2025/7/3 11:01







Swagger UI

|  |
| --- |
| ./opt/swagger-conf |

Explore

Slamware RESTful API 1.1.0 OAS3

[./opt/swagger-conf.json](https://docs.slamtec.com/opt/swagger-conf.json)

本⽂档适⽤于思岚科技旗下的各类底盘和服务机器⼈产品.

system 系统资源 

|  |  |  |
| --- | --- | --- |
| GET **/api/core/system/v1/capabilities** 获取机器⼈能⼒ | | |
| 该接⼝⽤于判断机器⼈⽀持哪些功能， 以及是否已完成初始化。本⽂档中的部分接⼝需要依赖特定的capability才能运⾏。 | | |
| Parameters |  |  |
| Try it out |
|  |
| No parameters | | |
| Responses | | |
| Code Description Links | | |
| 200  OK  Media type | *No* *links* | |
| |  | | --- | | application/json | | | |
| Controls Accept header.  Example Value  Schema  [  {  "name " : "slamware.agent.core " , "version " : "4 .0 .0 " ,  "enabled " : true }  ] | | |
|  | | |

|  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- |
| GET **/api/core/system/v1/power/status** | 获取机器⼈电源状态 |  | | |  |
| Parameters |  |  |  | |  |
|  | Try it out |
|  | |  |

[https://docs.slamtec.com/#/industry/postTaskEvent 1/115](https://docs.slamtec.com/#/industry/postTaskEvent1/115)

|  |  |  |
| --- | --- | --- |
| No parameters  Responses  Code Description | | Links |
| 200  OK  Media type | | *No* *links* |
| |  | | --- | | application/json | | |
| Controls Accept header.  Example Value  Schema  {  "batteryPercentage " : 90 ,  "dockingStatus " : "on\_dock" , "isCharging " : true ,  "isDCConnected " : false , "powerStage " : "running " , "sleepMode " : "awake "  } | |
| POST **/api/core/system/v1/power/:shutdown** | | 关闭或重启机器⼈ |
| Parameters | | |  | | --- | | Try it out | |
| No parameters | |
| Request body | required | |  | | --- | | application/json | |
| 通过设置关机时间和重启时间来实现机器⼈延时重启， Example Value  Schema  {  "shutdown\_time\_interval " : 0 ,  "restart\_time\_interval " : 0  }  Responses  Code Description | | 单位分钟，如果都为0则表示⽴即关机且不再重启。  Links |
| 200  OK  Media type | | *No* *links* |

|  |  |  |
| --- | --- | --- |
| Code Description Links   |  | | --- | | application/json |   Controls Accept header.  Example Value  Schema  true | |
| POST **/api/core/system/v1/power/:hibernate** 休眠机器⼈ | |
| 休眠时激光雷达暂停⼯作 | |
| Parameters | |  | | --- | | Try it out | |
| No parameters | |
| Responses | |
| Code Description Links  200 *No* *links* OK | |

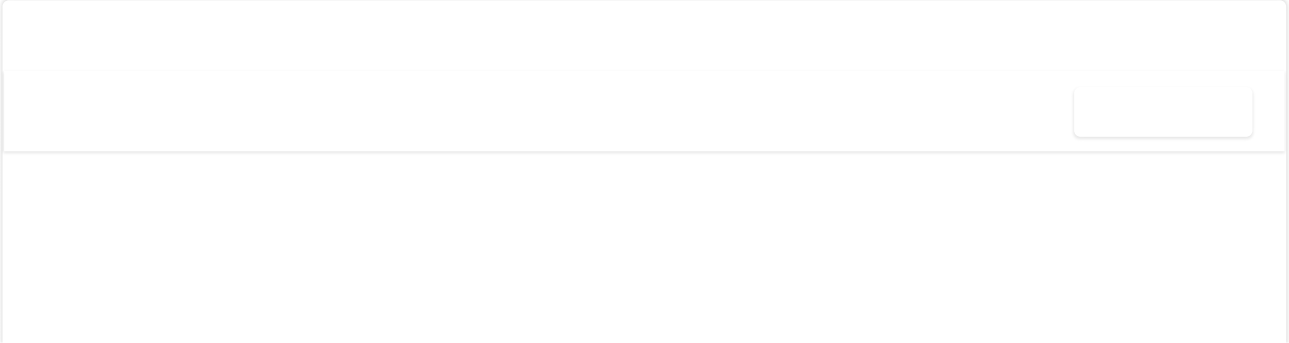
|  |  |  |
| --- | --- | --- |
| POST **/api/core/system/v1/power/:wakeup** | 唤醒机器⼈ |  |
| Parameters |  | |  | | --- | | Try it out | |
| No parameters |  |  |
| Responses |  |  |
| Code Description  200  OK |  | Links  *No* *links* |
|  |

|  |  |  |
| --- | --- | --- |
| POST **/api/core/system/v1/power/:restartmodule** 重启模块 | | |
| Parameters |  |  |
| Try it out |
|  |



|  |  |  |  |  |
| --- | --- | --- | --- | --- |
| No parameters | | | |  | | --- | | application/json | |
| Request body | required | |
| 根据指定的重启模式（默认软复位）执⾏重启操作。 Example Value  Schema  {  "mode " : "RestartModeSoft " }  Responses  Code Description | | | Links |
| 200  OK  Media type | |  | *No* *links* |
| |  | | --- | | application/json | | |
| Controls Accept header.  Example Value  Schema  true | |
| GET **/api/core/system/v1/robot/info** | | 获取设备信息 |  |
| Parameters    No parameters  Responses  Code Description | |  | |  | | --- | | Try it out | |
| Links |
| 200  OK  Media type | |  | *No* *links* |
| |  | | --- | | application/json | | |
| Controls Accept header.  Example Value  Schema | |

|  |  |
| --- | --- |
| Code Description Links  {  "manufacturerId " : 255 ,  "manufacturerName " : "Slamtec " , "modelId " : 43792 ,  "modelName " : "Apollo " ,  "deviceID " : "D2E6D7C0F7ABF29EDFEAFEFE1C781D09 " , "hardwareVersion " : "511 " ,  "softwareVersion " : "3 .6 .1-rtm+20210807 " } | |
| GET **/api/core/system/v1/robot/health** 获取设备健康状态信息 | |
| Parameters    No parameters | |  | | --- | | Try it out | |
| Responses  Code Description Links | |
| 200  OK  Media type | *No* *links* |
| |  | | --- | | application/json | | |
| Controls Accept header.  Example Value  Schema  {  "hasWarning " : false ,  "hasError " : true ,  "hasFatal " : false ,  "baseError " : [  {  "id " : 0 ,  "component " : 1 ,  "errorCode " : 33621760 ,  "level " : 2 ,  "message " : "motor barke released " }  ]  } | |



|  |  |
| --- | --- |
| DELETE **/api/core/system/v1/robot/health/{error\_code}** 清除出错的状态信息 | |
| Parameters | |  | | --- | | Try it out | |
| Name Description | |
| error\_code \*  **integer** | required  错误码 |

|  |  |  |  |  |
| --- | --- | --- | --- | --- |
| Name Description  ***(path)*** *Example* : 33621760   |  | | --- | | 33621760 |   Responses  Code Description Links  200 *No* *links* OK  400 *No* *links* Invalid Error Code | | | |
| GET **/api/core/system/v1/laserscan** | 获取当前激光观测帧 |  |  |
| 所需最低固件版本 4.2.2  Parameters |  |  | |  | | --- | | Try it out | |
| No parameters  Responses  Code Description | Links |
| 200  OK  Media type |  |  | *No* *links* |
| |  | | --- | | application/json | |
| Controls Accept header.  Example Value  Schema  {  "pose " : {  "x " : 0 ,  "y " : 0 ,  "z " : 0 ,  "yaw " : 0 ,  "pitch " : 0 , "roll " : 0    { |

|  |  |  |  |
| --- | --- | --- | --- |
| Code Description Links  "distance " : 0 , "angle " : 0 ,  "valid " : true  }  ]  } | | |  |
| GET **/api/core/system/v1/parameter** 获取系统参数 | | | |
| Parameters | | |  | | --- | | Try it out | | |
| Name Description | | | |
| param  **string**  ***(query)*** | \* required  系统参数名:  **base.max\_moving\_speed** - 最⼤线速度  **base.max\_angular\_speed** - 最⼤角速度  **docking.docked\_register\_strategy** - 充电桩注册策略， **always** 每次回桩都 注册， **when\_not\_exists** 桩不存在时注册 | | |
| *Available* *values* : base.max\_moving\_speed, base.max\_angular\_speed, docking.docked\_register\_strategy   |  | | --- | | base.max\_moving\_speed | | | | |
| Responses | | | |
| Code Description Links | | | |
| 200  OK  Media type | | *No* *links*  *No* *links* | |
| |  | | --- | | text/plain | | |
| Controls Accept header.  Example Value  Schema  string  400  Parameter is required | |
|  | | | |

|  |  |  |  |
| --- | --- | --- | --- |
| PUT **/api/core/system/v1/parameter** 设置系统参数 | | | |
| Parameters |  |  |  |
| Try it out | |
|  | |

|  |  |  |  |  |
| --- | --- | --- | --- | --- |
| No parameters | | | |  | | --- | | application/json | |
| Request body | required | |
| 设置的系统参数仅本次运⾏有效，重启机器后恢复原值 Example Value  Schema  {  "param " : "base.max\_moving\_speed " ,  "value " : "0 .5 " }  Responses  Code Description | | | Links |
| 200  OK  Media type | |  | *No* *links*  *No* *links* |
| |  | | --- | | application/json | | |
| Controls Accept header.  Example Value  Schema  true  400  Bad Request | |
| GET **/api/core/system/v1/network/status** | | 获取⽹络状态 |  |
| 获取机器⼈当前的⽹络状态  Parameters    No parameters  Responses | |  | |  | | --- | | Try it out | |

|  |  |  |  |
| --- | --- | --- | --- |
| Code Description | | | Links |
| 200  OK  Media type | |  | *No* *links* |
| |  | | --- | | application/json | | |
| Controls Accept header.  Example Value  Schema  {  "networkstatus " : {  "ethip1 " : "192 .168 .11 .1/24 " , "ip " : "10 .6 .128 .147 " ,  "mac " : "ec:0e:c4:0a:e4:3b " , "mode " : "STA " ,  "quality " : 100 ,  "ssid " : "string " }  } | |
| PUT **/api/core/system/v1/network/status** | | 设置⽹络状态 |  |
| 当⽹络由安卓管理时，该接⼝会返回false  Parameters | |  | |  | | --- | | Try it out | |
| No parameters | |
| Request body  Example Value | required  Schema | |  | | --- | | application/json | |
| {  "networkmode " : 0 , "options " : {}  }  Responses  Code Description | | Links |
| 200  OK  Media type | |  | *No* *links* |
| |  | | --- | | application/json | | |
| Controls Accept header. | |



|  |  |
| --- | --- |
| Code Description Links  Example Value  Schema | |
| true | |
| 400 *No* *links* | |
| Bad Request | |
| GET **/api/core/system/v1/network/route** 获取路由信息 | |
| Parameters | |  | | --- | | Try it out | |
| No parameters | |
| Responses | |
| Code Description Links  200 *No* *links* | |
| OK | |
| Media type | |
| |  | | --- | | application/json | | |
| Controls Accept header. | |
| Example Value  Schema | |
| { | |
| "priority " : "wifi " | |
| } | |
| 500 *No* *links* | |
| Failed to get route | |

|  |  |  |
| --- | --- | --- |
| PUT **/api/core/system/v1/network/route** 设置路由信息 | | |
| 可设置路由优先级， 当wiﬁ和4g都可⽤时，可选择wiﬁ优先或者4g优先。 | | |
| Parameters | |  | | --- | | Try it out | | |
| No parameters | | |
| Request body | required | |  | | --- | | application/json | |

|  |  |  |
| --- | --- | --- |
| Example Value  Schema  {  "priority " : "wifi " }  Responses  Code Description |  | Links |
| 200 |  | *No* *links* |
| OK |  |  |
| 400 |  | *No* *links* |
| Invalid JSON data |  |  |
| 500 |  | *No* *links* |
| Failed to set route |  |  |
| GET **/api/core/system/v1/network/apn** | 获取cmlink apn |  |
| 所需最低固件版本 4.4.0 |  |  |
| Parameters |  | |  | | --- | | Try it out | |
| No parameters |  |  |
| Responses |  |  |
| Code Description |  | Links |
| 200 |  | *No* *links* |
| OK |  |  |
| Media type |  |  |
| |  | | --- | | application/json | |  |  |
| Controls Accept header. |  |  |
| Example Value  Schema |  |  |
|  |  |  |
| 500 |  | *No* *links* |
| Failed to get cmlink apn |  |  |

|  |  |  |  |
| --- | --- | --- | --- |
| Code Description Links | | |  |
| PUT **/api/core/system/v1/network/apn** 设置cmlink apn | | | |
| 根据地区来设置cmlink apn ，设置4g在不同地区的接⼊点，具体的apn请查阅运营商官⽹ 所需最低固件版本 4.4.0 | | | |
| Parameters | | |  | | --- | | Try it out | | |
| No parameters | | | |
| Request body | required | |  | | --- | | application/json | | |
| Example Value  Schema  {  "apn " : "cmhk" } | | | |
| Responses | | | |
| Code Description Links  200 *No* *links* OK  500 *No* *links* Failed to set cmlink apn | | | |

|  |  |
| --- | --- |
| PUT **/api/core/system/v1/cube/config** 设置Cube配置 | |
| 以⼆进制⽅式读取cube\_cfg\_dat⽂件作为Request Body.  Cube配置⽂件请⽤RoboStudio的Cube配置⼯具导出或联系思岚技术⽀持获取. 所需最低固件版本 4.2.0 | |
| Parameters | |  | | --- | | Try it out | |
| No parameters | |
| Request body | |  | | --- | | application/octet-stream | |

|  |  |  |
| --- | --- | --- |
| *Example* *values* *are* *not* *available* *for* *application/octet* *-stream* *media* *types.*  Responses  Code Description | | Links |
| 200  OK | | *No* *links* |
| POST **/api/core/system/v1/light/control** 设置灯光控制效果 | |  |
| 可以设置不同通道，不同部分，不同类型的led灯颜⾊效果。  Parameters | | |  | | --- | | Try it out | |
| No parameters | |
| Request body  Example Value | required  Schema | |  | | --- | | application/json | |
| {  "channel " : "One " ,  "controlPart " : "Left " , "mode " : "AlwaysBright " , "color " : {  "red " : 0 ,  "green " : 0 ,  "blue " : 0  } ,  "brightnessEndColor " : { "red " : 0 ,  "green " : 0 ,  "blue " : 0  } ,  "brightMs " : 0 ,  "offMs " : 0  }  Responses  Code Description | | Links |
| 200  OK  400  Invalid JSON data | | *No* *links*  *No* *links* |

|  |  |  |  |
| --- | --- | --- | --- |
| Code Description Links  500 *No* *links* Failed to set light control | | |  |
| POST **/api/core/system/v1/aeb/control** 设置AEB控制 | | | |
| 设置AEB功能打开或者关闭。 | | | |
| Parameters | | |  | | --- | | Try it out | | |
| No parameters | | | |
| Request body | required | |  | | --- | | application/json | | |
| Example Value  Schema  "On " | | | |
| Responses | | | |
| Code Description Links  200 *No* *links* OK  400 *No* *links* Invalid JSON data  500 *No* *links* Failed to set aeb control | | | |

|  |  |  |
| --- | --- | --- |
| POST **/api/core/system/v1/jack/status** 设置千⽄顶状态 | | |
| 设置千⽄顶状态。 | | |
| Parameters | |  | | --- | | Try it out | | |
| No parameters | | |
| Request body | required | |  | | --- | | application/json | |

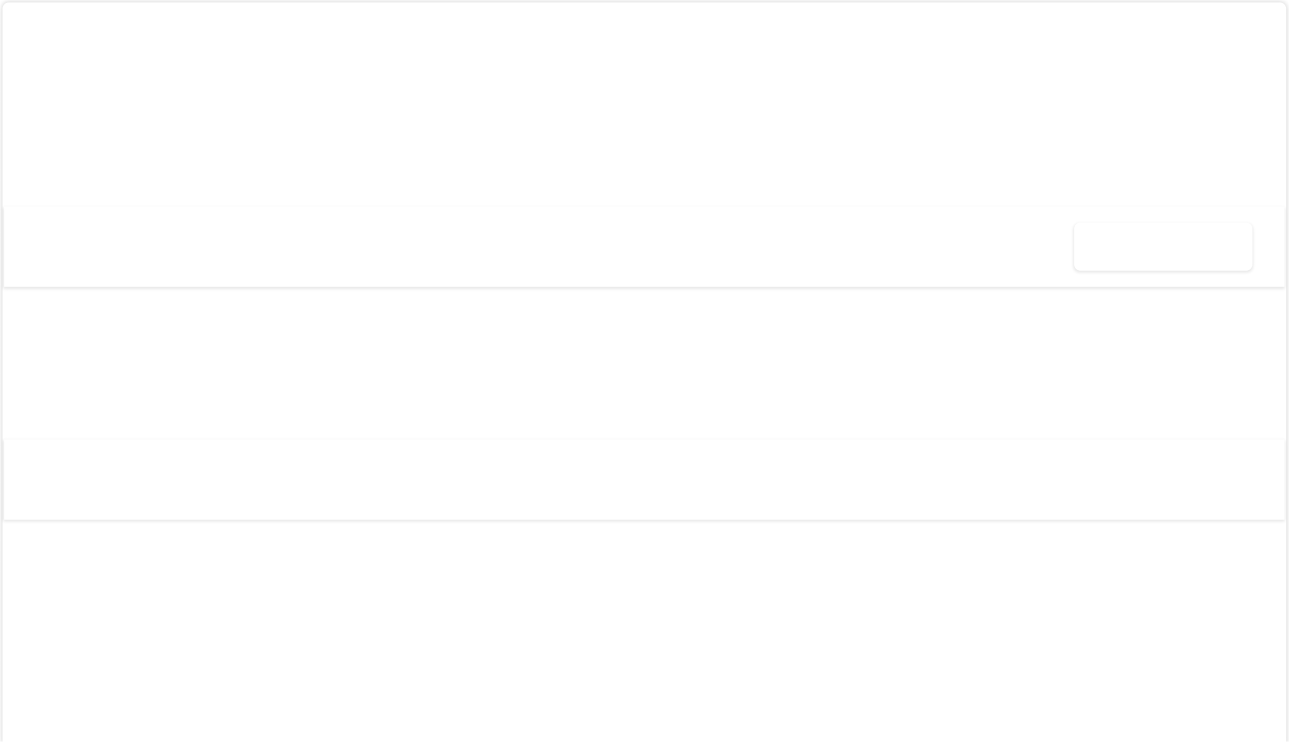
|  |  |  |
| --- | --- | --- |
| Example Value  Schema  "On "  Responses  Code Description |  | Links |
| 200  OK  400  Invalid JSON data  500  Failed to set aeb control |  | *No* *links*  *No* *links*  *No* *links* |
| GET **/api/core/system/v1/jack/status** | 获取千⽄顶状态 |  |
| 获取千⽄顶状态。  Parameters    No parameters  Responses |  | |  | | --- | | Try it out | |



|  |  |  |
| --- | --- | --- |
| Code Description | | Links  *No* *links* |
| 200  OK  Media type | |
| |  | | --- | | application/json | | |
| Controls Accept header.  Example Value  Schema  {  "actual\_pos " : 0 , "alarm " : 0 ,  "drv\_status " : 0 , "stage " : 0  } | |
| GET **/api/core/system/v1/rawadcimu** | 获取IMU的ADC原始值 |  |
| 获取机器⼈IMU的ADC原始值  Parameters |  | |  | | --- | | Try it out | |
| No parameters  Responses  Code Description | Links |
| 200  OK  Media type |  | *No* *links* |
| |  | | --- | | application/json | |
| Controls Accept header.  Example Value  Schema  {  "acc\_x " : 0 ,  "acc\_y " : 0 ,  "acc\_z " : 0 , "gyro\_x " : 0 ,  "gyro\_y " : 0 ,  "gyro\_z " : 0 , "comp\_x " : 0 ,  "comp\_y " : 0 ,  "comp\_z " : 0 ,  "timestamp " : 0 } |



|  |  |  |  |
| --- | --- | --- | --- |
| GET **/api/core/system/v1/battery/pack** | | 获取电池包的电流和温度 |  |
| 获取电池包的电流和温度 | |  |  |
| Parameters | |  | Try it out |
| No parameters | |  |  |
| Responses | |  |  |
| Code Description | |  | Links  *No* *links* |
| 200  OK  Media type | |  |
| |  | | --- | | application/json | | |
| Controls Accept header.  Example Value  Schema | |
| {  "current " : 1000 "temp\_count " : 2 "temp " : [  233 ,  234 ]  } | ,  , |
|  | |

