

# Simplify your move to IP-based voice



## Consulting brings you the expertise and experience to streamline your SIP transformation

Many organizations are migrating from traditional TDM and ISDN services to SIP trunking. They want to take advantage of the tremendous versatility (voice, video, integrated capabilities) and potential savings SIP trunking can offer. Of course, making the move to SIP can be complex. That's where AT&T can help. Our consultants work with you to create and implement a customized [SIP transformation plan](#)—and help you dodge common pitfalls.

### Take advantage of potential savings

Costs for public switched telephone network (PSTN) trunking services can be reduced significantly when a business transforms to a SIP trunking environment. How?

First, you pay for only the lines you need. Traditional TDM T1s and ISDN PRIs provide voice circuits in bundles of 23—which typically means that you pay for more lines than you require. SIP trunking involves connecting corporate

### Benefits

- Cost savings—reduce the number of long distance lines required
- Enhanced efficiency—better visibility into call patterns, improved disaster recovery, centralized management, and hardware consolidation
- Reduced complexity—we help you understand how moving to SIP will impact your voice and data environments
- Built for you—we build custom-tailored SIP transformation programs

### Features

- SIP Readiness Assessment
- SIP Strategy and Architecture
- SIP Design and Engineering
- SIP Testing and Piloting
- SIP Transformation Planning
- SIP Transformation and Governance
- SIP Service Management

voice traffic to a service provider's network over a data circuit rather than over multiple TDM lines. This allows you to purchase only the number of concurrent calls that are required, with the flexibility to add more capacity on demand during heavy call periods.

Second, SIP trunking can also reduce intracompany long-distance fees by transporting voice calls over the corporate data network.

You also get other benefits, like better visibility into call patterns, improved disaster recovery, centralized management, hardware consolidation, and service provider standardization.

## Enhanced performance and network efficiency

Using SIP trunking for contact centers can also improve performance and network efficiency. SIP was designed to not simply emulate TDM voice applications, but to enhance their capabilities. Past Computer Telephony Interface (CTI) applications used middleware and translation routes to identify the call destination and match the computer endpoint associated with the answering agent. This resulted in an inconsistent customer experience and higher costs for deployment, support, and the network. By integrating SIP in the contact center, you lay the foundation for:

- Enhanced **customer experiences** and interactions
- Better **support for the access channel** (e.g. email, web chat, social media, mobility, SMS, etc.)
- Multiple **support mechanisms**
- **Reduced cost** per transaction

## Simplifying the complexity

While carriers provide the SIP transport, organizations need to be prepared for their own respective responsibilities in the transformation. This is particularly true for organizations moving to a centralized solution in which calls are delivered first to their data centers before being sent over the corporate WAN to remote offices. This can represent a major change to the network architecture, as traditional voice trunking services are usually deployed at the remote site.

In most cases, deploying SIP requires that new network elements called Session Border Controllers

(SBCs) be deployed to terminate the SIP trunks and provide security, enhanced call routing, and other critical functions. In addition, many organizations lack expertise in configuring and managing their voice platforms (PBXs, contact centers, and unified communications (UC) solutions) to take advantage of the new SIP capabilities.

Adding to the complexity is that SIP includes multiple standards. For example, AT&T SIP implementation includes support for six Requests for Comment (RFCs)—including call transfers, DTMF handling, codec negotiation, error recovery, and other features.

In addition, SIP has optional extensions available, and each equipment vendor is free to implement SIP as they see best. This can cause interoperability challenges when integrating components from different vendors.

To be successful, you should understand how moving to SIP will impact your voice and data environments. You need to evaluate your existing infrastructure to help ensure that it is capable of supporting SIP services; or, if not, what would be required to enable that support. This could include upgrading the bandwidth of the WAN environment, upgrading or reconfiguring the LAN and WAN to address Quality of Service (QoS) and/or making changes to existing PBX, contact center and Unified Communications (UC) solutions. You also need to understand how SIP will affect your costs for delivering communications services. Additionally, you need to better understand how the introduction of this new SIP service will impact your ability to effectively incorporate it into an existing operations framework and manage it long term. A comprehensive solution architecture must be developed that encompasses not only the network and SIP trunking services themselves, but also the systems deployed in the data center and possibly remote sites as applicable. To minimize the risk of service disruption, a non-production proof of concept or production pilot should be performed that includes extensive testing of integration, interoperability, functionality and management. Load testing of the new solution is often recommended before shifting voice traffic to SIP trunking. Finally, the organization must effectively plan the migration and SIP service transformation prior to execution and then deliver on that plan to the full production environment.

