Genesys Cloud CX Use Cases

Genesys Voice Services (OP04) for Genesys Cloud

2/25/2026

Telephony Connection Options

What's the challenge?

While new communication channels continue to crop up, the importance of voice remains. But physical hardware and network maintenance can be cumbersome and doesn't scale well. Meanwhile, your business is growing and today's needs may not be the same as next year's needs.

What's the solution?

A wide variety of voice services connectivity options can provide ultimate flexibility and choice—so whether you want to use the same vendor for your contact center solution and voice services, or you prefer to bring your own carrier and manage your own costs, you're able to keep up with your business' shifting needs, all while extending cloud benefits across the business to provide speed, stability and agility.

Contents

Use Case Overview

Story and Business Context

While new communication channels continue to crop up, the importance of voice remains. The speed and agility of the Genesys™ Genesys Cloud CX™ contact center platform connects your customer engagement and enterprise-wide unified communications with the telephony option that best fits your business needs. The widest variety of voice services connectivity options in the industry gives customers unparalleled flexibility and choice. Customers can choose Genesys Cloud CX Voice (Genesys telecom) for VoIP, use the cloud-based Bring Your Own Carrier (BYOC) option, or BYOC on-premises using a Genesys Cloud CX Edge appliance for local survivability. Customers can keep a carrier contract or existing PBX infrastructure, or consolidate using Genesys as a single vendor for all needs. Customers who choose Genesys Cloud CX are often attracted to the cloud technologies and microservices architecture that provide speed, stability, and agility for their business. Adopting a cloud solution for voice services is a future-proof approach—extending these same cloud benefits across a customer's entire communications system.

Genesys Cloud CX Voice

Genesys Cloud CX Voice is an internet-based telephony service provided by Genesys that, when activated, provides public telephony access to Genesys Cloud CX services. (for example, Genesys Cloud CX Communicate and Genesys Cloud CX contact center.) The Genesys Cloud CX Voice service is built on Genesys Telecom, a Genesys second-generation multi-carrier platform, and registered Interconnected-VoIP provider, subject to all local telecom regulation. With Genesys Cloud CX Voice, customers can simplify their software and vendor management, consolidating down to one vendor and one bill. Deployment is fast with this all-cloud solution that easily scales. After enabling Genesys Cloud CX Voice for an organization, the administrator can purchase new phone numbers (for example, 800 numbers and DIDs) from a Genesys Cloud CX-provided inventory. Alternatively, they can also port existing phone numbers to the service for use with Genesys Cloud CX. From there, administrators can assign phone numbers to users, IVR systems, managed phones, or campaigns. Pricing is based per phone number and usage-per-minute.

Bring Your Own Carrier (BYOC).

Genesys Cloud CX BYOC refers to the ability for customers to define SIP trunks between Genesys Cloud CX and third-party devices or services. Customers can establish and maintain strategic carrier relationships and manage their own business voice costs. This service also eases deployment of global offices by enabling compliance with country-by-country telephony regulations. This service also allows customers to apply the speed, scalability, and agility of the cloud. A premises-based appliance is also available for customers who want local survivability. BYOC is available in two distinct offerings, named according to where the connection terminates against Genesys Cloud CX: BYOC Cloud: Customers can define SIP trunks between the Genesys Cloud CX cloud-based Edge & Media Tier and third-party systems over the public Internet. BYOC Premises: Customers can define SIP trunks between premises-based Edge hardware devices and third-party systems. Whether customers use BYOC in the cloud or a local Edge appliance, the solution enables them to create efficient and cost-effective telephony plans by applying local carriers and defining outbound routes for various number classifications.

Use Case Benefits*

The following benefits are based on benchmark information captured from Genesys customers and may vary based on industry, lines of business or Genesys product line:

Use Case Benefits	Explanation
Reduced Administration Costs	Easily purchase and provision new phone numbers directly within an intuitive administrative interface.
Reduced Deployment Costs	Take advantage of an all-cloud solution for voice services—can be deployed in days, with no hardware required.
Reduced IT Operational Costs	With a zero-hardware footprint, IT teams can realize a reduction in communications hardware and network maintenance.

Summary

Genesys Cloud CX telephony connection options provide convenience and flexibility. Simplify your implementation by using Genesys Cloud CX Voice, a comprehensive contact center solution that includes telephony service provided by Genesys. For more interoperability between Genesys Cloud CX and third-party devices, or to retain your existing carrier service, choose a Bring Your Own Carrier (BYOC) option.

