bachmann.
SolutionCenter

Device Manager

As part of the SolutionCenter the Device Manager is the integrated tool for configuration and commissioning of all Bachmann automation devices. The entire M200 control system, the terminals of the OT series, but also standard-compliant fieldbus nodes from third-party manufacturers are supported by this tool. Due to its offline engineering ability, implementation can start before the hardware is available. Switching between offline and online configuration in both directions is not only possible for the complete control system but also for the exchange and archiving of individual hardware and software modules, as well as for complex fieldbus configurations.

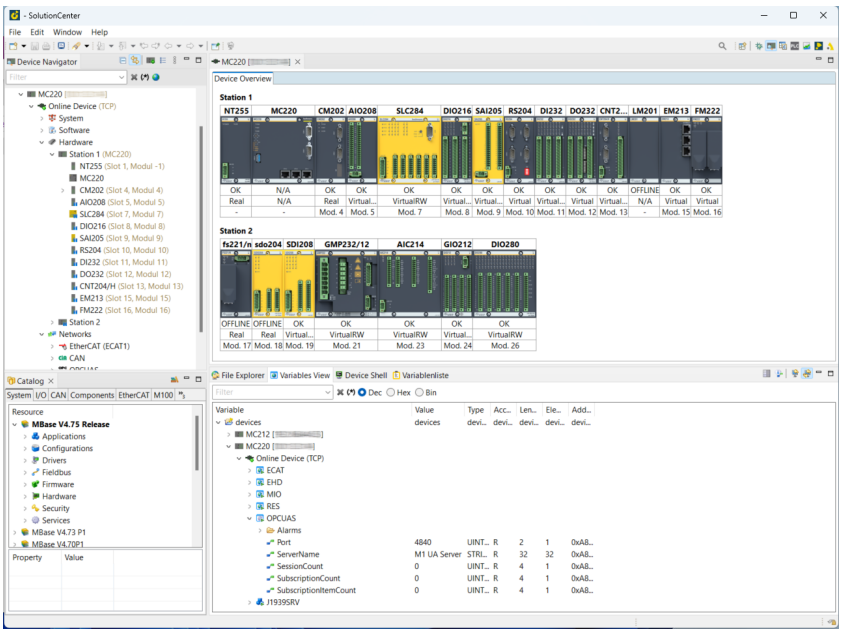
The working area is consistently divided into configurator and monitor areas for all topics. The configurator shows the saved target state which will be used at the next time the system is booted. The monitor shows the current state and allows for manual adjustment of values and settings.

The representation of the modules corresponds to the arrangement in reality. The tree view displays network connections via proprietary and standardized bus systems. I/O modules can be clearly identified and directly controlled via the graphic representation. Thus, the wiring test can start immediately after switching on the system.

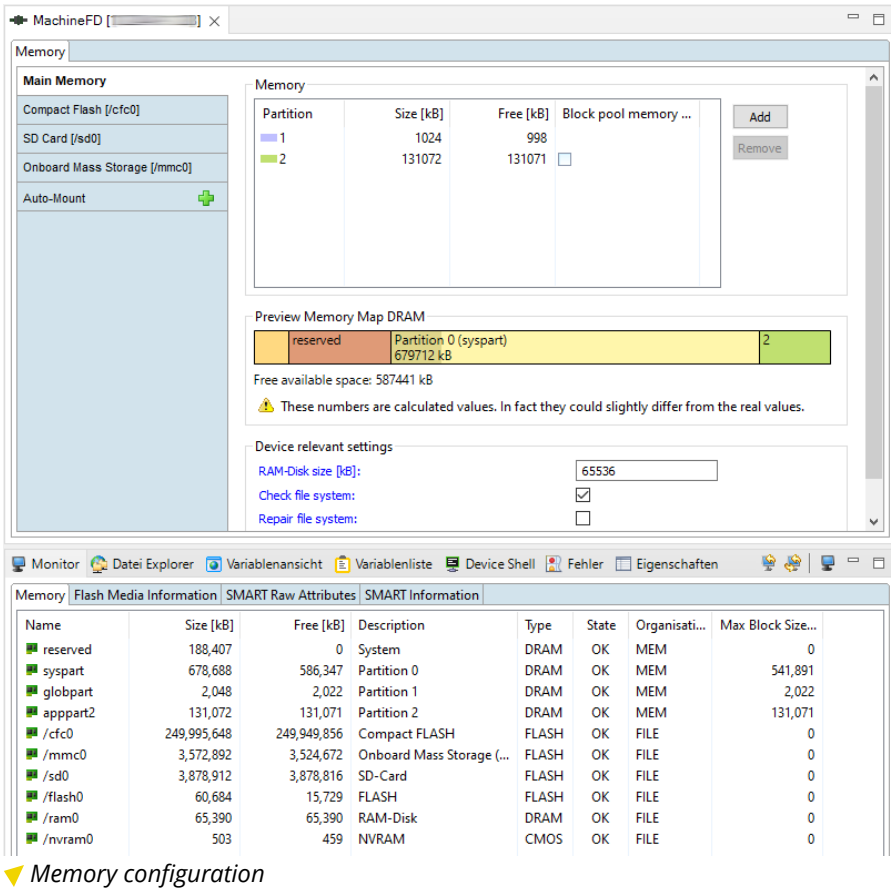
Additionally, the runtime software for real-time control is managed via the Device Manager. Bachmann system packages are summarized in a catalog. The update of the entire software is carried out comfortably by an assistant, that guides through the process. In addition to the supplied system packages, users can create their own, machine-specific packages to manage and transfer them to other PCs. This ensures consistent and unambiguous software versions on all systems and service PCs.

