

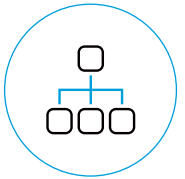
# AT&T IP Flexible Reach

Your foundation for transformational services

# AT&T IP Flexible Reach overview



SIP trunking service that delivers integrated access to IP PBX, TDM PBX or key system environments



Possible cost benefits through consolidation of voice and data – one provider, single transport, integrated management



Foundational service for operational transformation and intelligent service integration



# SIP trunking for communications transformation

From...

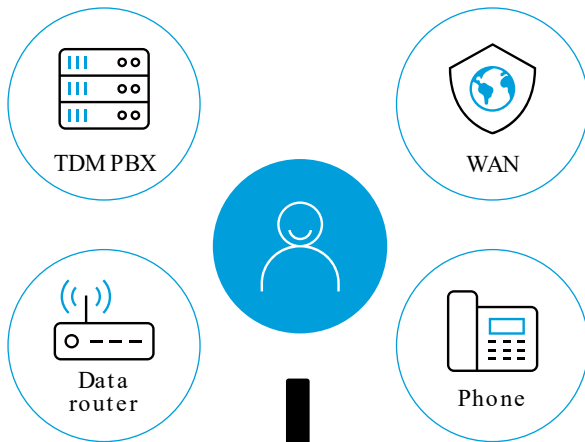


To...



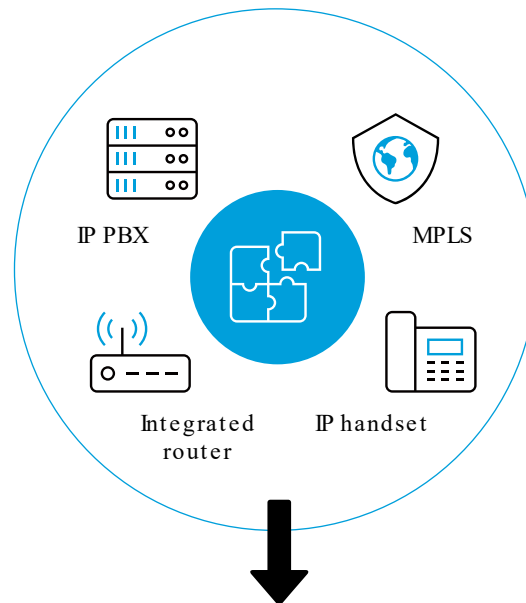
Enhanced services

- Multi-vendor, multi-network, corporate managed
- End of life equipment
- Obsolete technologies



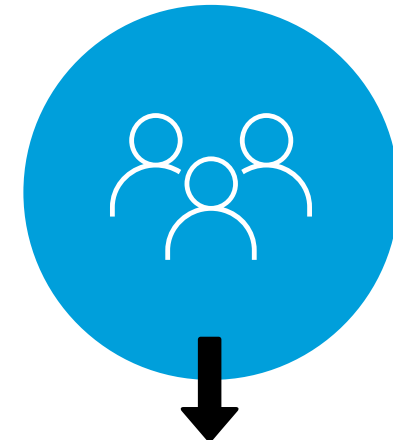
Higher cost, complex and more difficult to manage

- SIP services on MPLS transport with on-net advantages



Lower costs, reduced complexity, easier to manage

- Audio, web, video collaboration
- Unified communications, including instant messaging and presence
- Managed services for technology loyalists
- Professional services



Pay as you go, a la carte choices

# AT&T IP Flexible Reach benefits

Integrate voice and data into one integrated access circuit



## Optimize network capacity

Combine voice and data over integrated access and simplify network management



## Control costs

Only pay for the number of lines and capacity you need



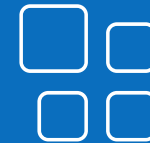
## Maintain call quality

Benefit from calls carried on the AT&T MPLS network, not public internet



## Utilize your current equipment

Avoid investing in new equipment for voice lines



## Be scalable and flexible

Increase and decrease the number of concurrent call channels as needed



## Avoid toll charges

On-net (VoIP to VoIP) calls route within the IP network and don't incur additional charges

AT&T communication transformation

# Inside AT&T IP Flexible Reach

## Management

A web-based customer portal is available for feature self-management and reporting

- Max DID policing
- Anonymous call rejection
- Account codes
- Authorization codes
- Sequential ringing
- Simultaneous ringing

