Star2Star COMMUNICATIONS

StarSIP AlwaysUp:

The Ultra-Reliable SIP Solution Businesses With Legacy PBXs Need

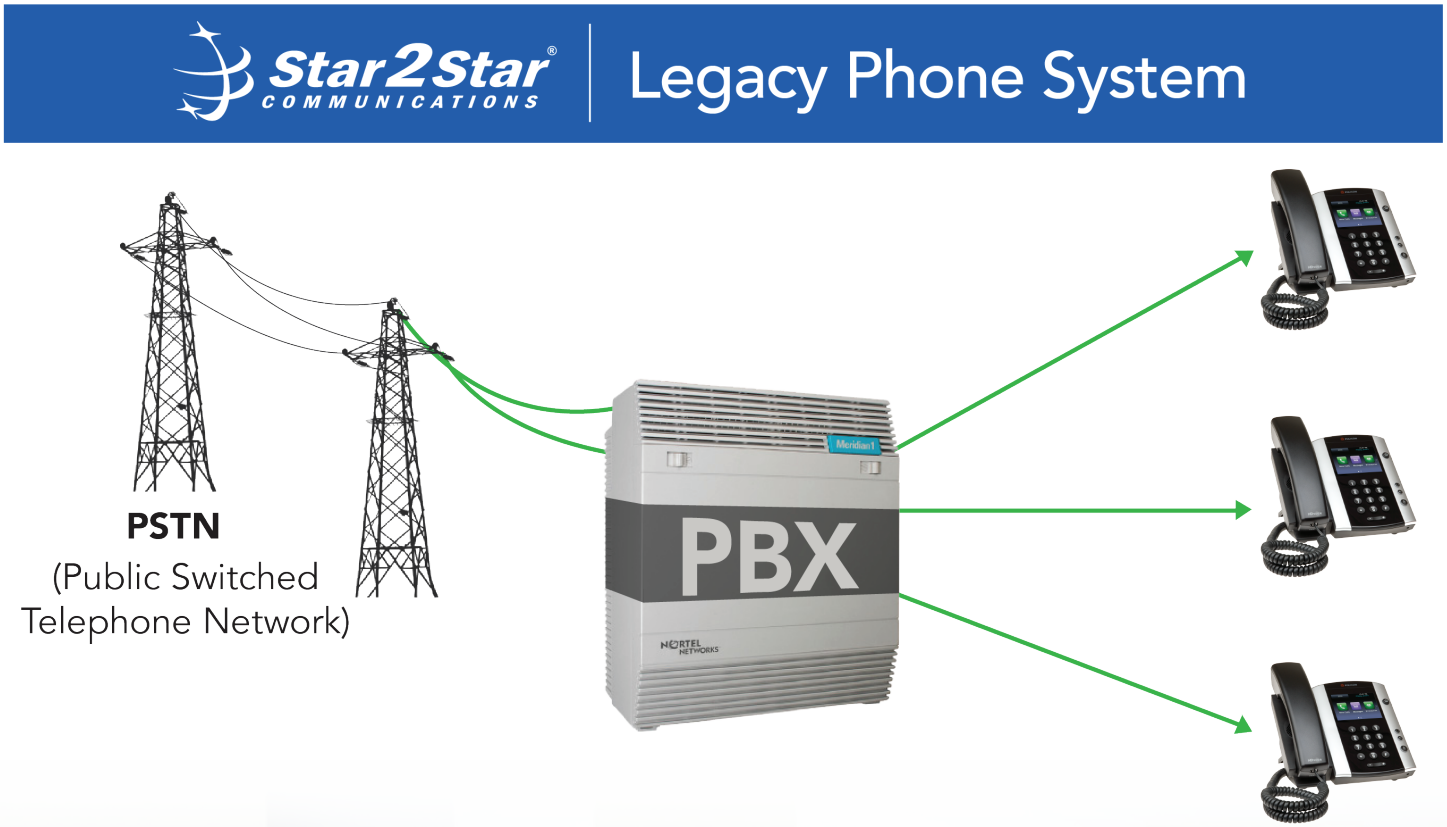
What Is StarSIP AlwaysUp?

