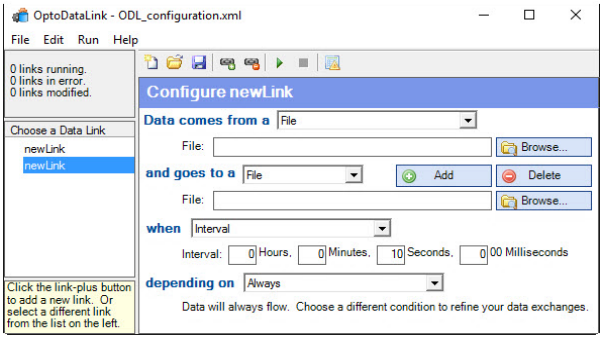
OptoDataLink

Features

- Integrates Opto 22 SNAP PAC controllers and brains with databases and other enterprise business systems
- Creates data conduits between multiple controllers, databases, and other systems
- Provides easy setup and configuration, with no need to recreate control strategy tagnames



OptoDataLink main window

Description

OptoDataLink™ from Opto 22 is connectivity software for Microsoft® Windows® that collects data from Opto 22 SNAP PAC industrial controllers and other sources, and then sends that data to one or more destinations. OptoDataLink supports sending data to:

- **Databases,** including Microsoft SQL Server®, MySQL®, Microsoft Access®, and other ODBC-compliant databases
- **SNAP PAC controllers and brains**
- **ASCII text files**

Data can be sent to any of these destinations—or all of them—simultaneously. Applications that are well suited for OptoDataLink include data archival and data warehousing, as well as those where control system alarms need to be reported, acknowledged, and recorded at an enterprise level.

Ease of Use

OptoDataLink has several features that make it easy to use:

- As part of Opto 22's PAC Project Professional™ Software Suite, OptoDataLink is integrated into the SNAP PAC System™. OptoDataLink uses the same control system tags (tagnames) used in your PAC Control™ strategies. This saves time and effort, since you don't have to recreate tagnames for variables, input/output (I/O) points, or other controller values.
- OptoDataLink uses a graphical user interface to set up data connections. You don't need to be a database expert to configure data links with OptoDataLink.

- Once a data link is established, OptoDataLinkRuntime runs in the background as a Windows service. Unless you choose to stop the service, OptoDataLinkRuntime continues to run as long as the computer is running.
- If your system is set up for redundancy, OptoDataLink automatically recognizes when a strategy includes redundant controllers, and includes information about them in the OptoDataLink project. When the project runs, OptoDataLink detects when the active controller changes and switches to scanning the new active controller.

PAC Project Professional

OptoDataLink is part of Opto 22's **PAC Project Professional** Software Suite, and can also be purchased separately. PAC Project Professional also includes PAC Control™ for control programming, PAC Display™ for HMI development, OptoOPCServer™ for OPC 2.0-compliant clients, PAC Manager™ for configuration, and SoftPAC™, a software-based programmable automation controller for PC-cased control.

SNAP PAC controller or brain

OptoDataLink connectivity software

Database or other enterprise application

Part Number

Part	Description
OPTODATALINK	Database Connectivity Software

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Compatibility with Opto 22 Products

OptoDataLink collects control data from the following Opto 22 controllers and brains (I/O processors):

- S-series and SNAP PAC R-series programmable automation controllers (PACs), and SoftPAC (Opto 22's PC-based controller).
- EB-series Ethernet brains, with or without a PAC controller.
  - When using an EB-series brain with a PAC controller, your OptoDataLink project uses tags from a PAC Control strategy (.idb) file.
  - When using an EB-series brain without a PAC controller, your OptoDataLink project uses tags from a PAC Manager™ configuration (.otg) file.
- SB-series brains connected to SNAP PAC S-series controllers.
- OptoEMU Sensor. For information on reading data from an OptoEMU Sensor, see Opto 22 form 1958, *OptoEMU Sensor Communication Guide*.

OptoDataLink can also be used with older Opto 22 controllers and brains. For more information on supported hardware and software, see form 1705, *OptoDataLink User's Guide* (included in your download of OptoDataLink or PAC Project Professional).

OptoOPCServer Software

If OptoDataLink and other applications must communicate with the same Opto 22 controller, Opto 22 recommends that you use **OptoOPCServer** software to optimize controller/application communications. OptoOPCServer must be installed on the same PC as OptoDataLink. OptoOPCServer is included in Opto 22's PAC Professional Software Suite and can also be purchased separately.

Compatible Databases

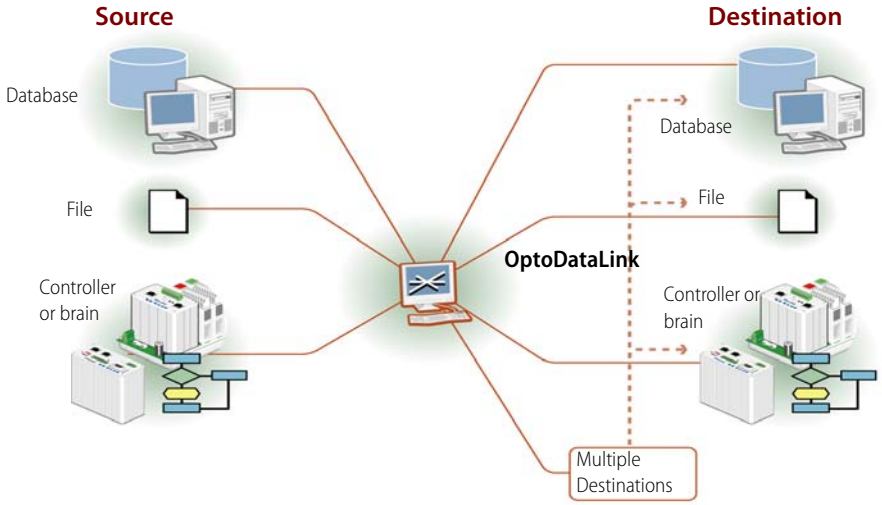
- Microsoft® SQL Server® 2014, 2012, 2008, 2005, and 2000
- MySQL® 3.51 and 5.1 (32-bit only)
- Microsoft Access® 2000–2003 and 2007–2016
- Other ODBC-compliant applications (such as Microsoft Excel®, which has a 32-bit ODBC driver)

