

# NYQUIST™

## The Modern Educator's Digital Communication Solution

Nyquist is a software-based state-of-the-art IP paging and intercom solution that leverages the latest digital, mobile and software technologies to address today's educational environments, security challenges and mobile lifestyles. But to call it a paging and intercom system is to under-represent its capabilities in communication, safety and security. Nyquist is a suite of powerful, yet easy to use tools that allows educators to quickly and effectively manage campus and district-wide communications.

The heart of Nyquist is a remarkably easy to use software suite with an intuitive Graphical User Interface (GUI). Nyquist software resides on a network server and utilizes existing LAN/WAN and/or legacy 'home-run' cable infrastructure for two-way data and communication flow. IP phones and purpose-built Nyquist appliances provide convenient communication control and interoperability with third party devices.

**NYQUIST HIGHLIGHTS**

- Easy to install, expand and use
- Accessible – administrators, technicians and other key users can access the system on web-enabled devices – desktop or mobile\*
- Compatible with legacy intercom infrastructure, including re-use of existing analog speakers, call switches and cabling (with use of the Nyquist Analog Station Bridge appliance)
- SIP device and trunk support (IP-PBX, VoIP phones, and VoIP speakers)
- Audio feature rich
  - Songs / Playlists
  - Call monitoring and recording capability
  - Announcements
  - Networked audio distribution
- Available integrations with PBXs, security systems, relay control, time systems, and third-party PA systems
- Flexible – easily add features, stations and facilities with virtually unlimited scalability\*

\*When supported by the facility's infrastructure.

**Unlimited Scalability**

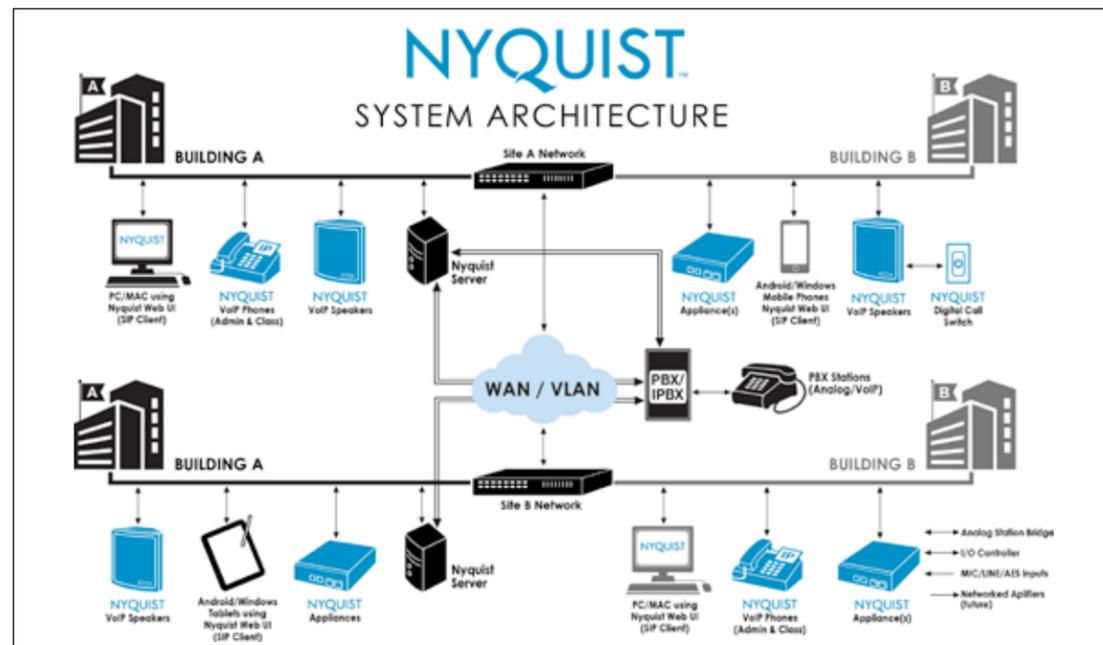
Without the limitations of purely hardware based systems, Nyquist can expand as the user's needs expand. The system can accommodate an infinite number of stations, facilities, zones and bell schedules.

**Easy and Economical to Install**

Nyquist integrates with existing facility's cabling. Many of the Nyquist appliances are PoE devices. With Nyquist there are no bulky racks to build, simply install the

Nyquist server software then plug in the endpoint devices and appliances. All Nyquist appliances are auto-discovered by the server to facilitate fast and easy system set up.

