

EtherCAT Technology Group  
Members

**EtherCAT**  
Technology Group

ETG Headquarters  
Ostendstraße 196  
90482 Nuremberg  
Germany

+49 (0) 911 54056 -20  
info@ethercat.org  
www.ethercat.org/ITW

## 2025 EtherCAT International Technology Week (ITW) AMER | online February 17–21, 2025

January 2025

Dear Sir or Madam,

We are pleased to invite and encourage all developers working on EtherCAT MainDevices, SubDevices, Codes, and Tools to take part in the **EtherCAT International Technology Week (ITW) World Series**. Now in its fourth year, the ITW World Series has become a staple in the annual ETG event calendar.

Throughout the ITW, ETG experts will lead a series of **technical webinars**, offering in-depth development insights and practical guidance on EtherCAT-related topics. These sessions are designed to address common challenges encountered during the implementation, certification, and release of EtherCAT devices. Each webinar will be followed by a dedicated **Q&A session**, providing ample opportunity for you to ask questions and engage with the presenters.

The webinars focus on the implementation and use of the EtherCAT technology. The content is interesting for EtherCAT newbies, as well as for the well-experienced developer. Take advantage of both, new session topics as well as sessions topics which have been addressed last year. Even if you attended those already, since they may address updated features and other aspects this year, they may offer new insights, nevertheless.

Join the **ITW World Series this year** — specifically the **ITW AMER** — which takes place **February 17 to 21, 2025** for ETG members located in North, Central and South America. Explore the details of each session and view the complete session calendar at the following pages.

Please register via the following link for one or multiple webinars, if not all of them:

[www.ethercat.org/itw-AMER](http://www.ethercat.org/itw-AMER)

**Participation is free of charge and limited to ETG members.** Feel free to forward the invitation to your colleagues!

If you have any questions, please contact us.

Best regards,



Dr. Guido Beckmann  
Chairman Technical Committee  
EtherCAT Technology Group



Robert B. Trask  
ETG Representative North America  
EtherCAT Technology Group



Dr. Guido Beckmann



Robert B. Trask

# Webinars

## BASICS MONDAY

Monday, Feb 17, 2025  
11:00 am —12:00 pm (CST)

### How to begin an EtherCAT development – some key points

As straight-forward the functional principle of EtherCAT is, the many implementation options, communication devices (ASICS, SoCs, and more), documentation, and developer events are available. This webinar shows key decisions and development steps, and in which order those may be tackled: It includes basic EtherCAT theory training, parameter selection to choose an EtherCAT SubDevice Controller, possible EtherCAT SubDevice software stacks, organizing the parameter and process data, in-house testing, available test tools, official testing at an EtherCAT Test Center, and more developer events.



Florian Essler

Monday, Feb 17, 2025  
12:30 pm —11:30 pm (CST)

### Navigate EtherCAT information

There are plenty of EtherCAT documents, specifications, and web page information available. In this session we show which information is available. How to read the EtherCAT specification ETG.1000/IEC.61185, how to use ETG.2000 EtherCAT SubDevice Information, how to make use of the EtherCAT Knowledge Base and the EtherCAT Compendium, which valuable and popular events are offered, and how to make contact with the ETG EtherCAT experts world-wide.



Alessandro Figini

## PROFILE TUESDAY

Tuesday, Feb 18, 2025  
11:00 am —12:00 pm (CST)

### Structuring CoE object dictionary using profiles: MDP, DS402, Semi Device Profile

The CoE object dictionary lists all parameters and variables of a SubDevice, and is the interface to the sensor or actuator functionality. Depending on which type of device is developed, different CoE OD structurings, so called device profiles, are beneficial. Those reach from a basic framework (MDP) defining a handful of categories, to a very detailed parameter definitions for drives (DS402), valves (Semi Device Profile), gateways, and others. Profiles are a very helpful concept for both, developers and device users, and this is why they have become very popular on both sides. This is to an extent where basically any EtherCAT device makes use of device profile benefits. And this webinar explains the concepts and advantages. Device profile are well combined with the ESI concepts of Modules and Slots—which are explained in the following webinar.



Florian Essler

Tuesday, Feb 18, 2025  
12:30 pm —11:30 pm (CST)

### Using Modules/Slots in ESI and online CoE object dictionary

The ESI elements Modules and Slots allow to generate a flexible EtherCAT SubDevice description, e.g., for modular servo drives and gateways. This webinar shows how to make correct use of the ESI elements and which online CoE objects are used for Modules/Slots functionality.