For most of the telephone's history, the only way to transmit calls was over direct copper wire connections. The public switched telephone network, or PSTN, is made up of millions of these connections. Because the PSTN requires direct connections, the only way for an office to avoid paying for a dedicated line for every user is to use a private branch exchange, or PBX. Traditionally, PSTN lines connected to PBXs, which then routed calls to the desired extension. Unfortunately, PSTN lines can be expensive and cannot provide the advanced communications features that are becoming integral to modern business operations.

Voice over Internet Protocol, or VoIP, was developed as an alternative to the PSTN and transmits calls over Internet bandwidth. VoIP can be significantly less expensive than the PSTN, and also offers the possibility of providing voice, messaging, fax, video, and other services as a single unified communications service. Initially, switching to VoIP meant that businesses had to abandon their existing PBXs because VoIP virtual lines could not connect to them. Session initiation protocol, or SIP, was developed to connect VoIP virtual lines to PBXs. Supplying VoIP lines to PBXs through SIP is known as SIP trunking. SIP trunking allows companies who are not interested in replacing their PBX system for financial or familiarity reasons to still access the benefits of VoIP technology.

Unfortunately, many SIP trunking services experience reliability issues that make it challenging for their customers to do business. Few take full advantage of the power of the cloud to protect against disaster. Many provide only a limited number of the unified communications (UC) features that are some of the biggest advantages of SIP trunking.

In an effort to give those companies that aren't ready to replace their PBX a SIP trunking solution that truly meets their needs, Star2Star Communications developed StarSIP AlwaysUp. StarSIP AlwaysUp provides ultra-reliable, cost-effective SIP trunks and a suite of advanced UC features that revolutionize business communications. StarSIP AlwaysUp can also provide primary rate interface, or PRI, lines if the customer desires. This paper will explore what StarSIP AlwaysUp has to offer to businesses of all sizes and industries.



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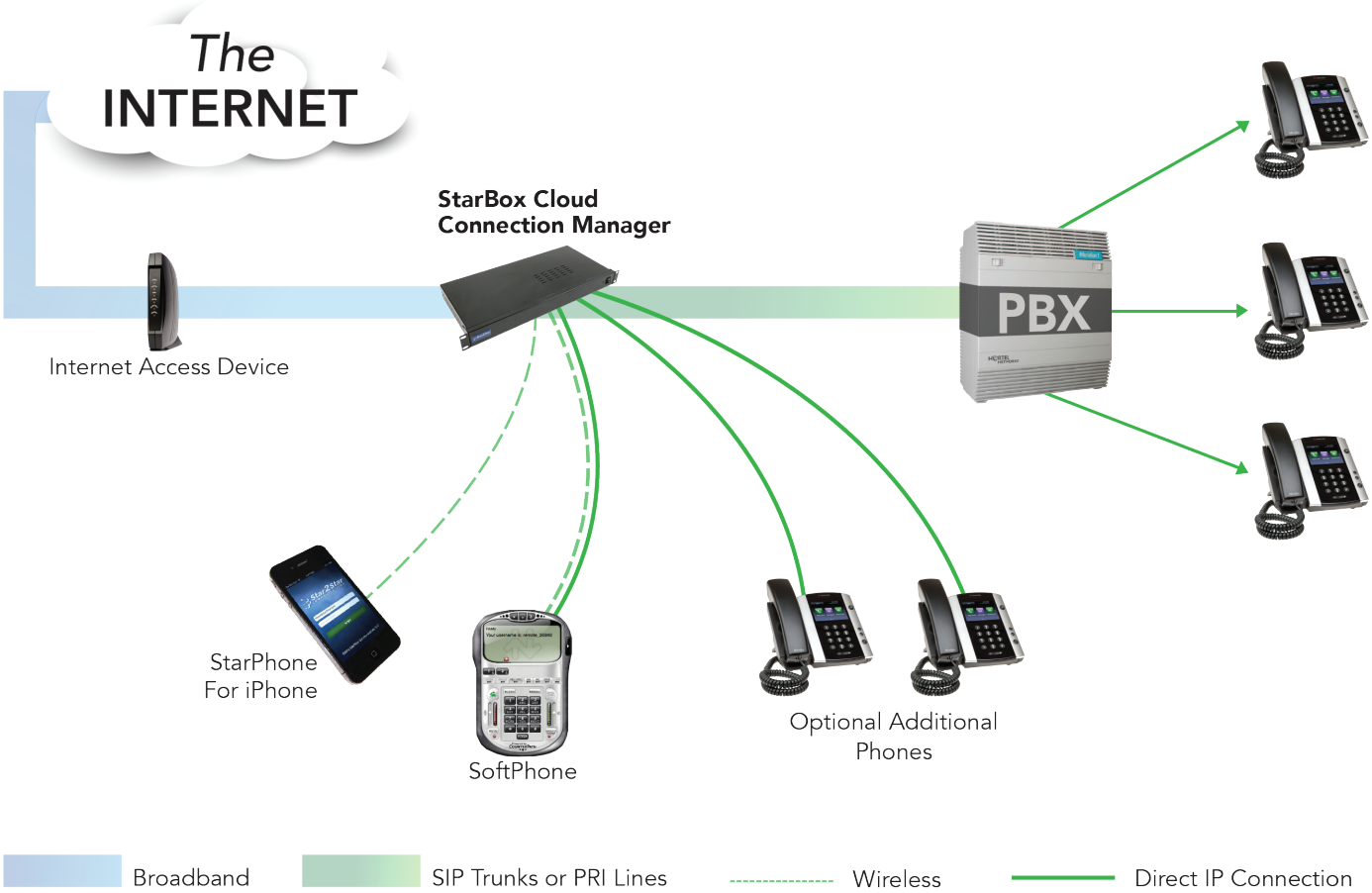
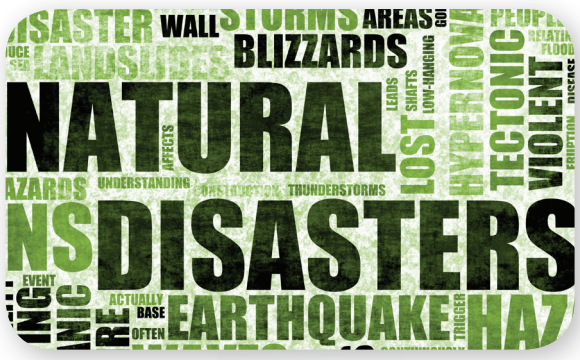


