



DYNAMIC EMERGENCY SERVICE OPERATOR CONNECT

Deployment Guide

Your Connected, Secure, and Frictionless Work Environment Starts with Fusion Connect.

Connect. Protect. Accelerate.

We secure your business with a managed zero trust security approach that safeguards networks, people, and data without impacting reliability or productivity—all backed by our industry leading service guarantee.

Managed Services At-a-Glance

Managed Security

Centralized management of a zero-trust security approach that safeguards your data, network, and people without impacting reliability or productivity. This includes discovery, monitoring, risk mitigation, and incident response backed by our fully staffed security operations center.

Optimized Application Performance

An optimized technology stack to deliver frictionless access to the critical business applications and data you use every day.

CCaaS, UCaaS, and Calling Services

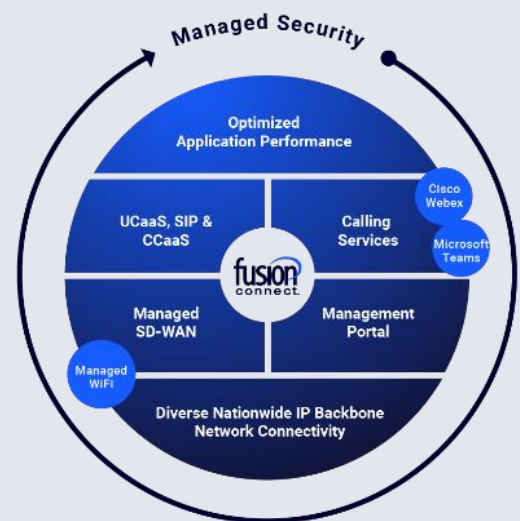
A comprehensive cloud-based business communication solution for employees and contact center workers to keep your business connected anywhere, anytime, from any device.

SD-WAN and Management Portal

We deliver a single pane of glass to manage your technology infrastructure in real-time, with SD-WAN to encrypt data and optimize application performance.

Network Connectivity and a Diverse Nationwide IP Backbone

In today's hyperconnected world, an always-on, reliable Internet service with safe and secure wireless access for your employees and guests is critical to run a successful business.



Our Consultative Approach

Gain confidence with our white-glove approach to customer onboarding with your own Dedicated Project Manager and Technical Team.

Collaborative Design

We are understanding your unique business objectives and tailor solutions to deliver optimized business performance today and in the future.

Project Management & Rapid Implementation

A dedicated project team uses a comprehensive delivery methodology to enable rapid solution implementations with minimal disruption to your business.

Lifecycle Management & Optimization

Our continuous improvement approach delivers the latest technology to your environment, all supported by a 24/7/365 service team.

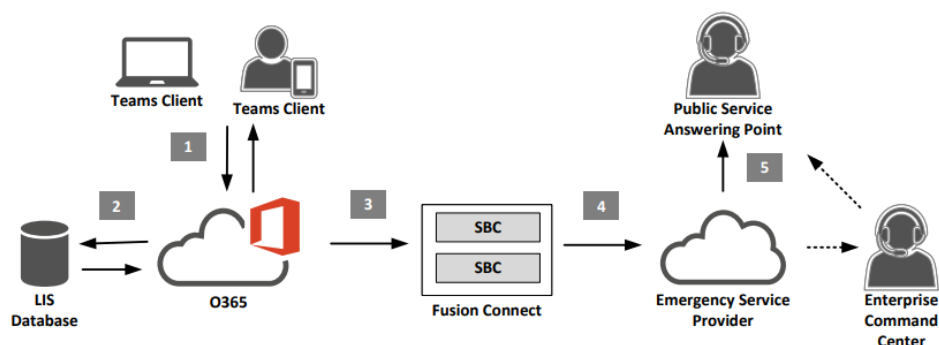
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Overview

Operator Connect includes dynamic emergency services for subscribers located in the United States and Canada. Combined with the Microsoft's Location Information Service (LIS) administered through Microsoft Teams Admin Center, Fusion Connect ensures delivery of emergency services calls to the appropriate Public Safety Answering Point (PSAP) with accurate location information of the originating caller.

