**家乐福销售需求计划项目数据库设计文档**

|  |  |  |
| --- | --- | --- |
| **版本** | **日期** | **更新内容** |
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# 数据库概况

家乐福数据池为基于Cloudera 解决方案的大数据集群。数据库表为Hive 表。为了提升性能，优化储存空间，表在创建时选择parquet为储存格式。表根据使用需求进行分扇。

依据使用性质，表可分为如下几类

* 参数表

储存需求计划系统运行基础参数。表内容更新不频繁。

* 数据输入表

储存数据池中其它表的快照，用作需求计划系统运行输入。表中信息按日更新。

* 数据输出表

储存每次运行的产出

* KPI监控表

储存所需的可测量KPI的测量结果。表中信息按日更新。

* 模拟运行表

需求计划模拟运行时使用的专用表，在日常运行时不会被使用。

# 参数表

## 门店单品信息 （forecast\_store\_item\_details）

|  |  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- | --- |
| 序号 | 字段英文名称 | 字段中文名称 | 类型 | 长度 | 允许空 | 缺省值 | 说明 |
| 1 | store\_code |  | string |  |  |  | 门店代码 |
| 2 | dept\_code |  | string |  |  |  | 部门代码 |
| 3 | item\_code |  | string |  |  |  | 商品一级代码 |
| 4 | sub\_code |  | string |  |  |  | 部门代码 |
| 5 | cn\_name |  | string |  |  |  |  |
| 6 | store\_status |  | string |  |  |  |  |
| 7 | dc\_supplier\_code |  | string |  |  |  |  |
| 8 | ds\_supplier\_code |  | string |  |  |  |  |
| 9 | repl\_type |  | string |  |  |  |  |
| 10 | order\_day |  | string |  |  |  | 订单日 |
| 11 | lead\_time |  | int |  |  |  |  |
| 12 | order\_by |  | string |  |  |  |  |
| 13 | qty\_per\_pack |  | int |  |  |  |  |
| 14 | pack\_per\_box |  | int |  |  |  |  |
| 15 | dc\_status |  | string |  |  |  |  |
| 16 | rotation |  | string |  |  |  |  |
| 17 | item\_type |  | string |  |  |  |  |
| 18 | remark |  | string |  |  |  |  |
| 19 | risk\_item\_unilever |  | string |  |  |  |  |
| 20 | qty\_per\_unit |  | int |  |  |  |  |
| 21 | con\_holding |  | string |  |  |  |  |

## 存库单品送货信息 （forecast\_onstock\_order\_delivery\_mapping）

|  |  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- | --- |
| 序号 | 字段英文名称 | 字段中文名称 | 类型 | 长度 | 允许空 | 缺省值 | 说明 |
| 1 | store\_code |  | string |  |  |  |  |
| 2 | dept\_code |  | string |  |  |  |  |
| 3 | rotation |  | string |  |  |  |  |
| 4 | lead\_time |  | string |  |  |  |  |
| 5 | order\_days |  | string |  |  |  |  |
| 6 | order\_iso\_weekday | | string |  |  |  |  |
| 7 | order\_weekday\_short | | string |  |  |  |  |
| 8 | delivery\_iso\_weekday | | string |  |  |  |  |
| 9 | week\_shift |  | int |  |  |  |  |

## 越库单品送货信息 （forecast\_xdock\_order\_mapping）

|  |  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- | --- |
| 序号 | 字段英文名称 | 字段中文名称 | 类型 | 长度 | 允许空 | 缺省值 | 说明 |
| 1 | store\_code |  | string |  |  |  |  |
| 2 | dept\_code |  | string |  |  |  |  |
| 3 | item\_code |  | string |  |  |  |  |
| 4 | sub\_code |  | string |  |  |  |  |
| 5 | lead\_time |  | string |  |  |  |  |
| 6 | dc\_to\_store\_time | | int |  |  |  |  |
| 7 | order\_days |  | string |  |  |  |  |
| 8 | order\_iso\_weekday | | string |  |  |  |  |
| 9 | order\_weekday\_short | | string |  |  |  |  |

