

AI识别调用流程

请求涉及内容

- API接口调用
- mqtt订阅
- AI识别结果绘制

API接口调用

▼ AI数据字典查询

URL	{{base_url}}/backend/dictionary/queryDicDataByDicType/AIIdentifyType
Method	post
Headers	access_token
Params	无
Response	参考返回示例
Response Parameter	code ：AI能力编码code dicId ：字典编码 content ：能力名称（中） flag ：能力名称（英）

▼ 返回示例：

```
{
  "code": 0,
  "msg": "操作成功",
  "data": [
    {
      "code": "AI-00",
      "flag": "somke",
      "remark": null,
      "dicId": "AI-00",
      "content": "烟雾",
      "dicType": "AIIdentifyType"
    }
  ]
}
```

```
    },  
    {  
      "code": "AI-01",  
      "flag": "pedestrian",  
      "remark": null,  
      "dicId": "AI-01",  
      "content": "行人",  
      "dicType": "AIIdentifyType"  
    },  
    {  
      "code": "AI-02",  
      "flag": "people",  
      "remark": null,  
      "dicId": "AI-02",  
      "content": "人",  
      "dicType": "AIIdentifyType"  
    },  
    {  
      "code": "AI-03",  
      "flag": "bicycle",  
      "remark": null,  
      "dicId": "AI-03",  
      "content": "自行车",  
      "dicType": "AIIdentifyType"  
    },  
    {  
      "code": "AI-04",  
      "flag": "car",  
      "remark": null,  
      "dicId": "AI-04",  
      "content": "汽车",  
      "dicType": "AIIdentifyType"  
    },  
    {  
      "code": "AI-05",  
      "flag": "van",  
      "remark": null,  
      "dicId": "AI-05",  
      "content": "面包车",  
      "dicType": "AIIdentifyType"  
    }  
  ],  
  "dicType": "AIIdentifyType"  
}
```

```

{
    "code": "AI-06",
    "flag": "truck",
    "remark": null,
    "dicId": "AI-06",
    "content": "卡车",
    "dicType": "AIIdentifyType"
},
{
    "code": "AI-07",
    "flag": "tricycle",
    "remark": null,
    "dicId": "AI-07",
    "content": "三轮车",
    "dicType": "AIIdentifyType"
},
{
    "code": "AI-08",
    "flag": "awning-tricycle",
    "remark": null,
    "dicId": "AI-08",
    "content": "遮阳三轮车",
    "dicType": "AIIdentifyType"
},
{
    "code": "AI-09",
    "flag": "bus",
    "remark": null,
    "dicId": "AI-09",
    "content": "公交车",
    "dicType": "AIIdentifyType"
},
{
    "code": "AI-10",
    "flag": "motor ",
    "remark": null,
    "dicId": "AI-10",
    "content": "摩托车",
    "dicType": "AIIdentifyType"
},
{

```

```

        "code": "AI-11",
        "flag": "Floating debris",
        "remark": null,
        "dicId": "AI-11",
        "content": "漂浮物",
        "dicType": "AIIdentifyType"
    },
    {
        "code": "AI-12",
        "flag": "illegal structure",
        "remark": null,
        "dicId": "AI-12",
        "content": "蓝色彩钢瓦",
        "dicType": "AIIdentifyType"
    },
    {
        "code": "AI-13",
        "flag": "yc",
        "remark": null,
        "dicId": "AI-13",
        "content": "渔船",
        "dicType": "AIIdentifyType"
    },
    {
        "code": "AI-14",
        "flag": "xlc",
        "remark": null,
        "dicId": "AI-14",
        "content": "巡逻船",
        "dicType": "AIIdentifyType"
    },
    {
        "code": "AI-15",
        "flag": "ljc",
        "remark": null,
        "dicId": "AI-15",
        "content": "垃圾船",
        "dicType": "AIIdentifyType"
    },
    {
        "code": "AI-16",

