



Digitized Automation for a Changing World

DIAStudio **Smart Machine Suite**

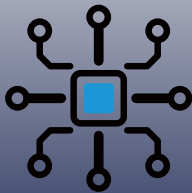
DIASudio Smart Machine Suite

Save Time. Bring Convenience to Your Design.

The increasingly complex applications in industrial manufacturing demand higher requirements for automation technology regarding performance, functionality and efficiency. Delta has developed the **DIAS**udio Smart Machine Suite to fulfill these market requirements.

The **DIAS**udio is an integrated and unified engineering platform that helps you to efficiently develop machinery systems by selecting appropriate products, programming, and export. Machine makers can develop an integrated control system using one software. The **DIAS**udio integrates IEC61131-3 programming, parameter configuration, machine tuning, and human machine interface (HMI) settings as a unified engineering platform for Delta's PLCs, HMIs, servo drives & motors, and AC motor drives. It simplifies programming processes, saving time and cost for machine makers in building machinery systems.

Digitalized Platform



Standardized Engineering



Efficiency Flexibility

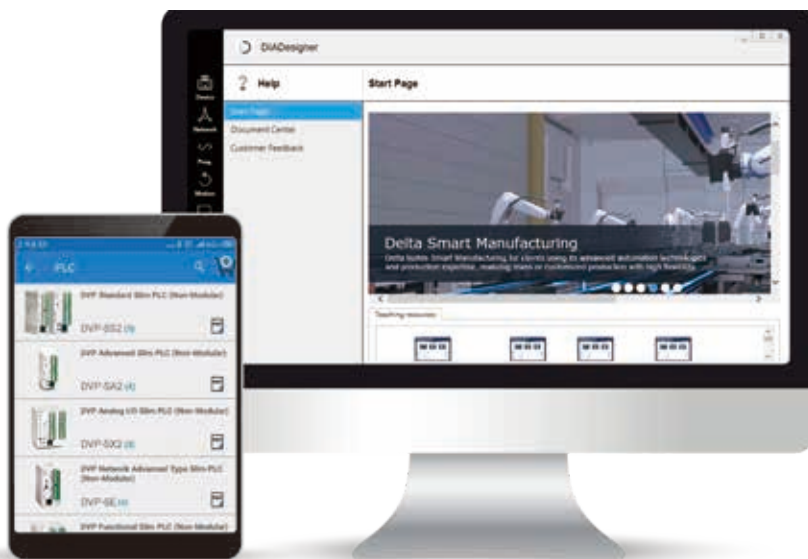


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What is DIAStudio?

DIAStudio Smart Machine Suite



An **all-in-one integrated engineering platform** for

- Efficient machinery system development*
- Product selection*
- Programming*
- Configuration*
- Commissioning*
- Visualization*

Simplifies the execution of tasks and reduces system setup and configuration time

DIASelector

Quick, easy and smart selection tool



- Product Selection

DIADesigner

Integrated development & engineering software



- Programming
- Configuration
- Commissioning

DIADesigner-AX

Motion development & engineering software



- Programming
- Configuration
- Commissioning

DIAScreen

Intuitive visualization software

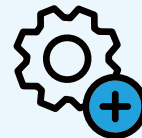


- HMI Programming
- DIADesigner TAG Sharing

Commissioning Features



Parameter Editor



Gain Tuning



Motion Control Setting



Oscilloscope



Device Setting Wizard



Status Monitoring

What is DIAStudio?

DIADesigner (Development & Engineering) + DIAScreen (Visualization) System

■ DIADesigner supports:

