PC 端 Web SDK Vue 接口说明文档 V4.0.6

文档修改记录

序号	版本号	修改内容	修改者	修改日期
1	v3.1.2	• 文档建立	周功成	2021/4/7
2	v3.1.4	• 更新 3.1.4 内容	石坤	2021/11/15
3	v3.1.8	• 兼容新机型 • 修复旋转后裁切异常 bug	石坤	2022/8/8
4	v3.1.8	更新接口封装	张彬	2023/6/7
5	v3.2.1	• 支持 K3 及 K3W 机型 • 增加 WIFI 相关接口	张彬	2023/10/12
6	v3.2.2	• 支持 M2 机型 • 增加 M2 相关说明	张彬	2023/10/30
7	v3.2.5	• 支持 B3S_P 机型 • 支持 B21S 机型 • 支持 B31 机型 • 更新图像库	张彬	2024/9/12
8	v4.0.3	• 支持 M3、K2、B21Pro 系列机型 • 完善错误码 • 新增绘制带 logo 二维码接口	张彬	2025/4/29

		• 提高 Websocket 通讯速度 5.Demo 支持黑标间隙纸		
9	v4.0.6	• 新增 closePrinter 接口 • 修复 Wifi 搜索接口 BUG • 修复历史遗留 WIFI 连接 BUG	张彬	2025/9/13

DEMO 目录结构

代码块

```
PC-SDK-VUE/
├── node-module/                              # NPM 加载的项目依赖模块
├── public/                                   # 存放公共资源和项目主入口文件
├── src/                                      # 项目核心文件夹：包括项目源码、静态资源等
│   ├── asset/                                # 存放静态资源的文件夹
│   ├── router/                               # 保存各类路由相关配置
│   │   └── index.js                          # 路由配置
│   ├── units/                                # 存放接口文件的文件夹
│   │   ├── printData/                        # 存放打印数据的文件夹
│   │   │   ├── Barcode.js                    # 一维码打印及预览示例数据
│   │   │   ├── Batch.js                      # 批量打印及预览示例数据
│   │   │   ├── Combination.js                # 组合打印及预览示例数据
│   │   │   ├── Graph.js                      # 图形打印及预览示例数据
│   │   │   ├── Img.js                        # 图片打印及预览示例数据
│   │   │   ├── Line.js                       # 线条打印及预览示例数据
│   │   │   ├── QrCode.js                     # 二维码打印及预览示例数据
│   │   │   └── Text.js                       # 文本打印及预览示例数据
│   │   ├── Print.js                          # 打印接口文件
│   │   ├── Socket.js                         # 打印服务连接文件
│   │   └── PrintElementFactory.js            # 绘制工厂策略类
│   ├── views/                                # 存储页面文件
│   │   └── HomeView.vue                      # 打印示例文件
│   ├── App.vue                               # 页面入口文件
│   ├── balel.config.js                       # 全局配置文件
│   ├── jsconfig.json                         # 指定了根文件以及JavaScript语言服务提供的功能选项
│   ├── package-lock.json                     # 项目版本管理使用的文件
│   └── package.json                          # 项目的基本配置文件
```

```
└── vue.config.js                          # 配置文件
```

产品目的

JCAPI 接口为调用者提供易用的方法完成标签绘图、打印操作。本接口中提供了标贴的绘制方法，包括：文字、一维码、二维码，图形、线条、图像绘制，同时还能进行绘制对象的旋转，调用者还可以调用方法获得绘制完成的标签图片用于标签预览，打印。方便用户在二次开发中调用接口，缩短开发周期，加快开发

打印机支持

支持打印机型号
B1
B203
B21 /B21_Pro/B21S
B3S / B3S_P
B31
B4
B11
K2
K3/K3W
B50/B50W
B32/Z401/B32R
M2
M3

准备工作

- 安装精臣打印服务（jcPrinterSdk.exe）
  - 前置：关闭杀毒软件（如 360，易误报）

  - 关键：**必须默认路径安装（C 盘）**
  - 注意：勿禁用服务开机启动

- 安装对应机型驱动

机型系列	系统要求
B50/B11	Win7/10/11 均需装驱动
其他机型	Win10/11 无需装，仅 Win7 需装

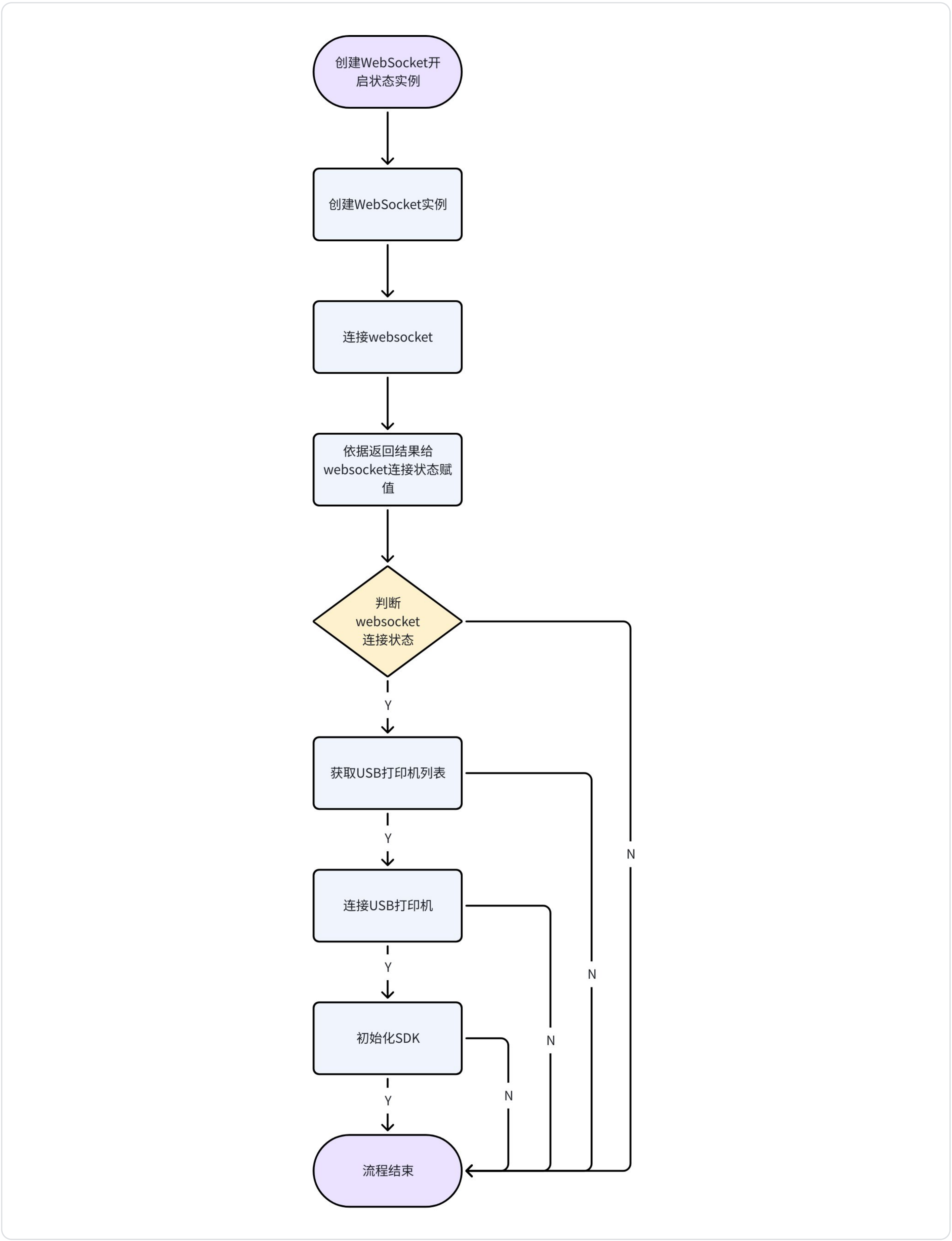
- 设备连接（2 种方式，不支持蓝牙）
  - USB 连接
    - 系统：仅支持 Windows
    - 驱动：可能需装（参考第 2 步）
    - 特别：**不支持驱动打印**（已用驱动打印需下载专用驱动
  - WIFI 连接
    - 机型：**仅支持 K3W 机型**
    - 系统：仅支持 Windows
    - 驱动：无需安装

