Jetter
automation

JetSym

Programming in high-level language STX to IEC-61131-3

We automate your success.

JetSym – The tool

JetSym is the central programming tool from Jetter AG, which combines all the automation technology functions. From programming the control system to commissioning entire systems, everything can be realized with JetSym.

All included: Configuration | Programming | Debugging | Oscilloscope function | Commissioning | Diagnostics and versioning
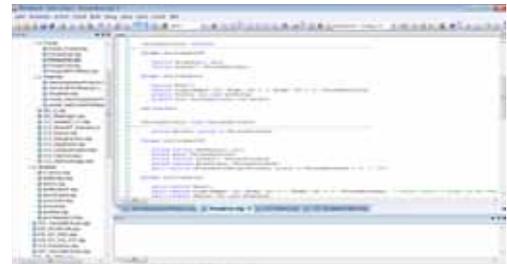
- High-level language to IEC-61131-3 (ST)
- Multitasking
- Object-oriented
- One language for PLC functions, axis movements, data and file management, and much more
- Clearly laid out and powerful commissioning interface
- Tool tip display
- Easy-to-use hardware manager
- Support for command entry through IntelliSense

- Incorporation of external files: e.g., MS Word | MS Excel
- Interface to versioning tools
- Oscilloscope function
- Transparent access to all system parameters in real time
- Convenient debugger with a host of functions
- Data export to the visualization tool JetViewSoft
- Simple axis handling through Motion-API

STX – The programming language

With STX, Jetter AG has developed a language that meets all the demands of modern automation technology. Its syntax is based on IEC 61131-3 ST. With this process-oriented language, the real processes of a system can be directly mapped and described. High-performance commands for arithmetical calculations, axis handling, operator interaction and strings make programming of controllers much easier.

The seamless integration of Motion Control significantly reduces programming expenditure for complex tasks.

With STX, even complex axis motions, e.g., a movement of several axes in space, is astonishingly easily with just a single program command. Thus it is possible to create and test programs for complex machinery in the shortest time imaginable.

Because of the process- and object-oriented procedures, entry into this technology is very easy.
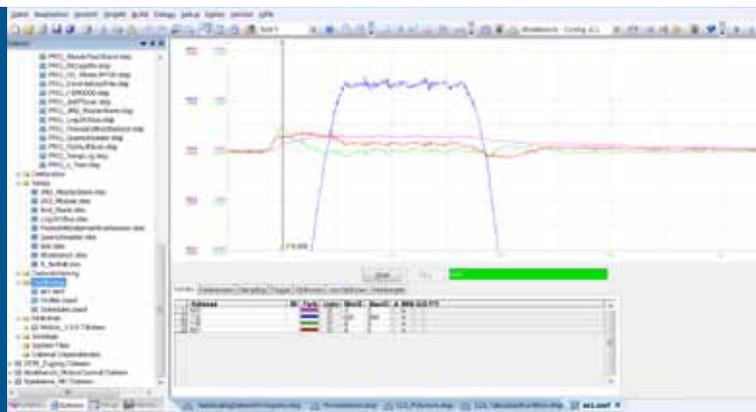
Oscilloscope mode is an integral feature of JetSym. The parameters and scaling are freely selectable; data can be saved in CSV format.

The principle of object orientation
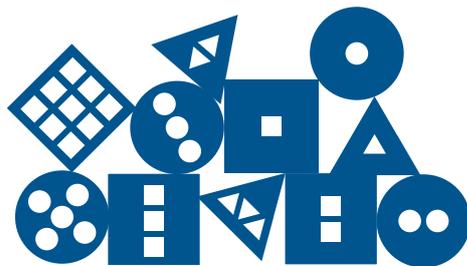
Imperative programming

The programs are formulated as successive commands. The commands change the values saved in the variables as the program is executed, so the calculation results can be determined.
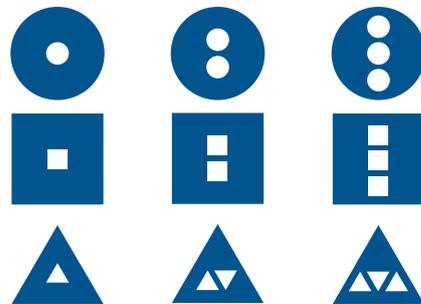
Object-oriented programming

The programs are divided into units (objects). Each object has a state which is described by properties (object attributes). Only the functions available in the object itself (methods) can manipulate this data and thus change the state.

The object-oriented approach of STX means unequivocal advantages. With it, tried and tested routines can be encapsulated so that neither the code nor the essential data can be changed.

In addition, classes can also take over data structures and methods of other classes and extend them. Precisely this basic principle of the object-oriented programming is highly interesting for automation technology: Here, the programmer can map shared object properties through a base class and therewith define derived classes for the different manifestations of the object. The use of these program elements is especially efficient.

ST✗ – Can do more

STX has been extended beyond the standard to include many important elements that are indispensable in modern automation. These include object orientation, which is integrated into STX to a very high degree. Many further indispensable functions can be mapped with simple and common commands:

- Positioning
- Path control
- Task management
- File operations on the file system of the control system
- Word processing
- Data processing in complex structures
- User-programmable TCP/IP network access
- Email dispatch from the controller
- Exception handling
- and much more

The motion setup offers direct access to the parameters of a JetMove; there are one online and one offline parameter set.

STX uses a multitasking operating system

The multitasking operating system of STX manages up to 100 tasks, which are themselves fully autonomous. These tasks can be processed cyclically as well event- or process-oriented. This corresponds to the natural depiction of the various processes of a system. Each of these tasks can be assigned its own priority.

Test JetSym today

Convince yourself. For further information and the demo version, please visit www.jetter.de.
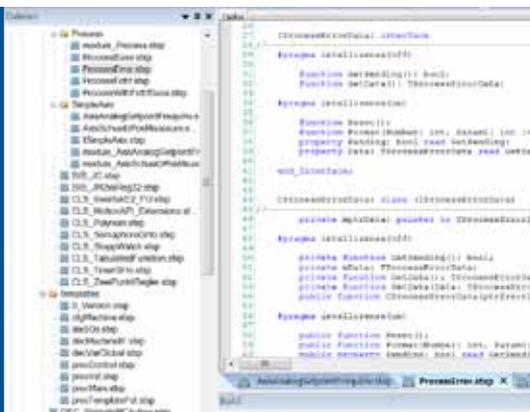
By means of the program INTELLISENSE(OFF), support of the writing function (IntelliSense) can be switched on and off.
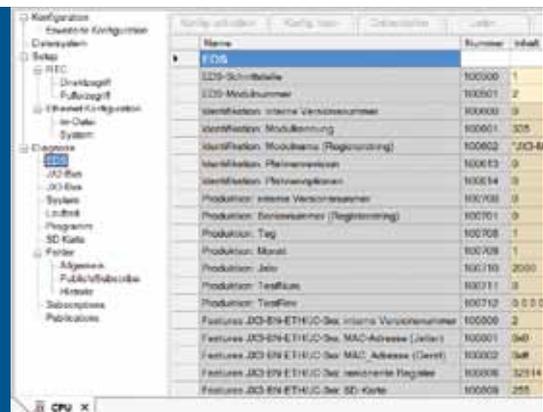
Access to the EDS (Electronic Data Sheet) of the connected JX3 module of a JetControl 3xx.

Jetter
automation

We automate your success.