<https://www.centurylink.com/wholesale/pcat/pbx.html>

**Resale - Private Branch Exchange (PBX) Trunk Service - V29.0**

[History Log](https://www.centurylink.com/wholesale/downloads/2015/150406/HL_Resale_PBX_V29.doc)

**Product Description**

CenturyLink™'s retail telecommunication service, Private Branch Exchange (PBX) trunk service, is available for resale by Competitive Local Exchange Carriers (CLECs) to their end-users. Additional information about resale of CenturyLink's retail services can be found in [Resale - Local Exchange Services - Business and Residence Plain Old Telephone Service (POTS)](https://www.centurylink.com/wholesale/pcat/resaleexchangeservices.html) and [Resale - General](https://www.centurylink.com/wholesale/pcat/resalegeneral.html).

PBX trunk service provides analog or digital trunks to connect your end-user's PBX Customer Provided Equipment (CPE) telecommunications system equipment from your end-user's premises to the CenturyLink Central Office (CO). The trunks provided by CenturyLink are CO lines that terminate in a type of common equipment. Digital trunks are referred to as [Digital Switched Services (DSS)](https://www.centurylink.com/wholesale/pcat/resaledss.html).

Your end-user's PBX CPE system equipment routes incoming, outgoing, and internal calls. The PBX system at your end-user's premises determines which line or trunk is available to make or receive a call.

PBX requires the following CPE components:

* Station Line - Internal line that connects the switching equipment of the PBX CPE to a station set or extension. Your end-user will typically have several internal station lines for each trunk connected to the CO. Internal calls do not utilize any of the trunks.
* Station Set- Basic telephone instrument equipped with function keys.
* Attendant Console - An expanded telephone or automated station is used for answering, managing, connecting and putting calls on hold.
* Centralized Processing Unit (CPU) - CPE that provides internal call routing when manual routing is not used.
* Guest Registers (optional with Hotel/Motel service) - records local calls made by guests (can also be located in the Central Office).
* Call Rating System (optional with Hotel/Motel service) equipment that times and rates 1+ long distance calls

The service is not available on a 1-way outgoing basis. Therefore, you must choose a combination of incoming-only and outgoing-only trunks or trunks with 2-way capabilities.

Types of CO Trunks:

* 1-way in, analog or digital - Receives incoming calls only.
* 1-way out, analog or digital - Handles outgoing calls only.
* 2-way, analog, or digital - Provides for the flexibility of both incoming and outgoing calls over the same trunk.
* Safety Plus - A combination of 2-way analog trunk with Caller ID. This is not available with a Foreign Central Office or Foreign Exchange Service and the PBX system must be compatible with Caller ID Name and Number.
* Direct Inward Dialing (DIDï¿½) 1-way in or 2-way, analog or digital - Allows a caller to dial a seven-digit number to reach a specific [PBX station](https://www.centurylink.com/wholesale/pcat/resaledid.html).
* Data Trunks - Trunks that are digital only.
* Guest Trunk (for use with Hotel/Motel Service) - allows Hotel/Motel to charge for local calls.
* Toll Trunk (for use with Hotel/Motel service) - allows Hotel/Motel to rate and bill calls prior to guest check out.

**Availability**

PBX trunk service is available where facilities exist throughout [CenturyLink QC.](https://www.centurylink.com/wholesale/pcat/territory.html)

**Terms and Conditions**

PBX service is available where PBX service is available to CenturyLink's retail end-users.

Each 1-way outgoing or 2-way trunk in an equal access end office must carry Primary Interexchange Carrier (PIC) intra-Local Access and Transport Area (LATA) Carrier (LPIC) information. Information about selecting a long-distance carrier can be found in the [Long Distance Carrier Selection Overview](https://www.centurylink.com/wholesale/preorder/ldselection.html).

The mixing of flat and message or measured service on the same premises for the same end- user is not permitted.

You must provide CenturyLink with accurate end-user location information for state regulated emergency reasons. Information regarding 911/E911 is located in [Access to Emergency Services (911/E911)](https://www.centurylink.com/wholesale/pcat/911.html).

Loop Diversity and/or Avoidance is available with PBX as defined in the individual state specific [Private Line Transport Services tariff](https://www.centurylink.com/aboutus/legal/tariff-library.html). Additional charges may apply.