一、初始化及打印调用流程、打印流程

1.1 初始化流程

1.1.1 USB 打印初始化流程

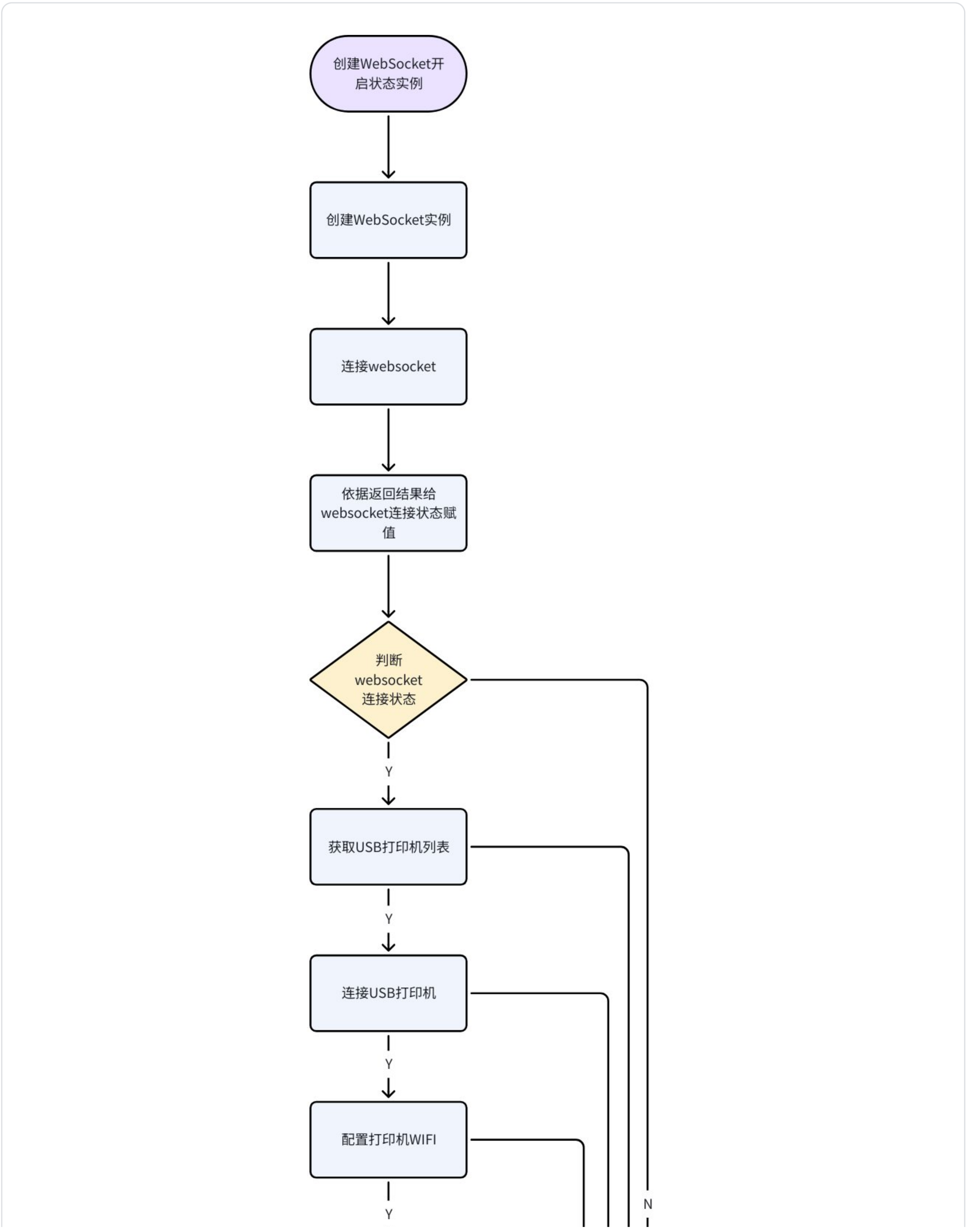
- WebSocket 建议页面加载时进行初始化，在 WebSocket 初始成功后回调中进行获取打印机、选择打印机、初始化 SDK 等操作
- 因为所有接口均为异步操作，调用下一接口需要验证当前接口结果后再执行下一接口
- 记录打印机列表获取状态、连接状态、初始化状态，打印机需要检查对应的状态

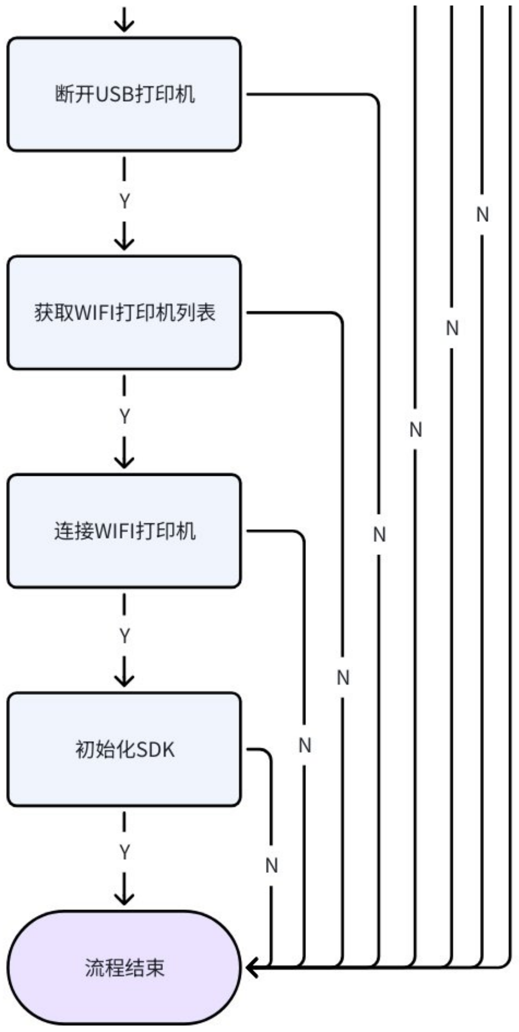


1.1.2 WIFI 打印初始化流程

- WebSocket 建议页面加载时进行初始化，在 WebSocket 初始成功后回调中进行获取打印机、选择打印机、初始化 SDK 等操作

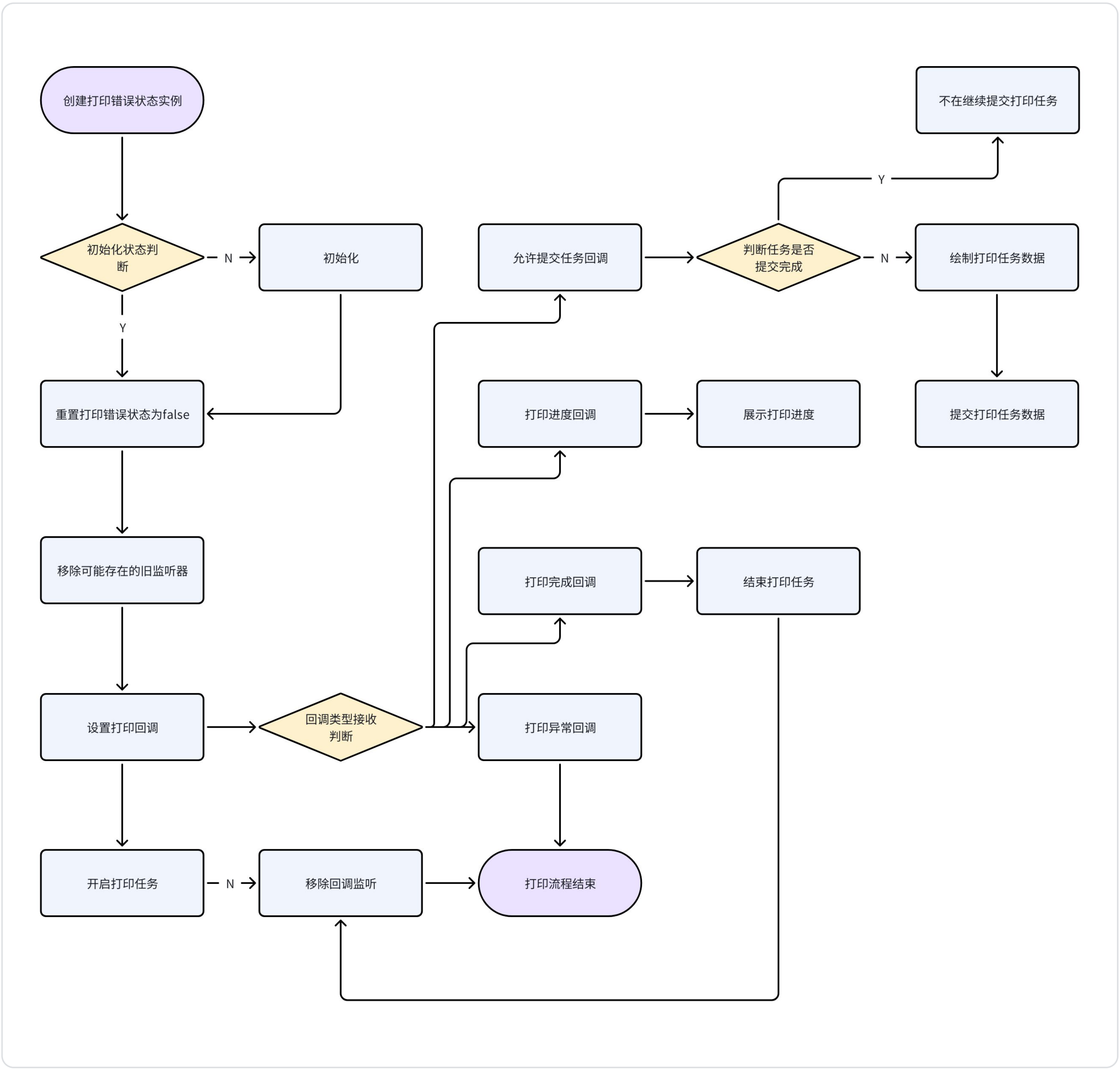
- 因为所有接口均为异步操作，调用下一接口需要验证当前接口结果后再执行下一接口
- 记录打印机列表获取状态、连接状态、初始化状态，打印机需要检查对应的状态
- **打印机 WIFI 配置成功后，后续直接搜索连接，无需多次进行配置（省略 USB 打印机获取、打印机连接、打印机网络配置）**





