



Unity

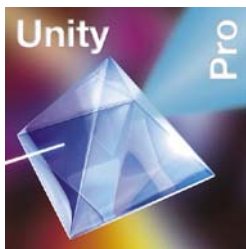
Come with us into the new world of Telemecanique automation.

Schneider Electric has drawn on its expertise to develop Unity, an entirely redesigned range of automation software based on openness and collaboration between software at every stage of the application life cycle. Used with the new Premium, Atrium and Quantum PLC processors, Unity has created a new approach to software development and operation of automation systems, which puts your productivity first.

Schneider Electric is at the leading edge of new technologies applied to the world of automation, and is committed, through Unity, to supplying the best open standards from the worlds of software and communication.

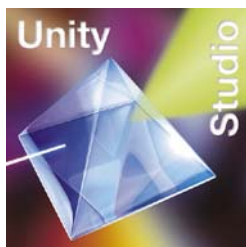
With Unity and Transparent Ready, Schneider truly takes you into a new world of automation: Collaborative Automation.

A simple yet specialized software range



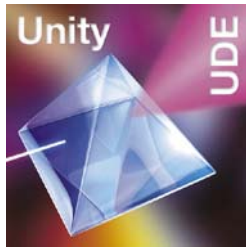
Unity Pro has become the common programming, debugging and operating software for the Premium, Atrium and Quantum PLC ranges. It offers the freedom to choose the best solution for your application and the benefit of total portability between Telemecanique PLCs.

Unity Pro takes the standards set by PL7 and Concept software and opens the door to a complete range of new functions for greater productivity and openness to other software solutions. Thanks to the built-in converters in Unity Pro, PL7 and Concept IEC61131-3 standards and applications are automatically converted. Software investment is optimized, training costs are reduced, and you benefit from an unrivalled potential for development.

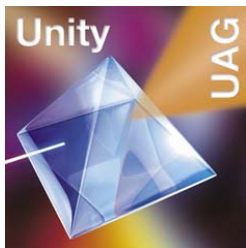


With engineering teams in mind, Schneider Electric has created **Unity Studio** as a tool for project management of Collaborative Control applications. A true software suite incorporating Unity Pro, PowerSuite for drives and motor starters, XBT-L1000 for user interfaces, and OFS for real-time communication, Unity Studio offers application experts an engineering platform, easily customizable and which enables to apply free methodology of project development (Top-Down or Bottom-Up).

Using Microsoft's graphic editor Visio to graphically describe the process to be automated and the topology of the architecture, Unity Studio helps you to increase speed and consistency for synchronization of applications on Ethernet.



Unity Developer's Edition (UDE) includes additional specialist software for IT development engineers in VBA, VB or C++. It provides access to all Unity Pro and Unity Studio object servers. It can be used to develop made-to-order solutions such as the creation of interfaces with an electrical CAD system, a variables generator or PLC programs.



For process applications **Unity Application Generator (UAG)** is the design and generation tool providing PLC / HMI integration. UAG enables plant design based on reusable standard objects (valve, PID, motor...) compliant with the ISA S88 standard. UAG generates the PLC application code (Unity & Concept projects) and feeds the HMI system, providing a "single database entry" integration.

UAG's structured design approach, modularity and reusable object libraries allow Users, System Integrators and OEMs to achieve a very significant reduction in time and cost in the design, commissioning and validation phases of automation projects.

More powerful PLC processors in terms of memory and execution time

Performance is not an end in itself. It is simply essential for optimum productivity and availability of the installation.

With Unity, Telemecanique Modicon **Premium, Atrium and Quantum** PLCs have significantly increased memory capacities for programs, data (7 MB flash memory) and trace files (8 MB PCMCIA card).

The new PLC processors offer the best performance levels on the market for program execution, regardless of which IEC61131-3 language is used. By distributing processing according to priority levels, the Unity multitasking system further optimizes the performance of the application.

With an onboard Ethernet TCP/IP link, web server and high-speed USB port (12 Mbps) on new Premium and Quantum PLC processors, Unity simplifies and optimizes the integration of PLCs into a company's communication architecture.

All the existing peripherals – I/O, application-specific modules, communication modules and field buses – as well as system and application diagnostics functions are provided by Unity Pro.





A redesigned architecture, new functions for greater collaboration between tools, and greater productivity over the life cycle of the application

- > XML, the W3C universal standard for Internet data exchange, has been adopted as the source format for Unity applications: variables, programs, I/O, configurations, etc.
- > By simple import / export, all or part of the application can be exchanged with other applications used in the project.
- > Unity hyperlinks can be used to link documents (electrical wiring diagrams, maintenance records...) and tools (external configurator, etc.) directly to the PLC application. This provides a single, consistent point of access to all project resources.
- > Unity's open client/server architecture provides local or remote access to all software resources by means of VBA, VB or C++ COM/DCOM interfaces, e.g. for automation of repetitive tasks (data entry, configuration, translation, etc.).
- > Unity uses Microsoft Visio as a graphic editor at a project level. As well as the control system objects provided by Schneider Electric (PLCs, variable speed drives, terminals, networks, etc.), thousands of specialized application-specific objects (mechanical, electrical, P&ID process, HVAC, etc.) are available. Customized objects can be added by configuration, with no need for any programming.
- > Stored in libraries on the local PC or remote server, Unity Pro functional components (data, code, module) and their properties can be used and shared by all programs. Programs are automatically updated if a library object is modified.
- > Independent symbolic memory variables make re-use and adaptations very easy to manage.
- > The 5 IEC61131-3 languages (LD, ST, SFC, IL, FBD) are supported as standard in Unity Pro with powerful graphic editors and all debugging functions, on the PLC simulator on PC or directly on line with the PLC.
- > Using graphic libraries, Unity Pro operator screens can be configured by the user in the PLC application. Operator access is simple and direct. Debugging and maintenance are simplified by the use of animated graphic objects.
- > Diagnostics are immediate with the display window in Unity Pro, which provides a clear display in chronological order (date-stamped at source) of all system and application faults. The navigation function for tracing the cause of a fault allows you to return to the source of the missing conditions.
- > The log of operator actions on Unity Pro software is archived in a standard Windows file. The file is secured to protect the data recorded there. Events are date-stamped with clear identification of those responsible and the actions performed.
- > Unity Pro also includes the latest Windows XP and 2000 user interface standards: optimum graphic interface, considerable scope for customization, context-sensitive online help, data entry wizard, etc.