

BECKHOFF New Automation Technology

Manual | EN

TC399x

TwinCAT 3 | Restricted Runtime

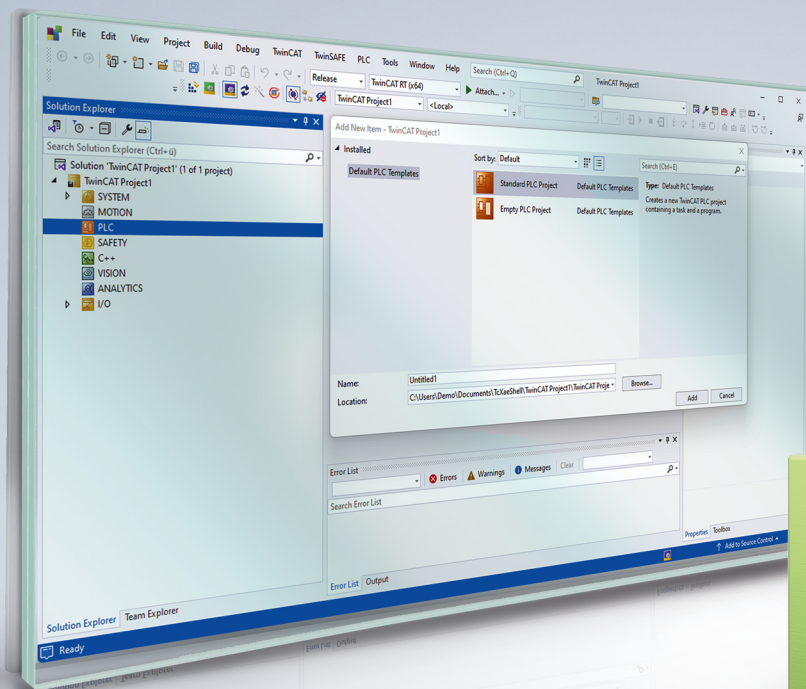


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1 Overview

The TwinCAT 3 Restricted Runtime is a license specifically developed for use over several hours in continuous integration, continuous deployment, and simulation processes. It enables flexible, recurrent use in development and test environments, but is not suitable for live operation.

The scope of delivery includes a defined selection of licenses for TwinCAT 3 products that are specifically tailored to simulation and automation tests without physical I/O systems, such as EtherCAT or other fieldbuses. The basic TC3998-0194 license must be purchased in order to use this product. After the initial purchase of the basic license for the first system, all additional systems can be equipped with TC3999-0194 add-on licenses.

Thanks to an integrated sanction function, the software automatically switches to TwinCAT's configuration mode after 6 hours have elapsed during runtime. This causes all programs to stop running. For this reason, its use on production systems – such as machines – is prohibited. The software can be run for a further 6 hours by restarting it, and restarts can be repeated as often as required.

The software is delivered and licensed exclusively via a TwinCAT USB dongle ([C9900-L100-0033](#)). All the TwinCAT 3 runtime licenses that are included are issued for the highest platform level 94.

Product licenses already included:

- TC1220 | TwinCAT 3 PLC/C++/MATLAB® and Simulink®
- TC1701 | TwinCAT 3 Usermode Runtime: External Control
- TC1702 | TwinCAT 3 Usermode Runtime: Fast As Possible
- TF1420 | TwinCAT 3 Runtime for FMI
- TF2045 | TwinCAT 3 HMI Clients Pack 100
- TF2090 | TwinCAT 3 HMI Targets Pack 100
- TF3500 | TwinCAT 3 Analytics Logger
- TF3520 | TwinCAT 3 Analytics Storage Provider
- TF3550 | TwinCAT 3 Analytics Runtime
- TF3600 | TwinCAT 3 Condition Monitoring
- TF3650 | TwinCAT 3 Power Monitoring
- TF3685 | TwinCAT 3 Weighing Library
- TF3710 | TwinCAT 3 Interface for LabVIEW™
- TF5850 | TwinCAT 3 XTS
- TF5890 | TwinCAT 3 XPlanar
- TF6100 | TwinCAT 3 OPC UA
- TF6250 | TwinCAT 3 Modbus TCP
- TF6310 | TwinCAT 3 TCP/IP
- TF6420 | TwinCAT 3 Database Server
- TF6421 | TwinCAT 3 XML Server

Restrictions

- Use on production systems (physical machines) is not permitted.
- Delivery and use with the TwinCAT USB dongle C9900-L100-0033.
- Runtime: 6 hours; after that, the program stops automatically and switches to TwinCAT configuration mode.
- Physical I/O systems (EtherCAT, other fieldbuses) cannot be used.
- To use an add-on license, you must first purchase a basic license.