NOTE: Microsoft has ended support for SQL Server 2005 (and lower) and for Access 2003 (and lower).
If you're using applications that Microsoft no longer supports, you should consider upgrading.

System Requirements

- A computer with a standard or mainstream core processor and (at least) the minimum memory required for your version of Microsoft Windows. (Low-end CPUs are not recommended.) Additional memory may be required for some configurations.
- One of the following operating systems:
  - Microsoft Windows 10 Professional (32-bit or 64-bit)
  - Windows 8.1 Professional (32-bit or 64-bit)
  - Windows 7 Professional (32-bit or 64-bit)
  - Windows Vista® Business (32-bit only)
  - (OptoOPCServer and OptoDataLink only) Windows Server 2012 R2 and Windows Server 2008 R2

  NOTE: PAC Project will not install on Windows XP or older Windows operating systems. Embedded operating systems are not tested or supported.
- Ethernet capability.
- VGA or higher resolution monitor (Super VGA recommended). Minimum size: 800x600 with small fonts.
- Mouse or other pointing device.
- (Optional) Installed Windows printer.
- Microsoft .NET Framework 3.5 or higher. (.NET 3.5 SP1 is included in PAC Project Professional, or you can download it from the Microsoft website.)



OptoDataLink flexibly and simultaneously connects multiple data sources and destinations.

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More About Opto 22

Products

Opto 22 develops and manufactures reliable, easy-to-use, open standards-based hardware and software products deployed worldwide.

Industrial automation, process control, building automation, industrial refrigeration, remote monitoring, data acquisition, Industrial Internet of Things (IIoT), and information technology applications all rely on Opto 22.

groov

Monitor and control your equipment from anywhere using your smartphone or tablet with groov. Build your own mobile app easily—just drag, drop, and tag. No programming or coding. Visit groov.com for more information and your free trial.

SNAP PAC System

Developer- and IIoT-ready, the SNAP PAC System connects physical assets to databases and applications using open standards. The SNAP PAC System consists of four integrated components:

- SNAP PAC controllers
- PAC Project™ Software Suite
- SNAP PAC brains
- SNAP I/O™

SNAP PAC Controllers

SNAP PAC programmable automation controllers handle a wide range of digital, analog, and serial functions for data collection, remote monitoring, process control, and discrete and hybrid manufacturing.

For IIoT applications and easier integration with company systems, standalone and rack-mounted SNAP PACs include a built-in HTTP/HTTPS server and **RESTful API** (application program interface). The REST API gives you secure, direct access to I/O and variable data using your choice of programming languages. No middleware, protocol converters, drivers, or gateways needed.

Based on open Ethernet and Internet Protocol (IP) standards, SNAP PACs make it easier to build or extend a system without the expense and limitations of proprietary networks and protocols.

PAC Project Software Suite

Opto 22's PAC Project Software Suite offers full-featured, cost-effective control programming, HMI (human machine interface), OPC server, and database connectivity software.

Control programming includes both easy-to-learn flowcharts and optional scripting. Commands are in plain English; variables and I/O point names are fully descriptive.

PAC Project Basic offers control and HMI tools and is free for download on our website, www.opto22.com. PAC Project Professional, available for separate purchase, adds one SoftPAC software-based controller, OptoOPCServer, OptoDataLink, options for controller redundancy or segmented networking, and support for legacy Opto 22 serial *mistic*™ I/O units.

SNAP PAC Brains

While SNAP PAC controllers provide central control and data distribution, SNAP PAC brains provide distributed intelligence for I/O processing and communications. Brains offer analog, digital, and serial functions, including thermocouple linearization, local PID loop control, watchdog, totalizing, and much more.

SNAP I/O

I/O provides the local connection to sensors and equipment. Opto 22 SNAP I/O offers 1 to 32 points of reliable I/O per module. Analog, digital, and serial modules are mixed on one mounting rack and controlled by a SNAP PAC brain or rack-mounted PAC.

Quality

Founded in 1974, Opto 22 has established a worldwide reputation for high-quality products. All are made in the U.S.A. at our manufacturing facility in Temecula, California.

Because we test each product twice before it leaves our factory, rather than only testing a sample of each batch, we can guarantee most solid-state relays and optically isolated I/O modules for life.

Free Product Support

Opto 22's California-based Product Support Group offers free, comprehensive technical support for Opto 22 products from engineers with decades of training and experience. Support is available in English and Spanish by phone or email, Monday–Friday, 7 a.m. to 5 p.m. PST.

Additional support is always available on our website: how-to videos, OptoKnowledgeBase, self-training guide, troubleshooting and user's guides, and OptoForums.

In addition, hands-on training is available for free at our Temecula, California headquarters, and you can register online.

Purchasing Opto 22 Products

Opto 22 products are sold directly and through a worldwide network of distributors, partners, and system integrators. For more information, contact Opto 22 headquarters at 800-321-6786 (toll-free in the U.S. and Canada) or 951-695-3000, or visit our website at www.opto22.com.

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