

## 9Line for CUCM

9Line for Cisco® Unified Communications Manager helps Cisco Collaboration customers meet the evolving state and federal regulatory requirements, protect your existing telephony investment, and achieve compliance with affordable licensing complementing your existing telephony licensing.

### Key Features:

- Industry leading functionality: 9Line's innovative features such as no DID's being required offers a true return on investment by eliminating the costs for direct-inward-dial numbers required by ERL/ELIN-based service offerings.
- Empower remote users: Remote users can update their location with HELD automatic location switching via Webex.
- Native integration: 9Line operates natively inside Webex thereby eliminating the need for another software client installed on the users' computers to assist with tracking.
- Compatibility: Support for Wi-Fi connected Webex and Cisco IP Phone clients along with tracking phones by IP subnet or switchport on Cisco & non-Cisco switches is included.
- Alert notifications: Alert recipients can receive notifications of an emergency call via SMS, email, browser-based desktop notifications, and alerts within the 9Line portal.
- Rapid Reporting: Quickly and easily verify call information with simple call history searches while admins can view system address and phone number utilization.



Uncompromising Affordability



HELD Location Switching



No DID's Required



SSO & API Ready



# Other Features

## Uncompromising Affordability



All users are included in licensing with no extra device fees and may validate their location to ensure compliance with federal regulations requiring a validated address accompany 911 calls.

## HELD Location Switching



Users with Webex registered to CUCM have the ability to utilize automatic location switching with HELD.

## No DID's Required



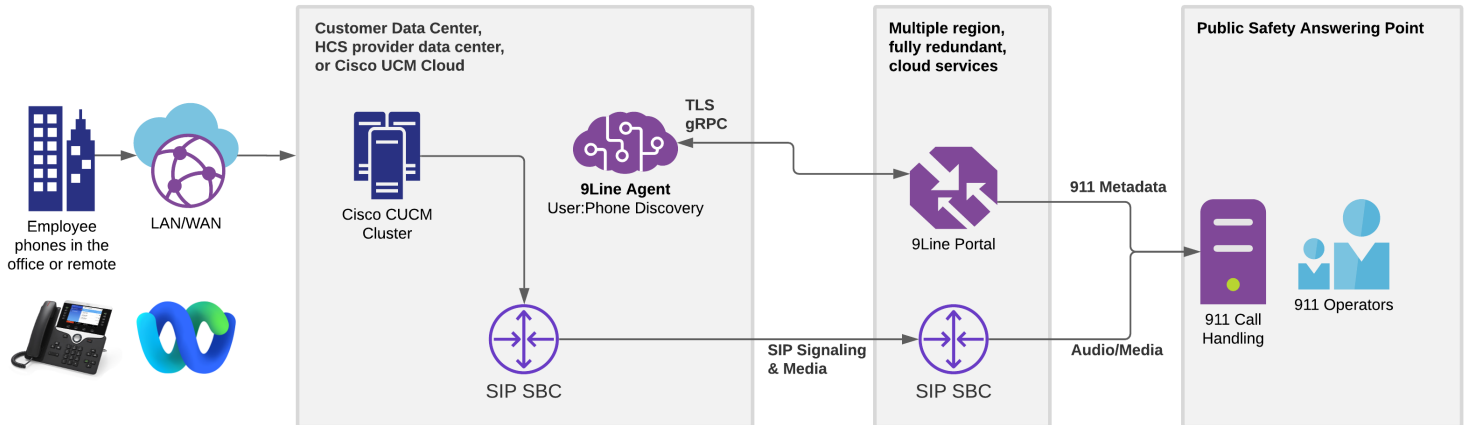
Customers are not required to purchase any DID numbers since 9Line can be used alone to assign a DID at call time, which will remain allocated through the life cycle of a call.

## SSO & API Ready



Customers have the ability to utilize Single Sign-On and APIs to further improve efficiency, usability, and security with all 9Line integrations.

# Architecture



## Before the emergency call:

- Tracking of on-premises devices through the 9Line Agent is achieved by matching MAC Address, IP Subnet, or Wi-Fi access point information to the physical location information provided by the end-user or telephony administrator.
- Organizations using Webex will have the ability to utilize HELD for setting user locations.
- Granular dispatchable location address information for both on-premises and off-premises users is validated and synchronized in the 9Line cloud portal, then stored and ready to be assigned when calling 911.

## When an emergency call occurs:

- Cisco Unified Communications Manager will send the call to the customer's voice gateway (CUBE or other SBC), which sends the 911 call over the top via the Internet, securely encrypted if desired, to the highly available, active-active, 9Line session border controllers.
- When 9Line receives the call, a temporary DID is assigned.
- 9Line inserts metadata containing the address information set earlier by the user or the administrator.
- The call is presented to the responsible PSAP with the dynamic metadata information.