DID Digit Manipulation allows the expansion of a number range to include numbers that do not fit the current end-user's CPE (PBX) programmed dialing pattern. Additional information can be found in the state specific [Tariffs/Catalogs/Price Lists](https://www.centurylink.com/aboutus/legal/tariff-library.html).

CenturyLink will accept one white page directory listing for each main telephone number at no charge. Additional information about directory listings is available in [White Pages Directory Listings](https://www.centurylink.com/wholesale/pcat/whitepagedirlist.html).

**Technical Publications**

Technical characteristics are described in:

* [Telecordia Special Reports (SRs), SR-2275, Notes on the Network](https://telecom-info.njdepot.ericsson.net/site-cgi/ido/docs.cgi?ID=271272036SEARCH&KEYWORDS=&TITLE=Notes+on+the+Network&DOCUMENT=sr-2275&DATE=&CLASS=&COUNT=1000)
* [American National Standards Institute (ANSI) Standard Publications](http://webstore.ansi.org/).

**Pricing**

**Rate Structure**

General resale rate structure information is described in [Resale - General](https://www.centurylink.com/wholesale/pcat/resalegeneral.html).

PBX service and optional features are billed on a month-to-month basis or under a Rate Stability Plan (RSP). Contact your CenturyLink [Sales Executive](https://www.centurylink.com/wholesale/clecs/accountmanagers.html) for additional information on RSPs.

The trunk billing elements for a PBX service will be based on the combination of the trunk rate category (flat, measured or message) and the central office trunk type (1-way in, 1-way out, 2-way). Generally, both a monthly recurring and a nonrecurring charge per trunk will apply. Zone pricing can apply as well as first and subsequent rate elements.

In addition to the trunk charges, the following recurring charges apply:

* Message rated trunks - Each local call.
* Measured rated trunks - Local calls by the minute.

Trunk Rating Categories:

* Flat rated - Service entitles the end-user to an unlimited number of calls within the local calling area.
* Message rated on a per call charge - Service for which charges based upon message units are made according to a measured amount of usage.
* Measured on a per minute charge - Service for which local usage charges will apply for outgoing calls completed on a local basis.

CenturyLink retail rates, rate elements, and how they apply to PBX service can be found in the state specific [Tariffs/Catalogs/Price Lists](http://www.centurylink.com/Pages/AboutUs/Legal/Tariffs/displayTariffLandingPage.html).

Nonrecurring charges apply when establishing, changing, or converting existing service to PBX analog trunks.

**Rates**

Retail rates are located in the state specific [Tariffs/Catalogs/Price Lists](http://www.centurylink.com/Pages/AboutUs/Legal/Tariffs/displayTariffLandingPage.html).

Rates and/or applicable discounts are available in Exhibit A or the specific rate sheet in your Interconnection or Resale Agreement.

**Tariffs, Regulations and Policy**

Tariffs, regulations and policies applicable to CenturyLink retail products available for resale, are located in the state specific [Tariffs/Catalogs/Price Lists](http://www.centurylink.com/Pages/AboutUs/Legal/Tariffs/displayTariffLandingPage.html).

**Optional Features**

Amplified Voice Grade Circuit (VGA) is available in all states except Idaho. This option provides your end-user with improved transmission by limiting the decibel (dB) loss to no more than four dB (measured at 1005 Hertz (Hz)) from the local CO to the end-user's Network Interface Device (NID). A VGA trunk can have up to 8.5 dB loss.

Personal Lines provide direct access to or from the CenturyLink network and are not to be included in pooled facilities (access code dialing). These lines are personal lines that terminate on the PBX electronic sets and bypass the end-user's attendant. Personal Lines are available with loop start only.

Touchtone service applies to 1-way out only and 2-way trunks and is not available on DID.

Private Switch/Automatic Location Identification (PS/ALI) is available but is not available at a Resale discount (except in MN and WY) and must be separately purchased out of the Exchange Services Tariff for the particular State where it is located. PS/ALI requires a separate PS/ALI agreement to guarantee delivery of 911/E911 messaging. PS/ALI is offered separately from 911/Enhanced 911 (E911) services. For details on 911/E911 services and PS/ALI, see Access to Emergency Service (911/E911).