1.2 打印流程

- 打印前建议判断 WebSocket 是否初始化成功、SDK 是否初始化成功（包含初始化 SDK，获取打印机、选择打印机三个流程）
- 因为所有接口均为异步操作，除 WebSocket 初始化调用是在单独的回调接口中判断是否初始化成功外，其他接口应通过添加 await 关键字调用方法后，等待方法返回结果，解析返回的结果数据后进行判断再进行下一接口调用
- 打印回调监听会有多种回调，包含异常取消、页码回调，可参考流程图及 DEMO 进行处理



二、页面初始化相关接口

2.1 初始化打印服务及接口实例（包含打印机状态回调）

代码块

```
export default class Socket {
 /**
  * 打开 WebSocket 连接并返回一个解析为 WebSocket 实例的 Promise。
  *
  * @param {function} openChange - WebSocket 连接打开时要调用的回调函数。
  * @param {function} onMessageCallback - 接收到消息时要调用的回调函数。
  * @return {Promise} 一个解析为 WebSocket 实例的 Promise。
```

```
   */
  open(openChange, onMessageCallback)
}
```

代码块

```
// 创建socket实例
const socketData = new Socket();
socketData.open(
  (openBool) => {
    console.log(openBool, "openBool");
    this.printSocketOpen = openBool;
  },
  (msg) => {
    if (msg.resultAck.callback != undefined) {
      const callbackName = msg.resultAck.callback.name;
      const msgInfo = msg.resultAck.info;
      if (callbackName == "onCoverStatusChange") {
        //盒盖状态: 0-闭合、1-打开
        console.log("盒盖状态", msgInfo.capStatus);
      } else if (callbackName == "onElectricityChange") {
        //"power" : 0-4, // 电池电量等级（共5档）
        console.log("电池电量等级", msgInfo.power);
      }
    }
  }
);
```

2.2 初始化 SDK initSdk

代码块

```
export default class NMPrintSocket {
  /**
   * 初始化SDK，在打印服务连接成功后调用此接口。
   * 在调用SDK的绘制接口之前，必须先调用此接口。
   *
   * @param {object} json - 包含必要参数的JSON对象,格式如下:
   *  {
   *    "fontDir": string, //字体文件目录，默认为""，暂不生效
   * }
   *
   * @return {Promise} 返回一个 Promise，解析为初始化SDK的结果
   */
  initSdk(json)
}
```

代码块

```
//初始化SDK参数JSON
{
  "fontDir": ""
}
//初始化成功返回JSON
{
  "apiName": "initSdk",
    "resultAck": {
      "errorCode": 0,
      "info": "initSdkApi ok!",
      "result": 0
    }
}

// 创建打印实例,此实例只需创建一次
this.nMPrintSocket = new NMPrintSocket(socketData);
//进行初始化
async init() {
  if (!this.printSocketOpen) return alert("打印服务未开启");
  //初始化数据
  try {
    const res = await this.nMPrintSocket.initSdk({ fontDir: "" });
    if (res.resultAck.result == 0) {
      console.log("初始化成功");
      this.initBool = true;
    } else {
      console.log("初始化失败");
      this.initBool = false;
    }
  } catch (err) {
    console.error(err);
  }
}
```

2.3 获取 USB 打印机列表 getAllPrinters

代码块

```
export default class NMPrintSocket {
  /**
   * 获取所有当前PC上连接的精臣打印机
   *
   * @return {Promise} 返回一个Promise，解析为打印机列表。
   *
   * @description
   * 需要在打印服务连接成功后调用此函数。
   */
  getAllPrinters()
}
```

代码块

```
//返回结果
{
        "apiName": "getAllPrinters",
        "resultAck": {
                "errorCode": 0,
                "info": "{\"e623012991\":\"31\"}",//打印机名称及类型
                "result": "true"
        }
}

// 创建打印实例,此实例只需创建一次
this.nMPrintSocket = new NMPrintSocket(socketData);
//调用流程
async getPrinters() {
  if (!this.printSocketOpen) {
    return alert("打印服务未开启");
  }
  console.log("开始获取打印机");
  try {
    const allPrintersRes = await this.nMPrintSocket.getAllPrinters();
    console.log(allPrintersRes, "allPrintersRes");
    if (allPrintersRes.resultAck.errorCode === 0) {
      const allPrinters = JSON.parse(allPrintersRes.resultAck.info);
      this.printers = { ...allPrinters };
      this.selectPrinter = Object.keys(this.printers)[0];
      console.log("printers", this.printers);
    } else {
      alert("没有在线的打印机");
    }
  } catch (err) {
    console.error(err);
  }
}
```

2.4 获取 WIFI 连接的打印机列表 scanWifiPrinter

代码块

```
export default class NMPrintSocket {
  /**
   * 搜索Wifi打印机
   *
   *
   * @return {Promise} 返回一个 Promise，解析为打印机Wifi配置信息
   *
   * @description
   * 需要在打印服务连接成功后调用此函数。
   */
  scanWifiPrinter()
}
```

代码块

```
//返回结果
{
        "apiName": "scanWifiPrinter",
        "resultAck": {
                "errorCode": 0,
                "info": "[{
      "deviceName":"K3W-E828013369",
                        "IP":"192.168.1.10",
                        "tcpPort":"9200",
                        "avaliableClient":"0"
          }]",
    "result": "true"
        }
}


// 创建打印实例,此实例只需创建一次
this.nMPrintSocket = new NMPrintSocket(socketData);
//调用流程
async scanWifiPrinters() {
  const allPrintersRes = await this.nMPrintSocket.scanWifiPrinter();
  console.log("allPrintersRes", allPrintersRes);
  const errorCode = allPrintersRes.resultAck.errorCode;
  //处理搜索结果
  if (errorCode === 0) {
    const allPrinters = allPrintersRes.resultAck.info;
    this.wifiPrinters = {};
```

```
      allPrinters.forEach((item) => {
        this.wifiPrinters[item.deviceName] = item.tcpPort;
      });
      console.log("wifiPrinters", this.wifiPrinters);

      this.wifiSelectPrinter = Object.keys(this.wifiPrinters)[0];
      console.log("wifiSelectPrinter", this.wifiSelectPrinter);
    } else {
      alert("没有在线的打印机");
    }
  },
```

2.5 连接 USB 打印机 selectPrinter

代码块

```
export default class NMPrintSocket {
  /**
   * 选择并打开需要使用的打印机名称，及端口号
   *
   * @param {string} printerName - 打印机名称。
   * @param {number} port - 连接端口。
   * @return {Promise} 返回一个Promise，解析为连接结果
   *
   * @description
   * 需要在打印服务连接成功后调用此函数，建议在getAllPrinters调用成功后调用该接口，以保证传入的打印机名称和端口的打印机状态正常。。
   */
  selectPrinter(printerName, port)
}
```

代码块

```
//返回数据示例
{
        "apiName": "selectPrinter",
        "resultAck": {
                "callback": {
                        "name": "onConnectSuccess",
                        "printerName": "e623012991"
                },
                "errorCode": 0,
                "info": "select printer ok!",
                "result": true
        }
}
```

```

// 创建打印实例,此实例只需创建一次
this.nMPrintSocket = new NMPrintSocket(socketData);
//调用流程
async selectOnLinePrinter() {
  if (!this.printSocketOpen) {
    return alert("打印服务未开启");
  }
  console.log("开始连接打印机");
  try {
    const res = await this.nMPrintSocket.selectPrinter("e623012991",31));
    console.log("选择打印机", res);
    if (res.resultAck.result) {
      console.log("连接成功");
      this.onlineBool = true;
    } else {
      console.log("连接失败");
      this.onlineBool = false;
      alert("连接失败");
    }
  } catch (err) {
    console.error(err);
  }
}
```

