

PC PhoneHome™

Tracks & Locates Missing Computers

INSTALLATION GUIDE



Version 2.15.1



95/98/ME/XP/NT/2000

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INSTALLATION GUIDE FOR PC PhoneHome™

THEFT RECOVERY SOFTWARE

INTRODUCTION

This report will assist authorized users to track and locate computers protected with PC PhoneHome™ software. The proper installation and configuration of PC PhoneHome™ is critical to the recovery process.

INSTALLATION

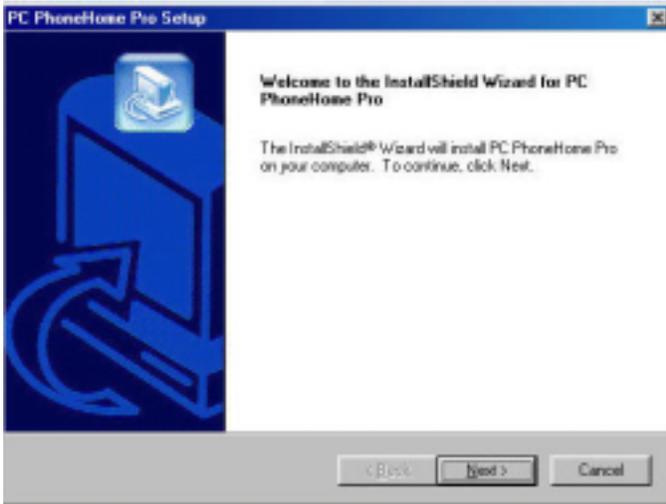


Figure 1 Installation Setup

This section covers proper installation and configuration. The examples used here are for the installation of PC PhoneHome™ for Windows 95/98/ME/XP/NT/2000. All other versions of PC PhoneHome™, including PC PhoneHome Enterprise™ will be essentially the same. At the start of the install you will see this:

The PC PhoneHome™ install wizard is a menu-driven application. Simply follow the directions provided by the installer.

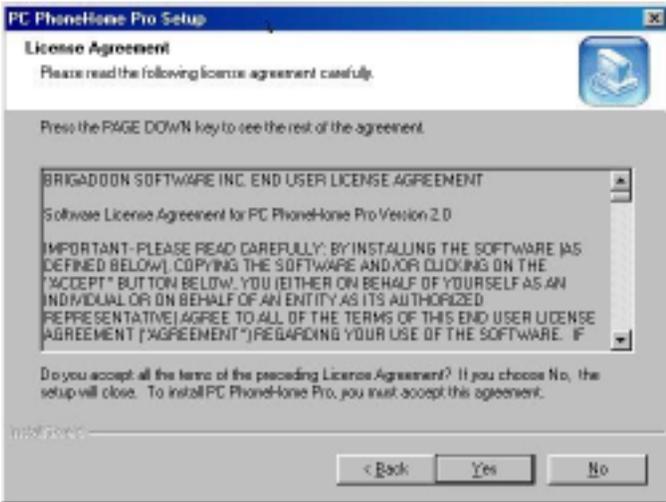


Figure 2 License Agreement

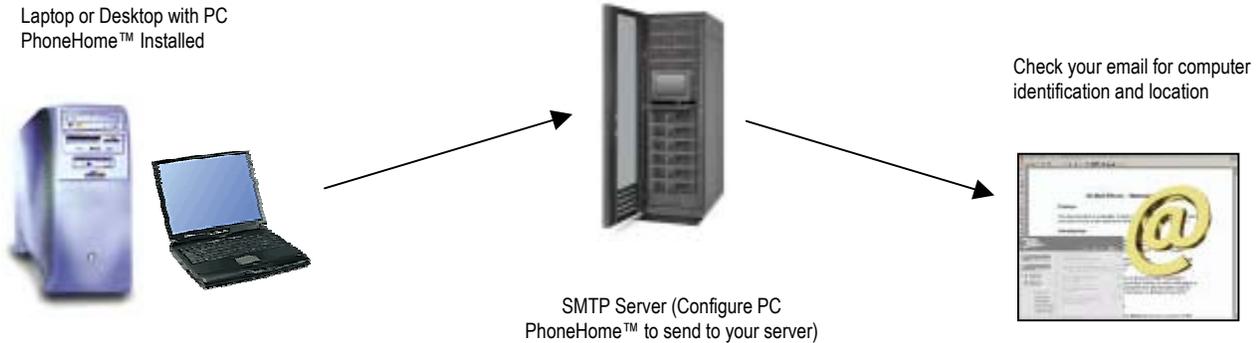
The PC PhoneHome™ license agreement should be read in its entirety to insure that the registrant understands the legalities of using PC PhoneHome™ and agrees with the terms and conditions of using PC PhoneHome™ software.

