Release notes — Beckhoff ADS Driver for Ignition 8.1

Deutsche Fassung: RELEASE_NOTES.de.md

What changes for you when you install a new version of this module: new features, changed behaviour, what was removed and what was fixed. This includes changes in the ToddySoft Connect ADS driver inside the module. Every item is described in full in the manual (*Version history* and the sections it points to).

1.3.0 — 2026-11-13

Built on ToddySoft Connect 1.3.0.

Before you upgrade

- **Ignition 8.1.33 or later is required** (Java 17). On older 8.1 releases Ignition refuses the install. Upgrade Ignition first.
- **The licence agreement has changed**, so Ignition asks you to accept it again.
- **Date and time tags have new value types.** DATE and DATE_AND_TIME are DateTime values; TIME and LTIME are milliseconds; TIME_OF_DAY and LTIME_OF_DAY are milliseconds since midnight. Check scripts and bindings that use them.
- **The `ethercat` folder appears only when a browse query reaches it.** If you use EtherCAT (AoE) tags, add `ethercat.*` to **Browse Queries**.
- **Write Timeout** now takes effect, with a default of 30 s. A value saved earlier was never applied and is not carried over; set it again if you need another one.

New

- **Triggered groups:** tags read together when a trigger tag changes, instead of at a fixed polling rate.
- **Licence diagnosis on the gateway:** why a device is or is not licensed, with a report to send to support.
- **An expired licence keeps working for its 30-day grace period**, and the gateway names its end date. Until now an expired licence was reported as corrupted and refused at once.
- **Installing or upgrading the module needs no gateway restart** on Ignition 8.1.
- **Single bits by direct address**, for example `0x4020/2.3:BIT`.

- **TwinCAT's long date and time types** (LDATE, LTIME_OF_DAY, LDATE_AND_TIME): these could not be written before.
- **Manual:** activating, renewing and moving the licence, online and offline.

Changed

- **Faster connect.** The driver looks up each PLC variable when it is first used, instead of loading the whole symbol table at every connect. Each browse loads the table for itself.
- **Program downloads and online changes are followed reliably**, also on TwinCAT 2. A variable that moved is read at its new address.
- **Browsing:** an array is one folder holding its elements, an array of structures a folder per element. Existing tags keep their item paths and keep working.
- **The device status is accurate:** *Connected* once reads succeed, and a paused tag group says why it is paused.
- The module's description on the gateway says it is the build for Ignition 8.1.

Fixed

- **Global variable lists (GVL):** first-level variables of a GVL no longer read Bad when one variable is used by two tags.
- **Licence:** a valid licence is no longer reported as *corrupted* after a gateway start, nor when Ignition delivers it while the gateway is running. The licence itself no longer appears in the gateway or audit log.
- **Writes the PLC refuses fail in Ignition**, with the reason as the status. They used to be reported as successful.
- **Tag quality:** a tag not read yet, or whose last read failed, no longer reads 0 with Good quality.
- **BIT members of structures** (for example an axis status structure) read and write the right bits.
- **Arrays:** a selection such as `MAIN.arr[2..4]` or `0x4040/600[0..5]:BYTE` reads exactly those elements.
- **Large and unusual programs browse:** programs with task-specific symbols, large PLC programs (no more request timeout) and TwinCAT 2 arrays without a type description. A variable the driver cannot type is skipped and named in the log instead of stopping the whole device.
- **No more waiting for a missing EtherCAT master** during a browse, and no error logged for it.
- **The PLC no longer runs out of memory after many reconnects.** Closing a connection now removes everything it registered on the PLC.
- **Secure ADS:** a refused TLS handshake names its cause in the gateway log.
- **Password fields are masked** (Keystore Password, Trust Store Password, Pre-Shared Key).
- Removing the last tag of a tag group no longer leaves the device in *Connection Lost*.

- A device no longer fails to start with `NoClassDefFoundError: …/PlcDeviceSetup`.