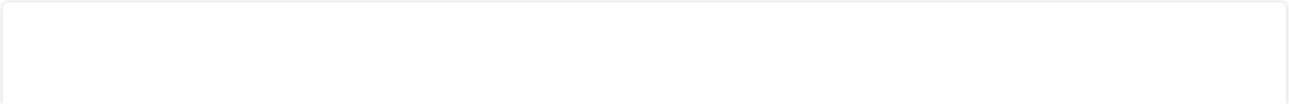


|  |  |
| --- | --- |
| GET **/api/core/system/v1/rawimu** 获取IMU原始值 | |
| 获取机器⼈IMU原始值 | |
| Parameters | |  | | --- | | Try it out | |
| No parameters  Responses  Code Description Links | |
| 200 *No* *links* OK | |

|  |  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- | --- |
| |  |  |  | | --- | --- | --- | | Code | Description | Links | | Media type   |  | | --- | | application/json |   Controls Accept header.  Example Value  Schema  {  "acc\_x " : 0 ,  "acc\_y " : 0 ,  "acc\_z " : 0 , "gyro\_x " : 0 ,  "gyro\_y " : 0 ,  "gyro\_z " : 0 , "comp\_x " : 0 ,  "comp\_y " : 0 ,  "comp\_z " : 0 ,  "timestamp " : 0 } | | | |

slam 定位 、建图相关功能 

|  |  |  |  |
| --- | --- | --- | --- |
| GET **/api/core/slam/v1/localization/pose** | | 获取机器⼈位姿 |  |
| Parameters | |  | |  | | --- | | Try it out | |
| No parameters | |  |  |
| Responses | |  |  |
| Code Description | |  | Links  *No* *links* |
| 200  OK  Media type | |  |
| |  | | --- | | application/json | | |
| Controls Accept header.  Example Value  Schema  {  "x " : 0 ,  "y " : 0 ,  "z " : 0 ,  "yaw " : 0 ,  "pitch " : 0 , "roll " : 0 | |
|  | } |



|  |
| --- |
| PUT **/api/core/slam/v1/localization/pose** 设置机器⼈位姿 |
|  |

|  |  |  |
| --- | --- | --- |
| 将机器⼈强制设置到地图中的某个位置  Parameters    No parameters  Request body  Example Value  Schema  {  "x " : 0 ,  "y " : 0 ,  "z " : 0 ,  "yaw " : 0 ,  "pitch " : 0 , "roll " : 0  }  Responses  Code Description | |  | | --- | | Try it out | |
| |  | | --- | | application/json | |
| Links |
| 200 | *No* *links* |
| OK |  |
| 400 | *No* *links* |
| Invalid Argument |  |
| GET **/api/core/slam/v1/localization/odopose** 获取机器⼈⾥程计位姿 |  |
| Parameters | |  | | --- | | Try it out | |
| No parameters |  |
| Responses |  |
| Code Description | Links |
| 200  OK  Media type | *No* *links* |
| |  | | --- | | application/json | |
| Controls Accept header. |



|  |  |  |
| --- | --- | --- |
| Code Description    Example Value  Schema  {  "x " : 0 ,  "y " : 0 ,  "z " : 0 ,  "yaw " : 0 ,  "pitch " : 0 , "roll " : 0  } |  | Links |
|  |  |
| GET **/api/core/slam/v1/localization/quality** | 获取定位质量 |  |
| 定位质量范围 0 ~ 100 ，值越⼤表示定位越好 |  |  |
| Parameters |  | Try it out |
| No parameters |  |  |
| Responses |  |  |
| Code Description |  | Links |
| 200  OK  Media type |  | *No* *links* |
| |  | | --- | | application/json | |
| Controls Accept header.  Example Value  Schema 0 |

|  |  |
| --- | --- |
| GET **/api/core/slam/v1/localization/:enable** 是否⽀持定位 | |
| 返回值true表示⽀持定位，false表示暂停定位即纯⾥程模式 | |
| Parameters | |  | | --- | | Try it out | |
| No parameters | |

|  |  |
| --- | --- |
| Responses  Code Description Links | |
| 200  OK  Media type | *No* *links* |
| |  | | --- | | application/json | |
| Controls Accept header.  Example Value  Schema  true |
| PUT **/api/core/slam/v1/localization/:enable** 开启/暂停定位 |  |
| 返回值true表示操作成功  Parameters    No parameters  Request body  Example Value  Schema  {  "enable " : true }  Responses  Code Description | |  | | --- | | Try it out | |
| |  | | --- | | application/json | |
| Links |
| 200  OK  Media type | *No* *links* |
| |  | | --- | | application/json | |
| Controls Accept header.  Example Value  Schema  true |

|  |  |  |
| --- | --- | --- |
| Code Description Links  400 *No* *links* Bad Request | |  |
| POST **/api/core/slam/v1/localization/status/:reset** 重置定位状态 | | |
| 将定位状态重置 | | |
| Parameters | |  | | --- | | Try it out | | |
| No parameters | | |
| Responses | | |
| Code Description Links | | |
| 200  OK  Media type | *No* *links* | |
| |  | | --- | | application/json | | | |
| Controls Accept header.  Example Value  Schema  true | | |

|  |  |
| --- | --- |
| GET **/api/core/slam/v1/mapping/:enable** 是否开启建图 | |
| 返回值true表示建图模式，false表示定位模式 | |
| Parameters | |  | | --- | | Try it out | |
| No parameters  Responses | |

|  |  |  |
| --- | --- | --- |
| Code Description | | Links |
| 200  OK  Media type |  | *No* *links* |
| |  | | --- | | application/json | |
| Controls Accept header.  Example Value  Schema  true |
| PUT **/api/core/slam/v1/mapping/:enable** | 开启/暂停建图 |  |
| 返回值true表示操作成功  Parameters    No parameters  Request body  Example Value  Schema  {  "enable " : true }  Responses  Code Description |  | |  | | --- | | Try it out | |
| |  | | --- | | application/json | |
| Links |
| 200  OK  Media type |  | *No* *links* |
| |  | | --- | | application/json | |
| Controls Accept header.  Example Value  Schema  true |

|  |  |  |
| --- | --- | --- |
| Code Description Links  400 *No* *links* Bad Request | |  |
| GET **/api/core/slam/v1/loopclosure/:enable** 是否开启闭环检测 | | |
| 所需最低固件版本 4.6.0 | | |
| Parameters | |  | | --- | | Try it out | | |
| No parameters | | |
| Responses | | |
| Code Description Links | | |
| 200  OK  Media type | *No* *links* | |
| |  | | --- | | application/json | | | |
| Controls Accept header.  Example Value  Schema  true | | |
|  | | |

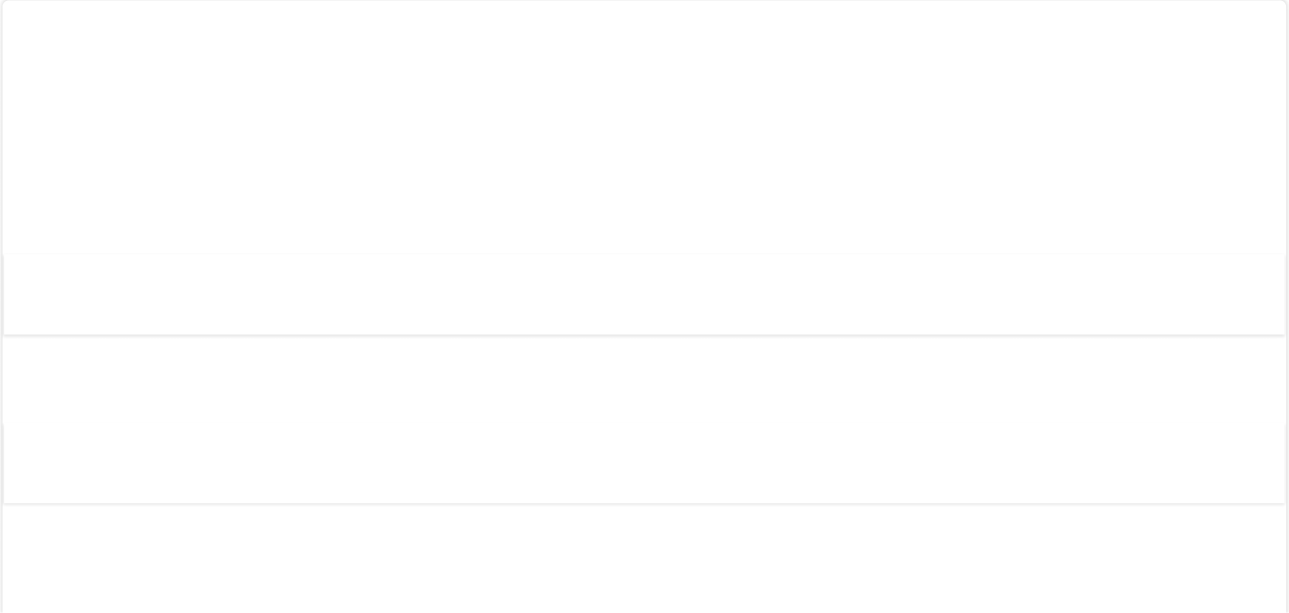
|  |  |
| --- | --- |
| PUT **/api/core/slam/v1/loopclosure/:enable** 开启/暂停闭环检测 | |
| 返回值true表示操作成功 所需最低固件版本 4.6.0 | |
| Parameters | |  | | --- | | Try it out | |
| No parameters | |
| Request body | |  | | --- | | application/json | |
| Example Value  Schema | |

|  |  |
| --- | --- |
| {  "enable " : true }  Responses  Code Description | Links |
| 200  OK  Media type | *No* *links*  *No* *links* |
| |  | | --- | | application/json | |
| Controls Accept header.  Example Value  Schema  true  400  Bad Request |
| GET **/api/core/slam/v1/homepose** 获取充电桩位置 |  |
| 获取当前的充电桩位置，如果当前地图中不存在充电桩，则返回404错误  Parameters    No parameters  Responses  Code Description | |  | | --- | | Try it out | |
| Links |
| 200  OK  Media type | *No* *links* |
| |  | | --- | | application/json | |
| Controls Accept header.  Example Value  Schema |

|  |  |  |
| --- | --- | --- |
| Code Description Links | | |
| 404 | {  "x " : 0 ,  "y " : 0 ,  "z " : 0 ,  "yaw " : 0 ,  "pitch " : 0 ,  "roll " : 0  }  *No* *links*  Home dock not found | |
| PUT **/api/core/slam/v1/homepose** 设置充电桩位置 | | |
| 设置当前的充电桩位置， 当地图中存在多个充电桩时，需要上位机设置其中—个作为当前使⽤的桩。 | | |
| Parameters | | |  | | --- | | Try it out | |
| No parameters | | |
| Request body | | |  | | --- | | application/json | |
| Example Value  Schema  {  "x " : 0 ,  "y " : 0 ,  "z " : 0 ,  "yaw " : 0 ,  "pitch " : 0 ,  "roll " : 0  }  Responses  Code Description Links | | |
| 200  OK  Media type | | *No* *links* |
| |  | | --- | | application/json | | | |
| Controls Accept header.  Example Value  Schema  true | | |



|  |  |  |
| --- | --- | --- |
| GET **/api/core/slam/v1/homedocks** 获取所有充电桩信息 | |  |
| 获取机器⼈的所有充电桩信息。 所需最低固件版本 4.3.2 | |  |
| Parameters | | Try it out |
| No parameters | |  |
| Responses | |  |
| Code Description  200  OK  Media type | | Links  *No* *links* |
| |  | | --- | | application/json | | |
| Controls Accept header.  Example Value  Schema  [  {  "id " : "3fa85f64-5717-4562-b3fc-2c963f66afa6 " , "pose " : {  "x " : 0 ,  "y " : 0 ,  "yaw " : 0  } ,  "metadata " : {} | |
|  | } ] |



|  |  |
| --- | --- |
| PUT **/api/core/slam/v1/homedocks** 设置所有充电桩 | |
| 设置机器⼈的所有充电桩信息。 所需最低固件版本 4.3.2 | |
| Parameters | |  | | --- | | Try it out | |
| No parameters | |
| Request body | |  | | --- | | application/json | |
| Example Value  Schema | |

|  |  |  |
| --- | --- | --- |
| [  {  "id " : "3fa85f64-5717-4562-b3fc-2c963f66afa6 " , "pose " : {  "x " : 0 ,  "y " : 0 ,  "yaw " : 0  } ,  "metadata " : {} }  ]  Responses  Code Description | | Links |
| 200  OK  Media type | | *No* *links* |
| |  | | --- | | application/json | | |
| Controls Accept header.  Example Value  Schema  true | |
| POST **/api/core/slam/v1/homedocks** 添加充电桩 | |  |
| 给机器⼈添加—个充电桩，metadata需要display\_name字段，表示充电桩名称。  Parameters | | |  | | --- | | Try it out | |
| No parameters | |
| Request body  Example Value | required  Schema | |  | | --- | | application/json | |
| {  "id " : "3fa85f64-5717-4562-b3fc-2c963f66afa6 " ,  "pose " : { "x " : 0 , "y " : 0 , "yaw " : 0  } ,  "metadata " : {} } | |



|  |  |
| --- | --- |
| Responses | |
| Code Description Links | |
| 200  OK  Media type | *No* *links* |
| |  | | --- | | application/json | | |
| Controls Accept header.  Example Value  Schema  true | |
| DELETE **/api/core/slam/v1/homedocks** 清空充电桩信息 | |
| Parameters | |  | | --- | | Try it out | |
| No parameters | |
| Responses | |
| Code Description Links | |
| 200  OK  Media type | *No* *links* |
| |  | | --- | | application/json | | |
| Controls Accept header.  Example Value  Schema  {  "id " : "3fa85f64-5717-4562-b3fc-2c963f66afa6 " , "pose " : {  "x " : 0 ,  "y " : 0 ,  "yaw " : 0  } ,  "metadata " : {} } | |
|  | |

|  |
| --- |
| POST **/api/core/slam/v1/homedocks/:register** 注册充电桩 |
| 根据机器⼈当前位置在地图上注册—个充电桩 |

|  |  |  |  |  |
| --- | --- | --- | --- | --- |
| Parameters | | | |  | | --- | | Try it out | |
| No parameters | | |
| Request body  Example Value | required  Schema | | |  | | --- | | application/json | |
| {  "metadata " : {  "display\_name " : "string "  }  }  Responses  Code Description | | | Links |
| 200  OK  Media type | | | *No* *links* |
| |  | | --- | | application/json | | | |
| Controls Accept header.  Example Value  Schema  {  "id " : "3fa85f64-5717-4562-b3fc-2c963f66afa6 " , "pose " : {  "x " : 0 ,  "y " : 0 ,  "yaw " : 0  } ,  "metadata " : {} } | | |
| PUT **/api/core/slam/v1/homedocks/{dock\_id}** 编辑充电桩信息 | | |  |
| 编辑充电桩信息，id不可修改，只允许修改pose和metadata  Parameters    Name Description | | | |  | | --- | | Try it out | |
| dock\_id \* required  **string($uuid)**  ***(path)*** | | |  | | --- | | dock\_id | | |  | | --- | | application/json | |
| Request body | required | |

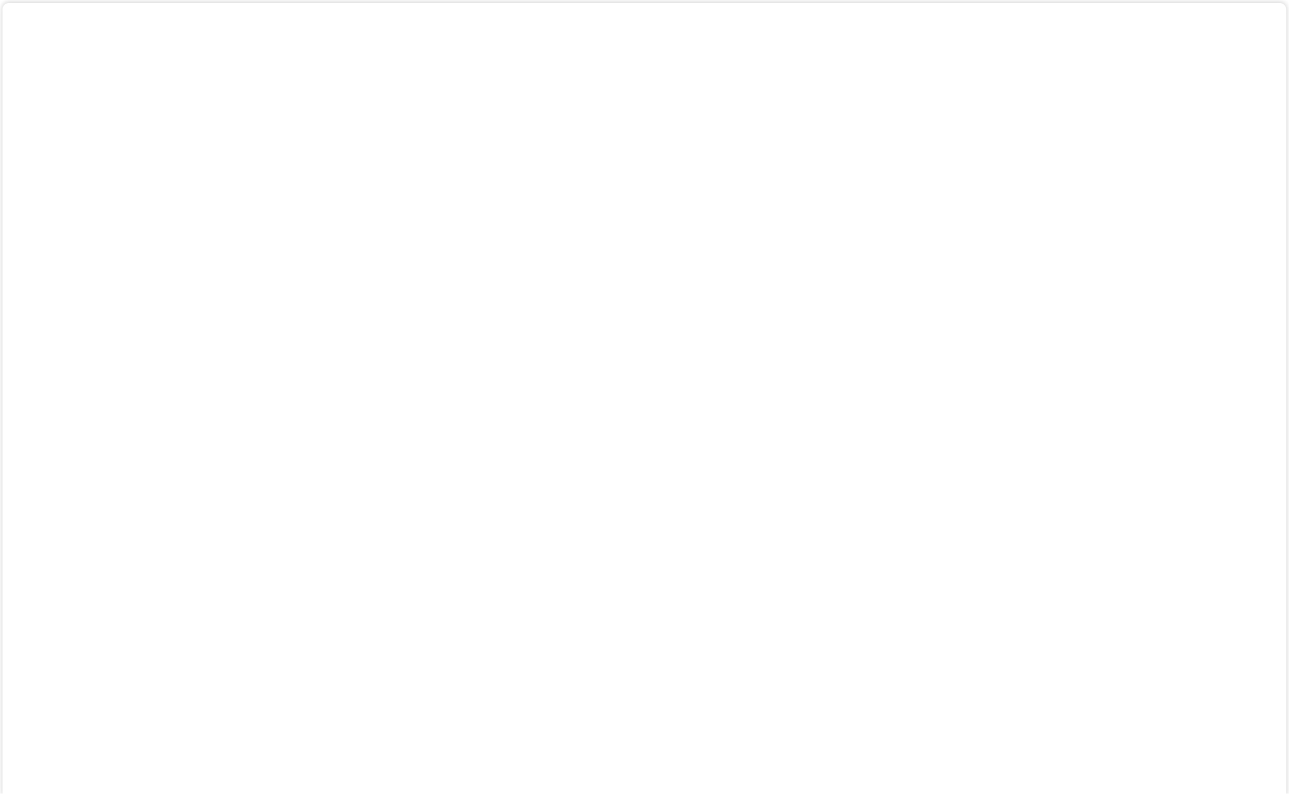
|  |  |  |
| --- | --- | --- |
| Example Value  Schema | | |
| { | | |
| "pose " : { | | |
| "x " : 0 , | | |
| "y " : 0 , | | |
| "yaw " : 0 | | |
| } , | | |
| "metadata " : {} | | |
| } | | |
| Responses | | |
| Code Description Links | | |
| 200  OK  Media type | | *No* *links* |
| |  | | --- | | application/json | | | |
| Controls Accept header.  Example Value  Schema  true | | |
| DELETE **/api/core/slam/v1/homedocks/{dock\_id}** 移除—个充电桩 | | |
| Parameters    Name Description | | |  | | --- | | Try it out | |
| dock\_id \* required  **string($uuid)**  ***(path)*** | |  | | --- | | dock\_id | | |
| Responses  Code Description Links | | |
| 200  OK  Media type | | *No* *links* |
| |  | | --- | | application/json | | |