## Authorization/restriction

- Operator assistance/  
directory assistance
- Domestic
- International
- Toll-free

## Appearance

- Configurable calling line ID

## Call forwarding

- Call forwarding not reachable
- Call forwarding selective
- Call forwarding always
- Call forwarding busy
- Call forwarding no answer

## Call transfer

- Call transfer blind (SIP REFER)
- Call transfer consult (SIP REFER)

## Flexible calling plans

- Supports unlimited local and on-net calling with option for bundle of free, off-net, long-distance minutes

## Resiliency/Redundancy

- Border Gateway Protocol – Reroute (BGP-R)
- Trunk Call Routing (TCR)
- Route Exhaust

## Virtual telephone numbers (VTNs)

- Establish local visibility by assigning a telephone number to a phone not physically located within your location's local calling area.

## Branch office extensions

- Share trunks across multiple locations



# AT&T IP Flexible Reach service quality and assurance



Class of Service (CoS), prioritizes the voice packets over other types for immediate transport



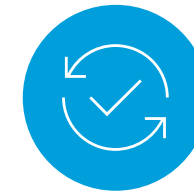
All calls across network monitored for service quality



Failover and resiliency, with trunk to trunk failover and call preservation target less than 5 seconds



Advanced bandwidth management and traffic queuing priorities help optimize for applications and traffic types running simultaneously



Managed transition with design, implementation, and lifecycle management that helps assure migration is smooth

# SIP – economics and possibilities

## Reduced...

- Lines/connections
- Call charges
- Maintenance agreements
- CAPEX-funded CPE
- Support/training
- Service providers & vendors
- SLAs/monitoring
- Spend management



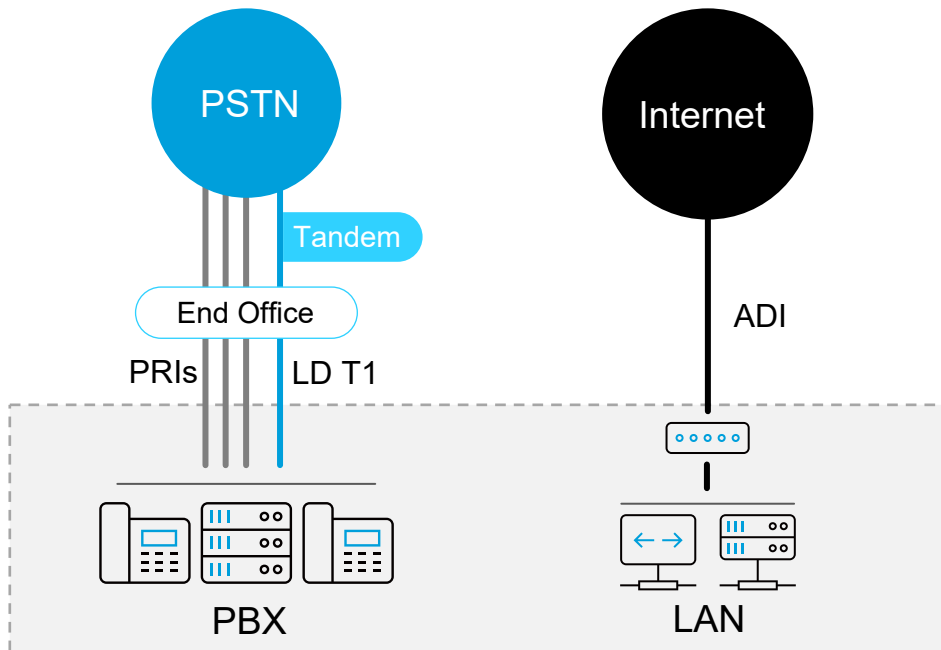
## Greater...