Disaster Recovery

One of the biggest weaknesses of the PSTN is that it provides essentially no disaster recovery protections. Events such as hurricanes and tornadoes can knock out PSTN service for weeks, and even a single lightning strike or fallen tree can leave a business unable to communicate for days afterwards. Companies that rely on a traditional PBX are putting themselves at risk of massive losses if a disaster leaves them unable to contact customers and suppliers.



Every StarSIP AlwaysUp service package includes a broad suite of disaster recovery protections designed to keep businesses running, even if their offices are inaccessible. Star2Star automatically routes calls from a down system to other locations or even employee cell phones, meaning that no call is ever missed. Voicemail can be accessed anywhere from email, making it easy to get business back on track quickly. Cloud-based auto attendants continue to function and direct customer calls. These features not only prevent businesses from losing income, they can actually increase local business while competing companies are still suffering from communications failure.

Reliability And Maintenance

Star2Star guarantees 99.999% uptime reliability, and the company delivers on its guarantee. In fact, Star2Star has had 100% uptime since 2011. Star2Star is able to provide such a high level of reliability due to its Constellation Network. The Constellation Network is composed of Star2Star's two main data centers and six additional points of presence, all of which are located at major Internet hubs. Every StarSIP

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Spotlight on:
StarPath

The Constellation Network is the primary cloud-based component of the Star2Star solution. The Constellation connects each StarSIP AlwaysUp service package to the cloud and is primarily responsible for routing calls made using StarSIP AlwaysUp. Star2Star routes calls using StarPath for end-to-end-quality.

Every StarBox Cloud Connection Manager has a list of preferred pathways in the Constellation Network, prioritized according to latency. The StarBox Cloud Connection Manager automatically routes calls along the highest priority/lowest latency path, unless that pathway is non-operational. The StarBox Cloud Connection Manager will then route that call along the second highest priority path, and so on. The Constellation Network reprioritizes the preferred pathway list every thirty minutes based on the results of continuous monitoring of Internet traffic and call quality, ensuring that the StarPath truly is the best path. StarPath keeps call quality high, reduces lag time, and prevents dropped calls.

AlwaysUp service package is connected to the Constellation Network through the on-premise StarBox Cloud Connection Manager. The Constellation Network and the StarBox Cloud Connection work together to identify the highest quality and fastest pathway over the Internet and route calls accordingly, assuring that all calls arrive at their destination with the highest quality.

