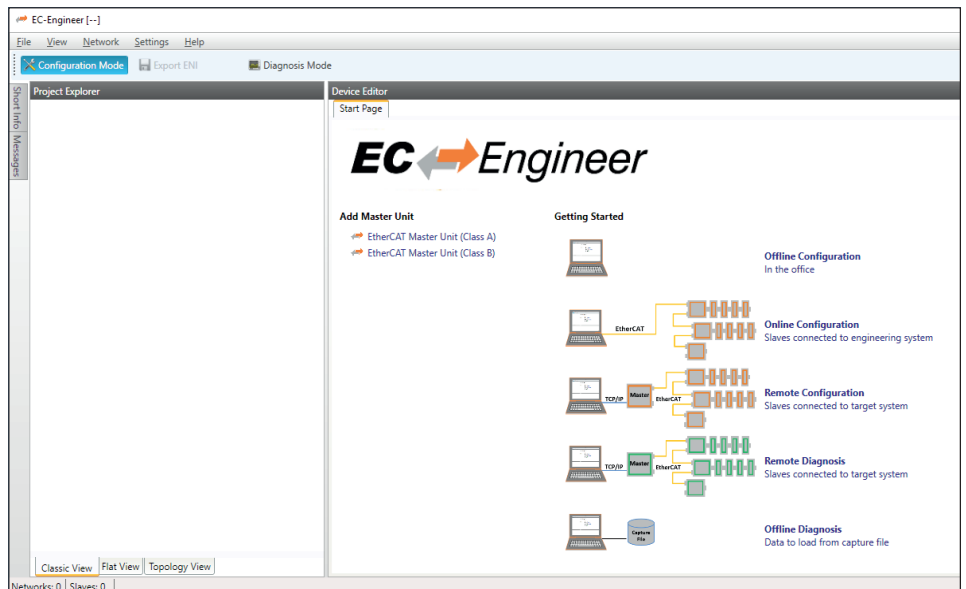


# EtherCAT® Configuration and Diagnosis Tool

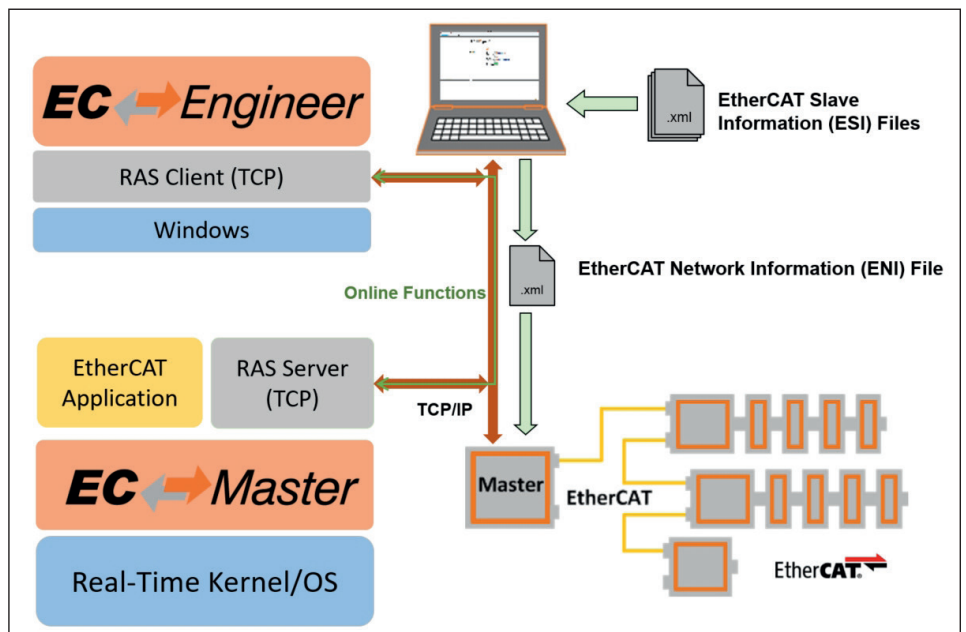
## EC-Engineer

The EC-Engineer is a powerful software tool used for configuration and diagnosis of EtherCAT® networks. Using this single tool one can handle all required engineering and diagnosis tasks in a quick and comfortable way. The modern, clear and very intuitive user interface is crucial for a smooth experience in configuring and diagnosis of customer's EtherCAT® networks.



## Online or Offline Configuration

The configuration can be done “offline” in the lab/office or “online” when connected with the real EtherCAT® network on the machine. It doesn't matter whether the EtherCAT® slaves are connected with the local Windows® PC where the EC-Engineer is running or with the control system where the control application's master stack is running. In either case the slaves and the network topology can easily be determined using the “Bus-Scan” feature. In case the slaves are connected with the Windows® PC, the integrated Windows® EtherCAT® Master is able to run and verify the system. If the slaves are connected with the control system, the master stack running on the controller will take over communication and provide all services and information to the EC-Engineer which is needed for diagnosis.



