The TELUS Business Connect® Customer onboarding guide.

How to successfully set up your service.
Welcome to the TELUS Business Connect Concierge service.

The TELUS Business Connect Concierge service is here to ensure you have a positive onboarding experience. This complimentary service is available at any time to help answer any questions you may have as you set up your TELUS Business Connect solution. Contact your Concierge prime using the phone number or email address provided to you.
Let’s get started.

Setup in 4 easy steps.

This guide is designed to give you the information and tools you need to get your TELUS Business Connect solution set up and outlines timelines and expectations for each of the four steps during the onboarding process.

The onboarding process:

1. Network readiness
   All you need to know about network readiness and system requirements.

2. Web registration
   A guide through account registration, for administrators and users.

3. Implementation calls
   An overview of the three complimentary calls to ensure setup is complete.

4. Number transfer
   Instructions on how to transfer an existing office number to the TELUS Business Connect solution.

To ensure a smooth setup:

1. Ensure someone is available to accept your FedEx shipment of phone orders. Your phones should arrive in 2-5 business days.

2. Verify that your network meets the minimum recommended requirements prior to your implementation date.

3. Ensure that you (and any other points of contact) are available for your implementation appointments.
Step 1. Network readiness

You discussed network requirements with your TELUS representative before choosing the TELUS Business Connect solution. Now, make sure everything is set up and ready for great calls by glancing through this information and completing the network readiness checklist.

Introduction to networking for VoIP.

- The TELUS Business Connect solution provides reliable, high-quality voice service. Your local network plays a big part in your call quality.
- Since the TELUS Business Connect solution is a cloud phone system, there is relatively little that you need in your offices.

**Recommended network setup.**

In order to have your phone system run successfully, it is essential to have your network set up correctly.

Note: Example only. Your network setup may differ.

Network readiness checklist:

- **Test your Internet connection bandwidth:** Make sure your Internet connection has enough capacity to deliver a high-quality call. Use the tools on the next page to test your Internet speed.
- **Site cabling:** You may need to update your cabling or install additional access jacks.
- **Ensure you have the right kind of modem:** Verify that your modem is in IP pass-through or bridge mode.
- **Buy a router:** Ensure your router and firewall have the right features and settings.
- **Plug in your phones:** For best performance, plug phones directly into your network with cat 5 ethernet cables.

To ensure a smooth setup: Complete the network readiness checklist.
Internet connectivity: Test your Internet connection bandwidth.

Use the following tests to make sure your Internet has enough capacity to deliver high call quality:

- Bandwidth tool
- Internet speed test tool

How much bandwidth do you need? It depends on how many calls and devices you want to connect. Connection speeds are identified as XX/YY, where XX represents your download speed and YY, your upload speed.

<table>
<thead>
<tr>
<th>How much upload capacity do I need?</th>
<th>1 Mbps</th>
<th>5 Mbps</th>
<th>10 Mbps</th>
</tr>
</thead>
<tbody>
<tr>
<td>Number of concurrent calls</td>
<td>1 to 3</td>
<td>1 to 25</td>
<td>1 to 50</td>
</tr>
<tr>
<td>Number of connected devices</td>
<td>Up to 5</td>
<td>Up to 50</td>
<td>Up to 100</td>
</tr>
</tbody>
</table>

Ensure you have the right kind of modem.

Check with your service provider to make sure your modem is compatible. Gateway modems (aka routers, modem router combination units) are not recommended. Please ensure you have an IP passthrough modem (aka bridge modem). Some modems have different modes that let them behave as both types above; those are acceptable in bridge mode.

Buy a router.

It is strongly recommended that your router supports the features detailed below. Most routers will already be configured and ready to work out of the box. However, if you need assistance with setup, please see the appendix as well as the user guide of the router.

Features to have:

- **Stateful Firewall** - Most routers have a firewall built in to protect your network. The “stateful” types are capable of allowing VoIP traffic without any special configuration.
  - For routers with stateless firewalls, please ensure the router supports “port triggering” for single ports and port ranges. Also, please follow the instructions under the “Port and Firewall setup” section of the appendix.
- **QoS Traffic Prioritization** - Allows you to better manage traffic on your network.

To ensure a smooth setup: Test your bandwidth and configure your modem and router.
Features to avoid or disable:

- **SIP ALG** - This is a feature that involves inspecting and modifying VoIP traffic; it reduces call quality by delaying traffic.

