



NEW BUSINESS OPPORTUNITIES USING VOICE OVER INTERNET PROTOCOL (VOIP)

GlobalPhone is pleased to announce an innovative VOIP service that will drastically lower costs to customers overseas and open exciting new selling opportunities for GlobalPhone agents. Using a small device the size of a small pizza box, customers can send phone calls directly over the Internet to our switching facility in Falls Church, Virginia. Using the Internet eliminates the most expensive portion of a call, i.e. from overseas to the US switch. The GlobalPhone switch acts as a gateway and processes your call to the destination phone number anywhere in the world over the public telephone network. Your cost is only a two-cent switching fee plus the second leg of the call.

Example: You are in Kenya and want to call to the United Kingdom. You pay only \$.02 for the Kenya-US leg and normal rates for the second leg of the call, i.e. USA to UK at Global Phone's rate is currently \$.08 per minute using our retail rates. The total cost of a call from Kenya to the UK is \$.10. By contrast, international callback service costs around \$0.50 per minute, while the local phone company will charge much more.

This is not a PC-to-phone solution with all of its inherent problems involved with software, microphone and speaker installation. It is a phone-to-phone solution that provides high quality voice connections. Once set up, it works just like a regular phone. It also works well over satellite circuits.

The VOIP service can be configured for small businesses, large corporations, prepaid phone card operations, Internet Cafés and Call Shops, and Hotels.



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Hardware/Software Requirements

1. Internet Connection. This can be a Cable Modem, ISDN, DSL or T-1 link. A dedicated IP address is required if you want to receive calls. If you only originate calls, a dedicated IP Address is not required. Bandwidth requirements will be approximately 14Kbps per phone conversation. Therefore, a 64 Kbps DSL link could handle approximately 4 simultaneous conversations. The cost of Internet connections typically ranges from \$40 per month for a Cable or DSL connection to \$600 per month for a full T-1.

2. VOIP Hardware. GlobalPhone supports H323 coding and hardware that supports G.711, G.729, G.729a and G.723 for VOIP solutions. For large installations using digital T-1 interfaces to the phone company or your PBX, GlobalPhone uses the appropriate Quintum T1/E1 or fractional requirement. For smaller implementations using analog phone lines, we use the 2 or 8 port Quintum.

Quintum units are small boxes the size of a small pizza box, and are available in two, eight and T1/E1 ports with 110 V or 220V power. The protocol used is H323 G.711, G.729, G.729a or G.723.

3. Interface Equipment. You will need regular phones for the Quintum FXS applications, which simply plug into the RJ11 cables on the Quintum unit. The Quintum FXO unit is designed to connect to the telephone lines provided by your local phone company so that you can call into them from outside your office. You can also connect the Quintum FXO to a PBX so that everyone in the office can make low cost international phone calls. Lastly, you may also connect the units to T1/E1 for maximum line size application with minimum wiring.

4. GlobalPhone Account. You will need GlobalPhone accounts to make phone calls. The Quintum unit can be programmed to convey the account code automatically by means of ANI delivery. If the phone number is in the switch as an account number, the caller is not prompted for an account code. Alternatively, the caller can be prompted for an account code by removing the phone number from the switch.

Sales Opportunities

The Quintum units can be used in numerous sales scenarios, FXS and FXO. The 2 and 8 port Quintum take standard analog telephones plugged directly into them (FXS) or alternatively to the local phone company or a PBX (FXO).

Quintum FXS Applications

- **Small Corporate Offices without a PBX.** Assuming your office has a dedicated Internet connection, the Quintum units are plugged directly into your ethernet LAN hub or router. Regular telephones are then plugged into the Quintum unit

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via the supplied cables. When a caller picks up the handset, the call is immediately processed over the Internet. The user hears a dial tone or is prompted to dial the destination number. The Quintum delivers the ANI (originating number) of the phone, which is pre-programmed into the switch. As a result, the caller is not prompted for the account code.

- **Internet Cafés and Phone Shops.** This scenario is similar to the small business office described above. However, phone service can be sold to anyone who needs to make a long distance phone call. The major difference is that each customer must be charged separately for his or her phone time.

In the event that a call shop is accustomed to billing for exact charges, the owner of the Call Shop or Internet café can view the call records on the GlobalPhone web site and issue exact change. In this scenario, unique account codes are not necessary for each caller.

Alternatively, the operator of the Internet café or call shop may sell the customer a prepaid phone card (or simply write the account number on a slip of paper). The Internet Café can sell phone cards in various denominations, i.e. \$1.00, \$5.00, \$20.00 etc and in any currency. The customer picks up the handset and enters the account number when prompted. After the customer enters a valid account code, he is prompted to dial his destination. In this scenario, there is no accounting to be done or change to be issued at the cash register. If the customer does not finish the card, the value is retained in the card until the next time it is used. Under this scenario, the phone number of the calling unit is not entered into our switch and the caller will be prompted for his or her account code.

Quintum FX0 Applications

- **Large Corporate Offices with PBX.** The Quintum unit can be deployed in any large company, similar to the small office scenario, except that it is connected to a PBX or the local phone company instead of directly to the telephone handsets. If there are one hundred employees in a company, they can all have access to the VOIP calls. To make an international call, the caller would just dial 8, for example. A line would be opened to the GlobalPhone switch and the caller would dial the destination number as normal. All calls preceded by 8 in this scenario would be routed through the Quintum unit and the caller never knows his call is going over the Internet.
- **Hotels.** Hotel owners can connect a Quintum unit to their Hotel PBX in the same manner as described above. However, the hotel will want to charge the customer for the calls. In this case, the hotel owner can perform billing in several different ways. The owner can simply require the customer buy a prepaid phone card. Alternatively, he could put a certain limit on the phone account when a customer checks in. When the customer checks out, the owner can call the

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account and see how much credit was used using the “speak units” feature. A third option assumes the customer requires printed call detail. The Hotel owner can use the billing functions that may exist in the Hotel PBX, or the hotel owner could go to the GlobalPhone website to view and print the customer’s call records in real time. Each room would have its own account number.

- **Prepaid Phone Cards.** One of the most exciting business opportunities made available through the GlobalPhone VOIP system is the ability to quickly establish a prepaid phone card business. The Quintum unit can be used to set up a phone card network. The entrepreneur must acquire phone lines from the local phone company. The lines should come with phone numbers or toll free numbers. The numbers should hunt from one trunk to the next when one trunk is busy.

The entrepreneur then sells phone cards in any denomination and in any currency. The customers make a local phone call or toll free phone call to that number. The call accesses the Quintum unit, is passed to our switch and the caller is prompted for his or her account code.

The entrepreneur can sell access to phone service without physically opening up a call shop or Internet café and can distribute cards widely around any city or country. The entrepreneur is able to avoid investing in expensive switching equipment because GlobalPhone provides a world-class prepaid calling card platform. This system replaces traditional International Callback services.

Cost Analysis

The following cost comparison shows the savings that are achieved for a small corporation using 2,000 minutes per month between Kenya and the UK.

VOIP Solution		
One time Costs	Quintum port XFS	\$2000
Monthly	DSL Internet	\$40
2000 minutes to UK	\$0.09Per minute x 12 months	\$2,160*
Cost over 12 month period with Quintum fully amortized		\$4,200

**Using Callback*

Cost of 2,000 minutes per month @ \$.50 x 12 months **\$12,000**

**Using the local PTT*

Cost of 2,000 minutes per month @ \$.75 x 12 months **\$18,000**

This cost comparison can be extrapolated to any of the scenarios described in this document.