# KINGSTAR 4.0

## RELEASE NOTES

KS-DOC-X64-0038-R01

IntervalZero

KINGSTAR IntervalZero

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# KINGSTAR 4.0 release notes

## New features

The following new features and improvements are available in this release:

**NOTE:** Reference numbers, [KS–<XXX>], are for internal tracking purposes.

- Add new supported hardware:
  - Servo drives
    - Copley AEV [KS-2176]
    - Ingenia Everest XCR 30/80 [KS-2175]
    - Inovance SV635N [KS-2239]
  - Others
    - NI CompactRIO modules [KS-1525]
    - Sick Flexi Soft FX0-GETC EtherCAT Gateway [KS-2053]
    - Sigmatek modules [KS-2527]
- Add `ExplicitId` in the SlaveStatus structure. An Explicit ID is used to identify the same model of EtherCAT slaves. [KS-527]
- Display the POT/NOT and Resolution object in KINGSTAR ESI Import Tool. [KS-529]
- Support FailSafe over EtherCAT (FSoE). [KS-1754]
- Support multi-packet EtherCAT data. [KS-1755]
- Add multiple master instances. [KS-1831]
- Add Hot Connect. [KS-1838]
- Add Modbus TCP server for PLC. [KS-1885]

- Add `SlotId` in the SlaveStatus structure. A Slot ID is used to identify which slot the device is connected when a modular device, such as an IO-Link device, is used. [KS-2323]

## Updates

- From 4.0, KINGSTAR capabilities vary based on the licenses. See KINGSTAR Runtime components. [KS-1246]
- Tuning Console is renamed Configuration Tool. [KS-1384]
- Change the way the commanded values work to meet PLCopen specifications. [KS-1540]
- Change the way the commanded position values work to meet PLCopen specifications. [KS-1709]
- All the APIs are redesigned. [KS-1839]
- In KINGSTAR ESI Import Tool, add check boxes for latched position objects on the **PDO** tab. [KS-2034]
- `kse64eoe.rtdll` is renamed `KSeoe.rtdll`. [KS-2042]
- Support RTX64 4.0.2. [KS-2472]

## Fixes

- When there are two motion commands and the second command's buffer mode is `mcAborting`, the previous command is aborted and the next command's velocity is applied immediately. However, in some cases, when **MoveAxisContinuousAbsolute** or **MoveAxisContinuousRelative** is the second command, and its buffer mode is `mcAborting`, its velocity doesn't applied to the axis. [KS-1809]
- Spikes exist in velocity and acceleration when a motion command is almost done. [KS-1952]

- When two **`MC_MoveLinearAbsoluteEx`** are used, a discontinuous velocity is detected between these two commands. **`MC_MoveLinearAbsoluteEx`** is renamed **MoveLinearAbsolute** in KINGSTAR 4.0. [KS-2008]
- The axis state is repeatedly set when **`MC_MoveLinearAbsoluteEx`**, **`MC_MoveLinearRelativeEx`**, or **`MC_MoveLinearAdditive`** is almost done. These three functions are renamed **MoveLinearAbsolute**, **MoveLinearRelative**, and **MoveLinearAdditive** in KINGSTAR 4.0. [KS-2011]
- The system time of a distributed clock is not stable. [KS-2014]
- In Configuration Tool, the scope log is too short to show a full move of a position test on the Tune page. [KS-2028]
- When a servo drive's touch probe is used, an RTX64 exception occurs. [KS-2248]
- Configuration Tool cannot be started after a file is imported into KINGSTAR ESI Import Tool. [KS-2351]
- When many commands are queued, the commands at the back of the queue may not be run. [KS-2408]
- Cam functions crash while it is run at a specific velocity. [KS-2497]
- Wrong length with segmented SDO. [KS-2526]
- Modules CoE Init commands are not shown in the ESI import tool or sent by auto-config. [KS-2547]

# Get support

KINGSTAR offers a number of support options for KINGSTAR users, including third-party, online, and phone support.

## Third-party support

If you are a customer who purchased a KINGSTAR product through a third-party reseller, contact the reseller for support.

## Online support

The KINGSTAR Customer Support web page is located at:

http://kingstar.com/support/

The KINGSTAR support web pages provide electronic access to the latest product releases, documentation, and release notes. You can access the online support ticketing system to submit issues or questions.

## Before calling technical support

Please have the following information ready before calling KINGSTAR Technical Support:

### The version number of your RTX64 and KINGSTAR software

To obtain the RTX64 version number:

1. Click Start > **RTX64 4.0 Runtime** > **RTX64 Control Panel**.
2. In the **RTX64 4.0 Control Panel**, record the **Version** shown in the **Installed Runtime components** area.

To obtain the KINGSTAR version number:

1. Click Start > **KINGSTAR 4.0 Runtime** > **KINGSTAR Control Panel**. Or, in the notification area, double-click the KINGSTAR icon.

2. In KINGSTAR Control Panel, click **About**.
3. Record the **Version** shown on the page.

## Phone support

For technical support related to installing and using KINGSTAR, please call technical support at this number:

+886-2-2556-8117

Hours are Monday – Friday from 9:30 to 17:30, UTC+08:00, excluding holidays.