

# Hangzhou Tai-Ji Control Software Co., Ltd. Tai-Ji Control

Product Name: Tai-Ji RealDB

Version: 3.1

Release Date: April 2025

Copyright: © 2025 Tai-Ji Control. All rights reserved.

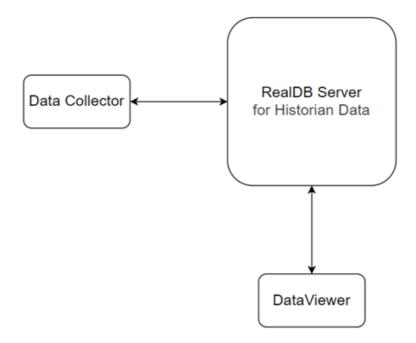
- Tai-Ji RealDB 3.1 User Manual
  - 1. Introduction
  - o 2. Installation
    - 2.1 Obtain the Installation Package
    - 2.2 Obtain Dongle Authorization
    - 2.3 Install Dongle Driver
    - 2.4 Dongle Verification
    - 2.5 Dongle Authorization Update
  - o 3. Starting the Database Service
    - Function Overview
  - 4. Data Collection
    - 4.1 Configure the Connection Between OPCGate and RealDB3 Service
    - 4.2 Data Collection
    - 4.3 Export Configuration
  - 5. DataViewer Client
    - 5.1 Launch the Client
  - 6. Troubleshooting
    - 6.1 How to Confirm if the Database Service is Running

# 1. Introduction

**Tai-Ji RealDB** is a compact, high-performance, general-purpose real-time database service component, designed to solve the problem of real-time data storage in industrial field implementation. Currently, RealDB supports **50,000 points** of real-time data storage, high-speed data access, and distributed operation, providing convenience for field commissioning and customized development.

The database adopts a **client-server (CS) architecture**, where the server handles data storage and compression tasks, while the client provides useful functions such as data collection, trend display, and export.

As shown in the diagram below:



# 2. Installation

# 2.1 Obtain the Installation Package

- 1. Obtain the database installation package (e.g., RealDB3dot1.zip).
- 2. Extract the package to a TaijiControl folder on your computer.
- 3. After extraction, the folder should contain:
  - RealDB server programs (TaiJi RealGoDB Starter, RealGoShell).
  - Client program (DataViewer) for data collection, trend viewing, and export tools.

**Note**: The server folder will also be used to store data files. It is recommended to reserve sufficient disk space.

# 2.2 Obtain Dongle Authorization

Get the dongle authorization from Hangzhou Tai-Ji Control Software Co., Ltd. (Tai-Ji Control).

# 2.3 Install Dongle Driver

- 1. Locate HASPUserSetup.exe in the TaijiControl\Tools folder.
- 2. Double-click to run it and follow the instructions to complete the installation.

# 2.4 Dongle Verification

- 1. Find HASPChecker.zip in the TaijiControl\Tools folder.
- 2. Extract it and run HASPChecker.exe.
- 3. Verify if the dongle is correctly installed and authorized.

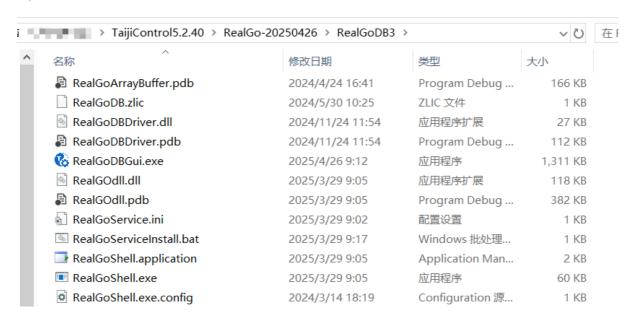
# 2.5 Dongle Authorization Update

1. Locate RUS\_TJC.zip in the TaijiControl\Tools folder.

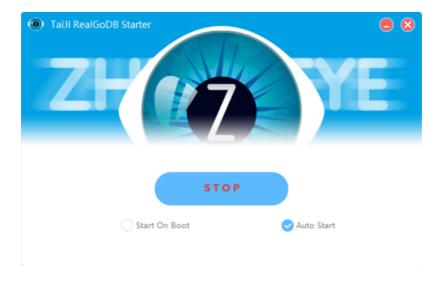
- 2. Extract it and follow the instructions to update authorization.
- 3. Note: Authorization updates require assistance from Tai-Ji Control technical support.

# 3. Starting the Database Service

Open TaijiControl\RealGoDB3\RealGoDBGui.exe.