A complete list of standard features, feature descriptions, availability, pricing, and ordering information is available in the [Resale - Features](https://www.centurylink.com/wholesale/clecs/features/resalefeatures.html) matrix. Some features have compatibility restrictions and cannot be used with DID trunks, contact your CenturyLink Service Manager with compatibility questions.

Traffic Data Report Service (TDRS) provides customers with a summary of traffic data on certain network facilities. For additional information contact your [CenturyLink Service Manager](https://www.centurylink.com/wholesale/clecs/accountmanagers.html).

Use of USOCs and Field Identifiers (FIDs) are described in the  [Universal Service Order Codes (USOCs) and Field IDentifiers (FIDs) Overview](https://www.centurylink.com/wholesale/pcat/usocfid.html).

**Features/Benefits**

The primary reason for ordering PBX service is for pooling access. Pooled access allows your end-user to have many more telephone stations than lines connected to the CenturyLink CO. PBX service operates on the premise that not all of the telephone sets will be in use at the same time. This method is the most efficient and cost-effective way to maximize your end-user's telephone access.

Other features and benefits include:

|  |  |
| --- | --- |
| **Features** | **Benefits** |
| Call Monitoring | * Provides the ability to restrict and monitor usage and receive internal call monitoring reports. |
| Off Premises Extensions | * Provides the ability to connect PBX features to telephone sets in other offices. |
| Pooled Access | * Allows a business to have more telephone stations than lines connect. * Efficient use of telephones * Cost effective way to maximize employee access. |
| Simplified Changes | * Internal moves and extension number changes require only PBX reprogramming. |

**Applications**

The following key industries will find PBX services a benefit:

* Health Care/Hospitals
* Businesses
* Government
* Manufacturing
* Education
* Hotel/Motel
* Service/Utilities
* Financial
* Insurance
* Education
* Distribution
* Transportation
* Enhanced Service Providers
* Telephone Answering Services

**Implementation**

**Product Prerequisites**

If you are a new CLEC and are ready to do business with CenturyLink, view the [Getting Started as a Facility-Based CLEC](https://www.centurylink.com/wholesale/clecs/clec_index.html) or the [Getting Started for Resellers](https://www.centurylink.com/wholesale/clecs/reseller_index.html). If you are an existing CLEC wishing to amend your Interconnection Agreement or New Customer Questionnaire, additional information is located in the [Interconnection Agreement](https://www.centurylink.com/wholesale/clecs/negotiations.html).

For PBX RSP information contact your CenturyLink [Sales Executive](https://www.centurylink.com/wholesale/clecs/accountmanagers.html) to establish a contract and obtain the contract identification number.

**Pre-Ordering**

General pre-ordering information is described in the [Pre-Ordering Overview](https://www.centurylink.com/wholesale/clecs/preordering.html). Requirements for pre-ordering are described in [Local Service Ordering Guidelines (LSOG)](https://www.centurylink.com/wholesale/clecs/lsog.html) Pre-Order.

**Ordering**

It is important to understand the [Resale - General](https://www.centurylink.com/wholesale/pcat/resalegeneral.html) procedures before ordering PBX.

General ordering activities are described in the [Ordering Overview](https://www.centurylink.com/wholesale/clecs/ordering.html).

PBX trunks are available on a loop start or ground start basis. Loop start designs the cable pairs in such a manner that the tip conductor is grounded at the CO, whereas in ground start, the tip conductor is grounded at your end-user's premises.

Service requests should be placed using [EASE-LSR Extensible Markup Language (XML)](https://ease.lumen.com/) or [EASE-LSR Graphical User Interface (GUI)](https://ease-lsr.lumen.com/).

PBX service requests are placed using the following Local Service Ordering Guidelines (LSOG) forms:

* LSR
* End User (EU)
* Resale Service (RS)
* DID Resale Services (DRS)
* Directory Listing (DL), if applicable

Field entry requirements are described in the [LSOG](https://www.centurylink.com/wholesale/clecs/lsog.html).