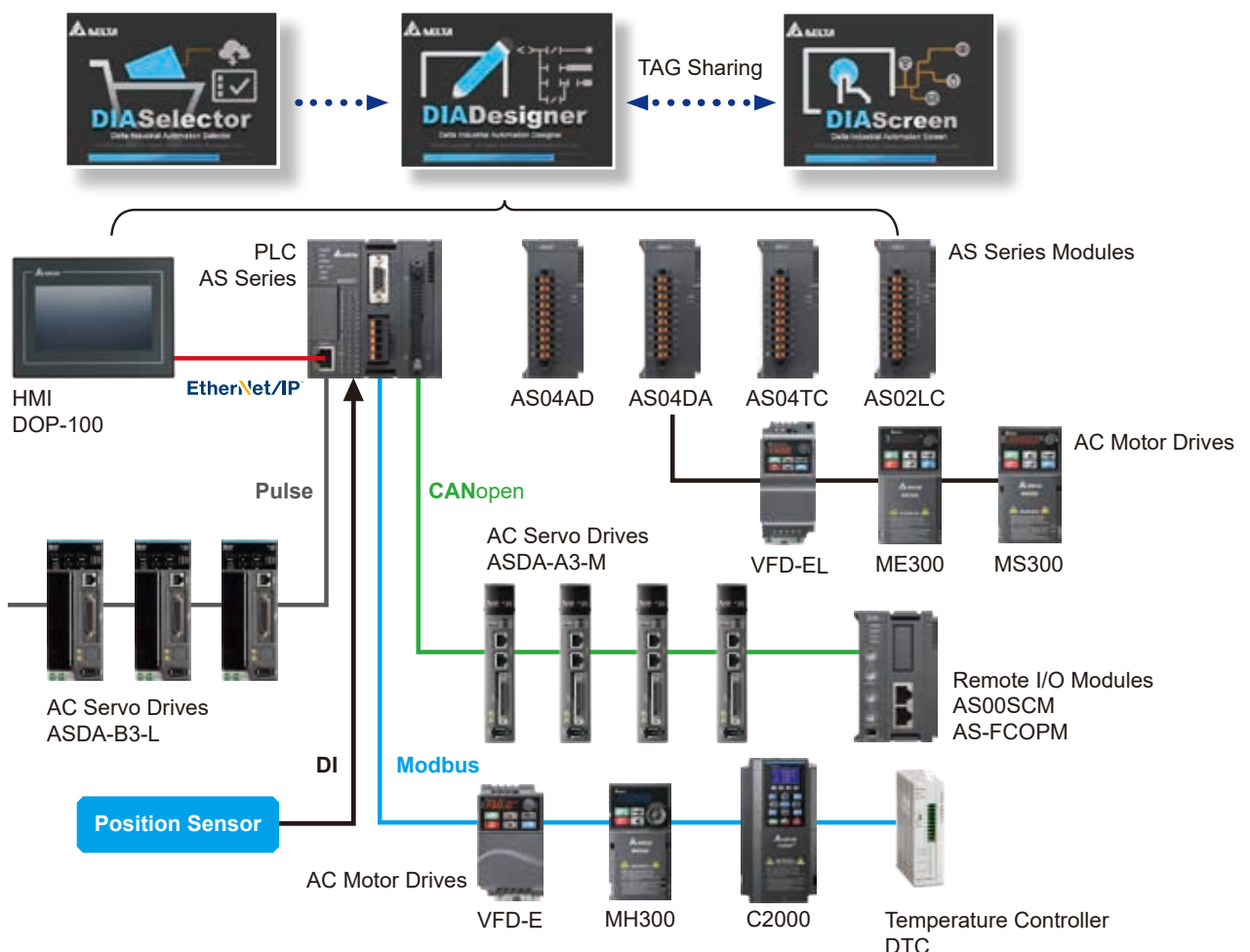
- Controllers: AS Series
- Motor Drives: C2000 Family, M300 Family, VFD-EL Family, MPD Series
- Servo Drives: ASDA-A2-L & M Series, ASDA-B2-B & F Series, ASDA-A3-L & M Series, ASDA-B2-L & M Series
- Temperature Controllers: DTC Series

■ DIAScreen supports:

- HMIs & Text Panels: DOP-100 Series, TP Series

■ Fieldbus: Modbus, CANopen, Modbus TCP, EtherNet/IP

■ Applications: Packaging machines | Electronics manufacturing | Labeling / textile machines



DIADesigner-AX (Motion Development & Engineering) + DIAScreen (Visualization) System

■ DIADesigner-AX supports:

- Motion Controllers:

PLC-based Controller: AX-308E, AX-332E, AX-364EL

PC-based Controller: AX-8 Series

- Logic Controllers: AX-300N, AX-324N

- Motion: AC Servo Drive ASDA-A2-E/ASDA-A3-E/ASDA-B3-E Series

- Drives: AC Motor Drive C2000 series, MS300/MH300 Series

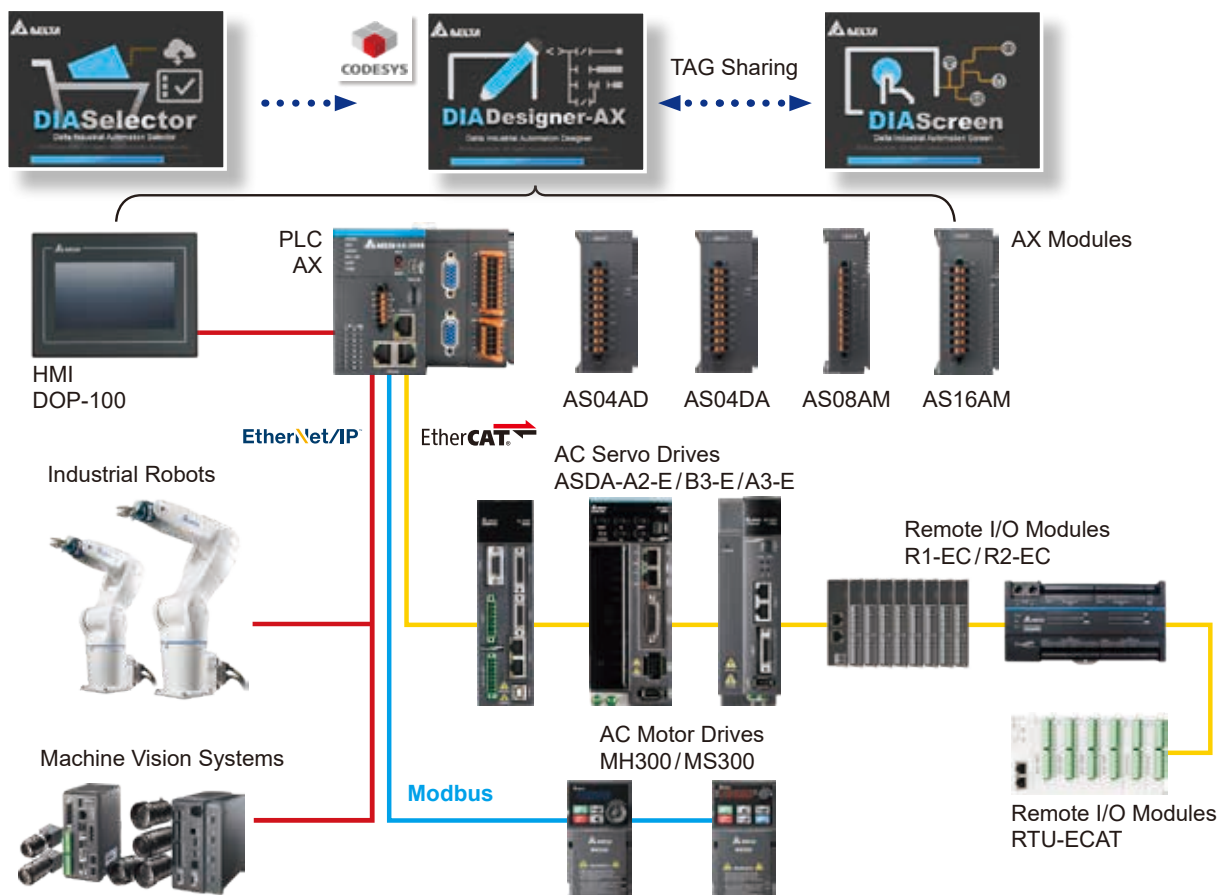
- Remote I/O Modules: RTU-ECAT Series, R1-EC/R2-EC Series

■ DIAScreen supports:

- HMIs & Text Panels: DOP-100 Series, TP Series

■ Fieldbus: EtherCAT[®], EtherNet/IP[™], Modbus, Modbus TCP, OPC UA (Server)

■ Applications: Electronics manufacturing | Material Handling | Logistics | Multi-axis motion control equipment



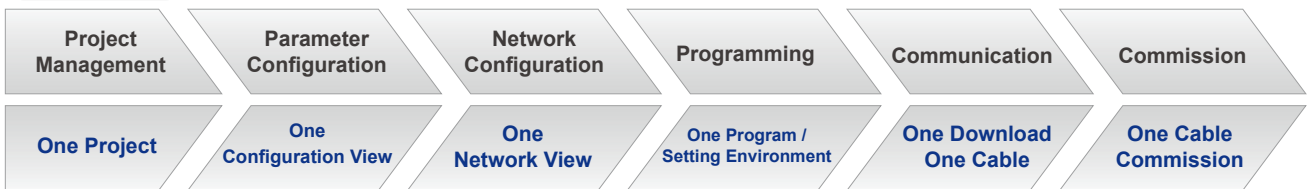
DIA Designer

Integrated Development & Engineering Software

Provides a programming environment for machine system developers to enhance system configuration and development efficiency