A separate view displays all relevant variables of all involved controllers. The search for values is facilitated by an automatic full-text search. A selection of task-related relevant values can be compiled, saved and reloaded in another window. A trend display can show the time course of values graphically.

- One interface for all Bachmann devices
- Managing devices
- Backup of existing devices
- Offline configuration of entire control systems or individual hardware modules / software modules
- Offline- and Online-configuration of fieldbuses (CAN, PROFINET RT und IRT, PROFIBUS DP, EtherCAT)
- Same way of working for online and offline devices
- Consistent concept: monitor (actual state) and configurator (target state)
- Graphic representation of the I/O modules
- Configuration and diagnostics in one tool
- Managing software in factory catalog and in custom catalogs
- Flexible combination of functional window areas (perspectives)



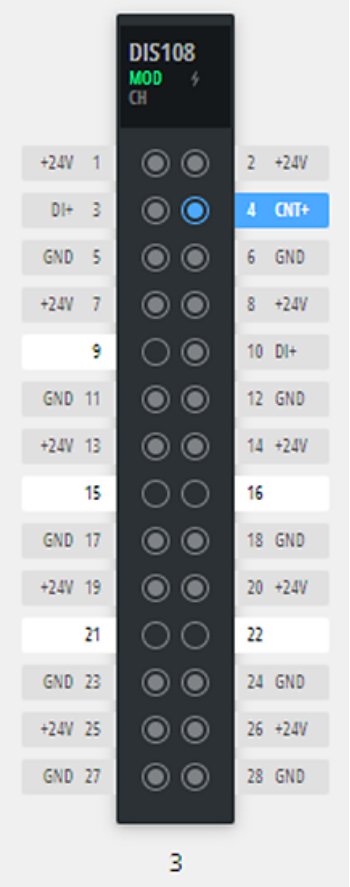
Station overview in the Device Manager perspective



