


AT&T IP Flexible Reach

National Communications Group
email: Sales@N-C-Group.com

© 2013 AT&T Intellectual Property. All rights reserved. AT&T, the AT&T logo and all other AT&T marks contained herein are trademarks of AT&T Intellectual Property and/or AT&T affiliated companies. All other marks contained herein are the property of their respective owners.

Rethink Possible® 

Agenda

- Convergence
- AT&T's VoIP Portfolio
- AT&T IP Flexible Reach
- AT&T Business in a Box[®] with AT&T IP Flexible Reach
- Features
- Reporting
- Summary



Key Considerations for Convergence and Voice Over IP

Enterprise Drivers

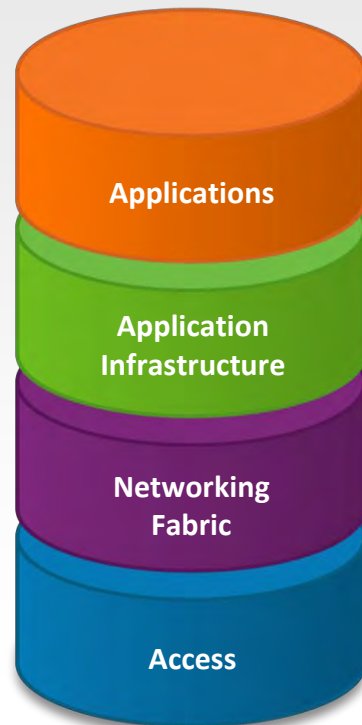
“How can I improve productivity?”

“How can I better integrate business applications?”

“How can I manage my costs more effectively?”

“How can I ensure the security of my business?”

IT Landscape



4 Points of Convergence

Take Advantage of Services Over IP

Optimize Your Application Infrastructure

Enable Your Network with MPLS

Converge Voice and Data on Your Access

Enterprise Benefits

Performance

Enhancing operational efficiencies and productivity

Agility

Increasing time-to-market and workflow responsiveness

Control

Strengthening visibility and real-time adaptability across the enterprise

Security

Protecting against the unexpected

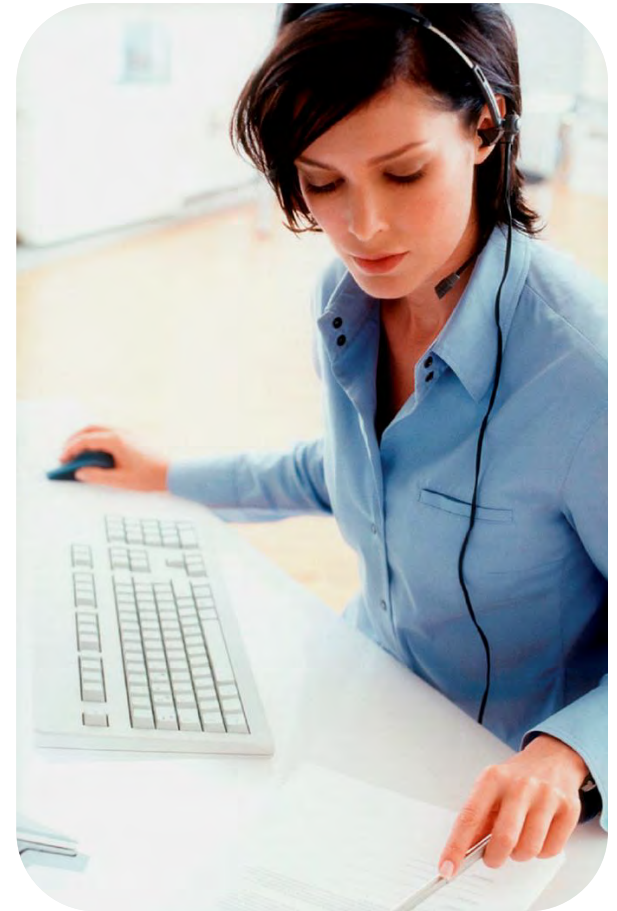


Voice Over IP – Converging Voice and Data

Use the Network of Tomorrow to Empower Your Business Today

Inspire your communications in ways you never thought possible with voice transformation.