⚠ WARNING**Serious bodily injury and property damage caused by a sudden machine shutdown during operation**

If Restricted Runtime licenses are used on machines, TwinCAT automatically switches to Config Mode after 6 hours. This causes the machine to stop suddenly, which can result in damage to the machine, damage to workpieces, and serious injuries.

- Therefore, you may only use Restricted Runtime licenses in virtual environments and not on physical machines.

2 Installation and use

Licenses are delivered and used exclusively via a C9900-L100-0033 TwinCAT USB dongle.

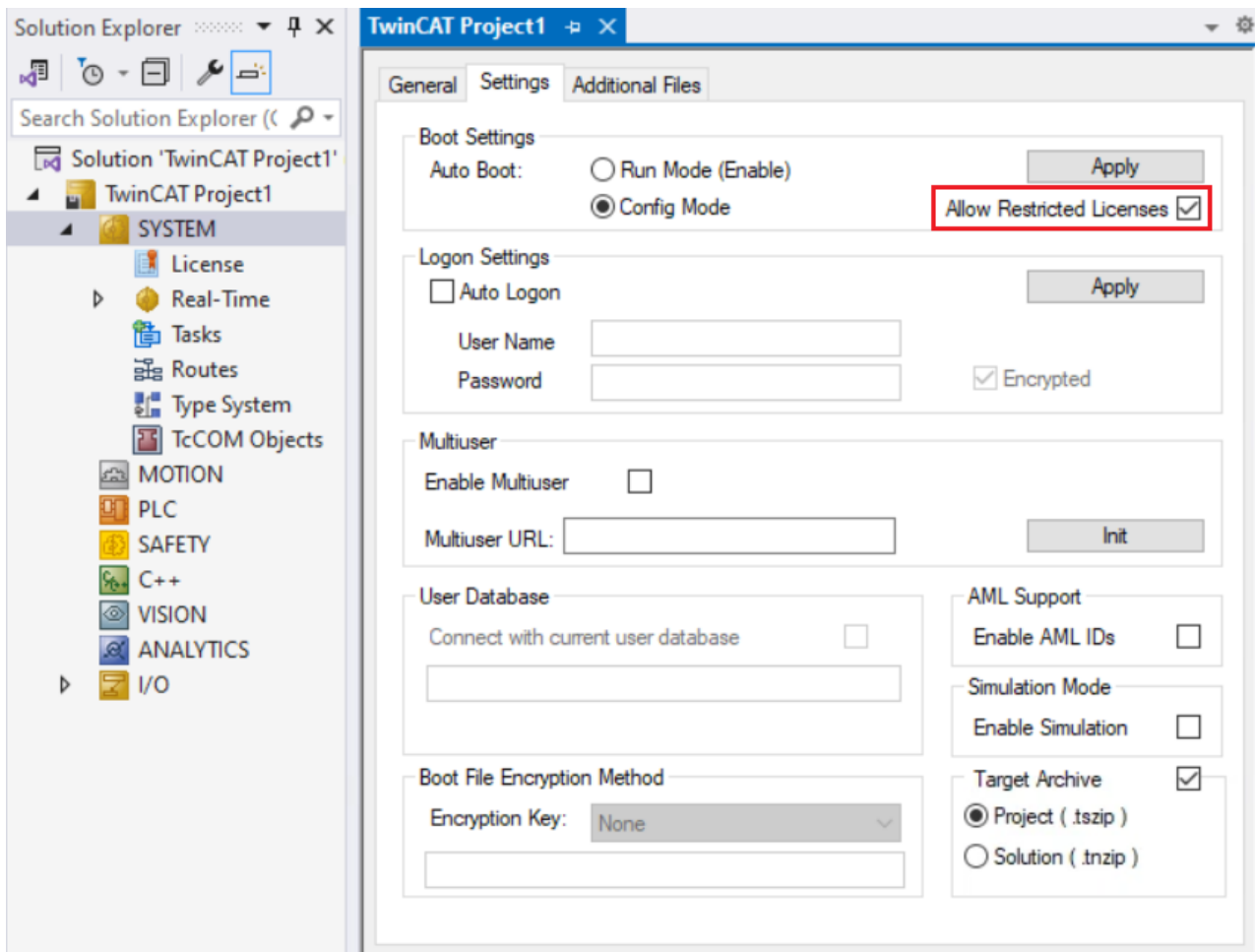
Commissioning and use are governed by the [TwinCAT 3 standard licenses](#).

The TwinCAT license dongle can be loaded with additional TwinCAT 3 standard licenses as required. These licenses are also subject to the 6-hour time limit, as this runtime restriction applies throughout the system.

The Restricted Runtime license is provided in a separate license file as it uses an extended format. Optional additional standard licenses are not included in this file; instead, they are listed in a separate license file.

To use the Restricted Runtime License function, TwinCAT version **4026.26** must be installed at minimum.

The function must be explicitly enabled in TwinCAT 3 Engineering, using the check box in the project's system settings:



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