Florian Hammel

# Webinars

## SSC WEDNESDAY

Wednesday, Feb 19, 2025  
11:00 am —12:00 pm (CST)

### Slave Stack Code (SSC) Tool: How-to part I

1. Step-by-step from the Idea to the running application (based on the Beckhoff EL9800 hardware)
2. Working with the SSC command line tool
3. Create own SSC Tool configurations: For development service provider, ESC or development board vendor, to distribute own/custom code settings



Rainer Hoffmann

Wednesday, Feb 19, 2025  
12:30 pm —11:30 pm (CST)

### Slave Stack Code (SSC) Tool: How-to part I

1. Update an SSC Tool Project
2. Create own hardware access layer
3. Update an existing application



Rainer Hoffmann

## CTT THURSDAY

Thursday, Feb 20, 2025  
11:00 am —12:00 pm (CST)

### CTT – basic features and how to use it for EtherCAT SubDevice development

This webinar aims to present the basics around the EtherCAT Conformance Test Tool (CTT) and how to use it for EtherCAT SubDevice development. In this presentation we will cover the many helpful functionalities and plugins of the tool, EtherCAT protocol testing as well as long-term testing of different EtherCAT SubDevice configurations, error detection mechanisms, and analysis of the test results.



Gregor Erzen

Thursday, Feb 20, 2025  
12:30 pm —11:30 pm (CST)

### CTT – advanced features (incl. remote control interface, configuration, and more)

This webinar shows advanced CTT configuration and testing of complex EtherCAT SubDevices. We will also explain how automated testing via the CTT remote control interface can be done. The scripting via PowerShell™ allows to start the CTT remotely, load different configurations, execute tests, and save results for internal test documentations.



Oliver Horst

# Webinars

## SUPER FRIDAY

Friday, Feb 21, 2025  
11:00 am —12:00 pm (CST)

### Official EtherCAT Conformance Test: Certificate benefits and organisational steps

The official EtherCAT Conformance Test at an EtherCAT Test Center (ETC) has many advantages and is highly recommended, even though it is optional. This webinar explains the importance of EtherCAT Conformance Tested certificates for machine builders and device vendors. It shows the process to obtain a certificate and gives practical hints and tips for successful conformance testing of EtherCAT SubDevices.



Gregor Erzen

Friday, Feb 21, 2025  
12:30 pm —11:30 pm (CST)

### EtherCAT analysis with Wireshark

As complement to the standard diagnostic features provided by EtherCAT both at hardware and software level, the Wireshark tool is frequently used to analyze the EtherCAT communication and troubleshoot complex issues at low level. Wireshark includes by default a packet dissector enabling to display and filter individual fields of EtherCAT datagrams. This webinar intends to show, through a series of practical examples, how different features of Wireshark can be used in order to approach different concrete scenarios in the analysis of EtherCAT communication.



Alessandro Figini

## COMPLETE SESSION CALENDAR

Please find an overview of all webinar sessions available for the 2025 EtherCAT ITW AMER below and for download: [https://www.ethercat.org/download/2025\\_EtherCAT\\_ITW\\_AMER\\_SessionTable.pdf](https://www.ethercat.org/download/2025_EtherCAT_ITW_AMER_SessionTable.pdf)

CST	PST	MONDAY Feb 17, 2025	TUESDAY Feb 18, 2025	WEDNESDAY Feb 19, 2025	THURSDAY Feb 20, 2025	FRIDAY Feb 21, 2025
10:30 am	08:30 am	Kick-off				
11:00 am	09:00 am	How to begin an EtherCAT development — some key points	Structuring CoE object dictionary using profiles: MDP, DS402, Semi Device Profile	SSC tool: How-to part I	CTT — basic features and how to use it for EtherCAT slave development	Official EtherCAT Conformance Test: Certificate benefits and organisational steps
12:00 pm	10:00 am	Q&A	Q&A	Q&A	Q&A	Q&A
12:30 pm	10:30 am	Navigate EtherCAT information	Using Modules/Slots in ESI and online CoE object dictionary	SSC tool: How-to part II	CTT — advanced features, incl. remote control interface, configuration, and more	EtherCAT analysis with Wireshark
01:30 pm	11:30 am	Q&A	Q&A	Q&A	Q&A	Q&A
02:00 pm	12:00 pm					Wrap-up

## Registration & More

Registration deadline: February 14, 2025

### ONLINE REGISTRATION

Register early for the full event via the link

[www.ethercat.org/itw-AMER](http://www.ethercat.org/itw-AMER)

and attend as many webinars and Q&A sessions as you want.

The registration deadline is **Friday, February 14, 2025**.

Feel free to forward the invitation to your interested colleagues!

Prerequisite for attending is a valid ETG membership.

[Click here](#) to become a member.

### ONLINE PLATFORM

[GoToWebinar](#)™ will be used as webinar software.



### ONLINE REGISTRATION CONFIRMATION AND REMINDER

Each registration has to be approved by ETG HQ, thus the login information may be provided with a small delay after your registration. Once you receive the login information, please be aware that this is **personal** and must **not** be shared inside nor outside your organization.

You will be notified one day before and one hour before each webinar day via email from GoToWebinar.

### SPEAKER INTRODUCTION

Besides the content, one highlight of the EtherCAT International Technology Week is the speakers who prepare and conduct the details of the individual presentations and are available to answer participants' questions in the Q&A sessions.

Participants can look forward to the know-how and knowledge transfer of some of the world's most experienced EtherCAT experts. You will find the EtherCAT experts and much more at the **EtherCAT International Technology Week (ITW) World Series** landing page:

[www.ethercat.org/ITW](http://www.ethercat.org/ITW)