IMPORTANT!!

The ownership information you provide in the configuration box for PC PhoneHome™ is the information that is sent to your designated command center. It is also the same information you will turn over to the police in the event your computer is lost or stolen. **It is important that you enter accurate and truthful information** in the data field of the configuration window. The police will use this information **as a basis to attain a court-ordered search warrant to retrieve your property. Less than accurate information may result in a search warrant application being denied.**

How PC PhoneHome™ Works

PC PhoneHome™ contains a stealth email application that sends your pre-configured recovery information via proprietary protocol to the email address of your choice (including web-based email).



Configuring PC PhoneHome™ involves two tasks: (i) providing SMTP server information that is embedded into the application; and (ii) identification information that is essential to the recovery process. Therefore, it is important that you obtain all the information required prior to the installation of PC PhoneHome™.

The following screen shows the configuration and identification information that is embedded into PC PhoneHome™.

Figure 3 PC PhoneHome™ Configuration Window

SMTP Details*

SMTP Server: Enter your SMTP server name here

Example: <mail.your-smtp-server.com>

If you have any doubt, **check with your ISP (Internet Service Provider)** to insure you have your **correct SMTP server name**.

Sender's E-Mail ID: Enter a valid email address for the SMTP server here.

Example: <valid-email-address@your-smtp-server.com>

Recipient's E-Mail ID: Enter the E-Mail address you want your computer's location coordinates sent to

Example: <your-valid-email-address@any-isp-anywhere.com>

* For PCPH-Enterprise users, the SMTP Details and User Registration Info is already "hard-coded" into the installation file.

User Ownership Info

Name: Your name

Organization: Your organization (if any)

Address: Your address

City: Your City

State/Province: Your state or province

Zip/Postal Code: Your zip code or postal code

Country: Your country

Company Phone: Your company phone (if owned by organization)

Home Phone: Your home phone (for notification of recovery)

Email: Your E-Mail: (for notification of recovery)

Unique ID: If you purchase a CD, it will have a Unique ID provided with the CD. Insert that Unique ID code here.

Computer Info

Manufacturer: What company made this computer?

Model Number: What model number is this computer?

Serial Number: What is the serial number on the back or bottom of this computer?

Inventory Number: What is the organization's inventory or asset tracking number of this computer?

Miscellaneous:

Start/Stop mail application: This setting allows an advanced user to start or stop the sending of the stealth email for testing and advanced configuration issues. **We advise you to ALWAYS LEAVE THIS SETTING TO THE DEFAULT ("Start mail application").**

The screenshot shows the 'PC PhoneHome Pro Version' registration window. It has several sections: 'SMTP Details' with fields for Server, Sender's Email ID, and Receiver's Email ID; 'User Registration Info' with fields for Name, Organization, Address, City, State/Province, Zip/Postal Code, County, Phone Home, Phone Office, Email, and Unique ID; and 'Computer Info' with fields for Mfg, Model No, Serial No, and Inventory Asset Number. A red arrow points to the Unique ID field.

Setting Your Boot Sequence - VERY IMPORTANT

After installing and testing PC PhoneHome™, you must **reset your boot sequence so your computer ONLY boots from the C: Drive**. This is done to protect the installed tracking agent and prohibit an unauthorized user from booting from the A: drive. It may be possible to delete PC PhoneHome™ if you fail to perform this task.

To reset your boot sequence, simply reboot your computer and enter your BIOS setup. **Each computer is different so you should refer to your owner's manual for the correct method of entering BIOS setup for your particular model computer.**

Reconfigure your BIOS settings to boot ONLY from the C: drive and **place a supervisory password on this setting**. This will prohibit an unauthorized user from changing your settings. **Do NOT set a BOOT password. We WANT the thief to have access to the computer so they make an Internet connection and become traceable.** The beauty of PC PhoneHome™ is in its stealth capability to send location information that allows the computer to be recovered.

REGISTERING YOUR SOFTWARE

IMPORTANT! Even though you have a paid single user version of PC PhoneHome™, it is not fully operational until you register the software and receive a User Name and Serial Number.

Why? There is a legal basis for this: Remember, this application is primarily designed to track and locate missing and stolen computers. As such, the software is designed to (1) locate the computer; and (2) provide law enforcement the necessary tools they need to both (a) obtain a search warrant to recover the computer; and (b) prosecute the perpetrator.

Since, in most cases, PC PhoneHome™ was the PRIMARY instrumentality that provided the information used to find and prosecute a thief, the METHOD on how that instrumentality is used is subject to legal scrutiny.

