# RCMP-ADIS 通信设计文档

前提：部署一个公共的RocketMQ，RCMP和所有的ADIS接入

## 获取日志

1. 流程

所有的ADIS订阅topic：log\_request，当在RCMP点击获取日志时，RCMP发送广播topic：log\_request，ADIS接收到广播后查看本系统是否存在该设备，不存在，忽略该广播，存在，发送topic：log\_reply回复正在处理中，RCMP收到消息后通过websocket推送给前端，显示“生成文件中...”，等到生成日志链接后，再次发送topic：log\_reply回复成功信息（RCMP订阅该topic），RCMP收到消息后通过websocket推送给前端展示下载链接

1. 协议

日志请求：

|  |
| --- |
| {  "sessionId": "8b2409c5364945e9be164267d3b09863",  "timestamp": 1624611422000,  "factory\_num": "CAI003UBT10000003", //工厂序列号  "enterprise\_num": "xxx",  "product": "uv",  "log\_type": "ros", // 日志类型：ros/guide  "time": 1 // 小时数，1,2,3...  } |

日志回复：

|  |
| --- |
| {  "sessionId": "8b2409c5364945e9be164267d3b09863",  "timestamp": 1624611422000,  "factory\_num": "CAI003UBT10000003", //工厂序列号  "enterprise\_num": "xxx",  "log\_type": "ros", // 日志类型：ros/guide  "log\_url": "https://xxx",  "product": "uv",  "result": "success", // processing处理中success获取成功failure获取失败  "message": "" // 错误信息  } |

websocket推送前端：

|  |
| --- |
| {  "title": "get\_log",  "sessionId": "9525o3c5364945e9be164267d3b01526",  "timestamp": 1624611422000,  "factory\_num": "CAI003UBT10000003",  "product": "uv",  "enterprise\_num": "xxx",  "content": {  "log\_type": "ros", // 日志类型：ros/guide  "log\_url": "https://xxx",  "result": "success", // processing处理中success获取成功failure获取失败  "message": "" // 错误信息  }  } |

## 上报状态

1. 流程

ADIS 订阅topic：status\_request

RCMP订阅topic：status\_response

1. RCMP发送topic：status\_request广播请求状态，ADIS通过topic：status\_response上报对应状态，RCMP保存数据库，并通过websocket推送给前端；
2. ADIS主动发送信息上报状态给RCMP，保存数据库。
3. 协议

RCMP广播请求状态协议

|  |
| --- |
| {  "sessionId": "8b2409c5364945e9be164267d3b09863",  "timestamp": 1624611422000,  "factory\_num": "CAI003UBT10000003", //工厂序列号  "status\_type": "diagnostic", // 状态类型：diagnostic传感器状态&设备状态  "product": "uv"  } |

传感器状态&设备状态websoket协议

|  |  |
| --- | --- |
| {  "title": "get\_diagnostic\_info",  "content": {  "sessionId": "a90cc43a-bf86-4798-b0bd-a8db8209cca2",  "timestamp": 1615356472731,  "factory\_num": "CAI003UBT10023456",  "product": "uv",,  "enterprise\_num": "xxx",  "list": [  {  "key": 40010000,  "device\_name": "lidar\_bottom",  "enable": 1,  "error\_value": 3,  "message": "lidar data error, all data zero"  },  {  "key": 40020000,  "device\_name": "lidar\_top",  "enable": 1,  "error\_value": 0,  "message": "normal"  },  {  "key": 42070000,  "device\_name": "floor\_ir",  "enable": 1,  "error\_value": 2,  "message": "distance so small:0"  }  ]  }  } |  |

传感器状态&设备状态上报协议：

|  |
| --- |
| {  "title": "response\_get\_diagnostic\_info",  "content": {  "sessionId": "a90cc43a-bf86-4798-b0bd-a8db8209cca2",  "timestamp": 1615356472731,  "factory\_num": "CAI003UBT10023456",  "product": "uv",  "list": [  {  "key": 40010000,  "device\_name": "lidar\_bottom",  "enable": 1,  "error\_value": 3,  "message": "lidar data error, all data zero"  },  {  "key": 40020000,  "device\_name": "lidar\_top",  "enable": 1,  "error\_value": 0,  "message": "normal"  },  {  "key": 42070000,  "device\_name": "floor\_ir",  "enable": 1,  "error\_value": 2,  "message": "distance so small:0"  }  ]  }  } |

