Genesys Voice Platform Private Edition Guide

Architecture - Media Control Platform

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Contents

Learn about Genesys Voice Platform- media control platform architecture

Related documentation:
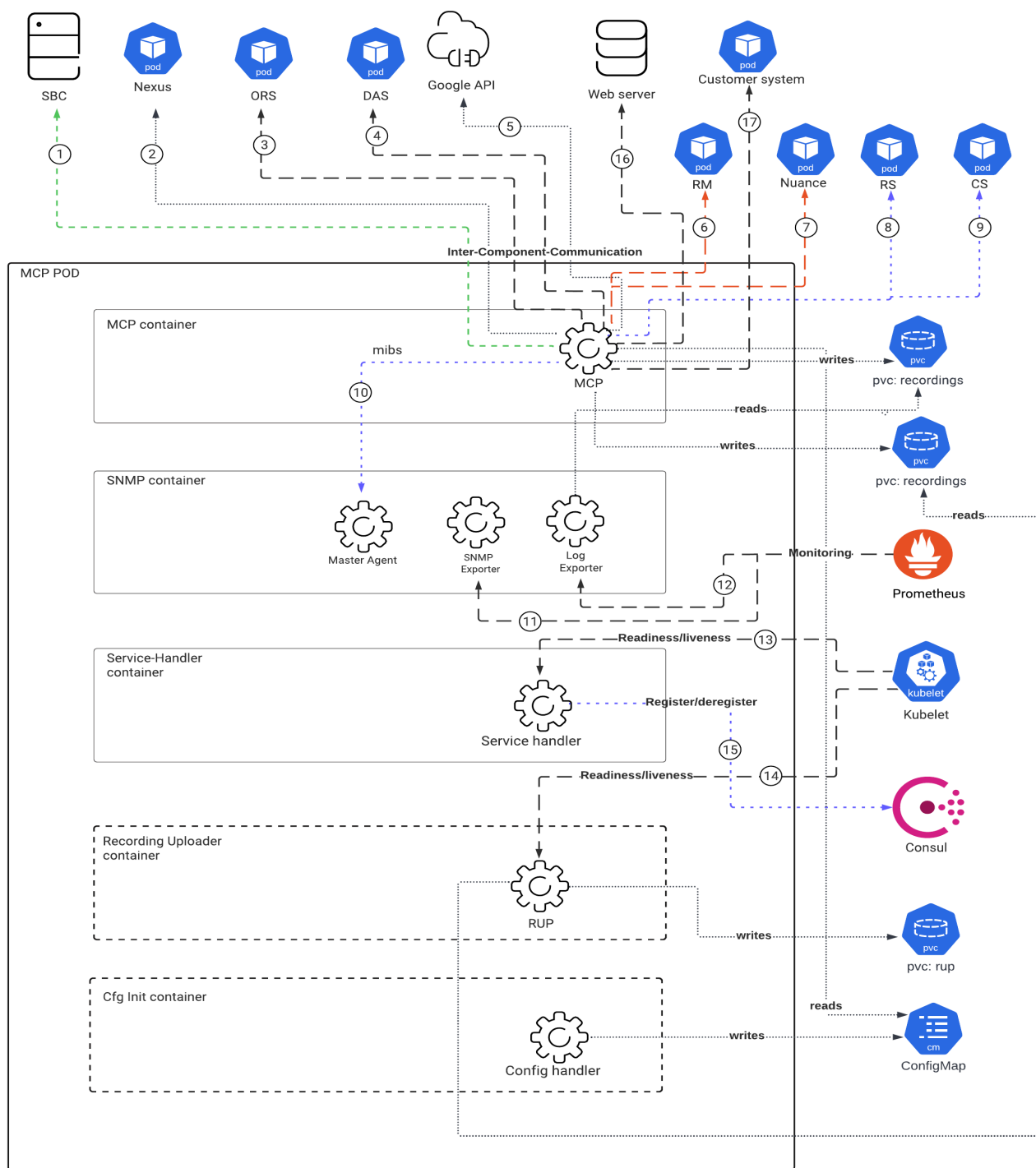-
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RSS:
- For private edition

Introduction

The following diagram displays the architecture for Media Control Platform.