## 大仓单品信息 （forecast\_store\_item\_details）

|  |  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- | --- |
| 序号 | 字段英文名称 | 字段中文名称 | 类型 | 长度 | 允许空 | 缺省值 | 说明 |
| 1 | dc |  | string |  |  |  |  |
| 2 | dc\_site |  | string |  |  |  |  |
| 3 | full\_item\_code |  | string |  |  |  |  |
| 4 | dc\_status |  | string |  |  |  |  |
| 5 | item\_name\_english |  | string |  |  |  |  |
| 6 | item\_name\_local |  | string |  |  |  |  |
| 7 | current\_warehouse |  | string |  |  |  |  |
| 8 | primary\_ds\_supplier |  | string |  |  |  |  |
| 9 | primary\_ds\_supplier\_name |  | string |  |  |  |  |
| 10 | qty\_per\_box |  | int |  |  |  |  |
| 11 | primary\_barcode |  | string |  |  |  |  |
| 12 | rotation |  | string |  |  |  |  |
| 13 | box\_per\_layer\_ti |  | int |  |  |  |  |
| 14 | layer\_per\_pallet\_hi |  | int |  |  |  |  |
| 15 | stop\_start\_date |  | string |  |  |  |  |
| 16 | stop\_reason |  | string |  |  |  |  |
| 17 | qty\_per\_pack |  | int |  |  |  |  |
| 18 | pack\_per\_box |  | int |  |  |  |  |
| 19 | holding\_supplier\_code |  | string |  |  |  |  |
| 20 | holding\_code |  | string |  |  |  |  |
| 21 | risk\_item\_unilever |  | string |  |  |  |  |
| 22 | order\_uint |  | string |  |  |  |  |
| 23 | seasonal |  | string |  |  |  |  |
| 24 | item\_type |  | string |  |  |  |  |
| 25 | dept\_code |  | string |  |  |  |  |
| 26 | item\_code |  | string |  |  |  |  |
| 27 | sub\_code |  | string |  |  |  |  |
| 28 | qty\_per\_unit |  | int |  |  |  |  |

## 系统日 （forecast\_calendar）

|  |  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- | --- |
| 序号 | 字段英文名称 | 字段中文名称 | 类型 | 长度 | 允许空 | 缺省值 | 说明 |
| 1 | week\_index |  | int |  |  |  |  |
| 2 | date\_key |  | string |  |  |  |  |
| 3 | iso\_day |  | string |  |  |  |  |
| 4 | weekday |  | string |  |  |  |  |
| 5 | iso\_weekday | | string |  |  |  |  |
| 6 | weekday\_short | | string |  |  |  |  |
| 7 | weekday\_long | | string |  |  |  |  |

## 大仓订货日 （forecast\_dc\_order\_delivery\_mapping）

|  |  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- | --- |
| 序号 | 字段英文名称 | 字段中文名称 | 类型 | 长度 | 允许空 | 缺省值 | 说明 |
| 1 | con\_holding |  | string |  |  |  |  |
| 2 | holding\_name | | string |  |  |  |  |
| 3 | order\_date |  | string |  |  |  |  |
| 4 | order\_weekday | | string |  |  |  |  |
| 5 | delivery\_date | | string |  |  |  |  |
| 6 | delivery\_weekday | | string |  |  |  |  |
| 7 | week\_shift |  | bigint |  |  |  |  |
| 8 | risk\_item\_unilever | | string |  |  |  |  |

## 门店送货到店时间 （forecast\_stores\_delv\_time）

|  |  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- | --- |
| 序号 | 字段英文名称 | 字段中文名称 | 类型 | 长度 | 允许空 | 缺省值 | 说明 |
| 1 | store\_code |  | string |  |  |  |  |
| 2 | delivery\_time | | string |  |  |  |  |

## 门店可订货单品信息（v\_forecast\_inscope\_store\_item\_details）

## 大仓可订货单品信息（v\_forecast\_inscope\_dc\_item\_details）

## 当日应在门店下订单的存库单品信息（v\_forecast\_daily\_onstock\_order\_items）

|  |  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- | --- |
| 序号 | 字段英文名称 | 字段中文名称 | 类型 | 长度 | 允许空 | 缺省值 | 说明 |
| 1 | dept\_code |  | string |  |  |  |  |
| 2 | item\_code |  | string |  |  |  |  |
| 3 | sub\_code |  | string |  |  |  |  |
| 4 | cn\_name |  | string |  |  |  |  |
| 5 | con\_holding |  | string |  |  |  |  |
| 6 | store\_code |  | string |  |  |  |  |
| 7 | rotation |  | string |  |  |  |  |
| 8 | ds\_supplier\_code | | string |  |  |  |  |
| 9 | dc\_supplier\_code | | string |  |  |  |  |
| 10 | order\_day |  | string |  |  |  |  |
| 11 | item\_stop\_start\_date | | string |  |  |  |  |
| 12 | item\_stop\_end\_date | | string |  |  |  |  |