The intention of this guide is to provide the customer with a best practice approach to administering Teams Admin Center for dynamic emergency calling. PowerShell can also be used for all configuration changes required within the customer tenant. Please refer to the linked documentation provided by Microsoft for specific instructions when using Teams Admin Center or PowerShell cmdlet scripts.



Teams Admin Center

Within Teams Admin Center, to ensure dynamic delivery of location information when utilizing emergency services, the customer must configure their tenant with the necessary network, location and policy settings described below.

When making changes to network and location settings, Microsoft suggests allowing several hours as information is propagated and made available to Teams clients.

Locations

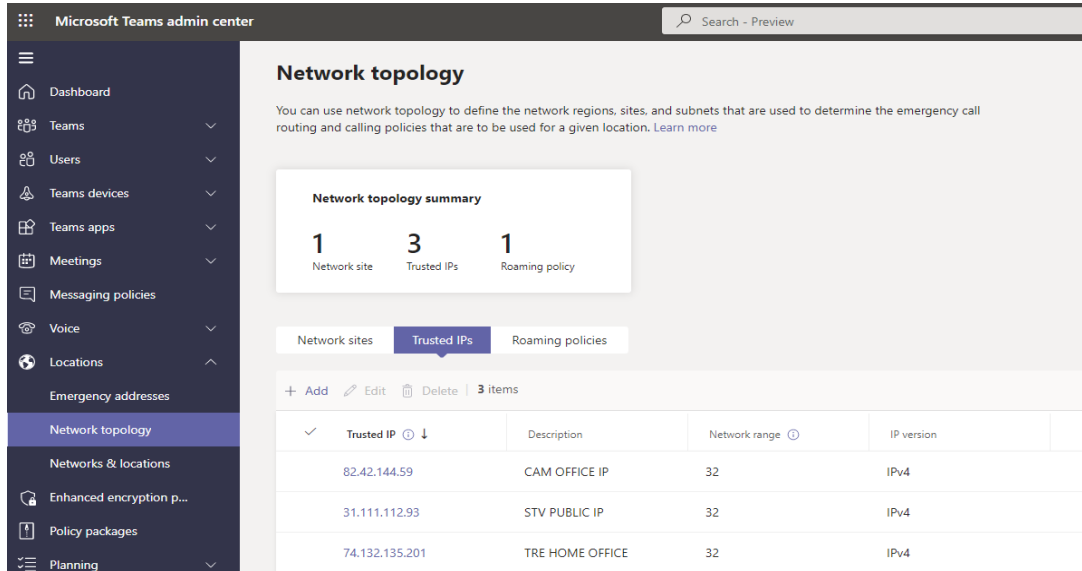
1. [Network Topology](#)

The Network Topology settings are used to validate a Teams client is connected to the corporate network and dynamically assign emergency calling policies to users.

