# 登录注册绑定解绑接口

## 用户查信息询接口

查询用户的信息。请求字段中备注的是必填项，其余可以不填写。

|  |  |  |  |  |
| --- | --- | --- | --- | --- |
| 连接协议 | http | | | |
| url | http(s)://ip:port/api/microuser/queryuser | | | |
| 请求方式 | POST | | | |
| 参数格式 |  | | | |
| 请求字段 | 字段名称 | 是否必填 | 类型 | 说明 |
| openID | 必填 | string | 微信ID |
| 请求样例 |  | | | |
| 正确返回示例 | {  "statusCode": 200,  "data": {  "**userName**": "hlei",  "**loginName**": "hlei",  "**passwordMD5**": null,  "passwordConfirmed": false,  "email": "string",  "**phoneNumber**": "15168378245",  "phoneNumberConfirmed": true,  "**wechatId**": "15168378245",  "status": 0,  "isPreset": true,  "roleNames": null,  "roleIds": null,  "**organizationId**": 102,  "organizationName": null,  "id": 6,  "index": 0,  "createdDateTime": "2022-05-30 14:04:03"  },  "**succeeded**": true,  "errors": null,  "extras": null,  "timestamp": 1653898518366  } | | | |
| 返回字段解释 | 字段名称 | 是否必填 | 类型 | 说明 |
| **organizationId** | 是 | String | 用户所归属的组织ID |

## 用户注册接口

新用户注册时，默认注册在**游客组中**，游客组中的用户，名下是没有设备的。接口内部配置roleNames、organizationId等参数。

|  |  |  |  |  |
| --- | --- | --- | --- | --- |
| 连接协议 | http | | | |
| url | http(s)://ip:port/api/microuser/wxuserregister | | | |
| 请求方式 | POST | | | |
| 参数格式 | {  "encryptedData": "string",  "iv": "string",  "code": "string"  } | | | |
| 请求字段 | 字段名称 | 是否必填 | 类型 | 说明 |
|  |  |  |  |
| 请求样例 | {  "statusCode": 0,  "data": true,  "succeeded": true,  "errors": "string",  "extras": "string",  "timestamp": 0  } | | | |
| 正确返回示例（详细解释见表3） | {  **"statusCode": 0,**  "data": {  **"token": "string",**  **"openID": "string"**  },  "succeeded": true,  "errors": "string",  "extras": "string",  "timestamp": 0  } | | | |
| 返回字段解释 | 字段名称 | 是否必填 | 类型 | 说明 |
| statusCode | 是 | BOOl | 状态码，请求成功是200 |
| token | 是 | BOOl | JWT token |
| openID | 是 | BOOl | 微信唯一ID |

## 插入自定义组织

创建自定义农服组织接口。

如果当前用户是游客，该用户同时可以进行设备绑定操作。则认为用户类型可以从**游客**转变为**农业服务组织**。

在绑定设备之前需要新建一个私人农服组织。用户归属于该组织，同时也是该组织的负责人。

创建组织成功后，会自动更新该用户的类型和组织ID。

|  |  |  |  |  |
| --- | --- | --- | --- | --- |
| 连接协议 | http | | | |
| url | http(s)://ip:port/api/microorganization/**insertcustomorganization** | | | |
| 请求方式 | POST | | | |
| 参数格式 | json | | | |
| 请求字段 | 字段名称 | 是否必填 | 类型 | 说明 |
| wechatId | 是 | string | 用户微信ID |
| remark | 是 | string | 备注 |
| parentId | 是 | Int | 父级组织ID，可从querydevicebindinginfo接口获取**OrganizationId**。 |
|  | createdDateTime | 是 | string | 本次请求的UTC时间 |
| 样例 | {  "id": 0,  "index": 0,  "createdDateTime": "2022-06-17T03:23:33.666Z",  "wechatId": "oYHf65Z0MORXJs6Lg2387OTdaIuE",  "remark": "",  "parentId": 102  } | | | |
| 返回字段解释 | 字段名称 | 是否必填 | 类型 | 说明 |
| data | 是 | ID | 组织ID |
| 正确返回示例 | {  "statusCode": **200**,  "data": {  "name": "personal\_oYHf65Z",  "leader": "oYHf65Z0MORXJs6Lg2387OTdaIuE",  "email": null,  "phoneNumber": "15168378245",  "wechatId": "oYHf65Z0MORXJs6Lg2387OTdaIuE",  "orderIndex": 0,  "isPreset": false,  "remark": "",  "parentId": 102,  "children": null,  **"id": 107,**  "index": 0,  "createdDateTime": "0001-01-01 08:00:00"  },  "succeeded": true,  "errors": null,  "extras": null,  "timestamp": 1655437463074  } | | | |