- Cost efficiencies
- Optimization of network resources
- Focus on strategic value tasks
- Use of OPEX
- Integration
- Service integration
- Automation
- Transparency and control

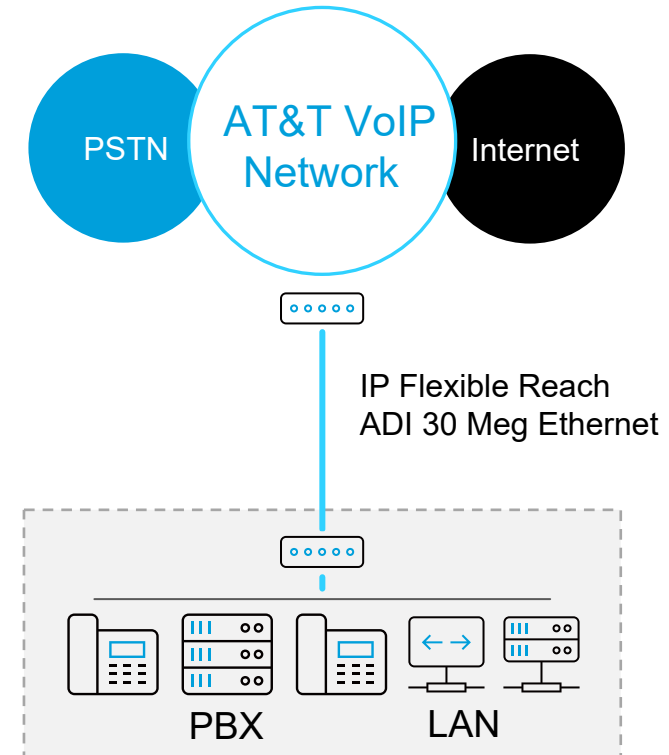
# Transforming voice use case

## Local PRIs, Dedicated LD T1 and ADI to AT&T IP Flexible Reach

- Three Local PRIs with 69 voice channels
- One LD T1 Dedicated Intra/Interstate circuit
- One ADI 20 Meg Internet circuit
- Five Total Circuits



- 70 Voice Calls occur simultaneous with Internet Traffic
- One IP Flexible Reach Voice and Data IP Integrated access circuit



