

Instant Connections

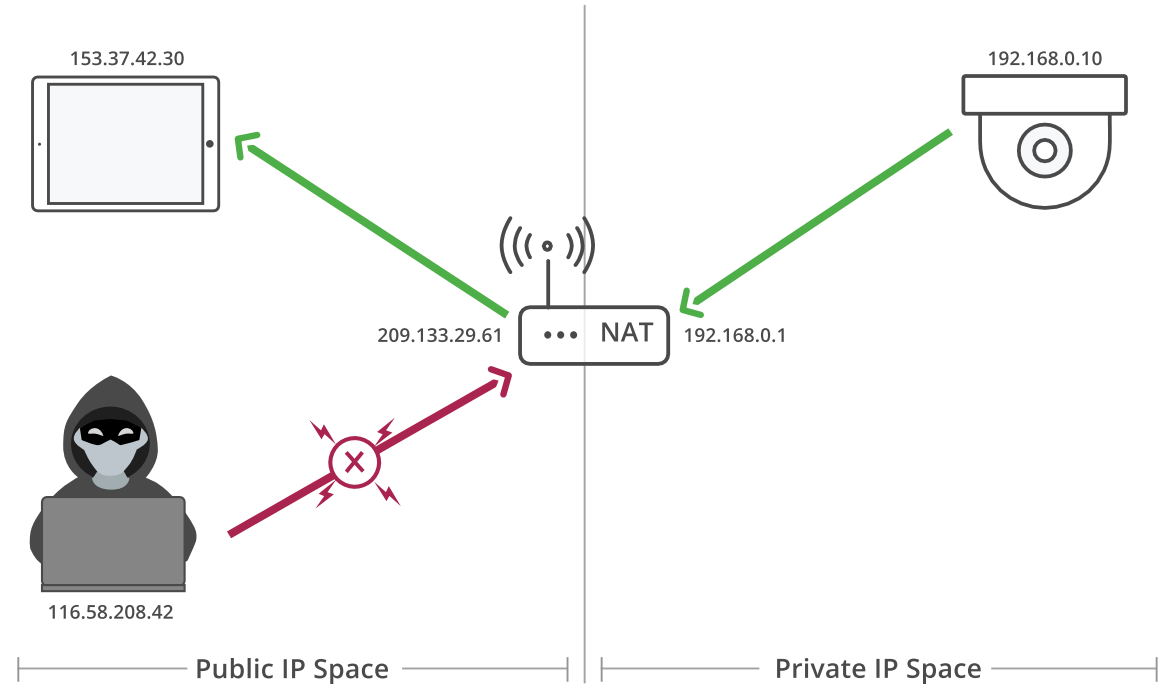
Version 1.1 | As seen on [Instant Connections](#)

Background: Network Address Translation (NAT)

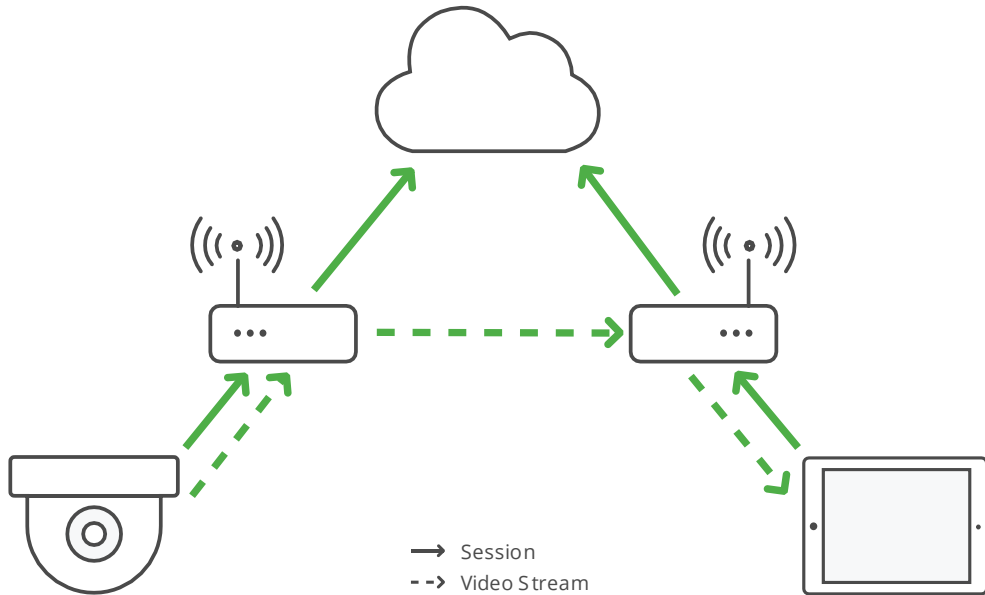
Network Address Translation (NAT) is a technique by which a router remaps a public IP address space into a private IP address space by translating IP addresses in packet headers. NATs forward solicited packets to their destinations and discard unsolicited packets. NATs also enable IP masquerading, a technique by which many devices share a single public IP address.