2.6 连接 WIFI 打印机列表中的打印机 connectWifiPrinter

代码块

```
export default class NMPrintSocket {
  /**
   * 发送消息以选择打印机。
   *
   * @param {string} printerName - 打印机名称。
   * @param {number} tcpPort - 端口号。
   * @return {Promise} 返回连接结果
   *
   * @description
   * 需要在打印服务连接成功后调用此函数，建议在scanWifiPrinter调用成功的回调接口中调用该接口，保证传入的打印机名称和端口的打印机状态正常。
   * 注意：此函数仅能连接 WIFI 打印机列表中的打印机。
   */
  connectWifiPrinter(printerName, tcpPort)
}
```

```
//示例返回成功数据
{
        "apiName": "selectPrinter",
        "resultAck": {
                "callback": {
                        "name": "onConnectSuccess",
                        "printerName": "e623012991"
                },
                "errorCode": 0,
                "info": "select printer ok!",
                "result": true
        }
}
//示例返回失败数据
{
  "apiName":"connectWifiPrinter",
  "resultAck":{
    "callback":{
      "name":"onDisConnect",
      "printerName":"K3_W-F612010061"
    },
    "errorCode":0,
    "info":"success",
    "result":false
  }
}

// 创建打印实例,此实例只需创建一次
this.nMPrintSocket = new NMPrintSocket(socketData);
//调用流程
async selectOnLineWifiPrinter() {
  if (!this.printSocketOpen) {
    return alert("打印服务未开启");
  }
  try {
    const wifiConnectRes = await this.nMPrintSocket.connectWifiPrinter(
      this.wifiSelectPrinter,
      parseInt(this.wifiPrinters[this.wifiSelectPrinter])
    );
    //此版文报存在问题，errorCode连接成功与连接失败一致，暂时先用result判断
    const result = JSON.parse(wifiConnectRes.resultAck.result);
    if (result) {
      console.log("连接成功");
      this.onlineWifiBool = true;
      this.onlineUsbBool = false;
    } else {
      console.log("连接失败");
```

```
        this.onlineWifiBool = false;
        alert("连接失败");
      }
      console.log("wifiConnectRes", wifiConnectRes);
    } catch (err) {
      console.error(err);
    }
  },
```

2.7 断开打印机连接 closePrinter

代码块

```
export default class NMPrintSocket {
  /**
   * 断开打印机连接。
   *
   * @return {Promise} 返回一个Promise，解析为关闭结果
   */
  closePrinter()
}
```

2.8 配置打印机的 WIFI 信息 configurationWifi

代码块

```
export default class NMPrintSocket {
  /**
   * 配置打印机的Wifi网络
   *
   * @param {string} wifiName - wifi网络的名称。
   * @param {string} wifiPassword - wifi网络的密码。
   * @return {Promise} 返回一个 Promise，解析为打印机Wifi配置结果
   *
   * @description
   * 注意:仅支持2.4G频段网络，且需要在连接成功后配置。首次配置建议在USB连接成功后配置
   */
  configurationWifi(wifiName, wifiPassword)
}
```

代码块

```
//示例返回数据
{
  "apiName":"configurationWifi",
  "resultAck":{
    "errorCode":0,
    "info":"configuration wifi printer ok!",
    "result":true
  }
}

// 创建打印实例,此实例只需创建一次
this.nMPrintSocket = new NMPrintSocket(socketData);
//调用流程
async setWifiConfiguration() {
  if (!this.printSocketOpen) {
    return alert("打印服务未开启");
  }

  try {
    if (this.wifiName.trim() !== "") {
      const wifiConfigurationResult =
        await this.nMPrintSocket.configurationWifi(
          this.wifiName.trim(),
          this.wifiPassword.trim()
        );

      console.log("wifiConfigurationResult", wifiConfigurationResult);

      const errorCode = JSON.parse(
        wifiConfigurationResult.resultAck.errorCode
      );

      console.log("errorCode", errorCode);

      if (errorCode === 0) {
        return alert(
          "网络配置成功，请断开USB线缆后使用WIFI搜索连接打印机（PC需要和打印机在同一网络）"
        );
      } else {
        return alert("网络配置失败");
      }
    } else {
      return alert("wifi名称不得为空");
    }
  } catch (err) {
    console.error(err);
  }
},
```

2.9 获取打印机的 WIFI 相关配置 getWifiConfiguration

代码块

```
export default class NMPrintSocket {
  /**
   * 获取打印机的wifi配置。
   *
   * @return {Promise} 返回一个 Promise，解析为打印机Wifi配置信息
   */
  getWifiConfiguration()
}
```

代码块

```
//示例返回成功数据
 {
   "apiName":"getWifiConfiguration",
     "resultAck":{
     "errorCode":0,
     "info":"{
       \n\t\"wifiName\" : \"Test\"\n
       }\n",
      "result":"{
       \n\t\"wifiName\" : \"Test\"\n
       }\n"
   }
 }
//示例返回失败数据
 {
   "apiName":"getWifiConfiguration",
     "resultAck":{
     "errorCode":23,
     "info":"select printer connect first!",
     "result":false
   }
 }

// 创建打印实例,此实例只需创建一次
this.nMPrintSocket = new NMPrintSocket(socketData);
//调用流程
async getWifiConfigurationInfo() {
  if (!this.printSocketOpen) {
    return alert("打印服务未开启");
  }
  try {
    const wifiInfo = await this.nMPrintSocket.getWifiConfiguration();
    const errorCode = JSON.parse(wifiInfo.resultAck.errorCode);

    if (errorCode === 0) {
      const info = JSON.parse(wifiInfo.resultAck.info);
      console.log("wifiInfo", info);
      alert("wifiInfo:" + info);
    } else {
      alert("wifiInfo:获取失败");
    }
  } catch (err) {
    console.error(err);
  }
},
```

三、绘制打印数据相关接口

3.1 创建画板 InitDrawingBoard

代码块

```
export default class NMPrintSocket {
  /**
   * 初始化绘制画板
   *
   * @param {Object} json - 包含初始化绘制画板所需数据的JSON对象。格式如下:
   * {
   *   "width": number, // 画板的宽度，单位为mm
   *   "height": number, // 画板的高度，单位为mm
   *   "rotate": number, // 画板的旋转角度，仅支持0、90、180、270
   *   "path": string, // 字体文件的路径，默认为"", 暂不生效
   *   "verticalShift": number, // 垂直偏移量，暂不生效
   *   "HorizontalShift": number // 水平偏移量，暂不生效
   * }
   * @return {Promise} 返回一个 Promise，解析为初始化绘制画板的结果
   *
   * @description
   * 增加接口说明:
   * 1.在调用绘制接口之前，必须先初始化SDK。
   * 2.绘制元素前，必须先初始化画板，否则会引起崩溃!
   * 3.初始化画板时会清空画板上次绘制的内容!
   */
  InitDrawingBoard(json)
}
```

代码块

```
{
        "apiName": "InitDrawingBoard",
        "resultAck": {
                "errorCode": 0,
                "info": "init draw board success!",
                "result": 0
        }
}

// 创建打印实例,此实例只需创建一次
this.nMPrintSocket = new NMPrintSocket(socketData);
// 调用流程
asnyc InitDrawingBoard(){
  const InitDrawingBoardParam={
  "width":48,
  "height":30,
  "rotate":0,
  "path":"ZT001.ttf",
  "verticalShift":0,
  "HorizontalShift":0};
  //设置画布尺寸
  try {
    const res = await this.nMPrintSocket.InitDrawingBoard(
      InitDrawingBoardParam
    );
    if (res.resultAck.result != 0) {
      return;
    }
    // //进行下一步操作,绘制元素
  } catch (err) {
    console.error(err);
  }
}
```

3.2 绘制文本 DrawLableText

代码块

```
export default class NMPrintSocket {
  /**
   * 绘制标签文本。
   * @param {object} json - 包含标签文本信息的JSON对象。
   *   JSON格式要求如下:
   *   - x: x轴坐标，单位mm
   *   - y: y轴坐标，单位mm
   *   - height: 文本高度，单位mm
   *   - width: 文本宽度，单位mm
   *   - value: 文本内容
   *   - fontFamily: 字体名称，暂不生效，使用默认字体思源黑体
   *   - rotate: 旋转角度，0:0，1:90，2:180，3:270
   *   - fontSize: 字号，单位mm
   *   - textAlignHorizonral: 水平对齐方式：0:左对齐 1:居中对齐 2:右对齐
   *   - textAlignVertical: 垂直对齐方式：0:顶对齐 1:垂直居中 2:底对齐
   *   - letterSpacing: 字母之间的标准间隔，单位mm
   *   - lineSpacing: 行间距（倍距），默认1
   *   - lineMode: 1:宽高固定，内容大小自适应，预设宽高过大时字号放大，预设宽高过小时字号缩小，
   *     保证内容占据满预设宽高（字号/字符间距/行间距 按比例缩放）
   *     2:宽度固定，高度自适应
   *     4:宽高固定,超出内容直裁切
   *     6:宽高固定，内容超过预设的文本宽高自动缩放
   *     建议设置为6
   *   - fontStyle: 字体样式[加粗，斜体，下划线，删除下划线（预留）]
   *
   * @return {Promise} 返回一个 Promise，解析为绘制标签文本的结果
   * @description 绘制标签文本前必须先初始化画板
   */
  DrawLableText(json)
}
```

代码块

```
//返回数据示例
{
        "apiName": "DrawLableText",
        "resultAck": {
                "errorCode": 0,
                "info": "draw bar code success!",//此处返回信息有误，下个版本修复
                "result": 0
        }
}


// 创建打印实例,此实例只需创建一次
this.nMPrintSocket = new NMPrintSocket(socketData);
// 调用流程
async DrawLableText(){
  const DrawLableTextParam = {
    "x": 20.0,
    "y": 10.0,
    "height": 10,
    "width": 50,
    "value": "精臣SDK",
    "fontFamily": "宋体",
    "rotate": 0,
    "fontSize": 4.0,
    "textAlignHorizonral": 0,
    "textAlignVertical": 0,
    "letterSpacing": 1.0,
    "lineSpacing": 1.0,
    "lineMode": 0,
    "fontStyle": [false, false, false, false]
  }

        const res = await this.nMPrintSocket.DrawLableText(DrawLableTextParam);
  if (res.resultAck.result != 0) {
    return;
  }
  //进行下一步操作,继续绘制或提交
}
```