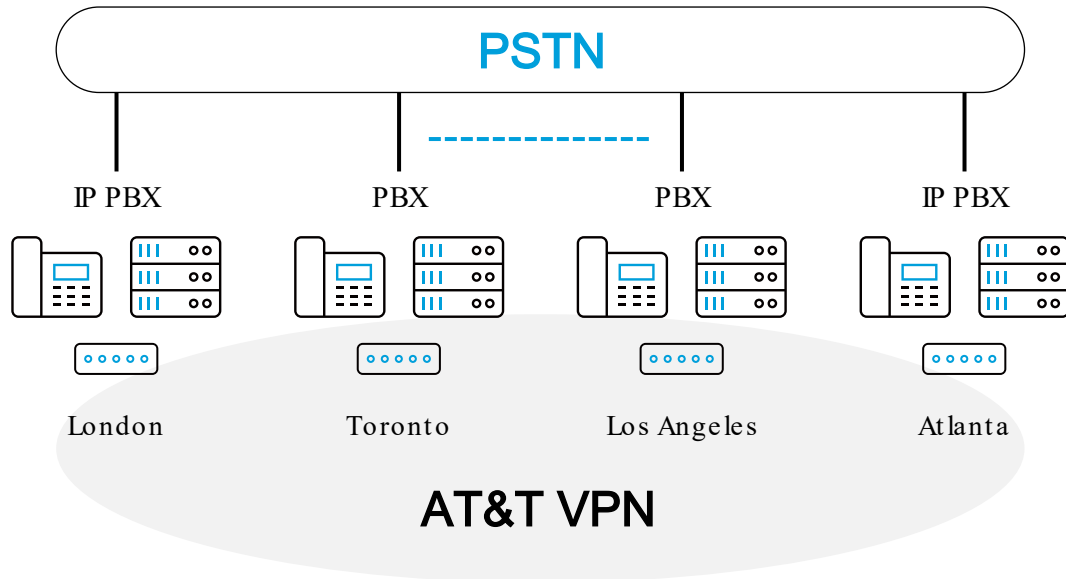


# Enterprise voice transformation use case

## TDM to AT&T VoIP, AT&T IP Flexible Reach and AT&T VPN

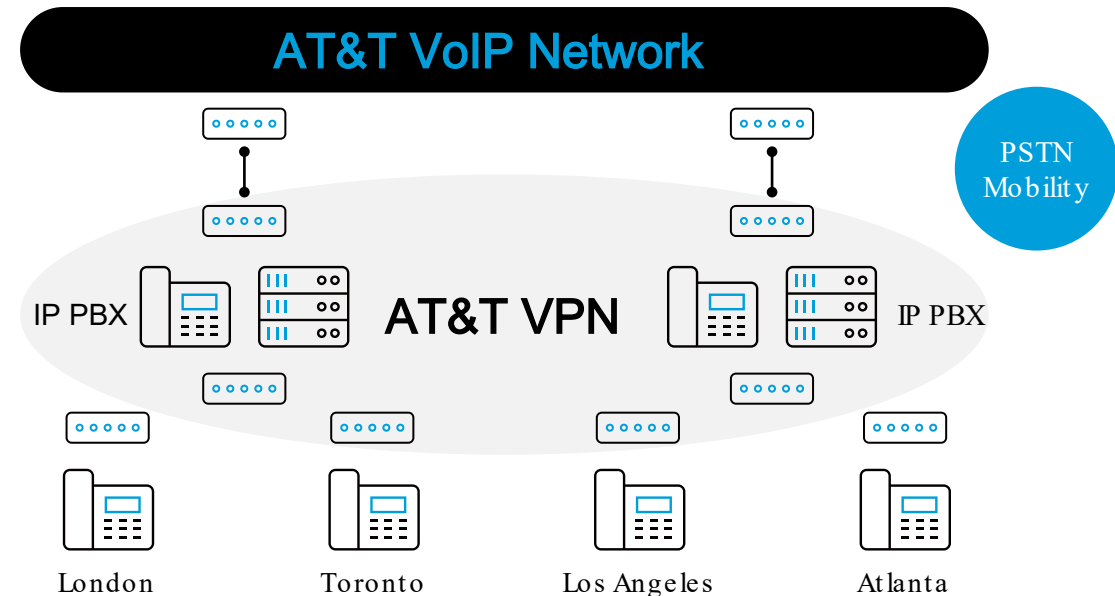
### TDM based Voice w/Distributed Architecture

- Costly, multiple PRIs at each location for PSTN calling
- Costly, PBX management at each location for PSTN calling



### IP based Voice w/Centralized Architecture

- PRI savings consolidated access to PSTN with Centralized SIP trunks
- CPE savings with Centralized IPPBX management for all call types



# TDM to SIP transformation for a major airline



## Problem

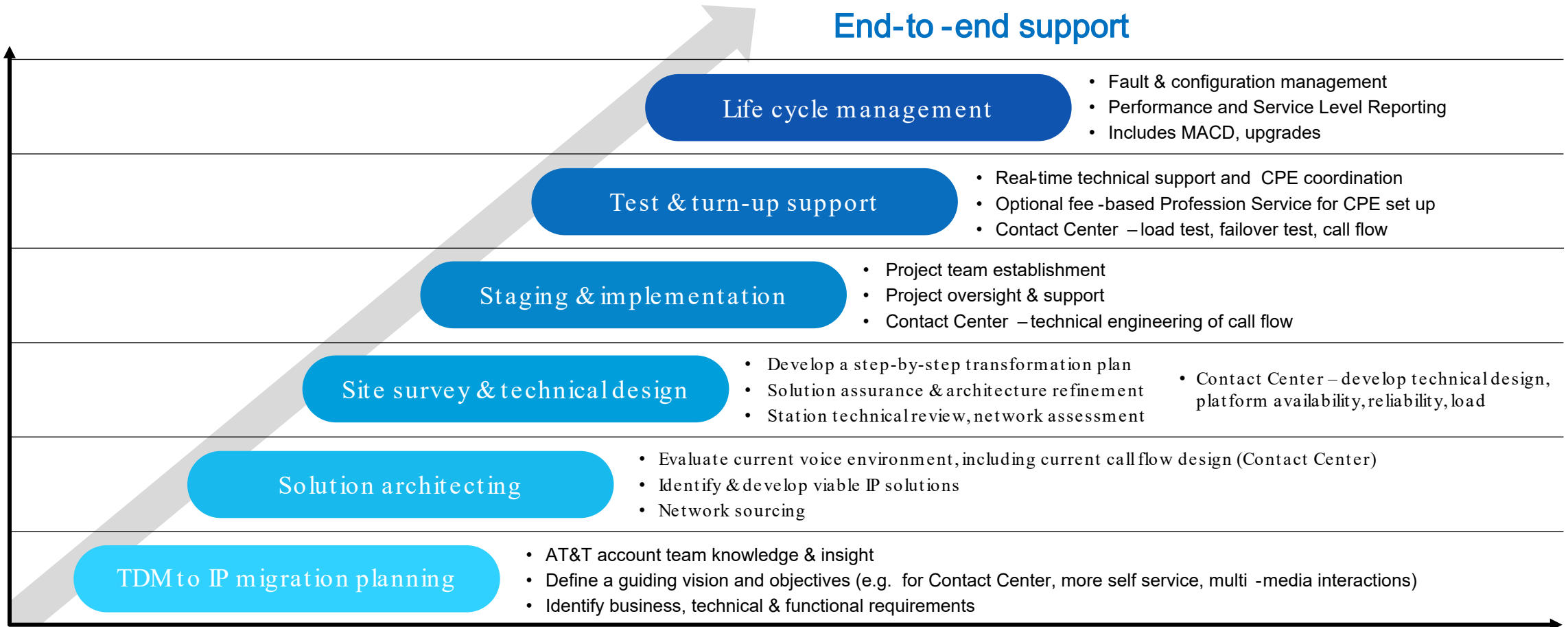
- Manager contact center: 6 sites; 22,000 concurrent call peak volume
- Customer call center hardware was end of life
- Disparate workforce; customer seeking a more ubiquitous approach for all agents

