



360iQ Technical Overview and Network Specification

360iQ saves you time and money by leveraging your existing video and POS systems to identify and predict risk, as well as provide insights to improve your business. For more than 25 years, we have been an industry leader and have helped 37,000+ restaurants, C-stores, and retail locations increase revenue, manage costs, and deliver an exceptional customer experience.

Content

In this guide, we will cover the proceeding topics:

- [How It Works](#)
 - [WebRTC](#)
 - [POS Integration](#)
 - [Cloud Security](#)
- [Networking Requirements](#)
 - [Whitelists](#)
 - [Detailed Endpoints List](#)

How It Works

The **Network Video Recorder** (NVR) is responsible for recording, storing, and playing back historical video. It handles data acquisition/pre-parsing and other management and monitoring tasks at the store level. To meet security and compliance standards, the NVR uses two independent ethernet adapters to isolate the camera network from other store devices.

Data and video are uploaded to DTiQ's secure cloud dashboard to provide end-users with advanced enterprise analytics.

WebRTC

In **WebRTC**, the NVR utilizes the **Interactive Connectivity Establishment** (ICE) protocol to transmit video streams through the firewall. Our solution does not require setting up any inbound port forwarding for streaming live and historical video. Some whitelisting may be required for customer networks with restricted outbound traffic rules.

POS Integration

The **360iQ POS integration** configuration depends on which POS system is installed at the store, as well as on the requirements of the IT team maintaining the environment.

DTiQ usually integrates with live POS data in one of the proceeding ways:

- **POS to NVR Direct:** The POS system transmits data in XML, JSON, or flat text formats to a designated IP address and port on the NVR. If the NVR is not located on the same subnet as the POS, a one-way firewall rule is required to permit traffic flow from the POS to the NVR.
- **Secure Data Relay:** A proprietary POS-specific agent is installed on either the POS or the Back-of-House (BOH) server. This agent manages the acquisition, encryption, and secure transfer of data to the NVR. One-way communication must be established from the POS/BOH to the NVR.
- **Cloud Connection:** Cloud POS integration utilizes vendor-specific APIs to retrieve data directly from the provider's cloud database. This method typically does not require connectivity between the POS and the NVR.

Cloud Security

All data transmitted from the NVR at the store level to our secure cloud is encrypted using industry-standard strong encryption. Our private cloud is hosted in SSAE 16 and SOC-audited Tier 3 facilities, ensuring compliance with major standards such as HIPAA, HITECH, and PCI DSS 3.0.

Networking Requirements

Whitelists

The following is a list of all **whitelisting** required for 360iQ:

Destination URL	Services/Ports	Purpose
*.go360iq.com	TCP 443, TCP 80, UDP 80, TCP 3478-3479, UDP 3478-3479, TCP 8140, TCP 8141	360iQ API (application interfaces, data interfaces, systemAPI, Identity services, connectivity services, monitoring services)
*.amazonaws.com	TCP 443	360iQ Microservices on AWS, AWS S3
*.google.com *.gstatic.com	TCP 443	reCaptcha3 from Google security
*.godaddy.com	TCP443	SSL CA Repository
*.microsoft.com *.windows.net	TCP 443, UDP 123	Microsoft Windows Updates, Windows NTP Servers
*.teamviewer.com	TCP 443	TeamViewer Remote Access Server
*.cloudflare.com	TCP 443	Resources required for faster Identity loading
*.atera.com *.pubnub.com *.pndsn.com *.pubnubapi.com	TCP 443	Atera Tool for Windows Updates CDN service

Detailed Endpoints List

If it is not permitted to wildcard a domain as specified in the above table, the following is a detailed list of all **endpoints** required for 360iQ:

Destination URL	Services/Ports	Purpose
*.go360iq.com	TCP 443, TCP 80, UDP 80, TCP 3478-3479, UDP 3478-3479, TCP 8140, TCP 8141	360iQ API (application interfaces, data interfaces, systemAPI, Identity services, connectivity services, monitoring services)
turn-us-ps1.go360iq.com http://turn-us-ps2.go360iq.com http://turn-aus-ps2.go360iq.com turn-eu-ps1.go360iq.com turn-aus-ps1.go360iq.com turn-ap-southeast-1.go360iq.com turn-aus-ps3.go360iq.com turn-aus-ps2.go360iq.com turn-eu-1.go360iq.com turn-eu-central-1.go360iq.com turn-us-central-1.go360iq.com turn-us-east-1.go360iq.com turn-us-east-1.go360iq.com	TCP 80, UDP 80 , TCP 3478-3479, UDP 3478-3479	TURN/STUN servers for WebRTC
dtiq-risa-files.s3.amazonaws.com	TCP 443	360iQ Microservices on AWS, AWS S3

