



Integrated Voice

Service Guide

Save money and maximize bandwidth efficiency

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Product Overview

WHAT IS INTEGRATED VOICE?

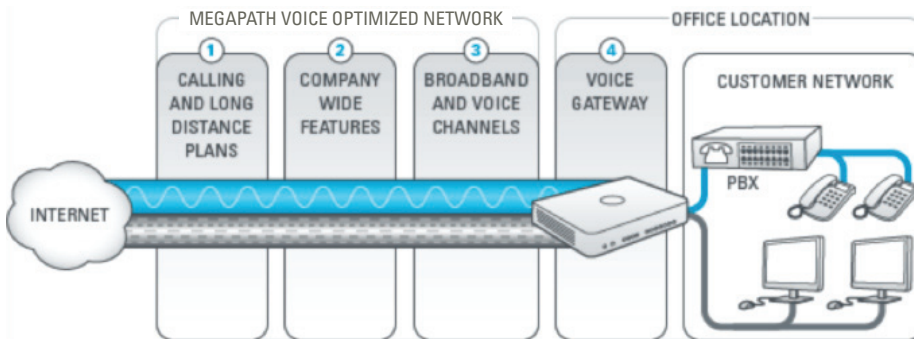
MegaPath Integrated Voice is a cost-effective way to provide voice and data services for businesses by combining the services over a single dynamic broadband connection. Integrated Voice can deliver up to 2 PRIs or 24 analog lines to a premises-based PBX (Private Branch Exchange), IP PBX or key system. When calls are not in use, the remaining bandwidth is available for data. Connections can be made to a PBX via analog Business Lines or PRI Services including T1-CAS or ISDN-PRI.

Integrated Voice provides significant savings - up to 45% over traditional phone service.

- **Buy only one circuit.** Voice and Data can share one circuit. No need to purchase circuits separately.
- **No waste.** Buy only the lines, trunks or full PRIs you need for efficient growth management.
- **Improve efficiency.** Voice compression and dynamic bandwidth allocation optimize bandwidth usage.
- **Boost productivity and mobility** with hosted services, such as Find Me/Follow Me, and Remote Office.
- **Save on usage**
 - *Share long distance minutes company-wide and carry forward unused minutes monthly.*
 - *Unlimited local calling included with all service plans.*
 - *Free on-net calling between all MegaPath Voice locations.*

In addition, the optional Enhanced PBX User feature allows customers to take advantage of powerful productivity and mobility features, such as Remote Office and Find Me / Follow Me.

HOW IT WORKS



An Integrated Voice solution will include the following elements:

- 1. Calling and Long Distance Plan:** Select different long distance calling plans for each line or trunk, or share a pool of long distance minutes company-wide. All options include unlimited local and inbound calling.
 - 2. Company Wide Services:** Services such as Auto Attendants, Hunt Groups, and Audio Conferencing are available as optional add-ons to your service for centralized call routing, disaster recovery and multi-site integration. A unique feature, the Enhanced PBX user, gives employees advanced hosted services, such as Remote Office, Find Me / Follow Me, and Simultaneous Ring.
 - 3. Broadband Connection and Voice Channels:** Your voice service runs over a MegaPath DSL, T1, Bonded T1 or Ethernet connection with speeds up to 20x20 Mbps, leaving plenty of bandwidth for your data needs. **MegaPath's voice-optimized nationwide network ensures reliable connectivity and security, while providing consistently clear voice quality.** The number of lines or trunks you need is based on the maximum number of concurrent calls your business requires. MegaPath can provide up to 2 PRIs or 24 analog lines at a single location. Lines and Trunks may be purchased individually or full PRIs are available. Bandwidth is allocated dynamically to meet your changing data needs.
 - 4. Voice Gateway:** MegaPath will provide an Integrated Access Device (IAD) on your premises to serve as a router and LAN gateway, performing voice traffic conversion to and from the MegaPath network.
- Customer Network:** MegaPath Integrated Voice works with your existing phone equipment and IP data network. There is no need to replace phones or equipment.

BASE SERVICES

Below are the basic service options for MegaPath Integrated Voice. All services include unlimited local calling.

National and international shared long distance minute plans are available. Unlimited long distance packages, including Canada, are also available.

Product Name	Description
Integrated Full PRI/CAS	<ul style="list-style-type: none"> • Full PRI replacement service • Includes T1 and 24 business trunks • Dynamic Bandwidth provides flexibility so that circuit can be used for data backup and redundancy
Integrated Analog Line	<ul style="list-style-type: none"> • Individual line for Analog line delivery • Single DID included with each line • Fax lines available • Minimum 2 line purchase per location
Integrated Full PRI/CAS Trunk	<ul style="list-style-type: none"> • Individual trunk for Digital T1-CAS/ISDN-PRI delivery • Minimum 2 trunk purchase per location
Telephone Number (DID)	<ul style="list-style-type: none"> • Individual DIDs • May be purchased in any quantity • Available with digital T1-CAS/ISDN-PRI service only
Enhanced PBX User	<ul style="list-style-type: none"> • Specific PBX user with enhanced hosted features—such as Remote Office, Simultaneous Ring, Voice Communication Toolbar • Available with digital T1-CAS/ISDN-PRI service only

STANDARD FEATURES

The following standard features may be included, depending on the delivery method – analog lines, T1-CAS, or ISDN-PRI.