```

```

        "flag": "guard",
        "remark": null,
        "dicId": "AI-16",
        "content": "防护网",
        "dicType": "AIIdentifyType"
    },
    {
        "code": "AI-17",
        "flag": "bottle",
        "remark": null,
        "dicId": "AI-17",
        "content": "瓶子",
        "dicType": "AIIdentifyType"
    },
    {
        "code": "AI-18",
        "flag": "plastic",
        "remark": null,
        "dicId": "AI-18",
        "content": "塑料垃圾",
        "dicType": "AIIdentifyType"
    },
    {
        "code": "AI-19",
        "flag": "garbage",
        "remark": null,
        "dicId": "AI-19",
        "content": "其他垃圾",
        "dicType": "AIIdentifyType"
    },
    {
        "code": "AI-20",
        "flag": "rubbish",
        "remark": null,
        "dicId": "AI-20",
        "content": "垃圾堆放",
        "dicType": "AIIdentifyType"
    },
    {
        "code": "AI-21",
        "flag": "move vendors",

```

```

        "remark": null,
        "dicId": "AI-21",
        "content": "流动摊贩",
        "dicType": "AIIdentifyType"
    },
    {
        "code": "AI-22",
        "flag": "Dam abnormal alarm",
        "remark": "",
        "dicId": "AI-22",
        "content": "大坝异常",
        "dicType": "AIIdentifyType"
    }
]
}

```

▼ 组织拥有AI模型能力查询

URL	{{base_url}}/ai/customer/queryAiByCustId/{{custId}}
Method	post
Headers	access_token
Params	无
Response	参考返回示例
Response Parameter	<p>aiInvokeMaxCount：AI可调用模型数量</p> <p>aiDetail：具体模型能力</p> <p>aiTypeId：能力Id</p> <p>aiTypeName：识别能力名称（中）</p> <p>aiTypeNameEn：识别能力名称（英文）</p> <p>modelId：模型Id</p> <p>modelName：模型名称</p> <p>custId：组织id</p> <p>aiSwitch：能力开关</p>

	aiServers : AI服务器
	aiEndDate : 到期时间
	aiEffDate : 生效时间

▼ 返回示例：

```
{
  "code": 0,
  "msg": "operate success.",
  "data": {
    "aiInvokeMaxCount": 3,
    "aiDetail": [
      {
        "aiTypeName": "烟雾",
        "modelName": "烟雾模型",
        "createBy": "1725684357466820608438748095",
        "creator": "lrz",
        "modelId": "1811314484164317184331193567",
        "aiTypeId": "AI-00",
        "aiTypeNameEn": "somke"
      },
      {
        "aiTypeName": "人",
        "modelName": "人车模型",
        "createBy": "1725684357466820608438748095",
        "creator": "lrz",
        "modelId": "1811591883006808064129620382",
        "aiTypeId": "AI-02",
        "aiTypeNameEn": "people"
      },
      {
        "aiTypeName": "汽车",
        "modelName": "人车模型",
        "createBy": "1725684357466820608438748095",
        "creator": "lrz",
        "modelId": "1811591883006808064129620382",
        "aiTypeId": "AI-04",
        "aiTypeNameEn": "car"
      },
      {

```

```

        "aiTypeName": "蓝色彩钢瓦",
        "modelName": "非法搭建模型",
        "createBy": "1725684357466820608438748095",
        "creator": "lrz",
        "modelId": "1812014756104249344317781687",
        "aiTypeId": "AI-12",
        "aiTypeNameEn": "illegal structure"
    },
    {
        "aiTypeName": "垃圾堆放",
        "modelName": "垃圾堆放模型",
        "createBy": "1725684357466820608438748095",
        "creator": "lrz",
        "modelId": "1814495434871373824148428250",
        "aiTypeId": "AI-20",
        "aiTypeNameEn": "rubbish"
    },
    {
        "aiTypeName": "流动摊贩",
        "modelName": "流动摊贩模型",
        "createBy": "1725684357466820608438748095",
        "creator": "lrz",
        "modelId": "1814496782174093312366919308",
        "aiTypeId": "AI-21",
        "aiTypeNameEn": "move vendors"
    }
],
"custId": "999001",
"aiEffDate": "2024-06-01 00:00:00",
"aiSwitch": 1,
"aiServers": "aiserver1",
"aiEndDate": "2024-12-31 00:00:00"
}
}

```

▼ 当前正在调用AI能力

URL	{{base_url}}/ai/schedule/object/identify/info/{{executionsId}}
Method	get
Headers	access_token

Params	无
Response	参考返回示例
Response Parameter	aiTypeId ：能力Id aiTypeName ：识别能力名称 modelId ：模型Id modelName ：模型名称 status ：调用状态（0调用中）