系统状态&在线状态websoket协议

|  |
| --- |
| {  "title": "get\_system\_info",  "content": {  "sessionId": "a90cc43a-bf86-4798-b0bd-a8db8209cca2",  "timestamp": 1615356472731,  "online": true, //机器人在线离线； true：在线；false:离线  "area": "南山", //组别：机器人工作区域  "factory\_num": "CA1001UBT0000003", //工厂序列号：CA1001UBT0000003  "serial\_num": "ADIBOT.A1.b0f1ecccd924", //软件序列号：ADIBOT.A1.b0f1ecccd924  "product": "uv",  "battery": 80, //剩余电量：80%  "stat\_count": 31, //累计消杀次数：31  "stat\_time": 1514, //累计消杀时间：1514  "active\_time": 1627464613668, //首次激活时间：1627464613668  "online\_time": 1627464613668, //最近上线时间：1627464613668  "door\_sensor": {  "connected": false,  "pair": false,  "mac\_address": "A8TD009914"  }, //门禁牌  "net\_type": "wifi",  "version": {  "bms\_hw": "V1.1-2020081",  "bms\_sw": "V1.D.1-1.2.8-210106-LJH",  "chassismagn": "0.08",  "chassissensor": "0.04",  "core": "1.0.26",//  "ctrlboard": "1.3.9.2",  "d435i": "5.12.08.200",  "doorsensor\_sw": "0.18",  "img": "0.0.2",  "movecontrol": "0.45",  "nordichost": "010",  "uslam": "UVBOT-USLAM-V2.3.1(20210723)",  "app\_version": "xxx"  } //版本号  }  } |

系统状态&在线状态上报协议：

|  |
| --- |
| {  "title": "response\_get\_system\_info",  "content": {  "sessionId": "a90cc43a-bf86-4798-b0bd-a8db8209cca2",  "timestamp": 1615356472731,  "online": true, //机器人在线离线； true：在线；false:离线  "area": "南山", //组别：机器人工作区域  "factory\_num": "CA1001UBT0000003", //工厂序列号：CA1001UBT0000003  "serial\_num": "ADIBOT.A1.b0f1ecccd924", //软件序列号：ADIBOT.A1.b0f1ecccd924  "product": "uv",  "battery": 80, //剩余电量：80%  "stat\_count": 31, //累计消杀次数：31  "stat\_time": 1514, //累计消杀时间：1514  "active\_time": 1627464613668, //首次激活时间：1627464613668  "online\_time": 1627464613668, //最近上线时间：1627464613668  "offline\_time": 1627464613668, //最近离线时间：1627464613668  "door\_sensor": {  "connected": false,  "pair": false,  "mac\_address": "A8TD009914"  }, //门禁牌  "net\_type": "wifi",  "version": {  "bms\_hw": "V1.1-2020081",  "bms\_sw": "V1.D.1-1.2.8-210106-LJH",  "chassismagn": "0.08",  "chassissensor": "0.04",  "core": "1.0.26",//  "ctrlboard": "1.3.9.2",  "d435i": "5.12.08.200",  "doorsensor\_sw": "0.18",  "img": "0.0.2",  "movecontrol": "0.45",  "nordichost": "010",  "uslam": "UVBOT-USLAM-V2.3.1(20210723)",  "app\_version": "xxx"  } //版本号  }  } |

## **同步客户/代理商数据到ADIS**

1. 流程
2. RCMP新增客户/代理商成功后，发送广播topic:account\_sync,tag:sg(或者cn)，ADIS接收到广播后保存数据
3. ADIS重启时，向RCMP发送广播topic：account\_request请求对应区域全量的客户/代理商信息，RCMP回复topic:account\_sync,tag:sg(或者cn)
4. 协议

RCMP新增后发送广播

|  |
| --- |
| {  "sessionId": "8b2409c5364945e9be164267d3b09863",  "timestamp": 1624611422000,  "data":[  {  "enterprise\_num": "xxx",  "server\_url": "https://xxx",  "product": "uv"  }  ]  } |

ADIS请求广播

|  |
| --- |
| {  "sessionId": "8b2409c5364945e9be164267d3b09863",  "timestamp": 1624611422000,  "area": "sg", //sg新加坡，cn中国  "product": "uv"  } |

RCMP收到请求广播会的回复

|  |
| --- |
| {  "sessionId": "8b2409c5364945e9be164267d3b09863",  "timestamp": 1624611422000,  "data":[  {  "enterprise\_num": "xxx",  "server\_url": "https://xxx",  "product": "uv"  }  ]  } |

## 4.机器人/添加移除企业号同步企业历史信息

topic：sync\_enterprise\_history:cn/sg

|  |
| --- |
| {  "title": "sync\_enterprise\_history",  "sessionId": "8b2409c5364945e9be164267d3b09863",  "timestamp": 1624611422000,  "product": "uv",  "enterprise\_list": [  {  "enterprise\_num": "xxx",  "robot\_list": [  {  "factory\_num": "xxx",  "status": "binded/leave"  }  ]  }  ]  } |

## 5.发起企业历史同步请求

topic：sync\_enterprise\_history\_request

|  |
| --- |
| {  "title": "sync\_enterprise\_history\_request",  "sessionId": "8b2409c5364945e9be164267d3b09863",  "timestamp": 1624611422000,  "product": "uv",  "area": "cn"  } |