Additional information can be found in these documents:

- https://help.mypurecloud.com/articles/telephony-connection-options
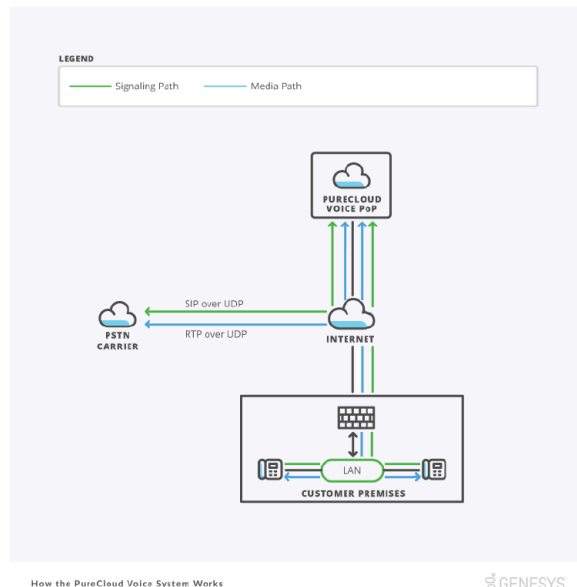- https://www.genesys.com/capabilities/voice-services

Use Case Definition

Business Flow

How does Genesys Cloud CX Voice work?

After an organization enables Genesys Cloud CX Voice, the Genesys Cloud CX Voice administrator purchases new phone numbers or ports current phone numbers to the service. They can then assign phone numbers to users, IVRs, managed phones, or campaigns.

When you use Genesys Cloud CX Voice with a phone, it securely connects over the public Internet to the nearest available Genesys Cloud CX Voice region. After the phone connects to the Genesys Cloud CX Voice region, the phone authenticates and registers with the customer's Genesys Cloud CX services. TLS encryption secures the communications between the phone and Genesys Cloud CX Voice service.

For more information, see https://help.mypurecloud.com/articles/how-does-purecloud-voice-work/.

How the PureCloud Voice System Works

Business Flow Description

1. Our customer's customer calls an 800 number for sales or support assistance.

    *   Our customer purchases a toll-free (1-800-xxx-xxxx) number from a carrier of choice.
    *   Anyone can call this 800 number from a mobile device or landline and reach our customer via the PSTN.

1. PSTN routes the call to the appropriate cloud carrier that is registered to the 800 number.
2. The cloud carrier connects to Genesys Cloud CX Media Tier & Trunking Services over the Internet.
3. The call connects to a Genesys Cloud CX ACD or business user via the Internet.
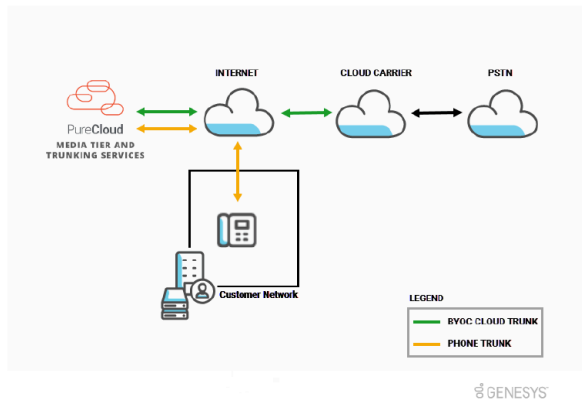
Business Flow

BYOC Cloud solutions

With Genesys Cloud CX's BYOC Cloud solution, you can choose one of two methods to implement either your Carrier connection or your PBX connection.

*   Configure BYOC Cloud by means of a cloud-based carrier device or a premises-based carrier device.
*   Configure BYOC Cloud by means of a cloud-based PBX device or a premises-based PBX device.

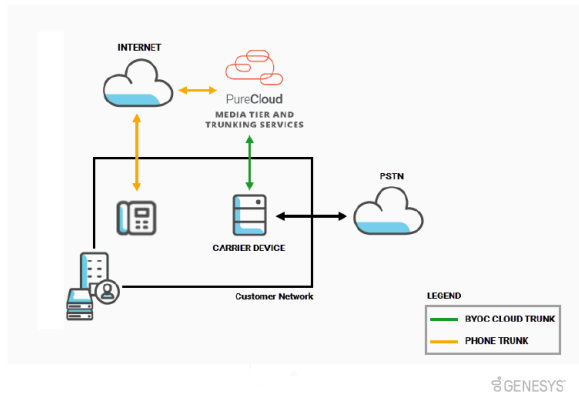The following diagrams illustrate each of these options. For more information, see https://help.mypurecloud.com/articles/byoc-cloud-solutions/.

