

Three PC Control Solutions using Think & Do

1 **Studio**

Powered by **Visio**

Think & Do Studio

- PC-ENT-SDD-USB <---> Studio Development/run-time license
- Runtime licenses
- PC-ENT-SDR-USB <---> Studio Runtime License
- PC-ENT-SRN-USB <---> Remote Screen Node

Includes:

- Advanced Visio graphics
- Flowchart logic
- Superior HMI features
- Easy SQL interface
- Linked flowchart libraries
- Remote screen development
- Importing screens
- Project Sync, multi-user development environment support
- Integrated serial communication
- Modbus TCP, Modbus RTU and Modbus Plus support
- Integrated motion control
- Integrated vision control
- PID process control (64 loops)
- Powerful debugging tools
- Offline logic testing
- Common database for HMI, logic and motion
- Productivity analysis tools
- WinPLC support
- Supports Windows 2000 and XP

Choose Studio when you need:

1. to communicate to a SQL database
2. a superior HMI with animation and advanced Visio graphics
3. multiple developers on same projects or sharing flowcharts on many projects

System requirements:

Recommended:
 Microsoft Visio 2002
 Windows NT, 2000 or XP (Vista not yet supported)
 700+MHz PIII CPU, 256 MB RAM, 32 MB VRAM, 625 MB(NT)/2.56 GB (W2K) UDMA/SCSI HDD [560MB (additional 180 MB during install) for Studio & Visio, not including OS]
Minimum:
 128 MB RAM, 4 MB VRAM

2 **Live!**

Completely compatible with original Think&Do Development Software applications

Think & Do Live!

- PC-ENT-LIVE <---> Development/run-time license
- PC-WPLC-LIVE <---> WinPLC programming pack (HMI creator and external I/O drivers not incl.)

Includes:

- Flowchart logic
- HMI creator
- Reuseable subcharts
- Integrated serial communication
- Integrated motion control
- OPC Client and Server
- Modbus TCP & Modbus RTU Support
- PID process control (64 loops)
- Powerful debugging tools
- Offline logic testing
- Common database for HMI, logic and motion
- Productivity Analysis tools
- WinPLC support
- Supports Windows 2000 and XP

Choose Live! when:

- 1) HMI requirements are moderate
- 2) No SQL is required
- 3) Projects are created by a single developer
- 4) Costs must be minimal

System requirements:

Recommended:
 Microsoft Visio 2002
 Windows NT, 2000 or XP (Vista not yet supported)
 Pentium 133 MHz CPU, 2 MB VRAM, 64 MB (32 MB min with NT) RAM, 500 MB(NT)/2.31 GB (W2K) UDMA/SCSI HDD [300 MB (additional 130MB during install) for Live!, not including OS]

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The WinPLC is our lowest cost PC control solution

The WinPLC, a hybrid PC/PLC solution

The WinPLC is a truly unique hybrid solution providing Think & Do PC control programming benefits on a PLC-style device. Develop applications with either Think & Do Studio or Think & Do Live! and download them to the WinPLC.

Use a WinPLC when you need:

1. The advantages of PC control: complex math, data manipulation and connectivity
2. A PLC's rugged industrial form, non-volatile memory and standard PLC I/O

Or when:

1. A standard OI will suffice for your HMI
2. You don't need a full power or priced PC

WinPLC CPU Modules

For both Think & Do Studio and Think & Do Live!

WPLC	Memory	Price
H2-WPLC2-EN	4 MB ROM/2 MB RAM	<---> (100MHz)
H2-WPLC3-EN	8 MB ROM/8 MB RAM	<---> (100MHz)

Think & Do Live! for WinPLC Programming Pack (PC-WPLC-LIVE)

This package gives you just the programming features needed for the WinPLC at a low price. Includes flowchart logic, reusable subcharts, PID functions, serial drivers, Modbus TCP/IP and a free OPC/DDE server.

Think & Do DataPak (PC-ENT-DAP) <--->

Think & Do Data Acquisition Pack toolkit enables programmers to create applications that acquire real-time data from a runtime system. Interfaces include OPC, DDE, and VB/C++ programming control. For the WinPLC (or other CE-based platform), this kit allows monitoring, starting/stopping a station, and up/downloading existing project files. No runtime licenses required. The PC-ENT-DAP is compatible with all versions of Think & Do Studio, Think & Do Live!, and Think & Do version 5.2 or later. See <http://www.phoenixcon.com/software> for more details.

PLC Overview

DL05/06 PLC

DL105 PLC

DL205 PLC

DL305 PLC

DL405 PLC

Field I/O

Software

C-more HMIs

Other HMI

AC Drives

Motors

Steppers/Servos

Motor Controls

Proximity Sensors

Photo Sensors

Limit Switches

Encoders

Current Sensors

Pushbuttons/Lights

Process

Relays/Timers

Comm.