## Solution

- AT&T managed, integrated solution delivering a near seamless experience via a SPOC for service assurance
- Contact center solution, IP toll-free, managed ethernet access, GigE bandwidth and IP Infopack for call data delivery
- Special multi-layer failover design and configurations
- Total transformation of reservations call center to E2E IP platform

# AT&T IP Flexible Reach – the foundation for voice transformation

## End-to -end support



# In summary



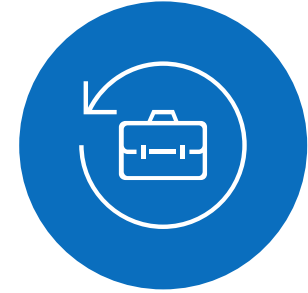
## Operational savings and greater ROI

across calling, connectivity,  
customer premises  
equipment, resource  
management and  
maintenance.



## Industry-leading network quality, assurance and service migration

to help customer benefit  
from shifting to the next  
generation in  
communications  
technologies.



## Become future-ready with an IP foundation

providing rapid access  
to cloud, voice and  
collaboration services.



AT&T Business

# AT&T Global SIP Trunking

## Global local service

### North America

USA  
Canada  
Mexico

### Europe

Austria  
Belgium  
Czech Republic  
Denmark  
Finland\*  
France  
Germany  
Ireland  
Italy  
Luxembourg\*

Netherlands  
Norway\*  
Portugal  
Romania  
Slovakia\*  
Spain  
Sweden  
Switzerland  
United Kingdom

### Asia

Hong Kong  
Singapore  
Japan  
Malaysia\*

### Australia

Australia  
New Zealand

## Global SIP Trunking

Local service in 23 countries today and 5 planned including number portability and emergency service support

# AT&T Global SIP Trunking

Long distance offer global

## North America

USA  
Canada

## Latin America

Argentina  
Brazil  
Chile  
Colombia  
Ecuador  
Mexico  
Panama  
Peru  
Venezuela

## Europe and Africa

Austria  
Belgium  
Bulgaria  
Czech Republic  
Cyprus  
Denmark  
Estonia  
Finland  
France  
Germany  
Greece  
Hungary  
Ireland  
Italy  
Latvia  
Lithuania  
Luxembourg  
Netherlands  
Norway  
Poland  
Portugal  
Romania  
Slovakia  
Slovenia  
Spain  
Sweden  
Switzerland  
United Kingdom  
South Africa

## Asia Pacific

Australia  
India  
Japan  
Malaysia  
S. Korea  
Hong Kong  
New Zealand  
Philippines  
Singapore  
Taiwan  
*On-net only:*  
China  
Thailand  
Indonesia  
Vietnam

## IP Flexible Reach

Calls originating from  
54 countries with  
Global Termination

# AT&T Global SIP Trunking

## Canada and United States BOEs

### Customer Hubs

- Local service replacement
- Remote sites become Branch Office Extensions to IP PBX Site
- Connect remote sites through AVPN or other WAN
- SIP Inbound and Outbound voice traffic aggregation
- Off-net access to PSTN through cross border Hub Site
  - In-country PSTN
  - Rest of World PSTN
  - Mobility Networks

Hub and BOE in any combination of United States, Canada and Europe

### Centralized Voice Gateway Hubs

#### Canada and United States Hub and BOE Locations

