

PhoneTray Dialup:

Helping ISPs to Increase the Bottom Line

White Paper

Introduction

As a dial-up internet service provider you have the challenge of creating the difference between yourself and the ever-growing competition in an ever-shrinking marketplace. How does one do this? In this white paper we'll explore PhoneTray Dialup technology and how you can benefit from offering this technology to your customers.

What is PhoneTray Dialup

Despite impressive growth of broadband internet services in 2004, only 55 percent of on-line households currently have broadband connections. Since cable and DSL services are costly and, in any case, unavailable in many rural areas, dial-up modems remain a popular and reliable means of accessing the Internet. Besides slower data transfer speed, dial-up has another significant shortcoming compared with broadband internet. Users of dial-up internet service are unable to receive incoming phone calls or make outgoing calls while on-line. To address this shortcoming, several companies started to offer Internet Call Waiting services that allow dial-up users to screen and answer incoming calls. In addition to basic functionality these services can provide other features like voicemail and call transfer. However, Internet Call Waiting services are quite expensive to operate. Most companies charge their customers a monthly fee of \$4 - \$9 for Internet Call Waiting, and ISPs are not able to offer this service free of charge. PhoneTray Dialup technology allows dial-up users to see who is calling and

answer incoming calls when on-line at a fraction of the costs of traditional Internet Call Waiting services.

How legacy Internet Call Waiting services work

Typical Internet Call Waiting systems consist of two parts: Internet Call Waiting application installed on the customer's computer, plus server hardware and software installed at a call center. Call Forward Busy service provided by the customer's phone company is used to transfer incoming calls to a call center when the user is on-line. The usual scenario of incoming call processing is described below:

1. A call comes in when the user is on-line.
2. User's phone company transfers incoming call to a call center number that was set up for Call Forward Busy service.
Call is received at the call center.
Caller's name and number is sent to the user over the Internet. Call Waiting application running on the user's computer displays incoming call alert.
3. Call is answered at the call center and a short voice message is played to the caller. This message informs the caller that the called party is on-line and asks the caller to hold.
4. If the user decides to accept the call, the internet connection is terminated and the call is transferred to the user's phone. Some companies offer additional voicemail service to the customers. If the user has voicemail service, the caller can leave a message if the user decides not to answer the call.

Advantages of legacy Internet Call Waiting systems:

- Highest compatibility. User's modem is not used to detect a call and obtain Caller ID. Internet Call Waiting service works with any modem, and can support non-Windows operating systems.
- Most systems provide voicemail service and allow callers to leave a message (additional charges usually apply). Users can listen to their messages on-line.
- Only Call Forward Busy service from user's phone company is needed. Legacy Internet Call Waiting systems do not require customers to have Call Waiting or Caller ID service from a phone company.

Disadvantages of legacy Internet Call Waiting systems:

- **High initial costs.** Internet Call Waiting system requires expensive server-side hardware and software setup.
- **High operational expenses.** To operate Internet Call Waiting service, a company has to lease phone lines and/or pay for VoIP bandwidth. Server hardware and software needs maintenance and support by qualified IT personnel.
- **Capacity limitations.** Call center should have enough capacity to process large number of calls simultaneously. Incoming calls might be lost if capacity is exceeded.
- **Per-minute charges.** Because call transfer is essentially a long-distance call from a call center to a user, Internet Call Waiting systems put a limit on how long a user can talk to a caller. Some companies charge users per-call fees or per-

minute fees for any airtime over the allowed limit.