▼ 返回示例：

```
{
  "code": 0,
  "msg": "operate success.",
  "data": [
    {
      "aiTypeId": "AI-00",
      "aiTypeName": 0,
      "modelId": '1811591883006808064129620382',
      "modelName": '人车模型',
      "reliability": "0.6",
      "status": 0,
    }
  ]
}
```

▼ 开启AI识别

URL	{{base_url}}/ai/schedule/object/identify/start
Method	post
Headers	access_token
Params	executionsId ：执行id infers ：具体调用 aiTypeId ：能力Id aiTypeName ：识别能力名称

	modelId ：模型Id
	modelName ：模型名称
	reliability ：置信度（默认 0.6 ）
Response	参考返回示例
Response Parameter	execute-ai-server-id ：执行的AI服务器

▼ 请求示例：

```
{
  "executionsId": "GDM002S2312178-20240930-60886504",
  "infers": [
    {
      "aiTypeId": "AI-04",
      "aiTypeName": "汽车",
      "reliability": 0.6,
      "modelId": "1811591883006808064129620382",
      "modelName": "人车模型"
    }
  ]
}
```

▼ 返回示例：

```
{
  "code": 0,
  "msg": "ai schedule request success,command code has set",
  "data": {
    "execute-ai-server-id": "aiserver1"
  }
}
```

▼ 关闭AI识别

URL	{{base_url}}/ai/schedule/object/identify/sub
Method	post
Headers	access_token
Params	executionsId ：执行id
	infers ：具体调用

	<p>aiTypeId：能力Id</p> <p>aiTypeName：识别能力名称</p> <p>modelId：模型Id</p> <p>modelName：模型名称</p> <p>reliability：置信度（默认0.6）</p>
Response	参考返回示例
Response Parameter	execute-ai-server-id ：AI服务器

▼ 请求示例：

```
{
  "executionsId": "GDM002S2312178-20240930-60886504",
  "infers": [
    {
      "aiTypeId": "AI-04",
      "aiTypeName": "汽车",
      "reliability": 0.6,
      "modelId": "1811591883006808064129620382",
      "modelName": "人车模型"
    }
  ]
}
```

▼ 返回示例：

```
{
  "code": 0,
  "msg": "ai schedule request success,command code has set",
  "data": {
    "execute-ai-server-id": "aiserver1"
  }
}
```

MQTT订阅（AI）

▼ 颜色参考

['#FF0000', '#00FF00', '#FF00FF', '#FFFF00', '#FF6700', '#912CEE', '#F45A8E', '#00BFFF', '#00FFFF', '#1E90FF']

▼ 具体颜色



▼ 识别事件触发推送

topic	gis/{{dronelId}}/AIPicWarnTip
Response	参考返回示例
Response Parameter	<p>videoCutPicId：保存的图片id</p> <p>custId：组织id</p> <p>missionId：任务id</p> <p>executionsId：执行id</p> <p>longitudeDeg：经度</p> <p>latitudeDeg：纬度</p> <p>altitude：高度</p> <p>picType：图片类别（0普通 1异常 2警告 3事件）</p> <p>aiFlag：图片类型（0普通图片 1AI图片）</p> <p>fileName：图片名称</p>

	fileUrl ：图片地址
	modelId ：模型id
	identifyType ：识别能力编码
	identifyTypeName ：识别能力名称
	IdentifyQty ：识别结果数量（多少个识别框）
	reliability ：置信度
	auditStatus ：审核状态
	beginTime ：发生时间

▼ 返回示例：

```
{
  "videoCutPicId": "1840642066134167552823980406",
  "custId": "999001",
  "missionId": "",
  "executionsId": "GDM002S2312178-20240930-60886504",
  "latitudeDeg": 22.759178995556777,
  "longitudeDeg": 114.24295786452764,
  "picType": "2",
  "aiFlag": 1,
  "bucketName": "gdcx-dev",
  "fileName": "2024093014372007b1c36bccb04b9992d4be4deaa2",
  "filePath": "AI/999001/pic/20240930/GDM002S2312178-2024",
  "fileUrl": "https://gdcx-dev.oss-cn-shenzhen.aliyuncs.c",
  "remark": "AI",
  "createBy": "10000100000999900000000001",
  "modelId": "1811591883006808064129620382",
  "identifyType": "AI-04",
  "identifyTypeName": "car",
  "IdentifyQty": "21",
  "reliability": 0.849418044090271,
  "altitude": "100.0",
  "auditStatus": 0,
  "beginTime": "2024-09-30 14:37:20"
}
```