- Voice communications are part of nearly every aspect of work and life
- Ever-changing technology is influencing the way we interact like never before
- Voice transformation maximizes the way you communicate and collaborate, to change the way you do business
- Convergence of your voice and data communications empower your employees to be more productive
 - Virtually anytime, anywhere, all while realizing potential cost savings



AT&T Business VoIP Portfolio

Choose The Solution That Best Fits Your Business

Company owns
and manages PBX
AT&T provides
transport

SIP Trunking

- SIP trunking service that delivers integrated access for PBX and Key systems
- VoIP calling solution with unlimited local and on-net calling with competitive long distance plans

Company chooses
to delegate
management and
does not have a PBX
system. AT&T
provides transport

Hosted VoIP

- Network-based fully-hosted VoIP SIP solution that offers organizations a full range of advanced calling features
- Web-based management tools for organization
- Supports remote worker capabilities

Small/Medium
business or large
organization with
distributed locations
Choose to delegate
management

Business in a Box

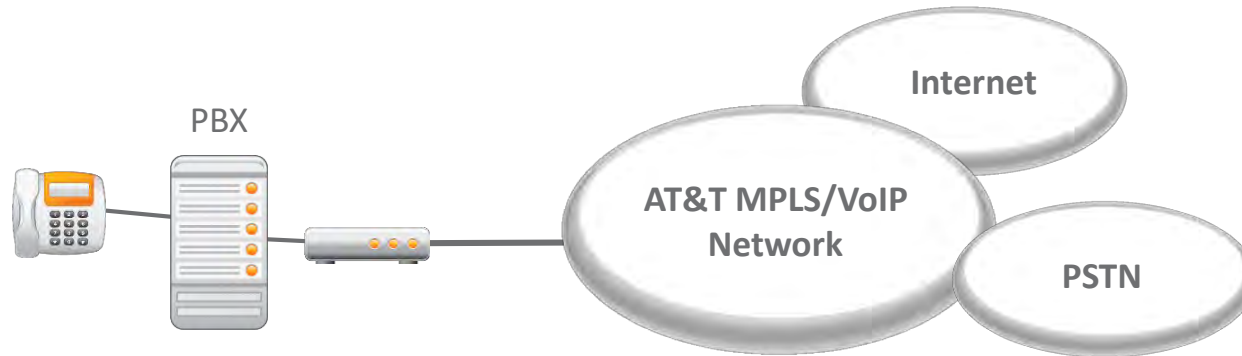
- Fully-integrated simplified voice and data services in one piece of equipment, managed by AT&T
- Available with Hosted VoIP or SIP Trunking

**IP Toll Free – Integrated Toll Free Service across VoIP
and TDM end-points with advanced feature capabilities**



AT&T IP Flexible Reach

SIP trunking service delivering IP voice & data on integrated access for customer PBX systems



Highlights

- Potential Access / bandwidth savings via converged voice and data
- Connects with analog, digital & certified IP PBXs
- Unlimited local & on-net with off-net LD
- Local: Portability, OA/DA
- Virtual Telephone Numbers*
- Access options: T1, T3, FracT3, bonded T1s, Ethernet, Ocx
- Access Types: Managed Internet Service, PNT and AVPN

