Do you know why coding guidelines for C language are needed and required by the safety-related and cybersecurity standards?

Do you know how to effectively and efficiently adopt and comply with the MISRA C, for new or existing code?

DE0801 Software implementation in C, in accordance with MISRA C:2023 coding guidelines

Currently, ISO 26262 does not provide requirements on how to reuse (qualify) pre-existing complex software elements.
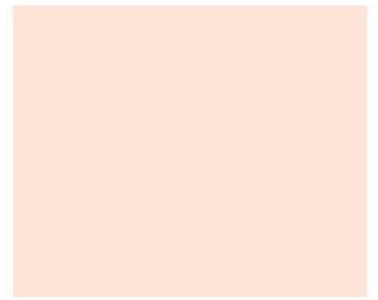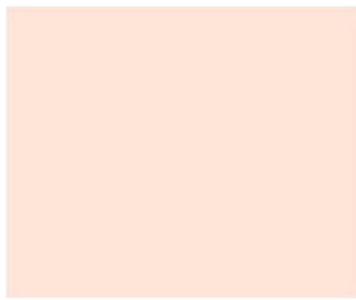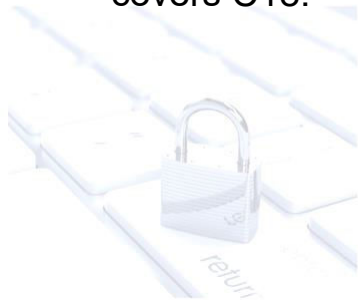
This training introduces the MISRA C coding guidelines and MISRA C key concepts.

It focuses on the implementation of reliable non-safety-related, safety-related, and security-related software.

The learning success, understanding of C-language-specific problems, and solutions to them are supported by examples, exercises, and interactive quizzes during the training sessions.

The training also includes the exida recommendations for adopting MISRA C in your software development process.

The training also covers the latest version of MISRA C:2023, which in turn covers C18.

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Agenda and Content

- Background to MISRA C coding guidelines

  - What's MISRA C and why do we need it
  - Short MISRA C coding guidelines history

- Overview of the MISRA C coding guidelines

  - Guidelines classifications, categories, decidability.
  - Guidelines format

- Overview of the MISRA C directives and rules

  - document walk-through – presentation of various examples
  - exercises

- Overview of the MISRA C rules

- Introduction to the Essential Type concept

- Overview of security-related guidelines

  - Overview of MISRA C Amendments and Addendums
  - Overview of C Secure coding guidelines
  - Overview of CERT C coding guidelines

- Overview of MISRA C updates for C11, C18

- Adopting MISRA C in the software development process

  - Compliance with ISO 26262 and IEC 61508 and other safety standards
  - Process activities
  - Tools management, configuration, and validation
  - Deviation procedure
  - exida recommendations

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Who should attend?

- Software Development Engineers that implement software in C and/or are responsible for the deployment of coding guidelines
- Software Architects

Duration: 2 days à 4 hours (1 day à 8 hours if requested)

Language: English

The training material will be in English.

Location: online

Certificate: Each participant gets a letter of attendance.
After the end of the training, there is a possibility to take the exam including certificate.

For more information, please contact:

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