2. After starting the server program, the following interface will appear:



3. After clicking the minimize button, the database core (Shell) will minimize to the system tray. No further operations are generally needed during runtime.

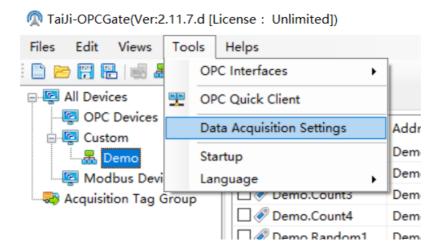
#### **Function Overview**

- **START/STOP Button**: Control the start and stop of the RealDB service.
- Auto Start: Automatically start RealDB service when launching the starter GUI.
- Start On Boot: Enable auto-start on system boot.

# 4. Data Collection

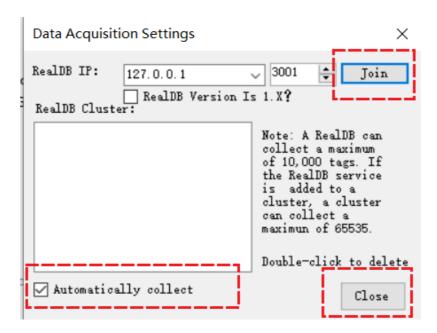
Use Tai-Ji OPCGate for data collection.

- 4.1 Configure the Connection Between OPCGate and RealDB3 Service
  - 1. Click **Tools** -> **Tag Collection Settings** in the menu bar.



### 2. In the dialog box:

- Click Join Cluster.
- Check Automatically Collect from RealDB When Program Starts.
- Click Close.

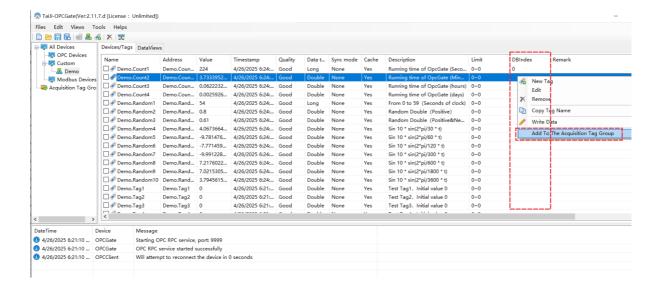


## 4.2 Data Collection

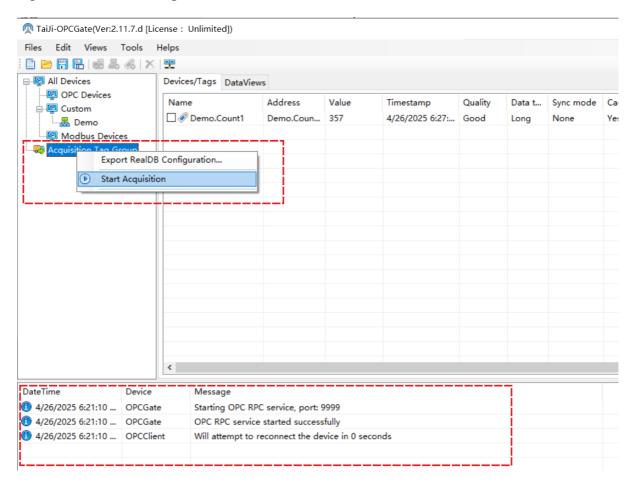
- 1. Locate the tag you want to collect, right-click, and select Add to Collection Tag Set.
- 2. OPCGate will automatically create a RealDB address for the tag (you can also manually modify or import via a CSV file).

**Note**: RealDB address represents the storage location in the database. Please assign addresses reasonably to avoid duplication.