Memory configuration

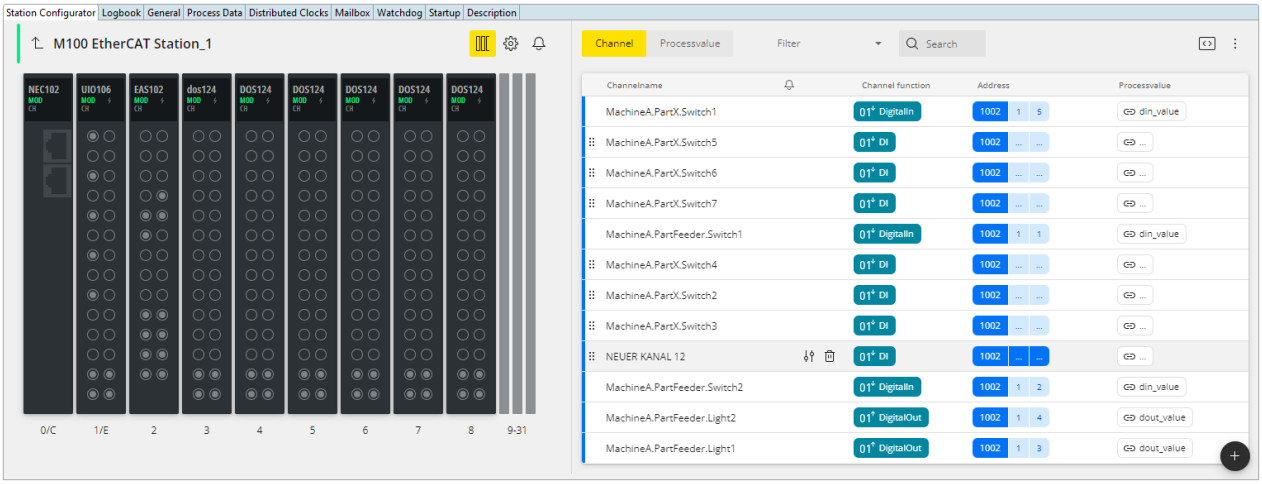
M100 I/O Device Manager

The M100 I/O system allows for decentralized signal acquisition via remote I/O-interface modules on fieldbus SubDevices. The configuration of these stations is part of the respective fieldbus management. A comfortable graphical user interface allows for the definition of module interactions within the station structure as well as settings for the I/O modules or individual channels. All tools and views are integrated directly into the SolutionCenter and do not require the installation of additional tools.



The user decides for himself whether he starts with the system configuration of fieldbus nodes, modules and channels or starts with an imported signal list and later distributes it to the physical interfaces. The sensor-dependent setting of the standard signal type is specified here as well as application-specific sampling rates, synchronization or cut-off frequencies of the digital filters. So that the M100 I/O not only has a single piece of process information (e.g. switching state) of the application available per channel, but also several derived process variables of the same channel (e.g. period duration → velocity) are formed internally by the modules, this selection of the process image is also responsible to the M100 I/O device management.

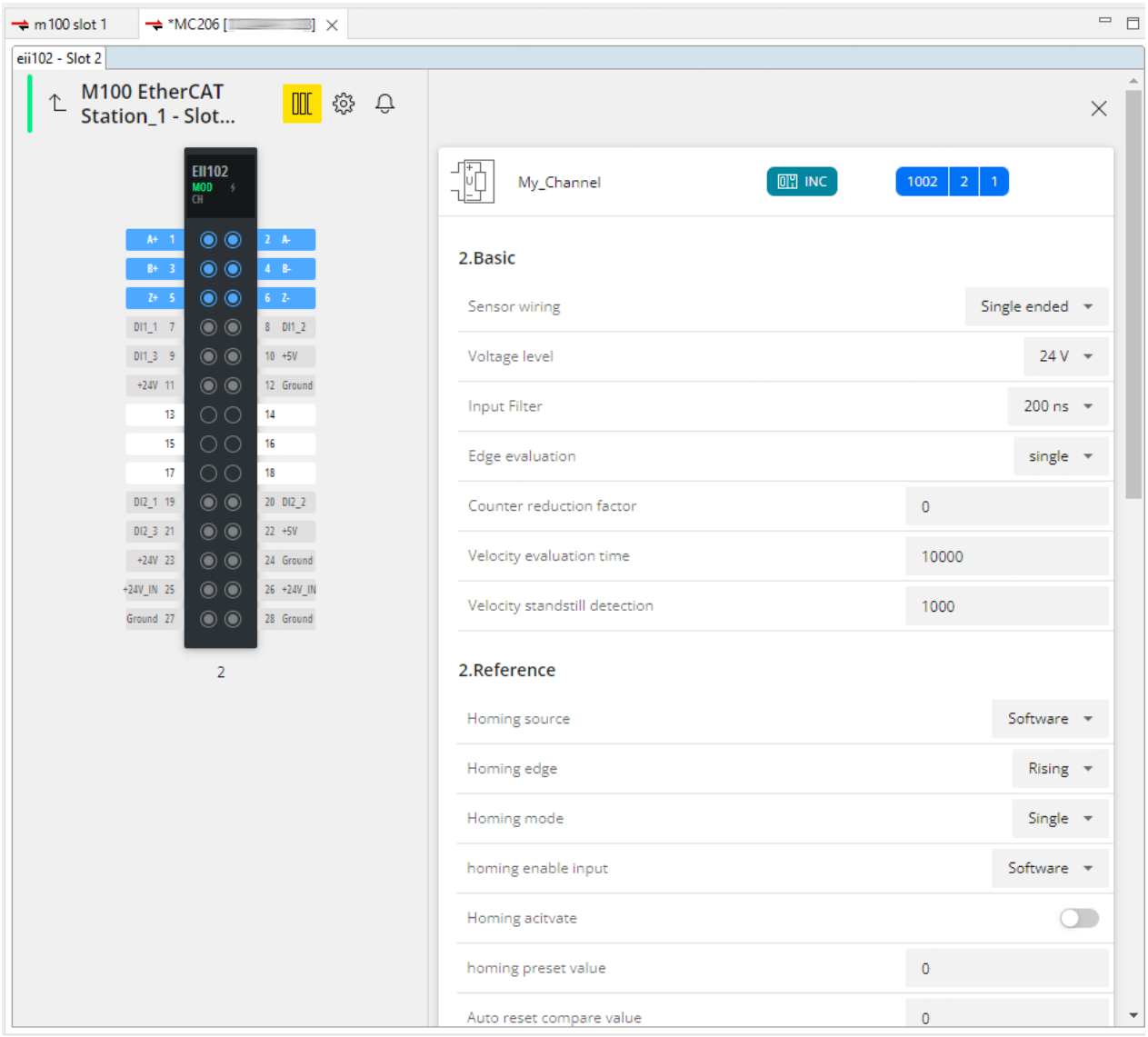
Simplified graphic views of the module arrangement and the channels guide the user and always provide orientation and feedback. The signal statuses, measured values and error messages from online stations and modules are displayed directly on the user interface and make remote maintenance activities considerably easier. The integrated monitor function also enables the active setting of outputs for commissioning and testing.



