         "left":453,
115         "top":-365
116     }
117 },
118     "other_columns":[
119
120 ]
121 }
```

```
1 {
2     "code": "000",
3     "data": {
4         "model_request": {
5             "uuid": null,
6             "last_modified": 0,
7             "create_time": 1668658877156,
8             "version": "4.0.0.0",
9             "mvcc": -1,
10            "alias": "test_model1",
11            "owner": "",
12            "config_last_modifier": null,
13            "config_last_modified": 0,
14            "description": null,
15            "fact_table": "DEFAULT.TEST_KYLIN_FACT",
16            "fact_table_alias": null,
17            "management_type": "MODEL_BASED",
18            "join_tables": [
19                {
20                    "table": "DEFAULT.STUDENT_SCORE",
21                    "kind": "LOOKUP",
22                    "alias": "STUDENT_SCORE",
23                    "join": {
24                        "type": "LEFT",
25                        "primary_key": [
26                            "STUDENT_SCORE.STU_ID"
27                        ],
28                        "foreign_key": [
29                            "TEST_KYLIN_FACT.TRANS_ID"
30                        ],

```

```

31         "non_equi_join_condition": null,
32         "primary_table": null,
33         "foreign_table": null,
34         "simplified_non_equi_join_conditions": []
35     },
36     "flattenable": "flatten",
37     "join_relation_type": "MANY_TO_ONE"
38 }
39 ],
40 "filter_condition": "",
41 "partition_desc": null,
42 "capacity": "MEDIUM",
43 "segment_config": {
44     "auto_merge_enabled": null,
45     "auto_merge_time_ranges": null,
46     "volatile_range": null,
47     "retention_range": null,
48     "create_empty_segment_enabled": false
49 },
50 "data_check_desc": null,
51 "semantic_version": 0,
52 "storage_type": 0,
53 "model_type": null,
54 "all_named_columns": [],
55 "all_measures": [],
56 "recommendations_count": 0,
57 "computed_columns": [],
58 "canvas": {
59     "coordinate": {
60         "STUDENT_SCORE": {
61             "x": 713.8333468967018,
62             "y": 75.94445122612848,
63             "width": 200.0,
64             "height": 230.0
65         },
66         "TEST_KYLIN_FACT": {
67             "x": 440.55555555555556,
68             "y": 161.94444444444446,
69             "width": 200.0,
70             "height": 230.0
71         }
72     },
73     "zoom": 9.0
74 },
75 "multi_partition_desc": null,
76 "multi_partition_key_mapping": null,
77 "fusion_id": null,

```

```
78     "project": "KYLIN_40052",
79     "start": null,
80     "end": null,
81     "simplified_measures": [
82         {
83             "id": 0,
84             "expression": "COUNT",
85             "name": "COUNT_ALL",
86             "return_type": "",
87             "parameter_value": [
88                 {
89                     "type": "constant",
90                     "value": "1"
91                 }
92             ],
93             "converted_columns": [],
94             "column": null,
95             "comment": null
96         },
97         {
98             "id": 0,
99             "expression": "MAX",
100             "name": "aaaa",
101             "return_type": "",
102             "parameter_value": [
103                 {
104                     "type": "column",
105                     "value": "STUDENT_SCORE.Scores"
106                 }
107             ],
108             "converted_columns": [],
109             "column": null,
110             "comment": "各个分数"
111         }
112     ],
113     "simplified_dimensions": [
114         {
115             "id": 0,
116             "name": "学号",
117             "column": "STUDENT_SCORE.STU_ID",
118             "status": "DIMENSION"
119         },
120         {
121             "id": 0,
122             "name": "姓名",
123             "column": "STUDENT_SCORE.STU_NAME",
124             "status": "DIMENSION"
```