In the unlikely event of a system failure, Star2Star provides a fully redundant data connection and call failover. Star2Star includes a comprehensive maintenance package with every StarSIP AlwaysUp service package, known as StarMaintenance. One of the most important features of StarMaintenance is next-day parts replacement. Star2Star will replace any non-functioning component, including phones, at no additional charge for any reason other than abuse. Star2Star also provides extensive implementation services and 24/7 customer support.

UC Functionality

When a business uses PSTN lines, it is essentially limited to communicating through voice only. Those other services, such as fax, that the PSTN can provide are generally entirely separate services that do not fully integrate and require their own dedicated lines. While this was once the model under which all businesses operated, modern business is increasingly reliant on faster and more efficient methods of communication, like video and instant messaging. Without access to these and other fully integrated UC features, a business risks falling behind the competition.

StarSIP AlwaysUp provides users with access to an array of advanced UC features, even if they continue to use their existing PBX. These features are designed to improve and expand business communications and therefore impact every facet of a company's operations. Star2Star shows its commitment to providing UC by including several key features with every StarSIP AlwaysUp service package.

StarScope 2 is an advanced presence monitoring and management tool only available through Star2Star. StarScope 2 makes it easy for employees and managers alike to track the status and location of users and control all of their communications from a single, easy-to-use interface.

The activities application is a part of StarScope 2. The activities application allows users to access to all of their activities in one place. Users initiate and participate in several services including StarChat and StarFax Personal and access stored data including recorded calls through the activities application.

StarPhone for iPhone enables unprecedented levels of mobility by transforming user smartphones into full-featured softphones that extend the quality and reliability of the StarSystem. StarPhone for iPhone makes it possible for users to make calls over virtually any IP network, including public Wi-Fi hotspots, without using their cell phone minutes.

The Star2Star Softphone turns a computer into a fully functioning Star2Star extension. Users can make and take calls and use StarCenter's many advanced tools from anywhere with sufficient bandwidth.

StarSIP AlwaysUp also enables users to access a number of optional UC features that significantly increase the power and flexibility of their communications.

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StarVideo allows up to 12 users to participate in a live videoconference. Users can share documents and instant message during these videoconferences, enabling even greater levels of collaboration. StarVideo is a great way to meet face-to-face without leaving the office.

StarChat slashes communications time with one-on-one and multi-party instant messaging. StarChat lets users convey vital information immediately with a few presses of the keyboard.

StarCenter provides a suite of advanced features designed to improve the operation and management of inbound call centers, including advanced ring strategies, flexible announcements, queue and agent reporting, queue monitoring, barge in, and nine levels of failover. StarCenter also has optional call recording, which is especially useful for call center agent training and performance grading.
StarConferencing enables up to 150 users to join a conference call. StarConferencing helps groups of all sizes collaborate efficiently, even if the participants are located thousands of miles apart. Some businesses even use StarConferencing to hold company-wide weekly meetings.

StarFax Classic allows users to send and receive faxes without using a fax machine. Everything is done using the power of the cloud.

StarFax Personal connects a traditional fax machine to the StarSystem, enabling businesses to continue to use their existing equipment and operating procedures.

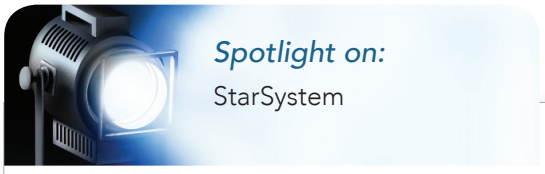
Pooling And Bursting Lines

One of the major advantages of StarSIP AlwaysUp is the ability to take advantage of pooling and bursting lines. Star2Star is able to pool all of a company's virtual lines and share them between different extensions. By pooling lines, a company is able to reduce the total number of lines it uses and pays for. One Star2Star customer was able to replace more than 11,000 PSTN lines with 3,000 virtual call pathways through line pooling, saving them many thousands of dollars every month. Line pooling lets Star2Star customers pay for the number of lines they actually need, not the number dictated to them by antiquated technology. Line pooling cuts the communications bills of many companies by up to 50%.

StarSIP AlwaysUp users have access to bursting lines as well. When all of a Star2Star customer's lines are in use and another call comes in, Star2Star will automatically add an additional line on the fly for a small fee. This prevents callers from ever receiving a busy signal. It also helps companies that maintain a steady call volume most of the time, but occasionally experience call spikes. The only limit to the number of lines that StarSIP AlwaysUp can add temporarily in this manner is the number that a user's PBX can handle.

