SmartVac

Description

SmartVac is an intelligent vacuum control system developed with Qt, used for managing and monitoring the operating status of vacuum equipment.

Software Architecture

This software is developed using the Qt framework and mainly includes the following modules:

- Homepage module: Displays device status and operation interface
- Data curve module: Shows the changing trends of device operation data
- Event alarm query module: Records and queries system events and alarm information
- Parameter calibration module: Used for setting and calibrating device parameters
- System data module: Manages system configuration and data

Installation

1. Launch with Qt Creator (Recommended)

   - Open Qt Creator
   - Select "File" > "Open Project" > "smartVac.pro"
   - Wait for the project to load completely
   - Click "Build" > "Build Project" to compile
   - After compilation, click "Run" to start the application

2. Launch from command line (without Qt Creator)

   - Open Command Prompt
   - Navigate to the project directory: `cd D:\QtProject\smartVac`
   - Create a build directory: `mkdir build-release`
   - Enter the build directory: `cd build-release`
   - Generate Makefile: `qmake "CONFIG+=release" ..\smartVac.pro`
   - Compile the project: `jom` or `nmake`
   - After compilation, the executable file is located at: `build-release elease\smartVac.exe`
   - Use windeployqt tool to deploy dependencies: `windeployqt build-release elease\smartVac.exe`

Instructions

1. After starting the application, the homepage will display the device status and control panel
2. Click the "EN" button in the top-left corner to switch the interface language to English
3. You can access different functional modules through the top navigation bar:

- Data Curve: View the changing trends of device operation data
- Device Image: View device image information
- Event Alarm: Query system events and alarm records
- Parameter Calibration: Set and calibrate device parameters

4. In the settings page, you can adjust system parameters and configurations