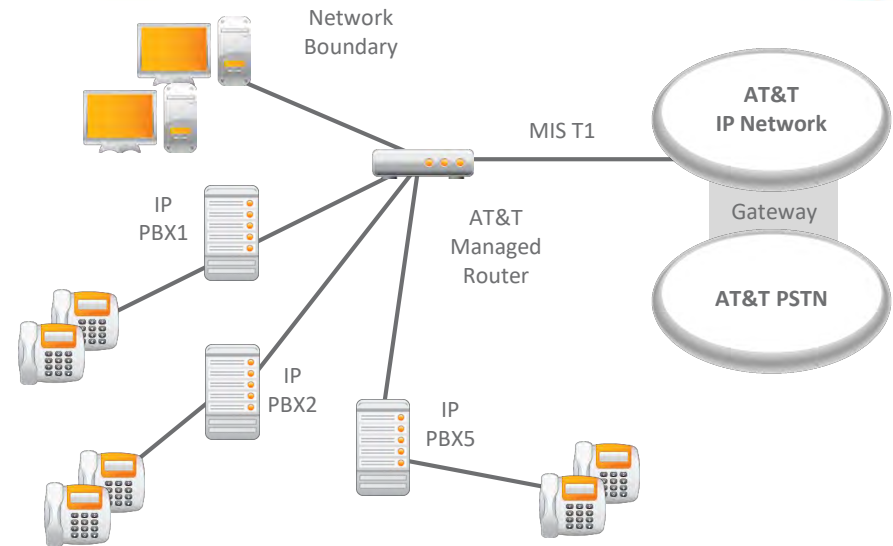
*limitations and conditions for virtual telephone numbers may apply



AT&T IP Flexible Reach

Multiple IP Addresses (MIP)

- You need more than one VoIP signaling address to support multiple call processing devices
- With the Multiple IP Addresses (MIP) feature, you can select up to 5 IP PBXs in a cluster on a single AT&T IP Flexible Reach connection



Highlights

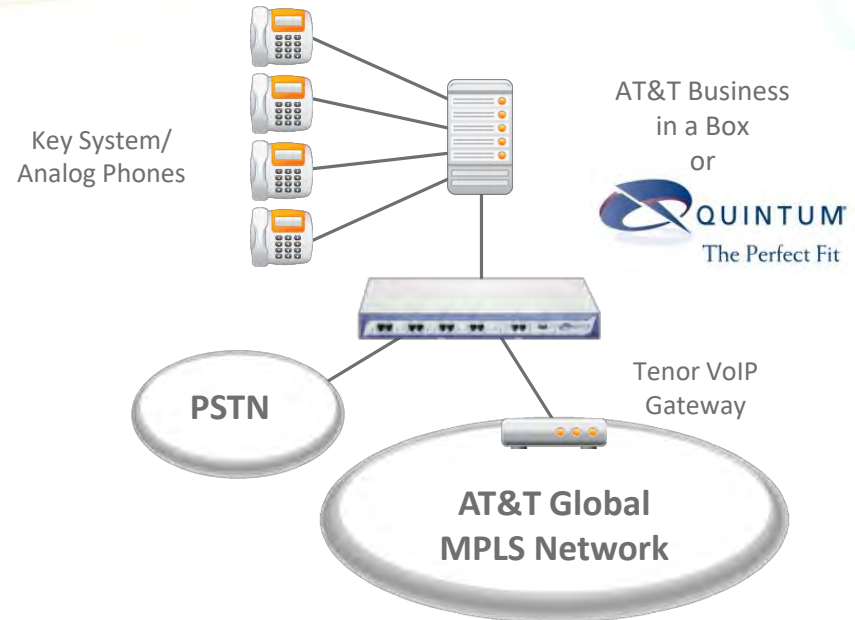
- You may select up to five VoIP signaling addresses for IP PBXs in clustered configurations located on a single AT&T IP Flexible Reach site.
- All IP PBXs in a cluster must be the same software version, same protocol and release.
- Available with certified IP PBXs clusters only
- MIP feature is supported with Calling Plans A, B and C



AT&T IP Flexible Reach

For Key Systems (Analog Telephones)

- SIP “trunking” service delivering integrated access for customers with analog systems
- Provides an elegant migration path to VoIP



Highlights

- Optional failover to the PSTN for added backup
- Transparent deployment – AT&T Business in a Box or Quintum Tenor® switch appears like the PSTN to the analog key system
- Connects any brand analog key system – One solution for all locations
- VoIP switch is simple to deploy, easy to configure & requires no modification to the existing key system