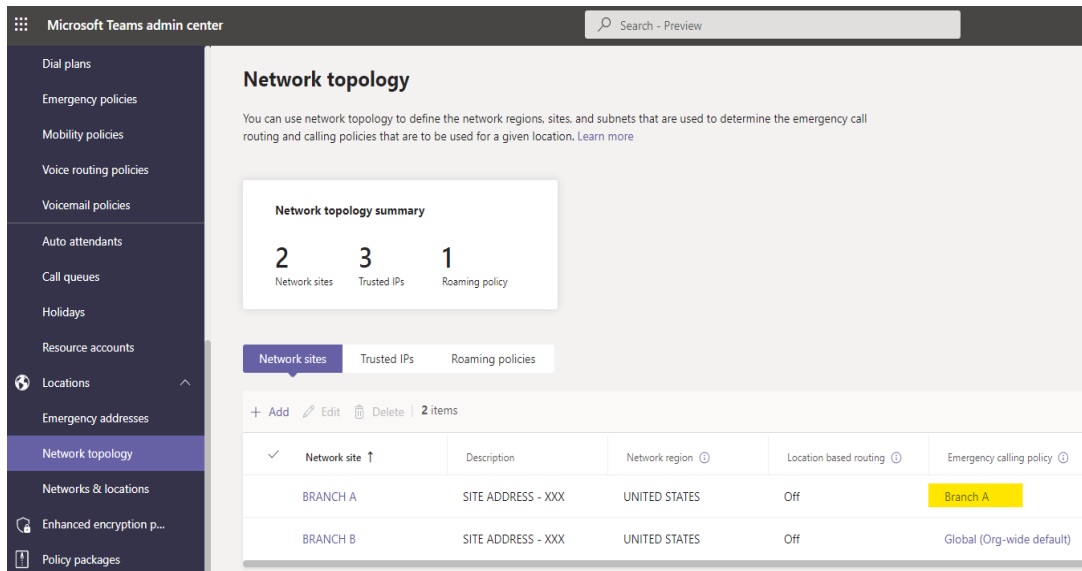
The [Trusted IP](#) List must be populated with the Internet routable IP addresses used by the enterprise

when Teams clients register to Microsoft’s cloud hosted Teams services.

** Important: Any clients registering to Teams services using IP addresses not listed in Trusted IPs are not capable of using a dynamic location or emergency policy assignment.*



If dynamic assignment of an emergency calling policy for security notifications is required, tenant administrators must configure [Network Sites](#). These settings are only required for dynamic assignment of an emergency calling policy, location discovery is determined through Location Information Service (LIS) settings covered in a later section.



Microsoft Teams admin center

Search - Preview

Network topology \ BRANCH A

BRANCH A

SITE ADDRESS - XXX

Network region ⓘ
UNITED STATES ✕ Change

Location based routing ⓘ
 Off

Network roaming policy ⓘ
 Global (Org-wide default)

Emergency calling policy ⓘ
 Branch A

Emergency call routing policy ⓘ
 Global (Org-wide default)

Subnets

A network subnet defines a segment of the IP network that contains the addresses of one or more endpoints. Each subnet must be associated with an emergency location, and the subnet ID must match the client network ID. [Learn more](#)

+ Add ✎ Edit 🗑 Delete | 2 items

Subnet ⓘ	Description	Network range ⓘ	IP version
10.1.1.0	BRANCH A DATA VLAN	24	IPv4
10.1.2.0	BRANCH A VOICE VLAN	24	IPv4

2. [Emergency Addresses](#)

An administrator populates a list of all emergency addresses containing a validated civic address of each physical location. The addresses must be validated and contain latitude/longitude coordinates to ensure proper routing of emergency services calls.

Validated addresses requiring more precise location information can be updated to include [Places](#). Using *places* allows an organization to include buildings, floors and suite numbers in the location information sent to emergency dispatchers.

Microsoft Teams admin center

Emergency addresses \ New emergency address

Corporate Office

Country or region: United States

Input address manually: Off

Address: 210 Interstate North Parkway Southeast, Atlanta, GA 30339

Organization name: Fusion Connect

ELIN (optional): ELIN (optional)

Buttons: Save, Cancel

Microsoft Teams admin center

Emergency addresses \ Corporate Office - ATL

Corporate Office - ATL

210 Interstate North Circle Southeast, Atlanta GA 30339, US

Validated

Location ID: 15d2a5b8-73d2-4a38-bc5a-9614a16e4df1

Organization name: Eitel OC

Places: 2

Voice users: 0

Phone numbers: 0

Location network summary

Subnets: 0

Wi-Fi access points: 0

Switches: 0

Ports: 0

Buttons: Add, Edit, Delete

Name	Voice users	Subnets	Wi-Fi access points	Switches
Floor 1	0	0	0	0
Floor 2	0	0	0	0

3. [Location Information Services](#)

Network elements (subnets, WAPs, switches and ports) are used to associate connected clients to locations with emergency addresses.

