

Telephony Connection Options — BYOC Cloud vs BYOC Premises

Section	Description
Feature Area	Telephony Infrastructure
Navigation	Admin → Telephony → Trunks
Alt Navigation	Menu → Digital and Telephony → Telephony → Trunks
Primary Function	Connect Genesys Cloud to a third-party telecommunications carrier using SIP trunks

Genesys Cloud offers three telephony connection options. Understanding the differences between them — and between the two BYOC variants in particular — is a common exam topic.

Three Telephony Connection Options

Option	Description	Who Controls the Carrier?
Genesys Cloud Voice	Genesys-provided telephony service over AWS infrastructure — fully managed by Genesys	Genesys provides the carrier service
BYOC Cloud	Customer brings their own carrier; SIP trunks terminate in Genesys Cloud's AWS-based Media Tier over the public internet	Customer — uses their own carrier contract
BYOC Premises	Customer brings their own carrier; SIP trunks terminate at a premises-based Edge hardware device	Customer — uses their own carrier contract + their own on-premises Edge hardware

Study Notes

Topic	Explanation
BYOC	Bring Your Own Carrier — allows organizations to keep their existing carrier contract while using Genesys Cloud for contact center functionality
SIP Trunk	A virtual phone line over IP that connects Genesys Cloud to the PSTN (public telephone network) via a carrier
BYOC Cloud	Cloud-to-cloud — SIP trunks connect a third-party carrier directly to Genesys Cloud's Media Tier (AWS) over the public internet
BYOC Premises	Hybrid — SIP trunks connect a third-party carrier to a Genesys Cloud Edge appliance installed on the customer's premises
Genesys Cloud Edge	A physical hardware device installed on the customer's premises — required for BYOC Premises
Media Tier	Genesys Cloud's AWS-based media processing infrastructure — where BYOC Cloud SIP trunks terminate
Trunk Type	BYOC Cloud uses BYOC Carrier or BYOC PBX trunk types; BYOC Premises uses External SIP trunk type

BYOC Cloud vs BYOC Premises — Side-by-Side Comparison (Exam Critical)

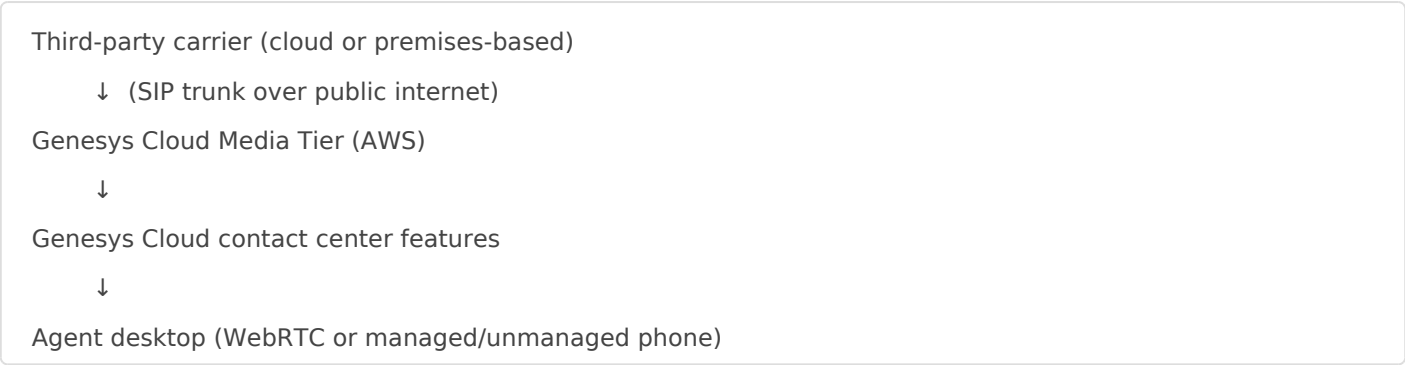
Attribute	BYOC Cloud	BYOC Premises
Where SIP trunks terminate	Genesys Cloud Media Tier (AWS, cloud)	Genesys Cloud Edge (on-premises hardware)
Connectivity	Over the public internet	On-premises network + internet for cloud connectivity
Hardware required	None — fully cloud-based	Yes — Genesys Cloud Edge appliance
Trunk types used	BYOC Carrier · BYOC PBX	External SIP
Third-party device	Can be a cloud-based carrier OR a premises-based carrier device / SBC	Can connect to a premises-based carrier device (SBC/SIP gateway) or cloud-based carrier device

Attribute	BYOC Cloud	BYOC Premises
E911	Customer must verify E911 support with carrier	Customer must verify E911 support with carrier
Kari's Law	Customer must check with carrier for compliance	Customer must check with carrier for compliance
BYOC Premises hardware deprecation	N/A	Genesys Hardware Solution end of support: December 1, 2026 (announced March 2025)