When selecting the type of product from the EASE-LSR GUI drop down menu for Resale Analog PBX trunks, use the following guidelines:

* Western Region (Washington, Oregon, N-Idaho) - Select designed trunks
* Eastern Region (Minnesota, Iowa, Nebraska, North and South Dakota) - Select PBX
* Central Region (Montana, Wyoming, S-Idaho, Colorado, Arizona, New Mexico, Utah) - Select designed trunks when VGA trunks are requested; Select PBX for non-VGA trunk requests.

DID trunk requests require use of the DRS form in place of the RS form. The REQTYP for Resale DID requests is NB.

Currently the TOS field does not allow you to state your preference for Measured, Message or Flat rated Class of Service nor does it allow you to state a preference for Foreign Exchange Service. In the interim, enter the appropriate USOCs in the Service Details section on the RS form.

The RSP contract identification number must be noted in the Variable Term Agreement (VTA) field on the LSR.

A sufficient number of trunks must be ordered to adequately handle the volume of incoming calls. If not, when all the DID trunks are busy, the calling party will receive a fast busy tone.

USOCs and FIDs are described in the [Universal Service Order Codes (USOCs) and Field IDentifiers (FIDs) Overview](https://usocfidfind.centurylink.com/).

A Design Layout Record (DLR) is available on designed trunks. The DLR request is described in the [EASE-LSR XML Network Disclosure Document](http://centurylink.com/disclosures/netdisclosure409.html) or in the[EASE-LSR User's Guide](https://ease.lumen.com/).

The S2N USOC is required on all Out-only and 2-way DID trunk groups. The S2N USOC is associated with a telephone number that will be used for long distance billing and emergency 911 identification. Multiple trunk groups can share the same S2N telephone number.  
  
This number must be a dialable number that can be called back by emergency services personnel and will be answered by your end-user. Whenever possible, your end-user's published number should be used for the S2N. When this is not possible, CenturyLink will accept a DID number,  
  
When working with existing service, you should review the CSR to see if an S2N telephone number is assigned for each trunk group that requires one. If the S2N telephone number does not appear on the CSR, you must negotiate with your end-user to determine which number is to be used. Provide the information to CenturyLink by populating "S2N" in the Feature field and the telephone number in the Feature Detail field of the RS form.  
  
When requesting new service, you should negotiate with your end-user which S2N telephone number assignment option they prefer; published number, other number in a DID range, or stand-alone DID. Populate the USOC "S2N" in the Feature field of the RS form and the chosen option in REMARKS, for example, "Use published number for S2N."  
  
CenturyLink will provide the assigned S2N telephone number on the Firm Order Confirmation (FOC). It is your responsibility to communicate this telephone number to your end-user and/or their CPE vendor and ensure that they connect it to a telephone someone will answer when the number is called.

To order DID Digit Manipulation, include the following information in REMARKS field on the DRS form:

* DID Digit Manipulation
* instructions on how to program the new telephone number(s)
* PT3DM

e.g. REMARKS: DID Digit Manipulation request. Program telephone number 223-1264 for three digit out pulse PT3DM.

**Provisioning and Installation**

General provisioning and installation activities are described in the [Provisioning and Installation Overview](https://www.centurylink.com/wholesale/clecs/provisioning.html).

**Maintenance and Repair**

General maintenance and repair activities are described in the [Maintenance and Repair Overview](https://www.centurylink.com/wholesale/clecs/maintenance.html).

**Billing**

On a monthly basis, CenturyLink will provide you with billing information that will provide summary account information as well as end-user sub-account information. ~~Customer Records and Information System (CRIS) billing is described in~~[~~Billing Information - Customer Records and Information System (CRIS)~~](https://www.centurylink.com/wholesale/clecs/cris.html)~~.~~ Ensemble is the new billing system for customers. For questions about the bill, please follow the instructions on the reverse side of each billing statement.

The Ensemble bill is described in [Billing Information – Ensemble](https://www.centurylink.com/wholesale/clecs/ensemble.html)

**Training**

View CenturyLink courses in the ~~Course~~[Training Catalog](https://www.centurylink.com/wholesale/training/coursecatalog.html).

**Contacts**

CenturyLink contact information is located in [Wholesale Customer Contacts](https://www.centurylink.com/wholesale/clecs/customercontacts.html).

**Frequently Asked Questions (FAQs)**

This section is being compiled based on your feedback

**Last Update:** April 6, 2015

**Last Reviewed:** March 21, 2024

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