

Welcome! This document will describe the installation and configuration of the Hamachi VPN package onto PBX in a Flash Version 1.2 – 32 and 64 bit OS's. I have tested this script on Lab, Production, and VMware machines with great success. This is version 2.0 of the program released May 31, 2008

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Please contact me at pbxinaflash@gmail.com for further information.

As with any new piece of software you need to ensure it actually works in your own computer environment. If you fail to test this software on your production machine and you rely on it for mission critical processes "IT WILL FAIL"! What does this mean? It means that without testing on your own hardware Hamachi may not work at all.

OVERVIEW

“Hamachi is a centrally-managed [zero-configuration virtual private network](#) (VPN) [freeware](#) application capable of establishing direct links between computers that are [behind NAT firewalls](#) without requiring reconfiguration (in most cases); in other words, it establishes a connection over the Internet that very closely emulates the connection that would exist if the computers were connected over a [local area network](#).” Read the whole article [here](#).

This install program will install hamachi on your PBX in a Flash version 1.2 all versions. This will allow you to create your own private network in the 5.x.x.x region and have secure communications between various PIAF servers and remote softphones. You will have the option when you install hamachi of creating a new network or joining an existing one you have already created. Once you have at least 2 systems tied together you can do virtually anything between them from ssh to http to voip. It is just like having your PIAF servers connected on a private lan.

The future of the Linux version of Hamachi is on shaky ground. The original developers of Hamachi recently sold it to LogMeIn and they may cease to allow it's use. I recommend that if you use Hamachi you contact the new owners and lobby for it continued support. If it goes away in the future don't worry! We have already begun developing a similar solution that will use Open VPN.

Also this program does NOT setup Dundi on your PIAF server. A Dundi wizard is currently in alpha testing and will be released when it is up to our standards. As with many of our programs the install-hamachi does NOT have the source available and is a compiled binary. Prior to using the program you will be asked to agree to these terms. Hamachi is also a closed source program so please don't ask us to provide it to you as no one has it except the owners of Hamachi.

METHODOLOGY

Once you have downloaded install-hamachi started the install process you will be guided through the setup. Various questions will have to be answered as outline below. I recommend you have these answers prior to starting the program.

REQUIREMENTS

1. A configured and working PBX in a Flash version 1.2 system running either a 32 or 64 bit operating system. Note this install program will NOT work with prior versions of PBX in a Flash. Also this program is only licensed to run on PBX in a Flash systems. Attempting to run it on other pbx systems is a violation of the terms of use.
2. Working internet connection
3. Decide the name and password for your new Hamachi VPN network or have available the network name and password to join an existing Hamachi VPN network

4. Decide on a unique machine name that the hamachi network will use to help identify you PIAF system. The install program will use the machine name that currently exists unless it is pbx.local. This name is the default install machine name! You will be prompted for a new name if this is the current machine name.

PROCEDURE

1. Log on to the PIAF system in the CLI and user root.
2. Type the following: * choice a is for PIAF systems based on Asterisk 14 and choice b is for PIAF systems based on Asterisk 1.6
 - a. wget <http://pbxinaflash.org/ast14/scripts/install-hamachi.x.gz> or
 - b. wget <http://pbxinaflash.org/ast16/scripts/install-hamachi16.x.gz>
 - c. gunzip install-hamachi*.x.gz
 - d. chmod +x install-hamachi*.x
 - e. ./install-hamachi*.x
3. License agreement

```
*****
* In order to download and install these free and compiled scripts *
* you must agree to the following: *
* *
* 1. I agree to honor the terms of use set out below *
* 2. I agree not to reverse engineer any of the binaries *
* 3. I agree not to request the source code for this script *
* 4. I agree to only run this script on a PBX in a Flash system, *
* 5. I agree that this script is an 'independent and separate work' *
* 6. By typing Y, I agree that this act constitutes my legal *
* signature and agreement to all of these terms and conditions *
* of use. *
* *
* IF YOU DO NOT AGREE WITH THESE TERMS OF USE,DO NOT USE THIS *
* PROGRAM! *
* *
* Tap the Y key to agree to these terms or ENTER to exit *
*****
```

Choose Y to agree with the license terms.

4. If you are attempting to run the installation script on a none PBX in a Flash system you will see one of the following messages.

```
I am sorry you do not appear to have a valid PBX in a Flash install. Now exiting
```

```
This script is designed to run only on PBX in a Flash 1.2 - Asterisk 1.4 version. Now exiting
```

5. If you are installing this program onto a genuine PBX in a Flash Version 1.2 you will see the following screen.

```
install-hamachi Version 1.0.0 released on Date 053108
Running on 32 Bit CentOS
*****
*                               *
*               Welcome         *
* This program will install Hamachi onto your system *
* You will need to make some descisions regarding:  *
* 1. If you are joining an existing hamachi network *
* 2. If not the name of your new network            *
* 3. What your network password will be             *
* 4. What the nickname of your machine.Default is hostname*
* I recommend the network name be at least 8 characters *
* long and something very unique!                   *
*                                                     *
* Tap the ENTER key to continue or CTRL-C to exit  *
*****
```

You need to think about the questions displayed prior to continuing. If you are creating a new Hamachi VPN then you need to think of a unique name. Using something like “testnetwork” is already taken and you won’t be able to use it. If you are joining an existing Hamachi VPN then you will need to know the network name and the password.

You will be asked also to name your computer. If you have not changed the machine name of your PBX in a Flash system from the default of “pbx.local” You will need to think of a new name. You will be given the opportunity later to accomplish this. Tape the ENTER key to continue.