- **Green Ethernet (a.k.a. Energy efficient Ethernet)** - This is a feature that shuts down ethernet ports when no traffic is detected. Not recommended for VoIP.

### Using switches

- **VoIP Prioritization** - Any switches that carry VoIP traffic should be set to prioritize voice. Refer to your switch documentation for configuration instructions.

  Depending on the size of your network, you may not require a network switch.

- **Power over Ethernet (POE)** - If you plan to run power to the phones over the network cable, make sure that your switch has sufficient power capacity for the number of phones you plan to run on that switch. To do this, check the output power rating on your switch (usually written right on the switch) and add up the power consumption on each of the phones you want to run from the switch. If the power consumption on the phones is greater than the power output on the switch, you’ll need to either add another POE switch or use power supplies for the phones.

### Cabling

For best results, phones should be connected by cat 5e ethernet cable or better to your VoIP configured router or switch. If your local network is more than 5 years old, or you did not set it up, you should get a cabling or electrical contractor to test it to verify that you have cat 5e or better with good connection quality from end to end.

### Plugging in phones.

Connect your phones and workstations. When you have your network set up, connect your phones to the ethernet and then connect your workstations to the phones. This will ensure that activity on a workstation does not interfere with the voice quality of a phone call.

### Wi-Fi

If you have people in your office who will make and take calls using the desktop or mobile application over Wi-Fi, you need to configure your wireless access points to prioritize voice and media traffic. Refer to your access point documentation.

**To ensure a smooth setup:** Check site cabling and plug in phones.
Step 2. Web registration

Now that you have set up your network, the next step is for administrators to register for the TELUS Business Connect Voice Manager, which manages the features and services offered by the solution.

1. **Administrator registration:**

   We will send a link to the administrator’s email address to register to the TELUS Business Connect Voice Manager.

   1. Open the email with the subject line “Please set up your TELUS Business Connect® account”.
   2. Click on the link included in the email to set up your account.
   3. You will be taken to the TELUS Business Connect Voice Manager set up page. Please set your password, PIN and security questions.
   4. Your account is now activated. Click Schedule Now in Express Setup to schedule your implementation call.
      
      Note: If you skip step 4, you will need to contact TELUS Support at 1-844-626-6638 in order to schedule an implementation call.
   5. Complete **Express Setup** and be sure to input the contact information for the users on your account in the locations specified. Once you have completed Express Setup, the users on your account will receive their Welcome Emails to set up their own TELUS Business Connect Voice Manager accounts.
   6. Please bookmark the link for TELUS Business Connect Voice Manager included in your email so that you can reference this login page in the future.

2. **User registration:**

   Once the administrator completes Express Setup, TELUS will send a **Welcome to TELUS Business Connect** registration email to all users. Users must complete the same steps as the administrator with the exception of booking an implementation call.

To ensure a smooth setup: Please be sure to complete Express Setup, book your first implementation call and input the contact information for all users on your account.
Step 3. Implementation calls

TELUS offers 3 complimentary calls with a trained implementation advisor to help your administrators get your account up and running. They will walk your administrators through the physical setup of your phones and help them configure the settings for each user, to ensure that everyone gets the most from your new system.

To ensure the most efficient learning process, your implementation calls will be spread out over 30 days.

Implementation process:

1. **Schedule implementation.**
   Once you complete the Web Registration, schedule your first implementation call in Voice Manager.

2. **Attend implementation session #1 (1 hour).**
   Your first implementation session covers the following:
   - Review network information such as modem, router, internet provider, verified up/down speed
   - Discuss how you use your system and how you would like your phone system to work
   - Learn how to use the mobile app
   - Schedule implementation session #2

3. **Attend implementation session #2 & #3 (1 hour each).**
   Your second & third implementation sessions will cover the following:
   - Review implementation progress and confirm that your system is working properly
   - Confirm and review Advanced Rules and Call Handling
   - Review the Number Transfer process
   - Any outstanding items or help with specific needs

**To ensure a smooth setup:** Schedule your first implementation call in Voice Manager as soon as possible.
Step 4. Number transfer

This step is only necessary if you plan to use your existing phone numbers from your existing phone system. If you have a new TELUS Business Connect deployment and will use the numbers assigned to you by TELUS for Business Connect, you can skip this step.

**IMPORTANT:**
Don’t cancel your existing phone service. It needs to stay active to complete the transfer which can take 10 to 15 business days to complete. Your transfer will occur during business hours; transfer requests on weekends and holidays will be rejected.