- IEC61131-3 programming environment
- Integrates project, configuration, programming, commission, and monitoring in a simple environment

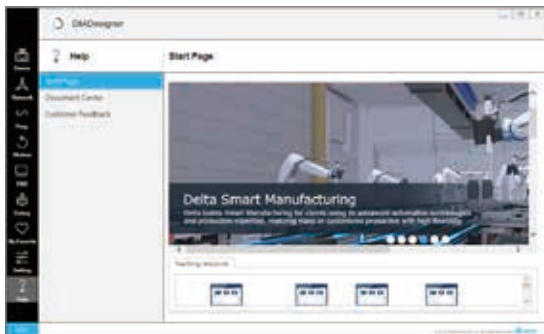
Processes



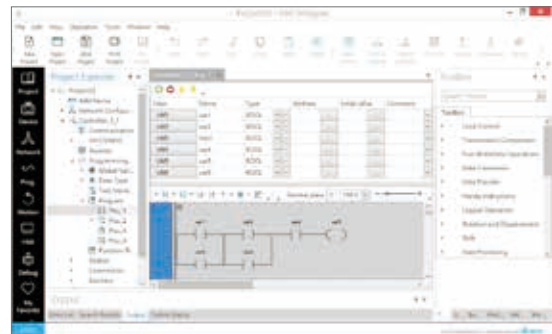
User-oriented Project Management

- Basic designer view: Wizard Design for operation guidance
- Advanced designer view: Complete functions via menus

Basic designer view



Advanced designer view



Supports IEC61131-3 Standard Programming Languages



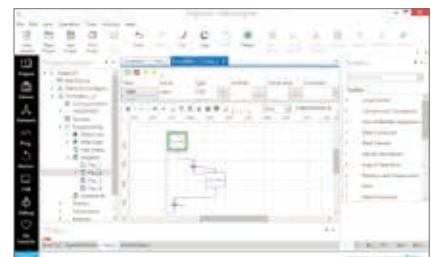
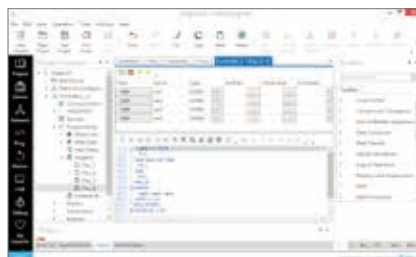
Ladder Logic



Structure Text



Sequence Function Chart





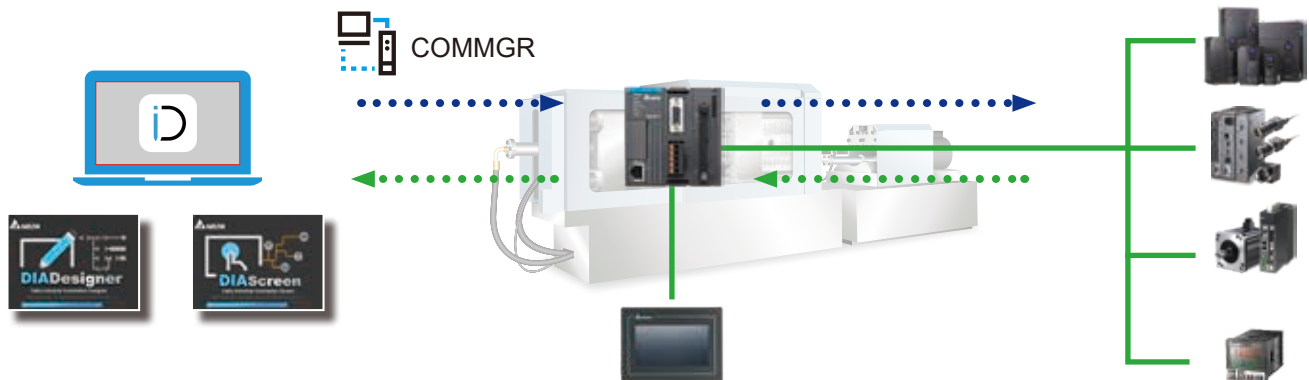
Data Management

- Variable sharing with DIAScreen without import/export



One-Cable Communication

- Integrates multiple protocols in COMMGR
- Requires only one cable to transfer the parameter configuration to the project