Transitioning To The Full StarSystem

One of the major problems with PSTN lines is that the PSTN itself is increasingly obsolete. Every year, more and more PSTN users are transitioning to VoIP, and it is widely accepted that VoIP will replace the PSTN entirely within a few years. Even the telecom giant AT&T, traditionally one of the PSTN's greatest supporters, has successfully petitioned the FCC to begin transitioning away from the PSTN. While



Spotlight on:
StarSystem

The StarSystem is the most Complete and Scalable Cloud Communications Solution available. The StarSystem uses a unique Blended Architecture that combines best-in-class on-premise hardware with the power of the cloud to provide users with industry-leading reliability, instinctive, easy-to-use communications, and a comprehensive suite of UC features.

Unifying voice, video, messaging, mobile, and fax enhances business productivity and collaboration, making the StarSystem highly beneficial for all industries. Because the StarSystem has virtually limitless scalability, it is an ideal solution for businesses of all sizes, from sole proprietorships to huge national chains. The lower operating costs of Star2Star's hardware, the Star2System's ability to adapt to virtually any sufficient bandwidth, flexible pricing plans, and features like pooling and bursting lines slash business communications costs. Many customers see monthly savings of up to 50%, even after adding exciting new features and improving reliability.

For more information on everything the StarSystem can do for your business, please contact your Star2Star partner or visit www.star2star.com.

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most PBX owners will still be able to use PSTN lines for several years, it is likely only a matter of time before they will be forced to find a replacement.

Businesses with StarSIP AlwaysUp won't have to worry about the impending transition away from the PSTN because making the switch from StarSIP AlwaysUp to a full StarSystem could not be easier. All that it takes is a single phone call letting Star2Star know the number and type of phones that the company needs. Star2Star will then send those phones and any necessary switches and complete the transition. The ease with which StarSIP AlwaysUp can transition into a full StarSystem makes StarSIP AlwaysUp an excellent option for businesses who want to protect themselves against future discontinuation of PSTN service or those who are considering abandoning their traditional PBX in the near, but not immediate, future.

StarSIP AlwaysUp truly bridges the gap between a traditional PBX and the emerging dominance of cloud-based communications services. StarSIP AlwaysUp is the ideal solution for companies that:

- Already have an existing PBX that they are not yet ready to replace
- Are looking to slash their communications costs without sacrificing reliability
- Introduce UC functionality such as video, messaging, and fax to their business operations
- Are or may be considering making the transition to VoIP complete sometime in the future

If you are interested in learning more about the many ways that StarSIP AlwaysUp can help your company, please visit www.star2star.com.

Spotlight on:
Moving To The Cloud

There is substantial confusion over what "the cloud" is. In general, the cloud is a remote location that can only be reached electronically. The cloud typically allows for significantly more processing power and speed, storage space, security, and backup than on-premise solutions. Because programs run in the cloud typically do not need to be stored on an individual computer, the cloud also saves local computer memory and reduces software costs. The cloud also allows users to access their programs and files remotely.

Star2Star harnesses the power of the cloud to bring numerous benefits to customers, including advanced UC features, virtually limitless call recording, tremendous levels of mobility, extensive backup and recovery options, and remote auto-attendants. It is Star2Star's ability to provide of cloud-based features that gives StarSIP AlwaysUp perhaps its biggest advantages over PSTN lines.

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About Star2Star

About Star2Star: Founded in 2006 in Sarasota, Florida, Star2Star Communications delivers the World's Most Complete and Scalable Cloud Communications Solution. Star2Star unifies customers' voice, video, fax, instant messaging and presence management into a single, easy-to-use system. Star2Star's award-winning, patent-pending Constellation™ technology overcomes the reliability and quality limitations of other communications technologies.

In the past three years, Star2Star was named to the Forbes Most Promising Companies list, the Deloitte Technology Fast 500 twice, and the Inc. 500|5000 three times. Star2Star also recently received Inc. Magazine's Hire Power Award honoring the top private business job creators in the country.

Star2Star Communications solutions are sold through a diversified network of partners that include distributors, master agents, managed service providers and certified installing resellers. Available across North America, Star2Star systems are installed in hundreds of thousands of businesses, including large national chains with multi-location communications footprints.

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