|  |  |
| --- | --- |
| Code Description  Controls Accept header.  Example Value  Schema  true | Links |
|  |
| GET **/api/core/slam/v1/imu** 获取IMU数据 |  |
| 获取以机器⼈坐标系表示的IMU数据 |  |
| Parameters | Try it out |
| No parameters |  |
| Responses |  |
| Code Description | Links |
| 200  OK  Media type | *No* *links* |
| |  | | --- | | application/json | |
| Controls Accept header.  Example Value  Schema  } ,  "availibilityBitMap " : 0 , "compass " : {  "x " : 0 ,  "y " : 0 ,  "z " : 0  } ,  "euler\_angle " : { "x " : 0 ,  "y " : 0 ,  "z " : 0  } ,  "gyro " : {  "x " : 0 ,  "y " : 0 ,  "z " : 0  } ,  "quaternion " : {  "w " : 0 ,  "x " : 0 ,  "y " : 0 ,  "z " : 0  } ,  "raw\_acc " : {  "x " : 0 ,  "y " : 0 |



|  |  |  |
| --- | --- | --- |
| GET **/api/core/slam/v1/knownarea** 获取已知区域 | | |
| 已知区域即当前地图的范围, 机器⼈的活动空间和各种⼈⼯标记元素都应当在此范围内 | | |
| Parameters |  |  |
| Try it out |
|  |
| No parameters | | |
| Responses | | |
| Code Description Links | | |
| 200  OK  Media type | *No* *links* | |
| |  | | --- | | application/json | | | |
| Controls Accept header.  Example Value  Schema  {  "x " : 0 ,  "y " : 0 ,  "width " : 0 , "height " : 0  } | | |
|  | | |



|  |
| --- |
| GET **/api/core/slam/v1/maps/explore** 获取栅格地图 |
| 获取激光探索的栅格地图, 可通过min\_x, min\_y, max\_x, max\_y指定获取的范围, 默认获取全部地图. 响应报⽂为⼆进制字节流，前32字节为元数据(低位字节在前) ，后续为地图数据。   |  |  |  | | --- | --- | --- | | 位置 | 数据类型 | 描述 | | 0-3 | ﬂoat | 地图起始位置的X坐标 | | 4-7 | ﬂoat | 地图起始位置的Y坐标 | | 8-11 | uint32 | X轴⽅向栅格数量 | | 12-15 | uint32 | Y轴⽅向栅格数量 | | 16-19 | ﬂoat | 地图分辨率，每个格⼦的边⻓ ，单位⽶ | | 20-31 | byte[] | 预留 | | 32-35 | uint32 | 后续数据的字节数，该值应当等于X轴栅格数\*Y轴栅格数 | | 36-End | byte[] | 地图数据，每个字节代表—个格⼦ | |



|  |  |  |
| --- | --- | --- |
|  | | |
| Parameters | | Try it out |
| Name Description | |  |
| min\_x  **number** | |  | | --- | | min\_x | |
| ***(query)*** | |  |
| min\_y  **number** | |  | | --- | | min\_y | |  |
| ***(query)*** | |  |
| max\_x  **number** | |  | | --- | | max\_x | |  |
| ***(query)*** | |  |
| max\_y  **number** | |  | | --- | | max\_y | |  |
| ***(query)*** | |  |
| Responses | |  |
| Code Description | | Links  *No* *links* |
| 200  OK  Media type | |
| |  | | --- | | application/octet-stream | | |
| Controls Accept header.  Example Value  Schema  string | |
| GET **/api/core/slam/v1/maps/stcm** 获取复合地图 | |  |
| 包含所有数据的复合地图  响应报⽂为⼆进制字节流，可直接保存为stcm⽂件. | |  |
| Parameters | | Try it out |
| No parameters | | |



|  |  |
| --- | --- |
| Responses | |
| Code Description Links | |
| 200  OK  Media type | *No* *links* |
| |  | | --- | | application/octet-stream | | |
| Controls Accept header.  Example Value  Schema  string | |
| PUT **/api/core/slam/v1/maps/stcm** 设置复合地图 | |
| 将地图设置到slamware系统中, 以⼆进制⽅式读取stcm⽂件作为request body。 机器⼈位姿会被重置到原点，需要重新设置机器⼈位姿.  【注意】地图不会持久化保存，重启后即失效 | |
| Parameters | |  | | --- | | Try it out | |
| No parameters | |
| Request body | |  | | --- | | application/octet-stream | |
| *Example* *values* *are* *not* *available* *for* *application/octet* *-stream* *media* *types.* | |
| Responses | |
| Code Description Links  200 *No* *links* OK | |

|  |  |  |  |
| --- | --- | --- | --- |
| DELETE **/api/core/slam/v1/maps** 清空地图 | | | |
| Parameters    No parameters |  | |  |
|  | Try it out |
|  | | |

|  |  |  |
| --- | --- | --- |
| Responses  Code Description Links  200 *No* *links* OK | | |
| PUT **/api/core/slam/v1/maps/origin** 移动地图原点 | | |
| 移动地图原点,并更新到slamware系统中 | | |
| Parameters | |  | | --- | | Try it out | | |
| No parameters | | |
| Request body | required | |  | | --- | | application/json | |
| Example Value  Schema  {  "new\_origin " : {  "x " : 0 ,  "y " : 0  }  }  Responses  Code Description Links | | |
| 200 *No* *links* OK | | |

artifact 地图语义元素 

|  |  |  |
| --- | --- | --- |
| GET **/api/core/artifact/v1/lines/{usage}** 获取虚拟线段 | | |
| Parameters | | |  | | --- | | Try it out | |
| Name Description | | |
| usage  **string**  ***(path)*** | \* required | **tracks** 虚拟轨道  **walls** 虚拟墙 |



|  |  |  |  |
| --- | --- | --- | --- |
| Name Description | | | |
| *Available* *values* : tracks, walls | | | |
| |  | | --- | | tracks | | | | |
| Responses  Code Description Links | | | |
| 200  OK  Media type | | | *No* *links* |
| |  | | --- | | application/json | | | | |
| Controls Accept header.  Example Value  Schema  [  {  "id " : 0 ,  "start " : { "x " : 0 , "y " : 0  } ,  "end " : { "x " : 0 , "y " : 0  } ,  "metadata " : {} }  ] | | | |
| POST **/api/core/artifact/v1/lines/{usage}** 添加虚拟线段 | | |  |
| 添加时id为⽆效字段，可为任意值。  Parameters | | | |  | | --- | | Try it out | |
| Name Description | | |
| usage  **string**  ***(path)*** | \* required | **tracks** 虚拟轨道  **walls** 虚拟墙 |
| *Available* *values* : tracks, walls | | |
| |  | | --- | | tracks | | | |
| Request body | | | |  | | --- | | application/json | |

|  |  |  |  |
| --- | --- | --- | --- |
| Example Value  Schema  [  {  "id " : 0 ,  "start " : {  "x " : 0 , "y " : 0  } ,  "end " : { "x " : 0 , "y " : 0  } ,  "metadata " : {} }  ]  Responses  Code Description | | | Links |
| 200  OK  Media type | | | *No* *links* |
| |  | | --- | | application/json | | | |
| Controls Accept header.  Example Value  Schema  true | | |
| PUT **/api/core/artifact/v1/lines/{usage}** 修改虚拟线段 | | |  |
| Parameters    Name Description | | | |  | | --- | | Try it out | |
| usage  **string**  ***(path)*** | \* required | **tracks** 虚拟轨道  **walls** 虚拟墙 | |  | | --- | | application/json | |
| *Available* *values* : tracks, walls | | |
| |  | | --- | | tracks | | | |
| Request body  Example Value  Schema | | |

|  |  |  |  |
| --- | --- | --- | --- |
| [  {  "id " : 0 ,  "start " : {  "x " : 0 ,  "y " : 0  } ,  "end " : {  "x " : 0 ,  "y " : 0  } ,  "metadata " : {} }  ]  Responses  Code Description Links | | | |
| 200  OK  Media type | | | *No* *links* |
| |  | | --- | | application/json | | | | |
| Controls Accept header.  Example Value  Schema  true | | | |
| DELETE **/api/core/artifact/v1/lines/{usage}** 清空某—类虚拟线段 | | |  |
| Parameters    Name Description | | | |  | | --- | | Try it out | |
| usage  **string**  ***(path)*** | \* required | **tracks** 虚拟轨道  **walls** 虚拟墙 | |
| *Available* *values* : tracks, walls | | | |
| |  | | --- | | tracks | | | | |
| Responses | | | |



|  |  |  |  |
| --- | --- | --- | --- |
| Code Description | | | Links |
| 200  OK  Media type | | | *No* *links* |
| |  | | --- | | application/json | | | |
| Controls Accept header.  Example Value  Schema  true | | |
| DELETE **/api/core/artifact/v1/lines/{usage}/{id}** 删除虚拟线段 | | |  |
| Parameters | | | Try it out |
| Name Description | | |  |
| usage  **string**  ***(path)*** | \* required | **tracks** 虚拟轨道  **walls** 虚拟墙  *Available* *values* : tracks, walls |  |
| id \* required  **integer**  ***(path)*** | | |  | | --- | | tracks | |
| |  | | --- | | id | |
| Responses | | |  |
| Code Description | | | Links |
| 200  OK  Media type | | | *No* *links* |
| |  | | --- | | application/json | | | |
| Controls Accept header.  Example Value  Schema  true | | |



|  |  |  |
| --- | --- | --- |
| GET **/api/core/artifact/v1/rectangle-areas/{usage}** 获取矩形区域 | | |
| Parameters | | |  | | --- | | Try it out | |
| Name Description | | |
| usage  **string**  ***(path)*** | \* required  *Available* *values* : forbidden\_area, elevator\_area, dangerous\_area, coverage\_area, maintenance\_area, sensor\_disable\_area, restricted\_area | |
| |  | | --- | | forbidden\_area | | | |
| Responses | | |
| Code Description Links | | |
| 200  OK  Media type | | *No* *links* |
| |  | | --- | | application/json | | | |
| Controls Accept header.  Example Value  Schema | | |
| [  {  "id " : 0 ,  "usage " : "forbidden\_area " , "area " : {  "start " : {  "x " : 0 ,  "y " : 0  } ,  "end " : {  "x " : 0 ,  "y " : 0  } ,  "half\_width " : 0  } ,  "metadata " : {} }  ] | |  |

|  |  |
| --- | --- |
| POST **/api/core/artifact/v1/rectangle-areas/{usage}** 添加矩形区域 | |
| 不同类型的矩形区域，所需要的metadata也不同，请参考⽂档描述。 | |
| Parameters | |  | | --- | | Try it out | |
|  | |

|  |  |  |  |  |
| --- | --- | --- | --- | --- |
| Name Description | | | | |
| usage  **string**  ***(path)*** | \* required  *Available* *values* : forbidden\_area, elevator\_area, dangerous\_area, coverage\_area, maintenance\_area, sensor\_disable\_area, restricted\_area | | | |
| Request body | | |  | | --- | | forbidden\_area | | |  | | --- | | application/json | | |
| Example Value  Schema  {  "area " : {  "start " : {  "x " : 0 ,  "y " : 0  } ,  "end " : {  "x " : 0 ,  "y " : 0  } ,  "half\_width " : 0  } ,  "metadata " : {} }  Responses  Code Description Links | | | | |
| 200  OK  Media type | | | *No* *links* | |
| |  | | --- | | application/json | | | | | |
| Controls Accept header.  Example Value  Schema  true | | | | |
| DELETE **/api/core/artifact/v1/rectangle-areas/{usage}** | | | 清空某—类矩形区域 |  |
| Parameters | | |  | |  | | --- | | Try it out | |

|  |  |  |  |  |
| --- | --- | --- | --- | --- |
| Name Description | | | | |
| usage  **string**  ***(path)*** | \* required  *Available* *values* : forbidden\_area, elevator\_area, dangerous\_area, coverage\_area, maintenance\_area, sensor\_disable\_area, restricted\_area | | | |
| |  | | --- | | forbidden\_area |   Responses  Code Description Links | | | | |
| 200  OK  Media type | | | *No* *links* | |
| |  | | --- | | application/json | | | | | |
| Controls Accept header.  Example Value  Schema  true | | | | |
| PUT **/api/core/artifact/v1/rectangle-areas/{usage}/{id}** | | | 编辑矩形区域 |  |
| 修改指定ID的矩形区域坐标或metadata。 | | | | |
| Parameters | | | |  | | --- | | Try it out | | |
| Name Description | | | | |
| usage  **string**  ***(path)*** | \* required | *Available* *values* : forbidden\_area, elevator\_area, dangerous\_area, coverage\_area, maintenance\_area, sensor\_disable\_area, restricted\_area   |  | | --- | | forbidden\_area |  |  | | --- | | id | | | |
| id \* required  **integer**  ***(path)*** | |
| Request body | | | |  | | --- | | application/json | | |
| Example Value  Schema | | | | |

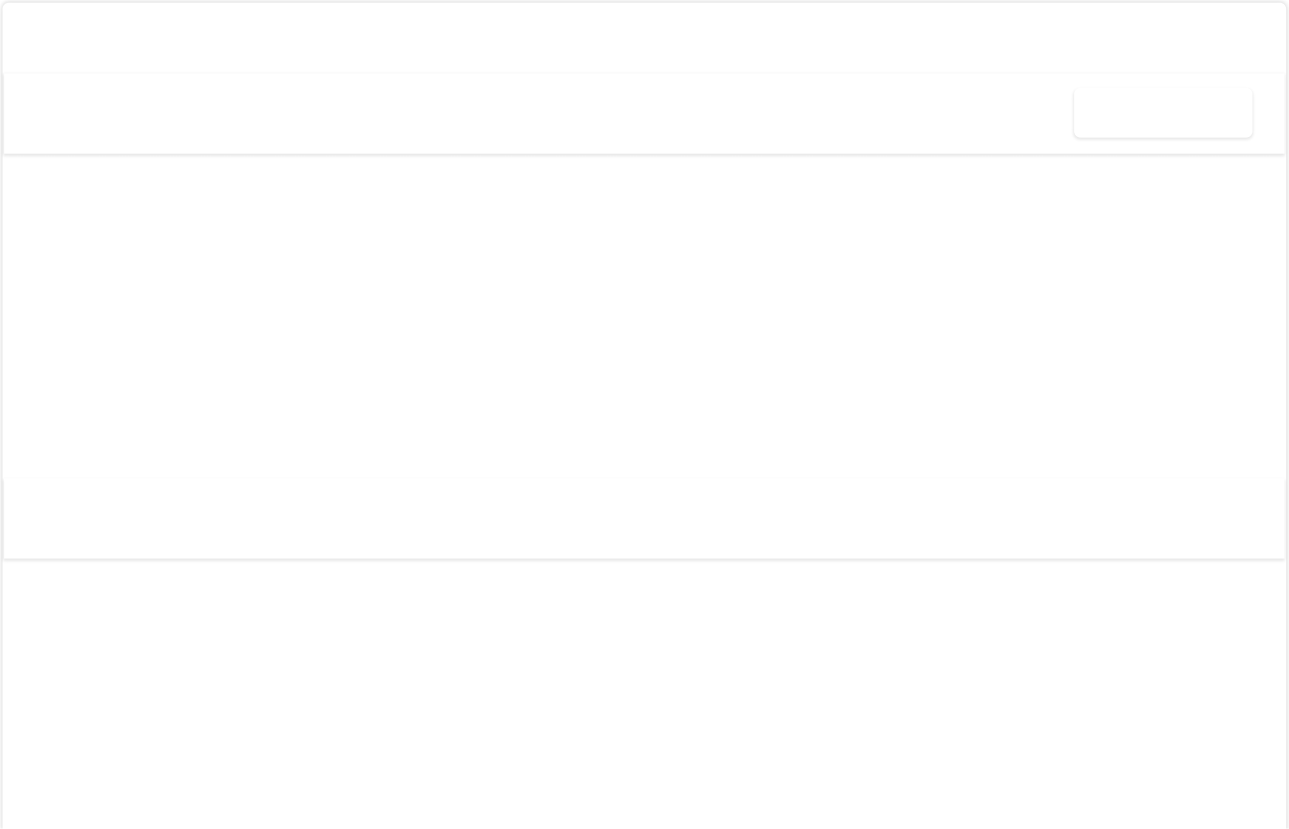
|  |  |  |  |
| --- | --- | --- | --- |
| {  "area " : {  "start " : {  "x " : 0 ,  "y " : 0  } ,  "end " : {  "x " : 0 ,  "y " : 0  } ,  "half\_width " : 0  } ,  "metadata " : {} }  Responses  Code Description Links | | | |
| 200  OK  Media type | | | *No* *links* |
| |  | | --- | | application/json | | | | |
| Controls Accept header.  Example Value  Schema  true | | | |
| DELETE **/api/core/artifact/v1/rectangle-areas/{usage}/{id}** 删除矩形区域 | | |  |
| Parameters | | | |  | | --- | | Try it out | |
| Name Description | | | |
| usage  **string**  ***(path)*** | \* required | *Available* *values* : forbidden\_area, elevator\_area, dangerous\_area, coverage\_area, maintenance\_area, sensor\_disable\_area, restricted\_area   |  | | --- | | forbidden\_area |  |  | | --- | | id | | |
| id \* required  **integer**  ***(path)*** | |
| Responses | | | |

|  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- |
| Code Description Links | | | | | |  |
| 200  OK  Media type | | *No* *links* | | | |
| |  | | --- | | application/json | | | | | | |
| Controls Accept header.  Example Value  Schema  true | | | | | |
| GET **/api/core/artifact/v1/pois** 获取当前地图中的所有POI | | | | | | |
| POI指Point of interest, 也称为星标或兴趣点，⽤于标记地图上的某个位姿， 以及若⼲与业务逻辑相关的metadata。 | | | | | | |
| Parameters | |  | | --- | | Try it out | | | | | | |
| No parameters | | | | | | |
| Responses | | | | | | |
| Code Description Links | | | | | | |
| 200  OK  Media type | | | *No* *links* | | | |
| |  | | --- | | application/json | | | |
| Controls Accept header.  Example Value  Schema  [  {  "id " : "3fa85f64-5717-4562-b3fc-2c963f66afa6 " , "pose " : {  "x " : 0 ,  "y " : 0 ,  "yaw " : 0  } ,  "metadata " : {} }  ] | | |
|  |  |  |  |  |  | |
| POST **/api/core/artifact/v1/pois** 添加POI | | |  | | | |

|  |  |  |  |
| --- | --- | --- | --- |
| 调⽤⽅应当随机⽣成—个UUID作为id, metadata中的display\_name⽤于界⾯显示, type⽤于区分POI类型。  在建图过程中添加POI时，建议不包含Pose ，此时会⽤机器⼈当前位置创建POI ，并且记录传感器观测信息，在闭环后会进 ⾏位姿调整。 | | | |
| Parameters | | |  | | --- | | Try it out | | |
| No parameters | | |  | | --- | | application/json | | |
| Request body | required |
| Example Value  Schema  {  "id " : "3fa85f64-5717-4562-b3fc-2c963f66afa6 " ,  "pose " : {  "x " : 0 ,  "y " : 0 ,  "yaw " : 0  } ,  "metadata " : {} }  Responses  Code Description Links | | | |
| 200  OK | |  | *No* *links* |
| DELETE **/api/core/artifact/v1/pois** | | 清空POI |  |
| Parameters    No parameters  Responses  Code Description | |  | |  | | --- | | Try it out | |
| Links |
| 200  OK  Media type | |  | *No* *links* |
| |  | | --- | | application/json | | |
| Controls Accept header. | |