NATs are ubiquitous. They've been essential to Internet growth by enabling:

- IP address space expansion
- Network management
- Network security



Background: NAT Traversal



NAT traversal is a computer networking methodology which establishes and maintains peer-to-peer connections across routers that implement NAT and IP masquerading. NAT Traversal is required for network applications that require peer-to-peer connections, such as connected video telephony, IoT, and connected cameras.

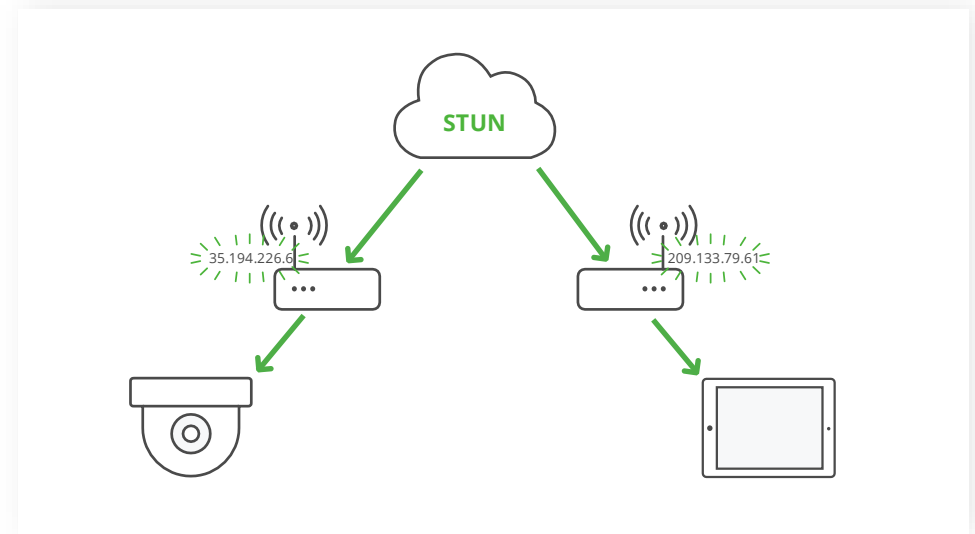
AnyConnect enables NAT Traversal for connected cameras. [Learn more about NAT Traversal.](#)

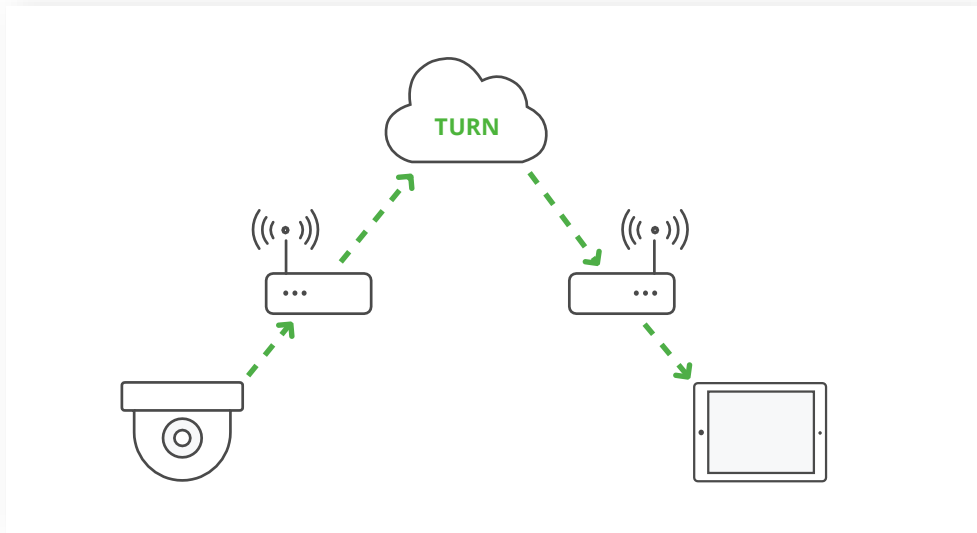
Background: STUN TURN ICE

STUN, TURN, and ICE are IETF standard NAT traversal protocols which enable peer-to-peer connections:

STUN

Enables a device to discover its public IP address



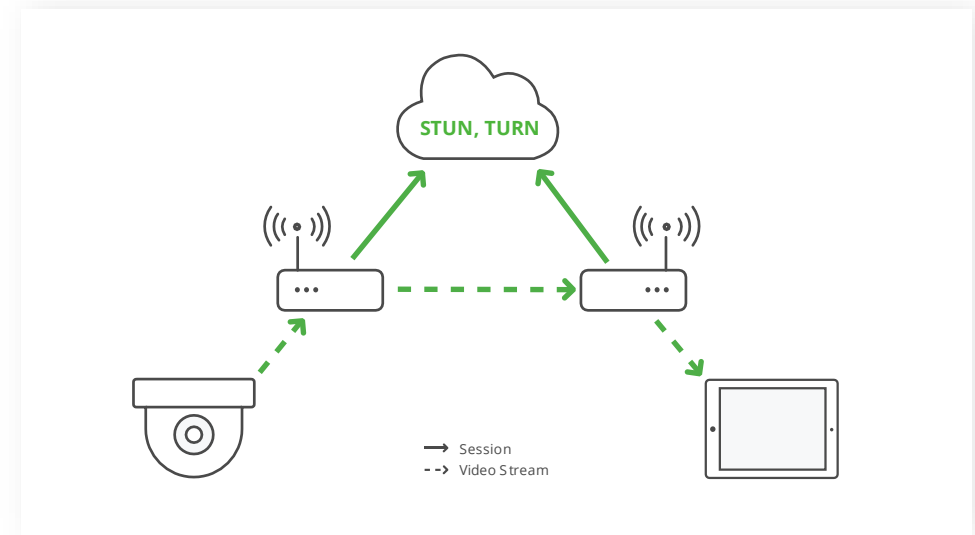


ICE

Enables a device to communicate its public IP address and connect to other devices

TURN

Enables a server to relay packets between devices



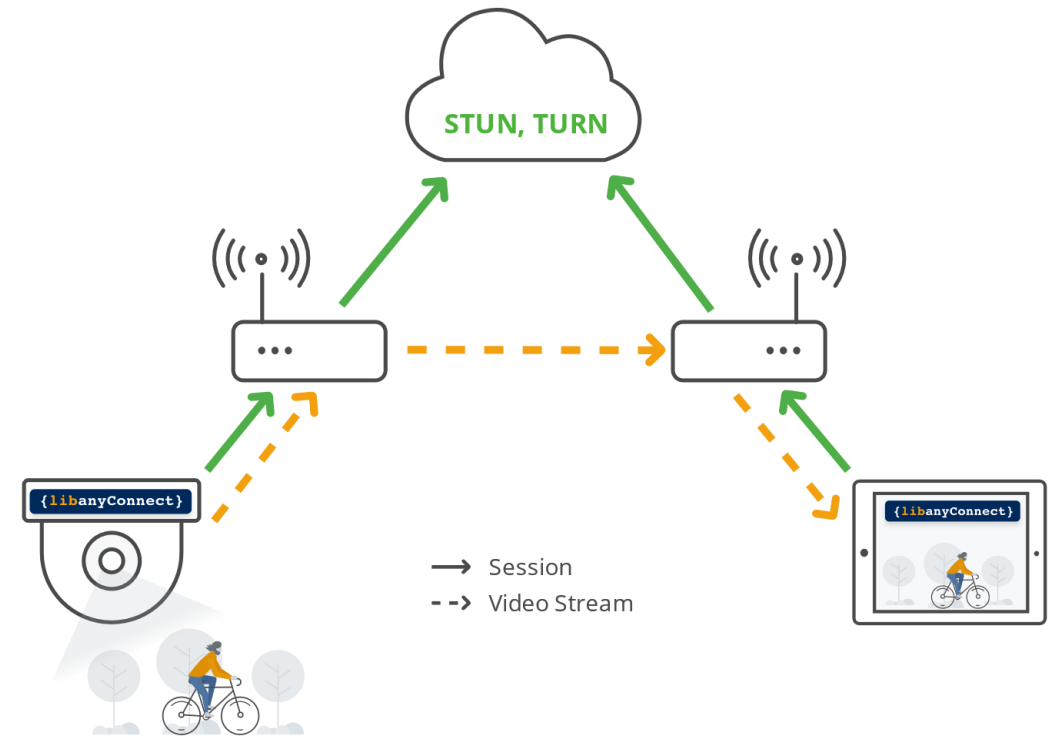
AnyConnect enables STUN, TURN, and ICE for connected cameras. Learn more about AnyConnect [STUN, TURN, and ICE](#).