A Cloud-Based Carrier Device

Business Flow Description
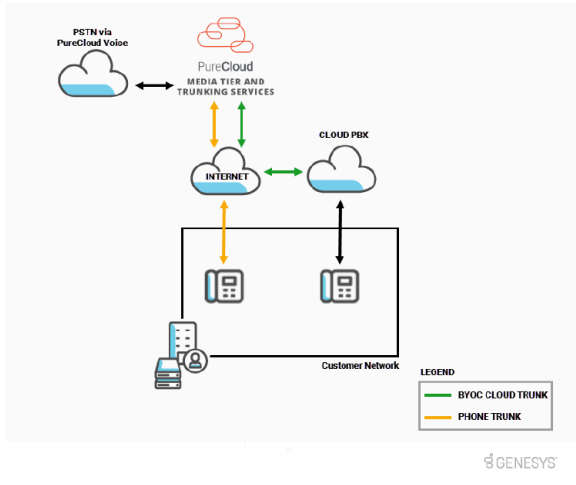
Business Flow

A Premises-based Carrier Device

Business Flow Description
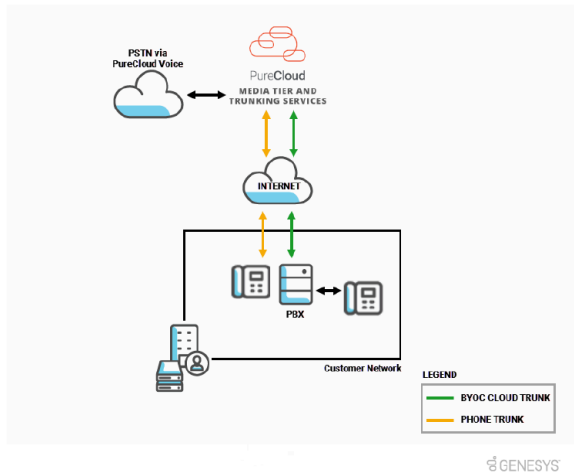
Business Flow

A Cloud-based PBX Device

Business Flow Description
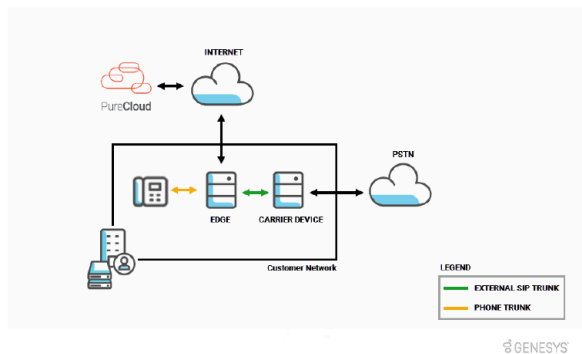
Business Flow

A Premises-based PBX Device

Business Flow

BYOC premises solutions

With Genesys Cloud CX's BYOC premises solution, configure SIP trunks between your premises-based Edge appliances and a third-party carrier using one of two methods. Use a premises-based carrier device or use a cloud-based carrier device. The following diagrams illustrate both options.

A premises-based carrier device

Configure a SIP trunk that connects your on-premises Edge to an on premises carrier device. For more information, see https://help.mypurecloud.com/articles/byoc-premises-solutions.
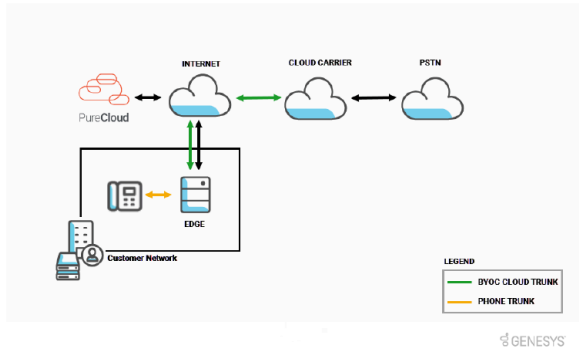
Business Flow Description
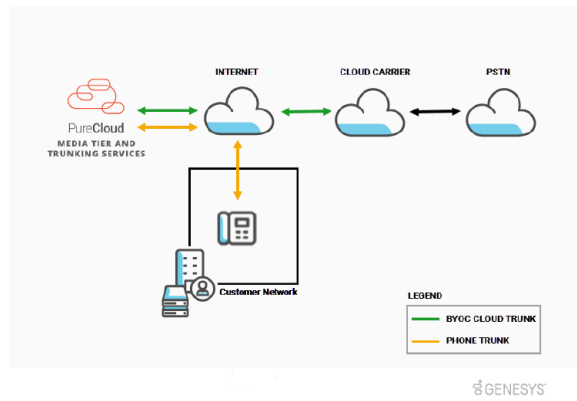
Business Flow

A Cloud-Based carrier Device

Configure a SIP trunk that connects your on-premises Edge to a carrier device in the cloud.

Business Flow Description

Business Flow

Business Flow Description

Business and Distribution Logic

Business Logic

All voice calls to external participants route through a Genesys Voice Solution: Genesys Cloud CX Voice or Bring Your Own Carrier.