Simplified graphic views of the module arrangement and the channels

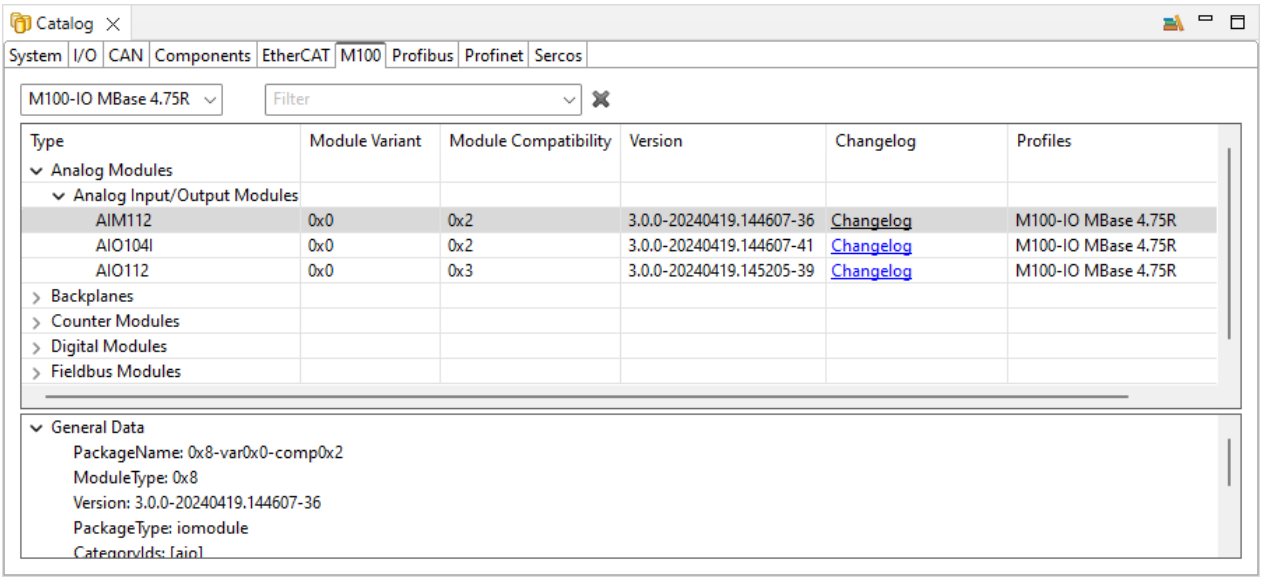
In addition to the hardware-free, i.e. purely PC-based, preliminary engineering with components from the parts catalog, an existing fieldbus can also be read out and its station network used as a starting point for further engineering. Each process variable allows a symbolic name to be assigned for the application programming, which makes it easier to understand and the software can be completely separated from the actual I/O mapping. Alternatively, the IEC 61131-3 addressing (e.g. %IX7.3) can still be used.

The process variables of the M100 I/O stations are made available to the processor modules of the controller (M200 family) via the proven UFB mechanism (Unified Fieldbus Model) or SVI. The well-known monitor and debug functions of the SolutionCenter are used to monitor the variables.



Module display with setting options in the SolutionCenter

- M100 I/O configuration integrated with M200 engineering in the SolutionCenter
- Clear and application-optimized graphical user interface
- Light/dark theme switching for optimal working conditions
- Signal list import/export and signal-centric engineering
- Automated assignment of channel list names to module channels and functions
- Complete offline configuration with no existing devices
- Reading out the existing topology and configuration of existing buses
- Live view of signals and error messages
- Setting outputs for commissioning and testing
- Station import/export for restoring and saving complex configurations
- Module catalog with online update and changelog
- Station/device report and order list



Module catalog with online update and changelog