

## ISONAS support of Biometric Devices

### ***Panel-Free Access Control with Biometrics***

The combination of ISONAS PowerNet™ Reader-controllers and biometric recognition devices provides the superior capabilities of standards-based, IP-at-the-door Access Control and the advanced identification features provided by biometric recognition technologies.

This paper describes the integration of the ISONAS PowerNet with a typical fingerprint reader.

### ***Solution Topology***

Both the fingerprint reader and the ISONAS PowerNet Reader-controller are located at the door location. Sometimes, for operational purposes, the users are directed to only use the Fingerprint reader. In these cases, the ISONAS PowerNet acts as the door's controller and may be mounted in a location that is not accessible to the user, such as inside the facility, if so desired.

There are two software programs which control the security devices; the ISONAS Crystal Matrix™ access control software and the fingerprint configuration software. These control programs can be installed on a single

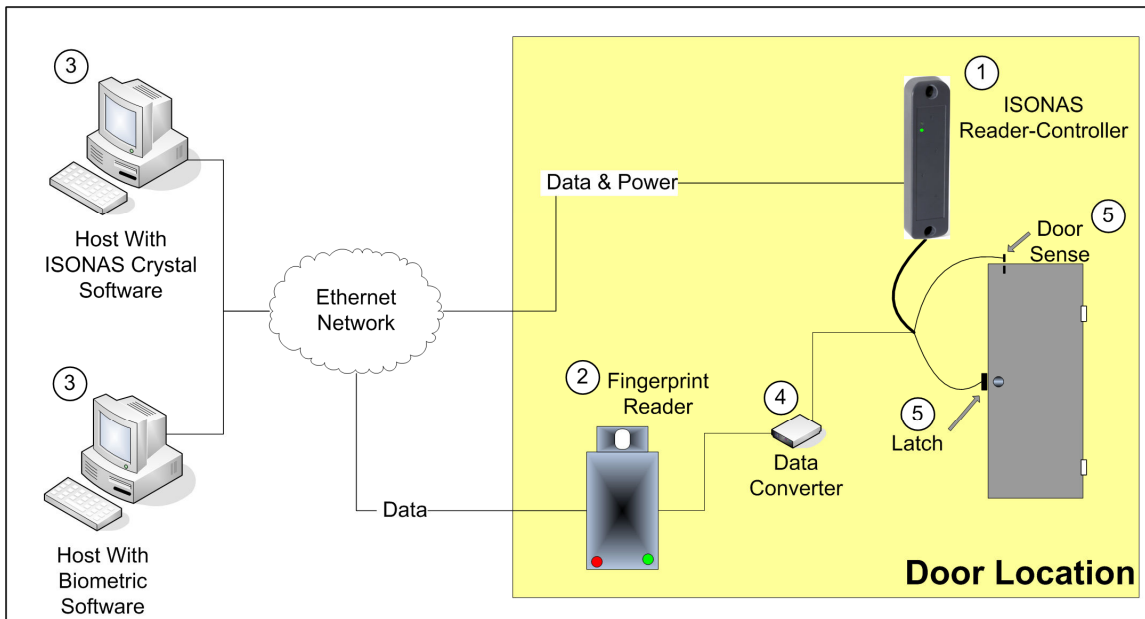
host computer or on separate hosts as shown in the schematic in Figure 1.

### ***Solution Operation***

When the user presents his/her fingerprint and proximity credential to the fingerprint reader, the credential and fingerprint are validated. Wiegand credential data are generated by the reader. The data converter converts this data to the RS-232 format and forwards it to the ISONAS PowerNet Reader-controller. The ISONAS system then validates that the user is allowed access and if so operates the door lock mechanism.

The fingerprints and the assigned proximity credentials of the system's users are enrolled in the fingerprint system, and the users assigned proximity credentials are also enrolled in the ISONAS system, providing the extra level of access security desired in this type of installation.

**Figure 1: Solution Topology**



## **Solution Components**

- 1) PowerNet Reader-Controller
- 2) FingerPrint Reader
- 3) Host computer(s) running
  - a. ISONAS Crystal Matrix Software
  - b. Fingerprint Configuration Software
- 4) Data Converter (Wiegand to RS-232)
- 5) Standard Door Hardware (as required)
  - a. Electric Lock
  - b. REX device
  - c. Door Open Sensor

Please contact your ISONAS account representative for the list of currently supported biometric devices and detailed installation instructions.