Overview
As part of the Next Generation Telephony Solution (NGTS), CBTS is able to offer various enhanced 911 services to organizations utilizing the NGTS phone registration and call processing. In addition to the default street address provided in 911 services, enhanced 911 services include the street address but also add additional location information such as agency name and floor. In addition, the Enable 911 platform provides services that enable building security desks to be prepared for emergency responders arrival. These services include automatically bridging in the building security desk to the 911 outbound call, sending notification emails, and sending notification to security desk PCs.

More accurate location information is enabled by mapping IP subnets to locations when the NGTS phones are deployed. When a phone dials 911, the phone’s IP address correlates to a specific location and sends that additional information to the 911 Public Safety Answering Point (PSAP).

It’s important when deploying NGTS phones to work with the agency network support team to ensure that IP subnets map to locations.

Locations via IP Subnets
To provide location information in addition to the street address, the location information must be provided to CBTS as the phones are deployed. The agency provides this information to CBTS during the TAW process. Below are guidelines to ensure that CBTS can provide the PSAP with appropriate location information:

1. NGTS phones should be deployed using registered address space to ensure the addressing is globally unique.

2. To enable the most efficient use of registered address space, the IP subnets should map as closely as possible to the required endpoint numbers. Agencies should work with OIT and/or their network staff to provide appropriately sized subnets. If growth can be documented by the requesting Agency, additional or larger subnets may be available as part of the initial allocation. Agencies must work with OIT and/or their network staff to address the needs created by any anticipated growth.

3. NGTS users should deploy IP subnets for phones that map logically to location. This most often maps to a single floor. Multiple IP subnets can also map to a single floor.

   \textit{Note: Since locations are statically mapped to IP subnets, it is the agencies responsibility to notify CBTS should the subnet be moved to a different location to ensure appropriate 911 location information is sent to the PSAP.}

4. In cases such as DRC, DYS, DODD, DOH, etc, where first responders will enter the facility through a security desk, it is recommended that the agency continue to map phone location to IP subnet. This will ensure that the most precise information will be sent to the security desk by the phone dialing 911.
Additional 911 NGTS Services
In addition to providing more precise location information, the NGTS 911 platform provides the agency with opportunity to use additional services that allow agency and/or building security to respond to 911 events. Below are the additional services and information on availability, function, and requirements.

Desk Alert Notification
Security desk personnel need to know that 911 has been dialed from within their location. This enables them to direct emergency responders when they arrive and ensure quick access. When 911 is called from a phone in a location, Desk Alert notifies the security desk of the event. Desk Alert is software that runs on the security desk’s PCs that creates a pop-up notification that contains location information associated with the phone, including phone number, name. The alert is accompanied by a .wav file to bring attention to the notification.

To enable Desk Alert, the CBTS provides the application and login information. The agency loads the application onto their PC and logs into the application. The application does require the PC have access to the CBTS voice subnets. Firewall rules requirements will be provided by CBTS during the set up process.

Email Crisis Alerts
In addition to the Desk Alert Notification, an email notification can be sent when 911 is dialed from a specific location. The email notification can be specific to each location, and each location can have different email notification list. Email to location mappings are also collected during the engagement process as part of the TAW.

911 Call Bridging
Security desk call monitoring allows personnel to listen in on 911 calls sent to the local PSAP. The call is routed to both the PSAP and security desk using three-way call conference, with security personnel on one- way mute. For organizations that have configured security desk call monitoring using the NGTS, personnel can also barge in on the call simply by pressing *1.