|  |  |
| --- | --- |
| Code Description    Example Value  Schema  true | Links |
| POST **/api/core/artifact/v1/pois/:adjust** 优化POI位姿 |  |
| 如果在建图时添加POI ，则在闭环后POI会跟着调整位姿，调⽤该接⼝可以进—步减少位姿调整的误差。 【注意】仅在闭环后调⽤有效，其他时候⽆需调⽤ 。  所需最低固件版本 4.2.4  Parameters    No parameters  Responses  Code Description  200  OK | |  | | --- | | Try it out | |
| Links |
| *No* *links* |



|  |  |  |
| --- | --- | --- |
| GET **/api/core/artifact/v1/pois/{poi\_id}** 根据ID查找POI | | |
| Parameters | |  | | --- | | Try it out | | |
| Name Description | | |
| poi\_id \* required  **string($uuid)**  ***(path)*** | |  | | --- | | poi\_id | | |
| Responses  Code Description Links | | |
| 200  OK  Media type | | *No* *links* |

|  |  |  |  |  |
| --- | --- | --- | --- | --- |
| Code Description Links   |  | | --- | | application/json |   Controls Accept header.  Example Value  Schema  {  "id " : "3fa85f64-5717-4562-b3fc-2c963f66afa6 " , "pose " : {  "x " : 0 ,  "y " : 0 ,  "yaw " : 0  } ,  "metadata " : {} } | | | |
| PUT **/api/core/artifact/v1/pois/{poi\_id}** 修改POI | | |  |
| 请求报⽂中pose和metadata可以只包含其中—个，则另—个字段保持不变。  Parameters | | | |  | | --- | | Try it out | |
| Name Description | | |
| poi\_id \* required  **string($uuid)**  ***(path)*** | | |  | | --- | | poi\_id | |
| Request body  Example Value | required  Schema | | |  | | --- | | application/json | |
| {  "pose " : {  "x " : 0 ,  "y " : 0 ,  "z " : 0 ,  "yaw " : 0 ,  "pitch " : 0 , "roll " : 0  } ,  "metadata " : {} }  Responses  Code Description | | | Links |
| 200  OK | | | *No* *links* |

|  |  |  |  |
| --- | --- | --- | --- |
| Code Description Links | | |  |
| Media type | | |
| |  | | --- | | application/json | | | |
| Controls Accept header.  Example Value  Schema  true | | |
| DELETE **/api/core/artifact/v1/pois/{poi\_id}** 删除POI | | | |
| Parameters | | |  | | --- | | Try it out | | |
| Name Description | | | |
| poi\_id \* required  **string($uuid)** | |  | | --- | | poi\_id | | | |
| ***(path)*** | | | |
| Responses | | | |
| Code Description Links | | | |
| 200  OK  Media type | | *No* *links* | |
| |  | | --- | | application/json | | | | |
| Controls Accept header.  Example Value  Schema  true | | | |
|  | | | |

|  |  |
| --- | --- |
| GET **/api/core/artifact/v1/laser-landmarks** 获取激光地标 | |
| 激光地标指激光雷达识别到的反光板位置。 所需最低固件版本：5.1.1 | |
| Parameters | |  | | --- | | Try it out | |
|  | |

|  |  |  |
| --- | --- | --- |
| No parameters  Responses  Code Description Links | | |
| 200  OK  Media type | | *No* *links* |
| |  | | --- | | application/json | | |
| Controls Accept header.  Example Value  Schema  [  {  "id " : "3fa85f64-5717-4562-b3fc-2c963f66afa6 " , "pose " : {  "x " : 0 ,  "y " : 0 ,  "yaw " : 0  } ,  "metadata " : {} }  ] | |
| DELETE **/api/core/artifact/v1/laser-landmarks** | 清空激光地标 |  |
| 清空所有激光地标  所需最低固件版本：5.1.1  Parameters    No parameters  Responses  Code Description |  | |  | | --- | | Try it out | |
| Links |
| 200  OK  Media type |  | *No* *links* |
| |  | | --- | | application/json | |
| Controls Accept header.  Example Value  Schema |

|  |  |  |  |
| --- | --- | --- | --- |
| Code Description Links  true | | |  |
| PUT **/api/core/artifact/v1/laser-landmarks** 设置激光地标 | | | |
| 将从地图中读出的激光地标信息设置到Slamware中 所需最低固件版本：5.1.1 | | | |
| Parameters | | |  | | --- | | Try it out | | |
| No parameters | | | |
| Request body | required | |  | | --- | | application/json | | |
| Example Value  Schema  [  {  "id " : "3fa85f64-5717-4562-b3fc-2c963f66afa6 " , "pose " : {  "x " : 0 ,  "y " : 0 ,  "yaw " : 0  } ,  "metadata " : {} }  ] | | | |
| Responses | | | |
| Code Description Links | | | |
| 200  OK  Media type | | *No* *links* | |
| |  | | --- | | application/json | | | | |
| Controls Accept header.  Example Value  Schema  true | | | |



|  |  |  |
| --- | --- | --- |
| GET **/api/core/artifact/v1/laser-landmarks/:update** | 获取激光地标更新状态 |  |
| Slamware是否正在⾃动更新激光地标 |  |  |
| 所需最低固件版本：5.1.1 |  |  |
| Parameters |  | |  | | --- | | Try it out | |
| No parameters |  |  |
| Responses |  |  |
| Code Description |  | Links  *No* *links* |
| 200  OK  Media type |  |
| |  | | --- | | application/json | |
| Controls Accept header.  Example Value  Schema  true |

|  |  |  |
| --- | --- | --- |
| PUT **/api/core/artifact/v1/laser-landmarks/:update** 设置取激光地标更新状态 | | |
| 设置是否允许Slamware⾃动更新激光地标 所需最低固件版本：5.1.1 | | |
| Parameters | |  | | --- | | Try it out | | |
| No parameters | | |
| Request body | required | |  | | --- | | application/json | |
| Example Value  Schema  {  "enable " : true } | | |

|  |  |  |
| --- | --- | --- |
| Responses  Code Description Links | | |
| 200  OK  Media type | | *No* *links* |
| |  | | --- | | application/json | | | |
| Controls Accept header.  Example Value  Schema  true | | |
| POST **/api/core/artifact/v1/laser-landmarks/:remove** 删除激光地标 | | |
| 删除部分激光地标, 请求报⽂为ID数组， ID来⾃获取激光地标接⼝返回内容的id字段。 | | |
| 所需最低固件版本：5.1.1 | | |
| Parameters | | |  | | --- | | Try it out | |
| No parameters | | |
| Request body | required | |  | | --- | | application/json | |
| Example Value  Schema | | |
| [ | | |
| 0 | | |
| ] | | |
| Responses | | |
| Code Description Links | | |
| 200  OK  Media type | | *No* *links* |
| |  | | --- | | application/json | | | |
| Controls Accept header. | | |



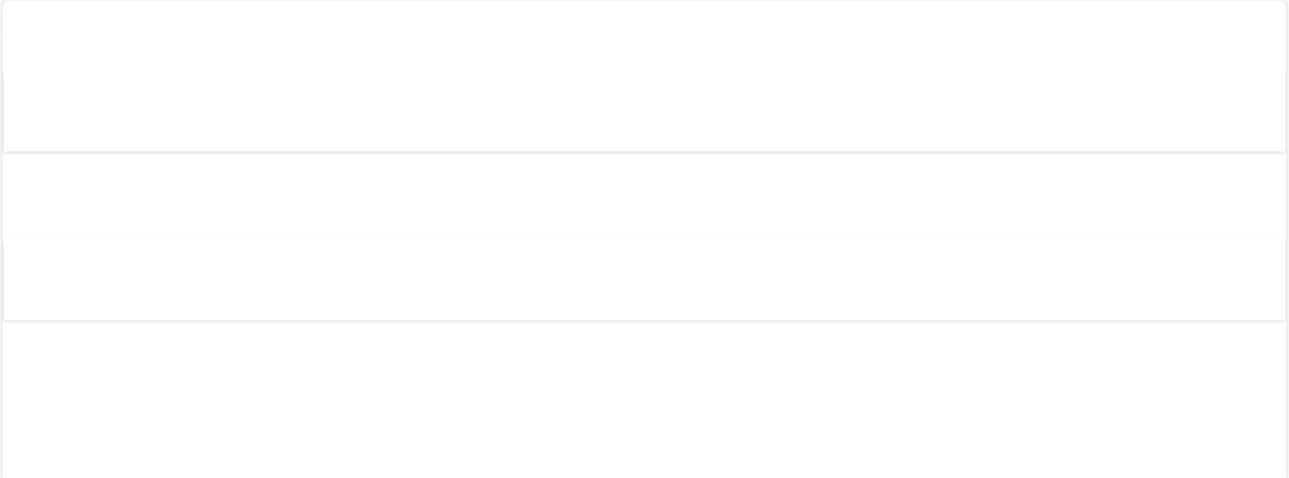
|  |  |  |  |
| --- | --- | --- | --- |
| Code | Description | Links |  |
| Example Value  Schema  true |

motion 机器⼈运动控制 

|  |  |  |
| --- | --- | --- |
| GET **/api/core/motion/v1/action-factories** 获取所有⽀持的Action | |  |
| Parameters | | Try it out |
| No parameters | |  |
| Responses | |  |
| Code Description  200  OK  Media type | | Links  *No* *links* |
| |  | | --- | | application/json | | |
| Controls Accept header.  Example Value  Schema  [  {  "action\_name " : "slamtec.agent.actions.MoveToAction " | |
|  | } ] |

|  |  |  |
| --- | --- | --- |
| GET **/api/core/motion/v1/actions/:current** 获取当前⾏为 | | |
| Parameters    No parameters  Responses |  |  |
| Try it out |
|  | |

|  |  |
| --- | --- |
| Code Description Links | |
| 200  OK  Media type | *No* *links*  *No* *links* |
| |  | | --- | | application/json | |
| Controls Accept header.  Example Value  Schema  {  "action\_id " : 0 ,  "action\_name " : "string " ,  "stage " : "GOING\_TO\_TARGET " ,  "state " : {  "status " : 0 ,  "result " : 0 ,  "reason " : " "  }  }  404  Action Not Found |
| DELETE **/api/core/motion/v1/actions/:current** 终⽌当前⾏为 | |
| Parameters    No parameters | |  | | --- | | Try it out | |
| Responses  Code Description Links | |
| 200 *No* *links* OK | |



|  |  |  |
| --- | --- | --- |
| POST **/api/core/motion/v1/actions** 创建新的运动⾏为 | | |
| Parameters | | |  | | --- | | Try it out | |
| No parameters | | |
| Request body | required | |  | | --- | | application/json | |
| action\_name通过/core/motion/v1/action-factories接⼝进⾏查询, options具体内容根据action类型⽽定 Example Value  Schema | | |

|  |  |  |
| --- | --- | --- |
| {  "action\_name " : "slamtec.agent.actions.MoveToAction " , "options " : {  "target " : {  "x " : 0 ,  "y " : 0 ,  "z " : 0  } ,  "move\_options " : {  "mode " : 0 ,  "flags " : [] ,  "yaw " : 0 ,  "acceptable\_precision " : 0 ,  "fail\_retry\_count " : 0 ,  "speed\_ratio " : 0  }  }  }  Responses  Code Description | | Links |
| 200  OK  Media type | | *No* *links*  *No* *links* |
| |  | | --- | | application/json | | |
| Controls Accept header.  Example Value  Schema  {  "action\_id " : 0 ,  "action\_name " : "string " ,  "stage " : "GOING\_TO\_TARGET " ,  "state " : {  "status " : 0 ,  "result " : 0 ,  "reason " : " "  }  }  400  Can not create action | |
| GET **/api/core/motion/v1/actions/{action\_id}** 查询Action状态 | |  |
| 可查询最近20次action的状态, state.status为4表示action已结束，此时通过result判断成功与否。  Parameters    Name Description | | Try it out |
| action\_id \* required  **integer** | |  | | --- | | action\_id | | |

|  |  |  |  |
| --- | --- | --- | --- |
| Name Description | | |  |
| ***(path)***  Responses  Code Description | | Links |
| 200  OK  Media type | | *No* *links*  *No* *links* |
| |  | | --- | | application/json | | |
| Controls Accept header.  Example Value  Schema | |
| 404 | {  "action\_id " : 0 ,  "action\_name " : "string " ,  "stage " : "GOING\_TO\_TARGET " , "state " : {  "status " : 0 ,  "result " : 0 ,  "reason " : " " }  }  Not Found |
| GET **/api/core/motion/v1/path** 获取剩余路径点 | |  |  |
| 当前Action剩余的路径点  Parameters    No parameters  Responses  Code Description | | |  | | --- | | Try it out | |  |
| Links |
| 200  OK  Media type | | *No* *links* |
| |  | | --- | | application/json | | |



|  |  |
| --- | --- |
| Code Description Links  Controls Accept header.  Example Value  Schema  {  "path\_points " : [ [  0 ,  0  ]  ]  } | |
| GET **/api/core/motion/v1/milestones** 获取剩余⽬标点 | |
| 当前Action剩余的⽬标点 | |
| Parameters | |  | | --- | | Try it out | |
| No parameters  Responses  Code Description Links | |
| 200  OK  Media type | *No* *links* |
| |  | | --- | | application/json | | |
| Controls Accept header.  Example Value  Schema  {  "path\_points " : [ [  0 ,  0  ]  ]  } | |

|  |  |
| --- | --- |
| GET **/api/core/motion/v1/speed** 获取运动速度 | |
| 获取机器⼈当前运动速度 | |
| Parameters | |  | | --- | | Try it out | |



|  |  |
| --- | --- |
| No parameters | |
| Responses | |
| Code Description Links | |
| 200  OK  Media type | *No* *links* |
| |  | | --- | | application/json | | |
| Controls Accept header.  Example Value  Schema | |
| {  "vx " : 0  "vy " : 0  "omega " } | ,  ,  : 0 |
| GET **/api/core/motion/v1/time** 获取剩余时间 | |
| 获取机器⼈到⽬的地的剩余运动时间（估计值） | |
| Parameters | |  | | --- | | Try it out | |
| No parameters | |
| Responses | |
| Code Description Links | |
| 200  OK  Media type | *No* *links* |
| |  | | --- | | application/json | | |
| Controls Accept header.  Example Value  Schema 0 | |



|  |  |  |  |
| --- | --- | --- | --- |
| POST **/api/core/motion/v1/:search\_path** | | 搜索路径 |  |
| 搜索从机器⼈到⽬标点的最优路径 | |  |  |
| Parameters | |  | |  | | --- | | Try it out | |
| No parameters | |  |  |
| Request body | required |  | |  | | --- | | application/json | |
| Example Value  Schema  {  "target " : { "x " : 0 ,  "y " : 0  } ,  "timeout " : 0 } | |  |  |
| Responses | |  |  |
| Code Description | |  | Links  *No* *links* |
| 200  OK  Media type | |  |
| |  | | --- | | application/json | | |
| Controls Accept header.  Example Value  Schema  {  "path\_points " : [ [  0 ,  0  ]  ]  } | |

|  |
| --- |
| GET **/api/core/motion/v1/strategies** 获取⽀持的所有运动策略 |
| 运动策略为Slamware—系列内部参数的组合，涉及到运动速度 、避障⾏为等各个⽅⾯，不同的策略可适⽤于不同的场景。 —般情况下采⽤默认策略即可。  所需最低固件版本 4.2.4 |



|  |  |  |
| --- | --- | --- |
| Parameters | |  | | --- | | Try it out | |
| No parameters |  |
| Responses |  |
| Code Description | Links  *No* *links* |
| 200  OK  Media type |
| |  | | --- | | application/json | |
| Controls Accept header.  Example Value  Schema  [  "default " ] |
| GET **/api/core/motion/v1/strategies/:current** 获取当前运动策略 |  |
| Parameters | Try it out |
| No parameters |  |
| Responses |  |
| Code Description | Links  *No* *links* |
| 200  OK  Media type |
| |  | | --- | | text/plain | |
| Controls Accept header.  Example Value  Schema  string |

|  |
| --- |
| PUT **/api/core/motion/v1/strategies/:current** 设置运动策略 |
|  |



|  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- |
| Parameters | | |  | Try it out |  |
|  | |
| No parameters | | | | | |
| Request body | required | application/json | | |  |
|  | | |
| Example Value  Schema  {  "strategy " : "string " } | | | | | |
| Responses | | | | | |
| Code Description Links | | | | | |
| 200  OK  Media type | | *No* *links* | | | |
| |  | | --- | | application/json | | | | | | |
| Controls Accept header.  Example Value  Schema  true | | | | | |
|  | | | | | |

ﬁrmware 固件升级 

|  |
| --- |
| **/api/core/firmware/v1/newversion**  查询新版本固件  GET |

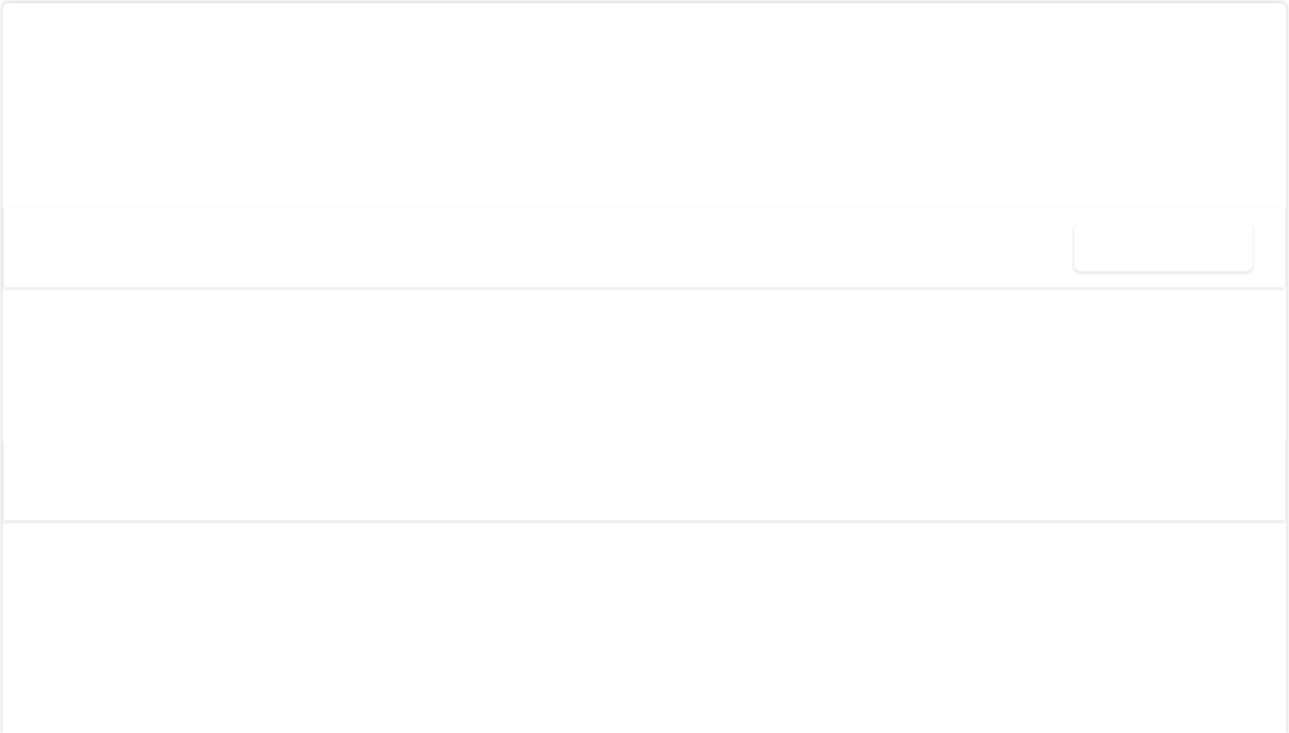
|  |
| --- |
| GET **/api/core/firmware/v1/autoupdate/:enable** 是否⽀持⾃动升级 |

|  |
| --- |
| PUT **/api/core/firmware/v1/autoupdate/:enable** 开启/关闭⾃动升级 |

|  |  |  |  |  |
| --- | --- | --- | --- | --- |
|  | | POST | **/api/core/firmware/v1/autoupdate/:start** 开始⾃动固件升级 |  |
|  | POST | | **/api/core/firmware/v1/update/:start** 上传固件升级 |  |
|  | GET | | **/api/core/firmware/v1/progress** 获取固件升级进度 |  |

statistics 运⾏数据统计 

|  |  |  |
| --- | --- | --- |
| GET **/api/core/statistics/v1/odometry** | 获取运⾏⾥程 |  |
| 机器⼈总的运⾏⾥程，单位⽶ |  |  |
| Parameters |  | |  | | --- | | Try it out | |
| No parameters |  |  |
| Responses |  |  |
| Code Description |  | Links  *No* *links* |
| 200  OK  Media type |  |
| |  | | --- | | application/json | |
| Controls Accept header.  Example Value  Schema 0 |



|  |  |
| --- | --- |
| GET **/api/core/statistics/v1/runtime** 获取运⾏时间 | |
| 机器⼈总的运⾏时间，单位秒 | |
| Parameters | |  | | --- | | Try it out | |
| No parameters  Responses  Code Description Links | |
| 200 *No* *links* OK | |