Administrators can configure any combination of the four network elements when using LIS to match clients to locations. Microsoft uses the first match result using the following order when a client could match against multiple elements:

WAP

Ethernet port

Ethernet switch

Subnet

Microsoft Teams admin center Search - Preview

Networks & locations

Subnets Wi-Fi access points Switches Ports

Each subnet must be associated with a specific network site. A client's location is determined based on the network subnet and the associated network site. You can associate multiple subnets with the same network site but you can't associate multiple sites with the same subnet. [Learn more](#)

Subnets summary

1 Subnet **1** Emergency location

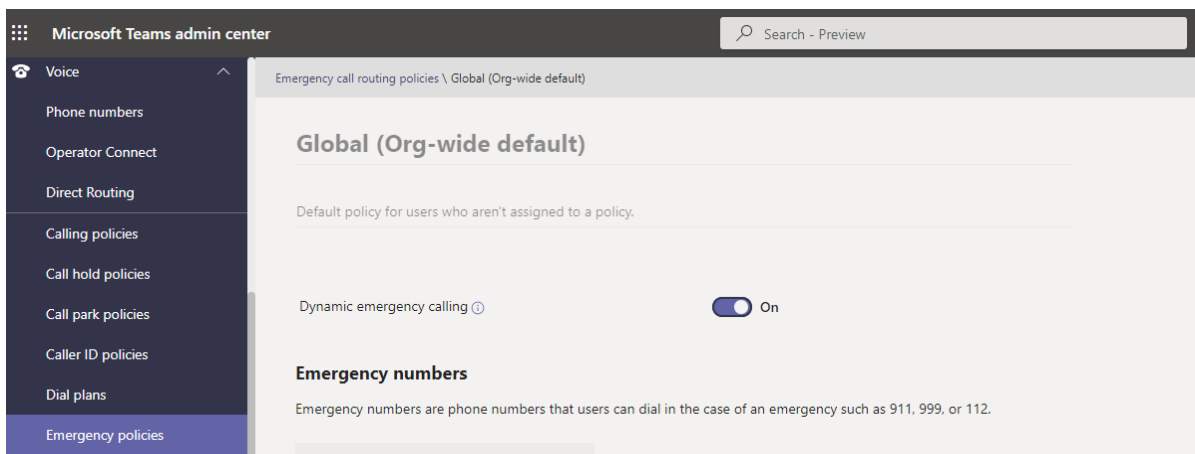
+ Add + Upload Edit Delete 1 item

Subnet	Description	Emergency location
10.1.1.0	BRANCH A DATA VLAN	Corporate Office - ATL

Voice Policies

1. [Emergency Call Routing Policy](#)

Users assigned a telephone number provided by Fusion Connect using Operator Connect in the United States and Canada are automatically enabled for emergency calling to 911. Tenant administrators must validate the toggle button for Dynamic Emergency calling is turned on for any default or custom policy a user could be assigned to. This setting ensures the location information of the caller is included when placing calls to emergency service numbers.



2. [Emergency Call Policy](#)

Emergency call policies define the notification settings when a user or users defined by network sites place emergency calls. These policies will dictate whether security personnel are conferenced into the call and/or notified through a Teams message.

By default, all users are defined by the global policy. Custom policies created by tenant administrators can be applied direct to users or network sites. In situations where a user with a policy directly assigned is also located at a network site with a defined policy, the policy assigned to the network site will override the user assigned policy.


In addition to notification settings, the emergency calling policy defines a user's ability to define their address when working from a location outside of the LIS-defined corporate environment. Administrators must enable External location lookup mode in the emergency call policy if allowing remote users to configure an emergency location.