For information about the overall architecture of Genesys Multicloud CX private edition, see the high-level Architecture page.

See also High availability and disaster recovery for information about high availability/disaster recovery architecture.

Architecture diagram — Connections

The numbers on the connection lines refer to the connection numbers in the table that follows the diagram. The direction of the arrows indicates where the connection is initiated (the source) and where an initiated connection connects to (the destination), from the point of view of Genesys Voice Platform as a service in the network.

SBC Nexus ORS DAS Google API Web server Customer system

RM Nuance RS CS

Inter-Component-Communication

MCP POD

MCP container

mibs

MCP

writes → pvc: recordings

reads

writes → pvc: recordings

SNMP container

Master Agent SNMP Exporter Log Exporter

Monitoring → Prometheus

reads

Readiness/liveness

Service-Handler container

Service handler

Register/deregister

Kubelet

Readiness/liveness

Recording Uploader container

RUP

writes → pvc: rup

Cfg Init container

Config handler

reads

writes → ConfigMap

Consul

Connection type

RTP/RTCP -----------
HTTP ----------
SIP/TCP -- -- --
TCP ....

Connections table

The connection numbers refer to the numbers on the connection lines in the diagram. The **Source**, **Destination**, and **Connection Classification** columns in the table relate to the direction of the arrows in the Connections diagram above: The source is where the connection is initiated, and the destination is where an initiated connection connects to, from the point of view of Genesys Voice Platform as a service in the network. *Egress* means the Genesys Voice Platform service is the source, and *Ingress* means the Genesys Voice Platform service is the destination. *Intra-cluster* means the connection is between services in the cluster.

Connection	Source	Destination	Protocol	Port	Classification	Data that travels on this connection
1	MCP	SBC	RTP/RTCP	20000-45000	Egress	RTP messages.
2	MCP	Nexus	HTTP	443	Egress	Websocket messages. MCP connects to Nexus for Voicebot and Agent Assist services.
3	MCP	ORS	HTTP	11200	Egress	HTTP messages.
4	MCP	DAS	HTTP	80	Egress	HTTP messages. MCP connects to DAS to fetch VXML applications.
5	MCP	Google API	HTTP	443	Egress	GRPC messages. MCP connects to Google APIs for TTS service.
6	MCP	RM	SIP/TCP	5060	Egress	SIP Protocol messages.
7	MCP	Nuance	SIP/TCP	5060	Egress	SIP messages. Also, RTSP messages (protocol is RTSP and port is 14000-15999) and RTP (protocol is

Connection	Source	Destination	Protocol	Port	Classification	Data that travels on this connection
						RTP and port is 20000-45000). MCP connects to Nuance for ASR/TTS services.
8	MCP	RS	TCP	61616	Egress	ActiveMQ messages. MCP posts billing data to RS.
9	MCP	CS	TCP	8888	Egress	TCP messages. MCP connects to configuration server to get recording certificate details.
10	MCP	Master Agent	TCP	1705	Egress	TCP messages. MCP posts SNMP metric and traps to SNMP MA.
11	Prometheus	SNMP Exporter	HTTP	9116	Ingress	HTTP messages. MCP Custom SNMP metric upload to Prometheus.
12	Prometheus	Log Exporter	HTTP	8200	Ingress	HTTP messages. MCP log metric upload to Prometheus.
13	Kubelet	Service Handler	HTTP	8300	Ingress	HTTP GET Requests and for liveness and readiness checks.
14	Kubelet	RUP	HTTP	8080	Ingress	HTTP GET Requests and for

Connection	Source	Destination	Protocol	Port	Classification	Data that travels on this connection
						liveness and readiness checks.
15	Service Handler	Consul	TCP	8500/8501	Egress	TCP messages. Service Handler container inside MCP Registers MCP to the Consul.
16	MCP	Web server	HTTP	80	Egress	HTTP messages. MCP connects to web server to fetch vxml applications.
17	MCP	Customer system	HTTP/HTTPS	80	Egress	HTTP messages.