

# Migrating to Newer Opto 22 Products

Are your older Opto 22 *mistic* and G4 systems still reliably chugging along? Even though everything's still working well, are you wishing you had access to Ethernet, or more I/O in the same cabinet space, or the ability to store more data?

If you're wanting more, take a look at migrating to the **SNAP PAC System**.

- Gain memory, density, speed, and network flexibility.
- Maintain your investment in I/O, sensors and actuators, and field wiring.

## Where are you starting from?

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**Cyrano** — The first flowchart-based control language, introduced in 1988! Cyrano ran on the MS-DOS operating system, and was designed for the first *mistic* controllers like the G4LC32 series.



**FactoryFloor** — Released in 1996, FactoryFloor was a complete automation software suite for Microsoft Windows operating systems. FactoryFloor was bundled with control software OptoControl, HMI development package OptoDisplay, and included an OPC server and database integration tool. Later, Ethernet networking was added via a plug-in adapter card for the LCM4 controller.

**ioProject** — Introduced in 2001 and designed for our first Ethernet-based controller, SNAP Ultimate I/O, ioProject was re-written from the ground up to offer all that FactoryFloor did with expansion for the future. ioProject is the predecessor to today's PAC Project software suite, released in 2007.

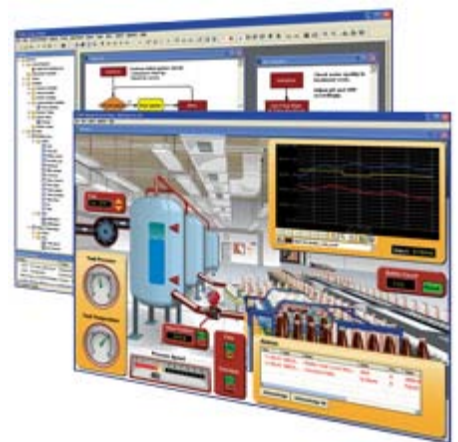
## Where are you going?

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The **SNAP PAC System** is your goal. Developed in 2007, it's an integrated system of hardware and software that makes your job easier.

The SNAP PAC System's [PAC Project Software Suite](#), SNAP PAC [programmable automation controllers](#), and [SNAP I/O](#) offer all of this:

- Control programming, HMI development and runtime, OPC communication, and two-way database connectivity
- Powerful, compact Ethernet-based standalone and rack-mounted controllers
- Two Ethernet network interfaces on PACs and brains
- Ethernet and serial I/O units in the same system under one controller
- High-density I/O packaging with up to 512 I/O points on one rack
- One brain processing analog, digital, and serial I/O on the same rack, in any position
- Distributed intelligence including PID loop control at the I/O level
- Native communication with Allen-Bradley Logix systems and Modbus/TCP systems
- MicroSD card slots for up to 2 GB removable data storage
- True controller redundancy
- Optional wireless 802.11a, b, and g communication with WPA2/AES security



Learn more about the [SNAP PAC System](#).

## How do you get there?

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Depends on where you start. See the migration document below that matches your current system:

- Cyrano—[Cyrano to OptoControl Technical Note](#)
- FactoryFloor—[FactoryFloor to PAC Project Migration Technical Note](#)
- ioProject—[SNAP PAC System Migration Technical Note](#)

Also see the [Legacy and Current Products Comparison Chart](#) for details on which products work together.

## Learning from Others

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Check out these **case studies**:

[Malisko Engineering](#)—Advanced Energy knew they could realize major improvements in performance and gain other advantages by moving from their G4LC32 controller to the new SNAP PAC System hardware. OptoPartner Malisko helped them do it.

[Ballarat Health Services](#)—Ballarat was using mistic and SNAP Ethernet I/O. They upgraded to the SNAP PAC System for greater throughput and its dual Ethernet ports, which can be used for network segmenting.

[U.S. Bureau of Reclamation](#)—The Bureau re-examined their installed Opto 22 mistic control platform with multiple G4LC32 controllers and opted to upgrade to the more advanced SNAP PAC System.