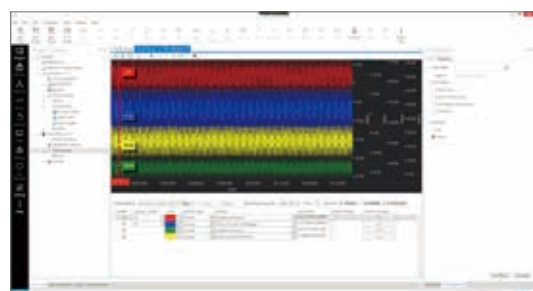
Intuitive Topology Configuration

- Supports topology to configure the device protocols in the project via a user-friendly system



Commissioning Tool

- Provides parameter management, gain tuning, motion control setting, oscilloscope, device setting wizard, and status monitoring



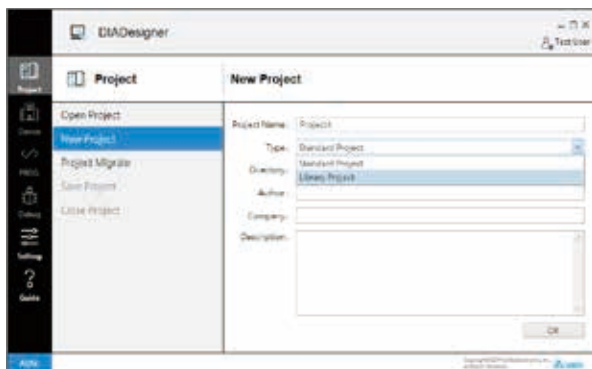
DIA Designer

Integrated Development & Engineering Software

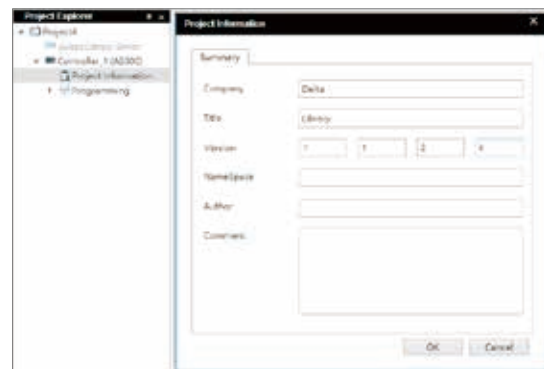


Library Manager

- Proven library manager for the reutilization of applications
- Supports a library for HVAC applications
- User-definable library applications