3.3 一维码绘制 DrawLableBarCode

代码块

```
export default class NMPrintSocket {
  /**
   * 绘制一维码条形码。
   *
   * @param {Object} json - 包含一维码条形码信息的JSON对象。格式如下:
   * {
   *   "x": number, // x轴坐标, 单位mm
   *   "y": number, // y轴坐标, 单位mm
   *   "height": number, // 一维码宽度, 单位mm
   *   "width": number, // 一维码高度, 单位mm (包含文本高度)
   *   "value": string, // 一维码内容
   *   "codeType": number, // 条码类型:
   *                      // 20: CODE128
   *                      // 21: UPC-A
   *                      // 22: UPC-E
   *                      // 23: EAN8
   *                      // 24: EAN13
   *                      // 25: CODE93
   *                      // 26: CODE39
   *                      // 27: CODEBAR
```

```
     *                     // 28: ITF25
     *   "rotate": number, // 旋转角度，0: 0, 1: 90, 2: 180, 3: 270
     *   "fontSize": number, // 文本字号，单位mm，字号为0则文本不显示
     *   "textHeight": number, // 文本高度，单位mm，高度为0则文本不显示
     *   "textPosition": number // 一维码文字识别码显示位置:
     *                          // 0: 下方显示
     *                          // 1: 上方显示
     *                          // 2: 不显示
     * }
     *
     * @return {Promise} 返回一个 Promise，解析为绘制一维码条形码的结果
     *
     * @description
     * 1. 绘制元素前，必须先初始化画板
     */
    DrawLableBarCode(json)
  }
```

代码块

```
//返回数据示例
{
        "apiName": "DrawLableBarCode",
        "resultAck": {
                "errorCode": 0,
                "info": "draw bar code success!",
                "result": 0
        }
}

// 创建打印实例,此实例只需创建一次
this.nMPrintSocket = new NMPrintSocket(socketData);
// 调用流程
async DrawLableBarCode(){
  const DrawLableBarCodeParam = {
          "x": 20.0,
          "y": 10.0,
    "height": 10,
    "width": 50,
    "value": '12345678',
    "codeType": 20,
    "rotate": 0,
    "fontSize": 4.0,
    "textHeight": 0,
    "textPosition": 0,
  }
```

```

        const res = await
this.nMPrintSocket.DrawLableBarCode(DrawLableBarCodeParam);
  if (res.resultAck.result != 0) {
    return;
  }
  //进行下一步操作,继续绘制或提交
}
```

3.4.1 二维码绘制 DrawLableQrCode

代码块

```
export default class NMPrintSocket {
  /**
   * 绘制二维码。
   *
   * @param {Object} json - 包含二维码信息的JSON对象。格式如下:
   * {
   *   "x": number, // x轴坐标, 单位mm
   *   "y": number, // y轴坐标, 单位mm
   *   "height": number, // 二维码高度, 默认宽高一致
   *   "width": number, // 二维码宽度, 单位mm
   *   "value": string, // 二维码内容
   *   "codeType": number, // 条码类型:
   *                      // 31: QR_CODE
   *                      // 32: PDF417
   *                      // 33: DATA_MATRIX
   *                      // 34: AZTEC
   *   "rotate": number, // 旋转角度, 仅支持0、90、180、270
   * }
   *
   * @return {Promise} 返回一个 Promise, 解析为绘制二维码的结果
   *
   * @description
   * 1. 绘制元素前, 必须先初始化画板
   */
  DrawLableQrCode(json)
}
```

代码块

```
//返回数据示例
{
        "apiName": "DrawLableQrCode",
        "resultAck": {
                "errorCode": 0,
                "info": "draw qr code success!",
                "result": 0
        }
}

// 创建打印实例,此实例只需创建一次
this.nMPrintSocket = new NMPrintSocket(socketData);
// 调用流程
async DrawLableQrCode(){
  const DrawLableQrCodeParam = {
          "x": 20.0,
          "y": 10.0,
    "height": 10,
    "width": 10,
    "value": "精臣SDK",
    "rotate": 0,
    "codeType": 31,
  }

        const res = await
this.nMPrintSocket.DrawLableQrCode(DrawLableQrCodeParam);
  if (res.resultAck.result != 0) {
    return;
  }
  //进行下一步操作,继续绘制或提交
}
```

3.4.2 二维码绘制 DrawLableQrCode

代码块

```
export default class NMPrintSocket {
   /**
 * 绘制带logo的二维码。
 * @param {*} json - 包含二维码信息的JSON对象。格式如下:
 * {
 *   "x": number, // x轴坐标, 单位mm
 *   "y": number, // y轴坐标, 单位mm
 *   "height": number, // 二维码高度, 默认宽高一致
 *   "width": number, // 二维码宽度, 单位mm
 *   "value": string, // 二维码内容
 *   "codeType": number, // 条码类型:
 *                     // 31: QR_CODE
 *                     // 32: PDF417
 *                     // 33: DATA_MATRIX
 *                     // 34: AZTEC
 *   "rotate": number, // 旋转角度，仅支持0、90、180、270
 *  "correctLevel": 2,//纠错级别，取值范围1-4，默认2
 *  ""logoBase64": ": string,//logo的base64编码(不含数据头，如
data:image/png;base64,)
 *  ""logoPosition": ": 0,//logo的位置，取值范围0-4，默认0:居中，3右下·
 *    "logoScale": 0.25,//logo占据二维码的比例
 * }
 */
DrawLableQrCodeWithLogo(json)
}
```

3.5 线条绘制 DrawLableLine

代码块

```
export default class NMPrintSocket {
  /**
   * 绘制线条。
   *
   * @param {Object} json - 包含线条信息的JSON对象。格式如下：
   * {
   *   "x": number, // x轴坐标，单位mm
   *   "y": number, // y轴坐标，单位mm
   *   "height": number, // 线高，单位mm
   *   "width": number, // 线宽，单位mm
   *   "lineType": number, // 线条类型： 1:实线 2:虚线类型,虚实比例1:1
   *   "rotate": number, // 旋转角度，仅支持0、90、180、270
   *   "dashwidth": number // 线条为虚线宽度，【实线段长度，空线段长度】
   * }
   *
   * @return {Promise} 返回一个 Promise，解析为绘制线条的结果
   *
   * @description
   * 1. 绘制元素前，必须先初始化画板
   */
  DrawLableLine(json)
}
```

代码块

```
//返回数据示例
{
        "apiName": "DrawLableLine",
        "resultAck": {
                "errorCode": 0,
                "info": "draw line success!",
                "result": 0
        }
}

// 创建打印实例,此实例只需创建一次
this.nMPrintSocket = new NMPrintSocket(socketData);
// 调用流程
async DrawLableLine(){
  const DrawLableLineParam = {
          "x": 2.0,
          "y": 2.0,
    "height": 2,
    "width": 50,
    "rotate": 0,
    "lineType": 2,
    "dashwidth": [1,1],
  }

        const res = await this.nMPrintSocket.DrawLableLine(DrawLableLineParam);
  if (res.resultAck.result != 0) {
    return;
  }
  //进行下一步操作,继续绘制或提交
}
```

3.6 绘制图形 DrawLableGraph

代码块

```
export default class NMPrintSocket {
  /**
   * 绘制图形。
   *
   * @param {Object} json - 包含绘制图形信息的JSON对象。格式如下:
   * {
   *   "x": number, // x轴坐标，单位mm
   *   "y": number, // y轴坐标，单位mm
   *   "height": number, // 图形高度，单位mm
   *   "width": number, // 图形宽度，单位mm
   *   "rotate": number, // 旋转角度，仅支持0、90、180、270
   *   "cornerRadius": number, // 圆角半径，单位mm，暂不生效
   *   "lineWidth": number, // 线宽，单位mm
   *   "lineType": number, // 线条类型: 1:实线 2:虚线类型,虚实比例1:1
   *   "graphType": number, // 图形类型: 1:圆，2:椭圆，3:矩形 4:圆角矩形
   *   "dashwidth": number // 线条为虚线宽度，【实线段长度，空线段长度】
```

```
     * }
     *
     * @return {Promise} 返回一个 Promise，解析为绘制图形的结果
     *
     * @description
     * 1. 绘制元素前，必须先初始化画板
     */
    DrawLableGraph(json)
  }
```

代码块

```
//返回数据示例
{
        "apiName": "DrawLableGraph",
        "resultAck": {
                "errorCode": 0,
                "info": "draw graph success!",
                "result": 0
        }
}

// 创建打印实例,此实例只需创建一次
this.nMPrintSocket = new NMPrintSocket(socketData);
// 调用流程
async DrawLableGraph(){
  const DrawLableGraphParam = {
          "x": 2.0,
          "y": 5.0,
    "height": 30,
    "width": 40,
    "rotate": 0,
    "graphType": 3,
    "cornerRadius": 0,
    "lineWidth": 4,
    "lineType":2,
    "dashwidth": [1,1],
  }

        const res = await
this.nMPrintSocket.DrawLableGraph(DrawLableGraphParam);
  if (res.resultAck.result != 0) {
    return;
  }
  //进行下一步操作,继续绘制或提交
}
```