## 设备信息查询接口

查询设备的绑定信息。如果bindingstatus为0，则认为设备没有被绑定，为1则认为被已经绑定。不能执行设备绑定接操作。

|  |  |  |  |  |
| --- | --- | --- | --- | --- |
| 连接协议 | http | | | |
| url | http(s)://ip:port/api/microdevice/QueryDeviceInfo | | | |
| 请求方式 | POST | | | |
| 参数格式 | json | | | |
| 请求字段 | 字段名称 | 是否必填 | 类型 | 说明 |
| deviceIMEI | 是 | String | 车辆ID |
| 请求样例 | "deviceIMEI": "862177044661190" | | | |
| 返回字段解释 | 字段名称 | 是否必填 | 类型 | 说明 |
| deviceName | 是 | Int | 设备的名字 |
| deviceIMEI | 是 | String | 设备的唯一码 |
| organizationId | 是 | Int | 设备所归属的组织ID。未绑定的设备，其ID为当地代理的ID。 |
| remark | 是 | String | 设备备注 |
| productSeries | 是 | String | 产品类别，可拼装路径从服务器，获取产品图片 |
| productModel | 是 | String | 产品型号，可拼装路径从服务器，获取产品图片 |
| bindingstatus | 是 | Int | （0：未绑定）  （1：已绑定：已绑定的设备，不能进行绑定操作） |
|  | succeeded | 是 | BOOL | 请求成功/失败 |
| 正确返回示例 | {  "statusCode": 0,  "data": {  "id": 0,  "index": 0,  "createdDateTime": "string",  "deviceName": "string",  "deviceIMEI": "string",  "organizationId": 0,  "remark": "string",  "productSeries": "string",  "productModel": "string",  "bindingstatus": 0,  "openID": "string"  },  "succeeded": true,  "errors": "string",  "extras": "string",  "timestamp": 0  } | | | |

表4 作业记录ID查询接口

## 设备绑定接口：

|  |  |  |  |  |
| --- | --- | --- | --- | --- |
| 连接协议 | http | | | |
| url | http(s)://ip:port/api/microdevice/bindingdevice | | | |
| 请求方式 | POST | | | |
| 参数格式 | json | | | |
| 请求字段 | 字段名称 | 是否必填 | 类型 | 说明 |
| deviceIMEI | 是 | String | 车辆ID |
| deviceName | 否 | String | 设备名（**用户可自定义**） |
| organizationId | 否 | Int | -1：代表绑定到用户归属的组织下  非-1：代表绑定到指定组织下，组织ID需要明确的获取到。 |
| remark | 是 | String | 设备自定义备注 |
| openID | 否 | String | 微信用户的唯一ID |
| 请求样例 | {  "id": 0,  "index": 0,  "createdDateTime": "2022-06-18T02:16:42.987Z",  "deviceName": "大东的一号车",  "deviceIMEI": "862177043462095",  "organizationId": -1,  "remark": "",  "openID": "oYHf65Z0MORXJs6Lg2387OTdaIuE"  } | | | |
| 返回字段解释 | 字段名称 | 是否必填 | 类型 | 说明 |
| statusCode | 是 | Int | 状态码 |
| data | 是 | bool | 请求结果结构体  绑定成功：true  绑定失败：false |
| succeeded | 是 | bool | 请求 |
| 正确返回示例 | {  "statusCode": 0,  "data": true,  "succeeded": true,  "errors": "string",  "extras": "string",  "timestamp": 0  } | | | |