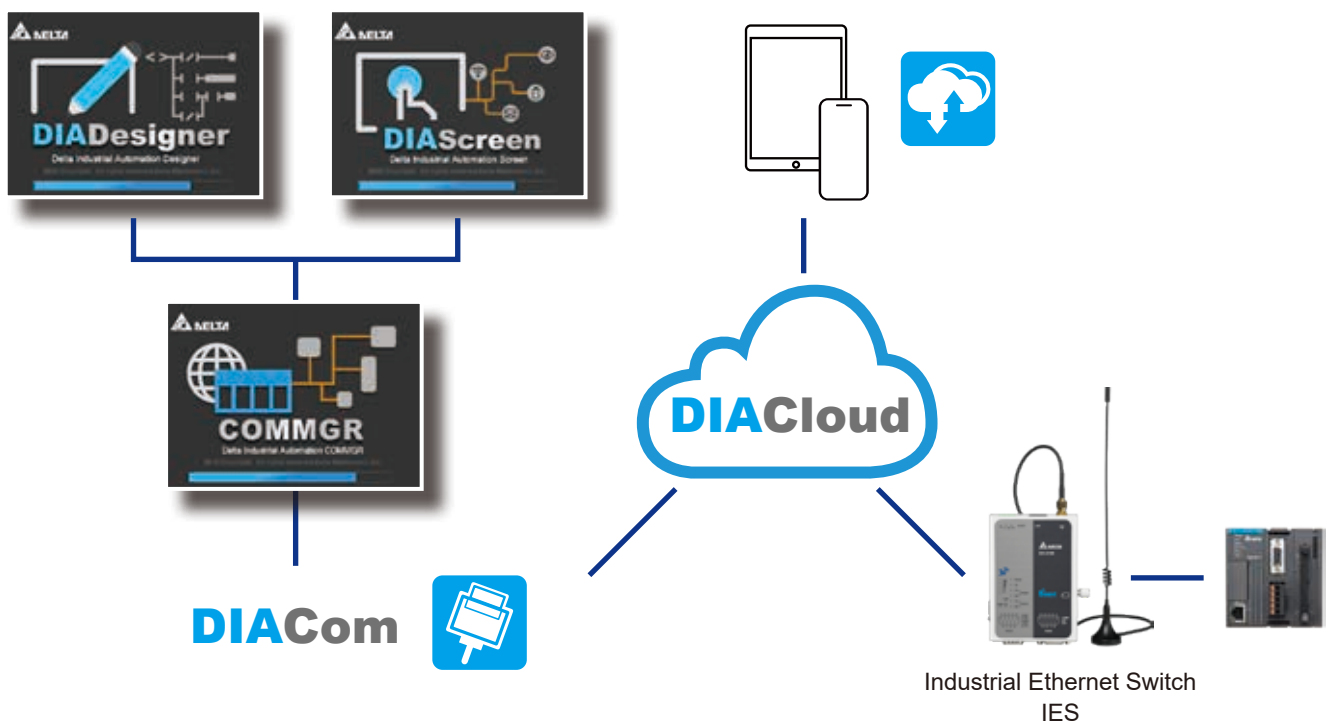
Library Project



Library Management

DIACloud Communication

- Supports DIACloud platform communication via DIACom channel
- Router read/write data from device via DIACloud
- Combines with Delta's cloud routers to construct IoT for more automation applications and upgrades



DIADesigner-AX

Motion Development & Engineering Software



DIADesigner-AX is a programming tool compliant with IEC 61131-3 for Delta's new generation motion controller – AX series. It adopts a large number of application instructions, especially Motion library. The multilingual environment and user-friendly interfaces provide users with a convenient and efficient development environment.

- Standard IEC 61131-3 programming and unified integrated software
- Open and modular Platform to allow secondary development for customized functionalities and components by users with industry know-how
- Motion control programming based on standard PLCopen motion control
- Tags Sharing between DIAScreen and AX Series controllers variables sharing for easy operation

Motion Software							
Motion Controllers	PC-Based		PLC-Based		HMI		
	 AX-8 series	 CODESYS	 AX-3 series	 CODESYS	 DOP-100		
Field Devices	Servo Drives			Remote I/O Modules		Motor Drives	
	ASDA-A2-E 	ASDA-A3-E 	ASDA-B3-E 	R1-EC 	R2-EC 	C2000 Plus 	
			RTU-ECAT (EtherCAT Remote I/O)		MH300 		MS300

DIASelector

Quick, Easy, Smart Selection Tool



Easy product selection using specifications, patterns and key words regarding Delta's controllers, servo drives, motor drives, sensors, and HMIs for various automation projects

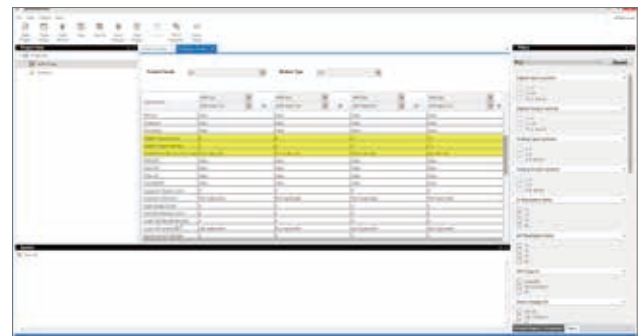
- Product specifications / patterns search, filter and comparison
- Supports servo sizing tool with Mechanism Selection
- Product information (catalogs / brochures, manuals, technical documents) for download
- BOM list generation based on projects and sending to personnel by e-mails
- Save project in the cloud and share cross team



Website



Product Selection



Product Comparison



Servo Sizing



Mechanism Parameters

DIA Screen

Intuitive Visualization Software



User-friendly HMI visualization software for DOP-100 and TP Series

Abundant Graphics and Smooth Animation

- Built-in element graphics for interface display, suitable for a variety of industrial applications
- Smooth animation technology for realistic visual effects



Advanced Alarm

- Advanced alarm functions for managing machine operations

Detail		Properties	
No.	Message Content		Categor
1*	Temp. too High · PV is %d1		1
2*	Temp. too Low · PV is %d1		1
3*	PV is %d1 · ALM Mail		2
4			0
5			0

