**军队车辆数据库设计**

|  |  |  |
| --- | --- | --- |
| 时间 | 修改人 | 修改内容 |
| 2018-10-19 | 曾恒旭 | 创建文档 |
| 2018-10-22 | 曾恒旭 | 更新表结构，删除部分管理表，迁移至主表 |
| 2019-01-07 | 曾恒旭 | 新增审批信息表 |

**一、数据库说明**

数据库名称：CR\_CUSTOM\_VehicleManagement

数据库字符集：utf8 -- UTF-8 Unicode

数据库排序规则：utf8\_general\_ci

**二、表说明**

**表名：VehicleInfo（车辆信息表）**

|  |  |  |  |  |
| --- | --- | --- | --- | --- |
| **Index** | **bigint** | **8** | **not null**  **unsigned**  **auto\_increment** | **索引** |
| **ID** | **varchar** | **255** | **not null**  **unsigned** | **车牌号** |
| **VIN\_NO** | **varchar** | **16** | **not null**  **unsigned** | **车架号** |
| **ENGINE\_SERIAL\_NUMBER** | **varchar** | **255** | **not null** | **发动机序列号** |
| **Model** | **varchar** | **255** | **not null** | **车辆类型** |
| **Brand** | **varchar** | **255** | **null** | **车辆品牌** |
| **Fuel\_Index** | **bigint** | **8** | **not null** | **燃料索引** |
| **Color** | **varchar** | **255** | **not null** | **车辆颜色** |
| **Seating** | **int** | **8** | **not null** | **座位数** |
| **Time** | **datetime** | **0** | **not null** | **配发时间** |
| **Mileage** | **bigint** | **8** | **not null** | **里程** |
| **Oil\_Wear** | **varchar** | **8** | **not null** | **油耗** |
| **TankSize** | **varchar** | **8** | **not null** | **邮箱大小** |
| **Maximun\_Load** | **varchar** | **16** | **not null** | **最大载重** |
| **Totle\_mass** | **varchar** | **64** | **not null** | **总质量** |
| **Overall\_Dimension** | **varchar** | **255** | **not null** | **外廓尺寸** |
| **V\_Dept** | **varchar** | **255** | **not null** | **车属单位** |
| **V\_Dept\_Manager** | **varchar** | **255** | **not null** | **车辆管理单位** |
| **V\_Employee\_Manager** | **varchar** | **32** | **not null** | **车辆管理人员** |
| **Register\_Time** | **date** | **0** | **not null** | **入档日期** |
| **Responsible\_Officer** | **varchar** | **32** | **not null** | **负责单位主官** |
| **FirstLeading\_Person** | **varchar** | **32** | **not null** | **第一负责人** |
| **SecordLeading\_Person** | **varchar** | **32** | **not null** | **第二负责人** |
| **ModifyDateTime** | **datetime** | **0** | **not null** | **修改时间** |
| **Remark** | **text** | **0** | **null** | **备注** |

**表名：MainTainInfo（维修信息表）**

|  |  |  |  |  |
| --- | --- | --- | --- | --- |
| **Index** | **bigint** | **8** | **not null**  **unsigned**  **auto\_increment** | **索引** |
| **VehicleInfo\_Index** | **bigint** | **8** | **not null** | **车辆信息表索引** |
| **Date** | **date** | **0** | **not null** | **日期** |
| **MainTain\_Reason** | **varchar** | **255** | **not null** | **维修原因** |
| **MainTain\_Content** | **text** | **0** | **not null** | **维修内容** |
| **Next\_MainTain\_Date** | **date** | **0** | **not null** | **预计下次维修日期** |
| **Repairman** | **varchar** | **32** | **not null** | **维修工** |
| **Driver** | **varchar** | **32** | **not null** | **司机** |
| **Cost** | **varchar** | **32** | **not null** | **维修费用** |
| **Registrant** | **varchar** | **32** | **not null** | **登记人** |
| **RegistDateTime** | **datetime** | **0** | **not null** | **录入时间** |
| **ModifyDateTime** | **datetime** | **0** | **not null** | **修改时间** |
| **Remark** | **text** | **0** | **null** | **备注** |