## 当日应在门店下订单的越库单品信息（v\_forecast\_daily\_xdock\_order\_items）

# 参数表

## nsa.dm\_extract\_log 快照表 （forecast\_nsa\_dm\_extract\_log）

## 门店每日库存 （forecast\_item\_code\_id\_stock）

## p4cm.store\_item快照表（forecast\_p4cm\_store\_item）

## 大仓每日库存 （forecast\_lfms\_daily\_dcstock）

## 大仓最新平均销量 （forecast\_dc\_latest\_sales）

## 销售预测 （t\_forecast\_daily\_sales\_prediction）

|  |  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- | --- |
| 序号 | 字段英文名称 | 字段中文名称 | 类型 | 长度 | 允许空 | 缺省值 | 说明 |
| 1 | item\_id |  | int |  |  |  |  |
| 2 | sub\_id |  | int |  |  |  |  |
| 3 | store\_code |  | string |  |  |  |  |
| 4 | week\_key |  | string |  |  |  |  |
| 5 | daily\_sales\_pred | | double |  |  |  |  |
| 6 | daily\_sales\_pred\_original | | double |  |  |  |  |
| 7 | daily\_order\_pred | | double |  |  |  |  |
| 8 | dm\_to\_daily\_pred | | double |  |  |  |  |
| 9 | dm\_to\_daily\_pred\_original | | double |  |  |  |  |
| 10 | dm\_to\_daily\_order\_pred | | double |  |  |  |  |
| 11 | daily\_sales\_prediction | | double |  |  |  |  |
| 12 | daily\_sales\_prediction\_original | | double |  |  |  |  |
| 13 | date\_key |  | string |  |  |  |  |

# 数据输出表

## 存库单品门店订单 （forecast\_onstock\_orders）

|  |  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- | --- |
| 序号 | 字段英文名称 | 字段中文名称 | 类型 | 长度 | 允许空 | 缺省值 | 说明 |
| 1 | item\_id |  | int |  |  |  |  |
| 2 | sub\_id |  | int |  |  |  |  |
| 3 | dept\_code |  | string |  |  |  |  |
| 4 | item\_code |  | string |  |  |  |  |
| 5 | sub\_code |  | string |  |  |  |  |
| 6 | con\_holding |  | string |  |  |  |  |
| 7 | store\_code |  | string |  |  |  |  |
| 8 | supplier\_code | | string |  |  |  |  |
| 9 | delivery\_day | | string |  |  |  |  |
| 10 | minimum\_stock\_required | | double |  |  |  |  |
| 11 | order\_qty |  | int |  |  |  |  |
| 12 | order\_without\_pcb | | double |  |  |  |  |
| 13 | order\_day |  | string |  |  |  |  |

## 越库单品门店订单 （forecast\_xdock\_orders）

## 存库单品大仓订单（forecast\_dc\_orders）

|  |  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- | --- |
| 序号 | 字段英文名称 | 字段中文名称 | 类型 | 长度 | 允许空 | 缺省值 | 说明 |
| 1 | item\_id |  | int |  |  |  |  |
| 2 | sub\_id |  | int |  |  |  |  |
| 3 | dept\_code |  | string |  |  |  |  |
| 4 | item\_code |  | string |  |  |  |  |
| 5 | sub\_code |  | string |  |  |  |  |
| 6 | con\_holding |  | string |  |  |  |  |
| 7 | supplier\_code | | string |  |  |  |  |
| 8 | delivery\_day | | string |  |  |  |  |
| 9 | average\_sales | | double |  |  |  |  |
| 10 | order\_qty |  | int |  |  |  |  |
| 11 | order\_without\_pcb | | double |  |  |  |  |
| 12 | order\_day |  | string |  |  |  |  |