Message
Temp. too Low · PV is 12
Temp. too High · PV is 91
Temp. too Low · PV is 15
Temp. too Low · PV is 23

User Authority Management

- Account & authorization management; provides operation logs



Auxiliary

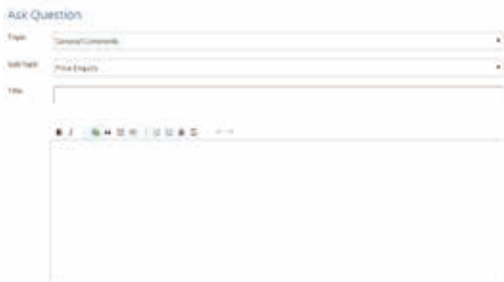
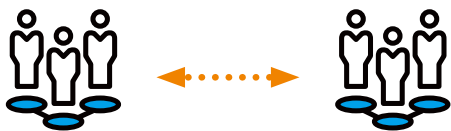
DIAStudio Online Service

Website – Access to Information and Service

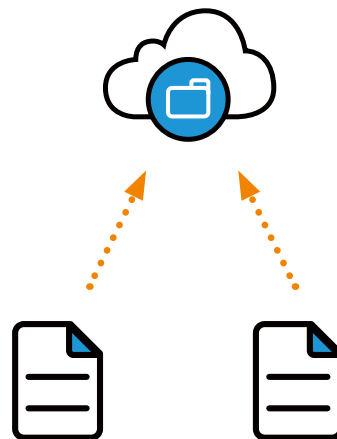
- Software introduction/download
- Register for software downloads and cloud service



- Online technical discussions to learn different kinds of know-how



- Cloud service: file storage



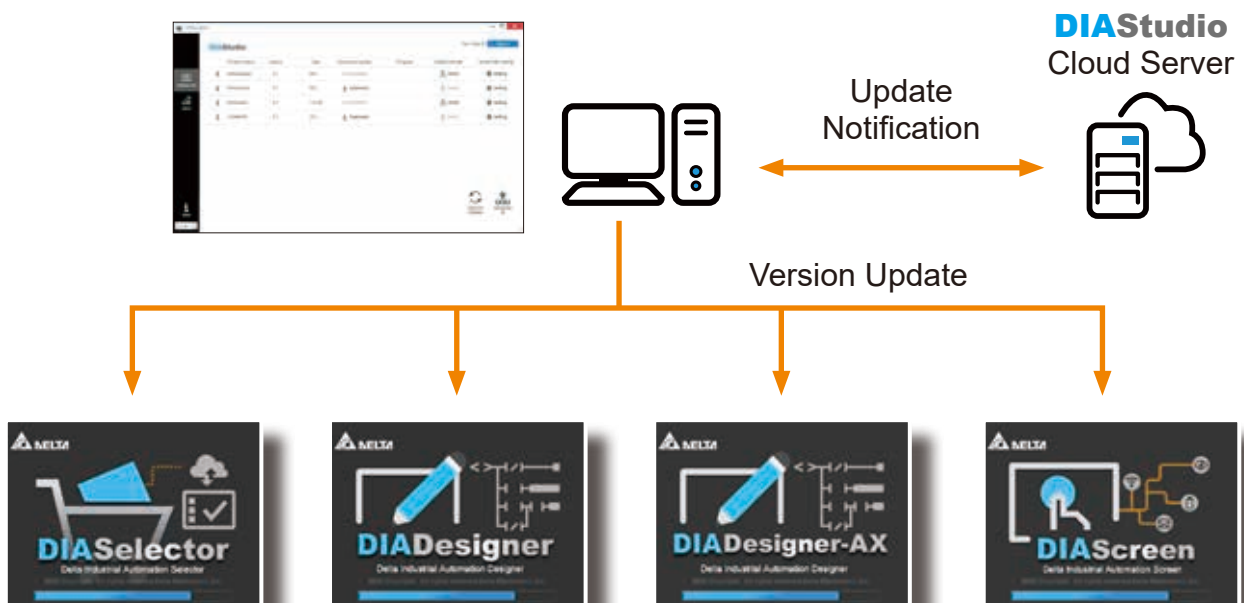
DIAInstaller

Software Download/Upgrade Management Tool

- Software download and installation: version selection/user authority management



- Version update notifications
- Supports manual and automatic version updates



* Note: Please register to download the DIAInstaller.



Smarter. Greener. Together.

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