gstatic.com	TCP 443	reCaptcha3 from Google security
fonts.gstatic.com		
*.godaddy.com	TCP 443	SSL CA Repository
windowsupdate.microsoft.com	TCP 443, UDP 123	Microsoft Windows Updates, Windows NTP Servers
*.windowsupdate.microsoft.com		
*.update.microsoft.com		
*.windowsupdate.com		
download.windowsupdate.com		
download.microsoft.com		
*.download.windowsupdate.com		
wustat.windows.com		
http://ntservicepack.microsoft.com		
http://go.microsoft.com		
dl.delivery.mp.microsoft.com		
dl.delivery.mp.microsoft.com		
*.delivery.mp.microsoft.com		
time.windows.com		
time.nist.gov		
*.teamviewer.com	TCP 443	Team Viewer Remote Access Service
*.cloudflare.com	TCP 443	Content Delivery Network (CDN)
http://maxcdn.bootstrapcdn.com	TCP 443	Resources required for faster Identity loading

pubsub.atera.com	TCP 443	Atera Tool for Windows Updates CDN service
pubsub.pubnub.com		
http://app.atera.com		
agenthb.atera.com		
packagesstore.blob.core.windows.net		
ps.pndsn.com		
agent-api.atera.com		
cacerts.thawte.com		
agentreportingstore.blob.core.windows.net		
atera-agent-heartbeat.servicebus.windows.net		
ps.atera.com		
atera.pubnubapi.com		
appcdn.atera.com		
atera-agent-heartbeat-cus.servicebus.windows.net		
ticketingitemsstoreeu.blob.core.windows.net		
download.visualstudio.microsoft.com		
http://a32dl55qcodech-ats.iot.eu-west-1.amazonaws.com		

agentspoliciesprod.blob.core.windows.net		
aias.go360iq.com	TCP 443	CV Model
http://api.go360iq.com	TCP 443	API
breeze.go360iq.com	TCP 443	Production component
conn-us-ps1-4001.go360iq.com	TCP 443	Production component
conn-us-ps1-4002.go360iq.com		
conn-us-ps1-4003.go360iq.com		
conn-us-ps1-4004.go360iq.com		
conn-us-ps1-4005.go360iq.com		
conn-us-ps1-4006.go360iq.com		
conn-us-ps1-4007.go360iq.com		
conn-us-ps1-4008.go360iq.com		
conn-us-ps1-4009.go360iq.com		
conn-us-ps1-4010.go360iq.com		
conn-us-ps1-4011.go360iq.com		
conn-us-ps1-4012.go360iq.com		
conn-us-ps1-4013.go360iq.com		

conn-us-ps1- 4014.go360iq.com		
conn-us-ps1- 4015.go360iq.com		
conn-us-ps1- 4016.go360iq.com		
conn-us-ps1- 4017.go360iq.com		
conn-us-ps1- 4020.go360iq.com		
conn-us-ps1- 4021.go360iq.com		
conn-us-ps1- 4022.go360iq.com		
conn-us-ps1- 4023.go360iq.com		
conn-us-ps1- 4031.go360iq.com		
conn-us-ps1- 4032.go360iq.com		
conn-us-ps1- 4033.go360iq.com		
conn-us-ps1- 4034.go360iq.com		
conn-us-ps1- 4035.go360iq.com		
conn-us-ps1- 4036.go360iq.com		

conn-us-ps1- 4037.go360iq.com		
conn-us-ps1- 4038.go360iq.com		
conn-us-ps1- 4039.go360iq.com		
conn-us-ps1- 4040.go360iq.com		
conn-us-ps1- 4041.go360iq.com		
conn-us-ps1- 4042.go360iq.com		
conn-us-ps1- 4043.go360iq.com		
conn-us-ps1- 4044.go360iq.com		
conn-us-ps1- 4045.go360iq.com		
conn-us-ps1- 4046.go360iq.com		
conn-us-ps1- 4047.go360iq.com		
conn-us-ps1- 4048.go360iq.com		
conn-us-ps1- 4051.go360iq.com		
conn-us-ps1- 4052.go360iq.com		

conn-us-ps1-4053.go360iq.com		
conn-us-ps1-4056.go360iq.com		
conn-us-ps1-4057.go360iq.com		
conn-us-ps1-4058.go360iq.com		
conn-us-ps1-4080.go360iq.com		
data-api.go360iq.com	TCP 443	Production Data Interface
http://data-us-ps1.go360iq.com		
http://data-us-ps2.go360iq.com		
http://data.go360iq.com		
features-director.go360iq.com		
http://files-us-ps1.go360iq.com	TCP 443	File Services
files-us-ps2.go360iq.com		
http://id.go360iq.com	TCP 443	Identity Services
http://identity.go360iq.com		
ipt.go360iq.com	TCP 443	IPT Tool
logs-gateway.go360iq.com	TCP 443	Log stash
microservices-data-prod.go360iq.com	TCP 443	Microservice
microservices-mms-prod.go360iq.com		
microservices.go360iq.com		

notification-broker.go360iq.com		
http://pdi.go360iq.com	TCP 443	Parser Data Interface
puppet.go360iq.com	TCP 8140, TCP 8141	Puppet Tool
rabbitmq.go360iq.com	TCP 5671, TCP 5672	RabbitMQ
res.go360iq.com	TCP 443	Resources for app

For additional information or questions, please contact **Support** at support@dtiq.com or your **Customer Experience Team** at csr@dtiq.com.



800.933.8388 | info@dtiq.com | www.DTiQ.com