The recovery process must withstand a defense's challenge on "can you prove that you used this software on your computer legally?" A good defense lawyer may challenge the software as being "illegally used" (i.e., bootlegged, or used in violation of the user license). He/she will challenge the prosecution to prove that it wasn't used illegally (proving a negative is always difficult).

But with PC PhoneHome™'s registration procedure, we can.*

When an end-user purchases the program, the purchase is verified by a number of methods:

1. Electronic download: usually by the Unique ID OR by the Invoice from the download; or
2. CD media: by the Unique ID that accompanies each paid disk.

Therefore, registration provides the basis for proving that the software is legally installed on the computer (remember, the license is for ONE computer for the length you own the computer).

30-Day Registration Period

The end-user is required to "Register" the software in order to continue to use it after the first 30 days. IF YOU DO NOT REGISTER YOUR SOFTWARE IN THE FIRST 30 DAYS AFTER INSTALLATION, IT WILL STOP SENDING LOCATION INFORMATION.

When Brigadoon Software receives your request for the registration codes, the request is cross-referenced against records (either download receipts or validly-issued Unique IDs). If everything checks out (i.e., valid purchase) the registration User Name and Serial Number are sent to the bona fide end-user. No further registration User Names and Serial Numbers are now issued for that software license.

How do you register your paid single user version of PC PhoneHome™?

Once you install PC PhoneHome™, you may request your Registration Codes **by emailing your request, along with identifying information (i.e., such as your name, address and privacy code/Unique ID from the configuration screen when you installed PC PhoneHome™ to tech@pcphonehome.com.**

Brigadoon Software will then check your Unique ID or electronic download invoice to determine if you are a bona fide licensee, and will then send you your User Name and Serial Number, usually by email.

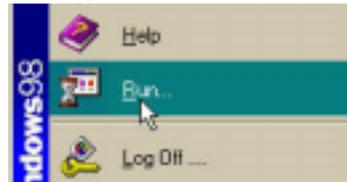
* Remember, Enterprise Editions have none of these issues, so the registration protocol is not required.

Here's how you complete the registration process:

1. Click on "Start"



2. Click on "Run"

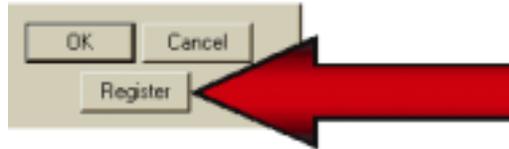


3. Then type "configmod" in the "Open" data field.



This should bring up the configuration window.

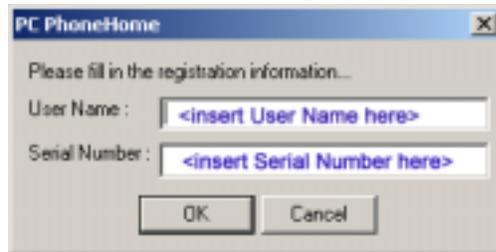
4. Click on the "Register" button on the configuration window



5. Enter your User Name and Serial Number

(provided to you by Brigadoon Software)

and then click "OK".



If you correctly completed the registration of your software license by correctly entering the User Name and Serial Number, you should then see the following window:



MONITORING, TRACKING, LOCATING AND ASSET RECOVERY

Every time the computer has Internet access, PC PhoneHome™ has the ability to send an identifying stealth email to the pre-configured Recipient's email address for location and recovery purposes. An example of how the message appears is as follows (color added for emphasis):

Figure 4. Sample of Received email including header

```
X-Persona: <BrigTech>
Return-Path: <sender@brigadoonsoftware.com>
Received: from mail.brigadoonsoftware.com (66.84.179.38)
by mail.mcf.com
with SMTP (Eudora Internet Mail Server 3.1b1);
Thu, 18 Oct 2001 11:10:21 -0400
From: sender@brigadoonsoftware.com
To: tech@brigadoonsoftware.com
Subject: Information
Date: Thu, 18 Oct 2001 11:10:21 -0400
Message-ID: <1208704675-101666554@mail.mcf.com>

PCPH Pro For Win 95/98/ME/NT/2K

Date: 10-18-2001
Time: 11:10:21
Computer Name: SPARKY3223
User Name: Sparky3223
IPAddress : 66.84.179.38
Mac Address: 44-45-53-54-61-6F
Mac Address: 44-45-53-54-61-70
Mac Address: 00-80-C7-98-D6-9F
Serial Number: 392D12D8

Registrants Name: sammy
Organization: bsi
Address: 100 main st
City: nyc
State/Province: ny
Zip/Postal Code: 10002
Country: usa
Work Phone: 212-555-1234
Home Phone: 212-555-4321
E-mail: sparky@somewhere.com
Unique Identifier: my-unique-identifier-goes-here
Computer Manufacturer: ibm
Computer Model Number: 570
Computer Serial Number: 1231VF2937121-92
Inventory Number: bsi-34234
```