Features	Analog Lines	T1-CAS	ISDN-PRI
Basic Line Hunting*	Yes, Call Waiting must be disabled	Yes, Call Waiting must be disabled	Yes, Call Waiting must be disabled
Call Logs	Yes	Yes	Yes
Call Forwarding	Yes	No, handled by customer PBX	No, handled by customer PBX
Call Return	Yes, via feature access code	No	No
Call Transfer	Yes, via flash	No, handled by customer PBX	No, handled by customer PBX
Call Waiting	Yes, via flash	Yes	Yes
Call Hold	Yes, via flash	No, handled by customer PBX	No, handled by customer PBX
Last Number Redial	Yes, via feature access code	No	No
Inbound Caller Name Delivery	Yes	Yes	Yes
Inbound Caller Number Delivery	Yes	Yes	Yes
Outbound Caller Name Delivery (Default Value)	Yes (Individual line name)	Yes (Primary Company Name)	Yes (Primary Company Name)
Outbound Caller Number Delivery (Default Value)	Yes (Individual line number)	Yes (Primary Site Number)	Yes (Primary Site Number)
Three Way Calling	Yes, via flash	No, handled by customer PBX	No, handled by customer PBX

• *Series Hunting* – Each line is attempted in a predefined order starting with the dialed number; calls do not loop.

OPTIONAL ADD-ON FEATURES

Feature Name	Description
Audio Conferencing	Company audio conferencing services
Auto Attendant	Automated receptionist for inbound call routing
Directory Listing	White Page Directory Listings for company name, address, and telephone number
Forwarding Numbers	Simple forwarding number service from one DID to another, on or off-net
Growth Reserved Number	<ul style="list-style-type: none"> • Spare telephone numbers allocated for future growth • May be purchased in any quantity
Hunt Group	<ul style="list-style-type: none"> • Advanced incoming call hunting • Sequential, Circular, Uniform and Simultaneous hunting policies supported • Call forwarding on busy or by time schedule • Optional hosted voicemail box included
Toll Free Numbers	<ul style="list-style-type: none"> • Inbound-only toll free service for 800, 866, 877 and 888 numbers • Vanity toll free numbers are available
Voicemail Box	Hosted voicemail box, does not integrate with customer PBX
Voicemail Portal	<ul style="list-style-type: none"> • Hosted voicemail system • Required if hosted voicemail boxes are needed

CALLING FEATURES

Calling Feature	Description
Account Codes	Tracking of calls by dialed code with support for verified and non-verified account codes.
Directory Assistance	Local directory assistance service reachable by dialing 411 or (area code) 555-1212.
Enhanced 911 (E911)	MegaPath provides 911 routing to the appropriate local emergency dispatch center. 911 services with MegaPath may operate differently than traditional 911 services.
Faxing	On MegaPath's optimized voice network, most customers experience the same quality as when faxing over a standard PSTN. Faxing is supported via either G.711u or the T.38 fax relay standard.
Inbound	Inbound calling allows for receiving calls from the PSTN or other MegaPath users. Calls must be directed to MegaPath-provided number or numbers ported to the MegaPath network.
Local Number Portability	LNP service is available for porting numbers from another provider to MegaPath within the same local rate center.
Local Outbound	Outbound calling is included with each Business Line or Trunk to the customer's local calling area. Calls must originate from a MegaPath-provided number or numbers ported to the MegaPath network.
Long Distance (Domestic and International)	Long distance calls may be made to any destination in the world. Unlimited domestic calling packages are available, as well as domestic and international shared minute plans.
Operated Assisted Dialing	Customers may dial "0" to reach an operator for assistance with calling cards, credit card, third party and collect dialing
Toll-Free Inbound	Toll-Free Inbound service is available if toll-free numbers are acquired from MegaPath. Minute plans are available.

