数据库中表

ExcelTable

|  |  |  |  |  |
| --- | --- | --- | --- | --- |
| **字段名** | **数据类型** | **主键** |  | **备注** |
| ID | INT() | 是 | 唯一 | AUTO\_INCREMENT |
| TableDesc | VARCHAR(30) | 否 | NOT NULL | Excel表描述 |
| Signal | VARCHAR(10) | 否 | 唯一 | 符号，例如：CX… |
| IsInfo | Boolean | 否 |  | True：基础数据表  False: 绘图表 |
| Total\_hold | double | 否 |  | 累计阈值 |
| Diff\_hold | double | 否 |  | 相邻差阈值 |
| Remark | VARCHAR(100) | 否 |  | 备注 |

Create table ExcelTable(ID INT PRIMARY KEY AUTO\_INCREMENT,

TableDesc VARCHAR(30) NOT NULL,

Signal VARCHAR(10) UNIQUE,

IsInfo Boolean,

Total\_hold double,

Diff\_hold double,

Remark VARCHAR(100)

) DEFAULT CHARSET = utf8;

三种表的列和类型

KeyTable

|  |  |  |  |  |
| --- | --- | --- | --- | --- |
| **字段名** | **数据类型** | **主键** |  | **备注** |
| ID | INT() | 是 | 唯一 | AUTO\_INCREMENT |
| Excel\_ID | INT() | 外键 | NOT NULL | 对应ExcelTable表的主键ID |
| Group\_ID | INT() | 外键 |  | 对应GroupTable表的主键ID |
| KeyName | VARCHAR(20) | 否 | NOT NULL | 存放表格的属性（绘图表没有属性存储） |

CREATE TABLE KeyTable(ID INT PRIMARY KEY AUTO\_INCREMENT,

Excel\_ID INT NOT NULL,

Group\_ID INT NOT NULL,

KeyName VARCHAR(20) NOT NULL,

CONSTRAINT kt\_ExcelId FOREIGN KEY (Excel\_ID) REFERENCES ExcelTable(ID) on delete cascade,

CONSTRAINT kt\_GroupId FOREIGN KEY (Excel\_ID) REFERENCES ExcelTable(ID) on delete cascade

) DEFAULT CHARSET = utf8;

GroupTable

|  |  |  |  |  |
| --- | --- | --- | --- | --- |
| **字段名** | **数据类型** | **主键** |  | **备注** |
| ID | INT() | 是 | 唯一 | AUTO\_INCREMENT |
| Excel\_ID | INT() | 外键 | NOT NULL | 对应ExcelTable表的主键ID |
| GroupName | VARCHAR(20) | 否 | NOT NULL | 存放属性类别名称 |
| Remark | VARCHAR(100) | 否 |  | 备注 |

不能级联删除，外键置空

CREATE TABLE GroupTable(ID INT PRIMARY KEY AUTO\_INCREMENT,

Excel\_ID INT NOT NULL,

GroupName VARCHAR(20) NOT NULL,

Remark VARCHAR(100),

CONSTRAINT gt\_ExcelId FOREIGN KEY (Excel\_ID) REFERENCES ExcelTable(ID)

) DEFAULT CHARSET = utf8;

EntityTable

|  |  |  |  |  |
| --- | --- | --- | --- | --- |
| **字段名** | **数据类型** | **主键** |  | **备注** |
| ID | INT() | 是 | 唯一 | 自动增加 |
| Excel\_ID | INT() | 外键 | NOT NULL | 对应ExcelTable表的主键ID |
| EntityName | VARCHAR(20) | 否 | NOT NULL | 存放表的实体名 |
| Remark | VARCHAR(100) | 否 |  | 对实体的备注 |

CREATE TABLE EntityTable(ID INT PRIMARY KEY AUTO\_INCREMENT,

Excel\_ID INT NOT NULL,

EntityName VARCHAR(20) NOT NULL,

Remark VARCHAR(100),

CONSTRAINT et\_ExcelId FOREIGN KEY (Excel\_ID) REFERENCES ExcelTable(ID) on delete cascade

) DEFAULT CHARSET = utf8;

属性面板显示表

InfoTable

|  |  |  |  |  |
| --- | --- | --- | --- | --- |
| **字段名** | **数据类型** | **主键** |  | **备注** |
| ID | INT() | 是 | 唯一 | 自动增加 |
| Key\_ID | INT() | 外键 | NOT NULL | 对应KeyTable表的主键 |
| Entity\_ID | INT() | 外键 | NOT NULL | 对应EntityTable表的主键 |
| Value | VARCHAR(20) |  |  | 基础表中的值 |

CREATE TABLE InfoTable(ID INT PRIMARY KEY AUTO\_INCREMENT,

Key\_ID INT NOT NULL,

Entity\_ID INT NOT NULL,

Value VARCHAR(20),

CONSTRAINT it\_keyId FOREIGN KEY (Key\_ID) REFERENCES KeyTable(ID) on delete cascade,

CONSTRAINT it\_EntityId FOREIGN KEY (Entity\_ID) REFERENCES EntityTable(ID) on delete cascade

)DEFAULT CHARSET = utf8;

绘图表

DrawDataTable

|  |  |  |  |  |
| --- | --- | --- | --- | --- |
| **字段名** | **数据类型** | **主键** |  | **备注** |
| ID | INT() | 是 | 唯一 | 自动增加 |
| Excel\_ID | INT() | 外键 | NOT NULL | 对应ExcelTable表的主键 |
| Entity\_ID | INT() | 外键 | NOT NULL | 对应EntityTable表的主键 |
| Date | DATETIME() | 否 |  | 绘图表中实体测量日期 |
| MaxValue | double | 否 |  | 最大值 |
| MidValue | double | 否 |  | 中位数 |
| MinValue | double | 否 |  | 最小值 |
| Detail | VARCHAR(100) | 否 |  | 绘图表对应ENTITY某日期的所有深度测量值 |

CREATE TABLE DrawDataTable(ID INT PRIMARY KEY AUTO\_INCREMENT,

Excel\_ID INT NOT NULL,

Entity\_ID INT NOT NULL,

Date DATETIME,

MaxValue double,

MidValue double,

MinValue double,

Detail VARCHAR(100),

CONSTRAINT dt\_ExcelId FOREIGN KEY (Excel\_ID) REFERENCES ExcelTable(ID) on delete cascade,

CONSTRAINT dt\_EntityId FOREIGN KEY (Entity\_ID) REFERENCES EntityTable(ID) on delete cascade

)DEFAULT CHARSET = utf8;