The information that is sent back to the monitoring email address provides two major bodies of information:

1. Information regarding ownership of the computer that is vital for its recovery (data in image 4 in blue); and
2. Information pertaining to the location identifiers in order to track the location of the computer at the time the computer was on the Internet and was able to send the stealth email message (data in image 4 in red).

The information included (data in image 4 in blue) above is vital in order to provide the court with probable cause so that the law enforcement agency in charge can obtain a search warrant necessary in order to recover the computer.

Section II - Recovering the Computer

During the normal course of monitoring, the owner and Brigadoon Software's redundant emergency backup system archive the information received from the computer in case there is a theft by saving the stealth email sent to the Recipient Email address by PC PhoneHome™.

Once a computer is reported as lost or stolen, report the incident to the applicable local law enforcement agency. Law enforcement should then generate a case number, and assign the case to an investigating officer. The investigating officer will serve as the focal contact point in the recovery efforts. At that point, contact Brigadoon Software and provide as much information about the loss, including the

case number and the contact information for the investigation officer. We will then provide you with recovery technical assistance at no extra cost.

Your PC "Phones Home"

The next time your lost or stolen computer has any kind of Internet access, it will send a new message. Once that new message is sent, a Brigadoon Software recovery technician can extract the IP address (the address on the Internet from which the message was sent) from the email and determine the Internet Service Provider that assigned that IP address.

Internet Service Providers log the telephone numbers (or, in the case of broadband service, the access point) of the incoming call BEFORE assigning an IP address. This telephone number or static access point is stored at the Internet Service Provider. This telephone number or access point provides the exact location of the missing computer. Internet Service Providers provide this telephone number or the access point information to the investigating law enforcement agency, which in turn uses this information to acquire a search warrant to retrieve the missing computer.

What is the "IP Address?"

In an IP network, each computer is allocated a unique IP address. The IP address is assigned to a computer once it makes a connection to a network. The Internet is composed of thousands of networks all connected together.

Each physical network has to have a unique Network Number, comprising some of the bits of the IP address. The rest of the bits are used as a Host Number to uniquely identify each computer on that network. The number of unique Network Numbers that can be assigned in the Internet is therefore much smaller than 4 billion, and it is very unlikely that all of the possible Host Numbers in each Network Number are fully assigned.

An address is divided into two parts: a network number and a host number. The idea is that all computers on one physical network will have the same network number - a bit like the street name, the rest of the address defines an individual computer - a bit like house numbers within a street. The size of the network and host parts depends on the class of the address, and is determined by address' network mask. The network mask is a binary mask with 1s in the network part of the address, and 0 in the host part.

Because IP addresses are a scarce resource, most Internet Service Providers (ISPs) will only allocate one address to a single customer. In majority of cases this address is assigned dynamically, so every time a client connects to the ISP a different address will be provided. Big companies can buy more addresses, but for small businesses and home users the cost of doing so is prohibitive. Because such users are given only one IP address, they can have only one computer connected to the Internet at one time. With a NAT gateway running on this single computer, it is possible to share that single address between multiple local computers and connect them all at the same time. The outside world is unaware of this division and thinks that only one computer is connected.

Client computers label all packets with unique "port numbers". Each IP packet starts with a header containing the source and destination addresses and port numbers:



This combination of numbers completely defines a single TCP/IP connection. The addresses specify the two machines at each end, and the two port numbers ensure that each connection between this pair of machines can be uniquely identified.

Each separate connection is originated from a unique source port number in the client, and all reply packets from the remote server for this connection contain the same number as their destination port, so that the client can relate them back to its correct connection.

Turnaround Time and Monitoring/Recovery

Once a message is received from a lost or stolen computer, it generally takes mere minutes to get enough information to either contact the ISP directly or provide law enforcement with the information necessary for them to contact the ISP and proceed with the inspection of the ISP's log records. From the ISP's log records, law enforcement obtains enough information to determine the exact address of the lost or stolen computer when it "Phoned Home."

TECH SUPPORT

If you need technical support or have any questions regarding your software, here is how you contact us:

Email (usually the fastest response): tech@pcphonehome.com

Fax: +1-845-624-0990

Telephone (during normal business hours-New York time): +1-845-624-0909.