3.7 绘制图像 DrawLableImage

代码块

```
export default class NMPrintSocket {
  /**
   * 绘制图片。
   *
   * @param {Object} json - 包含绘制图片信息的JSON对象。格式如下:
   * {
   *   "x": number, // x轴坐标，单位mm
   *   "y": number, // y轴坐标，单位mm
   *   "height": number, // 图片高度，单位mm
   *   "width": number, // 图片宽度，单位mm
   *   "rotate": number, // 旋转角度，仅支持0、90、180、270
   *   "imageProcessingType": number, // 图像处理算法，默认0
   *   "imageProcessingValue": number, // 算法参数，默认127
   *   "imageData": number, // 图片base64数据，不含数据头
   *                      // 如原始数据
为“data:image/png;base64,iVBORw0KGgoAAAANSU”
   *                      // 传入的数据需要去除头部，数据为，“iVBORw0KGgoAAAANSU”
   * }
   * @return {Promise} 返回一个 Promise，解析为绘制图片的结果
   *
   * @description
   * 增加接口说明:
   * 1. 绘制元素前，必须先初始化画板
   */
  DrawLableImage(json)
}
```

代码块

```
//返回数据示例
{
        "apiName": "DrawLableImage",
        "resultAck": {
                "errorCode": 0,
                "info": "draw image success!",
                "result": 0
        }
}

// 创建打印实例,此实例只需创建一次
this.nMPrintSocket = new NMPrintSocket(socketData);
```

```
// 调用流程
async DrawLableImage(){
  const DrawLableImageParam = {
    "x": 2.0,
    "y": 2.0,
    "height": 10,
    "width": 50,
    "rotate": 0,
    "imageProcessingType": 0,
    "imageProcessingValue":127,

"imageData":"iVBORw0KGgoAAAANSUhEUgAAAZAAAACgCAYAAAAisjrVAAAAAXNSR0IArs4c6QAAAA
RnQU1BAACxjwv8YQUAAAAgY0hSTQAAeiYAAICEAAD6AAAAgOgAAHUwAADqYAAAOpgAABdwnLpRPAAAA
AlwSFlzAAAOxAAADsQBlSsOGwAAROVJREFUeF7tnQmYFcW1gFtEDe64Am5BIyhxe/jcRTQquBDc17gb
FfdEfUYlKu6JccWnKIoYiIIGNVEB81TcggsEFQFN3BWjKIILaIG+9V/pmuoqam+3ffevjPPzPm/r76
Z27e6e6urrvvvXXqLHVqia+++ipeuPD7qF27JaM45m+7aIkllpCiKIqiKHEcS/n++++NbGhn/i40ssLIid
mzZ8dLLdU+at9+qegHP/hBvQBRFEVRFIsVIP/+97+j//znu2u2Fnfx0v4Wfxxe9fPXKIWH/7OdbxMgsmsUVuxkZQVPSv8xZSKfdZTUUxRMg8WGjCHMp8Fpo2ZEkjtdCIxSmI7QYXRu3wqHqKEVHs34pP
ZR0vvvvuu2jBgm9RONqp8FAURVFyY2XGEgsXfh9jy1pcWbhwahW8+fPj/71r38eo/Ih27dOkSLbPM
MmqOUxRFqQHffPOvAkz+MbJ6yDffvttNGrUqGj8+PYyxxxnYGdYTfb2xvIBtaNdtkLxTH/nmfRqtq+XCUyRFt1BPzn86eOPuxjAv61HRcXjLvx+AzTK9WEDt8RzjX9rxnEbbQu8YJr/MJvPKRyVHOPnfJeTTs/YWGZ1Pyo6LTNqfYBlsM0H4ywh1bCsJ0ZlazG9zVY
2muuvRUOHDo1++MMfSjuKojQ/LyIjSIEIGTCXE1hsBF9Cp8rUFFppasZRl68ygqqSX0qHqy+6ENEDPEkQKCvu6fHSuMsBXDOBi+QsXQUbeyrZDBucZbCfxCrbxYqJ16QOl/XLFA6gDWb9LNb4m+zzFmK7wcKiMB9HBFYCMoTB14J1eApNRHZHDPCq4xSg+B9y
fkQk8YDAptfaQH/KlOxzwoBJUDVtcHhWv24ORLcrBhZQl7vLWxJwR/5iBgAlCnGf7xdYj1rAG10TMDv3++L2SnMqaSMPKdEX
akNMbN3FSjvPBAi4KqoJs8WRh5nAVDnTL+cJgN2zqA9aM5+6hLNJ3gzLoLlP2tSHgvyB5EaCfTS2Kt2TlS+hNsyfetcjv6K1Pj2/aFZfZsrdw3NlapZnDIVuFamVSdR9mcKnKqBkr0d2mWm8ZPP2kjptj
dLR4+rE7IEghoBQpEPsWcCTbagaiMX3fr9+Gs0Pnx5FlrgagaPnp3DRCwXRyaNP3Ai3LX4SBp6jNoRRO7KFwqIGhuo8JUNVYP30YR2TrBo8qM+I/BjuJOJRSeyARCAW/hbEvi4TcK+5KqaTUAnEy5TE4JXoVNhVS5XVjzKUF2A2c8YDh9PQR4wdWcmyKbmn
gvkCqnsqYBnQGjnfxNYuTDSPUh8BtJAy5JpOpC4ehcgQCOxbVzQHVMqcADJGUgIqr5TeG6bHqeMKtVxRHIyx20Nn1lCN3Vb1VaxXrNDaw4LGwa+9bZvIOpp2yHE0X0Fd
mn5sT0tm4DO+HX3WWP8EPjjuMNiYABzGOcNzt4KBwBGRN0ibVnbL64D8RiJUcyhZ/3HRoADZt+2mfYgnjuYsKhCRRYzmAwfnWOCEQuU5ehtFx7oV2Fa+B
gTvnJcUC3AGGaG1S/1HK+sqYANJ5cqXIcpvRrCE2i2rGdwUF7vcgN1Y92TzYKNEj22Ae59uf38RnHt7B/Yw9d/ZjXsq5iHyxl3iMRIhXrn80c6o0O5H6rgUXzaX
4mL87hl1gfZijSFkLCLb/CMPrjjNbwywgL6TGe8Qb/ItYOmY+/Z6MmuoFUaK2X1IMzgxr/fbdvkebs94wPA0QdpfvjfSvN6+z/T2bu/nCdz0Oe14cjnG+dFgc6QV
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```

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P/h/2RoQk7TZ4uwAAAABJRU5ErkJggg==",
  }

        const res = await
this.nMPrintSocket.DrawLableImage(DrawLableImageParam);
  if (res.resultAck.result != 0) {
    return;
  }
  //进行下一步操作,继续绘制或提交
}
```

3.8 标签预览 generateImagePreviewImage

代码块

```
export default class NMPrintSocket {
  /**
```

```
     * 生成图像预览图像。
     *
     * @param {number} displayScale - 图像显示比例，表示 1mm 的点数，可调整预览图大小。
     *                              例如，200dpi 的打印机可设置为 8，300dpi 的打印机
可设置为 11.81。
     *
     * @return {Promise} 返回一个 Promise，解析为生成图像预览图像的结果
     *
     * @description
     * 增加方法说明：
     * 1. 在调用此函数之前，必须确保图像数据已准备好，否则无法生成预览。
     */
  generateImagePreviewImage(displayScale)
}
```