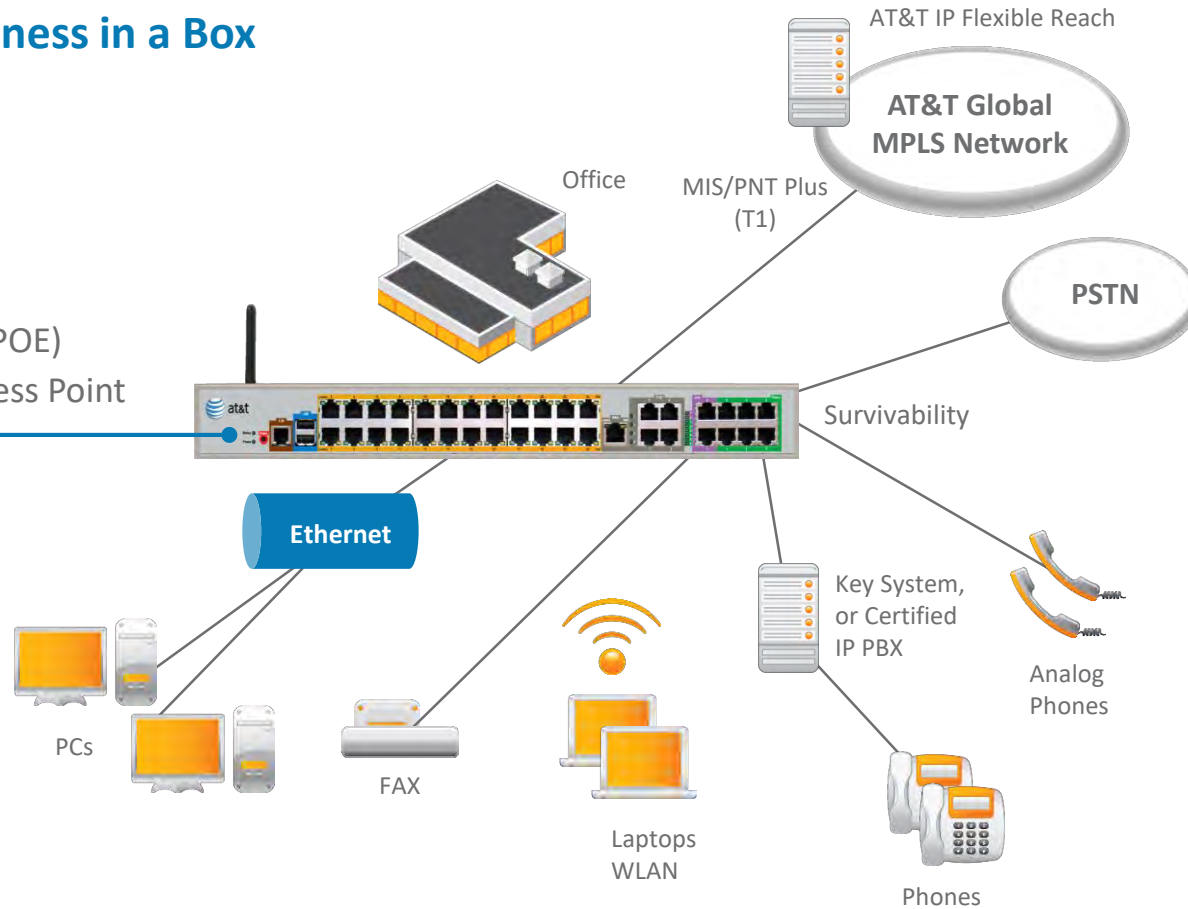


AT&T Business in a Box[®]

With AT&T IP Flexible Reach

AT&T Business in a Box

- Firewall
- IP VPN
- Analog Ports
- Ethernet
- Router
- LAN Switch (POE)
- Wireless Access Point



AT&T Business in a Box[®]