## 存库单品门店订单历史输出记录（forecast\_onstock\_orders\_hist）

## 越库单品门店订单历史输出记录（forecast\_xdock\_orders\_hist）

## 存库单品大仓订单历史输出记录（forecast\_dc\_orders\_hist）

## DM单品门店订单（forecast\_dm\_orders）

|  |  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- | --- |
| 序号 | 字段英文名称 | 字段中文名称 | 类型 | 长度 | 允许空 | 缺省值 | 说明 |
| 1 | item\_id |  | int |  |  |  |  |
| 2 | sub\_id |  | int |  |  |  |  |
| 3 | store\_code |  | string |  |  |  |  |
| 4 | con\_holding |  | string |  |  |  |  |
| 5 | theme\_start\_date | | string |  |  |  |  |
| 6 | theme\_end\_date | | string |  |  |  |  |
| 7 | npp |  | decimal(15,4) | |  |  |  |
| 8 | ppp |  | decimal(15,4) | |  |  |  |
| 9 | ppp\_start\_date | | string |  |  |  |  |
| 10 | ppp\_end\_date | | string |  |  |  |  |
| 11 | city\_code |  | string |  |  |  |  |
| 12 | dept\_code |  | string |  |  |  |  |
| 13 | item\_code |  | string |  |  |  |  |
| 14 | sub\_code |  | string |  |  |  |  |
| 15 | pcb |  | string |  |  |  |  |
| 16 | dc\_supplier\_code | | string |  |  |  |  |
| 17 | ds\_supplier\_code | | string |  |  |  |  |
| 18 | rotation |  | string |  |  |  |  |
| 19 | run\_date |  | string |  |  |  |  |
| 20 | first\_order\_date | | string |  |  |  |  |
| 21 | first\_delivery\_date | | string |  |  |  |  |
| 22 | regular\_sales\_before\_dm | | double |  |  |  |  |
| 23 | four\_weeks\_after\_dm | | double |  |  |  |  |
| 24 | dm\_sales |  | double |  |  |  |  |
| 25 | order\_qty |  | int |  |  |  |  |
| 26 | first\_dm\_order\_qty | | int |  |  |  |  |
| 27 | order\_without\_pcb | | double |  |  |  |  |
| 28 | dm\_theme\_id | | int |  |  |  |  |

## DM单品大仓订单（forecast\_dm\_dc\_orders）

|  |  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- | --- |
| 序号 | 字段英文名称 | 字段中文名称 | 类型 | 长度 | 允许空 | 缺省值 | 说明 |
| 1 | item\_id |  | int |  |  |  |  |
| 2 | sub\_id |  | int |  |  |  |  |
| 3 | con\_holding |  | string |  |  |  |  |
| 4 | theme\_start\_date | | string |  |  |  |  |
| 5 | theme\_end\_date | | string |  |  |  |  |
| 6 | npp |  | decimal(15,4) | |  |  |  |
| 7 | ppp |  | decimal(15,4) | |  |  |  |
| 8 | ppp\_start\_date | | string |  |  |  |  |
| 9 | ppp\_end\_date | | string |  |  |  |  |
| 10 | dept\_code |  | string |  |  |  |  |
| 11 | item\_code |  | string |  |  |  |  |
| 12 | sub\_code |  | string |  |  |  |  |
| 13 | pcb |  | string |  |  |  |  |
| 14 | ds\_supplier\_code | | string |  |  |  |  |
| 15 | rotation |  | string |  |  |  |  |
| 16 | run\_date |  | string |  |  |  |  |
| 17 | first\_order\_date | | string |  |  |  |  |
| 18 | first\_delivery\_date | | string |  |  |  |  |
| 19 | regular\_sales\_before\_dm | | double |  |  |  |  |
| 20 | four\_weeks\_after\_dm | | double |  |  |  |  |
| 21 | dm\_sales |  | double |  |  |  |  |
| 22 | order\_qty |  | int |  |  |  |  |
| 23 | order\_without\_pcb | | double |  |  |  |  |
| 24 | dm\_theme\_id | | int |  |  |  |  |

## 门店订单文件存档（forecast\_store\_daily\_order\_files）

## 大仓订单文件存档（forecast\_dc\_daily\_order\_files）

# KPI监控表

## 门店库存状况监控（forecast\_store\_daily\_order\_files）

## 大仓库存状况监控（forecast\_dc\_daily\_order\_files）