AT&T Consulting provides a programmatic approach to SIP transformation, including a full life cycle approach from readiness to Day 2 service support. To



meet your unique needs, we build custom-tailored SIP transformation programs based on the following activities:

- SIP Readiness Assessment
- SIP Strategy and Architecture
- SIP Design and Engineering
- SIP Testing and Piloting
- SIP Transformation Planning
- SIP Transformation and Governance
- SIP Service Management

## SIP Readiness Assessment

We identify aspects of your infrastructure that will be impacted, and we highlight the potential risks of SIP adoption. For example, equipment vendors for routers

and SBCs may provide basic or enhanced services. It's critical to align their product refresh cycles with your SIP readiness. AT&T Consulting has experience with a broad array of platforms, including SBCs, PBXs, contact centers and UC solutions that will be impacted by the deployment of a SIP-based architecture. Additionally, AT&T Consulting has vast experience evaluating platforms and service management situations relating to the existing voice services portfolio and what impact SIP trunking will have on you.

## SIP Strategy and Architecture

The underlying protocols between TDM/ISDN trunks and SIP trunks—though they both transport voice—are completely different. AT&T Consulting creates the architectural framework for your transformation. You can integrate SIP trunking in phases, while addressing security, high availability, supportability, and interoperability. The architecture of an environment migrating to SIP can change dramatically, especially if you're moving from distributed voice trunk services to centralized call delivery. AT&T Consulting can also run a cost-savings analysis.

## SIP Design and Engineering

AT&T Consulting provides design and engineering expertise to address the detailed configuration and integration aspects of a SIP architecture. This service focuses on the development of the equipment configurations, test plans, and integration plans required to integrate the elements into a SIP environment. Target SIP infrastructure elements include IP addressing, routers, SBCs, PBXs, Contact Centers, and UC platforms. Consultants provide detailed configuration and integration parameters for each element impacted by SIP integration.

## SIP Testing and Piloting

AT&T Consulting doesn't just flip a switch to SIP trunking and wait to see what happens to your infrastructure. AT&T Consulting helps you test and pilot the system first. AT&T Consulting can deploy lab environments for proof-of-concept testing. AT&T Consulting help you launch pilot deployments to validate integration and educate your IT staff. AT&T Consulting also conducts load testing of the new architecture to identify any issues that may affect the call quality or delivery of calls during peak times.

## SIP Transformation Planning

AT&T Consulting can develop an overall governance plan and integration schedule. This makes for a virtually seamless transformation to SIP. Integration planning includes creating the deployment schedule, identifying necessary resources and tasks, and implementing input from the teams involved in program governance.

## SIP Transformation and Governance

When it comes to technical or governance capacities, AT&T Consulting can assist you with either project-based work scope or "Trusted Advisor" augmentation of existing IT teams. Staff augmentation consists of subject matter experts delivering defined tasks around a SIP migration (project management, design and engineering, and integration activities). The governance model relies on project-based teams that own and manage the transformation to SIP.

## SIP Service Management

AT&T Consulting can help you develop a SIP service management strategy, starting with the SIP readiness assessment and continue into Day 2 management. AT&T Consulting focuses on current operations architecture (people, processes, and tools) and compares them against the SIP service target state. AT&T Consulting does this to define and minimize risk and a Day 2 care model. This capability, tied to our expertise in developing solutions in the core SIP service infrastructure, helps address critical readiness issues as well as the eventual development of a robust SIP support model.

## AT&T Consulting and SIP Transformation Services

AT&T Consulting provides world-class methodology, expertise, and experience. As a trusted advisor, we are ready to help you make the most of your SIP transformation.

### Why AT&T

As the leader in technology, media, and telecommunications, our edge-to-edge capabilities provide the foundation for your SIP transformation, so you can stay competitive in a world where the pace of business continues to accelerate.

For more information contact an [AT&T Representative](#) or [visit AT&T](#).