Security Guidelines

AudioCodes Intuitive Human Communications for Chatbot Services

Voice.AI Gateway

Version 2.0

audiocodes

Table of Contents

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Abbreviations and Terminology

Each abbreviation, unless widely used, is spelled out in full when first used.

Related Documentation

Document Name
Product Description
Voice.AI Gateway API Reference Guide
Voice.AI Gateway Integration Guide
Voice.AI Gateway with One-Click Dialogflow Integration Guide
AudioCodes Phone Number Connector

General Notes, Warnings, and Safety Information

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1 Introduction

This document provides security guidelines for safeguarding your network and AudioCodes Voice.AI Gateway's audio-centric (voice-bot) solution against malicious attacks.

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2 Architecture

To effectively secure the network, it's important that you familiarize yourself with the architecture of the Voice.AI Gateway components.

The Voice.AI Gateway system is Docker-based, providing two installation variants:

- **All-in-one**: A single docker-compose file with all components.
- **A single, central server** with shared components such as a database, a web server and so on (called Center), and a separate (potentially multiple) session manager instance.

The following table lists the containers of the Voice.AI Gateway system.

Table 2-1: Voice.AI Gateway Containers

Service	Description	Port
vag-session-manager	Main application.	8080
vag-version	Static version file and several helper scripts. The files are synchronized to the host, and then the container is stopped.	
fluentd	Syslog server.	
telegraf	Collects system statistics.	
mongo	Mongo database (persistent). Stores the application data, configuration, transcripts, alarms and more.	27017
nginx	Web server. This is the user interface (UI) of the system and Grafana.	443
alarms	Raises alarms according to configuration.	161/UDP
influxdb	Time series database. Stores usage statistics.	8086
grafana	Grafana UI for the data from influxdb.	
vag-ui-server	UI server.	
vag-ui-client	Static client files. Synchronized to the host and then the container is stopped.	
vag-services-mngr	Internal service for status queries, database cleanup and more.	8081

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3 Firewall Rules

Open ports allow access to services from the network. All incoming ports should be blocked by the firewall by default, except those that are required.

The Session Manager should be in a **private network** that the SBC can access.

The following table refers to the split variant. For the All-In-One variant, Center and Session Manager are the same host.

Table 3-1: Firewall Rules for Split Variant

Source	Target	Port	Transport Protocol	Comments
SBC	Session Manager	8080	TCP	-
Session Manager	Center	27017, 8086	TCP	Only needed for Split variant. The port is not exposed in the All-In-One variant.
Private Network	Center	443	TCP	Optional. Only if you need UI / Grafana.

Note: Grafana and the UI can only be accessed from NGINX. They don’t expose any port to the host machine.

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4 Credentials

If the Voice.AI Gateway system is public, it is highly recommended that you change the passwords of the UI and Grafana before going live.

The default credentials of the components that require authentication are listed in the following table:

Table 4-1: Default Credentials

Service	User:Password	How to change
Mongo	vag:voice-ai	Internal. Should not be accessible from outside.
Influx	admin:admin	Internal.
UI	admin:admin	Click **Users** -> **Admin** -> **Set Password**.
Grafana	admin:admin	Changed upon initial login.

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5 Disabling Services

To reduce the attack surfaces (vulnerabilities) of the Voice.AI Gateway system, it's recommended to disable various services described in this section.

5.1 Disabling Grafana

If you are not using Grafana, you can disable it as follows:

1. Open the docker-compose file.
2. Delete or comment out the entire grafana service.
3. Delete or comment out grafana dependency in the NGINX service.

5.2 Disabling Web UI

If you are not using the Web user interface (UI), you can disable it as follows:

1. Disable Grafana (as described in the previous section).
2. Delete or comment out the entire nginx and vag-ui-client services.
3. For All-In-One variant only:
   a. In telegraf dependencies, replace vag-ui-server with vag-session-manager.
   b. Delete or comment out the entire vag-ui-server service.

International Headquarters
1 Hayarden Street,
Airport City
Lod 7019900, Israel
Tel: +972-3-976-4000
Fax: +972-3-976-4040

AudioCodes Inc.
200 Cottontail Lane
Suite A101E
Somerset NJ 08873
Tel: +1-732-469-0880
Fax: +1-732-469-2298

Contact us: https://www.audiocodes.com/corporate/offices-worldwide
Website: https://www.audiocodes.com/

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