代码块

```
//返回数据示例
{
        "apiName": "generateImagePreviewImage",
        "resultAck": {
                "errorCode": 0,
                "info": "{\n\t\"ImageData\" :
```
\"iVBORw0KGgoAAAANSUhEUgAAAZAAAADwCAIAAAChXqV1AAAgAElEQVR4AezBeaznd33f++fr8/2dbWbOeMYzY+MZb+DxgAk2lN5QGiVRC71RK4SaRKJqdRM1EamKyI3C4pKNViit
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```
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```

```
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```

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pAlqenODpBGTQPkVGoaIII2aCZBGze0A0aRR0wBpFGzy4AsSc0uQ023v4A0ahoADRqGiCnUtMAadR0+ws12wCyJDVvGE8/fSXh1KAg4Nho0xWq1UpBVhRNsY4DAOTJICaphi1ku+hupFkjEmOLtyTM3XllZeSALXWUkqtdRiGi5ieLbKK
pAlqenODpBGTQPkVGoaII2aCZBGze0AadRMgDRqGiCnUtMAadR0+ws12wCyJDXd2QHSqGmAnEpNA6RRcwKQRk0DpFFzApBGTQPkVGoaIII2aCZBGze0AadRMgDRqGiCnUtMAadR0+ws12wCyJDXd2QHSqGmAnEpNA6RR
```

```
MwHSqLkdII2aCZBGTQPkVGoaII2abn+hZhtAlqSmOztAGjUNkFOpaYA0aiZAGjW3A6RRMwHSqGmAnEp
NA6RR0+0v1GwDyJLUdGcHSKPmrgBp1EyANGrmAJmjZgKkUXNXgDRquv2Fmm0AWZKa7uwAadTcFSCNmg
mQRs0cIHPUTIA0au4KkEZNt79Qsw0gS1LTnR0gjZq7AqRRMwHSqJkDZI6aCZBGzV0B0qjp9hdqtgFkS
Wq6swOkUXNXgDRqJkAaNXOAzFEzAdKouStAGjXd/kLNNoAsSU13doCcKTUTII2aBkijpgHSqJkAOVNq
uv2Fmm5/ATlTaiZAGjUNkEZNA6RRMwFyptTsMiBLUrPLUNPtLyBnSs0ESKOmAdKoaYA0aiZAzpSaXQZ
kSWp2GWq6/QXkTKmZAGnUNEAaNQ2QRs0EyJlSs8uALEnNLkNN120PyN1S080BsiQ1uww1Xbc9IHdLTT
cHyJLU7DLUdN32gNwtNd0cIEtSs8tQ0+0vICeouQWQiZo5QE5Q0wCZo+Z2gJxKTQPkBDX7AsiS1Owy1
HT7C8gcNRMgjZo5QE5Q0wCZo+ZUQG5HTQPkBDX7AsiS1Owy1GwDyJLUdGcHyBw1EyCNmjlATlDTAJmj
5lRAbkdNA+QENd0bA2q2AWRJarqzA2SOmgmQRs0cICeoaYDMUXMqILejpgFygprujQE12wCyJDXd2QH
SqLljQBo1DZAT1DRAGjV3DEijpgHSqDkBSKOm21+o2QaQJanpzg6QRs0dA9KoaYCcoKYB0qi5Y0AaNQ
2QRs0JQBo13f5CzTaALElNd3aANGruGJBGTQPkBDUNkEbNHQPSqGmANGpOANKo6fYXarYBZElqurMDp
FFzx4A0ahogJ6hpgDRq7hiQRk0DpFFzApBGTbe/ULMNIEtS050dII2aBsgJahogp1LTAJmjpgFyx9Sc
CkijpntjQM02gCxJTXd2gDRqGiAnqGmAnEpNA2SOmgbIHVNzKiCNmu6NATXd/gLSqGmAnKCmAXIqNQ2
QOWoaIHdMzamANGr2BZAlqdllqOn2F5BGTQPkBDUNkFOpaYDMUdMAuWNqYDMUdMAuWNqTgWkUbMvgCxJzS5DTbe/gM
xRMwHSqLkdIKdS0wBp1JwApFHTAGnUNEAmavYRkCWp2WWo6fYXkDlqJkAaNbcD5FRqGiCNmhOANGoaI
I2aBshEzT4CsiQ1uww13f4CMkfNBEij5naAnEpNA6RRcwKQRk0DpFHTAJmo2UdAlqRml6Gm219A5qiZ
AGnU3A6QU6lpgDRqTgDSqGmANGoaIBM1+wjIktTsMtR0bwxAGjV3DMgdUzMHSKNmAqRR0wCZo2YCZI6
aXQZkSWp2GWq6NwYgjZo7BuSOqZkDpFEzAdKoaYDMUTMBMkfNLgOyJDW7DDXbALIkdN7ygDRq7hiQO6
ZmDpBGzQRIo6YBYBMkfNBMgcNd3+Qs02gCxJTbcMIBM12wByx9TMATJR0wBp1DRA5qiZAJmjpttfqNkGk
CWp6XYBkEbNHCCNmhOANGoaIII2aBshETQOk3t2PMgAABxxJREFUUdPtL9RsA8iS1HS7AEijZg6QRs0J
QBo1DZBGTQNkoqYB0qjp9hdqtgFkSWq6XQCkUTMHSKPmBCCNmgZIo6YBMlHTAGnUdPsLNdsAsiQ13dk
BcqbUTIDMUXM7QO6KmgmQOWq6/YWabQBZkpru7AA5U2omQOaouR0gd0XNBMgcNd3+Qs02gCxJTXd2gJ
wpNRMgc9TcDpC7omYCZI6abn+hpttfQM6UmgmQOWpuB8hdUTMBMkfNLgOyJDW7DDXd/gLSqLkrQBo1J
wC5K2rmAGnUNEAmavYRkCWp2WWo6fYXkDlqJkAaNbcD5FRqGiCNmhOANGoaIII2aBsgJau4YkEZN98aAmm0AWZKa7uwAadQ0QE6lpgHSqJkA2YaaUwGZ
o6YBcio13f5CzTaALElNd3aANGoaIKdS0wBp1DRAGjUNEAmavYRkCWp2WWo6fYXkDOlZgJkjpoGyBw1Ew
CNmjlATlDTAJmj5naAnEpNA6RRcwKQRk0DpFHTAJmo2UdAlqRml6Gm219A5qiZAGnU3A6QU6lpgDRqTg
DSqGmANGoaIBM1+wjIktTsMtR0bwxAGjV3DMgdUzMHSKNmAqRR0wCZo+ZUQG5HTQPkBDX7AsiS1Owy1
HT7C8gcNRMgjZo5QE5Q0wCZo+ZUQG5HTQPkBDX7AsiS1Owy1GwDyJLUdGcHyBw1EyCNmjlATlDTAJmj
5lRAbkdNA+QENd0bA2q2AWRJarqzA2SOmgmQRs0cICeoaYDMUXMqILejpgFygprujQE12wCyJDXd2QH
SqLljQBo1DZAT1DRAGjV3DEijpgHSqDkBSKOm21+o2QaQJanpzg6QRs0dA9KoaYCcoKYB0qi5Y0AaNQ
2QRs0JQBo13f5CzTaALElNd3aANGruGJBGTQPkBDUNkEbNHQPSqGmANGpOANKo6fYXarYBZElqurMDp
FFzx4A0ahogJ6hpgDRq7hiQRk0DpFFzApBGTbe/ULMNIEtS050dII2aBsgJahogp1LTAJmjpgFyx9Sc
CkijpntjQM02gCxJTXd2gDRqGiAnqGmAnEpNA2SOmgbIHVNzKiCNmu6NATXd/gLSqGmAnKCmAXIqNQ2
QOWoaIHdMzamANGr2BZAlqdllqOn2F5BGTQPkBDUNkFOpaYDMUdMAuWNqYDMUdMAuWNqTgWkUbMvgCxJzS5DTbe/gM
```

```
Wp2GWq6rjsfgCxJzS5DTdd15wOQJanZZajZBpAlqem6rpuDmm0AWZKaruu6OajZBpAlqem6rpuDmm0AWZKaruu6OajZBpAlqem6rpuDmm0AWZKaruu6OajZBpAlqem6rpuDmm0AWZKaruu6Oajpuu58ALIkNbsMNV3XnQ9AlqRml6Gm67rzAciS1Owy1HRddz4AWZKaXYaaruvOByBLUrPLUNN13fkAZElqdhlquq47H4AsSc0uQ03XdecDkCWp2WX/N3y+mOLHwCY+AAAAAElFTkSuQmCC\",\n\t\"errorCode\" : 0,\n\t\"errorInfo\" : \"No error!\"\n}\n",
                "result": 0
        }
}



// 创建打印实例,此实例只需创建一次
this.nMPrintSocket = new NMPrintSocket(socketData);
// 调用流程
async generateImagePreviewImage(){
  const generateImagePreviewImageParam = {
                "displayScale":8
        }

        const res = await this.nMPrintSocket.generateImagePreviewImage(generateImagePreviewImageParam['displayScale']);
  //预览图生成失败，退出流程
  if (res.resultAck.result != 0) {
    return;
  }

  //解析处理数据
  const obj  = JSON.parse(info);
  const data = obj.ImageData;

}
```

四、打印接口说明

4.1 设置打印回调

代码块

```
export default class NMPrintSocket {
  // 添加打印监听方法
  addPrintListener(callback)
 }
```

代码块

```
let printListener = null;

printListener = this.nMPrintSocket.addPrintListener(async (msg) => {
  const resultAck = msg?.resultAck;

  if (resultAck?.errorCode === 0 && resultAck?.info === "commitJob ok!") {
    await strategyFactory.handleCommitSuccess();
  }
  //已接入历史版本客户仍可以使用printQuantity和onPrintPageCompleted字段获取打印进度

  if (resultAck?.printCopies != null && resultAck?.printPages != null) {
    strategyFactory.handleProgressUpdate(resultAck);
  }

  if (resultAck?.printCopies === printQuantity &&
    resultAck?.printPages === list.length) {
    await strategyFactory.handleCompletion();
  }

  if (resultAck?.errorCode !== 0) {
    strategyFactory.handleError(msg);
  }
});
```

4.2 移除打印回调

代码块

```
 export default class NMPrintSocket {
   /**
   * 移除指定的打印监听回调函数
   * @param {Function} callback - 需要移除的回调函数
   * @returns {void}
   */
  removePrintListener(callback)
 }
```

代码块

```
const cleanupListener = () => {
  if (printListener) {
    this.nMPrintSocket.removePrintListener(printListener);
    printListener = null;
  }
};
```