Before you begin, do you have the following?

- A recent phone bill
- The service address where your phone rings
- Account number and primary billing telephone number (BTN)
- All local, mobile and toll-free numbers you wish to transfer (port)

The number transfer process.

1. Log in to TELUS Voice Manager.
2. Select Phone System tab.
3. Select Phone Numbers, select Transferred and Vanity tab and select Transfer Numbers.
4. Select the type of phone number that needs to be transferred to the TELUS Business Connect solution.
5. Complete the 7 questions on the Check list screen.
6. Input your Business Telephone Number (BTN) within the Enter numbers screen and check off I want to transfer my BTN. Add additional numbers if required.
7. In the Date and mapping screen, select a transfer date. Note transfer date may be later than requested. Transfer date cannot be a weekend or holiday.
8. In the Account Confirmation screen, provide all details as shown on your current provider’s bill.
9. Review verification screen and click Next to confirm.
10. Upload a copy of the entire latest invoice for the number(s) you want to transfer. This invoice must be dated within the last 30-45 days.
11. In the Additional Comment box, you can list the phone numbers you are not transferring and the action to be taken (cancel or retain). You may also indicate an alternate email address to receive emails pertaining to your request.

To ensure a smooth setup: Download the detailed Transferring your existing phone number or contact Concierge.
Congratulations.
You are now set up.

Need help?

Once you successfully onboarded to the TELUS Business Connect solution, we now provide support with the support resources listed below.

Please visit the [TELUS Business Connect support page](#) to access:

- How-to guides
- Troubleshooting tips
- User guides and manuals

This is just the beginning.

Download your user guides today and discover over 30+ exciting features including…

- Audio and video conferencing
- Call routing rules and office hours
- Groups and IVR setup
- Recorded messages and music-on-hold
- Smartphone & tablet mobile apps
- And much more...

Contact

To ensure you reach a dedicated TELUS Business Connect support representative.

**Call 1-844-626-6638**

Enter your TELUS Business Connect number and follow the prompts.
Appendix

Port & firewall setup
Port & firewall setup.

Troubleshooting port and firewall issues.

In a typical network, routers are used to allow access to any device that connects to the local network or the Internet. Routers have built-in security features that prevent unrequested access to the network. A router firewall may cause issues with your VoIP connectivity through the TELUS Business Connect solution.

Port triggering is a configuration that you can set on your router to allow access to specific service ports in a secure manner. A router acts like the sender and receiver of requests, allowing VIP pass to these service ports that are triggered.

To allow seamless Voice over IP (VoIP) connectivity to your devices, the following ports should be triggered on your router.

If it is confirmed that a firewall is stateful, the configuration below would not be needed.