表5 作业详细记录查询接口

## 设备解除绑定接口：

从用户所在的组织中解绑该设备，需要传入设备ID和用户信息，用户信息用于验证该设备是否属于当前用户。

|  |  |  |  |  |
| --- | --- | --- | --- | --- |
| 连接协议 | http | | | |
| url | http(s)://ip:port/api/microdevice/unbindingdevice/ | | | |
| 请求方式 | POST | | | |
| 参数格式 | json | | | |
| 请求字段 | 字段名称 | 是否必填 | 类型 | 说明 |
| deviceIMEI | 是 | String | 车辆ID |
| openID | 是 | JSON | 用户信息 |
| createdDateTime | 是 | String | 请求时间 |
| deviceName | 否 | String | 设备名 |
| organizationId | 否 | INT | 组织ID |
| remark | 否 | String | 备注 |
| UserQueryModel  样例 | {  "id": 0,  "index": 0,  "createdDateTime": "2022-06-18T02:16:42.987Z",  "deviceName": "",  "**deviceIMEI**": "862177043462095",  "organizationId":-1,  "remark": "",  "**openID**": "oYHf65Z0MORXJs6Lg2387OTdaIuE"  } | | | |
| 正确返回示例 | {  "statusCode": 0,  "data": true,  "succeeded": true,  "errors": "string",  "extras": "string",  "timestamp": 0  } | | | |

# 设备作业参数查询接口

## 设备作业信息统计接口

查询设备的作业统计，结构体中分为两层json,最外层是所有统计结果的总和。内层统计的是每天的数据。

|  |  |  |  |  |
| --- | --- | --- | --- | --- |
| 连接协议 | http | | | |
| url | http(s)://ip:port/api/micro/getdeviceworkingstatistics | | | |
| 请求方式 | POST | | | |
| 参数格式 | {  "pageIndex": 0,  "pageSize": 0,  "**beginTime**": "2021-01-18T06:41:37.694Z",  "**endTime**": "2022-06-11T06:41:37.694Z",  "isTimeRange": true,  "dateRange": [""],  "**deviceIMEI**": "862177043462095"  } | | | |
| 请求字段 | 字段名称 | 是否必填 | 类型 | 说明 |
| beginTime | 必填 | string | 起始时间 |
|  | endTime | 必填 | string | 结束时间 |
|  | deviceIMEI | 必填 | string | 设备唯一码 |
| 请求样例 | {  "pageIndex": 0,  "pageSize": 0,  "**beginTime**": "2021-01-18T06:41:37.694Z",  "**endTime**": "2022-06-11T06:41:37.694Z",  "isTimeRange": true,  "dateRange": [""],  "**deviceIMEI**": "862177043462095"  } | | | |
| 正确返回示例 | {  "statusCode": 200,  "data": {  "workingMile": 1766399.8887770865,  "workingArea": 15909.366958852655,  "waterUsage": 5227859.400000012,  "oilUsage": 0,  "doseUsage": 0,  "workingTime": null,  "remark": null,  "**workRecords**": {  "2022-01-21": {  "workingMile": 1.2045601530177872,  "workingArea": 18.019094440528296,  "waterUsage": 2.5,  "oilUsage": 0,  "doseUsage": 0,  "workingTime": null,  "remark": "2022-01-21",  "workRecords": null  },  "2022-01-19": {  "workingMile": 1.2073235653066534,  "workingArea": 16.260198652258346,  "waterUsage": 2.5,  "oilUsage": 0,  "doseUsage": 0,  "workingTime": null,  "remark": "2022-01-19",  "workRecords": null  },  "2021-09-22": {  "workingMile": 28.970689975757324,  "workingArea": 260.7362097818087,  "waterUsage": 1.7424000000000002,  "oilUsage": 0,  "doseUsage": 0,  "workingTime": null,  "remark": "2021-09-22",  "workRecords": null  },  "2021-09-18": {  "workingMile": 1720.5577939832299,  "workingArea": 15485.020145849037,  "waterUsage": 5.808000000000001,  "oilUsage": 0,  "doseUsage": 0,  "workingTime": null,  "remark": "2021-09-18",  "workRecords": null  },  "2021-09-13": {  "workingMile": 4.969281694655392,  "workingArea": 44.72353525189736,  "waterUsage": 0.29040000000000005,  "oilUsage": 0,  "doseUsage": 0,  "workingTime": null,  "remark": "2021-09-13",  "workRecords": null  },  "2021-09-12": {  "workingMile": 8.610068092295526,  "workingArea": 77.49061283065798,  "waterUsage": 0.5808000000000001,  "oilUsage": 0,  "doseUsage": 0,  "workingTime": null,  "remark": "2021-09-12",  "workRecords": null  },  "2021-09-09": {  "workingMile": 0.8801713128252624,  "workingArea": 7.921541815427362,  "waterUsage": 5160.603800000001,  "oilUsage": 0,  "doseUsage": 0,  "workingTime": null,  "remark": "2021-09-09",  "workRecords": null  },  "2021-08-04": {  "workingMile": 0,  "workingArea": 0,  "waterUsage": 53.834,  "oilUsage": 0,  "doseUsage": 0,  "workingTime": null,  "remark": "2021-08-04",  "workRecords": null  }  }  },  "succeeded": true,  "errors": null,  "extras": null,  "timestamp": 1655535689284  } | | | |
| 返回字段解释 | 字段名称 | 是否必填 | 类型 | 说明 |
| workingMile | 是 | String | 作业里程（KM） |
| workingArea | 是 | String | 作业面积（亩） |
| waterUsage | 是 | String | 用水量（吨） |
| oilUsage | 否 | String | 油耗（L） |
| workingTime | 是 | String | 作业累计时间（小时） |
| remark | 是 | String | 日期备注 |
| workRecords | 否 | JSON | 子结构（里面以日为单位的统计结果） |