**表名：FuelInfo（燃料信息表）**

|  |  |  |  |  |
| --- | --- | --- | --- | --- |
| **Index** | **bigint** | **8** | **not null**  **unsigned**  **auto\_increment** | **索引** |
| **Name** | **varchar** | **32** | **not null** | **燃料名称** |
| **ModifyDateTime** | **datetime** | **0** | **not null** | **修改时间** |
| **Remark** | **text** | **0** | **null** | **备注** |

**表名：OilConsumptionInfo（油耗信息表）**

|  |  |  |  |  |
| --- | --- | --- | --- | --- |
| **Index** | **bigint** | **8** | **not null**  **unsigned**  **auto\_increment** | **索引** |
| **VehicleInfo\_Index** | **bigint** | **8** | **not null** | **车辆信息索引** |
| **Date** | **date** | **0** | **not null** | **加油日期** |
| **First\_Refueling\_Mileage** | **varchar** | **32** | **not null** | **初次加油里程** |
| **Total\_Mileage** | **varchar** | **32** | **not null** | **总里程数** |
| **Oil\_Number** | **varchar** | **32** | **not null** | **加油数量（升）** |
| **Oil\_Person** | **varchar** | **32** | **not null** | **加油员** |
| **Driver** | **varchar** | **32** | **not null** | **司机** |
| **Registrant** | **varchar** | **32** | **not null** | **登记人** |
| **ModifyDateTime** | **datetime** | **0** | **not null** | **修改时间** |
| **Remark** | **text** | **0** | **null** | **备注** |

**表名：VehicleUseApplicationInfo（车辆使用申请表）**

|  |  |  |  |  |
| --- | --- | --- | --- | --- |
| **Index** | **bigint** | **8** | **not null**  **unsigned**  **auto\_increment** | **索引** |
| **VehicleInfo\_Index** | **bigint** | **8** | **not null** | **车辆信息索引** |
| **VehicleDept** | **varchar** | **255** | **not null** | **出车单位** |
| **VehicleModel** | **varchar** | **32** | **not null** | **车辆型号** |
| **UseDept** | **varchar** | **255** | **not null** | **用车单位** |
| **UseContent** | **text** | **0** | **not null** | **出车事由** |
| **Car\_owner** | **varchar** | **32** | **not null** | **带车人** |
| **Driver\_route** | **text** | **0** | **not null** | **行驶路线** |
| **Schedule** | **varchar** | **255** | **not null** | **出车行程** |
| **Driver** | **varchar** | **32** | **not null** | **司机** |
| **Time** | **datetime** | **0** | **not null** | **用车时间** |
| **Replies** | **varchar** | **32** | **not null** | **批复人** |
| **Contractor** | **varchar** | **32** | **not null** | **承办人** |
| **Status** | **enum** | **0** | **‘0’ 未审核**  **‘1’ 已审核**  **not null** | **状态** |
| **MoidfyDatetime** | **datetime** | **0** | **not null** | **修改时间** |
| **Remark** | **text** | **0** | **null** | **备注** |