```
125     },
126     {
127         "id": 0,
128         "name": "各个科目",
129         "column": "STUDENT_SCORE.COURSES",
130         "status": "DIMENSION"
131     },
132     {
133         "id": 0,
134         "name": "各个分数",
135         "column": "STUDENT_SCORE.SCORES",
136         "status": "DIMENSION"
137     },
138     {
139         "id": 0,
140         "name": "??1",
141         "column": "TEST_KYLIN_FACT.TRANS_ID",
142         "status": "DIMENSION"
143     },
144     {
145         "id": 0,
146         "name": "??2",
147         "column": "TEST_KYLIN_FACT.ORDER_ID",
148         "status": "DIMENSION"
149     },
150     {
151         "id": 0,
152         "name": "??3",
153         "column": "TEST_KYLIN_FACT.CAL_DT",
154         "status": "DIMENSION"
155     },
156     {
157         "id": 0,
158         "name": "??4",
159         "column": "TEST_KYLIN_FACT.LSTG_FORMAT_NAME",
160         "status": "DIMENSION"
161     },
162     {
163         "id": 0,
164         "name": "??5",
165         "column": "TEST_KYLIN_FACT.LEAF_CATEG_ID",
166         "status": "DIMENSION"
167     },
168     {
169         "id": 0,
170         "name": "??6",
171         "column": "TEST_KYLIN_FACT.LSTG_SITE_ID",
```



```
172         "status": "DIMENSION"
173     },
174     {
175         "id": 0,
176         "name": "??7",
177         "column": "TEST_KYLIN_FACT.SLR_SEGMENT_CD",
178         "status": "DIMENSION"
179     },
180     {
181         "id": 0,
182         "name": "??8",
183         "column": "TEST_KYLIN_FACT.SELLER_ID",
184         "status": "DIMENSION"
185     },
186     {
187         "id": 0,
188         "name": "??9",
189         "column": "TEST_KYLIN_FACT.PRICE",
190         "status": "DIMENSION"
191     },
192     {
193         "id": 0,
194         "name": "??10",
195         "column": "TEST_KYLIN_FACT.ITEM_COUNT",
196         "status": "DIMENSION"
197     },
198     {
199         "id": 0,
200         "name": "??11",
201         "column": "TEST_KYLIN_FACT.TEST_COUNT_DISTINCT_BITMAP",
202         "status": "DIMENSION"
203     }
204 ],
205 "other_columns": [],
206 "rec_items": [],
207 "index_plan": null,
208 "save_only": false,
209 "with_segment": true,
210 "with_model_online": false,
211 "with_base_index": false,
212 "with_second_storage": false,
213 "computed_column_name_auto_adjust": false
214 },
215 "message_info": {
216     "as_comments": [],
217     "as_columns": []
218 }
```

```
219     },
220     "msg": ""
221 }
```

场景二：单表同步 comments，调用 API 可正常返回接口，且用返回的结果去调用 createModel API 成功

```
1  {
2    "uuid":null,
3    "name":"test_model2",
4    "owner": "",
5    "project":"KYLIN_40052",
6    "alias":"test_model2",
7    "fact_table":"DEFAULT.STUDENT_SCORE",
8    "join_tables":[
9
10   ],
11   "simplified_dimensions":[
12     {
13       "name":"STU_ID",
14       "column":"STUDENT_SCORE.STU_ID",
15       "status":"DIMENSION",
16       "datatype":"varchar(4096)"
17     },
18     {
19       "name":"STU_NAME",
20       "column":"STUDENT_SCORE.STU_NAME",
21       "status":"DIMENSION",
22       "datatype":"varchar(4096)"
23     },
24     {
25       "name":"COURSES",
26       "column":"STUDENT_SCORE.COURSES",
27       "status":"DIMENSION",
28       "datatype":"varchar(4096)"
29     },
30     {
31       "name":"SCORES",
32       "column":"STUDENT_SCORE.SCORES",
33       "status":"DIMENSION",
34       "datatype":"varchar(4096)"
35     }
36   ],
37   "simplified_measures":[
38     {
```