## 设备工况查询

查询设备从创建时间到当前时间，所有工况数据的总和。总里、总时间、总作业面积等。

|  |  |  |  |  |
| --- | --- | --- | --- | --- |
| 连接协议 | http | | | |
| url | http(s)://ip:port/api/micro/QueryDeviceWorkingCondition | | | |
| 请求方式 | POST | | | |
| 参数格式 | {  "pageIndex": 0,  "pageSize": 0,  "beginTime": "2021-01-18T06:41:37.694Z",  "endTime": "2022-06-11T06:41:37.694Z",  "isTimeRange": true,  "dateRange": [""],  "**deviceIMEI**": "862177043462095"  } | | | |
| 请求字段 | 字段名称 | 是否必填 | 类型 | 说明 |
| openID | 必填 | string | 微信ID |
|  | deviceIMEI | 是 | string | 设备ID |
| 请求样例 |  | | | |
| 正确返回示例 | {  "statusCode": 200,  "data": {  "workingMile": 1766.3998887770865,  "workingArea": 15910.171338621618,  "waterUsage": 5227.859400000011,  "oilUsage": 0,  "doseUsage": 0,  "workingTime": "3",  "remark": null,  "workRecords": null  },  "succeeded": true,  "errors": null,  "extras": null,  "timestamp": 1655541797663  } | | | |
| 返回字段解释 | 字段名称 | 是否必填 | 类型 | 说明 |
| workingMile | 是 | String | 作业里程（KM） |
| workingArea | 是 | String | 作业面积（亩） |
| waterUsage | 是 | String | 用水量（吨） |
| oilUsage | 否 | String | 油耗（L） |
| remark | 否 | String | 备注 |
| workingTime | 是 | String | 设备使用时间（天） |