## In case of disconnect:

- The PSAP will attempt to call back the temporary DID previously assigned.
- 9Line converts the call to the original calling party number.
- 9Line sends the call back to the customer gateway, connecting the 911 dispatcher to the original directory number.

# Specifications

<b>Cloud Capabilities</b>	<ul style="list-style-type: none"> <li>• Geo-dispersed across multiple cloud regions.</li> <li>• Serverless system design for scaling and redundancy.</li> <li>• Independently operable database design.</li> <li>• Active-Active support with nearest data center routing.</li> <li>• Fully virtualized Session Border Controllers.</li> <li>• Support for TLS/SRTP for calling.</li> </ul>
<b>Collaboration System</b>	<ul style="list-style-type: none"> <li>• Recommend CUCM 11.5, 12.5 or 14 release (minimum 12.5 SU2 for Wi-Fi tracking, minimum 12.5 SU6 for HELD).</li> <li>• Integrates with on-premises, HCS-hosted, UCM Cloud, or private cloud deployment.</li> <li>• Cisco Unified Border Element (physical or vCUBE) with direct or indirect Internet access.</li> <li>• Cisco Expressway can be used in lieu of CUBE (consumes rich media sessions).</li> <li>• Other manufacturer SBCs (must support SDP IP address changes if behind NAT).</li> </ul>
<b>Alerting</b>	<ul style="list-style-type: none"> <li>• Singlewire's products for notification can be used when 9Line is deployed.</li> </ul>
<b>Dynamic Call Routing</b>	<ul style="list-style-type: none"> <li>• SIP with TCP-only.</li> <li>• PSTN backup connectivity, if requested.</li> <li>• RTP/SRTP G.711.</li> <li>• DTMF RTP-NTE.</li> <li>• 911 emergency calls with PSTN backup DID, if requested.</li> <li>• 933 test number for service address location testing.</li> <li>• US and Canada PSAP Coverage via VPC covering 6000+ PSAP facilities.</li> </ul>
<b>Provisioning &amp; Validation</b>	<ul style="list-style-type: none"> <li>• Real-time feedback is presented for incorrect address.</li> </ul>
<b>Unlocated Caller Services (Relay Calls)</b>	<ul style="list-style-type: none"> <li>• Professionally trained and 24/7/365 staffed 911 call takers to triage a caller's location.</li> <li>• 9Line includes the first unlocated caller fee at no additional charge (\$25 thereafter).</li> <li>• Supports callers calling with unprovisioned, or incorrectly provisioned address information.</li> </ul>

# Specifications Continued

<b>Security Features</b>	<ul style="list-style-type: none"><li>• Call signaling encryption with TLS.</li><li>• Call media encryption with SRTP.</li><li>• Support private instances, ExpressRoute, Site-to-Site VPN (fees apply).</li></ul>
<b>Capacity</b>	<ul style="list-style-type: none"><li>• Supports unlimited Unified Communications Manager clusters.</li></ul>
<b>Testing</b>	<ul style="list-style-type: none"><li>• Unlimited test calls can be placed to the “933” test pattern.</li><li>• 24/7/365 access to service.</li><li>• Dynamically generated audio recording will read back the address of the device.</li><li>• Can be made available to users if administrators wish to allow self-testing.</li><li>• Automated testing of endpoints with UnifiedFX can be used with the 933 pattern.</li></ul>
<b>Ordering Information</b>	<ul style="list-style-type: none"><li>• Licensed on a per-user model per the customer’s flex plan.</li><li>• Public space devices are included at no additional charge.</li><li>• All of a user’s devices (physical &amp; soft phones) are included in the user fee.</li><li>• 30-day trial for services for customers wishing to try &amp; buy.</li><li>• Annual subscription-based software as a service billing model.</li><li>• Discounts available for multi-year pre-paid terms.</li></ul>
<b>Compliance</b>	<ul style="list-style-type: none"><li>• Meets or exceeds state and federal 911 regulatory requirements.</li><li>• IETF/RFC requirements for SIP in RFC 2543, 2833, 3261, 5139.</li><li>• Encryption with TLS 1.2+.</li></ul>
<b>Support</b>	<ul style="list-style-type: none"><li>• Onboarding support included with Customer Success Manager.</li><li>• Post-implementation support available 24/7/365 via email and web.</li><li>• Online system administrator documentation.</li></ul>

## About 9Line

9Line was founded to bring affordable emergency calling solutions to the market. Built by industry veterans with over 25 years of experience in Cisco unified communications applications and premier software engineering capabilities, 9Line is uniquely positioned to help customers of all sizes achieve compliance. By working hand-in-hand with our customers and partners, we deliver the features that help organizations become and remain compliant with federal laws such as Kari’s Law and Ray Baum’s Act.

Please visit [www.9Line911.com](http://www.9Line911.com) for more information.