```
39         "expression": "COUNT",
40         "name": "COUNT_ALL",
41         "parameter_value": [
42             {
43                 "type": "constant",
44                 "value": 1,
45                 "table_guid": null
46             }
47         ],
48         "return_type": ""
49     },
50     {
51         "name": "sum_1",
52         "expression": "MAX",
53         "return_type": "",
54         "comment": "",
55         "parameter_value": [
56             {
57                 "type": "column",
58                 "value": "STUDENT_SCORE.STU_NAME"
59             }
60         ]
61     }
62 ],
63 "computed_columns": [
64
65 ],
66 "last_modified": 0,
67 "filter_condition": "",
68 "partition_desc": null,
69 "multi_partition_desc": null,
70 "management_type": "MODEL_BASED",
71 "canvas": {
72     "coordinate": {
73         "STUDENT_SCORE": {
74             "x": 683.8333468967014,
75             "y": 141.94444444444446,
76             "width": 200,
77             "height": 230,
78             "isSpread": true
79         }
80     },
81     "zoom": 9,
82     "marginClient": {
83         "left": 858,
84         "top": -334
85     }
86 }
```

```
86     },
87     "other_columns": [
88
89     ]
90 }
```

```
1 {
2   "code": "000",
3   "data": {
4     "model_request": {
5       "uuid": null,
6       "last_modified": 0,
7       "create_time": 1668668447767,
8       "version": "4.0.0.0",
9       "mvcc": -1,
10      "alias": "test_model2",
11      "owner": "",
12      "config_last_modifier": null,
13      "config_last_modified": 0,
14      "description": null,
15      "fact_table": "DEFAULT.STUDENT_SCORE",
16      "fact_table_alias": null,
17      "management_type": "MODEL_BASED",
18      "join_tables": [],
19      "filter_condition": "",
20      "partition_desc": null,
21      "capacity": "MEDIUM",
22      "segment_config": {
23        "auto_merge_enabled": null,
24        "auto_merge_time_ranges": null,
25        "volatile_range": null,
26        "retention_range": null,
27        "create_empty_segment_enabled": false
28      },
29      "data_check_desc": null,
30      "semantic_version": 0,
31      "storage_type": 0,
32      "model_type": null,
33      "all_named_columns": [],
34      "all_measures": [],
35      "recommendations_count": 0,
36      "computed_columns": [],
37      "canvas": {
38        "coordinate": {
39          "STUDENT_SCORE": {
```

```
40         "x": 683.8333468967014,
41         "y": 141.94444444444446,
42         "width": 200.0,
43         "height": 230.0
44     }
45 },
46     "zoom": 9.0
47 },
48     "multi_partition_desc": null,
49     "multi_partition_key_mapping": null,
50     "fusion_id": null,
51     "project": "KYLIN_40052",
52     "start": null,
53     "end": null,
54     "simplified_measures": [
55         {
56             "id": 0,
57             "expression": "COUNT",
58             "name": "COUNT_ALL",
59             "return_type": "",
60             "parameter_value": [
61                 {
62                     "type": "constant",
63                     "value": "1"
64                 }
65             ],
66             "converted_columns": [],
67             "column": null,
68             "comment": null
69         },
70         {
71             "id": 0,
72             "expression": "MAX",
73             "name": "sum_1",
74             "return_type": "",
75             "parameter_value": [
76                 {
77                     "type": "column",
78                     "value": "STUDENT_SCORE.STU_NAME"
79                 }
80             ],
81             "converted_columns": [],
82             "column": null,
83             "comment": "姓名"
84         }
85     ],
86     "simplified_dimensions": [
```

```

87         {
88             "id": 0,
89             "name": "学号",
90             "column": "STUDENT_SCORE.STU_ID",
91             "status": "DIMENSION"
92         },
93         {
94             "id": 0,
95             "name": "姓名",
96             "column": "STUDENT_SCORE.STU_NAME",
97             "status": "DIMENSION"
98         },
99         {
100             "id": 0,
101             "name": "各个科目",
102             "column": "STUDENT_SCORE.COURSES",
103             "status": "DIMENSION"
104         },
105         {
106             "id": 0,
107             "name": "各个分数",
108             "column": "STUDENT_SCORE.SCORES",
109             "status": "DIMENSION"
110         }
111     ],
112     "other_columns": [],
113     "rec_items": [],
114     "index_plan": null,
115     "save_only": false,
116     "with_segment": true,
117     "with_model_online": false,
118     "with_base_index": false,
119     "with_second_storage": false,
120     "computed_column_name_auto_adjust": false
121 },
122 "conflict_info": {
123     "cols_with_same_comment": [],
124     "dims_origin_from_same_col": []
125 }
126 },
127 "msg": ""
128 }

```