## 设备作业轨迹查询

查询设备的作业轨迹。

|  |  |  |  |  |
| --- | --- | --- | --- | --- |
| 连接协议 | http | | | |
| url | http(s)://ip:port/api/micro/GetDeviceSparyTrajectory | | | |
| 请求方式 | POST | | | |
| 参数格式 |  | | | |
| 请求字段 | 字段名称 | 是否必填 | 类型 | 说明 |
| deviceIMEI | 必填 | string | 微信ID |
| operatingId | 必填 | string | 作业的唯一ID |
| 请求样例 | http://localhost:53481/api/micro/getdevicesparytrajectory/862177043462095/3ce6225fa1344e49b0190bbfd056fdd3 | | | |
| 正确返回示例 | {  "statusCode": 200,  "data": [  [  {  "longitude": 117.27345276,  "latitude": 31.78045654  },  {  "longitude": 117.27345276,  "latitude": 31.78046608  },  {  "longitude": 117.27345276,  "latitude": 31.78047371  },  {  "longitude": 117.27345276,  "latitude": 31.78048325  },  {  "longitude": 117.27345276,  "latitude": 31.78049278  }  ]  ],  "succeeded": true,  "errors": null,  "extras": null,  "timestamp": 1655542550468  } | | | |
| 返回字段解释 | 字段名称 | 是否必填 | 类型 | 说明 |
| **organizationId** | 是 | String | 用户所归属的组织ID |

## 作业记录询接口

查询设备的作业的作业记录。

|  |  |  |  |  |
| --- | --- | --- | --- | --- |
| 连接协议 | http | | | |
| url | http(s)://ip:port/api/micro/GetDeviceSprayOperationRecord | | | |
| 请求方式 | POST | | | |
| 参数格式 |  | | | |
| 请求字段 | 字段名称 | 是否必填 | 类型 | 说明 |
| openID | 必填 | string | 微信ID |
| 请求样例 | {  "pageIndex": 0,  "pageSize": 0,  "beginTime": "2022-01-18T08:47:21.083Z",  "endTime": "2022-06-18T08:47:21.083Z",  "isTimeRange": true,  "dateRange": [  ""  ],  "deviceIMEI": "862177043462095"  } | | | |
| 正确返回示例 | {  "statusCode": 200,  "data": [  {  "workingMile": 482.92942612266137,  "workingArea": 6.864143646849394,  "waterUsage": 1000,  "oilUsage": 0,  "doseUsage": 0,  "workingTime": "12:25-12:29",  **"remark": "3ce6225fa1344e49b0190bbfd056fdd3",**  "workRecords": null  },  {  "workingMile": 482.0980344803095,  "workingArea": 6.851699104979475,  "waterUsage": 1000,  "oilUsage": 0,  "doseUsage": 0,  "workingTime": "12:05-12:10",  **"remark": "017b00d7a46149fa90b5447e3237ad1e",**  "workRecords": null  },  {  "workingMile": 482.92942612266137,  "workingArea": 6.864143646849394,  "waterUsage": 1000,  "oilUsage": 0,  "doseUsage": 0,  "workingTime": "11:56-12:01",  **"remark": "0935035edcc040828d0a2a746579d3a4",**  "workRecords": null  },  {  "workingMile": 482.92942612266137,  "workingArea": 6.864143646849394,  "waterUsage": 1000,  "oilUsage": 0,  "doseUsage": 0,  "workingTime": "11:44-11:49",  **"remark": "263feec91946421aa3b8d97c8835c53c",**  "workRecords": null  },  {  "workingMile": 480.9974054761469,  "workingArea": 6.835163047258986,  "waterUsage": 1000,  "oilUsage": 0,  "doseUsage": 0,  "workingTime": "09:37-09:42",  "remark": "846ebf135e6a42108e4d7ede723db85d",  "workRecords": null  }  ],  "succeeded": true,  "errors": null,  "extras": null,  "timestamp": 1655542061133  } | | | |
| 返回字段解释 | 字段名称 | 是否必填 | 类型 | 说明 |
| **organizationId** | 是 | String | 用户所归属的组织ID |