With AT&T IP Flexible Reach

Highlights

- Provides **fully integrated voice & data** services
- **Analog interface** for up to 22 ports can be connected to key systems
- **Integrated VoIP** with AT&T IP Flexible Reach with SIP interface for use with certified Avaya IP Office and Nortel BCM-50 releases
- T1 **internet access** to satisfy your high speed requirements
- **Fully managed service:** Automatic Configuration, Self-Provisioning, Data Monitoring & more...
- Integrates CPE into **one “touch point”** which AT&T remotely manages, no need for additional support to manage your communications components



AT&T Business in a Box[®]

With AT&T IP Flexible Reach

Robust Feature Set

Integrated Router with handling routing of voice and data to your IP network

- Improved security through an integrated, robust firewall
- Survivability for connectivity from analog & IP phones during a service interruption
- 802.11g wireless data access with WPA encryption
- POE-enabled LAN ports to connect VoIP enabled phones and computers
- Integrates CPE into **one “touch point”** which AT&T remotely manages, no need for additional support to manage your communications components



AT&T Business in a Box[®] with AT&T IP Flexible Reach Customer Equipment Options

- AT&T has performed interoperability testing for IP interfaces directly into Avaya and Nortel IP PBXs and has certified their PBXs to work efficiently with AT&T Business in a Box.
- Available for an additional cost, both of these high quality PBX systems offer you a range of communications capabilities to meet your business needs.
- Support for additional PBX models is being added -check with your AT&T sales associate to see what PBX systems can be used with AT&T Business in a Box.



AT&T IP Flexible Reach Features

Voice Quality of Service

- Class of Service with 25 different profiles optimizes voice & data application performance
- Dynamic bandwidth allocation supporting bursting of data during voice idle periods
- Silence suppression for up to 50% reduction of per call packets
- Industry leading call compression capabilities

Multiple Call Types

- IP On-Net to IP On-Net
- IP On-Net to PSTN Off-Net
- Inbound /Outbound Local Calling
- International off-net

Interoperability with traditional and next-generation PBXs

- Traditional PBX/Key system interfaces
 - Support CAS, PRI & analog signaling
- IP PBXs interfaces
 - Cisco, Avaya, & Nortel
- Additional PBX certification testing in 2011 will support more PBX vendors in the future.

AT&T Management

- Centralized Dial Plan administration and maintenance
- Network QoS monitoring & management
- Network Performance Reporter – Web portal for Call Detail Reports
- Service Level Agreement - Site Availability

Virtual Telephone Numbers*

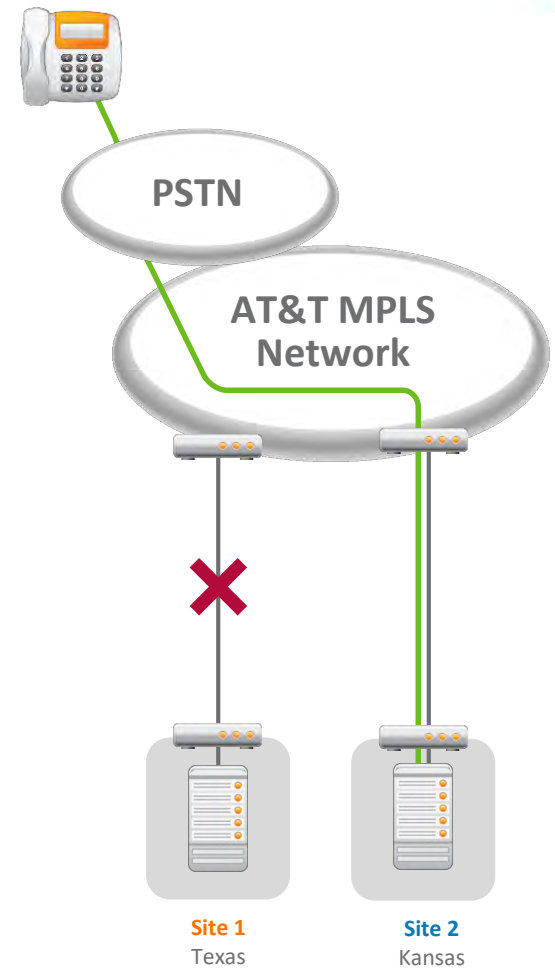
* Limitations do apply to Virtual Telephone Numbers. Please see the BVoIP Service Guide for details on limitations and conditions of use.



