

DID Redundancy with Flowroute HyperNetwork™

The Only Solution That Offers Business Continuity for Inbound DID Calls

The Importance of Redundancy in Voice Systems

Despite all of the technological advancements and increasing ways to communicate, the phone is still a business necessity for most businesses of all sizes. From delivering an omnichannel customer experience to [ensuring inbound calls make it to their intended destination](#), organizations need assurance their voice systems are reliable.

Building business redundancy is intended to prevent disruption of critical operations if there is a technical failure.

[Technical failures occur](#) all of the time:

- ⚠️ **48% of companies report tech-performance issues daily**
- ⚠️ **3 of 4 global executives report that failure frequency is increasing or staying the same**
- ⚠️ **33% of surveyed companies regularly collect data to quantify the impact of failures**

Business operations that rely on phone systems include support call centers and customer service, sales, healthcare triages, billing departments, and scheduling, just to name a few. If a phone system fails and calls don't connect, businesses can not only lose potential customers, but they often see a decline in customer satisfaction which can lead to attrition.

System failure can be minimized or avoided with proper redundancy. Voice redundancy is an essential component of any disaster preparedness plan for organizations that value business continuity.



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Phone systems aren't perfect.

There are multiple reasons a phone system can fail. Whether you have a traditional PBX with physical copper lines or a virtual PBX with VoIP, you can experience outages and audio quality degradation at any point.

In February 2023, T-Mobile suffered a [major outage](#) due to a third-party fiber interruption that impacted its voice, data, and messaging services. Users had no way to receive calls and could only make emergency outbound calls.

The carrier racked up nearly 100,000 complaints within two hours of the outage.

How does redundancy typically work?

Redundancy is a safeguard against system failure of any kind, such as power, servers, or the internet. While failures are inevitable, building in redundancy so that there is a failover to another working system when an issue arises is a best practice to ensure business continuity.

For instance, a company may have multiple servers so if one server fails, the others will take over the processing load of the downed server, often without application users noticing anything has happened. Similarly, a business may have multiple backup internet connections so that if one ISP fails, the website continues to function with another ISP.

What is the problem with voice redundancy?

With voice, many providers offer failover and redundancy at the SIP trunk or WAN level for outbound calls. A carrier that manages its own toll-free numbers (called a RespOrg) provides resiliency for inbound toll-free numbers. Yet neither solution solves inbound DID call problems that can impact business continuity.

What happens when the carrier itself goes down? In this case, companies traditionally have to port their numbers to a different carrier, which is time-consuming. Carrier outages can lead to days of no phone service. For an organization that relies on business-critical voice services, this can be devastating.

Which organizations are most dependent on reliable phone systems?

While all businesses paying for a voice system expect their phone lines to work, there are some organizations that cannot afford a phone system outage or poor call quality. Inbound calls can be of particular importance. Customer service call centers at any company, healthcare providers, government entities, law firms, school districts, colleges and universities, and hospitality are among the organizations that depend on reliable phone systems, and in particular inbound calls.

For them and others, ensuring inbound callers are connected is essential. Call centers, for example, are a vital service used by financial institutions that have customers who need to report fraud or inquire about a loan. Medical practices have patients calling to schedule appointments, find out test results, or ask medical questions. A call center's primary objective is to have agents resolve issues, provide information or instruction, and support the business by routing calls to appropriate employees. A high-quality, dependable phone system is a basic requirement.



What is DID in telecom?

DID is an acronym for Direct Inward Dialing. TechTarget provides a concise [definition of DID](#), saying, "DID is a method organizations use to route incoming calls to a specific private branch exchange (PBX) systems without an operator. Organizations purchase DID numbers from a telephone company or service provider and assign them to individual extensions within the organization."

The caller only sees a standard telephone number, but DID is a virtual number that isn't tied to a geographic location, such as an office. Instead, the service provider routes inbound calls through a PBX to the phone number's owner, much like a switchboard operator used to connect callers to a specific person. Now, all of this happens automatically, even routing calls instantly to people working remotely on mobile devices. With the increase in remote and hybrid working, this capability significantly boosts productivity and customer service.

What are the benefits of DID in telecom?

For the organization, DID delivers a more streamlined customer experience, costs less than on-premises phone lines, is highly and rapidly scalable, and empowers modern ways of working. Even years after the COVID-19 pandemic shut down offices, still only about [50% of workers](#) are back in the office. Remote and hybrid working is likely to remain commonplace, and DID gives employees a way to respond to incoming calls without revealing their personal phone numbers on their devices or sending the caller to voicemail until they return to their office.

Another huge benefit to companies is they can purchase DID numbers on demand in minutes. For companies with seasonal spikes in incoming calls, DID allows them to save significant costs by paying for those numbers only when they need them and canceling the numbers when call volumes decline. Similarly, as a company grows its locations or employee base, adding new DID numbers involves clicking a few buttons versus calling a phone company to physically add new lines.

The benefit to the caller is that they can more quickly reach their intended person without having to engage with an auto attendant or phone tree, nor do they have to remember and dial an extension to reach their person. They dial the number, and the system automatically routes the call to the appropriate person or extension. With DID, there is less frustration when trying to reach a particular department or person at a business.

Is redundancy available with inbound DID call issues?

As we mentioned, with voice, providers offer failover and redundancy at the local level or for toll-free numbers only. If a carrier network fails, however, the numbers associated with that carrier fail, as what happened with T-Mobile. The only way to provide redundancy with inbound DID call issues is to port all of the numbers over to another carrier. This porting process can take days or even weeks. Fortunately, carrier outages are uncommon, but they happen, and organizations must be prepared.



