June 1, 2010



Dear i-Vu® Open Standard/PLUS Owner:

Given the heightened security awareness in all aspects of our society, it is not surprising that customers are concerned about whether or not i-Vu® Open controls poses a security risk to their building network. While there is no such thing as a system that is absolutely invulnerable to hackers, the inherent design and security aspects of i-Vu Open controls make it extremely unlikely that anyone could gain unauthorized access to the building network through the i-Vu Open web server. There are several key reasons why i-Vu Open controls do not pose a security risk:

- i-Vu Open controls uses its own, built-in web server engine (Tomcat). It does not utilize the Microsoft IIS web server, which is a favorite and well-known target for hackers. This web server is only used by the i-Vu Open system and is not shared by any other system on the network.
- The i-Vu Open web server runs a custom, streamlined version of the Linux operating system. The i-Vu Open database is restricted to internal connections only and cannot be accessed externally.
- The HTTP, HTTPS, and Alarm Pop-up Utility ports are the only user-configurable ports in the system. They can be viewed and/or modified using the i-Vu Open Management Tool. All other ports are NOT configurable.
- The i-Vu Open Management Tool uses the Ruby WEBrick 1.3.1 server on port 8080. The i-Vu Open web server does not open ports for traditional Telnet, FTP, Windows file sharing, or other applications that increase the vulnerability of the system.
- The i-Vu Open web server is "locked down" and will only render i-Vu Open pages. It cannot be used as a general-purpose web server to render pages from other systems on the building network.
- i-Vu Open system offers an extremely "fine grained" password security control, allowing
  operator privileges to be custom tailored for each operator, providing no more access than is
  required.
- i-Vu Open system offers built-in support for Secure Socket Layer (SSL) communications, providing 128-bit encryption for all communications to ensure that unauthorized "eavesdroppers" cannot obtain passwords.

In addition to the inherent protection listed above, i-Vu Open controls are compatible with external security provisions such as firewalls and Virtual Private Networks (VPNs) that the customer's IT staff may wish to use. These systems can limit access to specific computer IDs and provide an additional layer of login/password protection, as well as offering alternative encryption schemes.

For a detailed list of ports and protocols that are used by i-Vu Open controls, or if you have additional questions, please feel free to contact your local Carrier office.

Sincerely,

Carrier Systems Support