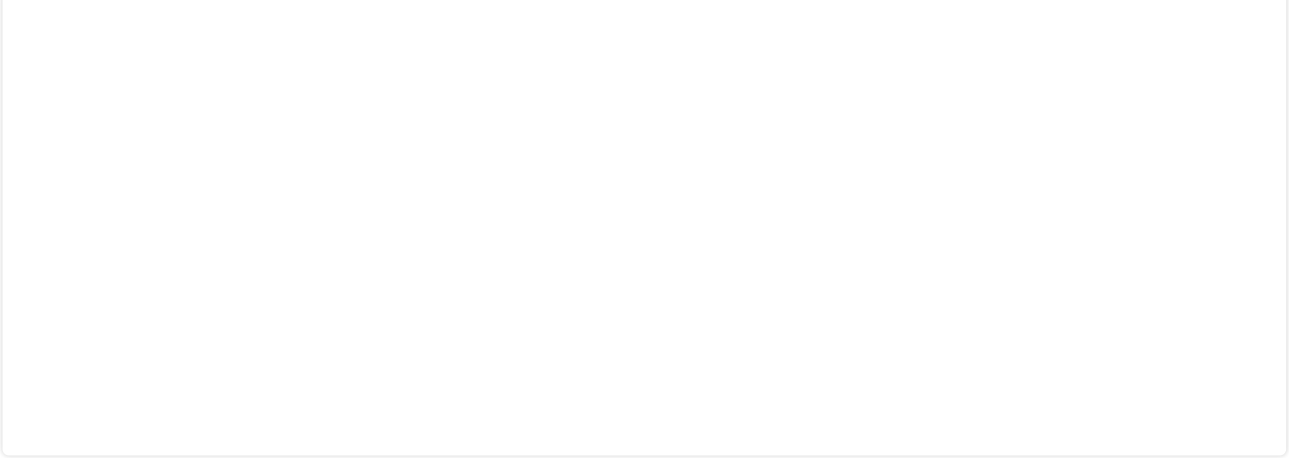


|  |  |  |
| --- | --- | --- |
| Code | Description | Links |
| Media type |  |
| application/json |
| Controls Accept header.  Example Value  Schema 0 |

sensors 传感器控制 

|  |  |
| --- | --- |
| PUT **/api/core/sensors/v1/depth/:enable** 使能/禁⽤深度摄像头数据 | |
| ⽤户设置是否使⽤深度摄像头数据 | |
| Parameters | |  | | --- | | Try it out | |
| No parameters | |
| Request body | |  | | --- | | application/json | |
| Example Value  Schema  {  "enable " : true } | |
| Responses | |
| Code Description Links  200 *No* *links* OK | |
| GET **/api/core/sensors/v1/masks** 获取传感器禁⽤状态 | |
| 获取禁⽤状态的传感器掩码信息。 | |
| Parameters | |  | | --- | | Try it out | |

|  |  |
| --- | --- |
| No parameters  Responses  Code Description | Links |
| 200  OK  Media type | *No* *links* |
| |  | | --- | | application/json | |
| Controls Accept header.  Example Value  Schema  [  {  "id " : 0 ,  "isAlways " : true }  ] |
| PUT **/api/core/sensors/v1/masks** 使能/禁⽤传感器 |  |
| 设置传感器掩码。  Parameters    No parameters  Request body  Example Value  Schema  [  {  "id " : 0 ,  "isAlways " : true , "isEnabled " : true  }  ]  Responses  Code Description | |  | | --- | | Try it out | |
| |  | | --- | | application/json | |
| Links |
| 200  OK | *No* *links* |



|  |
| --- |
| Code Description Links |
| Media type |
| |  | | --- | | application/json | |
| Controls Accept header.  Example Value  Schema  true |

application 安卓应⽤程序管理(仅限ARM平台) 

|  |  |  |  |
| --- | --- | --- | --- |
| GET **/api/core/application/v1/apps** | | 获取所有⾃定义安装的APP |  |
| Parameters | |  | Try it out |
| No parameters | |  |  |
| Responses | |  |  |
| Code Description | |  | Links  *No* *links* |
| 200  OK  Media type | |  |
| |  | | --- | | application/json | | |
| Controls Accept header.  Example Value  Schema  [  {  "name " : "string " ,  "version " : "string " | |
|  | } ] |

|  |  |
| --- | --- |
| POST **/api/core/application/v1/apps** 安装APP | |
| Parameters    No parameters  Request body | |  | | --- | | Try it out | |
| |  | | --- | | application/octet-stream | |



|  |  |  |  |
| --- | --- | --- | --- |
| *Example* *values* *are* *not* *available* *for* *application/octet* *-stream* *media* *types.* | | | |
| Responses | | | |
| Code Description Links  200 *No* *links* OK  500 *No* *links* Failed to install application | | | |
| DELETE **/api/core/application/v1/apps/{app\_name}** 卸载—个APP | | | |
| Parameters | | | |  | | --- | | Try it out | |
| Name Description | | | |
| app\_name  **string**  ***(path)*** | \* required | |  | | --- | | app\_name | | |
| Responses | | | |
| Code Description Links  200 *No* *links* OK | | | |

platform 机器⼈通⽤底盘和平台相关的功能 

|  |  |
| --- | --- |
| GET **/api/platform/v1/timestamp** 获取系统时间戳 | |
| 获取系统启动以来的毫秒数, 返回值为字符串格式的整数。 所需最低固件版本 4.2.4 | |
| Parameters | |  | | --- | | Try it out | |
| No parameters | |



|  |  |
| --- | --- |
|  | |
| Responses | |
| Code Description Links | |
| 200  OK  Media type | *No* *links* |
| |  | | --- | | application/json | | |
| Controls Accept header.  Example Value  Schema  "string " | |
| GET **/api/platform/v1/events** 获取事件信息 | |
| 获取机器⼈发⽣的事件，上位机可以播报语⾳或进⾏别的交互，启⽤不同的插件会扩展出不同的事件类型。 | |
| Parameters | |  | | --- | | Try it out | |
| No parameters | |
| Responses | |
| Code Description Links | |
| 200  OK  Media type | *No* *links* |
| |  | | --- | | application/json | | |
| Controls Accept header.  Example Value  Schema  [  {  "type " : "DEVICE\_ERROR" ,  "timestamp " : "string " }  ] | |
|  | |

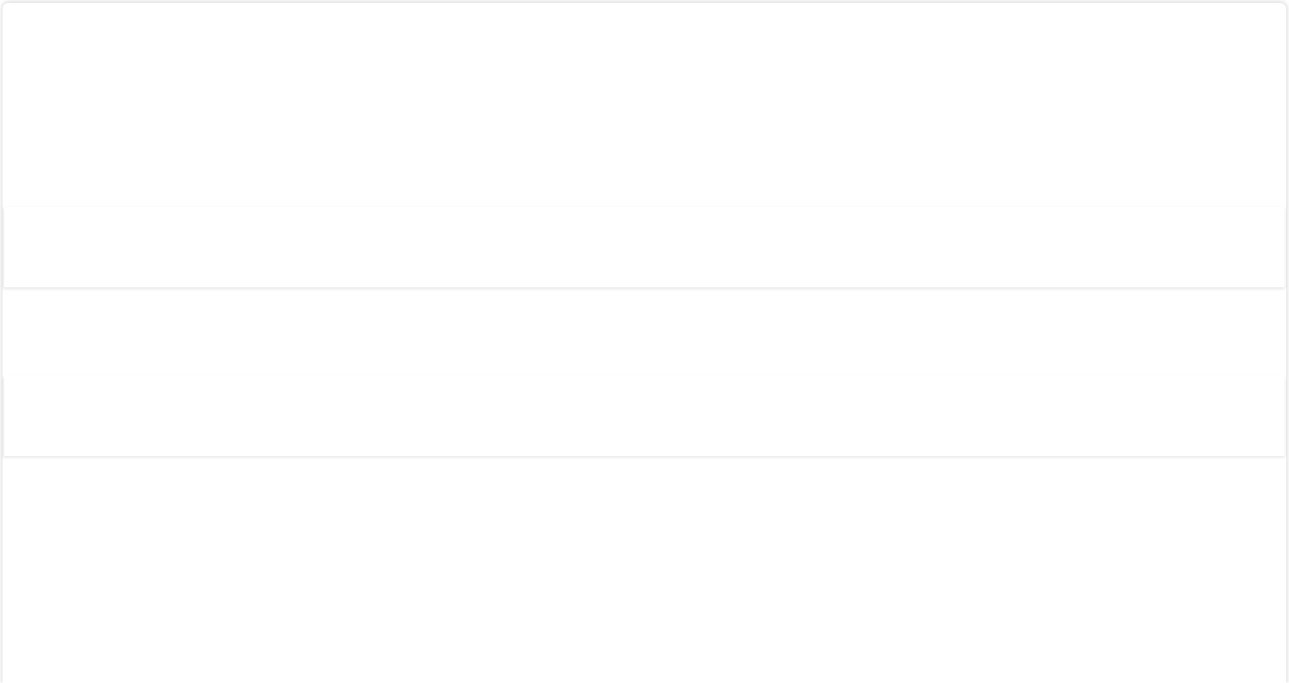
multi-ﬂoor 多楼层地图管理，乘电梯等功能 



|  |  |  |
| --- | --- | --- |
| GET **/api/multi-floor/status** 获取地图状态信息 | |  |
| Parameters | | Try it out |
| No parameters | |  |
| Responses | |  |
| Code Description  200  OK  Media type | | Links  *No* *links* |
| |  | | --- | | application/json | | |
| Controls Accept header.  Example Value  Schema  {  "is\_in\_mapping\_mode " : true ,  "map\_load\_status " : "NOT\_LOADED " , "is\_managed\_by\_cloud " : true | |
|  | } |

|  |  |
| --- | --- |
| GET **/api/multi-floor/map/v1/floors** 获取所有楼层信息 | |
| Parameters    No parameters | |  | | --- | | Try it out | |
| Responses  Code Description Links | |
| 200  OK  Media type | *No* *links* |
| |  | | --- | | application/json | | |
| Controls Accept header.  Example Value  Schema  [  {  "building " : " " , | |

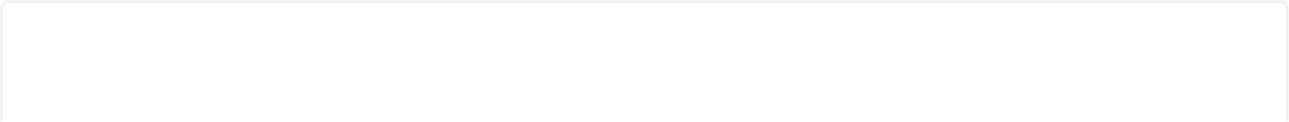
|  |  |  |
| --- | --- | --- |
| Code Description Links  "floor " : "1F " ,  "order " : 0 ,  "is\_default\_floor " : true }  ] | |  |
| GET **/api/multi-floor/map/v1/floors/:current** 获取机器⼈所在楼层信息 | | |
| Parameters | |  | | --- | | Try it out | | |
| No parameters | | |
| Responses | | |
| Code Description Links | | |
| 200  OK  Media type | *No* *links* | |
| |  | | --- | | application/json | | | |
| Controls Accept header.  Example Value  Schema  {  "building " : " " ,  "floor " : "1F " ,  "elevator " : " " ,  "map\_id " : "3fa85f64-5717-4562-b3fc-2c963f66afa6 " } | | |
|  | | |



|  |  |  |
| --- | --- | --- |
| PUT **/api/multi-floor/map/v1/floors/:current** 设置机器⼈所在楼层信息 | | |
| 正常情况下应当由机器⼈在乘坐电梯过程中⾃主切换楼层，该接⼝仅供特殊情况下（ 如⼈⼯搬运机器⼈） 使⽤ 。 | | |
| Parameters | | |  | | --- | | Try it out | |
| No parameters | | |  | | --- | | application/json | |
| Request body | required |
| Example Value  Schema  {  "building " : "string " , "floor " : "string " ,  "pose " : {  "x " : 0 , | | |

|  |  |  |
| --- | --- | --- |
| "y " : 0 ,  "yaw " : 0  }  }  Responses  Code Description | | Links |
| 200  OK | | *No* *links* |
| GET **/api/multi-floor/map/v1/pois** 获取POI信息 | |  |
| 通过参数指定楼层，不带参数时获取所有楼层的POI。  Parameters    Name Description | | Try it out |
| ﬂoor  **string**  ***(query)***  building  **string**  ***(query)*** | 楼层名   |  | | --- | | ﬂoor |   建筑物名  *Default* *value* :   |  | | --- | | building | | Links |
| Responses  Code Description | |
| 200  OK  Media type | | *No* *links* |
| |  | | --- | | application/json | | |
| Controls Accept header.  Example Value  Schema | |

|  |  |  |  |
| --- | --- | --- | --- |
| Code Description Links | | |  |
| 400 | [  {  "id " : "3fa85f64-5717-4562-b3fc-2c963f66afa6 " ,  "poi\_name " : "string " ,  "type " : "ROOM " ,  "floor " : "string " ,  "building " : "string " ,  "pose " : {  "x " : 0 ,  "y " : 0 ,  "yaw " : 0  }  }  ]  *No* *links*  Invalid ﬂoor or building | |
| POST **/api/multi-floor/map/v1/pois/:search\_nearby** 查找最近的POI | | | |
| 查找离机器⼈最近的POI信息。其中name有三个特殊值，ON\_DOCK表示在桩上， IN\_ELEVATOR表示在电梯内， UNKNOWN表示没有POI ，此时没有relative\_pose字段，其他的值均表示地图中添加的常规POI的名称。 | | | |
| Parameters | | |  | | --- | | Try it out | | |
| No parameters | | | |
| Responses | | | |
| Code Description Links | | | |
| 200  OK  Media type | | *No* *links* | |
| |  | | --- | | application/json | | | | |
| Controls Accept header.  Example Value  Schema  {  "id " : "3fa85f64-5717-4562-b3fc-2c963f66afa6 " , "name " : "ON\_DOCK" ,  "relative\_pose " : {  "x " : 0 ,  "y " : 0  }  } | | | |



|  |
| --- |
| POST **/api/multi-floor/map/v1/pois/:dispatch** 查询POI的最优遍历顺序 |
|  |

|  |  |  |  |
| --- | --- | --- | --- |
| 给定若⼲个POI名称，返回调整顺序后的POI名称，使得机器⼈依次遍历这些POI并回到当前位置的总路径最短。 【注】该接⼝耗时随着POI数量指数增⻓ ，请勿传⼊⼤量POI。  所需最低固件版本 4.5.0 | | | |
| Parameters | | | |  | | --- | | Try it out | |
| No parameters | | | |
| Request body | required | |  | | --- | | application/json | | |
| Example Value  Schema  [  "101 " ,  "103 " ,  "102 " ]  Responses  Code Description Links | | | |
| 200  OK  Media type | | | *No* *links* |
| |  | | --- | | application/json | | | |
| Controls Accept header.  Example Value  Schema  [  "101 " , "102 " , "103 "  ] | | |
| GET **/api/multi-floor/map/v1/homedocks** 获取充电桩信息 | | |  |
| 通过Query参数指定楼层，不带参数时获取所有楼层的充电桩  Parameters    Name Description | | | Try it out |
| ﬂoor  **string** | 楼层名 | | |

|  |  |  |  |  |
| --- | --- | --- | --- | --- |
| Name Description  ***(query)***   |  | | --- | | ﬂoor |   building  **string**  建筑物名  ***(query)***  *Default* *value* :   |  | | --- | | building |   Responses  Code Description Links  200  *No* *links*  OK  Media type   |  | | --- | | application/json |   Controls Accept header.  Example Value  Schema  [  {  "id " : "3fa85f64-5717-4562-b3fc-2c963f66afa6 " , "dock\_name " : "string " ,  "floor " : "string " ,  "building " : "string " ,  "pose " : {  "x " : 0 ,  "y " : 0 ,  "yaw " : 0  }  }  ] | |
| GET **/api/multi-floor/map/v1/homedocks/:current** 获取绑定的充电桩 |  |
| 获取机器⼈当前绑定的充电桩信息，如果没绑定过或dock id⽆效，返回的result为false。 | |
| Parameters | |  | | --- | | Try it out | |
| No parameters  Responses | |

