

SECURITY PRECAUTIONS



PRAESENSA is an IP-connected, networked Public Address and Voice Alarm system. In order to ensure that the intended functions of the system are not compromised, special attention and measures are required during installation and operation to avoid tampering of the system. Many of such measures are provided in the configuration manual and installation manual, related to the products and the activities described. This section provides an overview of precautions to be taken, related to network security and access to the system.

- Follow the installation instructions with respect to the location of equipment and the permitted access levels. See section 4.1 of the installation manual. Make sure that critical** call stations and operator panels that are configured for alarm functions only have restricted access using a special procedure, such as being mounted in an enclosure with lockable door or by configuration of user authentication on the device*.
* Availability of the user authentication function is to be announced.
** Call stations, that address very large areas, are considered as critical.
- It is highly recommended to operate PRAESENSA on its own dedicated network, not mixed with other equipment for other purposes. Other equipment may be accessible by unauthorized people, causing a security risk. This is especially true if the network is connected to the Internet.
- It is highly recommended that unused ports of network switches are locked or disabled to avoid the possibility that equipment is connected that may compromise the system. This is also the case for PRAESENSA call stations that are connected via a single network cable. Make sure that the connector cover of the device is in place and properly fixed, to avoid that the second network socket is accessible. Other PRAESENSA equipment should be installed in an area that is only accessible by authorized people to avoid tampering.
- PRAESENSA uses secure OMNEO for its network connections, using encryption and authentication for all control and audio data exchange, but the system controller allows the configuration of unsecure Dante or AES67 audio connections as an extension of the system, both as inputs and as outputs. These Dante/AES67 connections are not authenticated and not encrypted and form a security risk, as no precautions are taken against malicious or

accidental attacks via their network interfaces. For highest security, these Dante/AES67 devices should not be used as part of the PRAESENSA system. If such inputs or outputs need to be used, use unicast connections only. Only Dante devices should be used that support Device Lock. Device Lock allows you to lock and unlock supported Dante devices using a 4-digit PIN (Personal Identification Number). Make sure that the devices are locked when in normal operation. Dante Controller is needed to set the PIN and setup the connections. Alternatively use Dante Domain Manager.

- For security reasons, by default the PRA-ESA8P2S Ethernet switch is not accessible from the Internet. When the default (special link-local) IP-address is changed to an address outside the link-local range (169.254.x.x/16), then also the default (published) password must be changed. But even for applications on a closed local network, for highest security the password may still be changed. See section 14.5 of the installation manual.
- The PRA-ES8P2S network switch supports SNMP. By convention, most SNMPv1-v2c equipment ships from the factory with a read-only community string set to "public". This also applies to the PRA-ES8P2S. For security reasons SNMP should be disabled. If SNMP must be enabled, for example to use the Bosch Network analysis tool OMN-DOCENT, use SNMPv3. SNMPv3 provides much better security with authentication and privacy. Select the authentication level SHA and encryption via AES. To configure the switch accordingly please consult the manual.
- The system controller webserver uses secure HTTPS with SSL. The web server in the system controller uses a self-signed security certificate. When you access the server via https, you will see a Secure Connection Failed error or warning dialog indicating that the certificate was signed by an unknown authority. This is expected and to avoid this message in the future you have to create an exception in the browser.
- Make sure that new user accounts for system configuration access use sufficiently long and complex passwords. The user name must have between 5 and 16 characters. The password must have between 4 and 64 characters.
- The PRAESENSA system controller provides an Open Interface for external control. Access via this interface requires the same user accounts as for system configuration access. In addition, the system controller generates a certificate to setup the TLS (secure) connection between the system controller and the Open Interface client. Download the certificate and open/install/save (depending on browser type) the crt-file. Activate the certificate on the client PC. See section 7.2 of the configuration manual.
- System access to the devices of this system is secured via the OMNEO security user name and passphrase of the system. The system uses a self-generated user name and long passphrase. This can be changed in the configuration. The user name must have between 5 and 32 characters and the passphrase must have 8 to 64 characters. To update the firmware of the devices, the firmware upload tool requires this security user name and passphrase to get access.
- In case a PC for event logs is used (PRAESENSA logging server and viewer), make sure that the PC is not accessible by unauthorized persons.