# e-Bridge App Requirements (Android)

### 1. Minimum System Requirements

- a. Android device (smartphone or tablet) running Android v5.1 or later (as of e-Bridge v8.0.0.46)
- b. Android device with the Google Play Store installed and must have a Google Account logged in (to receive push notifications for new messages via Firebase Cloud Messaging (FCM))
- c. If any Mobile Device Management (MDM) software is used, access to microphone and camera must be allowed for sending voice, picture or video messages. Android device must also be able to receive push notifications via Firebase Cloud Messaging (FCM).
- d. If using the Location Tracking feature, Android device MUST have a built-in GPS receiver.

#### 2. Network Requirements

The following ports need to be open in any firewalls between the Android device and the internet for e-Bridge to communicate:

Port # (Protocol)	Direction	Destination
443 (TCP)	Outgoing	https://mobile.gdserver.net
		https://messaging.gdserver.net
		https://webupdate.gdserver.net
		https://workflow.gdserver.net
		<b>Note:</b> This is for the Secure Messaging portion of the app.
5228, 5229, 5230 (TCP)	Outgoing	FCM doesn't provide specific IPs because the IP range changes too frequently. Ideally, whitelist ports 5228-5230 with no IP restrictions. However, if you must have an IP restriction, you should whitelist all of the IP addresses in the IPv4 and IPv6 blocks listed in Google's ASN of 15169.
		Note: This is used for receiving push notifications on Android
		devices via Firebase Cloud Messaging (FCM). See
		https://firebase.google.com/docs/cloud-messaging/concept-
		options#ports_and_your_firewall for more info.
5060, 5061	Both	66.227.100.0 Netmask 255.255.255.0
(UDP/TCP)		199.7.172.0 Netmask 255.255.255.0
		199.7.173.0 Netmask 255.255.255.0
		199.7.174.0 Netmask 255.255.255.0
		199.7.175.0 Netmask 255.255.255.0
		<b>Note:</b> CIDR Notation for above: 66.227.100.0/24, 199.7.172.0/22
		<b>Note:</b> This is for the Live Streaming portion of the app.
20000-20099	Both	66.227.100.0 Netmask 255.255.255.0
(UDP)		199.7.172.0 Netmask 255.255.255.0
		199.7.173.0 Netmask 255.255.255.0
		199.7.174.0 Netmask 255.255.255.0
		199.7.175.0 Netmask 255.255.255.0
		<b>Note:</b> CIDR Notation for above: 66.227.100.0/24, 199.7.172.0/22
		<b>Note:</b> This is for the Live Streaming portion of the app.

# e-Bridge App Requirements (Android)

For e-Bridge Live Streaming, only networks with a single Network Address Translation (NAT) layer are supported. If using Verizon Wireless hotspots they must be configured with a static, public IP address to eliminate a double NAT.

### 3. Third Party App Requirements

The following file types may not open by default on Android (depending on device). GD recommends the following third party apps to open these file types:

- a. PDF files Adobe Reader
- b. TIF files Fast Image Viewer Free