**注意：**

**Driver\_route行驶路线字段应用|号隔开（隔开的部分分别对应起点，途径，目的地）**

**示例：**

**"Driving\_route":"合肥南站|创始科技"**

**Schedule出车行程字段应用|隔开。首个数据段，标记符b#代表起始时间，其次数据段标记符e#代表结束时间。时间数据Y代表“年”，M代表“月”，D代表“日”，H代表“时”，m代表“分”**

**示例：**

**"Schedule":"b#2018Y10M18D15H20m|e#2018Y10M18D15H21m"**

**表名：VehicleApprovalInfo （车辆审批信息表）**

|  |  |  |  |  |
| --- | --- | --- | --- | --- |
| **Index** | **bigint** | **8** | **not null**  **unsigned**  **auto\_increment** | **索引** |
| **VehicleInfo\_Index** | **bigint** | **8** | **not null** | **车辆基本信息索引** |
| **Person** | **varchar** | **255** | **not null** | **用车人** |
| **BeginTime** | **datetime** | **0** | **not null** | **开始时间** |
| **EndTime** | **datetime** | **0** | **not null** | **结束时间** |
| **SubmitDate** | **date** | **0** | **not null** | **提交时间** |
| **ModifyDateTime** | **datetime** | **0** | **not null** | **修改时间** |
| **Remark** | **text** | **0** | **null** | **备注** |

**接口：**

**获取车辆信息历史GPS轨迹 （ GetDeviceHistoryGPSData ）**

**请求地址：**

**http://127.0.0.1:2580/VehicleManagement/php/service/index.php**

**请求参数：**

|  |  |  |  |  |
| --- | --- | --- | --- | --- |
|  | **参数名称** | **参数类型** | **参数含义** | **参数示例** |
| **\*** | **beginTime** | **String** | **开始时间** | **{**  **beginTime : '2018-01-01 00:00:00',**  **endTime : '2019-01-01 00:00:00',**  **PUID : '1510384027000035',**  **VehicleID : '皖A12345',**  **offset : '0',**  **count : '1000'**  **}** |
| **\*** | **endTime** | **String** | **结束时间** |
| **\*** | **PUID** | **String** | **设备唯一标识** |
| **\*** | **VehicleID** | **String** | **车牌号** |
|  | **offset** | **String** | **分页查询起始数** |
|  | **count** | **String** | **分页查询记录数** |
| **说明：** | | **PUID与VehicleID 可任意传一个即可。**  **offset 主要用于分页查询，默认值0**  **count 主要用于分页查询，默认值200**  **即查询0-200的记录。** | | |

**响应结果：**

|  |  |
| --- | --- |
| **PUID** | **设备PUID** |
| **ResIdx** | **GPS资源索引** |
| **Latitude** | **纬度（取值范围[-90,90]，北纬为正，南纬为负）** |
| **Longitude** | **经度（取值范围[-180,180]，东经为正，西经为负）** |
| **Bearing** | **方向（取值范围[0,360]，正北为0，正东为90，以此类推）** |
| **Speed** | **速度（单位km/h）** |
| **Altitude** | **海拔（单位m，小于等于-50000表示无效）** |
| **UTC** | **时间** |
| **State** | **状态（0，表示正常，1，标识无信号，2表示无模块）** |
| **MaxSpeed** | **最大速度（单位km/h）** |
| **MinSpeed** | **最小速度（单位km/h）** |

**接口示例：**

**请求示例：**

{

action: 'GetDeviceHistoryGPSData',

content: {

beginTime : '2018-01-01 00:00:00',

endTime : '2019-01-01 00:00:00',

PUID : '1510384027000035',

VehicleID : '皖A12345',

offset : '0',

count : '1000'

}

}

**响应示例：**

{

"response": {

"errorCode": "0x0000",

"time": 1546852659,

"action": "GetDeviceHistoryGPSData",

"content": [

{

"PUID": "15E7AB88850BFF9EF0",

"ResIdx": "0",

"Latitude": "31.84807777404785",

"Longitude": "117.203125",

"Bearing": "0",

"Speed": "0",

"Altitude": "0",

"UTC": "2018-01-10 14:46:26",

"State": "4",

"MaxSpeed": "0",

"MinSpeed": "0"

},

{

"PUID": "15E7AB88850BFF9EF0",

"ResIdx": "0",

"Latitude": "31.842300415039062",

"Longitude": "117.19654846191406",

"Bearing": "0",

"Speed": "0",

"Altitude": "0",

"UTC": "2018-01-10 14:46:26",

"State": "3",

"MaxSpeed": "0",

"MinSpeed": "0"

},

{...},

],

"time\_utc": 1546852659

}

}