One-way communications using EverAlert Live

"Please dismiss to the gym for assembly..."

American Time's EverAlert Communication System now harnesses the power of multicast and session initiation protocol (SIP) technology to provide one-way paging functionality to your EverAlert displays. This allows EverAlert users to dial an extension on their VoIP phone system and instantaneously page a single display or a group of displays. Rather than spending tens of thousands of dollars on a dedicated paging system, EverAlert Live provides this functionality for a low annual subscription and requires little or no additional equipment.
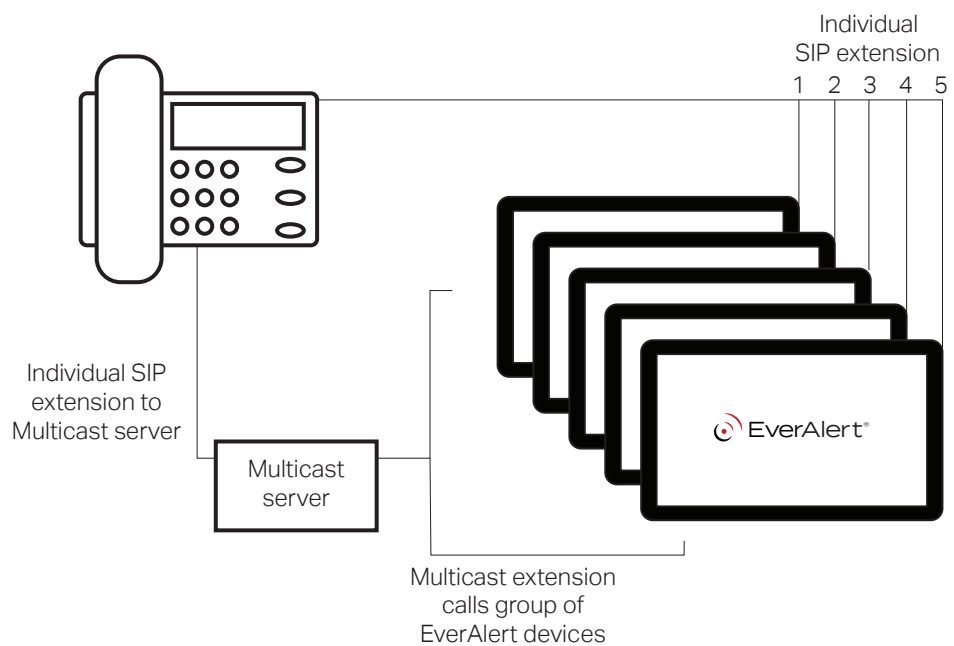
THE TECHNOLOGY: SIP and MULTICAST

EverAlert Live uses two different technologies to page through EverAlert devices: session initiated protocol, or **SIP**, and **multicast**. Both technologies essentially treat targeted EverAlert devices (or groups of devices) as an extension within an IP phone system.

The important difference between SIP and multicast is that multicast is best suited to all-call or group-based paging of displays, while SIP is best suited to individual (one-to-one) device paging.

Because of these differences, the ideal setup for a facility will vary depending on the desired performance of the paging system. If a facility wants the maximum amount of flexibility in paging devices, it will use SIP infrastructure to page individual devices and have a multicast server installed for making grouped or all-call pages. Multicast may be installed alone, if a facility only uses all-call paging or if SIP licensing through the telecommunications provider is cost-prohibitive; likewise, SIP may be used alone if all-call paging is not important, thereby removing the expense of a multicast server.

The diagram to the right outlines a system using both SIP for one-to-one paging and a multicast server for grouped and all-call paging.

On the next page, we'll examine the details of both installation types in greater detail.

Individual SIP extension
1 2 3 4 5

Individual SIP extension to Multicast server

Multicast server

Multicast extension calls group of EverAlert devices

SIP systems for paging individual devices

SIP-enabled systems allow you to assign unique extensions to individual EverAlert devices, similar to extensions within your phone system. This will require contacting your IP phone service provider to obtain information on their SIP settings (specifically the server's IP address, as well as the extension and password information that will be assigned to the devices).

Once this information has been obtained, your paging system can be assigned and configured in the SIP Config section of your site on the inCloud management portal.

After the system has been set up, you will be able to send pages to individual EverAlert displays in the same manner you would make an internal phone call on your phone system. Note that it's possible to page multiple devices at once, but this requires dialing each individual extension prior to the page; if this functionality is required on a regular basis, adding multicast support is recommended.

Multicast systems for all-call or group/zone paging

Multicast paging uses SIP functionality to connect to a multicast server, which then can route your page to a chosen group of EverAlert devices. This is ideal for two specific scenarios:

- Locations requiring the ability to regularly page more than one device at a time
- Locations where SIP licensing is cost-prohibitive, as multicast paging requires only one SIP license

A multicast system will require the installation of a dedicated multicast server, as well as a single SIP license to contact the server from your phone system. Once the server is operational, your EverAlert devices can be assigned extensions within the server.

Multicast servers have a limited number of extensions; this means that, while individual devices can be given extensions via multicast for individual paging, it's important to keep in mind the number of extensions you'll need to support your site. Additionally, since multicast functionality requires dialing both the server's extension and the target extension, using multicast for individual paging involves additional dialing.

american ⬥ time.