Feature

Inbound Alternate Routing (IAR)

- VoIP failover feature enabling customers to increase the resiliency of IP Flexible Reach applications.
- Enables the specification of a secondary IP Flexible Reach site where inbound calls to a primary IP Flexible Reach site should be re-directed in case the primary site cannot complete the call.
 - IAR is available with IP Flexible Reach on AT&T MIS with MPLS PNT and on AT&T VPN
- Protect calls through the IAR triggers that automatically enable the feature:
 - No response from the Primary site: triggering a time-out
 - Error conditions that result in call failure, which include errors in the CPE, AT&T-managed Router, link to the Managed Router, IP Border Element, PSX, or any other network element
 - Concurrent call limit has been reached
 - Network Busy
- Once the Primary site is restored, calls automatically revert back to the Primary site



Virtual Telephone Numbers (VTNs)

Assign a telephone number from anywhere within AT&T's business VoIP local footprint to a phone that is not physically located within your location's local calling area

Highlights

- Centralize inbound calls to a common location
- Extend capabilities of IP-PBXs
- Simplify management of enterprise calling

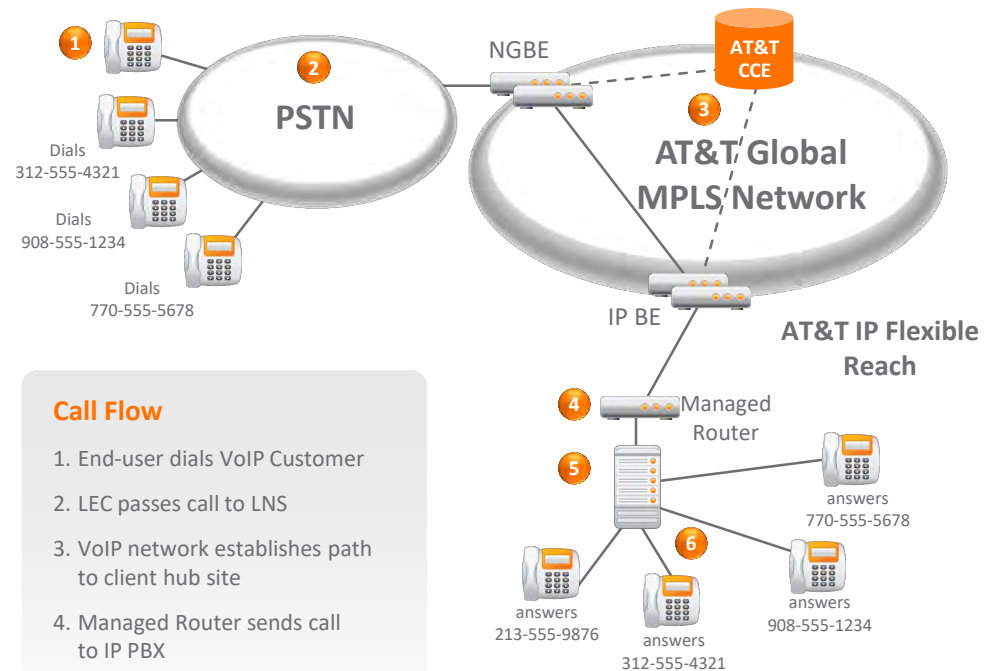
* Limitations do apply to Virtual Telephone Numbers. Please see the BVoIP Service Guide for details on limitations and conditions of use.



Virtual Telephone Numbers (VTNs)

Centralized Call Delivery

- Assign VTNs from any local calling area
- Allows a single site to support telephone numbers from multiple local calling areas
- Routes calls originating from across the country and answer them at a central location



CCE = Call Control Element

NGBE = Network Gateway Border Element

IP BE = IP Border Element

PSTN = Public Switched Telephone Network

* Limitations do apply to Virtual Telephone Numbers. Please see the BVoIP Service Guide for details on limitations and conditions of use.