3. Left-click **Collection Tag Set** to view all tags to be collected.



4. Right-click Collection Tag Set and select Start Collection.



5. Check the log to confirm successful collection. If successful, the data is stored in the database.

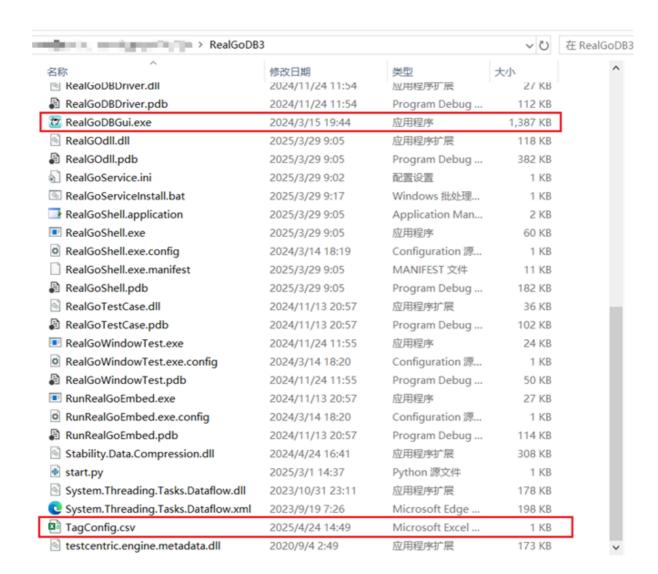
**Tip**: Remember to save the OPCGate project file promptly.

## 4.3 Export Configuration

- 1. Right-click Collection Tag Set and select Export RealDB Configuration.
- 2. Set the export path to the directory where RealGoDBGui.exe is located, and keep the filename as TagConfig.csv.

**Note**: The export path must be the same as the database server directory, and the filename must be TagConfig.csv. You must export again each time you modify the database configuration.

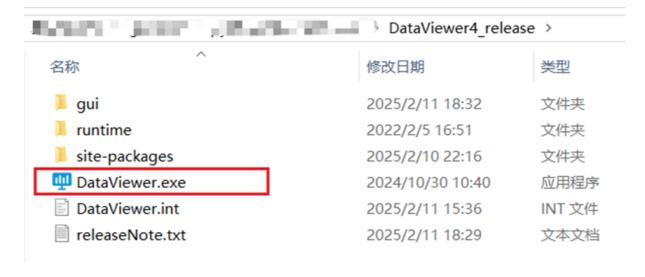
3. After exporting, verify the database server folder as shown below:



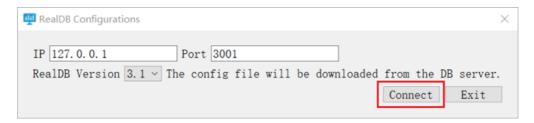
# 5. DataViewer Client

#### 5.1 Launch the Client

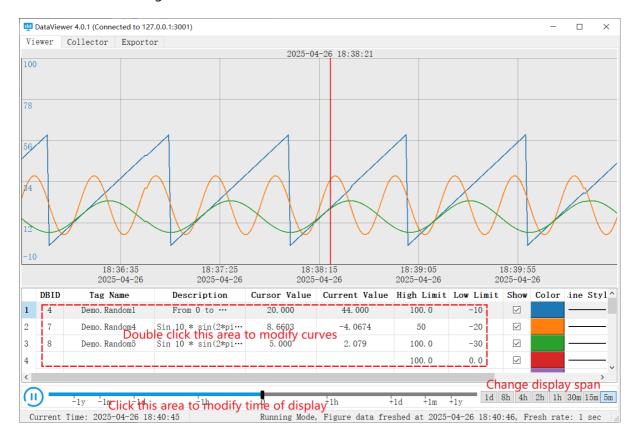
1. Locate the DataViewer.exe client program and double-click to open.



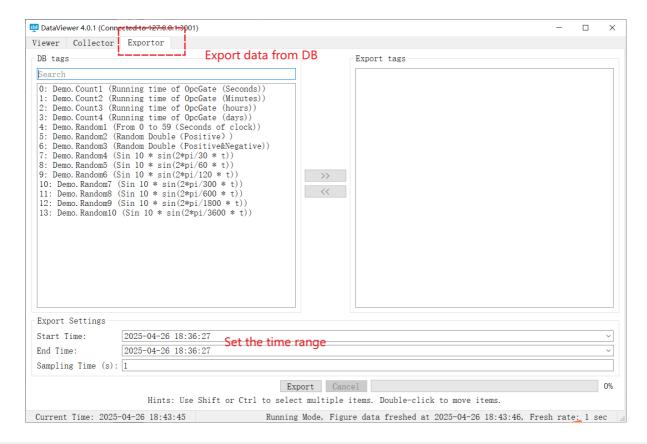
- 2. After opening, click **Connect**.
- 3. If using an older database version, select the corresponding version and configuration file.



4. Enter the trend viewing interface, as shown below:



**Tip**: DataViewer allows multiple instances for browsing different data trends and can be closed at any time.



**Tip**: Users can export data under the **Export** tab.

# 6. Troubleshooting

- 6.1 How to Confirm if the Database Service is Running
  - 1. Open Windows Task Manager.
  - 2. Under the **Details** tab, check for the presence of the RealGoShell.exe process.