Emergency calling policy


Name
Branch A


Description
Security Desk Bridge - Branch A

External location lookup mode
 On


Notification mode 
Conferenced in but are muted

Emergency service disclaimer

Numbers to dial for emergency calls notifications 

Users and groups for emergency calls notifications 
Search by display or username

Notification group

-  Security Desk - Branch A
SecuritydeskA@EitelOC...

Non-Dynamic Address Assignment

Users and clients registering to Teams services not meeting defined criteria in LIS for dynamic location identification are classified as not detected. Administrators can employ the following practices to assign a registered address or permit users to edit their location for emergency service calls.

1. [Static Assignment](#). Microsoft Teams administrators can elect to statically assign an emergency location to telephone numbers provisioned to users. The address must already exist and be validated as an emergency address in the Locations database of Team Admin Center prior to assignment.

This type of assignment will receive the lowest priority when alternate methods of location assignment are configured and match a policy or feature assigned to the user.

The screenshot shows the Microsoft Teams admin center interface. The left sidebar lists various settings under 'Voice', with 'Phone numbers' selected. The main content area is titled 'Phone numbers' and includes a table with the following data:

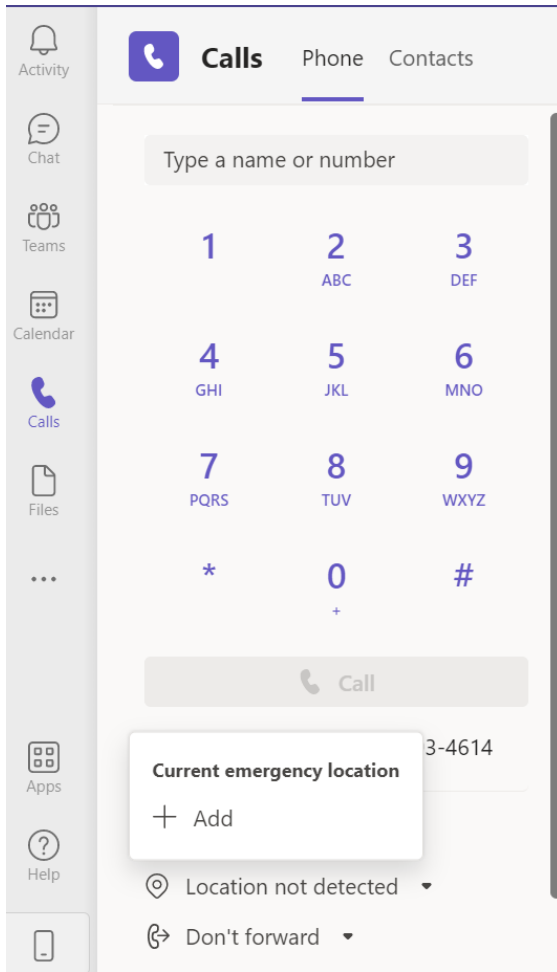
Phone number	Number provider	Available usages	Licensed usages	Number type
+1 469 293 4614	Intrado	User	User	OperatorConnect