Supported Specifications

ANALOG LINES

Signaling

The following signaling types are supported: Loop Start

MegaPath-provided Connectivity Matrix

Connectivity Type	ADSL/2	SDSL	T1 1.5	Bonded T1 up to 6.0	Ethernet up to 20.0
Supported	Yes	Yes	Yes	Yes	Yes
Maximum Lines with Voice Compression (default)	N/A	N/A	16	24	N/A
Maximum Lines without Voice Compression	5	8	12	24	24
Delivery	RJ-11	RJ-11	66 Block	66 Block	66 Block

Limitations

- Three-way calling is not supported on T1 1.5, Bonded T1, and Business Ethernet services

T1-CAS TRUNKS

Signaling

The following signaling types are supported:

- E&M Wink (default)
- E&M Immediate
- Feature Group D

MegaPath-provided Connectivity Matrix

Connectivity Type	ADSL/2	SDSL 1.5	T1 1.5	Bonded T1 up to 6.0	Ether-net 3.0	Ether-net 5.0 to 20.0
Supported	No	No	Yes	Yes	Yes	Yes
Maximum Trunks with Voice Compression (default)	N/A	N/A	24	48	N/A	N/A
Maximum Trunks without Voice Compression	N/A	N/A	12	12 per T1	24	48
Delivery	N/A	N/A	RJ-48	RJ-48	RJ-48	RJ-48

Limitations

- Call forwarding to external telephone numbers requires primary site outbound calling line ID is set.
- If remote PBX users are needed, primary site outbound calling line ID is not supported. Therefore, call forwarding to external telephone numbers is not supported. The outbound caller ID provided by the PBX will be sent.

ISDN-PRI TRUNKS

Signaling

The following signaling types are supported:

- AT&T 4ESS
- Lucent 5ESS
- Nortel DMS-100
- National ISDN 2 (default)

MegaPath-provided Connectivity Matrix

Connectivity Type	ADSL/2	SDSL 1.5	T1 1.5	Bonded T1 up to 6.0	Ether-net 3.0	Ether-net 5.0 to 20.0
Supported	No	No	Yes	Yes	Yes	Yes
Maximum Trunks with Voice Compression (default)	N/A	N/A	23	46	N/A	N/A
Maximum Trunks without Voice Compression	N/A	N/A	12	12 per T1	23	46
Delivery	N/A	N/A	RJ-48	RJ-48	RJ-48	RJ-48

Limitations

- Call forwarding to external telephone numbers requires primary site outbound calling line ID is set.
- If remote PBX users are needed, primary site outbound calling line ID is not supported. Therefore, call forwarding to external telephone numbers is not supported. The outbound caller ID provided by the PBX will be sent.

Customer Support Process

INSTALLATION SERVICES

MegaPath will oversee the installation of your Integrated Voice services to ensure smooth transition and turn-up. An Installation Project Coordinator (IPC) will be assigned to your order to manage the schedule and address any concerns you may have. The table below describes the expectations for each voice installation.

Analog Lines	MegaPath Responsibility	Customer Responsibility
Dedicated ADSL SDSL	A MegaPath certified voice installer will configure and connect the voice equipment. The service will be tested from the voice equipment.	<ul style="list-style-type: none"> • Connecting the voice equipment to the PBX, Key System or analog phones via RJ-11 cables or 66 Block • Any inside wiring required to install the voice equipment in the appropriate location • Installation, configuration and support of the PBX or KTS
T1 1.5 Bonded T1 up to 6.0 Business Ethernet	The MegaPath certified voice installer will configure and connect the voice equipment. The installer will also mount the voice router and a 66 block to the customer-provided mounting board. The voice router and 66 Block will be connected via an RJ-21 cable. The service will be tested from the 66 block.	<ul style="list-style-type: none"> • Provide access to a mounting board at least 4'x4' in size. • Cross-connections from the MegaPath-installed 66 Block to the PBX, Key System or analog phones • Any inside wiring required to install the voice equipment in the appropriate location • Installation, configuration and support of the PBX or KTS
T1-CAS/ISDN-PRI	MegaPath Responsibility	Customer Responsibility
T1 1.5 Bonded T1 up to 6.0 Business Ethernet	The MegaPath certified data installer will configure and connect the voice equipment.	<ul style="list-style-type: none"> • Connecting the voice equipment to the PBX or Key System via RJ-48 cable(s) • Any inside wiring required to install the voice equipment in the appropriate location • Installation, configuration and support of the PBX

ONGOING CUSTOMER SUPPORT

If you should experience any issues with your Integrated Voice or MegaPath-provided broadband services, MegaPath Customer Support services are available to assist you. MegaPath can help with any network-related issues, but cannot provide configuration and troubleshooting support for your PBX.

For analog line services, the demarcation for the voice service is the 66 Block installed by a MegaPath certified installer or the integrated RJ-11 breakout on the voice equipment, if applicable. For data service, the demarcation is the Integrated Access Device (IAD) or connectivity router. For T1-CAS or ISDN-PRI, the demarcation for both the voice and data services is the Integrated Access Device (IAD) installed by a MegaPath certified installer.

If it is determined that a trouble issues resides beyond our demarcation point, it is your responsibility to provide a technician capable of troubleshooting your phone equipment.

LET US SHOW YOU MORE

Call us at **877.634.2728** for a complete analysis of your telephony and data needs. Or visit us online at **www.megapath.com**.