How PhoneTray Dialup works

PhoneTray Dialup technology differs significantly from traditional Internet Call Waiting systems. PhoneTray Dialup software installed on a user's computer does everything by itself; there is no server-side hardware or software involved. PhoneTray Dialup utilizes the user's modem to detect incoming calls and get the caller's name and number. (Note: PhoneTray Dialup requires V.92 modem to work.) All modems that support V.92 standard can detect Call Waiting signals and obtain Caller ID information when on-line. If a user subscribes to Call Waiting service PhoneTray Dialup notifies the user when a call comes in and allows answering the incoming call. If a user subscribes to Caller ID service PhoneTray Dialup also displays the caller's number and name (if not blocked). If ISP supports V.92 modem-on-hold (MOH), the user can answer incoming calls without terminating the internet connection. Here is how PhoneTray Dialup processes incoming calls when the user is on-line:

1. A call comes in when the user is on-line.
2. Telco equipment sends out a Call Waiting signal.
3. PhoneTray Dialup detects the Call Waiting signal and obtains the Caller ID information if available.
4. PhoneTray Dialup displays the incoming call alert and allows the user to choose one of the following options:
 - a) Disconnect from the internet and answer the call;

- b) Put internet on hold and answer the call;
 - c) Ignore the call.
5. If the user selects to disconnect from the internet, PhoneTray Dialup terminates the internet connection and connects the call. The user can pick up the phone handset and talk to the caller.

If the user selects to put the internet on hold, PhoneTray Dialup sends out a modem-on-hold request, obtains MOH timeout and connects the call. The user can pick up the phone handset and talk to the caller. After the user finishes talking, hangs up and selects to return to the internet, the internet connection is restored.

If the user selects to ignore the call the caller hears the phone ringing continuously, however, if the user has voicemail service from her/his phone company the call is eventually transferred to voicemail.

Possible issues with PhoneTray Dialup technology:

- PhoneTray Dialup is not compatible with very old existing modems. PhoneTray Dialup requires a modem that supports V.92 standard and might be unable to work with older V.90 modems. However, almost all modems manufactured after 2001 are V.92 modems and most older PCI or USB V.90 modems can be upgraded to V.92 simply by installing a new modem driver. The misconception about today's non-V.92 modems comes from a fact that many users have '56k' modems (that's how Windows displays it). These are in fact OEM V.92 modems, commonly found in Dell,

Gateway, HP and other brand-name computers.

- PhoneTray Dialup requires Call Waiting service from the user's phone company to function. Caller ID service is needed to display callers' names and numbers. Unlike Call Forward Busy, these services are useful without PhoneTray Dialup and many users already have them as a part of their phone company's local service package.

Advantages of PhoneTray Dialup technology:

- **Works when on-line and off-line.** PhoneTray Dialup can obtain Caller ID information and display the caller's name and number when on-line and off-line. It can also block telemarketers or other unwanted callers.
- **Low initial costs.** All you need to start offering PhoneTray Dialup service to your customers is the software itself, there is no server-side hardware or software to set up.
- **Zero operational expenses.** PhoneTray Dialup software does everything by itself, there is no need to lease phone lines or purchase VoIP bandwidth.
- **Unlimited talk time.** Users can talk to the callers for as long as they want. If internet was put on hold and the user talks longer than modem-on-hold timeout, the internet connection is terminated without affecting the conversation.

How end-users benefit from *PhoneTray Dialup*

- Users can see who is calling when on-line and choose to accept a call or ignore it.
- Users can talk to the callers without disconnecting from the internet. (Requires V.92 modem-on-hold support from ISP).
- Users know who is calling before answering a call when off-line.
- Users can keep complete history of incoming calls.
- Users can block telemarketers and other unwanted callers.

How ISPs can benefit from *PhoneTray Dialup*

➤ **Attract new customers.**

Gain competitive advantage and win customers by offering internet call waiting and caller id with your dial-up service. Let potential customers see you as a provider of full-featured dial-up internet and make your service stand out from a growing number of low-cost ISPs.

➤ **Retain existing customers.**

Offer PhoneTray Dialup software to your customers to eliminate “missed phone call” problems, one of the main reasons why users switch to broadband internet service.

➤ **Increase per-customer revenues.**

Create premium service that includes V.92 modem-on-hold support and PhoneTray Dialup software. Combine with web accelerator to offer your customers a real broadband-like experience.

Please contact sales@traysoft.com today to inquire about our ISP licensing program and find out how *PhoneTray Dialup* can help to increase your bottom line.