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# PAC TERMINAL SECURE STRATEGY DISTRIBUTION (SSD)

#### **Features**

- Uses encryption to protect compiled control strategies for distribution
- > Secures a controller with a key to ensure only encrypted strategies can be downloaded
- > Ensures only signed firmware can be downloaded to the controller
- Provides security functions via a graphical user interface (GUI) or a command line interface (CLI)



PAC Terminal SSD (Secure Strategy Distribution™) allows you to safely distribute a PAC Control strategy and to protect it once it is downloaded to a SNAP PAC controller. This guarantees that only firmware that has been signed using the correct key can be downloaded to the controller.

NOTE: PAC Terminal SSD works with SNAP PAC controllers only. It does not support groov EPIC processors.

SSD helps original equipment manufacturers (OEMs) secure the PAC Control strategy and firmware running on the controllers in the systems they build with Opto 22 equipment. Using this security system, you can:

- Encrypt strategies for safe distribution.
- Ensure that only firmware that has been signed using the correct key can be downloaded to the controller.

NOTE: You cannot use Background Downloading with an SSD file.

While this is a robust and effective system, there are some things this system does *not* protect:

- Original strategies on a PC. SSD does not provide password protection in PAC Control. It protects only the signed strategy compiled download file (.cdf).
- Normal system communications such as controller to controller, controller to I/O, human-machine interface (HMI) to controller, and so on.
- I/O settings such as I/O configuration, proportional-integral-derivative (PID) loop settings, Event/Reaction settings, and so on.
- Inspection of controllers using PAC Terminal.

When you are using Secure Strategy Distribution, one user task is used. This means that the number of charts that can run



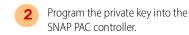
**PAC Terminal SSD** 

simultaneously is reduced by one, but performance is otherwise unaffected.

The PAC Terminal SSD security functions are available in both a graphical user interface (GUI) and a command line interface (CLI). The CLI makes it easy for you to create batch or script files to handle the various aspects of strategy security.

## Steps to Securing Your Strategy

**1** Generate an encryption key pair.







Encrypt the strategy CDF with the public key. The CDF becomes an encrypted strategy SSD file.

Download the encrypted strategy SSD file with the matching public key to the secured controller.







Distribute the encrypted strategy SSD and secured controller publicly.

### Part Number

Part	Description
PACTERMSSD	PAC Terminal SSD software and documentation (in PDF format)



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# System Requirements

PAC Project 9.3 or higher (either Basic or Pro) must already be installed on your computer. In addition, your SNAP-PAC-R or SNAP-PAC-S controller must have loader R4.0b or higher and firmware R9.2c or higher installed.

#### How to Obtain PAC Terminal SSD

PAC Terminal SSD is available for purchase from authorized Opto 22 distributors worldwide or from our website at www.opto22.com.

Because SSD protects your intellectual property, you must submit a registration form upon purchase. After registration is complete, you will receive the software and installation instructions by email.

If you have any questions about obtaining PAC Terminal SSD, contact Opto 22 (opto22.com/support/contact-us).