The Flowroute HyperNetwork™: The Only Solution for Complete DID Redundancy

Flowroute HyperNetwork is a multicarrier redundancy model for U.S. customers making inbound calls to local phone numbers, solving the problem carrier outages pose for companies by building resiliency for inbound DIDs. This patented approach is the only solution on the market that offers business continuity for DID numbers across the majority of the U.S.

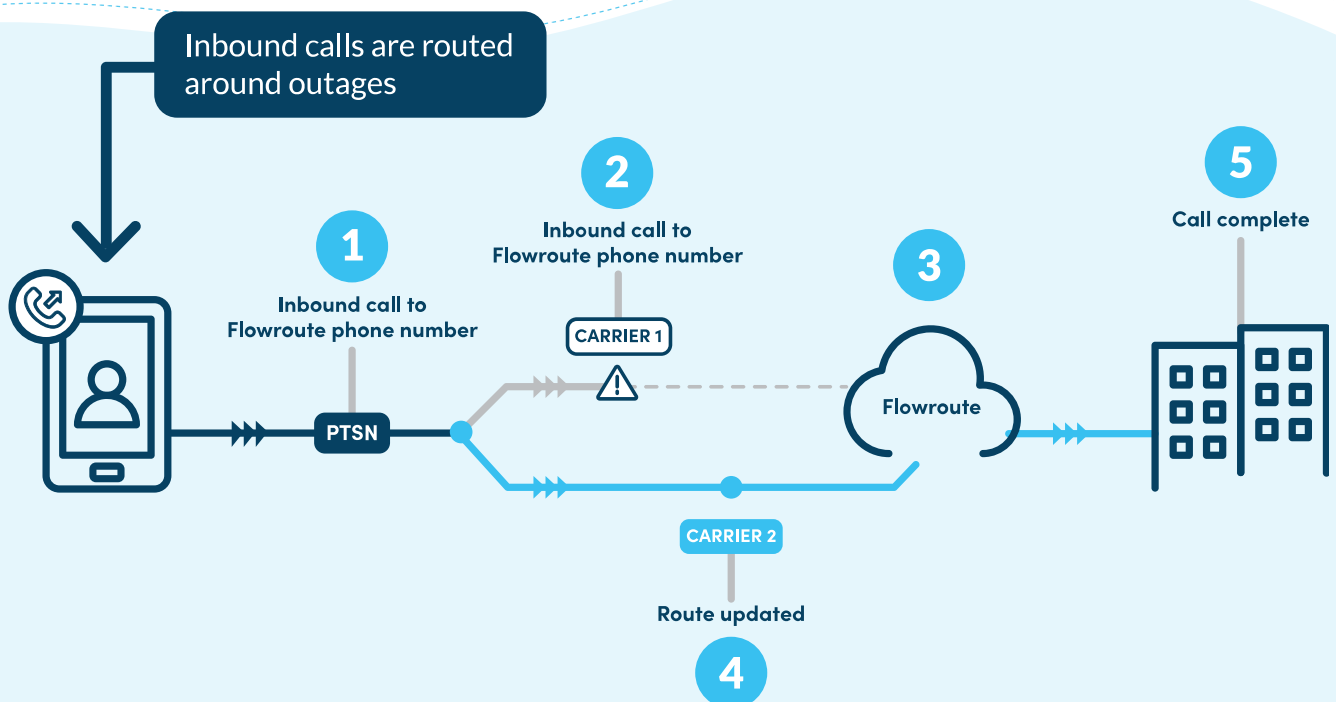
While every company can benefit from Flowroute's HyperNetwork, organizations like those mentioned previously that rely on mission-critical voice applications and must safeguard business continuity now have a solution to ensure incoming calls make it to their destination.

We provide business continuity for virtually all of your inbound numbers so you get peace of mind that your voice applications are always up and running.

How does HyperNetwork work?

Network outages and disruptions happen, but Flowroute ensures inbound calls get where they need to go. In the event of an upstream network outages, our software and carrier status allows us to identify or potential degradation in network service and rapidly reroute an inbound call path from one carrier to another, bypassing the outage to avoid service interruptions.

HyperNetwork creates an optimal connection that maximizes call quality, reliability, and control and is ideal for any organization that depends on call reliability or call quality. Our solution reduces risk with built-in failover and redundancy.



The Benefits of DID Redundancy

HyperNetwork meshes multiple networks into a single telecom network, giving companies superior reliability, reach, and simplicity.

Business Continuity, Resiliency, and Call Reliability

Outages can translate into hours of downtime and waiting for support teams to get the systems up and running. When one carrier is experiencing an outage, another carrier typically is not. With Flowroute HyperNetwork, we rapidly reroute the underlying network path that the inbound call is using to an alternate carrier that is not experiencing an issue. HyperNetwork improves reliability with failover and business continuity built in, helping customers avoid an outage within a defined SLA.

HyperNetwork recovery examples

Carrier	Issue	Cause	Carrier Impact	Flowroute Impact
Traditional Carrier 1	Call failure	Fiber cut	24 hours	32 minutes
Traditional Carrier 2	Degraded audio	Switch failure	9 hours	28 minutes
Traditional Carrier 3	Call failure	Switch failure	7 hours	18 minutes

The Only Way to Ensure Business Continuity for Inbound DID Numbers

Being able to receive incoming calls is as essential as making calls. DID numbers are an excellent way to build enterprise-level voice experiences for your business and your customers, but they need to be protected from outages.

With Flowroute HyperNetwork, you can ensure resilient, mission-critical voice applications. Whether you use our inbound DID numbers or our owned and managed toll-free numbers, we ensure all incoming calls are connected and sound great. [Sign up](#) for a free Flowroute account to get started.