<table>
<thead>
<tr>
<th>Device type</th>
<th>Protocol</th>
<th>Source port customer side</th>
<th>Destination port TELUS side</th>
</tr>
</thead>
<tbody>
<tr>
<td>Deskphone signalling</td>
<td>SIP/UDP</td>
<td>5060-5090</td>
<td>5090</td>
</tr>
<tr>
<td>Deskphone signalling</td>
<td>SIP/UDP</td>
<td>5060</td>
<td>5090</td>
</tr>
<tr>
<td>Deskphone media</td>
<td>RTP/UDP</td>
<td>16384-16482</td>
<td>20000-39999</td>
</tr>
<tr>
<td>Deskphones signalling Secure Voice</td>
<td>SIP/TLS/TCP</td>
<td>5096</td>
<td>5060</td>
</tr>
<tr>
<td>Deskphones media Secure Voice</td>
<td>SRTP/UDP</td>
<td>16384-16482</td>
<td>40000-49999</td>
</tr>
<tr>
<td>Deskphone provisioning</td>
<td>HTTPS/TCP/IP</td>
<td>80, 443</td>
<td>80, 443</td>
</tr>
<tr>
<td>Deskphone clock sync</td>
<td>NTP/UDP</td>
<td>123</td>
<td>123</td>
</tr>
<tr>
<td>Deskphone BLA/Presence</td>
<td>SIP/UDP</td>
<td>5099</td>
<td></td>
</tr>
<tr>
<td>Mobile app signalling</td>
<td>SIP/UDP</td>
<td>5060</td>
<td>5090</td>
</tr>
<tr>
<td>Mobile app signalling</td>
<td>SIP/TCP</td>
<td>5060</td>
<td>5090-5091</td>
</tr>
<tr>
<td>Mobile app media</td>
<td>RTP/UDP</td>
<td>N/A</td>
<td>5090-5091</td>
</tr>
<tr>
<td>Mobile app signalling Secure Voice</td>
<td>SIP/TLS/SRTP</td>
<td>40000-5000, 20000-60000</td>
<td>50000-59999</td>
</tr>
<tr>
<td>Mobile app media Secure Voice</td>
<td>SRTP/UDP</td>
<td>N/A</td>
<td>5097</td>
</tr>
<tr>
<td>Mobile app BLA/Presence</td>
<td>SIP/TCP</td>
<td>40000-5000, 20000-60000</td>
<td>60000-64999</td>
</tr>
<tr>
<td>Mobile app BLA/Presence</td>
<td>SIP/UDP</td>
<td>N/A</td>
<td>5091</td>
</tr>
<tr>
<td>Mobile app data sync with TELUS backend</td>
<td>HTTPS</td>
<td>N/A</td>
<td>5099</td>
</tr>
<tr>
<td>Desktop app signalling</td>
<td>SIP/UDP</td>
<td>5060-5090</td>
<td>443</td>
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<tr>
<td>Desktop app signalling</td>
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<td>60000-64000</td>
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<tr>
<td>Desktop data sync with TELUS backend</td>
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<td>443</td>
<td>443</td>
</tr>
<tr>
<td>Business Connect Meetings signalling</td>
<td>SIP/TCP</td>
<td>N/A</td>
<td>8801, 8802</td>
</tr>
<tr>
<td>Business Connect Meetings signalling</td>
<td>SIP/TLS/TCP</td>
<td>N/A</td>
<td>443</td>
</tr>
<tr>
<td>Business Connect Meetings media</td>
<td>RTP/UDP</td>
<td>N/A</td>
<td>8801</td>
</tr>
<tr>
<td>Business Connect Meetings media Secure</td>
<td>TLS/TCP</td>
<td>N/A</td>
<td>443</td>
</tr>
</tbody>
</table>
Setting up port triggering on a D-Link router.

Port triggering allows you to give specialized Internet applications within a private or local network, such as VoIP or IP phone services, access to the Internet. This will also help you with audio issues you may be experiencing with your TELUS Business Connect solution.

To set up port triggering on your D-Link router, follow the steps below:

**Step 1:**
Access the router’s web-based setup page.

**QUICK TIP:** This can be done by entering the IP address of your router in a web browser’s address bar.

**Step 2:**
Click the **Advanced** tab.

**Step 3:**
On the left panel, click on **Application Rules**, then supply the necessary info on the table.

**Step 4:**
Click **Save Settings** to apply the changes.

**NOTE:** Make sure to put a tick mark on the rule to enable it.
Setting up port triggering on a Linksys router.

Port triggering allows you to give specialized Internet applications within a private or local network, such as VoIP or IP phone services, access to the Internet. This will also help you with audio issues you may be experiencing with your TELUS Business Connect solution.

To set up port triggering on your D-Link router, follow the steps below:

**Step 1:**
Access your router’s web-based setup page. For instructions, click here.

**Step 2:**
Click Applications & Gaming.

**Step 3:**
Select Port Range Triggering.

**Step 4:**
Under the Application Name column, enter “TELUS Business Connect” to represent the software.

**Step 5:**
Enter the port numbers of the computer application in the required fields.

**NOTE:** The range of port numbers for the TELUS Business Connect service is 5060 - 5090

**Step 6:**
Click Save Settings.

You have now performed port triggering on a Linksys router.
Setting up port triggering on a Netgear router.

Port triggering allows you to give specialized Internet applications within a private or local network, such as VoIP or IP phone services, access to the Internet.

Step 1:
Login to your Netgear router’s web-based setup page.

QUICK TIP: This can be done by going to www.routerlogin.com or by typing the router’s IP address on your browser’s address bar. Enter your login credentials on this page.

Step 2:
Under the Advanced section, click the Port Forwarding / Port Triggering link.

Step 3:
Select the Port Triggering radio button.

Step 4:
Click the Add button.

Step 5:
Enter the following values on the Port Trigger Service page:

• Check Enable
• Service Name: TELUS Business Connect

Step 6:
Click Apply.

Step 7:
Repeat steps 4 to 6 for port ranges 8000 to 8200 and 16384 to 16482.

Step 8:
Check the Turn on Port Triggering box then click Apply.
The settings should take effect immediately.