Nyquist can be integrated with existing analog cabling as well as IP-only networks

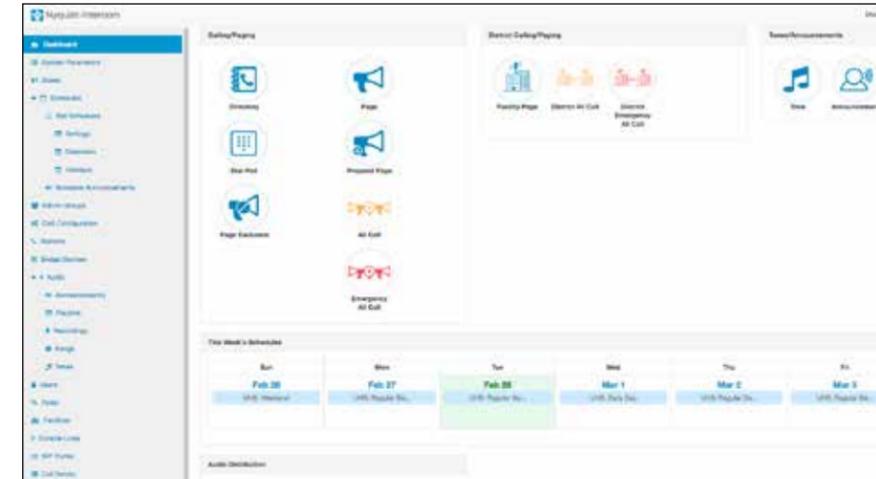


**Easy Graphical User Interface (GUI)**

Administrators, educators and support staff are going to love Nyquist! Users interface with Nyquist either through a Nyquist-certified VoIP admin phone or via a browser-based GUI (Fig 1) on PC's, smart phones and tablets, allowing users to access the system no matter where they are in the connected world.\*\*

Figure 1 - The main Dashboard of Nyquist's Graphical User Interface

The core principle of Nyquist's user interface is simplicity. Form follows function, resulting in an interface that is functional, intuitive, and aesthetically pleasing.



Nyquist's GUI allows people with a broad spectrum of technical proficiencies to use the system. Buttons are large and clear; text is simple and legible. Embedded tooltips and guides aid in user self-sufficiency. Technical administrators can assign individual users permissions appropriate for their role and proficiency (Fig.2).

\*\* With iOS devices the Dashboard does not function, but all other features are accessible via the menu.

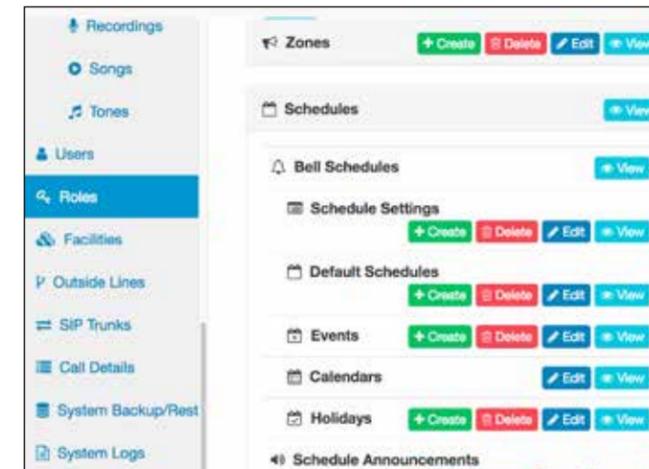


Figure 2 - Nyquist makes it easy to define roles and permissions

## NYQUIST CAPABILITIES

- **Enhanced Security and Safety** - Instantaneous accessibility to campus and district-wide communications vital for the safety and security of students and staff. Nyquist can help with features such as call monitoring, call recording and playback, emergency paging with pre-programmed announcements and much more.
- **Security device integration** - Nyquist interfaces with select third-party security devices such as locks, alarm systems and sensors via the programmable I/O Controller appliance.
- **Unlimited Scheduling** - Administrators can take full control of scheduling functions via Nyquist's powerful web based user interface.
- **Unmatched Audio Capability** - Bogen's 85-year history of audio excellence is evident in the range and quality of audio features.
- **State-of-the-Art Paging and Intercom** - Paging and Intercom functions are brought to new levels of sophistication and control with Nyquist.
- **Convenient and Powerful Configuration and Maintenance** - IT and Facilities technicians can remotely access Nyquist's GUI. Wherever they are, technicians have the ability to program, diagnose and control.
- **Telephony – Integrated and Elevated** - Nyquist easily integrates with virtually any VoIP or analog phone system to create a seamless communication platform.

## NYQUIST SERVER REQUIREMENTS

Nyquist software is intended to be installed on a server provided by the school system's IT department or the installing Bogen dealer. Ideally there would be one server in each facility, although multi-school campuses could use a single centrally located server. Server requirements are:

- OS - Debian Linux OS (AMD 64-bit version) release 8.4.0 or later
- CPU - Quad-core Intel-based processor running at 3.0 GHz or higher
- Memory - 8 GB RAM
- Disk Storage - One 250 GB disk drive. (A RAID configuration is recommended for redundancy and high availability.)
- NIC - 10 / 100 /1000 MB Ethernet port
- PCI Expansion Slots – Min. one PCI/PCIe slot if telephony network connectivity other than, or in addition to SIP trunking is needed.