▼ 识别结果推送

topic	aiserver/{{droneld}}/infer
Response	参考返回示例
Response Parameter	<p>1811591883006808064129620382 表示AI模型id</p> <p>cresult：具体识别结果</p> <p>rect：识别框数据</p> <p>x：左上角顶点横坐标</p> <p>y：左上角顶点纵坐标</p> <p>w：识别框宽度</p> <p>x：识别框高度</p> <p>strcode：AI识别能力</p> <p>cidx：对应矩形框颜色下标</p>
description	<p>1. 目前通用无人机视频分辨率1920*1080</p> <p>2. 绘制原点为当前视频画面的左上角</p> <p>3. 绘制AI识别框，需要将当前元素的宽高和无人机视频真实宽高做等比换算，再进行绘制</p>

▼ 返回示例：

```
{"1811591883006808064129620382":  
  {"cresult":{"rect":  
    {"x":970,"y":915,"w":25,"h":48},"conf":0.8596795},"strcode":"AI-  
04","cidx":0}, {"cresult":{"rect":  
    {"x":767,"y":968,"w":51,"h":27},"conf":0.83327514},"strcode":"AI-  
04","cidx":0}, {"cresult":{"rect":  
    {"x":759,"y":857,"w":49,"h":25},"conf":0.8217843},"strcode":"AI-  
04","cidx":0}, {"cresult":{"rect":  
    {"x":761,"y":881,"w":48,"h":25},"conf":0.81388754},"strcode":"AI-  
04","cidx":0}, {"cresult":{"rect":  
    {"x":740,"y":665,"w":43,"h":22},"conf":0.8130608},"strcode":"AI-  
04","cidx":0}, {"cresult":{"rect":  
    {"x":737,"y":687,"w":45,"h":22},"conf":0.80385333},"strcode":"AI-  
04","cidx":0}, {"cresult":{"rect":
```

```

{"x":778,"y":1007,"w":47,"h":20},"conf":0.7984146},"strcode":"AI-04","cidx":0},{
"result":{"rect":
{"x":728,"y":594,"w":44,"h":23},"conf":0.7954998},"strcode":"AI-04","cidx":0},{
"result":{"rect":
{"x":812,"y":339,"w":19,"h":33},"conf":0.79113454},"strcode":"AI-04","cidx":0},{
"result":{"rect":
{"x":762,"y":920,"w":49,"h":24},"conf":0.78745794},"strcode":"AI-04","cidx":0},{
"result":{"rect":
{"x":743,"y":738,"w":44,"h":23},"conf":0.77644974},"strcode":"AI-04","cidx":0},{
"result":{"rect":
{"x":731,"y":634,"w":45,"h":26},"conf":0.7555676},"strcode":"AI-04","cidx":0},{
"result":{"rect":
{"x":956,"y":848,"w":22,"h":41},"conf":0.72812295},"strcode":"AI-04","cidx":0},{
"result":{"rect":
{"x":722,"y":565,"w":46,"h":26},"conf":0.7061017},"strcode":"AI-04","cidx":0},{
"result":{"rect":
{"x":748,"y":780,"w":46,"h":25},"conf":0.69504964},"strcode":"AI-04","cidx":0},{
"result":{"rect":
{"x":716,"y":473,"w":37,"h":20},"conf":0.68678445},"strcode":"AI-04","cidx":0},{
"result":{"rect":
{"x":766,"y":943,"w":49,"h":26},"conf":0.6539735},"strcode":"AI-04","cidx":0},{
"result":{"rect":
{"x":732,"y":615,"w":42,"h":22},"conf":0.6513415},"strcode":"AI-04","cidx":0},{
"result":{"rect":
{"x":708,"y":445,"w":37,"h":22},"conf":0.64585465},"strcode":"AI-04","cidx":0},{
"result":{"rect":
{"x":708,"y":416,"w":36,"h":18},"conf":0.64570165},"strcode":"AI-04","cidx":0},{
"result":{"rect":
{"x":744,"y":758,"w":45,"h":24},"conf":0.64337564},"strcode":"AI-04","cidx":0},{
"result":{"rect":
{"x":753,"y":816,"w":45,"h":21},"conf":0.6375995},"strcode":"AI-04","cidx":0},{
"result":{"rect":
{"x":799,"y":414,"w":17,"h":31},"conf":0.6231104},"strcode":"AI-04","cidx":0}
]}

```