

Cisco Intelligent Proximity–Networking Requirements

Intelligent Proximity for Content Sharing allows you to automatically pair your mobile devices, for example a phone, laptop or a phone with Cisco’s room-based video collaboration systems.

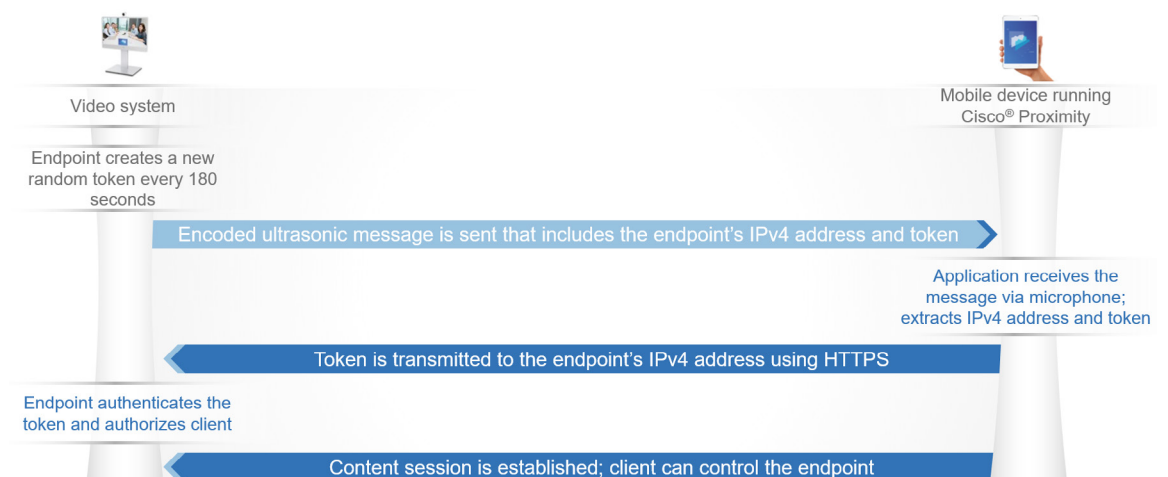
The Intelligent Proximity solution enables a range of features, which will improve the meeting experience.

This document describes the networking requirements needed to successfully deploy Intelligent Proximity.

How Cisco Proximity Works

When the Intelligent Proximity services are enabled on a video endpoint, an inaudible ultrasonic sound token will be played through the video system loudspeakers. The Cisco Proximity client application running on the mobile device will record this token through its integrated microphone. The token contains information on how to connect to the video system over the network.

The mobile device will decode the token and try to establish a secure connection to the video system. To establish the connection, the mobile device needs to be able to reach the IPv4 address of the video system in the room on port 443 (HTTPS).



Network Types

Virtual Local Area Networks (VLAN)

If virtual LANs are deployed for network isolation, a route needs to be configured for TCP/port 443 so, for example, a laptop in the data VLAN can connect to the video system on a video/voice VLAN.

Cellular Networks

A user could be on a mobile data network (3G/4G/LTE) as long as there is a VPN connection back to the enterprise and there is a route to the endpoint IP from the VPN concentrator. The endpoint has to be routable on IPv4

Guest Networks

Guest networks can be granted access if deemed suitable for the respective enterprises and the security aspect has been considered. The same concept as the latter also applies to this subsection.

IPv6, Hostnames and Fully Qualified Domain Names (FQDN)

The ultrasound token exchange does not support IPv6 addresses, hostnames, or FQDN's. However, the mobile device could have an IPv6 address as long as it can connect to the IPv4 addressable endpoint.

NAT'ed Networks

If the video endpoint is configured behind a NAT (Network Address Translation) Cisco Proximity will not be able to connect to the endpoint. The mobile device however will be able to connect to the endpoint as long the IPv4 address of the endpoint is reachable from behind the client NAT.