What are AnyConnect Instant Connections?

STUN, TURN, and ICE enable peer-to-peer connections, but these connections are not optimized for setup time or data delivery.

AnyConnect Instant Connections leverage STUN, TURN, and ICE, and plus AnyConnect patented innovations, to enable connections with optimal setup times and data delivery.

AnyConnect Instant Connections enable mobile apps to stream, record, and receive notifications from connected cameras, instantly.



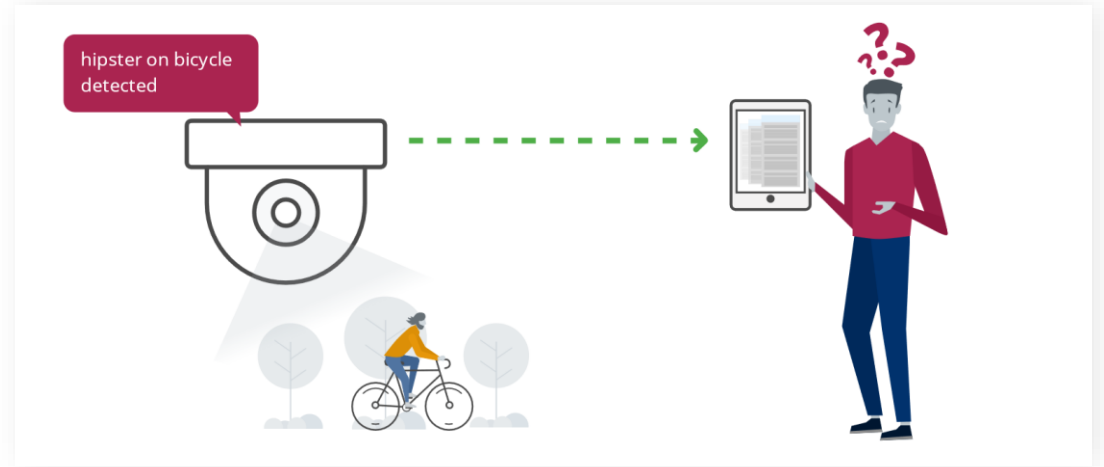
Instant Connection Challenges

Instant Connections must support cameras and mobile devices on the same network and across the world. There are several challenges to reliable instant connections including:

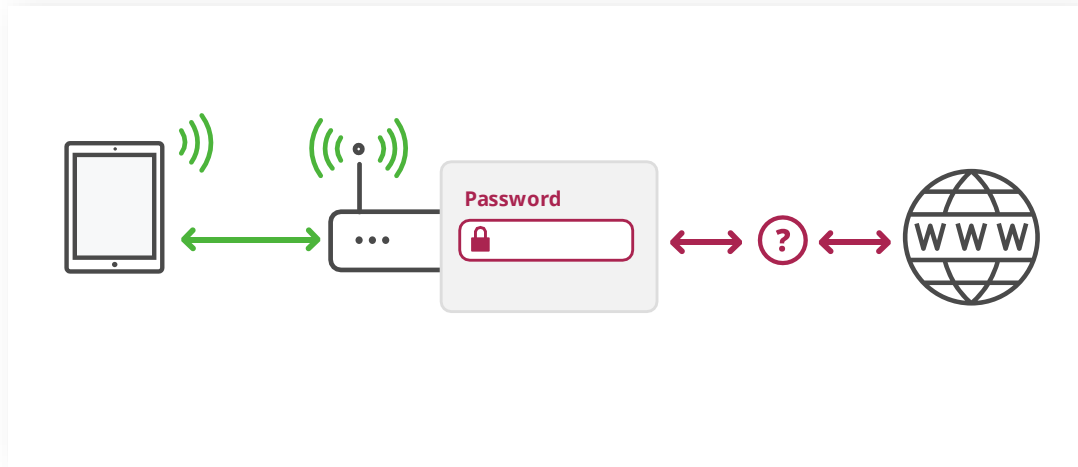
Cross-region support



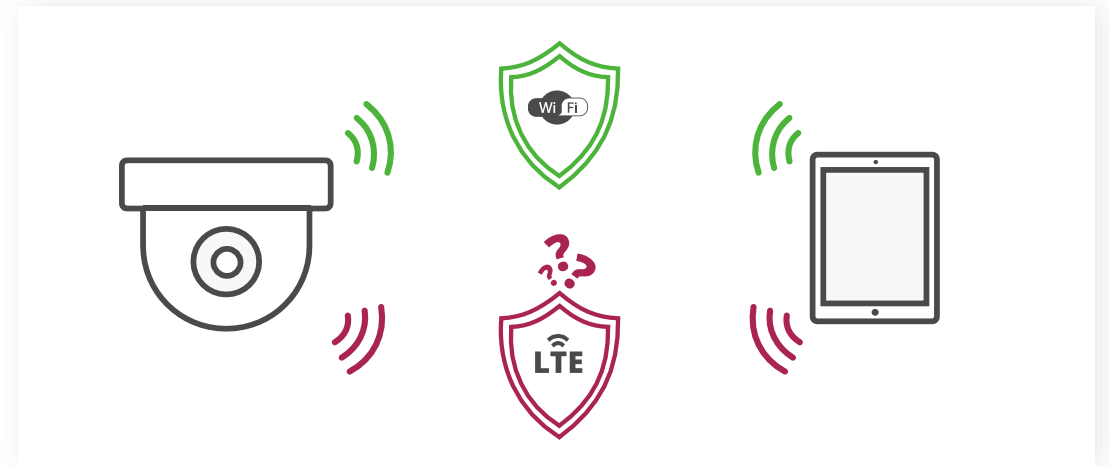
Background / foreground modes



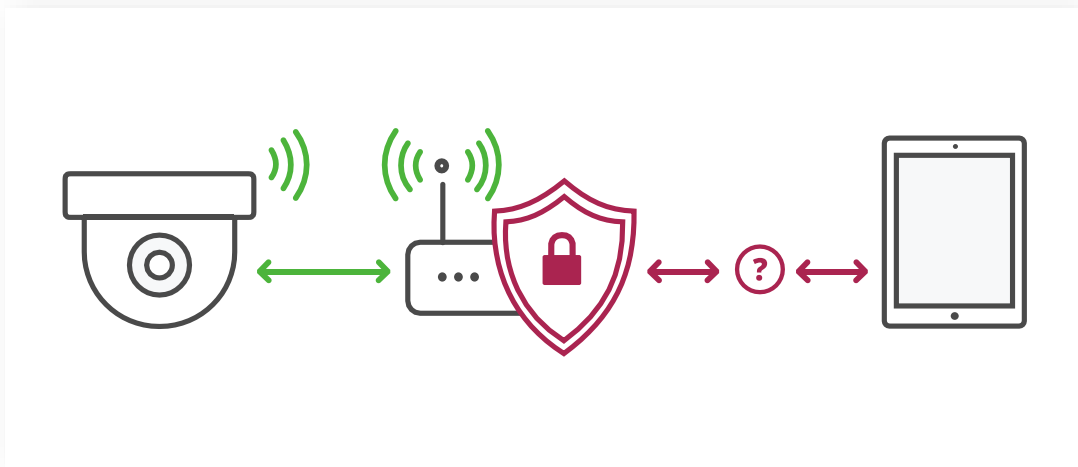
Guest pass authentication



Network and state transitions

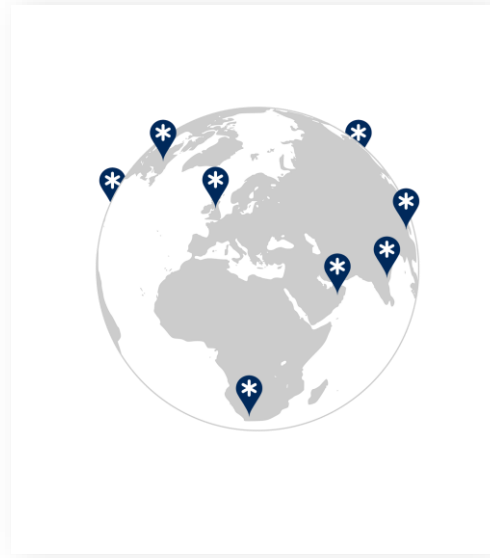


Port restriction

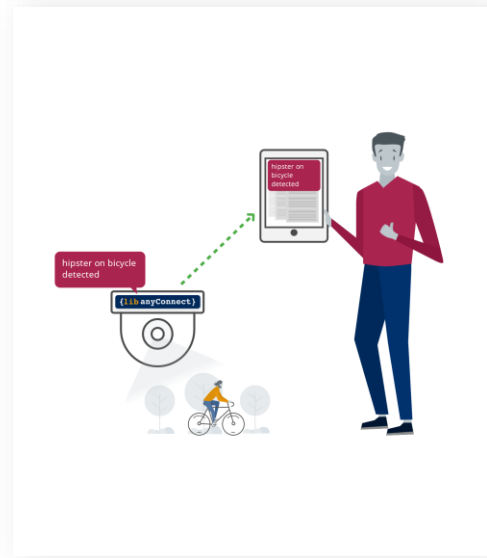


AnyConnect Instant Connection Benefits

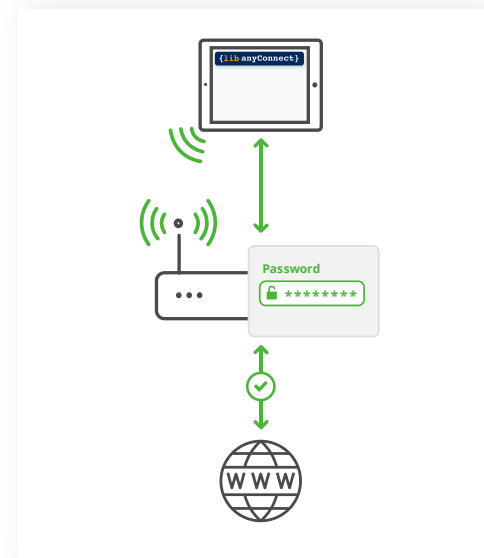
AnyConnect Instant Connections delivers optimized setup times and data delivery for cameras and mobile apps in:



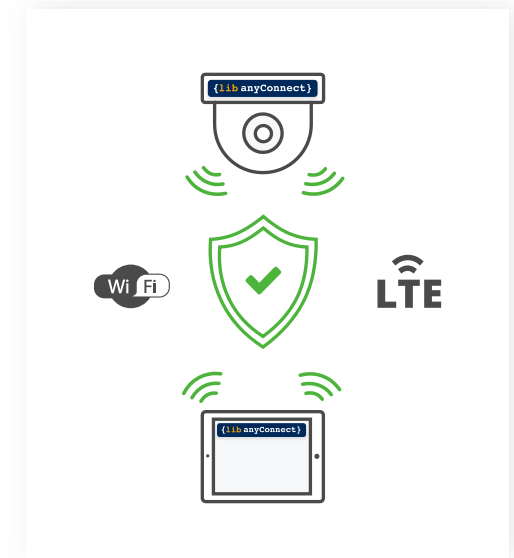
The same network ... or across the world.



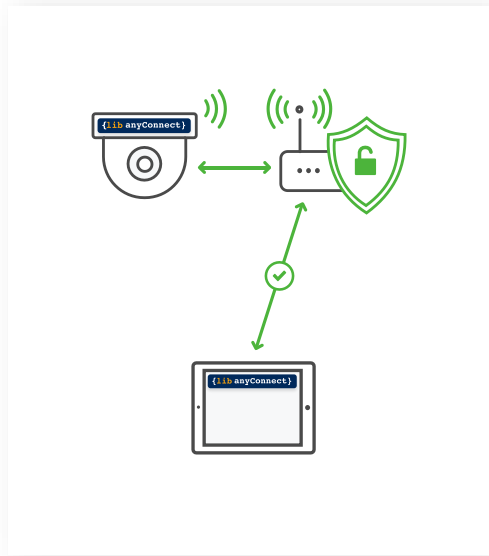
Background and foreground modes.



Public networks with guest pass authentication.



Between data networks (e.g. WiFi to 4G) and online / offline states.



Enterprise networks with
protocol and port
restriction policies.

Get started with AnyConnect.

Ready to get started? Contact us

Talk to an expert