AT&T IP Flexible Reach Optional Feature

Technical Assistance - Project Management and Onsite Installation Service

With Technical Assistance, you don't have to worry about installation issues and delays. AT&T takes care of the following details for you at no additional cost*:

- Project Management of Installation
 - Coordinate onsite installation
 - Provide timely status
- Install AT&T Managed IP Flexible Reach Router
 - Power up and physical check
 - Connect POTS lines for AT&T remote management
 - Install the Quintum Unit (optional)

* Inside wire or demarcation extensions are at additional cost. Other Optional Service Charges may apply.



Choose Your Calling Plan...

US Long Distance (Plan A)

- Unlimited on-net calling
- Per minute off-net for LD and international calling

Local and Long Distance Plan (Plan B)

- Unlimited on-net calling
- Unlimited inbound and outbound local calling
- Per minute off-net for LD and international calling

Local and Long Distance Package (Plan C)

- Unlimited on-net calling
- Unlimited inbound and outbound Local calling
- 300 minutes/concurrent call “included” for off-net LD calling
- Per minute (over included minutes) off-net for LD & international calling

(All plans selected on a per site basis)



E911

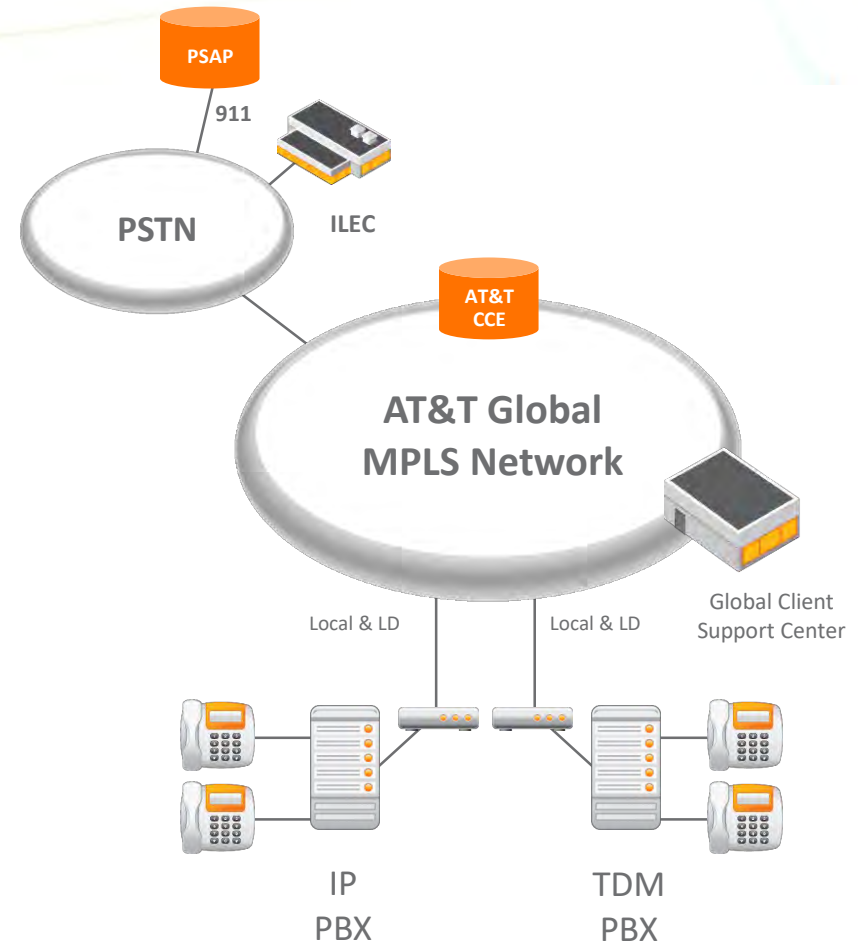
Local Calling Plan

- E911 is supported only for calls made from the registered location within the business VoIP local footprint (including AT&T owned local service facilities)
- Emergency calls are routed to a geographically appropriate PSAP based on the caller's location.
- Key System or PBX (IP or TDM):
 - Only one registered address for a given customer location
- TDM PBX utilizing CAS*:
 - Only one call back number (configured in the router) for all users.
- TDM PBX utilizing PRI or IP-PBX:
 - Station ID is supported as the call back number if provided by the PBX