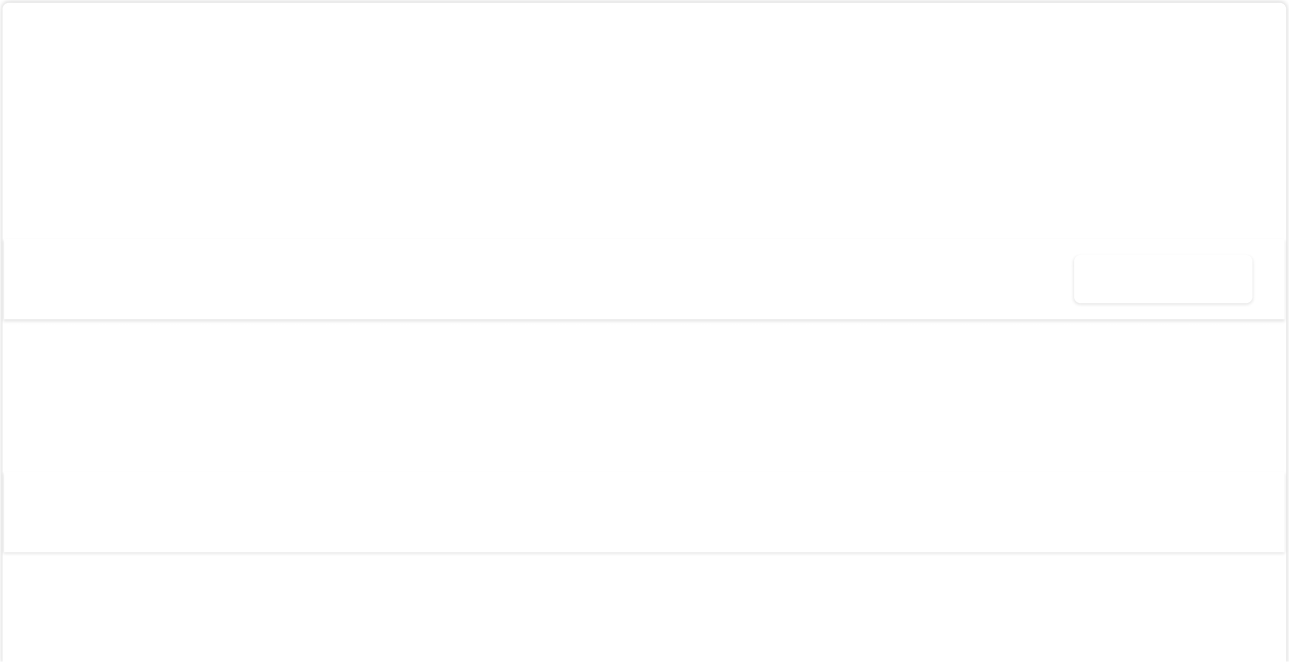
|  |  |  |
| --- | --- | --- |
| Code | Description | Links |
| 200 | OK  Media type | *No* *links* |
| |  | | --- | | application/json | |
| Controls Accept header.  Example Value  Schema  {  "result " : true ,  "msg " : "string " ,  "data " : {  "id " : "3fa85f64-5717-4562-b3fc-2c963f66afa6 " , "dock\_name " : "string " ,  "floor " : "string " ,  "building " : "string " ,  "pose " : {  "x " : 0 ,  "y " : 0 ,  "yaw " : 0  }  }  } |
| PUT | **/api/multi-floor/map/v1/homedocks/:current** 绑定充电桩 |  |
| 【注意】如果绑定的充电桩不在启动楼层，则需要先将机器⼈推到充电桩上， 然后调⽤本接⼝ ，此时会同步修改启动楼层并 重置地图。 | | |
| Parameters    No parameters  Request body | | |  | | --- | | Try it out | |
| |  | | --- | | application/json | |
| Example Value  Schema  {  "dock\_id " : "3fa85f64-5717-4562-b3fc-2c963f66afa6 " }  Responses | | |



|  |  |
| --- | --- |
| Code Description | Links |
| 200 | *No* *links* |
| OK |  |
| POST **/api/multi-floor/map/v1/homedocks/:search\_nearby** 查找离机器⼈最近的充电桩 |  |
| 调⽤该接⼝前请确保机器⼈定位准确。 |  |
| Parameters | Try it out |
| No parameters |  |
| Responses |  |
| Code Description | Links  *No* *links* |
| 200  OK  Media type |
| |  | | --- | | application/json | |
| Controls Accept header.  Example Value  Schema  {  "id " : "3fa85f64-5717-4562-b3fc-2c963f66afa6 " , "dock\_name " : "string " ,  "floor " : "string " ,  "building " : "string " ,  "pose " : {  "x " : 0 ,  "y " : 0 ,  "yaw " : 0  }  } |
| POST **/api/multi-floor/map/v1/stcm** 上传地图到机器⼈ |  |
| 上传的地图会持久化保存在⽂件系统中, 但不会加载到Slamware中。 【注意】 当机器⼈由云端管理时，从云端下载的地图会覆盖本地地图。 |  |
| Parameters | Try it out |
| No parameters |  |



|  |  |  |
| --- | --- | --- |
| Request body | |  | | --- | | application/octet-stream | |
| *Example* *values* *are* *not* *available* *for* *application/octet* *-stream* *media* *types.* |  |
| Responses |  |
| Code Description  200  OK | Links |
| *No* *links* |
| DELETE **/api/multi-floor/map/v1/stcm** 删除保存的地图 |  |
| 不会清空内存中的当前地图，⽽是删除⽂件系统中缓存的地图 |  |
| Parameters | |  | | --- | | Try it out | |
| No parameters |  |
| Responses |  |
| Code Description  204  OK | Links  *No* *links* |



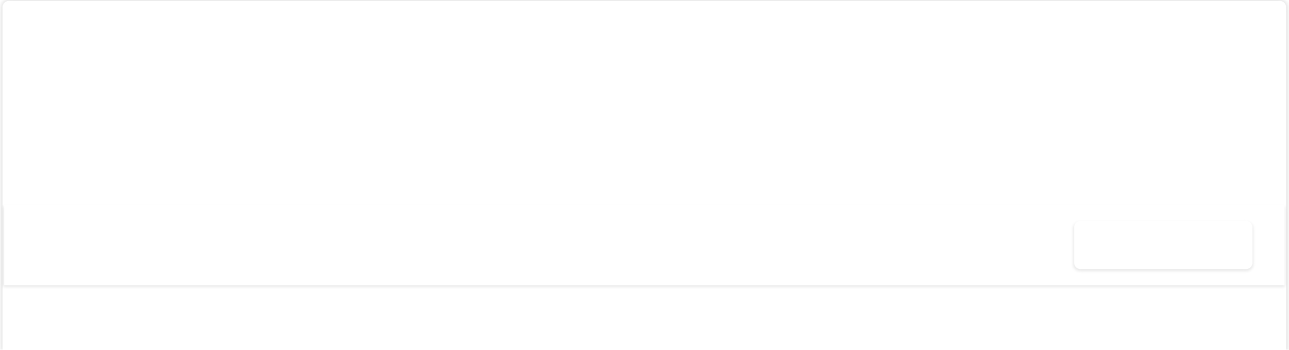
|  |  |
| --- | --- |
| POST **/api/multi-floor/map/v1/stcm/:save** 持久化保存当前地图 | |
| 从Slamware中读取地图并保存到⽂件。  【注意】 多楼层环境中禁⽌该操作，否则会丢失其他楼层的地图。 | |
| Parameters | |  | | --- | | Try it out | |
| No parameters  Responses | |

|  |  |  |
| --- | --- | --- |
| Code Description Links  200 *No* *links* OK | |  |
| POST **/api/multi-floor/map/v1/stcm/:reload** 重新加载地图 | | |
| 重新加载地图，优先尝试从云端下载，下载失败或机器⼈不受云端管理时从本地⽂件读取。 pose为可选字段，pose为空时设置机器⼈位姿到充电桩前。  【注意】 系统启动时会⾃动加载地图，该接⼝—般在部署阶段地图有变更时才需要调⽤ 。 | | |
| Parameters | |  | | --- | | Try it out | | |
| No parameters | | |
| Request body | |  | | --- | | application/json | | |
| Example Value  Schema  {  "pose " : {  "x " : 0 ,  "y " : 0 ,  "z " : 0 ,  "yaw " : 0 ,  "pitch " : 0 , "roll " : 0  }  } | | |
| Responses | | |
| Code Description Links  200 *No* *links* OK | | |

|  |  |
| --- | --- |
| POST **/api/multi-floor/map/v1/stcm/:sync** 同步地图 | |
| 保存当前地图到⽂件，并重新加载，相当于save和reload 2个接⼝的组合。 【注意】 多楼层环境中禁⽌该操作，否则会丢失其他楼层的地图。  所需最低固件版本 4.2.4 | |
| Parameters | |  | | --- | | Try it out | |
|  | |



|  |  |
| --- | --- |
| No parameters | |
| Responses | |
| Code Description Links  200 *No* *links* OK | |
| POST **/api/multi-floor/map/v1/scene/unbind** 解绑云端场景 | |
| 将机器⼈与云端场景解除绑定，并删除本地地图，在机器⼈需要换场景部署时调⽤ 。 所需最低固件版本 6.2.0 | |
| Parameters | |  | | --- | | Try it out | |
| No parameters | |
| Request body | |  | | --- | | application/json | |
| Example Value  Schema  {  "keep\_local\_map " : true } | |
| Responses | |
| Code Description Links  200 *No* *links* OK | |



|  |  |
| --- | --- |
| POST **/api/multi-floor/map/v1/search\_path\_points** 通过轨道搜索路径点 | |
| 在轨道构成的图中，搜索起点到终点的可⾏路径。 | |
| Parameters | |  | | --- | | Try it out | |
|  | |

|  |  |  |  |
| --- | --- | --- | --- |
| No parameters | |  | |
| Request body | required |  | |  | | --- | | application/json | |
|  |
|  |
| Example Value  Schema | |  | |
| {  "building " : "string " , "floor " : "string " ,  "start\_point " : {  "x " : 0 ,  "y " : 0  } ,  "end\_point " : { "x " : 0 ,  "y " : 0  } ,  "with\_direction " : true } | |  | |
| Responses | |  | |
| Code Description | | Links | |
| 200  OK  Media type | | *No* *links* | |
| |  | | --- | | application/json | | |
| Controls Accept header.  Example Value  Schema  {  "path\_points " : [ [  0 ,  0  ]  ]  } | |
| PUT **/api/multi-floor/localization/v1/pose** 设置机器⼈位姿 | |  | |
| 将机器⼈位姿设置到指定的POI上， —般⽤于发⽣异常后的恢复操作。 所需最低固件版本 4.5.3 | | | |
| Parameters | |  | | --- | | Try it out | | | |
| No parameters | | | |
| Request body | |  | | --- | | application/json | | | |

|  |  |
| --- | --- |
| Example Value  Schema | |
| { | |
| "poi\_name " : "string " | |
| } | |
| Responses | |
| Code Description Links | |
| 200  OK  Media type | *No* *links* |
| |  | | --- | | application/json | | |
| Controls Accept header.  Example Value  Schema  true | |
| PUT **/api/multi-floor/localization/v1/homedock** 根据充电桩重置机器⼈定位 | |
| 将机器⼈位姿设置到指定的充电桩前，—般⽤于发⽣异常后的恢复操作。 所需最低固件版本 6.2.0 | |
| Parameters | |  | | --- | | Try it out | |
| No parameters | |
| Request body | |  | | --- | | application/json | |
| Example Value  Schema  {  "dock\_id " : "3fa85f64-5717-4562-b3fc-2c963f66afa6 " }  Responses | |

|  |  |  |
| --- | --- | --- |
| Code Description Links  200 *No* *links* OK | |  |
| GET **/api/multi-floor/map/v1/elevators** 获取电梯区域 | | |
| 获取电梯区域内的元素，包括电梯ID以及等待点。 | | |
| Parameters | |  | | --- | | Try it out | | |
| No parameters | | |
| Responses | | |
| Code Description Links | | |
| 200  OK  Media type | *No* *links* | |
| |  | | --- | | application/json | | | |
| Controls Accept header.  Example Value  Schema  {  "door\_type " : "front\_door " , "elevator\_id " : "string " ,  "front\_scheduling\_poses " : [  {  "x " : 0 ,  "y " : 0 ,  "z " : 0 ,  "yaw " : 0 ,  "pitch " : 0 ,  "roll " : 0  }  ] ,  "rear\_scheduling\_poses " : [ {  "x " : 0 ,  "y " : 0 ,  "z " : 0 ,  "yaw " : 0 ,  "pitch " : 0 ,  "roll " : 0  }  ]  }  ] | | |
|  | | |

|  |  |  |
| --- | --- | --- |
| GET | **/api/multi-floor/map/v1/elevators/{elevator\_id}** 获取某个电梯的信息 |  |



|  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- |
| Parameters | | | | |  | | --- | | Try it out | | |
| Name Description | | | |
| elevator\_id \*  **string**  ***(path)*** | | required   |  | | --- | | elevator\_id | | |
| Responses  Code Description  200 | | | | Links  *No* *links* | |
| OK | | | |  | |
| Media type | | | |  | |
| |  | | --- | | application/json | | | | |
| Controls Accept header. | | | |  | |
| Example Value  Schema | | | |  | |
| { | | | |  | |
| "door\_type " : "front\_door " , "elevator\_id " : "string " , | | | |  | |
| "front\_scheduling\_poses " : [ { | | | |  | |
| "x " : 0 ,  "y " : 0 ,  "z " : 0 , | | | |  | |
| "yaw " : 0 , | | | |  | |
| "pitch " : 0 , "roll " : 0 | | | |  | |
| } | | | |  | |
| ] , | | | |  | |
| "rear\_scheduling\_poses " : [ { | | | |  | |
| "x " : 0 ,  "y " : 0 ,  "z " : 0 , | | | |  | |
| "yaw " : 0 , | | | |  | |
| "pitch " : 0 , "roll " : 0 | | | |  | |
| } | | | |  | |
| ] | | | |  | |
| } | | | |  | |
| 400 | | | | *No* *links* | |
| Unknown Elevator ID | | | |  | |
| GET | **/api/multi-floor/map/v1/elevators/{elevator\_id}**  **/pose\_relation** | | 获取机器⼈与电梯的位置关系 | |  |
| Parameters | | |  | | --- | | Try it out | | | | |



|  |  |  |
| --- | --- | --- |
| Name Description | | |
| elevator\_id \*  **string**  ***(path)*** | required   |  | | --- | | elevator\_id | | |
| Responses | | |
| Code Description Links | | |
| 200  OK  Media type | | *No* *links* |
| |  | | --- | | application/json | | | |
| Controls Accept header.  Example Value  Schema  "in\_elevator "  400 *No* *links* Unknown Elevator ID | | |
|  | | |

industry ⼯业搬运服务 

|  |  |
| --- | --- |
| POST **/api/industry/v1/tasks/templates** 创建任务模板 | |
| 创建—个呼叫器任务模板 | |
| Parameters | |  | | --- | | Try it out | |
| No parameters | |
| Request body | |  | | --- | | application/json | |
| Example Value  Schema  {  "key " : "3fa85f64-5717-4562-b3fc-2c963f66afa6 " , "name " : "string " ,  "action\_list " : [  {  "display\_name " : "string " ,  "action " : "string " ,  "wait\_time " : 0 | |

|  |  |
| --- | --- |
| }  ]  }  Responses  Code Description | Links |
| 200  OK  Media type | *No* *links* |
| |  | | --- | | application/json | |
| Controls Accept header.  Example Value  Schema  {  "task\_template\_key " : "3fa85f64-5717-4562-b3fc-2c963f66afa6 " , "task\_template\_type " : 0 ,  "name " : "string " ,  "scene\_id " : "3fa85f64-5717-4562-b3fc-2c963f66afa6 " ,  "device\_id " : "3fa85f64-5717-4562-b3fc-2c963f66afa6 " ,  "action\_list " : [  {  "display\_name " : "string " ,  "action " : "string " ,  "wait\_time " : 0  }  ]  } |
| GET **/api/industry/v1/tasks/templates** 获取任务模板 |  |
| 获取当前设备所属场景下的所有任务模板  Parameters    No parameters  Responses  Code Description | |  | | --- | | Try it out | |
| Links |
| 200  OK  Media type | *No* *links* |
| |  | | --- | | application/json | |
| Controls Accept header. |

|  |  |  |  |
| --- | --- | --- | --- |
| Code Description Links  Example Value  Schema  [  {  "task\_template\_key " : "3fa85f64-5717-4562-b3fc-2c963f66afa6 " , "task\_template\_type " : 0 ,  "name " : "string " ,  "scene\_id " : "3fa85f64-5717-4562-b3fc-2c963f66afa6 " ,  "device\_id " : "3fa85f64-5717-4562-b3fc-2c963f66afa6 " ,  "action\_list " : [  {  "display\_name " : "string " ,  "action " : "string " ,  "wait\_time " : 0  }  ]  }  ] | | |  |
| DELETE **/api/industry/v1/tasks/templates/{key\_id}** 删除任务模板 | | | |
| 删除⼀个任务模板 | | | |
| Parameters | | |  | | --- | | Try it out | | |
| Name Description | | | |
| key\_id \* required  **string($uuid)**  ***(path)*** | |  | | --- | | 3fa85f64-5717-4562-b3fc-2c963f66afa6 | | | |
| Responses | | | |
| Code Description Links | | | |
| 200 *No* *links* OK | | | |
| Media type | |  | |
| |  | | --- | | text/plain | | |
| Controls Accept header.  Example Value  Schema  {  "result " : true , "msg " : "string " , "data " : {}  } | |

|  |  |  |
| --- | --- | --- |
| GET **/api/industry/v1/tasks** 查询任务信息 | | |
| 默认返回ready和running状态的所有类型的任务，status为all时表示查询最近的所有任务，包括已成功完成和失败的任务。 | | |
| Parameters | | |  | | --- | | Try it out | |
| Name Description | | |
| type  **string**  ***(query)***  status  **string**  ***(query)*** | *Available* *values* : carry\_calling\_by\_template, carry\_calling, industry   |  | | --- | | -- |   *Available* *values* : ready, running, succeeded, failed, all | |
| |  | | --- | | -- | | |
| Responses  Code Description Links | | |
| 200  OK  Media type | | *No* *links* |
| |  | | --- | | application/json | | |
| Controls Accept header.  Example Value  Schema  {  "id " : "3fa85f64-5717-4562-b3fc-2c963f66afa6 " , "task" : {  "target " : "string " ,  "type " : "CARRY\_CALLING " ,  "order\_id " : "string " ,  "template\_key " : "string " ,  "start\_time " : "string " ,  "task\_targets " : [  {  "target\_name " : "string " ,  "action " : "string " ,  "wait\_time " : 0  }  ] ,  "message " : {}  } ,  "status " : "READY " ,  "result " : {  "stage " : "GOING\_TO\_ELEVATOR" ,  "reason " : " " ,  "timestamp " : "string "  }  }  ] | |



|  |  |  |  |
| --- | --- | --- | --- |
| POST **/api/industry/v1/tasks/events** 推送任务事件 | | | |
| 上位机执⾏呼叫器任务时，通过该接⼝推送任务事件， 同时更新任务状态。 | | | |
| Parameters | |  |  |
| Try it out |
|  |
| No parameters | | | |
| Request body | application/json | |  |
|  | |
| Example Value  Schema  {  "task\_id " : "3fa85f64-5717-4562-b3fc-2c963f66afa6 " , "status " : "RUNNING "  } | | | |
| Responses | | | |
| Code Description Links  200 *No* *links* OK | | | |

delivery 配送服务(仅限整机，通⽤底盘⽆法⽀持) 

|  |
| --- |
| GET **/api/delivery/v1/admin/password** 获取操作密码 |

|  |  |
| --- | --- |
| PUT | **/api/delivery/v1/admin/password** 设置操作密码 |

|  |  |
| --- | --- |
| GET | **/api/delivery/v1/admin/mode** 获取机器⼈⼯作模式 |

|  |  |
| --- | --- |
| PUT | **/api/delivery/v1/admin/mode** 设置机器⼈⼯作模式 |

|  |  |
| --- | --- |
| GET | **/api/delivery/v1/admin/language** 获取机器⼈语⾔ |

|  |  |
| --- | --- |
| PUT | **/api/delivery/v1/admin/language** 设置机器⼈语⾔ |

|  |
| --- |
| GET **/api/delivery/v1/admin/working\_time** 获取机器⼈⼯作时间 |

|  |
| --- |
| PUT **/api/delivery/v1/admin/working\_time** 设置机器⼈⼯作时间 |

|  |  |
| --- | --- |
| GET | **/api/delivery/v1/admin/move\_options** 获取运动选项 |

|  |  |
| --- | --- |
| PUT | **/api/delivery/v1/admin/move\_options** 设置运动选项 |

|  |
| --- |
| GET **/api/delivery/v1/admin/line\_speed** 获取配送速度和返航速度 |

|  |
| --- |
| PUT **/api/delivery/v1/admin/line\_speed** 设置配送速度和返航速度 |

|  |  |
| --- | --- |
| GET | **/api/delivery/v1/configurations** 获取机器配置信息 |

|  |  |
| --- | --- |
| GET | **/api/delivery/v1/settings** 获取配送相关的设置信息 |

|  |  |
| --- | --- |
| PUT | **/api/delivery/v1/settings/timeout** 设置任务的超时时间 |

|  |  |
| --- | --- |
| GET | **/api/delivery/v1/voice\_resources** 获取语⾳包信息 |

|  |  |
| --- | --- |
| GET | **/api/delivery/v1/cargos** 获取所有Cargo信息 |

|  |
| --- |
| GET **/api/delivery/v1/cargos/{cargo\_id}/boxes** 获取某个Cargo所有Box信息 |