TB's & Wiring

Power

Circuit Protection

Enclosures

Appendix

Part Index

Think & Do Live! Overview



For control, HMI, motion, PID, and serial communications

Chances are you think your application out in flowcharts, so why not use them to program the control logic? Think & Do Live! is completely compatible with original Think & Do Development Software applications.

Think & Do Live! (PC-ENT-LIVE) is a full-featured control and Human Machine Interface (HMI) development tool. A common tag database and built-in HMI make Live! a great low cost PC-based control solution. Live! contains these features:

Flowcharts for control

- Easy-to-use and easy-to-read flowcharts for control let you program like your machine or process operates, rather than one device at a time
- Subcharts (subroutine flowcharts) let you develop your logic once and reuse it on multiple projects
- Online changes are supported with graphical debugging to simplify troubleshooting your application
- Develop for Windows 2000, Windows XP and Windows CE platforms in the same environment

Built-in HMI with same database

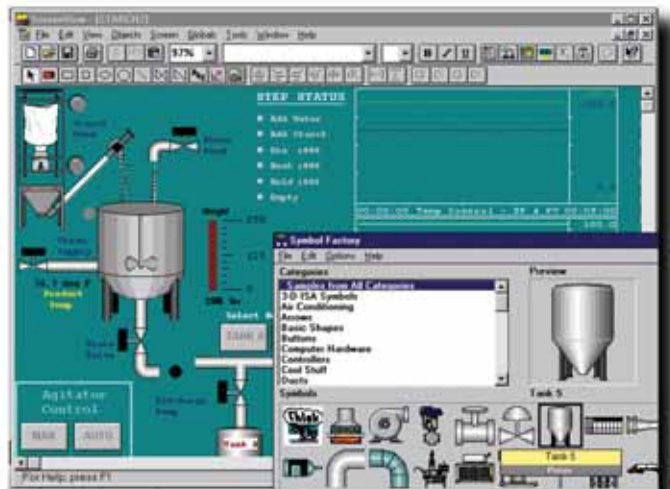
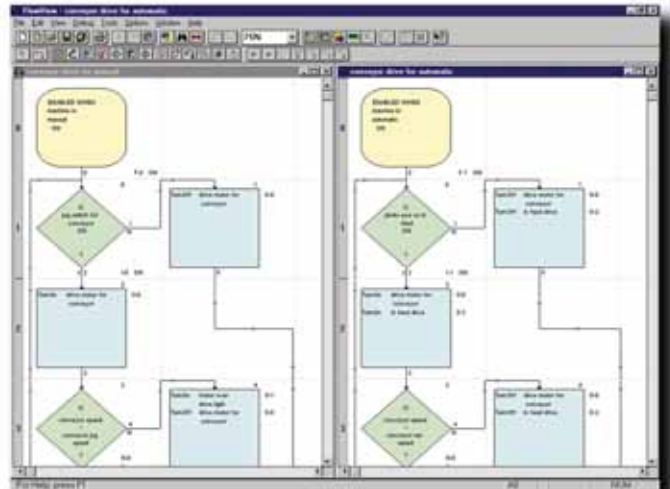
- Full screen editor with over 2,000 bitmapped graphic symbols, such as buttons, lights, pumps, motors, conveyors, and tanks
- Single database for HMI and control functions means there are no communication errors
- Text, numeric display, messaging, and trend charts
- Import any bit map or metafile format graphics to display CAD drawings, company logos, or digital photographs
- Function key and touch screen support to give you flexibility in design

Communicate to business systems

- OPC (OLE for process control) support allows easy connectivity to other standard software applications at host and ERP levels
- DCOM/COM for communications to other programs or for network communications
- OCX allows direct connections to Visual Basic® and C++ user programs
- Easy serial communication and string manipulation

Choose Live! when:

- HMI requirements are moderate
- Hardware costs must be kept low
- SQL communications are not required



