ioBusinessMusic

ioB + Grace Digital Link External Connectivity Requirements*

Whitelisting External Ports
The players must communicate externally over the following ports:

PROTOCOL	PORT	PURPOSE	DETAILS
TCP	80	HTTP	Unencrypted traffic
TCP	443	HTTPS	Encrypted traffic
UDP	53	DNS	Domain name resolution
UDP	123	NTP	Network time synchronization

Whitelisting ioB + SGS Streaming Servers
Our streaming services use the StreamGuys Content Delivery Network for delivering content to the player/receiver. The player/receiver uses the following URLs for content:

*streamguys1.com
*iob-ais.streamguys1.com (optional)
*mydigitalradio.io (device portal)
*servercentral.net (optional)
*edg1-ord-iob.streamguys1.com (optional)
*ntp.org

Because these URLs are appended with dynamic information, whitelisting of the URL must be limited to the base URL.

Whitelisting of URLs can also be done using pattern matching. For example, *streamguys1.com, or iob-ice-streamguys1.com/*.aac are valid patterns where “*” can match any valid permutation of sub-domain (DNS) names, including multiple names separated by periods + "*.aac" can match any valid permultations of a music channel stream mount, respectively.

All streaming sites for *.streamguys1.com go through an enterprise Web Application Firewall (WAF). The WAF IP addresses MUST be allowed ("Allow List"). Therefore, the IP ranges must be allowed:

50.31.192.56/29

The IP range belongs to Server Central, LLC, and may be referenced as such or as "Deft.com"
–

*This External Connectivity Requirement guide is applicable for the ioB + Grace Digital Link and Mondo Elite devices.