|  |
| --- |
| GET **/api/delivery/v1/cargos/{cargo\_id}/boxes/{box\_id}** 获取Box信息 |

|  |
| --- |
| PUT **/api/delivery/v1/cargos/{cargo\_id}/boxes/{box\_id}/{op}** 操作Box |

|  |  |  |
| --- | --- | --- |
| GET | **/api/delivery/v1/cargos/{cargo\_id}/boxes/{box\_id}**  **/operation\_result** | 查询Box操作结果 |

|  |  |
| --- | --- |
| GET | **/api/delivery/v1/cargos/assigned** 获取被占⽤的外卖舱 |

|  |  |
| --- | --- |
| GET | **/api/delivery/v1/tasks** 查询任务信息 |

|  |  |
| --- | --- |
| POST | **/api/delivery/v1/tasks** 创建任务 |

|  |  |
| --- | --- |
| DELETE | **/api/delivery/v1/tasks** 取消所有任务 |

|  |  |
| --- | --- |
| POST | **/api/delivery/v1/tasks/:batch** 批量创建任务 |

|  |
| --- |
| DELETE **/api/delivery/v1/tasks/{task\_id}** 根据Task ID取消任务 |

|  |
| --- |
| DELETE **/api/delivery/v1/tasks/orders/{order\_id}** 根据订单ID取消任务 |

|  |  |
| --- | --- |
| GET | **/api/delivery/v1/stage** 获取当前任务状态 |

|  |
| --- |
| PUT **/api/delivery/v1/tasks/:task\_execution** 暂停/继续执⾏任务 |

|  |  |
| --- | --- |
| PUT | **/api/delivery/v1/tasks/:task\_finish** 结束所有任务 |

|  |  |
| --- | --- |
| PUT | **/api/delivery/v1/tasks/:start\_pickup** 开始取物 |

|  |  |
| --- | --- |
| PUT | **/api/delivery/v1/tasks/:end\_pickup** 结束取物 |

|  |  |
| --- | --- |
| PUT | **/api/delivery/v1/tasks/:end\_operation** 完成操作 |

|  |
| --- |
| Schemas |
| Capability **{**  **name string**  **slamware agent core** 定位导航等底盘核⼼通⽤功能  · **slamware agent platform** ⽇志采集等平台通⽤功能  . **slamware agent multi floor** 多楼层地图管理和跨楼层移动功能 · **slamware agent delivery** 配送服务功能  · **slamware.agent.mercury2** ⽀持云端调度的智能酒店配送服务功能  **Enum:**  **Array [ 5 ]**  **version string**  ***example: 4.0.0***  **enabled boolean**  插件初始化失败，或者刚启动时该值为**false**，上位机应当继续等待⼀段时间，直到该值变成**true**或 者超时。  **}** |

|  |  |
| --- | --- |
| PowerStatus **{**  **batteryPercentage**  **dockingStatus**  **isCharging**  **isDCConnected**  **powerStage**  **sleepMode**  **}**  DeviceInfo **{**  **manufacturerId**  **manufacturerName**  **modelId**  **modelName**  **deviceID**  **hardwareVersion**  **softwareVersion**  **}** | **integer**  ***example: 90***  电池电量百分⽐ ，**0 ~ 100**  **string**  对桩状态  **Enum:**  **Array [ 2 ]**  **boolean**  是否正在充电  **boolean**  ***example: false***  外部电源是否连接  **string**  ***example: running***  电源状态  **Enum:**  **Array [ 5 ]**  **string**  休眠状态  **Enum:**  **Array [ 3 ]**  **integer**  ***example: 255***  制造商**ID**  **string**  ***example: Slamtec***  制造商名称  **integer**  ***example: 43792***  设备型号**ID**  **string**  ***example: Apollo***  设备型号名称  **string($uuid)**  ***example: D2E6D7C0F7ABF29EDFEAFEFE1C781D09***  设备序列号  **string**  ***example: 511***  硬件版本号  **string**  ***example: 3.6.1-rtm+20210807***  软件版本号 |

|  |  |  |  |
| --- | --- | --- | --- |
| BaseError  **id**  **component** | **{** |  | **integer**  **integer**  ***example: 1***  **0 User, 1 System, 2 Power, 3 Motion, 4 Sensor, 255 Unknown** |
| **errorCode**  **level** | |  | **Enum:**  **Array [ 6 ]**  **integer**  ***example: 33621760***  **integer**  ***example: 2***  **0 Healthy, 1 Warn, 2 Error, 4 Fatal, 255 Unknown** |
| **message** | |  | **Enum:**  **Array [ 5 ]**  **string**  ***example: motor barke released*** |
| **}** | |  |  |
| BaseHealthInfo  **hasWarning** | | **{** | **boolean**  ***example: false***  是否有告警信息 |
| **hasError** | |  | **boolean**  ***example: true***  是否有错误信息 |
| **hasFatal** | |  | **boolean**  ***example: false*** |
| **baseError }** | |  | 是否有致命错误  **[...]** |
| NetworkStatus  **ethip1** | | **{** | **string**  ***example:*** [***192.168.11.1/24***](192.168.11.1/24) |
| **ip** | |  | 以太⽹地址  **string**  ***example:*** [***10.6.128.147***](10.6.128.147)  **IP**地址 |
| **mac** | |  | **string**  ***example: ec:0e:c4:0a:e4:3b*** |
| **mode** | |  | **MAC**地址  **string**  **Enum:** |
| **quality** | |  | **Array [ 2 ]**  **integer**  ***example: 100*** |
| **ssid }** | |  | ⽹络质量  **string** |



**{**

ApModeOptions

**description:**

ssid和password均为可选项，默认从配置⽂件设置热点名称

**ssid string**

***example: Slamware-58660D***

**password string**

**}**

StationModeOptions

**ssid\***

**password\***

**}**

**{**

**string**

***example: Slamtec-Test***

**string**

|  |  |  |
| --- | --- | --- |
| RouteStatus  **priority** | **{** | **string**  ***example: wifi***  路由优先级选择 **:**  **wifi - WIFI** 优先 · **4g - 4G** 优先 |

**Enum:**

**Array [ 2 ]**

**}**

ApnStatus **{**

**apn string**

***example: cmhk***

根据地区选择对应**apn:** 例如⾹港地区：**cmhk**

**}**

ActionState

**{**

**status**

**result**

**reason }**

ActionGravestone

**action\_id**

**state }**

**integer**

**0:NewBorn, 1:Working, 3:Paused, 4:Done Enum:**

 **Array [ 4 ]**

**integer**

**0:Success, -1: Failed, -2: Aborted Enum:**

 **Array [ 3 ]**

**string**

***default:***

**{**

**integer**

ActionState

**{...}**

ActionInfo **{ action\_id**

**action\_name stage**

**state**

**}**

Pose3D **{**

**description:**

**x**

**y**

**z**

**yaw**

**pitch**

**roll }**

Pose2D **{**

**description:**

**x**

**y**

**yaw**

**}**

Location

**{**

**x**

**y**

**z**

**}**

Point

**{**

**x**

**y }**

Quaternion

**{**

**w**

**x**

**y**

**z**

**}**

PathPoints

**[**

**integer**

**string**

**string**

***example: GOING\_TO\_TARGET***

ActionState

**{...}**

三维空间的位姿信息

**number**

**number**

**number**

**number**

**number**

**number**

⼆维平⾯的位姿信息

**number**

**number**

**number**

**number**

**number**

**number**

**number**

**number**

**number**

**number**

**number**

**number**

**x**、**y**坐标构成的路径点，每个元素为包含两个浮点数的数组，分别为**x**、**y**坐标值 PathPoints **[...]]**



LaserScan **{ description:**

pose为观测到该帧激光时的机器⼈位姿，每个激光点的angle表示激光与机器⼈正前⽅的夹角。

**pose**

**{...}**

Pose3D

**[...]**

**laser\_points**

**}**

EmptyMetadata

**{**

**description:**

metadata是key和value都是字符串的map

**}**

**{**

BezierCurveMetadata

**description:**

**control\_point1\***

**control\_point2\***

描述贝塞尔曲线的metadata，control\_point1和control\_point2是两个控制点的坐标，再加上 Line的起点和终点可以确定—个三阶贝塞尔曲线

**string**

***example: {'x':0.1,'y':0.1}***

**string**

***example: {'x':0.1,'y':0.1}***

**}**

Line **{**

**id integer**

如果是添加线段，**id**会被忽略，如果是编辑线段，则会修改对应**id**的线段

Point Point

**{...}**

**{...}**

**start**

**end**

**metadata**

**{...}**

**}**

**{**

Rectangle

**x**

**y**

**width**

**height**

**number**

**number**

**number**

**number**

**}**

RectangleAreaUsage **string**

**forbidden area** 禁⾏区域，禁⽌机器⼈进⼊该区域 **elevator area** 电梯区域

**dangerous area** 危险区域 **,** 机器⼈进⼊该区域后⾃动减速

 **coverage area** 覆盖规划区域，⽤于清扫和消毒等

**maintenance area** 运维区域，⽤于将建图范围限制在该区域内

**sensor disable area** 传感器禁⽤区域，机器⼈进⼊该区域后忽略指定的传感器数据 **restricted\_area** 限⾏区域，⽤于多机调度，可限制同时进⼊的机器⼈数量。

**Enum:**

**[ forbidden\_area, elevator\_area, dangerous\_area, coverage\_area, maintenance\_area,**

**sensor\_disable\_area, restricted\_area ]**

ElevatorAreaMetadata

**elevator\_id\***

**elevator\_sill\_width\***

**{**

**string($uuid)**

梯控设备序列号

**string**

***example: 0.4***

⻔槛宽度，从电梯⻔内侧到⻔洞外侧的距离

**elevator\_scheduling\_point\_dist\* string**

***example: 1***

电梯调度点离电梯⻔的距离

**elevator\_door\_type string**

电梯开⻔⽅向 **, 0** 正⾯开⻔ ，**1** 背⾯开⻔ ，**2** 双向开⻔ **Enum:**

**Array [ 3 ]**

**}**

ForbiddenAreaMetadata **{**

**escape\_distance\* string**

***example: 0.4***

可逃脱区域⼤⼩ ，从禁区边界往⾥⾯计算，单位⽶ **.**

**}**

DangerousAreaMetadata **{**

**dangerous\_area\_type\* string**

危险区域类型 **, 0** 斜坡，**1** 窄⾛廊

**Enum:**

 **Array [ 2 ]**

**max\_line\_speed string**

***example: 0.5***

机器⼈在该区域内的最⼤线速度 **,** 单位⽶**/**秒

**}**

SensorDisableAreaMetadata **{ sensor\_type string**

***example: [0****，****3]***

传感器类型，**0** 碰撞，**1** 跌落，**2** 超声，**3** 深度

**}**

CoverageAreaMetadata

**{**

**}**



RestrictedAreaMetadata **{**

**restricted\_scheduling\_points string**

***example: [{"x":"0.1","y":"0.1"}]***

限⾏区域调度点

**restricted\_robots\_number\_limit string**

***example: 1***

允许同时进⼊的机器⼈数量

**}**

RectangleAreaMetadata **{**

**description:**

**oneOf ->**

**}**

RectangleArea

**id**

**usage**

**area**

**metadata**

**}**

矩形区域的metadata，键值对数据，所有数据都应当序列化成字符串格式。

|  |  |
| --- | --- |
| EmptyMetadata **{...}** ElevatorAreaMetadata  ForbiddenAreaMetadata DangerousAreaMetadata CoverageAreaMetadata | **{...}**  **{...}**  **{...}**  **{...}** |

SensorDisableAreaMetadata **{...}** RestrictedAreaMetadata **{...}**

**{**

**integer**

**RectangleAreaUsage string**

**forbidden area** 禁⾏区域，禁⽌机器⼈进⼊该区域 **elevator area** 电梯区域

**dangerous area** 危险区域 **,** 机器⼈进⼊该区域后⾃动减速

 **coverage area** 覆盖规划区域，⽤于清扫和消毒等

**maintenance area** 运维区域，⽤于将建图范围限制在该区域内

**sensor\_disable\_area** 传感器禁⽤区域，机器⼈进⼊该区域后忽略指定的传感器数 据

**restricted\_area** 限⾏区域，⽤于多机调度，可限制同时进⼊的机器⼈数量。

**Enum:**

**Array [ 7 ]**

**{...}**

RectangleAreaMetadata

**{...}**

|  |  |  |  |
| --- | --- | --- | --- |
| ImuData **{ description:**  **acc**  **availibilityBitMap**  **compass**  **euler\_angle gyro**  **quaternion**  **raw\_acc**  **raw\_compass**  **raw\_gyro**  **timestamp**  **}** | | 通过按位或运算组合⽽成的availibilityBitMap表明了哪些数据是有效的  Location **{...}**  **integer**  **1** 以四元数表示的位姿  **2** 校准后的加速度计  **4** 校准后的陀螺仪  **8** 校准后的罗盘  **16** 加速度计原始值  **32** 陀螺仪原始值  **64** 罗盘原始值  **128 6**⾃由度的位姿信息  **256 9**⾃由度的位姿信息  **512** 以欧拉⻆表示的位姿 | |
| Location  Location  Location | **{...}**  **{...}**  **{...}** |
| Quaternion **{...}** | |
| Location  Location  Location  **integer** | **{...}**  **{...}**  **{...}** |
| 底盘启动以来经过的毫秒数  **string**  ***default: Slamtec***  **string**  ***default: Hermes***  **string**  ***default: 4.2.2-rtm+20211011***  **string($uuid)**  **string**  ***default:***  **string**  ***example: 1F***  **integer**  如果需要在**UI**中列出楼层信息，应当按此字段排序  **boolean**  是否为默认楼层，不指定启动楼层时，机器⼈会设置到默认楼层。所有电梯都需要停靠默认楼层。 | |
| FirmwareInfo  **manufacturer**  **model**  **firmware**  **firmware\_id }** | **{** |
| FloorInfo **{ building**  **floor**  **order**  **is\_default\_floor**  **}** | |

CurrentFloorInfo

**building floor**

**elevator**

**map\_id**

**}**

MultiFloorTarget

**building**

**floor**

**pose }**

**{**

**string**

***default:***

**string**

***example: 1F***

**string**

***default:***

如果该字段⾮空则表示机器⼈还在电梯内。

**string($uuid)**

当前所在楼层的地图**ID**

**{**

**string**

***default:***

**string**

***example: 1F***

Pose2D

**{...}**



PoiType **string**

**Enum:**

**[ ROOM, REFILL, RECEPTION, TABLE, PARKING, RECYCLE, DISINFECT ]**

SpecialPOIName **string**

 **ON DOCK** 在桩上

 **IN ELEVATOR** 在电梯内

 **UNKNOWN** 未知，没有**POI**或软件异常

**Enum:**

**[ ON\_DOCK, IN\_ELEVATOR, UNKNOWN ]**

NearbyPoiInfo

**{**

**description:**

name字段有三个特殊值，除此之外都表示地图中添加的常规POI名称。 relative\_pose表示POI相对 机器⼈的位姿，机器⼈前⽅为X轴正⽅向，左侧为Y轴正⽅向。

**string($uuid)**

**id**

**name\***

**relative\_pose**

**{...}**

Point **{...}**

**}**

**{**

MultiFloorPoiInfo

**id**

**poi\_name type**

**string($uuid)**

**string**

**PoiType string**

**Enum:**

 **Array [ 7 ]**

**string**

**floor**

**building**

**string**

Pose2D

**pose**

**{...}**

**}**

|  |  |  |
| --- | --- | --- |
| MultiFloorDockInfo  **id**  **dock\_name**  **floor**  **building**  **pose**  **}** | | **{**  **string($uuid)**  **string**  **string**  **string**  Pose2D **{...}**  **string($uuid)**  Pose2D **{...}**  **{...}**  **integer**  **string**  **Enum:**  **Array [ 5 ]**  **string**  **Enum:**  **Array [ 2 ]**  **string**  **Enum:**  **Array [ 3 ]**  **string**  **Enum:**  **Array [ 3 ]**  **[...]**  **string($uuid)**  **integer**  **string**  **Enum:**  **Array [ 3 ]**  **integer**  **string**  **Enum:**  **Array [ 2 ]**  **[...]**  **[...]**  **string($uuid)**  **[...]** |
| PoseEntry  **id\***  **pose** | **{** |
| **metadata**  **}**  Box **{ id**  **door\_status**  **lock\_status**  **stock\_status**  **status**  **errors**  **}**  Cargo **{ id**  **pos**  **orientation**  **layer type**  **errors**  **boxes**  **}** | |
| CargoEntry  **cargo\_id**  **boxes**  **}** | **{** |

AssignedCargoEntry

**target**

**order\_id**

**cargo\_id**

**boxes**

**}**

FailedTask

**{**

**target**

**cargos**

**}**

DeliveryTaskRequest

**target**

**type**

**req\_id**

**order\_id**

**no\_pickup\_wait cargos**

**failed\_tasks**

**station\_id**

**station\_cargos**

**message**

**{**

**string**

**string**

**string($uuid)**

**[...]**

**string**

**[...]**

**{**

**string**

**string**

**Enum:**

 **Array [ 9 ]**

**string string boolean**

**[...]**

 **[...]**

**string**

**[...]**

**{...}**

**}**

DeliveryPickupResultEntry **{ description:**

包含cargo信息表示舱体的取物结果，包含task\_point\_id表示任务点的操作结果，⼆者只存其—

**cargo\_id string($uuid)**

**box\_id string($integer)**

***example: 0***

**result string**

**Enum:**

 **Array [ 2 ]**

**reason string**

***default:***

**task\_point\_id string**

***default:***

**}**

DeliveryTaskEventStage

**string**

任务执⾏阶段

**Enum:**

**Array [ 13 ]**

DeliveryTaskResult

**stage**

**reason**

**pickup\_result**

**timestamp**

**}**

DeliveryTaskStatus

**Enum:**

**Array [ 6 ]**

**{**

**DeliveryTaskEventStage string**

任务执⾏阶段

**Enum:**

 **Array [ 13 ]**

**string**

***default:***

 **[...]**

**string($datetime)**

**string**



**{**

DeliveryTask

**id**

**task**

**status**

**string($uuid)**

DeliveryTaskRequest **{...} DeliveryTaskStatus string**

**Enum:**

**Array [ 6 ]**

DeliveryTaskResult **{...}**

**result**

**}**

**{**

DeviceError

**component**

**error\_code**

**error\_level**

**message**

**integer**

**integer**

**integer**

**string**

**}**

TaskExecutionInfo **{**

**enable\_task\_execution boolean**

**}**



GeneralEventType **string**

 **DEVICE ERROR** 发⽣了**Error**或**Fatal**级别的设备健康状态报警

 **PATH OCCUPIED** ⾏进路径被阻挡

 **ROBOT BLOCKED** 在⼀个地⽅被⻓时间连续阻挡（默认**3**分钟）

 **RESET MAP TO DOCK** 机器⼈被推回桩并重置地图成功

 **START CHARGING** 开始充电

 **STOP CHARGING** 停⽌充电

 **ON DOCK** 机器⼈上桩

 **OFF DOCK** 机器⼈下桩

 **UPGRADE** 正在升级固件

 **POWER OFF** 正在关机

 **PASS THE NARROW CORRIDOR** 通过窄⾛廊

 **MAP LOOP CLOSURE** 完成⼀次建图闭环

 **SET MAP DONE** 完成设置地图操作

 **MOVE TO LANDING POINT\_FAILED** 前往充电桩失败

 **SEARCH DOCK FAILED** 找桩失败

 **CHARGING BASE FAILED** 充电失败

 **SYNC MAP FROM CLOUD** 从云端同步地图

 **DOCK ID NOT FOUND** 在地图中找不到绑定的桩

 **BRAKE RELEASED** 刹⻋释放按钮被按下

 **BUMPER TRIGGERED** 碰撞传感器触发

 **CURRENT POSE OCCUPIED** 当前机器⼈位姿被占据

 **CLIFF\_DETECTED** 检测到悬崖

**Enum:**

**[ DEVICE\_ERROR, PATH\_OCCUPIED, ROBOT\_BLOCKED, RESET\_MAP\_TO\_DOCK, START\_CHARGING, STOP\_CHARGING, ON\_DOCK, OFF\_DOCK, UPGRADE, POWER\_OFF, PASS\_THE\_NARROW\_CORRIDOR, MAP\_LOOP\_CLOSURE, SET\_MAP\_DONE,**