- Does the customer have an existing carrier relationship?

- Does the customer want to keep this existing carrier relationship or port services to Genesys Cloud CX Voice?

The first example uses a toll-free 800 number. The number in this example can also be interchanged with the DID number. For example, any number reachable from the PSTN.

Example 1

- Customer has an existing relationship with Carrier ABC that owns their 800 numbers.

- Customer selects BYOC open and integrates our solution with Carrier ABC for PSTN services.

Example 2

- Customer does not have an existing relationship with any carriers and needs to buy net-new 800 numbers.

- Customer selects Genesys Cloud CX Voice and purchases new 800 numbers from within our platform.

Example 3

- Customer has an existing carrier relationship with Carrier ABC that owns their 800 numbers. Customer wants to consolidate and sees efficiencies in porting these numbers to Genesys Cloud CX Voice.

- Customer selects Genesys Cloud CX Voice and completes the necessary paperwork to transfer or port services from their previous carrier to Genesys Cloud CX Voice. For 800 numbers, this process is referred to 'resporg'. It updates the PSTN so that it knows what carrier to route the traffic to. In this example, PSTN has to be notified that the 800 number is now registered to Genesys Cloud CX Voice.

Distribution Logic

All voice calls to external participants route through a Genesys Voice Solution: Genesys Cloud CX Voice or Bring Your Own Carrier.

The Number Plan / Number Assignment configuration defines all distribution logic of calls to business users or agents. Customers can assign a phone number to a user or to an IVR with ACD Routing. For more information about distribution logic after routing the number per number assignment, please refer to Genesys Business Communications or Genesys Call Routing use cases.

- Business users: To assign a DID, see https://help.mypurecloud.com/articles/number-assignments/.

- IVR: To assign a toll-free or DID, see https://help.mypurecloud.com/articles/beta-add-a-call-route/.

User Interface & Reporting

Agent UI

There is no applicable content.

Reporting

Real-time Reporting

Genesys Cloud CX provides real-time reporting for managers, supervisors, and agents. Real-time reporting includes contact center performance and metrics in dynamic views and dashboards. For more information about real-time reporting for your business requirements, see About reports, views, and dashboards.

Views

Real-time reporting dynamic views display historical and real-time contact center metrics for interactions, agents, and queues. Use these views to meet your business needs.

To view in-progress and completed interactions, see Interactions view. The interaction's details page shows the interaction overview that is a visual representation of the interaction. The interaction overview provides information about the interaction participants and the type of interaction, including a waveform for voice interactions.

Agents Performance views include agent metrics, time in statuses, and evaluations. To understand agent activity, view detailed performance metrics for an agent or group of agents, in the Agents Performance Detail view.

Queues views provide insight into both real-time and historical queue performance data, including queue activity and metrics. See real-time information about a specific queue in the Queues Activity Detail view, including the queue's current interactions, agents, and service levels in one view. The Queues Activity Summary view updates in real time, and shows real-time statistics for all queues at the same time.

Dashboards

Performance Dashboards allow you to monitor the real-time activity for the contact center. These include service level, ASA, and the number of customers interacting and waiting. Display selected metrics and performance data about your contact center by creating Dashboards. With the Metric and Chart widgets, you can select the metrics about the queues, users, wrap-up codes, flows, or flow outcomes you want to see on your dashboards.

Historical Reporting

Reports show you historical data about your contact center and assist you in understanding your business needs. Use reports to see past metrics and data about the contact center. Reports include a pre-defined set of metrics. You set parameters for reports such as which users or queues to include, which media types to include, what date range to report on, and when to run the report. You can schedule reports to run at certain times, and you can run the report directly from your reports list page.

Using historical reports with dashboards and views gives you an accurate picture of your contact center's performance.

Customer-facing Considerations

Interdependencies

All required, alternate, and optional use cases are listed here, as well as any exceptions.

All of the following required:	At least one of the following required:	Optional	Exceptions
None	None	None	None

General Assumptions

All voice calls to external participants route through a Genesys Voice solution: Genesys Cloud CX Voice or Bring Your Own Carrier.

For a list of countries in which Genesys Cloud CX Voice is currently available, see https://help.mypurecloud.com/articles/purecloud-voice-global-coverage-2/ .

BYOC Cloud is available in all regions where Genesys Cloud CX is available. To view BYOC Cloud requirements, see https://help.mypurecloud.com/articles/carrier-requirements-byoc-cloud/ .

For more information about how BYOC Premises is defined, see https://help.mypurecloud.com/articles/byoc-premises-solutions/ .

Customer Responsibilities

There is no applicable content.

Document Version

- Version **V 1.0.1** last updated **February 25, 2026**