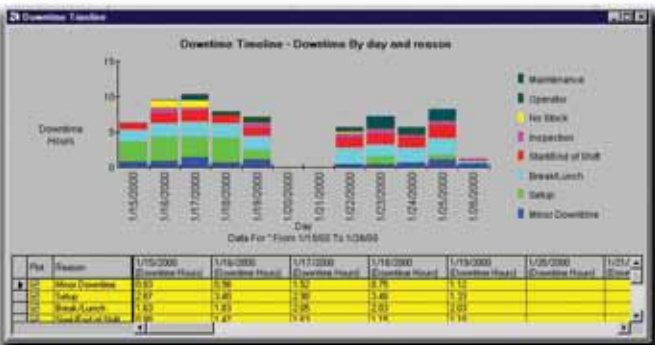
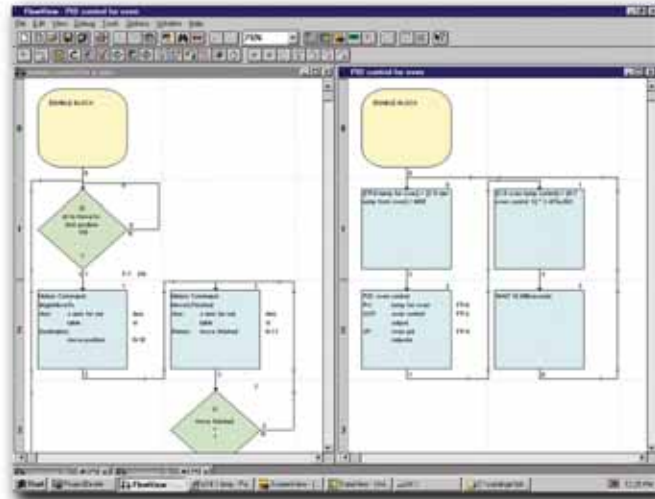
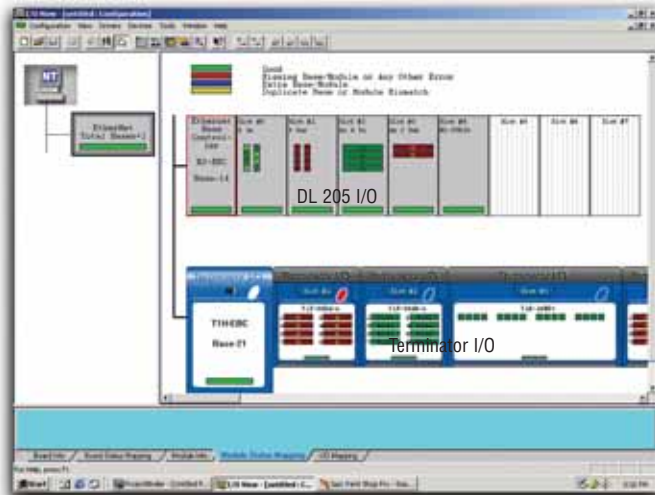
System requirements

- Windows NT, 2000 or XP (Vista is not supported)
- Pentium 133 MHz CPU or better
- 64 MB RAM
- 260 MB HDD (not including OS)

Think & Do Live! Overview



Lots of features for a little price



Think & Do Live! Development & Runtime Licenses

PC-ENT-LIVE <--->
Includes one Live! development and runtime license. Use to develop or modify a Think & Do Live! project on a PC.

PC-ENT-LIVE-E <--->
Live! Development/Runtime License with 1-year ESS (Extended Service Subscription)

ESS-ENT-LIVE <--->
Live! Development/Runtime 1-year ESS (Extended Service Subscription) only

Note: This subscription cannot be purchased online. Call us at (800)633-0405 to order. New keycode will be issued. Valid software serial number required at time of purchase.

UPG-ENT-LIVE <--->
Live! Development/Runtime upgrade to most current version

PC-WPLC-LIVE <--->
Live! programming pack for DL205 WinPLC CPUs. Includes one development license without HMI.

PC-WPLC-LIVE-UPG <--->
Upgrades from PC-WPLC-LIVE to the full PC-ENT-LIVE Development/Runtime package adds HMI capability

Easy connection to I/O and serial devices

- All I/O drivers are included, with virtually no limit on I/O tags including Ethernet, Profibus, DeviceNet and SDS
- Built-in serial communication block within the flowchart environment allows easy communication to barcode readers, drives, and other smart devices
- All motion drivers are included for both serial and PC-card based motion

Integrated motion and PID control with easy-to-use flowchart blocks

- Common flowchart language for motion control independent of the motion card you choose
- All motion parameters accessible to flowcharts and screens
- Several motion drivers supported; check the Phoenix Contact Web site for the latest list
- Easy to synchronize motion and control with your flowchart logic
- 64 full function PID loops
- Advanced PID functions like cascaded loops, bumpless transfer, anti-windup and wildflow variables allow you to perform complex process control applications

Productivity analysis tools

- Downtime analysis — monitor machine downtime by reason codes to identify production bottlenecks
- Cycletime analysis — View machine cycle time by hour, shift or operator to enable you to increase machine and production yield
- Capacity analysis — compare production yield versus maximum capacity to determine maintenance schedules, identify supply problems, or to justify new equipment purchases

Also includes

Powerful debugging and offline logic testing tools

Check out:

www.phoenixcon.com/software for full details

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