## Key benefits

- Easy to use, modern design
- Build an configuration in less steps
- Basic and expert settings
- Available options can be restricted to those features which the control system supports
- Pinned process data offsets
- Powerful online functions
- Scan connected slaves
- Compare configured and connected slaves
- Access to states, variables, registers, objects dictionary, etc.
- ENI export conforming to ETG.2100
- CSV export for process data variable layout
- Supports ESI files (ETG.2000)

# EtherCAT® Configuration and Diagnosis Tool

## Modern Design

The graphical user interface of the EC-Engineer is optimized to have a high level of usability. The user can adjust the look and feel by choosing his preferred theme and language. All users from simple technician till advanced engineers can use the EC-Engineer intuitively. The common use cases are immediately exposed at the start page, like building a simple offline configuration, an online configuration by scanning the connected network, a remote configuration or a remote diagnosis of the connected target system.

Browsing through the connected slaves is possible by means of the project explorer that presents all slaves as an icon-based tree for quick access while configuring or diagnosing the bus.

## Pinned process data offsets

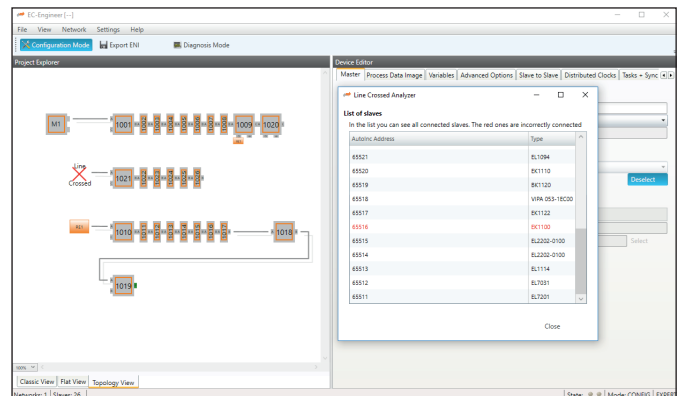
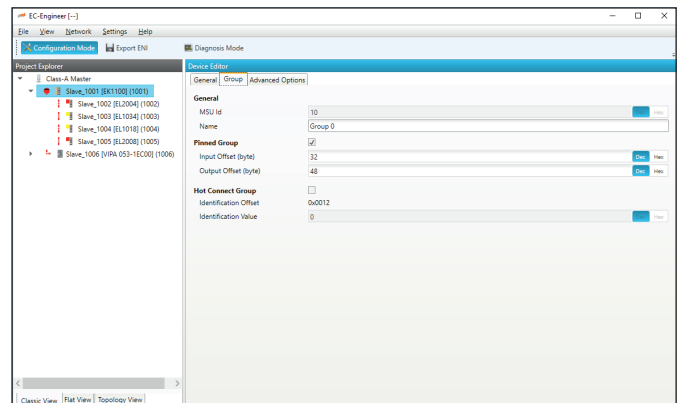
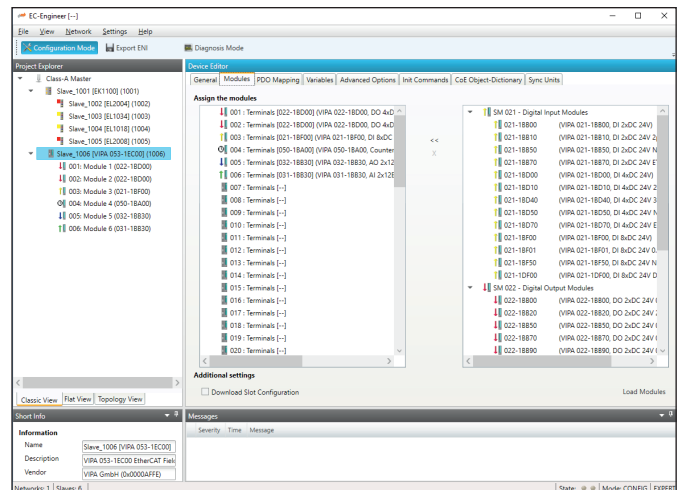
A unique feature of the EC-Engineer is the ability to set an arbitrary fixed process data memory layout for a single slave or a group of slaves. It is possible to set the address of a slave to the desired fixed location in the process data area. This address then will not be changed in case any other slaves are added or removed. The desired memory location can be set to different values for input and output data. In this way the configured process data of slaves can easily be re-arranged without the need to reflect the configuration change within the application.

## Powerful Diagnosis

The EC-Engineer is a sophisticated tool for diagnosis as well. Using a TCP/IP connection with the EtherCAT® Master both, master and slaves can be explored. Display of the system status and the process data content as well as more complex functions like reading the object dictionary or downloading new slave firmware are available then. A special view is provided for analysis of erroneous or incomplete EtherCAT® bus start-up. The chart view seamlessly tracks input variables so changes to inputs are visible on the fly.

## EC-Engineer Software Development Kit (SDK)

Using the available SDK all, or some, EC-Engineer features can be integrated into other engineering applications. Also brand labeling and customer specific enhancements can be achieved. All EC-Engineer business logic modules are available on Windows® and Linux. The user interface layers are based on the Microsoft® WPF Technology.



## acontis technologies – EtherCAT® Products and Services

As a services company we offer both, the product as well as support and development services. Get your benefit using our knowledge on many different embedded operating systems as well as in implementing high-performance networking solutions.

Many market leading companies rely on our EtherCAT® expertise to get optimum and competitive solutions.

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