6. The program will check to see if an existing version of Hamachi is running and stop it

```
Checking to see if hamachi is installed and running
```

7. If hamachi is already installed and running it will be shut down.

```
Hamachi is running from a previous install I will have to shut it down now
```

OR

```
Hamachi does not appear to be running now continuing with installation
```

8. If a previous version of Hamachi exists it will delete the install folder.

```
/usr/src/hamachi exists now deleting it
```

9. The program will now rename the /etc/hamachi configuration folder to hamachi-old

```
/etc/hamachi exists Renaming it to /etc/hamachi-old
```

10. Now the install-hamachi program will download the latest version of hamachi from the internet.

```
Hamachi hamachi-0.9.9.9-20-lnx successfully downloaded
```

11. We will now move onto the configuration phase of the install-hamachi program

```
*****
*           Hamachi install and configuration           *
* You will be asked several questions as the install program continues *
*****
Successfully installed!
```

12. The first part of the configuration phase is the installation of the hampiaf command line tool. This is a short script that wraps the hamachi command line up to make it easier for you to use on a day to day basis. More information can be found in appendix 1.

```
Custom PIAF - hamachi command downloaded! Now installing
```

13. You will now be asked which type of configuration you wish to proceed with. Create a new network or join an existing network Choose N for new or J for join.

```
*****
* Please choose one of the following *
* * *
* Tap N to create a new hamachi network *
* Tap J to join an existing hamachi network *
* Tap the ENTER key to exit this install *
*****
```

14. Depending on if you are creating a new network or joining an existing one you will see one of the screens below

Create a new network

```
*****
* Please enter a name for your Hamachi network *
* This name needs to be as unique as possible! *
* Blank network names are not allowed! *
*****
```

OR

Joining an existing hamachi network

```
*****
* Please enter the name of the existing Hamachi *
* network *
* Blank network names are not allowed! *
*****
```

15. You should see the following screens after seeing either of the above screens

```
Please enter the network name and then tap the ENTER key
Note null names are not permitted!
```

```
Now re-enter the same network name so we can verify it. Then tap the ENTER key
```

You should see a short confirmation message and the install-hamachi program will continue. If you make a mistake and the names don't match you will be warned and then you will have to re-enter the names again

16. Next you will be asked for the network password. You will be asked to enter a new password or an existing one depending on if you are creating a new network or joining an existing one.

Password for new network

```
*****
* Please enter a password for your Hamachi network*
* This password needs to be as unique as possible!*
* Blank passwords are not allowed! *
*****
```

OR

Password of existing network

```
*****
* Please enter the password for the existing *
* Hamachi network *
* Blank passwords are not allowed! *
*****
```

Then the confirmation screens

```
Please enter the network password and then tap the ENTER key
Note blanks are not permitted!
```

```
Now re-enter the same network password so we can verify it
```

17. Now comes the time to choose a network nick name. This should be something unique and not duplicated by other machines. The program checks to see what your existing machine name is to ensure it is NOT pbx.local. Please note pbx.local is the default machine name of a PBX in a Flash Version 1.2. We have decided to not allow this name into the Hamachi cloud to prevent confusion. If your machine name is not pbx.local then you will see the following screen

```
Current machine name: buildbox.piaf
*****
* Now you have to enter a nickname for your computer *
* You have the choice of using your existing name *
* or using something different. Please choose: *
* Tap E for existing machine nickname *
* Tap N to enter a new machine nickname *
* *
* NOTE you cannot use pbx.local as a name! *
* *
* Any other key will exit this program! *
*****
```

You can accept the current machine name as displayed or enter a new one. This name is only used in the Hamachi VPN cloud.

If your machine IS named pbx.local you will see the following screen instead

```
*****
* Please enter a nickname for your computer as it *
* will appear on the hamachi network *
* Blank nicknames are not allowed nor is the *
* nickname pbx.local *
*****
```

You must enter a new machine name other than pbx.local! Blank nicknames are not allowed. You will then see the confirmation prompts

```
Please enter the nickname you want and then tap the ENTER key
Note blanks are not permitted! Also pbx.local is not permitted
```

```
Now re-enter the same nickname so we can verify it. Then tap the ENTER key
```

18. You should now see the View the log file screen. The log will detail all of what the install-hamachi program did on your system in “painfully detailed”™@mode.

```
*****
* Do you wish to view the detailed log for your own edification and self*
* gratification? Once displayed tapping q exits *
* View log file? Y = yes *
*****
```

Summary

Once you have at least 2 systems configured and in the Hamachi VPN Cloud issue the following commands:

- hampiaf get-nicks
- hampiaf list

You will see your computers listed with an ip address of the format 5.x.x.x. You can now do various things in a secure manner with Hamachi. A companion program is under development to facilitate PIAF servers connecting together using DUNDI running in a Hamachi cloud.

Appendix One

HAMPIAF

This is a simple wrapper script of the hamachi command. The reason we provide this is it will save you some typing when you are learning about Hamachi. The long hamachi command is

```
hamachi -c /etc/hamachi <command>
```

The short version is

```
Hampiaf <command>
```

This script resides in /usr/local/sbin and is uncompiled. Below is what you will see when you type hampiaf with no command line parameters.

```
You need to specify a command line parameter!

hampiaf command line parameters
*****
* Command                               * Command                               *
*****
* Start                                 * stop                                  *
* set-nick <nickname>                  * login                                 *
* logout                                * list                                  *
* get-nicks                             * create <network> <password>         *
* delete <network>                      * evict <network> <5.x.x.x>           *
* join <network> <password>             * leave <network>                      *
* go-online <network>                   * go-offline <network>                *
*****
Hamachi, a zero-config virtual private networking utility, ver 0.9.9.9-20

version  : hamachi-lnx-0.9.9.9-20
pid      : 6785
status   : logged in
nickname : piaftest.piaf
```