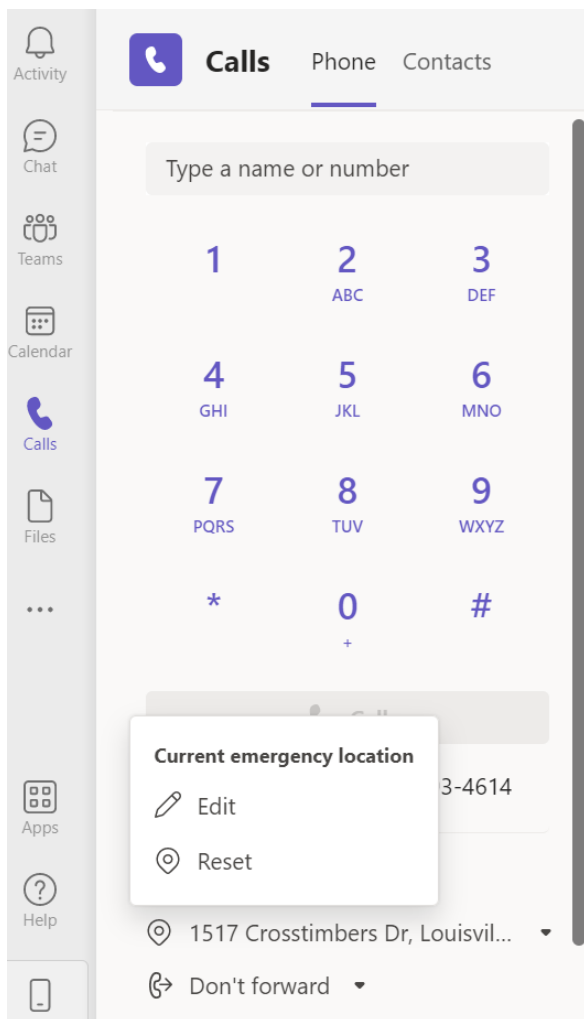
The right-hand panel, titled 'Assign/unassign', shows the selected number '+1 469 293 4614'. It includes sections for 'Number type' (OperatorConnect), 'Number features', 'Assigned to' (Terry Eitel), and 'Emergency location' (Corporate Office - ATL, 210 Interstate North Circle Southeast, Atlanta GA 30339, US, Floor 1). 'Apply' and 'Cancel' buttons are at the bottom.

2. [End User Assigned](#). When defined and permitted by an emergency call policy, supported Teams clients (see note below) will allow end user input when an emergency location is not discovered dynamically. Users can add or edit addresses within the client which is then presented to dispatchers when placing a call to emergency services numbers.

In cases where devices supporting [Location Services](#) are deployed and enabled, users can confirm the address suggested by the Operating System (OS).

** Important: User defined locations are only supported on Teams Desktop client for Windows and MAC. Teams Phone and Teams Mobile client will not allow users to define emergency location.*





User Experience

In the event a user places a call to emergency services, the calling experience of the user can differ based on several factors detailed in this section. The resulting call will be handled in one of two ways:

1. Direct to the PSAP servicing the dynamically identified location of the calling party.
2. Screened through the national call center of the Emergency Services Provider and then transferred to local PSAP upon confirming the caller's location.

Note: All emergency service calls placed by subscribers in Canada will be screened regardless of whether the address was dynamically or statically assigned.

Teams Client Support

Dynamic emergency calling is not supported for Teams Web Client and 3PIP SfB devices. Additional information on unsupported devices along with minimum software requirements for desktop and mobile clients can be found on [Microsoft's website](#).

Emergency services calls placed from unsupported devices or those not meeting minimum software requirements will require call screening before transfer to PSAP.

Location Selection

When an emergency services number is dialed, an emergency address will be selected using the following order:

1. Dynamically acquired address defined in Location Information Service. Calls will be routed direct to the geographic PSAP of the caller's location.
2. A user defined address. Calls will be screened by the Emergency Services Provider's Enterprise Command Center (ECC) and transferred to geographic PSAP upon confirming the address of the caller.
3. Address obtained from the operating system. Operating system suggested addresses confirmed by the user are routed direct to the geographic PSAP, while those not confirmed or edited by the user are screened by the ECC before transfer to PSAP.
4. Static address defined by Teams administrators. Calls will be screened by ECC before transfer to PSAP.

Testing

To avoid disruption to normal operations, dialing 933 allows organizations to place simulated calls to a service operated by the emergency service provider. Calls placed to 933 will reach an automated service prepared to read back the location information presented by the Teams client. The service provided feedback will include the user's telephone number and provisioned address information which can be used to match the information present in the Teams client interface.