4.3 开始打印

代码块

```
export default class NMPrintSocket {
    /**
     * 开始一个打印任务。
     *
     * @param {number} printDensity - 打印浓度，根据不同打印机型号取值范围不同，具体如下:
     *                                    - B3S、B203、B1、K3、K3W、M2: 取值范围 1~5，默认为 3。
     *                                      - B50、B11、B50W、B32、Z401: 取值范围 1~15，默认为 8。
     * @param {number} printLabelType - 纸张类型，可选值:
     *                                 1: 间隙纸
     *                                 2: 黑标纸
     *                                 3: 连续纸
     *                                 4: 定孔纸
     *                                 5: 透明纸
     *                                 6: 标牌
     *                                10:黑标间隙纸
     * @param {number} printMode - 打印模式，可选值:
     *                              1: 热敏
     *                              2: 热转印
     *                              注意，不同打印机型号支持的打印模式有限制，具体如下:
     *                              - D11、D101、D110、H10、B16、B18、B3S、B203、B1、K3、K3W、B11 仅支持热敏。
     *                              - B50、B50W、B32、Z401、M2 仅支持热转印。
     * @param {number} count - 总打印份数，表示所有页面的打印份数之和。
     *                              例如，如果你有3页需要打印，第一页打印3份，第二页打印2份，第三页打印5份，那么count的值应为10（3+2+5）。
     * @return {Promise} - 返回一个 Promise，解析为开始打印任务的结果
     * @example
     * //返回数据示例
     * {
     *     "apiName": "startJob",
     *     "resultAck": {
     *         "errorCode": 0,
     *         "info": "startJob ok!",
     *         "result": 0
     *     }
     * }
     * @description 返回结果中的 errorCode 含义如下:
     *              - 0: 成功
     *              - -1: 失败，info 表示原因
     *              - -2: 打印机忙碌, info 表示原因
     *              - -3: 打印机接收到不支持的参数, 主要是浓度、纸张类型、打印模式,
info 表示具体原因
     */
  startJob(printDensity, printLabelType, printMode, count) {
    // 方法实现将在这里
  }
}
```

代码块

```
//返回数据示例
{
        "apiName": "startJob",
        "resultAck": {
                "errorCode": 0,
                "info": "startJob ok!",
                "result": 0
        }
}
// 创建打印实例,此实例只需创建一次
this.nMPrintSocket = new NMPrintSocket(socketData);
//总打印页数
const printDataLength = 5;
// 调用流程
async startJob() {
  const jsonObj = {
    printerImageProcessingInfo: {
      printQuantity: 1,
    },
  };
  const density = 3;
  const label_type = 1;
  const print_mode = 1;
  const printQuantity =jsonObj.printerImageProcessingInfo.printQuantity;
  try {
    const startRes = await this.nMPrintSocket.startJob(
      density,
      label_type,
      print_mode,
      printDataLength*printQuantity
    );
    if (startRes.resultAck.result == 0) {
      // 提交打印任务
      await this.printTag(list, 0);
    }
  } catch (err) {
    console.error(err);
  }
}
```

4.4 提交打印任务

代码块

```
export default class NMPrintSocket {
  /**
   * 提交打印任务，并执行回调函数。
   *
   * @param {string} [printData=null] - 打印数据的 JSON 字符串。
   * @param {string} printerImageProcessingInfo - 打印机图像处理信息的 JSON 字符串，包含打印份数信息，格式如下：
   * {
   *   "printerImageProcessingInfo": {
   *     "printQuantity": 1 // 用于指定当前页的打印份数。例如，如果需要打印3页，第一页打印3份，第二页打印2份，第三页打印5份，则在3次提交数据时，printerImageProcessingInfo 中的 "printQuantity" 值分别应为 3，2，5。
   *   }
   * }
   *
   * @return {Promise} 返回一个 Promise，解析为提交打印任务返回信息
   *
   * @description
   * 需要先开启打印任务，完成绘制后再提交打印任务
   */
  commitJob(printData, printerImageProcessingInfo)
}
```

代码块

```
//数据提交成功返回数据示例
{
        "apiName": "commitJob",
        "resultAck": {
                "errorCode": 0,
                "info": "commitJob ok!",
                "result": 0
        }
}

//打印进度返回示例1: 此回调的含义为第一页第一份打印完成
{
        "apiName": "commitJob",
        "resultAck": {
                "errorCode": 0,
                "info": "",
                "onPrintEPCCodeCompleted": "",
                "onPrintPageCompleted": 1,//打印完成份数回调
                "onPrintPageLengthCompleted": "38.00",
                "printQuantity": 1//打印完成页数回调
        }
}

//打印进度返回示例1: 此回调的含义为第一页第二份打印完成
{
        "apiName": "commitJob",
        "resultAck": {
                "errorCode": 0,
                "info": "",
                "onPrintEPCCodeCompleted": "",
                "onPrintPageCompleted": 2,//打印完成份数回调
                "onPrintPageLengthCompleted": "38.00",
                "printQuantity": 1//打印完成页数回调
        }
}

//打印进度返回示例1: 此回调的含义为第二页第一份打印完成
{
        "apiName": "commitJob",
        "resultAck": {
                "errorCode": 0,
                "info": "",
                "onPrintEPCCodeCompleted": "",
                "onPrintPageCompleted": 1,//打印完成份数回调
                "onPrintPageLengthCompleted": "38.00",
                "printQuantity": 2//打印完成页数回调
        }
}


// 创建打印实例,此实例只需创建一次
this.nMPrintSocket = new NMPrintSocket(socketData);
//打印数据长度
const printDataLength = 5;
// 调用流程
async commitJob() {
  const jsonObj = {
    printerImageProcessingInfo: {
      printQuantity: 1,
    },
  };

  try {
    this.nMPrintSocket.commitJob(null, JSON.stringify(this.jsonObj));
  } catch (err) {
    console.error(err);
  }

}
```

4.5 结束打印任务

代码块

```
export default class NMPrintSocket {
  /**
   * 结束打印任务
   *
   * @return {Promise} 返回一个 Promise，解析为结束打印任务的结果
   *
   * @description
   * 收到最后一页最后一份打印页面后调用该函数结束打印任务
   */
  endJob()
}
```

代码块

```
//返回数据示例
{
        "apiName": "endJob",
        "resultAck": {
                "errorCode": 0,
                "info": "endJob ok!",
                "result": 0
        }
}
// 创建打印实例,此实例只需创建一次
this.nMPrintSocket = new NMPrintSocket(socketData);
// 调用流程
async endJob() {
  try {
    const endRes = await this.nMPrintSocket.endJob();
    if (endRes.resultAck.errorCode == 0) {
      console.log("结束打印完成");
    }
  } catch (err) {
    console.error(err);
  }
}
```

4.6 取消打印任务

代码块

```
export default class NMPrintSocket {
  /**
   * 取消当前的打印任务，并执行回调函数。
   *
   * @return {Promise} 返回一个 Promise，解析为取消打印任务的结果
   */
  cancelJob()
}
```

代码块

```
// 创建打印实例,此实例只需创建一次
this.nMPrintSocket = new NMPrintSocket(socketData);
// 调用流程
async cancelJob() {
  try {
    const cancelJobRes = await this.nMPrintSocket.cancelJob();
    if (cancelJobRes.resultAck.errorCode == 0) {
      console.log("取消打印成功");
    }
  } catch (err) {
    console.error(err);
  }
}
```

五、回调说明

代码块

```

/**
 * {
 *   "apiName": string, // 调用的 API 名称
 *   "resultAck": {
 *     "errorCode": number, // 错误代码，0 表示成功，其他值表示错误
 *     "info": string, // 信息字符串，描述操作结果
 *     "result": number // 结果代码，通常与 errorCode 一致
 *   }
 * }
 */
{
  "apiName": "commitJob",
  "resultAck": {
    "errorCode": 0,
    "info": "commitJob ok!",
    "result": 0
  }
}
```

六、错误码相关说明

6.1 错误码说明描述

代码块

```
* 0-无错误
//打印机返回部分
* 1-盒子打开
* 2-缺纸
* 3-电量不足
* 4-电池异常
* 5-手动停止
* 6-数据错误
* 7-温度过高
* 8-走纸异常
* 9-正在打印
* 10-未检测到打印头
* 11-环境温度过低
* 12-打印头松动
* 13-未检测到碳带
* 14-不匹配的耗材
* 15-用完的碳带
* 16-不支持的纸张类型
* 17-设置纸张类型失败
* 18-设置打印模式失败
* 19-设置浓度失败
* 20-写入rfid失败
* 21-边距参数错误
* 22-超时错误
* 23-断开连接
* 24-画板参数设置错误
```

```
 * 25-旋转角度参数错误
 * 26-json参数错误
 * 27-出纸异常（关闭上盖检测）
 * 28-检查纸张类型
 * 29-碳带与打印模式不匹配
 * 30-设置浓度不支持
 * 31-不支持的打印模式
 * 32-标签材质设置异常，请重新设置
 * 33-不支持该标签材质，请更换或重新设置
 * 34-不支持RFID写入
 * 50-非法标签
 * 51-非法碳带和标签

//内部使用
//E_UNKNOW_ERROR = 255,
```