Trunk Types in Detail

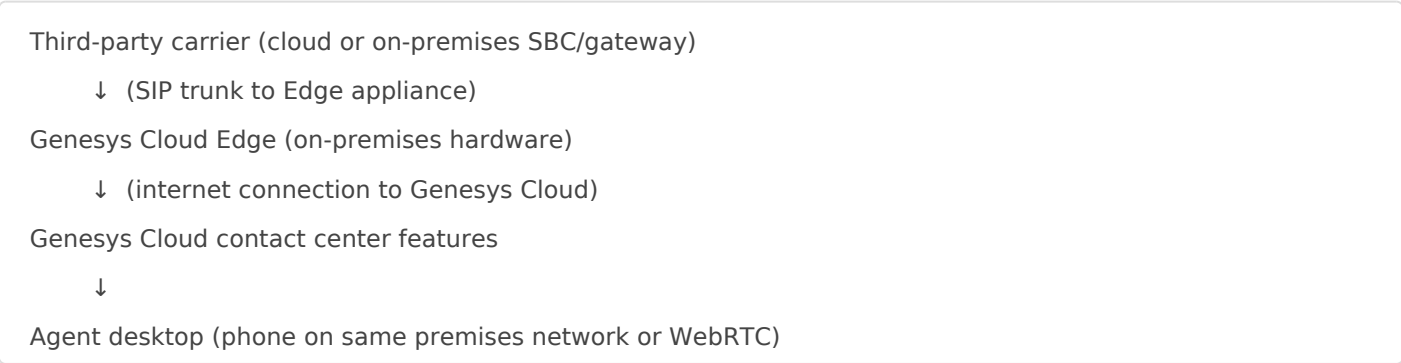
Trunk Type	Used With	Description
BYOC Carrier	BYOC Cloud	SIP trunk to a third-party carrier (telephone company)
BYOC PBX	BYOC Cloud	SIP trunk to a third-party PBX (private branch exchange)
External SIP	BYOC Premises	SIP trunk from a premises-based Edge device to a third-party system
SIP Phone Trunk	All	Internal trunk type for SIP phones
WebRTC Phone Trunk	All	Internal trunk type for WebRTC phones

BYOC Cloud — How It Works



Configuration: Admin → Telephony → Trunks → External Trunks → Add → BYOC Carrier or BYOC PBX

BYOC Premises — How It Works



Configuration: Admin → Telephony → Trunks → External Trunks → Add → External SIP

Genesys Cloud Edge (BYOC Premises Hardware)

The Edge is the on-premises appliance that bridges the customer's local SIP trunks to Genesys Cloud. It handles media processing and call control locally before relaying to the cloud.

Hardware Solution	Notes
Genesys Hardware Solution	Deprecated — End of Support: December 1, 2026
Customer-provided Edge (virtual or third-party hardware)	Customers should plan migration to alternative Edge solutions before the EOS date

“ If you are on Genesys-provided BYOC Premises hardware, plan your migration strategy before **December 1, 2026**.

Emergency Services with BYOC

Unlike Genesys Cloud Voice (which includes built-in E911 via AWS), BYOC customers must work with their carrier for emergency services compliance:

Scenario	E911 Approach
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BYOC Cloud	Check with your carrier — the carrier must support E911 for the numbers and locations in use
BYOC Premises	Check with your carrier — same requirement; carrier must support E911
BYOC + Kari's Law (US)	Check with your carrier — Genesys Cloud Voice handles this natively; BYOC requires carrier verification
BYOC Premises + Site configuration	Configure emergency number plan in Admin → Telephony → Sites → Number Plans — do not assign an emergency number plan to a BYOC trunk unless the carrier has confirmed support

When to Use Each Option

Scenario	Recommended Option
Fastest, simplest deployment with no existing carrier contract	Genesys Cloud Voice
Organization has an existing carrier contract they want to keep	BYOC Cloud
Organization needs on-premises media processing or local survivability (within a site)	BYOC Premises
Fully cloud-native strategy with own carrier	BYOC Cloud
Hybrid deployment needing both cloud and on-premises	BYOC Premises (possibly in combination with other options)

⚠️ Note: As of June 2025, Genesys deprecated Remote Survivability for BYOC Premises Edges, citing inability to reliably deliver IVR flows and AI features during internet outages.

Permissions

Permission	Purpose
Telephony > Plugin > All	Full access to telephony configuration
Telephony > SipTrunk > View/Add/Edit/Delete	Trunk-specific permissions

Key Takeaways

Topic	Summary
Three options	Genesys Cloud Voice · BYOC Cloud · BYOC Premises
BYOC Cloud	Carrier SIP trunks → Genesys AWS Media Tier · No on-premises hardware · Trunk types: BYOC Carrier / BYOC PBX
BYOC Premises	Carrier SIP trunks → on-premises Edge appliance → Genesys Cloud · Requires Edge hardware · Trunk type: External SIP
Key distinction	Where SIP trunks terminate — cloud (BYOC Cloud) vs on-premises Edge (BYOC Premises)
E911	Both BYOC options require carrier verification — not built-in like Genesys Cloud Voice
Premises hardware deprecation	Genesys Hardware Solution for BYOC Premises: EOS December 1, 2026
Remote Survivability	Deprecated as of June 2025 — no longer supported for BYOC Premises Edges

Revision #1
Created 13 March 2026 17:46:45 by Cesar Gzz
Updated 13 March 2026 17:46:53 by Cesar Gzz