US LD Only Plan

- 911 calling is not supported. A traditional POTS line needs to be actively maintained to support 911 calling

AT&T strongly recommends alternate means of accessing 911 services at every site
*Channel Associated Signaling



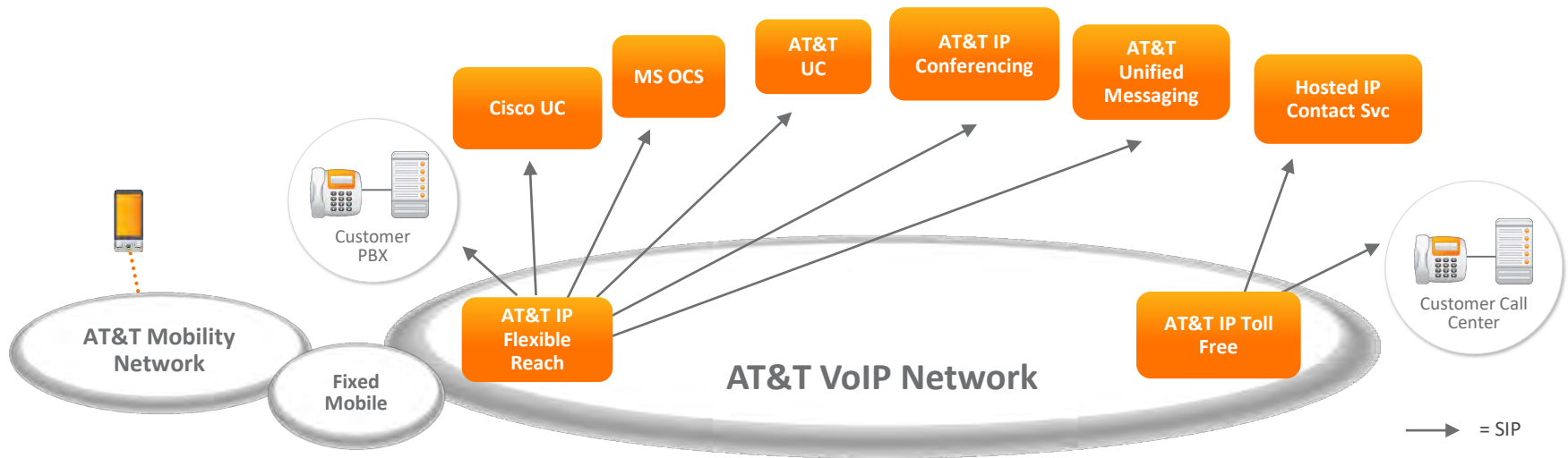
CCE = Call Control Element

PSAP = Public Safety Answering Point



Delivering SIP-Enabled Applications

Session Initiation Protocol (SIP) connects VoIP transport services with applications to benefit your business now and in the future



- VoIP is the foundation for organizations to move to bigger and better converged solutions in the future.
- Applications can be added now or later, allowing for further convergence and integration of applications.
- Maximizes the way businesses communicate and collaborate, to change the way they do business.



Why AT&T IP Flexible Reach?

Build a new outlook on how your voice service could benefit your bottom line and overall productivity. Empower your business for the future with AT&T Business VoIP solutions.

What's in it for you..

- Consolidate voice and data with a potential lower TCO, optimizing your budget
- Increase your voice functionality
- Can ensure future business resiliency and easy scalability
- Create a flexible working environment – make it available virtually anywhere
- Can improve productivity - make regular voice tasks more efficient
- Have less hardware on site than with traditional systems
- Simplify administration and maintenance
- Prepare for the future, enable communications applications



Thank You



Rethink Possible[®]