**MOVE\_TO\_LANDING\_POINT\_FAILED, SEARCH\_DOCK\_FAILED, CHARGING\_BASE\_FAILED, SYNC\_MAP\_FROM\_CLOUD, DOCK\_ID\_NOT\_FOUND, BRAKE\_RELEASED, BUMPER\_TRIGGERED, CURRENT\_POSE\_OCCUPIED, CLIFF\_DETECTED ]**

ElevatorEventType **string**

 **WAIT ELEVATOR** 机器⼈到达电梯等待点

 **ENTER ELEVATOR** 即将开始进电梯

 **ENTER ELEVATOR OCCUPIED** 进电梯过程中被阻挡

 **ENTER ELEVATOR FAILED** 进电梯失败

 **TURNING ROUND IN\_ELEVATOR** 在电梯内即将转身

 **LEAVE ELEVATOR** 即将开始出电梯

 **LEAVE ELEVATOR OCCUPIED** 出电梯过程中被阻挡

 **LEAVE ELEVATOR\_FAILED** 出电梯失败

 **IN ELEVATOR** 在电梯内

 **OUT OF ELEVATOR** 在电梯外

 **TAKE ELEVATOR OCCUPIED** 进出电梯被挡

 **SEARCH ELEVATOR PATH FAILED** 搜索电梯路径失败

 **ENTER\_ELEVATOR\_PATH\_FOUND** 进电梯搜路成功

**Enum:**

**[ WAIT\_ELEVATOR, ENTER\_ELEVATOR, ENTER\_ELEVATOR\_OCCUPIED, ENTER\_ELEVATOR\_FAILED,**

**TURNING\_ROUND\_IN\_ELEVATOR, LEAVE\_ELEVATOR, LEAVE\_ELEVATOR\_OCCUPIED, LEAVE\_ELEVATOR\_FAILED, IN\_ELEVATOR, OUT\_OF\_ELEVATOR, TAKE\_ELEVATOR\_OCCUPIED, SEARCH\_ELEVATOR\_PATH\_FAILED,**

**ENTER\_ELEVATOR\_PATH\_FOUND ]**



DeliveryEventType **string**

 **START FROM DOCK** 从桩上出发执⾏任务

 **DELIVERY SETTINGS CHANGED** 配送相关的设置项有更新

 **DELIVERY TASK START** 开始执⾏配送任务

 **STATION TASK START** 开始执⾏货柜取物任务

 **OPERATING CABINET** 正在操作货柜

 **BACK TO RECEPTION FOR\_FAILED\_ORDER** 配送失败回到前台

 **DELIVERY NO PICKUP** 配送任务⽤户未取物

 **COLLECT NO PICKUP** 回前台任务⽤户未取物

. **UNDOCK FAILED** 下桩失败**(**下桩重试时间为**2**分钟**)**

· **START TO WORK** 机器⼈开始⼯作**(**进⼊⼯作时间或电量充到**80%)**

 **GET OFF WORK** 机器⼈下班啦

 **LOW BATTERY** 电量过低，机器⼈即将回桩

 **NEW TASK RECEIVED** 从云端接收到新的任务

 **ROBOT REBOOT** 机器⼈即将重启

 **DISINFECT TASK FAILED** 消毒任务失败

 **LOCALIZATION\_ANOMALY** 定位异常 **,** 需要推回桩或调⽤接⼝重置机器⼈位姿后才会消除

**Enum:**

**[ START\_FROM\_DOCK, DELIVERY\_SETTINGS\_CHANGED, DELIVERY\_TASK\_START, STATION\_TASK\_START,**

**OPERATING\_CABINET, BACK\_TO\_RECEPTION\_FOR\_FAILED\_ORDER, DELIVERY\_NO\_PICKUP, COLLECT\_NO\_PICKUP, UNDOCK\_FAILED, START\_TO\_WORK, GET\_OFF\_WORK, LOW\_BATTERY, NEW\_TASK\_RECEIVED, ROBOT\_REBOOT,**

**DISINFECT\_TASK\_FAILED, LOCALIZATION\_ANOMALY ]**

**{**

RobotEvent

**description:**

机器⼈事件信息，type在不同场景下会扩展新的定义，APP只需处理⾃⼰关⼼的事件即可。 GeneralEventType为通⽤的事件，ElevatorEventType为进出电梯相关的事件 ,

DeliveryEventType为配送相关事件。

 **{...}**

**type**

**timestamp**

**string($int64)**

系统启动以来的毫秒数

**}**

PostTaskRequestEntry **{**

 **{...}**

**location**

**type**

**string**

 **TAKEOUT** 外卖配送任务（仅限有货仓的机型）

 **GUIDE** 引领任务 将⼈带到指定⽬的地

 **FOOD DELIVERY** 送餐任务

 **RETURN** 快速返航，回到取餐点

 **RECYCLE** 回收餐盘

 **TAKEOUT\_DISTRIBUTE** 外卖分发，打开所有舱⻔由⽤户⾃主取物

**Enum:**

**Array [ 6 ]**

**[...]**

**cargos }**



DeliveryWorkMode **{**

**work\_mode string**

 **DISPATCH** 派送模式，本地应当禁⽌⽤户创建任务，只响应云端的呼叫任务

 **RECYCLE** 回盘模式，本地除了回盘禁⽌创建其他任务，可响应云端的呼叫回盘任务  **MANUAL** ⼿动操作模式，本地⼈⼯创单进⾏配送或回盘

**Enum:**

**Array [ 3 ]**

**}**

DeliverySettings **{ low\_battery\_level timeout\_settings**

**{...}**

**{...}**

**}**

WorkingTime

**{**

**hours**

**[...]**

**[...]**

**restdays**

**}**

**{**

LocationInfo

**poi\_name type**

**string**

**PoiType**

**string**

**Enum:**

**Array [ 7 ]**

**}**

GoingHomeStage

**description:**

**stage**

**milestone**

**current\_floor**

**target\_floor**

**}**

IdleStage **{**

**description:**

**stage**

**current\_floor**

**}**

**{**

正在回桩，对应stage为GOING\_HOME

**string**

**Enum:**

 **Array [ 1 ]**

**string**

**Enum:**

 **Array [ 8 ]**

**string**

***example: 2F***

**string**

***example: 1F***

空闲，对应stage为IDLE

**string**

**Enum:**

 **Array [ 1 ]**

**string**

***example: 1F***

**{**

OnDeliveringStage

**description:**

正在前往⽬标点，对应stage为ON\_DELIVERING

**stage**

**milestone**

**current\_floor**

**target\_floor**

**info**

**}**

ArrivedAtTargetStage

**description:**

**stage**

**info**

**pickup**

**}**

DeviceErrorStage **{ description:**

**stage**

**info }**

**string**

**Enum:**

**Array [ 1 ]**

**DeliveryTaskEventStage string**

任务执⾏阶段

**Enum:**

 **Array [ 13 ]**

**string**

**string**

**{...}**

**{**

已到达⽬标点，对应stage为ARRIVED\_AT\_TARGET

**string**

**Enum:**

**Array [ 1 ]**

DeliveryTask

**{...}**

**{...}**

设备故障，对应stage为DEVICE\_ERROR

**string**

**Enum:**

**Array [ 1 ]**

**{...}**

OnReturningStage

**description:**

**stage**

**current\_floor**

**target\_floor**

**{**

机器⼈正在返航

**string**

**Enum:**

 **Array [ 1 ]**

**string**

**string**

**}**

ArrivedAtTaskPointStage **{ description:**

到达任务点，对应stage为ARRIVED\_AT\_TASK\_POINT

**string**

**stage**

**Enum:**

**Array [ 1 ]**

**{...}**

**info }**



GoingToTaskPointStage **{ description:**

正在前往任务点，对应stage为GOING\_TO\_TASK\_POINT

**string**

**stage**

**Enum:**

 **Array [ 1 ]**

**string**

**current\_floor**

**target\_floor**

**info**

**string**

**{...}**

**}**

TaskStage **{**

**description:**

返回数据为以下⼏种结构体中的其中—种，⾸先判断stage字段，再解析剩余的信息 DeviceErrorStage **{...}**

**oneOf ->**

GoingToTaskPointStage ArrivedAtTaskPointStage

**{...}**

**{...}**

OnDeliveringStage **{...}**

ArrivedAtTargetStage **{...}** OnReturningStage **{...}**

GoingHomeStage **{...}** IdleStage **{...}**

**}**

**{**

ElevatorInfo

**description:**

电梯区域信息

**door\_type\***

**elevator\_id\***

**front\_scheduling\_poses**

**rear\_scheduling\_poses**

**}**

**string**

**Enum:**

 **Array [ 3 ]**

**string**

**[...]**

**[...]**



**integer**

MoveOptions **{ mode\***

***default: 0***

**0**： ⾃由导航， **1**：严格轨道模式**(**遇障碍物停⽌并等待**)**，**2**： 轨道优先模式**(**遇障碍物下轨绕⾏**)**

**Enum:**

**Array [ 3 ]**

**[...]**

**flags**

**yaw**

**number**

到⽬标点后机器⼈的朝向

**number**

**acceptable\_precision**

可接受的到点范围，当⽬标点被占据时，机器⼈离⽬标点距离在该范围内都算成功， 默认值为**0.1**⽶ 或**0.18**⽶ ，该值不影响机器⼈到点精度。

**integer**

**fail\_retry\_count**

失败重试次数

**number**

**speed\_ratio**

【所需固件版本 **4.5.4**】速度⽐例 **,** 配置的最⼤移动速度乘以该值为本次运动的最⼤速度 **,** 最⼩值为

**0.1,** ⼤于**1**的值会导致避障距离变⻓ ，在动态障碍物较多的环境中请谨慎使⽤。

**}**

EnterElevatorOptions **{**

**elevator\_door\_flag string**

***default: front\_door***

***items: OrderedMap { "type": "string", "enum": List [ "front\_door",***

***"rear\_door" ] }***

 **front door** 从电梯前⻔进⼊

 **rear\_door** 从电梯后⻔进⼊

**elevator\_stopping\_yaw string**

***default: face\_to\_front\_door***

***items: OrderedMap { "type": "string", "enum": List [ "face\_to\_front\_door",***

***"face\_to\_rear\_door" ] }***

 **face to front door** 进⼊电梯后⾯向电梯前⻔

 **face\_to\_rear\_door** 进⼊电梯后⾯向电梯后⻔

**timeout\_in\_ms number**

进电梯的总时⻓

**use\_conservative\_mode boolean**

**true**表示保守策略，前往电梯中⼼点。**false**表示挤电梯，前往电梯更⾥⾯

**}**

**string**

LeaveElevatorOptions **{ elevator\_door\_flag**

***default: front\_door***

***items: OrderedMap { "type": "string", "enum": List [ "front\_door", "rear\_door" ] }***

 **front door** 从电梯前⻔进⼊

 **rear\_door** 从电梯后⻔进⼊

**number**

**timeout\_in\_ms**

出电梯的总时⻓

**number**

**arrive\_door\_timeout\_in\_ms**

出电梯过程中到达电梯⻔的超时时间

**number**

**search\_path\_timeout\_in\_ms**

出电梯的搜路超时时间，超过这个时间仍未搜到路便放弃出电梯

**on\_elevator\_door\_timeout\_in\_ms number**

**if\_need\_reach\_milestone**

**move\_options**

**}**

堵在电梯⻔槛上的超时时间，到达超时放弃出梯

**boolean**

**true**前往出后前往⽬标点，**false**表示只到达⻔⼝等待点

MoveOptions **{...}**



MoveToActionOptions **{**

**target\*** Location **{...}**

**move\_options** MoveOptions **{...}**

**}**

SeriesMoveToActionOptions **{**

**targets\***

**[...]**

MoveOptions

**move\_options }**

**{...}**

ActionDirection

**integer**

 **0** 前进

 **1** 后退

 **2** 右转

 **3** 左转

**Enum:**

**[ 0, 1, 2, 3 ]**



**{**

MoveByActionOptions

**description:**

遥控运动的参数，direction和theta只需包含—个即可，前者指定⽅向，后者指定—个角速度进⾏ 转弯

**direction ActionDirection integer**

 **0** 前进

 **1** 后退

 **2** 右转

 **3** 左转

**Enum:**

**Array [ 4 ]**

**theta number**

**duration integer**

运动持续时间，单位毫秒。不指定时默认持续**500**毫秒。注意！遥控运动不会避障，请勿设置过⻓的持 续时间。

**}**

GoHomeActionOptions

**{**

**{...}**

**gohome\_options**

**}**

RotateActionOptions **{**

**angle\* number**

机器⼈转动的⻆度值，单位弧度，正数表示逆时针旋转，负数表示顺时针旋转

**}**

RotateToActionOptions **{**

**angle\* number**

机器⼈停⽌时的**Yaw**值，单位弧度

**}**

RecoverLocalizationActionOptions **{ description:**

不包含area字段或area为空时为全局重定位，否则为局部重定位

Rectangle **{...}**

**area**

**{...}**

**relocalization\_options**

**}**

MoveToTagActionOptions **{ description:**

标签精准对接，其中target为开始对接的起始位置

**target\***

**tag\_type\***

**target\_relative\_pose backward\_docking**

**turn\_radian**

**tag\_ids**

**reflect\_tag\_num**

**dock\_retry\_count**

**dock\_allowance**

Pose3D **{...}**

**integer**

***default: 0***

**0**：⼆维码视觉标签， **1**：激光标签 **, 2**：激光反光板 **, 3**：货架**(**需要**6.0**或更⾼版本**)**

**Enum:**

**Array [ 4 ]**

**{...}**

**boolean**

***default: false***

是否向后对接

**number**

对接成功后的转向弧度，默认机器是⾯向或背对**Tag**，如果需要机器在对接成功后转指定⻆度，请设置 该字段。

 **[...]**

**integer**

**tag\_type**为**2**时有效，对接的反光板个数，默认为**1.**

**integer**

对接失败后的重试次数，默认不重试 **.**

**number**

**tag\_type**为**3**时有效，对接货架时默认机器中⼼对准货架中⼼ 。**dock\_allowance**表示机器⼈留在货 架外的机身⻓度。

**}**

BackOfFromTagActionOptions **{ description:**

从⼆维码前后退

**backup\_mode integer**

 **0** ⾃由后退

 **1** 窄道后退，在后退过程中⼀直观测⼆维码并调整⻆度

**Enum:**

 **Array [ 2 ]**

**tag\_type integer**

***default: 0***

**0**：⼆维码视觉标签， **1**：激光标签 **, 2**： 激光反光板

**Enum:**

**Array [ 3 ]**

**backup\_distance number($double)**

后退的距离 **,** 可选值，默认后退直到机器可以转身

**backward\_docking boolean**

***default: false***

是否向后对接 **,** 如果是向后对接，则调⽤**BackOffFromTagAction**时实际是向前移动

**}**



MultiFloorMoveActionOptions **{**

**target\***

**{...}**

MoveOptions

**move\_options**

**{...}**

**}**

SweepActionOptions

**{**

清扫Action的参数，不包含region\_ids时清扫所有区域，否则只清扫指定区域

**{...}**

**description:**

**sweep\_options**

**}**

ReturnToParkingActionOptions **{ description:**

返航Action的参数

**{...}**

**target**

**move\_options }**

MoveOptions

**{...}**

FollowPathPointsActionOptions **{**

**path\_points\***

**[...]**

MoveOptions

**move\_options }**

**{...}**

EnterElevatorActionOptions **{**

**elevator\_id\* string**

**enter\_elevator\_options**

**{...}**

EnterElevatorOptions

**}**

LeaveElevatorActionOptions **{ elevator\_id\* string**

**target** Pose2D **{...}**

**leave\_elevator\_options**

**{...}**

LeaveElevatorOptions

**}**

DisabledSensorMaskData **{**

**id integer**

**isAlways boolean**

**}**

SensorMaskCtrlData

**id**

**isAlways**

**isEnabled**

**}**

**{**

**number**

**boolean**

**boolean**



LightControlData **{ channel**

**controlPart**

**mode**

**color**

**brightnessEndColor**

**brightMs**

**offMs**

**}**

TaskOperation

**{**

**display\_name**

**action**

**wait\_time**

**}**

TaskTemplateRequest

**key**

**name**

**action\_list }**



**string**

***example: One***

**led**控制通道**:One**通道⼀ ，**Two**通道⼆

**Enum:**

 **Array [ 2 ]**

**string**

***example: Left***

**led**控制部分**:Left**左半部，**Right**右半部 **Enum:**

 **Array [ 2 ]**

**string**

***example: AlwaysBright***

**led**控制模式**:AlwaysBright**常亮，**Breathe**呼吸，**Blink**闪烁，**HorseLamp**跑⻢ **Enum:**

**Array [ 4 ]**

**{...}**

 **{...}**

**integer**

常亮模式可填⼊任意值；呼吸模式填⼊亮度单次变化时间（ 单次变化表示**color**每次增⼤**1**的时间）；闪 烁模式填⼊点亮的持续时间；跑⻢模式表示点亮下⼀个灯的时间

**integer**

闪烁模式填⼊熄灭的持续时间；其他模式可填⼊任意值

**string**

⽬标点位**POI**的**display\_name**

**string**

机器⼈在⽬标点位需要执⾏的操作

**integer**

机器⼈在⽬标点位完成操作后的等待时间，单位秒

**{**

**string($uuid)**

任务模板**ID**

**string**

任务模板名称

**[...]**

TaskTemplate **{ task\_template\_key**

**task\_template\_type**

**name**

**scene\_id**

**device\_id**

**action\_list }**

IndustryTarget

**{**

**target\_name**

**action**

**wait\_time**

**}**

IndustryTaskRequest

**target**

**type**

**order\_id**

**template\_key start\_time**

**task\_targets**

**message**

**string($uuid)**

任务模板**ID**

**integer**

任务模板类型

**string**

任务模板名称

**string($uuid)**

任务模板绑定的场景**ID**

**string($uuid)**

创建任务模板的设备**ID**

**[...]**

**string**

**string**

**integer**

**{**

**string**

**string**

**Enum:**

 **Array [ 3 ]**

**string**

**string**

**string**

**[...]**

**{...}**

**}**

IndustryTaskEventStage

**string**

任务执⾏阶段

**Enum:**

**Array [ 10 ]**

IndustryTaskResult

**{**

**stage**

**string**

**IndustryTaskEventStage**

任务执⾏阶段

**Enum:**

 **Array [ 10 ]**

**string**

**reason**

**timestamp**

***default:***

**string($datetime)**

**}**

|  |  |
| --- | --- |
| IndustryTask  **id**  **task**  **status**  **result**  **}** | **{**  **string($uuid)**  IndustryTaskRequest **{...} DeliveryTaskStatus string**  **Enum:**  **Array [ 6 ]**  IndustryTaskResult **{...}** |

